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                   BEFORE THE WASHINGTON STATE
             UTILITIES AND TRANSPORTATION COMMISSION
 2.
     BNSF RAILWAY COMPANY,
                                   ) DOCKET NO. TR-070696
                                      Volume XI
 3
                     Petitioner,
                                    )
                                      Pages 1130 to 1229
 4
               vs.
     CITY OF MOUNT VERNON,
 5
                     Respondent,
 6
               and
     SKAGIT COUNTY, WASHINGTON
     STATE DEPARTMENT OF
 8
     TRANSPORTATION, and WESTERN
     VALLEY FARMS, LLC,
 9
                     Intervenors.
10
                A hearing in the above matter was held on
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12
     January 31, 2008, from 9:00 a.m to 11:40 a.m., at 401
13
     Second Avenue South, Suite 200, Seattle, Washington,
14
     before Administrative Law Judge ADAM E. TOREM.
15
                The parties were present as follows:
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- 2 JUDGE TOREM: Good morning, this is Thursday,
- 3 January 31st, 2008, and this is Judge Torem, we're back
- 4 on the record in TR-070696 gathered in Seattle,
- 5 Washington. We have a number of witnesses on the docket
- 6 for this morning. Where we left off earlier this month
- 7 in Mount Vernon, three witnesses were scheduled. Albert
- 8 Liou and Richard Smith, yesterday there was an exchange
- 9 of E-mails among counsel indicating that BNSF and its
- 10 essential partner and proponent to the petition to close
- 11 Hickox Road would be waiving the right to cross-examine
- 12 these witnesses. I understand that by late in the day
- 13 and evening yesterday all the other parties confirmed
- 14 they had no cross-examination questions, so Mr. Liou and
- 15 Mr. Smith are not here today. The last remaining
- 16 witness is Thomas Zeinz, and he is seated to my right
- 17 and ready to testify as soon as we get to him.
- 18 Let me note that all of the counsel that were
- 19 previously present in Mount Vernon are here again except
- 20 for I don't see anybody here for the Fire District. I
- 21 did not expect to see them based on their previous
- 22 suggestion that if they did not have a witness that they
- 23 were directly interested in either presenting or
- 24 cross-examining they would waive their presence, and
- 25 yesterday also Skaqit County waived its presence

- 1 indicating that Mr. Rogerson would be representing their
- 2 interests today. So I believe other than that, all
- 3 others are present, all the same counsel, so we don't
- 4 need to take any further appearances and detail the
- 5 record again today.
- Also we talked a little bit about how we were
- 7 going to number exhibits that were submitted by the
- 8 railway for its potential cross-examination of
- 9 Mr. Zeinz, and I can go through those and note them for
- 10 the record now.
- 11 First there are three WUTC responses to data
- 12 requests from BNSF, they were BNSF Data Request Number
- 13 29, 36, and 37. Those are all grouped together as
- 14 Exhibit 139.
- There's a group of collision articles,
- 16 essentially 12 pages, those are Exhibit 140.
- 17 There are some Operation Lifesaver Crash
- 18 Statistics from Washington, 7 pages, and those have been
- 19 labeled as Exhibit 141.
- 20 Some Operation Lifesaver posters, a total of
- 21 5 pages, have been labeled as Exhibit 142.
- 22 There is a 2 page, at least the way it
- 23 printed out for me the updated version was 2 page
- 24 Railroaders Editorial, that's Exhibit 143.
- 25 There is a Driver Risk at Railroad Crossing

- 1 Study that I have marked as Exhibit 144, and it's from
- 2 June of 1999 in North Carolina. I have not counted the
- 3 number of pages, but we have marked that as Exhibit 144.
- 4 There is a National Transportation Safety
- 5 Board Railroad Accident Report from Illinois or,
- 6 hesitate to say it, Bourbonnais, it's spelled
- 7 B-O-U-R-B-O-N-N-A-I-S, this is also from 1999, and it's
- 8 Exhibit 145. Again I did not count the pages.
- 9 Finally although it was submitted in two
- 10 parts I think mainly for the graphics and the electronic
- 11 submission, there is a Federal Highway Administration
- 12 Guidance on Warning Devices, both part 1 and part 2 are
- 13 Exhibit 146 taken together.
- So those are the exhibits, I think,
- 15 Mr. Scarp, is that everything that we had extra
- 16 submitted since Mount Vernon?
- 17 MR. SCARP: That's correct, Your Honor.
- 18 JUDGE TOREM: All right, so those are at
- 19 least marked, not yet offered or admitted.
- 20 Also this morning we talked about the need
- 21 for post-hearing briefs, and just to be clear that
- 22 everyone was on the same page with what was in the
- 23 notice that went out January 14th, again two weeks from
- 24 tomorrow is the deadline for submitting post-hearing
- 25 briefs, and there's a mechanism for dates to request

- 1 within a week after if there is a need to file
- 2 supplemental briefs and any time to respond to or object
- 3 to those requests and set appropriate dates as needed.
- And hopefully by the end of the month we'll
- 5 have an idea, end of the month of February, have an idea
- 6 as to when those briefs would be coming in. Whether
- 7 there are post-hearing briefs or not, it looks like my
- 8 work schedule and some absences from the office starting
- 9 in mid April, I'm hoping to get this out before I
- 10 depart, so Friday, April the 4th I think is my last day
- in the office until late April, so I'm hoping you will
- 12 see something at the end of March or early April on this
- 13 unless it takes me a lot longer to decide than I
- 14 currently anticipate based on the briefing schedule. So
- 15 I know a lot of people, I have seen the press clippings
- 16 that say this is going to the judge and going to the
- 17 Commission and when, just so you have an idea what my
- 18 target dates will be, end of March, beginning of April,
- 19 and if it doesn't happen by then, there will be two and
- 20 a half to three weeks of dead time.
- 21 All right, anything else before we turn to
- 22 the stipulations on Mr. Smith's and Mr. Liou's
- 23 testimony?
- 24 All right, first, Albert Liou, Mr. Rogerson,
- 25 your witness submitted Exhibit 16, which was his

- 1 prefiled direct testimony, and Exhibit 17, which was his
- 2 curriculum vitae, and you have asked the parties if they
- 3 will stipulate to its admission. Are you going to offer
- 4 those at the same time?
- 5 MR. ROGERSON: That's correct, Your Honor,
- 6 the City would offer Exhibit 16, prefiled direct
- 7 testimony of Albert Liou, and Exhibit 17, Curriculum
- 8 Vitae of Albert Liou, into evidence.
- 9 JUDGE TOREM: Any party object to its
- 10 Admission?
- MR. SCARP: No.
- MR. THOMPSON: No.
- 13 JUDGE TOREM: All right, then that will be
- 14 admitted based on the parties' stipulation.
- Turn to Exhibit 77 and 78, Mr. Jones, Richard
- 16 Smith was going to turn in his testimony prefiled
- 17 direct, and Exhibit 78 was a map of the railroad siding
- 18 extension that supported his testimony, I take it you
- 19 want to offer those into evidence at this time?
- MR. JONES: Yes, I do.
- 21 JUDGE TOREM: Okay, that being done, is there
- 22 any objection to Mr. Smith's two exhibits coming in?
- MR. SCARP: No objection.
- MR. THOMPSON: No.
- JUDGE TOREM: Okay, then those are admitted

- 1 as well, and I will modify the comprehensive exhibit
- 2 list, and I will get that back out to all of you based
- 3 on these stipulations and whatever exhibits are offered
- 4 and admitted today, and we'll deal with objections to
- 5 any of those as they may come up here on the record.
- 6 All right, let me turn to where Mr. Zeinz'
- 7 testimony is, and for the record these are going to be
- 8 prefiled direct testimony Exhibit 50 and his biography
- 9 Exhibit 51 if you will get those in front of you, and
- 10 then Mr. Scarp's proposed cross-examination exhibits
- 11 that again I have numbered 139 through 146, and we'll
- 12 see how those go from here.
- 13 Mr. Zeinz, let me ask you to stand and raise
- 14 your right hand.
- 15 (Witness THOMAS R. ZEINZ was sworn.)
- JUDGE TOREM: All right, have a seat, please.
- Mr. Thompson.

- 19 Whereupon,
- THOMAS R. ZEINZ,
- 21 having been first duly sworn, was called as a witness
- 22 herein and was examined and testified as follows:

23

24

- 1 DIRECT EXAMINATION
- 2 BY MR. THOMPSON:
- 3 Q. Mr. Zeinz, would you please state your full
- 4 name and spell your last name for the record.
- 5 A. Thomas Zeinz, Z-E-I-N-Z.
- 6 Q. And did you prepare and cause to be filed the
- 7 written testimony that's premarked as Exhibit 50 and the
- 8 biography that is premarked as Exhibit 51?
- 9 A. Yes.
- 10 O. And if I were to ask you the questions set
- 11 out in your prefiled testimony today, would your answer
- 12 be the same or do you have changes?
- 13 A. I would make one change in two places.
- Q. Okay, if you would direct us to the page
- 15 where you would do that.
- 16 A. On page 7, lines 9 through 11, and on page
- 17 12, lines 10 through 12. In both cases I stated the
- 18 first instance and reference to Hickox Road or the
- 19 Hickox Road crossing and the second instance in
- 20 reference to the Blackburn Road crossing that in effect
- 21 if the State ever achieved its stated goal of 110 mile
- 22 an hour passenger operations on this line that the
- 23 Federal Railroad Administration will likely require
- 24 4-quadrant gates be installed. I would like to change
- 25 that from will likely require to could require.

- 1 Q. Okay. With those changes to your answer in
- 2 those two instances, are your answers and your attached
- 3 exhibit true and correct to the best of your knowledge?
- 4 A. Yes.
- 5 MR. THOMPSON: Your Honor, I would offer for
- 6 admission the exhibits premarked as 50 and 51.
- 7 JUDGE TOREM: All right, I understand those
- 8 are to be modified to strike on page 7, line 10, the
- 9 words, will likely, and replace them with, could, and
- 10 have a similar striking and revision on page 12, line
- 11 11; is that correct, Mr. Zeinz?
- 12 THE WITNESS: Yes.
- JUDGE TOREM: All right, with those
- 14 substitutions for his opinion as to the FHA requirements
- 15 in the future, are there any objections to the Exhibit
- 16 50 and also the biography Exhibit 51 coming in?
- MR. SCARP: No.
- 18 JUDGE TOREM: All right, then those will be
- 19 admitted.
- Mr. Scarp, cross-exam.
- MR. SCARP: Thank you, Your Honor.
- 22
- 23 CROSS-EXAMINATION
- 24 BY MR. SCARP:
- Q. Mr. Zeinz, let me ask you what the difference

- 1 is and the basis for the change in your testimony
- 2 between likely would and could?
- 3 A. A point of confusion on my part at the time.
- 4 The Federal requirement for active devices with full
- 5 barrier protection, which is kind of a euphemism for
- 6 4-quadrant gates or similar, applies to where train
- 7 speeds are higher than 110, so under the current Federal
- 8 Railroad Administration Regulations, they're technically
- 9 not required. There is as far as I know, however, only
- 10 one instance so far where passenger rail operations
- 11 above 100 miles an hour has been approved, and that's
- 12 the extension of the Northeast corridor between New York
- 13 and Boston. And in that instance, there were some
- 14 number of crossings that Federal Railroad required
- 15 4-quadrant gates with presence detection if train speeds
- 16 were going to be more than 80 miles an hour. In fact,
- 17 they prohibited train speeds in excess of 95 miles an
- 18 hour even at those crossings. So I can't say for sure
- 19 the FRA would require them, but they could, and past
- 20 history shows that they have.
- 21 Q. And would I be correct in characterizing your
- 22 change that you have articulated on the record and just
- 23 explained as being a very cautious characterization of
- 24 your testimony?
- 25 A. Yes.

