1	BEFORE THE WASHI	NGTON STATE
	UTILITIES AND TRANSPOR	TATION COMMISSION
2		) DOCKET NO. TR-070696
3		) Volume V
4	vs.	) Pages 241 to 398 )
5	CITY OF MOUNT VERNON,	)
6	Respondent,	)
7	and	)
/		)
0	SKAGIT COUNTY, WASHINGTON	)
8	STATE DEPARTMENT OF	)
•	TRANSPORTATION, and WESTERN	)
9	VALLEY FARMS, LLC,	)
		)
10	Intervenors.	)
		)
11		
12	A hearing in the ab	ove matter was held on
13	January 7, 2008, from 9:35 a.m	to 12:45 p.m., at 1805
14	Continental Place, Multi-purpo	se Room, Mount Vernon,
15	Washington, before Administrat	ive Law Judge ADAM E.
16	TOREM.	
17	The parties were pr	esent as follows:
18	THE COMMISSION, by	
	Assistant Attorney General, 13	-
19	Drive Southwest, Olympia, Wash	
	Telephone (360) 664-1225, Fax	(360) 586-5522, E-Mail
20	jthompso@wutc.wa.gov.	
21	CITY OF MOUNT VERNO	N, by KEVIN ROGERSON, City
	Attorney, 910 Cleveland Avenue	, Mount Vernon, Washington
22	98273, Telephone (360) 336-620	
	E-Mail kevinr@ci.mount-vernon.	
23		
24	Joan E. Kinn, CCR, RPR	
	· · ·	

25 Court Reporter

SKAGIT COUNTY, by STEPHEN R. FALLQUIST, 1 Deputy Prosecuting Attorney, 605 South Third Street, Mount Vernon, Washington 98273, Telephone (360) 2 336-9460, Fax (360) 336-9497, E-Mail 3 stephenf@co.skagit.wa.us. 4 WSDOT - FREIGHT SYSTEMS DIVISION, by L. SCOTT LOCKWOOD, Assistant Attorney General, 905 Plum Street Southeast, Building 3, Olympia, Washington 98504, 5 Telephone (360) 753-1620, Fax (360) 586-6847, E-Mail 6 scottl@atg.wa.gov. BNSF RAILWAY COMPANY, by BRADLEY P. SCARP and 7 KELSEY ENDRES, Attorneys at Law, Montgomery Scarp 8 MacDougall, 1218 Third Avenue, 27th Floor, Seattle, Washington 98101, Telephone (206) 625-1801, Fax (206) 9 625-1807, E-Mail brad@montgomeryscarp.com. 10 SKAGIT COUNTY FIRE DISTRICT #3, by THOMAS G. BURKE, Attorney at Law, Burke Law Offices, 612 S. 227th 11 Street, Des Moines, Washington 98198, Telephone (206) 824-5630. 12 WESTERN VALLEY FARMS, LLC, DAVID BOON and 13 YVONNE BOON, by GARY T. JONES, Attorney at Law, Jones & Smith, 415 Pine Street, Mount Vernon, WA 98273, 14 Telephone (360) 336-6608, Fax (360) 336-2094, E-Mail gjones@jonesandsmith.com. 15 16 17 18 19 20 21 22 23 24 25

1		
2	INDEX OF EXAMINATION	
3		
4	WITNESS:	PAGE:
5	DANNIEL MACDONALD	
6	Direct Examination by Mr. Scarp	267
7	Voir Dire Examination by Mr. Rogerson	272
8	Direct Examination by Mr. Scarp	276
9	Cross-Examination by Mr. Rogerson	285
10	Cross-Examination by Mr. Thompson	318
11	Redirect Examination by Mr. Scarp	343
12	Examination by Judge Torem	344
13	Redirect Examination by Mr. Scarp	344
14	Recross-Examination by Mr. Rogerson	350
15	Recross-Examination by Mr. Thompson	352
16	Redirect Examination by Mr. Scarp	356
17	LARRY RABEL	
18	Direct Examination by Mr. Rogerson	357
19	Cross-Examination by Mr. Scarp	361
20	Redirect Examination by Mr. Jones	390
21	Redirect Examination by Mr. Burke	393
22	Recross-Examination by Mr. Scarp	394
23		

24

1				
2		INDEX OF 1	EXHIBITS	
3				
4				
5	EXHIBIT:		MARKED:	ADMITTED:
б		STUART GORDON		
7	1		251	
8		MEGAN MCINTYRE		
9	2		251	
10	3		251	
11		FOSTER PETERSON		
12	5		251	
13	6		251	
14		DANNIEL MACDONALD		
15	4		251, 269	274
16	7		251	268
17		JEFFREY SCHULTZ		
18	8		251	
19	9		251	
20	10		251	
21	127		264	
22		GARY NORRIS		
23	11		252	
24	12		252	
25	13		252	

14		252
		252
15		252
	ALBERT LIOU	
16		252
17		252
	EDWARD "ESCO" BELL	
18		252
19		252
20		252
21		252
22		252
	GLENN BRAUTASET	
23		253
24		253
26		253
27		253
	BUD NORRIS	
28		253
	MIKAEL LOVE	
29		253
30		253
	JANA HANSON	
31		253
32		253
33		253
	16 17 18 19 20 21 22 23 24 26 27 28 29 30 30 31 32	ALBERT LIOU  16  17  EDWARD "ESCO" BELL  18  19  20  21  20  21  22  GLENN BRAUTASET  23  24  26  27  BUD NORRIS  28  MIKAEL LOVE  29  30  JANA HANSON  31  32

1	34		253
2		MARK WATKINSON	
3	35		254
4	36		254
5	37		254
6	38		254
7	39		254
8	40		254
9		RIC BOGE	
10	41		254
11	42		254
12	43		254
13	44		254
14	45		254
15	46		255
16	47		255
17	48		255
18		PAUL CURL	
19	49		255
20		THOMAS R. ZEINZ	
21	50		255
22	51		255
23		ROBERT JOHNSTON	
24	52		255
25	53		255

1	76		257
2		RICHARD H. SMITH	
3	77		257
4	78		257
5		PATRICK DEJONG	
б	79		257
7	80		257
8	81		257
9	82		257
10		JOHN DEVLIEGER	
11	83		257
12		DARRIN MORRISON	
13	84		258
14		DAVID SKRINDE	
15	85		258
16	86		258
17		GLENN HARMAN	
18	136		264
19	137		264
20		VICTOR L. BENSON	
21	87		258
22		LARRY RABEL	
23	88		258
24	89		258
25	90		258

1	91	258 360
2	128	264
3	129	264
4	130	264
5	131	264
6	132	264
7	133	264
8	134	264
9	135	264
10		CITY/CO/FARMS/FIRE CROSS-EXAMINATION EXHIBITS
11	101	258
12	102	259
13	103	259
14	104	259
15		STAFF CROSS-EXAMINATION EXHIBITS
16	105	259
17	106	259
18	107	259
19	108	259
20	109	259 342
21	110	259 342
22	111	259 342
23	112	259
24	113	260
25	114	260

$\sim$	$\sim$	-	$\sim$
		5	

1	126	260
2	150	266
3		BNSF CROSS-EXAMINATION EXHIBITS
4	115	260
5	116	260
6	117	260
7	118	260
8	119	260
9	120	260
10	121	260
11	122	260
12	123	260
13	124	261
14	125	261
15		PUBLIC COMMENT
16	200	261
17		
18		
19		
20		
21		
22		
23		
24		
25		

1		PREMARKED EXHIBITS
2	PARTY: BN	SF
3	WITNESS:	STUART GORDON
4	1	Prefiled Direct Testimony of Stuart Gordon
5		(7 pp.) (SG-1T)
6	WITNESS:	MEGAN MCINTYRE
7	2	Prefiled Direct Testimony of Megan McIntyre
8		(9 pp.) (MM-1T)
9	3	Prefiled Rebuttal Testimony of Megan McIntyre
10		(4 pp.) (MM-2T)
11	4	BNSF Videos (MM-3)
12	WITNESS:	FOSTER PETERSON
13	5	REVISED Prefiled Direct Testimony of Foster
14		Peterson (8 pp.) (FP-1T *REVISED*)
15	6	Curriculum Vitae (10 pp.) (FP-2)
16	WITNESS:	DANNIEL MACDONALD
17	7	Prefiled Direct Testimony of Danniel MacDonald
18		(6 pp.) (DM-1T)
19	PARTY: WS	DOT
20	WITNESS:	JEFFREY SCHULTZ
21	8	Prefiled Direct Testimony of Jeffrey Schultz
22		(19 pp.)
23	9	Resume of Jeffrey Schultz (1 pg.)
24	10	WSDOT Long-Range Plan for Amtrak Cascades
25		(1 CD-ROM)

1	WITNESS:	GARY NORRIS
2	11	Prefiled Direct Testimony of Gary Norris
3		(26 pp.)
4	12	Curriculum Vitae of Gary Norris (2 pp.)
5	13	Hickox Road Study (1 CD-ROM)
б	14	Curriculum Vitae of Lesley Struthers (1 pg.)
7	15	Prefiled Rebuttal Testimony of Gary Norris
8		(8 pp.)
9	PARTY: CI	TY OF MOUNT VERNON
10	WITNESS:	ALBERT LIOU
11	16	Prefiled Direct Testimony of Albert Liou
12		(7 pp.)
13	17	Curriculum Vitae of Albert Liou (4 pp.)
14		(AL-1)
15	WITNESS:	EDWARD "ESCO" BELL
16	18	Prefiled Direct Testimony of Esco Bell
17		(14 pp.)
18	19	Resume of Edward "Esco" Bell (6 pp.) (EB-1)
19	20	Photographs of Hickox Road Crossing (7 pp.)
20		(EB-2A-1 through EB-2A-7)
21	21	Photographs of Stackpole Road Cross'g (7 pp.)
22		(EB-3A-1 through EB-3A-7)
23	22	Photographs of 2nd Street Crossing (17 pp.)
24		(EB-4A-1 through EB-4A-17)
25		

1	WITNESS:	GLENN BRAUTASET
2	23	Prefiled Direct Testimony of Glenn Brautaset
3		(15 pp.)
4	24	Resume of Glenn Brautaset (1 pg.) (GB-1)
5	26	Flood Evacuation Map (1 pg.) (GB-2)
6	27	Flood Fight Elements Map (1 pg.) (GB-3)
7	WITNESS:	BUD NORRIS
8	28	Prefiled Direct Testimony of Bud Norris
9		(8 pp.)
10	WITNESS:	MIKAEL LOVE
11	29	Prefiled Direct Testimony of Mikael Love
12		(10 pp.)
13	30	Resume of Mikael Love (1 pg.)
14	WITNESS:	JANA HANSON
15	31	Prefiled Direct Testimony of Jana Hanson
16		(8 pp.)
17	32	Curriculum Vitae of Jana Hanson (3 pp.)
18		(JH-1)
19	33	City of Mount Vernon - 2005 Buildable Lands
20		Analysis (11 pp.) (JH-2)
21	34	City of Mount Vernon Commercial and Industrial
22		Land Needs Analysis - September 2006 (35 pp.)
23		(JH-3)
24		
25		

1	PARTY: SK	AGIT COUNTY
2	WITNESS:	MARK WATKINSON
3	35	Prefiled Direct Testimony of Mark Watkinson
4		(8 pp.) (MW-1T)
5	36	Resume of Mark Watkinson (4 pp.) (MW-2)
б	37	Emergency Management Coordinator Job
7		Description (6 pp.) (MW-3)
8	38	Graph - Skagit River Recorded Discharges
9		(2 pp.) (MW-4)
10	39	Skagit River Annual Flood Risk Awareness
11		(8 pp.) (MW-5)
12	40	Map - Skagit County Evacuation Routes (2 pp.)
13		(MW-6)
14	WITNESS:	RIC BOGE
15	41	Prefiled Written Testimony of Ric Boge (7 pp.)
16		(RB-1T)
17	42	Resume of Ric Boge (2 pp.) (RB-2)
18	43	Skagit County Surface Water Manager Job
19		Description (4 pp.) (RB-3)
20	44	Photo of 1951 Flooding in Vicinity of Hickox
21		Rd (2 pp.) (RB-4)
22	45	Photo of 1951 Flooding in Vicinity of Hickox
23		Rd w/Approximate Present Location of I-5
24		(2 pp.) (RB-5)
25		

1	46	Map – Major Levee Failures in Lower Skagit
2		River Basin (2 pp.) (RB-6)
3	47	Map - Pos. Fut. Levee Failure (2 pp.) (RB-7)
4	48	Map - Skagit River Floodplain (2 pp.) (RB-8)
5	PARTY: CO	MMISSION STAFF
б	WITNESS:	PAUL CURL
7	49	Prefiled Direct Testimony of Paul Curl
8		(10 pp.) (PC-1T)
9	WITNESS:	THOMAS R. ZEINZ
10	50	Prefiled Direct Testimony of Thomas R. Zeinz
11		(13 pp.) (TRZ-1T)
12	51	Biography of Thomas R. Zeinz (2 pp.) (TRZ-2)
13	WITNESS:	ROBERT JOHNSTON
14	52	Prefiled Direct Testimony of Robert Johnston
15		(10 pp.) (RJ-1T)
16	53	Photo - Westbound on Stackpole Road (2 pp.)
17		(RJ-2)
18	54	Photo - Eastbound on Stackpole Road (2 pp.)
19		(RJ-3)
20	55	Aerial Photo (high) - Stackpole Road (2 pp.)
21		(RJ-4)
22	56	Aerial Photo (low) - Stackpole Road (2 pp.)
23		(RJ-5)
24	57	Photo - Eastbound on Hickox Road (2 pp.)
25		(RJ-6)

1	58	Photo - Westbound on Hickox Road (2 pp.)
2		(RJ-7)
3	59	Aerial Photo (high) - Hickox Road (2 pp.)
4		(RJ-8)
5	60	Aerial Photo (low) - Hickox Road (2 pp.)
6		(RJ-9)
7	61	Photo - Eastbound on Blackburn Road (2 pp.)
8		(RJ-10)
9	62	Photo - Westbound on Blackburn Road (2 pp.)
10		(RJ-11)
11	63	Photo - Northbound on Old Hwy 99 (2 pp.)
12		(RJ-12)
13	64	Photo - Southbound on 2nd Avenue (2 pp.)
14		(RJ-13)
15	65	Aerial Photo (high) - Blackburn Road (2 pp.)
16		(RJ-14)
17	66	Aerial Photo (low) - Blackburn Road (2 pp.)
18		(RJ-15)
19	PARTY: WE	STERN VALLEY FARMS
20	WITNESS:	DAVID BOON
21	67	Prefiled Direct Testimony of David Boon
22		(9 pp.)
23	68	Map - Boon Family & Business (1 pg.)
24	69	Map - Railroad Siding Extension (1 pg.)
25	70	Photos - Farm Equipment (7 pp.)

1	WITNESS:	JEFFREY BOON
2	71	Prefiled Direct Testimony of Jeffrey Boon
3		(9 pp.)
4	72	Map - Boon Family & Business (1 pg.)
5	73	Map - Railroad Siding Extension (1 pg.)
б	74	Photos - Farm Equipment (7 pp.)
7	WITNESS:	L. SLOANE WINKES, M.D.
8	75	Prefiled Direct Testimony of L. Sloane Winkes,
9		M.D. (5 pp.)
10	76	Letter from L. Sloane & Ben Winkes to WUTC
11		dated 28 May 2007 (1 pg.)
12	WITNESS:	RICHARD H. SMITH
13	77	Prefiled Direct Testimony of Richard H. Smith
14		(7 pp.)
15	78	Map - Railroad Siding Extension (1 pg.)
16	WITNESS:	PATRICK DEJONG
17	79	Prefiled Direct Testimony of Patrick Dejong
18		(5 pp.)
19	80	Resume of Patrick Dejong (2 pp.)
20	81	Job Description - School Principal (3 pp.)
21	82	Photos - School Crossing Area (3 pp.)
22	WITNESS:	JOHN DEVLIEGER
23	83	Prefiled Direct Testimony of John Devlieger
24		(4 pp.)
25		

1	WITNESS:	DARRIN MORRISON
2	84	Prefiled Direct Testimony of Darrin Morrison
3		(5 pp.)
4	PARTY: SK	AGIT COUNTY FIRE PROTECTION DISTRICT NO. 3
5	WITNESS:	FIRE CHIEF DAVID SKRINDE
6	85	Prefiled Direct Testimony of Fire Chief David
7		Skrinde (16 pp.)
8	86	Response Time Summary - Hickox Road Closure
9		Study (1 pg.)
10	WITNESS:	FIRE COMMISSIONER VICTOR L. BENSON
11	87	Prefiled Direct Testimony of Fire Commissioner
12		Victor L. Benson (5 pp.)
13	WITNESS:	LARRY RABEL
14	88	Prefiled Direct Testimony of Larry Rabel
15		(21 pp.)
16	89	Graph (Fig 1) - Response Time re Intervention
17		and Survival Rates (2 pp.)
18	90	Graph (Fig 2) - Fire Growth Over Time and
19		Sequence of Events (2 pp.)
20	91	Article - Flashover - A Firefighter's Worst
21		Nightmare! (11 pp.)
22	CITY/CO/F	ARMS/FIRE CROSS-EXAMINATION EXHIBITS
23	101	DOT FRA Railroad-Highway Crossing Handbook
24		(2nd Ed., Aug 2007)
25		

1	102	CITY/CO/FARMS/FIRE - DOT FRA Accident
2		Prediction Report for Skagit County
3		(17 Dec 07) (21 pp.)
4	103	CITY/CO/FARMS/FIRE - DOT FRA Summary of
5		Accident Information for Skagit County (3 pp.)
б	104	CITY/CO/FARMS/FIRE - Overview Photos of Hickox
7		Rd and Old Hwy 99 west of RR Crossing (3 pp.)
8	STAFF CRO	SS-EXAMINATION EXHIBITS
9	105	City of Mt Vernon Response to Staff Data
10		Request No. 2 (9 pp.)
11	106	City of Mt Vernon Response to Staff Data
12		Request No. 3 (5 pp.)
13	107	BNSF Railway Response to Staff Data Request
14		No. 2 (2 pp.)
15	108	BNSF Railway Response to Staff Data Request
16		No. 10 (1 pg.)
17	109	BNSF Railway Response to Staff Data Request
18		No. 12 (1 pg)
19	110	BNSF Railway Response to Staff Data Request
20		No. 13 (1 pg.)
21	111	BNSF Railway Response to Staff Data Request
22		No. 14 (1 pg.)
23	112	US DOT - Crossing Inventory Info as of
24		12/18/2007 for "BLACKBURN & PAC"
25		

1	113	US DOT - Crossing Inventory Info as of
2		12/18/2007 for "STACKPOLE RD"
3	114	US DOT - Crossing Inventory Info as of
4		12/18/2007 for "HICKOX RD"
5	126	Miscellaneous GradeDec.Net work papers
6		(36 pp.)
7	PARTY: BN	SF - CROSS-EXAM EXHIBITS
8	115	Skagit County Natural Hazards Mitigation Plan
9		(excerpts) (11 pp.)
10	116	Skagit County Public Bulletins from 2006 Flood
11		(19 pp.)
12	117	Projected Flooding Maps - US Army Corps of
13		Engineers (14 pp.)
14	118	Mt. Vernon Fire Department Flood Handbook
15		(excerpts) (45 pp.)
16	119	"Hydraulic Technical Documentation" - Draft
17		Report on Skagit River Basin & Skagit River
18		Flood Damage Reduction Feasibility Study from
19		US Army Corps of Engineers - October 2003
20		(24 pp.)
21	120	Floodplain Maps (2 pp.)
22	121	Routing Maps (MapQuest) (3 pp.)
23	122	Mt Vernon Community Development Maps (2 pp.)
24	123	Mt Vernon Boundary Maps (11 pp.)
25		

1	124 Skagit County Code Chapter 11.20 - Road	
2	Closures and Restrictions (4 pp.)	
3	125 Aerial Maps of Hickox Rd Area (3 pp.)	
4	PUBLIC COMMENT & HEARING EXHIBITS	
5	200 Filed Public Comment	
б		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

1 PROCEEDINGS 2 JUDGE TOREM: It's now almost 9:40 a.m., it's 3 Monday, January the 7th, 2008. We are convened here in 4 Docket Number TR-070696. This is a Utilities and Transportation Commission hearing about the BNSF Railway 5 6 Company versus the City of Mount Vernon regarding the 7 Hickox Road grade crossing. This is the opening of the evidentiary hearing. We were assembled here at 9:00 8 9 this morning to take care of some prehearing business, 10 and I will sum that up in a minute. I'm going to ask 11 all the parties present to identify themselves, I will 12 begin, I am Adam Torem, the Administrative Law Judge 13 from the UTC's Administrative Law Judge Division. 14 MR. THOMPSON: Jonathan Thompson, Assistant 15 Attorney General representing the Commission Staff. 16 MR. BURKE: Thomas Burke representing Skagit County Fire District. 17 18 MR. SCARP: Brad Scarp represent BNSF. 19 MS. ENDRES: Kelsey Endres representing BNSF. 20 MR. LOCKWOOD: Scott Lockwood for the State 21 Department of Transportation. 22 MR. FALLQUIST: Steve Fallquist representing 23 Skagit County. 24 MR. JONES: Gary Jones representing the 25 interveners Western Valley Farms, LLC, David Boon and

1 Yvonne Boon.

2 MR. ROGERSON: Kevin Rogerson, City of Mount 3 Vernon.

JUDGE TOREM: And our court reporter today is Joan Kinn, and we will be taking witness testimony this morning. Already on the witness stand is Mr. Danniel MacDonald, we'll swear him in in just a few moments, he's our first scheduled witness.

