1 BEFORE THE WASHINGTON STATE UTILITIES AND TRANSPORTATION COMMISSION 2 BNSF RAILWAY COMPANY,) 3) DOCKET NO. TR-090121 Petitioner,) 4 Volume IV) Pages 87 to 391) vs. 5 SNOHOMISH COUNTY, б Respondent.) 7 A hearing in the above matter was held on 8 March 30, 2009, from 9:15 a.m to 5:50 p.m., at 9124 -9 271st Street Northwest, Stanwood, Washington, before 10 Administrative Law Judge ADAM TOREM. 11 The parties were present as follows: THE COMMISSION, by JONATHAN THOMPSON, 12 Assistant Attorney General, 1400 South Evergreen Park Drive Southwest, Olympia, Washington 98504-0128, 13 Telephone (360) 664-1225, Fax (360) 586-5522, E-Mail jthompso@wutc.wa.gov. BNSF, by BRADLEY SCARP and KELSEY ENDRES, 14 Attorneys at Law, Montgomery Scarp MacDougall, PLLC, 15 1218 Third Avenue, Suite 2700, Seattle, Washington 98101, Telephone (206) 625-1801, Fax (206) 625-1807, 16 E-Mail brad@montgomeryscarp.com and kelsey@montgomeryscarp.com. 17 SNOHOMISH COUNTY, by JUSTIN W. KASTING, 18 Attorney at Law, Prosecuting Attorney, Civil Division, 3000 Rockefeller Avenue, 7th Floor, M/S 504, Everett, Washington 98201, Telephone (425) 388-6335, Fax (425) 19 388-6333, E-Mail jkasting@co.snohomish.wa.us. 20 LYNN F. LOGEN, 15017 Southeast 43rd Place, Bellevue, Washington 98006, Telephone (425) 641-1692, 21 E-Mail jynnludy@aol.com. 22 23 24 Joan E. Kinn, CCR, RPR 25 Court Reporter

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1 PROCEEDINGS JUDGE TOREM: It is Monday morning, March 2 3 30th, 2009, it's about 9:15 in the morning, and we've 4 taken care of a number of off the record housekeeping 5 issues this morning. This is again Docket TR-090121. We're going to hear from Burlington Northern Santa Fe's б 7 witnesses this morning first, and if the first witness, 8 Mr. Rick Wagner, can come up and take a seat, we'll get 9 started with his testimony. 10 This morning's proceedings are going to have 11 the BNSF witnesses, then the one witness from UTC 12 Commission Staff, and then Mr. Logen will present his 13 exhibits and then take the stand for his own testimony. Apparently the SEPA issues we talked about last Thursday 14 15 will be addressed by a witness, and if we get done this 16 afternoon we'll talk about after lunch sometime a 17 deadline for post hearing briefs that take into account 18 that date. 19 Just for the record we are at the Stanwood Public Utilities District building, and we'll be here 20 this evening as well for the public comment hearing 21 that's scheduled to begin I believe at 6:00 p.m. 22 23 All right, let me swear in Mr. Wagner, if 24 you'll stand and raise your right hand.

25 (Witness RICHARD W. WAGNER was sworn.)

1 JUDGE TOREM: All right, take a seat and state your first and last name and spell it for the 2 3 record. 4 THE WITNESS: Richard W. Wagner, I go by 5 Rick. MR. SCARP: May I? б 7 JUDGE TOREM: You may, please. 8 9 Whereupon, 10 RICHARD W. WAGNER, having been first duly sworn, was called as a witness 11 12 herein and was examined and testified as follows: 13 14 DIRECT EXAMINATION BY MR. SCARP: 15 16 Q. Good morning, Mr. Wagner. Can you just tell 17 us what is your position, and for whom do you work, and 18 what do you do? 19 I'm employed by BNSF Railway Company. Α. 20 In what capacity? Q. 21 Α. As a Project Engineer, which is more or less a project manager. 22 23 Q. And with regard to the project, the siding 24 extension project in Stanwood, are you involved with 25 that project?

Yes, sir. 1 Α. And is the petition to close the at-grade 2 Ο. 3 crossing at Logen Road part of that project? 4 Α. Yes, sir. 5 Mr. Wagner, I've put before you there what I Ο. believe has been marked as Exhibit 1 to this hearing, б 7 and that's the petition for closure of a highway rail grade crossing. Do you have that? 8 Yes, sir. 9 Α. 10 Ο. The contact person at the bottom is Megan 11 McIntyre, can you tell us who that is? 12 Α. Yes, Megan was the Manager of Public Projects 13 at the time that this was filed, and at this time I've 14 taken over her projects as well, in lieu of a formal 15 promotion into that position, but. 16 Q. In short, does that mean that you're now in 17 charge of this project? 18 Α. Yes, sir. 19 Are you familiar with what's contained in Ο. 20 Exhibit 1? 21 Α. Yes. 22 Okay. And did you participate in any way in Q. 23 collecting the information? 24 Α. Oh, yes, sir. 25 MR. SCARP: Your Honor, we would move to

1 admit Exhibit 1.

2	JUDGE TOREM: All right, Exhibit 1 again for
3	the record is the petition for closure, I have that as a
4	total of 13 pages, and this is the document that started
5	this proceeding back on the 22nd of January. Are there
б	any objections to Exhibit 1?
7	Hearing none, that will be admitted.
8	And just for the record, I've also premarked
9	the response of Snohomish County dated 26 January, 2009,
10	waiving the right to this hearing as Exhibit 2. This
11	would be an appropriate time I think to have
12	Mr. Kasting, do you still want to offer that into
13	evidence as the County's position?
14	MR. KASTING: Yes, that's correct.
15	JUDGE TOREM: So are there any objections to
16	that being admitted at this time?
17	So Exhibit 2 will also be admitted showing
18	the County waived its right to the hearing, and there's
19	a form that they filled out that's enclosed within
20	Exhibit 1, I think it's labeled as page 6 of Exhibit 1.
21	So Exhibit 2 will be admitted as well.
22	Mr. Scarp, go ahead.
23	MR. SCARP: Thank you, Your Honor.
24	BY MR. SCARP:
25	Q. Can you just tell us a little bit,

1 Mr. Wagner, about what the siding project that's -- is it called the siding extension project? 2 3 Α. Yes. 4 Ο. What's its purpose? 5 Α. Its purpose is to extend the siding to what б BNSF -- to a BNSF standard for use of parking freight 7 trains in the clear, and their current standard is 8,500 8 feet. 9 Q. Okay. And what's the reason for doing so, 10 what is resolved or what issues are taken care of by 11 doing that? 12 Α. To be able to meet or pass other trains, have 13 a place to park a train so another train can proceed on 14 through. 15 Q. Okay. 16 Α. And in this instance, it is -- well, never 17 mind, I'll stop there. 18 Ο. Okay. What kind of train traffic does this area have, what kind of rail traffic? 19 20 Freight, freight mainly from, it can come Α. 21 from all parts of the country, but between Seattle and 22 Vancouver, BC. 23 And how many freight trains do you have here? Q. 24 Α. Currently right now between 8 and 10 a day, but due to market conditions it's down from I think as 25

1 many as 15.

2 All right. And is there an anticipation at 0. 3 BNSF that this will increase, the traffic? 4 Α. Yes. But there's also 4 Amtrak trains as 5 well that travel between Seattle and Vancouver, BC. б Q. Is there an anticipation of an increase in 7 the passenger rail traffic? 8 Α. That's certainly a possibility. 9 Q. Okay. 10 We've already increased it. There was, as I Α. 11 recall, there was just one, and we have allowed the 12 second train in lieu of the upgrades that come under the 13 program that BNSF and WSDOT are involved in right now. 14 Q. Okay. 15 Α. To increase commuter rail. 16 Q. All right. Tell me, do you know what the 17 speed limits are on the track as you approach the or at 18 the crossing where Logen Road is, do you know what the 19 speed limits of those trains are? 20 Α. 79 miles per hour for commuter or for 21 passenger trains and 60 miles an hour for freight. 22 Is that information contained in Exhibit 1? Ο. 23 I believe so. Yes, sir, it is, I'm certain Α. 24 of it. 25 All right, at page 3. Q.

1 How do passenger trains and freight trains interact, if you will, are they scheduled? 2 3 Α. Well, the passenger trains are scheduled. 4 The freight trains are not because they -- there's 5 different classifications of freight trains. Z train is б your hottest priority, and those have priority on a par 7 of passenger. 8 Ο. Okay. So how does this work with sidings and 9 things like that with those two different types of rail 10 traffic? 11 Α. Well, the -- obviously because of the speed 12 of the passenger, they can overtake a freight, and so 13 you need to have areas that you can pull the freight trains off of the main line and allow the passenger 14 15 trains to pass, either oncoming or overtaking. 16 Q. Okay. Now the State of Washington through the Department of Transportation is involved in this 17 18 siding project? 19 Α. Yes. And can you just briefly just summarize what 20 Ο. 21 was their involvement? They -- this project is mitigation of the 22 Α. added additional Amtrak traffic. 23 24 Q. Okay. 25 That is their only role in this project. Α.

1 ο. And is this siding project, how, if at all, is it related to the new terminus here for Amtrak? 2 3 Α. Well, you'll have an Amtrak train stopping. 4 This is also a meet-pass area. Folks who live here 5 would notice that shortly after one comes, another one б comes, another one passes through. 7 Ο. Meet-pass means? 8 Α. Well, that you have them coming from both directions on the track. 9 10 Okay. Now when the siding project is Q. 11 extended north from its -- first off, where does it --12 how long is it right now going north out of Stanwood, 13 how far does it extend? I believe it's 6,800 feet, but that's not 14 Α. 15 usable distance. I think there's only 4,800 feet that's 16 usable where you can park a train. 17 In order for another one to pass? 0. 18 Α. In order for another one to pass, yeah. And you indicated before something about 19 Ο. standard of 8,500 feet, can you just briefly explain 20 21 that? Well, that's the BNSF standard, because now 22 Α. 23 trains, coal trains, grain trains, they can be as long 24 as that due to technology and other aspects of the industry that can now -- they can handle that. They can 25

actually -- there's actually trains that are longer than 1 2 that. 3 Ο. Okay. But in this corridor 8,500 is the 4 standard? 5 8,500 feet allows you to park an 8,000 foot Α. train in there. б 7 Ο. All right. JUDGE TOREM: Mr. Scarp, can you clarify, is 8 that 8,500 total feet or usable feet? 9 10 THE WITNESS: That's usable feet. 11 JUDGE TOREM: So the siding itself may have 12 to be longer than 8,500 feet? 13 THE WITNESS: Yeah, sure, depending on what obstructions there may be, crossings, sidings. And by 14 15 crossing I mean a public crossing. 16 BY MR. SCARP: 17 And that takes us to the Logen Road crossing Ο. 18 which currently is a public crossing; is that correct? 19 Α. Yes. 20 And when you say obstructions such as public Q. 21 crossings, what does that mean in terms of the 22 engineering of the siding project? 23 Α. Well, if we -- we're limited to the amount of 24 time that we can block the siding, and we could block 25 the siding without -- I guess we could theoretically

1 block the siding without really blocking it, but trains, locomotives, are supposed to stop within 200 feet of a 2 3 crossing for sight clearance and for them to have sight 4 clearance as well. 5 Ο. Okay. And so the siding extension on this project is going to go through Logen Road? б 7 Α. Yes. 8 Ο. Okay. And does that mean that trains will block the siding for longer periods of time, or can you 9 10 explain that? Sure they could, it could be hours. 11 Α. 12 Ο. And why is that? 13 Α. As the needs of the operation dictate or if you're waiting to move a series of higher level trains, 14 15 you know, higher rated trains through. 16 Q. Okay. 17 Α. It could be passenger trains, could be higher 18 rated freight trains. 19 Okay. And so your testimony is that the Ο. 20 siding could be occupied by a train for hours? 21 Α. Yes. 22 Okay. And is that part of the reason why Ο. 23 there's a petition to close that crossing? 24 Α. Yes, that would be one. 25 Q. Okay. What else?

1	A. And the safety effects of that as well.
2	Q. All right, I think there's some other
3	witnesses that are going to get into that.
4	A. Yes.
5	Q. So I won't take you too far down that.
6	A. Yes.
7	MR. SCARP: Your Honor, I would like to hand
8	the witness what we've a portion of the responses to
9	Data Request Number 18. And just for the record there
10	is a timetable, BNSF timetable, contained in response to
11	the data request, and that is about the fifth page of
12	Exhibit 2.
13	BY MR. SCARP:
14	Q. Mr. Wagner, if you look at the first page of
15	the responses to the data request from Mr. Logen, and
16	that would be Request Number 18, did you provide
17	information to respond to Request Number 18?
18	A. Yes, sir.
19	Q. And did you provide your attorneys with a
20	copy of the timetable for this area?
21	A. I believe that actually that because we were
22	in transition at the time, Megan and I, that Megan might
23	have supplied it.
24	Q. All right.
25	A. But I was aware of it.

1 Ο. Fair enough. And are you familiar with the 2 timetable --3 Α. Yes, sir. 4 Ο. -- for Northwest Division Number 3, and this is dated April 26, 2006 --5 б Α. Yes, sir. 7 Ο. And does this confirm what you testified to 8 earlier regarding the train speeds that are allowable on this track? 9 10 Α. Yes, sir. MR. SCARP: Your Honor, we would move to 11 12 admit Exhibit 2. 13 JUDGE TOREM: That's Exhibit 3 actually. 14 MR. SCARP Oh, I'm sorry, 3. 15 JUDGE TOREM: I snuck in the other Snohomish 16 County exhibit ahead of it. 17 So Exhibit 3 by my count has a total of 8 18 pages and consists of a cover page with a response to 19 Mr. Logen's Data Request Number 18. Mr. Scarp or 20 Ms. Endres, whoever can best describe this, is this the 21 entirety of the response to the data request? 22 MS. ENDRES: I believe that the data request 23 had portions of the timetable that apply to other 24 divisions in Bellingham, so in the interest of saving 25 trees we didn't attach those portions for this.

1 JUDGE TOREM: All right, so the timetable portion has been cut down for the purposes of this 2 3 witness and the focus on this geographical location? 4 MS. ENDRES: Yes. 5 JUDGE TOREM: All right, so 8 pages, any 6 objections to its admission? 7 All right, hearing none, then Exhibit 3 will 8 be admitted. MR. SCARP: And, Your Honor, my apologies for 9 10 referring throughout to Exhibit 2 and meaning Exhibit 3. 11 JUDGE TOREM: That's fine. 12 All right, and you've handed me another 13 schematic I believe as a separate exhibit. 14 MR. SCARP: I have, Your Honor. BY MR. SCARP: 15 16 Q. Mr. Wagner, what's I believe been marked as 17 Exhibit 4, can you just tell us what that document is? 18 Α. That's what we call a signature schematic, 19 which usually there's different iterations as you move 20 through a project, and different levels of authority 21 within the company will review this and possibly make comments. It's very similar to track charts that we 22 23 have. As a matter of fact, it's almost identical to it, 24 but there's more detail in it.

25 Q. All right.

1 Α. This indicates the entire project. Okay. And do you utilize this document in 2 Ο. 3 your work on this project? 4 Α. Oh, yes. 5 Ο. Okay. This shows a lineal configuration, and 6 when I say that it means sort of straight, if you will. 7 Is there a purpose that I'm looking at vertical lines 8 instead of curved lines, or I guess my question is, out 9 there if you look at the board up there, it shows a 10 curve in the track and things like that. Here we're looking at vertical lines, why is that? 11 12 Α. Well, if you look just down from the top, 13 you'll see that there's also curve data on this schematic. About the third line down you'll see some 14 15 red alphanumeric characters there. 16 Okay, what does that signify? Q. 17 It signifies that there is a curve right Α. 18 within -- right within -- Logen Road sits right in the 19 middle of a curve. 20 And just if you can assist us, it shows up Ο. 21 there, where is Logen Road with relation to the tracks? 22 Just if you look along the top right below Α. 23 where it says line segment 50, you will see 55, 56, 57, 24 58, 59, those are mileposts, railroad mileposts. 25 Q. Mm-hm.

1	A. Probably also something you should know is
2	that a railroad milepost is not necessarily a mile,
3	5,280 feet, it can be a little short, a little long.
4	But right at 57 if you just move back 2 hatch marks
5	there along the milepost, you'll see Logen Road. Logen
б	Road is in green.
7	Q. All right. And so for purposes of this
8	schematic, that's where Logen Road is in terms of the
9	project schematic?
10	A. Yes, about 56.8.
11	Q. Okay. Mr. Wagner, does this what does
12	this tell us about the overall length of the siding
13	extension project, and what is that length?
14	A. The length is roughly I think it's 14,400
15	feet of the entire buildout.
16	Q. Okay.
17	A. That includes the existing siding and the
18	extension that we are building.
19	Q. Okay. Now if I'm looking at if I'm
20	looking at this Exhibit 4 so that down at the bottom it
21	says BNSF Railway Stanwood siding extension, if I'm
22	looking to my left, we're going south toward Stanwood
23	and it shows where the Amtrak station is?
24	A. Yes, the little red square there.
25	Q. All right.

1 A. The little red square, or rectangle, excuse me, at 271st, which is roughly milepost 55. I think they 2 3 have it 4. 4 ο. All right. And then at I think you said 5 approximately milepost 56.8 is where the crossing is for 6 Logen Road? 7 Α. Yeah, I need to correct myself, it's actually 56.9. 8 Okay, let the record so reflect. 9 Q. 10 Now going north, just can you briefly summarize what is the project, and I know there's an 11 12 Amtrak pocket, what's up there and where is that? 13 Α. Okay, so right between the public crossing at 14 102nd and between 300th Street --15 Q. And can you just tell us where those 16 crossings are? If you need to reference a milepost, 17 that's fine. 18 Α. Oh, okay, I'm sorry. At 55, well, let me put 19 my -- roughly 55.5 for 300th Street. 20 Q. 55? 21 Α. Excuse me, 57.5. 22 Q. Okay. 23 Α. And --24 Q. It says 300th Street right on there in black 25 lettering?

1 Α. Yes, it does. Okay. And that's north of Logen Road? 2 Ο. 3 Α. That's correct. 4 And then a little further north at 57.993 is 5 the 102nd Street crossing. Okay. And those are both existing public б Ο. 7 crossings? Yes, sir. 8 Α. Where is the so-called Amtrak pocket? 9 Ο. 10 In between the two of them in what in Α. railroad is called a tangent, which is a straight track. 11 12 Ο. Okay. And what's the function or the 13 intention of that part of the siding? 14 Α. Well, the Amtrak trains are shorter, don't 15 require the length that the freight does. 16 Q. What do they require? Α. 17 Well, right now my understanding is the 18 length is right around 800 feet, 900 feet, and certainly 19 I suppose that could change. But there's 1,203 proposed 20 feet capacity of the one that we have designed for 21 there. That's the needed capacity for -- that gives us the capacity to park a current standard length of Amtrak 22 23 train there. 24 Q. And why do you need a pocket there? 25 Well, because once again as I said earlier, Α.

1 that's an area where there is a meet-pass, so if you have a station and you have to stop an Amtrak train 2 3 there while you have another one coming, that gives him 4 a place to sit while the other one is offloading at the 5 station. б Q. Okay. 7 Α. And then that one can, you know. 8 Ο. Now the freight trains, however, would they 9 be using that pocket to stop and to wait? 10 No, it's not long enough. I suppose if you Α. 11 -- I mean anything's possible. 12 Ο. But I mean if you had an 8,500 foot --13 Α. Oh, no, no, there's no, yeah. But if you had one or two cars or --14 Ο. 15 Α. Yes, if you had a local, a short local there, 16 what's called a local train, which is one that goes out 17 and picks up industry cars. 18 Q. Okay, but when we're talking about a freight train for purposes of these questions, we're talking 19 about a full sized freight train, they would park using 20 21 this schematic where? 22 They would park to the south, and to the Α. 23 south would be below between 300th and roughly 271st 24 Street. 25 Okay. So when we look on this at the 300th Ο.

1 Street crossing, we're someplace about milepost 57.4 or 2 5, right in there? 3 Α. That's correct. 4 Ο. And then to the left or south towards Stanwood down somewhere would it be short of 271st? 5 Oh, yeah, it has to be short of 271st, б Α. 7 because we have an industry track there that goes to Wolf Kill Industry. 8 9 Q. Okay. 10 Α. Which is a feed --11 ο. Feed location? 12 Α. Yes. 13 Q. All right. And so that's where you'd park the freight trains, and that would block Logen Road; is 14 15 that correct? 16 Α. Yes. 17 Q. Okay. How often could you expect freight 18 trains to block Logen Road? 19 I would say probably every time that one Α. 20 would go into the siding and had to hold. 21 Q. And is there a range of time that you expect, you said a couple of hours, is that always or sometimes? 22 23 Α. Well, I suppose if there was an incident 24 somewhere, you could have -- it could sit there for much 25 longer as well.

1	Q. What do you mean by an incident?
2	A. Well, if you had a derailment, if you had
3	some kind of a failure with the track, mechanical,
4	something that needed to be repaired.
5	Q. All right.
6	Is there a question at the location of Logen
7	Road regarding sight distance at that crossing?
8	A. Well, it's in the middle of a curve, and so
9	your sight distance is reduced. I mean in the instances
10	when we've been up there doing preliminary construction
11	research, we as a rule use a flagman for protection,
12	because there's not enough sight visibility up there,
13	it's not a safe condition if you're working along, if
14	you're walking along the track there.
15	Q. Okay.
16	A. So in order to be safe and operate within,
17	you know, company rules.
18	Q. Okay.
19	MR. SCARP: Your Honor, we would move to
20	admit Exhibit 4.
21	JUDGE TOREM: Are there any objections to
22	Exhibit 4?
23	I have a few questions before I admit it.
24	
25	

1 EXAMINATION 2 BY JUDGE TOREM: 3 Q. Mr. Wagner, what you've said is Logen Road 4 crossing --5 Α. Yes. -- is that the one labeled here as 292nd б Ο. 7 Street Northwest? 8 Α. Yes, sir. That's the County's name for the street. 9 10 Q. And so the intended parking on the siding for an Amtrak would be to the north of that between 300th 11 Street and 102nd; is that correct? 12 13 Α. That's correct. 14 Q. And that's where it says the capacity is 15 1,203 feet? 16 Α. Yes, sir. 17 Q. So that portion of the siding, does it exist 18 today? 19 Α. Oh, no. 20 So that portion of the siding would be built Ο. 21 as part of the project as well? 22 Α. Yes. 23 And the portion to be built intended for the Q. 24 freight trains of greater length would be used going 25 south from 300th Street perhaps as far as what looks

0028 1 like the crossing near the Amtrak station at 271st? 2 Yes, if you look at milepost 55.58, there's a Α. 3 number 11 turnout siding. 4 Ο. I see it. 5 Α. Okay. So we would need to stop -- I believe the -- we have to stop within 50 feet of that turnout. б 7 We can't block the turnout. 8 Ο. All right, so there would be 50 feet after 9 that turnout, and going northbound would be the 10 beginning of the usable siding? Yes. And then no closer than 250 feet of 11 Α. 12 300th Street would be as far north as we could go. 13 Q. And so the crossings to be blocked would be Logen Road or 292nd Street Northwest and a private 14 15 crossing that appears as well? 16 Α. Yes, sir. 17 JUDGE TOREM: All right, I believe I 18 understand how this document works then. Are there any 19 objections to its admission? 20 Hearing and seeing none, then Exhibit 4 is 21 admitted. 22 Mr. Scarp, go ahead. 23 MR. SCARP: Thank you, Your Honor. And I 24 want to apologize, we've taken a little longer with this 25 witness than I anticipated, but I thought that questions

0029 1 relating to this project should be clarified for the 2 benefit of subsequent witnesses. 3 4 DIRECT EXAMINATION 5 BY MR. SCARP: б Q. Mr. Wagner, how far is Dettling Road, is that 7 another name for 300th? Yes, sir. 8 Α. 9 Q. And is there a -- as part of the siding 10 extension, is there a plan first off for closure of 11 Logen Road? 12 Α. I'm sorry? 13 Q. Sorry, I was confusing. 14 First off, is the petition to close Logen 15 Road part of the overall plan for the project, the 16 siding project extension? 17 Α. Yes. 18 Ο. And is there also a plan for any upgrades or 19 any work on the other crossings, adjacent crossings? 20 Α. Yes, at 300th/Dettling as well as at 102nd. 21 Q. Which is north of 300th? 22 Yes. Α. And then back at 271st here in Stanwood. 23 24 Q. Okay. Can you just tell us what are the, to 25 the best of your knowledge and understanding as part of

1 -- as project engineer, what are those upgrades to the two crossings to the north? 2 3 Α. Well --4 Ο. The north of Logen? 5 Α. To the north of Logen, to the north there's 6 going to be some improvements to the approaches on 7 either side. Because as we add the new main on the 8 outside, on the west side, that changes the geometry of 9 the approaches. So your grades that bring you up to the 10 level to make the crossing need to be adjusted, as well 11 as the signals will need to be relocated, crossing arms, 12 that sort of thing. 13 Q. Those crossings have active warning devices? 14 Α. Yes, sir. 15 Ο. And are they expected to continue to have 16 active warning devices? 17 Α. Oh, yes, yes. 18 Ο. And that's flashing lights and gate arms? 19 Yes, sir. Α. 20 Q. Bells? 21 Α. Yes. 22 All right. Those crossings are not intended Q. 23 to be blocked by parked trains that would use the siding 24 that is going --25 Α. No.

1	
1	Q. All right.
2	Where's the site plan?
3	Could you just
4	JUDGE TOREM: Mr. Scarp, I have three
5	different one page exhibits, two are labeled site plans
6	and one's for Logan Way and 292nd, one's for 300th
7	Street Southwest at the Old Pacific Highway, and then
8	there's another street closure exhibit for the siding
9	extension.
10	MR. SCARP: Which are all part of Exhibit 1.
11	JUDGE TOREM: Are they all contained in
12	Exhibit 1?
13	MR. SCARP: At least two of them are.
14	BY MR. SCARP:
15	Q. Looking at, Mr. Wagner, the photographs, the
16	color copy photographs that are part of Exhibit 1 that
17	you have there, can you tell us, they both say site
18	plan, one's for it says Logen Way, and it's misspelled,
19	at 292nd Street, and the other is for 300th Street at
20	Old Pacific Highway, can you just tell us what those,
21	what do those site plans signify?
22	A. It just shows a proposed scheme for a
23	turnaround.
24	Q. And tell us what is the scheme for
25	turnaround?

1 Α. Well, for Logen Road it would be a cul-de-sac expansion of the, you know, buildout, build an area that 2 3 -- where a vehicle can turn around. 4 ο. Okay. And is that indicated by the white 5 line that's sort of curved, it shows a what I think is a б car, and then right near where that vehicle is begins a 7 curved white line, is that to signify what the intended 8 cul-de-sac --9 Α. Yes. 10 Q. Okay. 11 Mr. Wagner, and is that cul-de-sac, is that 12 part of the mitigation of the road closure? 13 Α. Yes. 14 Okay. That is the -- are the upgrades at Ο. 15 Dettling or 300th and also at 102nd, is that part of the 16 mitigation? 17 Α. Yes. 18 Ο. All right. 19 Mr. Wagner, last thing I want to talk to you 20 about because there have been questions regarding the 21 environmental review or the SEPA review, can you tell me are you familiar with SEPA review as it relates to 22 23 projects that you're involved in? 24 Α. Yes, sir. 25 And can you tell us, what is the status of Q.

1 that right now as concerns the siding extension project 2 and to the extent it affects the petition for closure? 3 Α. Well, the lead agency will be DOE. 4 Ο. DOE, is that Department of Ecology? 5 Yes, sir. Α. б Q. And why do you say they'll be the lead 7 agency? Well, as it turns out, there is one permit 8 Α. 9 that's required by Snohomish County, which is a flood 10 hazard permit, but it is a Type 1, and as a Type 1, it 11 does not -- that doesn't mean that Snohomish County has 12 to be the lead agency on the SEPA. 13 Q. Do you have a contractor that you use for the permitting process? 14 15 Α. Yes, sir. 16 Q. And who is that contractor? 17 Α. Intermountain Resources. 18 Ο. And have you been in regular communication 19 with them? 20 Α. Oh, yeah, I spoke with them this morning. 21 Q. Okay. 22 And they've left me several voice mails as Α. 23 well. 24 Q. Okay. And have they indicated to you that 25 they've communicated with DOE?

1	A. Yes, they have indicated that they have
2	spoken with DOE, DOE is waiting for the approval of the
3	the approval of the mitigation here at Stanwood for
4	the Stanwood project, the wetlands mitigation.
5	Q. And can you just briefly tell us, I don't
6	want to take us too far down
7	A. Sure.
8	Q but so that we have an understanding of
9	the kind of the status of that and what your knowledge
10	is of what's required and how the what are the
11	expectations timewise, because you heard the Judge say
12	that he's interested to know because we have two
13	administrative bodies here working it?
14	A. Sure. The Corps is currently working on
15	finalizing the permitting for another of my projects in
16	Everett which is rather large.
17	Q. The Corps of Engineers?
18	A. The Corps of Engineers, yes.
19	Q. Okay.
20	A. And the mitigation for that project is
21	finished, it's just a matter of finalizing, having the
22	wordsmiths look at the document, and then signatures,
23	which we are supposed to have today was the last date
24	that I was given on Thursday, it would either be Friday
25	or it would be on Monday.

1 Q. Today?

2 A. Today.

3 Q. And that's for the Delta Yard Project in 4 Everett?

5 A. Yes, sir.

Q. And were you given an understanding of what'snext in the queue?

8 A. Yes, the next one in the queue is Stanwood 9 and another project, Swift. Swift, however, has a 10 mitigation plan that is all but approved, but Stanwood 11 will move to the top of the queue according to the Corps 12 of Engineers.

Q. And based on your experience, what is the size of the project and the scope of the project for the environmental review, and what would be your expectation of some determination by the lead agency regarding the SEPA review?

18 A. For Stanwood?

19 Q. Yes.

A. Well, the remarks that I have heard that were related to the Corps was because we were kind -- we had expressed concern that, you know, we didn't want -because we've been so concerned with the amount of time it's taken to have Delta approved, understandably because it's considerably larger, but when we expressed

1 concern, we were told that we would be -- we would 2 probably be surprised how quickly we got the permit. MR. SCARP: Okay, I don't have any more 3 4 questions on that, Your Honor, I have one just last 5 issue. BY MR. SCARP: б 7 Ο. Mr. Wagner, you were asked about a private 8 crossing that is within the siding, a portion of the 9 siding that will be used by larger freight trains. Is 10 that Mr. Lund's crossing? 11 Α. Yes. 12 Ο. For the record, where is that located --13 Α. That one is at --14 -- if you're using the schematic Exhibit 4? Q. 15 Α. If you're using the schematic, it is at 56.2, 16 and it would be in green on the schematic. 17 Ο. All right. And what is the status, what's 18 the use of that, if you --19 Mr. Lund moves his farm equipment back and Α. 20 forth across there. 21 Q. Okay. Does anyone else use that? 22 I don't believe so, I think just he does. Α. 23 It's not -- I wouldn't know I guess. 24 Q. All right. Well, let me ask this, are there 25 any roadways leading to it or --

1	A. Oh, no, no, it's pretty it's pretty
2	it's a pretty basic farm road.
3	Q. Okay, meaning it's
4	A. Driveway, it's a driveway, it runs between
5	fields, it's very wet, there's no rock on it, you know,
6	it's a typical farm road.
7	Q. Okay. Is there a what's the what's the
8	sight distance? Have you been to that crossing?
9	A. Oh, yeah, yeah, lots of times, I was just
10	there early last week.
11	Q. And what was your reason for being there?
12	A. I was just down there looking at the site,
13	making sure that I knew what I was talking about.
14	Q. Okay. And what's the sight distance that you
15	were aware of, or did you pay attention?
16	A. Oh, there's that's tangent to the south.
17	You can see the overpass for highway I always get
18	this one goofed up.
19	Q. 532?
20	A. Yeah, 532.
21	Q. Okay.
22	A. Right, you can see south to 532, and you can
23	see up and beyond. It kind of disappears after
24	disappears the main line disappears to the to your
25	right if you're standing on the east side.

1 Ο. To the north? 2 Α. Yes, as you look to north up towards where 3 Logen Road is located, it disappears off into the brush. 4 MR. SCARP: All right, those are all the 5 questions I have. б JUDGE TOREM: Just so I'm clear on exhibits, 7 Exhibit 1 had the two site plans included in it is admitted. Exhibit 3, the responses to data requests, 8 9 were admitted. And Exhibit 4 was the one page 10 schematic. I think I have one additional exhibit you 11 brought up, Mr. Scarp, this extension here, is that for 12 this witness? 13 MR. SCARP: You know, I think we can -- oh, this is the construction -- I'm sorry, I did forget 14 15 that. Your Honor, I would hand this -- just so it's 16 part of the record. If anybody has questions about it, 17 they can certainly ask this witness. 18 JUDGE TOREM: I will mark this one as Exhibit 19 5, and we'll call it the construction plan. 20 MR. SCARP: The construction plan, correct. 21 BY MR. SCARP: And just briefly, if you would, Mr. Wagner, 22 Ο. 23 can you tell us what is Exhibit 5? 24 Α. That's a little more in-depth view of what we're proposing post closure of 292nd. 25

1 ο. All right. And it shows -- it shows -- to the left of the -- it shows new main track --2 3 Α. Yes. 4 ο. -- which is to the west of the existing main 5 track which is the -- becomes the proposed siding track; б is that accurate? 7 Α. Yes, sir. 8 Ο. To the right of that or to the east, it shows I think what you referred to before as a cul-de-sac? 9 10 Α. Yes. And to the left of the new main track, it 11 Ο. 12 shows a dark line with various arrows pointing to it, 13 what is that? I'm a little lost. Oh, it looks like it's 14 Α. 15 pointing to --16 Q. Are those just reflecting distances? 17 Α. I think they're just reflecting distances. 18 MR. SCARP: All right, those are all, we 19 would move to admit Exhibit 5. 20 JUDGE TOREM: Any objections to Exhibit 5? 21 Hearing and seeing none then, Exhibit 5 is also admitted to the record. 22 23 All right, any further questions for this 24 witness? 25 MR. SCARP: I have none, Your Honor.

1	JUDGE TOREM: Mr. Thompson, any cross-exam?
2	MR. THOMPSON: No questions.
3	JUDGE TOREM: Mr. Kasting?
4	MR. KASTING: No questions.
5	JUDGE TOREM: Mr. Logen?
б	MR. LOGEN: Yes, I have some questions.
7	JUDGE TOREM: All right, and if I can remind
8	the witness to speak up a little bit and Mr. Logen as
9	well, go ahead.
10	
11	CROSS-EXAMINATION
12	BY MR. LOGEN:
13	Q. You've testified as to the speed limits, the
14	maximum speed limits of the trains passing through the
15	Logen Road crossing, do you have any idea what the speed
16	would be of a passenger train that is going to stop in
17	Stanwood or has stopped in Stanwood when it reaches or
18	comes to Logen Road?
19	A. I would only be supposing, but based on my
20	experience, they generally stay at track speed until
21	they need to slow to stop, and they stop rather quickly
22	because they're so light, so it would only be a guess on
23	my part.
24	Q. Thank you.
25	You said the standard is 8,500 feet, and you

1 mentioned coal and grain trains were often that long, how many coal and grain trains traverse this track? 2 3 Α. I don't know. I know that our coal sales 4 have increased, and that's been carrying a lot of the 5 traffic, and grain as well goes north. I mean they're both commodities that go north, but I don't know, I б 7 wouldn't know how many. 8 Ο. And you mentioned that the blocking of Logen Road could be for hours. Given today's trains and the 9 10 traffic on the tracks, would that happen for hours 11 today, or is this just something possible in the future? 12 Α. Oh, no, that could happen now. 13 Q. Okay. How often? I wouldn't know, I wouldn't know. 14 Α. 15 Q. And you mentioned that a private crossing 16 will also be closed; is that Jim Lund's crossing? 17 Α. No, I didn't say any private crossings would 18 be closed. 19 On Exhibit 4, it says, close one private Ο. crossing and one public crossing; where is that private 20 21 crossing? I don't know, it's not our plan to close any 22 Α. 23 private crossings. 24 MR. SCARP: I'm sorry, what are we referring 25 to?

1	THE WITNESS: In the green right below 1.
2	JUDGE TOREM: So again for the record,
3	Exhibit 3 under the scope of work has some green type
4	that talks about removing three existing signals,
5	closing one private crossing and one public crossing.
6	Mr. Logen, is that what you're referring to?
7	MR. LOGEN: That's what I'm referring to,
8	yes.
9	A. Yeah, no, it's not our plan to close the
10	private crossing.
11	BY MR. LOGEN:
12	Q. And the private crossing
13	A. Not that I'm aware of.
14	Q. And the private crossings north of Logen Road
15	will also remain open?
16	A. North of Logen Road?
17	Q. Isn't there one between Dettling Road and
18	102nd or 300th and 102nd?
19	A. No.
20	Q. I don't see one on here, but I think there's
21	one.
22	A. Not to mind, but there is there are
23	several north of 102nd.
24	Q. Right, there's houses across there from the
25	road.

1

A. Well, barns.

JUDGE TOREM: Mr. Logen, you're referring to 2 3 north of milepost 58 several private crossings marked 4 with a black type; is that correct? 5 MR. LOGEN: I thought there was a crossing, 6 private crossing between roughly milepost 57.5 and 7 milepost 58 or the 102nd Street crossing. I thought I 8 had read that earlier somewhere, but I must be wrong on that. 9 10 BY MR. LOGEN: 11 Ο. So is Dettling Road or 300th also on a curve? 12 Α. It's right at the start of the curve, yes. 13 Q. Okay. Well, actually it's in the curve, I'm not --14 Α. 15 let me correct myself, it's in the curve. 16 Q. Okay. 17 Α. It's not at the start. 18 Ο. And 102nd, is it at the start of the curve or 19 in the curve? 20 The 102nd is in the tangent. It's straight Α. 21 as an arrow there at 102nd. 22 Okay. So am I understanding this correctly Ο. 23 on Exhibit 4 again that I'm looking at, there's a red 24 line that extends from approximately 56.5 up to just 25 past 58, is that the siding that's being constructed?