- 1 O. Okay. And, in fact, it would kind of
- 2 surprise you if they didn't require that based on what
- 3 you have seen so far, if they didn't require that kind
- 4 of protection?
- 5 A. Yes, it would.
- 6 Q. All right.
- 7 Mr. Zeinz, I'm going to switch gears a little
- 8 bit. Let me ask you as a general matter, first of all I
- 9 apologize, I just introduced myself before the hearing,
- 10 my name is Bradley Scarp, and Ms. Endres and I represent
- 11 BNSF Railway, and I appreciate your coming all the way
- 12 out here, and I will try to do this as expeditiously as
- 13 possible, but I want to take you through some of the
- 14 exhibits that we have provided to prepare for your
- 15 cross-examination. And as we discussed off the record
- 16 before, part of the purpose for all these documents is
- 17 to, from our perspective, to confirm the opinions and to
- 18 kind of test the practicality, if you will, or the
- 19 factual basis for your opinions and testimony instead of
- 20 a more technical description, which is my
- 21 characterization. And so with that in mind, I'm going
- 22 to take you through those and try to do it somewhat
- 23 quickly in relation to your prefiled testimony. And I
- 24 also apologize that those exhibits aren't going to be in
- 25 the same order that they are numbered, which is our

- 1 fault.
- 2 Your opinions, Mr. Zeinz, factor in that
- 3 drivers, automobile vehicle drivers, play a significant
- 4 part in grade crossing accidents; is that accurate?
- 5 A. That's correct.
- 6 Q. And are you familiar with studies, is it part
- 7 of the analysis you do to review studies regarding
- 8 driver behavior?
- 9 A. From time to time, yes.
- 10 Q. And you have done so over the course of your
- 11 consulting practice?
- 12 A. And my career with the railroad prior to
- 13 that, yes.
- 14 Q. Would you agree that some drivers are risk
- 15 prone?
- 16 A. Yes.
- 17 Q. And in considering your analysis and opinions
- 18 regarding grade crossings, you rely on that factor of
- 19 driver, the risk associated with driver behavior?
- 20 A. I understand it exists.
- Q. Okay. And let me ask you this, could you
- 22 take driver behavior out of the equation?
- 23 A. No.
- Q. Now are you familiar with the study that was
- 25 provided, it's been premarked as Exhibit 144, and I'm

- 1 looking at the North Carolina Department of
- 2 Transportation Rail Division, it's entitled Driver
- 3 Performance and Expressed Attitudes Toward Risk as
- 4 Factors Associated with Railroad Grade Crossing
- 5 Violations.
- 6 A. I have perused that report, I can't say I'm
- 7 intimately familiar with it.
- 8 Q. It's also dated June of 1999. When did you
- 9 -- did you receive that report from counsel?
- 10 A. I downloaded it from the WUTC web site within
- 11 the last week.
- 12 Q. Okay. And when you say you perused it, was
- 13 there anything in it that you found inconsistent with
- 14 other studies that you have seen or reviewed?
- 15 A. No.
- 16 Q. Would you say that the material and the
- 17 component parts of the study are consistent with other
- 18 studies that you have reviewed, and does it support the
- 19 conclusions that you have reached in your opinions?
- 20 A. Yes.
- Q. Okay. I would like you to take a look at
- 22 page 13 if you could. The section 2 on that page
- 23 involves a section involving the perceived risk of grade
- 24 crossing incident being fatal, and it says that:
- 25 Drivers in general perceive the

- 1 likelihood of a crash between a train
- 2 and a vehicle as somewhat less than 4
- 3 chances in 10. Drivers less than chance
- 4 estimates of how often a grade crossing
- 5 crash was fatal is surprising given that
- 6 86% indicated that they correctly
- 7 perceived the force of a train when
- 8 striking a car to be the equivalent of
- 9 that of an automobile running over a
- 10 soda can.
- I would like to ask you, does that sort of
- 12 study regarding driver perceptions surprise you?
- 13 A. No, it doesn't surprise me.
- Q. Were you going to elaborate?
- 15 A. No.
- 16 Q. Okay, I just couldn't tell from your answer
- 17 if you had another thought there.
- 18 Is it safe to say that in your experience you
- 19 find that a lot of people just don't appreciate what the
- 20 likelihood of the result would be of a collision between
- 21 a vehicle and a train?
- 22 A. I think they comprehend what the likely
- 23 result could be. I think they underestimate the risk of
- 24 it occurring.
- 25 O. Okay. Meaning they're not going to get hit?

- 1 A. Right.
- Q. All right. On page 14 under the driver's
- 3 perceptions of train operations, the middle of that
- 4 paragraph, in the middle it says that:
- 5 Approximately 1 out of every 4 believe
- 6 there to be a full 60 seconds between
- 7 the time when the gates go down and the
- 8 train actually arrives.
- 9 Leaving aside that particular study and
- 10 analysis, have you found in your experience that people
- 11 have misguided or misconceptions about the timing of
- 12 gates and the arrival of passing trains?
- 13 A. Yes.
- 14 Q. And does that factor in to your analysis of
- 15 the risk and danger associated with such at-grade
- 16 crossings?
- 17 A. In a roundabout way, yes.
- 18 Q. Okay. One of the things that you mentioned
- 19 in your testimony was the particular danger posed of a
- 20 siding track, one where there is a train parked and a
- 21 vehicle potentially confusing that with another train
- 22 that might activate the warnings or confusing that
- 23 parked train as being the what activated the warnings
- 24 when in fact there is another one in route; do you
- 25 recall that in your --

- 1 A. Yes, I recall that.
- Q. And on that note, is there a similar concern
- 3 or safety problem posed by what, as this study points
- 4 out, drivers who don't perceive the full threat or risk
- 5 of a slow moving train? I didn't see that addressed in
- 6 your testimony.
- 7 A. I do know that there are a number of drivers
- 8 who perceive that the train is going to stop for them.
- 9 Q. Okay.
- 10 A. And they're often mistaken.
- 11 Q. And that takes me to lower down on that page,
- 12 it says:
- 13 14% of drivers believed it was possible
- for a fully loaded train traveling at 55
- miles an hour to come to a complete stop
- in 300 feet or less, in approximately
- 17 the same distance required for a fully
- 18 loaded tractor trailer to come to a
- 19 complete stop on dry pavement.
- 20 Do you see that?
- A. Mm-hm.
- 22 Q. Is that what you're talking about when you
- 23 say that drivers misinterpret or mistakenly believe --
- 24 A. Yes.
- 25 Q. -- that a train will stop for them?

- 1 A. Yes.
- Q. I don't want to belabor any more the
- 3 specifics, but if we are to go through, is there
- 4 anything in this study in this analysis, I think I asked
- 5 you if you disagreed with it and you said no, but do you
- 6 generally agree with me that these risk factors as
- 7 outlined in here provide essentially the same basis that
- 8 you relied upon in forming your opinions of drivers'
- 9 risky behavior?
- 10 A. Yes.
- 11 MR. SCARP: Your Honor, we would move to
- 12 admit Exhibit 144.
- MR. THOMPSON: I guess I would have, well, I
- 14 have a concern about it seems like this is not offered
- 15 as actually truly a cross-exhibit to challenge something
- 16 in Mr. Zeinz's prefiled testimony. I don't, I guess I
- 17 don't have a major problem with it in that it seems like
- 18 it's, you know, a study that I think is probably fairly
- 19 objective, and I guess I see where the railroad is going
- 20 and how they might use this in their brief. But one
- 21 thing that, one problem with this kind of friendly cross
- 22 is I don't get a chance to see what it is that they
- 23 would use this for in terms of their own testimony and
- 24 possibly cross-examine a witness as to what the point
- 25 is. So I do have some concerns about this and as well

- 1 as some other items that I think are going to be
- 2 offered, so.
- JUDGE TOREM: I will take that as an
- 4 objection to its admission.
- 5 MR. THOMPSON: Yes.
- 6 JUDGE TOREM: I will ask first if you want an
- 7 opportunity to ask the witness some more questions about
- 8 his opinion about the report, or I will do that as
- 9 needed, because I have some of my own questions about
- 10 how this work was done and what Mr. Zeinz thinks of the
- 11 statistical data gathering that is or isn't in it.
- 12 Are there any other counsel that wish to make
- 13 an objection about Exhibit 144 at this time?
- MR. ROGERSON: Your Honor, the City would
- 15 make an objection and ask for the opportunity to voir
- 16 dire the witness.
- JUDGE TOREM: All right, you get first crack.
- 18
- 19 VOIR DIRE EXAMINATION
- 20 BY MR. ROGERSON:
- 21 Q. Mr. Zeinz, did you review this as part of the
- 22 basis for your prefiled testimony?
- 23 A. No.
- Q. What is your opinion regarding the relevancy
- 25 of this report in terms of your prefiled opinions on the

- 1 safety of Hickox Road and Blackburn or Hickox Crossing
- 2 and Blackburn Crossing?
- 3 A. It substantiates my opinion that even with
- 4 the current protection or 4-quadrant gates that that
- 5 does not preclude that there could still be an accident
- 6 at that crossing.
- 7 Q. Does this study relate to drivers'
- 8 perceptions in Washington state?
- 9 A. On the face of it, no.
- 10 Q. Are there any criticisms you may have
- 11 regarding flaws or weaknesses to this study in terms of
- 12 drivers' perceptions?
- 13 A. I have not thoroughly reviewed the study
- 14 methodology or how the data was gathered, so I can not
- 15 comment on that.
- MR. ROGERSON: No further questions.
- 17 The City renews its objection, this is not
- 18 the basis of what forms the basis of the testimony of
- 19 Mr. Zeinz that was offered and admitted.
- 20 JUDGE TOREM: Any other counsel wishing to
- 21 make an objection or voir dire the witness at this time?
- 22
- EXAMINATION
- 24 BY JUDGE TOREM:
- 25 Q. Mr. Zeinz, can you look at the executive

- 1 summary on Roman Numeral page VI and VII. When I looked
- 2 at this and then started to page through the study when
- 3 it came to my attention when it was filed last week, it
- 4 appeared to me that the purpose of the study was to
- 5 figure out why people try to beat the train or run the
- 6 gates. Is that how you interpreted this study?
- 7 A. Yes. And if you wish, I could elaborate on
- 8 that.
- 9 Q. If you wish, go ahead.
- 10 A. North Carolina has a rail corridor that is
- 11 actually an extension of the Washington-Richmond line,
- 12 which is the extension of the Northeast corridor where
- 13 they have been developing higher speed passenger train
- 14 traffic. And in the portion of North Carolina, they
- 15 have adopted what they call a sealed corridor concept.
- 16 Their goal was to close, grade separate, or put
- 17 4-quadrant gates at all of the crossings on that
- 18 passenger train route. The gentleman who's in charge of
- 19 that program is a gentleman by the name of Paul Wartley
- 20 with North Carolina DOT, and I'm personally acquainted
- 21 with Mr. Wartley. After completing their sealed
- 22 corridor, they started to realize that they were still
- 23 having accidents despite the fact that all of the
- 24 crossings that remained open had 4-quadrant gates, and
- 25 this was an attempt on their part to try and determine

- 1 why is it that they were still having accidents.
- Q. Now when you look at the first sentence in
- 3 the executive summary, second paragraph, apparently
- 4 there was a questionnaire that asked the drivers to
- 5 voluntarily submit their driver history as to violations
- 6 and perhaps tendencies to speed or get infractions, and
- 7 they found that violators were overrepresented it says
- 8 here in age ranges 16 to 30 and 31 to 60, and my initial
- 9 note here says, well, who's left. And then when I
- 10 looked at the rest of the report to determine what
- 11 number of questionnaires might have been filled out in
- 12 total for statistical significance and what number of
- 13 them fell into each of these categories and I looked
- 14 back in the report, I remember the tables having a
- 15 different number like 31 to 50. And I could find that,
- 16 but I didn't see anything including the appendix that
- 17 gave me a clue as to what number of surveys were out
- 18 there, how reliable they thought the surveys might be
- 19 for selfreporting and those sorts of issues given this
- 20 broad range of drivers from age 16 to 60. With those
- 21 concerns, I wanted to know if you had any similar
- 22 concerns about the methodology of this study from the
- 23 review you have done. And if you haven't reviewed it
- 24 sufficiently, so much for me stating my concerns, and
- 25 those can be taken up by counsel later in letting me

- 1 know where to find things. And I know Ms. Endres has
- 2 some pages she might on further questions point out.
- 3 A. I did not really get into studying the study
- 4 methodology, so I really can't comment on that.
- JUDGE TOREM: Ms. Endres, was there a
- 6 particular page that you thought I, because I know I
- 7 didn't read it cover to cover, is there something that I
- 8 missed?
- 9 MS. ENDRES: Just about the number of people
- 10 who took the survey.
- JUDGE TOREM: Where is that found?
- 12 MS. ENDRES: It's at the bottom of page 3 in
- 13 the last paragraph, and I think it explains the
- 14 questioning of violators and non-violators in that last
- 15 paragraph.
- 16 JUDGE TOREM: So am I to understand that
- 17 1,127 surveys were sent out, and 137 came back, and
- 18 that's what the basis of this study is, is what how you
- 19 understand it, Ms. Endres?
- MS. ENDRES: That appears to be the case.
- 21 BY JUDGE TOREM:
- Q. And when you look at that, Mr. Zeinz, on the
- 23 bottom of page 3, is that how you would interpret this?
- 24 A. Yes.
- 25 Q. And so despite their indication they offered

- 1 free round trip tickets on Amtrak to those who completed
- 2 and returned the questionnaire, they didn't get but
- 3 about 10% or less response?
- 4 A. 11%, 12%, somewhere in that range.
- 5 Q. All right, and that may not be given how many
- 6 surveys we're all asked to take a poor response or not.
- 7 A. Unfortunately that's common in these kinds of
- 8 studies.
- JUDGE TOREM: All right, well, I don't know
- 10 how state departments of transportation could increase
- 11 their captive audiences as to who they get to take
- 12 surveys and increase it, but I just wanted to note my
- 13 concern with the validity of this. And if there is
- 14 going to be argument made if this is admitted, and I
- 15 want to give Mr. Scarp a chance to respond to the
- 16 objections that have been stated before I make a ruling,
- 17 that those questions have been raised now, at least you
- 18 know where I initially sit, and if it's to be used to
- 19 support a brief in the long run that those questions may
- 20 be or limitations may be acknowledged and points made.
- 21 Mr. Scarp, what's the, having heard my
- 22 questions and Mr. Rogerson's questions, and,
- 23 Mr. Thompson, do you have anything further?
- MR. THOMPSON: No.
- 25 JUDGE TOREM: And his objection, what else

- 1 does the railway have to offer on this?
- 2 MR. SCARP: Only that Mr. Zeinz said that he
- 3 is familiar with similar studies, and they confirm or
- 4 verify the basis of his opinions. Taken separately, the
- 5 percentages that may be represented aren't of particular
- 6 importance, and we don't intend to use them to
- 7 substantiate a likelihood or a percentage of times, you
- 8 know, that an accident may occur at Hickox Road. What
- 9 we're talking about and we're trying to give some
- 10 illustration to Mr. Zeinz' prefiled testimony and to
- 11 show that there is a basis independent, similar studies
- 12 if not the one that he -- ones that he has reviewed in
- 13 his experience with the railroad or as a consultant.
- 14 This is very similar and one that we had that shows sort
- 15 of categorically and succinctly the types of risky
- 16 behavior and which I think he has testified that they're
- 17 very consistent with his opinions. And again not unlike
- 18 the videos that were or the pictures from the videos
- 19 that were shown of the types of risky behavior that
- 20 people do, it illustrates it, it gives it something that
- 21 can be understood and appreciated as opposed to just a
- 22 statement that this is what occurs. And I don't mean to
- 23 diminish Mr. Zeinz' or anyone else's experience in that,
- 24 but there's a flesh and blood, you know, basis for this,
- 25 and that's the only purpose for which we seek to admit

