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## **2016 CONCURRENCY REPORT**

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# **An Annual Report on the Level-of-Service (LOS) of the County's Arterial Road Network from April 1, 2015 to March 31, 2016**



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Prepared by the Transportation and Environmental Services  
Division of the Department of Public Works

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# TABLE OF CONTENTS

Executive Summary.....	4
Summary of Arterial Units at Risk of Falling into Arrears, in Arrears or at Ultimate Capacity.....	4
List of Acronyms Used in This Report.....	4
Review of the Concurrency Management System.....	5
Methods for Determining Level-of-Service (LOS) .....	5
Arterial Unit Status Definitions.....	5
Arterial Units at Risk of Falling into Arrears (AUAR) .....	5
Arterial Units in Arrears (AUIA) .....	6
Arterial Units at Ultimate Capacity (AUUC).....	6
2016 Concurrency Report.....	7
Arterial Units at Ultimate Capacity.....	7
Arterial Units in Arrears .....	7
Arterial Units at Risk of Falling into Arrears.....	7
Analysis of Urban Arterial Units at Risk of Falling into Arrears .....	8
Analysis of Rural Arterial Units at Risk of Falling into Arrears.....	12
Summary Tables .....	13
Table 1: Summary of Level-of-Service (LOS) Status.....	13
Table 2: Summary of Arterial Units at Risk.....	14
Table 3: Summary of Concurrency Determinations .....	15
Table 4: Status of Arterial Units Compared With Prior Year .....	16

# Executive Summary

This Concurrency Report details the Level-of-Service (LOS) of Snohomish County's arterial road system. This report, where possible and known, identifies strategies that may be implemented by either the Department of Public Works (DPW) or another jurisdiction to remedy the LOS deficiencies.

## Summary of Arterial Units at Risk of Falling into Arrears, in Arrears or at Ultimate Capacity

Status of Arterial Units	2015	2016
Arterial Units at Risk of Falling into Arrears	4 <sup>1</sup>	9 <sup>2</sup>
Arterial Units in Arrears	0	0
Arterial Units at Ultimate Capacity	3	3

The number of Arterial Units in Arrears has remained at zero since 2011 and the number of Arterial Units at Ultimate Capacity has remained at 3 since 2007.

## List of Acronyms Used in This Report<sup>3</sup>

ALOSI	Arterial LOS Improvement
AU	Arterial Unit
AUAR	Arterial Unit At Risk of Falling into Arrears
AUIA	Arterial Unit in Arrears
CASI	Critical Arterial System Improvements
DPW	Snohomish County Department of Public Works
IRC	Inadequate Road Condition
LOS	Level-of-Service
SR	State Route (State Highway under the jurisdiction of the WSDOT)
TSA	Transportation Service Area
WSDOT	Washington State Department of Transportation
TIP	Snohomish County's six-year Transportation Improvement Program. (The TIP referenced in this report is always the current TIP that is usually adopted in November of the prior year.)
N/R	Not Required. The information was deemed not to be required based on the LOS being at a level high enough to not warrant concern.
U	Urban
R	Rural

<sup>1</sup> The actual number of AU's At Risk in last year's report was 5 because two of the AU's are on the border of two TSA's and are given a separate AU number for each TSA and are counted as 2 arterial units each.

<sup>2</sup> The actual number of AU's At Risk in this year's report is 12 because three of the AU's are on the border of two TSA's and are given a separate AU number for each TSA and thus are counted as 2 arterial units each.

<sup>3</sup> There are additional abbreviations in other sections of this report that are applicable to those sections.

## Review of the Concurrency Management System

Consistent with the requirements of the Growth Management Act (GMA) and the concurrency requirements of Snohomish County Code (SCC) Chapter 30.66B for new development, the County is required to determine whether or not capacity exists (and will likely exist within six years) when the development adds its new trips to the road system. This concurrency determination includes two important considerations:

- 1) An estimate of existing traffic volumes and all new traffic that will be added to the road system from other developments that have been deemed concurrent (pipeline trips), and;
- 2) The additional capacity on the road system that will result from any system improvements which will be constructed and open to the public within the next six years.

## Methods for Determining Level-of-Service (LOS)

Snohomish County uses a four-tiered approach to determining the LOS on the road system.

