

WSDOT's Corridor Sketch Initiative is a collaborative planning process with agency partners to identify performance gaps and select high-level strategies to address them on the 304 corridors statewide. This Corridor Sketch Summary acts as an executive summary for one corridor. Please review the User Guide for Corridor Sketch Summaries prior to using information on this corridor:

SR 539: I-5 Jct (Bellingham) to Canadian Border

This 15-mile long north-south corridor runs between the Interstate 5 interchange in Bellingham and the U.S.-Canada Lynden-Aldergrove border crossing. State Route 539 passes through portions of the cities of Bellingham and Lynden, and crosses over Wisner Lake and the Nooksack River. Outside of population centers in the cities, the majority of this corridor is rural in character and agricultural land is predominant with some residential development. There are some urban areas and suburban regions concentrated around Lynden and Bellingham, as well as small clusters of commercial use at major intersections along the corridor. Within the urbanized areas, large commercial centers dominate the corridor. There is also a significant industrial area located just east of SR 539 in Bellingham, and additional industrial development in Lynden. Whatcom Community College is also located west of the corridor in Bellingham. The landscape is predominately flat farmland with trees dotted alongside the corridor.



Current Function

SR 539 is also known as the Guide-Meridian Road, and runs from Bellingham at the south end to the Canada-U.S. border at the Lynden-Aldergrove crossing in the north. The corridor's primary function is to move people and goods between urban Bellingham and the Canadian border through rural Whatcom County. The corridor provides access to two border-crossings, one north of Lynden and one at Sumas via SR 546 and SR 9, and supports local commerce and international freight headed to and from Canada. The corridor also provides access to commercial areas such as the shopping centers in north Bellingham, and nearby Whatcom Community College and the Cordata Business Park. Other traffic generators along the corridor include light industrial, residential neighborhoods, and agriculture. Pedestrians are present where there are sidewalks in the city of Bellingham and portions of the city of Lynden. Whatcom Transportation Authority provides bus transit service along this route, with access to one park and ride in Lynden.

Future Function

Based on the projected population, land use, and economic trends, the future function of this corridor is expected to remain the same. Bellingham is a major city near an international border anticipates significant population and employment growth in the future. Freight traffic is expected to increase substantially, as border, retail, and distribution center uses expand.

Highlights and Performance

SR 539 is a mainly a four-lane undivided highway. There is a short four-lane divided segment near the Nooksack River and in north Lynden it is a two lane undivided highway. The average annual daily traffic on this corridor is highest near the I-5 interchange and lowest at the Canadian border.

What's working well?

- Roughly, 91% of surveyed pavement on this corridor is in fair or better condition.
- Enhancements at the border crossing are facilitating increased traffic volumes between the U.S. and Canada.
- Investments that increased capacity from two to four lanes with intersection, and access improvements have improved mobility and safety for a significant stretch of the corridor.
- Low cost access management improvements from I-5 to Horton Road have increased throughput and safety.
- A number of local parallel routes provide alternate freight and non-motorized connections.
- Recent investments have improved drainage and fish passage barriers.

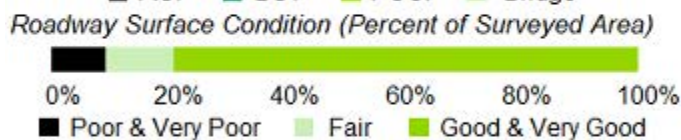
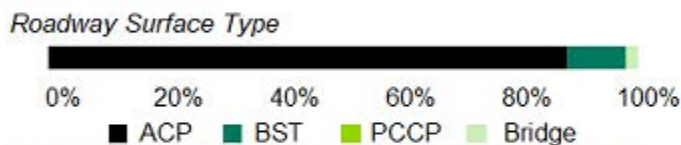
What needs to change?

- Approximately 65% of this corridor experiences congestion on a regular basis.
- Long queues develop at I-5 in Bellingham.
- Access management does not extend through northern Bellingham resulting in turning conflicts .
- There is a lack of east-west bike and pedestrian network connections across SR 539.
- The interchange configuration at I-5 is overwhelmed by traffic volume.
- Intersection at SR 546/Badger Road has high volume of left turning movement for freight.
- Lack of local network connections near the industrial center in Lynden forces freight traffic onto the corridor.
- Several fish passage barriers have been identified along the corridor.