- 1 it.
- JUDGE TOREM: Okay, well, as I have noted, I
- 3 have some questions about the weight of the actual
- 4 methodology and the conclusions, but despite those I do
- 5 agree with what you said, Mr. Scarp. Mr. Zeinz has said
- 6 that this is consistent, and although, Mr. Rogerson, he
- 7 didn't use this obviously in preparation for his direct
- 8 testimony, and even though it's possible that this could
- 9 have been offered by any number of the BNSF Railway
- 10 witnesses, Mr. Thompson, I will overrule those
- 11 objections. I think both of you have heard my concerns
- 12 as to weight of this exhibit. If it turns out that this
- 13 is used to your surprise, Mr. Thompson, in a way in a
- 14 brief that needs to be rebutted, there is that
- 15 opportunity we discussed earlier, and I would entertain
- 16 your request for a chance to respond, and you could
- 17 certainly confer with your witnesses and the rest as to
- 18 the appropriate way to file a responsive brief if that
- 19 proves necessary, but I will admit Exhibit 144.
- 20 MR. ROGERSON: Your Honor, I understand the
- 21 Judge's ruling, for the record, to preserve the record,
- 22 the City's objection includes the fact that any exhibit
- 23 offered for illustrative purposes is not an exhibit
- 24 offered for terms of evidence, it's not relevant to the
- 25 tendency of making a fact more or less likely, exhibits

- 1 are not evidence, they don't go back into a jury room in
- 2 trial, and as such the judge should not use this as a
- 3 determination on whether or not a statement of fact is
- 4 more or less likely and probable, and that's a part of
- 5 our objection.
- 6 JUDGE TOREM: All right, I will note that.
- 7 I'm not certain with the time that my brain has to
- 8 machinate around here in discussing it that I fully
- 9 agree, but this is offered at least to make it more
- 10 likely than not I think, Mr. Scarp.
- MR. SCARP: Yes.
- 12 JUDGE TOREM: That drivers do have risky
- 13 behavior. It's a very general proposition, but I think
- 14 that's the purpose of why this is being offered. It's
- 15 not for any specific fact, it's certainly not for any
- 16 specific driver behavior in Washington, let alone in
- 17 Skagit County. But I think the general proposition the
- 18 exhibit is being offered for does meet the rather wide
- 19 range of is this evidence or not. And the weight of
- 20 this, if I was having a jury here I may have to worry
- 21 about those concerns, I'm not, although maybe I do have
- 22 12 different personalities, only 1 of them will be
- 23 making the decision here.
- 24 All right, further questions?
- 25 MR. SCARP: Not with regard to that exhibit.

- 1 JUDGE TOREM: All right, then let's move on
- 2 to the next line of questioning.

- 4 CROSS-EXAMINATION
- 5 BY MR. SCARP:
- 6 Q. Mr. Zeinz, with regard to driver behavior in
- 7 general, and I think you mentioned that one of the
- 8 concerns if I recall correctly, or I could be wrong, are
- 9 you familiar with the notion of follow the leader gate
- 10 running?
- 11 A. Absolutely.
- 12 Q. Can you explain that?
- 13 A. Sometimes there will be a situation where the
- 14 gates are down, lights are flashing, it may or may not
- 15 be apparent that there is a train approaching the
- 16 crossing. For some reason, the first driver in a queue
- 17 decides that he or she is going to drive around the
- 18 gates, does so, gets across the crossing safely. The
- 19 person sitting behind them sees what happened, decides,
- 20 well, if they can get through, I can get through, so
- 21 they go around the gates and go across the crossing.
- 22 And the next person and the next person, and it becomes
- 23 a follow the leader. And usually if and when the train
- 24 shows up and an accident occurs, often it's not the
- 25 first car that gets hit, it's typically the second or

- 1 third or fourth car that goes through that gets hit.
- Q. And is that just simply another manner by
- 3 which drivers fail to perceive the risk; is that how you
- 4 would characterize that?
- 5 A. Yes.
- 6 Q. Okay.
- 7 I have another question about your prefiled
- 8 testimony, you talked about concerns where drivers are
- 9 familiar with the location of the crossing; do you
- 10 recall that?
- 11 A. Yes.
- 12 Q. And how does that differ from an area where
- 13 you would have a larger percentage of I will call it
- 14 transients, maybe that's the wrong term, out of the area
- 15 traffic? Let's say for example down the street here
- 16 you've got freeway off ramps and large stadiums where
- 17 people from Olympia and Cle Elum and Portland may drive
- 18 to go to a Seahawks game, I'm asking you to contrast
- 19 that if you can with a place like Hickox Road and what
- 20 it was that you meant when you talked about local area
- 21 people with familiarity.
- 22 A. Okay. I believe it's a common accident
- 23 statistic that the vast majority of accidents typically
- 24 occur, I'm talking highway accidents but this is a form
- 25 of highway accident, typically occur within 25 miles of

- 1 the driver's home or place of work. You have heard the
- 2 expression familiarity breeds contempt, and in this area
- 3 it's more like familiarity breeds complacency. If you
- 4 had a situation where people observe a certain
- 5 occurrence on a regular basis and they have done a
- 6 certain action one time and gotten away with it, there's
- 7 more of a tendency to believe that they can get away
- 8 with that same action again in the future.
- 9 Q. Kind of like running the stop sign right
- 10 there at the corner next to your house?
- 11 A. Yes.
- 12 Q. And would you in analyzing the risk posed at
- 13 a grade crossing consider higher risk when people
- 14 believe that they're very familiar or have a better
- 15 appreciation of the risk than someone else?
- 16 A. Well, I go back to the expression a little
- 17 bit of knowledge is dangerous. When people are familiar
- 18 or think they're familiar with a situation, sometimes
- 19 they make assumptions that in a situation they're not
- 20 familiar with they might not be so inclined to make the
- 21 same assumption.
- 22 Q. With regard to Hickox Road, and I want to use
- 23 the scenario whereby the crossing is not closed but left
- 24 open with some sort of protective cantilevered gates or
- 25 other devices perhaps, based on what you understand the

- 1 use of that siding and especially if there's a train in
- 2 the area close to the siding but not completely blocking
- 3 it, would you see a particular risk there?
- 4 A. Yes.
- 5 Q. Can you elaborate?
- 6 A. Again, this is only extrapolation to Hickox
- 7 Road per se, it's based on my awareness and statistics
- 8 of similar incidents and similar locations. But there
- 9 seems to be a tendency that when a train is stopped or
- 10 parked in close proximity to a crossing and the lights
- 11 are activated and the gates are deployed, the conclusion
- 12 that many drivers make is, well, that train sitting
- 13 there is the reason why the lights are active and the
- 14 gates are down. And when they see that train sitting
- 15 there for a long period of time and it's not moving,
- 16 after a while they get the notion, well, that's why
- 17 these gates are down, and he's not moving, so obviously
- 18 it should be safe for me to cross, so that's partly when
- 19 they make the decision to drive around the gates.
- Q. All right.
- 21 A. That's a fact.
- Q. You're familiar with the Hickox Road area,
- 23 and you have been there and inspected the area, the
- 24 adjacent crossing south at Stackpole and north at
- 25 Blackburn?

- 1 A. Yes.
- 2 Q. Are you familiar with the or do you have an
- 3 understanding of the amount of farm trucks, delivery
- 4 trucks, farm equipment, that do utilize that crossing?
- 5 A. Not so much from personal observation, but I
- 6 am aware of some of the other documents and evidence
- 7 that's been posted on the WUTC's web site.
- 8 Q. And you drove west of the crossing past
- 9 Mr. Boon's farm?
- 10 A. Yes.
- 11 Q. And so you would anticipate a fair amount of
- 12 farm trucks and farm equipment traversing that crossing?
- 13 A. Seasonal, but yes.
- Q. Okay. Does that play any role in your
- 15 analysis of the types of risk presented at that
- 16 crossing?
- 17 A. Not especially.
- 18 Q. Okay.
- 19 A. In rural areas it's understood that there's
- 20 going to be seasonal increases or peaks of different
- 21 kinds of traffic, but those are going to occur on the
- 22 roadway system in general in any event.
- Q. Would you agree with me that it would be
- 24 difficult to drive a truck eastbound toward the freeway
- 25 if you will from the floodplain down on the west; do you

- 1 have that in mind?
- 2 A. Okay.
- 3 Q. And toward the crossing and then to see those
- 4 lights start flashing and the gates start to come down,
- 5 would you anticipate a problem in backing up a big truck
- 6 or farm equipment?
- 7 A. Yes.
- 8 Q. And if put in that position, could you see an
- 9 increased risk or an increased threat of risky behavior
- 10 for someone that was faced with that situation?
- 11 A. Possibly, depends in part on what other
- 12 supplemental devices might be there.
- Q. Okay, let's talk about those for a minute,
- 14 and I would like you to take a look at Exhibit 139 if
- 15 you will. There's some responses to data requests, and
- 16 there's three different ones, and they have all been
- 17 premarked together as Exhibit 139. And I'm first
- 18 interested in Data Request Number 29, and our question
- 19 was:
- 20 Is it Mr. Zeinz' opinion that it's
- 21 practical to install a raised median
- 22 barrier at a crossing even if wide
- 23 trucks frequently drive at least partly
- 24 across the center line due to the width
- of the roadway?

- 1 Did you review this request and contribute to
- 2 the response?
- 3 A. Yes.
- 4 Q. Your short answer is, no, it is not. Can you
- 5 explain, whether it's using Exhibit 139 or your
- 6 rationale to explain the difficulties with medians here?
- 7 A. Well, I considered that as an option, one of
- 8 the improvements that could be made at that crossing if
- 9 the decision was made to leave it open. And my
- 10 assessment is that yes, it's an option, but I don't
- 11 think it's a very good one for a couple of reasons. And
- 12 that is that where you have particularly large
- 13 agricultural equipment, center medians or center curb
- 14 with raised delineators or something like that could
- 15 interfere with that type of equipment being able to get
- 16 across the crossing. The other thing is we were talking
- 17 about this in the context of a crossing that could be
- 18 blocked by a standing train very possibly for an
- 19 extended period of time where a vehicle that's stopped
- 20 at the crossing might decide to want to turn around and
- 21 seek another route, and I felt that these raised medians
- 22 or delineators would interfere with a vehicle's ability
- 23 to turn around so that they could seek another route.
- Q. Right.
- 25 A. So that's why I tended to discount those type

- 1 of supplemental devices as being terribly viable at this
- 2 location.
- 3 Q. Okay. In your answer there you, down at the
- 4 bottom of the response to Number 29, you say, other
- 5 strategies such as installing 4-quadrant gates. I have
- 6 a question about 4-quadrant gates specifically at the
- 7 Hickox Road crossing as a possible alternative, and I --
- 8 you just testified, and I will make sure I understand,
- 9 that your understanding if the siding project is
- 10 extended south its proposed extension, that it will go
- 11 from where it currently switches back into the main
- 12 line, which is north of Hickox, and it will extend
- 13 across Hickox in a certain considerable distance down
- 14 toward Stackpole before it joins the main line again, is
- 15 that --
- 16 A. That's correct.
- 17 Q. Okay.
- 18 A. I understand that.
- 19 Q. And your understanding regarding the length
- 20 of that siding is that longer freights will be able to
- 21 be accommodated for meet and pass, either meet and pass
- 22 or just simply passing in the same direction whether it
- 23 be passenger trains or other freights?
- 24 A. Correct.
- Q. And so your understanding is that those

- 1 freight trains could be there depending on the traffic
- 2 system an hour, two hours, whatever the situation may
- 3 be?
- 4 A. I understand that.
- 5 Q. All right. And so are you aware of any place
- 6 in Washington where 4-quadrant gates are utilized as a
- 7 barrier for, and I use the word barrier, correct me if
- 8 you have another term, are you aware of any place in
- 9 Washington where 4-quadrant gates are used as a barrier
- 10 at a crossing that is intended or would be intended to
- 11 be blocked for hours at a time?
- 12 A. No.
- 13 Q. You mentioned earlier that in like a North
- 14 Carolina high speed corridor, and I'm sure you're
- 15 familiar much more than I am of many high speed
- 16 corridors, is that primarily where you see 4-quad gates,
- 17 where trains are coming fast and they wanted to make --
- 18 they take an extra measure of precaution to make sure
- 19 that people don't engage in that risky behavior or to
- 20 preclude it?
- 21 A. Yes, the idea behind that is that in those
- 22 types of situations it's not necessarily that the risk
- 23 of accident is greater, but the potential consequences
- 24 of an accident could be considerably greater.
- 25 Q. Especially if it's passenger train?

- 1 A. Exactly.
- 2 Q. Okay.
- A. And so it's an added measure to try and
- 4 further reduce the likelihood of an accident at those
- 5 locations, particularly where there's high speed rail.
- 6 Q. All right.
- 7 Exhibit 145 is a National Transportation
- 8 Safety Board Railroad Accident Report of Bourbonnais,
- 9 Illinois, March of 1999, are you familiar with that
- 10 accident?
- 11 A. Yes, I am.
- 12 Q. Can you explain?
- 13 A. That accident occurred on my railroad.
- Q. For the record, can you give us some
- 15 background?
- 16 A. I was Public Project Manager for the Illinois
- 17 Central Railroad at the time that incident occurred, and
- 18 that incident occurred on my territory.
- 19 Q. Are you familiar with the NTSB report?
- 20 A. Yes.
- 21 Q. And did the factors laid out in this report
- 22 contribute to your opinions regarding warning devices
- 23 and safety devices as you have expressed them in this
- 24 case?
- 25 A. It is illustrative of the potential

- 1 consequences of an incident where someone who violated
- 2 the gates collided with a passenger train.
- 3 Q. And when you talk about the, my word, the
- 4 magnitude or the extent of the consequences, is that
- 5 Bourbonnais example one that you have in mind of what
- 6 happens when people cause a passenger train accident?
- 7 A. Yes.
- 8 Q. All right. What was the cause, if you will,
- 9 of that accident?
- 10 A. A semi tractor truck, flat bed truck carrying
- 11 a load of rebar, drove around the lower gates. Almost
- 12 made it across the crossing. The Amtrak train struck
- 13 the back of the truck, spilled rebar all over, the train
- 14 ran over some of the rebar on the tracks, and it
- 15 derailed the train.
- 16 O. What was the damage that occurred, and I will
- 17 -- there is an executive summary right after the index
- if it helps refresh your memory or if you know?
- 19 A. Well, I don't have a copy of the report in
- 20 front of me.
- 21 Q. Oh, I'm sorry.
- JUDGE TOREM: That's been remedied.
- Q. And I will at page 1, the synopsis --
- 24 A. I assume you're referring to the second
- 25 paragraph.