- 1) Screening: Current peak-hour traffic counts are compared with estimated capacities for each arterial unit and average daily traffic (ADT) counts are compared with the thresholds adopted in Chapter 30.66B SCC.
- 2) Monitoring: Monitoring consists of more frequent traffic counts and analysis of the traffic conditions.
- 3) Operational Analysis: Operational analysis consists of travel-time studies and/or results from traffic models to determine whether or not LOS on an arterial unit is currently operating below the adopted standard.
- 4) Future Level-of-Service Forecast: A future LOS forecast is used to determine whether or not the LOS within six years is likely to be operating below the adopted standard with the addition of new trips expected to be added to the road system by developments already deemed concurrent.

A review of Snohomish County's concurrency management system is available on the County's web site. The web site includes previous concurrency reports, and many other documents related to the County's traffic mitigation and concurrency regulations including DPW Rules 4224.

The web site address is: <http://www.snohomishcountywa.gov/888/Traffic-Mitigation-Concurrency>

## Arterial Unit Status Definitions

### Arterial Units at Risk of Falling into Arrears (AUAR)

Arterial units that are close to being deficient, i.e. 1-2 mph above LOS F for urban roads or LOS D for rural roads, are considered to be at risk of falling into arrears. For arterial units meeting these criteria, DPW utilizes the Operational Analysis method to determine the existing and future (forecast) LOS, and monitors the units with travel time and delay studies conducted on an annual basis (see Methods for Determining Level-of-Service (LOS) above).

Occasionally, the operating conditions and contributing factors associated with an arterial units decline in LOS to the level where that arterial unit is considered to be "At Risk", can be attributed to another jurisdictions roadway. When this is the case, the solution to improve the LOS is entirely under the control of the other jurisdiction. For this type of situation the County

has little, if any, control over the solution, and if the other jurisdiction will not agree to the County's solution, the County is forced to accept the existing condition.

### **Arterial Units in Arrears (AUIA)**

Snohomish County Code defines an Arterial Unit in Arrears (AUIA) as any arterial unit operating, or within six years is forecast to operate, below the adopted LOS standard, unless a financial commitment (or strategies) is in place for improvements to remedy the deficiency within six years. The LOS for the urban area is LOS F and in the rural area is LOS D. DPW utilizes the Operational Analysis method to determine the existing and future (forecast) LOS, and monitors the units with travel time and delay studies conducted on an annual basis.

### **Arterial Units at Ultimate Capacity (AUUC)**

SCC 30.66B.110(1) states, "When the County Council determines that excessive expenditure of public funds is not warranted for the purpose of maintaining adopted LOS standards on an arterial unit (AU), the County Council may designate, by motion, such arterial unit as being at ultimate capacity. Improvements needed to address operational and safety issues must be identified in conjunction with such ultimate capacity designation."

# 2016 Concurrency Report

This concurrency report covers the period from April 1<sup>st</sup> of the previous year through March 31<sup>st</sup> of the current year and details the Level-of-Service (LOS) of Snohomish County's arterial road network. The report, where possible and known, identifies strategies that may be implemented by either the Department of Public Works (DPW) or another jurisdiction to remedy the LOS deficiencies.

## Arterial Units at Ultimate Capacity

The County Council has designated the following arterial units at Ultimate Capacity:

### **Snohomish-Woodinville Road in TSA E (AU# 211)**

This urban arterial unit is located in TSA E and was designated at Ultimate Capacity in 1997.

### **164<sup>th</sup> Street SW/SE east of Interstate 5 located in TSA D (AU# 218)**

This urban arterial unit is located in TSA D and was designated at Ultimate Capacity in 2007.

### **164<sup>th</sup> Street SW west of Interstate 5 located in TSA D (AU# 219)**

This urban arterial unit is located in TSA D and was designated at Ultimate Capacity in 2007.

## Arterial Units in Arrears

As of the date of this report there are no arterial units in arrears.

## Arterial Units at Risk of Falling into Arrears

The following is a list of those arterial units considered to be at risk of falling into arrears.