1 Α. Well, let me explain a little further. The red line indicates new mainline that will be built on 2 3 the west side of the existing main. The existing main 4 will be converted to a siding, and the switch which is 5 currently at 56.5 will be relocated up to roughly 58.1. б Q. Okay. 7 Α. And then -- and the track will be adjusted in 8 the area of 56.5 to have the alignment so that the new 9 track becomes the main and the existing main becomes an 10 extension of the siding. 11 Ο. Okay, thank you. 12 So in looking at Logen Road, 300th, and 13 102nd, in the future when the siding is or the new mainline is completed and the existing mainline becomes 14 15 a siding, there will be two tracks at each one of those? 16 Α. Yes. 17 Okay. So there's no difference between those Q. 18 and Logen Road? 19 MR. SCARP: Is that a question? 20 MR. LOGEN: Good point. I'm not used to 21 doing this, so. 22 MR. SCARP: That's okay. 23 JUDGE TOREM: So, Mr. Wagner, the question 24 was where will there be, where there's one track now, where at these crossings will there soon be two tracks? 25

1	A. There will be two tracks, there will be two
2	track crossings, double track crossings, at 102nd, at
3	300th/Dettling Road, and through 292nd/Logen Road.
4	BY MR. LOGEN:
5	Q. Okay, so 300th and 292nd to Logen Road, 300th
б	being Dettling Road, are both on curves, so there's no
7	difference between the two really other than the fact
8	that there may be trains stopped at Logen Road but there
9	won't be trains stopped at Dettling Road?
10	A. Well did you say 292nd is in the curve.
11	Q. Right.
12	A. 300th is in a curve.
13	Q. Right.
14	A. 102nd is in a tangent.
15	Q. Correct. But between, looking at 300th and
16	292nd, the only difference between those two is the fact
17	that trains will occasionally block the crossing at
18	Logen Road?
19	A. When in the siding they will block Logen Road
20	because of their length, yes.
21	Q. Okay. And trains will never block 300th or
22	102nd?
23	MR. SCARP: Do you mean parked trains?
24	Q. Parked trains.
25	A. Well, that would I don't know that I could

1 answer that and say no, they never would. There could be a reason why trains might block there I suppose, but. 2 3 JUDGE TOREM: Is there any plan to have them 4 blocked there? 5 THE WITNESS: No, I'm talking about emergency situation. б 7 MR. LOGEN: I think that was all the 8 questions I have, thank you. 9 10 REDIRECT EXAMINATION BY MR. SCARP: 11 12 Q. Just for clarification, you mentioned earlier 13 distances for the standard siding for parked freight 14 trains, and I think your testimony was short of the 15 industry track going to Wolf Kill and short of 300th by 16 certain distances; is that your expectation for where 17 trains park? 18 Α. Oh, yeah, there's -- that's the only place 19 there's 9,200 -- there would be 9,200 feet. There's 20 9,200 feet there, and that's the only place an 8,500 21 foot train could fit. 22 MR. SCARP: I have nothing further. 23 JUDGE TOREM: All right, any further 24 questions for this witness? 25 Mr. Thompson.

0047 1 C R O S S - E X A M I N A T I O N BY MR. THOMPSON: 2 3 0. Well, I would just for clarification on the 4 question of if a train were parked on the new siding between, a freight train, between the Amtrak station and 5 б to the north there, what would you expect would be the 7 typical clearance to the south of 300th or sort of a 8 minimum clearance? Well, 9,200 feet between the Wolf Kill 9 Α. 10 turnout and 300th, 9,200 feet. 11 Ο. I guess what I'm thinking of is for purposes 12 of, you know, if you're sitting in a car at the 300th 13 Street crossing looking to the south, what would be the usual distance away that you would see a car, the last 14 15 train car parked? 16 Α. Oh, the last train car parked, well, if it 17 was a 8,500 foot train, it would be 700 feet away. 18 Ο. Okay. Well, it would, excuse me, it would be 950 19 Α. 20 feet away. 21 Q. Okay. So it would be out of view because you're in 22 Α. 23 the curve. I would assume it would depending on the 24 geometry of the curve. 25 Thank you. Q.

1	A. No, can I just correct that? Because I know
2	that area, it would be out of sight. You don't have
3	1,000 feet to view, you don't have 1,000 feet of view.
4	Q. Okay.
5	JUDGE TOREM: Does that raise any additional
б	questions?
7	MR. LOGEN: I don't think so, Your Honor.
8	JUDGE TOREM: All right, thank you,
9	Mr. Wagner, you can step down.
10	We're just going to take a one minute break
11	so we get everybody up to speed. The next witness who's
12	going to be, as I said, Mr. Jeffers, if Mr. Jeffers will
13	approach the witness stand, we'll take a one minute
14	break off the record.
15	(Brief recess.)
16	JUDGE TOREM: All right, our next witness is
17	Mr. Kevin Jeffers. Would you stand and raise your right
18	hand.
19	(Witness KEVIN JEFFERS was sworn.)
20	JUDGE TOREM: Can you state and spell your
21	first and last name for the record.
22	THE WITNESS: Sure, Kevin Jeffers, last name
23	J-E-F-F-E-R-S.
24	JUDGE TOREM: All right.
25	

1 Whereupon, 2 KEVIN JEFFERS, 3 having been first duly sworn, was called as a witness 4 herein and was examined and testified as follows: 5 б DIRECT EXAMINATION 7 BY MS. ENDRES: 8 Ο. Good morning, Mr. Jeffers. Will you please 9 state your position, whom you work for, and what your 10 job duties are? 11 Α. I'm the Rail Engineer for the Washington 12 State Department of Transportation. My current duties 13 include being the project manager for the Stanwood Station project as well as leading all technical 14 15 information as far as the Department's rail engineering. 16 Q. And what do you do in your position as 17 project manager for the Stanwood project? 18 Α. Well, I manage an agreement between the State 19 of Washington and the Railroad for passenger rail service and ensure that the State's investment is made 20 21 wisely. Are you familiar with passenger train service 22 Ο. 23 in Washington, I'll call it the I-5 rail corridor sort 24 of between the Canadian border down south to Portland? 25 Α. I am.

Q. And could you just explain sort of the
 current level of passenger train service and then
 Amtrak's or WSDOT's future projection for passenger rail
 service?

5 Α. Sure. The State sponsors the Amtrak Cascade 6 service in what we call the Pacific Northwest rail 7 corridor. We sponsor passenger rail service between 8 Portland and Vancouver, BC. Today there are two round 9 trips, four trains per day that travel through Stanwood 10 on their way to either Bellingham or Vancouver, BC. 11 Those trains are fully sponsored by the State of 12 Washington and the passengers that ride them, that's 13 where the funds come from. Our future projections or our future plans, we have a long range plan to increase 14 15 that to four trains per day, but in the short term, mid 16 term, say ten year time frame, we don't have any plans 17 to increase the number or frequency of those trains, but 18 we do intend to start -- begin stopping at the new station that will start construction very soon. 19 Why don't you tell us a little bit more about 20 Ο. 21 the plans for the Amtrak station here in Stanwood? The Amtrak station will be built here 22 Α. Sure. over the summer, and as part of that, as Mr. Wagner 23

24 testified, we need to really mitigate the impacts to the 25 rail service, so we agreed to fund the improvements at

Stanwood siding to mitigate the impacts to the rail
 system as a whole.

Q. And without this mitigation that you just
spoke of, what would be the impact to rail service?
A. Well, we wouldn't be able to begin stopping
at the Stanwood station, and so the people of Stanwood
wouldn't have a stop. They would have to travel to
either to Mount Vernon or to Everett.

9 Q. And is that because it would create rail 10 congestion, or could you describe that a little bit 11 more?

12 Α. Yes, it would. A passenger stop is a mere 13 two minutes, but the slowing and stopping and the taking off and accelerating is somewhere around a four minute 14 15 hit, if you will, or a decrease in capacity. But in 16 advance, because the passenger trains have a priority, 17 then freight traffic has to clear the way well in 18 advance so that they're not delayed. This siding would allow -- give another place for a freight train to wait 19 in the clear off of the main line to allow a passenger 20 21 train to move by either northbound or southbound. Is it, do you know if once the Amtrak station 22 Ο.

23 is built and the passenger train is at the station, will 24 freight trains be able to sort of I guess skip the 25 station entirely on the siding track? A. Well, I suppose they could theoretically, but I doubt that that would happen in practice. Generally I would anticipate a freight train stopping in the siding if it was in the proximity while the passenger train was calling in to the station.

Q. So your understanding and testimony is that
the siding track will mitigate sort of a bottleneck
congestion of having to wait to go around passenger
trains at the station?

10 A. Yes.

11 Q. We heard Mr. Wagner testify that currently 12 two Amtrak trains per day are traveling along this 13 route, is that, and you said four, so is it two trains 14 going north and then it's a round trip, or is it -- can 15 you just clarify that for the record?

16 There's in the morning a train leaves Α. 17 Bellingham. This sounds like an algebra question, 18 doesn't it? But a train leaves Bellingham -- no. But one does leave north of here in the morning, another one 19 is leaving Seattle at roughly the same time, and they 20 21 meet in this general vicinity. The design-meet location right now is Mount Vernon, but with the stop scheduled 22 23 here at Stanwood, odds are that meet location where 24 these two passenger trains have to get by each other 25 will probably tend to happen south at the what

1 Mr. Wagner called the Amtrak pocket.

2	Q. And similarly, when you were describing a
3	long range plan to increase to four passenger trains per
4	day, does that mean eight total round trips?
5	A. Four round trips, eight total trains.
6	Q. Okay, thank you. Sorry if I wasn't clear on
7	that.
8	A. That's fine.
9	Q. Does WSDOT support closure of the Logen Road
10	as part of this project?
11	A. Yes, we do.
12	Q. Why is that?
13	A. Well, obviously because in order to fully
14	utilize the extended siding, we're in concurrence with
15	BNSF that the siding that the crossing will be
16	blocked. But we also have a general concern for safety
17	of the rail system as well, and at-grade crossings in
18	general are less safe than not having an at-grade
19	crossing, either an overpass or closing it all together.
20	Q. Are you aware of any specific safety hazards
21	that would exist at Logen Road for passenger trains if
22	it's left open to public travel?
23	A. Well, if a freight train were stopped in the
24	siding, and let's say in this case it's the local train
25	that Mr. Wagner testified about that might be shorter,

1 so they would not theoretically be blocking the crossing, but they could be moving through very slowly. 2 3 As that train were to pass, a passenger train could be 4 coming in the opposite direction, and a motorist who has 5 gotten impatient with the slow moving freight train at б the crossing could decide to go around the gates or 7 something like that and be struck by the Amtrak train. 8 Ο. And Mr. Wagner testified that the speed limit 9 for Amtrak trains is 79 miles per hour, do you expect 10 that to be the speed limit of passenger trains traveling 11 through Logen Road crossing after the Amtrak station is 12 built? 13 I do. As Mr. Wagner testified, they do slow Α. and accelerate very quickly, much faster than a freight 14 15 train. 16 MS. ENDRES: I think those are all the 17 questions I have, short and sweet. I don't know if 18 Judge Torem has any additional ones. 19 20 EXAMINATION 21 BY JUDGE TOREM: Just on the speed question, Mr. Jeffers, it 22 Q. looks to me that the Logen Road crossing going north 23 24 from the station would be approximately one mile or 25 more, and is it your opinion that a passenger train

would be able to reach full speed by the time it gets to
 Logen Road?

A. Yes. The trains that are -- typically use this route are relatively short or in the case of the very specialized Amtrak Cascades equipment very relatively light weight, and they do accelerate very quickly, so I have every confidence that they would be at or near 79 miles an hour by the time they reached Logen Road.

10 Q. Now you also mentioned the use of this Amtrak
11 pocket --

12 A. Yes.

13 Q. -- for the trains to meet as they come from14 the north and head to the north in opposite directions.

15 A. Mm-hm.

16 Q. Would that influence the speed as they came 17 through the Logen Road crossing?

18 Α. If you were departing the pocket track, 19 they'll be -- they would be entering the mainline if 20 memory serves, and I don't have the diagram in front of 21 me, but I believe they will be departing that pocket 22 track at a maximum speed of 35 miles an hour. It's 23 about a half mile if I remember, again working from 24 memory, from that point to Logen Road, maybe even 25 slightly longer, and they may not be quite at 79 miles

1 an hour, but they could easily be well over 60. So if a train's coming south from the pocket 2 Ο. 3 through Logen Road, would they be also then stopping at 4 the station another half a mile or mile later? 5 Α. That's right. б Ο. So you think they would accelerate up to 60 7 miles an hour and then slow back down to stop at the 8 station? 9 Α. It's possible. It depends on the -- how 10 tight the tolerance is for the schedule. As I 11 mentioned, the design-meet location is going to be north 12 up at Mount Vernon or is up in Mount Vernon, so 13 theoretically the northbound train may already be late, 14 and so the southbound train is trying to keep from being 15 made late as well. 16 All right, so the intention may be to have Q. 17 trains come through at 79 miles per hour, but even if 18 the schedule is altered and the pocket is used for a meet and pass, you still expect speeds in excess of 60 19 miles per hour at the Logen Road crossing? 20 21 Α. Yes, sir. 22 And for the train leaving the station from Ο. 23 Stanwood heading north, would that train be slowing for 24 use of the pocket ever, or would it be expected to be 25 heading straight on to its next stop?

1 Α. Well, ever is an absolute, so. As scheduled. 2 Ο. 3 Α. Generally it would not be using, the 4 northbound train would not use the pocket. 5 Ο. So -б Α. At least that's not the way we understand the 7 operations to be designed. 8 Ο. So the design then is for the northbound 9 train to always leave and attain its highest and fullest 10 speed as soon as possible? 11 Α. Yes. 12 Ο. And as you said, with that mile of ground 13 between the station and Logen Road, that would be at 79 miles per hour? 14 15 Α. Yes. 16 Now is there any plan in the future to Q. 17 increase that 79 mile per hour limit? 18 Α. In the -- in our ultimate long-range plan 19 there is. We envision operating speeds up to 110 miles 20 an hour. 21 Q. When you say ultimate plan, how far in the future might that be? 22 23 Well, that would -- all depends on the level Α. 24 of funding. When I came to this job more than 10 years 25 ago, we had a 20 year plan that had that -- that showed

1 that we would be attaining those speeds within 20 years. However, the funding hasn't come anywhere close, the 2 3 funding available for those kind of improvements. So in 4 our latest iteration of our what we now call our long-range plan, we took out the references to time 5 line. So before we -- before we would be -- at the same б 7 time that we would be reaching those four round trip level, we would be also trying to increase speeds up to 8 a maximum of 110 miles an hour. 9 10 Ο. So this is decades in the future? 11 Α. Yes, that's an -- those are unfunded 12 improvements. 13 JUDGE TOREM: All right. 14 Ms. Endres, does that raise any additional 15 redirect questions you want to pose to this witness? 16 MS. ENDRES: No, Your Honor. 17 JUDGE TOREM: All right. 18 Cross-exam, Mr. Thompson? 19 MR. THOMPSON: No questions. 20 MR. KASTING: Nothing from the County. 21 JUDGE TOREM: Mr. Logen. 22 MR. LOGEN: Just a couple. 23 24 25

1 CROSS-EXAMINATION BY MR. LOGEN: 2 3 Ο. You testified that the crossing could be 4 blocked or there could be a train close to the crossing 5 and people could go around the gates. б Α. Yes. 7 Ο. Do you have any idea how long those gates 8 are? 9 Α. Well, the current gates that are installed 10 there? 11 Ο. Yes. 12 Α. I don't, I don't. I would imagine that they 13 would go at least halfway across the roadway surface 14 because that would be -- that's a minimum requirement. 15 JUDGE TOREM: Mr. Logen, which crossing are 16 you referring to? 17 MR. LOGEN: Logen Road. 18 JUDGE TOREM: Okay. 19 BY MR. LOGEN: 20 The reason I ask is I believe the road's only Ο. 21 15 feet wide there, and as I recall the arms go most of the way across the road, and it would be, without going 22 23 through the arms, it wouldn't be possible to go through 24 it. 25 A. I can't say that I've seen --

1 Q. Do you recall that at all? I can't say that I've witnessed the gates in 2 Α. 3 a down position, so I can't really testify. 4 Ο. What speed do the passenger trains cross 5 Logen Road now? б Α. 79 miles an hour. 7 Ο. Okay. And do you have any idea if Amtrak 8 service were stopped in Stanwood -- let me start with another question. 9 10 Once Amtrak service starts in Stanwood, will 11 it continue on indefinitely, or is it dependent on 12 ridership? 13 Α. I suppose there's some dependency on ridership, but generally we are not going to make this 14 15 kind of investment in total of roughly \$20 Million and 16 in service, you know, less than a year or something like 17 that. It would have to take quite a while before we 18 would have to -- before we would consider stopping or 19 ending the service stop in Stanwood. 20 Ο. Do you --21 Α. That's a major investment. 22 Do you have any expected ridership numbers Q. 23 that would be contingent on keeping the stop open? 24 Α. We don't have a -- if you're asking is there 25 a limit or a bottom, if you will, of how few riders

0061 1 and --2 Right. Q. 3 Α. I don't -- we don't have that sort of thing. 4 But I can say that the projected ridership for the first 5 year is 4,400 riders. б JUDGE TOREM: That's an annual number? 7 THE WITNESS: Yes. BY MR. LOGEN: 8 9 Q. So 1,100 per train per year, so about 3 per 10 train, something like 3 or 4 per train? 11 Α. I believe that works out right. 12 MR. LOGEN: I don't have any further 13 questions. 14 JUDGE TOREM: Okay, any other questions for 15 this witness? 16 MR. THOMPSON: None. 17 JUDGE TOREM: Mr. Jeffers, just give me a 18 minute to see if I have anything else. 19 20 EXAMINATION 21 BY JUDGE TOREM: 22 Q. Mr. Jeffers, you heard Mr. Wagner note that 23 despite what it says on the schematic exhibit that they 24 were not going to close Mr. Lund's private crossing. 25 Does that pose any safety questions from your

1 perspective for Amtrak?

I don't believe it does. I have -- while 2 Α. 3 I've not been on the tracks at that location, I have 4 ventured down to Mr. Lund's gate from Pioneer Highway 5 and looked with the best I could down that way, and the access road that Mr. Lund has is pretty much a muddy б 7 track, or at least on the day it was, and the gate is a 8 locked gate. So other than Mr. Lund's farm equipment 9 using the crossing, I wouldn't envision anybody else 10 using it. And being as it's already in the siding, I 11 would imagine that his operators are already used to 12 dealing with the occasional freight train blocking that. 13 Have you looked at the sight distances at Q. Mr. Lund's private crossing? 14 15 Α. No, I haven't been to Mr. Lund's -- I haven't 16 been to that particular intersection, so I can't -- I 17 haven't seen those. 18 Ο. Do you think that the current plan would be able to accommodate a private crossing at what is now 19 Logen Road, does that raise any concerns for Amtrak? 20 21 Α. It does in that the -- at that location, you already have what is essentially a public roadway that 22 23 comes up to that location, so that would invite people 24 who aren't party to the private crossing who shouldn't be using it to try to use it. There are residences on 25

1 the east, and perhaps they're trying to get a shortcut to Stanwood or something like that and get over to Old 2 3 Pacific Highway, 102nd Street. 4 Would those concerns of unauthorized usership Ο. 5 be addressed by a private keyed gate? б Α. I suppose it could. 7 Ο. If a locked private gate is there with a key 8 that only an authorized user has, and I understand that 9 these agreements require one to open the gate and then 10 close it behind themselves to maintain the agreement, 11 what other concerns would Amtrak have about a private 12 crossing at that location? 13 Well, even the authorized user could be Α. injured or killed by the train moving through. I'm not 14 15 sure if this was the exact case or not, but just north 16 some of the private crossings that we talked about that 17 are shown in the exhibit that Mr. Wagner testified 18 about, one of those crossings, it was a private crossing to my understanding, and there was a fatality of what I 19 believe to be an authorized user in October, it was 20 21 Halloween 2003, October 31st, 2003. Do you remember the circumstances of how that 22 Ο. 23 occurred? 24 Α. I don't, other than it was an Amtrak Cascades

train traveling in what was straight track.

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0064 1 Ο. And was that --2 Α. To the north. 3 Ο. -- a pedestrian-train accident or a car or 4 vehicle? 5 No, it was a vehicle, some sort of pickup if Α. б I'm not mistaken. 7 Ο. And at Logen Road there's a curve; is that 8 correct? 9 Α. Yes. 10 Q. So in your opinion would that increase the 11 safety concerns with a curve? 12 Α. It would. 13 JUDGE TOREM: Okay. 14 Ms. Endres, does that raise any additional 15 questions you wanted to pose? 16 MS. ENDRES: I do have just a few. 17 18 REDIRECT EXAMINATION 19 BY MS. ENDRES: 20 I'm going to ask you a few questions in the 0. 21 context of what Judge Torem brought up with potentially 22 having a private crossing with a locked gate. Are you 23 aware of any crossings where that private crossing 24 configuration exists currently?

Well, I'm sure there are some, I'm not -- I

25

Α.

1 mean I already testified I guess to Mr. Lund's private crossing, but other specific examples, that would be 2 3 probably the limit. 4 ο. Do you know if a locked gate can actually 5 prevent a pedestrian from going down to wherever the б gate starts and walking around it? 7 Α. Oh, as an old farmhand I've jumped many a 8 fence and many a gate, so I don't believe that would be 9 the case. 10 And correct me if I'm wrong, I think I Q. 11 remember that you earlier testified one of the safety 12 concerns is perhaps a freight train that can pull clear 13 of the crossing but still may be sitting close to it and blocking the view of an Amtrak on the mainline track; is 14 15 that correct? 16 Α. Yes. 17 Is that concern still there if there's a Ο. 18 gated private crossing that a user may unlock the gate to attempt to cross the tracks, and, you know, an Amtrak 19 train is coming through, and the view of that passenger 20 21 train is blocked by a freight train parked on the 22 siding? 23 I would say that that would be true of Α. 24 whomever the user, whether they were authorized or not.

25 Q. And we'll probably get to this with our BNSF

1 safety guys, but to the extent that you know, do you 2 know if trains are required to blow horns at private 3 crossings? And if you don't, you don't, but --4 Α. I believe it is up to the railroad or the 5 engineer. б Q. Okay. 7 A. Operating the train. I don't -ο. Is it --8 I don't believe it's a requirement. 9 Α. 10 Q. So is it fair to say you're not aware of any law that requires --11 12 Α. I'm not. 13 Q. -- passenger or freight trains to blow horns 14 at private crossings? 15 Α. I'm not aware of any. 16 MS. ENDRES: Okay, I don't have any other 17 questions. JUDGE TOREM: Mr. Thompson, anything? 18 19 MR. THOMPSON: No questions. 20 JUDGE TOREM: Mr. Kasting? 21 MR. KASTING: I have no questions. 22 JUDGE TOREM: And Mr. Logen? 23 MR. LOGEN: I've got a couple. 24

25

1 RECROSS-EXAMINATION BY MR. LOGEN: 2 3 Ο. You mentioned that you went down onto Jim 4 Lund's property from Pioneer Highway; is that correct? 5 Α. I ventured down the driveway from Pioneer б Highway until I got to the locked gate and looked across 7 to the private crossing from there. 8 Ο. Which side of the creek was that locked gate 9 on? 10 Α. Which side of the creek? 11 Ο. The north or south side? 12 Α. If I remember -- as I recall, I don't believe 13 I -- I don't believe I crossed any creek, so I would have to say I was to the east or perhaps -- I'm not sure 14 15 where the creek is, so I can't say. 16 Q. It's between the what used to be a cattle 17 barn and, well, it's basically two barns down there. 18 Α. Okay, I didn't --19 The creek runs between, there's a large ditch Ο. 20 that goes --21 Α. I didn't ---- straight out towards the railroad. 22 Q. 23 I didn't go past any barns, so I can't -- I Α. 24 believe I stopped short of the creek or to the east or 25 south of the creek.

- -

1	Q. So you didn't go to and you didn't cross the
2	creek to where there's an open gate by the barn north of
3	the Creek there?
4	A. I don't believe so.
5	Q. Okay.
6	Is there any reason that you are aware of
7	that 292nd or Logen Road couldn't be closed at Pioneer,
8	or not at Pioneer, but Old Pacific Highway?
9	MS. ENDRES: Your Honor, I'm going to object
10	as to foundation. I'm not sure Mr. Jeffers is the
11	proper person to testify about closing the County road.
12	JUDGE TOREM: Sustain the objection because I
13	think we are going to hear from Mr. Bloodgood, and that
14	might be better posed to him, Mr. Logen.
15	MR. LOGEN: Okay.
16	JUDGE TOREM: This witness knows I think the
17	operation of the Amtrak, but perhaps not how the
18	protocol for closing roads.
19	Mr. Jeffers, with that in mind, do you know
20	where Mr. Logen is asking about closures, are you
21	familiar with that intersection?
22	THE WITNESS: I'm familiar with the
23	intersection.
24	JUDGE TOREM: All right. And have you ever
25	worked on actual closings of roads in conjunction with

1 Amtrak?

2	THE WITNESS: No, not directly.
3	JUDGE TOREM: All right, then we'll have to
4	direct the question to the other witness.
5	MR. LOGEN: Okay.
б	BY MR. LOGEN:
7	Q. I have I guess one final one. The speeds
8	that the trains are traveling, you indicated that they
9	could travel faster in the future, and that would be the
10	case even if the siding were not built or the new
11	mainline wasn't aligned and we use the old one for the
12	siding, would the train speeds still increase even
13	without stopping at Stanwood if there were no stop
14	there?
15	A. Yes, they could be increased. Of course,
16	before any speed increases above 79 miles an hour,
17	there's a number of things that would have to be done,
18	least of which getting would be getting federal
19	approval to exceed those speeds, so there would be a
20	much longer environmental and regulatory process before
21	that would occur.
22	MR. LOGEN: Thank you.
23	JUDGE TOREM: All right, anything further for
23 24	JUDGE TOREM: All right, anything further for this witness?

0070 1 you, Mr. Jeffers, and we'll come back with our next 2 witness I believe is Mr. Norris. 3 (Recess taken.) 4 JUDGE TOREM: It's now about 5 minutes to 11:00, and our next witness is Gary Norris. I've been 5 handed his curriculum vitae and a Logen Road Railway б 7 Crossing Closure Traffic Impact Analysis. We're going to mark those as Exhibits 6 for the CV and Exhibit 7 for 8 the traffic impact analysis. 9 10 And I will swear in Mr. Norris now. Sir, if 11 you will raise your right hand. 12 (Witness GARY A. NORRIS was sworn.) 13 JUDGE TOREM: Thank you, can you state and spell your name for the record. 14 15 THE WITNESS: My name is Gary A. Norris, 16 N-O-R-R-I-S. 17 JUDGE TOREM: All right, let's have the 18 direct exam then. 19 20 Whereupon, 21 GARY A. NORRIS, 22 having been first duly sworn, was called as a witness 23 herein and was examined and testified as follows: 24 25

1 DIRECT EXAMINATION BY MS. ENDRES: 2 3 Q. Good morning, Mr. Norris. 4 Α. Good morning. 5 Q. You should have in front of you what's been marked as Exhibit 6; is that your curriculum vitae? б 7 A. Yes, I do. 8 Q. Is the information contained in that true and 9 correct to the best of your knowledge? 10 Α. To the best of my knowledge, yes. 11 MS. ENDRES: Your Honor, I would move to 12 admit Exhibit 6. 13 JUDGE TOREM: Mr. Norris, I have to ask you 14 when was this last updated? 15 THE WITNESS: When was it last updated, I 16 believe it was updated for a hearing in Leavenworth last 17 spring. 18 JUDGE TOREM: I'm just looking for the Hickox 19 Road analysis. 20 THE WITNESS: Yeah, that's not on there. 21 JUDGE TOREM: All right, despite that incompletion, are there any objections to the admission 22 of this exhibit? 23 24 Hearing none, Exhibit 6 is admitted. 25 BY MS. ENDRES:

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Q. All right, Mr. Norris, you also have in front of you a document that is approximately 8 pages titled Logen Road Railway Crossing Closure Traffic Impact Analysis, March 30th, 2009; are you familiar with this document?

6 A. Yes, I am.

7 Q. What is it in a nutshell?

8 Α. Nutshell, it was my attempt to assess the 9 issues that surround the potential closure of Logen Road 10 as relates to the railway crossing. It examines the 11 existing geometric conditions on the roadway network 12 serving this area, traffic volumes that are on Logen 13 Road and the surrounding roadway network, impacts on school service and emergency vehicle access and response 14 15 to the area, and then also makes an analysis of the 16 conditions that should be considered in the evaluation 17 of whether or not to close the roadway. 18 Ο. And just to clarify, did you gather the 19 information that's within this document? 20 Yes, I did. Α. 21 Q. And did you create this traffic impact

22 analysis what's been marked as Exhibit 7?

23 A. Yes, I did.

Q. Is the information that's in that documenttrue and correct to the best of your knowledge?

1 Α. Yes, it is. 2 MS. ENDRES: Your Honor, I would move to 3 admit Exhibit 7. 4 JUDGE TOREM: Any objections to the admission 5 of Exhibit 7? б All right, hearing none, Exhibit 7 is 7 admitted. 8 BY MS. ENDRES: 9 Q. All right, Mr. Norris, we're going to walk 10 through some of the analysis and conclusions that you 11 came to in this traffic impact analysis, but just so 12 that everyone here has a picture of your ultimate 13 conclusion where we're going, is it your position that you recommend the Logen Road public crossing be closed 14 15 when the siding track is extended through the crossing? 16 Α. Your Honor, it's my recommendation that the 17 Logen Road be closed at the crossing. 18 Ο. And some of the things that you considered in 19 your traffic impact analysis that we're going to talk 20 about were the nature of the vehicular traffic, like you 21 said emergency response impacts, whether adjacent crossings are suitable for Logen Road traffic, any 22 23 mitigation that's planned. Let's talk briefly first 24 about the nature of use of the Logen Road public 25 crossing. What is your understanding of the level of

1 traffic that currently uses the Logen Road public 2 crossing?

3 Α. My understanding of the existing traffic 4 volumes on the crossing are related to traffic counts 5 that were provided by Snohomish County taken last summer and then again this fall, which basically indicated б 7 there's approximately 140 cars a day that are using 8 Logen Road. In addition to that, we did p.m. peak hour 9 vehicle turning movement counts at Logen Road and 10 Pioneer Highway, Logen Road and 92nd, 292nd, which is 11 the extension of Logen Road to the west where it 12 intersects with Old Pacific Highway, and then also at 13 the crossing in downtown Stanwood at 271st. So that kind of indicated the level of volume of peak hour 14 15 volumes on Logen Road itself were approximately 14 16 vehicles in the peak hour. On 271st it was 17 approximately 780 vehicles, and I guess the p.m. or the 18 total daily volume on Dettling Road was about 800 19 vehicles based on the County traffic counts. Okay. We'll talk about the adjacent 20 Ο. crossings briefly in a minute, but for right now I want 21 to focus on the Logen Road public crossing. I'm looking 22 specifically on page 4 of Exhibit 7, traffic impact 23 24 study, and is this what reflects what you've testified to that the daily volume on Logen Road west of the 25

1 railway crossing is 142 vehicles, 11 vehicles during the 2 a.m. peak and 19 vehicles during the p.m. peak? 3 Α. That was the data from the Snohomish County 4 count, yes. 5 Ο. How would you describe compared I quess to other railroad crossings, public railroad crossings 6 7 within the county, is that a high daily traffic count, 8 is that a low daily traffic count, how would you characterize that? 9 10 In general in regards to other railway Α. 11 crossings, it's a very low volume. We have as in Hickox 12 Road had similar types of volumes, but this is a very 13 low traffic volume. 14 And I'm looking a little bit further at the Ο. 15 bottom of page 4, and your report says approximately 16 half of the traffic on Logen is generated by the single 17 family homes along the corridor. How did you make that 18 conclusion? 19 I made that conclusion, Your Honor, based Α. upon the calculation of trip generation rates from the 20 21 -- to the traffic engineers generation handbook, which gave me an estimate of about 67 daily trips being 22

23 generated by the 6 homes that are along the corridor, or 24 7 homes, excuse me. And then comparing that to the 25 daily traffic counts and peak hour traffic counts that I

1 obtained, that was about half of that volume. 2 Is that a process that's typically done by Ο. 3 other professionals in your same field? 4 Α. Yes, it is. 5 Ο. I would like to take a look at Figure 2, 6 traffic volumes, I believe it's after page 5. And you 7 testified as we just went through that Logen Road has an average daily traffic count of approximately 140; is 8 that what the 140 refers to on this diagram --9 10 Α. That's correct. 11 Ο. -- of Logen Road? 12 And up where it says Dettling Road, there's 13 an 800, does that refer to the average daily traffic 14 count up at Dettling Road? 15 Α. Yes, it does. 16 Ο. And down at the bottom of the page where it 17 says 271st Street Northwest, 7,800, is that the average 18 daily traffic count down at 271st Street? 19 Yes, it is. Α. 20 Do you know how far it is from Logen Road to Ο. 21 Dettling Road? 22 Α. I believe from the intersection with Old 23 Pacific Highway to Dettling Road's intersection with Old 24 Pacific Highway is about a half a mile. 25 And what about from the Logen Road public ο.

1 crossing down to 271st Street Northwest public crossing. I believe that's about a mile and a half. 2 Α. 3 I'm not absolutely sure of that, but I think that's 4 about what it is. 5 Is it your professional opinion that those Ο. are reasonable distances to access alternative crossings б 7 if the Logen Road public crossing is closed? 8 Α. Your Honor, in this particular case, I 9 believe it's reasonable because of the activity centers 10 that are being served by these roads. Most of the 11 activity that is occurring in this area focuses around 12 the city of Stanwood itself major activities, and access 13 to this area is what is being offered by Logen Road and the other surrounding roadway networks here that 14 15 supports that activity center, so I believe in light of 16 that because the focus is to the south that that is 17 correct, that it is a reasonable distance to travel. 18 Ο. If we -- if the tribunal orders that the Logen Road public crossing be closed, where will that 19 traffic be diverted to between the two adjacent 20 21 crossings? The majority of the traffic obviously as 22 Α. shown from the traffic counts itself are oriented to the 23

south, as I stated, to the activity center in downtown Stanwood, so most of that traffic is coming either from 25

1 or going to that area. Very little or a small 2 percentage is going to the north which would use 3 Dettling Road. So the major focus would be down to 4 271st as an alternative crossing. And again, most of 5 this traffic or at least half of it, as I said, was б being generated by the single family developments that 7 live along Logen Road, so that would be their main 8 access as well.

9 Q. Is it your opinion that 271st Street can 10 satisfactorily absorb that extra traffic diverted from 11 Logen Road?

12 Α. Yes. Currently the daily traffic volumes are 13 about 7,800 vehicles per day, and the typical capacity of a 2-lane roadway is roughly 10,000 to 12,000 cars. 14 15 And then when we get into the section where we have the 16 2-way left turn lane, the capacity goes anywhere from 17 12,000 to 18,000 vehicles, so that's well within the 18 capacity. I would like to say as well that the volumes, 19 the magnitude of the volumes that we're talking about in terms of diverting to other links is so insignificant 20 21 that it was not likely to be even detected with the typical traffic counting equipment within the limits of 22 error in that data collection process. 23

Q. And when you say, and I'm looking at page 7 where I think you wrote what you just said, traffic

1 diverted from Logen Road would not be of a magnitude to be detected by traditional traffic counting equipment, 2 3 does that apply to the Dettling crossing as well? 4 Α. You're talking about the magnitude of the 5 traffic that would be diverted to Dettling Road being б within the significance of the volume that currently 7 exists on Dettling? 8 Yes, you phrased that much better than I did. Ο. 9 Α. I believe that's correct. When you look at the magnitude, it's a very small volume that is going to 10 11 -- would be susceptible using Dettling Road as an 12 alternative, so it would be well within that. As we're 13 looking basically at 70 to 80 cars diverting off of the road looking for alternative routes, a 5% magnitude 14 15 difference if we had, oh, let's see, we've got say 20% 16 is going to Dettling Road, and so that gives us about 14 17 cars a day, and that's certainly within 5 or, well, if 18 they were all using Dettling that would be about 40 cars, so certainly within that range. 19 So to clarify, is it your opinion that the 20 Ο. 21 crossings adjacent to Logen Road can acceptably handle any Logen Road traffic that's rerouted to them? 22 23 Yes, it's my opinion that that would be the Α.

24 case.

25 Q. Have you visited the Logen Road crossing,

1 driven around the area?

2 A. Several times.

Q. What type of -- and I don't want you to --I'm not asking for any sort of legal conclusion, but what sort of property area is the crossing located in, is it industrial, rural?

7 Α. The crossing itself is basically an 8 agricultural area. Logen Road has single family residences along it. As we said, I think there were 9 10 like seven. And then as you shift to the south along 11 Pioneer Highway, there's a lot of residential properties 12 on the east side, pioneer as you go to the north there's 13 a lot of vacant land, and to the west of the railway itself is mainly agricultural as I see it. 14 15 Ο. Did you consider farm equipment using both 16 Logen Road and the roads in the surrounding area? 17 I observed that there were notifications that Α. 18 farm equipment does exist on both Logen Road and 19 Dettling Road and that there are warning signs notifying 20 the motoring traffic that that condition does exist. 21 JUDGE TOREM: Mr. Norris, does that mean that you didn't personally observe the farm traffic, but you 22 23 saw the signs posted, that's all? 24 Α. I did not see any farm traffic in the times

25 that I was there.