- 1 Q. With regard to the part about cause, or I was
- 2 talking about the damage, because that was the topic
- 3 that we were on and what the --
- 4 A. All right:
- 5 Both the locomotives and 11 of the 14
- 6 cars in the Amtrak derailed. The
- 7 derailed Amtrak car struck 2 freight
- 8 cars that were standing on an adjacent
- 9 siding. The accident resulted in 11
- 10 deaths and 122 people being transported
- 11 to local hospitals.
- 12 Q. From a less important but monetary
- 13 standpoint, it says the total Amtrak equipment damages
- 14 were estimated at \$14 Million, and just the damage to
- 15 the track and structures was estimated at about
- \$295,000; are those numbers that you're familiar with?
- 17 A. Yes.
- 18 Q. All right. Down below on the second
- 19 paragraph it talks about the truck driver's
- 20 inappropriate response to grade crossing warning devices
- 21 and his judgment likely impaired by fatigue that he
- 22 thought he could cross the tracks before the arrival of
- 23 the train. My question is simply, and I won't spend too
- 24 much of everyone's time further on this, did this
- 25 accident on your railroad play a part in forming your

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- 1 opinions about the importance of the safety and the
- 2 magnitude of damage that can occur if such accidents
- 3 happen?
- 4 A. Yes.
- 5 MR. SCARP: Okay, we move to admit Exhibit
- 6 145.
- 7 JUDGE TOREM: Any objections on this Exhibit
- 8 145?
- 9 MR. THOMPSON: Actually, I have no objection
- 10 to that one.

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- 12 EXAMINATION
- 13 BY JUDGE TOREM:
- 14 Q. All right, I just have one question,
- 15 Mr. Zeinz. Do you know given what you have explained to
- 16 us about your familiarity with this particular railway
- 17 if this report contains any remedial steps to prevent a
- 18 future accident that were taken at this crossing or
- 19 other crossings along that line?
- 20 A. Yes, it did, not necessarily in the -- one of
- 21 the problems the NTSB had in coming to their conclusions
- 22 in this report is they were unable to get confirmation
- 23 from the recording devices on the crossing signals when
- 24 or in fact that the gates were fully deployed, because
- 25 we didn't have that type of monitoring equipment on

- 1 those gates at the time. And their recommendation was
- 2 that in the future that such crossings include
- 3 monitoring capability so that it can be determined
- 4 exactly when the gates deploy. Beyond that, nothing
- 5 that was of any particular consequence that affected
- 6 that crossing or other crossings on that line. They did
- 7 issue a recommendation to a number of the other parties
- 8 as a result of that accident, but they didn't
- 9 particularly take issue with the fact that that crossing
- 10 only had 2-quadrant gates.
- 11 Q. So I'm looking at page 66 and 67 of the
- 12 report, which is labeled recommendations, and I see what
- 13 you mean about recommendations being made to various
- 14 bureaucracies or other groups, and the third one down
- 15 about class 1 railroads and regional railroads to
- 16 upgrade their warning systems, is that the
- 17 recommendation you're discussing?
- 18 A. Yes, that they be equipped with event
- 19 recorders, those that include crossing gates and are
- 20 equipped with event recorders capture the, by those
- 21 event recorders, the information that indicates the
- 22 position of the gates.
- Q. But there's nothing in this report or
- 24 anything that you're aware of that the railroad did to
- 25 upgrade safety devices at crossings other than the event

- 1 recording to see what happens when there already is an
- 2 accident?
- 3 A. Well, I am aware of the fact that since then,
- 4 since this report was issued, that crossing has been
- 5 closed.
- 6 Q. To the best of your knowledge, is that due to
- 7 this accident, or were there other factors?
- 8 A. I believe the fact that this incident
- 9 occurred was the major trigger behind it, but there was
- 10 another crossing approximately a mile away that was
- 11 improved, in conjunction with that improvement this
- 12 crossing was closed, is now closed.
- 13 Q. To the best of your knowledge, was there any
- 14 movement or thought to close this particular crossing
- 15 prior to the accident?
- 16 A. No.
- 17 Q. So there was none of this, I told you this
- 18 would happen, sort of mentality?
- 19 A. No.
- 20 JUDGE TOREM: Those are all the questions I
- 21 had, does that raise any additional questions in this
- 22 report or any objections to it?
- 23 All right, then Exhibit 145 is admitted.
- 24 MR. THOMPSON: I'm presuming I will have an
- 25 opportunity to do redirect on that exhibit at the end.

- JUDGE TOREM: You will, I'm sorry, I have
- 2 strayed into some redirect areas, but since we were on
- 3 this report, I've taken the liberty, what can you do.
- 4 All right, Mr. Scarp, how much longer do you
- 5 have, because we're at 10:00, and I know we have the
- 6 morning, but I want to make sure folks can take a
- 7 comfort break as needed.
- 8 MR. SCARP: I would like to think that I'm
- 9 more than half. I mean, I don't know, half hour, just
- 10 sort of depends. Based on what you have said, I can see
- 11 some places that I probably won't go.
- JUDGE TOREM: Okay, well, why don't we go
- 13 ahead and take a break for 5 minutes, let everybody else
- 14 decide where they want to go on their redirect as
- 15 needed, and when we come back, hopefully within half an
- 16 hour you will be completed with your cross, we'll take
- 17 care of any other exhibits you want to offer, and then,
- 18 Mr. Thompson, you'll have redirect and we'll see if
- 19 there's any other questions from other counsel, and I'm
- 20 hoping by around 11:00 we'll be all set. So right now,
- 21 it's almost 10 after 10:00, and we'll take a break just
- 22 for 5 minutes, we'll come back on the record promptly at
- 23 10:15.
- 24 (Recess taken.)
- JUDGE TOREM: All right, we're back on the

- 1 record, it's now 10:15, and Mr. Zeinz is still answering
- 2 questions from Mr. Scarp, and we were just discussing
- 3 off the record we have not yet admitted Exhibit 139, but
- 4 I think the reason is we have only dealt with the first
- 5 data request, Number 29, and 36 and 37, pages 2 and 3 of
- 6 that exhibit, may yet be dealt with.

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- 8 CROSS-EXAMINATION
- 9 BY MR. SCARP:
- 10 Q. Mr. Zeinz, we sort of zigzagged in issues
- 11 from 4-quadrant gates into your explanation about what
- 12 they try to -- the types of dangers that they try to
- 13 preclude, and we got into the Bourbonnais accident. The
- 14 Bourbonnais accident had what you call just regular
- 15 2-quad or is that what you refer to them?
- 16 A. Standard 2-quadrant flashing lights and
- 17 gates.
- 18 Q. Okay. Was there a consideration, do you
- 19 know, of using 4-quadrant gates after that accident?
- 20 A. Well, I don't -- there wasn't a serious
- 21 consideration. There were center delineators installed
- 22 shortly after that accident, they were ordered in by the
- 23 Illinois Commence Commission. And then within a couple
- 24 years after that when they completed improvements at the
- 25 next crossing, that crossing was closed.

- 1 Q. Okay. I notice in this drawing on page 25,
- 2 it shows that the direction of the truck -- I will wait
- 3 until you get there.
- 4 And it says, right where it says direction of
- 5 truck and the arrow points toward the cantilevered gate
- 6 it says break, do you see that?
- 7 A. Yes.
- 8 Q. Do you know what that refers to?
- 9 A. The tip of the gate arm was broken off. Now
- 10 it was unclear whether that was caused by the truck
- 11 striking it or if that was caused by the aftermath of
- 12 the train accident.
- 13 Q. Okay. It wasn't broken off prior to the
- 14 accident?
- 15 A. No.
- 16 Q. And then apparently part of the gate on the
- 17 other side was broken off, but that clearly would have
- 18 been a result of the collision. Is the damage or
- 19 breaking of gates a problem?
- 20 A. Yes.
- 21 Q. Can you clarify or elaborate what kind of a
- 22 problem it poses, how often, how they occur?
- 23 A. It's quite common for railroads to have to go
- 24 out and replace broken gate arms. Sometimes in longer
- 25 arms they can be broken by wind, but very often they can

- 1 be broken by vehicles trying to drive around the gates
- 2 or trying to drive through the gates, or a vehicle will
- 3 be going across the crossing as the gate is coming down,
- 4 and it will get caught on the vehicle say between the
- 5 cab and a trailer on a tractor trailer, and that will
- 6 cause it to break off.
- 7 Q. Tell me to the best of your ability, not
- 8 perhaps necessarily as project manager but as having
- 9 experience in the operations end, which maybe this would
- 10 go under maintenance as much as operations, but how
- 11 quickly, you know, as a rule of thumb do gates get
- 12 replaced when they're broken?
- 13 A. Well, that would depend on how quickly the
- 14 railroad gets a report of the fact that they're broken.
- 15 Q. All right.
- 16 A. But whenever we got a report of a broken
- 17 gate, we would dispatch an engineer out there as soon as
- 18 possible and get it taken care of. Typically you're
- 19 talking, you know, a couple of hours.
- 20 Q. And when you say when you get a report, what
- 21 does that mean, you may not hear about it for a while?
- 22 A. We may not know about it until generally
- 23 either another train goes through that area and reports
- 24 it or someone from the public contacts the railroad and
- 25 submits a report.

- 1 Q. Is there times when that's to your knowledge
- 2 taken days?
- 3 A. In a few instances, yes.
- 4 Q. Are trucks a pretty big problem as far as
- 5 breaking gates?
- 6 A. Yes.
- 7 Q. Okay. With regard to cantilevered gates and
- 8 including 4-quadrant gates, do you have information in
- 9 your experience that people have manually manipulated or
- 10 lifted gates?
- 11 A. I'm not sure I understand what you mean by
- 12 cantilevered gates.
- Q. Well, just plain old 2-quad gates, isn't that
- 14 what they call them when they come down, isn't that
- 15 cantilevered?
- 16 A. No.
- 17 Q. Oh, I apologize.
- 18 A. Cantilever usually refers to the overhead
- 19 structure that supports additional sets of flashing
- 20 lights on multilane highways.
- 21 Q. Okay, I apologize for that, I had a
- 22 particular crossing in mind and that term stuck.
- 23 2-quadrant gates, 4-quadrant gates, can they
- 24 in your experience be moved or lifted manually?
- 25 A. Yes, the motors that drive the gates, they

- 1 don't actually hold the gates down, they hold them up.
- 2 There's current to the gate motor holding the gate up,
- 3 and when there's a train activation, what it does is it
- 4 cuts the power to that motor, and the gate is counter
- 5 weighted, but it's counter weighted in a way that once
- 6 the power is removed, the gate will fall. And part of
- 7 that is so if you lose power to the crossing, you lose
- 8 battery to the crossing, the gates are going to fall.
- 9 Q. And that's a safety measure to make sure that
- 10 if that happens, power or if there's a failure, that
- 11 they fail in the down position?
- 12 A. Correct.
- 13 Q. Does that create a problem if you have gates
- 14 failing in the down position with regard to driver
- 15 behavior?
- 16 A. Yes.
- 17 Q. Can you explain?
- 18 A. It is not uncommon that when somebody
- 19 encounters a crossing that the gates are malfunctioning,
- 20 which means under their failsafe design they're going to
- 21 be in the down position, after they sit there for some
- 22 length of time and there's no apparent train movement
- 23 occurring, that after a period of time drivers will
- 24 start to drive around the gates.
- 25 Q. Okay. And if drivers have, let's say there

- 1 isn't a -- let's say you've got 4-quad gates, have you
- 2 ever heard of a driver propping a gate up?
- 3 A. Oh, yes.
- 4 Q. How common is that or how --
- 5 A. It's hard to say. I would say there might be
- 6 a correlation between that and between say the frequency
- 7 that there is say a malfunction at that crossing.
- 8 Q. Okay.
- 9 A. Crossings where there are common reports of,
- 10 you know, signal malfunctions, that's going to tend to
- 11 happen more often than not.
- 12 Q. Is it also common that if there's two people
- 13 in the car, the passenger will jump out and hold the
- 14 gate open while the driver --
- 15 A. I wouldn't say it's common, but I have known
- 16 it to occur.
- 17 Q. Okay. It's a risk and it's a danger?
- 18 A. Yes.
- 19 Q. Okay. Would you expect that sort of behavior
- 20 to occur if there was a long delay as opposed to just a
- 21 what I will call an ordinary crossing like a single
- 22 track crossing where you've got a -- you wouldn't have
- 23 any blocking, where you just have an approaching train?
- 24 A. Yes, there's been studies done on that, and I
- 25 believe the studies I have seen show that when the

- 1 driver has to wait more than typically about 45 seconds
- 2 is where the incidents of gate running start to
- 3 increase.
- Q. Okay, I want to ask you to take a look, if
- 5 you would, at Exhibit 141. They are the crash
- 6 statistics prepared it says through the Washington UTC
- 7 and Operation Lifesaver Crash Statistics.
- 8 A. Mm-hm.
- 9 Q. Have you reviewed this document prior to it
- 10 being submitted in this matter?
- 11 A. Quite frankly, no.
- 12 Q. Okay. And are you generally familiar with
- 13 these types of grade crossing trespass incidents or
- 14 collisions and injuries?
- 15 A. Well, I really can't say that, because I
- 16 really haven't reviewed it.
- 17 Q. Okay, so you haven't reviewed it at all?
- 18 A. No.
- 19 Q. Okay. Do you review these types of
- 20 documents, or excuse me, these types of statistics as
- 21 part of your job?
- 22 A. When I was employed as a public projects
- 23 manager, I always paid attention to crossing accident
- 24 statistics that occurred on my railroad.
- Q. Okay. Let me make sure that this was not --

- 1 you didn't review it at any time in any manner?
- 2 A. Not specifically. It just appeared to be
- 3 listings of various events, and I didn't understand the
- 4 point.
- 5 Q. Okay. Well, it was the point for that
- 6 purpose, but if you haven't read it, was just the number
- 7 of tractor trailers that are listed, the number of
- 8 commercial vehicles that are shown involved in grade
- 9 crossing accidents over the last ten years in
- 10 Washington.
- 11 Let me just ask you this, and then I will
- 12 move on from it, would you agree with me that a grade
- 13 crossing accident involving a commercial vehicle, a
- 14 tractor trailer, poses a greater risk than a passenger
- 15 car?
- 16 A. It poses a greater risk to the possibility of
- 17 causing injury or death on the train or derailing the
- 18 train.
- 19 Q. But not necessarily a greater risk to the
- 20 loss of life of the driver in the vehicle?
- 21 A. Not really, because an awful lot of those
- 22 incidents they hit the trailer, they don't hit the
- 23 tractor, and a lot of times the driver walks away. The
- 24 engineer and fireman may not, but the driver of the
- 25 vehicle walks away.

