Exhibit No. \_\_\_T (PC-1T)
Docket TR-150189
Witness: Paul Curl

## BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**BNSF RAILWAY COMPANY** 

**DOCKET TR-150189** 

Petitioner

v.

WHATCOM COUNTY

Respondent.

**TESTIMONY OF** 

**Paul Curl** 

STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

**September 21, 2015** 

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## List of Exhibits

Exhibit No. PC-2	USDOT "Railroad-Highway Grade Crossing Handbook" (Aug. 2007 Revised 2nd Ed.), Section III, pp. 62-72
Exhibit No. PC-3	Meeting Record Notes of Diagnostic Review, "County of Whatcom, WA – Valley View Rd. 096110B, Crossing Safety Assessment for Reconstruct Petition," July 7, 2014
Exhibit No. PC-4	RCW 81.53.020 – Grade Separation Required Where Practicable, RCW 81.53.060 - Petition for alteration of crossing — Closure of grade crossing without hearing
Exhibit No. PC-5	USDOT "Railroad-Highway Grade Crossing Handbook" (Aug. 2007 Revised 2nd Ed.), Section III, pp. 78-82
Exhibit No. PC-6	USDOT "Guidance on Traffic Control Devices at Highway-Rail Grade Crossings (Nov. 2002), pp. 32-33
Exhibit No. PC-7	Commission orders in dockets TR-940282 – BNSF v. Skagit County (Boe Rd./Green Rd.) TR-940330 – BNSF v. City of Ferndale (Thornton Rd.) TR-010194 – BNSF v. Snohomish County (156th St. NE) TR-070696 – BNSF v. City of Mount Vernon (Hickox Rd.) TR-090121 – BNSF v. Snohomish County (Logen Rd.) TR-140382/TR-140383 – BNSF v. Yakima County (Barnhart Rd./N. Stevens Rd.)
Exhibit No. PC-8	Photo of the Ham Road crossing from the Commission's crossing inventory
Exhibit No. PC-9	USDOT "Railroad-Highway Grade Crossing Handbook" (Aug. 2007 Revised 2nd Ed.), Section III, Table 32 - Sight Distances for Combinations of Highway Vehicle and Train Speeds, US Customary

I		I. INTRODUCTION
2		
3	<b>Q.</b>	Please state your name and business address.
4	A.	My name is Paul Curl. My business address is 1300 S. Evergreen Park Drive S.W.,
5		P.O. Box 47250, Olympia, WA 98504.
6		
7	Q.	By whom are you employed and in what capacity?
8.	A.	I have worked at the Washington Utilities and Transportation Commission
9		(Commission) for about 40 years. From May 1974 to June 1986, I worked in a
0		number of positions in the Financial Services Office, including nine years as Chief
1		Financial Officer. In June 1986, I was appointed to the position of Executive
12		Director/Commission Secretary, which encompassed the duties of chief operating
13	,	officer and general manager.
14		In September 1993, I became the Transportation Division Director, where I
15		stayed until my official retirement in 2002. From 2002 to 2012, I worked part-time
16		at the Commission as a policy specialist, focusing my efforts primarily in the Safety
17		and Consumer Protection Division. In May 2012, I left the Commission but returned
18		part-time in May 2014. Since May 2014, I have worked exclusively in Rail Safety.
19		
20	Q.	You were the Transportation Division Director for nine years. What were your
21		duties in that position as they apply to railroad safety?
22	A. ·	One of my direct reports was the Assistant Director for Railroad Safety. I was
23		responsible for overall management of the program. This included setting new

1		policies and reviewing and revising existing policies to ensure we were operating a
2		program that provided the safest environment possible for the railroads and the
3		general public. I participated in every major decision related to staff's position on
4		new crossings, modification to existing crossings, and crossing closures.
5		
6	Q.	You worked part-time at the Commission from 2002 to 2012 in the Safety and
7		Consumer Protection Division. How did your duties during this time relate to
8		railroad safety?
9	A.	My work in railroad safety involved a mix of field work and policy work. In
10		partnership with our crossing safety specialist and safety inspectors in various
11		disciplines, I conducted field visits to existing and potential crossing locations, high
12		pedestrian traffic areas, and any other area that affected the safety of the railroad or
13		the general public. I reviewed the conditions at the area and made recommendations
14		for changes to improve safety. My policy work included policy development and
15		analysis at the direction of the Director of Safety and Consumer Protection and the
16	•	Assistant Director for Transportation Safety. Policy development generally involved
17		research, analysis, and writing of existing or potential state law, Commission rules or
18		orders, or other materials that related to how we regulate railroad safety.
19		
20	Q.	Are your duties substantially different in Rail Safety since returning to the
21		Commission in 2014?
22	A.	No.