This morning we clarified that two witnesses 9 10 who are unavailable this week, Albert Liou and Thomas 11 Zeinz, will be available sometime after the Martin 12 Luther King holiday. The parties have agreed that the 13 first good week for both witnesses and the best week to 14 try to schedule their cross-examination would be between 15 28 January and the 1st of February. We'll do that in 16 Seattle preferably Monday through Thursday at a date to be determined. The parties will notify me later. 17

18 Parties have also agreed that there should only be one filing of closing briefs, that will be due 19 20 on the 15th of February. However, if the parties feel 21 that there is something novel or they're surprised by a 22 position taken or argument made and they need to respond 23 to one of the closing briefs, they will file a request 24 with the Commission to have a responsive brief and address the reason for that. I'm hoping that can be 25

done by the following Friday, the 22nd of February, and
 I will be able to respond to any such requests by early
 the next week.

There were some additional cross-examination exhibits that were discussed as potentially coming in at our prehearing conference last held on 20 December. Staff introduced and marked Exhibit 127, it's a series of data requests that will be used to discuss testimony with Mr. Schultz perhaps today or tomorrow.

BNSF and the State Department of Transportation had a series of it appears eight different responses to data requests that they wanted to have marked as Exhibits 128 through 135, and those will be used for Mr. Rabel this morning as well as for Chief Skrinde or I guess it's going to be Chief Harman as his substitute witness, he will be available on Wednesday.

17 They also had a series of maps that were from 18 MapQuest and printed out, that is going to be marked as 19 Exhibit 136, and these maps are apparently to address 20 testimony dealing with the Blackburn Road crossing and 21 accidents at that area.

And finally Exhibit 137 is a four-page document about the Conway and Cedardale fire service areas, and those will be marked for Chief Harman, who will testify in place of Chief Skrinde on Wednesday.

None of these exhibits have been admitted 1 2 yet, as was the case with the rest of the exhibits we 3 have marked. So today as witnesses are introduced and 4 are adopting testimony, we'll have to make sure we keep track as to which witness adopts testimony or other 5 6 exhibits that are supporting that testimony and if the 7 cross-examination exhibits also need to be moved. If 8 parties already know that there is no objection and can 9 sort this out maybe at different breaks before witnesses 10 that there is a stipulation, that may speed things up 11 procedurally as we go.

Parties, was there anything else besides thedriving route that I need to address?

14 All right, I have not yet been furnished the 15 final copy, but I know it's been circulating over the 16 last few weeks, a proposed driving route through the valley, and I understand that Staff came up with some 17 18 proposal, and Mr. Jones came up for Western Valley Farms 19 with some additional information, Mr. Lockwood and the 20 railway this morning indicated that there may be some 21 portions on the map that they feel are irrelevant, that 22 driving them won't hurt or add to the case in their 23 opinion, but they're not objecting, they just wanted to note for the record they thought it was somewhat more 24 driving territory to cover than necessary. And I have 25

indicated and now I will again on the record that I
 don't mind driving a few extra miles or risking a few
 wrong turns to get as much potentially relevant
 information as possible.

5 So, Mr. Thompson, you have a copy of that 6 driving route, and I will just suggest that we go ahead 7 and mark that given where we are in exhibit numbers as Exhibit Number 150, so we'll just put it a little out of 8 9 sequence in case something else comes up in between and 10 it will be obvious that it's set off. If you will have 11 copies made for everybody else, we can mark that as 12 Exhibit 150, then at some point in the next few days I 13 will make sure to get out and drive that area. And you 14 tell me it takes between, well, closer to an hour? 15 MR. THOMPSON: It took us about an hour when 16 we did it yesterday afternoon. 17 JUDGE TOREM: All right, so we'll find a day when we have an hour, and it may even be Thursday 18 19 morning depending on how things go the rest of the week, 20 and get it done at that point.

All right, I don't think there's any other prehearing items to take care of. Parties, counsel? All right, seeing none, let me swear in the witness.

0266

1 Whereupon, DANNIEL MACDONALD, 2 3 having been first duly sworn, was called as a witness 4 herein and was examined and testified as follows: 5 DIRECT EXAMINATION 6 BY MR. SCARP: 7 Will you state your name for the record. 8 Ο. 9 Danniel MacDonald. Α. 10 ο. And your address? 11 Α. 2454 Occidental Avenue South, Suite 1-A, 12 Seattle, Washington 98134. 13 Q. And your employer and position? 14 Α. BNSF Railway Company and Manager Engineering 15 for Engineering Services in Seattle, Washington. 16 Ο. Okay. And did you cause and prepare and file direct testimony listing your testimony in this matter 17 and marked as Exhibit Number 7? 18 19 I did prepare testimony. Α. 20 ο. Okay. And if I were to ask you the same 21 questions set forth in that document here today, would 22 your answers be the same? 23 They would. Α. All right. And is the information set forth 24 Ο. 25 in your prefiled testimony true and correct to the best

1 of your knowledge?

2 Α. Tt is. 3 MR. SCARP: All right, with that, Your Honor, 4 I would offer Exhibit 7 for admission in the record, and prior to tendering the witness for cross I would like to 5 6 ask him about the newly marked Exhibits 3-A and 3-B. 7 JUDGE TOREM: First as to Exhibit 7, Mr. MacDonald's prefiled direct testimony, is there any 8 9 objection to its admission? 10 MR. ROGERSON: No objection. 11 JUDGE TOREM: All right, hearing none, 12 Exhibit 7 is admitted. 13 For the other exhibits that were initially 14 filed under the witness Megan McIntyre there was an 15 intention that that be a video presentation and that 16 that was going to be presented as Exhibit 3, I think it 17 was MM-3. When they were circulating the still 18 photographs because of reproduction and display issues 19 with the proprietary software I understand from BNSF, 20 everybody should have gotten as I did a copy of three 21 different still photographs. Two of them are from the 22 24th of January. That looks like date they're printed 23 out. It looks like March 15, 2007, is one set, August 2nd, 2006, is another set, and then there are some other 24 photographs in support. I chose to mark those up as 25

-

MM-3-A for the set that displays March 15th, MM-3-B for 1 2 the August 2nd set, and then the still photographs that 3 support I think showing the warning signals but it 4 doesn't look like part of a video, those we'll mark as MM-3-C. So for purposes of reference, those are the 5 6 documents, and I think 3-A and 3-B are the ones that are going to be used for this witness as well as 7 8 Ms. McIntyre tomorrow. 9 Mr. Scarp, is that correct? 10 MR. SCARP: That's correct. These are 11 essentially for illustrative purposes for a small 12 portion of Mr. MacDonald's testimony regarding drivers 13 who disregard warning devices. 14 JUDGE TOREM: All right, so for our purposes 15 if you look at the exhibit list for Megan McIntyre, 16 Exhibit 4 is now going to consist of, if this isn't 17 confusing enough, Exhibits MM-3-A, MM-3-B, and MM-3-C. 18 It may be helpful for admissibility purposes or if these are just going to be referenced today and admitted 19 20 tomorrow to have the entirety foundation laid or an 21 offer at once. 22 MR. SCARP: I can lay this foundation with 23 Mr. MacDonald. JUDGE TOREM: All right, very well. I just 24 25 want to be clear that this is all part of one exhibit,

which is Exhibit 4, but it's been labeled differently 1 2 because of the change of presentation. 3 All right, your witness, please. 4 BY MR. SCARP: Mr. MacDonald, with regard to your prefiled 5 Q. testimony regarding drivers' tendencies to disregard б 7 warning devices, have you reviewed video portions of the 8 documents that are in front of you? 9 Α. I have. 10 Ο. And what was your purpose and can you 11 describe the instance by which you did that? 12 Α. We met with our claims agent that had the 13 video, and the purpose was to review the documents in 14 support of the testimony I would give related to drivers 15 that violate the warning devices, drive around the 16 warning devices. And can you describe just summarily, I don't 17 Ο. want to take too much time, with regard to the video the 18 source and the difficulties to your understanding of 19 20 reproducing the video here and in an exhibit form? 21 Α. The video source is from, as I understand it, 22 from the locomotive camera on two separate BNSF 23 locomotives that were involved in, one in a collision, 24 one in a near collision. The dates of the incidents are noted on the photos, and the -- it's my understanding 25

it's a proprietary software that runs this locomotive 1 2 camera system. 3 Q. Okay. 4 Α. And that was the issue. 5 And have you reviewed such videos and seen Q. locomotive camera videos before? 6 7 Α. No. 8 Ο. Okay. 9 No, this was my first one. Α. 10 Ο. What have you seen in terms of videos or 11 similar types of depictions of near misses in your 12 experience? 13 Α. Crossing cameras located at stations or 14 adjacent highways or video from adjacent things that 15 were occurring that have been transmitted as part of 16 other E-mails and correspondence. 17 All right. And do they depict similar, in Ο. your experience, similar or circumstances and 18 occurrences such as are depicted by those photographs? 19 20 Α. Yes. 21 MR. SCARP: Your Honor, we would ask to admit 22 MM-3-A and MM-3-B for the purposes of Mr. MacDonald's 23 testimony. MR. ROGERSON: Your Honor, a motion for an 24 25 opportunity to voir dire the witness based on

0272 1 foundation. JUDGE TOREM: Go ahead, please. 2 3 4 VOIR DIRE EXAMINATION 5 BY MR. ROGERSON: Q. Mr. MacDonald, did you review these video 6 stills before submitting your prefiled testimony on 7 October 15th, 2007? 8 9 Α. No. 10 Ο. Are these videos considered in your opinion 11 data that you relied on before submitting your prefiled 12 testimony? 13 Α. These videos, no. 14 Q. Are these videos videos of the Hickox 15 Crossing? 16 Α. No. 17 Of the Stackpole crossing? Q. 18 Α. No. Of the Blackburn crossing? 19 Q. 20 Α. No. 21 Q. Are these videos in fact just examples of 22 what may happen? 23 Yes, that was our intended purpose. Α. 24 MR. ROGERSON: Your Honor, I would object to 25 admitting these videos on the basis this is neither data relied on nor relevant to the case at hand. These are
 videos merely for illustrative purposes, what could
 potentially happen regarding safety issues at a
 crossing, and aren't of any evidentiary value to this
 case.

6 MR. SCARP: Your Honor, I believe, and we 7 respectfully oppose Mr. Rogerson's objection, I believe 8 that Mr. MacDonald has testified that these are very 9 similar, and his -- the distinction that he drew was 10 simply that he hasn't seen the locomotive cameras from 11 which these proprietary software were derived from, but 12 he has seen very similar ones. And yes, these are for 13 illustrative purposes, that was the nature by which we 14 proposed these in the first place was to show an example 15 for the very sorts of circumstances that we contend will 16 occur at Hickox Crossing if the crossing remains open and trains are near -- stopped near the crossing with 17 18 traffic still allowed to pass through, that they're 19 precisely the same types of things. So for illustrative 20 purposes, that's our purpose.

21 MR. ROGERSON: Well, for illustrative 22 purposes the City doesn't object to having these photos 23 shown. But for the purpose of evidence, it must be 24 relevant, which means it has to tend to make a 25 likelihood of such an event more or less probable, and

1 it's the City's position that this is not evidence, it 2 has no evidentiary value, but it may help the trier of 3 fact understand the evidence that's being submitted, but 4 this in and of itself is neither data relied on in this 5 expert's testimony nor tend to make a likelihood more or 6 less probable and therefore is not relevant.

7 MR. SCARP: Your Honor, I think that 8 Mr. MacDonald's testimony, he didn't rely on these 9 specific videos, but he relied on depictions very 10 similar, and I think that's a small distinction. As for 11 Mr. Rogerson's objection that they're not relevant 12 because they will not assist the trier of fact, I think 13 he said in the next sentence that they would assist or 14 could assist the trier of fact, so that's our position.

15 JUDGE TOREM: I'm going to overrule the 16 objection, but I understand the basis on which it's made. I respect where Mr. Rogerson's coming from, the 17 18 witness said he had not relied on these in any way in making his Exhibit 7 testimony that was admitted. And I 19 20 looked at these for the first time on Friday and could 21 not distinguish that these were local or not, but we 22 have now established they are not from any of the local 23 crossings based on the voir dire of the witness. With 24 that in mind, I don't have a problem admitting these as illustrative so they will help me to understand the 25

basis of the proponents' arguments as to the type of 1 2 potential safety hazards that could occur at a crossing 3 that has two sets of tracks. As Mr. Rogerson says, 4 these aren't evidence of what will or has happened at Hickox Road, but I'm looking at these as what might. 5 6 And I think part of what we're dealing with 7 here, the sort of objection Mr. Rogerson made this 8 morning, if we continue to make objections in that 9 fashion as to, well, has this occurred, no, it hasn't, 10 might it occur, we're trying to look at the future, so 11 for the fire district, for flood response, for a variety 12 of questions we may not have what has ever happened with 13 a train blocking or a train splitting because there's 14 not a way that the crossing and the siding exists yet, 15 so a lot of what we're looking at is predictive of the 16 future and perhaps would also be objectionable based on speculation. But I think we're going to try to obtain 17 18 as much information that will help me and eventually perhaps the commissioners decide what safety hazards are 19 20 going to be at this crossing if the siding is extended 21 and whether it's closed or left open.

22 So I think by nature, Mr. Rogerson, I'm just 23 saying this sort of objection will be noted each time 24 that folks want to make it on both sides, and I would 25 prefer if we want to do that, note concerns, but if I

need to say it again I will just refer back to what I 1 2 said Monday morning, the objections will generally be 3 noted, overruled, and the items will come in if they're 4 going to help me or the commissioners decide the best way to obtain the information as to public safety and 5 6 public convenience and weigh those two and the situation presented at Hickox Road. 7 Anything else for the witness on direct? 8 9 MR. SCARP: Only to ask him to explain the 10 nature of the, very briefly, the nature of what the 11 photographs show. 12 13 DIRECT EXAMINATION 14 BY MR. SCARP: 15 ο. If you would, Mr. MacDonald, the first one 16 that you have is I believe from Brush, Colorado, can you just explain walking through maybe perhaps a time line 17 18 that shows the sequential photographs taken, and explain the speed of the train, the horn sounding, whatever is 19 20 helpful? 21 Α. The first photo is taken at 15:12:28. I 22 believe these are all stepped in approximately 1 second 23 increments is what the photos are. It shows the train approaching the crossing. The -- as you approach the 24 25 crossing, the first one is the back view approaching the
crossing. If you go forward 2 sheets to 15:12:31, it's 1 closer, you can see there's 2 units on the left from and 2 3 adjoin that train that is adjacent. 4 Two units on left means a train on a siding Q. track? 5 It may be the train or it may be double 6 Α. track, I'm not familiar with the location to state what 7 8 they are. 9 Q. Okay. 10 Α. There is a crossover there, which would 11 incline me to believe that it's 2 main tracks. 12 Q. Okay. 13 Α. Or it could be double tracks depending on the 14 timetable. 15 So at 15:31, or excuse me, 15:12:31, the 16 third slide in that I have shows the approach. 17 Jump to --What's the speed of the train? 18 Q. The speed of the train is 57 miles an hour. 19 Α. 20 Ο. How does that compare with the area that will 21 cross Hickox? 22 I believe Hickox is very similar, 60 mile an Α. 23 hour would be the timetable speed for Hickox I believe. For a freight train? 24 Ο. 25 A. For a freight train.

1 Ο. Okay. 15:12:33, the sixth slide in I believe, Your 2 Α. 3 Honor, is you can see a vehicle approaching from the 4 left, and it's on the other track. 5 Q. What is the --6 And the train is still approaching at 57 Α. miles an hour. 7 For purposes of future discussion in this 8 Ο. 9 proceeding, is there a term for when a car reaches 10 another track and shouldn't be there? 11 Α. They're afoul of the track at this point in 12 time. 13 Q. Afoul of the track? They are afoul of the track. 14 Α. 15 Q. Thank you. 16 Α. As you progress through 15:12:33 to 15:12:34, you can see the car continues to advance. You can also 17 18 notice in the left-hand, upper left-hand corner the gate is in the down position. 19 20 Ο. You say the gate --21 Α. Yes. 22 -- is in the down position? Q. 23 You can -- from looking at the traffic Α. control device on the left-hand side, the flashing light 24 25 and gate, the gate arm appears to be in the lowered

1 position.

