

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26

**BEFORE THE WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION**

BNSF RAILWAY COMPANY,

DOCKET NO. TR-070696

Petitioner,

WRITTEN TESTIMONY OF  
GARY NORRIS

v.

CITY OF MOUNT VERNON,

Respondent

SKAGIT COUNTY, WASHINGTON  
STATE DEPARTMENT OF  
TRANSPORTATION, WEST VALLEY  
FARMS LLC, and SKAGIT COUNTY,

Intervenors.

**Q. Please state your name and business address.**

**A.** My name is Gary A. Norris, P.E. and P.T.O.E. My business address is 3150 Richards Road, Suite 200, Bellevue, WA 98005. My business e-mail address is:

[garyn@gsassoc-inc.com](mailto:garyn@gsassoc-inc.com).

1 **Q. By whom are you employed and in what capacity?**

2 **A.** Garry Struthers Associates, Inc.  
3 Gary Norris - Senior Project Manager

4 **Q. What are your qualifications?**

5 **A.** Please see my resume, which is attached as Exhibit A.

6 **Q. Please state your qualifications to provide testimony in this proceeding.**

7 **A.** My employer, Garry Struthers Associates, Inc. (GSAI), prepared the traffic impact  
8 analysis of the proposed closure.

9 **Q. Have you presented testimony before this Commission in other cases?**

10 **A.** I have presented testimony in the proposed crossing closure of 156<sup>th</sup> Street in the  
11 Marysville area of Snohomish County.

12 **Q. What is the purpose of your testimony?**

13 **A.** The purpose of the GSAI testimony is to summarize the process, analysis, findings,  
14 conclusions and recommendations of the traffic impact analysis of the proposed Hickox  
15 Road railway crossing closure.  
16

17 **Q. What work did you perform in response to the request to close the BNSF/Hickox  
18 Road railway crossing?**

19 **A.** GSAI prepared a traffic impact analysis to assess the impact of the proposed closure on  
20 the transportation system.

21 **Q. What is a Traffic Impact Analysis (TIA)?**

22 **A.** A traffic impact analysis evaluates the traffic-related impacts of a proposed action on  
23 the transportation system.  
24

25 ///

26 ///

1 **Q. What guidelines are used in development of a TIA?**

2 A. The underlying authority for the development of a TIA is the State Environmental  
3 Policy Act (SEPA). A standardized process for identifying traffic-related impacts has  
4 been developed by the traffic engineering community and is commonly employed to  
5 address SEPA requirements. Many jurisdictions have TIA guidelines which focus the  
6 study to meet the needs of the local SEPA authority. The analysis techniques employed  
7 are commonly accepted practice for the professional traffic engineering community.  
8

9 **Q. What is SEPA?**

10 A. SEPA is an acronym for the State Environmental Policy Act. It provides a way to  
11 identify possible environmental impacts that may result from governmental decisions.  
12 These decisions relate to issuing permits for private projects, constructing public  
13 facilities or adopting regulations, policies or plans. SEPA helps decision-makers  
14 understand how a proposal will affect the environment. The information can be used to  
15 change a proposal to reduce likely impacts or to deny a proposal when adverse  
16 environmental impacts are identified.  
17

18 **Q. What are TIA guidelines?**

19 A. TIA guidelines are outlines of the desired scope of work for the preparation of a TIA.  
20 The guidelines focus the study in areas where the SEPA authority requires special  
21 evaluation.

22 **Q. What are some of the commonly accepted analysis practices and techniques?**

23 A. The commonly accepted analysis practices and techniques include: identification of the  
24 peak hour traffic flow, evaluation of crash data, roadway geometrics standards,  
25 emergency response times, analysis and evaluation of level of service. In all cases the  
26

1 study employed commonly accepted standards of the industry. With regard to the level  
2 of service analysis, the study used *Synchro* to evaluate the level of service as  
3 determined by the Highway Capacity Manual.

4 **Q. Was a TIA prepared for the potential closure of the BNSF/Hickox Road railway**  
5 **crossing?**

6 **A.** Yes, and it was documented in a report.

7 **Q. What was the name of the report?**

8 **A.** *Hickox Road Railway Crossing Closure Traffic Impact Analysis*, which is attached  
9 hereto as Exhibit B.

10 **Q. Did anyone else at your firm assist with the preparation of this report?**

11 **A.** Yes. Ms. Lesley A. Struthers, E.I.T., assisted.

12 **Q. What is Ms. Struthers' professional and educational background?**

13 **A.** Please see Ms. Struthers' resume, which is attached as Exhibit C.

14 **Q. What was the purpose of your report?**

15 **A.** The report was written to investigate the probable short-term and long-term traffic  
16 impacts created by the closure of the BNSF/Hickox Road railway crossing as part of  
17 the Mount Vernon Siding Extension Project.

18 **Q. What was the scope of the report?**

19 **A.** The report presents an analysis of traffic conditions during an average weekday p.m.  
20 peak. An analysis of traffic conditions during major events is not included in the  
21 analysis. Only future funded transportation improvement projects are included. For the  
22 purpose of this report, 2006 is defined as the horizon year. To address federal  
23 requirements, an analysis of traffic conditions 20 years in the future with the proposed  
24  
25  
26

1 action is also presented and defined as the future year. The future year for this study is  
2 2026.

3 **Q. What was the study area of your analysis?**

4 **A.** The study area includes the transportation network potentially impacted by the closure  
5 of Hickox Road. It is located adjacent to I-5 in Skagit County in the northwestern part  
6 of Western Washington, between Seattle, Washington and Vancouver, B.C. The study  
7 area lies within the southwestern part of Skagit County in a broad delta and flood plain,  
8 both of which extend inland through the rich and fertile Skagit Valley. The majority of  
9 the study area resides in the unincorporated town of Conway and the southwestern tip  
10 of the City of Mount Vernon. The study area is bounded by Blackburn Road on the  
11 north, I-5 on the east, Fir Island Road on the south, and Dike Road on the west.