1 BY MS. ENDRES:

2	Q. Mr. Norris, did you consider an accident
3	history of Logen Road and the two adjacent crossings?
4	A. Yes, I did. I obtained the accident records
5	from the Federal Railroad Administration accident
б	history for crossings and obtained data that dates back
7	to 1975 for the 271st, Logen Road, and Dettling Road
8	crossings.
9	Q. And how did that data that you collected
10	affect your analysis of whether we can acceptably and
11	safely reroute Logen Road traffic to the two adjacent
12	crossings?
13	A. I believe the basic question in that
14	consideration is whether or not there are accident
15	histories that occur at these other crossings that would
16	be impacted by the additional traffic volume being
17	diverted from Logen Road to either Dettling or 271st.
18	There were two accidents at the Dettling Road crossing
19	which occurred prior to the time the crossing was
20	improved with gates and warning lights. There has been
21	a history of crossing incidents at 271st, and really
22	it's mainly that either pedestrians or vehicles have
23	been driving around the gates and the warning system. I
24	believe that is part of this work, and correct me if I'm
25	wrong, but my understanding is that there will be

improvements to the gates and the flashers at the 271st crossing that will help mitigate any kind of accident history that has occurred there, and I believe at this point there's been no recent experience subsequent to the improvement of the crossing at Dettling Road, so I didn't see any issue with that.

Q. And the discussion that you have mentioned
about the accident, the prior accidents, is that on page
5 of your traffic impact study?

10 A. Yes, there's a history there for both 271st 11 and Dettling Road, and then as I said there have been no 12 incidents at the Logen Road.

Q. Is there -- did you learn anything about the accident history at 271st that caused you to believe that it is not an acceptably safe as far as railroad crossings goes alternative crossing for Logen Road users to use?

18 Α. No, I didn't see anything in the particularly in the layout or the control of the crossing that would 19 indicate that that would not be acceptable. Again, it 20 21 relates to motorists' reaction to warning devices and their disregard of those devices that I believe with the 22 23 enhanced equipment that's being suggested with the 24 proposed closure would improve the warning and 25 observance of that.

1 Ο. Let's talk a little bit about your analysis of the effect of closing the Logen Road public crossing 2 3 on emergency responders, and specifically I'm looking at 4 page 6 of your traffic impact study. And your study 5 states that primary emergency response to the area is б provided by the Snohomish County Fire District 14, 7 Station 96, where is that located? 8 Α. That's located on 300th Street just west of 9 the I-5 interchange at Exit 215 on the north side of 10 300th Street. The address is 3231 - 300th Street 11 Northwest. 12 Ο. Can you explain to us your analysis and your 13 conclusion about the effect of closure on emergency response time to the Logen Road area? 14 15 Α. Well, to begin with I was quite surprised 16 when I found out that the primary response for this area 17 was the Fire District 14 station on 300th, as it is 18 approximately 5 miles away from the Logen Road area when 19 in fact the City of Stanwood/Camano Island Fire Department has a station that is about 1.6 miles or 20 21 about a third of the distance. When talking to the fire chief, they indicated that there was a mutual aid 22 23 agreement and that they do respond to situations that 24 occur along Logen Road. So the difficult geometry in 25 accessing Logen Road from the District 14 station and

1 the distance indicated to me it's probably unlikely that as a first response that District 14 would be there when 2 3 you have such a close station at the City of 4 Stanwood/Camano Island Fire Department at 8117 - 267th 5 Street Northwest in downtown Stanwood. б Q. Now when you said you spoke with the fire 7 chief who indicated there was a mutual aid agreement 8 between the Stanwood fire station, well, first of all, is the Stanwood fire station located on 532; is that 9 10 your understanding? 11 Α. Just to the south of 532. 12 Ο. Okay. And when you say the fire chief, which 13 fire chief are you referring to? 14 I spoke to the fire chief of the City of Α. 15 Stanwood Fire Department. 16 Q. And just to clarify, did that fire chief tell you that in an emergency situation at Logen Road they 17 18 could respond to that emergency situation based on the 19 mutual aid agreement? 20 Yes, he did. Α. 21 Q. If the crossing is left open to public travel, but, and we've heard testimony from Mr. Wagner 22 23 that the siding, the use of the siding track would mean 24 that the Logen Road crossing would be blocked 25 unpredictably or for potentially extended lengths of

time, would you expect that whichever station responds to an emergency would have to approach Logen Road from the east to avoid the unpredictable, you know, not knowing whether the crossing is blocked, or does that affect it at all?

6 A. I would think, Your Honor, that under the 7 circumstances with the uncertainty of whether or not 8 that crossing was closed or blocked by train activity, 9 it would necessitate for an expedient response to come 10 from the east on Pioneer Highway.

11 Q. And you testified that the North County 12 Station 96, is that the one that's by I-5?

13 A. That's correct.

Your report here says, response times are 14 Ο. 15 estimated to be 12 minutes as the station is 16 approximately 4.8 miles from Logen Road. In your 17 analysis, did you become aware of any extension of that 18 response time if they are -- if Logen Road public 19 crossing is closed? 20 The issue that concerned me, and I have not Α.

21 been able to verify this or not, but the approach to the 22 Logen area from the east would most likely be down 23 Pioneer Highway to 92nd, making a right turn onto 92nd, 24 and then making a right turn onto Logen Road, and there 25 is some roadway geometry because of the width of Logen

1	Road, it's only about 15 feet wide with no shoulders or
2	any room for maneuvering, that it would be difficult for
3	a truck to get around that corner, and therefore access
4	from the south from Pioneer Highway from the Camano
5	Island/Stanwood Station would be more direct, it would
б	not be faced with that same kind of roadway geometrics.
7	Q. And those roadway geometrics that you
8	mentioned, is that one of the reasons that you believe
9	that Stanwood Fire Station would become sort of a first
10	responder under that mutual aid agreement?
11	A. It is.
12	Q. And I apologize if my question earlier wasn't
13	clear, your report here says that if response is coming
14	from Station 96, it's approximately 12 minutes. Do you
15	know what the additional time would be, ignoring the
16	geometry configuration problems for now, if the
17	responders are still going to come from Station 96, does
18	that increase the response time substantially by closing
19	Logen Road, the 12 minute response time?
20	A. I can't say for sure. I think there's some
21	issues with them making that turn that probably require
22	some special maneuvering around that corner, so however
23	long it took them to do that, I couldn't
24	Q. Do you know what the response time from the
25	Stanwood Fire Station would be?

1 Α. I estimated about 4 minutes. Is it your understanding that if the crossing 2 Ο. 3 is left open, the emergency response route will have to 4 be adjusted anyway because of the unpredictable 5 blockage? б Α. Your Honor, it's my assertion that that would 7 be the case because of the unpredictability of being 8 able to use the crossing with train blockages which 9 would be unknown at the time of an emergency call. 10 And is it your conclusion that closure of the Ο. 11 Logen Road public crossing will have a substantial 12 impact on emergency response? 13 Α. No, I do not believe that it would. 14 Does closure of the Logen Road public Ο. 15 crossing have a substantial effect on school bus routes? 16 Α. My conversations with the Stanwood School 17 District indicated that they are not at this time using 18 Logen Road for bus routing. They did indicate, however, 19 though that they do evaluate that on a yearly basis. I 20 believe from my review of the road though that using 21 Logen Road for bus routing would be problematic because 22 of the width of the road and the fact that there, as I 23 said before, very little room for maneuvering outside 24 the roadway, and you've got extreme grades on the west 25 side all along the corridor, so I would think -- and

plus the roadway geometry that I mentioned before for the train or the emergency vehicles would also apply to school buses and the difficulty in maneuvering around those turns and accessing Pioneer Highway as well, so I don't think that would be a preferred route for a school bus.

7 Ο. Mr. Norris, does closure of the Logen Road 8 public crossing affect the response route from the 9 Stanwood Fire Station up through Logen Road? 10 I don't believe it does, because the -- it Α. 11 would be the same direct route. The only other issue 12 that would be there would be any kind of secondary route 13 access to the site. And again as we were noting that with the blocking of the railway, that would be 14 15 problematic to get through there anyway. So I don't 16 think as a whole that it would really adversely impact 17 the emergency vehicle response.

18 Ο. Did you consider future growth and development of the area in your traffic impact analysis? 19 Yes, I looked at the development potential of 20 Α. 21 the land there. It's basically agricultural property with 10 acre zoning. It's outside the City of Stanwood 22 23 urban growth area. The use of this road for a future 24 corridor as a connection between Pioneer and Old Pacific Highway would be problematic because of the narrow width 25

1 of the road being 15 feet wide across the extent even as it goes into the 292nd Street section. There are no 2 3 shoulders, there would -- the cost of construction along 4 that would be significant, and with at this point in time very little benefit to the motoring public, so. 5 MS. ENDRES: I don't think I have any further б 7 questions for Mr. Norris at this time. 8 Did I move to admit Exhibit 7, Your Honor, I can't remember? 9 10 JUDGE TOREM: You did. 11 MS. ENDRES: I did? 12 JUDGE TOREM: That was admitted, 6 and 7 are 13 admitted. 14 Thank you, Ms. Endres. 15 Mr. Thompson, any questions for Mr. Norris? 16 MR. THOMPSON: No questions. 17 JUDGE TOREM: Mr. Kasting? 18 MR. KASTING: Again no questions for the 19 County. 20 JUDGE TOREM: Mr. Logen, if you will allow me 21 to ask a couple of questions first, they might impinge 22 on some you were going to ask, but I just want to follow 23 a little bit with the traffic questions here. 24

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EXAMINATION

2 BY JUDGE TOREM:

3 Mr. Norris, you testified about the 140 trips Ο. 4 that are shown on Figure 2 being generated perhaps half 5 by these 7 private residences that are along Logen Road. I'm trying to see which direction those went. Is there б 7 any direction to those, did they go toward Old Pacific 8 Highway or toward Pioneer Highway, or are the 9 directional arrows shown only the peak hour trips on 10 this document?

11 Α. The document illustrates the direction of 12 p.m. peak hour vehicle counts. It does not identify any 13 origins or destinations of those trips. It's only the actual magnitude of what was observed. There was no 14 15 modeling that was done to assess where the trips are 16 coming. So all you can do is really look at the 17 magnitude of the trips at the different intersections 18 and see the orientation of those trips to gain a feel 19 about where they're coming from and going to.

20 Q. And looking at the roadway geometry, you said 21 that Fire Station 96 which was District 14 is the 22 primary responder to the Logen Road area; is that 23 correct?

A. That's correct.

25 Q. And they come from the north on Pioneer

1 Highway to access this area? 2 Currently I believe they come down Α. 3 300th/Dettling Road, and then come across that way. 4 With the closure of the crossing, they would be 5 compelled to use Pioneer Highway and come to 92nd. So if they were to come as you're describing б Ο. 7 it down 300th, they would cross Pioneer Highway and 8 continue apparently westbound across the tracks once, 9 and then turn south on Old Pacific Highway and come back 10 across the tracks a second time? 11 Α. That's my understanding, yes. 12 Ο. And was that described to you by a member of 13 that fire house? 14 No, it was not. Α. 15 Ο. And would that routing with two crossings as 16 you've described it of the rail line to access the spots 17 on Logen Road between the railway on the west and 18 Pioneer Highway on the east, is your assumption that 19 that's the routing so they would avoid the roadway 20 geometrics you previously described at 288th and 92nd? 21 Α. That is correct. 22 And this would be for a fire engine that has Ο. 23 to make those turns; is that correct? 24 Α. That's correct. 25 Did you look at all about medical aid or Ο.

1 ambulance and what their most direct routing would be? Their most direct routing would most likely 2 Α. 3 be to the 288th Street/92nd intersection, come that way 4 rather than going across the railway twice. 5 Ο. And so with the District 14 Station 96 response being 12 minutes, is that for the fire truck 6 7 with the routing and the two crossings we just described? 8 9 Α. Actually that's the time difference between 10 the -- with the closure between the two stations, it's a 11 comparative between the two stations. 12 Ο. Okay. I don't recall if you had any data in 13 your report as to actual responses being made to the Logen Road area. Were you able to get any data 14 15 regarding actual responses from either firehouse in 16 Stanwood or from the County? 17 Α. I did not. 18 Ο. Is that you tried and there wasn't a data 19 source, or you just didn't make that attempt at this 20 time? 21 Α. I spoke with the chief and one of the fire folks, and I didn't obtain any information from the 22 23 Stanwood Station on it and didn't have the opportunity 24 to talk to the District 14 chief, so. 25 In your opinion though, it sounded as though Q.

1 if there were a medical emergency in one of the residences or a fire anywhere along the Logen Road 2 3 corridor that the fastest response would be from the 4 City of Stanwood? 5 Α. That's correct. б Q. And that would be by at least three times 7 faster? 8 Α. Correct. 9 Q. And when you spoke to the Stanwood fire 10 chief, was that the same understanding that he 11 expressed, that he would be the primary responder 12 despite the assignment of primary responders in some 13 other plan? 14 The fire chief actually said that -- he Α. 15 didn't get into that. He basically said it was a mutual 16 aid response and that they would respond to that. The 17 fireman that I spoke to said that they are actually the 18 ones that respond there, but I didn't get that word from 19 the chief. So it's just with the mutual aid response 20 it's just logical with those time differences that the 21 Stanwood Station would be the primary responder to. 22 And again, the routing that the Stanwood Fire Q. 23 Station would take would be along Pioneer Highway? 24 Α. Correct. 25 And up into Logen Road? Q.

1	A. Right, they're if you look at my graphic
2	on Figure 2 if you're looking at that one, SR 532 runs
3	east and west, and then SR 530 comes down north and
4	south, and so just on the south side of 532 are 268th
5	Street Northwest, and that southeast quadrant, that
б	intersection, is where the Stanwood/Camano Island Fire
7	Station is.
8	Q. So on the bottom right-hand portion
9	A. Correct.
10	Q of the map?
11	A. Correct.
12	Q. So there would be no reason for the Stanwood
13	folks to be on Old Pacific Highway making that response
14	if they were coming directly from their fire house?
15	A. That's correct.
16	Q. Okay. As to the accident history on page 5,
17	in the narrative above Table 1, it says the crash
18	history dates back to 1978, and then you have a date of
19	1975 in the table; which one is correct?
20	A. Yes, that '78 is in error, that should be
21	1975 was when the records became available for the
22	national data.
23	Q. All right, so I will make a pen and ink
24	correction to my copy, the narrative will then say the
25	crash history dates back to 1975.

1 Α. That's correct. At 271st Street Northwest, you described 2 0. 3 those accidents as possibly being prevented in the 4 future when the gates are improved? 5 Α. Correct. б Ο. What is the nature of the gates that are 7 there right now? 8 Α. I believe there's the full gates and flashers 9 and warning devices now. 10 Q. These are two quadrant gates? 11 Α. I don't believe they're -- I don't know that 12 for sure, no. But these incidents have been occurring 13 over a 30 year time frame, and I know that the crossing 14 has been updated with the development of the siding and 15 the enhancement of the crossing protection, so not all 16 of them apply to the same gate crossing configuration. 17 0. Do you know about when that modification 18 occurred? 19 I've got that in my --Α. Because I believe the January 2008 incident 20 Ο. 21 occurred actually while we were in hearing up at Hickox 22 road; is that correct? 23 I think that's true, yes. Α. 24 Q. Do you have an approximate date for the update, because it would have been I'm guessing either 25

1 before the 1989 accident or somewhere thereafter? 2 Yeah, I don't have that right before me. I Α. 3 would have to do a little research on that to be able to 4 verify that. 5 JUDGE TOREM: And I apologize if I'm directing something to you that should go to a future б 7 witness, but at least the attorneys understand what data I'm looking for, and if we need to have a supplemental 8 exhibit later on to fill out the record, I would 9 10 certainly entertain that. Okay, Mr. Logen, have I left you anything? 11 12 MR. LOGEN: Yes. 13 JUDGE TOREM: Okay. 14 MR. LOGEN: Thank you. 15 JUDGE TOREM: And as you can see, you'll have 16 to speak up just a little bit. 17 MR. LOGEN: Yes. 18 19 C R O S S - E X A M I N A T I O N 20 BY MR. LOGEN: 21 Q. Mr. Norris, you testified that you had gathered the information in your report; is that 22 23 correct? 24 Α. That's correct. 25 Q. How did you validate the information?

1 Α. What particular information are you referring 2 to? 3 Q. The accidents. 4 Α. The accidents were obtained from the Federal 5 Railroad Administration accident reporting system. But you don't know that they -- or I'll б Q. 7 phrase it as a question. 8 Do you know if that is 100% accurate? 9 Α. I can't speak to the 100% accuracy fact, although I know that they do keep records of the 10 11 incidents that occur at grade crossings, so. 12 Ο. In regards to the number of, what do you call 13 it, the number of cars that travel these roads, the traffic volumes that you show on Figure 2, how did you 14 15 validate that? 16 Those were actually validated from field Α. traffic counts that were collected by a traffic count --17 18 professional traffic counting company in March of this year for the turning movement counts, and the 24 hour 19 counts that were obtained from Snohomish County were 20 21 collected in July of '08 and October of '08. What is the total capacity of Dettling Road 22 Q. 23 as far as traffic volume? 24 Α. Generally the capacity of a two-lane road is

around 10,000 vehicles per day. 25

1 Q. Specifically Dettling Road, what is the capacity there, what would you estimate? 2 3 Α. It's probably in that range from an actual 4 capacity standpoint. 5 Ο. Are you aware if Dettling Road has ever been б closed? 7 Α. I'm not aware of whether it has or not, no. 8 Ο. You testified that it's a reasonable distance 9 for people to travel from instead of using Logen Road to 10 use 271st or Dettling Road. Is that a reasonable 11 distance, were you referring to cars and trucks and 12 pickups, that type of vehicles, or are you referring to 13 it being a reasonable distance for farm vehicles? 14 Of course the reasonableness of the route Α. 15 totally depends on where people are going and what their 16 destination is, and so the practicality of it would have 17 to be evaluated on a case-by-case basis. But in general 18 because of the activities in this area, a half a mile distance when traffic is oriented to the north or south 19 of this location is not a major impact because of the 20 21 point where they make their decision on the routing to the destination that they're going to. And so that 22 23 location and that distance is consistent with the point 24 at which they make a decision for where they're going. 25 JUDGE TOREM: I think, Mr. Norris, the

0099 1 question was more specific than that. Let me rephrase 2 it. 3 4 EXAMINATION 5 BY JUDGE TOREM: Would it be reasonable since you said it б Ο. 7 would be on a case-by-case basis to imagine a farmer on 8 the east side of the tracks at Logen Road to have to 9 make a decision whether to drive equipment that would 10 normally go across the existing Logen Road crossing from 11 the west side to the east side to have to decide to go 12 out to Old Pacific Highway and then turn north or south 13 and bring that farm equipment either across the Dettling 14 Road crossing or as you say the other choice would be 15 all the way down and across 271st on that street, which 16 direction would a person just trying to get to the other 17 side of the tracks with farm equipment go? 18 Α. By virtue of the nature of the traffic on the roadway system, I would assume they would probably go to 19 Dettling Road and go across. 20 21 Q. And do you know how much longer it might take to move standard farm equipment that might have that 22 23 orange triangle on the back of it showing it's a slow 24 speed vehicle from there at the intersection of Logen 25 Road and the crossing that would be closed around to the

1 other side of that crossing if you used the routing you 2 suggested? 3 Α. Let's see, I would have to do some 4 calculation here. 5 Four or five minutes. So you think it would take an extra four or б Q. 7 five minutes to go out Pacific Highway, turn to the 8 right, turn to the right again at Dettling Road and 9 cross, and then come to Pioneer Highway, turn back 10 south, and I believe they would encounter that same 11 roadway geometrics you mentioned would be a hard turn 12 for the fire equipment, they would have to come back on 13 288th to 92nd and then go back up Logen Road? 14 Heading north on Logen Road, yes. Α. 15 Ο. And so is that a total trip length of four to 16 five minutes or just an additional four to five minutes 17 you're anticipating? 18 Α. Additional four or five minutes. 19 I didn't observe in my experience any major 20 agricultural activity along Logen Road from Pioneer 21 Highway to the crossing. The road drops off pretty sharply to the west, and there's a bank on the east side 22 23 of Logen Road with residential properties along the east 24 side, so I don't know -- I don't know what the occasion 25 would be for someone to want to go north on Logen Road

1 if they were on the west side of the railway crossing now and coming around from the other way. 2 3 JUDGE TOREM: Mr. Logen, go ahead. 4 MR. LOGEN: Thank you. 5 б C R O S S - E X A M I N A T I O N 7 BY MR. LOGEN: 8 Ο. What's the maximum distance that you consider reasonable, and is that -- and the second part to the 9 10 question is, is that just in your judgment or is there 11 some standard for reasonable distance to travel to 12 another crossing? 13 Α. I don't think there's any standard for measuring what's reasonable for farm equipment to have 14 15 to travel to access the farm locations. This is an 16 answer to a hypothetical question of what the time would 17 be. 18 Ο. You testified that Logen Road to Dettling 19 Road is approximately half a mile and Logen Road to 20 271st is approximately 1.5 miles; is that just the 21 distance on Old Pacific Highway? Yes, I believe it is. 22 Α. 23 So if someone were wanting to go from the Q. 24 intersection of Logen Road to the other side of the 25 tracks on Logen Road, the intersection of, excuse me,

1 Logen Road and Old Pacific Highway, that area, to get to the other side of the tracks, what's the total distance 2 3 that they would have to travel? 4 Α. So could you restate the question, please. 5 Ο. If you started at the intersection of Logen б Road and Old Pacific Highway. 7 Α. Okay. 8 And you wanted to get to a point on Logen Ο. Road east of the railroad. 9 10 Α. Okay. 11 Ο. What's the distance of that? 12 MS. ENDRES: Could Mr. Logen clarify what 13 point on Logen Road. I believe, and I'm not trying to testify, but I believe the railroad track back out to 14 15 Pacific Highway is something like a mile, so I want to 16 make sure that Mr. Norris's answer is accurate. 17 On the Figure 2 traffic volumes of your Ο. 18 exhibit, let's just assume that you would go from the 19 circle that's Old Pacific Highway/Logen Road; do you see 20 that circle? 21 Α. Yeah. And you're going to go by one of these two 22 Ο. 23 routes and go to the point where it says 140 on Logen 24 Road. 25 So going around on Old Pacific Highway down Α.

1 271st and back up on Pioneer Highway, is that what you're suggesting? 2 3 Q. Yes. 4 Α. Well, just kind of -- I don't know the exact 5 distance between Logen Road and, excuse me, between Old б Pacific Highway and Pioneer Highway along Logen Road, 7 but say roughly 5 miles or something like that, and I'm assuming farm equipment would travel 20, 25 miles an 8 hour. 9 10 Q. 12 to 15. 12 to 15? 11 Α. 12 Q. What we have. 13 JUDGE TOREM: Mr. Logen, I will let you 14 testify to that a little bit later. 15 MR. LOGEN: Sorry. 16 JUDGE TOREM: So you were estimating 25 miles 17 per hour in your --18 THE WITNESS: I was estimating 25. 19 JUDGE TOREM: But you're estimating that 20 essentially to go around the long way would be a 5 mile 21 distance? 22 What I was estimating, yeah, about 5 miles, Α. 23 so if I was going 25, it would be roughly about 10, 12 24 minutes I guess. 25 BY MR. LOGEN:

1 Ο. And approximately what would the distance be 2 going from that same circle where Logen Road and Old 3 Pacific Highway intersect traveling north on Old Pacific 4 Highway, crossing at Dettling Road, coming south on 5 Pioneer Highway to 288th and down around the sharp б corner that you described, I don't remember how you 7 described that, at 92nd and going back up to the 140? 8 Α. That was the value I was giving of about four 9 or five minutes for that. 10 And what is the approximate distance? Q. 11 Α. I was assuming it was roughly about 2 miles. 12 Ο. And approximately what is the distance from 13 the circle on Old Pacific Highway and Logen Road intersection to the mark of 140 on Logen Road traveling 14 15 on Logen Road? 16 Α. It looks like about maybe 3/4 of a mile, 17 something like that. 18 Ο. So do you feel that traveling an additional mile and a quarter or an additional 4 and a quarter 19 miles is reasonable? Again, I'm asking in regards to 20 farm equipment. 21 22 I don't believe that there's any, like I said Α. 23 before, any standard that specifies what's reasonable in

25 they have to do. I think when we're looking at these

terms of farm equipment accessing their fields or what

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1 situations, we're looking at the magnitude of the usage 2 and how it compares against the magnitude of the issue 3 and the safety that relates to the crossing itself and 4 the ability to get across. I think one of the issues 5 that the farm equipment is going to be faced with, just б as the emergency vehicle equipment and the general 7 public, is if that crossing's not open, that farm 8 equipment is going to have to turn around and go all the 9 way back the direction they already came and then 10 traverse these distances that we're talking about, so 11 you add that much more time into the travel. So I quess 12 that's where the reasonableness comes in is whether or 13 not we have a certain route that we know it's going to take, or do we have a route that's uncertain that is 14 15 going to add time and is going to have a major certainty 16 that it's going to be blocked for a continuous period of 17 time on a regular basis. 18 JUDGE TOREM: So two clarifications. 19 EXAMINATION 20 21 BY JUDGE TOREM: You said if it's closed, you were saying that 22 Ο.

23 not as though it was a permanent closure but closed due 24 to a freight train blocking the track for an unspecified 25 period of time?

1 Α. That's correct. And I think perhaps in other words your 2 Ο. 3 testimony is that the inconvenience that might be 4 imposed on a farmer wanting to move equipment across has 5 to be weighed against the overall situation of certainty б for everybody not having to come and turn around if they 7 find the crossing blocked, that's why you're proposing 8 and supporting the actual closure of this as a public crossing; is that correct? 9 10 I believe that that is one of the factors. Α. 11 One of the factors that weighs in the favor of closure 12 is that it offsets the issue that was expressed about 13 the use of farm equipment across the crossing is the 14 uncertainty of whether that crossing is going to be open 15 and whether they can use it or not, and that's one 16 issue. The other issue is the whole safety of the 17 crossing too, so. 18 JUDGE TOREM: Go ahead. 19 MR. LOGEN: Thank you. 20 C R O S S - E X A M I N A T I O N 21 BY MR. LOGEN: 22 23 Is Fire District 14 or specifically Station Q. 24 96 I believe it is, is that manned or is it volunteer? 25 I believe that's a fully manned station. Α.

1 Ο. Is the Stanwood/Camano Fire Department manned 2 or volunteer? 3 Α. That is a manned station as well. 4 Ο. Is there a paramedic at the Station 96? 5 Α. I believe they have Medic One service at б Station 96 and at the Stanwood Station. 7 Ο. Now moving on to the mutual aid agreement, it 8 seems like you provided conflicting or you got 9 conflicting information from the fire chief and a 10 fireman about who was going to respond there. In the 11 mutual aid agreement, isn't that only when one fire 12 department can't respond, the other one then responds? 13 Α. You would have to discuss that more fully with them, but my understanding is that under a mutual 14 15 aid agreement, the dispatcher evaluates who's the closer 16 proximity to the incident and makes a decision of who to 17 dispatch at that point in time. 18 Ο. So if that's the case, you may not know the answer to this question, there's taxes for our fire 19 districts, and why is somebody paying taxes to one fire 20 21 district when they're being served by another if that's 22 the case? 23 Α. I don't have the answer to that question. 24 JUDGE TOREM: Mr. Logen, do you have a copy

25 by any chance of the mutual aid agreement between these

0108 1 two fire stations? 2 MR. LOGEN: I do not. 3 4 EXAMINATION 5 BY JUDGE TOREM: б Q. Mr. Norris, did you ever see one? 7 Α. I did not. 8 So that was only word of mouth that one Ο. 9 exists? 10 Α. Right, the fire chief at Stanwood Station 11 indicated there was one. 12 Ο. Mr. Norris, in your experience, would you 13 expect a mutual aid agreement to lay out what you've 14 just testified to regarding who would have priority or 15 whether it would be a dispatcher's discretion to know 16 which station to charge with an initial response? 17 Α. I believe that would be laid out in the 18 mutual aid agreement. 19 All right, so if that was something I wanted Ο. 20 to take up or the parties wanted to submit as a 21 supplemental exhibit, I could probably obtain that with 22 a Bench Request to one or both of these parties? 23 I would believe so, I can't say for certain. Α. 24 Q. But if I asked for that, you would expect 25 that information to be contained in the mutual aid

1 agreement? 2 Α. Correct. JUDGE TOREM: Mr. Logen, additional 3 4 cross-exam? 5 C R O S S - E X A M I N A T I O N б 7 BY MR. LOGEN: On page 6 of your study marked Exhibit 7 on 8 Ο. 9 emergency services, the last sentence says the closing 10 is not expected to have a significant adverse impact on 11 emergency response, so would you expect that there is 12 some impact then? 13 Α. I believe there is impact on service from the District 14 Station located adjacent to I-5. The time 14 15 and the turns that have to be made coming from that 16 direction would be impacted. 17 And in regards to school transportation, you Ο. 18 indicated that there is no students currently living 19 along the corridor. If there were, how would they get 20 to school? 21 Α. I guess they could be driven to a stop that's adjacent to the highway where the bus could pick them 22 23 up, or parents could drive them. 24 Q. If the stop was on Old Pacific Highway, how 25 would the students get there?

1 Α. They would have to drive around. 2 MR. LOGEN: I believe that's all my 3 questions. 4 JUDGE TOREM: Any redirect? 5 MS. ENDRES: I do have a little bit of б redirect. 7 8 REDIRECT EXAMINATION BY MS. ENDRES: 9 10 I will sort of work backwards here while it's Q. 11 fresh in my mind. I don't want to speculate too much or 12 ask you to speculate about school traffic. Couldn't 13 students walk to the bus stop if they needed to? I mean 14 they wouldn't necessarily have to be driven, would they? 15 Α. They would not have to be driven necessarily, 16 no. 17 And Mr. Logan asked you questions about Q. 18 impact on emergency response, and then you've spoken a 19 little bit about the angle that emergency responding 20 vehicles, their route from Pioneer Highway to Logen 21 Road. If, and I want to exclude fire trucks from this, 22 if an aid car was coming from Station 96, would an aid 23 car be able to access Logen Road from Pioneer Highway? 24 Α. I believe an aid car would. 25 And did you testify earlier that Station 96 Q.

1 does have a Medic One, or is it just the Stanwood Station that has a Medic One? 2 3 Α. My understanding is that they do have a Medic 4 One. 5 And by they, you mean both stations or just Ο. б the --7 Α. Both stations. 8 Mr. Logen asked you some questions about farm Ο. 9 equipment traveling from the west side of the railroad 10 tracks to the east side either using Logen Road directly 11 or north on Dettling or south on 271st, and I believe 12 you testified earlier that it's your expectation that 13 farm equipment would use the Dettling crossing because it's a shorter reroute; is that correct? 14 15 Α. Not only do I believe it would be shorter, 16 but it would also avoid conflicts from the heavier 17 traffic volumes that would be experienced along 271st 18 and going through the heart of the town. 19 And is it correct that the Dettling Road ο. crossing has a farm equipment warning sign today? 20 21 Α. That's correct, they do. Mr. Logen asked you questions about whether 22 ο. 23 it's reasonable to divert farm traffic up to Dettling 24 Road or south to 271st if the crossing is closed. Does 25 the volume of farm traffic affect your analysis? And I

1 will sort of use extremes here, but specifically maybe 1 or 2 tractors versus if all 140 vehicles were slow 2 3 moving farm equipment? 4 Α. I don't think it changes the same scenario 5 that we're talking about, the potential of a closure 6 being generated by the existence of a train blocking the 7 track and creating the uncertainty, the inability to get 8 across that crossing. 9 Q. Let me clarify my question a little bit. In your professional opinion, would you consider the 10 11 reroute via Dettling crossing to be a more significant 12 public impact if it impacted a great number of farm 13 vehicles as opposed to just if it impacted one or two? Am I still not being clear? 14 15 Α. Yeah, I'm just trying to think about this 16 though. You're assuming that all of the farm equipment 17 is located on Logen Road on the west side of the 18 crossing and wants to get to Logen Road on the east side of the crossing? 19 I'm asking you to compare 1 slow moving farm 20 Ο. 21 vehicle, whether diverting that 1 vehicle is more reasonable than it would be to divert say 100? 22 I think it probably is more reasonable to 23 Α. 24 divert 1 rather than 100, but --Sorry if I wasn't being clear. 25 Q.

1 Α. No, that's all right. Do Pioneer Highway and Pacific Highway have 2 Ο. 3 shoulders? 4 Α. Both highways have very constrained 5 shoulders, maybe two to three feet along the section б between Dettling and Logen Road or 292nd. As you go 7 south along Pioneer Highway into town, you're getting some sections where the shoulder widens out and on the 8 east side there's some sidewalk and things like that. 9 10 So it varies along there, but there's no really designed 11 shoulder storage for vehicles of the typical standard 12 design today of six to eight feet, so that does not 13 exist. 14 How many homes are on Logen Road? Ο. 15 Α. My count was there are about seven homes that 16 have access to Logen Road. 17 So when we're discussing emergency access, is 0. 18 that limited to those seven homes in your understanding? 19 Α. That's correct. 20 MS. ENDRES: I don't have any further 21 questions. 22 JUDGE TOREM: Mr. Thompson, anything else? 23 MR. THOMPSON: No questions. 24 JUDGE TOREM: Mr. Kasting? 25 MR. KASTING: Still none.

1 JUDGE TOREM: And Mr. Logen? 2 3 R E C R O S S - E X A M I N A T I O N 4 BY MR. LOGEN: 5 Ο. You said that there was seven homes that have б access to Logen Road, do you have any idea how often, 7 well, a better question would be how many of those homes 8 have access only to Logen Road? 9 Α. I would say from my count probably five to 10 six of the seven. There may have been some houses that 11 go all the way through. It was difficult to tell from 12 the areal mapping whether the connections were all the 13 way through, but it looked to be about probably five to 14 six of the seven have access only to Logen. 15 Ο. So when you came up with your counts on 16 vehicle trips, you used seven homes; is that correct? 17 Α. That's correct. 18 Ο. And you assumed that they made all trips on 19 Logen Road rather than using their alternate access? 20 Α. That's correct. 21 Q. The grade of Dettling Road, does it cause you any concerns about farm equipment going up or down that 22 23 grade possibly pulling something? MS. ENDRES: Which road, I'm sorry? 24 25 MR. LOGEN: Dettling Road.

1 Α. Dettling Road does have a steep grade as you head east from the crossing. I mean traveling at 10 to 2 3 12 miles an hour I don't know that that would have a 4 significant impact on the ability of the farm equipment 5 to make the grade. MR. LOGEN: Thank you, that's all I have. б 7 JUDGE TOREM: All right, I see nothing else 8 for this witness, thank you, Mr. Norris. 9 THE WITNESS: Thank you. 10 JUDGE TOREM: Again, Exhibits 6 and 7 have 11 been admitted. We're at 12:00 noon or as close as we're 12 going to get to it, and we have I think three more 13 witnesses for BNSF. The next one scheduled is Mr. Bloodgood followed by Mr. Agee and then 14

15 Mr. MacDonald. Do we want to do those after a lunch 16 break?

17 MR. SCARP: Probably.

JUDGE TOREM: All right, then we'll come back and go off the record and discuss how long we'll take for a lunch break, but we'll come back after a little while with those witnesses in that order. And I think that will make BNSF's case in chief; is that correct? MR. SCARP: That's correct. JUDGE TOREM: All right, so hopefully

25 everybody will be prepared with their witnesses after

1 lunch. I think we're moving at a pretty reasonable pace to get done perhaps all together in one day, but I don't 2 3 want to rush anybody. If we do need to come back and 4 reconvene tomorrow, we do have the room tomorrow, and I 5 imagine we have the same parking we're going to get б tomorrow that we have today. 7 So we'll be at recess for lunch. 8 (Luncheon recess taken at 12:00 p.m.) 9 10 AFTERNOON SESSION 11 (12:50 p.m.) 12 JUDGE TOREM: It's about 10 minutes to 1:00, 13 we're back on the record, and Mr. Bloodgood is in the witness chair. I'm going to premark his resume' or CV 14 15 as Exhibit 8 and a Snohomish County Council motion 16 number 09-032 dated January 26, 2009, as Exhibit 9. 17 Sir, if you will stand and raise your right 18 hand. 19 (Witness JAMES BLOODGOOD was sworn.) 20 JUDGE TOREM: All right, thank you. 21 22 Whereupon, 23 JAMES BLOODGOOD, 24 having been first duly sworn, was called as a witness 25 herein and was examined and testified as follows:

1 DIRECT EXAMINATION BY MS. ENDRES: 2 3 Ο. Good afternoon, Mr. Bloodgood, one more 4 document, start with your CV here, I guess this will 5 probably be marked as Exhibit 8, do you see this document, your CV? б 7 Α. Yes. 8 Ο. And is the information in here true and 9 correct to the best of your knowledge? 10 Α. Yes. 11 Ο. And when was that CV generated? 12 Α. You mean like when was it last updated? 13 Q. Yes, is this the most recent update to your CV that you have? 14 15 Α. It's been a few years since I've updated it. 16 It's sort of self updating since my job's been the same 17 for the last few years. 18 MS. ENDRES: Your Honor, we'll move to admit 19 Mr. Bloodgood's CV as Exhibit 8. 20 JUDGE TOREM: Seeing no objections, admitted. 21 BY MS. ENDRES: 22 Mr. Bloodgood, you should have what has been ο. 23 marked and admitted as Exhibit 7, it's called a Logen 24 Road railway crossing Closure Traffic Impact Analysis; 25 do you have that document in front of you?