Urban / Rural	TSA	AU #	Arterial Name and Limits
U	D	228	Airport Road/128 <sup>th</sup> St SW from SR 99 to I-5 SB On and Off Ramps
U	D	227	Beverly Park Road from SR 525 to Airport Road
U	D	204	35 <sup>th</sup> Ave SE from 168 ST SE to Seattle Hill Road
U	D / E	207 / 336	35 <sup>th</sup> Ave SE from 188 ST SE to 168 ST SE
U	E / F	337 / 420	York Road/35 <sup>th</sup> Ave SE from 188 <sup>th</sup> St SE to SR 524
U	E / F	209 / 332	39 <sup>th</sup> Ave SE from 228 <sup>th</sup> St SE to SR 524
U	F	214	Larch Way from MTLK TERR C/L to Cypress Way N
U	F	217	North Road from SR 524 to 176 <sup>th</sup> PI SW
U	F	278	Poplar Way from LYNN C/L to Brier C/L

## Analysis of Urban Arterial Units at Risk of Falling into Arrears

The following is a comprehensive analysis of those arterial units considered to be at risk of falling into arrears. The analysis shows the AU number, AU name and limits, TSA and date the last travel time and/or forecast were performed, and the existing and forecast LOS with travel speeds.

### (AU# 227) Beverly Park Road from SR 525 to Airport Road

This urban arterial unit is in TSA D and is located at the south end of the Paine Field industrial/commercial area. A travel time study performed on October 28, 2015 indicated that the existing travel time speed and LOS in the AM and PM peak hours to be:

Existing LOS					Forecast LOS			
AM		PM		Direction	AM		PM	
LOS	MPH	LOS	MPH		LOS	MPH	LOS	MPH
C	27.78	C	24.07	NB	C	26.20	C	23.50
D	21.25	D	14.51	SB	D	20.40	E	13.10

The major contributing factors for the forecast LOS E in the PM SB direction is the existing traffic from the industrial / commercial and residential uses in the area (Boeing is to the north), the trips in the pipeline, and the close proximity of the signalized intersection at Beverly Park Road and 112<sup>th</sup> St SW and Beverly Park Road and SR 524 (Airport Rd). The signalized intersection at Beverly Park Road and SR 524 (Airport Rd) is a state controlled intersection which WSDOT gives the state highway SR 524 the higher priority, which results in a reduced LOS on the County arterial.

### (AU# 228) Airport Road/128<sup>th</sup> St SW from SR 99 to I-5 SB On and Off Ramps

This urban arterial unit is located in TSA D. Travel time studies performed on April 25, 2013 and April 15, 2014 for the AM period and May 2, 2013 for the PM period and a forecast analysis indicated that the existing and forecast travel time speeds and LOS in the AM and PM peak hours to be:

Existing LOS					Forecast LOS			
AM		PM		Direction	AM		PM	
LOS	MPH	LOS	MPH		LOS	MPH	LOS	MPH
C	21.11	E	10.91	EB	C	19.8	E	12.1
D	16.82	D	15.39	WB	D	14.30	D	18.0

The major contributing factor for the (existing and forecast) deficient LOS in the PM EB direction is the left turn lanes from the I-5 southbound off ramp to 128<sup>th</sup> St SW. WSDOT added an additional southbound left turn lane which doubled the amount of vehicles turning left (or eastbound) onto 128<sup>th</sup> St SW from I-5. This change, combined with the State signal at the east end of the I-5 & 128<sup>th</sup> St SW overpass, resulted in a significant delay for the EB traffic on 128<sup>th</sup> St SW between 4<sup>th</sup> Ave W and I-5. However, if the State signals are left as is, the corridor forecast will be LOS F at 8.3 mph in the PM EB. The April 15, 2014 Travel Time Study indicated that the travel speed for the Existing LOS in AM EB & WB directions improved to 21.11 and 16.82 respectively. Other than that the AU is operating at the same level as shown in the 2015 Concurrency Report. DPW will continue to work with WSDOT to the extent possible to improve the efficiency of this AU.



**(AU# 204) 35<sup>th</sup> Ave SE from 168 ST SE to Seattle Hill Road**

**(AU# 207 and AU# 336) 35<sup>th</sup> Ave SE from 188 ST SE to 168 ST SE**

**(AU# 420 and AU# 337) York Road/35<sup>th</sup> Ave SE from 188<sup>th</sup> St SE to SR 524**

Note: These three urban arterial units are typically referred to as the 35<sup>th</sup> Ave SE corridor. Two of the arterial units have two numbers each because the border between two TSAs runs down the middle of each arterial unit and are thus counted as two arterial units in the summary tables.

