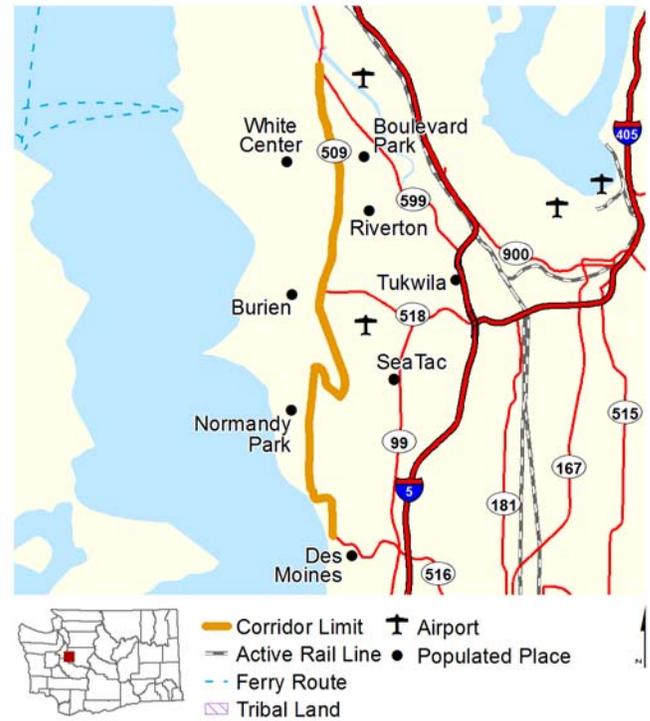


WSDOT's Corridor Sketch Initiative is a collaborative planning process with agency partners to identify performance gaps and select high-level strategies to address them on the 304 corridors statewide. This Corridor Sketch Summary acts as an executive summary for one corridor. Please review the User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

*SR 509: SR 516 Jct (Des Moines) to SR 99/East Marginal Way South (Seattle)*

This 12-mile long north-south corridor is located in King County, between the State Route 516 junction in the city of Des Moines and SR 99 in the city of Seattle. The corridor bisects the cities of Burien and SeaTac on the west and east side of the corridor, respectively. The corridor passes through the unincorporated community of Highland as well as the cities of Normandy Park and Burien. The corridor is primarily urban in character with residential, commercial, and industrial land uses. As the corridor passes through Georgetown in Seattle, land uses become denser and more industrial. There are many employment centers along the corridor's length and within cities it passes through one of which is the Seattle-Tacoma International Airport. The corridor runs parallel to Interstate 5, SR 99, Puget Sound, and the Duwamish Waterway. Terrain on the corridor is rolling.



**Current Function**

SR 509 is a state highway connecting the cities of Tacoma and Seattle and provides access and services to the several cities and neighborhoods it passes through. The corridor primarily functions as a freight route for the region and serves as a north-south commuter and a freight route alternative to I-5. The corridor provides access for users traveling to downtown Seattle, Boeing Field, the Fauntleroy Ferry Terminal, and local residences. Additional functions of the corridor include access to industrial and commercial areas located adjacent to the corridor. SR 516, SR 518, and SR 99 branch off this corridor providing links to other cities. Portions of the corridor permit bicycle use, transit is provided by King County Metro, and three park and rides are located along corridor.

**Future Function**

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

## Highlights and Performance

From the SR 516 junction to the S 188th Street intersection in Des Moines, SR 509 is an undivided, signalized highway with a center turn lane. North of Des Moines, it becomes a divided, unsignalized highway with acceleration/deceleration and HOV lanes on both sides. The corridor fluctuates between two and five lanes over its course. The annual average daily traffic on this corridor is highest at the S Cloverdale St interchange in Seattle and lowest at the 1st Avenue S intersection in Normandy Park.

### What's working well?

- Approximately 92% of surveyed pavements on the corridor in fair or better condition.
- The southern section of the corridor is served by fixed-route transit.
- The corridor has a low climate change vulnerability rating.
- There are no chronic environmental deficiency or habitat connectivity sites on the corridor.