0118 1 Α. Yes. 2 Have you seen this document before? Ο. 3 Α. Yes. 4 Ο. I don't know if you were here earlier, were 5 you here for Mr. Norris's testimony? б Α. Yes. 7 Ο. Was there anything that you heard us discuss relating to Exhibit 7 that you disagree with? 8 No, there was simply a minor correction, it's 9 Α. 10 more of a typographical correction. SR -- on the two figures, Figures 1 and 2 I believe, I just wanted to 11 12 point out that Pioneer Highway is no longer State Route 13 530. 14 And you're referring to Figures 1 and 2 where Ο. 15 it says Pioneer Highway and then a circle with 530 in 16 it? 17 Α. Right. 18 Ο. So you're saying the road is solely known as 19 Pioneer Highway; is that correct? 20 Α. That's correct. 21 Q. Was there anything in Exhibit 7 relating to 22 vehicular traffic at Logen Road and the two adjacent 23 crossings that you disagree with? 24 Α. No. 25 ο. Is it your understanding and position that

1 the closing of Logen Road and diverting the Logen Road traffic to the Dettling or 271st Street Crossing is an 2 3 acceptable result of closure to the public crossing? 4 Is it reasonable to deflect Logen Road 5 traffic to the two adjacent crossings? б Α. Yes. 7 Q. And why is that? It's a real low volume of traffic on Logen 8 Α. 9 Road. Diverting that to either one of the crossings or 10 both crossings would not have a significant operational effect. 11 12 Ο. Is it your position and understanding that 13 the closure of Logen Road Crossing to public travel 14 would have a significant impact on emergency response 15 time? 16 Α. No, it is not my position that that would 17 happen. 18 Ο. So is it fair to say that you are not aware 19 of a significant impact on emergency response time if 20 Logen Road Crossing is closed? 21 Α. That's correct. 22 JUDGE TOREM: Mr. Bloodgood, can you keep 23 your voice up. 24 THE WITNESS: Sure. 25 MS. ENDRES: And I will try my best to let

1 you get your answer out before I ask a question if you let me get it out before you get to your answer so our 2 3 court reporter doesn't hate us at the end of the day. 4 BY MS. ENDRES: Mr. Bloodgood, is it the County's position 5 Ο. that the Logen Road railway crossing should be closed? б 7 Α. Yes. 8 Is it the position of the County that 0. alternative traffic routes are suitable if the Logen 9 10 Road public crossing is closed? 11 Α. Yes. 12 Ο. I have also handed you I believe what will be 13 marked as Exhibit 9. Do you have that document in front of you? It's titled Snohomish County Council, Snohomish 14 15 County Washington, Motion Number 09-032. 16 Α. I have that, yes. 17 Ο. Have you seen this document before? 18 Α. Yes. 19 What is it? Ο. 20 It is a motion by the County Council stating Α. 21 that they are not opposed to the closure of the Logen 22 Road Railroad Crossing, that the County Council supports 23 the passenger train station in Stanwood, and also 24 authorized the County Engineer to sign the waiver of 25 public hearing for this crossing closure.

1	Q. And when you say the County Engineer to sign
2	a waiver of hearing, do you mean yourself?
3	A. No, Owen Carter is the County Engineer.
4	Q. Does Exhibit 9 indicate that it's the
5	official position of Snohomish County that the Logen
6	Road crossing should be closed?
7	A. Yes.
8	MS. ENDRES: Your Honor, I move to admit
9	Exhibit 9.
10	JUDGE TOREM: Any objections?
11	It's admitted.
12	BY MS. ENDRES:
13	Q. Mr. Bloodgood, we've heard a little bit about
14	some plans to mitigate the impacts of closure on traffic
15	that might otherwise use Logen Road, and Mr. Logen
16	brought up earlier with an earlier witness whether the
17	portion of Logen Road on the west side of the railroad
18	tracks will be closed. Can you explain what your
19	knowledge of that is?
20	A. I think the question that was posed was could
21	Logen Road be closed at Old Pacific Highway if I
22	remember correctly, and it could. That would require
23	some Council action, so I can't commit to anything other
24	than saying that we would work towards that goal with
25	the ultimate need to have the Council action.

1 Q. Is it your understanding that at some point between Old Pacific Highway and the railroad tracks at 2 3 Logen Road that the road would be barricaded and closed 4 to public travel if the Commission grants closure? 5 Α. Yes. MS. ENDRES: I don't think I have any more б 7 questions of Mr. Bloodgood, Your Honor. 8 JUDGE TOREM: Mr. Thompson? 9 MR. THOMPSON: No questions. 10 JUDGE TOREM: Mr. Kasting? 11 MR. KASTING: None. 12 JUDGE TOREM: And Mr. Logen? 13 14 C R O S S - E X A M I N A T I O N BY MR. LOGEN: 15 16 Q. You've said that it would need Council action 17 to close Logen Road at Old Pacific Highway, and it will 18 be barricaded and closed. Where in relation to the 19 railroad tracks and Old Pacific Highway on Logen Road 20 will it be closed? 21 Α. Well, we haven't made an exact location, and I think we had a phone conversation last week on this, 22 23 and I think you expressed the desire to close it at Old 24 Pacific Highway, and we would work with you wherever you 25 would want it.

1 Q. Is it going to take Council action wherever you put the barricade? 2 3 Α. Unless the closure is right at the railroad 4 right of way, it will take Council action to close a 5 public right of way. б Q. Okay. 7 You stated that it's the County position that Logen Road should be closed. Can you tell me why? 8 9 Α. Because the County Council supports the train 10 station. We signed a waiver of the public hearing 11 indicating that we were not opposed to the closure of 12 Logen Road. 13 Ο. So is not opposed to it different than it 14 should be closed? 15 Α. Not opposed is in this case in support of the 16 train station, which as I understand for the strain 17 station to operate, Logen Road needs to be closed. 18 Ο. So is there some kind of an agreement between 19 the County and the Railroad that says that in order to 20 get a train station, you've got to close any neighboring 21 roads or --22 There is no agreement between the County and Α. 23 Burlington Northern, no. 24 MR. LOGEN: Can I ask questions about 25 responses to data requests I have that Mr. Bloodgood may

1 be knowledgeable of? 2 JUDGE TOREM: If you mean that they were data 3 requests to Snohomish County? 4 MR. LOGEN: Yes. 5 JUDGE TOREM: Certainly. б MR. LOGEN: Okay, thank you, I wasn't sure on 7 that. 8 BY MR. LOGEN: 9 Q. In response to data requests, I was given 10 studies of the various intersections and the roads, 11 specifically one of them was 300th Street Northwest or 12 Dettling Road and Pioneer Highway and also at Old 13 Pacific Highway. I noted in those that there was a 14 number of accidents at those intersections. 15 JUDGE TOREM: Let's establish if he has 16 knowledge of those documents. 17 MR. LOGEN: Oh, okay. 18 JUDGE TOREM: Do you have documents you want 19 to show him? 20 MR. LOGEN: Yes, I do. 21 JUDGE TOREM: Are these part of your exhibits 22 as well? 23 MR. LOGEN: A couple of pages are but not the 24 entire response to the DR. 25 JUDGE TOREM: If you would show the exhibit

0125 1 first to Mr. Kasting so he'll know what his -- to 2 Mr. Scarp and Mr. Kasting as well. 3 MR. SCARP: But these were propounded to the 4 County. 5 JUDGE TOREM: Correct. I'm not sure if the 6 railway ever saw these data requests or would have had 7 reason to, Mr. Logen, so if you would show them to the 8 gentleman on your right, Mr. Kasting, he's the attorney 9 for this witness. 10 MR. KASTING: Yep. 11 JUDGE TOREM: And you've seen them, 12 Mr. Casting? 13 MR. KASTING: Yeah. 14 JUDGE TOREM: If you will hand them up to 15 Mr. Bloodgood just to see if he had any response or role 16 in the response. 17 THE WITNESS: Yes. 18 JUDGE TOREM: Do you recognize those 19 documents, sir? 20 THE WITNESS: Yes. 21 JUDGE TOREM: Are you going to be able to 22 answer questions perhaps by memory? 23 THE WITNESS: I probably can. 24 JUDGE TOREM: All right. 25 BY MR. LOGEN:

So there appears to be a number of accidents 1 Q. that have occurred at the intersections of Old Pacific 2 3 Highway and Dettling Road and Pioneer Highway and 4 Dettling Road; is that correct? 5 Α. As I recall, there was a relatively low б number, and the accident rate was quite low as well. 7 Let me see, I have Pioneer Highway and 8 Dettling Road, and it looks like there were three 9 collisions in a three year period. 10 Q. Okay. What causes the County to undertake a 11 study like this? 12 Α. In this case, this study was done as a 13 request from the Planning and Development Services Department in response to a land use issue for a 14 15 possible sand and gravel pit on Pioneer Highway just to 16 the north of Old Pacific Highway, so there was concern 17 about potential impacts from truck traffic. 18 Ο. And that truck traffic would use Dettling 19 Road? 20 It could have used that intersection of Α. 21 Dettling and Pioneer Highway as well as Old Pacific and 22 Pioneer. 23 Okay. Has the County ever undertaken a study Q. 24 for the intersection of Logen Road and Pioneer Highway

25 or Logen Road and Old Pacific Highway?

1 Α. Not to my knowledge, no. Not a study of this 2 magnitude, no. 3 Ο. Has there been accidents to your knowledge at 4 either one of those intersections? 5 Α. Not that I can recall. Moving to a similar study of the intersection б Ο. 7 of Old Pacific Highway or 102nd and Pioneer Highway, 8 that one shows on the sheet that's titled determination 9 of possible inadequate road condition, 3 pages down, I 10 believe it's one of my exhibits as well, it shows a 11 partial index or a total index, excuse me, of 39.15? 12 Α. Yes. 13 Q. Can you tell us what that means? Well, it's a summary of the different 14 Α. 15 indicators up above, and the way this process works, 16 it's called an inadequate road condition evaluation. 17 When you sum up the indicators, if the value is under 18 40, the facility is, and I hate to use a double 19 negative, but it's automatically determined not to be 20 inadequate. If the score is over 70, it's automatically 21 determined to be inadequate. In between 40 and 70, over -- well, let me go back to the under 40. The under 40 22 23 is then evaluated in a more informal in-house traffic 24 operations review committee. For those that score 25 between 40 and 70, there is a more formal review that is

1 conducted by the IRC review board, which consists of 2 three registered professional engineers in the state of 3 Washington. An evaluation is made, and a recommendation 4 is then forwarded to the County Engineer, who either 5 agrees or disagrees with those findings, whether it is 6 inadequate or is not inadequate.

7 MS. ENDRES: Your Honor, before we go much 8 further, if I'm correct that we're discussing 102nd 9 here, I guess I would just object for the record that we 10 haven't had any testimony, unless Mr. Bloodgood had some 11 to add, that any traffic will be rerouted to 102nd, so 12 I'm not quite sure where we're going with this 13 specifically, and I just would object along those lines. 14 JUDGE TOREM: Can you clarify, Mr. Logen, 15 what the 102nd intersection is and its relation to the 16 proposed closure? 17 MR. LOGEN: It is the next intersection just

18 north of Dettling Road, and it would be, because of the 19 grade of Dettling Road, would be an alternative if 20 you're pulling a heavy load.

JUDGE TOREM: So you're suggesting that this may be the next northerly intersection where traffic that has a concern with the grade would be diverting to? MR. LOGEN: Yes.

25 JUDGE TOREM: I will allow it for that

1 purpose, because there was some testimony as to the grade in the questions you asked Mr. Norris, so 2 3 objection is overruled, we can entertain this line but 4 in a limited fashion again due to the limited nature of 5 the traffic that might be going that direction. б BY MR. LOGEN: 7 Ο. On the data values, there's one that's 8 volume/capacity ratio? 9 Α. Yes. 10 Q. It's at .33? 11 Α. Yes. 12 Ο. Does that indicate that the road could handle 13 three times the traffic or, yeah, it would be three 14 times? 15 Α. No. 16 Well, it's got one third of what it will take Q. 17 now, and so it could take two thirds more? 18 Α. Oh, no, I see where you're going. No, it's 19 really a measure of delay. In this case because it's an 20 unsignalized intersection, it's a measure of delay on 21 the Old Pacific side of the intersection since it is the 22 one that is stop controlled. It doesn't necessarily 23 mean it could handle three times the amount of traffic, 24 because as you start approaching capacity, you start 25 getting more turbulence in the traffic flow, and it's

1 less predictable.

2	Q. Okay. And the sight distance ratio of .38?
3	A. Yes, it doesn't necessarily mean you could
4	see three times further.
5	Q. No, I didn't think that did, but I wasn't
б	sure what it meant, I wanted to understand that.
7	A. It's just you can see on the right side
8	you've got sight distance data as one of the tabs, and
9	there's a chart that gives you what we were looking at
10	for here, so that's on the second one, what is available
11	versus what is required.
12	Q. So to sum up, what does .38 mean?
13	A. It means it's good sight distance.
14	Q. That's good, the lower the number, the better
15	it is?
16	A. Yes, yes.
17	Q. Okay.
18	A. The higher the number, the closer you get to
19	40 if you total everything up.
20	JUDGE TOREM: Just so I'm clear, Mr. Logen,
21	as to which exhibit that I might have in front of me, it
22	appears that the numbers you're quoting come from what
23	you've submitted as Exhibit LFL-5.
24	MR. LOGEN: I believe that's correct.
25	JUDGE TOREM: Just so I can keep exhibits

1 with the witness that's talking about them, I'm going to mark that now as Exhibit 10, and I've just got it as a 2 3 one page exhibit. So I know you're referring to more 4 documents as the backup for those numbers, but what I'm 5 going to mark as Exhibit 10 is just a one page document. б MR. LOGEN: That's correct. 7 BY MR. LOGEN: 8 Ο. I think my final question on this, is any of 9 this subjective at all? 10 This is a little bit subjective when you're Α. 11 getting into things like driver expectancy, but the rest 12 of it is pretty much, you can see all the information on 13 the right side, it's pretty bookish. 14 Yes, I looked through that and couldn't quite Ο. 15 tie the two together into the summary here. 16 MR. LOGEN: I think that's all the questions 17 I have. 18 19 EXAMINATION 20 BY JUDGE TOREM: 21 Q. On Exhibit 10, Mr. Bloodgood, which is that cover page determination of the possible inadequate road 22 23 condition. 24 Α. Mm-hm. 25 The totals that came out here were 39.15. Q.

1 A. Yes.

2	Q. And if I understand correctly from the review
3	board determination at the bottom, this location,
4	Pioneer Highway at Old Pacific Highway, which apparently
5	is also known as 102nd?
б	A. Yes.
7	Q. Was determined not to be inadequate in its
8	road conditions by .85 points on this scale; is that
9	right?
10	A. Well, no, not exactly. It was automatically
11	determined that way. Even if it had gone over 40, it
12	could have been considered not inadequate.
13	Q. Can you explain that a little bit further,
14	how this numeric scale of 40 as a break point works?
15	A. When it is under 40, there is a more informal
16	in-house traffic operations section of Snohomish County
17	Public Works review. Over 40 yet under 70, there is a
18	more formal review conducted by three licensed engineers
19	in the state of Washington who then make a
20	recommendation on its adequacy or inadequacy to the
21	County Engineer, and the County Engineer then makes the
22	final determination.
23	Q. If someone were to, like myself, ask you
24	what's the take away then from this more formal
25	determination, how would you put it in layman's terms?

1 Α. I think you're having the eyes of a more licensed professional seeing the issue versus not. 2 3 Ο. And what's the ultimate conclusion that you 4 would report back? 5 Α. I'm not sure I quite --What does this mean, this number that comes б Ο. 7 out at 39.15, what do I need to know about the intersection that that number tells me? 8 9 Α. What it tells you is that it's not an 10 inadequate road condition. 11 Ο. So the intersection is acceptable? 12 Α. That's correct. 13 Q. Mr. Logen also referred to a similar determination made or a study done just south at the 14 15 Dettling Road intersection? 16 Α. Yes. 17 Ο. How would this intersection compare to the 18 one to the south that Mr. Norris suggested would be the 19 closest alternate intersection for diversion of traffic? 20 That one scored far less, more in the 27.15 Α. 21 range, so significantly lower than the 102nd Avenue 22 crossing. 23 JUDGE TOREM: All right. 24 And I believe, Mr. Logen, you have the same 25 data sheet on that, you had submitted it as LFL-7?

1 MR. LOGEN: Yes. 2 JUDGE TOREM: Would you mind if I mark that 3 as Exhibit 11 at this time to keep these together? 4 MR. LOGEN: Not a problem. 5 JUDGE TOREM: All right, that will be marked as Exhibit 11. б 7 MS. ENDRES: Your Honor, does Exhibit 11 have 8 a -- is it premarked by Mr. Logen, I want to make sure 9 that --10 JUDGE TOREM: Yes, LFL-7. 11 MS. ENDRES: Thank you. 12 MR. SCARP: Excuse me, Your Honor, Number 10 13 was LFL? 14 JUDGE TOREM: -5. 15 MR. SCARP: Thank you. 16 JUDGE TOREM: Mr. Logen, did you want to 17 offer these for admission at this time, what I've marked 18 as 10 and 11? 19 MR. LOGEN: Yes, I would. 20 JUDGE TOREM: Are there any objections? 21 Okay, seeing none, then those two of Mr. Logen's exhibits have been marked now as 10 and 11 22 23 and are admitted. 24 BY JUDGE TOREM: 25 Mr. Bloodgood, you testified regarding what's Q.

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1	been admitted now as Exhibit 9, the Snohomish County
2	Council Motion.
3	A. Yes.
4	Q. Were you present when this was adopted?
5	A. Yes.
б	Q. Do you know who prepared the document?
7	A. Yes, it was one of the public works staff.
8	Do you need a name?
9	Q. No, but it was prepared by a Snohomish County
10	employee?
11	A. Yes.
12	Q. And the language that is contained in the
13	various whereas clauses and the now therefore, was that
14	proposed by anyone outside the County?
15	A. There was no draft language that was
16	submitted to the County.
17	Q. So my understanding is the overall message
18	from the County Council was they wished to support
19	construction of the new passenger train station here at
20	Stanwood, and if its construction would require the
21	crossing now existing at Logen Road to be closed, that
22	was fine with them?
23	A. That's correct.
24	JUDGE TOREM: Okay.
25	Ms. Endres, did you have any further

1 questions you wanted to follow up with? 2 MS. ENDRES: I do have just a few. 3 4 REDIRECT EXAMINATION BY MS. ENDRES: 5 б Ο. Mr. Bloodgood, there's been some discussion 7 about the County's position, whether it supports closure or does not support closure, another double negative 8 there. I noticed on Exhibit 9, page 2 at the top, that 9 10 this document also discusses and states that: 11 The closure of the Logen Road Crossing 12 will improve public safety by 13 eliminating a low volume crossing over a 14 high-speed rail line and completing 15 infrastructure improvements within the 16 public right-of-way. 17 Is it your understanding that the County 18 recognizes the danger presented at Logen Road crossing 19 as well as the low daily traffic count at Logen Road 20 crossing separate from the Amtrak station based on this 21 language? 22 Α. Yes. 23 Is it your professional opinion that 102nd is Q. 24 a suitable alternative crossing for traffic that might

25 be diverted from the Logen Road crossing if it's closed?

1 A. 102nd?

2 Mm-hm, north of Dettling. Ο. 3 Α. North of Dettling, that's an acceptable 4 crossing, yes. 5 And there's also been some discussion like I Ο. б said about the County's position, and I want to focus on 7 your individual opinion as a professional engineer. 8 Α. Okay. 9 Given the testimony that you've heard from Ο. 10 Mr. Wagner about the project, the specifications of the 11 project, as well as Mr. Norris's testimony and 12 Mr. Norris's traffic impact study, as well as your own 13 knowledge as a County employee, is it your professional 14 opinion that the public safety requires closure of the 15 Logen Road crossing if the siding track project is 16 completed? 17 Α. Yes. 18 MS. ENDRES: I don't have any other 19 questions, Your Honor. 20 JUDGE TOREM: Okay, any other further 21 cross-examination for this witness? 22 Mr. Logen. 23 MR. LOGEN: I have one. 24 25

1 R E C R O S S - E X A M I N A T I O N BY MR. LOGEN: 2 3 Ο. If there was not going to be an Amtrak 4 station and Burlington Northern Santa Fe proposed the siding on their own, do you believe that Snohomish 5 County would support the closing of Logen Road? б 7 MS. ENDRES: Your Honor, I'm going to object 8 to that as a hypothetical question that I don't know if 9 Mr. Bloodgood is the correct person to answer. 10 JUDGE TOREM: I understand the nature of the 11 objection, and it does call for some speculation, but I 12 will overrule the objection because I do believe 13 Mr. Bloodgood -- he looked like he was quite ready to 14 answer. But I also think that given that he was at the 15 County Council meeting at which the resolution was 16 adopted, he may have some insight. So I know it's a 17 hypothetical question and certainly doesn't speak for 18 the County Council, but, Mr. Bloodgood, what are your 19 thoughts on if there was no Stanwood Amtrak station, what attention might the County Council be paying to the 20 21 Logen Road crossing? Well, my hypothetical response would be that 22 Α. I think that they would support it as well. 23 24 JUDGE TOREM: All right, thank you. 25 Mr. Logen, anything else?

1 MR. LOGEN: No, thank you. THE WITNESS: Can I make one clarification, I 2 3 was in error when you asked me about that factor, the 4 smaller the worse on that particular one. 5 EXAMINATION б 7 BY JUDGE TOREM: 8 Ο. Let's go back so we know for the record what we're speaking about. This would be on either Exhibits 9 10 10 or 11, which factor? 11 Α. The sight distance ratio. 12 Ο. All right. 13 Α. The .38, and that's why you will see that it scores the maximum amount in the partial index column. 14 15 Ο. All right, this is where the indicator value 16 on Exhibit 10 at the 102nd Street crossing or 17 intersection would be 100, and in comparison on Exhibit 18 11 the sight distance ratio of 1.21 scores a lower 19 indicator value of 23? 20 Α. That's correct. 21 Q. So in comparing those two intersections so we have this completely clear in the record, which has a 22 23 better sight distance ratio? 24 Α. The Dettling and Pioneer Highway. 25 And so again in layman's terms, does that Q.

0140 mean the driver could see farther? 1 2 Α. Yes. 3 MS. ENDRES: Your Honor, can I make one 4 clarification, one clarifying question? 5 JUDGE TOREM: Certainly. б 7 REDIRECT EXAMINATION BY MS. ENDRES: 8 Exhibits 10 and 11, those don't refer to the 9 Q. 10 crossing at the railroad tracks, do they? 11 Α. No, they are at the intersection. MS. ENDRES: Okay, thank you. 12 13 JUDGE TOREM: Any other further 14 clarifications, Mr. Bloodgood, that you saw? 15 THE WITNESS: No. 16 JUDGE TOREM: Any other questions for this 17 witness? 18 All right, thank you, Mr. Bloodgood, you can 19 step down. 20 Next witness scheduled is David Agee, 21 Sir, how do you pronounce your name? 22 THE WITNESS: Agee. 23 JUDGE TOREM: All right, I got it correct, 24 that's good. 25 THE WITNESS: You did.

1 JUDGE TOREM: Would you raise your right 2 hand. 3 (Witness DAVID AGEE was sworn.) 4 JUDGE TOREM: All right, thank you. 5 THE WITNESS: Last name is spelled A-G-E-E. JUDGE TOREM: I believe, Ms. Endres, that you б 7 indicated Mr. Agee would be testifying with exhibits 8 including the Operation Lifesaver slides, so we'll 9 premark those as Exhibit 12. 10 And he was also expected to testify with some 11 knowledge of this University of North Carolina Highway 12 Safety Research Center report from June of 1999; is that 13 correct? 14 MS. ENDRES: It is if I can find it. 15 JUDGE TOREM: All right, well, while you're 16 finding it I will mark my copy as Exhibit 13. 17 And there was some question as to whether he 18 would be testifying as to some photographs submitted 19 originally for Mr. Peterson to testify about, train and 20 tractor collision photos, did you intend to use those 21 this afternoon? 22 MS. ENDRES: There's a good chance we will. 23 JUDGE TOREM: All right. 24 MS. ENDRES: See how it goes. 25 JUDGE TOREM: I will hold those aside and

0142 1 mark them accordingly. 2 3 Whereupon, 4 DAVID AGEE, 5 having been first duly sworn, was called as a witness herein and was examined and testified as follows: б 7 8 DIRECT EXAMINATION BY MS. ENDRES: 9 10 Good afternoon, Mr. Agee. Q. 11 Α. Good afternoon. 12 Ο. Can you please briefly tell us who you work 13 for, what your job title is, and what you do? 14 Again my name is David Agee. I work for BNSF Α. 15 Railway. I work as a Manager of Field Safety. I do a 16 variety of different types of work. I do law 17 enforcement training, fire department training, first 18 responder type. I teach class for DOT Rail Institute 19 investigation class. I deal with private crossings in 20 the states of Oregon, Washington, and British Columbia. 21 I deal with permits for private crossings, internal 22 company program of close calls with motorists, a report 23 of unsafe motorists/trespass program that we have. I do 24 Operation Lifesaver presentations to the public, and I 25 do training for volunteers as Operation Lifesaver

1 presenters.

-	presencers.
2	Q. Okay. And I just want to be clear for the
3	record, you're not here on behalf of or as an agent of
4	Operation Lifesaver today; is that correct?
5	A. That's correct.
б	Q. Mr. Agee, what is the purpose of the
7	Operation Lifesaver presentations that you give?
8	A. Operation Lifesaver presentations are
9	designed to educate the public about safety around
10	railroad tracks. It's a non-profit organization that
11	goes out and tries to explain to people the dangers of
12	trying to beat trains, stopping on tracks, trespassing,
13	those type things, to change the behavior of the public
14	so that we have less of these needless fatalities and
15	injuries that we're having nationwide at this time.
16	Q. Is that because all railroad crossings are
17	inherently dangerous to some degree?
18	A. Railroad crossings can be indeed dangerous.
19	It depends on the actions of the public, whether they're
20	stopping on the tracks, going around the gates, trying
21	to beat the train, those types of things, that's what
22	makes them dangerous in my opinion. If the public
23	complies with the statutes and looks, listens, stops if
24	necessary, then the risk is very reduced at that point.
25	Q. How long have you been giving Operation

1 Lifesaver presentations?

I've been giving presentations since '97 when 2 Α. I had a close call with about 15 high school kids and I 3 4 was convinced I killed at least the last 3 of them, so 5 since that period. б Q. Can you explain what you just mentioned a 7 little bit more for us? 8 Α. I was taking the train out of Phoenix, 9 Arizona, and some kids on a close by road tried to beat 10 our train across the tracks, and the last 3 were so 11 close that you couldn't even see them in front of the 12 locomotive. And we put the train into emergency, and 13 believe me after striking a number of animals going -what I was expecting to go back and see was it creates 14 15 chill bumps on me right now. 16 17 EXAMINATION 18 BY JUDGE TOREM: 19 That was in Arizona when? Ο. That was, well, when that happened was 20 Α. 21 probably about '97, '96, '97. I worked out of Arizona, 22 New Mexico. 23 And there was an actual collision at that Q. 24 time?

25 A. No, sir, there was a close call.

1 Ο. And you were an engineer? 2 Α. At that time I was a conductor. 3 4 DIRECT EXAMINATION 5 BY MS. ENDRES: б Ο. How many years were you a conductor or part 7 of the train crew for BNSF or its predecessor? 8 Α. I worked for Santa Fe for about two and a 9 half years as initially a conductor and then two and a 10 half years as a locomotive engineer before transitioning 11 into this current position now I'm in as the Manager of 12 Safety. 13 We'll get to the Operation Lifesaver stuff in Q. a second, but first, you know, since you brought it up, 14 15 I want to talk a little bit about the experiences that 16 you had as a train crew member with that sort of close 17 call that you described. Have you had other situations 18 where you were involved either in a close call or a 19 collision with a pedestrian or a motorist? 20 I've certainly had many other close calls, Α. 21 and I would estimate five to seven vehicle/train collisions. Thank goodness none of them were fatal, but 22 certainly a significant number of close calls. 23 24 Q. That must have a scary sort of horrifying mental effect on crew members, I mean what's the effect 25

1 of that when a crew is involved in a collision with a
2 pedestrian or a motorist?

3 Α. Well, in some cases friends of mine have 4 seemed very devastated by those actions. I can tell you 5 from my personal experience with just the close calls б that you are a victim in many different ways dealing 7 with some of those close calls when you know the 8 potential for the devastation that may result, it is a 9 severe impact on the individual personally. 10 Have you ever been involved in a Q. 11 train/motorist or pedestrian collision where the 12 motorist or pedestrian ignored or disregarded warning 13 devices? 14 I've certainly seen a number of those, and I Α. 15 will give you a very good example, a concrete example

17 crossing working with our -- one of our maintenance away 18 people who was doing some work there. I finished 19 talking to the gentleman. I drove across the tracks, 20 and as I cleared the opposite side, I noticed the lights 21 start to flash, and a van which was approaching from the 22 west to the east direction actually ran the lights 23 trying to beat the train.

that occurred today. I was up at the Logen Road

Q. So this morning at the Logen Road crossing
you saw a motorist --

1 A. Yes.

-- ignoring the lights and trying to beat the 2 Ο. 3 train? 4 Α. Yes, that's correct, this morning. 5 Ο. Have you ever been a member of a train crew б that struck a motorist or pedestrian who had ignored the 7 warning devices? 8 Α. Yes, I have. I think probably two out of the 9 seven roughly were people who were trying to beat the 10 train, stopping on the crossing. 11 Ο. Why do you think that motorists or 12 pedestrians disregard warning devices? Why do you think 13 that motorists, what are the reasons that motorists or pedestrians ignore warning devices at railroad 14 15 crossings? 16 Α. I think there are a variety of reasons. 17 Certainly in some cases being able to see the train, 18 assuming it's not there. Others may be that they're 19 somewhat ignorant of what the revised code and the statutes may say in a particular state. They perceive, 20 21 as in the study here, in my opinion a lot of times they don't perceive a red flashing warning light as being 22 23 anything more than a cautionary yield type of sign. The 24 public certainly doesn't in general understand what a 25 crossbuck is, what that implies, what's expected of

1 their behavior at highway rail grade crossings. So I think there are a variety of numbers including being 2 3 overcome with data where they're looking at multiple 4 lights and devices and highway intersections, and all of 5 that comes together to sometimes help create confusion on the motorist's part. б 7 Ο. You have in front of you a set of graphics. 8 The first page is titled welcome to Operation Lifesaver, and I guess what are we on, Exhibit 12? 9 10 MR. SCARP: 14. JUDGE TOREM: No, this has been premarked as 11 12 Exhibit 12. 13 MR. SCARP: Oh, I'm sorry. BY MS. ENDRES: 14 15 Ο. Are you familiar with this document, 16 Mr. Agee? 17 Yes, I am. Α. 18 Ο. Can you explain what it is for us, please? These are the visuals that we use when we go 19 Α. out and try to educate the public about safety around 20 21 train tracks and working with different entities. 22 First one is we introduce the Operation Lifesaver program as a non-profit organization designed 23 24 to educate the public. 25 The second one, the 3 G's of Operation

Lifesaver. Here we talk about the value of education,
 how that changes behavior. Engineering typically refers
 to other issues that our engineering department gets
 into, whether it's the signalization of crossings, grade
 separations, and those type things.

б And the third one is the enforcement where we 7 bring in our partners, the law enforcement community, to 8 explain to them why it's important for the public to yield to the trains, and we emphasize things like 9 10 stopping distances and other issues along those lines. 11 It's a fact, visual, we talk about various things like 12 21% of the time people run into the train based on 13 Operation Lifesaver's data, people are more likely to die in a vehicle/train collision at the rate of about 20 14 15 times more likely than they would be with a 16 vehicle/vehicle incident. We talk about a variety of 17 facts, the fact that we lose on average two trespassers 18 a day trespassing on railroad property nationwide, all railroads considered. And then we lose two additional 19 people a day at highway rail grade crossings. 20

The next one, any time is train time, we talk about the fact that people have to expect a train on any track either direction at any time of day. And with the police we emphasize, as well to the public as well, not to overtake another vehicle close to the railroad tracks

be the size of that vehicle. 2 3 0. Mr. Agee, just to clarify, you're on page 4 4 right now? 5 Α. Right now I'm on the, well, these are not б numbered, but any time is train time is the one I 7 finished up with. 8 JUDGE TOREM: And that is the fourth page of 9 the exhibit. 10 So page 5, here we talk about weight ratios, Α. 11 the ratio of a car to a soda can being roughly 4000 to 12 1, and then we compare that to the weight of an average 13 6,000 ton manifest train at the bottom, which is 12

because of the blocking issue of other vehicles that may

14 million pounds, to the weight of a car, which is a 4000 15 to 1 ratio as well.

16 So is it your understanding that the ratio of Q. 17 impact between a car and a train is equivalent to the 18 ratio of impact between a soda can and a car? I think it makes a good analogy that we can 19 Α. see -- the public understands very clearly what a car 20 21 and a soda can the effect is going to be. They assume sometimes that because of the speed of a train it's not 22 going to do as much damage, and so in my mind I'm trying 23 to create that analogy. 24

25 Q. Why would they think that based on the speed

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1 of a train it's not going to do much damage, can you
2 explain that a little bit more?

A. Well, I think they don't understand physics sometimes. The thinking is that the car is going to be pushed a slight amount, there's not going to be that much intrusion into the car from the locomotive, and they just have a natural perception that it's not -it's safer if it's going slower.

9 Q. I think you told me once it's sort of similar 10 to watching an airplane; is that your understanding?

11 Α. Well, what we get into is optical illusions, 12 and I know one vehicle that I struck, the driver of the 13 vehicle explained to me that she thought I was going slower than I was. And I know based on my background in 14 15 aviation for many years, people do perceive trains or 16 airplane speed different. The larger the body, the 17 slower they perceive the speed. Smaller airplanes they 18 perceive as going much faster, yet terminal velocity is about the same. So we know there's this optical 19 illusion, and certainly with trains people are 20 21 misjudging the speed and possibly thinking it's going much slower than it's actually going. 22

Q. All right, on to slide 6, can you explain -A. This is a case where the public is going
around a gate in a white van, and a train is to the left

1 of that slide. We talk to people about stopping no closer than 15 foot to a railroad track, no further than 2 3 50 foot back. The fact that the -- we talk about 4 highway devices here, the end of the gate arm has a red 5 light on it so it's really a stop light and not to go б when the gates are in transition, either coming down or 7 going up, because of the issue of a second train on a 8 second track, which creates a significant problem for 9 the public where they think that one train may have 10 activated the devices and actually there's a second 11 train coming that is reactivating the devices when the 12 first train is leaving, and that gets a lot of people 13 unfortunately in trouble even though they see the two track sign in this case here to alert them under the 14 15 crossbuck that there is a possible train on the second 16 track. 17 Is this driver behavior similar to what you Ο. 18 witnessed this morning at Logen Road?

A. Well, this morning the arm was not -- the lights had started flashing, and I would say they had been flashing for 3 or 4 seconds, and the driver had plenty of time to stop prior to the red flashing lights, so the gates had not reached their fully lowered position at that point.

The next example is the two trains, the

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1 motorcycles waiting for the first train to go by, and we 2 have, unfortunately this happens all too often, where 3 the first train goes by, the person either goes around 4 the gates or they take off, and they don't expect a train on the second track, and this creates 5 unfortunately some very devastating incidents. б 7 Ο. So this sort of situation could occur at a 8 public crossing that has a siding track and a main line 9 track? 10 Absolutely has that potential, absolutely. Α. 11 Ο. Okay. 12 And how about the next slide? 13 The next one is a young person going between Α. the trains. This happens when we have trains that are 14 15 stopped on the railroad tracks. People are impatient, 16 they want to get to the other side in some fashion, they 17 take the shortcuts to go through. And then because of 18 the movement of the train, the slack action, we have people getting knocked down, getting arms, legs hurt, or 19 even getting knocked down to the point where the train 20 21 runs over them. And you mentioned slack action, is another 22 Ο. concern that the train is subject to start at any time? 23 24 Α. That's correct, and if the train locomotive is a mile or a mile and a half away, when they load 25

those locomotives up and take off, there is no noise coming out of the slack being taken up in the train, and the last car moves at about the same time the locomotive does, and that person has no warning that the train is getting ready to reposition itself.

Q. What about the train crew's ability to see
somebody potentially climbing over the train, is that a
concern whenever you have somebody climbing over a train
that's parked on a curb, so maybe the crew can't see
back to the back of the train?

11 Well, not only are you talking about the Α. 12 physical obstructions from the -- in a case like this 13 where we've got a curve and some dirt structure there, the fact that you couldn't see a mile or a mile and a 14 15 half back on a train or 8,000 foot back. So if a person 16 was indeed crawling through the train at that time, you 17 wouldn't -- you would not be physically able to see them 18 do that.

19 The next one is a young boy it looks like 20 crawling under the train. Certainly this happens at 21 times with young kids where we've got stopped trains 22 again. Not only are you -- they're not expecting the 23 movement. Surprisingly these trains can accelerate 24 fairly quickly, particularly if there's, as was 25 mentioned earlier, a local, a train that does switching, picking up cars, dropping off cars in a local community,
 that train can accelerate quite fast, and this young
 person would be in danger of getting run over by the
 train.

5 The next one, the truck being hit by the blue 6 locomotive, this was a fatal it seems like. I get 7 reports when they happen in daily, I'm getting reports 8 it seems like of either cars or trucks or pedestrians, trespassers at crossings, and obviously very unfortunate 9 10 for not only the driver of the vehicle but also for the 11 operators of the train having to endure something like 12 this.

13 JUDGE TOREM: In this picture, where would 14 the crossing have been?

15 Α. Yes, sir, it's hard to see, but if you look 16 at the end of the train, there's a slight red, and I 17 believe that's a sign. I'm not familiar with where this 18 took place at, so I can't give you an exact, but that would be about where it was at is my guess. Again 19 that's just a pure guess. As you see, the stopping 20 21 distance is significant. We talked to people based on my experience going as -- I run trains or ran trains at 22 23 70 miles per hour, and there we're maybe talking 7,000, 24 8,000 feet to stop. So the stopping distance by the time you can see someone, particularly if there's 25

limited sight visibility at that crossing, it's too
 late.