North Section: (AU# 204) 35<sup>th</sup> Ave SE from 168<sup>th</sup> St SE to Seattle Hill Road is located in TSA D. A travel time study and forecast analysis performed in February 2, 2016 indicated that the existing and forecast travel time speed and LOS in the AM and PM peak hours to be:

Existing LOS					Forecast LOS			
AM		PM		Direction	AM		PM	
LOS	MPH	LOS	MPH		LOS	MPH	LOS	MPH
B	28.94	D	18.35	NB	C	26.8	E	14.9
B	32.71	B	30.41	SB	C	28.1	B	33.3

Middle Section: (AU# 207 and AU# 336) 35<sup>th</sup> Ave SE from 188<sup>th</sup> St SE to 168<sup>th</sup> St SE. AU# 207 is located in TSA E and AU# 336 is located in TSA D. A travel time study and forecast analysis performed on February 2, 2016 indicated that the existing and forecast travel time speed and LOS in the AM and PM peak hours to be:

Existing LOS					Forecast LOS			
AM		PM		Direction	AM		PM	
LOS	MPH	LOS	MPH		LOS	MPH	LOS	MPH
B	28.33	C	23.72	NB	B	31.5	D	21.30
D	18.13	B	30.09	SB	E	14.1	C	23.60

South Section: (AU# 337 and AU# 420) York Road/35<sup>th</sup> Ave SE from 188<sup>th</sup> St SE to SR 524. AU# 337 is located in TSA F and AU# 420 is located in TSA E. A travel time study and forecast analysis performed on February 2, 2016 indicated that the existing and forecast travel time speed and LOS in the AM and PM peak hours to be:

Existing LOS					Forecast LOS			
AM		PM		Direction	AM		PM	
LOS	MPH	LOS	MPH		LOS	MPH	LOS	MPH
B	30.76	C	23.75	NB	D	21.9	E	13.0
E	16.04	D	19.20	SB	E	16.6	E	15.70

The major contributing factor for the forecast LOS E along the two AU of 207 and 337 in different directions is due to the trips in the pipeline from all the approved (but not completed) developments in the area,

including pipeline trips from the future Northshore School District (NSSD) high school. The new high school, which is expected to open in the fall of 2017, will be located at the SE corner of 35<sup>th</sup> Ave SE and 188<sup>th</sup> St SE. Along with the new high school, the NSSD is constructing and establishing a new County road (191<sup>st</sup> St SE). This new road will run from 35<sup>th</sup> Ave SE eastward along the NSSD's southern boundary then turn south on to another new county road (39<sup>th</sup> Ave SE) connecting to Jewel Road. The 39<sup>th</sup> Ave SE portion was constructed by the NSSD and private developers. Several new housing developments in the area have been completed, with two being located on opposite sides of York Rd at the York and Jewel Road intersection and one on 39<sup>th</sup> Ave SE across from the new high school. This is one of the fastest growing areas of Snohomish County and the new construction associated with that growth contributes to the decreased LOS of the AU.

Improvements programed in the current 2016 – 2021 TIP to improve the LOS are:

- Project E28.05. 35<sup>th</sup> Ave SE/39<sup>th</sup> Ave SE (York Rd), Corridor widening from SR 524 to 180<sup>th</sup> St SE, Phase II
- Project E28.06. 35 Ave SE, From 180 St SE to 152 St SE (Seattle Hill Rd), Phase I

In addition, the County has undertaken a Small Areas Transportation Study to determine what other road projects in the area would help to alleviate the pressure on the 35<sup>th</sup> Ave SE corridor. Preliminary results indicate that the extensions of 43<sup>rd</sup> Ave SE to the north connecting to Sunset Road and to the south connecting to SR 524 would provide relief. DPW plans on including these projects in the 2017-2022 TIP.

Two new signals on 35<sup>th</sup> Ave SE and 198<sup>th</sup> St SE/197<sup>th</sup> St SE intersections has been completed as well as the signal at 35<sup>th</sup> Ave SE and 188<sup>th</sup> St SE (Grannis Rd). Fine tuning of the signal timing is still ongoing to optimize operations along the corridor. Channelization for the two new developments at the York Road and Jewel Road intersection needs to be completed. Because of the ongoing construction and signal timing modifications, DPW will continue to analyze this corridor to determine appropriate solutions to improve the LOS.