2	Q.	What does that indicate to you?
3	Α.	That the warning devices are active.
4	Q.	Okay.
5	Α.	So it would be down.
6	Q.	Okay.
7	Α.	As you continue on 15:12:34, the car is now
8	in between	the two tracks.
9	Q.	Okay.
10	Α.	And it appears that the gate is also down
11	here judgi	ng by the shadow that's on the ground.
12	Q.	Meaning on the right-hand side
13	Α.	On the right-hand side, the gate appears to
14	be down th	ere as well.
15	Q.	Okay.
	~ `	-
16	A.	- Additionally the vehicle is serpentining
16 17	Α.	
	A. back, it's	Additionally the vehicle is serpentining
17	A. back, it's	Additionally the vehicle is serpentining out of its lane, and now it's coming back
17 18	A. back, it's into its l	Additionally the vehicle is serpentining out of its lane, and now it's coming back ane, so it came in on the opposing lane.
17 18 19	A. back, it's into its l Q. A.	Additionally the vehicle is serpentining out of its lane, and now it's coming back ane, so it came in on the opposing lane. What does that tell you?
17 18 19 20	A. back, it's into its l Q. A. attempting	Additionally the vehicle is serpentining out of its lane, and now it's coming back ane, so it came in on the opposing lane. What does that tell you? He ran around the first gate and now is
17 18 19 20 21	A. back, it's into its l Q. A. attempting of the roa	Additionally the vehicle is serpentining out of its lane, and now it's coming back ane, so it came in on the opposing lane. What does that tell you? He ran around the first gate and now is to get back into the correct right-hand side
17 18 19 20 21 22	A. back, it's into its l Q. A. attempting of the roa	Additionally the vehicle is serpentining out of its lane, and now it's coming back ane, so it came in on the opposing lane. What does that tell you? He ran around the first gate and now is to get back into the correct right-hand side d, so he came across the crossing on the left

that's down on the right-hand side? 1 2 That is correct, he is coming closer. Α. 3 Ο. Do those photos indicate any additional data 4 such as whether the horn is being sounded? 5 They do. The horn and the bell are on in the Α. majority of these, the photos. You can read in the 6 bottom part it says horn and bell. It says monitor 7 parameters down in the lower part, you can see where it 8 9 goes from horn to bell. 10 ο. Okay. 11 Α. And the final photo is the car across the 12 track immediately in front of the locomotive. 13 Q. Okay. 14 Α. And it's still 57 miles an hour in approach 15 to that car. 16 So that car is right there in front of that Ο. train that's doing 57 miles an hour with its horn 17 blaring and it's gone around the gate? 18 19 That is correct. Α. 20 ο. Sum it up? 21 Α. That's correct. 22 And in your experience, you have seen videos Q. 23 in your understanding as you attempt to design crossing safety or to analyze that, you're aware of that through 24

25 your experience?

1 Α. Yes. 2 And when I say you're aware of that, how do Ο. 3 you characterize that, as a common experience, what? 4 Unfortunately more common than I would like. Α. There are rules and regulations that prohibit it, but 5 individuals choose to beat the train or attempt to beat 6 the train. In this case I believe they were successful 7 and avoided a collision. 8 9 Can you move on to MM-3-B, and I will just Ο. 10 ask you to go through, this is in Devore, California. 11 MR. SCARP: And for the record, Your Honor, 12 what will be MM-3-C will be photos, we'll deal with that 13 with Megan McIntyre who has more specific information 14 regarding that particular crossing. 15 BY MR. SCARP: 16 But for illustrative purposes and to explain Ο. just the circumstances here, Mr. MacDonald, can you just 17 18 tell us what transpires in the video that's represented 19 here by the still photographs? 20 Α. Yes. There's a train approaching on, for the 21 purposes of the illustration here, on the left track. 22 The center track appears to be occupied by a train that 23 is stationary. And at the end of the video we see the far right track there's another train occupying that 24 25 track. So there are three trains on three tracks in

- -

close proximity to this crossing.

All right. The train with the locomotive cam 2 Ο. 3 that those photographs are taken from, does it indicate 4 the speed of that train? 5 It does, 31 miles an hour. It also indicates Α. the horn and the bell. 6 7 Okay. And as you look at those photos, you Q. can't see to your right, is that correct, because of the 8 presence of the train on the adjacent track? 9 10 Α. Correct. Intermittently you can see through 11 the containers. 12 Q. Okay. 13 Α. As you approach. 14 Q. Okay. 15 Α. That is correct. 16 How about to the left, what can you see as Ο. you look at those photos when you look over to the left? 17 18 You can see the approach from the left. The Α. 19 crossing approach from the left is visible. As you 20 approach it gets smaller as you get closer to the 21 crossing. 22 And does it indicate to you as you look at Q. 23 those photos whether there are active warning devices at 24 that crossing? 25 Yes, there are active warning devices. There Α.

0282

appears to be cantilevers at this location. We can deal with the rest of what those 2 ο. 3 warning devices are with Ms. McIntyre's testimony, is 4 there a vehicle stopped at the crossing on the left-hand side? 5 6 Α. Yes. 7 Q. Okay. 8 Α. Based on the --9 As you thumb through those photographs as Q. 10 part of Exhibit MM-3-B sequentially going forward, do 11 you see one car, more than one car, go ahead through the 12 crossing as you look, does it --13 Α. It appears to be numerous cars that have 14 headed through the -- that are heading through the 15 crossing. You can see there's a car on 17:04:35 shows a dark colored vehicle exiting the crossing area and then 16 17 the final vehicle as well. 18 Okay, so in your black and whites there, you Q. can see --19 20 Α. I can see the two for certain it appears. 21 Q. Okay. What does that indicate to you, if 22 anything, Mr. MacDonald? 23 That numerous vehicles or at least those two Α. 24 vehicles did go around the gates. 25 And what happens just for reference as you go Ο.

1 on there, you said the horn is sounding, the bells are
2 on?

Correct. At 17:04:39, there's a good picture 3 Α. 4 of you can see the vehicle approaching the track that the train is on. The train is traveling at 32 miles an 5 6 hour by the information recorded here. It then proceeds through the next series of slides to show the vehicle 7 8 cleared the track. However, the final slides show the 9 tail end of the vehicle crossing the track and the 10 trailer coming right into the -- onto the track. And 11 from the video that we watched, it was my understanding 12 a collision occurred there with the trailer.

Q. All right. And again this document, MM-3-B, is illustrative and representative of things that you're commonly aware of in your job as you design and analyze crossing safety or crossing design?

17 Correct, in the crossing safety issues, yes. Α. 18 MR. SCARP: Your Honor, that's all I have 19 with regard to that portion of supplementing 20 Mr. MacDonald's direct testimony. I would tender the 21 witness for cross-examination. 22 JUDGE TOREM: Thank you, Mr. Scarp. 23 We have two attorneys wishing to cross-examine you, Mr. MacDonald, first Mr. Rogerson and 24 then Mr. Thompson. So, Mr. Rogerson, your witness. 25

1 MR. ROGERSON: Thank you, Your Honor. 2 3 CROSS-EXAMINATION 4 BY MR. ROGERSON: 5 Good morning. Q. 6 Α. Good morning. Other than your prefiled testimony dated 7 Q. October 15th, have you reviewed any other materials 8 9 before preparing to testify here today? 10 Α. Yes. 11 Ο. What materials were that? 12 Α. The videos as previously discussed as well as 13 several of the other prefiled testimony from other 14 parties. I also reviewed the MUTCD and the Grade 15 Crossing Handbook as well as BNSF's standard plans, our 16 engineering instructions. I believe that's what I went 17 through. 18 And what other prefiled testimony have you Q. reviewed today, before today? 19 20 Α. I would have to go back and obtain a list. 21 It was -- I know I reviewed Mr. Zeinz, I reviewed 22 several of the Commissions, I reviewed Megan McIntyre's, 23 I reviewed the other witness for the company, the 24 gentleman's name escapes me, and Commission Staff's as 25 well.

1 And by company, you mean Burlington Northern Ο. 2 Santa Fe? 3 Α. The BNSF Railway Company, correct. 4 Would that be Mr. Peterson, the consultant? Q. If that -- I would have to -- I can check in 5 Α. the files and find out or request, I can -- whichever 6 one it was. 7 You have testified that your current 8 0. 9 employment is as Engineering Manager of Public Projects 10 and Manager Engineering; is that correct? 11 Α. No, it is not. Previously I was Manager of 12 Public Projects for the company, for BNSF Railway, I'm 13 currently the Manager Engineering in Seattle for the 14 BNSF. 15 Ο. What are those duties? 16 Responsible for delivery of our capital plan Α. as well as support other engineering functions of the 17 18 division, Northwest Division and the Montana Division, I cover part way into the Montana division as required, 19 20 and also issues associated with division derailments and 21 other railroad emergencies. 22 And when you mean delivery of capital plan, Q. 23 does that include delivery of the siding project that's been proposed to be installed or constructed at the 24

25 Hickox Railroad Crossing?

1 Yes, it is, the WSDOT program is part of our Α. 2 capital plan, so the -- yes, it is. 3 Ο. Is this position that you have recently taken 4 with the railroad a fairly new position? I have been in the position for approximately 5 Α. 18 months, so July of 2006 I assumed the position. б You have previously testified that the nature 7 Ο. of your involvement is extensive in this project. Does 8 that mean you have visited the site? 9 10 Α. I have visited the site. 11 Ο. How often? 12 Α. I visited the site to the best of my 13 recollection four times now. Q. Have you personally conducted any analysis involving the safety of the Hickox railroad crossing before forming your opinion on October 15th? I'm struggling with the term of performing Α. the analysis. Yes. Did I consider it before the petition was filed? Yes. So yes, if that is your question, sir, yes. 21 Q. Have you spoken with Tom Zeinz? 22 I have spoken with Tom Zeinz. I spoke with Α. 23 Tom Zeinz at the National Committee meeting prior to him accepting -- he had said he was contacted by the State 24 and told me that, and I said that was fine, and I told 25

14 15 16

him I didn't want to discuss it in any further detail. 1 2 So you did not speak with Tom Zeinz regarding Ο. 3 the safety issues of the Hickox railroad crossing? 4 I do not recall speaking with him about Α. those. I know that we may have spoken about crossing 5 issues in general. That would be more of a general б nature. But I do not recall speaking with Tom about 7 8 this one in specific other than to state that the 9 company had filed for closure. 10 Ο. Did you speak with Tom Zeinz regarding any of 11 the other crossings near the Hickox railroad crossing, 12 including Stackpole or Blackburn? 13 Α. I believe it would have been part of any 14 other discussion we had about Hickox Road. So if we had 15 discussed it, it would have been joint. And again, I do 16 not recall speaking specifically about the incident 17 other than --18 Before forming your opinion, did you speak Ο. with Paul Curl with the Washington Utilities and 19 20 Transportation Commission Staff? 21 Α. To the best -- I may have spoken with 22 Mr. Curl on other matters, but related to this one, no, 23 sir, I do not believe I did.

Q. Before forming your opinion regarding thesafety issues regarding the Hickox Crossing, did you

1	speak with Robert Johnston of the Washington Utilities
2	and Transportation Commission Staff?
3	A. To the best of my knowledge, no.
4	Q. Did you speak with anyone from Fire District
5	Number 3?
6	A. To the best of my knowledge, no.
7	Q. Did you speak with any official from the City
8	of Mount Vernon?
9	A. Not that I recall.
10	Q. Did you speak with anyone from the Department
11	of Emergency Management in Skagit County?
12	A. Not that I recall.
13	Q. Did you speak with anyone from the Public
14	Works Department of Skagit County?
15	A. I spoke with Pubic Works from Skagit County
16	but not related to this issue.
17	Q. Did you speak with anybody from Dike District
18	Number 3?
19	A. Not that I recall.
20	Q. Did you speak with anyone from the Mount
21	Vernon Christian School?
22	A. No.
23	Q. Before forming your opinion that you
24	submitted and filed on October, did you use any program
25	or model as a basis for forming your opinion involving

the crossing safety issues at Hickox? 1 2 Α. I did use computer programs when we were 3 filing -- contemplating filing the petition for closure, 4 so desktop applications, Excel and MapQuest and those. And do those programs involve safety analysis 5 Q. prediction models? 6 7 Α. They were -- no. 8 Ο. Did you use any hazard index or accident prediction formula before forming your opinion on the 9 10 safety issues on Hickox Road? 11 Α. No, I did not. 12 ο. Did you examine the surrounding street system 13 before forming your opinion? 14 Α. I did. 15 ο. Can you describe for me the street system 16 background? 17 I believe Dike Road runs parallel to the Α. dike, which is located to the west. I would have to 18 refer to the photograph. I did drive -- I believe I was 19 on Dike Road this morning driving that. I would have to 20 21 look at the map and see if that is -- Dike Road is 22 depicted on that map as I remember it. 23 And is Dike Road a road that would connect Q. with Hickox Road? 24 25 I believe Dike Road does connect with Hickox. Α.

1	JUDGE TOREM: Let me ask very quickly,
2	Mr. MacDonald, will you pull that microphone a little
3	bit closer.
4	THE WITNESS: Yes, sir.
5	BY MR. ROGERSON:
6	Q. Did you visit Dike Road, did you visit the
7	site?
8	A. Yes, I drove down Hickox Road this morning
9	down to Dike Road.
10	Q. Did you visit Britt Road?
11	A. I did not turn down Britt Road this morning.
12	Q. And the Dike Road you testified that you
13	visited this morning, did you visit Dike Road before
14	forming your opinion on October?
15	A. Yes.
16	Q. Blackburn Road?
17	A. Yes.
18	Q. Stackpole?
19	A. Yes.
20	Q. Would you agree that in the event of closure
21	of the Hickox Crossing that traffic currently using that
22	crossing would be diverted to other crossings nearby?
23	A. If there is no crossing and they need to
24	cross, they will go to another crossing, yes.
25	Q. And that would be Stackpole crossing to the

1 south? That is correct. 2 Α. 3 Q. Blackburn crossing to the north? 4 That is my understanding, correct. Α. Will it stand to reason that this would 5 ο. necessarily entail that the roads that would allow you б to travel to those crossings would be roads that would 7 be used to divert that traffic? For example, if one 8 9 person were not allowed to cross Hickox Road crossing, 10 they would either have to use Britt Road and Dike Road 11 to reach Blackburn or another road to reach Stackpole? 12 Α. That is a route, yes. 13 Q. Are there any other routes? 14 Α. I don't know, I would have to look at the 15 map, I would have to -- I'm not sure how far Dike Road 16 runs to the north. 17 Did you evaluate those routes before forming Ο. your opinion on October? 18 I did drive those routes, yes. 19 Α. 20 ο. Do you know what type of vehicles currently 21 use the Hickox Road crossing which would be diverted? 22 It's open for public use, so anything that Α. 23 would be legal in the state of Washington would be my 24 assumption. 25 What activities surround the area? Ο.

1 It's a farming -- it appears to be farming. Α. 2 Ο. So stand to reason that farm equipment would 3 be diverted? 4 If it used the crossing and the crossing was Α. closed, yes, sir. 5 6 Did you evaluate whether or not farm Q. equipment uses the crossing? 7 8 Α. I did not. 9 Large trucks, did you evaluate the frequency Q. 10 of large trucks and their use of the crossing? 11 Α. I did not. 12 Ο. Where is the nearest school located in 13 relation to Hickox Crossing? 14 Α. I did not look at the schools. That was done 15 by our manager of public projects. I did follow the 16 school bus this morning, so I'm assuming that is a school route out on Dike Road, or that was where I 17 18 believe I caught up to the school bus. So the school bus that you observed was 19 Q. 20 traveling Dike Road? 21 Α. It was traveling north. It did not go down 22 -- north on Dike Road, so I believe it was right in that 23 area that I observed a school bus. So if a school was presented over there and 24 Ο. 25 this was a route for that school, would it stand to

1 reason that it would most likely take the Britt Road to 2 reach that school?

3 A. If that's the route that the school district4 has determined, yes.

Would you agree that diverting tractors, 5 ο. large trucks, and farming equipment to routes that б include school bus routes could cause a hazard? 7 8 Α. If the streets -- the -- I'm struggling with 9 the answer to that question. It's a general question 10 that I -- I don't think I can sufficiently answer for 11 you, sir.

12 ο. If a school bus was to drop off and pick up 13 children and that same route was being used by large 14 farming equipment, for example tractors or three axle 15 trucks, could that potentially cause a safety hazard? 16 A school bus that picks up children at any Α. location in my opinion has that potential, that's why 17 18 they have all the extra warning devices on a school bus. 19 Would that hazard be increased by the type of Q. 20 vehicle used to travel a route, for example trucks and 21 tractors?

A. That would be for the school district, not me, sir. I wouldn't -- I don't want to guess at what the school district considers their safety threshold for students.

1 Isn't it true that you're diverting traffic Ο. in the event of closure of Hickox Road by these routes? 2 We would divert traffic, that is correct. If 3 Α. 4 the crossing is closed, they will -- and they have to get to the other side, they will take a different route. 5 And in fact, the farm tractors that commonly 6 ο. use Hickox Road would have to find another route, isn't 7 that right? 8 9 Whatever vehicles would currently use Hickox Α. 10 Road would have to use another route, yes, sir. 11 Ο. Have you reviewed any data from Skagit County 12 Medical in regarding dispatches to the area? 13 Α. I'm trying to remember which exhibits I 14 reviewed, I do not recall at this time. 15 Q. And did you review any data prior to forming 16 your opinion? Not from Skagit County. 17 Α. 18 Q. Mount Vernon Police Department? 19 Α. No. 20 Q. County Sheriff? 21 Α. No. 22 Mount Vernon Fire Department? Q. 23 Α. No. Fire District Number 3? 24 ο.

25 A. I believe there was information that was

provided during the course of the State's traffic study 1 that was part of what we reviewed, I reviewed prior to 2 3 October 15th, so if that was included in that. I know 4 there were discussions between folks, individuals at WSDOT and the preparer of that study. So if that 5 information was included, then yes, I would have 6 reviewed that as part of that. 7 Is that information part of the basis of your 8 Ο. 9 opinion? 10 Α. The discussions that were generated as 11 development of that information, yes. 12 ο. And that information in the traffic study 13 that you referred to, the Washington Department of 14 Transportation traffic study, was that the study? 15 Α. That is correct. 16 Does that study include information on the ο. frequency that Hickox Crossing is used by emergency 17 responders? 18 I would have to -- I did not author the 19 Δ 20 study, so I can't recall all the information that's 21 included in it. I would have to review it. 22 And did you use data involving frequency of Ο. 23 use of that crossing in forming your opinion on whether or not it is in the public safety to close that 24 25 crossing?

1	A. We when reviewing the traffic study, the
2	times for response times were reviewed. Frequency, I do
3	not recall excuse me. I do not recall if the
4	frequency times were considered as part of that
5	information. I know that there was an extensive
6	discussion about response times, response areas, and
7	where the responses would be coming from or could be
8	coming from.
9	Q. Would you agree that there's a difference
10	between time delay and the amount or volumes used at a
11	crossing?
12	A. I would ask for clarification on that.
13	Q. If a crossing is used in terms of frequency
14	it would be the volume of trips across a certain
15	crossing; is that right?
16	Does the term frequency mean the amount of
17	travel or the amount used of a certain crossing?
18	A. Frequency my understanding is how often would
19	be a simple way to state that.
20	Q. Sure. And is there a distinction between how
21	often a crossing is used versus delay that would be
22	presented if you did use or you did not use it?
23	A. I'm having frequency of use and the amount
24	of delay, I guess I have to ask for clarification on
25	that.

1 Q. Are those two different items, two different 2 ideas? 3 A. Delay is one concept and frequency would be 4 another. 5 MR. SCARP: Your Honor, may I give the witness some water? 6 7 JUDGE TOREM: Certainly you can give him some 8 water. 9 MR. SCARP: I just realized that he didn't 10 have any. 11 THE WITNESS: Thank you. 12 BY MR. ROGERSON: 13 Q. Mr. MacDonald, did you review any data 14 regarding flooding and the history of flooding in the 15 area before forming your opinion on October? 16 Α. I was familiar with the flooding issues based on other issues that we were dealing with with Skagit 17 County at the time. 18 Q. What data did you review? 19 20 Α. The data would have been relevant to the 21 WSDOT I-5 bridge project for the Skagit River Bridge, so 22 the flooding in those areas I believe to be west. 23 Did you review any --Q. 24 Α. East. Q. Did you review any data from the Army Corps 25

1 of Engineering?

2 A. That information would have been part of that3 study for that part of the county.

4 Q. What study are you referring to?

5 A. The WSDOT study that was performed for the6 Skagit River Bridge.

7 Q. Does that data include the frequency of8 flooding in the area?

9 A. I believe it did. It showed -- it had photos 10 and a description of the frequency of flooding in that 11 area, whether or not it was at this location or it was 12 considered that far south.