12  
13 **Q. What alternatives were assessed?**

14 **A.** Initially, only two alternative conditions were analyzed:

- 15 1. No Action—BNSF/Hickox Road railway crossing remains open; and
- 16 2. With Closure—closing the BNSF/Hickox Road railway crossing.

17  
18 The “No Action” alternative is characterized by an unaffected roadway capacity  
19 on Hickox Road. The “With Closure” alternative is characterized by a complete  
20 closure of the BNSF/Hickox Road railway crossing located approximately 550 feet  
21 west of Old Highway 99, with all BNSF/Hickox Road railway crossing traffic diverted  
22 to other roadways in the study area.

23  
24 Upon review of the draft TIA, all agencies expressed concern about additional  
25 options being explored. Thus, three additional alternatives were developed to meet the  
26

1 project objectives, and at the same time maintain access to the west side of the railway  
2 along the Hickox Road corridor. These alternatives include:

- 3 • Realign Hickox Road to the south of the proposed siding;
- 4 • Widen the existing crossing to accommodate the siding; and
- 5 • Move the proposed railroad siding to a new location south of Hickox Road.

6 **Q. What roadway information was collected?**

7 **A.** The roadway information collected included roadway classification, geometry,  
8 channelization, speed limits and intersection control types.

9 **Q. How was the average daily traffic volume data collected?**

10 **A.** Automated traffic counters were used to collect average daily traffic volumes, speed  
11 data and classification data. TC2 staff collected the data using a six day, 24-hour smart  
12 machine, which is connected to a tube that lies on the roadway.

13 **Q. When was the average daily traffic volume data collected?**

14 **A.** The data was collected from February 3 through February 8, 2006.

15 **Q. How was the peak hour turning movement traffic volume and pedestrian/bicycle  
16 volume data collected?**

17 **A.** DN traffic staff collected p.m. peak hour turning movement traffic volumes and  
18 pedestrian/bicycle volumes. This data was collected by field observation.

19 **Q. When was the p.m. peak hour count data collected?**

20 **A.** Data was collected between 4:00 p.m. and 6:00 p.m. in February 2006.

21 **Q. Do the collected traffic volumes accurately represent the average weekday  
22 conditions?**

23 **A.** Yes, they accurately reflect the average weekday conditions. Although the data was  
24 collected in February, monthly adjustment factors provided by Skagit County Public  
25 Works were used to adjust the data to reflect an annual average traffic flow scenario.  
26

1 **Q. What crash data was collected?**

2 **A.** Crash data for the latest available three years was collected.

3 **Q. What are some of the agencies that were contacted?**

4 **A.** The following agencies were contacted: Skagit County; Skagit County Medic One;  
5 Skagit Transit; City of Mount Vernon; Skagit County Fire District No. 3; Skagit  
6 County Diking District No. 3; LTI, Inc. (Milky Way); Conway School District; and,  
7 Mount Vernon School District

8 **Q. What was the 20-year growth scenario based on?**

9 **A.** It was based on Skagit County planning data as represented in the City of Mount  
10 Vernon's traffic assignment model.  
11

12 **Q. How was future year traffic volumes generated?**

13 **A.** The 2026 p.m. peak hour volumes were generated with the aid of the City of Mount  
14 Vernon's traffic assignment model. The 2026 forecasts were developed based on land  
15 use growth projections for the study area consistent with the current City of Mount  
16 Vernon and Skagit County Comprehensive Plans. The modeling process involved four  
17 steps similar to the process used for creating the 2006 With Closure assignment. The  
18 steps are as follows:  
19

- 20 • Generate a 2006 p.m. peak hour assignment calibrated against 2006 p.m. peak hour  
turning movement counts;
- 21 • Generate a 2026 p.m. peak hour assignment for the "No Action" condition;
- 22 • Subtract the 2026 p.m. peak hour "No Action" assignment from the 2006 p.m. peak  
assignment; and
- 23 • Add the intersection approach and volume difference between the 2026 "No  
24 Action" and 2006 existing assignment to each intersection movement based on the  
turning movement percentages derived from the 2006 existing ground counts to obtain  
25 the 2026 "No Action" p.m. peak hour assignment.  
26

1 P.M. peak hour turning movement volumes for the 2026 "With Closure"  
2 alternative were developed through a 2026 p.m. peak hour model run with the closure  
3 of the Hickox Road railway crossing. The model process is the same as the 2026 "No  
4 Action" scenario with the exception that a 2026 "With Closure" model was prepared  
5 and subtracted from the 2006 existing to estimate the future impact of the proposed  
6 railway crossing closure.  
7

8 **Q. What year were the existing conditions evaluated?**

9 **A.** In the year 2006.

10 **Q. What are the existing conditions of the roadway facilities within the study area?**

11 **A.** Blackburn Road is a two-lane minor arterial that runs east-west from Cedardale Road to  
12 Britt Road. Traffic controls on Blackburn Road include a signal at South Second Street  
13 and a stop sign at the intersection with Britt Road as well as a stop sign on the minor  
14 intersecting streets of Cleveland Street, Gunn Road and South Third Street. The speed  
15 limit is 25 m.p.h.

16 Anderson Road is a two-lane local access road that runs east-west. Traffic control on  
17 Anderson Road includes a stop sign at Old Highway 99. The speed limit is 35 m.p.h.

18 Pederson Lane is a private driveway that runs east-west from Old Highway 99 to a  
19 farm. Traffic control on Pederson Lane includes a stop sign at Old Highway 99.

20 Hickox Road is a two-lane minor collector that runs east-west from I-5 to Dike Road.  
21 Traffic control on Hickox Road includes stop signs at Old Highway 99 and Dike Road.  
22 The speed limit is 35 m.p.h.  
23  
24  
25  
26



1        Stackpole Road is a two-lane rural local access road that runs east-west from Conway  
2 Frontage Road to Dike Road. Traffic control on Stackpole Road includes stop signs at  
3 Conway Frontage Road and Dike Road. The speed limit is 35 m.p.h.