**(AU# 209 and AU# 332) 39<sup>th</sup> Ave SE from 228<sup>th</sup> St to SR 524**

This urban arterial unit is located in TSAs E and F. AU# 209 is located in TSA E and AU# 332 is located in TSA F. An AM travel time study performed on May 21, 2015, a PM travel time study performed on January 14, 2016 and a forecast analysis indicated that the existing and forecast travel time speed and LOS in the AM and PM peak hours to be:

Existing LOS				Direction	Forecast LOS			
AM		PM			AM		PM	
LOS	MPH	LOS	MPH	LOS	MPH	LOS	MPH	
C	26.00	D	20.73	NB	D	17.30	D	17.90
C	22.48	C	28.00	SB	E	14.60	C	27.70

The major contributing factor for the forecast LOS E in the AM SB direction is due to the number of new pipeline trips from the large number of new developments occurring on both the east and west side of this arterial unit. Another contributing factor is the many new trips being added to other intersections along 212<sup>th</sup> St SE.

**(AU# 214) 212<sup>th</sup> St SW / Larch Way from MTLK TERR C/L to Cypress Way N**

This urban arterial unit is located in TSA F. A travel time study performed on May 13, 2015 and a forecast analysis indicated that the travel time speed and LOS in the AM and PM peak hours to be:

Existing LOS					Forecast LOS			
AM		PM		Direction	AM		PM	
LOS	MPH	LOS	MPH		LOS	MPH	LOS	MPH
C	24.46	E	15.95	<b>EB</b>	C	22.10	E	13.90
C	22.10	C	22.95	<b>WB</b>	D	20.40	C	22.40

This AU is an important east-west connector between Mountlake Terrace and Bothell. The major contributing factor for the forecast LOS E in the PM EB direction is primarily due to lengthy delays at the signalized Poplar Way intersection. Another contributing factor is the queues at both the 28<sup>th</sup> Ave W and Cypress Way intersections because they are both all-way stops. DPW will continue to analyze this corridor to determine appropriate solutions to improve the LOS.

**(AU# 217) North Road from SR 524 to 176 Place SW**

This arterial unit (AU) is located in TSA F. This section of North Road is an urban major collector that has 2 traffic signals along its length. A travel time study performed on September 30, 2015 and a forecast analysis indicated the travel time speed and LOS in the AM and PM peak hours to be:

Existing LOS					Forecast LOS			
AM		PM		Direction	AM		PM	
LOS	MPH	LOS	MPH		LOS	MPH	LOS	MPH
B	33.68	B	32.33	<b>NB</b>	B	33.40	B	32.10
E	15.17	D	18.95	<b>SB</b>	E	14.20	D	18.00

The major contributing factors for the declining LOS is primarily the SB delay at SR 524 in both the AM and PM peak hours, and to a lesser extent, the delay for the AM southbound movement at the Lynnwood High School signal. The worst case overall existing LOS for the AU is E (15.17 mph) in the SB direction in the AM peak hour. The AM forecast LOS E in the SB direction is based on optimizing the signals at Lynnwood High School and SR 524. WSDOT approval will be needed for any changes to the signal at SR 524. Further operational analysis will need to be performed to encompassing the entire AU to arrive at a definitive conclusion on the LOS of the AU.

The segment of this AU from SR 524 to 164<sup>th</sup> Street SW is being widened to a 3-lane urban section with final construction activities expected to be completed by Fall of 2016 (2016 – 2021 TIP Project E.45.02).

**(AU# 278) Poplar Way from LYNN C/L to Brier C/L**

This urban arterial unit is located in TSA F. A travel time study performed on January 13, 2016 and a forecast analysis indicated the travel time speed and LOS in the AM and PM peak hours to be:

Existing LOS				Direction	Forecast LOS			
AM		PM			AM		PM	
LOS	MPH	LOS	MPH	LOS	MPH	LOS	MPH	
D	20.82	E	16.77	NB	D	20.40	E	16.00
D	18.83	E	13.15	SB	D	18.2	E	14.10

This AU is a 2-lane Urban Major Collector with 3 traffic signals along its length and serves as an important north-south corridor between the Brier/Kenmore residential and commercial areas on the south and the Alderwood Mall commercial area along with I-5 / SR 524 access on the north. The major contributing factors for the declining LOS are not the result of a single issue but are comprised of multiple things, i.e. several signals along the corridor with roads that carry equal or greater amounts of traffic, a large percentage of “pass through” traffic; being only two-lanes; the slower 30 mph posted speed, traffic from schools in the area, and pipeline trips, all contribute to the declining LOS. The county will continue with operational analysis to monitor this arterial.

