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BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION
COMMISSION

BNSF RAILWAY COMPANY,)	DOCKET TR140382 and
)	DOCKET TR140383
Petitioner,)	
vs.)	
)	PREFILED TESTIMONY OF
YAKIMA COUNTY,)	KENT McHENRY
)	
Respondent.)	
<hr/>		

1: Please state your full name and job title.

My name is Kent L. McHenry, P.E. I am the Transportation Engineering
Manager for Yakima County Public Services.

2: Please provide a short summary of your testimony.

Closing the Barnhart Road and North Stevens Road crossings will create an
increased risk of motor vehicle collisions in Yakima County. No quantifiable safety
benefit will result from closing these crossings.

3: Please describe your background and qualifications.

I am a licensed civil engineer with more than 30 years of experience in the traffic
and transportation engineering fields.

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I began my professional career in 1983 as design engineer with the Washington State Department of Transportation. From 1986 to 1998, I worked for various consulting engineering firms in positions related to traffic and transportation engineering. I have been the Transportation Engineering Manager for Yakima County since 1998.

4: Have you worked with at-grade railroad crossings before?

Yes. I have extensive experience dealing with at-grade railroad crossings. Yakima County owns and leases a short line rail called the White Swan Branch Line, which operates from Toppenish to White Swan. In my capacity as Transportation Engineering Manager for Yakima County, I have overseen as project manager the installation of seven new railroad signals and one equipment upgrade at at-grade crossings. I have also worked on several traffic signal design projects that required interconnecting traffic signals to adjacent railroad signals.

5: Are you familiar with the Barnhart Road and North Stevens Road crossings?

Yes. I am familiar with these crossing and have personally inspected both.

6: Please describe the Barnhart Road crossing.

The Barnhart Road crossing with the BNSF tracks is currently controlled with stop signs and crossbucks. The roadway is paved between SR-22 and crosses the tracks nearly perpendicular. North of the crossing the roadway is gravel and curves from the northeast to the north with an approximately 750' radius curve. There is an intersection with Drainbank Road approximately 900 feet north of the crossing. Barnhart has an unposted speed limit, meaning that the basic speed law applies.

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The track is level to the east and west of the crossing. There are no trees, hills, buildings or other structures that limit visibility in either direction. Photographs taken from the crossing of the BNSF line extending in both directions are attached as Exhibit A.

7: Please describe the North Stevens Road crossing.

North Stevens Road crossing with BNSF tracks is currently controlled with stop signs and crossbucks. The roadway is gravel, curves from the north to the northeast at approximately 300 foot radius to cross the tracks at a nearly perpendicular angle. North Stevens T's into South Track road approximately 140 feet to the northeast of the crossing. North Stevens has an unposted speed limit.

The track is level to the east and west of the crossing. There are no trees, hills, buildings or other structures that limit visibility in either direction. Photographs taken from the crossing of the BNSF line extending in both directions are attached as Exhibit B.

8: Are there any features unique to these crossings that make them more or less hazardous than other at-grade crossings adjacent to or nearby these crossings?

Yes. There are four adjacent crossings. The Satus Longhouse Road crossing is located about 2 miles to the east of the Barnhart Road crossing and the Indian Church Road crossing is located about 1.5 miles to the west of the Barnhart Road crossing. The South Track Road crossing is located about 1 mile to the east of the North Stevens Road crossing and the Meyers Road crossing is located about 1.4 miles to the west of the North Stevens Road crossing.

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The Satus Longhouse Road crossing is not safer than the adjacent Barnhart Road crossing. The Satus Longhouse Road crossing has a stop sign and crossbucks. There is also a Grade Crossing Advance Warning sign and pavement markings to the north of the crossing. At a distance of approximately 465 feet, visibility to the west is compromised by trees and brush. At closer distance, visibility is compromised by an abandoned building. Photographs depicting these obstructions are attached as Exhibit C.

There are also safety concerns about the adjacent crossing at Indian Church Road. The approach to the crossing from the north negotiates a curve that degrades visibility of the approach, particularly to the west. Visibility to the west is also limited by trees and brush. Photographs depicting the limited visibility are attached as Exhibit D. The crossing has shoulder mounted lights, and gates.