1		II. SCOPE AND SUMMARY OF TESTIMONY
2		
3	Q.	What is the purpose of your testimony?
4	A.	The purpose of my testimony is to make a recommendation on the petition filed by
5		BNSF Railway Company (BNSF or Company) in this docket.
6		
7	Q.	Would you please summarize your recommendation?
8	A.	I recommend that BNSF's petition be granted.
9		
10		III. DESCRIPTION OF THE PROPOSED CROSSING CLOSURE SITE
11		
12	Q.	Have you reviewed BNSF's petition, pre-filed testimony and supplemental pre-
13		filed testimony filed in this case?
14	A.	Yes.
15		
16	Q.	When was the pre-filed testimony filed with the Commission?
17	A.	August 7, 2015.
18		
19	Q.	When was the supplemental pre-filed testimony filed with the Commission?
20	A.	September 15, 2015.
21		

Q.	What information does this supplemental testimony	contain?
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- 2 A. The testimony contains supplemental testimony from Kurt Bialobreski and includes
- a Traffic Impact Study (traffic study) conducted for BNSF.

4

5

1

- Q. Have you had adequate time to review the supplemental testimony and
- 6 associated traffic study?
- 7 A. I have reviewed the supplemental testimony and associated traffic study. However,
- 8 because it was late filed, I have not had an opportunity to conduct an in-depth
- 9 analysis. In my testimony, I present factual disputes, inconsistencies, and my
- 10 observations only.

11

- Q. What does BNSF propose to do?
- 13 A. According to the petition BNSF filed in this docket, the Company is petitioning to
- 14 close an at-grade public crossing on Valley View Road in Whatcom County. BNSF
- intends to extend the existing siding track over the crossing. The proposed siding
- extension will allow existing customers at the Cherry Point industrial area to receive
- and depart full-length trains without blocking the main line, switches, or roads. The
- siding extension will also allow trains to exit the main line and allow passenger and
- higher-priority freight trains to clear through the Custer area and prevent blocking of
- 20 nearby crossings for prolonged periods of time. In its petition, BNSF states that once
- 21 the siding extension is complete, trains could be stopped on the siding track for
- several hours depending on train traffic in the area. The Valley View Road crossing
- would be blocked by these trains.

1	Q.	Are you familiar with the location and physical characteristics of Valley View
2		Road, the railroad crossing, and the surrounding area?
3	A. •	Yes, I am. Valley View Road is located in rural Whatcom County north of Ferndale
4		and south of Blaine. Related to the petition, Commission staff focused on the
5		portion of Valley View Road south of Portal Way, which extends just over two and
6		one half miles to State Route 248/Grandview Road. Valley View Road is a two-lane
7		county road, with one travel lane in each direction and no curbs or sidewalks. The
8		posted vehicle speed limit is 50 miles per hour. The road runs north/south and
9		crosses the east/west railroad tracks at right angles. The railroad crossing's current
10		active warning devices consist of shoulder-mounted lights and gates. BNSF
11		presently operates an average of four freight trains per day over the crossing at 10
12		miles per hour. No passenger trains travel over the crossing.
13		
14	Q.	How many vehicles travel over the crossing each day?
15	A.	BNSF's petition states that the average annual daily vehicle traffic (AADT) over the
16		crossing is 90 vehicles. Whatcom County, in its response to the petition, states that
17		based on recent counts the AADT is approximately 350 vehicles per day. According
18		to the Commission's railroad crossing inventory records, Valley View Road is part
19		of an established truck route, with commercial vehicles making up approximately
20		eight percent of average daily traffic. Up to three school buses travel over the

crossing daily.

21

1	Q.	Does the traffic study measure AADT on Valley View Road?
2	A.	Yes. According to Mr. Bialobreski's testimony, traffic volumes collected on August
3		8, 2015, showed an AADT of 364 vehicles. <sup>1</sup>
4		
5	Q.	What source does the traffic study cite for its AADT counts?
6	A.	The traffic study does not cite a specific source. In some cases, the referenced
7		AADT counts appear to be based on actual counts taken for the traffic study. <sup>2</sup> In
8	•	other cases, the traffic study reports "estimated" AADT, but no source is cited for
9		these estimates. <sup>3</sup> For Ham Road, the traffic study states that the "Whatcom Council
10		of Governments Traffic Count Manual" does not have AADT for this section of
11		roadway.4 It is unclear if this manual was the source for any of the other AADT
12		counts.
13		
14	Q.	Have there been any accidents reported at the Valley View Road crossing in the
15		last 10 years?
16	A.	No.
17		
18 19		IV. DIAGNOSTIC REVIEW OF THE PROPOSED CROSSING CLOSURE SITE
20		
21	Q.	Have you visited the location at issue in this docket?

<sup>&</sup>lt;sup>1</sup> Pre-filed testimony of Kurt Bialobreski (KB-2T) at page 2, line 11.

<sup>&</sup>lt;sup>2</sup> Traffic Impact Study at page 3 - Valley View Road, and page 4 - Arnie/Ham Road.