**Analysis of Rural Arterial Units at Risk of Falling into Arrears**

There are no Rural Arterial Units at Risk of Falling into Arrears.

# Summary Tables

**Table 1: Summary of Level-of-Service (LOS) Status**

Table 1 is a summary of the LOS of all arterial units for the past six years. The top half shows a general breakdown of those AU's above or below the screening level. The bottom half shows a more detailed breakout of those below the screening level.

Breakout of The No. of Arterial Units Above or Below Screening Level							
LOS STATUS	2011	2012	2013	2014	2015	2016	% of 2016 AU's to Total AU's
LOS above screening level <sup>1</sup>	240	241	239	235	227	<b>237</b>	<b>86.8%</b>
LOS below screening level <sup>1</sup>	31	29	28	32	37	<b>36</b>	<b>13.2%</b>
<b>Total number of arterial units</b>	271	270	267	267	264	<b>273<sup>2</sup></b>	<b>100%</b>
Breakout Of Arterial Units Below Screening Level							
Monitoring level <sup>1</sup>	11	10	14	12	20	<b>11</b>	<b>4.0%</b>
Operational Analysis level <sup>3</sup>	17	16	11	17	14	<b>22</b>	<b>8.1%</b>
Arterial Units in Arrears	0	0	0	0	0	<b>0</b>	<b>0%</b>
Ultimate Capacity Arterials	3	3	3	3	3	<b>3</b>	<b>1.1%</b>
<b>Total below screening level</b>	31	29	28	32	37	<b>36</b>	<b>13.2%</b>

<sup>1</sup> See "Review of Concurrency Management System" described on page 2 for an explanation of the various 'tiers' of the concurrency management system. In simple terms, arterial units above the screening level are those clearly passing the LOS test. For those arterial units below the screening level as congestion increases the level of analysis typically goes from monitoring to operational analysis which determines if the arterial units LOS does not meet standards.

<sup>2</sup> The number of arterial units increased from 264 in 2015 to 273 in this report based on arterial unit changes in the Transportation Element and because some existing arterial units were divided into smaller units to better reflect the operational characteristics of the arterial unit.

<sup>3</sup> See Table 4 "Status of Arterial Units Compared with Prior Year" for more detailed information for all arterial units at this level.

## Table 2: Summary of Arterial Units at Risk

Table 2 shows a summary of the arterial units at risk. The data includes; the AU name and number, the TSA, if the AU is listed in Table 17 of the Transportation Element (TE), if the improvement is an Arterial Level-of-Service Improvement (ALOSI), a Critical Arterial System Improvement (CASI), or an Arterial System Enhancement (ASE), the status of the improvements in the adopted TIP, if the AU is located within a pending annexation area, and if the AU is a candidate for being designated at Ultimate Capacity. The abbreviations used in the table are:

<b>ALOSI</b> = Arterial LOS Improvements	<b>ANNEX PEND</b> = Annexation Pending
<b>CASI</b> = Critical Arterial System Improvements	<b>UCC</b> = Ultimate Capacity Candidate
<b>ASE</b> = Arterial System Enhancement	<b>IP-TIP</b> = Improvements Programmed in Current TIP
<b>NP</b> = Not Programmed	<b>PD-TIP</b> = Project Design Programmed in Current TIP
<b>DR</b> = Design Report	<b>RW-TIP</b> = Right-of-way Acquisition Programmed in Current TIP
<b>PIC</b> = Programmed Improvements Completed	<b>OI</b> = Operational Improvement
<b>WDI</b> = WSDOT Dependent Improvement	<b>NIT</b> = Not in TIP

The table is organized in descending order starting with TSA then AU Number.