3 Ο. Is that the same conclusion for a train 4 traveling at 60 miles an hour? 5 Α. At 60 miles an hour you're talking a mile 6 away, absolutely, depends upon things like grade, 7 curvature, territory, weights, various physical factors 8 come into play. 9 Q. What about a train moving at 30, 35 miles an 10 hour? 11 Α. The stopping distance can be significant, and 12 if we're talking about a freight train I assume you're 13 asking about, a freight train at 30 or 35 miles an hour may be three quarters of a mile or more, again depending 14 15 upon those factors, curve resistance, grade, whether 16 brakes have been applied, whether it's going up hill, 17 various factors like that come into play. 18 Ο. So it's safe to say that trains can't stop on a dime? 19 Correct. 20 Α. 21 Q. And how about the last photograph here? The last photograph is a -- was a fatal as 22 Α. well. And again in this one here I can not tell you 23

25 this is a much lighter train, it's a passenger train

where the crossing is at. I see the -- this is a --

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1 obviously. This is a train that stops a lot quicker, a half a mile or three quarters of a mile depending on 2 3 track speed, because they do go up to 90 miles an hour 4 in different places in the country. So this train, that 5 may be the reflection in the back of the lights, again б that would be a guess on my part. Either way you go, by 7 the time the person and the train see each other, it's 8 up to the motorist at that point to stop, yield to the 9 train, or the pedestrian not to be on the tracks. 10 MS. ENDRES: Your Honor, at this point we 11 move to admit Exhibit 12. 12 JUDGE TOREM: Any objections to Exhibit 12, 13 the Operation Lifesaver slides? All right I have that exhibit as 11 pages, it 14 15 will be admitted. 16 BY MS. ENDRES: 17 Mr. Agee, you've also been handed three 0. 18 photographs of train collisions, which I guess -- I don't know if Judge Torem marked this 13 or 14. 19 20 JUDGE TOREM: We'll mark those as 14. 21 Q. Can you describe what these pictures show, Mr. Agee? 22 Well, let's start with the first one. It 23 Α. 24 looks like some locomotives have derailed, and while we think that it takes a tremendous amount to derail a 25

1 train, I can tell you from firsthand experience that I
2 was blown off the railroad tracks out of Phoenix,
3 Arizona by a microburst of wind, so we know that
4 sometimes we think that it takes something big to derail
5 a train, but in reality it may not.

The second picture with the truck appears to б 7 me to be hauling gravel that's all over the front of the 8 locomotive. I have no idea where this took place at, 9 but the carnage is evident that when these type of 10 trucks, and this is one of our target audiences with 11 Operation Lifesaver is the professional drivers, 12 obviously it's devastating when we hit vehicles at a 13 crossing like that, or hit a vehicle like that I should 14 say.

15 The last picture looks like a -- I'm guessing 16 by the tire, well, looking at the fender too, it looks like a piece of farm equipment. And I can relate a 17 18 personal story in this instance in Fresno, California teaching a class to the California Highway Patrol that I 19 witnessed a big piece, a ten-wheel piece of equipment 20 21 after it was hit by a train, and the -- it didn't quite look that devastated, it was only a glancing blow, but 22 it still was a significant incident. 23

Q. Are these photographs illustrative of thetype of incidents that you've been describing, the

1 potential impact between a train and a vehicle? 2 Α. Yes. 3 MS. ENDRES: Your Honor, we would move for 4 admission of Exhibit 14. 5 JUDGE TOREM: Any objections? б 7 EXAMINATION 8 BY JUDGE TOREM: 9 Q. Mr. Agee, looking at that last picture again, 10 the way the rails are and the markings, do you have any 11 idea where this would have taken place? 12 Α. No, sir. 13 Q. Just looking at the web page address at the top, it appears to be from the United Kingdom. Is there 14 15 any similarity if this is actually from a British 16 locomotive, I recognize the laws of physics would apply 17 the same regardless of country, is there any indication 18 that this would be different than any other rail 19 intersection in this country? 20 I would not say based on what I can see here. Α. 21 I would need to see a bigger picture I suppose, more comprehensive picture. 22 23 All right, it may just be that it's posted on Q. 24 a British web site and could have been taken in this 25 country or any other, I just wasn't sure if there was

1 something with those rails you could tell me differently than -- they're clearly different than what's in the 2 3 picture of the gravel truck, which are I think a more 4 traditional thing we're used to seeing in this part of 5 the country, and pretty clearly the locomotives in the б first page were BNSF property. 7 Α. Yes, sir. JUDGE TOREM: All right, Exhibit 14 is 8 9 admitted. 10 11 DIRECT EXAMINATION 12 BY MS. ENDRES: 13 Now, Mr. Agee, you mentioned earlier in your Q. testimony what has been marked as Exhibit 13 and is 14 15 titled Prior Driver Performance and Express Attitudes 16 Toward Risk as Factors Associated with Railroad Grade 17 Crossing Violations; are you familiar with this 18 document? 19 I have scanned it, yes. Α. And I think you mentioned it in reference to 20 Ο. 21 your testimony about driver misperception, or at least that's what I wrote down to myself. I would like you to 22 23 take a look at page 13, and I'm not going to ask you to 24 agree that the statistics in this study are correct but 25 just whether the analysis illustrates and is in line

1 with your understanding as a railroad safety professional. Specifically I'm going to direct you to 2 3 the second paragraph on page 13, and it says partway 4 through that paragraph: 5 Drivers in general perceived the likelihood of a crash between a train б 7 and a vehicle as somewhat less than 4 chances in 10. Drivers' 8 less-than-chance estimates of how often 9 10 a grade crossing crash was fatal is 11 surprising given that 86% indicated that 12 they correctly perceived the force of a 13 train when striking a car to be 14 equivalent to that of an automobile 15 running over a soda can. 16 Is this statement in line with your 17 understanding and expertise as a railroad safety 18 professional? 19 Α. Yes. 20 And I don't mean the 4 in 10, I mean that Ο. 21 drivers may underestimate how often a grade crossing 22 crash can be fatal? 23 Α. Yes. 24 JUDGE TOREM: Just for the record, this is 25 page 13 as numbered in the report in the upper

1 right-hand corner, and it may not be the 13th page into the exhibit due to the Roman Numeral introductory pages. 2 3 Ο. Did you want to elaborate on that? 4 Α. No, I agree. 5 Ο. On the next page, which says 14, which may or б may not be the 14th page, under drivers' perceptions of 7 train operations, do you see beneath drivers' 8 perceptions of train operations it states: 9 When drivers were asked for their 10 estimates of the time between when the 11 gates go down and when the train 12 actually arrives at a crossing, 13 approximately 1 out of every 4 believed 14 there to be a full 60 seconds. 12% 15 believed they had anywhere from 1 to 5 16 minutes before the train arrived. 17 Is that a concern of motorists' misperception 18 that you understand to be true? And again, not the 1 in 19 4 or 12%, but that in your own experience this is what 20 drivers misperceive? 21 Α. Based on my presentations to the public, that is common thinking of the length of time that a train --22 23 their perception of train operations, yes. 24 Q. Does that create a problem from a safety 25 standpoint for the railroad?

1 Α. It does, because the motorist is misjudging the speed because of the optical illusion part, and so 2 3 they're taking more risk on, and then they're thinking 4 that they've got more warning time. So when you combine 5 the two, the visual and the perception of time, then I б think that is part of the reason why we have some of our 7 collisions, combined with a variety of other things 8 including the second track and not expecting a train on that track and so forth. 9 10 On the next page, page 15, in the graph there Ο. 11 it says, 3 in 10 don't perceive threat of slow moving 12 train, is it your testimony that based on your 13 understanding some drivers do not perceive the threat of a slow moving train? 14 15 Α. Yes, it is. 16 And the last thing I'm going to ask you about Q. in the paragraph below in the middle of page 15, it 17 18 says: 19 14% of drivers who responded to the questionnaire believed it was possible 20 21 for a fully loaded train traveling at 55 miles per hour to come to a complete 22 23 stop in 300 feet or less. 24 In your expertise, do you believe that that's an accurate statement, that some drivers believe it's 25

2 less? 3 Α. Some people do indeed believe that. They 4 don't understand the physics combining the mass of the speed and velocity of the train, and they do indeed 5 perceive that as being a fact, yes. б 7 MS. ENDRES: Your Honor, we would move to admit Exhibit 13, not for the truth of the statistics 8 therein, but as an illustration of Mr. Agee's 9 10 understanding and experience based on what we talked 11 about. 12 JUDGE TOREM: Any objections to the admission 13 of this for that limited purpose? 14 15 EXAMINATION 16 BY JUDGE TOREM: 17 Okay, seeing none, I actually have one Q.

possible for a fully loaded train to stop in 300 feet or

18 question, Mr. Agee, about Ms. Endres' questions about 19 drivers' perceptions of train operations back on the 20 page marked as 14. It says: 21 The typical response from those surveyed

in the study was a belief that the train
would arrive about 30 seconds after the
gates had gone all the way down.

25 Is that how you understand this study?

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1 Α. A full 60 seconds, is that what you're talking about there? 2 3 Ο. About another sentence and a half after that, 4 it says, the most typical response was 30 seconds. 5 Α. Oh, okay. And are you asking me is that my б belief, or are you saying do I believe the study? 7 Ο. First, you already testified, if I understood 8 correctly, that this was an accurate reflection of the 9 general public's misunderstanding about how long it 10 takes for the train to get there after the gates go 11 down; is that correct? 12 Α. Yes, sir. 13 Q. What is your understanding as a railroad

engineer and conductor and now a safety technician as to 14 15 the timing of gates, perhaps this morning's incident, 16 the timing of lights then gates then train, what is the 17 most standard used within BNSF for those crossings? 18 Α. Well, I would certainly defer to our signal maintainers to give you an exact, but I can tell you in 19 general based on my discussion with signal maintainers 20 21 and having taught electronics in college with signal maintainers before that, the CFR 49, the Federal 22 23 standard, requires a minimum of 20 seconds warning prior 24 to locomotives occupying crossing, and based on my 25 discussions with other BNSF employees, it's somewhere in

1 that 30, 32 second range of time before the locomotive occupies the crossing, based on the fact that we don't 2 3 want to give -- we can't violate the federal law by 4 being under the minimum, but we can't go too far in 5 time, otherwise people are impatient, they want to go б around the gates, those type of things. 7 Ο. So here if the typical response was they 8 thought it was 30 seconds, that might actually coincide 9 with the reality that BNSF is aiming for of about 32 10 seconds? 11 Α. Yes, sir. 12 ο. But that's from the beginning of signals, not 13 from when the gates are fully down as this survey is asking the question? 14 15 Α. The lights are flashing, and then the gates 16 are in the fully lowered position before the locomotive 17 occupies the crossing. 18 Ο. And the timing you're measuring is not from when all of the signals are deployed, but from when they 19 begin to deploy? 20 21 Α. Yes, sir. So here the end result that I wanted to be 22 Ο. clear about is these people surveyed in the study are 23 24 greatly overestimating the amount of time that BNSF would aim for for that train to occupy the crossing, as 25

1 you put it, from when those gates are in their full and lowered position? 2 At 60 seconds, yes, they would be. 3 Α. 4 Ο. And at 30 seconds, they still would be from 5 the time the gates hit their fully lowered position? б Α. They would be, yes, sir. 7 JUDGE TOREM: Okay, with those questions, are 8 there any other clarifications or questions about the study before it's admitted? 9 10 All right, seeing none, then Exhibit 13 is 11 also admitted. 12 13 DIRECT EXAMINATION 14 BY MS. ENDRES: 15 Ο. Mr. Agee, we've had some discussion about 16 driver misperceptions and evading warning devices, and I 17 want to specifically talk about the configuration of a 18 public crossing in between -- in the middle of a siding 19 track with one main line track where the siding track may allow freight trains to block that crossing 20 21 unpredictably or for unpredictable periods of time. Does that create an incentive, so to speak, for 22 23 motorists or pedestrians to ignore warning devices as 24 the train is approaching?

Α.

25

To make sure I understand your question, are

1 you saying if the train is completely blocking the 2 crossing or if it's separated so the cars can get 3 through? 4 Ο. I'm going to get to both, so let's start with 5 blocking the crossing. б Α. And then repeat your question. 7 Ο. Does that give motorists or pedestrians, 8 given that they are aware that trains may block the 9 crossing for unpredictable periods of time, when a train 10 is approaching the crossing and the gates and lights 11 start to activate, does that give the motorists and 12 pedestrians an incentive to try to beat the gates or 13 disregard them? 14 In my opinion, yes. Α. 15 Ο. And is that so that they don't get stuck 16 having to wait or guess how long the train is going to 17 be parked there? 18 Α. In my opinion, yes. 19 What about the safety concerns where a train Ο. may be parked on the siding but not fully blocking the 20 21 crossing, what safety concern is presented there? 22 Α. The motorist at times believes that the 23 parked train is the one that's maybe creating the signal 24 activation. And the other one is the sight visibility 25 of a motorist when a train is parked away from the

1 crossing but when a train's approaching at 60 or 70
2 miles per hour, by the time they can see the -- even
3 though the active devices are operating, by the time
4 they can see it, they may have taken on additional risks
5 at that time.

6 Q. You said you were involved with an internal 7 railroad program regarding close calls; did I remember 8 that right?

9 A. Yes, you did. It's the report of unsafe10 motorists and trespasser program.

11 Can you explain what that program is? Ο. 12 Α. That program is designed to have our train 13 crews, maintenance folks, our signal maintainers, any of 14 our employees who observe a close call, and we define a 15 close call in our reports, but with a vehicle or a 16 trespasser to report that. And then every one of those 17 are investigated by our special agents or police 18 department, and they follow up on them. And the ones 19 that I can, I follow up on whether it's -- I use them 20 when I go in and talk to the police to explain the 21 gravity of their problem, or I may go into a school and say we've got a trespassing issue, maybe it's the kids 22 23 and we need to do some education and maybe some of those 24 type things. So I use those reports to help me educate 25 the public in some fashion.

Q. Does BNSF take motorist and pedestrian safety
 at railroad crossings seriously?

A. We take that very seriously, and we have a zero tolerance for trespassers, and we are doing all the things we can to consolidate crossings in some cases, to improve crossings, to work with different entities that can help us reduce some of those injuries and fatalities that we see on a yearly basis, yes.

9 Q. And you discussed some of the reasons that 10 drivers may disregard warning devices to try to beat a 11 train, I think you mentioned confusion, misperception of 12 train speed, how does driver or pedestrian impatience 13 factor into that?

14 Well, I think from my observations, when the Α. 15 people see me coming, and I've gone down the tracks with 16 a single locomotive and seen them try to beat the train 17 because they are just totally lacking patience, and I 18 think they take more risk when they see a freight train coming. They understand an Amtrak or a Talgo train is 19 not going to occupy the crossing for a significant 20 21 length of time, but when they see a locomotive freight train coming down the track, they tend to take a little 22 23 bit more risk to get across and get on about their way. 24 MS. ENDRES: I think those are the only 25 questions that I have for Mr. Agee.

1	JUDGE TOREM: Mr. Thompson?
2	MR. THOMPSON: No questions.
3	JUDGE TOREM: Mr. Kasting?
4	MR. KASTING: No questions.
5	JUDGE TOREM: And Mr. Logen.
б	MR. LOGEN: I have a few questions.
7	
8	C R O S S – E X A M I N A T I O N
9	BY MR. LOGEN:
10	Q. This morning when you were out at the Logen
11	Road crossing, where were you parked?
12	A. I was going from the east headed west, and I
13	stopped on the east side talking to the maintenance away
14	person there, and then I was headed west at that point
15	when the approaching van, the minivan, passed me at that
16	point.
17	Q. Where was the maintenance person parked?
18	A. On the opposite side of the tracks on the
19	east side of the crossing.
20	Q. Were the vehicles clearly marked as railroad
21	vehicles?
22	A. No, my vehicle is not marked as railroad.
23	Q. How about the maintenance person?
24	A. He was driving a red vehicle, and it was not
25	marked as a railroad vehicle, no.

1	MS. ENDRES: Your Honor, I'm just going to
2	object as to the relevance of these questions.
3	JUDGE TOREM: Mr. Logen.
4	MR. LOGEN: Well, I have one further question
5	that would tie this together, if I may.
6	JUDGE TOREM: Please do.
7	BY MR. LOGEN:
8	Q. That would be could this person that went
9	through the warning lights, could they have thought that
10	your vehicle or the other vehicle was the cause that the
11	lights were on or working on the signals was the cause
12	that the lights were on? That's why I was trying to
13	establish that.
14	JUDGE TOREM: Go ahead and answer.
15	A. Again, neither vehicle was marked as BNSF. I
16	have a green Jeep with no markings, and it was a red
17	pickup truck that the other person had. We weren't
18	around the bungalow doing anything there. So in my
19	opinion that was not a contributing factor.
20	JUDGE TOREM: So, Mr. Logen, you were just
21	trying to determine if there was perhaps a reason
22	associated with his presence and another signal
23	technician that could have caused a misunderstanding?
24	MR. LOGEN: Yes.
25	JUDGE TOREM: And I'm taking away from his

1 answer that no, these were just two cars close to but not actively interacting with a railway grade crossing; 2 3 is that the understanding you're taking away as well? 4 MR. LOGEN: Yes. BY MR. LOGEN: 5 And I'm also understanding that they weren't б Ο. 7 parked on the right-of-way, they were parked on the 8 road? Because there is no shoulder except on the east 9 side. 10 I was driving westbound at that point. Α. 11 Okay. And you said that the lights were on 0. 12 and that the -- had the arm started to come down when 13 the van went through? At that point on driving by them and I see 14 Α. 15 the lights start to flash and the van is approaching 16 from 100 feet I suppose, I wasn't looking at the gate 17 arms, whether they had started down at that point, I 18 just know I could see out of the peripheral of my eye the lights were starting to come on, and the person in 19 my mirror I saw go across the tracks, so I wouldn't know 20 21 if the arms were in transit at that point or not. Is there room on the road to go around the 22 Ο. gates, to drive around the gates? 23 24 Α. Well, I really didn't sit there and look to 25 see how far the gate arms crossed the track there.

1 Based on my understanding of the requirements under the, I believe it's under the Manual Uniform Traffic Control 2 3 Devices, unless it's a one-way street, the gate arms 4 would not cross the entire lane of traffic. 5 So they can not cross the entire lane, so Ο. 6 they can only go partially across the lane; is that what 7 you're saying? 8 Α. Well, I would defer to people in our signal 9 department or engineer department who are versed in 10 public crossings and the requirements under that manual. 11 I deal with private crossings and couldn't speak as an 12 authority on what the requirements are. 13 Q. Okay. In response to a couple of questions by 14 15 Ms. Endres, you said that in your opinion that people 16 may tend to drive around the barriers, and if there is a 17 train blocking the intersection or it's separated there 18 or make them try to beat it because they think there might be a train that's going to stop there, is there 19 any opinion, any studies to support your opinion that 20 21 you're aware of? 22 I did not research -- that's not -- I'm Α.

23 basing that only on my observations as a locomotive
24 engineer and a conductor and based on my observations of
25 motorist behavior at some of the crossings where I see

1 them do these things.

 3 internal program for reporting trespassers, how long 4 that been in existence, or how long have trespassers 5 been reported? 6 A. Well, certainly the company officials and 7 employees have an obligation when they see these this 8 at any time to report them. The program where we have 9 initiated with certain cars that the employees use, 10 program was started in would have been roughly '99, 	ngs ve
 been reported? A. Well, certainly the company officials and employees have an obligation when they see these this at any time to report them. The program where we have initiated with certain cars that the employees use, 	ngs ve
6 A. Well, certainly the company officials and 7 employees have an obligation when they see these this 8 at any time to report them. The program where we hav 9 initiated with certain cars that the employees use,	ngs ve
7 employees have an obligation when they see these this 8 at any time to report them. The program where we hav 9 initiated with certain cars that the employees use,	ngs ve
8 at any time to report them. The program where we have 9 initiated with certain cars that the employees use,	ve
9 initiated with certain cars that the employees use,	
	that
10 program was started in would have been roughly '99.	
11 2000, late the '99, 2000.	
12 Q. Before that time, was there a policy to	
13 report trespassers?	
14 A. Yes, sir, our employees have a obligation	to
15 report trespassers as well as unsafe vehicular activ	ity
16 even prior to the initiation of the more formal	
17 reporting system.	
18 Q. Can you tell me why I wouldn't have been	
19 reported when I was a kid waving to the engineer	
20 standing on the right-of-way?	
21 A. Well, sir, sometimes our employees are no	t as
22 diligent maybe as they should be, and I can't speak	to
23 that example or know who that crew was, so I really	
24 couldn't give you a fair answer on that.	
Q. I see. I don't think they blew the horn,	but

1 they waved back.

2	You talked about, oh, in kind of your
3	introduction, you talked about striking a number of
4	animals. Can you tell me something more about that, is
5	that noticeable?
б	A. Can you I'm not quite sure I understand
7	what you mean by noticeable, can you explain that?
8	Q. If you hit an animal, does the conductor
9	typically notice that an animal's been hit, I mean is it
10	readily apparent?
11	A. As an engineer, the conductor, certainly
12	seeing an animal in front of the train is definitely
13	noticeable and apparent when they don't move, yes, sir.
14	Q. Would that be true at night as well?
15	A. Yes, sir, it would be. The headlights on
16	these locomotives, we're talking millions of candle
17	power per light, a significant amount of luminous light
18	there, so at nighttime, yes, you would see it as well.
19	Q. Are you aware of a train hitting a herd of
20	approximately 120 registered Holstein cattle on the
21	tracks north of here in about 1965, and the report when
22	the engineer got to Mount Vernon was I may have hit
23	something? I was wondering how that could happen if
24	it's that evident.

25

A. No, sir, I'm not aware of that situation.

I've lived in Washington state now for just about a year
 and a half and new to the area and not familiar with
 that.
 Q. And how would you say a close call when
 driving a train is different than a close call say

driving an 18 wheeler as far as impact on the driver?
A. Well, I have never driven an 18 wheeler, but
8 I would say both of them are victims in my eyes.

9 Q. Okay, I'm going to the Operation Lifesaver 10 slides, the one with the -- where you talk about ratios 11 with the pop can and the car and the train and the 12 tanker.

13 A. Yes, sir.

14 I've seen the Operation Lifesaver Ο. 15 presentation at least twice, and I think it's a very 16 good presentation with all the videos and everything. 17 But if this truck were to hit the car, would the damage 18 be significantly different if it was hit in the same 19 way? 20 Well, certainly the --Α. 21 MS. ENDRES: Sorry, damage to what? 22 MR. LOGEN: To the car.

23 MS. ENDRES: Compared to the train and the 24 car?

25 MR. LOGEN: Compared to being hit by the

1 train.

Well, certainly the weight ratios are 2 Α. 3 different. Instead of it being 4,000 to 1, it may be 4 1,000 to 1 or 50 to 1. Certainly the damage is going to 5 be significant with either the locomotive hitting the б car or the truck hitting the car. Either way it's going 7 to be significant I would expect. 8 Ο. And then going to it looks like the second to 9 the last slide, it's a semi tractor with a blue 10 locomotive, what can you tell me about the sight 11 visibility, how did that contribute to this accident? 12 Α. I would not be able to speak to that since 13 these slides were taken from the Operation Lifesaver Incorporated's presentation that we use and have no 14 15 knowledge beyond what I can see in this picture. 16 Q. Okay. How many tracks are there where this accident happened? 17 18 Α. Again, without knowing where it was at, I would have only what I can see in the picture, which 19 20 would indicate to me in this instance one track. 21 Q. And then we've got a packet of three pictures here, one at least is Burlington Northern. Do you have 22 23 any idea if any of these accidents were due to a train 24 being stopped at a siding or a train was stopped, could be seen from the siding, and somebody decided to drive 25

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1 around the barriers?

2 Α. No, sir, I have no background for these three 3 pictures. 4 Ο. Going to the North Carolina study, we're at 5 page numbered 13. I'm sorry, I didn't have a question б on these. 7 MR. LOGEN: No, I didn't have a question, 8 that was all my questions. 9 JUDGE TOREM: Bear with me just a second, 10 Mr. Agee, while I see if I have any other questions. 11 No, I don't have any questions. 12 Was there any redirect? 13 MS. ENDRES: No, Your Honor. 14 JUDGE TOREM: Any other questions for this 15 witness? 16 Thank you, Mr. Agee, appreciate your testimony. 17 18 It's now a little after 2:15, do we want to 19 take a quick break before BNSF's last withness. 20 When we come back, we'll have Mr. MacDonald, 21 so we'll take a couple minute break. 22 (Recess taken.) 23 JUDGE TOREM: All right, it's a little bit 24 after 2:30, we'll be back on the record, and as 25 Mr. MacDonald is just getting comfortable, we'll have

1 him stand up again.

2	(Witness DANNIEL MACDONALD was sworn.)
3	JUDGE TOREM: Thank you.
4	Can you state and spell both your first and
5	your last name for the record.
б	THE WITNESS: Yes, sir, Danniel,
7	D-A-N-N-I-E-L, MacDonald, M-A-C-D-O-N-A-L-D.
8	JUDGE TOREM: Are you ready for some slowly
9	stated questions?
10	THE WITNESS: Yes, Your Honor.
11	
12	Whereupon,
13	DANNIEL MACDONALD,
14	having been first duly sworn, was called as a witness
15	herein and was examined and testified as follows:
16	
17	DIRECT EXAMINATION
18	BY MS. ENDRES:
19	Q. Good afternoon, Mr. MacDonald. Can you
20	please state your job title, who you work for, and give
21	us a brief description of your job duties?
22	A. I'm currently employed by the BNSF Railway
23	Company. I'm the Manager of Engineering for the
24	Northwest Division in Seattle. I'm responsible for

1 BNSF WSDOT program for passenger services. Responsible for basic engineering and support for the entire 2 3 division including casualties and other required 4 engineering issues that come up. My territory goes from 5 Keddie, California to Vancouver, British Columbia, and б from the Puget Sound to White Fish, Montana. 7 JUDGE TOREM: What's the name of that city in California? 8 THE WITNESS: Keddie, K-E-D-D-I-E. 9 10 BY MS. ENDRES: 11 Are you familiar with the Stanwood siding Ο. 12 track extension project? 13 Α. I am. Rick Wagner reports to me, and Rick has been working on this project. 14 15 Q. How are you individually involved in the 16 project? 17 As I stated, Rick works for me, so I have Α. 18 been responsible for working with Rick on the delivery of the project including permitting issues, engineering 19 issues, consultant selection, contract award, 20 21 engineering design issues, and preparation for this 22 hearing. 23 So you're familiar with the configuration of Q. 24 the crossing and the specifics of the siding track project extension? 25

A. I am. I've also visited the site and driven
 the crossings.

Q. We heard Mr. Agee testify that trains occupying or blocking a crossing for extended periods of time can create a safety hazard. Is that a safety hazard at the Logen Road crossing once the siding project is complete?

8 A. It would be in my opinion, yes.

9 Q. And why is that?

10 Long periods of time, driver expectation is Α. 11 that the train will -- if the driver is conditioned that 12 there are long trains stopped there for an extended 13 period of time, it is typical for drivers to then make the assumption that any train that comes through there 14 15 will be stopped for a long period of time, and thus in 16 seeing the devices activate would attempt to beat the 17 device and put themselves in a precarious situation.

Q. We've heard testimony about issues with sight distance at the Logen Road crossing. Can you just explain whether that creates a safety concern at Logen Road, and if so, why?

A. It does. In its current condition, Logen Road has active warning devices, and the sight distances are mitigated through the presence of the active warning device. The sight distances from when I believe it was Mr. Wagner testified are not even acceptable for BNSF personnel, maintenance way and personnel, to occupy the track using individual train detection. As a means of protection, we had to use a Form B or flagging protection. So the sight distance is limited due to topography and the curve.

Q. Mr. Agee also testified of safety concerns where a train may clear the siding track but be parked close enough to block visibility. Will that be a safety hazard at the Logen Road crossing if left open to traffic once the siding extension is complete?

12 Α. In my opinion, it would be if the train were 13 blocking to the south, as I believe Mr. Wagner testified would be where the train would hold. If it was a 14 15 shorter train where Mr. Agee perhaps it was said that it 16 could be traveling one direction or the other, people 17 could assume that that train was what was causing the 18 activation, and if they were clear of the circuit, they would still if the gates come on, people may assume that 19 that's what it was and choose to go around it rather 20 21 than wait for that slow train.

Q. So is it your testimony today that a train parked close to the crossing but not all the way across it can still activate gates and lights if those are left at the crossing?

1 Α. A train in approach to an active crossing 2 would trigger the crossing warning circuit, but that is 3 based on the signal system design, so a train in 4 approach to a crossing would trigger that. If the train 5 stopped in the approach to the crossing, the crossing б devices would eventually recover. That is how they are 7 designed. We would to have defer to the signal 8 department if you wanted any more specific on that. 9 They are set to recover after a certain time once the 10 train ceases movement in that crossing circuit.

11 Q. And Mr. Agee mentioned the Manual on Uniform 12 Traffic Control Devices or MUTCD, are you familiar with 13 that manual?

I am. I currently sit as an associate member 14 Α. 15 to the National Committee on Uniform Traffic Control 16 Devices, which is an organization that supports the 17 development of that manual. It's -- I also am the 18 secretary to the light rail, excuse me, Railroad and Light Rail Technical Committee, which is Parts 8 and 10 19 of the manual, so I've been extensively involved in the 20 21 current revision for the past several years on the revisions that are coming out in the 2009 MUTCD. 22

Q. Now I want to focus you for a minute on the
configuration at Logen Road. Once the siding track
extension is complete and if the road is left open to

public travel, do you know of any warning devices that the MUTCD says would make that crossing acceptably safe for public travel?

4 Α. The concern I have with that is the long 5 periods of blockage. So the devices would be left in an б activated state for as long as that train was there, 7 which causes a driver perception issue based on the fact 8 that most drivers assume that the lights come on, the 9 gates go down, the train proceeds through the crossing, 10 and then the gates recover. But if you're left in a 11 situation where you have an extended period of time 12 where the gates are on and active, that would be 13 contrary to what we strive to show at all the other crossings in the state and across the system, which is a 14 15 consistent message of that traffic control device, which 16 is a tenet of the uniform traffic control, the Manual on 17 Uniform Traffic Control Devices, is to get uniformity 18 across not only the city, the county, the state, but all 19 50 states.

20 Q. Now you just discussed a situation where the 21 devices would be activated or perhaps falsely activated 22 if a train is, maybe I'm not using the right term, but 23 be activated if a train is parked close enough to the 24 crossing; is that correct?

25 A. Correct. If the train were parked over the

1 island circuit, which is the circuit directly that encompasses the crossing itself and extends for some 2 3 distance out based on signal design, that crossing would 4 not recover. 5 Ο. So would the bells keep clanging -б Α. They would. 7 Ο. -- that whole duration? 8 Α. Yes. 9 Q. Are you familiar with 4-quad gates? 10 Α. I am. 11 Ο. Would the installation of 4-quad gates at 12 Logen Road make the crossing acceptably safe for public 13 travel once the project is complete? 14 I have concerns and reservations given the Α. 15 current geometry of that is the answer to that, yes. I 16 would say at this point my opinion would be no. The 17 4-quadrant gates would be, on that narrow of a road, 18 potentially would be an issue. The application of the 19 4-quad gate is typically seen in quiet zone applications 20 now or in -- that's a typical location for it. 21 Q. Do you know a ball park cost to install 4-quad gates? 22 23 I believe I saw a correspondence recently Α. 24 that is approximately \$350,000 for the installation of 25 4-quadrant gates. I could confirm that, I would have to

1 confirm that with our signal department if you wanted a very specific cost, but my understanding is 2 3 approximately \$350,000 for that installation. 4 Ο. Can a person lift up a gate at a railroad 5 crossing when it's lowered if they wanted? б Α. Yes. 7 Ο. So it's light enough for one person to lift? 8 Α. Yes. 9 Q. Is that a problem from a safety perspective? 10 Α. It is. 11 Ο. Why? 12 Α. If someone wanted to lift a gate, there's 13 nothing that forces that gate to remain in the down 14 position. 15 Ο. Is it fair to say that warning devices are 16 meant to deter motorists from having a run-in with a 17 train but can't prevent one from doing so or acting 18 recklessly? 19 Correct, they are a traffic control device Α. just like a stop sign can not prevent someone from 20 21 running through an intersection or running a red light. 22 They are a traffic control device intended to provide 23 the motorist with a uniform message about the traffic 24 condition they're about to experience at that 25 intersection.

Q. How does the sight distance at Logen Road
 affect your analysis of whether traffic devices can make
 it acceptably safe for public travel once the siding
 project is complete?

5 A. The active warning devices would have to 6 remain because of the sight distance issue, and the 7 second train issue or the blockage issue is the safety 8 issue. There is not enough sight distance for you to 9 traverse that crossing in my opinion without the active 10 warning devices being there.

11 Q. Does the safety concern with sight distance 12 change if the crossing is being used by slow moving farm 13 equipment for example?

In the current configuration with active 14 Α. 15 traffic control devices, they would have, I believe 16 Mr. Agee was testifying as to our standard what we 17 consider normal for operation of the gates and lights, 18 there would be time for that farm equipment or any just say highway equipment to go across that crossing. The 19 bells, gates, and lights, lights would flash, gates 20 21 would descend, there's a predetermined time for that to transpire. So in the current condition, you could take 22 a piece of farm equipment across that crossing or any 23 24 public crossing.

25

Q. So it's your testimony that the current

1 configuration, if a piece of farm equipment is entering 2 or about to enter the crossing and the signals begin to 3 activate, that farm equipment would have time to clear 4 the tracks before the arrival of the train --5 Α. I would have ---- in theory if they're driving at a -б Ο. 7 Α. I would have to defer and start looking at 8 things like acceleration, are they at a stop, are they 9 going full speed, what is that full speed. So I don't 10 want to testify yes, because I'm sure someone could find 11 a piece of farm equipment that goes 1 mile an hour, and 12 then I would be -- I wouldn't be able to testify to that 13 in the affirmative, so. 14 And I understand with that, can you -- what Ο. 15 if there were two tracks at that crossing? 16 Α. The time to clear to the other side of the track would essentially be increased by the time frame 17 18 of 15 foot track centers plus an additional say 6 feet to clear to the far side of that crossing, so it would 19 20 be increased. 21 Q. Is cutting the train to let traffic go through a feasible option at Logen Road? 22 23 If the train were to occupy the crossing and Α. 24 it was required to be cut for some reason if it was a

25 public crossing, I would say no, it is not feasible or

practical for us to do on a regular basis due to the safety issues we would face with our train crews. We operate 365 days a year in all hours 24 hours a day, snow, rain, that exposes our train crews to severe hazards of being out in the elements and walking parallel to the mainline track.

Q. How long does it take to cut a train, or maybe first you can explain the process of cutting a train?

10 I can give you the process. How long it Α. 11 would take would be very dependent on where the train 12 was -- where in the train you wanted to cut it, where --13 how far you were walking, what the rate of the speed of the person walking it was. There's too many variables I 14 15 guess for me to answer that. But the process would be 16 potentially pull up to the crossing and have one of the 17 train crew members dismount. They have to stop, come to 18 a complete stop, to have that person get off the train. 19 Then they would have to pull the train forward to 20 whatever position and then cut the train at the location 21 where they wanted it cut. And that train part would continue on and clear the crossing. The individual left 22 23 on the ground would have to walk back and secure a 24 certain number of hand brakes on that train in 25 compliance with our operating rules, so that would be

another variable, what type of train, what the grade
 it's on, et cetera to make sure it's safe. Then that
 individual would have to move forward and get back to
 the cab.

5 Q. And what's the process for recoupling a train 6 that's split?

7 Α. Essentially the process in reverse. That 8 individual would have to walk from the cab back to the 9 location. They would probably -- my understanding is 10 they would make the joint first, then untie the hand 11 brakes. They may have to do an air test depending on 12 how long those trains have been -- the cars were left 13 off the air. If that's the case, the individual would have to walk the train it's my understanding four times, 14 15 twice on each side, the entire length to make sure that 16 the air is set and released on the brakes. But those 17 are operating issues, we can find out more in the 18 operating rules, but that is my understanding of what it 19 would take to cut the crossing in a certain case. So based on your understanding and 20 Ο. 21 background, is it fair to say that requiring a train to be broken to allow public travel could interfere with 22 railroad operations? 23 24 Α. It would at this location, yes.

25 Q. Do you have involvement in the creation of

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1 private crossings?

2	A. As manager engineering, leases and issues
3	involving property rights for the company do come across
4	my desk, yes.
5	Q. Is a private crossing at Logen Road a
6	feasible solution to Mr. Logen's concerns?
7	A. Based on my review of the crossing today, if
8	a private crossing application were to come in, I would
9	recommend denial of that application due to the safety
10	concerns at that location.
11	Q. Can you explain why?
12	A. The sight distances as we spoke about
13	earlier, I do not have a I didn't wheel I didn't
14	have track protection this morning, so therefore I did
15	not go out on the track. The sight distances appeared
16	from the stopping point to be approximately 400 feet to
17	the south and maybe 800 feet to the north, that's an
18	estimation. So moving at maximum track speed, the time
19	frame that an individual stopped there without the
20	active warning devices would have prior to the arrival
21	of a train would not be sufficient in my opinion to
22	safely traverse that crossing.
23	Q. I believe you were here this morning for
24	Mr. Wagner's testimony?
25	A. I was.

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1 Q. He addressed the SEPA issue.

2 A. Yes.

3 Q. Did you have anything to add to that4 discussion?

5 We did receive notice this afternoon that the Α. Corps permit we were waiting on that was in -- first in 6 7 queue ahead of the Stanwood project should be issued tomorrow morning at 9:00. I believe it was picked up, 8 9 may have been picked up this afternoon or it would be 10 prepared by 9:00 tomorrow morning, which would mean that 11 our Corps -- the staff that we have at the Corps -- the 12 Corps staff that was working on this project for the 13 company would be available to move on to the Stanwood 14 project. 15 16 EXAMINATION 17 BY JUDGE TOREM: 18 Ο. Did I understand that the permit for the 19 Stanwood project would be issued tomorrow, or was that 20 for a different project? 21 Α. That was for the Everett project, Your Honor. 22 23 DIRECT EXAMINATION 24 BY MS. ENDRES: 25 What does that mean to this project, if Q.

1 anything?

2 Α. That they will start working on the 3 environmental determination on this project at the Corps 4 of Engineers, which was necessary prior to the SEPA 5 document being filed with the Department of Ecology, б because that's one of the main components is to ensure 7 that compliance. 8 Is that permit before the Corps part of the Ο. 9 Logen Road closure analysis? 10 It is part of the overall project, so it Α. 11 would be -- the SEPA document I'm sure will -- it's my 12 understanding the Logen Road closure is included in the 13 SEPA document, but the Corps permit is specifically for 14 environmental issues. 15 Ο. Once the siding track project is complete, if 16 the crossing was left open to public travel, in your 17 background and expertise would you characterize that 18 crossing as exceptionally hazardous? 19 I would characterize it as exceptionally Α. hazardous due to the fact that we will block it for an 20 21 extended period of time, which could lead to driver behavior which may -- could lead to unacceptable 22 23 consequences based on driver behavior. 24 MS. ENDRES: I think those are all the 25 questions I have for Mr. MacDonald.