4        Peter Johnson Road is a two-lane rural local access road that runs east-west from  
5 Conway Frontage Road to Dike Road. Traffic control on Peter Johnson Road includes  
6 stop signs at Conway Frontage Road and Dike Road. The speed limit is 35 m.p.h.  
7

8        Fir Island Road is a two-lane major collector that runs east-west from Pioneer Highway  
9 to the west where it intersects with Best Road. Traffic controls on Fir Island Road  
10 include stop signs at Conway Frontage Road and Pioneer Highway. The speed limit is  
11 35 m.p.h. in the study area.

12        Old Highway 99 is a two-lane major collector that runs north-south from Blackburn  
13 Road to Hickox Road. Traffic controls on Old Highway 99 include a signal at  
14 Blackburn Road as well as stop signs on the minor intersecting streets of Anderson  
15 Road, McFarmland Lane, Pederson Lane, Jack Lane and Hickox Road. The speed limit  
16 is 35 m.p.h.  
17

18        Conway Frontage Road is a two-lane minor collector that runs north-south from Hickox  
19 Road to Fir Island Road. Traffic controls on Conway Frontage Road include a stop  
20 sign at Fir Island Road as well as stop signs on the minor intersecting streets of  
21 Stackpole Road and Peter Johnson Road. The speed limit is 50 m.p.h.  
22

23        Pioneer Highway is a two-lane major collector that runs north-south from Fir Island  
24 Road to the south where it intersects with I-5 at the SR-534 interchange at Smokey  
25  
26

1 Point. Traffic control on Pioneer Highway includes a stop sign at Fir Island Road. The  
2 speed limit is 50 m.p.h.

3 Dike Road is a two-lane minor collector that runs north-south from Britt Road to Fir  
4 Island Road. Traffic controls on Dike Road include stop signs at Britt Road and Fir  
5 Island Road as well as stop signs on the minor intersecting streets of Stackpole Road,  
6 Peter Johnson Road and Hickox Road. The speed limit is 40 m.p.h.

7  
8 Britt Road is a two-lane collector that runs north-south from Blackburn Road to Dike  
9 Road. At the Britt Road and Dike Road intersection, Britt Road is a minor collector;  
10 east of Dike Road it is an urban collector. Traffic controls within the study area include  
11 a stop sign at Dike Road as well as a stop sign at Blackburn Road. The speed limit is  
12 35 m.p.h.

13  
14 **Q. What are the existing traffic operations at intersections?**

15 **A. Volumes:**

16 Average weekday daily traffic on Hickox Road is 340 vehicles with a 50/50  
17 percentage split in the eastbound and westbound directions. The average weekend  
18 volume was 220 vehicles per day with the same 50/50 split by direction. Skagit County  
19 data indicated the average weekday volume on Hickox Road was 380 vehicles per day.  
20 The highest volume of the day occurred during the p.m. peak hours of 4:00 to 6:00.

21  
22 The volumes varied from a low of 17 entering vehicles at the Stackpole  
23 Road/Dike Road intersection to a high of 1,316 entering vehicles at Fir Island  
24 Road/Pioneer Highway intersection. With the exception of Fir Island Road/Pioneer  
25 Highway and Pioneer Highway/I-5 southbound ramps, the p.m. peak hour volumes at  
26

1 the key intersections in the study area were very low, which is consistent with the rural  
2 nature of the area. The total intersection approach volume for all study area  
3 intersections is 7,872 vehicles per hour. The highest volume occurs at the Fir Island  
4 Road/Pioneer Highway intersection (1,316 vehicles per hour [v.p.h.]) and the Pioneer  
5 Highway/I-5 southbound ramps (1,233 v.p.h.). The lowest p.m. peak hour approach  
6 volume occurs at the Stackpole Road/Dike Road intersection (17 v.p.h.). The average  
7 p.m. peak hour approach volume is 492 v.p.h.

8  
9 Level of Service:

10 All analysis intersections currently operate at an acceptable and high level of  
11 service (LOS) during the p.m. peak hour, with the exception of the Fir Island  
12 Road/Pioneer Highway intersection, which currently operates at LOS D during the p.m.  
13 peak hour. LOS D, however, is an acceptable LOS for the study area.

14  
15 Accidents:

16 The latest available three-year accident history included the period from January  
17 1, 2003 to December 31, 2005. There have been very few accidents at the analysis  
18 intersections during the last three-year period. The Old Highway 99/I-5 northbound  
19 ramp intersection has experienced one accident during the latest three-year period, with  
20 an accident rate of 0.609 accidents per million entering vehicles. The Old Highway  
21 99/I-5 southbound ramp intersection has no accident experience during the latest three-  
22 year period. The Pioneer Highway/I-5 northbound ramp intersection has experienced  
23 two accidents during the latest three-year period, with an accident rate of 0.252  
24 accidents per million entering vehicles. The Pioneer Highway/I-5 southbound ramp  
25 intersection has experienced six accidents during the latest three-year period, with an  
26

1 accident rate of 0.445 accidents per million entering vehicles. The Anderson Road/I-5  
2 northbound ramp intersection has experienced three accidents during the latest three-  
3 year period, with an accident rate of 0.109 accidents per million entering vehicles. The  
4 Anderson Road/I-5 southbound ramp intersection has experienced one accident during  
5 the latest three-year period, with an accident rate of 0.453 accidents per million  
6 entering vehicles. There have been no fatalities at intersections within the study area.

7  
8 **Q. Have there been any fatalities at the BNSF/Hickox road railway crossing and  
9 when?**

10 A. The vehicle/train accident history at the BNSF/Hickox Road railway crossing was  
11 obtained from the Federal Railroad Administration (FRA). There have been a total of  
12 two reported vehicle/train accidents at the BNSF/Hickox Road railway crossing since  
13 1975. In 1990, an eastbound vehicle on Hickox Road collided with a northbound  
14 freight train. The train was proceeding through the crossing and was struck by the  
15 vehicle. The incident occurred at dark under cloudy conditions. The motorist did not  
16 stop and was killed.

17  
18 **Q. What were other access issues?**

19 A. Other access issues included overall access to the study area, impact on emergency  
20 vehicle response for medical aid, police and fire. In addition, concern was expressed  
21 regarding the impact on large agricultural vehicles in terms of roadway geometry.