- 1 Q. And in the case of an automobile, you're
- 2 pretty much assured that the car is going to get the
- 3 worst of it like a soda pop can?
- 4 A. Right.
- 5 Q. Okay, I will move on, I won't ask to admit
- 6 the crash statistics.
- 7 Let me just ask you what problems are posed
- 8 by the entrance and exiting at 4-quad, at crossings with
- 9 4-quad gates, if you understand my question? And I'm
- 10 asking generally to move along.
- 11 A. Like I say, the purpose of 4-quadrant gates
- 12 or the addition of the exit gates really is the best way
- 13 to put it is to in effect seal the crossing to
- 14 discourage, it doesn't totally prevent, but it's to
- 15 discourage a motorist from trying to drive around the
- 16 gates and try and get across the crossing. The way they
- 17 function is that normally the exit gates there is a
- 18 delay of typically 5 to 6 seconds. This can vary based
- 19 on the number of tracks in the crossing, but it's to
- 20 allow a vehicle who has gotten past the entrance gate to
- 21 get across the crossing before the exit gate lowers. So
- 22 there's additional amount of time involved, there's a
- 23 delay between when the entrance gates come down and when
- 24 the exit gate lowers. Typically that's added to the
- 25 total warning time of the crossing. There have been

- 1 demonstrations of people who have tried to jump under
- 2 the exit gates before they go down. 4-quadrant gates
- 3 are not totally -- they're not going to solve all the
- 4 problems. They're a help, that's all.
- 5 Q. And is it -- and I guess my question is with
- 6 regard to the type of behavior that you just mimicked
- 7 with a hand gesture of people trying to get under the
- 8 exit gate before it comes down, is that a phenomena that
- 9 developed in response to the use of a 4-quadrant gate, a
- 10 driver behavior that developed in order to beat that
- 11 system?
- 12 A. Well, we've got a lot of drivers that are in
- 13 a hurry. If they approach a crossing that they're
- 14 familiar with and they know if they stop they could stop
- 15 for a long time, there's a greater tendency that they're
- 16 going to try to get across the crossing before the train
- 17 arrives. They're going to do it by whatever way they
- 18 can.
- 19 Q. Right. I want to ask you about, talk about
- 20 other signalization, and in conjunction with that I want
- 21 to get to the other crossings in the area of Hickox
- 22 Road, specifically Stackpole to the south and Blackburn
- 23 Road to the north. By the way, but before I get there I
- 24 want to ask you just so we can move through Exhibit 139,
- 25 the Data Request Number 36 is a question about driver

- 1 behavior and whether some would recognize that lights
- 2 and gates are being activated by a train that's stopped
- 3 as opposed to a second train, and your portion of your
- 4 answer down there was:
- 5 Mr. Zeinz is of the considered opinion
- and believes the preponderance of other
- 7 traffic engineers would concur that
- 8 there is also a higher likelihood of red
- 9 traffic signal violations when motorists
- 10 perceive they are being unduly delayed
- or precluded from making certain
- movements for no apparent reason.
- Now we discussed that generally earlier in
- 14 your testimony today; do you recall that?
- 15 A. Not about traffic signals.
- Q. Right, and that's -- but we talked about the
- 17 driver behavior in general with regard to being delayed
- 18 for no apparent reason?
- 19 A. Yes.
- 20 Q. Now with regard to traffic signals, what did
- 21 you mean there?
- 22 A. Drivers are not supposed to drive through red
- 23 lights, but we know it happens. It's a fact of life.
- 24 Traffic engineering where there are locations that have
- 25 been identified where those types of events occur with

- 1 frequency, engineers are always looking to try and find
- 2 strategies to try and overcome it.
- 3 Q. Is there an application --
- 4 A. If --
- 5 Q. Go ahead, is there an application that you
- 6 had in mind with regard to this case for this answer?
- 7 A. Well, one of the things that concerns me
- 8 about Blackburn is that when the lights and gates are
- 9 activated, I understand that they are supposedly
- 10 interconnected with the traffic signals, and I
- 11 understand that basically they turn all the traffic
- 12 signals red. What happens in the case that you have a
- 13 malfunction of the crossing signals at Blackburn, the
- 14 gates are going to go down, the lights on the railroad
- 15 signals are going to activate, it's going to trigger a
- 16 preemption of the traffic signals, the traffic signals
- 17 are going to be red. So you've got this whole 4-way
- 18 intersection red for no apparent reason for an extended
- 19 period of time. Sooner or later somebody's going to
- 20 start making moves through that intersection including
- 21 across the railroad irrespective of the condition of the
- 22 gates or the traffic signals. They're not going to just
- 23 sit there and wait forever.
- 24 Q. And your scenario is one where there is a
- 25 malfunction in the -- such as if the power was lost to

- 1 the gate or what type of malfunction did you have in
- 2 mind?
- A. Railroad signals are designed to be failsafe,
- 4 meaning if there's any kind of system failure, they're
- 5 designed to go to their most restrictive condition,
- 6 which in the case of lights and gates is for the lights
- 7 to flash and the gates to lower. It could be for a
- 8 variety of reasons.
- 9 Q. Okay. And your concern in that situation is
- 10 that that could occur at Blackburn both with the red
- 11 traffic signals and the railroad signals based on
- 12 whatever it is that caused the malfunction?
- 13 A. When the gates activate, it's going to send a
- 14 preemption call. At least that's the way it should be
- 15 designed to operate. I can't say for sure that's the
- 16 way it does operate. But under normal design if the
- 17 gates failed, it would send a preemption call to the
- 18 traffic signal so that the traffic signals would also go
- 19 all red.
- 20 Q. You're not aware of that having happened at
- 21 Blackburn?
- 22 A. Not personally, no.
- Q. Okay. Would that risk be present at any
- 24 crossing with those types of signals?
- 25 A. Well, it's highly unusual to have, you know,

- 1 that type of an intersection where you've got two roads
- 2 that cross each other with traffic signals right on top
- 3 of a railroad crossing. I'm not saying they don't exist
- 4 in other locations, but it's a highly unusual geometry,
- 5 so it's somewhat unique in that regard.
- 6 Q. And I saw from your prefiled testimony that
- 7 you didn't think that was the best crossing that you
- 8 have seen because of that configuration?
- 9 A. Let's say I would call it less than ideal.
- 10 Q. All right.
- 11 Data Request Number 37 asks whether you claim
- 12 that citizens or drivers have gone around the lower
- 13 gates at Blackburn crossing, and the answer is, no, not
- 14 with regard to that particular crossing, but your
- 15 concerns are related to your experience at all
- 16 crossings; is that fair?
- 17 A. Yes.
- 18 Q. Okay. And I don't think you will get any
- 19 dispute certainly from us that bad driver behavior
- 20 occurs at crossings everywhere. BNSF is certainly aware
- 21 of that.
- MR. SCARP: With that, Your Honor, I guess I
- 23 would move to admit Exhibit 139.
- 24 JUDGE TOREM: Any objection to these three
- 25 data requests being admitted?

- 1 MR. THOMPSON: No objection.
- 2 MR. ROGERSON: No objection.
- JUDGE TOREM: All right, 139 is admitted.
- 4 BY MR. SCARP:
- 5 Q. Your testimony, prefiled testimony,
- 6 Mr. Zeinz, and I'm looking at the last page, page 13,
- 7 and I will read the question:
- 8 In your opinion as between the following
- 9 alternatives, which would you deem
- 10 safer, (a) leaving Hickox Road crossing
- open but with 4-quadrant gates, or (b)
- 12 closing the Hickox Road crossing and
- diverting the traffic to Blackburn and
- 14 Stackpole crossings with, and the word
- 15 with is underlined, improvements being
- 16 made to both of these alternate
- 17 crossings?
- Your answer is:
- 19 Under those circumstances, (b) closing
- 20 the Hickox Road crossing and improving
- 21 both adjoining crossings would be safer.
- 22 Did you review the analysis or prefiled
- 23 testimony of Gary Norris in this case, the analyst
- 24 retained by the State Department of Transportation and
- 25 his traffic study?

- 1 A. Some time ago, yes, not real recently, but at
- 2 one point I did.
- 3 Q. Are you aware that he characterized the
- 4 impact or the increase in traffic to Blackburn due to
- 5 closure of Hickox, the potential closure, as
- 6 insignificant?
- 7 A. Yes.
- 8 Q. Did you accept or reject or have any
- 9 particular independent analysis of that?
- 10 A. I didn't do an independent analysis of that,
- 11 but I can understand how you would draw that conclusion.
- 12 Q. And why is that?
- 13 A. There are some number of trips that originate
- 14 let's say on Hickox Road west of the crossing that would
- 15 cross the railroad at Hickox, go up Old Highway 99, and
- 16 cross the railroad again at Blackburn to go into town.
- 17 So you've got two places along the railroad that the
- 18 same vehicle is crossing to get from somewhere to town.
- 19 If Hickox were closed, then that vehicle would have to
- 20 divert by way of Dike Road and Britt Road, and the net
- 21 result is they could get where they want to go without
- 22 having to cross the railroad at all. So not only in
- 23 that instance is it safer at Hickox, but there's one
- 24 less trip across the railroad at Blackburn. So I can
- 25 understand how by closing Hickox the peak traffic count

- 1 at the Blackburn crossing could in fact be less.
- 2 Q. The conditions that you see in response to
- 3 the question in your testimony at page 13 is
- 4 improvements to both Blackburn and Stackpole crossings;
- 5 what did you have in mind for Stackpole?
- 6 A. My recommendation would be and I understand
- 7 the petition in effect stated that part of the proposal
- 8 was to install lights and gates at Stackpole, and I
- 9 agree with that. It has been my experience over the
- 10 years that it's not good practice to close a crossing
- 11 and then divert traffic to another crossing that has a
- 12 lower level of protection than the one that's being
- 13 closed. So if you're proposing to close a crossing that
- 14 has lights and gates, to me it's just good practice that
- 15 any crossing that you're diverting that traffic to
- 16 should also have lights and gates.
- 17 Q. All right. And I want you to leave aside the
- 18 issue of whether traffic will increase or not at
- 19 Blackburn Road based on Mr. Norris's analysis, but what
- 20 improvements would you recommend at that crossing if
- 21 Hickox is closed?
- 22 A. At Blackburn?
- Q. At Blackburn.
- 24 A. Specifically one, and that is once the siding
- 25 is extended, the piece of that siding that extends north

- 1 of Blackburn based on my experience with rail operations
- 2 really serves no good purpose. There's no in my opinion
- 3 clear and compelling need to keep that piece of the
- 4 siding north of Blackburn.
- 5 Q. Can I clarify, so in other words you would
- 6 say that where that siding is used to enter or exit the
- 7 main line and that portion which is north of Blackburn,
- 8 you would want to see the track enter or exit or switch
- 9 from the main line south of Blackburn; is that right?
- 10 A. Correct.
- 11 Q. Now how much track are you talking about?
- 12 A. It's my understanding we're talking about
- 13 somewhere in the neighborhood of about 1,500 to 2,000
- 14 feet of track.
- 15 Q. Okay. And what's your understanding of what
- 16 that would do to the overall use and length of the
- 17 proposed siding?
- 18 A. It's my understanding that the proposal is to
- 19 extend the siding a sufficient distance south of
- 20 Blackburn, south of Hickox, that the longest shall we
- 21 say design train for that district would be able to be
- 22 stored on that siding south of Blackburn, which again
- 23 only reinforces my notion that the piece of the siding
- 24 that's left north of Blackburn doesn't really serve any
- 25 useful purpose.