1	JUDGE TOREM: Mr. Thompson?
2	
3	CROSS-EXAMINATION
4	BY MR. THOMPSON:
5	Q. Just to follow up on the SEPA issue, so the
6	Corps of Engineers it sounds like personnel who are
7	working on the Everett project are now finished with
8	that and ready to work on the Stanwood project?
9	A. That is correct.
10	Q. And it sounded like they have to complete
11	their work before DOE can begin its SEPA work?
12	A. That is my understanding, and we do retain an
13	environmental consultant to steer us through these
14	issues, because it's a it changes with regulations at
15	different times. But my understanding is that yes, they
16	have now they are free to work on this, and once the
17	Corps has made a determination regarding the mitigation
18	of those issues, wetland impacts, that can be included
19	in the SEPA process. We so that is where that's
20	where it got stopped is without that determination of
21	the mitigation and the wetlands impacts and the
22	environmental issue, there was no way for the DOE to
23	move forward with its process.
24	Q. Okay.

And I don't know if this is your area of

1 expertise, but is it your expectation then that the Department of Ecology would then do a checklist and make 2 3 a determination? 4 Α. That is correct, we will go through the SEPA 5 process with the Department of Ecology as the lead agency. б 7 MR. THOMPSON: Okay, thank you, that's all I 8 have. 9 JUDGE TOREM: Mr. Kasting. 10 MR. KASTING: Still nothing. 11 JUDGE TOREM: All right. 12 13 EXAMINATION 14 BY JUDGE TOREM: 15 Ο. A couple of questions before I turn you over 16 to Mr. Logen. You mentioned that a private crossing 17 application would be denied due to safety reasons, and 18 it sounded like the main issue would be sight distances; 19 is that correct? 20 Α. That is correct. 21 Q. And you estimate 400 feet visibility to the 22 south and 800 feet to the north? 23 Α. That was my estimation, Your Honor, without 24 wheeling it or using any other instrument to verify 25 that.

Q. What is the standard, if there is one, for you to approve an application if the only issue is sight distance? I guess in other words, what's a safe sight distance both north and south to allow approval of a private crossing?

I would say there is no standard for it, Your б Α. 7 Honor. The issue would involve train speed, train 8 dynamics, vehicle use, the intended use of the crossing, 9 was it seasonal, was it something that was for some 10 other private regulated entity, so there's lots of 11 variables. Based on my review of this crossing in 12 particular is what I made my statement that I would 13 recommend denial of this due to safety issues at this 14 location.

15 Q. Well, let's just cut right to the chase then, 16 what would it take sight distance here for you to change 17 your mind?

18 A. Boy, an absolute, several thousand feet at19 minimum.

20 Q. In each direction or total?

A. In each direction, Your Honor, due to thetrain --

23 MS. ENDRES: Your Honor, are you explaining 24 or -- are we talking about the situation the current 25 configuration with just one mainline track or the

1 configuration after the siding track project is complete 2 where we'll have trains parked across on the siding 3 track as well as using the mainline track? 4 Good clarification. I'm asking in the Ο. 5 condition of if the project were completed in the next б two-track configuration, because that's the only reason 7 you would have a private crossing application, that's 8 the implication I got this morning was that right now 9 Mr. Logen, as the driver of the minivan that ran the 10 lights this morning did, can cross there as a public 11 crossing, there would be no reason to have a private 12 crossing, but for clarification we're talking about 13 sight distances with the modifications planned here. I have reservations, Your Honor, if you could 14 Α. 15 actually safely build a crossing there given the 16 curvature and the direction of travel from the east with 17 the train blocking that even if the train were split. I 18 don't know that you could safely work -- you could safely construct a crossing at this location. 19 So part of your testimony earlier was that at 20 Ο. 21 this particular current configuration with only one track, the only way to make this a safe crossing is with 22 an active warning device? 23 24 Α. That is correct. 25 Q. Now you mentioned 4-quad gates are typically

1 used in a quiet zone, can you elaborate on what a quiet
2 zone is?

3 Α. 49 CFR part 222, that's an established rule 4 by the FRA for the establishment of quiet zones, 5 commonly referred to as the train horn rule, an act of б Congress that the FRA create that rule. And in that 7 rule, it was set out over I believe six or eight years 8 it took to craft that rule, it sets out the standards 9 for a public entity to declare a quiet zone essentially 10 where a train does not blow its horn, so it's a whistle 11 free or a horn free zone.

12 Ο. And to facilitate that elimination of the 13 obligation for an engineer to sound the train horn, you're suggesting I believe by your testimony that a 14 15 4-quad gate can be a factor in making the crossing, the 16 existing crossing there, a no-horn crossing? 17 It could be a factor, Your Honor, you are Α. 18 correct. It is outlined as a supplemental safety measure, an SSM I believe in the train horn rule. I 19 would have to defer back to the appendix which the 20 21 devices are listed to verify that, but it is -- that is one of the safety measures that could be put in place at 22 a location where a quiet zone is desired. 23

Q. So when you testified earlier that these4-quad gates are typically used in quiet zones, it was

1 in relation to that rule as a supplemental safety
2 measure?

3 A. That is correct, Your Honor.

Q. Is there any reason that a 4-quad gate
couldn't be used here to maintain Logen Road crossing
and essentially leave it open?

7 Α. The traffic control device, the flashing 8 lights and gates, driver expectation and the use of 9 those is for blockage of crossings by trains that are 10 passing through. That is the common expectation that individuals have. The train horn rule goes on to set 11 12 out actually requirements for night time closures, I 13 believe it's from 10:00 p.m. to 7:00 a.m., and active warning devices are not included in those longer term 14 15 closures so -- and as a part practically speaking based 16 on my experience in the industry, they are not -- active 17 devices are not used at locations where trains routinely 18 block for extended periods of time, because driver expectation is then counter to what the train operations 19 will do, and it creates an issue where you're setting 20 21 the driver up to see the gates go down, the lights go on, but the train doesn't move for an extended period of 22 23 time, and that doesn't create a uniform application of 24 that device.

25

Q. Let me ask it from a different angle then,

1 two different questions. Wouldn't driver expectations 2 be addressed by appropriate signage at a crossing 3 indicating the potential length of delay? 4 Α. The information could be put out there on a 5 sign. However, motorists -- there are numerous signs placed -- numerous traffic control devices placed that б 7 motorists disregard, therefore it's up to the individual 8 motorist to take heed of that traffic control device or 9 the information provided thereon. In my opinion, no, it 10 would not address it by telling them how long it would 11 -- it potentially could be blocked.

Q. Back to the 4-quad gates, is there any reason aside from the driver expectation one you've already described that on this apparently 15 foot wide roadway 4-quad gates would not be particularly effective in sealing off the crossing for as long as it takes for the train to clear?

18 Α. I have concerns with the exit gate operation on that roadway. If the -- I believe there was a 19 question asked earlier about how far the gate arms 20 21 extended across the roadway. Mr. Logen may have asked that question or made reference. The way I heard it was 22 they essentially extended farther across than mid way. 23 24 Part of a 4-quadrant gate system is typically a vehicle presence detection, which keeps the exit gate in the 25

1 upright position until such time as the vehicle has left 2 the crossing area. If the entrance gate was already 3 down and created a barrier, you could essentially trap 4 someone inside there. The exit gate could be up, but if that other gate goes down, and I believe Mr. Logen 5 б mentioned several times or asked questions about could 7 you drive around two cars on a 15 foot roadway, that 8 would create a safety issue that I would find 9 unacceptable. We could create a trapping situation for 10 an individual between the gates. 11 So what I'm understanding is the design Ο. 12 mechanisms built into the typical placement of 13 4-quadrant gates presume no interference on the exit zone from the opposite entry gate? 14 15 Α. That is correct. They do factor in certain 16 downstream effects of signals or traffic cues, those are 17 issues to be addressed during the diagnostic review. 18 Ο. But in this case with a roadway that may be already partially obstructed by the entry gate, it may 19 create a trapping situation in its current 2-quadrant 20 21 gate configuration that would only be further made a problem by 4-quadrant gates? 22 23 That could be potentially correct. Α. The 24 flashing lights, my understanding of the statute on flashing lights is when the flashing lights come on, 25

1 they have the same implication as a stop sign.

2	Therefore, the individual should stop when the flashing
3	lights come on, the gates would descend. So if you were
4	in compliance with the operation of the traffic control
5	device, you wouldn't have that issue of the potential to
б	hit the gate on the way down. However, if you did hit
7	the gate on the way down, it would sheer, so you could
8	break that gate off in the current configuration.
9	Q. Let me ask about the current configuration.
10	My understanding of your testimony raises perhaps a
11	current safety issue, do you know how long the gates
12	are, what the length of the design on the arm is?
13	A. I did not go and review the FRA diagrams at
14	this location with the signal maintainer, Your Honor, so
15	I would have to say no, I do not.
16	Q. All right. So there's not a standard length
17	or a range of lengths?
18	A. I believe there is there is a range of
19	lengths. I don't know the minimum length. The maximum
20	length is typically around 28 feet. They typically go
21	out to I believe the MUTCD says that they have to
22	cover the approach lanes of the roadway.
23	Q. All right, so each one is engineered to fit
24	its specific situation?
25	A. That is correct, Your Honor.

1 Ο. Might there also be a minimum length that might lead to the situation that Mr. Logen describes as 2 3 it already mostly covers the roadway? 4 Α. I assume there could. Our signal -- I would 5 have to verify counterweight and other mechanical б aspects of that, Your Honor, to answer you definitively, 7 but there would most likely be a practical minimum length for that gate. 8 All right. So despite what might be 9 Ο. 10 appearing to be even a practical safety issue that 11 currently exists if the entry gates drop at Logen Road, 12 I'm referring to the potential for entrapment if the car 13 is on the tracks as the opposite gate comes down causing some blockage of the roadway or difficulty in exiting, 14 15 despite that, you're not aware of any accidents at this 16 location? 17 Α. I am not. 18 Ο. All right. But again, the root of these questions was a 4-quadrant system you think is not 19 20 appropriate for this intersection? 21 Α. I would not recommend a 4-quadrant gate at this intersection in lieu of closure, Your Honor, no, I 22 23 would not, and I would not advocate for a 4-quadrant

25 Q. And you also don't see the possibility of a

gate at this location.

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1 private crossing addressing Mr. Logen's need to move equipment from one side to the other? 2 3 Α. I do not, Your Honor. I have severe 4 reservations about the sight distance, the ability to 5 travel across both tracks safely and bring Mr. Logen home at the end of the day. I don't -- I'm concerned б 7 about his safety as well as the safety of our train crew 8 to make that movement safely. 9 Q. All right, and I know Mr. Logen will have an 10 opportunity to testify this afternoon as to just what 11 his desires are and what his current patterns are. Are 12 you going to be around this afternoon to hear his 13 testimony? 14 Α. I will, Your Honor. 15 Ο. So if we need to recall you based on what he 16 testifies to, you would be available to do that? 17 Α. I will stay here, Your Honor, yes sir. 18 JUDGE TOREM: Okay, I appreciate that, thank 19 you. 20 Does that raise further questions before I 21 have Mr. Logen ask his cross-exam? 22 MS. ENDRES: I do have one brief question that popped into my head. 23 24 25

1 REDIRECT EXAMINATION BY MS. ENDRES: 2 3 Judge Torem was asking you about 4-quad Ο. 4 gates, and you testified that is it exit gate, am I 5 using the right term? б Α. Exit gate is the gate --7 Ο. Sort of entrance gate and --8 Α. There's an entrance gate in the direction of 9 travel. The first gate you would go across would be 10 considered the entrance gate. The second gate on the 11 far side of the crossing would be considered the exit 12 gate. 13 Do the exit gates come down before, after, at Q. the same time as the entrance gates? 14 15 Α. They are typically delayed. 16 Is it possible that a motorist who was trying Q. 17 to beat 4-quad gates could do so by driving through the 18 exit gate before it lowered? Yes, there's actually a provision, I believe 19 Α. it's in the train horn rule, that discusses that and 20 21 actually advocates for the installation of medians to avoid that, roadway medians, to avoid that learned 22 23 behavior. If they realize that they can do that and 24 drive through and keep the gates up, they do find a way 25 to make an S-curve through the crossing, and you could

essentially defeat the 4-quadrant gate system by doing
 so.

3 Q. And we've heard testimony that the roadway is
4 I think 15 feet, correct me if I'm wrong, is a median
5 barrier an option here?

б Α. I would have to defer back to the County as 7 to what their standard roadway width would be for the 8 installation of a roadway median, but my experience 9 would be that would not be enough room to put a median 10 at this location. Even if the median took up 1 foot and you split the road in half, you would have lanes that 11 12 could potentially be 7 feet. But I would have to defer 13 back to the County to verify if they would accept a 14 roadway with 7 foot.

15 Q. I'm trying to think of the best term for 16 this, are you familiar with the term follow the leader 17 motorist behavior at railroad crossings?

18 A. I'm trying to --

19 Q. Have you ever seen a situation where one 20 motorist may attempt to beat a gate and another one 21 follows and so on and so forth?

A. I'm seen video of that. I don't think I'veever seen it personally.

Q. Is that a potential concern if the Logen Roadcrossing is to remain open?

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1	A. If the individuals chose to run around the
2	gate, yes. Because if the second car if the first
3	car made it because they went right when the gate
4	started, the second car followed them, yes, I would have
5	a serious concern that the second car could be met in
б	the crossing by the lead engine of the train.
7	MS. ENDRES: Thank you.
8	That's all I have, Your Honor.
9	JUDGE TOREM: All right, Mr. Logen, your
10	cross-exam.
11	MR. LOGEN: Thank you, Your Honor.
12	
13	CROSS-EXAMINATION
14	BY MR. LOGEN:
15	Q. Would the installation of a 4-quad gate at
16	Logen Road assuming that we've got two tracks there
17	improve the safety over the present crossing with one
18	track and arms?
19	A. In my opinion, no. 4-quadrant gates are
20	typically used to replace the sounding of the locomotive
21	horn, which is typically blown at Logen Road currently,
22	so I would in my opinion, no.
23	JUDGE TOREM: Is that on que for the record?
24	We'll note for the record we can hear a train
25	horn blowing now, and Mr. MacDonald is smiling broadly.

1 It's amazing how these things work out. 2 THE WITNESS: Yes, Your Honor. 3 BY MR. LOGEN: 4 Ο. No, I think this is a question for staff 5 rather than you. б There was just a question about follow the 7 leader mentality of drivers, what do you think the 8 chances of that happening with 140 cars per day 9 occurring at the Logen Road crossing? 10 I guess you're asking me to speculate, but Α. 11 given that Mr. -- what Mr. Agee observed this morning in 12 terms of an individual running the lights, I would say 13 it's just as -- it could happen at that crossing today, tomorrow, or the crossing here in town today or 14 15 tomorrow. I won't give you a number in terms of 16 percentage on that, but is it a possibility, yes, sir, I 17 think it is. 18 Ο. You've testified about the sight distance at Logen Road, what's the sight distance at Dettling Road? 19 20 Dettling Road has active crossing control Α. 21 devices and is expected to remain a public crossing, so I did not stop and do a sight distance analysis on that 22 23 roadway. 24 Q. Mr. Wagner testified that, I think it was,

25 testified that that's also on a curve, so I would assume

1 that there's limited sight distance; is that a safe
2 assumption?

3 I would have to look back at the track charts Α. 4 or go visit it in person, but that's -- on a curve with 5 active warning devices would implicate to me that yes, there is potentially some sort of sight obstruction in б 7 one of the quadrants in approach to that crossing. 8 Ο. If there's trains parked on the siding, you 9 testified that people will -- they will change their 10 behavior because of the possibility of the crossing 11 being blocked by a train, and would you see any change 12 in behavior in drivers that see trains parked on the 13 siding just south of Dettling Road, would they tend to also try to beat the train if it looked like it was 14 15 either moving very slowly or stopped?

16 Α. There is -- I guess driver behavior, they 17 could -- anyone could expect to do anything, sir. So if 18 that is a perception of someone that is late and they think that's what the issue is, could they make that 19 move, yes, sir, they could. Could they be conditioned 20 21 over time to do that, it would depend on what they saw over time. But it is a possibility that someone will 22 23 get in their mind every time they see a train it will go 24 slow, just the same as someone could take the operate 25 approach and say every time this goes down it's just

1 Amtrak going to go through here at 8:00 in the morning, 2 I'm okay, it's just Amtrak. So I would say there is a 3 possibility for both, but I understand what you're 4 asking. 5 Ο. Thank you. б Is there a standard distance that a train 7 parks from a crossing? 8 Α. I believe Mr. Wagner testified earlier that 9 it was 250 feet, and that is my recollection as well. 10 By our general code of operating rules I believe it 11 states where practical to position standing cars and 12 locomotives 250 feet from a public crossing. 13 Ο. At what distance is the signal operated at Logen Road? 14 15 Α. The approach circuit, sir, in the current 16 configuration? 17 Yes. Ο. 18 Α. In the current configuration, it could extend out for -- in order to achieve the warning device times 19 that we have set by our signal department, the shunts, 20 21 the terminating shunts could be out several thousand feet, 4,000, 5,000, 6,000 feet for 79 mile an hour 22 23 locomotive. I would have to verify that, Your Honor, 24 with the actual diagrams held in the bungalow for the 25 FRA compliance, but they could be out several thousand

1 feet.

2 Q. Okay. 3 Α. Actually I won't say they could be, they are 4 set out several thousand feet possibly. 5 Ο. Would those shunts be set out a different б distance on the siding as opposed to the main line? 7 Α. The siding has a different track speed. It 8 would be designed for a different track speed, so yes, 9 they would be set for a different -- they're set for the 10 track speed or the maximum -- the class of track or the 11 track speed, whichever governs that location. 12 Ο. So if a train is parked 250 feet from the 13 intersection, from the crossing and on the siding, would that typically operate the crossing signals? 14 15 Α. I believe I testified earlier that when the 16 train entered the approach circuit, it would activate 17 the devices if it was -- the way they work -- and I will 18 try to -- I'm not a signal -- I don't work for the 19 signal department, but I will give you my understanding 20 as the engineering manager of how the signal works in 21 approach. The shunt is set out at the maximum speed that the train could approach the crossing at, and then 22 23 it's determined that you need so many seconds for the 24 equipment to sense the train. It works on an AC circuit, so you have a rate of change of impedance. 25 So

1 basically says how fast am I decreasing this circuit essentially. It's all electronic so it's not a -- so 2 3 when it gets there, it says, if the train is 4 decelerating at a rate that it thinks it will never 5 reach the crossing, is there a possibility that it would б not activate that crossing? Yes, that's a possibility. 7 But if it senses it, it doesn't know that it's 8 decelerating, it could activate the crossing, and then 9 the train would continue to decelerate and then stop. 10 Then after a certain amount of time where there is no 11 movement towards the crossing, the crossing warning 12 devices would recover, and the road would be opened 13 again.

Q. Okay. So that could be true at Logen Road with a shorter train than the long ones we're talking about, wouldn't it also be true at Dettling Road with a longer train on the siding?

A. It's actually true at any crossing that has active warning devices with constant time warning devices. The circuitry that would detect the approach of the train, any crossing on our system that has that logic in it, it would be a possibility, sir.

Q. When you add the second track, will the sightdistance be increased?

25 A. No, the sight distance would be decreased

1 because of the possibility that the track -- the train 2 would be -- a train or a part of a train would be 3 obstructing views of that crossing. If it's just a 4 purely geometric question that I'm putting the next 5 track out 15 feet, could I look down the track and see б incrementally further based on the sight triangle? 7 Ο. Clearing the trees and everything else. 8 Α. Well, actually at Logen Road we are working 9 on the other side to avoid environmental impact, so I 10 don't know that we're going to do anything on that -- in 11 those quadrants on the Logen Road, I'm sorry, on the 12 east side. On the west side when you approach, you 13 would have -- coming from the east, would your sight distance potentially be increased, yes. Coming from the 14 15 west, would it be increased, I would have to think 16 through that to say -- I would have to run the -- draw a 17 picture or something on that. 18 Ο. Okay. And verify that. 19 Α. So safe to say it may be increased, may be 20 Q. 21 decreased then depending on the direction? Depending on the direction, the condition, 22 Α. what's on the track, what's not on the track, so those 23 24 issues would all come into play, sir, yes. 25 You testified that keeping the Logen Road Ο.

1 crossing open would hamper railroad operations, at least 2 that's what I jotted down here. Help me understand how 3 that would hamper operations if the train is going to be 4 parked there for hours, which we've also heard? 5 Α. Correct, it would. So if -- however, there would be -- we would most likely end up in discussions 6 7 regarding the statutory requirement that we not block a 8 public crossing, and therefore we could not occupy that 9 crossing for extended periods of time without having 10 required to perhaps cut the crossing or come to some 11 other agreement on that. 12 Ο. As I recall, that requirement isn't -- it's 13 when practical I believe is how it says as far as blocking grade crossing. I'm looking for it here. 14 15 Α. And that may be. The larger -- the safety 16 concern is with the train parked on the crossing, an 17 individual either attempting to beat the train ahead of 18 time or driving into the side of the train would create a safety issue as well, which would further impede 19 railroad operations if there's a collision at that 20 21 location. And you mentioned it was a statutory 22 Ο. requirement, isn't it in fact a WAC rule? 23 24 Α. It may be, I may have misspoken, it may be a

rule and not a statutory requirement, so I will withdraw

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1 my testimony to that effect and let -- we can do further 2 research on where that actually comes in, Your Honor, I 3 apologize. 4 Ο. And it's been my experience that WAC rules 5 can be waived; would you agree with that? I believe there is an administrative process б Α. 7 in the state of Washington to address administrative 8 rules, yes, sir. 9 Q. Now you talked about the sight distances 10 being 800 feet to the north and 400 feet to the south, 11 yet we heard from Mr. Wagner that from 271st Street he 12 could see Logen Road, which is considerably more than 13 400 feet. 14 I don't believe I heard Mr. Wagner -- I did Α. 15 not hear that myself, sir. I heard him say that towards 16 Logen Road it disappeared around the curve is what I had 17 heard. Now I would have to defer to, Your Honor, the 18 testimony of Mr. Wagner for that. 19 MS. ENDRES: Can I ask for clarification, are you asking about Logen Road or the Logen Road railroad 20 21 crossing? 22 MR. LOGEN: The crossing, yes. BY MR. LOGEN: 23 24 Ο. I was a little bit confused about the, maybe 25 I understand it more, because in your answer to one of

1 my earlier questions you said that you would classify 2 this as extremely hazardous due to driver behavior, and 3 I was having a hard time correlating that with there's a 4 train blocking the road, how can it be hazardous, and 5 we're talking, you know, a WAC rule that says you can't 6 block it, and so that's why it's got to be closed, so 7 I'm trying to understand this.

8 Α. Just because the train occupies the crossing 9 doesn't prohibit someone from driving into the side of 10 the train, so I guess that's the other safety aspect 11 that I want to make sure I address is the presence of 12 the crossing in and of itself creates a condition 13 whereby an individual, whether paying attention or not or distracted, could literally drive into the side of 14 15 the train, and I believe there's ample occasions of 16 that. There's actually on I believe on the accident reporting forms there's actually a box it happens so 17 18 often that says driver drove into train or something to that effect, so that's a safety concern that any warning 19 device, anything short of closure or grade separation 20 21 would not address.

Q. In a situation where a driver drives into the side of the train, is the train usually moving or stopped?

25 A. It could be either, I don't know for certain

1 on that.

2 That's not tracked? Ο. 3 Α. I do not track it personally, so I would have 4 to defer to either the federal guidelines or someone else in the company, sir, to find that information. 5 You testified about the FRA train horn rule б Ο. 7 and quiet zones. 8 Α. Yes, sir, 49 CFR part 222. 9 Q. Are you familiar with the calculator that is 10 on their web site? I am aware of the calculator on their web 11 Α. 12 site. 13 And there's a number of options that can be Q. entered as mitigation for basically not using horns in a 14 15 quiet zone? 16 Α. There are a list of supplemental safety 17 measures and ASM, auxiliary safety measures I believe is 18 the correct term, that could be used to implement a quiet zone by a public agency. 19 20 And there's the results of their calculator Ο. 21 gives a risk index; are you familiar with that? 22 I am aware that it gives, the results give a Α. risk index, yes. 23 24 Q. And a risk index with horns and without? 25 Those are outputs that I believe. I have Α.

never run the calculator, because I do not -- that's a
 public agency's responsibility to address that side of
 the calculator.

4 Ο. Since this is put out by an agency of the 5 federal government and used I assume nationwide then, and it also gives a nationwide significant risk 6 7 threshold number that you can compare your results of 8 your calculation to, and my understanding is that if the 9 results of your calculation with the mitigation falls 10 under that nationwide significant risk threshold, then 11 it's not a significant risk to turn off the horns or not 12 use them; is that correct?

13 Α. Since I didn't write that portion of the regulation, to do an interpretation without looking at 14 15 the FRA's documentation on what they interpret that to 16 mean, sir, I can not answer that affirmatively or 17 negatively as to what the FRA intended that to be. 18 MR. LOGEN: Okay, I think that's all the 19 questions I have. 20 JUDGE TOREM: All right, thank you, 21 Mr. Logen. 22 JUDGE TOREM: Ms. Endres, any follow-up? 23 MS. ENDRES: I have just one follow-up 24 question.

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1 REDIRECT EXAMINATION BY MS. ENDRES: 2 3 Ο. The documents that Mr. Logen was just 4 discussing, did you have an opportunity to look at 5 those? б Α. (Shrugging.) 7 ο. And these are marked Exhibit LFL-12, 13, 14, 8 and 14, and I would like you to look at these, and I'm 9 not going to pretend to be an expert on this stuff, but 10 can you tell me whether this formula addresses Logen 11 Road's current configuration of one track or the future 12 configuration of two tracks? 13 Α. I'm trying to find Logen Road here, Logen Road, Logen Road. 14 15 JUDGE TOREM: I believe it's marked as 292nd 16 Street Northwest; is that correct, Mr. Logen? 17 MR. LOGEN: Yes, it is. 18 JUDGE TOREM: This is the same railway 19 intersection that we're referring to. 20 THE WITNESS: So I have 13, 14, I have two 21 page 2 of 2, so they're all for Logen Road, Your Honor? 22 JUDGE TOREM: That's my understanding. 23 MR. LOGEN: Yes. 24 THE WITNESS: Okay. 25 JUDGE TOREM: First off, let me ask you if

1 you're familiar with these printouts and feel

comfortable interpreting them at all. 2 3 THE WITNESS: I have not looked at these or 4 had time to review them, Your Honor. JUDGE TOREM: Ms. Endres, it might be more 5 6 appropriate to wait to see exactly what Mr. Logen 7 testifies to, and I have already asked this witness to 8 be available for further questions as needed. Once he 9 hears what Mr. Logen is purporting these to mean, I 10 think that might be a better time for Mr. MacDonald to 11 come back, and if he disagrees or agrees with 12 Mr. Logen's presentation, give his opinion at that time. 13 MS. ENDRES: Very good, Your Honor. 14 JUDGE TOREM: So aside from the questions 15 about these potential exhibits, was there any other 16 redirect? 17 MS. ENDRES: No. 18 JUDGE TOREM: All right. 19 Any other questions for this witness? All right, thank you, Mr. MacDonald, I 20 21 understand you're going to stick around. 22 THE WITNESS: Yes, Your Honor. 23 JUDGE TOREM: Are there any other witnesses 24 that BNSF wishes to call this afternoon before I turn 25 the case over to Mr. Thompson for his witness?

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MR. SCARP: None, Your Honor.

2 JUDGE TOREM: Then at this time I want to 3 just review which exhibits BNSF has offered or hasn't 4 offered to make sure that the record is complete from 5 your perspective for your case in chief. Exhibit 1, that's been admitted is the petition for closure. б 7 Exhibit 2 is Snohomish County's waiver of the hearing. 8 Exhibit 3 sponsored by Mr. Wagner were BNSF's responses 9 to Mr. Logen's Data Request Number 18. Exhibit 4 was 10 the schematic, one page, all the multiple colored ink. 11 And then Exhibit 5 was the construction plan at the 12 siding. The other ones that I had listed were already 13 incorporated in Exhibit 1, so I've just crossed those off my draft list. Exhibit 6 and 7 had to do with 14 15 Mr. Norris, those were his CV and the traffic impact 16 analysis. Exhibits 8 and 9 were brought in through 17 Mr. Bloodgood, his CV and the Snohomish County motion of 18 January 26th. Exhibits 10 and 11 also came in through Mr. Bloodgood, they were Mr. Logen's exhibits regarding 19 the determination of possible inadequate road condition 20 forms, and Mr. Bloodgood interpreted those. Exhibits 21 12, 13, and 14 came in with Mr. Agee, they were the 22 23 Operation Lifesaver slides, the North Carolina safety 24 study and report, and then the three photographs of the train and tractor collisions, and I think that's where 25

1 we are as far as exhibits that have been admitted.

2	You had previously identified before today
3	some Mapquest maps and some other web pages having to do
4	with fire departments that were not offered, and you
5	also indicated you might have use for your responses to
б	Logen's Data Request Numbers 8 and Number 14. At this
7	time was there any need to offer those or put them into
8	the record, or are you saving them for later?
9	MS. ENDRES: We're not going to save them.
10	The Mapquest maps, the need for that was negated when we
11	got the traffic impact study.
12	JUDGE TOREM: Okay.
13	MS. ENDRES: The data requests that we
14	flagged had some specifics about siding track length and
15	whatnot to the extent that they were needed to refresh
16	Mr. Wagner which weren't needed.
17	JUDGE TOREM: Okay, just wanted to make sure
18	that we weren't overlooking something accidentally
19	today.
20	So it seems formal to ask, but does BNSF rest
21	its original case here?
22	MR. SCARP: We do, Your Honor.
23	JUDGE TOREM: All right, then at this time I
24	think we're ready for the Commission Staff's witnesses
25	unless Snohomish County has a change of heart and wishes

1 to offer any additional evidence, it would be next as 2 respondent.

3 MR. KASTING: No changes. 4 JUDGE TOREM: All right, then hearing that, 5 we are ready to turn to Ms. Hunter, and any exhibits, б Mr. Thompson, that you've identified. 7 MR. THOMPSON: The only item we had was just 8 an excerpt from the USDOT Railroad Highway Grade 9 Crossing Handbook, and she's -- I just wanted to make 10 that a part of the record and ask that it be -- that you 11 take sort of official notice of it I quess. Ms. Hunter 12 actually is not going to refer to it in any detail in 13 her testimony, but --14 JUDGE TOREM: I know I have that here because 15 you submitted it last week. 16 MS. ENDRES: It's huge. 17 MR. THOMPSON: We submitted an excerpt, one 18 of the chapters, Chapter 4. 19 JUDGE TOREM: All right, I know I have it, it was about 6 pages. 20 21 MR. THOMPSON: I can give you a copy. 22 JUDGE TOREM: It was 8 pages in length. MR. THOMPSON: Here you go. 23 JUDGE TOREM: You know what, I do have that, 24 25 I just didn't recognize it as such, so thank you.

1 All right, so we're going to mark as Exhibit 15 this 8 page excerpt of the Department of 2 3 Transportation and FHA Handbook, it's pages 75 through 4 82. 5 You had also submitted previously some 6 photographs of the crossings and an overhead picture. 7 Were you planning to have Ms. Hunter testify or just 8 briefly mention those? 9 MR. THOMPSON: They might be largely 10 duplicative of things that are already in the record. I 11 quess I'll ask Ms. Hunter, do you plan to make reference 12 to those at all? 13 MS. HUNTER: I do not. They're just photos of the crossings in question, the Logen Road crossing 14 15 300 and 271st, and there's an overhead that's similar to 16 this, but I think that photograph is already in the 17 petition. 18 JUDGE TOREM: I don't remember it being of 19 this resolution in the petition. 20 MS. HUNTER: That's probably true. 21 JUDGE TOREM: Let me suggest, although I will be making a site visit probably tomorrow, that in the 22 23 case there's an appeal to the full Commission of 24 whatever ruling I issue that these might be the clearest 25 photographs of what I would describe in my report, and

if you're able to give personal testimony as to just generally that these do represent the crossings, it might make the record a more full record for any person besides those in the room to review if that becomes necessary. As descriptive as I might be able to be, these photographs are easily worth a thousand words apiece.

8 And I would suggest that, Mr. Thompson, since 9 you had the trouble of making them and they've 10 circulated among the parties here that we mark the 11 aerial photograph as 16 and the 6 individual photographs 12 of the 3 crossings as Exhibit 17. And that way even if 13 Ms. Hunter doesn't rely on them particularly much for her testimony today, I might be able to better refer to 14 15 them in footnotes as I explain what's out there in my 16 initial decision on this matter. So if you will indulge 17 me in that regard, we'll mark them as 15 for the 18 excerpt, 16 and 17 for the aerial and then the 19 individual photographs in that order.

Let me entertain the motion that we discussed at the status conference last week that I take official notice under WAC 480-07-495 of first the Department of Transportation Grade Crossing Protective Handbook, that would be the entire document from which this excerpt is drawn, and also official notice of the sights, sounds,

1 or otherwise what I might see out there on the driving 2 tour that's been described in the letter that you sent 3 dated March 13th, Mr. Thompson. I believe that's the 4 information that the rule allows me to take official 5 notice of and that I described last Tuesday that I would 6 intend to. Are there any objections to me doing so on 7 the record today?

8 All right, hearing none, I'm going to call 9 those Exhibit A and Exhibit B since they're not 10 something tangible in the record, but if I refer to any 11 knowledge I pick up on the drive, I might call it 12 Exhibit B somewhere in the directions and maybe give the 13 intersection for which I made a particular observation, we'll see how articulate I can be with that. 14 15 And I will take official notice of the entire 16 handbook, but this portion has been marked as Exhibit 17 15. As to Exhibit 15 is there any objection to me 18 making those 6 or 8 pages part of the record? 19 Hearing none, then 15 is admitted. And once we have a little bit of foundation 20 21 from this witness, we'll get to 16 and 17. So before I

22 forget, Ms. Hunter, let's get you sworn in, if you will 23 raise your right hand.

24 (Witness KATHY HUNTER was sworn.)

25 JUDGE TOREM: All right, thank you.

1 (Discussion off the record.) JUDGE TOREM: Ms. Hunter, can you spell your 2 3 first and last name for the record. 4 THE WITNESS: You bet. Kathy Hunter, K-A-T-H-Y, H-U-N-T-E-R. 5 б 7 Whereupon, 8 KATHY HUNTER, having been first duly sworn, was called as a witness 9 10 herein and was examined and testified as follows: 11 12 DIRECT EXAMINATION 13 BY MR. THOMPSON: 14 Ms. Hunter, by who are you employed and in Q. 15 what position? 16 Α. I work for the Washington Utilities and 17 Transportation Commission, and I'm the Deputy Assistant 18 Director of Transportation Safety. 19 How long have you been in that position? Ο. 20 Approximately three years. Α. 21 Q. And what are your responsibilities in that 22 position? 23 Α. I am a manager in the rail safety program. I 24 supervise four Federal Railroad Administration certified 25 staff in different disciplines. I work on crossing

1 petitions that are filed with the Commission which 2 include petitions to open new crossings, to close 3 crossings, to modify existing crossings. I review quiet 4 zone proposals that are filed at our agency, so I 5 actually participate in diagnostic meetings and offer б comments on behalf of the agency. I am a certified 7 Operation Lifesaver presenter. I also provide technical 8 assistance to railroads and road authorities on road 9 safety issues. 10 What education or training have you had Ο. 11 specific to railroad safety? 12 Α. I have attended several engineering classes 13 on railroad safety. Also attended a grade crossing safety course. All of those classes have been at the 14 15 University of Wisconsin. I have attended three or four 16 rail safety conferences. I represent the State of 17 Washington as a Rail Safety Program Manager at a 18 national level. 19 Could you just briefly summarize what are the Ο. sources of state policy on highway railroad grade 20 21 crossings? Well, RCW 81.53.060, WAC 480-62-150, and then 22 Α. 23 we talked about the MUTCD manual, that's also been 24 adopted and used to set policy. 25 And real briefly again, what are the sources Ο.

would you say of national or of federal policy on grade
 crossing safety?

A. We were just talking about the manual on railroad highway grade crossing safety that's published by the Federal Highway Administration DOT, and also Staff uses the FRA grade crossing consolidation manual as well.

8 Q. Okay. And then I guess gleaning from those 9 sources, what -- is there a test or a set of 10 circumstances under which you would say public policy 11 favors the closure of grade crossings?

12 Α. Typically Commission Staff will look at the 13 different characteristics of the crossing looking at the crossing as far as what might be considered dangerous at 14 15 the crossing. Other characteristics might be redundancy 16 of crossings if it's a redundant crossing. Perhaps 17 there's a crossing on every city block, so we might 18 target that crossing for closure, it might meet that redundancy criteria. We also look at alternate routes 19 when we're considering crossing closure, are the 20 21 alternate routes a reasonable distance, are they safe, can they also accommodate the increase in traffic if 22 that crossing were closed. We also look at the number 23 24 of collisions at a crossing as well. If there's a high number of collisions, typically that is something that 25

1 is examined for potential closure. We also look at the use of the crossing and the road for first response. 2 Ιf 3 there is a, you know, high frequency of use by first 4 responders, then typically that's taken into 5 consideration as well. And sight distance is also a characteristic that we examine when we're looking at б 7 crossings for a potential closure. 8 Ο. And have you made an assessment of BNSF's 9 petition to close Logen Road? 10 Α. I have. 11 And what specifically did you do to research Ο. 12 or review that petition? 13 Α. I reviewed the petition that was filed by BNSF. I have made several site visits to the actual 14 15 crossing, drove the designated alternate routes to 16 familiarize myself with the alternate routes, kind of a 17 general familiarity of the area. I met with several 18 community members, Dan and Pat Logen. I've met with 19 Chief Fulfs from the North County Regional Fire Authority. He actually filed comments in the case. I 20 did review the comments that were filed in the case as 21 well. I helped organize an informational community 22 23 meeting that was held in October 2008 in Stanwood 24 working with the Railroad and the County to organize a meeting. I've looked at the crossing inventory on the 25

Logen Road crossing, also the 271st crossing, 300th crossing as well. Helped prepare Staff data requests and responses to data requests that we received, looked at numerous data requests that the parties distributed between them, looked at some Commission orders as they relate to crossing closures.

