



TRANSPORTATION COMMITTEE
OCTOBER 25, 2017
3:30 P.M.
COUNCIL CHAMBERS

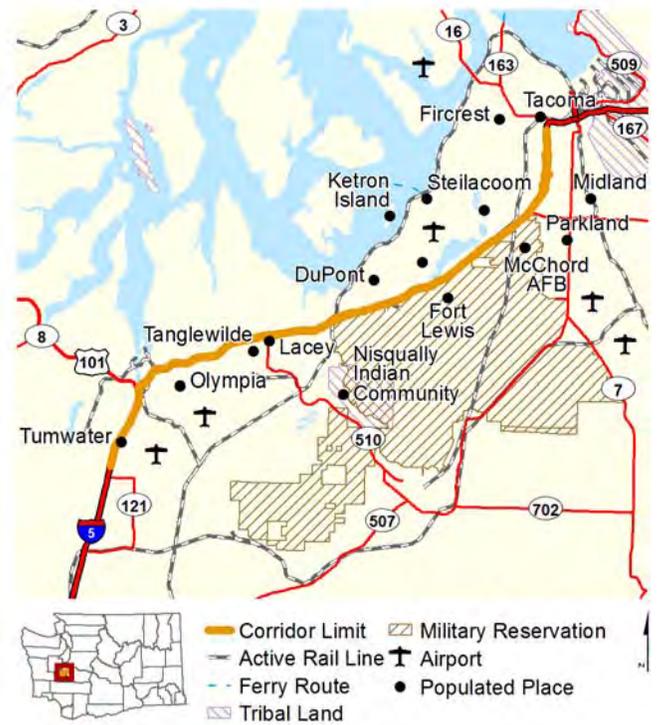
1. **WSDOT CORRIDOR SKETCH**
ROGER SCHOESSEL, CITY ENGINEER
(VERBAL – ATTACHMENT)

2. **PINBOARD – ACCIDENT HISTORY FOR LACEY STREET SYSTEM**
MARTIN HOPPE, TRANSPORTATION MANAGER
(VERBAL – NO ATTACHMENT)

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:

I-5 Tumwater to Tacoma (I-5 Tumwater to Arlington: South)

This 32-mile corridor on Interstate 5 runs between State Route 121 in the city of Tumwater, and SR 16 in the city of Tacoma. This section of I-5 goes through or near the cities of Tumwater, Olympia, Lacey, DuPont, Steilacoom, Lakewood, University Place, Fircrest, and Tacoma. The corridor also passes through the Billy Frank Jr. Nisqually National Wildlife Refuge, Nisqually Valley, and Joint Base Lewis McChord. Most of the area surrounding the corridor is mixed suburban and urban in character. A significant portion is also open space or rural in character particularly the section along JBLM and the Wildlife Refuge. Within the urban areas, the primary land uses along the corridor are residential and commercial. JBLM also makes up a significant portion of the land use along the corridor. There are also industrial and state government uses on the corridor, particularly in Olympia, Washington state's capitol. This section of the interstate runs parallel to Puget Sound. A rail line also runs parallel to the highway between Nisqually and Lakewood. Plant life along the corridor ranges from maintained grasses to mixed deciduous and coniferous trees, and saltwater estuary/wetland plants.



Current Function

I-5 is the major north-south route along the U.S. west coast, connecting most major cities between Canada and Mexico. This segment of I-5 connects Olympia and Tacoma and provides local access to communities between. The corridor shares interchanges with US 101, SR 121, SR 510, SR 512, and SR 16. This corridor is mainly used by commuters traveling between the Olympia and Seattle/Tacoma areas as well as travelers between Portland and Seattle. The corridor experiences some of the highest freight traffic volumes in Washington due to the proximity of major ports in Tacoma, Seattle, and Olympia. In addition, military convoys use this section of I-5. Traffic generators for the corridor include these major ports and employment centers like the state capitol, JBLM, and downtown Tacoma. Multiple transit agencies provide bus and vanpool services, and have park and rides along the corridor. Sound Transit and Amtrak Cascades provide commuter and intercity rail service, respectively. Bicycles are only permitted on small portions of the highway and minimally present. A bicycle trail parallels I-5 between Olympia and Lacey, connecting with other regional trails.

Future Function

Based on the projected population, land use, and economic trends, the future function of this corridor is anticipated to remain unchanged.