<sup>3</sup> Traffic Impact Study at page 3 - Portal Way, Birch Bay Lynden Road and Main Street, and page 4 - Bay Road and Bruce Road.

<sup>&</sup>lt;sup>4</sup> Traffic Impact Study at page 4 - Ham Road.

1	A.	Yes, on several occasions. Most recently, I visited the crossing on July 7, 2014, and
2		again on August 12, 2015.
3		
4	Q.	What was the purpose of your July 7, 2014, visit to the location?
5	A.	I participated in a diagnostic review of the Valley View Road crossing regarding the
6		proposed extension of the existing siding with representatives of BNSF and
7		Whatcom County.
8		
9	Q.	What, specifically, is a diagnostic review?
10	A.	A diagnostic review involves a team of experienced and knowledgeable individuals
11		from interested organizations meeting on site at an existing or proposed crossing to
12		evaluate its operational and physical characteristics and to determine whether
13		measures can be taken to maintain or improve safety at the crossing. Generally, the
14		team consists of the road authority, Commission staff, and the railroad, though other
15		organizations may also be involved. The team considers a number of factors,
16		including the crossing configuration and physical characteristics, vehicle and train
17		traffic patterns, operations at the crossing, the crossing approach zones, and traffic
18		control devices such as pavement markings and signs or signals.
19		
20	Q.	Are you familiar with a publication called the "Railroad-Highway Grade
21		Crossing Handbook?"

1	Α.	Yes, I use it often. It is published by the Officed States Department of Transportation
2		(USDOT) Federal Highway Administration (FHWA). It is available on the internet
3		at <a href="http://safety.fhwa.dot.gov/xings/com_roaduser/07010/">http://safety.fhwa.dot.gov/xings/com_roaduser/07010/</a> .
4		
5	Q.	Does the Railroad-Highway Grade Crossing Handbook contain any
6		recommendations about diagnostic reviews?
7	A.	Yes. Section III.C, which begins at page 62, recommends the diagnostic review
8		approach to examining conditions at crossings, including an assessment of existing
9		and potential hazards. The Commission follows that recommendation. Exhibit No.
10		PC-2 includes the pages from the handbook that describe a diagnostic review.
11		
12	Q.	Do you have notes of the diagnostic review held on July 7, 2014?
13	A.	Yes. Exhibit No. PC-3, "County of Whatcom, WA – Valley View Rd. 096110B,
14		Crossing Safety Assessment for Reconstruct Petition," is a copy of those notes.
15		
16	Q.	Who prepared the notes?
17	A.	The notes were prepared by Richard Wagner, Public Projects Manager for BNSF.
18		
19	Q.	Who was present at that diagnostic review?
20	A.	Participants included Gary Johnson and Lee Carter representing Whatcom County;
21		and Richard Wagner and Calvin Nutt representing BNSF. I represented the
22		Commission, along with Kathy Hunter, Rail Safety Manager.
23		

1	Q.	Do you believe the notes accurately present the conditions at the location of the
2		crossing at the time of the diagnostic review?
3	A.	Yes.
4		
5	Q.	Did you use the diagnostic review notes in analyzing BNSF's proposal in this
6		docket?
7	A.	Yes, I did.
8		
9	Q.	What was the purpose of your August 12, 2015, visit to the crossing?
10	A.	The primary purpose was to re-familiarize myself with the Valley View Road
11		crossing, as it had been over a year since the diagnostic review meeting. I wanted to
12	,	see if conditions at the crossing had changed in any way. I also drove the routes to
13		the two closest adjacent railroad crossings: Ham Road in Whatcom County and
14		Main Street in Custer.
15		
16	Q.	Had conditions changed at the Valley View Road crossing since your diagnostic
17		review meeting in July 2014?
18	A.	No.
19		
20	1	FACTORS CONSIDERED IN A DECISION TO CLOSE A CROSSING
21		
22	Q.	What is the legal authority by which the Commission regulates the safety of
23		railroad crossings?

1	A.	RCW 81.53 grants the Commission this authority. RCW 81.53.020 states a
2		legislative preference for grade separation, where practicable, and prohibits the
3		construction of an at-grade crossing without Commission approval. The relevant
4		portion of RCW 81.53.060 states that " any railroad company whose road is
5		crossed by any highway, may file with the Commission its petition in writing,
6		alleging that the public safety requires an alteration in the method and manner of
7		an existing crossing and its approaches, or in the style and nature of construction of
8		an existing grade crossing, or the closing or discontinuance of an existing
9		highway crossing, and the diversion of travel thereon to another highway or
10		crossing." Exhibit PC-4 contains copies of RCW 81.53.020 and RCW 81.53.060.
11		
12	Q.	Did you review other materials in analyzing the proposal in this docket?
13	Α.	Yes, I did. I reviewed pages 78-82 of the "Railroad-Highway Grade Crossing
14		Handbook." Exhibit No. PC-5 contains a copy of those pages.
15		
16	Q.	How are pages 78-82 of the "Railroad-Highway Grade Crossing Handbook"
17		relevant to this docket?
18	A.	This area of the Handbook speaks to the issue of crossing closures.
19		
20	Q.	What factors does the USDOT recommend be considered when determining
21		whether to close a crossing?
22	A.	The USDOT states that closure of a crossing should always be considered as an
23		alternative to maintaining an existing crossing. Eliminating redundant and unneeded

