
2004 Concurrency Report

A Report on the Level of Service of Snohomish County's Arterial Units as of March 2004

This report updates the report dated April 2003.

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Transportation and Environmental Services Division

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Summary

The 2004 concurrency report documents the County's arterial circulation network performance with respect to level of service conditions and identifies strategies being undertaken to alleviate level of service deficiencies. The measurement of arterial system performance covers the period from April 2003 (the date of publication of the previous report) to March 31, 2004. The following is a summary of the current level of service status on the arterial circulation network:

The County currently has five arterial units in arrears.

- Bunk Foss Road (South Machias Road to SR 9)
- Airport Way (99th Ave SE to SR 9)
- 35th AV SE (Grannis Road to 168th ST SE)
- 180th Street SE (SW County UGB to SR 9)
- 180th Street SE (Broadway Ave to SR 9)

Three arterial units are at risk of falling into arrears.

- 20th Street SE (SR 9 to SR 204)
- 20th Street SE (SR 9 to South Lake Stevens Road)
- Marsh Rd (Lowell Larimer Rd to SR 9)

The County currently has one arterial unit designated at ultimate capacity, Snohomish-Woodinville Road, from King County line to SR 522.

The Concurrency Management System is Working

The concurrency management system provides a reasonable, objective system of measuring level-of-service on the road system and of applying that information to concurrency determinations for individual development applications. (See "Conclusion" at end of report.)

Changes from Previous Report

Since the previous report, two arterial units are no longer in arrears, 20th ST SE and 228th ST SE.

- The County now has a funding commitment in place for improvements that are forecast to remedy the level of service deficiency on 20th Street SE from SR 9 to South Lake Stevens Road and this arterial unit was taken out of arrears on 12/12/03.
- The Washington State Department of Transportation now has a funding commitment in place for improvements on SR 9 between SR 522 and SR 524. These improvements are forecast to remedy the level-of-service deficiency on 228th ST SE between the Bothell urban growth boundary and SR 9 and this arterial unit was taken out of arrears on 12/19/03.

Current Status of Arterial Units

Arterial Units in Arrears

Snohomish County Code (SCC) 30.91A.290 defines “Arterial unit in arrears” as “any arterial unit operating, or forecast to operate within six years, below the adopted level-of-service standard contained in SCC 30.66B.100, unless a financial commitment is in place to complete improvements or implement strategies that are forecast to remedy the deficiency within six years.”

The following sections describe the five county arterials currently designated as in arrears.

Bunk Foss Road / Ritchey Road (South Machias Road to SR 9)

Bunk Foss Road (Arterial Unit #256) is located outside the urban growth area, with an adopted level of service of LOS C. Two separate travel time studies conducted in April and June 2000 show that this unit is operating at LOS F for the westbound movement onto SR 9 in the PM peak hour. The arterial unit was declared “in arrears” on August 17, 2000.

WSDOT has a funded project at this location, but Public Works is still reviewing the forecasts of future level of service conditions to determine if it can be taken out of arrears.

Airport Way (99th Ave SE to SR 9)

The adopted level-of-service standard for Airport Way (Arterial Unit #353), which is located inside the urban growth area, is LOS E. Both Marsh Road and Airport Way are impacted by delay at the signal with SR 9. Traffic congestion is further compounded by southbound traffic at the stop-controlled intersection of Springhetti Road and Airport Way and its close proximity to SR 9. Based on travel time studies conducted in 2000, 2001, and 2002 the westbound level of service is consistently LOS F. Eastbound traffic has typically been LOS B. This unit was declared “in arrears” on December 8, 2000.

Public Works is working on alternative circulation schemes for the entire arterial network in the vicinity of Airport Way that could significantly improve level of service.

35th AV SE (Grannis Road to 168th ST SE)

The adopted level-of-service standard for this arterial unit (Arterial Unit #336), located inside the urban growth area, is LOS E. The arterial unit is not currently operating worse than LOS E, but it is forecast to operate worse than LOS E in the future. This is based on the number of developments in the area which have previously been deemed concurrent but are not yet occupied.