### What needs to change?

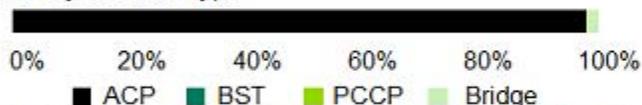
- Roughly 23% of the corridor experiences congestion on a regular basis.
- There are multiple fish passage barriers present on the corridor.
- The corridor's sidewalk network is incomplete and there are no dedicated shared-use or bicycle facilities.
- There are locations without noise walls on the corridor in where they would be beneficial.

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

High	Low	
66,804	7,279	Annual Average Daily Traffic (AADT)
9.1%	2.4%	Bus/Truck Percent
42.74		Number of Lane Miles
11		# of Signalized/Stop Controlled Intersections
\$37,158,000		Corridor Investments (2005-2016)

### Preservation

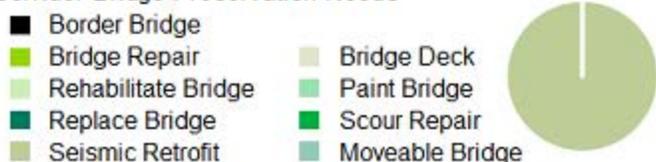
#### Roadway Surface Type



#### Roadway Surface Condition (Percent of Surveyed Area)

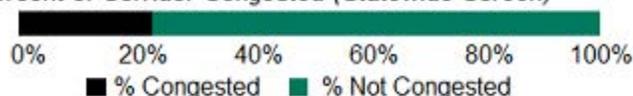


#### Corridor Bridge Preservation Needs



### Mobility

#### Percent of Corridor Congested (Statewide Screen)



### Environment

	Protect	Restore/ Enhance/ Assess
Fish Barriers	20% Passable	80% to Do
Noise Walls	0% Built	100% Proposed
Chronic Environmental Deficiencies	0% Resolved	0% Unresolved
Wildlife Connectivity	0 Structures in Place	0 High Priority Miles
Stormwater Treatment	19 BMPs	Retrofit Prioritization in progress
Zero	% of Corridor with high potential for increased Climate Impacts	
2	Wetland Mitigation Locations	
None	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 is interested in collecting feedback from our partners. To provide feedback on this corridor, please contact the office indicated on the last page of this document.

## 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>
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#### **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 <a href="http://www.wsdot.wa.gov/Projects/FishPassage/default.htm">http://www.wsdot.wa.gov/Projects/FishPassage/default.htm</a>.</i>

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#### **Mobility**

Assessment	<i>Further information about the proposed strategies can be found attached at the end of this document.</i>
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#### **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 sweeping and cleaning.</i>
Pavement	<i>WSDOT has identified four Pavement actions in the next six years encompassing 58% of the corridor.</i>

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#### **Safety**

Investment	<i>WSDOT has identified three Safety Investment actions in the next six years encompassing 12% of the corridor.</i>
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#### **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>
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This segment of SR 509 is a primary north-south connection between Des Moines and White Center for vehicular traffic. This corridor is parallel to I-5 for most of its length. Like SR 99, this corridor provides access to the Seattle-Tacoma International Airport and serves as a north-south commuter and freight route alternative to I-5.

The corridor experiences congestion during peak travel times.

### Corridor Segment Characteristics

- In 2015, the Average Daily Traffic ranged from 10,000 to 62,000 vehicles on E Marginal Way S.
- Most of the corridor has a T-3 freight classification, except for the T-2 classification for the segment from Des Moines Memorial Drive to SR 99 (E Marginal Way S), moving 3,630,000 tons of freight cargo in 2015.

### Contributing Factors

- Traffic demand exceeds capacity during heavy commuter and freight use particularly near interchanges, resulting in delay.
- Lack of local network connections forces additional traffic demand onto the segment.
- Lack of non-motorized facilities at interchanges make crossing the highway difficult for these users.