7 Ο. And having done all that, did you form an 8 opinion about the safety of the Logen Road crossing? 9 Α. I do have a concern about the safety if the 10 siding track is constructed at Logen Road. Part of what 11 Staff looks at is the danger at the crossing versus the 12 public convenience and necessity to keep the crossing 13 open. So my initial analysis is that if a siding track is constructed through Logen Road that it would create 14 15 an exceptionally hazardous condition and that the actual 16 value or use of the crossing is diminished because of 17 the blocking that will be anticipated when the siding is 18 functional.

19 Q. Okay.

A. I am also concerned about I think it's been mentioned several times about the sight distance at the current crossing. I think Mr. MacDonald just testified as well about if there are trains parked near the crossing, the sight visibility would potentially be decreased even further. Talked a lot about driver

confusion as well, I think Mr. Agee talked about driver
 confusion, driver expectation. I think all of those
 factors staff has reviewed as well and has taken those
 into consideration, so we do have significant concerns
 about the safety of this crossing if the siding were
 constructed.

Q. There's been an awful lot of testimony about the issue of safety issues that arise from main line and siding track location, did you generally agree with the testimony of Mr. MacDonald on that point?

11 A. I did, I do.

Q. Regarding the earlier testimony about impact on first responders or emergency response, did you have anything that you could add to that, or did you generally agree with the prior testimony?

16 I generally agree. I just wanted to say that Α. having driven those alternate routes probably a half a 17 18 dozen times, I do recognize that there is a additional time commitment for folks that are used to using Logen 19 Road, so it is more inconvenient to have to drive the 20 21 alternate routes, but I do think the alternate routes are a reasonable distance. I'm not a traffic engineer 22 like Mr. Norris that testified earlier, but I do agree 23 24 with his statements about reasonable distance and time. I think pretty much my experiences driving the alternate 25

routes and talking with folks, I'm in general agreement
 with Mr. Norris.

3 Ο. Could you address a little bit the issue of I 4 guess the safety of the alternative crossings that have 5 been identified as places where traffic would be diverted from Logen Road, maybe starting with 300th б 7 Street or Dettling. And I guess actually we could 8 probably refer to the -- is there a picture of Dettling 9 Road crossing in the pictures we submitted? 10 Α. There is. I show it as KH-3, I did not 11 record the exhibit number. 12 Ο. Yes, I think it's premarked as 17. 13 Α. So there's been two accidents, and I think Mr. Norris touched on those, prior to the crossing being 14 15 signalized. There have been no accidents since signals 16 were installed at the Dettling crossing. It's my 17 understanding with the improvements that the County and 18 the Railroad are proposing at this crossing as far as the approaches, I'm comfortable that the improvements 19 proposed will help mitigate the accident data, although 20 21 the accidents did take place before the warning devices were installed. I don't have any significant concerns 22 23 about the safety of this crossing.

Q. What sort of safety devices are there justlooking at the photo?

A. There's cantilever mounted lights and gates
 currently at the crossing.

3 Q. And that's in addition to what you would find 4 presently at Logen Road, right, the cantilevers?

5 A. Logen Road has shoulder mounted lights and6 gates, so similar but slightly different.

7 Q. Okay.

8 And now how about 271st Street to the south9 in Stanwood?

10 271st Street, my observations when I visited Α. 11 that crossing initially was that the hardware, active 12 warning devices, pavement markings, were very old. It's 13 my understanding that they've been in place at that crossing for more than 30 years. I do have concerns 14 15 because there's been 5 accidents at that crossing since 16 1975. I think Judge Torem mentioned earlier the latest 17 accident actually occurred in January of 2008 when we 18 were at Hickox Road where a pedestrian got under the gates at that location and was struck by an Amtrak. So 19 one thing that the stakeholders did, stakeholders to 20 21 this proceeding, is that we actually convened a diagnostic meeting at the alternate route crossing 22 23 several months ago, and we looked at the characteristics 24 of each crossing, and we had an opportunity to examine 25 those characteristics and make recommendations for

1 improving safety. So the 271st Street crossing we spent 2 quite a bit of time at talking about what improvements 3 should be there. It's my understanding that the 4 railroad will install all new active warning devices at 5 that crossing, they will consider adding additional б signage, they will look at sidewalk placement because of 7 the anticipated increase of pedestrian traffic because 8 of the Amtrak station. So there was a lot of discussion 9 about how to make that crossing safer, so after that 10 diagnostic meeting I did not have any significant concerns about the safety. I would have if the railroad 11 12 was proposing not to make any upgrades at 271st, because 13 I really think that it needs those improvements. I sort of mentioned this earlier, and you had 14 Ο. 15 -- I think you mentioned that you had met with an 16 official from the North County Regional Fire Authority 17 regarding impact on emergency response; do you want to 18 describe that conversation? Yeah, I contacted Chief Fulfs. He submitted 19 Α. comments in the case, general comments about his 20 21 concerns about the closure of Logen Road and losing the ability to respond, you know, to an incident that might 22 23 be in that local area. So he did meet with Staff and 24 just said he didn't have any specific concerns, but he

said from a first responder's perspective, there's

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1 always concern when roads are closed, that it limits 2 their ability to respond to an emergency. And Chief 3 Fulfs did acknowledge though that his station, which is 4 located south of Stanwood, isn't the primary responder 5 for incidents around Logen Road, that would actually be б the station on 300th, but that if there were a situation 7 whether a large structure fire or something of that 8 magnitude, that his station would respond as well as the 9 City of Stanwood with the mutual aid agreement that they 10 have in place.

Q. Did you have any -- there was a discussion again with Mr. MacDonald a moment ago about the possibility of using 4-quadrant gates as a way of addressing the problem of people driving around the gates I guess at Logen Road if the crossing would remain open; do you have anything to add to Mr. MacDonald's testimony on that point?

18 Α. Well, I agree with what Mr. MacDonald said, that you typically see a 4-quadrant gate system in a 19 high speed rail corridor in a quiet zone application. 20 21 My opinion is that 4-quad gates could help mitigate the hazards that would result from a second track being 22 installed there, a siding track, but that, you know, 23 24 that there's still that opportunity for safety concerns. I think that Mr. MacDonald described, you know, driver 25

1 behavior as unpredictable. 4-quad gates are not 2 foolproof. They are designed to seal a corridor where a 3 train is moving at a high rate of speed, but the gates 4 will break off if someone drives into a gate, the 5 vehicle detection that's required on the crossing б surface, so it's not 100%, so I do echo what 7 Mr. MacDonald said earlier. I do believe though that it 8 comes down to more of a cost value judgment, the cost of 9 I think it was mentioned \$350,000, \$400,000 to install 10 4-quadrant gates versus putting those on a crossing 11 where substantially that crossing could be blocked for 12 hours at a time. My observation would be in a high 13 speed rail corridor if you find 4-quadrant gates, you're not going to see a siding track within that corridor 14 15 that's going to have freight trains stopped for a long 16 period of time. 17 Is there, well, in the case where 4-quadrant Ο. 18 gates are installed as a supplemental safety device, if I've got that right, for a quiet zone, who typically 19 pays for them in that circumstance? 20 21 Α. Typically the community, the road authority that's initiating the quiet zone. 22 So the local --23 Q. 24 Α. Government.

25 Q. -- jurisdiction is looking for a way to

1 silence the train horns, and the way to do that is 2 through the supplemental, buying the supplemental 3 devices? 4 Α. That's correct. 5 Ο. Are there maintenance costs associated with б that kind of a device as well? 7 Α. It's my understanding maintenance costs are 8 higher on 4-quad gates versus a 2-quad gate system. 9 Q. Have you given thought to Mr. Logen's, well, 10 I guess this Mr. Logen's brother's use of the crossing 11 as a place for bringing the tractor across, and do you 12 have an opinion about that issue? 13 Α. I have given it some thought. I guess overall my observation is that it's more of a private 14 15 type need to get his farm equipment across that crossing 16 so his family can maintain their property on both sides 17 of the railroad crossing, and I don't think that it 18 typically represents the general public's overall use of 19 that public crossing, that it's more unique to his needs in getting his equipment across. Closing a crossing or 20 considering to close a crossing is generally based on a 21 safety issue to protect the general traveling public, so 22 23 folks that travel that crossing in their cars, the 24 railroad employees, passengers on an Amtrak, so it's 25 more of a public issue versus a private need.

Q. How would you address the notion that there's a tradeoff between, safety tradeoff I guess you would say, between allowing Mr. Logen to continue to use that location with his tractor versus driving around on higher speed roads?

Well, I think Mr. MacDonald said that, you б Α. 7 know, without active warning devices there, if it were 8 converted to a private crossing, I think that I would 9 like Mr. MacDonald have significant concerns about the Logen family traveling over that crossing. If the 10 11 active warning devices remain and they still have that 12 type of notification of an oncoming train, I think that 13 would alleviate some of my concern.

I'm not a traffic engineer, I think I just 14 15 said that a few minutes ago, but I would be concerned, 16 you know, to see a tractor traveling on Pioneer Highway or Old Pacific Highway at 60 miles per hour at 12 miles 17 18 per hour as a tractor, so I think that that brings its own set of safety concerns versus railroad crossing 19 safety. Now you have vehicular kind of safety issues on 20 21 the highway. I think that there are some reasonable alternatives instead of driving the tractor on Old 22 Pacific Highway or Pioneer, you know, perhaps the Logen 23 24 family could consider, you know, loading their tractor onto a trailer and transporting it on the roadways in 25

1 that manner. Certainly you could probably go closer to 2 the speed limit than 12 miles per hour. So it seems 3 like there's a reasonable alternative to taking that 4 tractor over those railroad tracks at that location. Are there benefits, would there be benefits 5 Ο. 6 to closing Logen Road crossing in addition to the 7 elimination of the collision hazard? 8 Α. Well, I think we touched briefly that if that 9 public crossing were closed, no train horn would be 10 blown at that location, and essentially that equipment 11 could be removed from the Logen Road crossing and 12 reinstalled at a different location. 13 Q. All right. Could you just sort of summarize then Staff's 14 15 recommendation with respect to the petition? 16 Α. Staff's recommendation is to close the Logen Road railroad crossing. The crossing would become 17 18 exceptionally dangerous with the addition of the siding track at that location, and Staff feels that the public 19 convenience and necessity does not require the crossing 20 21 to remain open. Staff also believes that the alternate routes are reasonable as far as distance and time and 22 23 offers safe alternatives. 24 MR. THOMPSON: Thank you, that's all the

25 questions I have for Ms. Hunter at this point.

1 JUDGE TOREM: All right, start with the railway, do you have any cross-exam? 2 3 4 CROSS-EXAMINATION 5 BY MR. SCARP: Just clarification very briefly, Ms. Hunter, б Q. 7 you referenced the crossing accident record at 271st and that there was a pedestrian fatality. 8 9 A. I believe it was an injury, I don't believe 10 it was a fatality. Q. I'm sorry, injury in January of 2008, and 11 12 that was your understanding someone who went past or 13 underneath --14 Α. Underneath. 15 Q. -- an active warning device? 16 Α. That's correct. 17 MR. SCARP: Okay, that's all the questions I 18 have. 19 JUDGE TOREM: County? 20 MR. KASTING: Nothing. 21 JUDGE TOREM: Mr. Logen. 22 MR. LOGEN: Thank you. 23 24 25

1 C R O S S - E X A M I N A T I O N BY MR. LOGEN: 2 3 Ο. You indicated that you drove the alternate 4 routes several times. Other than that, how did you 5 determine that the alternate routes were safe? How did I determine they were safe? I did б Α. 7 review Mr. Norris's traffic study as well. I drove the 8 routes from a -- just from a driving standpoint, they appeared to be safe. I looked at the inventory and 9 10 accident data for the crossing portion of the alternate 11 routes and determined based on my experiences actually 12 traveling those roadways at the designated speeds and 13 over the crossings that they appeared to be safe to me. 14 Was traffic generally following the Ο. 15 designated speed on Dettling Road? 16 Α. On Dettling Road, my observation was yes. 17 At 271st Street, you indicated that there has Ο. 18 been five accidents at that crossing, and there's three 19 tracks there, why isn't that being slated for closure as 20 well? 21 Α. You could ask the County that question, but my observation would be that that's a critical 22 23 thoroughfare to downtown Stanwood. 24 Q. We've got an overpass just a block away on

25 Highway 532 to totally avoid that crossing.

1 Α. I agree with you that that's a possibility. I think because the City of Stanwood is the road 2 3 authority that that would be a question for them. I do 4 think that the improvements that are being proposed at 5 that location will help mitigate the accidents. And if you look back at the accident data, three of the б 7 accidents were attributed to vehicles driving around the 8 gates. Now we've looked at, as part of the diagnostic 9 review, looked at to see if we could install median 10 barriers on the approaches, but because of the adjoining 11 driveways and parallel roadways, that's not an option. 12 So my understanding the City is also considering putting 13 in some type of video enforcement at that crossing so folks that are driving around the gates or not following 14 15 all traffic rules at that crossing could be ticketed, so 16 that's an option to improve safety away from the 17 traditional installation of median barriers.

18 Q. Thank you.

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You stated that adding a track makes the Logen Road crossing exceptionally dangerous, the proposal is also to add a track at the two crossings north of there, so is it the adding of the track, or is there something else that makes it dangerous? A. I think that the second component is the parked train or the parked train near the crossing as

1 well. It's my understanding at 300th and 102nd that the trains would be entering near those crossings but not 2 3 blocking those crossings, so it's more of an on/off 4 movement at that location. 5 Ο. Would the trains be traveling very slowly at 6 that point? 7 Α. I would imagine yes, they would be, 8 especially at 102nd where they're entering the siding. 9 Q. You indicated that loading the tractor onto a 10 truck or something like that would be an alternative to 11 driving a tractor around. What if you're pulling a load 12 of hay or something like that to store in the barn or 13 the shed that are on the other side of the tracks, I don't see how that's really feasible. 14 15 JUDGE TOREM: Is there a question there? 16 How would you propose an alternative for Q. 17 that? 18 Α. So the tractor's pulling like a hay wagon is what you're saying? 19 20 Ο. Yes. 21 Α. So I don't have a lot of farming experience or equipment experience, but my dad did have a tractor 22 23 and did hay, harvest hay. And how he handled it is he 24 would typically pull his John Deere tractor on the back 25 of -- on a trailer, flat bed trailer, and then

1 consequently then would also load the hay onto his flat bed trailer as well. Both times he used a three quarter 2 3 ton type pickup to move his tractor and then also move 4 his hay. So I'm not sure if I understand the question. 5 It sounds like maybe your tractor is actually pulling б the hay wagon? 7 Ο. Yes. It is, okay. I guess my response would be is 8 Α. it possible to have your pickup truck pull the same 9 10 trailer or a trailer that would allow you to move your 11 hay from one place to another? 12 JUDGE TOREM: Well, he'll have a chance to 13 testify and answer that question rather shortly I 14 imagine, but I appreciate the response and the 15 consideration. 16 17 EXAMINATION 18 BY JUDGE TOREM: 19 Would it be fair, Mr. Logen, Ms. Hunter, that ο. 20 you were just envisioning in your previous answer the 21 transportation of the trailer alone? 22 Α. Yes. 23 And had you given any additional thought to Q. 24 other accoutrements of the farm lifestyle? 25 Well, I know my dad had lots of equipment Α.

1 that he used for mowing fields, baling, that type of thing, so I can only imagine perhaps the Logen family 2 3 has similar equipment that's used with their tractor as 4 well. And, you know, the inconvenience of having to 5 move that equipment on the back of a trailer versus б hoisting it and lifting it up off the trailer and moving 7 it from point A to B I recognize that, it appears to me 8 that would be less convenient. 9 10 CROSS-EXAMINATION BY MR. LOGEN: 11 12 Ο. There's active warning devices at Logen Road, 13 can you tell me when they were installed? I believe they were installed 2002. 14 Α. 15 Ο. And what was the safety record before they 16 were installed? 17 There's no accidents, there has never been an Α. 18 accident at the Logen Road crossing. The signals were installed in 2002, Snohomish County filed a petition 19 with the Commission with the concurrence of BNSF. 20 21 Q. Snohomish County provided me a copy of a letter to Lori Halstead, notice of intent for quiet zone 22 at Logen Road dated May 30th, 2007; are you familiar 23 24 with that process at all? 25 Yes, I actually did participate in the Α.

diagnostic meeting at that crossing with the railroad
 and the County.

Q. And in the letter there, they state that they ran the quiet zone calculator, and the results were that there could be a quiet zone at Logen Road without installing any additional equipment; is that correct? A. That's correct, the risk was significantly below the acceptable tolerance.

9 Q. So the quiet zone calculator is a indication 10 of the risk at a particular crossing?

11 A. Yes.

Q. Okay. I reran the quiet zone calculator on my exhibits labeled LFL-12, 13, and 14, with two tracks and various levels of mitigation. All of the results indicated that the risk index was well below the national threshold. In fact with I believe it was 4-quadrant gates there was significant reduction in the risk.

JUDGE TOREM: Let me ask Ms. Hunter if she's got those exhibits in front of her so she's familiar and ready for the question that's coming.

22 THE WITNESS: I do.

23 BY MR. LOGEN:

Q. The particular one that I'm looking at isLFL-13 I believe it is. It shows that the quiet zone

1 risk index is 1478.5, which is significantly less than what it was with one track, that's with two tracks and 2 3 4-quadrant gates, and Snohomish County ran it with one 4 track and with no mitigation. This shows that the risk 5 is much lower, how do you explain this showing the risk б much lower and the witnesses we've heard today saying 7 that the risk is much higher? 8 Α. Can I ask a clarifying question, Mr. Logen, 9 when you ran this, did you put the second track in? 10 Because it's my understanding you can not change the 11 inventory. Were you able to change the inventory for 12 the Logen Road crossing and put two tracks in versus the 13 single track? 14 I believe I was, I was able to do that, yes. Ο. Okay. 15 Α. 16 I mean it came up with the inventory, and Q. there was a place to modify right here where it says 17 18 modify. So you modified and added the second track, 19 Α. so all of these examples have two tracks, not single? 20 21 Q. That was my intent when I was doing this, 22 yes. 23 So part of the value of having a diagnostic Α. 24 team review when there's a quiet zone proposal at a crossing is to look at the characteristics of the 25

1 crossing that the calculator can not take into account.
2 So for example when we visited the Logen Road crossing
3 back in 2007 when the County filed the proposal, one of
4 the things that the diagnostic team keyed on was the
5 sight visibility restrictions. So as I recall, BNSF
6 strongly objected and said, we will not support a quiet
7 zone at this crossing because of the obstructions.

8 Now the Commission's rule in a quiet zone is 9 different. We don't have the ability to say yes or no. 10 Our role in a quiet zone is to offer our expertise or 11 observations via a comment mechanism to the road 12 authority and the railroad, but we don't have an 13 absolute yes or no role in that process. So the comments that the Commission provided were we recognized 14 15 back in 2007 that you qualify without adding any 16 supplemental safety measures, but the Commission is 17 concerned about the sight distance north and south of 18 this crossing. So that really is our role is to highlight our safety concerns in a quiet zone situation, 19 and then it's really I believe up to the railroad and 20 21 the local road authority then to see how they're going to progress through that federal quiet zone system. 22 23 So I recognize that this risk was lowered by

24 adding those 4-quad gates, but I also think that a team 25 of rail safety experts offering their comments and

1 observations as a diagnostic team does not get taken into account with this risk level of 1478, and my guess 2 3 is there's no place in that FRA inventory to put that 4 the second track is actually a siding track. 5 Ο. Yes, there is. That's going to be blocked for extended б Α. 7 periods of time? 8 Ο. The blocking, no, but the fact it was a 9 siding, yes. 10 Α. Okay. 11 Ο. Main or siding you could add. 12 Α. Okay. So that's good to know, I didn't know 13 that. But I guess my concern would be more around the extended blockages of that crossing and the potential 14 15 behavior that could result from users at that crossing. 16 17 EXAMINATION 18 BY JUDGE TOREM: 19 Ms. Hunter, is it accurate to say then that Ο. despite what Mr. Logen may have gotten from the FRA's 20 21 computer calculator, you think that human beings with 22 the training and the actual being at the site that see 23 things the computer can't would still override this, and 24 the Commission's recommendation, you would still

recommend despite these numbers you're seeing today your

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1 previous testimony that the crossing be closed? 2 Yes, I think the Commission would offer Α. 3 strong comments in opposition. 4 ο. All right. Even though it's not the decision 5 authority? Correct. б Α. 7 Ο. These numbers wouldn't change your prior testimony or those recommendations? 8 9 Α. That's correct. 10 JUDGE TOREM: Mr. Logen, did you want to ask 11 further questions about these or save that for your 12 testimony? 13 MR. LOGEN: I don't think I have any further 14 questions, no. 15 JUDGE TOREM: Mr. Thompson, is there any need 16 for a short redirect? 17 MR. THOMPSON: I don't think I do need any 18 redirect, no. 19 JUDGE TOREM: All right, let me ask then --20 MR. SCARP: May I ask a question? 21 JUDGE TOREM: Just one second, Mr. Scarp, because I wanted to make sure that we get these other 22 23 exhibits on Mr. Thompson's --24 MR. THOMPSON: I move the admission of --25 JUDGE TOREM: 16 and 17, 15 has been

1 admitted. Are there any objections to Exhibits 16 or 17 being admitted? 2 3 All right, hearing none, Mr. Scarp, your 4 follow up. 5 C R O S S - E X A M I N A T I O N б 7 BY MR. SCARP: Ms. Hunter, this quiet zone calculator that 8 Ο. we've heard a fair amount about, can you tell me is that 9 10 the purpose for mitigation of train horns as opposed to a determination of public safety? 11 12 Α. Mitigation of train horns. 13 MR. SCARP: That's all I have, thank you. 14 JUDGE TOREM: Mr. Logen, anything further? 15 16 C R O S S - E X A M I N A T I O N BY MR. LOGEN: 17 18 Ο. Do train horns improve the public safety, the 19 use of train horns? 20 Well, it gives you an audible warning that Α. 21 there's an incoming train that's approaching, so the quiet zone I think Mr. MacDonald talked about briefly, 22 23 the quiet zone crossing is one where the train horn is 24 not blown.

25 Q. And I believe that the Snohomish County's

1 results indicated when you don't blow the horn, it's not as safe in the cover letter there I believe it's 2 3 covered? 4 Α. That it's not as safe if the train horn is 5 not blown? б Ο. It's kind of a backward sentence, sorry about 7 that. 8 Α. That's okay. 9 Q. That there was some increase of risk by having a quiet zone there but not a significant 10 11 increase, is that what was shown on Snohomish County's 12 petition? 13 Α. Where in the cover letter do you derive that? Doesn't it give --14 Q. 15 JUDGE TOREM: Mr. Logen, it may be more 16 helpful if there's a document that will speak for itself 17 to simply submit that as an exhibit, and then I could 18 read the actual text and draw what I would hope would be 19 obvious conclusions. 20 MR. LOGEN: That would be fine. I thought 21 the results of the calculator were in there. 22 THE WITNESS: They're attached, but I didn't want to speak on behalf of the County of what their 23 24 intent was. 25 JUDGE TOREM: I appreciate the thrust of the

1 question, but it may be easier to get this point across by submitting the document, either the cover letter 2 3 alone or the whole package in its entirety, for my 4 review and for potential objection. 5 MR. LOGEN: I would propose that we do that б then. 7 JUDGE TOREM: Okay. 8 Were there any other questions for this 9 witness? 10 MR. LOGEN: I have none. JUDGE TOREM: All right, any other questions 11 12 at all? 13 MR. THOMPSON: No. 14 JUDGE TOREM: All right then, hearing none, 15 Ms. Hunter, thank you for your testimony. 16 Mr. Thompson, is there anything else that 17 Commission Staff wants me to consider in this case? 18 MR. THOMPSON: I believe that's it. 19 JUDGE TOREM: All right, it is now 10 after 20 4:00. We have this sort of artificially imposed 21 deadline to get done today, but I want to go off the record for at least five minutes, give everybody a 22 23 stretch break, and then I think, Mr. Logen, we're up to 24 your case. So in these five minutes or so while we're 25 getting comfort and other needs taken care of, let's

1 confer off the record as to how long your testimony 2 might be and what expected cross-examination might take, 3 and then we'll see what we want to do between now and 4 the 6:00 p.m. public comment hearing which will require 5 at least some reorganization of this room, but we have б sufficient bodies to make that move quickly. All right, 7 so we'll be off the record for about five minutes. 8 (Recess taken.) 9 JUDGE TOREM: All right, it's about 4:35, we're back on the record, and we have one additional 10 11 witness, Mr. Logen. 12 We're going to confirm right now that at the 13 end of Ms. Hunter's testimony, I did mean to say I was admitting Exhibits 16 and 17 into the record. 14 15 And I promised that we were going to discuss 16 whether we thought we could finish the hearing tonight, 17 and our court reporter has said as long as we have a 30 18 minute break between this proceeding and the public comment proceeding, she's willing to stay on and we 19 won't have a mutiny here, so we anticipate we're able to 20 21 do that. In what I hope was a time saving gesture, we stayed off the record a little bit longer to mark 22 23 Mr. Logen's exhibits and all be on the same page as to the numbers I'm about to assign, so I'm going to read 24 25 the numbers that Mr. Logen had assigned to them and then

indicate the actual exhibit number being assigned in
 this proceeding.

We'll start with LFL-1, which is Mr. Logen's
response to BNSF Data Request Number 3, it's 1 page,
that's been assigned Exhibit 18.

б LFL-2 is also 1 page, and it should be noted 7 that at the top of that 1 page it says page 1 of 2, so 8 for those keeping score, change that pen and ink to say 9 1 of 1 so there's no future question as to this exhibit 10 being incomplete, it is a 1 page exhibit, it's been 11 assigned Exhibit 19, and it's a ratio of speed to 12 stopping distances taken from somewhere at the James 13 Madison University web site.

14 At this point to account for some duplicate 15 exhibits and those that have already been admitted, we 16 skipped to LFL-6, and that's been marked as Exhibit 20. 17 It is a 1 page document, it's a memorandum from November 18 21st, 2007, referring to the preferred option for signalization of Pioneer Highway and Old Pacific 19 Highway, that's Exhibit 20. 20 21 Exhibit LFL-8 is a series of 8 pages

22 referring to rail accident or incident reports in or
23 around Stanwood. I've assigned that Exhibit Number 21.
24 Mr. Logen's LFL-9 is a 2 page document, it's
25 the executive summary as well as table 2 from a Highway

Rail Grade Crossing Technical Working Group in November
 2002. It's titled Guidance on Traffic Control Devices
 at Highway Rail Grade Crossings, I've assigned that
 Exhibit 22.

5 Mr. Logen's LFL-10 is a 4 page printout from 6 the Federal Transit Administration Reports and 7 Publications, it's called Lesson 38, 4-quadrant Gated 8 Crossing. This has been assigned Exhibit 23. 9 Exhibit 24 is a 1 page document, it's from 10 the Transportation Research Board and a publications

11 index web site. It's simply I understand to be the 12 abstract of a much longer article entitled Field 13 Evaluation of a 4-quadrant Gate System for Use at 14 Railroad Highway Grade Crossings, so just this 1 cover 15 page printout that has the abstract is being assigned 16 Exhibit 24.

17 And the last 3 exhibits, LFL-12, 13, and 14 18 are products apparently of the FRA's quiet zone calculator that were previously referred to with 19 Ms. Hunter's testimony. At the top of the printout 20 21 there's an indication under the home, help, and contact tabs where it says change scenario. Each of those has a 22 23 unique identifier where it says Logen Road. The first 24 one which is LFL-12 has the identifier Logen Road 28432, that page has been assigned Exhibit 25. LFL-13 which 25

1 says Logen Road 28433 is assigned Exhibit 26, it's also 2 1 page. LFL-14 which is 2 pages has the FRA calculator 3 number Logen Road 28434, and again that's a 2 page 4 document, and that's Exhibit 27. 5 Mr. Logen is also going to be submitting a 6 copy of his prepared remarks which he's annotated, we're 7 going to mark that as Exhibit 28, essentially 8 Mr. Logan's testimony from which he will be reading 9 shortly. That has been furnished to Mr. Scarp in an 10 unannotated form to assist him today and will be 11 furnished after the hearing at a deadline we'll set for 12 the rest of the parties and myself and mainly for the 13 use of the court reporter in preparing our transcript. 14 Mr. Logen, is that all the documents covered 15 that you think you're going to be submitting today?

16 MR. LOGEN: Yes, it is.

17 JUDGE TOREM: Did I get that accurately then?18 MR. LOGEN: Yes.

JUDGE TOREM: Let me ask then since you intend to offer those all, I'm going to indicate that you're offering them now aside from your testimony, are there any objections to any of these exhibits? Let me start with Commission Staff first.

24 MR. THOMPSON: So this is the time to make an 25 objection to the exhibits?

1 JUDGE TOREM: It is, and there may be some 2 foundational questions that have to be held until 3 Mr. Logen's testimony is made, but if there are 4 substantive exhibits or relevance exhibit issues now, 5 that may alter Mr. Logen's testimony if I rule that it's just wholly irrelevant, and I think he would be better б 7 apprised now than interrupted in his testimony. So if 8 you see any, you can still object or I may have to hold 9 a ruling until Mr. Logen actually gets to the foundation 10 in his testimony, but if you know of any you're going to 11 object to one way or the other, I would like to know in 12 advance.

13 MR. THOMPSON: Well, I will just say I have some concerns about what I guess would be 25, 26, and 27 14 15 just because I have -- there's no way that I am able to 16 determine from looking at these how the result was 17 produced. It sort of just looks like an end result, and 18 it's not clear to me, you know, particularly on the issue of whether it's possible or whether a second track 19 was added, there just doesn't seem like there's adequate 20 21 foundation here. Maybe he can supply that through 22 testimony.

JUDGE TOREM: All right, well, I hope that Mr. Logen's testimony as prepared or as he can ad lib today can explain the process by which 25, 26, and 27

1 were generated, and that may be setting the foundation. I know we had a little bit of that discussion back and 2 3 forth with him and Ms. Hunter. 4 Mr. Scarp, you looked like you had similar 5 concerns with those three exhibits. б MR. SCARP: Well, I do, and I will just echo 7 for the time being, and I don't need to ask cross-exam 8 questions now, but I do have those. 9 Similarly Number 20 is the preferred option 10 for signalization at Pioneer Highway at Old Pacific 11 Highway which is a -- it regards signalization at an 12 intersection that is a significant distance removed, and 13 I guess from a relevance standpoint I'm not sure what we're trying to accomplish there. 14 15 JUDGE TOREM: I believe this is the same 16 highway that's 102nd; is that correct, Mr. Logen? 17 MR. LOGEN: Yes, it is. 18 MR. SCARP: Right, and I understand that, but we're talking about a 2007 signalization. I'm unclear, 19 perhaps Mr. Logen can address that for us. 20 21 JUDGE TOREM: Okay. Any other exhibits that are causing anyone concern before hearing Mr. Logen's 22 23 testimony and potential foundation for them? 24 MR. KASTING: The County would just echo 25 those same concerns.

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1 JUDGE TOREM: All right. MR. SCARP: And then finally similarly 2 3 there's the 4-quad gates, I guess I will start with a 4 foundation question, I don't know what qualifications or 5 expertise Mr. Logen is going to bring to allow him to rely on portions of a railroad traffic control device, б 7 so that's just preliminary. JUDGE TOREM: All right, and those would be 8 22, 23, and 24 I think depending on --9 10 MR. SCARP: Correct. 11 JUDGE TOREM: -- which particular 4-quad gate 12 exhibits you're referring to, but I believe it's those 13 three. 14 All right, Mr. Logen, do you know from the 15 portions of your testimony that has been prepared what 16 foundation you're laying for first the quiet zone 17 calculations, is that something you're prepared to speak 18 to when we have you testify? 19 MR. LOGEN: Yes, each one of the exhibits I'm 20 incorporating into my testimony. 21 JUDGE TOREM: All right, then we'll have you reoffer those at the completion of your testimony on 22 23 those three. 24 As to the signalization memo that Mr. Scarp 25 just raised at the Pioneer Highway and Old Pacific

1 Highway, were you going to address why that's relevant in your testimony? I believe it had to do with 2 3 alternative routes. 4 MR. LOGEN: Yes. 5 JUDGE TOREM: Okay, so you're going to cover б that in your testimony as well? 7 MR. LOGEN: I am. JUDGE TOREM: All right. 8 And finally the --9 10 MR. LOGEN: And the safety of those 11 alternatives. 12 JUDGE TOREM: All right. 13 As far as the 4-quadrant gate items, how did you intend to use those or have me refer to them as part 14 15 of the record? 16 MR. LOGEN: Just to show that the 4-quadrant 17 gates have been used successfully in many applications 18 on entire rail corridors on the East Coast. I mean 19 there must be something similar. 20 JUDGE TOREM: Okay, I understand, so it's a 21 general question as to these documents showing how 22 they're used and why they're used? 23 MR. LOGEN: Just that 4-quadrant gates seem 24 to improve safety at a crossing. 25 JUDGE TOREM: Okay. Well, what I'm hearing

1 right now then is that there are potential objections to Exhibits 20, 22, 23, and 24 as a group, 25, 26, and 27, 2 3 those calculator exhibits as a group, were there any 4 objections to 18, the response to the data request 5 regarding the speed of the tractor? б MR. SCARP: Oh, I had none. 7 JUDGE TOREM: All right, so that will be admitted, 18 is admitted. 8 9 19, the ratio of speed to stopping distance, 10 any objections to that? MR. SCARP: Well, I'm not sure, and I guess I 11 12 just don't know what the purpose of this is. However, 13 first looking at Mr. Logen's Number 28, it appears there's a paragraph about stopping distances out on the 14 15 highway for vehicles as opposed to stopping distances at 16 the rail crossing, am I --17 MR. LOGEN: That's correct, I'm addressing 18 the safety of the alternate route. 19 JUDGE TOREM: All right, so we'll hold off 20 admission of that one. 21 Finally, the only other one that seems to be uncontested is the rail accident and incident reports 22 23 marked as Exhibit 21, is there any objection to that 24 one? 25 MR. SCARP: I guess two of them in, well,

Dettling Road, there are five pages, is that correct?
 MR. LOGEN: 8 pages.

3 MR. SCARP: Two of them appear at Dettling, 4 the ones that don't occur, well, I'm assuming that 5 you're going to tell us it's going to go to weight, б we've already had testimony regarding this, so I guess 7 we'll just have to go through and look to see if the 8 configuration and devices are the same. I guess there's 9 a relevance objection in terms of what it is we're 10 trying to show by these. I won't make a foundation 11 objection, it's just relevance, Your Honor.

12 JUDGE TOREM: All right, on the relevance 13 issue I'm going to err on the side of allowing this to come in today. There are several -- I do hope that, 14 15 Mr. Logen, you will point out what you believe is the 16 relevance, I'm going to allow Exhibit 21 to be admitted 17 at this time even though there are a number of accidents 18 that are described here that of course are not at Logen 19 Road because there are no reported accidents there.

JUDGE TOREM: But you go as far afield as I think 102nd, which is the same intersection to which Mr. Scarp has concerns about Exhibit 20, the signalization exhibit. But again because I want to --I'll give you some latitude on talking about safety,

MR. LOGEN: That's right.

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1 then I will allow these accident reports to come in. And as Mr. Scarp correctly anticipates, depending on 2 3 what's there at the time of the accident and what 4 signals are in place now will go to the weight of how 5 it's considered in the overall public safety б requirements, which is the main statutory drive for 7 this, and then depending on my findings regarding safety 8 of the crossing, public convenience and necessity. 9 So I think that's all we can do with 10 processing the exhibits at this point. Let me have you 11 step over to where you can testify, and when you get 12 there if you will raise your right hand. 13 (Witness LYNN LOGEN was sworn.) 14 JUDGE TOREM: All right, thank you. 15 For the record, can you spell your first and 16 last name. 17 MR. LOGEN: My name is Lynn Logen, it's 18 L-Y-N-N, last name is L-O-G-E-N. 19 JUDGE TOREM: I understand you have a 20 prepared transcript or manuscript to read from. I would 21 just encourage you to read it at a reasonable pace and look up from time to time to make sure the court 22 23 reporter and I are tracking with you, okay? 24 MR. LOGEN: All right. 25 JUDGE TOREM: Go right ahead.

1 MR. LOGEN: Do I need to move that the exhibits be accepted at this point or wait until the end 2 3 for that? 4 JUDGE TOREM: The ones that have been 5 objections noted, let's wait until the end so that any б of the relevance issues and perhaps foundational issues 7 may have been addressed by the statement you're about to 8 make. 9 MR. LOGEN: Thank you. 10 11 Whereupon, 12 LYNN LOGEN, 13 having been first duly sworn, was called as a witness 14 herein and was examined and testified as follows: 15 16 DIRECT EXAMINATION 17 MR. LOGEN: Well, I plan to limit my 18 testimony to the three issues described in the 19 prehearing conference order, which are the requirements 20 of public safety, the convenience and necessity of the 21 use of Logen Road crossing, and the alternatives to the 22 closure. 23 In regards to the requirements of public 24 safety, I would like to first describe the use of Logen

25 Road at the point it is crossed by the railroad. The

1 Logen family owns farm property north and west of the intersection of Logen Road as well as south and east of 2 3 that intersection. We use the crossing to move 4 equipment such as tractors with various implements and 5 trailers between these two pieces of property by using б the Logen Road crossing. Logen Road is posted as a 7 farming area with a sign showing a tractor. With the 8 proposed closing of the Logen Road crossing, the 9 alternatives would be to travel on Old Pacific Highway 10 and Pioneer Highway, both of which are heavily traveled 11 as indicated on --

JUDGE TOREM: Is it Mr. Norris's report? MR. LOGEN: -- the traffic study, the volumes there. There is 4,000 trips on Old Pacific Highway and 4,500 on Pioneer Highway. The speed limits along those highways are posted at 50 miles an hour.