Q. Does your prefiled testimony include as part of the criteria of your opinion on the safety issues involving Hickox Road an evaluation of the likelihood of flooding in the area?

17 A. Where there was a dike, the consideration for18 flooding if the dike broke would be there, correct.

19 Q. In your opinion, how likely would it be that 20 that area would flood?

A. I'm not a hydrologist nor am I -- I guess I'm
not the right person to answer that.

Q. So were you able to evaluate the likelihoodof flooding in the area?

25 A. I did not evaluate -- I guess I need to

clarify. I work for the railway, I dealt with the 1 crossing safety issue, I didn't deal with the flooding 2 3 issue that would or would not be there depending on the 4 dike or what the issues associated with the dike would be. 5 6 Do you know if the levee system in that area Q. is certified? 7 A. I do not, I don't work for the diking 8 9 district. 10 ο. Are you aware of what level of protection 11 such a levee certificate provides? 12 Α. If there is a formal level of protection for 13 levees, I am not aware of it. 14 Q. Are you aware that there is a floodplain in 15 the area? 16 Α. I am aware that it is -- there is a floodplain. 17 Mr. MacDonald, to the best of your knowledge 18 Ο. is it true that accidents involving trains in railroad 19 20 operations are required to be reported to the federal 21 government? 22 A. Accidents involving trains are required to be 23 reported to the federal government, that's your 24 question, sir? 25 Q. That is correct.

1 I believe there is a monetary threshold Α. 2 associated with that, but yes, that is my understanding. 3 Ο. And pursuant to that mandate, is it true that 4 the Federal Railroad Administration and the Department of Transportation maintain accident information? 5 I believe the FRA does maintain records of 6 Α. that, but that would be a question -- that's to my 7 8 understanding, yes. 9 And that would include information for Ο. 10 crossings in Skaqit County? 11 Α. That would -- if the FRA is keeping it, I 12 assume it would go for the entire United States, 13 correct. 14 Q. Did you review any Federal Department of 15 Transportation accident data for Hickox Crossing? I did review it as part of what was provided 16 Α. as the response or answer to our questions I believe is 17 18 where it was provided. And when did you review that? 19 Ο. 20 Α. It would have been in the last couple of 21 weeks, and I also reviewed it again this morning. 22 So it would be fair to say that you did not Q. 23 review that and it was not the basis of your testimony filed in October? 24 No, that would have been related to our 25 Α.

manager of public projects to do that research. 1 2 Did you review any accident data maintained Ο. 3 by the Department of Transportation or Federal Railroad 4 Administration for any other crossings in Skagit County? I did not. That again would have fallen to 5 Α. 6 our manager of public projects who filed the petition. 7 Q. So it's fair to say that it's not a part of 8 your opinion? 9 No, my opinion may or --Α. 10 Ο. I will rephrase. 11 Α. -- may or may not include my understanding to 12 date. 13 Q. Did you review any of that data as a basis 14 for your opinion on October? 15 Α. It was not -- I was aware of in October. I 16 believe we may have had discussions that indicated there 17 had been no collisions at Hickox, so that data may or 18 may not have led to part of that discussion. So I can't answer your question, I don't want to give you a yes or 19 20 no, it would be incorrect, sir. 21 ο. You filed an opinion saying that for all 22 intents and purposes if the siding track is completed, 23 it is your opinion that it would be in the interest of 24 public safety to close that crossing, correct? 25 That is correct. Α.

1	Q. And in that opinion filed in October, prior
2	to forming that opinion, did you review any of the
3	accident data maintained by the Federal Railroad
4	Administration as a basis of that opinion?
5	A. I do not recall reviewing the data directly.
6	Q. Are you aware that the Federal Railway
7	Administration maintains data from which accident
8	probability for railroad crossings can be evaluated?
9	A. Yes.
10	Q. Do you review any such data when planning
11	this project?
12	A. When I became manager, the project was
13	already planned, and therefore it was already my job
14	was to deliver the project.
15	Q. Did you review any such data before forming
16	your opinion on October 15th?
17	A. To clarify your question, sir, the accident
18	prediction data?
19	Q. Correct.
20	A. I did not.
21	Q. Is it fair to say your written testimony
22	reflects general concerns about vehicle drivers ignoring
23	or evading rail crossing warning equipment?
24	A. That is correct.
25	Q. Do you have any data that would apply to this

specific project and this specific type of crossing
 related to vehicle drivers ignoring or evading crossing
 warning equipment?

4 The general -- I guess the hypothetical Α. question is double track or siding with a crossing in 5 it, is that your question or just in general? If the 6 7 answer -- if the question is do I believe that having a siding that will be blocked for an extended period of 8 9 time would create traffic safety issues, yes, I believe 10 that. Do I have data to support that, my experience 11 says yes, drivers become frustrated with extended 12 periods of down crossing gates and tend to make 13 decisions that either at their next crossing they may 14 attempt to beat the train because they don't want to 15 wait or they don't want to do the other route. 16 Did you present in your prefiled testimony Ο.

17 statistical data on the probability of that event 18 occurring?

19 A. I did not. I don't know how to prepare that20 for either our system or for these crossings.

Q. Are you aware of any accident report filed
within Skagit County where that event occurred?
A. As part of our responses, there were issues
associated with I believe there was a train vehicle

25 collision, one if I recall correctly from the data, I

would have to refer back to the data, in Skagit County,
 and it was reflected there. However, my -- the rest of
 the data also indicated it was not at Hickox, Blackburn,
 or Stackpole.

5 Q. Do you have any data that indicates the fire 6 district vehicles will be likely to ignore warnings at 7 railroad crossings?

8 A. Do I have any data, there have -- do I have 9 -- I guess you would have to define data, do I have --10 Q. Statistics, information, evidence that would 11 make it more likely than not that that conclusion that 12 this is going to occur would happen.

A. I can't answer for what the fire departmentwould or would not do, sir.

15 Q. Your written testimony cites to the Railroad 16 Highway Grade Crossing Handbook as an authoritative 17 reference or -- let me rephrase.

18 There is written testimony presented by
19 Burlington Northern Santa Fe witnesses that cites to a
20 Railroad Highway Grade Crossing Handbook as an
21 authoritative reference; would you agree with that
22 statement?
23 A. An authoritative reference is still a

24 reference, so if you're -- if it's a guidance document, 25 then yes, I believe it would be a guidance document that

1 we use in the industry, yes.

2 Would you consider that commonly relied on Ο. 3 treatise or material used to guide you in determining 4 safety issues regarding railroad crossings? I believe the purpose of that handbook in the 5 Α. 6 second revision was to provide general practitioners 7 with general information that then would be used in the 8 determination during diagnostic or other information. 9 So it is of general nature for general circumstances to 10 provide general information about what could or could 11 not be done adjacent to highways is my understanding of 12 what it is to be used for. 13 Q. Have you read that handbook? 14 Α. I have read portions of that handbook. I 15 also participated in a review of it. 16 Are you aware what the handbook states about ο. closing railroad crossings that are frequently used by 17 18 emergency equipment? I would have to go back and review what it 19 Α. 20 says, but there were several lists for closures and 21 issues and considerations and counties and cities and 22 municipalities and political issues, it listed numerous 23 items on it, sir. Is one of those items the frequency of use of 24 ο. a crossing by emergency equipment? 25

A. I would have to refer to the lists involved,
 I don't want to speculate on if it is or is not in that
 list, sir.

Q. Would you agree that frequency of a
crossing's use by emergency equipment would be a
consideration on whether or not that crossing should
remain open?

8 A. I would consider the use by emergency
9 personnel in whether or not the crossing should be
10 closed, correct.

11 Q. I believe you briefly testified and again 12 stated that part of your job duty was delivery of the 13 capital construction program related to the siding 14 project, was that right?

A. I'm responsible for delivering our capital
programs constructionwise when they occur, and this
falls into the larger category of my duties, yes.

Q. Has project design completed at this time?
A. To the best of my knowledge we are at 100%
design with the plan to date, that is correct.

Q. And how long has that been completed?
A. I believe it's been completed, I would have
to check with the project engineer, but I believe it's
been completed for several months now.

25 Q. Your written testimony filed on pages 4 and 5

states that keeping the siding open would mean you would 1 2 have to redesign the project and conduct further 3 evaluations, and you listed five different work tasks. 4 Do you recall that testimony? 5 I could review my testimony. I did recall it Α. 6 said it would be -- I remember one of the issues was 7 walkways was one of those issues that I highlighted. If you picked out five, then I could --8 9 You would agree that redesigning of the Ο. 10 siding for a train walkway would be one? 11 Α. That is an issue we need to address if we 12 were going to -- if we were required to split the 13 crossing, that is correct. It's a safety issue. 14 Q. You would have to adjust train scheduling and 15 personnel issues as well? 16 Train scheduling and personnel issues? Α. 17 If you were to keep the siding open? Ο. 18 I don't recall using those words in my Α. testimony, so I guess I would have to ask how --19 Would you agree that if you kept the siding 20 ο. 21 open that this could cause an issue with train 22 scheduling? 23 It depends on the use of the crossing. If Α. the crossing was left open and we were not to block the 24 crossing, then yes, that would create an issue. 25

You would also have to evaluate right of way 1 Ο. issues with the City of Mount Vernon; is that right? 2 3 Α. We have right of way issues, I'm not certain 4 that the City of Mount Vernon is the property holder. I believe there are two separate parcels to the south and 5 6 upwards of five parcels to the north that we are looking 7 at property acquisition for this project. As a project manager of sorts for this siding 8 Ο. project and other projects, have you been through 9 10 condemnation processes? 11 Α. Fortunately I have not. 12 ο. Is it your understanding that the railroad 13 has the power of getting that done? 14 Α. Yes, I'm certain we do in Washington. 15 To redesign the project to keep the siding ο. 16 open, is it your testimony that you would have to budget additional surface maintenance? 17 Budget addition -- that would be -- the 18 Α. company would, sir. If we kept the crossing open, would 19 20 you have to maintain it? Yes, it's a requirement under 21 state -- I believe it's state code to maintain the 22 crossing surface and the warning devices under federal 23 law. So yes, there would be a cost associated, an 24 additional cost, if there was a second track, there would be maintenance for a second set of panels as well 25

as I believe we're responsible for the asphalt surface
 between the crossing and the tracks. That's something
 the UTC I'm sure can verify for me.

Q. You previously testified that you would have
to evaluate grade approaches consistent with approved
land use activities; is that right as well?

7 That is correct. There is a construction in Α. 8 the corner of Mount -- of Hickox Road. I believe it's a 9 sewage or a storm water detention pond. And part of 10 their plan that was sent to us under separate cover that 11 dealt with their issues separate from this one, they 12 showed roadway improvements on Hickox Road, and I was 13 aware of that. And that was the issue if you put a 14 second track in, the approach grades have to still meet 15 the AASHTO requirements. Well, the UTC would tell us 16 what the grades would have to be, but the AASHTO requirements for those approach grades would have to 17 18 work with the crossing the second track and the roadway 19 system.

20 Q. Have you done any of these things to date?21 A. We have not.

Q. Those five previous factors that we just walked through, would you agree that these factors are operational issues?

25 A. No. There's an engineering issue, there's a

-- we talked about a real estate issue, there's a safety 1 issue associated with the approach grades. The 2 3 operating issue would be if there was some sort of -- if 4 we had to cut the trains, there would be an issue there with train crew times as well as if we can't use the 5 siding, the meets and passes that would be planned for 6 7 the division would not be able to meet and pass at that 8 location.

9 Q. Redesigning of the siding of the trainman's 10 walkway would be at further cost to the project; is that 11 right?

A. Correct. If there's additional walkway or road bed or ballast or subballast that would have to be associated, all those things would -- well, not the ballast, the subballast and the road bed potentially would have to be widened to accommodate that.

Q. Addressing, evaluating, and potentially
acquiring additional right of way would be an additional
cost to the project; is that right?

A. If it is -- I guess I would have to be careful, I don't want to step out of line. If the costs for the crossing closure can be apportioned so if it's tied into that process then I would -- if it's just -- I don't want to overstep and say yes or no to that, because I guess the UTC reserves the right to apportion

the costs of the closure. So if it's viewed as part of 1 2 the closure, then that would be one issue. If it's 3 viewed as not part of the closure, just a straight 4 construction project, then correct, it would be an additional cost to the project. 5 Additional surface maintenance cost more? 6 ο. 7 Α. Would be an operating cost to the company, 8 that is correct. 9 Have you planned for turnarounds east of the Ο. 10 Hickox Crossing? 11 Α. I would have to review the design plans on 12 that. We would have to have a turnaround -- if we cul 13 de sac it, it would have to be cul de sac. The exact 14 design of that, I can't recall at the time whether it be 15 a hammerhead or a turnaround. 16 Are you aware that you have designed for that Ο. or not, yes or no? 17 I can't recall at this time what the design 18 Α. plans show for the turnaround, but we would have to 19 20 design for it. Whether it's in the plans or not, to the 21 best of my knowledge the reality is if we close the 22 crossing, we would have to have a turnaround location at 23 those locations. I don't see any other way to do that 24 and have it work for transportation. Q. And it's your understanding that those 25
1 turnarounds would have to be designed for regardless of 2 the closure occurring. In the event the closure occurs 3 -- let me rephrase.

4 Right, if you close the road, you have to Α. provide the motoring public with a way to turn around 5 when they get there. If you provide signs and they б 7 still get there in error or if the individuals that 8 currently live on Hickox Road were to come down and need 9 to turn around, they didn't want to make a left turn out 10 of their driveway, they wanted to make a right turn, go 11 down, turn around, and come back, you would have to have 12 some mechanism for them to do so safely.

13 Q. Have you evaluated whether or not turnarounds 14 would be necessary in any place other than immediately 15 east and west of the crossing?

16 I did see that one of the Staff exhibits I Α. believe showed a turnaround area or what I thought was a 17 18 turnaround area, I don't know if it was Staff or -- one 19 of the responses showed a white area that I believe was 20 a turnaround and then again up at Hickox Road and, well, 21 I guess Old 99, there was another area that looked like 22 someone had penciled in potentially another turnaround 23 location.

Q. Was that a Burlington Northern Santa Fe sketch that you reviewed?

I don't recall the sketch for that. I do not 1 Α. -- I recall the sketch, I shouldn't -- I recall the 2 3 sketch, I don't know who generated the sketch on that at the top of my -- at this time. I could -- we could 4 review and find out. It was a document that was 5 provided as part of this proceeding. б Q. 7 Are you aware of any planning for the siding 8 project that includes turnarounds beyond immediately east and west of Hickox Road under your authority? 9

10 A. Under our -- to the best of my knowledge, no,
11 it would just be at the terminus of the roadway at the
12 railroad tracks.

13 Q. Have you planned as a part of your design for 14 the siding projects any construction of improved or 15 updated traffic control devices at the Stackpole 16 Crossing?

A. I believe the petition stated that it would
be upgraded, however, that has to be tempered with the
UTC's authority under which we would have to proceed
with any of those proposed upgrades.

Q. So you haven't planned for any at this point?
A. No, that's -- I did not say that. I believe
it was planned that the petition states -- Your Honor,
may I look at the -- I believe I have a copy of it.

25 I believe I'm looking at the correct one, it

says, as part of the crossing closure plan, petitioner
 also provides, probably the wrong word, to signalize the
 passive crossing at Stackpole Road. That probably
 should be proposed.

5 Q. And has that been designed for as part of 6 this project?

7 It would not be -- it is designed for -- the Α. 8 signal engineering is -- would -- no, to the best of my 9 knowledge we haven't done the signal engineering that 10 would be required again because it would be the result 11 of a diagnostic. We're proposing that as part of this 12 plan, of the closure plan, however it would have to be a 13 diagnostic team consisting of the road authorities, the 14 UTC, and ourselves to go out and determine what devices 15 would actually be needed.

16 Q. Does the proposal include any improvements to 17 the Blackburn Crossing?

18 A. To the best of my knowledge, no.

19 Q. Is it fair to say that your prefiled 20 testimony focuses largely regarding concerns of vehicle 21 drivers ignoring rail crossing warning equipment at 22 Hickox Road in the event the siding project is 23 constructed?

A. My concern is that there would be a collisionbetween a vehicle and a train, whether it be through

their ignoring the crossing warning devices, driving 1 2 through them, driving around them at the crossing, or a 3 pedestrian issue with a stopped train, someone climbing 4 through the train and either having the train start or having the train on the second track. My concern is I 5 6 guess focused more on broader on the crossing safety issue with an open crossing in the middle of the siding 7 8 that will potentially be blocked for extended periods of 9 time.

10 Q. And it's fair to say that those safety issues 11 give rise in the event a second track is constructed on 12 the crossing?

A. If the siding track is constructed as proposed, those safety issues would be present, that is correct. So not any second track, if it was a second main line track that was used for operation at timetable speeds, then it would be like any other crossing that has two tracks.

19 Q. And as they currently exist today, Hickox20 Crossing is how many tracks?

21 A. It is a single track.

Q. As part of forming the basis of your opinion,
did you evaluate the elevations of the levee immediately
west of the crossing?

25 A. I did not consider the levees east of the

0317	
1	crossing, the elevation of the levee.
2	Q. West of the crossing.
3	A. No.
4	Q. Are you aware that the levee is raised higher
5	than the land between the crossing such as levees are
б	want to do?
7	A. If you're asking does the levee hold back the
8	river, I hope so, yes, sir.
9	Q. And it's the earthen levee which is higher
10	than the ground below it?
11	A. I did not go up and physically verify the
12	water elevation, but I did see where the road from
13	driving this morning.
14	Q. Would it be fair to say that the railroad
15	main line is at a higher elevation than the land to the
16	west of it?
17	A. That is correct, I believe we are up on the
18	hill, yes, we're on the hill.
19	Q. And as the basis of forming your opinion, did
20	you address or factor whether or not in the event of
21	levee failure water releasing from the levees would have
22	a tendency to pool between those two elevated areas?
23	A. It is my understanding that the BNSF's track
24	structure does function as a second levee from
25	discussions that we had today. Did I consider that

before or after, I can't recall, sir. 1 Q. Did you consider that before forming your 2 3 opinion on October? 4 That's what I just, sorry, that's what I was Α. trying to answer. We had that discussion about the 5 flooding potential, and I can't recall if it was before 6 or after the -- when I filed the testimony. 7 Q. Okay. And did you evaluate any data that 8 9 would indicate a likelihood of that event ever 10 occurring? 11 A. I did not evaluate the levees as part of my 12 testimony. 13 Q. Flooding history? 14 A. At this location to the best of my knowledge, 15 no. 16 MR. ROGERSON: Nothing further at this time, Your Honor. 17 18 JUDGE TOREM: Mr. Thompson, are you ready? 19 MR. THOMPSON: Yes, I am. 20 21 C R O S S - E X A M I N A T I O N 22 BY MR. THOMPSON: 23 Good morning, Mr. MacDonald. Q. 24 A. Good morning. 25 Q. I'm Jon Thompson, I'm the lawyer for the

Commission Staff. I understand you worked for the 1 2 Oregon DOT probably in a similar position to what the 3 Commission Staff does in Washington? 4 That is correct. Α. I wanted to talk with you first just a little 5 ο. bit about the video stills that --6 Α. 7 Yes. 8 Ο. -- you were discussing earlier, and I think that there are three sets; is that correct? 9 10 Α. I have two. 11 Ο. Two sets, okay, so 3-A and 3-B? 12 Α. That's what I have marked. 13 Q. Okay. Just some general questions about 14 those. It sounded as if in both of those the -- what 15 sort of -- well, what sorts of warning devices were in 16 place at those crossings in those videos? 17 The one in Colorado that was 3-A, I believe Α. 18 that's in Colorado, appears to have gates, flashing lights and gates. And the one 3-B I believe 19 20 Ms. McIntyre is going to testify to that, I don't think 21 I ever stated my opinion. I can see cantilevers, but in 22 California I would assume that would be flashing lights 23 and gates and cantilevers would be an assumption, but I 24 haven't -- I can see the flashing lights and gates that 25 are on photo 17:04:37 shows a flashing light and gate

1 and a cantilever.