22 **Q. What did the existing transit system in the study area consist of?**

23 A. It consisted of: Skagit Transit (SKAT), a public bus system; and, school buses in the  
24 Conway School District and Mount Vernon School District.

1 **Q. Does SKAT have regular scheduled service on Hickox Road?**

2 **A.** No

3 **Q. Does SKAT have regularly scheduled service within the study area? And, if so,**  
4 **where?**

5 **A.** Yes. SKAT's Route 208 North provides service on Blackburn Road.

6 **Q. In the existing conditions is Hickox Road used by school buses?**

7 **A.** Yes. The Conway School District has a bus stop located at the Dike Road/Hickox  
8 Road intersection and the bus uses Hickox Road to reach the next destination.

9 **Q. What was the existing non-motorized transportation?**

10 **A.** Pedestrians, bicycles and rail.

11 **Q. What are the existing pedestrian and bicycle volumes on Hickox Road?**

12 **A.** Counts indicated one pedestrian and two bicycles at the Old Highway 99/Hickox Road  
13 intersection. No other pedestrian/bicycle volume was noted.

14 **Q. What are the existing pedestrian and bicycle facilities?**

15 **A.** Dedicated pedestrian or bike facilities in the study area exist at the following locations:

- 16 • Anderson Road/Old Highway 99—sidewalks on three of the four corners of the  
17 intersection;
- 18 • Blackburn Road/Old Highway 99—sidewalks on the four corners of the  
19 intersection; and
- 20 • Blackburn Road—Old Highway 99 to Britt Road—north side has an asphalt  
walkway separated from traffic by an extruded curb.

21 Some of the roadways in the study area have asphalt shoulders that can be used  
22 by pedestrians and bicyclists:

- 23 • Anderson Road has paved shoulders from Old Highway 99 through the I-5  
interchange;
- 24 • Conway Frontage Road has eight-foot-wide shoulders from Old Highway 99 to Fir  
Island Road;
- 25 • Old Highway 99 and Pioneer Highway/SR-534 have asphalt shoulders on the I-5  
interchange and within the WSDOT right-of-way boundaries;
- 26 • Fir Island Road has asphalt shoulders within the study area; and

- 1 • Old Highway 99 from Blackburn Road to Conway Frontage Road has asphalt  
2 shoulders varying in width from four feet to eight feet

3 **Q. What are the existing rail facilities?**

4 **A. Blackburn Road:**

5 BNSF Railway crosses Blackburn Road at grade between Railroad Avenue and  
6 Third Street South. There is a single track approximately 200-feet west of Railroad  
7 Avenue. The crossing is controlled by a cantilever flashing light signal with  
8 automatic gates.

9 BNSF Railway crosses on Blackburn Road.

10 **Pederson Lane:**

11 BNSF Railway crosses Pederson Lane at grade west of Old Highway 99. One  
12 track crosses Pederson Lane approximately 390 feet west of Old Highway 99. The  
13 crossing is controlled by a sign without automatic gates.

14 **Hickox Road:**

15 BNSF Railway crosses Hickox Road at grade approximately 550 feet west of  
16 Old Highway 99. The crossing is controlled by a flashing light signal with automatic  
17 gates.

18 **Stackpole Road:**

19 BNSF Railway crosses Stackpole Road at grade approximately 1,020 feet west  
20 of Old Highway 99. The crossing is controlled by a stop sign and cross bucks.

21 **Peter Johnson Road:**

22 BNSF Railway crosses Peter Johnson Road at grade approximately 1,110 feet  
23 west of Old Highway 99. The crossing is controlled by a stop sign and cross bucks.  
24  
25  
26

1        Fir Island Road:

2                    BNSF Railway crosses Fir Island Road at grade between Jones Road and First  
3        Street. The track crosses Fir Island Road approximately 220 feet west of Jones Road.  
4        The crossing is controlled by a cantilever flashing light signal with automatic gates.

5  
6        **Q.    What improvements are planned/programmed?**

7        **A.**    There are no planned or programmed highway transportation improvement projects in  
8        the vicinity of the study area. Roadway maintenance in the study area is scheduled on  
9        an annual basis.

10       **Q.    What is a horizon year?**

11       **A.**    The horizon year is the year evaluating the impact of the proposed action at the time the  
12       impact of the action is realized.

13       **Q.    What was the horizon year used for in this analysis?**

14       **A.**    The proposed closure of the BNSF/Hickox Road railway crossing is anticipated in the  
15       2006 time horizon. Therefore, for the purposes of this analysis, 2006 is assumed to be  
16       the horizon year.

17  
18       **Q.    What is the impact on traffic operations at intersections for the horizon year?**

19       Volumes:

20                    Traffic volume data for the 2006 “No Action” alternative is the same as the  
21        existing conditions. Under the “With Closure” alternative, existing traffic on Hickox  
22        Road will be diverted to other roadways in the study area. The average 2006 total  
23        intersection approach volume for all study area intersections under the “No Action”  
24        alternative is 492 v.p.h. compared to the average of 494 v.p.h. for the “With Closure”  
25        alternative. The largest increase (26 vehicles) occurs at the Anderson Road/Old  
26

1 Highway 99 intersection and the largest decrease (21 vehicles) occurs at the Hickox  
2 Road/Dike Road intersection.

3 LOS:

4 The LOS for the 2006 "No Action" alternative is the same as the existing  
5 condition analysis. All key intersections are estimated to operate at acceptable LOS  
6 under the "With Closure" alternative.  
7

8 Accidents:

9 Under the "No Action" alternative, the traffic accident rate for the study area  
10 will remain the same. Under the "With Closure" alternative, the study area traffic  
11 accident rate will remain essentially the same since the overall traffic volume for the  
12 study area is unchanged. Some intersections will experience an increase or decrease in  
13 traffic volume to accommodate the closure but these volumes are not large enough to  
14 result in the potential for measurable increased accidents.  
15

16 **Q. What is the impact on access in the study area for the horizon year?**

17 A. Under the "No Action" alternative, traffic access for the study area will not be  
18 impacted. Impact of the "With Closure" alternative is limited to a small area within the  
19 study area. The area includes Hickox Road west of the railway crossing and Dike Road  
20 within one-half mile of the Hickox Road/Dike Road intersection. Under the "With  
21 Closure" alternative, the Blackburn Road/Britt Road intersection on the north end of  
22 the study area will be the alternative route for trips to and from the north. Stackpole  
23 Road or West Johnson Road will be the alternative route for trips to and from the south.  
24 During the p.m. peak hour, the average travel time from the Hickox Road/Dike Road  
25  
26



1 intersection to the adjacent I-5 access points and Old Highway 99 increases an average  
2 of five minutes under the "With Closure" alternative.