WSDOT monitors the state system in ongoing efforts to track asset performance. For this corridor, WSDOT finds:

High	Low	
48,414	1,378	Annual Average Daily Traffic (AADT)
15.7%	3.2%	Bus/Truck Percent
52.27		Number of Lane Miles
19		# of Signalized/Stop Controlled Intersections
\$185,137,000		Corridor Investments (2005-2016)

Preservation



Corridor Bridge Preservation Needs



Mobility



Environment

	Protect	Restore/Enhance/Assess
Fish Barriers	50% Passable	50% to Do
Noise Walls	0% Built	0% Proposed
Chronic Environmental Deficiencies	0% Resolved	0% Unresolved
Wildlife Connectivity	0 Structures in Place	2 High Priority Miles
Stormwater Treatment	175 BMPs	Retrofit Prioritization in progress
98.9	% of Corridor with high potential for increased Climate Impacts	
2	Wetland Mitigation Locations	
1	Historical Bridges	

1) 2015 data unless otherwise noted. 2) For more information see the User Guide for Corridor Sketch Summaries at <http://bit.ly/WSDOTcorridorsketch>

What we heard from our partners

WSDOT collected feedback from agency partners. Key themes included:

- Small investments in local roads could facilitate more county road usage to reduce delays on SR 539 and increase freight access.
- Continued regional growth is expected to further impact corridor operations.
- A desire to expand pedestrian and bicycle facilities and cross highway connections.
- A desire to finish widening SR 539 within the city of Lynden.
- Multiple partners are interested in additional east-west connections between I-5 and SR 539.

Strategies

WSDOT identified the following strategies and associated actions to keep the corridor working well and address performance gaps. Regional partners collaborated on high-level mobility strategies. The identified strategies are not meant to be all-inclusive, nor an established list of priorities. Further evaluation is needed before any strategy can be recommended as a solution to address performance. Project funding decisions will take place at the programming phase, and are subject to statewide prioritization. For more strategy information, visit the Corridor Sketch Summary User Guide.

Policy Goals / Strategies Description and Near-Term Actions

Economic Vitality

Under Development	<i>WSDOT will continue to work with partners in developing strategies to address economic vitality.</i>
-------------------	---

Environment

Protect and Maintain	<i>Protect and maintain existing assets that provide environmental function (these include WSDOT's mitigation sites, storm water systems, fish passable culverts).</i>
----------------------	--

Enhance or Restore	<i>Enhance or restore natural areas and environmental functions associated with the multimodal transportation system.</i>
--------------------	---

Fish Barrier Retrofit	<i>WSDOT has prioritized the removal of state-owned culverts that block habitat for salmon and steelhead. See interactive map of uncorrected fish barriers at http://www.wsdot.wa.gov/Projects/FishPassage/default.htm.</i>
-----------------------	--

Mobility

Assessment	<i>Further information about the proposed strategies can be found attached at the end of this document.</i>
------------	---

Preservation

Maintenance	<i>Based on expenditure history, it is expected that the top three activities will continue to be maintenance on snow and ice control, rest areas, and pavement repair.</i>
-------------	---

Pavement	<i>WSDOT has identified three Pavement actions in the next six years encompassing 33% of the corridor.</i>
----------	--

Safety

Investment	<i>WSDOT has identified three Safety Investment actions in the next six years encompassing 44% of the corridor.</i>
------------	---

Stewardship

Planning	<i>Under Practical Solutions, the Corridor Sketch Initiative identifies corridor performance, and assesses alternative strategies to improve the quality, effectiveness, and efficiency of the transportation system.</i>
----------	---

For more information

To find out more information about this corridor or how to get involved, please contact:

Todd Carlson

NW Mt. Baker Area Planning Office
Planning & Engineering Services Manager
360-757-5980
carlsot@wsdot.wa.gov

Washington State Department of Transportation's Corridor Sketch Initiative is a set of planning activities that engage our partners to define the context and performance information for all of the state's 304 highway corridors. The Corridor Sketch complements and supports regional planning processes in Washington. It is not intended to duplicate, substitute or compete with other planning efforts; nor is it intended to generate lists of projects.

Under 23 U.S. Code § 148 and 23 U.S. Code § 409, safety data, reports, surveys, schedules, lists compiled or collected for the purpose of identifying, evaluating, or planning the safety enhancement of potential crash sites, hazardous roadway conditions, or railway-highway crossings are not subject to discovery or admitted into evidence in a Federal or State court proceeding or considered for other purposes in any action for damages arising from any occurrence at a location mentioned or addressed in such reports, surveys, schedules, lists, or data.

Americans with Disabilities Act (ADA) Information

Individuals requiring reasonable accommodations may request written materials in alternate formats, sign language interpreters, physical accessibility accommodations, or other reasonable accommodations by contacting the event sponsor (enter name of event sponsor and phone number), by (insert date-usually two weeks advance notice). Persons who are deaf or hard of hearing may contact the event sponsor through the Washington Relay Service at 7-1-1.