The source of congestion is the lack of turn lanes on 35th SE at the signalized intersection with 180th ST SE. Construction of a northbound left-turn lane and southbound left and right-turn lanes are forecast to remedy the level-of-service deficiency. Developments in the area have continued to be deemed conditionally concurrent based on their offers to construct these turn lanes. To date, there are applications pending for more than 800 residential lots that are conditioned upon the construction of the turn lanes. Developments so conditioned will not be able to secure building permits until the improvements are under contract, and

builders will not be able to get final inspection on homes until the improvements are constructed.

In 2004, Public Works is conducting a feasibility study for the 35th/39th AV SE corridor, including this intersection, and is coordinating with developers in the area on the construction of the turn lanes. The 2004-2009 transportation improvement program (TIP) programs about \$1M for preliminary engineering to begin in 2005.

180th St SE (Broadway Ave to SR 9)

The adopted level-of-service standard for this arterial unit (#262), located outside the urban growth area, is LOS C. A travel time study conducted in February 2001 shows that this unit was operating at LOS F for the westbound movement onto SR 9, during the morning and evening peak periods. It was declared "in arrears" on March 21, 2001. Congestion occurs primarily because of drivers heading west on 180th ST SE turning left to go south on SR 9. There is no turn lane or protected left-turn signal. The situation is compounded slightly by poor sight distance looking west which limits the ability of drivers making this left turn to see the eastbound cars approaching the intersection. Thus, as cars wait to turn left, cars trying to go straight or turn right are caught in the queue.

The County has programmed about \$140k for a feasibility study for the 180th ST SE corridor between 35th AV SE and Broadway Avenue to be conducted in 2004.

180th St SE (SW County UGB to SR 9)

The adopted level-of-service standard for this arterial unit (#350), located outside the urban growth area, is LOS C. A travel time study conducted in February 2001 shows that during the PM peak period, this unit was operating at LOS F for the eastbound movement onto SR 9. It was declared "in arrears" on March 21, 2001. Congestion occurs for the same reason as the arterial unit on the east side of SR 9. Congestion occurs primarily because of drivers heading east on 180th ST SE turning left to go north on SR 9. There is no turn lane or protected left-turn signal.

An interim improvement, adding a left-turn lane within the existing right-of-way, is being pursued by developers in the area.

Arterial Units at Risk of falling into Arrears

An arterial unit that consistently operates at or approaches the level-of-service standard can be described as "at risk of falling into arrears." This is not a formal designation. It is based on the professional judgment of the County Traffic Engineer and is intended mainly as information for the concurrency report.

20th St SE: Two Arterial Units, SR 204 to SR 9 (#238) and SR 9 to South Lake Stevens Road (#316)

The County designates the SR 9 signalized intersection as the dividing point for two arterial units in the 20th ST SE corridor between South Lake Stevens Road and the SR 2 / SR 204 merge and trestle. In the morning, westbound traffic backs up at this signal, as does afternoon eastbound traffic. In addition, morning westbound traffic backs up at the merge with SR 204.

Arterial Unit #238, 20th ST SE east of SR 9 was the subject of 44 separate travel time studies between 1996 and 2003. The level-of-service in the eastbound direction was never worse than LOS D in these studies. In 43 studies of the westbound direction, there was only one LOS F. (The measurements also include 1 LOS E, 3 LOS D's, 4 LOS C's, 7 LOS B's, and 27 LOS A's).

For the unit east of SR 9 (#316), out of 23 studies between 2000 and 2003, the level of service in the westbound direction was LOS F on four occasions. This is the arterial unit that was previously in arrears. In the eastbound direction, out of 22 studies, the worst recorded was LOS E on one occasion. The rest have been LOS D or better.