3 **Q. What is the impact on emergency response in the study area for the horizon year?**

4 A. The "No Action" alternative in 2006 is equivalent to existing conditions. The "With  
5 Closure" alternative will have minimal impact on response time for police service and  
6 Skagit County Medic One given that the location of the dispatched vehicle varies. Fire  
7 response would come from Skagit County Fire District No. 3 station located on East  
8 Hickox Road, which would have the largest potential increase in response time.

9  
10 Stackpole Road is the most likely alternate path for fire vehicles as it is the  
11 closest east-west road. The travel distance and time to the Hickox Road Area along this  
12 route from the fire station east of I-5 has a potential increase of three miles and a seven-  
13 minute increase in response time. Emergency response along the two north-south  
14 roads, Conway Frontage Road and Dike Road, will not be impacted.

15  
16 **Q. What is the impact on transit services for the horizon year?**

17 A. The "No Action" alternative is the same as the existing condition for transit service.  
18 There will be no impact to existing transit service. The closure of BNSF/Hickox Road  
19 railway crossing will not impact transit service because Hickox Road does not have  
20 service. Conway School District bus service in the study area will be impacted with the  
21 closure as currently there is a bus stop at the Hickox Road/Dike Road intersection and  
22 Hickox Road is used as a pass through.

23  
24 **Q. What is the impact on non-motorized transportation for the horizon year?**

25 A. The "No Action" alternative in 2006 is equivalent to existing conditions. The "With  
26 Closure" alternative will not significantly impact non-motorized traffic because the

1 volume of non-motorized traffic in the p.m. peak hour observed was very low. The  
2 “With Closure” alternative may inconvenience pedestrians and bicyclists, who will be  
3 forced to use other significantly longer routes. The few pedestrians and bicyclists who  
4 use the area may experience some inconvenience under the “With Closure” alternative.  
5

6 **Q. What future year was used for the purpose of this analysis?**

7 A. The future year of analysis is normally 20 years after the horizon year; therefore, 2026  
8 is the future year being used.

9 **Q. What is the impact on traffic operations at intersections for the future year?**

10 Volume:

11 The 2026 “No Action” results of the forecast indicate that p.m. peak hour  
12 volumes are expected to increase by 96 percent between 2006 and 2026. Under the  
13 “With Closure” alternative, 2026 p.m. peak hour traffic will be diverted to parallel east-  
14 west roadways, such as Blackburn Road to the north and Stackpole Road and West  
15 Johnson Road to the south. The total 2026 p.m. peak hour intersection approach  
16 volume is 15,617 v.p.h. for the “No Action” alternative and 15,626 v.p.h. for the “With  
17 Closure” alternative. The highest 2026 p.m. peak hour approach volume occurs at the  
18 Anderson Road/I-5 northbound ramps for both the “No Action” (3,177 v.p.h.) and  
19 “With Closure” alternatives (3,183 v.p.h.). The lowest 2026 approach volume occurs at  
20 the Stackpole Road/Dike Road intersection for the “No Action” (33 v.p.h.) alternative  
21 and at the Hickox Road/Dike Road intersection for the “With Closure” (36 v.p.h.)  
22 alternative. The average total 2026 intersection approach volume for all study area  
23 intersections is 977 v.p.h. for the “No Action” alternative and 976 v.p.h. for the “With  
24 Closure” alternative.  
25  
26

1        LOS:

2                Twelve of the 16 intersections are estimated to operate at an acceptable LOS in  
3        the 2026 time horizon. The remaining four intersections are estimated to operate at  
4        LOS F, which is below the standard for the study area. In fact, the delay at the  
5        Anderson Road/I-5 ramp intersections under the 2026 “No Action” and “With Closure”  
6        alternatives exceeds the delay thresholds in the analysis software.  
7

8        **Q.    What is the impact on access to the study area for the future year?**

9        A.    Under the “No Action” alternative for 2026, traffic circulation will utilize the existing  
10       road network. It is expected that with projected increased traffic volumes, travel times  
11       through and to the study area will dramatically increase if the transportation  
12       improvements discussed in the traffic operations sections are not constructed.  
13       Alternative traffic waiting under the “With Closure” alternative remains the same as the  
14       2006 routings.  
15

16       **Q.    What is the impact on emergency response access to the study area for the future  
         year?**

17       A.    Under the “No Action” alternative, emergency response service will use current routing  
18       to service calls. The “With Closure” alternative will increase the Skagit County Fire  
19       District No. 3’s response time to the Hickox Road/Dike Road intersection area and the  
20       Britt Road/Dike Road intersection area. Response time is increased as Hickox Road is  
21       the most direct route from the fire station located on East Hickox Road, east of I-5. By  
22       2026, another fire station may be required in or near the study area due to anticipated  
23       growth along the Blackburn Road corridor. With the addition of another fire station,  
24       the potential response time impacts may be mitigated. The travel distance and time to  
25       the potential response time impacts may be mitigated. The travel distance and time to  
26

1 the Hickox Road/Dike Road intersection will potentially have an increase of three miles  
2 and seven minutes, the same as in 2006.