1		crossings should be a high priority. The decision to close or consolidate crossings
2		requires balancing public necessity, convenience, and safety. The USDOT criteria
3		for evaluating the need for crossings include the following: 1) redundancy of
4	•	crossings, which means more than four crossings per mile in urban areas and more
5		than one per mile in rural areas; 2) the ability of vehicular traffic to be re-routed
6		safely and efficiently to an adjacent crossing; 3) the number of collisions at a
7		crossing; and, 4) visibility at the crossing. <sup>5</sup>
8		
9	Q.	Did you review additional materials in analyzing the proposal in this docket?
10	A.	Yes, I did. I reviewed the "Guidance on Traffic Control Devices at Highway-Rail
11		Grade Crossings," published by the USDOT FHWA in November 2002. Exhibit No
12		PC-6 is a copy of pages 32-33 of this document. The full copy of this 44-page
13		document is available online at the USDOT's website.
14		
15	Q.	How are pages 32-33 of the "Guidance on Traffic Control Devices at Highway-
16		Rail Grade Crossings" relevant to this docket?
17	Α.	On these pages, the USDOT speaks to the issue of crossing closures.
18		
19	Q.	What factors does the USDOT recommend be considered when determining
20		whether to close a crossing?
21	A.	The USDOT states that closure of a crossing should be considered when "railroad
22		operations will occupy or block the crossing for extended periods of time Such

<sup>&</sup>lt;sup>5</sup> FRA—Highway Rail Crossing Consolidation and Elimination: A Public Safety Initiative.

1		locations would typically include passing tracks primarily used for holding train
2		
3		
4	Q.	Have you reviewed other cases in which the Commission has considered
5		whether a crossing should be closed?
6	A.	Yes, I have.
7		
8	Q.	Which cases did you review?
9	A.	Specifically, I reviewed the Commission's orders from the following crossing
10		closure cases:
11		• TR-940282 – BNSF v. Skagit County (Boe Road/Green Road)
12		• TR-940330 – BNSF v. City of Ferndale (Thornton Road)
13		• TR-010194 – BNSF v. Snohomish County (156 <sup>th</sup> Street NE)
14		• TR-070696 – BNSF v. City of Mount Vernon (Hickox Road)
15		• TR-090121 – BNSF v. Snohomish County (Logen Road)
16		• TR-140382 and TR-140383 – BNSF v. Yakima County (Barnhart Road/N.
17		Stevens Road)
18		Copies of the relevant orders in these dockets are included in Exhibit PC-7.
19		
20	Q.	What factors has the Commission considered in deciding whether to close a
21		crossing?

<sup>&</sup>lt;sup>6</sup> Guidance on Traffic Control Devices at Highway-Rail Grade Crossings – November 2002, page 33.

1	A.	It is my understanding that the Commission has considered: 1) the amount and
2		character of travel on the railroad and on the roadway; 2) the number of people
3		affected by the closure; 3) whether there are readily-available alternative crossings in
4		close proximity that could handle additional traffic resulting from the closure; and, 4
5		whether the alternative crossings are safer than the crossing proposed for closure. It
6		is my understanding that if the danger of the crossing outweighs the need for the
7		crossing, the crossing should be closed.
8		
9	Q.	Can the Commission prevent the construction of the new siding track?
10	A.	No. Federal law does not allow the Commission to prevent the construction of the
11		siding, or to direct that the siding be built at another location. <sup>7</sup> Instead, the
12		Commission's role is to determine the appropriate highway-rail crossing design.
13		This includes determining whether the Valley View Road crossing should be closed
14		and traffic diverted to another crossing, or whether changes should be made to the
15		Valley View Road crossing and to other alternative crossings.
16		
17		VI. ALTERNATIVE CROSSINGS

VI. ALTERNATIVE CROSSINGS

Q. The Valley View Road crossing is located in a rural area. You previously
mentioned two other railroad crossings located near Valley View Road: Ham

<sup>&</sup>lt;sup>7</sup> The Interstate Commerce Commission Termination Act grants exclusive authority to the federal Surface Transportation Board over a broad range of railroad activities, including the construction of spur or side tracks. 49 U.S.C. § 10501(b).