Public Works now has a funding commitment in place for a project to widen 20th ST SE between 91st AV SE and 99th AV SE from two to five lanes. This consists of about \$15M of County local funds programmed in the 2004-2009 TIP.

Public Works, through an on-call consultant experienced with the advanced traffic simulation model VISSIM, evaluated future travel times in the corridor with this improvement in place. The forecast traffic volumes for the analysis consisted of the traffic from developments that had previously been deemed concurrent in the area (the "pipeline") added to the volumes already on the road taken from recent traffic counts. The analysis showed that with the road widening, future level of service for both arterial units would operate above the adopted standard. However, the analysis also showed that the addition of around 500 more peak hour trips above the current pipeline would likely cause the level of service to once again fall below the adopted standard. The critical directions are morning westbound on the western unit and afternoon eastbound on the eastern unit.

Thus, Public Works considers both of these units to still be at risk for falling into arrears as numerous applications are beginning to come in for more developments in the area. Each of these will be evaluated for concurrency in the order in which they are submitted, using the VISSIM model, to identify the point at which level of service is forecast to fail.

Marsh Road (Lowell Larimer Road to SR 9)

Travelers on Marsh Road (Arterial Unit #198) experience significant delay at the eastbound approach to the signal at SR 9. There have been 28 travel time studies on Marsh Road between 1998 and 2003. The most recent indicated LOS E for the eastbound direction. The westbound direction has consistently been LOS A.

The final portion of the extension of 132nd St SE to SR 9 has been completed and is alleviating some of the demand on Marsh Road, but analysis by Public Works is still underway to determine the level of service for this arterial unit.

Arterial Unit at Ultimate Capacity

SCC 30.66B.110(1) says, "When the county council determines that excessive expenditure of public funds is not warranted for the purpose of maintaining adopted level-of-service standards on an arterial unit, 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."

The County currently has one arterial unit at ultimate capacity, Snohomish-Woodinville Road in TSA E.

Snohomish-Woodinville Rd (King Co. Line to SR 522 EB Ramps)

Snohomish County Council Motion No. 97-202 designated Snohomish-Woodinville Road as being at “ultimate capacity” effective June 23, 1997. The motion laid out in detail why this action was taken and what it means for developers and the County. In the motion the Council directed Public Works to improve Snohomish-Woodinville Road’s operating efficiency (e.g., shoulders and/or center turn lane).

In March 2000 a pre-design study to evaluate design alternatives was completed. The study confirmed that the lack of width between the railroad tracks and SR 522 at the County Line precludes the possibility of constructing additional general-purpose lanes. The design of the final recommended improvements is on going. It will include two travel lanes, a center turn lane, bicycle lanes in both directions, a sidewalk on the east side of the roadway, a planter strip, curb, and sidewalk on the west side, water detention ponds, and a traffic signal at the intersection with 240th St SE. As the road approaches the SR 522 off-ramp, it will be widened to five lanes. This configuration will match the WSDOT proposed improvement on SR 522.

The 2004-2009 TIP programs about \$500k for preliminary engineering and right-of-way acquisition for 2004. About \$2.5M is programmed for 2005 for construction, of which the County hopes to obtain \$1M from TIB.

Critical Arterial Units

The arterial units that are designated as arterial units in arrears, arterial units at risk of falling into arrears, monitoring and operational analysis, are collectively referred to as “critical arterial units.” The county maintains a list of these units, which is updated in conjunction with this report, and reports on future level-of-service determination prepared by Developers. The list also shows the critical movements (i.e. AM or PM and NB, SB, EB or WB) for which level of service deficiencies have been identified.

This list of critical arterial units is provided to developers at traffic study scoping meetings.

Concurrency Management System

Purpose

The Snohomish County concurrency management system provides the basis for monitoring the traffic impacts of land development, and helps determine if transportation improvements are keeping pace with the prevailing rate of land development. Investigation of the arterial circulation network performance through the concurrency management system, provides an overview of the current level of service conditions on the county arterials, a synopsis of arterials considered to be potential concurrency problems, and a summary of the actions and programs to remedy level of service deficiencies.