3 **Q. What is the impact on transit services for the future year?**

4 **A.** Under the “No Action” alternative, there will be no impact to service. SKAT does not  
5 have any planned/programmed service scheduled on Hickox Road for 2026. The land  
6 use setting of the study area is agricultural, natural resource land; therefore, it is  
7 unlikely that the area will develop to a point where transit service would be beneficial  
8 for the area. For that reason, the closure of Hickox Road will not impact future transit  
9 service.  
10

11 **Q. What is the impact on non-motorized transportation for the future year?**

12 **A.** Under the “No Action” alternative, the railway crossings at Blackburn Road, Hickox  
13 Road, Stackpole Road and West Johnson Road will continue operations with their  
14 present control configurations. The impact of the closure will not significantly affect  
15 non-motorized traffic because the volume is relatively small in the p.m. peak hour.  
16 Under the “With Closure” alternative, the potential for train and pedestrian/bicycle  
17 accidents will be eliminated.  
18

19 **Q. What is the impact on planned/programmed improvements for the future year?**

20 **A.** There are no planned or programmed highway transportation improvement projects in  
21 the vicinity of the study area, therefore no impact.  
22

23 **Q. What were the findings on impacts to traffic operations at intersections?**

- 24 • Hickox Road in 2006 is carrying 340 vehicles per day, with a p.m. peak hour  
25 volume of approximately 32 vehicles split between the eastbound and westbound  
26 directions.

1 • All intersections are presently operating at an acceptable LOS per the study area  
2 standards. LOS D is within acceptable limits.

3 • There have been relatively few accidents in the study area during the latest  
4 three-year period with accidents limited to the I-5 interchanges. The highest number of  
5 accidents occurred at the Pioneer Highway/I-5 Southbound ramp (6). Even so, the  
6 accident rate was only 0.609 accidents per million entering vehicles, which is  
7 significantly less than the statewide average for similar intersections.

8 • Under the "With Closure" alternative, total intersection approach volumes  
9 during the p.m. peak hour are estimated to increase by 24 vehicles. This results from  
10 the increased circulation through the study area intersections resulting from the closure  
11 of the Hickox Road railway crossing.

12 • Although there are some very minor differences in the 2006 p.m. peak hour  
13 intersection delay with the closure, the LOS remains within acceptable limits at all  
14 study area intersections.

15 • Under the "With Closure" alternative, the study area traffic accident rate will  
16 remain essentially the same since the overall traffic volume for the study area is  
17 unchanged. Some intersections will experience an increase or decrease in traffic  
18 volume to accommodate the closure, but these volumes are not large enough to result in  
19 the potential for measurable increased accidents.

20 • Under both alternatives the 2026 traffic volumes in the study area are expected  
21 to approximately double over the 2006 p.m. peak.

22 • With the increased volumes in the 2026 p.m. peak hour, the LOS at four of the  
23 sixteen intersections exceeds acceptable limits. With significant reconstruction of the  
24 intersections, the LOS can be improved to acceptable and relatively high levels.

25 • Under the With Closure alternative in 2026, the same four intersections  
26 experience a failed level of service. With the same improvements, an acceptable and  
high LOS is achieved.

20 **Q. What were the findings on impacts to study area access?**

21 **A.**

22 • In 2006 and 2026, under the "No Action" alternative, the street network in the  
23 study area remains unchanged.

24 • In 2006 and 2026, under the "With Closure" alternative, traffic will be required  
25 to divert to alternative routes, increasing their average trip length by two to three miles  
26 for those properties within three-fourths of a mile of the Hickox Road/Dike Road  
intersection. The "With Closure" condition will eliminate an alternative route that  
might be needed during catastrophic blockage of alternative routes.

1 **Q. What were the findings on impacts to emergency response?**

2 **A.**

3  
4 • Skagit County Fire District No. 3's response time to the study area will increase  
5 by seven minutes and three miles. However, this appears to be within national response  
6 time standards of the National Fire Protection Association.

7  
8 • Stackpole Road will be a reasonable alternative route to the study area in an  
9 emergency condition, because it is the closest east-west road to Hickox Road.

10  
11 • Other emergency services response times will not be significantly impacted as  
12 they are dispatched from their present locations and have easily accessible alternative  
13 routes to the area.

14  
15 • The Skagit County Fire Marshal and the Skagit County Fire District No. 3 Fire  
16 Chief are opposed to the railway crossing closure as it would reduce access for  
17 emergency response.

18 **Q. What were the findings on impacts to truck access?**

19 **A.**

20 • In 2006, Hickox Road has approximately 50 heavy vehicle trips per day and six  
21 heavy vehicles during the p.m. peak period. In 2026, Hickox Road is estimated to  
22 serve approximately 80 heavy vehicle trips per day and eight heavy vehicles during the  
23 p.m. peak period.

24 **Q. What were the findings on impacts to transit services?**

25 **A.**

26 • There are no anticipated impacts to SKAT transit services with the closure of  
the BNSF/Hickox Road railway crossing.

• Currently SKAT has no scheduled service on Hickox Road. Therefore, the  
"With Closure" alternative will not impact the transit services currently operating.

• There are anticipated impacts to Conway School District school bus service  
under the "With Closure" alternative.

• Currently, the Conway School District has a bus stop located at the Hickox  
Road/Dike Road intersection. Rerouting of the school bus will be required under the  
"With Closure" alternative.

1 **Q. What were the findings on impacts to non-motorized transportation?**

2 **A.**

- 3 • The volume of non-motorized traffic is relatively small. In the p.m. peak hour,  
4 one pedestrian and two bicyclists were observed.
- 5 • The “With Closure” alternative is not expected to have a significant impact on  
6 pedestrian or bicycle traffic

7 **Q. What were the conclusions of the analysis?**

8 **A.**

- 9 • The “With Closure” alternative will not create a significant adverse impact on  
10 traffic operations at the study area intersections. Four of the sixteen intersections will  
11 require upgrades to the existing traffic control systems by 2026 regardless if the  
12 crossing is closed or not.
- 13 • Response time by the police, sheriff and Skagit Medic One in general should  
14 not be impacted by the crossing closure.
- 15 • Response time by Skagit County Fire District No. 3 will be impacted by the  
16 closure due to the location of the existing fire station on Hickox Road east of I-5.
- 17 • Transit service by SKAT will not be impacted by the closure.
- 18 • The Conway School District bus service will be impacted because a bus stop is  
19 located at the Hickox Road/Dike Road intersection.
- 20 • The BNSF/Hickox Road railway crossing closure should not have an impact on  
21 the safety of pedestrians and bicyclists.
- 22 • Future highway transportation improvements for the study area will not be  
23 affected by the closure.

