BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

BNSF RAILWAY COMPANY, Petitioner, v. CITY OF MOUNT VERNON, Respondent SKAGIT COUNTY, WASHINGTON STATE DEPARTMENT OF TRANSPORTATION, WEST VALLEY FARMS LLC, and SKAGIT COUNTY, Intervenors.	DOCKET NO. TR-070696 REBUTTAL TESTIMONY OF GARY NORRIS

Q. Please state your name.

A. Gary Norris.

Q. Is the information you provided in your earlier testimony in this case still accurate?

A. Yes.

Q. Have you reviewed the pre-filed written testimony in this case?

A. Yes, I have.

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Q. There has been testimony offered from others indicating that the Blackburn Road Railway Crossing is less than ideal and that the proposed Hickox Road railway crossing closure will increase traffic volumes and the accident potential at the Blackburn Crossing. Do you agree?

A. No. Based on our traffic analysis, the proposed closure of the Hickox Road railway crossing will not impact traffic volumes at the Blackburn Road railway crossing. The traffic assignment model results actually show a decrease of 5 PM peak hour trips at the Blackburn Road crossing with the proposed Hickox closure. Although the magnitude of the volume can be argued, the overall indication remains valid. That is, the Hickox Road closure will not have a measurable impact on the PM peak hour traffic volumes at the Blackburn Road railway crossing. Most of the Hickox Road crossing traffic will divert to the Stackpole Road railway crossing.

Q. Did you nevertheless consider safety conditions related to the Blackburn Road railroad crossing in your recommendation that the Hickox crossing be closed?

A. Yes. An ideal crossing has characteristics that encourage safety and mobility for both the motorist and the train. Mr. Robert Johnston, Transportation Specialist for the Washington Utilities and Transportation Commission, stated in his testimony that an ideal crossing is a single track intersecting a simple two-lane road with a slight ascending grade on both sides of the roadway approach. The intersection of the roadway and the track should be at a perfect 90-degree angle. The crossing surface would be level and smooth. Warning devices at the crossing would include flashing lights and gates. The motorist and train crew should have unobstructed sight distance

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of the crossing. An ideal crossing would also have sidewalks that traverse the crossing parallel to the roadway if pedestrian access were common. Mr. Johnston also stated that most crossings in our state are not ideal for one reason or another.

Q. Are there any of the characteristics of the Blackburn crossing that, considering Mr. Johnston's testimony, are favorable from a safety standpoint?

A. Yes. The Blackburn Road railway crossing has some characteristics of an ideal crossing described by Mr. Johnston, such as flashing lights, gates and a level, smooth surface. The sight distance may be limited since the crossing is skewed, but the flashing lights and gates minimize this hazard because they prevent the motorist from entering the crossing when a train is approaching. The interconnected rail signal and traffic signal is another favorable characteristic of the Blackburn Road railway crossing and promotes a safe and efficient operation.

Another ideal characteristic of the Blackburn Road crossing is the gradual approach grade. Steep grades create a sight distance and acceleration challenge for vehicles, especially trucks. The gradual approach grade at Blackburn Road minimizes the potential impact on approaching vehicles. The Hickox Road railway crossing has steeper approach and departure grades than the Blackburn Road railway crossing, such that the Blackburn Road would be a preferred railway crossing to Hickox Road for heavy trucks.

Q. Are there tools available that would assist an engineer to determine the impact of a crossing closure on traffic mobility and safety?

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A. Yes. The Federal Railroad Administration has developed a model to evaluate the effectiveness of proposed railway crossing closures in terms of the impact on mobility, safety, and cost benefit. The model, identified as the GradeDec.NET highway-rail grade crossing investment analysis tool, provides grade crossing investment decision support. The model provides a full set of standard benefit-cost metrics for a rail corridor, a region or an individual grade crossing. The model output allows a comparative analysis of grade crossing collision risk and other components of user costs, including highway delay and queuing, air quality and vehicle operating costs. GradeDec.NET uses simulation methods to analyze project risk and generate probability ranges for each model output, including B/C ratios and net present value.