Q. And in both instances what's occurring is that the motorists are driving around a 2-quad gate; is that right?

5 A. That is correct from what -- from what the 6 video showed, that is correct, they're driving around 7 the gate.

8 Q. So in other words, the gates in both 9 instances just cover the right-hand side of the road 10 from the approach?

11 A. Correct, they cover -- it appears they cover12 the approach lane.

Q. So that allows the motorist that's sitting there at the stop line if they think that the coast is clear so to speak that they would drive out into the left-hand lane, oncoming lane, and make I think you said a serpentine motion around the gate and then back into their lane so they don't run into the gate on the other approach?

A. I don't know that it would be the person sitting at the gate that would do it. Typically from what data is published it's the second or third car just because the distance it takes to get out around the gate arm. So if the person could back up and then make the movement, that would work. But if they were already in

at the stop bars, typically I believe in California it's 1 2 8 feet from the gate to the stop bar, so you wouldn't 3 have enough room, if that makes sense, sir. 4 Are there safety devices that are designed to Q. prevent that kind of driver behavior from happening? 5 6 Prevent, I would say no. Discourage, yes. Α. 7 Q. Okay, and those would be -- would 4-quad 8 gates be a type of device that's designed to do that? 9 Correct, my understanding of the 4 quadrant Α. 10 gates is they were designed for higher speed Amtrak 11 service on the Northeast corridor for crossings that 12 could not be eliminated and they wanted some assurance 13 for protection. So that is correct, they would be 14 something for main line movement to prohibit, excuse me, 15 discourage someone from going through the gates or 16 around the first gate. 17 Ο. Is a median barrier another way of addressing 18 the problem? It is. 19 Α. 20 ο. Okay. And how are those generally -- can you 21 describe how those are designed? 22 Actually I would refer to the quiet zone Α. 23 regulation, 49 CFR 222. They list in there as part of a 24 quiet zone what a median barrier would be and how it --

25 how far it would have to extend and what the

requirements for a median are. So I would defer to 1 2 that, because I don't know that there's any set standard 3 on what a median is elsewhere public. 4 Okay, but the idea there is that generally as Q. the motorists are sitting there waiting, they're unable 5 6 to drive out into the left-hand lane and get around the 7 gate? I would say they're discouraged. 8 Α. 9 Okay, but it's --Q. 10 Α. Because most of the -- the only reason I say 11 that is I have seen locations where the tire marks 12 indicate someone did not want to sit there, so they did 13 go over the top of the median that was provided. So 14 again, it falls in the same category to discourage, not 15 prevent. 16 ο. Okay, but there are mountable and unmountable barriers, right? 17 There are -- by definition there's a 18 Α. mountable curb and a non-mountable curb. In the AASHTO 19 20 I do believe is where that's located, in the AASHTO 21 Green Book for curb design. 22 Okay, but certainly if somebody's determined Ο. 23 to beat the system, they can probably do it? That's correct. 24 Α. I want to turn to do you have a copy of your 25 Ο.

testimony and the cross-exhibits in front of you? 1 2 I don't think I actually took a copy, brought Α. 3 a copy of my testimony up. 4 I will let your counsel give you one because Q. I want to just look at some of the things you said there 5 6 and ask you some questions about it. 7 Α. Okay. 8 MR. SCARP: I gave him the testimony, did you 9 want the exhibits? MR. THOMPSON: Yeah, it would be helpful 10 11 because I want to talk about cross-exhibits that have 12 been premarked as 109, 110, and 111. I won't get to 13 those for a while, but. BY MR. THOMPSON: 14 15 ο. Actually the first thing I wanted to talk 16 about though was on page 3 of your written testimony. 17 Yes, sir. Α. 18 Have you got that in front of you? Ο. I do. 19 Α. 20 Ο. And page 3, line 6, you say that construction 21 of the siding will create the situation whereby trains 22 may occupy the crossing for an extended period of time, 23 and then you talk about the tendency that I guess is illustrated by the videos showing where -- well, maybe 24 25 that's not right. You've got a tendency to try to beat

1 the train, I suppose that's when the gate is coming 2 down, right?

A. It could be either. It could be they -- the gate could be in the lowered position and they choose to go around it to beat the train, or they could attempt to beat the train before the device has become horizontal, that's correct.

8 Q. Okay. So you're talking about the fact that 9 the construction of the siding I guess creates an 10 additional hazard at that crossing were it to remain 11 open; is that fair?

A. It would create safety issues -- were it to remain open, the safety issues would exist, that is correct. If the crossing -- if the siding is constructed and the crossing was to remain open, those safety issues would exist.

Okay. And that would be -- let's assume -- I 17 Ο. know that there's some issue about this about whether 18 19 the railroad would be required in order to comply with 20 the Commission's blocking rule to break its train, but 21 let's set that aside and assume that that's not the 22 case. I take it you would still say that, you know, 23 assuming that a train were parked on the siding north of Hickox Road but still fairly close, if you follow me. 24

25 A. Mm-hm.

Q. That a motorist approaching from the east
 sitting there at the crossing, they might have their
 view of a southbound train blocked by that train
 standing there on the siding?

That would be correct. If there was a train 5 Α. 6 in the siding, then it would be impossible to see through the train. So if it was within the, you know, 7 8 250 feet back, you still can't see through the train. 9 Okay. And if there's no issue with breaking Ο. 10 the train again, that would likely be the problem area is when the -- well, let me put it this way. It 11 12 wouldn't be likely that there would be a train parked 13 completely to the south of Hickox Crossing on the 14 siding, would it?

A. I guess a train is -- it could be very small, so depending on how much room you have south of the crossing. I believe we have a couple thousand feet, Amtrak is only 800 feet long, so in theory there would be the potential to put Amtrak in there or short freight trains or a switch local merchandise train, so there is that potential.

Q. Okay. Well, in any event, there's still -even if there's no breaking the train, there's still some possibility of the train on the siding obscuring the view of the approaching train and confusing the

motorist into thinking they can beat the train, right? 1 2 If the devices are active is your question, Α. 3 so what you're giving me is a second train coming 4 scenario; is that correct? Correct. 5 Ο. 6 Α. I just want to make sure I'm answering your 7 question. 8 Ο. Yes, that's correct. 9 Okay, so second train coming, they see the Α. 10 train on the siding, they think it's the train on the 11 siding not Amtrak coming down the siding that you can't 12 see? 13 Q. Right. 14 Α. Okay. So yes, that is an operational 15 possibility, that is correct. 16 Okay, so that's -- it seems to me you're ο. saying that's one potential problem. I just want to get 17 18 the distinction between beating the train that you're talking about and driving around the gates. 19 20 Α. Right, well, driving around the gates would 21 be part of beating the train. If you see the large 22 lumbering freight train, driver tendency is I have 23 waited here for two hours before, I had to pull a U-turn, you could see a driver tendency to not wait. 24 25 They would say, well, I can beat it, I can accelerate

through it, I see the lights come on because there's a 1 2 delay between light activation and gate descent, so they 3 see the lights come on and they would accelerate in the 4 attempt to beat the train there. Or they're approaching, the gate's down, and they see the freight 5 train in the siding, they can say, well, that slow one's 6 7 just starting out, I can go around the gates and beat it. Those would be two possibilities, you know, two 8 9 scenarios we already discussed, sir. 10 ο. Okay, but this area where the person's just 11 rushing to try to get through the gate before it closes, 12 it seems to me that's probably a lesser problem, isn't 13 it? You've got a constant warning, right, with the 14 amount of time that it's going to take the train to 15 arrive? 16 Α. Correct. 17 Q. Let me back up. 18 The way the gate works is that there's a 19 constant warning, right? I believe at the location at Hickox Road, I 20 Α. 21 would have to defer to our signal department, my 22 understanding is it is a constant warning type device. 23 So in other words, no matter how fast the Q. 24 approaching train is going, the gate goes down a fixed 25 number of seconds before the train arrives?

That is the design, that is correct. 1 Α. 2 So the circuitry somehow gauges how fast the Ο. 3 train is going and --4 The decrease in the rate of impedance, that Α. is correct, my understanding of that. So it operates on 5 6 an electrical principle that samples how fast the train 7 is approaching by how fast the impedance of the track 8 structure changes, and then it calculates based on that. It's shortening up the circuit essentially, and that 9 10 would be -- then it would know to activate the devices. 11 ο. Okay, so let's say it's, well, what would be 12 a typical warning time then? 13 Α. I believe it's -- these are signal questions, 14 so I can give you my understanding of what a typical 15 warning time is. However, I'm not a signal maintainer 16 nor the signal manager. So my understanding is

17 approximately 35 seconds would be in the system, and 18 then you would have a warning time of 20 seconds or 25 19 seconds, so you would have time for the device to 20 understand what's going on.

Q. Okay, so if the driver's just simply trying
to get through the gate before it closes, it's basically
cutting into that constant warning time, right?
A. If the devices are already activated,

25 correct, he's into the 20 seconds or 25 seconds the

1 devices would have.

2 Right. Well, it seems to me though that ο. 3 isn't it right that the much more serious problem is the 4 driver not just racing to get through but the driver who is sitting there and getting impatient and decides, you 5 6 know, I'm going to drive around, thinking that the reason the device is activated is because of the train 7 8 that's sitting on the siding and not because of the 9 train that's approaching on the main line? 10 Α. I guess I wouldn't -- I guess I can't 11 categorize which would be worse, which collision. 12 ο. Well, I guess what I'm getting at, which one 13 is more likely to result in a collision? 14 Α. Either could result -- both have the 15 potential to result in a train-vehicle collision. Well, okay. 16 ο. I want to get a little bit with you into the 17 -- because you are talking about on page 3 here the fact 18 that the construction of the siding would create an 19 20 additional danger I guess at Hickox Crossing if it were 21 to remain open. That being the case, let's assume -- I 22 want you to think about a hypothetical to talk about the 23 question of cost apportionment, which is an issue for 24 Staff I think. Have you had a chance to review Staff's testimony on that? 25

1 A. I believe I read through Staff's testimony, 2 and there was discussion in the testimony about 3 apportionment and certain parts of the code, and there 4 was agreement, disagreement on statements that were 5 traded back and forth, so I did review that.

6 ο. Okay. Let's say there's a situation where 7 BNSF were building a siding track across an existing 8 roadway and that there were no question about the need 9 for that roadway to remain open because let's say the 10 alternative crossing just was not sufficient or that 11 there was some very compelling need to keep the crossing 12 open. In that event, would you expect that the railroad 13 would ordinarily bear the cost of any safety upgrades 14 that would be necessary to address the safety problem 15 presented by the siding?

A. My understanding is that if there was -- to put it simply, the person that initiated the project that created the issue from what I understand would be responsible for the cost of the changing of the warning devices or the other roadway approaches so that it does not impose on the other party a burden they didn't ask for.

23 Q. Okay.

Again on page 3 of your testimony, about line 13, it says the Hickox -- there's a question presented

1 to you, it says:

2 Hickox Road Crossing already has active 3 warning devices installed, gates, lights, and bells. Once the siding 4 track is extended across it, would the 5 6 current warnings be adequate? 7 I didn't really think you had a direct yes or 8 no answer to that question. I understand you're raising 9 a problem, but what is your yes or no answer to that 10 question, once the siding track is extended across it, 11 would the current warnings be adequate? 12 Α. We believe the crossing should be closed, 13 therefore I will make the next step there to say no. If 14 we thought it would, we would have said -- filed for 15 changing the warning devices, but we didn't, we filed 16 for closure, so I would say that closure is the option 17 we prefer. 18 Is there a way of addressing the safety Ο. 19 hazards you mentioned through installing warning devices 20 like 4-quadrant gates or a median barrier? 21 Α. The installation of 4-quadrant gates raises 22 issues with the gate down or the presence detection, the 23 ability of the driver to drive under the exit gate loop 24 and keep the gate in the up position, so there are some issues with that. There's also the issue of pedestrians 25

or other individuals that could be on the road, 1 2 bicyclist who gets tired of waiting while we have a 3 stack train or something else with empty cars, decides 4 to throw the bicycle on top and go across the train, so it doesn't address all of the safety issues with the 5 4-quadrant gate system. 4-quadrant gates also would be 6 if there's a siding, there's no restriction on how long 7 that train could remain there. If it was a train that 8 9 was -- had to hold for another operation somewhere, it 10 could be numerous hours, so you would have the devices 11 activated the entire time.

12

ο.

The bell would time out, right?

13 Α. Not necessarily. You could, I have seen 14 installations where the bell has what they call a bell 15 cutout, and you could time it. It has to do with when 16 the gate is in the horizontal position, it makes it so 17 that the bell is terminated. So then when the gate goes 18 back up, the bell goes again. So there are 19 installations that I am aware of where you have the gate 20 be a bell cutout.

Q. But in other words, in some instances the gates are designed in such a way that the gates would remain down and the lights would remain flashing, but the bell itself would stop ringing after say 20 seconds, something like that?

A. That's correct, when the gate's horizontal
 are the ones I have seen. They're specifically tied to
 gate location.

Q. If I have questions about the 4-quadrant
gates, are those better directed to Ms. McIntyre do you
think? She talks about them in her testimony.

A. I guess I don't know what your questions are.
8 I would be happy to entertain them, and if I believe
9 some are -- Your Honor, I guess I don't know the answer,
10 how to answer that correctly procedurally. I will
11 entertain them, and if I don't feel comfortable, I guess
12 I will just tell you that that will be better for
13 Ms. McIntyre.

Q. That's fair enough, I think her testimony addresses it more directly, so I will just save questions for that for her, but you didn't address that. A. I would be happy to answer the questions, I

18 don't want to put you off.

Well, you did address the 4-quadrant gate 19 Q. 20 issue, but what about do you have any reservations about 21 the use of an unmountable median barrier for example? 22 I do if it's -- the non-mountable would Α. 23 become an issue if you're going to talk about the farm 24 implements or something else. There's also maintenance issues with those, and if you have snow or ice they 25

would become drainage issues on those certain -- on 1 2 installations of those. So there are options for a 3 median device, but I have to -- they raise their own set 4 of fixed object concerns and roadway design concerns and clearance distance and shy distance and other roadway 5 6 geometric issues. Okay, but they do tend to address the beat 7 Ο. 8 the gate problem that you're discussing? 9 They address the going around the gate and Α. 10 the serpentine, going in the opposite lane, that is 11 correct. They're allowed for quiet zones, so that was 12 studied extensively. 13 Q. Okay, turning to a different subject now but 14 still on page 3 of your testimony, down at line 26, it's 15 the last line on page 3, the question is: 16 Is it reasonable to split trains to allow the crossing to remain open? Why 17 or why not? 18 19 And you said: 20 No, it's not reasonable to split the 21 trains for meets and passes. 22 Now if you were to assume that the Commission 23 were to agree with that, then it seems to me that would, 24 you know, in other words the Commission's blocking rule prohibits blocking a crossing for more than 10 minutes 25

1 when reasonably possible, correct?

2 I would have to review the exact -- that is Α. 3 my recollection of what the terminology is in it. 4 Okay. And if it's -- in other words, if the Q. Commission were to agree with you in applying its 5 6 blocking rule at this location that it's unreasonable to 7 split the train for meets and passes, then doesn't that largely if not completely take care of your operational 8 9 concerns about the impacts, you know, if the crossing 10 were to remain open, you know, you have these concerns 11 about impact on operations? 12 Α. Right, if the crossing -- if there was no 13 restriction to the use of the crossing, you could park 14 your train there for seven days in a row, then 15 operationally it would be like any other siding. I 16 believe that's what your question is? 17 Q. Right. 18 That would be correct, you could park a train Α. 19 on it. 20 Ο. Could you take a look at what's marked as 21 Cross-Exhibit 111, do you have that in front of you? 22 I do now. Α. 23 Okay. And you actually aren't listed as the Q. witness on this, but it seems closely related to a 24 couple other questions that you were listed as the 25

1 witness on. Are you familiar with this one?

A. I have read this.

3 Ο. Okay. This was a data request that Staff 4 sent to BNSF, and we're asking there whether BNSF owns or operates any siding tracks in Washington that are 5 6 crossed at grade by a public roadway and then whether at 7 those locations BNSF breaks its trains to comply with 8 the Commission's blocking rule. And then further, I 9 guess it's a multipart question, and then further 10 whether you regard it as reasonably possible to comply 11 with the Commission's rule if it's necessary to break 12 the train under those circumstances. And then down 13 below you indicate that or BNSF indicates that there are 14 approximately 80 siding tracks in Washington with an 15 average of 1 crossing, public or private, per siding 16 track; is that right?

A. That is correct, we discussed this, the data
that would be associated with the response to this, that
is correct.

20 Q. Okay.

21 A. To the best of my knowledge.

Q. So it sounds like it's not uncommon for there to be a crossing within a siding track within Washington state, right?

25 A. That would be -- I guess I don't want to say

0336

yes to that without understanding public crossing, 1 private crossing, where it's located in the crossing. 2 3 So if it averages out that way by the numbers, that may 4 be, but it may also be that it's based on it's an overhead crossing. I don't know that the statement 5 6 would differentiate -- does it say at grade? 7 Q. Well, the question does say crossed at grade 8 by a public --9 Crossed at grade, okay. So there are Α. 10 numerous that have a crossing in them, and there are 11 numerous that have none, so you may have one that has 12 four, you may have one that has none. 13 Q. Okay. But, well, it's certainly not unheard 14 of that there would be a public grade crossing in some 15 portion of a siding? 16 Α. Correct, Blackburn is an example of that today. 17 Okay. And it sounds as if where those do 18 Ο. 19 exist, the BNSF, given your answer here if I'm reading 20 this correctly, and you can correct me if I'm wrong, 21 that BNSF, you know, has taken the position that it 22 isn't reasonably possible to break the train and comply 23 with the Commission's blocking rule in those 24 circumstances? Right, I guess I have to -- I will clarify. 25 Α.

The siding length and the siding location would have a 1 2 large part whether or not those -- the purpose and use 3 of the siding would have a large impact on whether or 4 not those crossings are or are not operationally make it so you couldn't fit an 8,000 foot train in there. If 5 you have a siding track that we have in numerous 6 7 locations where it's there because you want to get off 8 the main line and serve an industry, you're only going 9 to serve it with 10 cars, whether or not there's a 10 crossing 5,000 feet apart in that siding on both ends 11 wouldn't have an impact to how that siding is supposed 12 to be used. So the intended use of the siding also has 13 large -- plays into whether or not those crossings are 14 or are not an issue by their use in how they're going to 15 -- we're going to do it.

In this case if you leave Hickox open with a train parked there for an extended period of time, that would be an issue from what we're seeing. But if you had a separate location 5,000 foot with an industry in the middle and you just needed to be able to pull the local in and switch it, having 2 sidings or 2 crossings may not be an issue.

Q. Okay. So in this instance though it sounds
like if you have a train about 8,000 or longer, it's not
going to fit between Blackburn and Hickox, so it's going

to be necessary to block the Hickox Crossing were it to
 remain open?
 A. Correct. If we hold back the 50 feet from
 Blackburn, which would be the standard G core distance,
 and then we would go back 8,000 from there, I believe we

6 end up a couple thousand feet south of Hickox.