Highlights and Performance

The majority of this corridor is a six-lane, divided highway. Between the Thorne Lane interchange near JBLM and the SR 16 interchange in Tacoma, I-5 expands to an eight-lane divided highway. The annual average daily traffic on this corridor is highest near the S 56th Street interchange in south Tacoma and lowest near the Olympia Airport at Tumwater Boulevard.

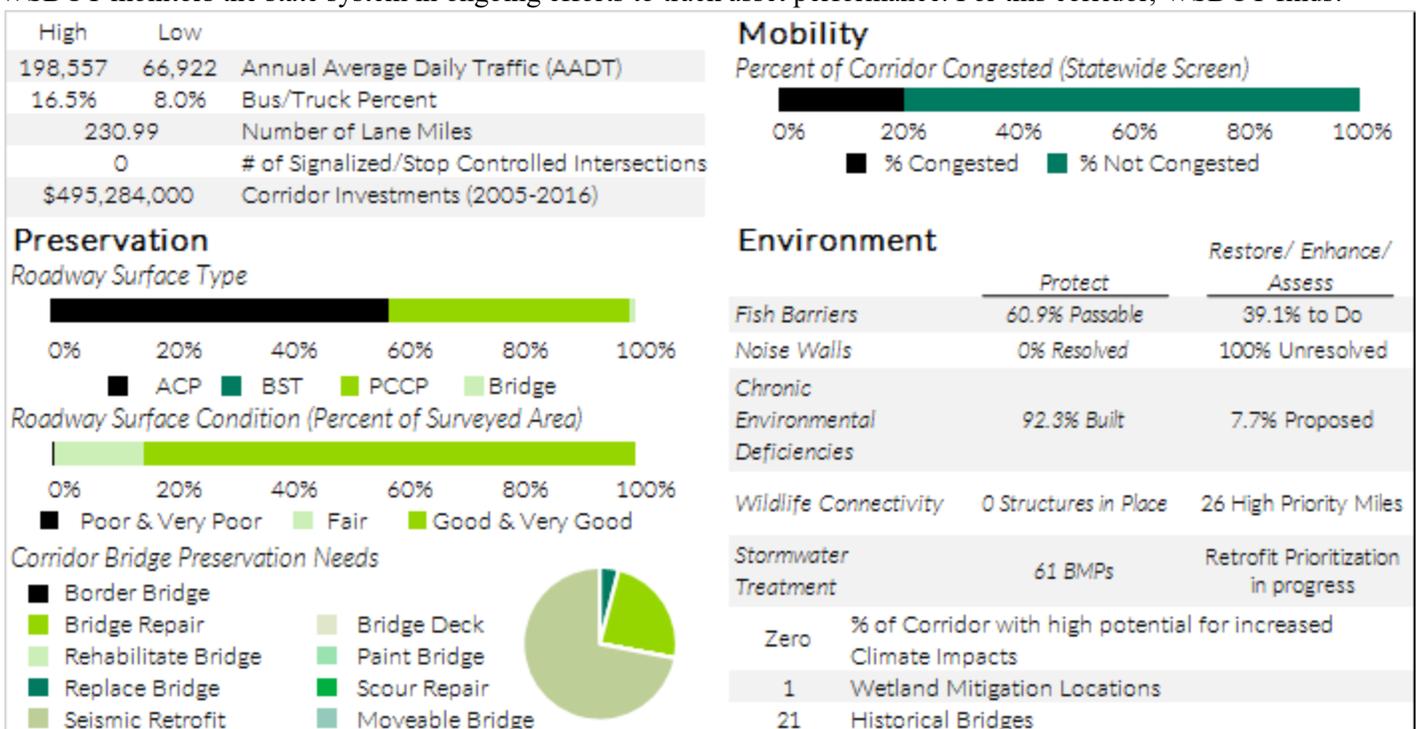
What's working well?

- 98% of pavements on this corridor are in fair or better condition.
- WSDOT installed ramp metering north of SR 510 to manage traffic flow.
- The JBLM Connector route is helping to reduce demand on the corridor.
- Multiple transit agencies provide service on or near the corridor.

What needs to change?

- Roughly 80% of this corridor experiences congestion on a regular basis.
- There are weight restrictions on the Nisqually River bridges.
- There are 25 bridge preservation needs on this corridor including 18 seismic retrofits.
- There are fish passage barriers present on the corridor.