24 **Q. What were the recommendations?**

25 **A.**

- 26 • It is recommended that the Hickox Road railway crossing be closed in  
conjunction with the Mount Vernon siding improvement project to support improved  
train service on the BNSF line between Seattle and Vancouver, B.C.
- It is recommended that the WSDOT’s Rail Office work with Skagit County Fire  
District No. 3 to mitigate the impact of the closure on fire service response.

1 • It is recommended that the Conway School District develop new bus routing to  
2 serve students within the study area with the closure of the Hickox Road railway  
3 crossing.

4 **Q. Does the WSDOT's study understate the impact of the closure on fire protection**  
5 **and emergency medical services by referencing only a .6 minute increase in**  
6 **response time with no explanation of how this conclusion was derived as one**  
7 **commentor suggested?**

8 **A.** No. The report does not reference a .6 minute increase in response time. As stated in  
9 chapters 3, 4 and 5 of the WSDOT TIA, a seven minute and three mile increase in  
10 response time from the Cedardale Station is estimated.

11 **Q. Was the agricultural use of the area considered in the traffic impact report, if so**  
12 **how?**

13 **A.** Yes. The agricultural use of the area was considered. Turning movements of larger  
14 trucks were evaluated since agricultural areas generally use larger trucks in the  
15 transport of goods, etc. Chapter 7 of the TIA recommends widening the Stackpole  
16 Road/Dike Road and the Hickox Road/Dike Road intersections to more readily  
17 accommodate larger trucks if the Hickox Road railway crossing is closed.

18 **Q. Has Skagit County, the City of Mount Vernon, Skagit County Fire District No. 3**  
19 **or the Dike District designated Hickox Road as an evacuation route?**

20 **A.** No. Neither the Skagit County Emergency Management Plan nor the Skagit County  
21 Emergency Management Evacuation Route Map identifies Hickox Road as an  
22 evacuation route. Evacuation routes for the City of Mount Vernon, Fire District No. 3  
23 and the Dike District are designated by Skagit County. Hickox Road has not been  
24 designated as an evacuation route. There is no signage within the study area indicating  
25 any evacuation routes.  
26



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26

Q. Does this end your testimony?

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 8<sup>th</sup> day of October, 2007 at Olympia, Washington.

  
GARY NORRIS

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26

DECLARATION OF SERVICE

Lisa M. Savoia declares I am a citizen of the United States of America, over 18 years old and competent to testify to the matters herein. On October 8, 2007, I served by e-mail and first class mail, postage prepaid, a true and correct copy of the foregoing document on the following:

BRADLEY P. SCARP, ESQ.  
1218 THIRD AVENUE, 27<sup>TH</sup> FLOOR  
SEATTLE WA 98101  
E-MAIL: [brad@montgomeryscarp.com](mailto:brad@montgomeryscarp.com)

STEPHEN FALLQUIST, SKAGIT COUNTY DEPUTY PROSECUTING ATTORNEY  
605 S. 3<sup>RD</sup> STREET  
MOUNT VERNON WA 98273  
E-MAIL: [stephenf@co.skagit.wa.us](mailto:stephenf@co.skagit.wa.us)

JONATHAN THOMPSON, AAG  
OFFICE OF THE ATTORNEY GENERAL  
P. O. BOX 40128  
OLYMPIA WA 98504-0128  
E-MAIL: [jonat@atg.wa.gov](mailto:jonat@atg.wa.gov)

GARY T. JONES, ESQ.  
P. O. BOX 1245  
MOUNT VERNON WA 98273  
E-MAIL: [gjones@jonesandsmith.com](mailto:gjones@jonesandsmith.com)

BRIAN K. SNURE, ESQ.  
612 SOUTH 227<sup>TH</sup> STREET  
DES MOINES WA 98198  
E-MAIL: [Brian@SnRlaw.net](mailto:Brian@SnRlaw.net)

KEVIN ROGERSON, CITY ATTORNEY  
P. O. BOX 809  
MOUNT VERNON, WA 98273  
E-MAIL: [kevinr@ci.mount-vernion.wa.us](mailto:kevinr@ci.mount-vernion.wa.us)

DATED this 8<sup>th</sup> day of October, 2007 at Tumwater, Washington.

  
\_\_\_\_\_  
Lisa Savoia, Legal Assistant

# GARY NORRIS, P.E., P.T.O.E

## Senior Engineer

---

*Total Professional Experience:* 31 years

*Education:*

University of Washington, M.S., Civil Engineering,  
Transportation Planning, 1977

University of Washington, B.S., Civil Engineering,  
Traffic Engineering, 1973

*Professional Registrations and Licenses:*

Professional Traffic Operations Engineer, WA, 2004

Professional Engineer, WA, 1980

Professional Engineer, OR, 1998

Professional Engineer, ID, 2003

*Brief Summary of Experience:*

Mr. Norris is a senior engineer with 31 years experience in transportation planning and traffic engineering, as both a consulting engineer and a traffic engineer/planner for local governments. While at GSAI, he has managed the development PS&E for major signal and illumination projects, work zone traffic control plans for large public works projects, and traffic impact analyses for proposed railway crossing closure and other development proposals. He has conducted in excess of 1,000 traffic impact analyses. As Renton's City Traffic Engineer for ten years, Mr. Norris was responsible for planning, design, construction, operation, and maintenance of the City's transportation facilities. He managed the City of Renton's \$10 million Capital Improvement Program and the \$1.2 million transportation department budget. He determined mitigation measures, established design standards, reviewed design plans, and inspected construction of roadway widening, traffic signals and street lighting projects. Mr. Norris established the first computerized master control of the City's traffic signal system and established a traffic mitigation program to help fund area-wide capital facility improvements. As Transportation Planning Engineer for the City of Bellevue for five years, Mr. Norris conducted a long-range transportation study to identify transportation facility improvements and coordinated transportation issues with Bellevue's Planning Commission. He is a past president of the Washington State Section, Institute of Transportation Engineers.