7 Q. Okay.

8 A. I can review the plan specifically, but9 that's my recollection of that.

10 Q. All right.

11 Now could I ask you to please look at what's 12 marked as Exhibit 109, and this goes to something you 13 were talking about a little earlier. There was one of 14 the statements you made in your testimony was that if 15 the crossing were to remain open, BNSF might have to 16 construct a walkway for people to walk, railroad 17 employees to walk back to make the break I guess in 18 between the cars at the Hickox Crossing. And we have a 19 data request here which we posed the question of whether 20 if BNSF were to get a waiver of that rule, it would be 21 necessary for it to still construct that kind of a 22 walkway, and, well, maybe you can just explain your 23 answer.

A. I will. If we have people on the ground that we need to provide them a safe facility to work on,

that's fundamental safety first rule. So if you have 1 2 the possibility, and I know this has come up and I guess 3 I -- let's say it's the crossing is left open as an 4 emergency access crossing, then you would still have to have those walkways. If the crossing is left open as a 5 6 public crossing, it would still have to have those 7 walkways. You can't -- we won't put people on the 8 ground intentionally where we know they're going to work 9 or have to walk like this morning in the snow. It would 10 be irresponsible for me to design the siding and then 11 not provide the train crew with a walkway that would be 12 safe for them to traverse the length of the train should 13 they need to.

14 Ο. So one of the issues is, well, that thing you 15 talked about earlier which was whether it's reasonably 16 possible to break the train to comply with the 10 minute blocking rule. If that were not an issue, it sounds 17 18 like you're saying there would still be an issue about complying with the part of the rule that says the train 19 20 has to get out of the way in the event that there's an 21 emergency vehicle sitting there with its light flashing? 22 If you could in the time frame or if there Α.

23 was a different option. I was just throwing out you -24 I didn't want to limit the discussion to say that a
25 train with walkways is only required at a public

crossing where you have to break it. If we have other 1 2 crossings that are required to be broken by other 3 agreements, and I threw out the emergency access one 4 because that's one we have issues with other places, would you have the same requirement to do so, and the 5 answer to that would be yes. So if you have people on 6 7 the ground, fundamentally people on the ground equals 8 you need to provide them the facilities. 9 Okay, but is it the existence of the crossing Ο. 10 that requires there to be people on the ground? 11 Α. It would be -- I believe the way it's phrased 12 is if you know during the course of their normal or it's 13 anticipated they could have to be there. 14 Q. Okay. But if there were no need --15 If there was no crossing at all, if the Α. 16 crossing were closed, the answer would be no. If the 17 crossing were --18 What is the thing about the crossing that Ο. would require there to be people on the ground? 19 20 Α. If they had to -- I mean if there was a 21 reason for them to have to break the train at the 22 crossing. 23 All right, fair enough. Q. 24 Let's see, so I wanted to have you look at the next one, Exhibit 110, and this was a UTC Staff data 25

request where we asked: 1 Does BNSF maintain a full trainman's 2 3 walkway at all siding tracks in 4 Washington? 5 And then it's similar that what you were just saying, depends on the circumstances. 6 7 That's correct. The answer to the question Α. was no as posed, but it would depend on what the siding 8 9 is used for, where it is, what issues are associated 10 with it. MR. THOMPSON: Very good, I think that's all 11 12 the questions I have for you. 13 Your Honor, I would move for admission of 14 Exhibits 109, 110, and 111. 15 JUDGE TOREM: Counsel, any objection to the 16 offered admission of Exhibits 109, 110, and 111? 17 MR. SCARP: None, Your Honor. 18 MR. ROGERSON: No objection. JUDGE TOREM: All right, then those three 19 20 exhibits will be admitted. 21 I anticipate there's a short need for 22 redirect. 23 MR. SCARP: Just a brief clarification, Your 24 Honor. 25 JUDGE TOREM: All right. Let me in the

interests of comfort and otherwise recommend we take a 1 2 10 minute break. It's now 11:20, come back at 11:30, 3 complete this witness, and hopefully that won't require 4 any recross but we'll see, and then we'll get Mr. Rabel on and off hopefully ahead of 12:30 so we will close for 5 6 lunch today, so we will be at recess for 10 minutes. 7 (Recess taken.) JUDGE TOREM: It's now a little after 11:30, 8 Mr. Scarp, you had some short redirect. 9 10 MR. SCARP: Briefly, Your Honor, if I may. 11 12 REDIRECT EXAMINATION 13 BY MR. SCARP: 14 0. Mr. MacDonald, you were asked questions by 15 counsel for Staff regarding the numbers of crossings 16 that there are at existing sidings, and I would like you to clarify if you can for this tribunal what you meant. 17 18 You even mentioned the name of Blackburn Road, which is 19 involved in this crossing. First of all, what did you 20 mean by that? 21 Α. Blackburn -- the crossing -- the siding that 22 we're -- that exists today is not the siding that we 23 would need for the meets and passes as anticipated for an 8,000 foot train, therefore Blackburn falls under the 24 category of it's in the siding, but you have an

0343

operational siding outside of the -- what the crossing 1 impact is to the track length, and that is accessible. 2 3 You can still build and construct and do your train 4 operations elsewhere in that siding even though there is a crossing in it. 5 б 7 EXAMINATION BY JUDGE TOREM: 8 9 So you're telling me there are today two Q. 10 tracks at Blackburn Road? 11 A. That is correct, there are two tracks at 12 Blackburn. 13 14 REDIRECT EXAMINATION 15 BY MR. SCARP: 16 Q. And why is it that that is distinguishable, if it is, from what's proposed here with regard to 17 Hickox Road? 18 Α. The purpose -- Blackburn is at the -- would 19 20 be at the end of the siding, the existing siding it is 21 as well. It wouldn't be blocked, the trains are held 22 back. The new siding is being proposed to be built to 23 the south so that no crossings are blocked, and thus Hickox would have to be closed. When the trains are 24 25 stationed or parked there, they could be there for again

extended periods of time, and that would -- that's the difference between the two. Blackburn you go through it and you're in and you're out. Hickox Road we would be parked on top of in theory or potentially for extended periods of time.

Q. Now to use counsel's term that it's not
uncommon or that if there are 80 of these in the state,
you're including crossings such as Blackburn Road which
are not intended to block, is that --

10 A. That is correct. They would be crossings 11 inside of sidings that are used for other purposes than 12 meets and passes or potentially inside a siding that's 13 used for another purpose, or the siding is so long that 14 the presence of that crossing doesn't take away from 15 what that siding could be used for.

Q. All right. And to your knowledge and having reviewed those documents and the types of sidings, do you have other circumstances where siding tracks are designed for long as you called them trains for meets and passes that would be blocked for long periods of time with a crossing in the middle?

22 A. No.

23 Q. Why is that?

A. It would take away -- you effectively closethe crossing. You create a driver expectation that the

gates are down and they're functioning but this train is going to sit here, so you create a safety issue in and of itself by doing so, so we wouldn't design for a new condition to create that.

5 Q. Let me ask you, you were also asked questions 6 by counsel for Staff about the use of 4-quadrant gates 7 at Hickox Road, and I wanted to understand your answer 8 regarding what you believe to be the propriety or lack 9 of appropriate use at Hickox Road of 4-quadrant gates if 10 the crossing was to remain open, why or why not?

11 Α. I do not believe that would be the 12 appropriate device for that given that the train could 13 occupy it for extended periods of time. Again the 14 driver expectation is gates go down, train occupies, 15 train leaves, gates go back up. If the train sits there 16 for extended periods of time with the gates down, then you create the mentality, we're almost creating our own 17 18 problem with a beat the train mentality, so they are -their intent was as a supplement to the 2-quadrant gate 19 20 system, which was to stop during the passage of a train, 21 stop vehicle traffic from crossing during the passage of 22 a train as well as stop the driver run around or the 23 person going around the first gate. So the 4-quadrant 24 gate system was to seal the crossing, not provide a long-term barricading solution for when a train is 25

1 parked there.

2 And part of the justification, the quiet zone 3 rules have methods for night time closures, and they get 4 into different specifics, and again that's the 49 CFR part 222, and it lists barricades and locking devices, 5 6 but the 4-quadrant gates are not listed in that section 7 of the rule, so they're meant -- my understanding, my 8 belief, they're meant as an adjunct to the 2-quadrant 9 gate system to address the gate run around or provide an 10 additional level of deterrence but not function as 11 essentially a closure device for a long period of time. 12 ο. And if you had -- and counsel asked you 13 questions about whether the active devices would 14 continue, and I'm asking about a circumstance whereby 15 the crossing remains opened but has active devices that 16 are there while a train is blocking for as long as that train may need to be there, whether it's an hour or two 17 18 hours, what happens with those devices? The devices would remain on in that 19 Α. 20 situation, so the bell may be cut out, but the flashing 21 lights both on the gate arm and on the masts themselves 22 would be activated in accordance with the federal

24 would be they do rely on commercial power, they do have 25 backup batteries in the bungalows, but those are of a

regulations that govern that. Another concern on that

0347

finite amount, so if you had a power outage that lasted 1 2 several days, you could have a train parked on the 3 siding with no active devices actually. They would just 4 -- they would fail in the down position, but they could be dark. So that's a concern with they are designed to 5 6 be failsafe, but they won't -- they only run as long as their batteries would run if commercial power is 7 8 terminated.

9 Q. There was a question about what vehicles will 10 do, if you are using something like cantilevered gates, 11 what do you do about backing up vehicles such as a truck 12 that might drive up there?

13 Α. Best of my knowledge there's nothing you can 14 do about that truck that would come in there. You have 15 a double -- the MUTCD shows a double yellow line, and by 16 vehicle code my understanding is you can't make a left turn over that line, or if you put a median there, they 17 18 can't jump the median. So you create a situation where 19 by creating a turnaround, you create another -- a bigger 20 safety issue with that by installing the gates and 21 closing the crossing intermittently for extended periods 22 with the train.

Q. My last question, Mr. MacDonald, pertains to
one other thing that you mentioned about emergency, and
I believe that you said something about emergency use
only, what was that about, and what was your point? 1 2 The point -- we were discussing walkways and Α. 3 the necessity for walkways, and I had mentioned that if 4 we have an emergency crossing, that discussion -- the flooding issue that -- I'm just going to make it 5 relevant to this discussion, Your Honor, if that's 6 7 acceptable -- the flooding issue with the properties 8 west of the tracks, if you had an emergency access that 9 we would have to provide that the trainmen stage the 10 train or do something with the train there, the 11 crossing's left in but it's barricaded, locked, gated, 12 has a daisy chain set of locks on it, could be 13 potentially that the trainmen would have to dismount, 14 break the train in the event of flooding and then 15 separate the train and then leave it open there. 16 Typically we would see some sort of protocol put in place for such an idea. I know it was under 17 18 walkways we were discussing, but to clarify my point 19 that it's not just left there for the fire department to

19 that it's not just left there for the fire department to 20 zoom through. It's a major emergency access that would 21 require contacting our dispatch or the resource 22 operation center, and then if it's a long-term issue, 23 then providing flag protection for the tracks, because 24 the tracks would remain live if they were still in 25 service. So if you have that sort of -- we have it

elsewhere, we have different locations where we have 1 2 agreements such as that that say the crossing is closed, 3 however you have all the provisions to allow people to 4 come back through the crossing from the head end to address that issue. 5 6 And what sort of protection is across in that Q. type of situation? 7 8 Α. Typically it would be a locking gate. 9 Q. And then would the active warning devices be 10 removed? 11 Α. It is removed, it is considered at that time 12 a private crossing, and it is subject to use by the 13 parties for the intended purpose thereof. 14 MR. SCARP: Those are all the questions I 15 have. 16 JUDGE TOREM: Mr. Rogerson, does that require any recross? 17 18 MR. ROGERSON: Very briefly, Your Honor. 19 20 RECROSS-EXAMINATION 21 BY MR. ROGERSON: 22 You just testified on redirect that the Q. 23 Blackburn crossing has two tracks. Will those tracks remain in place, the two tracks that cross Blackburn 24 25 Road, in the event the siding project is completed?

A. Yes, the siding project is intended to extend
 the crossing to the south. It did not change Blackburn
 Crossing.

Q. And will both of those tracks be used by
trains in the event a siding project is completed?
A. Yes, both tracks would be used by trains.
Q. And that would include trains being on both
tracks to the north of Blackburn crossing over Blackburn
to the south?

10 Α. From an operational standpoint, having trains 11 both north of Blackburn would create an issue. I'm not 12 positive where the signals are that would govern the 13 movement. However, if the train is stopped short of 14 Blackburn, then in order for it to proceed, it would 15 have to get a clear indication of the train in front of 16 it, so the likelihood -- we would have to do some modeling, but sitting here at this moment the likelihood 17 18 of having two trains proceeding north of Blackburn at 19 the same time or one proceeding north and one coming 20 south, my understanding of how we would operate that, I 21 don't see how we could at this point in time say that 22 would be an operational concern. They would either be 23 south of Blackburn or they would be coming on the main 24 line.

25

Q. However, you testified that the siding track

on Blackburn extending to the north and crossing over 1 Blackburn would still be utilized even though the siding 2 3 has been extended south; is that right? 4 That is correct, the existing crossover to Α. the north, or excuse me, the switch to the north would 5 6 remain in place. MR. ROGERSON: Nothing further, Your Honor. 7 8 JUDGE TOREM: Mr. Thompson. 9 MR. THOMPSON: I do have a little recross. 10 11 RECROSS-EXAMINATION 12 BY MR. THOMPSON: 13 Q. Mr. MacDonald, you mentioned on redirect that 14 there's a safety issue with the crossing being blocked 15 for a long period of time. 16 That is correct. In my opinion if you have Α. -- if it's blocked with the gates there, potential for 17 18 someone if the road's there, whether or not the person 19 sees the gates, whether or not the person drives right 20 through the gates into the side of the crossing or into 21 the side of a black tank car in the dark night or white 22 refrigerator car in the middle of a fog or snow storm, 23 if they ignore the warning device, if the road and the 24 crossing and the tracks are at the same location at the same time, that's my concern. 25

1 So the danger of motorists just running into Ο. the side of the train as it sits there? 2 3 Α. It would still exist; that is correct. 4 Isn't that diminished when you have flashing Q. lights? 5 Correct, to the point that if they obey 6 Α. those, that is correct. 7 8 Ο. Okay. 9 So again, if the gate -- if the lights are Α. 10 only as good as the power supply and the battery supply 11 thereto, so you could have them come upon parked train 12 on a dark night with no gates and lights because of 13 power failure. 14 Q. Okay. Presumably there would be, realizing 15 that that would be the scenario that would occur, long 16 periods of blocking, do you think that if the railroad 17 were required to have gates there, do you expect there 18 would be some way to address the need for longer term backup power there? 19 20 Α. That would actually fall to the FRA and the 21 railway to discuss on a signal level. I'm not -- I 22 don't know how long battery lives are, I don't know how

23 many batteries you can put in a bungalow, there's issues 24 with that that I'm not privy to to say yes or no to.

25 Q. Okay.

You referred to 49 CFR 222, the Code of 1 Federal Regulations I guess. 2 3 Α. It's the train horn rule, that's correct, it 4 was published recently. Which describes various supplemental safety 5 Q. б devices? Both supplemental and -- SSM's and ASM's, I 7 Α. 8 believe it's auxiliary safety devices or safety measures and supplemental safety measures. 9 10 ο. Okay, I just didn't understand, you mentioned 11 barricaded locking system, and I just didn't understand 12 what's the relevance of that? 13 Α. Long-term closure. When you have a crossing 14 that you know is going to be -- they use them for night 15 time quiet zone installations, you know that the road is 16 closed from 7:00 p.m. to 6:00 a.m. They don't leave the gates and lights running for that length of time and say 17 18 it's closed. They actually said you deactivate -- you locked us out and you have to have some positive 19 20 confirmation. So there's a whole separate set of rules 21 that match one scenario we have, which is the potential 22 for us to leave it there for -- leave a train there for 23 a long period of time. 24 ο. Okay.

Another issue you talked about was the I

0354

1 think it was in regard to a median barrier where you 2 said, well, sort of the idea that a median barrier 3 wouldn't be consistent with having a turnaround at the 4 crossing.

5 A. Right, that's correct, if you have one -- if 6 you have to go over the median to get to the turnaround, 7 that creates an issue. Or if you don't have the median, 8 then you still have the same issue of nothing to prevent 9 the driver from going around the gate.

Q. Would there be a way to design a turnaround, If think you mentioned a hammerhead or some way of setting the turnaround back a distance from the crossing so that a truck for example could maybe back into a Y turnaround?

15 That's a hypothetical, I guess we could look Α. 16 at the aerial photos of that and see what the engineering issues associated with that are. Off the 17 18 top of my head I would say you could probably design anything. Is it feasible to construct and does it make 19 20 sense once you start talking of the traffic, safety, 21 people in the city and the county for what their safety 22 standards are for that type of operation. So I would be 23 concerned with backing a semi blind into a hammerhead at night would be one of my -- how would we do that and 24 then make sure that the people don't come into it or 25

rear end it or they hit somebody, there's a lot of 1 issues with that. 2 3 MR. THOMPSON: Okay, that's all I have, thank 4 you. 5 MR. SCARP: If I could ask one question for 6 clarification. 7 8 REDIRECT EXAMINATION 9 BY MR. SCARP: 10 Q. When counsel for the City asked you if the 11 siding track as it crosses Blackburn would be used, what 12 is your understanding of the use of the track as it 13 crosses Blackburn, and I'm talking about the siding 14 track and farther north? 15 Α. So it would be essentially an on ramp, it 16 would be the -- it's used for the train to come into the 17 siding and decelerate or for the train once it's past 18 Blackburn to accelerate out onto the main line. MR. SCARP: Okay, that's all I have, Your 19 20 Honor. 21 JUDGE TOREM: All right, thank you, 22 Mr. MacDonald, it doesn't appear that any other counsel 23 have questions for you, so you have survived your ordeal 24 this morning. 25 Our next witness is going to be Larry Rabel,

so you can step down, sir. 1 And I understand Mr. Rabel is here. If you 2 3 can take the witness stand, Mr. Burke will make sure you 4 have any exhibits you might need. 5 MR. BURKE: Mr. Rogerson is going to be handling this witness. 6 7 JUDGE TOREM: All right, Mr. Rogerson will walk you through the adoption of your testimony and any 8 9 other exhibits. 10 (Witness LARRY RABEL was sworn.) 11 MR. ROGERSON: With Your Honor's permission. 12 JUDGE TOREM: (Nodding head.) 13 MR. ROGERSON: Thank you, Your Honor. 14 15 Whereupon, 16 LARRY RABEL, having been first duly sworn, was called as a witness 17 herein and was examined and testified as follows: 18 19 20 DIRECT EXAMINATION BY MR. ROGERSON: 21 22 Can you please state your name and spell your Q. 23 last name for the record. A. My name is Larry Rabel, last name is 24 25 R-A-B-E-L.