Four-Tiered Approach to Level-of-Service Measurement

The County uses a four-tiered approach to determine the level of service on the County arterial circulation network. Snohomish County measures level of service on arterial units as opposed to individual intersections. The County arterial network is disaggregated into smaller units referred to as “arterial units”. Arterial unit means a road, segment of a road, or

portion of a road or a system of roads, for the purpose of making level of service and concurrency determinations.

Tier One, Screening: Current traffic counts are compared with estimated capacities for each arterial unit. This process screens out units that are operating at very high level of service and are not at risk for level-of-service deficiency. Most arterial units fall into this tier, and the County only updates traffic counts for these arterial units every three years.

Tier Two, Monitoring: Those arterial units whose traffic counts are approaching the estimated capacity fall into the second tier, monitoring. Monitoring consists of more frequent traffic counts and analysis of the traffic conditions. If monitoring indicates that there may be a current level of service problem, then operational analysis is performed.

Tier Three, Operational Analysis: Operational analysis consists of travel-time studies and/or results from traffic models to determine whether or not level of service on an arterial unit is currently operating below the adopted standard.

Tier Four, Future Level-of-Service Determinations: Future level-of-service determinations are used to determine whether or not the level of service 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. To be deemed concurrent, large developments are required to forecast adequate future level-of-service on critical arterial units.

A summary of the level of service status on the arterial circulation network as of March 2004 is shown in Table 1. The status for the past few years are also included in the table.

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

Arterial Unit Status	2000	2001	2002	2003	2004	2004 % of Total
LOS above screening level	174	185	225	261	258	88%
LOS below screening level	68	60	42	34	37	12%
Monitoring level	31	18	20	10	10	3%
Operational Analysis	29	33	15	17	21	7%
Arterial unit in Arrears	7	8	6	6	5	2%
Designated Ultimate Capacity	1	1	1	1	1	<1%
Total Number of units	242	245	267	295	295	100%

Arterial Network Planning and Programming

The concurrency management system deals with the monitoring of roadway level of service and provides input into the program planning process that leads to the annual preparation of a transportation improvement program (TIP).

Transportation Improvement Program (TIP)

The Snohomish County Council adopted the TIP for the period 2004–2009, on November 19 2003. Two sections of the TIP relating to traffic safety/intersection (Section D) and capacity (Section E) set out the projects that are expected to sustain the adopted LEVEL OF SERVICE on the County's arterial network. Table 2 lists these so-called "concurrency projects" in the 2004-2009 TIP.

Table 2: Concurrency Projects in the 2004-2009 TIP

**CON C	TIP #	PROJECT
C	D.20	39 AVE SE / SR 524 REALIGNMENT
C	E.12	164 ST SW: SPRUCE WAY TO ASH WAY URBAN STANDARDS, 5 LANES, BICYCLE LANES AND SIDEWALKS
C*	E.08A	112 ST SW / BEVERLY PARK RD CORRIDOR: SR 525 TO AIRPORT RD W/ BICYCLE LANES
C*	E.23	SNOHOMISH-WOODINVILLE RD: SR 522 TO KING COUNTY LINE
C*	E.27A	20 ST SE CORRIDOR: PH 1: 91 AVE SE TO 99 AVE SE
C*	E.29	35 AVE SE / 39 AVE SE: SEATTLE HILL RD TO 228 ST SE FEASIBILITY STUDY
C*	E.30	180 ST SE: 35 AVE SE TO BROADWAY AVE FEASIBILITY STUDY
C*	E.38	AIRPORT WAY & MARSH RD: SNOHOMISH TO SEATTLE HILL RD FEASIBILITY STUDY
C*	E.39	4 AVE W: EVERETT C/L TO 112 ST SW DESIGN REPORT

**** CONC:** Concurrency projects in the TIP are highlighted by the use of two designations, C and C*. C indicates a fully funded project that will eliminate a concurrency problem, or prevent a concurrency problem from occurring elsewhere in the arterial network, and C* indicates a *not* fully funded project to eliminate a concurrency problem, or prevent a concurrency problem from occurring elsewhere in the arterial network.