1		Road in Whatcom County and Main Street in Custer. Can you describe the
2		Ham Road crossing?
3	A.	Yes. The Ham Road crossing (USDOT #096119M) is 1.3 miles from the Valley
4		View Road crossing. This crossing is passively protected with stop signs,
5		crossbucks, pavement markings, and advance warning signs. According to the
6		Commission's crossing inventory, the AADT from 2002 at this crossing is 205
7		vehicles per day with 10 percent commercial vehicle traffic. Two school buses
8		travel over this crossing per day. Ham Road is a two-lane rural county road with a
9		posted speed limit of 35 miles per hour.
10		
11	Q.	Is the AADT shown in the traffic study for Ham Road consistent with the
12		Commission's crossing inventory information?
13	A.	No. The traffic study states the AADT as 211 vehicles.
14		
15	Q.	Does the traffic study describe the characteristics of the Ham Road crossing?
16	A.	Yes.
17	*	
18	Q.	Do the described characteristics correspond with your observations?
19	A.	The description in the traffic study generally corresponds with my observations.
20		However, the traffic study states that the Ham Road crossing currently has
21		"preempted, flashing beacons." This crossing does not have flashing lights, but is
22		passively protected by stop signs only.9

 <sup>8</sup> Traffic Impact Study, page 3 - Ham/Arnie Road and Cherry Point Subdivision.
 9 Exhibit PC-8 - Photo of the Ham Road crossing from the Commission's crossing inventory.

2		observations regarding Ham Road?
3	A.	Yes. The traffic study states that Ham Road is approximately 20 feet wide. During
4		my August 12, 2015, site visit, I physically measured the road at 18 feet wide.
5		
6	Q.	Do these inconsistencies change your recommendation in this case?
7	A.	No.
8		
9	Q.	Page 10 of the traffic study references required sight distance for the Ham Road
10		crossing. Can you explain what "required sight distance" means?
11	A.	Yes. This means the distance along the railroad tracks needed to permit a driver to
12		see an approaching train, and for the vehicle to cross and be clear of the crossing
13		upon arrival of the train.
14		
15	Q.	The traffic study lists the required sight distance at the Ham Road crossing as
16		105 feet from the stop bar for cars. Do you agree with this?
17	A.	No. I calculate the required sight distance as closer to 100 feet.
18		
19	Q.	How did you calculate this number?
20	A.	I used the Railroad-Highway Grade Crossing Handbook table titled "Sight Distances
21		for Combinations of Highway Vehicle and Train Speeds, US Customary."10
22		According to the table, with a vehicle speed on Ham Road of 35 miles per hour, and
	. <u> </u>	
		, ,

Are there any other inconsistencies between the traffic study and your

Q.

 $<sup>^{10}</sup>$  Exhibit PC-9 - Railroad-Highway Grade Crossing Handbook table titled "Sight Distances for Combinations of Highway Vehicle and Train Speeds, US Customary."

1		train speed of 10 miles per hour, the required sight distance is approximately 100
2,		feet.
3		
4	Q.	Is the current sight distance at Ham Road at least 100 feet in all directions?
5	A.	Yes. According to the Commission's crossing inventory records, the sight distance
6		at Ham Road exceeds 100 feet in all directions.
7		
8	Q.	Does the inconsistency in the required sight distance calculation change your
9		recommendation in this case?
10	A.	No. The required sight distance is critical when a crossing is passively protected and
11		motorists have to be able to see if a train is approaching in order to proceed safely
12		through a crossing. If active warning signals are installed at the Ham Road crossing,
13		lights and gates will warn drivers and prohibit the vehicles from approaching the
14		tracks until the train has cleared the crossing. At that point, sight distance will not be
15		a factor in determining hazards at the crossing.
16		
17	Q.	The Recommendations section on page 15 of the traffic study recommends
18		installing gates at the Ham/Arnie Road crossing. Do you agree with this
19		recommendation?
20	A.	Yes. However, because there are currently no flashing lights at this crossing, I
21	,	recommend those be installed as well. Flashing lights offer a higher level of
22		protection for the traveling public and increase safety at the crossing by providing
23		visual warning of an approaching train.

1	Q.	You indicated that you drove the alternative crossing route to Ham Road
2		during your August 12 site visit. Please describe your observations.
3	Α.	Traveling north from SR-548/Grandview Road, the distance to Arnie Road is
4		approximately two miles. Arnie Road is about one tenth of a mile south of the
5		Valley View Road crossing and leads to the alternative crossings to the east and
6		west. At the intersection of Arnie Road and Valley View Road, I followed Arnie
7		Road west to Portal Way via the Ham Road crossing.
8		
9	Q.	Which route did you use to reach Portal Way via the Ham Road crossing, and
0		how long did it take?
1	A.	From the intersection of Valley View Road and Arnie Road, I drove west on Arnie
12		Road to Ham Road, north through the Ham Road crossing to Birch Bay/Lynden
13		Road, then east to Portal Way – a total distance of 3.1 miles. Traveling at the posted
14		speed limits, this route took a total of five minutes and 36 seconds.
15		
16	Q.	Do you have any particular concerns about the current conditions of the Ham
17		Road crossing?
18	A.	Yes. Both Arnie Road and Ham Road are very narrow roads with deep ditches.
19		Ham Road is only 18 feet wide, so each travel lane measures only nine feet. If the
20		crossing closure is approved, safety improvements should include installation of new
21	•	active warning devices at the Ham Road crossing, along with other safety
22		improvements such as pavement markings, stop lines, and increased signage. It also