TSA	AU No.	Name and Limits of Arterial Unit	Table 17	ALOS / CASI	Status of Imp & (TIP#)	Annex Pend	UCC
D	227	Beverly Park Road from SR 525 to Airport Road	YES	CASI	NIT	NO	NO
D	228	Airport Road/128 <sup>th</sup> St SW from SR 99 to I-5 SB On and Off Ramps	NO	NA	PIC	NO	YES
D	204	35 <sup>th</sup> Ave SE from 168 ST SE to Seattle Hill Road	YES	CASI	PD-TIP RW-TIP (E.28.06)	NO	NO
D/E	207/336	35 <sup>th</sup> Ave SE from 188 ST SE to 168 ST SE	YES	CASI	PD-TIP RW-TIP (E.28.06)	NO	NO
D/F	337/420	York Road/35 <sup>th</sup> Ave SE from 188 <sup>th</sup> St SE to SR 524	YES	CASI	PD-TIP RW-TIP (E.28.05)	NO	NO
E / F	209 / 332	39 <sup>th</sup> Ave SE from 228 <sup>th</sup> St SE to SR 524	YES	CASI	IP-TIP (E.55)	NO	NO
F	214	Larch Way from MTLK TERR C/L to Cypress Way N	YES	ALOSI	NIT	NO	NO
F	217	North Road from SR 524 to 176 <sup>th</sup> PI SW	YES	CASI	PD-TIP (E45.02)	NO	NO
F	278	Poplar Way from Lynnwood City Limits to Brier City Limits	YES	CASI	PD-TIP (E.54)	NO	NO

### Table 3: Summary of Concurrency Determinations

Table 3 shows a summary of the concurrency determinations that were made in 2015. The data is organized by TSA, type of development (residential or non-residential), and size of the development measured by the number of peak hour trips generated by the development.

Type and Size of Development	2015 Totals by Transportation Service Areas								Year By Year Totals For The 5 Previous Years				
	A	B	C	D	E	F	2015	% of 2015 Total	2014	2013	2012	2011	2010
Residential (< = 50 PHT)	2	1	0	31	7	6	47	75%	54	61	17	9	15
Residential (> 50 PHT)	0	0	0	5	0	0	5	8%	5	5	6	1	9
Non-Residential (< = 50 PHT)	2	0	0	5	0	2	9	14%	5	7	14	13	9
Non-Residential (> 50 PHT)	0	0	0	2	0	0	2	3%	1	1	1	2	2
<b>Total</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>43</b>	<b>7</b>	<b>8</b>	<b>63</b>	<b>100%</b>	65	74	38	25	35

**Table 4: Status of Arterial Units Compared With Prior Year**

Table 4 shows those arterial units, sorted by TSA, whose current status, as compared to the prior year, is either: Operational Analysis (OA), At Risk (AR), or In Arrears (AUIA). A status of Screening (S) or Monitoring (M) will only be used when the status has improved to that level from the prior year and if the AU remains at Screening or Monitoring the next year it will be removed from the list. The definitions of the different arterial unit status and methods for determining that status can be found at the beginning of this report and in DPW Rule 4224. The abbreviations used in the table are:

<u>Arterial Unit Status</u>		<u>Additional Terms</u>	
<b>S</b>	= Screening	<b>LOS</b>	= Level-of-Service
<b>M</b>	= Monitoring	<b>ADT</b>	= Average Daily Traffic
<b>OA</b>	= Operational Analysis	<b>FCST</b>	= Forecast
<b>AR</b>	= At Risk	<b>V/C</b>	= LOS estimate based on comparison of volumes
<b>AUIA</b>	= Arterial Unit in Arrears	<b>W / IMPS</b>	= With fully-funded improvements completed or expected to be complete within six years
<b>UC</b>	= Ultimate Capacity	<b>U</b>	= Urban
<u>OA Level Study Terms</u>		<b>R</b>	= Rural
<b>TTS</b>	= Travel Time Study	<b>PEND</b>	= Pending
<b>IntTTS</b>	= Intermediate TTS	<b>UNIT</b>	= Number assigned to the arterial unit
<b>RECON</b>	= Reconnaissance	<b>NB</b>	= North Bound
		<b>SB</b>	= South Bound
		<b>WB</b>	= West Bound
		<b>EB</b>	= East Bound
		<b>AM</b>	= The morning (AM) Peak Hours for traffic
		<b>PM</b>	= The evening (PM) Peak Hours for traffic
		<b>NA</b>	= Not Applicable

The projects identified below are listed by TSA in descending order from TSA A to TSA F (starting with the highest relevant TSA), then by the AU number, the AU name, limits, Rural or Urban designation, the prior year's status, the current year's status and Notes.