- 1 Q. All right. And what is it about the siding
- 2 that crosses Blackburn or is north of Blackburn that
- 3 concerns you?
- 4 A. Whenever I have been on a diagnostic team or
- 5 whenever I have gone out to evaluate a crossing, and I
- 6 believe this is documented in much of the guidance
- 7 literature, the first question that should be asked is
- 8 can the crossing be closed. Now normally when we think
- 9 about crossing closure, we think about it in the context
- 10 of can the street be removed across the railroad tracks.
- 11 There's another side of that, and that is can the
- 12 railroad track be removed from the street. That's
- 13 another way to close a crossing. And if it's a multiple
- 14 track crossing and not all of the tracks can be removed
- 15 through the street, can the number of tracks through the
- 16 street be reduced. That's a form of closure, and it's
- 17 commonly accepted that the fewer the tracks you have in
- 18 a crossing, the safer that crossing is going to be.
- 19 Q. Okay.
- 20 A. The other reason is because in its current
- 21 configuration, there is a possibility, granted it may
- 22 not happen very often and I'm sure the railroad would
- 23 issue instructions to its crews and attempt to avoid it,
- 24 but there is a possibility that the Blackburn crossing
- 25 could also be blocked by a train. By removing the track

- 1 through the crossing, you remove any possibility that
- 2 the Blackburn crossing would also be blocked by a
- 3 stopped or standing train that's waiting to meet or pass
- 4 another.
- 5 Q. You have indicated in your answer and your
- 6 prefiled testimony that you consider that alternative to
- 7 be the safer of the alternatives presented?
- 8 A. Yes.
- 9 O. Which involves the closure and the
- 10 improvements at both Stackpole, closure at Hickox and
- 11 improvements at both Stackpole and Blackburn?
- 12 A. Yes.
- MR. SCARP: I think those are all the
- 14 questions I had right now, thank you, Mr. Zeinz.
- JUDGE TOREM: Mr. Thompson.
- MR. THOMPSON: Just reviewing my notes here
- 17 to see if I have anything.

18

- 19 REDIRECT EXAMINATION
- 20 BY MR. THOMPSON:
- 21 Q. Mr. Zeinz, Mr. Scarp asked you at one point
- 22 if there is any place in Washington where there are
- 23 4-quad gates used as a barrier where the crossing would
- 24 be blocked frequently, and you said no. Can you offer
- 25 an opinion as to why that is or expand on your answer a

- 1 little bit?
- 2 A. I can't speak specifically to why that is in
- 3 the state of Washington, but it's commonly accepted by
- 4 all the people in my profession from railroads, from
- 5 state highway departments, from regulatory agencies
- 6 where I have had experience, if you have a situation
- 7 where a crossing is going to be routinely blocked by a
- 8 train, generally the best practice is not to have a
- 9 crossing there at all, either try and close it or grade
- 10 separate it or something. There are a number of
- 11 corridors where 4-quadrant gates have been installed on
- 12 a number of crossings, North Carolina line sealed
- 13 corridor is one, the high speed corridor between Chicago
- 14 and St. Louis is another one. I'm not familiar of any
- 15 of those locations being locations where trains
- 16 frequently stop and hold a crossing for an extended
- 17 period of time, because it's generally been my
- 18 experience that those are the kinds of situations where
- 19 we really try to avoid having crossings.
- Q. Well, let's assume in this case that a
- 21 crossing were to remain at the Hickox location, is there
- 22 anything about a 4-quadrant gate in particular that
- 23 would make it a less attractive choice as compared with
- 24 any other type of gate or supplemental safety device?
- 25 A. There are a variety of different supplemental

- 1 devices. Again going back to, you know, a different
- 2 requirement for Federal Highway and Federal Rail and
- 3 what should be at high speed railroad crossings and
- 4 everything else we know about this crossing, definitely
- 5 some kind of supplemental safety device should be
- 6 employed in addition to the gates that are there now.
- 7 Looking at the different choices and for reasons that I
- 8 have mentioned earlier, I would think exit gates
- 9 probably is the most reasonable choice. Is that going
- 10 to guarantee that there's not going to be any incidents
- 11 at this crossing? No. But I see that as the most
- 12 viable choice at this crossing if the crossing is left
- 13 open.
- Q. What would you say to the possibility of
- 15 putting in a median barrier instead of 4-quadrant gates
- 16 but then having a turnaround removed some distance from
- 17 the crossing itself in order to allow people to still
- 18 get the benefit of the barrier but to allow people to
- 19 turn around either before getting there or to back out
- 20 into the turnaround?
- 21 A. It could be viable. I still think that the
- 22 exit gates would be a better choice, and the reason I
- 23 say that is because you would have the issue of wide
- 24 farm equipment that could have some conflicts with the
- 25 center medians, the center barriers. And some of that

- 1 equipment that would use the crossing, the farm
- 2 equipment, the truck traffic, I'm not really sure how
- 3 you would back that up, you know, to be able to turn
- 4 around. I mean you could in theory, but is a truck
- 5 driver necessarily going to see that there's a small car
- 6 stopped behind him when he goes to back up, those kinds
- 7 of things.
- 8 Q. Let's see, one last area I wanted to ask you
- 9 about was the discussion you had with Mr. Scarp about
- 10 your recommendation to remove the siding track to the
- 11 north of Blackburn or through and to the north of
- 12 Blackburn, are you aware of arguments that the railroad
- 13 has made against doing that?
- 14 A. Some, yes.
- 15 Q. Okay. And what are those, and can you
- 16 comment on them at all?
- 17 A. The two that I noted was I believe in some of
- 18 the testimony it said, well, we will assure that our
- 19 trains will be at least 50 to 100 feet away from the
- 20 crossing. From the standpoint of the motorist possibly
- 21 misbelieving that a stopped or standing train is the
- 22 reason why the lights and gates are active, stopping a
- 23 train 50 to 100 feet from the crossing really does not
- 24 address that. Now by relocating the switch south of the
- 25 crossing, first of all most railroads have design

- 1 requirements of the minimum distance that there can be
- 2 between the end of the crossing and the switch.
- 3 Typically that range is from 50 to 150 feet depending
- 4 upon the railroad. I tend to prefer the longer
- 5 distance, but whatever.
- 6 Also there are certain physical
- 7 characteristics of the geometry of the switch itself
- 8 that says it takes a certain amount of length along the
- 9 track depending upon the size of the turnout, the speed
- 10 of the trains operating through the turnout, there is a
- 11 certain length of track along the track itself where
- 12 from that point of switch before you achieve a point
- 13 where the two tracks are far enough apart that a train
- 14 stopped or standing on one is going to be clear of
- 15 another train passing on the other track. For a 20 mile
- 16 an hour siding operation, typically that's going to
- 17 require a number 15 turnout.
- The geometrics of a number 15 turnout are
- 19 from the point of switch to where you achieve the
- 20 clearance point is typically going to be in the range of
- 21 about 250 feet. If you further have a separation of say
- 22 100 to 150 feet from the end of the crossing to where
- 23 that switch begins, that means that when a train stops,
- 24 that train is going to have to be at least 350 to 400
- 25 feet from the crossing in order to be clear of another

- 1 train on the other track. To me it's forcing the trains
- 2 to be that 350 feet, 400 feet or more away from the
- 3 crossing when they stop that is what addresses or does a
- 4 better job of addressing this tendency that, oh, that
- 5 stopped train is why these signals are working, and
- 6 therefore it's okay for me to go around them.
- 7 Q. What about do you think there's any value to
- 8 the railroad in having a stretch of siding track within
- 9 which they can say accelerate to get up to the speed of
- 10 the main line before they actually enter the main line
- 11 or conversely that they can exit the main line at the
- 12 main line speed and then use that additional distance in
- 13 the siding to slow down?
- 14 A. None whatsoever, because the speed that the
- 15 train travels in the siding is dictated by the safe
- 16 speed at which they can go through the turnout, so a
- 17 train entering the siding has to reduce speed to that
- 18 turnout speed before it goes into the turnout, and a
- 19 train leaving the siding has to have the entire train
- 20 clear of that turnout and already occupying the main
- 21 track before they can resume their reacceleration at
- 22 main line speed. So by having an additional 1,500 to
- 23 2,000 feet of track there that a train has to be
- 24 traveling at essentially turnout speed or siding speed
- 25 is really causing say a southbound train that's going to

- 1 enter the siding to have to decelerate sooner, and it's
- 2 going to cause a northbound train leaving the siding to
- 3 have to wait that much longer before it can start
- 4 accelerating.
- 5 Q. Okay. And what would a typical speed limit
- 6 be at a turnout point?
- 7 A. Assuming that's in the range of a number 15
- 8 turnout, in the realm of 20 miles an hour.
- 9 Q. Which is also the speed limit on the siding
- 10 itself?
- 11 A. I don't know that for a fact, but generally
- 12 that's the way it works.
- MR. THOMPSON: Okay, thank you, that's all
- 14 the redirect I have.
- JUDGE TOREM: Any additional questions?
- MR. ROGERSON: Brief moment, Your Honor.
- 17 Your Honor, Mr. Jones will be conducting.
- 18
- 19 CROSS-EXAMINATION
- 20 BY MR. JONES:
- 21 Q. Mr. Zeinz, are you familiar with an Exhibit
- 22 106 that was a Staff data request by the UTC directed to
- 23 the City of Mount Vernon which resulted in the
- 24 production of a set of -- it was Data request Number 3,
- 25 and it has a set of traffic impacts at Blackburn Road?

- 1 I guess the question was, provide a summary of
- 2 complaints received by the City of trains blocking the
- 3 crossing at Blackburn -- South Second Street, Old
- 4 Highway 99, and then there was this -- I will show it to
- 5 you.
- 6 A. (Reading.)
- 7 MR. THOMPSON: Just for clarification, that
- 8 was in response to Data Request Number 3?
- 9 MR. JONES: That's correct.
- 10 MR. THOMPSON: Okay.
- 11 A. Okay, I don't recall previously seeing this
- 12 particular document, so I can't claim to be familiar
- 13 with it.
- MR. JONES: I will move that it be admitted
- 15 if it hasn't previously been admitted. I guess I'm not
- 16 sure.
- JUDGE TOREM: It has not been utilized or
- 18 admitted. It was not offered by Staff. It had been
- 19 intended for cross-examination of Foster Peterson and
- 20 perhaps other railway witnesses. First let me ask, is
- 21 there any objection to the City of Mount Vernon response
- 22 to Staff Data Request Number 3, it's a total of 5 pages,
- 23 it's been marked as Exhibit 106, it's being offered by
- 24 not the party who originally had it on their list, but
- 25 does the railway or Department of Transportation have

- 1 any objection to these data request responses coming
- 2 into evidence?
- 3 MR. SCARP: Well, I do, there's no foundation
- 4 on the part of this witness to -- for what purpose.
- 5 MR. THOMPSON: It was my recollection, Your
- 6 Honor, that I discussed that with Mr. Norris, and I
- 7 thought I had offered it. I specifically remember
- 8 asking him whether this is the type of information that
- 9 he looked at in his line of work, and it's my
- 10 recollection he said yes. And that would you if you
- 11 were aware of this kind of information, would you follow
- 12 up on that, I thought I had offered it on that basis.
- JUDGE TOREM: You think with Mr. Norris?
- MR. THOMPSON: Yes.
- MR. SCARP: I probably wouldn't have an
- 16 objection with regard to Mr. Norris, but I don't
- 17 remember that. I mean I can understand why there would
- 18 be some use for that in his testimony.
- 19 JUDGE TOREM: My notes, Mr. Thompson, do show
- 20 that Exhibit 106 was discussed. I don't have the
- 21 previous draft of the report, I don't remember it being
- 22 offered. It was definitely discussed though, I do have
- 23 notes about you and Exhibit 106 with Mr. Norris.
- MR. THOMPSON: Well, I would offer it at this
- 25 time.

- 1 JUDGE TOREM: Yeah, you certainly may do so,
- 2 I just want to make sure that --
- 3 MS. ENDRES: We have it checked off as
- 4 admitted.
- 5 JUDGE TOREM: Do you, it may be an error on
- 6 my part. You know, in fact it does show it's admitted
- 7 on Mr. Norris's, the fact it wasn't offered previously
- 8 is what I was referring to, so you're right. Exhibit
- 9 106 has already been admitted, Mr. Jones, so that takes
- 10 care of your purposes. Maybe what I should do is just
- 11 not make a note here under Foster Peterson that it
- 12 wasn't offered then, because that's apparently where
- 13 that notes comes from. The way this exhibit list goes,
- 14 obviously there's room for confusion, but you're right,
- 15 under witness Gary Norris 106 is indicated that it has
- 16 been offered and admitted.
- MR. SCARP: Makes sense to me.
- JUDGE TOREM: So no need to have that
- 19 reoffered and admitted. Does that satisfy the questions
- 20 you wanted to ask, Mr. Jones?
- 21 MR. JONES: No, I guess I would like to have
- 22 the witness look at the Request Number 3 and then the
- 23 data that was provided, the answer that was provided,
- 24 and ask him to consider how it might affect the opinions
- 25 that he has just expressed about Blackburn Road.

- 1 JUDGE TOREM: And the opinion about Blackburn
- 2 Road was essentially that he wants those tracks removed.
- 3 MR. JONES: Right.
- 4 JUDGE TOREM: So you're asking whether it
- 5 reinforces or undermines essentially?
- 6 MR. JONES: Yes.
- 7 JUDGE TOREM: All right, I will give you a
- 8 couple minutes, Mr. Zeinz, to do that.
- 9 THE WITNESS: May I speak with counsel?
- JUDGE TOREM: (Nodding head.)
- 11 BY MR. JONES:
- 12 Q. There are two years of reports we understand.
- 13 A. Okay.
- 14 Q. Do you follow what the data request was in
- 15 the first place?
- 16 A. Yes.
- 17 Q. Okay. And does the data that was provided by
- 18 the Mount Vernon Police Department support the
- 19 recommendations that you have made to the Administrative
- 20 Law Judge today concerning Blackburn Road and the siding
- 21 removal?
- 22 A. Well, what this appears to be is a, correct
- 23 me if I'm wrong, a police log of times that there were
- 24 reports of malfunctions of the signals at Blackburn.
- 25 Q. Right.