### Mobility Strategies:

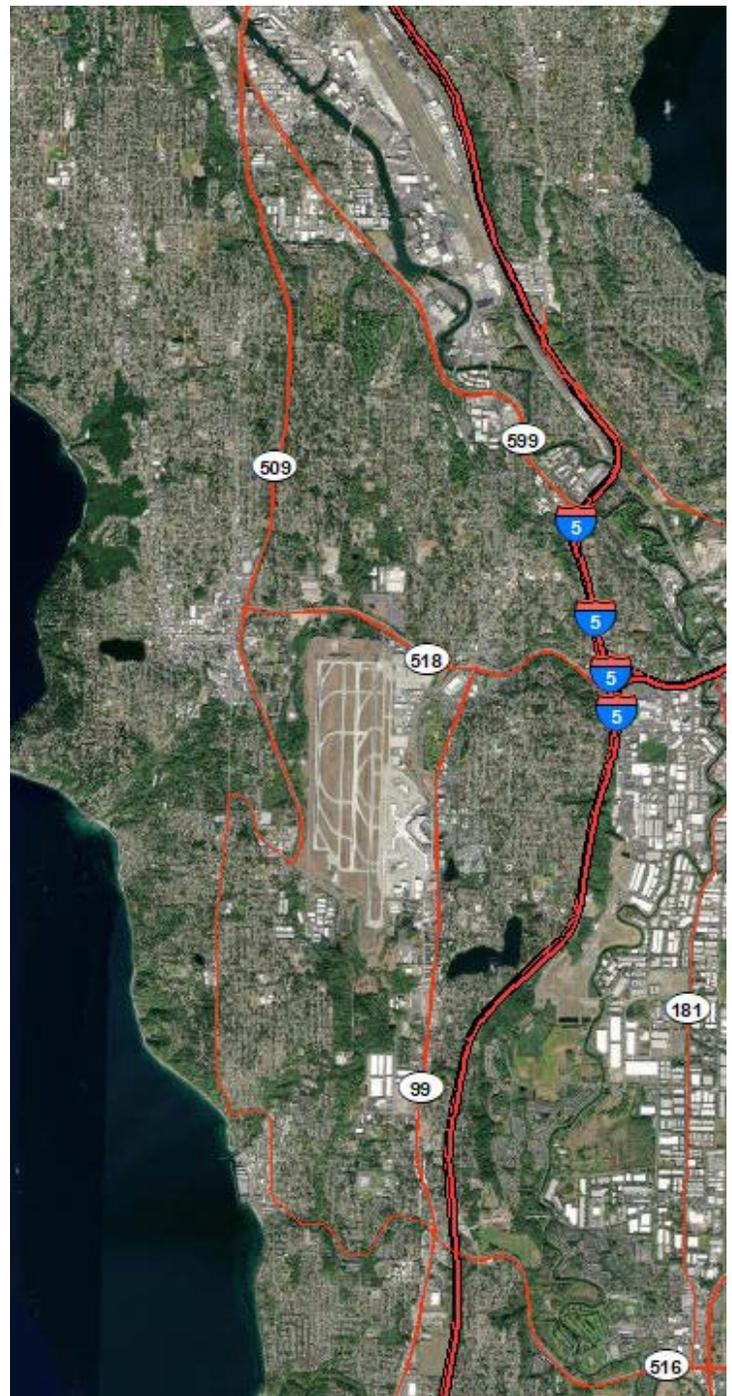
WSDOT compiled these strategies based on available information and existing plans. The agency will conduct engagement with its partners to further develop strategies for the corridor.

### Operational Improvements

- Improve modal access, options, and connectivity to reduce single occupant vehicle trips.
- Implement intersection improvements to improve efficiency during periods of high use.

### Further Study

- Using a Practical Solutions lens, continue to study potential strategies from the Puget Sound Gateway Program to improve mobility performance on SR 509.
- Additional strategies to manage congestion may be determined through the Puget Sound Regional Council's regional planning processes.



## For more information

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

### **Nazmul Alam**

Corridor Planning Manager  
WSDOT Management of Mobility Division  
206-464-1267  
alamn@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](mailto: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.