1		seems reasonable to explore the possibility of widening the crossing or including
2		stop refuges for vehicles such as school buses.
3		
4	Q.	Can you explain what a stop refuge is?
5	A.	Yes. A stop refuge is a short, extra lane located to the right of the traveling lane on
6		the approach to the crossing. The stop refuge allows a vehicle that is required by law
7		to stop at a crossing, such as a school bus or hazardous materials truck, to pull into
8		the refuge lane for its stop, leaving the regular travel lane open for vehicles that are
9		not required to stop.
10		
11	Q.	Has BNSF indicated that it plans any safety improvements at the Ham Road
12		crossing?
13	A.	Yes. According to its petition, BNSF has worked with Whatcom County on some
14		alternatives to mitigate the effects of the proposed crossing closure. If closure of the
15		Valley View Road crossing is approved, BNSF will install active warning devices
16		and signals at the Ham Road crossing where none currently exists.
17		
18	Q.	What is the accident history at the Ham Road crossing?
19	A.	There was one train vs. vehicle accident reported at the Ham Road crossing in 2003.
20		The apparent cause of the vehicle striking the train was motorist inattention or
21		negligence. There are no other accidents recorded at Ham Road since the
22		Commission began keeping accident records in 1975.
23		

2	: .	(FRA) as they pertain to Ham Road?
3	<b>A.</b>	Yes, I did.
4		
5	Q.	Do the FRA records note any accidents at Ham Road other than the one
6		identified by the Commission's records as occurring in 2003?
7	A.	No, they do not.
8		
9	Q.	Can you please describe the Main Street crossing?
10	A.	Yes. The Main Street crossing (USDOT #084843L) in Custer is approximately 1.2
11		miles from the Valley View Road crossing. The Main Street crossing currently has
12		active warning devices including cantilever-mounted lights and gates. According to
13		the Commission's crossing inventory, the AADT is 751 vehicles with seven percent
14	· ·	commercial traffic. Main Street is a two-lane roadway with a posted speed limit of
15		25 miles per hour.
16		
17	Q.	Is the AADT shown for Main Street in the traffic study consistent with the
18		Commission's crossing inventory information?
19	A.	No. The traffic study lists two different AADT counts for the Main Street crossing:
20		964 <sup>11</sup> and 823. <sup>12</sup> Because the source for these counts is not provided in the study, I
21		am unable to understand the difference in the numbers. Additionally, I have no way
22		to verify the actual AADT at the Main Street crossing.
		<u> </u>
		affic Impact Study, page 2.  affic Impact Study, page 3.

Did you review the accident records of the Federal Railroad Administration

Q.

1	Q.	Does the traffic study describe the characteristics of the Main Street crossing?
2	A.	Yes.
3		
4	Q.	Do the described characteristics correspond with your observations?
5	A.	The description in the traffic study generally corresponds with my observations.
6		However, the traffic study states that Main Street is approximately 16 feet wide.
7		Based on the information contained in the Commission's crossing inventory, the
8		road is 18 feet wide.
9		
10	Q.	Do these inconsistencies change your recommendation in this case?
11	A.	No.
12		
13	Q.	The traffic study lists the required sight distance at the Main Street crossing as
14		1,460 feet from the stop bar for cars. Do you agree with this?
15	A.	No. Using the sight distance table from the Grade Crossing Handbook, with a
16		vehicle speed limit of 25 miles per hour and train speeds of 79 miles per hour, the
17		required sight distance falls between 791 and 848 feet. I estimated it to be
18		approximately 825 feet, not 1,460 feet.
19		
20	Q:	Does this inconsistency affect your testimony or recommendation in this case?
21	A:	No. Because Main Street has lights and gates that warn drivers and prohibit the
22		vehicles from approaching the tracks until the train has cleared the crossing, the sight
23		distance is not a factor in determining hazards at the crossing.