- 1 A. Apparently there is no specific reports of
- 2 trains stopped blocking the crossing. I really can't
- 3 comment on why the signals malfunctioned. I'm inclined
- 4 to believe though that if the crossing were simplified
- 5 by removing the second track through the crossing, it's
- 6 entirely possible that the instances of the signals
- 7 malfunctioning might be less, because it would be less
- 8 complicated circuitry.
- 9 Q. Okay. One of the factors that we have heard
- 10 testimony about in this case involves the impacts on the
- 11 Mount Vernon Christian School located west on Blackburn
- 12 Road from this intersection. Is there anything about
- 13 your appraisal of the safety of the crossing that would
- 14 either add to or subtract from the concerns that people
- 15 at the Mount Vernon Christian School have about the
- 16 effect of directing traffic, particularly traffic from
- 17 farm and agricultural equipment, past their school
- 18 because of closing the Hickox Road crossing?
- 19 A. I would have to acknowledge that during
- 20 certain times of the day and during certain times of the
- 21 year it is going to cause maybe just a little bit of
- 22 added congestion in front of the school. Beyond that, I
- 23 don't see a whole lot of additional congestion anywhere
- 24 else, but yeah, that's one of the down sides.
- 25 Q. You did observe that there's a substantial

- 1 acreage devoted to farming that lies west of the Britt
- 2 slough and along the Skagit River there on the Dike Road
- 3 when you were in the area?
- 4 A. Yes.
- 5 Q. And it would be necessary for people farming
- 6 that land to be able to get in and out of that area with
- 7 their soil preparation, planting, cultivation,
- 8 harvesting of crops?
- 9 A. Yes.
- 10 Q. So it's these seasonal uses that I just
- 11 described that would be the points of concern then as
- 12 far as adding?
- 13 A. Yes.
- 14 Q. Okay. Did your analysis consider the impact
- of Interstate 5 on the choice of closing or not closing
- 16 Hickox Road?
- 17 A. For those people west of Hickox that need to
- 18 access I-5, particularly southbound, yeah, there's going
- 19 to be adverse travel. It's not as much with going
- 20 northbound, but.
- 21 Q. Right.
- 22 A. There will be adverse travel.
- 23 Q. So you did observe that both Anderson Road,
- 24 which is a freeway access, and Hickox Road, which is a
- 25 freeway access, has no rail crossing, no way of getting

- 1 from the west side of the railroad tracks to those
- 2 freeway accesses directly as a result of the proposed
- 3 siding and crossing closure?
- 4 A. It would create some adverse travel, yes.
- 5 Q. So your analysis really isn't -- did not
- 6 attempt to weigh the public convenience that would arise
- 7 from keeping the Hickox Road open because of its
- 8 connection to Interstate 5 and the ability to cross
- 9 Interstate 5?
- 10 A. Well, I did, but not directly.
- 11 Q. Okay.
- 12 A. I mean I understand there is going to be some
- 13 added inconvenience to closing the crossing. That's a
- 14 factor whenever you close a crossing. It becomes a
- judgment as to one outweighs the other, and that's
- 16 obviously the State's call, not mine.
- 17 Q. Did you consider the impact that flooding
- 18 would have on this crossing closure or vice versa, let's
- 19 say the reduction in the capacity of the street grid to
- 20 support rapid evacuations of people and animals from the
- 21 west side of the railroad tracks to high ground, which
- 22 would be east away from the tracks?
- 23 A. Yes, I did.
- Q. Did you see Mr. Liou's testimony that was
- 25 admitted by stipulation today concerning the risk of

- 1 flooding along that portion from Division Street Bridge
- 2 all the way down to Conway?
- 3 A. I'm familiar with the portions that were
- 4 posted on the WUTC's web site.
- 5 Q. Okay. Did it appear to you that the
- 6 Burlington Northern Santa Fe track is on a substantial
- 7 fill?
- 8 A. Yes.
- 9 Q. And does that fill lie between the Skagit
- 10 River and Interstate 5?
- 11 A. Yes.
- 12 Q. And did you observe any sort of means of
- 13 water to get --
- JUDGE TOREM: Mr. Jones.
- MR. JONES: Yes.
- 16 JUDGE TOREM: I want to interrupt you for two
- 17 reasons. One, this cross is well outside the scope of
- 18 any testimony delivered today.
- MR. JONES: Right.
- 20 JUDGE TOREM: And certainly if it was within
- 21 the scope of testimony today, I would allow you to go on
- 22 for a while. So I want you to stop on that account,
- 23 because you didn't ask for separate cross-exam time for
- 24 this witness, and he wouldn't be prepared for this.
- MR. JONES: Okay.

- 1 JUDGE TOREM: But I also think that many of
- 2 the facts you're going through today are better placed
- 3 in your closing brief than to this particular witness.
- 4 I think most of those points have been made, and I
- 5 certainly understand it from the driving tour I did on
- 6 the Wednesday after the hearing, so making them again is
- 7 not doing more than extending our time today.
- 8 Within the scope of his comments today and
- 9 the cross-examination of the railway and the redirect by
- 10 UTC, do you have any more questions about those areas,
- 11 because we started with some of those clearly, but then
- 12 we got off in another direction?
- Mr. Rogerson, did you have anything else with
- 14 Mr. Jones that you wanted covered within the scope of
- 15 today's testimony?

- 17 CROSS-EXAMINATION
- 18 BY MR. ROGERSON:
- 19 Q. Mr. Zeinz, Mr. Scarp indicated and you spoke
- 20 in large measure regarding a specific event that
- 21 occurred in 1999 in which a train derailed in another
- 22 state. Are you aware of any such events that occurred
- in the state of Washington?
- 24 A. Not personally, no.
- 25 Q. And can you just generally characterize the

- 1 frequency of such events as the one that occurred in
- 2 1999 in another state?
- 3 A. Incidents like that typically get reported
- 4 every couple of years somewhere in the nation.
- 5 Q. Twice nationwide?
- 6 A. No, I'm saying about every other year there's
- 7 a report of something like that somewhere in the nation.
- 8 Q. All right, so nationwide once every two
- 9 years, is that fair to say as a general? I won't hold
- 10 you to it.
- 11 A. I mean it's not a one time occurrence in one
- 12 place. Incidents like that have reoccurred time and
- 13 time again in the country. There was another incident
- 14 I'm familiar with because I use it in classes I teach at
- 15 the University of Wisconsin of a train hitting a
- 16 gasoline tanker truck in Fort Lauderdale, Florida. So I
- 17 mean these things are -- fortunately they're not common
- 18 events, but they can and do occur.
- 19 Q. And did you weigh that frequency of such an
- 20 event when you formulated your opinion on page 7 of your
- 21 testimony that the crossing couldn't safely remain open
- 22 if 4-quadrant gates were installed, turnarounds were
- 23 provided on one or both sides of the tracks, and
- 24 Commission's crossing blockage rules were suspended or
- 25 waived at this location?

- 1 A. That I believe was given in the context of a
- 2 specific scenario that there was no other improvements
- 3 being made at the other crossings. Now in the context
- 4 of that scenario, you do the best you can if you're
- 5 going to leave it open, and I think that's the best you
- 6 can do. But does that totally eliminate all the
- 7 problems, no. And in terms of the likelihood of
- 8 something like that happening, it only takes one.
- 9 Q. You had indicated when you answered that
- 10 question the need for the public to be made aware that
- 11 the crossing could be blocked by a stopped train for
- 12 extended periods of time. Are you aware of whether or
- 13 not there is an existing signage for that effect, for
- 14 that purpose?
- 15 A. There is no specific sign specified in the
- 16 MUTCD currently. There is latitude that allows for the
- 17 use of different signage for local purposes. The MUTCD
- 18 understands it can't show every sign that would ever
- 19 conceivably want to be used anywhere, it does allow
- 20 latitude that if you had a particular situation you
- 21 could use a sign specifically for that situation.
- 22 Q. What would you recommend in the specific
- 23 instance of Hickox Crossing should it remain open, what
- 24 type of signage?
- 25 A. Without, you know, really getting into any

- 1 detail, just some form of a sign that informs people
- 2 that trains may block this crossing for an extended
- 3 period of time, and in that event they may wish to seek
- 4 an alternate route. That was the drift of what I was
- 5 trying to get at.
- 6 Q. You had a mention in your testimony that at a
- 7 minimum Blackburn for safety improvements removal of the
- 8 siding north of Blackburn would be a part of your
- 9 recommendation. You had also indicated in your
- 10 testimony that Blackburn's configuration was, I'm
- 11 struggling for the right term, I think it was unusual
- 12 geometry, and my question is would that -- is it your
- 13 opinion that removal of the siding would be sufficient
- 14 to alleviate those hazards caused by the unusual
- 15 geometry?
- 16 A. In and of itself, no. Given my preference, I
- 17 would prefer to see some additional geometric
- 18 improvements made, but that I see as something that is
- 19 really going to have to be done on its own merits. I'm
- 20 not sure that that would fall within the scope of this
- 21 proceeding. It would have to be, you know, funding
- 22 identified and designs improved and go through the
- 23 normal highway design process. Whether or not it's
- 24 justified and economical is what I'm trying to say, I
- 25 don't know. In an ideal world, yes, I would like to see

- 1 it. Is it reasonable or realistic, I don't know.
- JUDGE TOREM: Mr. Scarp, any further
- 3 questions?
- 4 We'll just take a brief pause and go off the
- 5 record.
- 6 (Recess taken.)
- 7 JUDGE TOREM: All right, after a brief break
- 8 we're back on the record.
- 9 Mr. Scarp, did you have any recross?
- 10 MR. SCARP: Just a couple of follow ups on a
- 11 couple of things that were raised.
- 12
- 13 RECROSS-EXAMINATION
- 14 BY MR. SCARP:
- 15 Q. Mr. Zeinz, you were asked to take a look at
- 16 what was previously admit as Exhibit 106 that appeared
- 17 to be a summary of reports to the police about signal
- 18 malfunctions over some period of time at Blackburn Road;
- 19 is that your understanding of that?
- 20 A. That's what I believe it to be.
- Q. You haven't seen it before?
- 22 A. No, I had not.
- Q. All right. Generally in your experience with
- 24 the railroad, are you familiar with reports of signal
- 25 malfunctions?

- 1 A. Generally, yes.
- Q. And do you know how such reports to police
- 3 are typically generated?
- 4 A. Usually calls from some member of the public.
- 5 Q. And some member of the public may have any
- 6 type of complaint about that signal malfunction or just
- 7 not working the way they want it?
- 8 A. This is true.
- 9 Q. Okay. That exhibit as you looked at it, and
- 10 I don't know that you still have it, you weren't aware
- of any verification or confirmation of what signal may
- 12 have actually malfunctioned or what action was taken?
- 13 A. As pertains to this particular crossing, no.
- Q. Okay. And in your experience, do reports of
- 15 malfunctions always translate into malfunctions?
- 16 A. Not always.
- 17 Q. Okay.
- 18 A. Not always.
- 19 Q. I want to ask you about the questions
- 20 Mr. Jones asked, to follow up on those about whether you
- 21 weighed the inconvenience, and what was the term you
- 22 used, not additional travel but?
- 23 A. Adverse travel.
- Q. Adverse travel. Is that factor common in
- 25 every grade crossing closure?

- 1 A. Yes.
- 2 Q. Do you necessarily weigh that in to an
- 3 opinion that you make or consideration?
- 4 A. Yes.
- 5 Q. Did you do so here?
- 6 A. Yes.
- 7 Q. Did you weigh safety against inconvenience in
- 8 reaching your opinions here?
- 9 A. Yes.
- 10 Q. And do you hold safety in high regard?
- 11 A. Yes, I do.
- 12 Q. You were asked by the City of Mount Vernon's
- 13 counsel about the Bourbonnais accident and the frequency
- 14 of that type of incident; do you recall that?
- 15 A. Yes.
- 16 Q. Would you characterize that as catastrophic?
- 17 A. Yes.
- 18 Q. Would you consider that kind of loss of life
- 19 and damage in that incident as about as bad as it gets?
- 20 A. Pretty close.
- 21 Q. There have been worse?
- 22 A. Yes.
- Q. Are there a varying degree of such accidents
- 24 that occur in this country and in this state far more
- 25 frequently than the once every couple of years that you

- 1 characterized the Bourbonnais accident?
- 2 A. I can't speak to this state, but nationally
- 3 yes.
- 4 Q. And included in that are almost daily grade
- 5 crossing accidents that involve loss of life?
- 6 A. Well, I hope that they're not almost daily,
- 7 but yes.
- 8 Q. All right, that was an overstatement, but far
- 9 more frequently than the railroads would like to see?
- 10 A. Far more frequently than anyone would like to
- 11 see.
- 12 O. You talked about a collision in Florida with
- 13 a train and a gasoline tanker truck; do you recall that?
- 14 A. Yes.
- 15 Q. Let me ask you this, have you ever analyzed
- or had any reason to consider the factor of what those
- 17 types of incidents, what kind of factors, excuse me,
- 18 what kind of impact that has on train crews?
- 19 A. I'm sure it must be devastating, but in terms
- 20 of how you factor, it's very difficult to quantify.
- Q. Let me ask you, did you happen to read the
- 22 Railroaders Editorial?
- 23 A. Yes.
- Q. Had you seen it before?
- 25 A. Yes.