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



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:

- Concern shared by all partners about impacts of the Nisqually River bridges' capacity and weight restrictions.
- Strong concern for how susceptible I-5 is at the Nisqually River to impacts from incidents and the effects of traffic diverging onto local network alternatives.
- Interest in climbing/passing lanes at key locations on the corridor such as leading out of the Nisqually River valley in both directions on the steep hills.
- Concerns over capacity issues at multiple interchanges such as US 101, Martin Way and Marvin Road interchanges.
- An emphasis on the importance of I-5 as an important express transit route and interest in improving transit facilities on the corridor such as High-Occupancy Vehicle lanes.
- During peak periods, the city of Tacoma experiences heavy delays due to ongoing construction.

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. WSDOT has a planned Stormwater Retrofit action on this corridor.</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, pavement repair, and rest areas.</i>
-------------	---

Pavement	<i>WSDOT has identified three Pavement actions in the next six years encompassing 100% of the corridor.</i>
----------	---

Structures	<i>WSDOT has identified three Structures actions in the next six years at specific locations within this corridor.</i>
------------	--

Other Facilities	<i>WSDOT has identified one Other Facilities action in the next six years at a specific location within this 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>
----------	---

I-5 serves as an urban, recreational, and national freight corridor which travels through the cities of Tumwater, Olympia, and Lacey.

This segment includes high mainline traffic volumes with merging, diverging, and weaving movements between interchanges which reduce capacity.

Corridor Segment Characteristics

- I-5 functions as an urban, six-lane divided freeway with additional auxiliary lanes at specific locations along the segment. The posted speed is 60 mph in rolling terrain.
- The state capitol and state government offices are located along the segment which travels through the cities of Tumwater, Olympia, and Lacey.
- The Freight and Goods Transportation designation for the segment was T-1 with 57,570,000 to 61,880,000 in annual tonnage and 10,000 to 12,000 daily trucks (13.0% to 9.3%) in 2015.
- The average daily traffic on the segment ranged from 90,000 vehicles at SR 510 to 146,000 vehicles north of the US 101 Deschutes Way ramp in 2016.

Contributing Factors

- High traffic volumes with merging, diverging, and weaving between interchanges reduce mainline capacity.

Mobility Strategies:

Operational Improvements

- Implement a Statewide Intelligent Transportation System plan that includes ramp meters to improve efficiency.

- Install hard shoulder running strategies to reduce congestion.

Demand Management

- Study transit enhancements, specifically evaluate Hawks Prairie, Martin Way, and a new transit center/park and ride lot near Tumwater Town Center to reduce single occupancy vehicle trips.
- Install illumination and park and ride lot expansion at Grand Mound to encourage mode shift.

Mobility Strategies (continued):

- Implement “Go Transit” initiative and options for Joint Base Lewis-McChord military base, including a park and ride, transit shuttle system and grants, civilian vanpools, and connections to transit off base to encourage public transit use.
- Replace vanpools (Intercity Transit vanpools) in order to encourage use and reduce SOV trips.
- Implement transit pass program to increase ridership.
- Install a separated shared-use path/trail from Martin Way in Thurston County to Mounts Road in Pierce County and Olympia Woodland trail phase 3 and 4 connections near Capitol Lake in Olympia to encourage active transportation.
- Install bicycle routes for JBLM through Nisqually to encourage cyclists.
- Implement transit oriented development/parking at downtown Olympia transit hub to increase transit use.
- Study strategies for transit connections for the first and last mile to encourage public transit use.
- Establish a defined bike route between Tacoma and Tumwater for non-motorized use.