1	Q.	Which route did you use to reach Portal Way via the Main Street crossing and
2		how long did it take?
3	A.	From the intersection of Valley View Road and Arnie Road, I drove east on Arnie
4		Road to Bruce Road, south to Main Street, and east through the Main Street crossing
5		to Portal Way – a total distance of 1.1 miles. Following the posted speed limits, this
6		route took a total of two minutes and 19 seconds.
7		
8	Q.	Do you have any particular concerns about the current conditions of the Main
9		Street crossing?
10	A.,	Only one. Main Street is already equipped with appropriate early warning devices,
11		such as flashing lights and gates, which lower when a train approaches. However,
12		Main Street is only 18 feet wide, so each travel lane measures only nine feet. If the
13		crossing closure is approved, it seems reasonable to explore the possibility of
14		widening the crossing or including stop refuges for vehicles such as school buses.
15		
16	Q.	Has BNSF indicated that it plans any safety improvements at the Main Street
17		crossing?
18	A.	No. The Main Street crossing already has active warning devices, which BNSF
19		states will remain in place.
20		
21	Q.	Does the traffic study make any recommendations about safety improvements
22		at the Main Street crossing?

1	A.	Yes. The traffic study recommends constructing a southbound turn lane at Portal
2		Way and Main Street.
3		
4	Q.	Do you support this approach?
5	A.	I recommend that Whatcom County first evaluate the intersection at Main Street and
6		Portal Way to determine if a traffic signal is warranted. If the county determines a
7		traffic signal is not warranted, then I support the approach of adding a turn lane at
8		Portal Way and Main Street. If a traffic signal is warranted, I recommend that
9		Whatcom County install appropriate signals and that BNSF be ordered to reimburse
10		the county for the total cost of the signals. I also recommend that the traffic signals
11	•	be interconnected to the grade crossing signals, also at BNSF's expense.
12		
13	Q.	What is the accident history at the Main Street crossing?
14	A.	There was one train vs. vehicle accident reported at the Main Street crossing in 2000.
15		The apparent cause of the train striking the vehicle was that the car was defective or
16		stalled on the tracks. There are no other accidents recorded at Main Street since the
17		Commission began keeping accident records in 1975.
18		
19	Q.	Did you review the accident records of the FRA as they pertain to Main Street?
20	A.	Yes, I did.
21	,	

1	Q.	Do the FRA records note any accidents at Main Street other than the one
2		identified by the Commission's records as occurring in 2000?
3	A.	No.
4		
5	Q.	If the Valley View Road crossing is closed, could vehicular traffic be re-routed
6		to these crossings?
7	A.	Yes. Vehicular traffic could be re-routed to either the Ham Road crossing or the
8		Main Street crossing.
9		
10	Q.	Do you have an opinion about whether the alternative crossings could
11		logistically handle the increased traffic diverted from the Valley View Road
12		crossing?
13	A.	Based on my experience and observations, it is my opinion that the alternative
14		crossings could handle the increased traffic.
15		
16	Q.	Are the alternate routes to the closest crossings reasonable in terms of distance
17		and travel time?
18	A.	Yes. I am not a traffic engineer, but I have driven the alternate routes and found the
19		distance and travel times to be reasonable. While these routes may create some
20		inconvenience for residents, they will be safer once improvements are made and the
21		crossings meet the public need for crossing the tracks. Main Street seems more
22		likely to be used as an alternate route than Ham Road.
23		

I	Q.	Does the traine study discuss the emergency response impacts if the variety
2		View Road crossing is closed?
3	A.	Yes. The traffic study indicates that Mr. Bialobreski spoke with Ms. Polly Linville, a
4		representative of Whatcom Fire District. According to the study, Ms. Linville did
5		not expect any changes or delays to emergency response due to the Valley View
6		Road closure. 13
7		Mr. Bialobreski also spoke with a Mr. Henry Hollander of North Whatcom
8		Fire and Rescue, who indicated concerns about the closure of Valley View Road and
9		the impacts to emergency response times. The study states that Mr. Hollander wrote
10		a letter opposing the crossing closure; however, it does not indicate to whom the
11		letter was sent. A copy of the letter was not included as an exhibit to the study.
12		
13	Q.	Has the Commission received a letter from Mr. Hollander regarding his
14		concerns?
15	A.	No. The Commission's Public Involvement staff is tracking public comments
16		related to this case and has received nothing from Mr. Hollander.
17		
18	Q.	Has Whatcom County expressed any concerns related to emergency response
19		impacts?
20	A.	Yes. Whatcom County's response to the petition indicates that the Whatcom County
21		Fire Marshall has expressed concern related to the petition. However, because
22		Whatcom County's testimony is due at the same time as Commission Staff's, I was

 $<sup>^{13}</sup>$  Traffic Impact Study, page 5 – Stakeholder involvement.