<b>TSA</b>	<b>UNIT</b>	<b>ROAD NAME</b>	<b>FROM</b>	<b>TO</b>	<b>R/U</b>	<b>2015</b>	<b>2016</b>	<b>2016 Notes</b>
C	353	AIRPORT WY	SR9	SNOH C/L	U	OA / AR	M	AM/PM SB EXIST & FCST LOS D
D	204	35 AVE SE	168 ST SE	SEATTLE HILL RD	U	OA	OA-/AR	PM NB EXIST LOS D PM NB FCST LOS E,
D	220	ALDERWOOD MALL PKWY	164 ST SW	LYNN C/L	U	OA	OA	PM SB FCST LOS E
D	225	148 &150 ST SW/JEFFERSON/MADISON	SR 99	ASH WY	U	M	OA	PM WB EXIST LOS D, PM WB FCST LOS E
D	227	BEVERLY PARK RD	SR 525	ASH WY	U	M	OA-/AR	AM/PM SB EXIST LOS D, AM SB FCST LOS D, PM SB FCST LOS E
D	228	AIRPORT RD / 128 ST SW	SR 99	I-5 SB ON/OFF RAMPS	U	OA / AR	OA-/AR	PM EB EXIST LOS E, AM/PM WB EXIST LOS D, PM EB FCST LOS E, AM/PM WB FCST LOS D
D	229	4 AVE W	128 ST SW	112 ST SW	U	OA	M	PM NB/SB EXIST.& FCST LOS D, AM SB EXIST/FCST LOS D
D	230	112 ST SW	EVT C/L	EVT C/L	U	M	OA	PM EB/WB FCST LOS E; PM EB EXIST LOS E & PM WB EXIST LOS D AM WB FCST LOS D
D	288	ASH WY	164 ST SW	LYNN C/L	U	OA-/AR	OA	AM NB, PM SB EXIST. LOS D, FCST PENDING; PREVIOUS PM SB FCST LOS E
D	293	GIBSON RD/134 ST/4 AVE/ASH WY	SR 99	128 ST SW	U	M	OA	PM EB/WB EXISTING LOS E, AM EB/WB EXIST. LOS D
D	297	MEADOW RD, MEADOW PL SW, MERIDIAN AVE S, 130 ST SE, 3 AVE SE	164 ST SW	SR 96	U	M	OA	AM SB FCST LOS E, NEW FORECAST PENDING w IMPROVED EXIST LOS

<b>TSA</b>	<b>UNIT</b>	<b>ROAD NAME</b>	<b>FROM</b>	<b>TO</b>	<b>R/U</b>	<b>2015</b>	<b>2016</b>	<b>2016 Notes</b>
D	304	LARCH WY	164 ST SW	178 ST SW	U	OA	OA	AM NB FCST LOS E, PM NB EXIST & FCST LOS E
D	352	4 AVE W	112 ST SW	EVT C/L	U	M	OA	PM NB EXIST & FCST LOS E, SB LOS D
D/E	207 / 336	35 AVE SE	188 ST SE	168 ST SE	U	OA	OA-AR	AM SB EXIST LOS D: AM SB FCST LOS E PM NB FCST LOS D
D/F	457 / 458	178TH ST SW/MAPLE RD	LYNN C/L	LARCH WY	U	OA	OA	PM EB FCST LOS E: WB LOS D; AM EB FCST LOS D
E/F	209 / 332	39TH AVE SE	228 ST SE	SR 524	U	M	OA-AR	PM NB EXIST LOS D AM/OM NB FCST LOS D, AM SB FCST E
E/F	337 / 420	YORK RD / 35 AVE SE	SR 524	188 ST SE	U	OA-AR	OA-AR	AM SB EXIST LOS E PM NB EXIST LOS D AM NB FCST LOS D AM SB FCST LOS E PM NB/SB FCST LOS E
F	214	212 ST SW/LARCH WY	MT LK TERR C/L	CYPRESS WY (N LEG)	U	M	OA-AR	PM EB EXIST / FCST LOS E PM EB FCST LOS E AM WB FCST LOS D
F	217	NORTH RD	SR 524	176 PL SW	U	M	OA-AR	AM SB EXIST LOS E PM SB EXIST LOS D AM SB FCST LOS E PM SB FCST LOS D
F	278	POPLAR WY	LYNN C/L	BRIER C/L	U	OA	OA-AR	AM NB/SB EXIST LOS D PM NB/SB EXIST LOS E AM NB/SB FCST LOS D PM NB/SB FCST LOS E