Note that TIP Project #E.27A, phase one of the 20th ST SE project, shows as not fully funded. However, the funds committed are considered adequate to construct at least the portion of the project on 20th ST SE needed to remedy the level-of-service deficiency. This is further explained in Council Resolution 03-032.

Six-Year Network

DPW maintains an updated list of the “six-year network.” This list is provided to developers, who are required to do traffic studies to support their applications for new developments. Analyses of future trip distributions, assignments, and forecasts of future level of service, are based on assumptions about the County’s future road network, as it will be in six years. The six-year network is made up of a list of those projects in the TIP that are fully funded, and are expected to be constructed and open within six years. Joint projects with other jurisdictions may be added to the list if they are shown to be fully funded in each jurisdiction’s TIP and are expected to be constructed and open within six years. Projects from TIPs in other jurisdictions may also be added to the list if they are fully funded. WSDOT does not produce a TIP. State projects are added to the list of future network assumptions when they have been budgeted for construction. Table 3 lists the projects in the current Six-Year Network.

Table 3: Six-Year Network

Road Name	From	To	Description	TIP#
20th ST SE	91st AVE SE	99th AVE SE	Five lane urban design + bike lanes	E.27A
35 AV SE	168th ST SE		Intersection Signalization	D.02.14
35 AV W	at 156th ST SW		Intersection Signalization	D.02.12
39 AV SE	207 ST SE	204 SE (SR 524)	Realignment	D.20
39 AV SE	at 228 ST SE		Intersection Signalization	D.02.24
39 AV SE	SR 524		Intersection Signalization	Included in D.20
45 AV SE	at 228 ST SE		Intersection Signalization	D.02.15
51st AVE NE	at 152nd ST NE		Intersection Signalization	D.06
148 ST SW	52 AV W	SR 99	Three lane urban design + bike lanes	D.08A
148 ST SW	at 35th AV W		Intersection Signalization and Improvements	D.08B
148 ST SW	SR 99	35 AV W	Four lane urban design + bike lanes	D.08A
164 ST SW	Spruce Way	Ash Way	Five lane urban design + bike lanes	E.12
180th ST SE	at Brook Blvd		Intersection Signalization	D.02.13
228th ST SE	at 35th AV SE		Intersection Signalization	Bothell Project
Beverly Park Road	Airport Road	112 ST SW	Four lane urban section with bike lanes	E.18
Beverly Park Road	at SR 525		Intersection Improvements	E.08B
I-5	at 164th ST SW		Direct access Bus ramp from Ash Way PNR	WSDOT
Lundeen Park Way Ext	SR 9	SR 204	Three lane urban section with bike lanes	E.20
Marine Dr	at Waterworks Road		Intersection Signalization	D.02.16
Shoultes Road (108th ST NE)	at 51st AV NE		Intersection Signalization	D.02.04
SR 9	at Bunk Foss Road		Intersection Improvements	WSDOT
SR 9	SR 522	SR 524	Five lane urban design	WSDOT

Concurrency Determinations

Establishing Concurrency for Individual Development Applications

Snohomish County Code (SCC) Chapter 30.66B requires new developments to be reviewed for concurrency with respect to traffic impacts on the level of service of County arterials. The County has a system for making concurrency determinations based on the evaluation of the impacts of developments on arterial units in arrears. Detailed explanations of the methodology and figures can be found in the 2003 concurrency report. Upon the initial application submittal, a concurrency determination is made. Concurrency determinations are typically valid for six years from the date of determination. A development cannot be approved without a valid concurrency approval.

Table 4 shows a summary of the 180 concurrency determinations that were made in 2003, organized by Transportation Service Areas and by size and type of Development. Size is determined by the number of peak-hour trips (PHT).