17 The other alternative besides traveling on 18 those highways is to use the crossing to the north 19 either at 102nd Street or Dettling Road. I believe 20 there would be situations where we would not be able to 21 use Dettling Road. If we're pulling a heavy load, we wouldn't be able to stop on the grade. The only data 22 23 that I was able to locate in regards to the safety of a 24 tractor driver and for other drivers on the highway when 25 either of our 2 tractors which travel at 11 miles an

1 hour or at about 15 miles per hour as indicated in 2 Exhibit 18, when those tractors are driven on a heavily 3 traveled highway at 50 miles an hour, the table of 4 stopping distances that I have as Exhibit 19 shows that, 5 well, it assumes that a driver is approaching a stopped object and the distance that it takes to stop. There б 7 wouldn't be a whole lot of difference in the stopping 8 distance if you're stopping for a tractor that was 9 traveling very slowly or traffic backed up behind it. 10 And the other situation that I'm sure that 11 traveling on these highways at slow speeds is it will 12 cause people to pass the tractor when it's not 13 appropriate and cause drivers to take other risks. In some places on the Pioneer Highway and perhaps the Old 14 15 Pacific Highway the stopping distance at 50 miles per 16 hour exceeds the sight distance. In addition, there are 17 sections of Old Pacific Highway and Pioneer Highway 18 where there is no shoulder, that is also shown by Mr. Norris's study, thereby requiring the tractor to 19 travel fully within the driven lane rather than 20 21 partially on the shoulder. 22 The other option to traveling north and using one of the crossings there is to travel south from the 23

property that's west of the railroad tracks and crossing

the railroad at 271st Street Northwest and then on 25

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1 Pioneer Highway. In regards to traveling on Old Pacific 2 Highway and Pioneer Highway to use the 271st Street 3 Northwest crossing, the safety issues regarding the 4 streets would be the same as I described earlier to 5 utilize the crossings north of Logen Road except the б distance is greater, thereby increasing the risk. 7 The choices of crossing streets are 102nd 8 Street, Dettling Road, and 271st Street Northwest. 9 Dettling Road has the least amount of traffic, but the 10 steep grade can make it impassable, and curves and grade 11 result in very short sight distances. Traveling through 12 the city of Stanwood and then using 271st Street is a 13 much longer distance, and 271st Street is fairly busy, but it does have shoulders and a lower speed limit. 14 15 However, this isn't really an option due to the 16 distances that we would have to travel on Old Pacific 17 Highway and Pioneer Highway.

18 The last alternative is to use 102nd Street to cross the railroads, which is the same as traveling 19 on Old Pacific Highway until it meets Pioneer Highway. 20 21 The intersections involved in these alternative crossings offer another way to look at the public 22 23 safety. I asked Snohomish County to provide studies 24 regarding the safety or accidents regarding the crossing 25 at Old Pacific Highway and at Dettling Road. Their

1 response to my Data Request Number 13 is that they provided an extensive study of the Pioneer Highway and 2 3 Old Pacific Highway or 102nd Street intersection. Due 4 to the number of accidents, severity of those accidents, 5 and projected facilities shown on the Exhibit Z of the б Snohomish County response on a sheet titled 7 determination of possible inadequate road condition, the 8 location was very close to being classified as 9 inadequate. I realize that that was -- I understand 10 that better now, and it's above the 40 score, it would 11 be something they would look at, it would have to be I 12 believe above 80 where it was definitely found to be 13 inadequate. So that was my Exhibit Number 10 showing the determination of possible inadequate road condition. 14 15 The intersection of Old Pacific Highway and 16 Pioneer Highway could not be closed as noted on Exhibit 17 10 because Old Pacific Highway is a freight route, and a 18 truck turning radius is not available at Old Pacific Highway and Dettling Road. Plus Dettling Road would 19 need to be widened and curves improved for truck travel. 20 21 And my proposed Exhibit 20 or LFL-6, the November 21st, 2007, memorandum, indicates in handwriting about two 22 23 thirds of the way down the page, it says that Dettling 24 Road needs to be widened and curves improved for truck

25 traffic, so indicating a safety condition there. In a

1 similar study provided by Snohomish County, and Snohomish County labeled it as Exhibit AA, it was 2 3 regarding Dettling Road, and I marked that as or it's 4 been marked as Exhibit 11, and it reports three 5 accidents at Pioneer Highway and Dettling Road. I did б not research the public safety of traveling with a slow 7 moving tractor on Pioneer Highway and Old Pacific 8 Highway south of Logen Road and Old Pacific Highway due 9 to the distances involved in traveling that route 10 through Stanwood. I am not aware of any accidents at 11 the intersection of Logen Road and Old Pacific Highway. 12 I next looked at the public safety in regards 13 to crossing the railroad at the three optional crossings, and BNSF provided a partial response to my 14 15 Data Requests 24 and 25, a portion of which are included 16 as Exhibit 21, and that is 8 pages. These reports of 17 accidents included accidents involving vehicles and 18 trains at all 3 of the alternate crossings to Logen Road but none at Logen Road. The Commission has received a 19 comment from the fire chief of the North County Regional 20 21 Fire Authority who has concerns about closing Logen Road and states the public safety would be affected by longer 22 23 response time and limited access to the Old Pacific 24 Highway area.

25

In summary regarding public safety, I would

1 like to say that the railroad has provided an extensive 2 amount of data regarding the general safety of grade 3 crossings and the horrific accidents that can result 4 when a train strikes something. I'm very well aware of 5 this having seen firsthand experienced a herd of cattle б that was killed on tracks bordering our farm. I have 7 also seen several presentations regarding railroad 8 safety. I do not dispute the fact that in general grade 9 crossings and trains are dangerous to the public. 10 However, I question that this specific crossing would be 11 unsafe and must be closed and there isn't any options to 12 doing that. In fact, I believe that I have shown that 13 closing Logen Road would serve to degrade the public safety in general, and one result would be that traffic 14 15 would be forced to travel on the highways, 16 intersections, and crossings that are already less safe 17 than Logen Road. I understand that the added siding can 18 possibly degrade the public safety at the Logen Road crossing, but this can be addressed as I describe in 19 alternatives to closure. 20 21 In regards to the convenience and necessity of the use of the Logen Road crossing, Mr. Norris 22 assumed that Stanwood's Fire Department will respond. I 23 24 do not think that's been established as a fact. In

fact, it was my understanding that they would not

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1 respond unless specifically requested by the other fire 2 department that normally would serve that area. As I 3 described earlier, the Logen family has farm property on 4 both sides of the railroad and adjacent to Logen Road. 5 The use of Logen Road crossing is the most convenient б way to access these properties without being exposed to 7 the hazards of traveling on the two highways, Old 8 Pacific Highway and Pioneer Highway, and exposing the 9 public to the hazards of slow moving vehicles on those 10 roads. Traveling on these highways will impede the 11 traffic on both of the highways causing inconvenience 12 for many people possibly for hours at a time. And 13 Burlington Northern Santa Fe has refused to consider a convenient private crossing as a replacement so that the 14 15 inconvenience for my family as well as the public could 16 be avoided. In addition, there have been many members 17 of the public that have submitted comments explaining 18 their use of Logen Road and the inconvenience closure will have on them, and I expect that we'll hear from 19 many more at the hearing tonight. In summary, closure 20 21 will cause the Logen family the need to acquire additional equipment and will cause a number of people 22 23 inconvenience.

And this is all a, I don't have this written in here, but this whole area is diked, I don't know if

1 you've driven around here much. Where we're sitting here used to be tide flats up to the base of the hill as 2 3 evidenced by shell mounds at the base of the hills in 4 these areas, and it was diked many years ago. But 5 occasionally those dikes break, and it's been a little б while since downtown Stanwood has been flooded, but it 7 has happened in the past a number of times, and I'm sure 8 it will happen in the future. And the Old Pacific 9 Highway is definitely in a low lying area and that it 10 could very well be flooded so that emergency vehicles 11 would not be able to travel that area possibly and get 12 to the barns and houses that are on the north end of Old 13 Pacific Highway near Pioneer Highway.

14 Now as far as alternatives to closure, the 15 proposed new siding will result in one main track and 16 one siding track at the Logen Road crossing. I note 17 that the crossing at 271st Street already has a total of 18 three tracks, yet it is not being proposed for closure. There are several alternatives to closure including 19 leaving the crossing open and grade separation. The 20 21 present use of Logen Road crossing is insufficient to warrant the expense of grade separation. However, I 22 23 believe that mountable medians with reflective traffic 24 channelization devices are a viable option along with the non-traversable curb medians with or without 25

1 channelization devices and also 4-quadrant gates. I looked at the first and 4-quadrant gates and found a 2 3 paper on the U.S. Department of Transportation Federal 4 Highway Administration web site titled Guidance on 5 Traffic Control Devices at Highway Rail Grade Crossing, б it's been marked as Exhibit 22, which includes the 7 executive summary information on 4-quadrant gate systems 8 and table 2 clearing sight distance. These documents include a statement that: 9 10 Unlike 2-quadrant gate systems, 11 4-quadrant gates provide additional 12 visual constraint and inhibit nearly all 13 traffic movements over the crossing after the gates have been lowered. 14 15 I also found on the Federal Transit 16 Administration web site the document I have submitted as 17 Exhibit 23, which shows that safety was enhanced by a 18 4-quadrant gate but suggests on page 3 that other viable alternatives such as extension of gate arms and the use 19 of roadway medians should be considered during the 20 21 preliminary engineering phase of the project. 22 Finally, from the Transportation Research 23 Board of the National Academies I have what's been 24 labeled as Exhibit 24, and it states: 25 The 4-quadrant gate system had no effect

1	on the level of service at the crossing
2	point, but a positive effect on driver
3	behavior at the crossing by eliminating
4	risky and illegal behavior as well as
5	violations at the crossing, thus
б	producing superb improvements in safety
7	MOE's.
8	MOE's are measures of effectiveness.
9	And this goes on to state that:
10	Such benefits are especially important
11	at crossings with limited sight
12	distance, high speed trains, and
13	multiple tracks.
14	We've heard testimony that there's plans to
15	increase the speed of the passenger trains here. I'm
16	not sure what is considered high speed as I'm not an
17	expert in rail safety or anything like that, but 79
18	miles an hour seems pretty fast to me. To further
19	examine the safety and alternatives, I went to the quiet
20	zone calculator on the Federal Railroad Administration
21	web site. Snohomish County provided a response to a
22	data request showing that the quiet zone calculation at
23	the Logen Road crossing as it exists today with just the
24	main line and determined that the risk index was
25	7070.92. I entered the addition of 1 siding track at

1 the Logen Road crossing, and the calculator raised the risk index to an index of 8565.58, that is my Exhibit 2 3 25, which is still below the national significant risk 4 threshold of 17,610. I then added 4-quadrant gates to 5 the crossing with 1 main track and 1 siding track still, б and the resulting risk index was 1478.5, which is my 7 Exhibit 26. I then entered option 12, which is 8 mountable medians with reflective traffic channelization 9 devices, and option 13, non-traversable curb medians with or without channelization devices, to obtain risk 10 11 indexes of 2141.4 and 1713.12 respectively. Those runs 12 are included as my Exhibit 27. All of the results of 13 the mitigation are well below the nationwide significant risk threshold of 17,610. 14

15 As far as in summary of the alternatives 16 here, I believe that there are four or more viable alternatives to the closing of the Logen Road crossing. 17 18 One would be leaving the crossing open with the two tracks. Two would be installing 4-quadrant gates. 19 Three would be installing mountable medians with 20 21 reflective traffic channelization devices. Four would be installing non-traversable curb medians with or 22 without channelization devices. 23

24 Public safety will be harmed by the closing25 of Logen Road crossing, and leaving the crossing open

results in a crossing that is still well below the 1 nationwide significant risk threshold as shown by the 2 3 calculations. The last three options result in a 4 crossing that is more safe for the public than the 5 present crossing even with the addition of the siding. б In summary, I would like to say that I 7 believe that I've shown that the public safety will be 8 harmed by the closing of the Logen Road crossing, that 9 convenience and necessity of the public requires leaving 10 the crossing open and that there are viable options to 11 closing the crossing. Leaving the crossing open also 12 preserves options for the public in the future. 13 Therefore, Logen Road should not be closed, but instead an alternative to closing should be ordered. I also 14 15 note that in one case that I was referred to, the 16 Department of Transportation versus Snohomish County, 17 that that crossing was closed because there was an 18 overpass, there was a safer alternative that was an overpass I believe within a couple of blocks of the 19 crossing that was closed in that case. That's not the 20 21 case here. 22 That's all I have. 23 JUDGE TOREM: Thank you, Mr. Logen. 24 I believe we'll go straight to cross-exam,

25 and then we'll get to the, because I don't know what

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will come out on cross-exam, we'll deal with the other 1 exhibits that you've wished and objections that have 2 3 already been posed once we're done with 4 cross-examination. 5 Mr. Scarp. б MR. SCARP: Thank you, Your Honor. 7 CROSS-EXAMINATION 8 BY MR. SCARP: 9 10 Mr. Logen, did you conduct any traffic Q. analysis or traffic count? 11 12 Α. I did not. 13 Q. Okay. Is this the first time you've been involved in analysis of a grade crossing, a public grade 14 15 crossing closure? 16 Α. Yes, it is. 17 Ο. It's fair to say then your experience is 18 everything you've learned in the past couple of months? 19 Α. That is correct. 20 Okay. And you heard the testimony of Ο. 21 Mr. MacDonald and Ms. Hunter and also Mr. Bloodgood, 22 Mr. Agee, do you have any dispute that they're 23 professionals in their fields? 24 Α. I do not. 25 Q. Okay. And did you gather from listening to

1 their testimony that they have among them substantial experience in analyzing the factors for a grade crossing 2 3 closure? 4 Α. I don't know that I can assume that or not. 5 I don't recall them testifying how long they've been doing what they've been doing in all cases. б 7 Ο. Okay, fair enough. I would like you to look if you would at the 8 third page of Exhibit 28, your notes. 9 10 Α. Yes. And in the middle of the page there under 11 Ο. 12 convenience and necessity of use of Logen Road crossing, 13 the first paragraph there, do you see that? 14 Α. Yes. 15 ο. The last sentence says: 16 BNRR has refused to consider a 17 convenient private crossing as a 18 replacement so that the inconvenience 19 for the Logens and the public can be 20 avoided. 21 Do you see that? 22 Yes, I do. Α. 23 All right. Have you proposed a private Q. 24 crossing as a resolution to this? 25 I thought that that's what I was doing when I Α.

1 talked to you and you called back about possibly the use 2 of Jim Lund's crossing. 3 Ο. All right. And when you say here that 4 consider a convenient private crossing and you've got 5 the public in the same sentence, you weren't considering that the public would be using the private crossing, б 7 were you? 8 Α. I was not. It's just the inconvenience of 9 public of us traveling on the highway. 10 All right. And so the convenience of a Q. 11 private crossing would be strictly for the use of the 12 Logens for their farm equipment? 13 Α. That's correct. 14 All right. Is there anyone else that you're Ο. 15 aware of besides members of the Logen family that 16 traverse from property on one side of the crossing to 17 the other aside from Mr. Lund who's farther south and 18 has his own crossing? 19 Currently I'm not aware of any. We have at Α. one time leased to people that had another private 20 21 crossing that went from their property to our property. 22 How long ago was that? Q. 23 40 years ago. Α. 24 Q. Okay, fair enough. 25 And so but what we're talking about here then

0283 1 for that type of use would be for the Logen family? 2 Α. Yes. 3 Q. Okay. And can you help us out here --4 MR. SCARP: And, Your Honor, I wonder if we 5 could use for illustration the aerial photo, I want to make sure I understand if I can approach here. б 7 JUDGE TOREM: Please do. 8 BY MR. SCARP: 9 Q. And maybe you can show us and so that Judge 10 Torem especially has an understanding, Mr. Logen, of 11 exactly what we're talking about here and the crossing 12 and where it comes down. I assume this is what we're 13 talking about here is --14 Α. Right. 15 Ο. And maybe the --16 JUDGE TOREM: For the record, Mr. Logen is 17 pointing at an aerial photograph that we're using for 18 demonstrative purposes only today which shows the 292nd 19 Street Northwest and Logen Road railroad crossing. 20 And you've indicated here where the crossing Ο. 21 itself is, maybe I could use a pen to be more precise, 22 and then you come up toward the east and then in a 23 southeasterly direction following Logen. This area here 24 that shows it heavily at least in this picture forested 25 with trees, whose property is that?

1	A. That's part of the Albert family partnership,
2	they own this, and that's part of this parcel.
3	Q. Okay, and how
4	A. And it includes this portion over here.
5	Q. Is that some sort of wetland? I mean it's
б	forested, it's not farmed, is that correct?
7	A. I couldn't tell you if it's classified as
8	wetland or not. It is like all of this area on the east
9	side of the railroad tracks fairly low lying and
10	Q. Wet?
11	A. Wet, yes.
12	Q. But how long has it been since that parcel
13	has been farmed, just if you know, I mean given the age
14	of the trees and such?
15	A. I don't know.
16	Q. Okay. Long time?
17	A. At least 50 years I think it was. About 50
18	years ago it was used for grazing.
19	Q. All right. Now can you show us from this map
20	or this photo where does your property start and end?
21	A. This parcel right here.
22	Q. Okay, and for the record you're showing
23	what's north of Logen Road crossing west of the railroad
24	tracks?
25	A. That's correct.

1	Q. Who owns that parcel?
2	A. I believe it's in the name of my nephew, my
3	brother's son.
4	Q. And who's that?
5	A. Eric Logen.
б	Q. Okay. And how about over here on the east
7	side of the tracks?
8	A. This parcel below Logen Road clear down to
9	here, here's Jim Lund's, here's the crossing.
10	Q. And the light colored part here is Mr. Lund's
11	property, so if we're moving where it's green all the
12	way up to where the trees are, is that Logen?
13	A. Yes, plus this parcel here that goes up to
14	here.
15	Q. So this parcel up here on the hillside?
16	JUDGE TOREM: And up here is referring to
17	what appears to be the east side of the tracks?
18	THE WITNESS: Yeah, and east of Logen Road
19	and south of what would be 292nd if it went all the way
20	across.
21	JUDGE TOREM: And it's bordered by the
22	Pioneer Highway?
23	THE WITNESS: Yes.
24	BY MR. SCARP:
25	Q. So where does your property begin here to the

0286 1 north, can you show us? 2 Α. Right here. 3 Ο. And that's this part right here, and who owns 4 this part here? 5 I'm not sure, it may be Alberts as well. Α. б Q. Okay. 7 8 EXAMINATION 9 BY JUDGE TOREM: 10 Q. So the southern portion of that parcel is Logen family property? 11 12 Α. Yes. 13 Q. And the northern portion may be Albert, but it's definitely not Logen? 14 15 Α. That is correct. 16 Q. And again, this is the parcel bordered by the tracks --17 18 Α. Pioneer Highway --19 MR. SCARP: No, this parcel upland is 20 bordered by Logen Road to the west and Pioneer Highway 21 to the east. 22 And who is that in the name of? The first Ο. 23 one was Eric Logen. 24 Α. Margaret Logen. 25 Q. So Margaret Logen for that?

0287 1 Α. Yes, this one and this one. 2 JUDGE TOREM: All right. 3 4 CROSS-EXAMINATION 5 BY MR. SCARP: б Q. Is any of this property in your name, 7 Mr. Logen? 8 Α. No, it's not. 9 Q. Okay. 10 Α. Not presently. 11 Q. All right. 12 And so the closest parcel is here, what's 13 this cross street right here, is that --14 Α. That is 292nd I believe. 15 Q. Okay. 16 Α. I'm not sure. It's not a posted road, it's 17 more or less a driveway to this one house where my niece 18 lives. 19 ο. Okay. So your parcel begins at, if I will, 20 the northeasternmost part is at what would be 292nd and 21 Pioneer Highway? 22 Α. That's correct. Q. All right. And so how far is that from 23 24 Dettling or 300th? 25 JUDGE TOREM: I don't believe there's any

0288 1 scale indicated, so can you estimate? 2 Ο. If you know. 3 Α. I asked Mr. Norris that this morning on the 4 distance for the various routes to come around and get 5 back down to here. б Q. Back down to here, you mean down --7 Α. Down to my mother's house here. 8 Ο. Okay, and again that's on the --9 Α. It's on Logen Road. 10 Q. All right. 11 Α. At roughly 288th. 12 Q. All right. But you would know that route 13 pretty well, wouldn't you, you've traveled it a lot? 14 Α. Yeah. 15 Q. Okay. 16 Α. It's probably 3 quarters of a mile I'm 17 guessing. 18 Ο. From 292nd to 300th, all right. 19 This parcel down below to the west of Logen 20 Road, when was the last time you farmed that? 21 Α. We leased it out about 15 years ago, and my son and I have been doing work on the ditches recently 22 23 to start farming it again. 24 Q. So the last time it was farmed was about 15 25 years ago?

Α.	Yes.
Q.	All right.
	Okay, thank you.
	Mr. Logen, do you live in Bellevue?
Α.	I do.
Q.	And what is your job?
Α.	I work for Puget Sound Energy.
Q.	Okay. Is there a structure at your, I think
you called	it your mother's house, which is east of
Logen Road	that you could keep your tractor or one of
your tract	ors, is there a barn or
Α.	Yes, there's a barn and several sheds.
Q.	Okay. Do you have a pickup truck as well?
Α.	I have one in Bellevue.
Q.	All right.
Α.	It's
Q.	Do you use it well, never mind.
Α.	It's a 1980, let's put it that way, it goes
to the dum	p.
Q.	All right.
	Do you have, you know, an orange triangle
that you p	ut on the back of your tractor if you're on
the highway	Υ?
Α.	I think there's one in the tractor garage.
Q.	Okay.
	Q. A. Q. A. Q. You called Logen Road your tract A. Q. A. Q. A. Q. A. to the dum Q. that you p the highway A.

1 Α. I'm not positive on that, but I know I've 2 seen one somewhere. 3 Ο. Are there signs out here on Old Pacific 4 Highway as you go north out of Stanwood toward Logen 5 Road that caution drivers against farm equipment on the б road? 7 Α. I wasn't sure, and I asked my brother who 8 lives in Stanwood, and he didn't believe there were any. 9 Q. Have you ever seen any on Dettling Road? 10 Yes, I believe there's one in one of the Α. 11 pictures that Staff submitted. 12 Ο. Are you aware of farm equipment caution signs 13 anywhere else in the area between say 271st and 102nd on 14 either Pacific Highway or Pioneer? 15 Α. On Old Pacific Highway I don't know if there 16 are any other than my brother's answer to the question. 17 Q. Okay. 18 Α. On Pioneer Highway, that's on Google, I 19 cruised the entire road, didn't see any. 20 Ο. Okay. 21 Mr. Logen, there's your exhibits regarding calculations of the quiet zone calculator. Where's the 22 23 data that you put in, do you have that available, or do 24 you just have the printout? 25 A. I just printed this is all.

1	Q. Okay. Let me ask you on Exhibit 25, it says
2	estimated total cost zero dollars; do you see that?
3	A. Yes, I do.
4	Q. And on Exhibit 26, it says estimated total
5	cost \$100,000; do you see that?
б	A. I do.
7	Q. Do you know why that is, the difference?
8	A. 26 would reflect the installation of
9	4-quadrant gates, upgrade from the present 2-quadrant.
10	Exhibit 25 is with no added equipment, it's just adding
11	a siding track.
12	Q. Where does pardon me if I'm where does
13	Exhibit 26 show 4-quadrant gates?
14	A. If you look at the column marked pre-SSM,
15	shows a 0 and then SSM shows 4.
16	Q. Okay. So then on Exhibit 25
17	A. I did print this page, and you can see that
18	the 4 ties to the 4-quadrant gates.
19	JUDGE TOREM: Mr. Logen, we can't hear you
20	when you have your back turned.
21	Q. Then going back to Exhibit 25 if you can,
22	pre-SSM, and SSM, which by the way, what does that mean,
23	SSM, supplemental something?
24	JUDGE TOREM: I believe on those pages,
25	Mr. Scarp, it says SSM stands for supplementary safety

0292 1 measures. 2 MR. SCARP: Thank you. 3 BY MR. SCARP: That one says 0 and 0, is that --4 Q. 5 Α. That's correct. That's what you put in, inputted 0 gates? б Q. 7 Α. I added the siding track only on that 8 scenario. 9 Q. Oh. 10 And in your traffic count, is 60 cars, is that --11 12 Α. That came from the traffic study done by your 13 consultant. 14 Q. And who was that, Mr. Norris? 15 A. Yes, I'm sorry. 16 Q. All right. Did you put in a higher estimate 17 consistent with what he testified to here today? 18 Α. I did not. 19 Q. Okay. 20 Mr. Logen, do you ever see tractors out on 21 Old Pacific Highway when you're up here? 22 Α. Yes. 23 Q. And do you ever drive around them? 24 Α. Yes. 25 Q. Are you aware of any accidents involving them

0293 1 here? 2 Α. No, I'm not. 3 Q. All right. 4 Α. I would like to say I'm usually only here on 5 the weekends. Okay. б Q. 7 Α. When the traffic is light. All right. 8 ο. 9 The quiet zone, if the crossing is closed, that would make it a quiet zone, wouldn't it? 10 I believe that it would because there would 11 Α. 12 be no crossing to honk for. 13 Q. Okay. You've testified that your opinion regarding 14 15 the viability of using medians at the Logen Road 16 crossing in order to facilitate the use of 4-quadrant 17 gates; do you recall that testimony? 18 Α. Yes. 19 ο. And do you know what the width of those 20 medians is or are? 21 Α. I do not. 22 Okay. And similarly do you know what the Q. width of the traffic lanes that would be divided would 23 24 then be? 25 Α. I do not. I believe there was testimony

1 earlier that said if they are a foot wide, that would make the resulting lanes 7 foot rather than 7 1/2 foot. 2 3 Ο. And do you know what the width of a fire 4 truck is? 5 It's probably 7, 7 1/2 feet, I don't. Α. Okay. б Q. 7 Α. I've never measured one. All right. How about a school bus? 8 ο. I would think they vary somewhat, but it's 9 Α. 10 somewhere in that width as well. 11 Ο. Would you agree with me then if you add 12 medians to facilitate 4-quadrant gates that you probably 13 couldn't run a fire truck or a school bus across Logen 14 Road? 15 Α. Not unless the crossing was widened slightly. 16 Q. Have you spoken to the County about the cost 17 of installing or the viability of installing medians? 18 Α. I have not. 19 MR. SCARP: I think those are all the 20 questions I have, Your Honor. 21 JUDGE TOREM: All right. 22 Mr. Thompson? 23 MR. SCARP: Oh, I did find another one. 24 BY MR. SCARP: 25 ο. Regarding Exhibit 28, Mr. Logen, you said

1 that the speeds on Pioneer or Old Pacific Highway exceed 2 the sight distance. Do you recall your testimony on 3 that. 4 Α. Yes. 5 Do you have any qualifications to determine, ο. and I apologize, I think you said the stopping distances 6 7 exceed the sight distance, wasn't that --8 I believe that to be true, yes. Α. 9 All right. Do you have any qualifications to Q. 10 determine stopping distances? I do not. 11 Α. 12 Ο. All right. And have you measured stopping 13 distances in this instance on any of the roads out here 14 that we're talking about? 15 Α. I have not. 16 Q. All right. And have you measured sight 17 distances? 18 Α. I have not. 19 MR. SCARP: All right, those are all the 20 questions I have, Your Honor. 21 JUDGE TOREM: All right, thank you, 22 Mr. Scarp. 23 Mr. Thompson, anything? 24 MR. THOMPSON: No, Your Honor. 25 JUDGE TOREM: All right.

1 Mr. Kasting? I have a couple quick ones. 2 MR. KASTING: 3 JUDGE TOREM: Sure. 4 5 CROSS-EXAMINATION BY MR. KASTING: б 7 Ο. On Exhibits 25, 26, and 27, was there any way 8 to include sight distances into these estimations, or 9 was it simply that you put in there was going to be a 10 siding added? 11 Α. I did not see a place to add or change sight 12 distances. I assumed that those -- I assumed that those 13 factors were taken into account when the model was populated, which I didn't do, it came you select the 14 15 crossing, and the model populates. 16 MR. KASTING: Nothing further. 17 JUDGE TOREM: All right, thank you. 18 Mr. Logen, did you have anything else you wanted to add to clarify any of the responses you had 19 given on cross-examination? 20 21 MR. LOGEN: I don't believe so, no. 22 JUDGE TOREM: Okay. 23 Let me walk back through then the exhibits 24 that are still outstanding. First, Exhibit 19, if I 25 understood the objections on some of the supporting

1 testimony just come in was a question as to how this would be useful to me, which will be truly if it's 2 3 useful to me as now the finder of fact, I will err on 4 the side of admitting it. If I can't find any use for 5 it that's going to help me in my decision, then I would б be indicating it's irrelevant or otherwise not useful 7 and be excluded. 19 despite what, Mr. Scarp, you've 8 indicated he doesn't have any particular expertise in 9 stopping distances, this appears to be a table that 10 toward the bottom, although it's a 1950 code updated 11 through 1989, appears to have at least one state's 12 judicial endorsement that these are at least some 13 average stopping distances for vehicles for unloaded except for the driver with brakes in good condition on 14 15 dry hard approximately level stretches of highway and 16 free from lose material. I can't say that it would add 17 a whole lot of weight or that I can give a lot of weight 18 to this, but at least it gives me some basis for if 19 there's a brief that comes in later that talk about stopping distances to have something in the record to 20 21 which to refer. So for a very limited purpose of ball park figures for stopping distances on the highway, this 22 23 will be admitted, 19.

Now 20, despite all the testimony that came in as to why this is being offered, Mr. Logen, it

1 appears simply the annotation three quarters of the way 2 down the page regarding the need for Dettling Road to be 3 widened is the main thrust of why this was being 4 offered, and I see from you nodding your head that I 5 did get that correct?

6 MR. LOGEN: Yes, and that would include fire 7 trucks as well.

8 JUDGE TOREM: I understand. The testimony 9 that's come in thus far looked at this is all regarding 10 closing Logen Road today as opposed to the potential 11 closure further north of this intersection described, 12 and it appears that this intersection is still open as 13 you've suggested it be used as an alternative farther north for the farm equipment in cases where Dettling 14 15 Road would be inappropriate due to grade. And I don't 16 see that there's been any other supporting testimony in 17 the record that would tell me whether this November 18 21st, 2007, suggestion is in the works or otherwise has been accomplished, so I don't see that this will help me 19 at all and may turn out to be a distraction, and 20 21 Dettling Road and what improvements might need to be required there are not necessarily directly before me. 22 23 So I'm going to exclude Exhibit 20 as less helpful than 24 you might have thought it would be. The supporting 25 testimony around it though may still be helpful as the

1 transcript is produced.

Turning to Exhibits 22, 23, and 24, let me 2 3 say first I appreciate the spirit in which these were 4 researched and offered, but I want to say that the one 5 sentence comments in Exhibit 22 and 24 and what I have been able to glean is also included in Exhibit 23 б 7 regarding how 4-quadrant gated crossings did or didn't 8 function in these particular studies are less helpful 9 than the testimony that came in today from the live 10 witnesses that described the intent of them as well as 11 information that I believe is encompassed in those 12 documents of which I took official notice and proffered 13 by the Commission, Exhibit A, the DOT Grade Crossing Protective Handbook. I do believe that that has 14 15 portions that address 4-quadrant gates, and I hope I'm 16 not confusing it with another handbook that definitely 17 does, but I believe this one does as well. I would 18 rather rely on that in context than any of these studies which are specific to particular roadways and are not 19 from anything I can glean here directly applicable to 20 21 the situation here just north of Stanwood on Logen Road. So I understand the general message of these, and I 22 think that's been gotten across, but admitting them as 23 24 an exhibit on which I might be able to rely or even consider citing to in a decision, they're not helpful, 25

1 so I would exclude 22, 23, and 24.

As to 25, 26, and 27 and the calculator for 2 3 quiet zones, I've had to wrestle as we heard the back 4 and forth as to what the purpose of this calculator is 5 and how it functions, how you put information in. And as much as I thought initially I would like to admit б 7 these, the more I heard about the factors that are not 8 readily apparent on their face, I don't think in good 9 faith I can make these part of the record other than the 10 testimony you've already discussed as to the efforts you 11 went to to see. Because I don't know what these numbers 12 mean, there hasn't been for me at least sufficient 13 explanation of what this nationwide significant risk threshold means at the 17,610 point level and how that 14 15 might compare. I don't know if this is a linear scale 16 or a geometric scale, and I'm also a bit at a loss to 17 understand how the estimated costs are calculated. 18 You've indicated you didn't make those calculations but the computer did that on its own. So I find it might be 19 a useful tool for someone who knows why it's being done 20 21 or if there's a more complete narrative with it, but I simply don't have that in the proceedings today, so I 22 23 can't in good faith entertain those and the objections 24 have to be sustained as to the completeness of 25, 26, 25 and 27.

1 What I do want to say rather than sounding as 2 though that's discouraging that some of this material 3 you put together, Mr. Logen, has been excluded, the 4 message of it is gotten across, and the issues have been 5 raised through your cross-examination of other б witnesses. And these six exhibits, 22 through 27, focus 7 mainly as to whether or not 4-quadrant gates are a 8 reasonable alternative to closure, and that's definitely 9 an issue on which a record has been created today with 10 or without these specific exhibits, and it's something I 11 expect to see addressed in the briefs of all parties 12 that care to address that in their post-hearing briefs. 13 So I don't want you to walk away thinking that because I've excluded these exhibits that that issue is off the 14 15 table whatsoever, but a brief that addresses the actual 16 scenario of what I will see when I drive the area 17 tomorrow and one that does not introduce new evidence 18 but simply analyzes the testimony we heard about roadway widths, approaches, and what can be seen in the 19 photographs that were admitted in Exhibit 17 will be 20 21 real helpful for making that case and can be made without these documents I believe. So because these are 22 much less helpful to me than what I've just described, 23 24 they're excluded.

25

Mr. Logen, you were going to submit Exhibit

1 28, your notes with the annotations, and I need to set a 2 deadline for you to do that. Would noon on Thursday 3 work to allow you enough time to scan that and E-mail it 4 in to me and the records center and all the parties? 5 MR. LOGEN: Yes. б JUDGE TOREM: That's great, we'll set that 7 deadline then now. 8 And, Mr. Scarp, it appeared to me from 9 discussion earlier from Mr. Norris and testimony from 10 Mr. Logen that it would be helpful for me to have a copy 11 of the mutual aid agreement between these fire 12 departments. So, Ms. Endres, apparently you're being 13 deputized to find that. If you need further time past noon on Thursday to acquire it, please just send an 14 15 E-mail indicating an approximation of when it can be 16 submitted. So we'll mark that as Exhibit 29 will be the 17 mutual aid agreement for the local fire departments. 18 Mr. Logen, is there any other testimony or exhibits that you have? 19 20 MR. LOGEN: None. 21 JUDGE TOREM: All right. So the last housekeeping we have to do before 22 we take a break to get ready for the public comment 23 24 hearing tonight I think is setting a deadline somewhere out there for post-hearing briefs. Mr. Scarp, based on 25

1 your knowledge of the State Environmental Policy Act 2 proceedings that are pending, can we comfortably set a 3 deadline, or would you like to set a deadline earlier 4 for briefs with a chance for maybe a two-page letter 5 after the comment period ends, would you rather move б forward say somewhere in the first two weeks of May, say 7 a month from now to submit briefs, and then if necessary 8 you will submit a copy as Exhibit 30 of the SEPA document? 9 10 MR. SCARP: What I would like to do is could 11 we put that on the record just before we start the 12 public comment? If I have a chance to find out perhaps 13 a little more on -- I don't want to make promises I can't keep. 14 15 JUDGE TOREM: All right, I will allow you to 16 confer with the rest of your clients. 17 MR. SCARP: I think we could all -- unless 18 you have some ideas now about what you think. I just don't -- I'm sort of indifferent to what the date is so 19 long as we have what it is you want before you. So if 20 21 we could maybe just put that on the record before we begin. 22 23 JUDGE TOREM: Certainly. So let me be clear 24 then, what I'm asking for is a proposed date for submission of post-hearing briefs that will address 25

1 everything except the SEPA documents unless the parties wish to submit just one brief and wait for SEPA and then 2 3 have several weeks thereafter, which is a date that's 4 uncertain. What I'm looking for is a brief on 5 everything with substance that's before the Commission, б and if there's a chance to comment on the SEPA documents 7 from the parties, that can come in after the SEPA record 8 closes. MR. SCARP: I'm sorry, I did misunderstand. 9 10 I would suggest while the information is fresher in 11 everyone's mind, I don't have a particular date. 12 John, you want to take a stab? 13 MR. THOMPSON: I sort of liked the idea of the first couple weeks of May. 14 15 JUDGE TOREM: Would Friday, May the 8th, work 16 for everybody? 17 MR. SCARP: Sure. 18 JUDGE TOREM: Okay, so let's set Friday, May the 8th, as the deadline for post-hearing briefs. And 19 with any luck SEPA records will be issued in the next 20 20 21 to 30 days, and there will be a 30 day comment period for whatever the Department of Ecology submits. When 22 23 that comes out, I would ask that the SEPA document 24 itself, whether it be a mitigated determination of 25 non-significance or DNS by itself or on the off chance

1 they recommend an environmental impact statement or 2 report, whatever DOE recommends, that that be submitted 3 as Exhibit 30. And no later than 10 days after the 4 close of comment period that you plan on submitting any 5 additions or supplements to your briefs, which should б have already been filed on May 8th. I'm anticipating it 7 will be the end of May or the beginning of June before I 8 can officially close the record and take in the SEPA 9 documents and any comments on them. What I will plan to 10 do is when I see Exhibit 30 come in and I read in that 11 document what the closing date is for their comments, I 12 will issue you a new deadline based on that, but I'm 13 going to count on, Mr. Scarp, you or Ms. Endres 14 submitting the SEPA document so I am triggered to do 15 that. 16 MR. SCARP: Understood. 17 JUDGE TOREM: Anything else for this portion 18 of today's hearing, the evidentiary hearing? 19 All right, then the evidentiary hearing is 20 closed at about 10 minutes to 6:00. I'm going to give 21 our court reporter a break for as long as she needs up to 30 minutes, and I will tell the rest of the folks 22 23 here when we're going to take their comments as we 24 rearrange the room, so we're off the record.

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