- 1 Q. And had you seen it before this particular
- 2 involvement that was provided to you in this case?
- 3 A. Yes.
- 4 Q. And do you review it or similar documents
- 5 routinely?
- 6 A. I see things like that from time to time,
- 7 yes.
- 8 Q. How did that affect your evaluation of
- 9 overall safety, if at all?
- 10 A. In this case?
- 11 Q. Yes.
- 12 A. Like I said, it's very difficult to quantify.
- 13 I am aware of, you know, the fact that the occupants of
- 14 the motor vehicles are not the only parties that are
- 15 involved in crossing collisions, and I am aware of the
- 16 devastating effects crossing collisions have on train
- 17 crew members. I just can't tell you how that gets
- 18 factored in, because it's very subjective, it's not
- 19 something that you can quantify.
- Q. The exhibit that I'm talking about, Exhibit
- 21 143, just below the line in what would be the third to
- 22 the last paragraph, the writer, the train crew member,
- 23 says in the last sentence of that paragraph:
- 24 The reaction time was long enough to
- 25 think about some of the possibilities

- like, God, I hope that thing isn't
- 2 loaded with car batteries or Coleman
- fuel, bricks, propane bottles, et
- 4 cetera, et cetera.
- 5 Do you consider all the possibilities of the
- 6 types of cargo the trucks, not just their own fuel, but
- 7 the types of things that commercial vehicles might be
- 8 carrying and the impacts that would have?
- 9 A. If this were a crossing were located next to
- 10 a gasoline storage tank farm or next to a chemical plant
- or some, obviously that's something that you would pay
- 12 additional attention to. I operate on the assumption
- 13 that there is the likelihood of some vehicle carrying
- 14 some kind of hazardous material in virtually every
- 15 crossing, you know, even rural areas. It could be
- 16 fertilizer or ammonia nitrate or whatever, but I mean
- 17 the possibility of a hazardous vehicle collision can
- 18 occur at virtually any crossing.
- 19 Q. Would you expect there might be fuel
- 20 transported back and forth across that crossing to --
- 21 A. Fuel, fertilizer, chemicals, yes.
- MR. SCARP: Your Honor, we would move to
- 23 admit Exhibit 143 as a basis of this witness's opinions.
- 24 JUDGE TOREM: Any objections, Mr. Thompson?
- MR. THOMPSON: Well, I don't have an

- 1 objection to it to the extent that it, you know, shows
- 2 that there's a psychological effect on crew members who
- 3 are involved in collisions, but I would hope that it
- 4 wouldn't be used in brief for some other purposes.
- 5 MR. SCARP: And I would clarify also only for
- 6 the types it explains beyond -- gives foundation to this
- 7 witness's testimony about the types of materials that
- 8 would be involved and the magnitude, which goes to the
- 9 cross-examination of the City's attorney about whether,
- 10 you know, what kind of incidents we're talking about
- 11 here. That's all I have, that's the only reason.
- 12 JUDGE TOREM: Mr. Rogerson, same question as
- 13 to the illustrative purposes?
- 14 MR. ROGERSON: This is an editorial, this has
- 15 no relevance to whether or not it's more likely or not
- 16 that a collision is going to occur. As to the
- 17 psychological effects of people, the issue is public
- 18 safety, whether or not fatalities or injuries will
- 19 occur, I don't know if that extends to actually
- 20 psychological damage, I think it's marginally at best
- 21 relevant.
- JUDGE TOREM: Understood. I'm going to admit
- 23 this, but I'm going to indicate because it's editorial
- 24 and because of the nature of it that it's going to be
- 25 treated with the same weight essentially as a public

- 1 comment that might come in. A number of public comments
- 2 probably could be classified as editorials similar to
- 3 this from a different perspective. This one though at
- 4 least is relevant to this witness based on prior review,
- 5 and some of the considerations raised by this train
- 6 engineer are similar to what Mr. Zeinz says he considers
- 7 in evaluating safety at crossings, so I will admit it
- 8 here, the weight won't be particular to address your
- 9 other concerns you have stated earlier.
- 10 MR. ROGERSON: For the record I will formally
- 11 raise an objection it's unfairly prejudicial, it's full
- 12 of anecdotal information regarding emotions, I think it
- 13 would unfairly prejudice the trier of fact if this was
- 14 allowed into evidence.
- 15 JUDGE TOREM: If it was a jury trial, I might
- 16 agree with you.
- 17 MR. ROGERSON: That's fine, Your Honor.
- JUDGE TOREM: Okay.
- 19 BY MR. SCARP:
- 20 Q. Last area, Mr. Zeinz, you talked about
- 21 removal of the siding track as it exists north of
- 22 Blackburn and through that crossing, did you consider
- 23 the cost?
- 24 A. Yes.
- 25 O. And what was your estimate if you arrived at

- 1 one?
- 2 A. There could be a wide range of costs, but
- 3 that range of costs really is under the railroad's
- 4 control. We're talking about there's a switch existing,
- 5 moving a switch. We're talking about a control point
- 6 where the switch joins back into the main line, there
- 7 are signals, there's signal hardware, there's signal
- 8 housing, there are train control signals, all that would
- 9 need to be moved. If I could walk you through it, if
- 10 the railroad was to prepare an estimate on the basis of
- 11 we need to have a new control point.
- 12 O. South of Blackburn?
- 13 A. South of Blackburn. In other words, we want
- 14 to buy all new signal equipment, a new signal bungalow,
- 15 new home signals, you're probably talking in the range
- 16 of about \$100,000 to \$150,000 in material costs. If the
- 17 railroad says we need to put in a brand new switch,
- 18 okay, you're probably talking about \$50,000 in costs for
- 19 the switch, so let's say \$200,000 for material costs.
- 20 In addition to that, you've got the labor to put in the
- 21 new switch, the labor to put in the new signal equipment
- 22 and so forth. There's going to be some work involved in
- 23 modifying the signal circuitry on the existing signals
- 24 at Blackburn to eliminate the circuits for the second
- 25 track. There's going to be a cost of removing the

- 1 length of track. There's going to be a cost associated
- 2 with removing the track through the street and patching
- 3 the void in the highway. In round numbers I anticipate
- 4 the labor and additional material for all of that would
- 5 probably be in the range of about \$100,000. So you're
- 6 talking worst case scenario, and that's assuming the
- 7 railroad insists on a new switch and insists on a new
- 8 control point, of in the range of about \$300,000.
- 9 But the railroad could elect to relocate the
- 10 existing switch. As I understand, that switch was
- 11 recently replaced under the Siding Improvement Program,
- 12 so it ought to be a relatively new switch, there should
- 13 be no reason why that switch couldn't be relocated
- 14 rather than purchase a new one. The existing signal
- 15 equipment at the control point could be relocated if the
- 16 railroad chose to, so that means you don't have to spend
- 17 \$200,000 on all that new equipment and material. You
- 18 have now reduced the cost to essentially labor and
- 19 miscellaneous material, effectively \$100,000.
- The next thing is that once that's done,
- 21 you're going to have about 2,000 feet of track, rail
- 22 material, rail OTM, that's going to be able, that's
- 23 going to be salvageable and able to be reused on the
- 24 siding extension project. The value of that material,
- 25 well, the cost of new rail today is in the neighborhood

- of about \$200,000 a track mile. You've got 4/10 of a
- 2 mile of track, that's probably about \$80,000 worth of
- 3 value of that material that could be reused on the
- 4 siding extension project. That's a material salvage
- 5 credit offset to the project. Net net the whole thing
- 6 could be done for probably somewhere in the neighborhood
- 7 of about \$25,000 if the railroad chose to.
- 8 MR. SCARP: Those are all the questions I
- 9 have.
- 10 JUDGE TOREM: All right, any other questions
- 11 for this witness?
- Mr. Thompson.
- MR. THOMPSON: I do have one redirect
- 14 question.

- 16 REDIRECT EXAMINATION
- 17 BY MR. THOMPSON:
- 18 Q. Talking about the cost of removing the
- 19 siding, would there be, you talked about the costs, the
- 20 net costs under the scenario, would there be benefit,
- 21 cost benefit, you know, would there be benefits to the
- 22 railroad that you might take into consideration as well?
- 23 A. Yes. For a train, northbound train leaving
- 24 the siding, they would be able to reaccelerate to main
- 25 line speed 4/10 of a mile sooner. For a southward train

- 1 entering the siding, they could travel at main line
- 2 speed 4/10 of a mile longer before they had to start
- 3 reducing speed to go into the siding. So it would
- 4 contribute to a more efficient operation, a more
- 5 productive operation of the railroad. There are those
- 6 operating advantages, plus it would save the maintenance
- 7 on that 2,000 feet of track, plus it would save the
- 8 additional maintenance on that second crossing. So I
- 9 think there would be many advantages that would accrue
- 10 to the railroad by tearing that track out.
- 11 MR. THOMPSON: Thank you.
- 12 JUDGE TOREM: Mr. Jones.

- 14 RECROSS-EXAMINATION
- 15 BY MR. JONES:
- 16 Q. Is it clear that this change that you
- 17 proposed would not affect Stackpole, the next crossing
- 18 south?
- 19 A. No.

- 21 EXAMINATION
- 22 BY JUDGE TOREM:
- Q. No it would not, or no it's not clear?
- A. No, it would not impact Stackpole. We're
- 25 just talking about Blackburn.

- 1 Q. So again to be clear for all the counsel and
- 2 myself, the proposed I think it's 12,000 foot total
- 3 siding that's being approved could fit between
- 4 Blackburn, cross Hickox, and extend but not all the way
- 5 to Stackpole?
- 6 A. No, I'm not talking about extending the
- 7 siding further. I'm saying if the design of the siding
- 8 is such that an 8,000 foot train or 9,000 foot train,
- 9 whatever the design train is, can already fit south of
- 10 Blackburn --
- 11 Q. Then you're saying there would be no further
- 12 impact?
- 13 A. There's no further need for that track north
- 14 of Blackburn, and it would not require the track south
- 15 of Blackburn to be extended a comparable distance. It's
- 16 just getting rid of a piece of track that's no longer
- 17 needed.
- 18 JUDGE TOREM: Okay, any other questions for
- 19 this witness?
- 20 MR. SCARP: Just for clarification.
- 21
- 22 RECROSS-EXAMINATION
- 23 BY MR. SCARP:
- Q. So what you're saying is that under your
- 25 assumption that there is sufficient distance for that

- 1 design train I think you call it is going to fit on the
- 2 what we're referring to as the extended siding which is
- 3 not yet completed, then the track north is not needed
- 4 and should be removed for safety reasons?
- 5 A. Yes, that's what I'm saying.
- 6 Q. All right. And to clarify regarding
- 7 Mr. Jones' question, you are not anticipating or
- 8 considering that this is somehow going to extend this
- 9 further and impact the Stackpole crossing?
- 10 A. It might cause the overall siding extension
- 11 to be increased maybe 300, 400 feet, that's the 300 or
- 12 400 feet we were talking about earlier, the separation
- 13 between the Blackburn crossing and where the train could
- 14 stop, it might cause you to have to extend it another
- 15 300 or 400 feet, but that's not going to affect or
- 16 involve Stackpole at all.
- MR. SCARP: All right, that's all I had.
- 18 JUDGE TOREM: All right, Mr. Zeinz, thank you
- 19 very much for your testimony.
- That's all the additional evidence we're
- 21 taking in today. Let me be clear then, Exhibit 139 was
- 22 offered and admitted. Exhibit 141 was mentioned but not
- 23 offered or admitted. Exhibit 143, 144, and 145 were all
- 24 offered and admitted. Let me clarify that Exhibit 106
- 25 had been offered and had been admitted, so that is also

- 1 part of the record.
- 2 The only other items I see for today really
- 3 are just again a reminder that tomorrow really is the
- 4 deadline for submitting if you haven't done so already
- 5 those cross-exam exhibits that were brought up for the
- 6 very first time or any additional direct exam exhibits
- 7 brought up for the first time at the hearing January
- 8 7th, 8th, and 9th of this year. All the other prefiled
- 9 cross-exam exhibits are already with the Commission, all
- 10 the other prefiled direct are already there, but if
- 11 there is anything that you fail to submit by close of
- 12 business tomorrow, February 1st, it won't become part of
- 13 the record even if it had been admitted because it did
- 14 not comply with all of the submission requirements,
- 15 which again are just the original and 1 at this point,
- 16 original and 1 copy of any of these exhibits that fit
- 17 that description that were not previously filed
- 18 electronically or by hand with the Commission. Giving
- 19 me and the rest of the counsel a copy in Mount Vernon
- 20 did not meet that requirement. So double check, make
- 21 sure by close of business that the electronic copies
- 22 come in. I know there has been a flurry of activity,
- 23 but I can't say that I have babysat all the lists to
- 24 make sure they're all there, I'll leave that for you.
- 25 MR. THOMPSON: Your Honor, just one question

- 1 about the public comment and hearing exhibits 200, 201,
- 2 and 202.
- JUDGE TOREM: Yeah, my understanding is that
- 4 Exhibit 200 was all of the comments that had been
- 5 submitted previously. Most of those are already readily
- 6 available on the Commission's web site. And those that
- 7 were handed to Mr. Cupp on Monday afternoon or Tuesday
- 8 evening, January 7th or 8th, are to be compiled into one
- 9 group because they're not otherwise being submitted by
- 10 the commentors to the Commission, so Mr. Cupp had taken
- on the responsibility of combining and collating them,
- 12 and he will submit them to records hopefully by close of
- 13 business tomorrow. He and I had some exchanges of
- 14 E-mails and I thought I had given him sufficient
- 15 direction in that regard. There were some other public
- 16 comments that are coming in this week, I think
- 17 Woodmansee Construction sent in a letter, so that will
- 18 become -- I will probably have to create an Exhibit 203
- 19 for exhibits that have come in afterwards, or I may just
- 20 group that all into Exhibit 200, I haven't really
- 21 decided how to redescribe that particular comments
- 22 submitted directly to the Commission, not through the
- 23 hearing process, but they will all be reviewed and
- 24 collated at some point.
- 25 Anything else for the record today?

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All right, then I will look forward to any
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     other submissions that come in tomorrow and briefs in
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     about two weeks, and we'll see if by the end of February
     there is a need for response briefs or not.
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                Thank you, we are adjourned.
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                (Hearing adjourned at 11:45 a.m.)
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