Title VI Statement to Public

It is the Washington State Department of Transportation's (WSDOT) policy to assure that no person shall, on the grounds of race, color, national origin and sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its federally funded programs and activities. Any person who believes his/her Title VI protection has been violated may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For Title VI complaint forms and advice, please contact OEO's Title VI Coordinator at (360) 705-7098.

Información del Acta (ADA) de Estadounidense con Discapacidad

Este material se puede hacer disponible en un formato alternativo por correo electrónico al equipo de Asuntos de diversidad/ADA WSDOT en wsdotada@wsdot.wa.gov o llamando gratis, 855-362-4ADA (4232). Personas sordas o con problemas de audición pueden solicitar llamando el relé de estado de Washington al 711.

Notificación de Título VI al Público

Es la póliza de el Departamento de Transportación del Estado de Washington de asegurar que ninguna persona sea excluida de participación o sea negado los beneficios, o sea discriminado bajo cualquiera de sus programas y actividades financiado con fondos federales sobre la base de raza, color, origen nacional o sexo, como proveído por el Título VI de el Acto de Derechos Civiles de 1964. Cualquier persona que cree que sus protecciones de Título VI han sido violadas, puede hacer una queja con la Oficina de Igualdad de Oportunidades (OEO). Para información adicional con respecto a procedimientos de quejas de Título VI y/o información con respecto a nuestras obligaciones sin discriminación, por favor de comunicarse con le Coordinador de Título VI de la Oficina de Igualdad de Oportunidades (OEO) (360) 705-7082.

This corridor provides the primary access to two border crossing between Washington State and B.C. Canada. Additionally, there is limited east west connectivity to I-5 from other major corridors. North of Telegraph Road, the corridor passes through a heavy commercial business area with multiple signalized intersections and private driveway accesses. Connectivity to transit and commercial/residential area is a high priority.

Traffic demand at key intersections results in delay and queues which significantly affect corridor operations for all motorized vehicles including transit service during peak travel periods. Significant congestion occurs at Telegraph Road and queues often develop that stretch onto the I-5 off-ramp. Commercial and residential growth is forecasted in the north Bellingham urban area.

Corridor Segment Characteristics

- This segment of SR 539 is within the City limits of Bellingham.
- Average annual daily traffic was 48,000 vehicles in 2015. Freight made up 3.2% of traffic.
- The speed limit on this segment is 35 mph.
- This segment has four general purpose lanes with six signalized intersections, managed access near I-5, and a center turn lane north of E Kellogg.
- Commercial uses near I-5 with transition to undeveloped urban areas north of E Kellogg.
- Heavy traffic volumes in commercial area near I-5.
- Transit service is available, park and ride available in Lynden.

Contributing Factors

- Significant freight and recreational traffic passes through to access U.S.-Canada border crossings at Lynden and Sumas.
- I-5 northbound off-ramp merging onto SR 539 is restricted due to its proximity to the Telegraph Road signalized intersection (390 feet north) resulting in queues that sometimes stretching back to I-5.
- Multiple private driveways access SR 539 from individual businesses between intersections causing traffic conflicts that increase congestion.

Contributing Factors (continued)

- Heavy transit use with multiple stops and no bus turnouts causes delay on the corridor.
- Few east/west major road connections north of E Kellogg.
- Bakerview Road provides the only local alternative to I-5/major access to I-5 and is and is increasingly becoming congested.
- There are no bicycle facilities on this corridor; the main bicycle route is located on Hannigan Road to the east.



SR 539 Looking South toward I-5.



A transit stop on SR 539 with a bus pullout.

Mobility Strategies:

Operational Improvements

- Remove dual driveways, encourage shared-use driveways and/or public roads in less developed areas to avoid uncontrolled turning movements.
- In areas already fully developed, restrict uncontrolled turning movements to improve traffic flow.
- Continue to monitor traffic signal operations to improve traffic flow.

Demand Management

- Designate alternative parallel bicycle route to facilitate non-motorized access and connectivity.
- Encourage ridesharing, vanpooling, and transit service to reduce single occupant vehicle trips.