1 And, Mr. Rabel, what is your occupation? Ο. I am a career firefighter, currently a 2 Α. 3 captain with the City of Kent Fire in Fire District 37 4 and also a consultant. 5 And how long have you been so employed? Q. 6 Α. With City of Kent in my 18th year. Did you cause to be produced and filed 7 Q. certified on November 5th, 2007, written testimony 8 9 before the Washington Utilities and Transportation 10 Commission? 11 Α. I did, yes. 12 ο. And is that related to the Hickox Crossing 13 petition for closure by Burlington Northern Santa Fe? 14 Α. Yes, it is. 15 Q. And do you have a copy of that with you 16 today? 17 Α. I do. Q. And did you sign on November 5th under the declaration under penalty of perjury that that direct 20 written testimony was true and correct? 21 Α. I did, yes. 22 And do those answers found within this Q. written testimony remain the same today? Α. I believe so, yes. 25

18 19

23

24

MR. ROGERSON: At this point I would like to

offer into evidence I believe it's been marked Exhibit 1 2 88, the prefiled direct testimony of Larry Rabel. 3 JUDGE TOREM: And, Mr. Rogerson, are you also 4 offering at this time the supporting Exhibits 89, 90, and 91, those are a couple of graphs about response 5 time, fire growth over time, and the article entitled 6 Flashover? 7 MR. ROGERSON: The City would be willing to 8 9 offer that into evidence, however if there's an 10 objection, we can build a foundation as well. 11 JUDGE TOREM: So at this time the City is 12 offering Exhibits 88 through 91, is there any objection 13 to those four exhibits which are Mr. Rabel's prefiled 14 testimony and the three supporting exhibits? 15 MR. SCARP: I don't think so, but if I could 16 just have a second to make sure, I was trying to figure out some other exhibit numbers, sorry. With his 17 18 prefiled testimony there's no objection, and, oh, I'm sorry, and the exhibits that were attached thereto? 19 20 JUDGE TOREM: Correct. 21 MR. SCARP: I don't have any for purposes of 22 this hearing, no, I don't have any objection. 23 JUDGE TOREM: All right, thank you, so then for the record 88 which is the prefiled testimony, 89 24 which is the graph labeled in the testimony as Figure 1 25

response time about intervention and survival rates, 1 2 Exhibit 90 which is a graph regarding fire growth over 3 time and sequence of events, and also Exhibit 91 an 4 article entitled Flashover, a Firefighter's worst nightmare, are all offered and admitted at this time. 5 б Cross-examination is listed only for BNSF. Expecting, Mr. Rabel, to take about 20 minutes of your 7 time, we'll see if we can hold to that, and the 8 9 cross-examination exhibit that was identified and 10 hopefully provided to you in advance was Exhibit 121, 11 some MapQuest routing maps. 12 THE WITNESS: I have not seen the MapQuest 13 maps. 14 JUDGE TOREM: I think you're about to. 15 MR. SCARP: Actually, if I can approach, what 16 I would like to hand that has previously been marked 17 Exhibits 127 through --18 JUDGE TOREM: 128 through 135. 19 MR. SCARP: 128 through 135, a copy of which I have, and I'm not sure what we have other than these. 20 21 These are the documents provided by the fire district to 22 us, and my copy here is part of what Mr. Burke handed 23 us, so if we're able --24 JUDGE TOREM: Why don't you show those to the

25 witness.

0361 1 MR. SCARP: I will. 2 3 CROSS-EXAMINATION 4 BY MR. SCARP: 5 Mr. Rabel, have you seen the data responses Q. 6 prepared by the fire district and sent to us and provided to us on Friday? 7 8 Α. Yes, I have. 9 Okay. And have you seen the documents, the Q. 10 response -- what would you call those, by the way, and 11 they're attached as part of the exhibit, I just want to 12 make sure we get on the same page, what, for example, do 13 you call this document, how do you refer to that? 14 Α. It would be an incident report. 15 Q. Incident report, and so have you reviewed the 16 incident reports that are attached in --17 Α. I have. -- in response to Exhibit 133? 18 Q. (Nodding head.) 19 Α. 20 Q. Okay. And when did you review those incident 21 reports? 22 Late last night. Α. 23 Had you reviewed those incident reports prior Q. to late last night? 24 25 Α. No.

And had you -- obviously then you had not 1 Q. reviewed them when you prepared and signed your prefiled 2 3 testimony? 4 A. No, I -- the references in my testimony to response times was from direct communications with the 5 district's counsel or the district personnel. 6 7 Q. Okay. And when you say the district's 8 counsel, you are talking either Mr. Snure or Mr. Burke? 9 That's correct. Α. 10 Ο. And so was it Mr. Snure? 11 A. Mr. Snure. 12 Q. Okay. And then you also spoke with 13 representatives of the fire district, and from whom did 14 you obtain your information? 15 Α. I don't recall. I was -- there was a 16 transition in chiefs I think, but I'm not sure which one 17 I spoke with. 18 Chief Skrinde or, I'm sorry, I just learned Q. 19 the name --20 MR. BURKE: Chief Harman. 21 Q. -- Chief Harman, I apologize, as you sit 22 here? 23 Α. I would have to go back to my notes and figure that out, I don't remember. 24 Q. All right. 25

1 Do you have your prefiled testimony in front 2 of you? 3 Α. I do. 4 Q. Could you take a look at page 12. 5 Okay, I'm on page 12. Α. 6 All right, let me go over here to the podium Q. and I can probably organize myself a little better. 7 Mr. Rabel, at page 12 of your prefiled 8 9 testimony you have indicated that -- and by the way your 10 prefiled testimony just for the record was signed and dated on November 5 of 2007; is that your recollection? 11 12 Look at page 21. 13 Α. Sounds familiar. 14 Q. Okay. 15 And at page 12 it says: 16 Service to the area to be affected by 17 the Hickox Road closure has historically 18 recorded actual response time averages of 13 minutes. 19 20 Do you see that? 21 Α. Yes. 22 And am I correct in understanding that the Q. 23 basis of that information is what was told to you by either counsel for the fire district or either Chief 24 25 Skrinde or --

1 That's correct. Α. 2 So did you verify any independent data or Ο. 3 verify or review any data or just rely on what counsel 4 and the chief told you? 5 I relied on primarily on what they told me. Α. I also did a Google search and looked at distances and 6 compared with my experience of drive times, reaction 7 times, felt that that was reasonable. 8 9 All right. But again, you hadn't seen any Ο. 10 actual incident reports or any other data to show the 11 actual times? 12 Α. No, sir. 13 Q. Okay. Now you said that you reviewed these 14 documents that are attached as an exhibit to, I'm sorry, 15 attached to Exhibit 133 last night. 16 Α. That's correct. Did you do any computations or anything when 17 Ο. 18 you reviewed those to confirm your testimony at page 12 of your --19 Yes, I did. 20 Α. 21 Q. And what did you do? 22 First I looked at the summary reports and Α. 23 looked -- that the district gathered from their record 24 management system and saw that the averages were 25 slightly a little bit less than 13 minutes.

1 Q. Okay.

2 And then I went through the individual Α. 3 records. There was 13 incident reports. Of those 13, I 4 believe that 9 were usable because there was another 4 that were mutual aid outside the fire district, and 5 6 there was a what we sometimes refer to as code green or stopped in route that the problem had been corrected. 7 And so there was I think left 8 or 9 that were usable. 8 9 And in that, there was -- I ran some response times, 10 both averages and a fractile.

11 Q. All right, I hate to ask a question that I 12 don't know the answer to, but what was that last word, 13 what does it mean?

14 Α. Fractile reporting is a percentage -- when 15 you're looking at fractile reports, and this is what 16 NFPA 1720 requires, they're looking at a response time 17 of 14 minutes 80% of the time. And what that means is 18 that you add up all of the responses that you have had from slowest to fastest. If you had a stack of 100, 19 20 when you got to the 80th one, that time would be your 21 80th percentile or fractile response time.

22 Q. All right.

Well, you said that of all the incident reports that you reviewed, which I believe you said was 13?

1 A. Right.

2 Q. And you found that there were 8 or 9 that 3 were usable?

4 Yeah, there was a couple mutual aids out of Α. area which weren't credited to the fire district. There 5 6 was a wind storm event, that typically is not a primary 7 response because of the fact that there's other things 8 going on within that wind storm. And there was also --9 and then one of the mutual aids also did not have an 10 address. Any time there's no address given on dispatch, 11 you can't expect an appropriate response.

12 Q. Now do you know, and take a second if it's 13 helpful, Mr. Rabel, that the documents that are attached 14 there to Exhibit 133, are those the same incident

15 reports that you reviewed?

16 A. They appear to be, yes.

Q. And I will represent to you the fax banner at the bottom will indicate that they came to us on Friday. I'm not trying to confuse you, but I'm just wanting to know if we're talking apples and apples here.

21 A. We are.

Q. Okay. And the one that's flagged there, it's got the little piece of yellow paper on it, and I did that so you would be able to get ahold of it quickly, I'm looking at a date on that that says August 15 of

1 2005.

That's correct. 2 Α. 3 Q. Okay. And that one says something about 4 ground fire suppression or other, and it shows an alarm time of 12:40 and 8 seconds; do you see that? 5 Α. That's correct. 6 7 And it shows an arrival time of 13:32 and 40 Ο. seconds or 52 minutes later; do you see that? 8 9 Α. Yes. 10 Ο. Is that one of the ones you tossed out? 11 Α. Yes. 12 Q. Okay. 13 Α. That's a mutual aid given, that was not the district's fault. 14 15 ο. And did you understand that one to represent 16 sort of an anomaly in these response times for reasons 17 other than a mutual aid response? 18 Without researching more into it, it may or Α. may not have been an anomaly, just the nature of how the 19 20 requests for mutual aid came about. 21 Ο. Okay. I noticed that I see 3 different 22 vehicles, chief officer car, privately owned vehicle, 23 and the unit above is an E-321, which I assume to be -well, you tell me what that is. 24 25 I assume it would be Engine 321. Α.

Okay. Well, those 3 all arrived at the same 1 Ο. 2 time according to this document 52 minutes after the 3 alarm; does that strike you as unusual? 4 Only that it's -- I don't know the nature of Α. how this dispatch works, but it may be that those 3 were 5 6 toned out, one arrived and the others didn't, just depends on -- but nonetheless it was thrown out just 7 8 because it was mutual aid. 9 All right. But you would agree with me that Ο. 10 it's also an anomaly in the other incident reports and 11 the response times insofar as an alarm 52 minutes before 12 an arrival in a district that small? 13 Α. Yes, it would be an anomaly, yes. 14 Q. Okay. Now the documents that you have relied 15 on in preparing your calculations are, and I'm sorry, 16 correct me, was it 8 or was it 9, if you know? 17 Let me take a quick look here to see for sure Α. which it was. 18 Q. Doesn't make too much difference, but I'm 19 20 just interested. 21 Α. I've got 8. 22 Okay. Q. 8 usable. 23 Α. 24 You've got 8 and they go back into the year Ο. 25 2005?

1	Α.	Yes.	
2	Q.	And they include the year 2006?	
3	A.	They do.	
4	Q.	And they include the year 2007?	
5	Α.	They do.	
б	Q.	So those were those 8 incident responses	
7	were the en	ntire data that you were provided for the area	
8	to be affected by the Hickox Road closure; is that		
9	correct?		
10	Α.	That's correct.	
11	Q.	Okay. Is it your understanding that there	
12	are no more incident responses to review for that period		
13	of time?		
14	A.	I am not aware of any.	
15	Q.	Okay.	
16		I notice at page 18 of your prefiled	
17	testimony,	and I'm looking in the very middle at line	
18	12, the second sentence of that paragraph says, in		
19	total, up		
20	A.	Excuse me, which page are you on?	
21	Q.	I'm on page 18 of your prefiled testimony, my	
22	apologies.		
23	A.	I'm sorry.	
24	Q.	And I'm looking at the middle paragraph at	
25	line 12, t	he second sentence says:	

1	In total, up to 22 calls per year can be		
2	expected to occur in the area affected		
3	by the proposed siding closure.		
4	Do you see that?		
5	A. I do.		
б	Q. Okay. Would you agree with me, Mr. Rabel,		
7	that the data that has been provided to you,		
8	specifically 13 incident reports of which you have used		
9	8 of them for your calculations, is substantially less		
10	than the up to 22 calls per year that you have predicted		
11	here?		
12	A. Yes.		
13	Q. Okay. Would you agree with me, Mr. Rabel,		
14	that if you have a smaller number of incidents in your		
15	calculation that any abnormality or any change in any of		
16	them will more dramatically affect the overall average		
17	than if you had substantially more?		
18	A. I'm not sure I understand.		
19	Q. It was a pretty lousy question I admit.		
20	If you have a greater sampling, isn't it true		
21	that any differences will affect that overall average		
22	that you have come up with less as opposed to if you		
23	have a very small sampling?		
24	A. A sampling of what?		
25	Q. Well, number of incidents and average		

response time, in order to calculate average response 1 2 time. 3 Α. If you're asking if larger numbers of 4 incidents will give you a more accurate picture, yes, that's correct. 5 6 Ο. Would you characterize 8 samples over 3 years to be a very small number to use in order to obtain an 7 8 accurate or valid average response time? 9 Α. No. 10 ο. Okay. 11 Now I have a couple of questions with regard 12 to those data responses, and I'm looking at number 17 if 13 you have that and if they're separated out, I think we 14 will -- oh, not 17. I'm looking at Exhibit 132, which 15 is data request, WSDOT's Data Request Number 12, and the 16 fire district's response. Now Data Request Number 12 17 reads as follows: Of the number of residences and 18 businesses within the "area affected by 19 20 the closure" please state how many are 21 closer to the Cedardale Fire Station 22 than to the Conway or other responding 23 location. 24 Do you see that? 25 I do. Α.

1	Ο.	And it lists:
2	~	Skagit Turf Farm, Boon Farm, West
3		Valley, and Jean Plant Farm, all
4		locations are located closer to
5		Cedardale.
6		My question to you is, do you know how many
7	residences	or businesses are going to be closer in
8	response f	rom the Conway Station than Cedardale?
9	Α.	I don't.
10	Q.	Okay.
11		The exhibit before that, Number 131, do you
12	see that or	ne?
13	Α.	Yes.
14	Q.	Says:
15		Please list the total number of
16		residences and businesses located within
17		the "area affected by the closure".
18		It says 52 total home owners and then by my
19	count list:	s 61. That aside, do you see what I'm talking
20	about there	e?
21	Α.	Yes.
22	Q.	It's 25, 27, and 9 looks to add up to 61, but
23	my question	n to you is, do you know how many are located
24	on Stackpo	le Road?
25	Α.	I don't.

1 All right. Do you know how many are located Ο. south of Hickox Road? 2 3 Α. I don't. 4 Okay. Any that are located south of Hickox Q. Road would be closer by access from Conway Station; is 5 that your understanding? 6 7 Yes, I would assume so. Α. Okay. The 14 minute goal that you have 8 Ο. referenced in your testimony, did I say that right, is 9 10 goal the right word or recommendation, how do you 11 characterize that? 12 Α. It's a standard, it's up to the local 13 jurisdiction to adopt. 14 Q. And has it been adopted here? 15 Α. I'm not sure. 16 ο. Oh, okay. And what happens when you adopt it, it just means you try to meet it? 17 18 Yes, you would try to meet it, that's Α. 19 correct. 20 ο. Okay. And it's your -- by the way, when you 21 ran the average times using those 8 usable incidents 22 over 3 years, what was the average time that you came up 23 with? The fractile is 11 minutes and 52 seconds. 24 Α. 25 Okay. And what is the overall just the Ο.

1 average?

2 Well, average is very misleading, and I would Α. 3 never recommend the use of an average in response time. 4 Q. Hm. The difference and the reason being that if 5 Α. you're -- the fractile is over here and the average is б 7 skewed by an unusually short response time, I don't want to be the one that holds my breath between the average 8 9 and the fractile. 10 ο. Did you calculate the average? 11 Α. No. 12 Q. Hm. I thought you said that you used those 8 13 and calculated both average and fractile? 14 Α. I didn't calculate, it looked to me somewhere 15 around 7 or 8 minutes. 16 Okay. So if you were just using an average, Ο. it would be 7 or 8 minutes? 17 Yeah. Like I said, I would have to confirm 18 Α. that, I did not actually calculate it. 19 20 Ο. Now that average that you shoot for of 14 21 minutes is for the entire district; is that correct? 22 No, that's not an average, 14 is a fractile, Α. 23 it's not an average. 24 ο. Okay, it's a fractile that you use --A. It's performance at 80%. 25

And that's for the entire district, correct? 1 Ο. 2 That's correct. Α. 3 Ο. So how many incidents did the chief or did 4 the counsel for the fire district tell you went into calculating that entire fractile for the whole district? 5 6 Α. Well, that's not relevant in this case. Well, isn't that what you're shooting for, 14 7 Ο. 8 minutes over the whole district? 9 No, I was -- in my work I was asked to look Α. 10 at a specific area in the fire service, that's usually 11 referred to as a fire planning zone. And then you look 12 at that area and say, okay, what is performance in this 13 area. It also could be tied to census tracks, and this 14 actually kind of overlays pretty close to the census 15 tracks for that area. So they would be looking at a 16 planning zone, that was specifically what I looked at, 17 not the entire department. It would be misleading, 18 that's why there are planning zones, because there's 19 different demographics throughout the department. 20 Ο. So are you telling the tribunal that the 21 planning zone is only this area represented by the 8 22 usable incident reports? 23 The planning zone is the area affected by the Α. 24 Hickox Road closure. All right. Well, but your calculations as a 25 Ο.

fire district are your response times for your entire 1 district; isn't that how that's determined? 2 3 Α. If you're going to do it correctly, no, 4 that's not the science of what is being asked for in modern fire service planning. Modern fire service 5 planning is about community equity. If you have light 6 areas, you should provide relatively light level of 7 service, but there's -- that's why you have the fire 8 9 planning zones, because there's so many different 10 variables within your district or with your response 11 area. 12 ο. So it's your testimony here today that the 13 Rural Fire district Number 3 does not calculate or 14 compute its average or fractile response time over its 15 entire district; is that correct? 16 Α. I don't know, I was never asked to be involved in that. 17 18 All right. Q. 19 Mr. Rabel, I would like you to move to page 20 14, and I would like you to look at the paragraph that 21 is one sentence, the second from last, and this comes 22 under your concern about access to water supply; do you 23 see that? 24 Α. Yes.

25 Q. I will read the sentence so that we have it

and we know what we're talking about. 1 2 To further complicate the water supply 3 issue, the closing of the Hickox Road 4 will block access to a 12 inch water main capable of quickly filling the 5 district's large 3,500 gallon tender. 6 That's correct. 7 Α. Okay. Now is your understanding that this 8 Ο. water main, this 12 inch water main, is on the east side 9 10 of the railroad tracks at Hickox? 11 Α. That's my understanding. 12 Q. And so that main is within the City of Mount 13 Vernon? 14 Α. I'm not sure, all I know is it's located on 15 the east side is what I was told. 16 And you were told that by the chief? Ο. 17 Yes. Α. So you don't know who owns the water supply? 18 Q. 19 Α. No. 20 ο. All right. But you assume that the rural 21 fire district has it at its disposal for any fire that 22 might be fought west of the railroad tracks? 23 Α. Yes. 24 ο. Okay. Let me ask you this in your experience, 25

1 chief, if there was a --

2 A. I'm not a chief.

3 Q. My apologies, I stand corrected.

4 In your experience, Mr. Rabel, have you ever 5 come across situations where there is a gate locked that 6 can be opened by a fire department for emergency access? 7 A. Yes.

8 Q. Okay. If there was such a gate here with the 9 fire district representative having access to open a 10 locked gate, would that satisfy the concern that you 11 have set forth here about access to the 12 inch water 12 main?

A. It may help mitigate. I am not sure that it
would satisfy completely, because there is a time delay.
Any obstruction in response adds time.

Q. All right. Have you factored in, speaking of that, Mr. Rabel, that the siding project is designed to put up to 8,000, 9,000, 10,000 foot trains blocking the entire Hickox Road Crossing?

20 A. I have been told that it would possibly do21 that.

Q. Okay. And do you understand that even if the crossing was to remain as we call it open that there would be trains blocking that crossing for extended periods each day?