Table 4: Summary of Concurrency Determinations

Size / Type of Development	Transportation Service Areas						TOTAL
	A	B	C	D	E	F	
Small Residential (less than 7 PHT)	16	8	6	26	2	3	61
Medium Residential (7 - 50 PHT)	24	2	1	40	5	10	82
Large Residential (>50 PHT)	5	2	1	11	1	3	23
Small Non-Residential (less than 5 PHT)	0	0	1	5	1	0	7
Medium Non-Residential (5 - 50 PHT)	0	1	0	2	1	3	7
Large Non-Residential (>50 PHT)	0	0	0	0	0	0	0
Total	45	13	9	84	10	19	180

Pipeline Database and Key Intersections

The concurrency management system uses an inventory of developments in the pipeline, referred to as the pipeline database, to forecast future traffic volumes on arterial units. The term “developments in the pipeline” means developments previously deemed concurrent, but not yet built and occupied. If a development is deemed concurrent, the number of trips from its assignment is added to the inventory of trips from developments in the pipeline.

For each arterial unit, DPW has identified the key intersections, which contribute to the delay. Typically, each arterial unit will have a key intersection at one or both ends. Sometimes there will be one or more other key intersections along the arterial unit.

For each key intersection the possible traffic movements consist of all the possible directions in which a vehicle can go at that intersection (e.g., eastbound through, eastbound left turn, eastbound right turn, westbound through, etc.)

The traffic studies submitted by developers include trip assignments, which show the number of individual vehicle trips likely to be added to each traffic movement at each key intersection.

For each key intersection, the inventory of trips from developments in the pipeline consists of all the trips assigned from developments previously deemed concurrent. However, when a development is constructed and occupied, it is assumed that the trips from that development will show up in the actual traffic counts, and they can be removed from the pipeline inventory.

DPW maintains a database that contains all of the trip assignments at the key intersections for all developments deemed concurrent. Reports from this database provide the summations of trips for each possible traffic movement at each of the key intersections, and are made available to developers for the purpose of preparing new traffic studies.

Table Showing Arterial Unit Status

Table 5 shows the 2004 status of arterial units and changes between the 2003 report and the 2004 report sorted by TSA and then Road Name.

The abbreviations in the table are:

AUIA = arterial unit in arrears

M = monitoring

OA = operational analysis

TTS = travel time study

S = screening

UC = ultimate capacity

Table 5. Arterial Status in 2004 Compared with 2003

TSA	ROAD NAME	FROM	TO	UNIT #	2003	2004	Notes
A	140/STIMPSON/136 ST NE	23 AVE NE	MARYSVILLE C/L	139	M	OA	
A	34 AVE NE	116 ST NE	136 ST NE	248	OA	OA	
A	MARINE DR NE	I-5 SB ON/OFF RAMPS	MARYSVILLE UGB/.128 MI E 27 AVE NE	163	OA	OA	
A	MARINE DR NE/MARINE DR	MARYSVILLE UGB/.128 MI E/O 27 AVE NE	64 ST NW	161	M	M	
A	OLD PACIFIC HWY	STANWOOD C/L/276 ST NW	PIONEER HWY	101	M	M	
B	20 ST SE	SR 204	SR 9	238	OA	OA	
B	20 ST SE	SR 9	S LK STEVENS RD	316	AUIA	OA	
B	91 AVE SE	20 ST SE	SR 204	317	OA	M	