1		unable to review or analyze any information related to the potential impacts to
2		emergency response from Whatcom County's perspective.
3		
4	Q.	In its petition, did BNSF indicate it would make any safety improvements on
5		Valley View Road?
6	A.	Yes. BNSF proposed constructing a cul-de-sac north of Arnie Road, prior to the
7		bridge on Valley View Road, to facilitate vehicle turnarounds.
8		
9	Q.	Do you support this approach?
10	A.	No. If the Commission orders the crossing closed, Whatcom County should make
11		the decision on where barriers are placed and whether or not a cul-de-sac is
12		necessary.
13		
14	<b>Q.</b>	Does the traffic study make any recommendations for safety improvements on
15		Valley View Road?
16	A.	Yes. The study recommends appropriately signing the change in access north of the
17		closure.
18		
19	Q.	Do you support this approach?
20	A.	I am unclear as to what is meant by "appropriately signing the change in access." I
21	,	would need additional detail about what this recommendation entails.
22		

1	Q.	Does the traffic study make any other recommendations for safety
2		improvements on Valley View Road?
3	A.	Yes. The study recommends redesigning the intersection of Valley View Road and
4		Creasey Road to allow a design vehicle to turn around.
5		
6	Q.	Do you support this approach?
7 .	A.	No. Again, I believe it is up to Whatcom County to decide where barriers should be
8		placed and what sort of turnaround arrangements should be made.
9		
10		VII. EFFECTS OF CROSSING CLOSURE
11 .		
12	Q.	According to the petition, are any homes or businesses likely to be affected by
13		the closure of the Valley View Road crossing?
14	A.	Yes. In its petition, BNSF reports that the crossing provides access primarily to farm
15		field parcels and a few single family residences. Based on my observations during
16		site visits, this appears to be accurate.
17		
18	Q.	Has BNSF proposed any actions to mitigate the closure for those farms and
19		residences?
20	A.	Yes. In its petition, BNSF offered to install a private gate at a location south of
21		Creasey Road, just north of the existing crossing, for the property owners' exclusive
22		use as needed.
23		

1	Q.	Do you support this approach?
2	A.	No. Whatcom County should be the decision maker on where barriers or gates are
3		placed.
4		
5		VIII. CROSSING SAFETY
6		
7	Q.	In its testimony pre-filed on August 10, 2015, does BNSF address safety factors
8		regarding the Valley View Road crossing?
9	A.	Yes, as follows:
10		1. Grant Haag, BNSF Terminal Supervisor of the Greater Seattle Terminal
11	4.	Complex, in his testimony (GH-1T) beginning at page 7, line 16, regarding if
12		the Valley View Road crossing were to remain open once the meet/pass
13		siding extension occurs: " if the crossing remains open and trains are
14		parked or even split, pedestrians may be tempted to walk under, over, near
15		and around the trains, which can cause fatal consequences In addition,
16		sometimes motorists drive into the side of parked trains."
17		2. Richard Wagner, BNSF Manager of Public Projects, NW Division, in his
18		testimony (RW-1T) beginning at page 6, line 21, states that "Adding a second
19		track through a crossing creates increased hazards than those involved with
20		one set of tracks. Crossing two sets of railroad tracks is inherently
21		dangerous. Trains parked in the siding track can block motorists, bicyclists,
22		and pedestrians' view of approaching trains on the mainline track. It is also

very dangerous for bicyclists or pedestrians to cross near parked trains that

1		are subject to move at any time, where the conductor may be more than a
2		mile away from the pedestrian(s) because of the length of the train and unable
3	•	to see the person on the tracks."
4		3. Steven Neubauer, BNSF Director of Field Safety and Support, in his
5		testimony (SN-1T) beginning at page 6, line 22, when asked if the Valley
6		View Road crossing should be closed, states that "Yes, given that there is
7		alternate access available, I believe the crossing should be closed because it
8		presents an increased safety exposure to the traveling public once the second
9		track is added. In the hierarchy of safety controls, elimination is always the
10	•	preferred course as this takes the risk completely out."
11		
12	Q.	Do you agree with the opinions contained in the testimony of these three
13		witnesses that once the siding track extension is completed at the Valley View
14		Road crossing, the danger to the public will outweigh the need for the crossing?
15	A.	Yes. Every crossing is a potential point of conflict where a vehicle traveling on the
16		road has the potential to intersect with a train traveling on the track. The addition of
17		the siding track at the Valley View Road crossing increases this potential.
18		The nature of the siding track means the crossing may be blocked for long
19		periods of time. BNSF testified that the crossing could be blocked for several hours.
20		Motorists that frequently travel over the crossing will soon become aware that the
21 .		train sits for extended periods, blocking the crossing. Given this, it becomes more
22		likely that motorists may speed up and drive around the gates to try to beat an

approaching train to avoid sitting at the crossing or finding an alternative crossing.

1		Trains parked near a crossing impede a driver's visibility when looking down the
2		tracks for approaching trains. If a train is approaching on the second set of tracks,
3		the possibility for a collision increases.
4		
5	Q.	What does Commission Staff recommend regarding BNSF's petition to close the
6		Valley View Road crossing?
7	A.	Staff recommends that the Valley View Road railroad crossing be closed. The
8		crossing will be exceptionally dangerous with the addition of a second track. The
9		public need for the crossing is not so great as to outweigh the danger to the public.
10		
11	Q.	Does this conclude your testimony?
12	A.	Yes.
13		
14		