Local Network Improvements

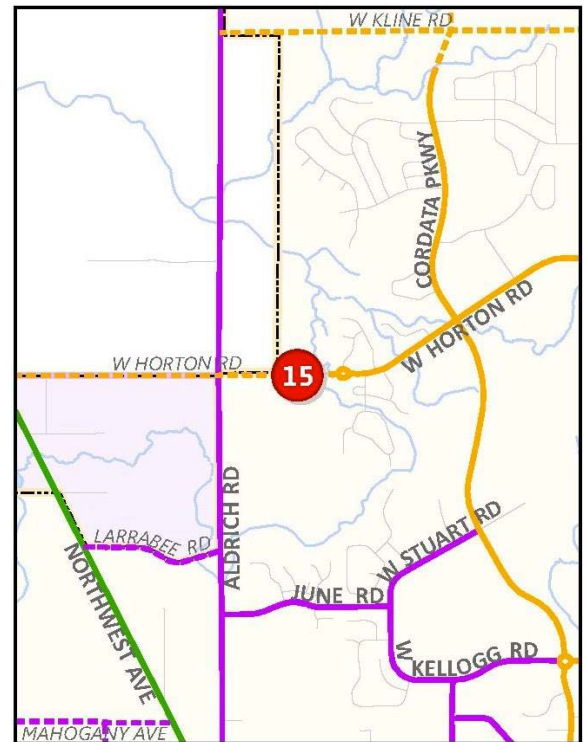
- Support city of Bellingham’s efforts to continue connecting local arterials to provide better vehicular and non-motorized circulation.

Policy Change

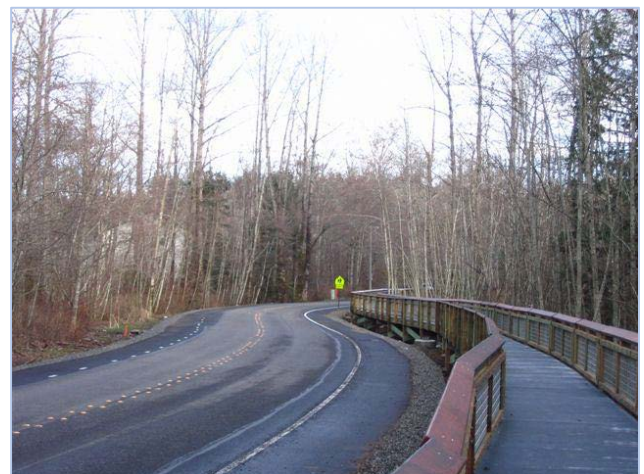
- Work to leverage funding for mutually beneficial improvements on local and state system.
- Adopt additional policies to restrict the number and location of individual driveways to reduce conflict points, maximize the efficiency of traffic movement, and preserve public investment.

Further Study

- Monitor transit activity to determine location of opportunities to improve transit operations.
- Develop options to support local trips on local roadway network.
- Develop options to improve traffic flow from I-5 to SR 539.



West Horton Road multimodal corridor extension, phase 2 – creating an east-west, multi-modal connection in fast-growing north Bellingham



This corridor provides the primary access to two border crossings between Washington State and B.C. Canada. This segment of SR 539 passes through Lynden's commercial zone, which has multiple private access driveways serving high intensity commercial activities.

During peak travel periods queuing occurs at signalized intersections, multiple driveways, and where the number of lanes reduces to roadway configuration lanes are.

Corridor Segment Characteristics

- This segment of SR 539 is in Lynden's city limits.
- Average annual daily traffic was 13,860 in 2015. Freight made up 15.7% of traffic.
- The speed limit on this segment is 40 mph.
- SR 539 is the primary freight and passenger vehicle corridor to Lynden and Sumas border crossings.
- Commercial and industrial uses are present and expanding along the corridor.
- There are two signalized intersections and lots of turn lanes within Lynden.
- Pedestrian and bicycle facilities are limited.
- Transit service and park and ride lots are available.

Contributing Factors

- Significant freight and recreational traffic passes through to access two US/Canada Border crossings within 4.5 and 12.5 miles, respectively, exceeding system capacity during period of peak use.
- Signalized intersections and lane reductions create a bottleneck resulting in significant congestion.
- Multiple private driveways access from individual businesses between signalized intersections resulting in turning conflicts for traffic.
- Transitions from areas with full urban improvements like sidewalks to a narrow two lane rural road standard result in slow downs for vehicles and lack of non-motorized access.
- Pedestrian and bicycle facilities are limited with multiple gaps causing poor non-motorized connectivity along the corridor.

Mobility Strategies:

Operational Improvements

- Monitor cross-border freight operations and deploy dynamic active traffic management to manage congestion.
- Provide traveler information to drivers on roadway conditions such as incidents, travel time, weather, emergency alerts, and alternatives to avoid delays.

Demand Management

- Improve multimodal connectivity by extending sidewalks and designating bicycle facilities along the corridor within the urban area.
- Encourage ridesharing, vanpooling, and transit service to reduce single occupant vehicle trips.

Policy Change

- Work to leverage funding for mutually beneficial improvements on local and state system.
- Adjust access management policies to restrict the number and location of individual driveways to reduce conflict points, maximize the efficiency of traffic movement, and preserve public investment.

Further Study

- Evaluate options for addressing slowdowns and non-motorized access through Lynden.



SR 539 at Kok Road where segment narrows to two lanes.