Q. Did you use the GradeDec.NET model to determine the impact of closing the Hickox crossing?

A. Yes. For the proposed Hickox Road railway crossing closure, the GradeDec.NET model was used to evaluate the impacts of the Hickox Road closure on the Stackpole Road railway crossing and the Blackburn Road railway crossing. The overall analysis showed significant improvements in safety, mobility, and benefit cost with the proposed closure. The overall mean benefit cost of the Hickox Road railway crossing closure was 5.463119. This is overwhelming in light of the fact that most public works projects are considered worthwhile with benefit cost ratios of 1.5 and above.

Q. There has been testimony submitted that expressed concerns regarding the validity of the traffic volume data since it was not collected at a time when traffic volumes were expected to be at the peak. Is this a valid criticism of the accuracy of your study?

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A. No. Traffic volumes fluctuate on an hourly, daily, weekly, monthly and annual basis. Therefore, it is unlikely that a traffic count taken at a specific point in time will represent a realistic scenario of traffic conditions in the area. For the purposes of developing an overall view of area traffic flow, spot traffic counts are adjusted by various factors to obtain an average annual traffic volume scenario. The annual average volume eliminates the daily and seasonal variations which normally occur and presents a view which is useful in evaluating the existing traffic flow conditions and designing future improvements.

For the Hickox Road analysis, the traffic counts were collected in February. Factors were obtained from annual traffic data obtained from Skagit County Public Works to create an annual average traffic volume for the Hickox Road study area. This is a commonly accepted engineering practice and proved useful for the study purpose. The use of the annual average data is acceptable for analysis and design as public works facilities are never designed for the absolute "worst case" scenario, but rather an "average" worst case scenario. This scenario is reflected in the application of the average annual traffic volumes.

Q. There has been testimony submitted with concerns regarding the width of roadways within the Hickox Road study area in view of the volume of agricultural equipment in the area and whether alternative routes can accommodate that equipment. Did you look into these concerns?

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A. Yes. To address this concern existing volumes and with closure volumes were reviewed, the probability of emergency vehicles experiencing delay due to truck traffic was evaluated and the existing conditions were assessed.

Q. What was your conclusion?

A. The Fire Department expressed concern about the ability of fire apparatus to pass farm equipment on the Dike Road assuming increased emergency vehicle use of Dike Road, if Hickox Road were closed. A review of the Dike Road traffic volumes for the existing and with closure scenarios indicates a volume increase of 11 vehicles during the PM peak hour. The two-way PM peak hour volume would increase from 17 to 28 PM peak hour vehicles. This is approximately one vehicle every two minutes. The likelihood that an emergency vehicle would encounter another vehicle at all is relatively low. The likelihood of encountering farm equipment which would block the road would be even less.

To address the concern about the ability of farm equipment to negotiate the turns at the existing intersections, intersection radii improvements have been recommended for those locations impacted by the closure. Specifically, the Dike Road/Hickox Road intersection and the Dike Road/Stackpole Road intersection.

The study area is zoned agricultural and is predominated by farming activity. Farm equipment has successfully operated on the study area roads with competition from emergency vehicles for many years. The proposed closure will not adversely impact this situation. Minor intersection improvements have been recommended to facilitate turning movements which have been impacted by the proposed closure.

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Q. There has been testimony submitted that states your traffic analysis does not accurately represent emergency vehicle response times. Do you still stand by the response times set forth in your traffic analysis study?

A. Yes. It should first be noted that the consultant attempted on many occasions to obtain accurate and adequate response time summaries for the Conway and Cedardale Stations of Fire District Three. When the data was finally received, there were so many inconsistencies that the data wasn't of value in determining the impact of the closure on emergency services.

For example, previous fire department testimony indicates that it takes six minutes to reach the Hickox Road/Dike Road intersection from the Conway Station and eight minutes to reach the Dike Road "S" curves; an additional two minutes. Conversely, the response time summary indicates that it takes four minutes to reach the Hickox Road/Dike Road intersection from the Cedardale Station and four and one half minutes to reach the Dike Road "S" curves; an additional 30 seconds. This represents a minute and one half difference between the response time from the Hickox Road/Dike Road intersection to the Dike Road "S" curves for the Conway Station and the Cedardale Station, which is inconsistent.

Our analysis indicates that with the closure of Hickox Road, emergency response times will remain within the NFPA standard. The increase in response time with the closure of Hickox Road within the impacted area will not exceed the NFPA rural standard response time requirement of 14 minutes, 80 percent of the time.

Q. Does this end your testimony?

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A. Yes.

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

DATED this 30th day of November, 2007 at Olympia, Washington.

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