Local Network Improvements

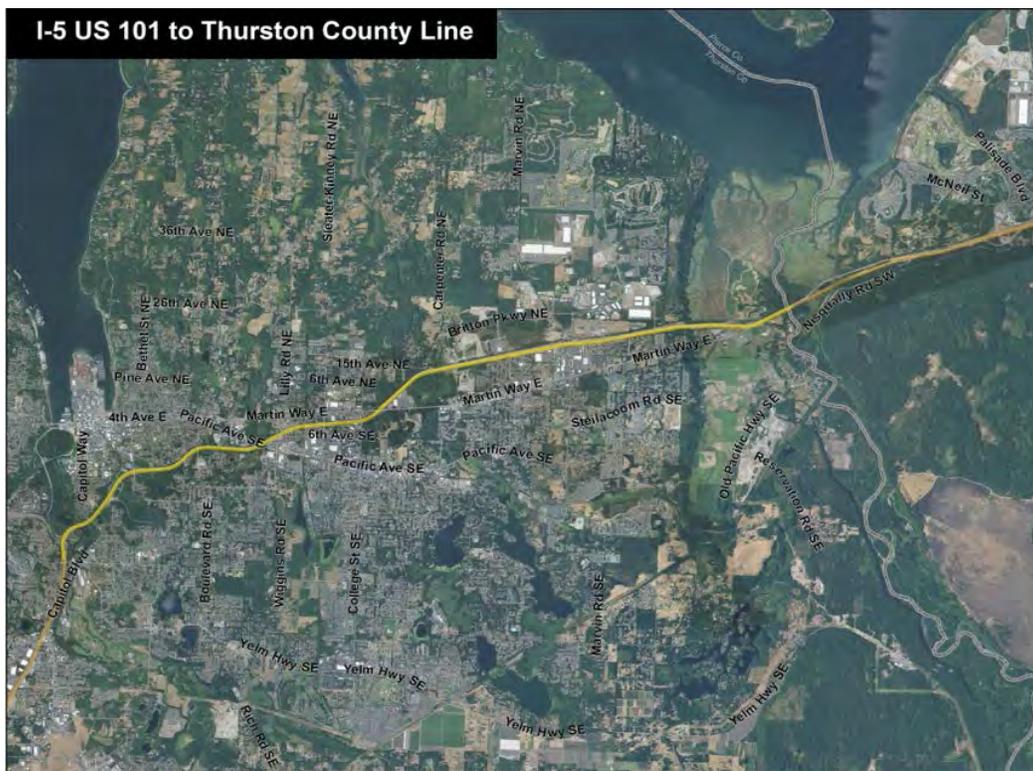
- Update timing and channelization for north-south and east-west local streets to increase throughput.

Policy Change

- Look into implementing weight restrictions on Nisqually River bridges for “super loads.”
- Allow motorcycles to travel between travel lanes in order to improve system efficiency.
- Implement Commute Trip Reduction programs to reduce the number of vehicles on the road.
- Install electric vehicle charging systems at park and ride lots and safety rest areas to reduce emissions.
- Install park and ride lot cameras to monitor utilization and increase security.
- Design/build for safety and operational improvements.
- Washington State Patrol speed enforcement.
- Implement landscaping to “balance” visibility for business and reduce encampments/litter.
- Consider new school locations to reduce traffic impacts and address safe routes to school concerns.

Further Study

- Study interchange ramp terminal improvements to improve efficiency and reduce queuing (e.g. 93rd northbound off/on signal and intertie, Tumwater Boulevard teardrop roundabouts, Trosper Road northbound off/on realignment with roundabout at Capital/Trosper, I-5/City Center-Henderson braided southbound ramp, I-5/Sleater Kinney southbound off/on ramp terminal roundabout or signal, I-5/Martin Way southbound shared double left/right or future partial cloverleaf, I-5/Marvin - SR 510 diverging diamond interchange, etc.).
- Look into the use of High Occupancy Vehicle lanes to provide reliability and reduce congestion.
- Evaluate multimodal mobility strategies identified in the I-5 corridor mobility strategy study from the Lewis County line to the Steilacoom-DuPont Road interchange.
- Study the I-5/US 101 interchange for southbound off weaving and northbound off queuing.
- Develop options to improve into transit reliability along the corridor.
- Explore methods for the future replacement of steel truss Nisqually River bridges to improve Nisqually River delta (helping to restore saltwater estuary).
- Work with Sound Transit on rail connections into Thurston County.
- Consider revisiting recommendations for improving freight mobility from the commerce corridor feasibility study using a Practical Solutions framework.
- Evaluate options for reducing slowdowns due to climbing freight vehicles leading out of the Nisqually delta in both directions on the steep hills (southbound between Nisqually on ramp to Marvin Road-SR 510 off ramp and northbound Nisqually on ramp to Mounts Road off ramp vicinity).
- Consider options for reducing congestion at and between the Martin Road and Marvin Road interchanges.
- Develop options for reducing corridor-wide congestion using a practical solutions framework.
- Develop options for reduce queuing at the southbound Martin Way ramp terminal signal.



For more information

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

Dennis Engel

Olympic Region Planning Office

Planning Manager

360-357-2651

engeld@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 el Coordinador de Título VI de la Oficina de Igualdad de Oportunidades (OEO) (360) 705-7082.