The crossing at South Track Road is probably the most hazardous crossing between Toppenish and Granger. The road is generally viewed by the travelling public in the area as unsafe due to a prevalence of speeding. South Track Road crosses the BNSF line at other than a 90-degree angle in the middle of several curves that limit visibility in both directions, increasing the risk of a vehicle-train collision. In my view, the presence of safety features at this crossing does not mitigate to any great extent the safety concerns presented by this crossing.

The Meyers Road crossing has shoulder mounted lights and gates. It also has several features that make it uniquely dangerous. First, Meyers Road crosses the tracks at other than a 90-degree angle, inhibiting visibility of drivers. Second, Meyers Road crosses multiple sets of tracks. Third, the crossing occurs in a relatively urban high-

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traffic environment when compared to other crossings in the vicinity. Photographs depicting these features of the crossing are attached as Exhibit E.

9: Are you aware of any proposed changes to the BNSF rail line or nearby roads or highways that may increase the safety hazard of these crossings?

I am not aware of any proposed revisions or modifications to the BNSF rail line in Yakima County, any proposed revision or changes to SR-22, or any changes or revisions to Yakima County roadways in the vicinity of the BNSF rail line.

10: Are you aware of any traffic counts taken with respect to these crossings?

Yes. Yakima County took traffic counts on the County roadways in the vicinity of these crossings in March 2014. I am also aware that BNSF took traffic counts in the vicinity of these crossings in October 2014.

11: To your knowledge, does the traffic volume at the Barnhart Road and North Stevens Road crossings fluctuate during the course of the year?

Yes. All traffic volumes vary by time of the year and day of the week. These are rural, farm crossings. I would expect traffic at these crossings to be heaviest throughout the summer, peaking during harvest in September and October.

12: Does traffic data typically indicate the type of vehicles using crossings?

Traffic data generally indicates certain classifications of vehicles that are on the roadway but does not identify specific vehicles. The data can generally differentiate between passenger cars and tractor-trailers based on the number of axles that pass over the traffic counter, but is not able to identify farm equipment.

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13: Do you have knowledge as to the types of vehicles that use these crossings?

Yes. I have been on and in the vicinity of these crossings on many occasions. I am knowledgeable about traffic patterns in Yakima County. I have also learned about the use of these crossings from public comments received concerning the proposals to close the crossings.

14: To your knowledge, what types of vehicles use these crossings?

These crossings are used primarily in service of the local agricultural industry. A disproportional amount of usage is by farm equipment and other commercial vehicles.

15: To your knowledge, what are the maximum speeds of the types of farm equipment that commonly use these crossings.

While not an expert on farm equipment, it has been my observation that most farm equipment travels at speeds of 20 to 25 MPH. I have been advised that newer tractors are able to travel in excess of 25 MPH.

16: Will the number of vehicles crossing the BNSF line decrease if these crossings are closed?

There is no reason to believe that closing these crossings will reduce the total number of crossings in the area. Vehicles that would have crossed the BNSF line at Barnhart Road or North Stevens Road will instead use adjacent crossings.

17: How will vehicles access the adjacent crossings?

The most direct routes to access the adjacent crossings at Satus Longhouse Road, Indian Church Road, South Track Road and Meyers Road are SR 22 and South Track

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Road. It can be expected that vehicles (including farm equipment) will use these routes to access the adjacent crossings.

18: Please describe SR 22.

SR 22 is a two lane state highway. It is currently posted at 55 mph.

19: Are rural highways associated with increased risk of motor vehicle accidents?

According to the National Highway Traffic Safety Administration (NHTSA) publication "Traffic Safety Facts 2012", rural highways with a speed limit of 55 mph have the highest number of fatalities of any classification of roadways within the United States. SR 22 falls squarely within this category of roadway and is associated with an increased risk of motor vehicle accidents.

20: What are other factors that are associated with increased risk of accidents involving farm equipment and motor vehicles?

The biggest factor associated with farm equipment is the differential in operating speed between the equipment and motor vehicles. Specifically, on SR-22 motor vehicles are traveling at least at 55 mph and farm equipment is traveling at 25 mph or less, depending on the type of equipment and if it is towing anything.

A driver requires at least 2.5 seconds to see and react to any change in conditions. If a vehicle is traveling at 55 MPH it will travel just over 200 feet. Once the driver applies the brakes the vehicle will require an additional 290 feet (on dry pavement) to come to a stop, for a total of 490 feet. This action requires just less than 5 seconds to accomplish. At the same time the farm equipment has traveled just over 100 feet. This is why rear end accidents are common with farm equipment.

