#### Corridor 316 - SR 104: Dayton St. (Edmonds) to SR 522 Jct (Lake Forest Park) Summary

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 104: Dayton St. (Edmonds) to SR 522 Jct (Lake Forest Park)

This seven-mile long corridor on State Route 104 stretches between the intersection of Dayton Street in the city of Edmonds and the SR 522 junction in the city of Lake Forest Park. A 0.34-mile spur is located mid-corridor, west of Interstate 5. The corridor crosses the Snohomish/ King county line near its juncture with I-5. The corridor traverses populated and developed urban and suburban communities in Edmonds, Esperance, Woodway, Shoreline, Mountlake Terrace, and Lake Forest Park. Land use along the corridor is primarily commercial or residential. Other amenities present on the corridor include schools, golf courses, city parks, and cemeteries. The corridor is bookended by Puget Sound on the west, Lake Washington on the east, and skirts the southern edge of Lake Ballinger. Vegetation along the corridor consists of a golf course, street trees, and landscaped city parks. The corridor crosses or is located adjacent to several creeks.

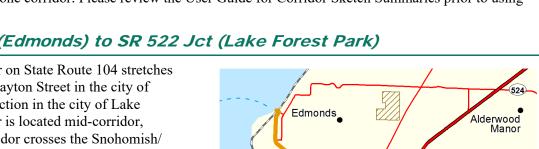
# 104 Shoreline 99

# **Current Function**

SR 104 connects communities on the northern Kitsap and Olympic peninsulas, via the Kingston/Edmonds ferry route, to the north Seattle metro area and serves as a major arterial. The corridor is a significant regional commuter, recreation, tourism, and freight corridor with major highway junctions, including SR 99, SR 522 and I-5. The corridors provides access to various parks, shorelines, and marinas draw recreational users. The corridor accommodates personal, commercial, and mass transit traffic, and facilitates access to the Edmonds/Kingston ferry. King County Metro and Community Transit provide fixed-route bus, ridesharing, and vanpool services. Sound Transit, Community Transit, Washington State Ferries, and Amtrak serve the corridor. Pedestrian traffic is present along most of the corridor and bicyclists use road shoulders. Major traffic generators on the corridor include waterfronts, downtown business areas, schools, retail and business centers, and transportation hubs such as the Edmonds Ferry Terminal and the Edmonds Station.

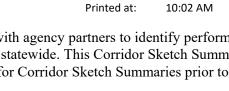
# **Future Function**

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



#### Esperance Brier Woodway Mountlake Terrace Lake Forest Park + (522) Corridor Limit **†** Airport Active Rail Line Populated Place Ferry Route

Military Reservation





# **Highlights and Performance**

This segment of SR 104 is a four-lane, signalized highway that narrows to two lanes east of the 19th Avenue NE intersection in Lake Forest Park. SR 104 includes a four-lane spur which begins at SR 99 and joins with the mainline near the Meridian Avenue N/76th Avenue W intersection. Both the mainline and spur have a center turn lane and are divided for about half of the corridor. The annual average daily traffic on this corridor is highest at the I-5 junction in Edmonds and lowest near the Edmonds ferry terminal.

#### What's working well?

Low

High

• Approximately 92% of surveyed pavements on the corridor are in fair or better condition.

• The corridor accesses a multimodal transit center which provides travel by many modes for passenger and commuter traffic.

• Transit service and park and ride lots are well used on the corridor.

#### What needs to change?

- Roughly 62% of the corridor experiences congestion on a regular basis.
- The corridor segment in Edmonds and Woodway has a medium climate change vulnerability rating.
- There are missing links in existing shared-use
- facilities, impeding pedestrian and bicyclist mobility.
- There are multiple fish passage barriers present on the corridor.

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

#### Mobility

nigh	LOW					MODIII	LY				
17,777	10,765	Annual Average Daily Traffic (AADT)				Percent of Corridor Congested (Statewide Screen)					
11.0%	8.6%	Bus/Truc	k Percent								
8.8	8.82		Number of Lane Miles			0%	20%	40%	60%	80%	100%
4		# of Signalized/Stop Controlled Intersections				% Cong	jested	% Not Co	ngested		
S	0	Corridor	Investments	(2005-201	6)						
Preservation						Environment Restore/ Enha			Enhance		
Roadway Surface Type					Protect		ect	Assess			
						Fish Bar	riers	100% Pa	assable	0% t	o Do
0%	20%	40%	60%	80%	100%	Noise Walls 0% Built		Built	0% Proposed		
	ACP	BST	PCCP	Bridge		Chronic					
Roadway Surface Condition (Percent of Surveyed Area)						Environr	mental 0% Resolved 0%		0% Unre	esolved	
-						Deficien	cies				
0%	20%	40%	60%	80%	100%	Wildlife		0 Structures in Place		2 High Priority Miles	
Poor & Very Poor Fair Good & Very Good						Connect	ivity o structures in Place		3 III Flace	2 right Phoney Miles	
Corridor Bridge Preservation Needs						Stormwater		4 BMPs		Retrofit Prioritization	
<ul> <li>Border Bridge</li> </ul>					Treatme	nt	4 DIVIPS		in progress		
Bridge Repair		None	13.8 % of Corr		idor with high potential for increased						
Rehabilitate Bridge Paint Bridge Iden			Identified	10.0	Climate Ir	limate Impacts					
Replace Bridge Scour Repair				1	Wetland Mitigation Locations						
Seismic Retrofit Moveable Bridge				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 collected feedback from agency partners. Key themes included:

• All partners were interested in creating more dedicated bicycle facilities and fill missing links in existing shared-use facilities.

• A desire to see improvements made to increase commuter/passenger multimodal options, particularly around the SR 104 Aurora Spur.

• Concern about the mobility of motorized and bicyclist traffic at the corridor's major intersections in the city of Edmonds.

• There is a desire to explore ways to reduce impacts to mobility caused by the backup of Edmonds Ferry Terminal traffic at the corridor's west end.

• Interest in exploring alternatives to at grade rail near the waterfront in Edmonds and SR 104.

# **Strategies**

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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	WSDOT will continue to work with partners in developing strategies to address economic vitality.					
Environment						
Protect and Maintain	Protect and maintain existing assets that provide environmental function (these include WSDOT's mitigation sites, storm water systems, fish passable culverts).					
Enhance or Restore	Enhance or restore natural areas and environmental functions associated with the multimodal transportation system.					
Fish Barrier Retrofit	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.					
Mobility						
Assessment	Further information about the proposed strategies can be found attached at the end of this document.					
Preservation						
Maintenance	Based on expenditure history, it is expected that the top three activities will continu to be maintenance on sweeping and cleaning, catch basins, and snow and ice contr					
Pavement	WSDOT has identified one Pavement action in the next six years encompassing 29% of the corridor.					
Safety						
Investment	WSDOT has identified one Safety Investment action in the next six years encompassing 29% of the corridor.					
Stewardship						
Planning	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.					

### Mobility assessment for segment of Corridor 316 SR 104: Dayton Street to SR 522 Junction (Milepost 28.19-32.15)

This segment connects the city of Edmonds and the city of Shoreline and acts as an urban commuter, recreation, tourism, and freight corridor.

There are about a dozen signals within this segment which are congested, and the corridor experiences congestion up to 15 hours per day on weekdays and weekends.

#### **Corridor Segment Characteristics**

- SR 104 is typically an urban five-lane facility (center two-way left turn lane) west of 19 Ave NE and a two-lane facility to the east.
- This segment is designated a freight route with 1,350,000 to 3,110,000 in annual tonnage and 520 to 1,100 daily trucks (2.4% to 3.4%) in 2017.
- The annual average daily traffic on this segment ranges from a low of 15,000 east of NE 195<sup>th</sup> Stto a high of 47,000 east of 5<sup>th</sup> Ave NE in 2016.
- Sound Transit plans to expand light rail service from the University of Washington to Everett. Sound Transit also plans to connect Lake Forest Park to this light rail service with a new bus rapid transit line, including new stations and parking.

#### **Contributing Factors**

• Traffic demand exceeds capacity during heavy commuter and tourist use particularly near interchanges, resulting in delay.

#### **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**

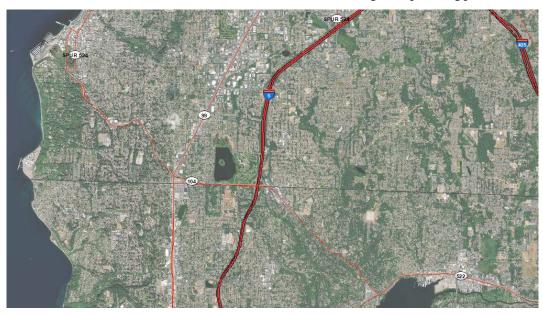
- Implement intersection improvements to manage congestion during periods of high use.
- Provide traveler information on roadway conditions to reduce delay.

#### **Demand Management**

- Increase transit service paired with highway improvements to provide travel time savings and reliability, and increase ridership.
- Improve modal access, options, and connectivity to reduce single occupant vehicle trips.

#### **Further Study**

- Continue studying additional transit options through the Sound Transit 3 measure as approved by voters to increase modal options.
- I-405/SR 167 Executive Advisory Group will continue to explore next steps for the I-405 Master Plan and express toll lane performance to manage congestion.
- Additional strategies to manage congestion may be determined through the Puget Sound Regional Council's regional planning processes.



Corridor 316 – SR 104: Dayton St. (Edmonds) to SR 522 Jct (Lake Forest Park) Summary

# For more information

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

#### Nazmul Alam

WSDOT Management of Mobility Division

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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.

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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.

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