**Ridgefield Grade Crossing Consolidation Study; Ridgefield, WA, Project Manager:** Evaluate traffic related impacts of potential rail crossing closures within the City of Ridgefield, Washington. The study provided a traffic impact analysis of two railway crossing closure alternatives for the existing railway crossings at Mill Street and Division Street in the City of Ridgefield, Washington in order to accommodate high-speed rail service. The traffic-related impacts of various grade crossing closure alternatives in light of existing and potential future development of the Port of Ridgefield were evaluated.

Key tasks included working with all stakeholders to determine the study area/intersections to be analyzed, collection of existing and proposed traffic data, analysis of effects of each closure condition on traffic within the defined study area, development of conclusions and recommendations, and drafting of a report to the client. GSAI coordinated closely with all stakeholders throughout the development of data, the analysis and development of conclusions.

**S. Holgate Street Railway Crossing Closure Traffic Impact Analysis; Seattle, WA, Project Manager:** Addressed the WSDOT Rail Office's need for a traffic impact analysis to evaluate the potential closure of the Holgate Street Railway Crossing located between First and Fourth Avenues South in the City of Seattle. GSAI gathered roadway data to document conditions on the existing roadway that included roadway information, average daily traffic volumes, turning movement traffic volumes, pedestrian/bicycle traffic, accident data, 20-year growth scenario, planned and programmed improvements, travel time analysis, traffic simulation modeling, grade crossing safety analysis, truck access analysis, transit and non-motorized transport, and emergency response.

**Kelso/Kalama Traffic Impact Analysis for EIS; Kelso, WA Project Manager:** Prepare the traffic impact analysis portion of the project's environmental impact statement. The analysis involved an assessment of traffic volumes conditions in the existing and 20-year horizon year of the impact of consolidating or closing several railroad crossings between Kelso and Kalama, Washington. GSAI prepared an existing conditions analysis of five railroad crossings along 18 miles of the railway corridor. GSAI also evaluated the traffic impacts at the crossings under four different scenarios in the existing and 20-year horizon. The analysis considered impacts on motor traffic, pedestrian and bicycle traffic, emergency vehicle response, and train delays. The analysis also evaluated the level of service at 27 intersections that could be affected by the different scenarios.



**S. 277th Street Reconstruction Project - Phase III; Signalization and Illumination, Kent, WA, Project Manager:** Preparation of plans, specifications, and cost estimates for the reconstruction of three signals and 35,000 lineal feet of illumination along the S 277th street corridor between 72nd Avenue South and the West Valley Highway. The illumination system was designed per King County, WSDOT, City of Kent, and City of Auburn standards. The project also included ITS elements, such as CCTV, ramp metering and fiber optic interconnect. In addition to permanent signalization, the project included temporary signals at each of the three intersections, and temporary illumination at the interchange.

**I-5, SR 161 Interchange and SR 18 Interchange Triangle Improvements (Hazardous Materials Investigation and Report); King County, Washington, Project Manager:** Providing a comprehensive investigation of hazardous materials sites along the project corridor in order to prepare a report that includes surveys and descriptions of hazardous materials sites, an analysis of the extent of confirmed hazardous materials, status of enforcement actions, a summary of impacts to the overall project and recommendations for improvement. The report is being prepared in accordance with the Hazardous Materials section of the WSDOT Environmental Procedures Manual and the associated Hazardous Waste Discipline Report checklist.

**Burlington Traffic Analysis; Burlington, WA:** Mr. Norris was the project manager for the development of a traffic mitigation fee to fund necessary improvements in the Burlington Boulevard corridor. The study estimated potential 20 year traffic growth in the Burlington Boulevard corridor and assigned the growth to various development parcels. The list of transportation improvements scheduled for the next twenty years "per trip fee" was established using the cost estimate. This fee is to be assigned to new growth impacting the Burlington Boulevard corridor.

**Holgate Street Railway Crossing Traffic Analysis; Seattle, WA:** Project Manager for traffic impact analysis for WSDOT Rail Office, evaluating the potential closure of the Holgate Street Railway Crossing in Seattle. Oversaw data collection, analysis, and forecasts of vehicular/truck traffic and pedestrian/bicycle traffic level of service and travel time analysis, traffic simulation modeling, grade crossing safety analysis, truck access analysis, transit and non-motorized transport, and emergency response. Examined existing and future impacts for crossing closure and non-closure alternatives. Prepared the traffic analysis report summarizing the study process findings, conclusion and recommendations of the study.

**Meridian Avenue East/SR 161 Corridor Analysis; Edgewood, WA:** Project Manager for development of a context-sensitive design that met the traffic and transportation needs of the City of Edgewood and related impacted parties. The primary scope of this effort was to explore alternative methods to widening SR 161 to achieve the WSDOT goals of safety and mobility. GSAI worked with the City, WSDOT, neighboring cities, businesses, land owners, public safety providers and other community interests. GSAI developed a corridor traffic model, conducted LOS analysis at nine intersections, developed Transportation Systems Management (TSM) improvement alternatives, and prepared cost estimates

**Bel-Red Road Intersection Improvements, Bellevue, WA, Project Manager:** Preparation of plans, specifications, and cost estimates documents for reconstruction of the Bel-Red Road/134th Avenue NE intersection. The project included signalization, street lighting, and roadway widening to provide left turn lanes on the north and south legs of the project. Utility conflicts, sight distance, adjacent property access, large trees, and topography were all issues which had to be addressed.

**Bear Mountain Ranch Road/SR 97A Intersection Design, Chelan County, WA, Project Manager:** Project manager for the intersection design of Bear Mountain Road and State Route 97A. Design of the intersection included a new northbound designated left turn pocket and a new southbound designated right turn pocket per WSDOT standards

**Columbia Slough Consolidation Conduit, Portland, OR, Senior Traffic Engineer:** Designed traffic control plans involving road closures and detour routes, lane closures, traffic signal modifications, as well as channelization and signing modifications for five segments of the tunneling project. Extensive coordination with design engineers, City of Portland staff, and the Oregon Department of Transportation was required for each segment of the project. Prepared drawings, specifications and cost estimates for traffic control measures for all five segments.