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21. Please describe South Track Road?

South Track Road is a two-lane hard surfaced roadway with narrow shoulders. South Track Road has an unposted speed limit. It has been my personal experience that vehicles commonly travel on South Track Road at speeds in excess of 60 mph. This experience is substantiated by a traffic count conducted by Yakima County in 2010. The results of this traffic count are as indicated in the following table:

Speed in MPH	Number of Vehicles
0-10	2
10-20	6
20-30	157
30-40	334
40-50	42
50-60	121
60-70	147
70-80	72
80-90	35
90-100	10

22. Are roads such as S. Track Road associated with increased risk of motor vehicle accidents?

Yes. South Track Road is a rural farm-to-market road with high operating speeds. This type of roadway experiences higher accident rates than other classifications of roadway.

23: Is there a safety benefit associated with closing these crossings?

There is an economic benefit for BNSF in that there are two less crossings to manage. I am unaware of any evidence that closing the crossings and diverting traffic elsewhere will result in any quantifiable safety benefit.

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BNSF seems to be saying that if you close the crossings at Barnhart Road and North Stevens Road, there will be a safety benefit at those locations. It is undoubtedly true that if you close these crossings, the risk of vehicle-train collisions on Barnhart Road and North Stevens Road will be reduced. But there is no net safety benefit if the risk of a vehicle-train collision at adjacent crossings is correspondingly increased. Nor is there a net safety benefit if the closures increase the risk of vehicle collisions along SR 22 and South Track Road.

24: Are there offsetting safety hazards associated with closing the crossings?

Yes. As explained above, the adjacent crossings will experience an increase in traffic, which will increase the risk of vehicle-train collision. Likewise, there will be an increase of farm equipment on SR 22 and South Track Road. This diversion of farm equipment to these roadways will increase the risk to the general public of Yakima County.

25: Are there other cost and convenience factors associated with closing the crossings?

In addition to the increase in the potential increase in accidents on the roadways, there is also a societal cost associated with the requested closings. These costs include the additional time and fuel to drive the additional distances to cross at the adjacent crossings. These costs would accumulate every day all day, not just the times that trains are present as a result of these closings.

26: In your opinion, do the increased safety risks to the general public associated with closing these crossings outweigh the safety benefit of closing the crossings?

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After reviewing the data and listening to the public input, I believe that the increase risks to the general public on the roadways (including increasing the risk to motor vehicles that would never use the railroad crossings) outweighs any reduction in risk to BNSF.

27: Is there a way to manage these crossings so as to minimize the risk?

There are other ways to manage the risks associated with railroad/roadway crossings. One is to provide active train protection. The installation of electronics, gates, lights and bells to warn the operators of vehicles on the roadway of an approaching train would increase the safety of both the railroad and roadway users.

DECLARATION

I, KENT McHENRY, declare under penalty of perjury under the laws of the State of Washington that the foregoing PREFILED TESTIMONY OF KENT McHENRY is true and correct to the best of my knowledge and belief.

DATED THIS 10th day of February, 2015.


KENT McHENRY

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DATED THIS 12th day of February, 2015.

MENKE JACKSON BEYER, LLP



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3 CERTIFICATE OF SERVICE

4 I am over the age of 18; and not a party to this action. I am the assistant to an
5 attorney with Menke Jackson Beyer, LLP, whose address is 807 North 39th Avenue,
6 Yakima, Washington, 98902.

7 I hereby certify that the original and three copies of the foregoing have been sent
8 by Overnight Delivery to Mr. Steven King, Executive Director and Secretary,
9 Washington State Utilities and Transportation Commission, 1300 South Evergreen Park
10 Drive, S.W., Olympia, Washington, 98504; and a .pdf version electronically filed
11 (www.utc.wa.gov/efiling) and emailed (records@utc.wa.gov). I also certify that true and
12 complete copies have been sent via electronic mail to the following interested parties:

13 Mr. Tom Montgomery
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Rayne Pearson
Administrative Law Judge
Washington Utilities and Transportation Commission
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Olympia, WA 98504

I declare under penalty of perjury under the laws of the State of Washington that
the foregoing information is true and correct.

DATED THIS 12th day of February, 2015.


KATHY S. LYCZEWSKI