That was one of the reasons in my testimony 1 Α. 2 that I stated that from an emergency response 3 standpoint, it didn't appear to be a well thought out 4 situation. 5 You mean where the siding is located? Ο. 6 No, blocking the access for fire. Α. 7 Q. All right. But you haven't done any analysis 8 about why, the purpose, what the purpose of the siding is for from the railroad's perspective or 9 10 transportation? 11 Α. No, no. 12 ο. Okay. Well, my question is, if you factored 13 in what delays in response time there would be from the 14 Cedardale Station for any of the what you call the 15 effected area west of the tracks if there is a train 16 that is blocking the crossing and is stopped for an 17 extended period of time? Have I calculated that? 18 Α. 19 Q. Have you analyzed that situation at all? 20 Α. I don't know how you could. 21 Q. Have you assumed that if there was a train 22 there blocking for an extended period of time that an 23 emergency responder would have to go around to an alternate route than Hickox? 24 25 Yeah, there's -- any jurisdiction that has Α.

trains running through it has that problem, and that's
 part of why the federal codes require a 10 minute
 blockage.

Q. Okay. I want to finish up on this access to water before I move on. It's your testimony here that if there was access to a locked gate and it could be unlocked for purposes, that would help to mitigate the problem that you have addressed here?

9 Maybe, maybe not. The Washington State Α. 10 Rating Bureau and Insurance Services Office rates fire 11 districts and fire departments, and they are --12 currently the fire district is rated an 8, which governs 13 insurance premiums. And with that 8 rating, they're 14 given credit for a tender or a tanker that shuttles 15 water. The insurance organizations rely on water supply 16 as the biggest factor in how they're going to rate a fire department. Right now they would probably just 17 18 barely meet the 250 gallon minimum with the time that 19 they've got right now for that test. Anything that 20 would distract it or took longer for them to access 21 water would likely reduce their rating to a 9, and that 22 would be the next step is a 10 is no fire department. 23 So the district would be harmed in my opinion either 24 way.

25 Q. Mr. Rabel, how many times in the past five

years has the water main that you referred to here been 1 accessed to fight a fire west of the or in the area 2 3 affected by the closure? 4 I'm not aware of that. Α. Not aware of any? 5 ο. 6 Α. No. 7 Q. But you would agree with me if a gate can be unlocked for access to that that it would help to 8 mitigate that problem? 9 10 Α. It would be a mitigation, but I think that 11 from the district's standpoint they're just -- they're 12 very borderline being able to supply water, and any 13 impedance at all would be detrimental. 14 Ο. Would you consider that a train sitting on 15 that track and blocking it would be an impedance to get 16 back across the track? 17 Yes, I would. Α. 18 You have also in analyzing the response Q. 19 times, and I'm back on that issue, no longer water 20 access, you have considered the responses from the 21 Cedardale and Conway Stations? 22 I have considered the incident reports that I Α. 23 was given. Okay. Now it's your understanding, isn't it, 24 Ο. 25 Mr. Rabel, that the Conway Station is west of the

1 railroad tracks?

2 Boy, I'm not sure. Α. 3 Ο. Okay, well, let me suggest to you --4 I drove that this morning actually, and I was Α. wondering where the tracks showed up until I finally 5 6 came through Hickox Road and there they were, so I'm not sure which side they were on. 7 Let me represent to you for purpose of this 8 Ο. 9 next question that the Conway Station is west of the 10 railroad tracks. 11 Α. Okay. 12 Ο. Just assume that. 13 Α. Okay. 14 Q. If that's the case, would you agree that 15 response to the area affected as we have called it would 16 not be in any way changed by the closure of Hickox? 17 If that Conway Station right now -- their Α. 18 current area of responsibility wouldn't change, no. Neither would their response time? 19 Q. 20 Α. Probably not, no, unless -- see, there's --21 response time in fire service delivery is very complex, 22 and there's different components of it. Because first 23 you look at distribution, can you place fire stations in a way that you can cover the dirt within a specified 24 25 time of your jurisdiction. The other critical component

is the force of the attack, how many people can you put 1 on scene to flow enough water, and with that you need 2 multiple resources. The criticality of the Conway 3 4 Station is that if the Cedardale Station needs support and they are blocked from and it takes longer for those 5 second and third units, the units required to launch an 6 effective firefight, if they are impeded, which the 7 Hickox Road could, then it would be an issue. 8 9 Now we have not objected to your article that Ο. 10 you submitted about blowover, a fireman's worst 11 nightmare. 12 Α. Flashover. 13 Q. Flashover, I apologize. Are you aware of any 14 of those circumstances in the area of the so-called 15 affected area historically? 16 Α. If there has been a fire, any fire historically there has been flashover unless it was put 17 18 out right away. All right. 19 Q. 20 Α. I will qualify that. Depending on the time, 21 the arrival with -- flashover will occur at any fire 22 unless there is intervention. So I can't say that there 23 has been flashover at every fire, but without intervention, it will occur. 24 25 The response times that you have reviewed, Ο.

and I think you have testified earlier you relied on 8 1 2 of them as representative for the last 3 years, how many 3 of those were affected by a train blocking either Hickox 4 or Stackpole or going through on the main line track? I don't know, there's no note on the reports 5 Α. that indicate that. 6 7 Okay. And you have not factored in anything ο. 8 for future response times about whether a train blocking Hickox on a siding track for your future increase in 9 10 response time; is that correct? 11 Α. No, I think that's why we're here. 12 ο. But I think you in doing your calculations, 13 you said it would be a 2 to 4 minute increase, if the 14 crossing was left open and there's a train blocking you 15 haven't factored that in as an increase, have you? 16 I'm not sure where you --Α. You said there would be a 2 to 4 minute 17 Ο. 18 increase in response times. Correct, that was the drive time differences 19 Α. 20 that was conveyed to me from the chief. 21 Ο. That's what the chief told you, and you're 22 taking it and passing it on here as accurate? 23 Α. I qualified I did the drive time, there was 24 some discrepancy in Mr. Norris's comments and I made the drive time this morning from the Conway Station, and I 25
got 6 minutes as well at Hickox Road, a little bit less than 6 minutes, but I was in a personal vehicle, so I felt that quantified what they said, and I took that for --

5 Q. All right.

A. That's why when I was asked this morning
whether I wanted to change anything in my testimony, I
confirmed that, and I feel comfortable.

9 Q. That's good. But you already said that the 10 distance from the Conway Station isn't going to change 11 whether the crossing is open or closed because they're 12 already on the west side of the tracks.

13 Α. No, the distance won't change, the only thing 14 that will change is response time for effective response 15 forces, that could be critical. Because any delay --16 the issues that we have at hand here, any delay in fire, fire grows exponentially. In 2001, the last report by 17 18 the U.S. Fire Administration, there was 102 firefighter deaths. Of those, 75 were volunteers. And one of the 19 20 concerns is if you don't get resources there on time, 21 those volunteers are doing more work than they should 22 be, a large part of those are heart attacks, and it's 23 definitely a risk. Any delay in that effective response 24 force coming in behind the first in folks is an issue. 25 Ο. I appreciate your answer, my question was,

you're not expecting the response time from Conway to 1 change whether the crossing is closed or left open? 2 3 Α. Yes, it could. 4 Q. How? If the Hickox Road from Conway is open, it's 5 Α. a way to provide support to the Cedardale Station, б because then they would be delayed. If that was the 7 quickest, fastest way, if there was a fire situation 8 9 where Hickox Road was the fastest way over to help the 10 Cedardale Station, it would be -- it would take longer 11 for them to get there if they couldn't use that road. 12 ο. Maybe I will just back us up one. You don't 13 know where the Conway Station is in relation to the 14 railroad tracks; is that correct? 15 Α. When I got off the freeway, I didn't cross 16 any -- well, maybe I did. I don't recall, I would have to look on the map. 17 18 Okay. And you have made no calculation for Q. 19 trains that would be blocking even if the Hickox Road is 20 left open; is that correct? 21 Α. No. 22 You have also indicated that farm machinery Ο. 23 is a problem in slowing down emergency response time. And I'm looking at page 16 of your prefiled testimony. 24 Okay, I'm on 16.

0386

25

Α.

0387

1 Well, do you remember that part of your Ο. 2 opinion? 3 Α. Yes. 4 Okay. Do you know how many of the 8 samples Q. that you have relied on over 3 years were slowed or 5 impeded in any way by farm machinery? 6 7 Α. No. You didn't factor that into the existing 8 Ο. 9 response time in any way? 10 Α. No. No, I would typically take drive time, 11 and driving that road I actually measured it, and the 12 road in the south end is actually less than -- the road 13 surface is less than 20 feet wide, and it doesn't even 14 -- it doesn't even actually meet fire code standards, 15 and I can't imagine how they could possibly pass 16 anything on that road in a response, there's not enough 17 room to move over. And in Mr. Norris's testimony, he 18 states that there would probably only be a chance every 2 minutes, well, if you drive up it, you've got at least 19 20 -- you probably have 3 or 4 chances for that to occur 21 just in response up to the area that the Cedardale 22 Station could no longer service. So I see it as 23 definitely a risk. The fire service is all based on 24 risk benefit, you look at your risk, and you have to 25 plan for that.

1	Q. Make sure I understood your answer, you have
2	not factored in the existing times or the historical
3	times to find out whether there has been any problem
4	with those response vehicles being impeded; is that
5	correct?
6	A. No, I didn't note anything in the incident
7	reports where there was an impedance.
8	MR. SCARP: One second, Your Honor.
9	That's all I have, Your Honor.
10	JUDGE TOREM: Mr. Rogerson.
11	MR. ROGERSON: Mr. Jones will be counsel for
12	redirect.
13	MR. SCARP: Oh, I'm sorry, Your Honor, we
14	would move to admit Exhibits 128
15	THE WITNESS: Would it be helpful if I held
16	on to those?
17	MR. SCARP: It might.
18	Exhibits 128 through 135 I believe.
19	JUDGE TOREM: That's correct, those are the
20	data request responses. Now I have yet to receive a
21	copy of those or see them.
22	MR. SCARP: My apologies. We have stacks of
23	them here, and within these, if I may, Your Honor, I
24	will this note is attached which indicates which one
25	if that's helpful, which of those documents have been

designated as specific exhibits, and they are just the data responses themselves. And with regard to number 13, the incident reports are attached as part of what I believe is now Exhibit 133, so we can make an appropriate copy of that, which I believe Mr. Rabel has, at this time.

JUDGE TOREM: All right, so what I'm looking at are all of the WSDOT data requests in a package and then various responses, only some of which have been offered as exhibits.

11 MR. SCARP: The problem that I have, I would 12 give you mine but it has some highlighting on it, Your 13 Honor. I would suggest that we can make an appropriate 14 copy or use Mr. Rabel's if that's helpful when it's 15 admitted.

MR. ROGERSON: Your Honor, as a suggestion, can we reserve our ability to object, I'm not exactly sure what's being offered at this point.

JUDGE TOREM: It would appear to me what's problematic certainly is that this came in Friday night, we knew this was a potential issue so I'm not faulting anybody that it's not ready picture perfect to go here at lunch time on Monday, but I think this came as responses to discovery, so I doubt very much there will be an objection. It's just simply a question of

housekeeping as to getting it admitted, and until I 1 2 actually have the documents I can mark, I'm not going to 3 admit them. So I know you want to tender them, what I 4 will do is allow you to make that tender when you have the appropriate documents marked so I can take them in. 5 6 And we will just continue to reference these Exhibits 7 128 through 135 that you have already provided to 8 Mr. Rabel to get through with this witness, and 9 hopefully by this time tomorrow everybody will have had 10 enough time to have caught their breath, gone to an 11 appropriate copy shop, and furnished me these exhibits 12 by lunch break tomorrow. 13 MR. SCARP: Very well. 14 JUDGE TOREM: But I'm leaving the burden on 15 you to remember to offer them at that time. 16 MR. SCARP: I was afraid you would do that. 17 JUDGE TOREM: All right, Mr. Jones, any 18 redirect here? 19 MR. JONES: Yes, Your Honor. 20 21 REDIRECT EXAMINATION 22 BY MR. JONES: 23 I wanted to inquire of this witness as to his Q. 24 knowledge of the facilities that are operated by the 25 fire district, and in particular how recently the

current fire station was built. 1 I don't to my knowledge. I drove by -- I 2 Α. 3 haven't seen the Cedardale Station other than on the web 4 site and the Conway Station this morning. 5 Okay. So you are not a witness who can tell Q. 6 us about the plans of the district to relocate any of its fire stations either? 7 8 Α. No. 9 Okay. And you have no knowledge of the Q. 10 publicly announced plans of the fire district to move 11 from its current location on the west side of the 12 railroad tracks to the east side of the railroad tracks? 13 MR. SCARP: Your Honor, I would object to the 14 form of the questions. It's obviously beyond this 15 witness's capability, and it's just simply leading 16 testimony to get into the record. 17 JUDGE TOREM: Mr. Jones, do you want to 18 rephrase those, please. 19 MR. JONES: Yes. 20 JUDGE TOREM: So I will sustain the 21 objection. 22 BY MR. JONES: 23 Who in the department would be responsible Q. for facilities planning, including fire station 24 25 construction?

A. I would think that would be a policy decision
 or an administrative decision by the fire chief or the
 commissioners.

4 Q. Okay. And that's really not your role?5 A. No.

Q. Okay. With respect to the availability of
water for a tender, were you aware that Skagit County
Public Utility District Number 1 provides all the piped
water in this city and area around the city?

MR. SCARP: Objection, leading.

JUDGE TOREM: Sustained. This is redirect, this is not recross, and this is supposed to be the group of opponents' witness, so if there's another witness that you know can make these points and will do it on Wednesday, I don't know what we're doing right now, Mr. Jones.

17 MR. JONES: Okay, I will sit down. JUDGE TOREM: I will state for the record I 18 recognize the limitations of a witness that's coming up 19 20 from Kent as a consultant to know on the ground as many 21 things as I assume Chief Hanson is going to know, so I 22 understand what you're trying to show me the limits 23 perhaps of this witness. If you want to ask some questions about what he has testified about or something 24 in response to the cross, that would be appropriate. 25

0392

But if it's to tell me the things I'm going to hear 1 2 Wednesday, the hearing record is not going to close for 3 some time. 4 MR. JONES: Right, well, I was uncertain about the knowledge of this witness, and I was 5 6 inquiring, and I think I now have learned, so. 7 JUDGE TOREM: Okay, very well. 8 Is there any other questions for this 9 witness? 10 MR. BURKE: Just a couple if I may, Your 11 Honor. 12 JUDGE TOREM: Mr. Burke, I recognize you're 13 counsel for the fire district. 14 MR. BURKE: Yes. 15 JUDGE TOREM: Okay. 16 REDIRECT EXAMINATION 17 BY MR. BURKE: 18 Mr. Rabel, does the fact that there have only 19 Q. 20 been 8 instances that you have considered in your 21 analysis affect the importance of limited response time? 22 No, in my opinion no. In my estimation, the Α. 23 number of calls, 22 calls, was based on housing count, because typically my experience that you can take the 24 25 number of residential structures times a population

figure of roughly 3 per residence and across the country 1 2 in my experience the call volumes per population run 3 between 1 for every 11 in more rural areas to 1 for 4 every 9 in more concentrated areas. The difference is probably because of traffic impacts, and that's what I 5 6 based my response number of calls on was basically it was 156 people, I've got about 15 or 14 that will be 7 going to residential, and then I added in some 8 9 commercial stuff for the activity that was there, the 10 farming, and figured that there would be probably 1 11 fire, and I looked at the reports that there was 1 fire. 12 So over time I think that the corrections that there 13 will be more consistent incident demand in that area 14 closer to the historical of 1 probably to every 11 15 people. 16 MR. BURKE: Thank you, I have no further questions, Your Honor. 17 MR. SCARP: I would ask one briefly. 18 19 20 RECROSS-EXAMINATION 21 BY MR. SCARP: 22 Can you tell me by looking at exhibits that Ο. 23 are attached to 133, the incident reports, can you tell me which of those you calculated and relied on, or do 24 25 you have that in your notes?

0395

1 I do. Α. 2 Ο. Just the dates would be fine. 3 Α. You know, I didn't use the year, I used --4 there was a 6-13 and 6-14, an 11-21, a 7-10, an 8-26, and a 5-12-05, 1-15-05, and 5-13-05. 5 6 Ο. What was the next to last one? 1-15-05. 7 Α. And that's 8 by my count, and the other 5 you 8 Ο. disregarded as you said for mutual response reasons? 9 10 Α. Well, there was one mutual aid on 3-22, there was a wind storm on 12-14, another mutual aid I don't 11 12 have the date for, and two other mutual aids. 13 Q. And this does not -- when you're doing your 14 calculation, you say you came up with was it 10 minutes 15 22 seconds or something? 16 Α. 11:52. 17 11:52, and that's not for the first Ο. responder, is it? 18 I looked at the -- there's -- that's an 19 Α. 20 interesting question because NFPA 1720 of the standards 21 that are out there is the most lax, and ICMA, 22 International City County Manager Association, has 23 teamed up with the National Fire Chiefs, and they 24 actually look at a rural response standard fractile of 90% versus NFPA's 80%, and they also require a first in 25

at 10 minutes. For this analysis I looked and I made 1 notes that they have actually, District 3 has done a 2 3 really good job of putting adequate people on scene 4 within this time. For a fire scene they had 21 on scene within 11 minutes and 26 seconds, and for another small 5 fire they had 10 on scene within 7 minutes. 6 7 Q. I appreciate your response, Mr. Rabel, but my 8 question was, that number, that average does not 9 indicate the first responder; is that correct? 10 Α. I'm not sure what you're saying. 11 Ο. The numbers you're calculating do not attempt 12 to calculate when the average or the fractile of when 13 the first responder arrives; is that correct? 14 Α. No, the fractile --15 Ο. The fractile is 11 minutes and 52 seconds? 16 Α. This is for the first to arrive time, these are the first to arrive units at 11:52. 17 18 Really? Q. 19 Α. Yes. 20 MR. SCARP: Okay, thank you, that's all I 21 have. 22 And then some -- okay. Α. 23 MR. BURKE: Nothing further, sir. JUDGE TOREM: All right, any other questions 24 25 for Mr. Rabel?

All right, thank you very much, Mr. Rabel,
 it's now about 12:40, you can step down.

3 Counsel, we have a public hearing scheduled 4 to begin at 1:30, so I will ask that everybody be back between 1:20 and 1:25. I'm not certain what sort of 5 6 group we're going to have in the room here, but it may 7 be best for folks to come up and use the witness stand 8 to give their testimony and each be sworn in. All of 9 you will be given an opportunity to cross examine them, 10 because it is sworn testimony, but I do recognize and I 11 will state for the record now these are members of the 12 public who have their own concerns, personal concerns, 13 they're not expert witnesses, and I would encourage you 14 unless there's something dramatic you need to cross 15 examine to not get into it with members of the public 16 unless you can't stand it and have to. It's not going to help me understand the record better by doing that 17 18 and will simply delay things this afternoon and tomorrow 19 evening. So if you feel you have to, it's your right, 20 but I'm telling you how I feel about cross examining 21 members of the public having seen plenty of them in my 22 years. Many of them do bring very good opinions, some 23 of them will just bring individual opinions that none of 24 us are going to be able to relate to, but they will nevertheless become part of the record. I recognize 25

that, you don't have to push that and show it to me. Anything else we need to take care of before the public hearing at 1:30? MR. SCARP: Only that your point is well taken. JUDGE TOREM: All right, so you have about 45 minutes or so to hit it on the nose to get lunch and be back, and we'll be off the record until 1:30. (Luncheon recess taken at 12:45 p.m.)