TSA	ROAD NAME	FROM	TO	UNIT #	2003	2004	Notes
B	BUNK FOSS RD/RITCHEY RD	SR 9	S MACHIAS RD	256	AUIA	AUIA	
B	LUNDEEN PARK WY	SR 9	CALLOW RD	172	S	M	
B	SOPER HILL RD/SUNNYSIDE BLVD	71 AVE NE	SR 9	325	S	OA	Based on Future Analysis
C	88TH ST SE / 92 ST SE	SR 2 OVERPASS	W END BRIDGE #633	237	OA	S	
C	AIRPORT WY	99 AVE SE	SNOHOMISH C/L	235	OA	M	TTS = D
C	AIRPORT WY	SR 9	99 AVE SE	353	AUIA	AUIA	
C	BROADWAY AVE	164 ST SE	SR 9	261	M	OA	
C	MARSH RD	LOWELL LARIMER RD	SR 9	198	OA	OA	
C	S MACHIAS RD	SR 2 OVERPASS	OLD MACHIAS RD S	407	M	S	
D	112 ST SW	EVERETT C/L	EVERETT C/L	230	OA	S	Project Completed
D	121 ST SW	SR 525	BEVERLY PARK RD	366	OA	S	right in, right out
D	132 ST SE/134 PL SE	SR 96 (SEATTLE HILL RD)	SNOHOMISH CASCADE DR	259	OA	OA	Based on Future Analysis
D	148 ST SW	52 AVE W	SR 99	224	S	OA	
D	164 ST SW	LYNNWOOD C/L	I-5 (NB RAMPS)	219	M	OA	Based on Future Analysis
D	180 ST SE	SR 527	35 AVE SE	206	S	OA	
D	35 AVE SE	SEATTLE HILL RD	SR 96	203	OA	M	
D	35 AVE SE	168 ST SE	SEA. HILL RD	204	OA	OA	
D	35 AVE SE	GRANNIS RD	168 ST SE	336 / 207	S	AUIA	Same as revised AU# 207 in TSA E
D	4 AVE W	128 ST SW	112 ST SW	229	OA	S	TTS = C
D	4 AVE W	112 ST SW	EVERETT C/L	352	OA	S	TTS = C
D	52 AVE W	LYNNWOOD C/L	148 ST SW	222	S	OA	
D	52 AVE W/BEVERLY PARK	148 ST SW	MUKILTEO C/L	223	S	OA	
D	AIRPORT/128 ST SW	SR 99	I-5 (SB RAMPS)	228	OA	OA	Based on Future Analysis
D	BEVERLY PARK RD	SR 525	AIRPORT RD (EVT)	227	M	OA	
D	SEATTLE HILL RD	35 AVE SE	SR 96	202	S	OA	Based on Future Analysis
E	180 ST SE	SR 9	BROADWAY AVE	262	AUIA	AUIA	

TSA	ROAD NAME	FROM	TO	UNIT #	2003	2004	Notes
E	180 ST SE	SW COUNTY UGB/.84 MI FROM 35 AVE SE	SR 9	350	AUIA	AUIA	
E	228 ST SE	SW UGB/ 45TH AVE SE	SR 9	272	AUIA	M	
E	39 AVE SE	228 ST SE	SR 524	209	OA	OA	
E	ECHO LK RD	SR 522	LOST LAKE RD	266	M	S	Project Funded
E	PARADISE LAKE RD	SR-522	MALTBY UGB	354	M	OA	Based on Future Analysis
E	SNOHOMISH WOODINVILLE RD	KING CO LINE	SR 522 (EB RAMPS)	211	UC	UC	
F	39 AVE SE	228 ST SE	SR 524	332	S	OA	
F	LARCH WY	MLT C/L	CYPRESS WY	214	M	M	
F	POPLAR WY	LYNNWOOD C/L	BRIER C/L	278	OA	M	TTS = D
F	35 TH AV SE	GRANNIS RD	SR 524	337	S	M	

Note: Arterial units in all categories other than screening are considered "critical" and require additional analysis by developers for concurrency determinations (See section on Critical Arterial Units page 7.)

Conclusion

Public Works believes that the concurrency management system is working. Public Works believes that the system provides a reasonable, objective system of measuring level-of-service on the road system and applying that information to concurrency determinations for individual development applications.

Staff constraints have been met in several ways, including shifting of priorities, increased use of technology, and methodological simplifications.

In 2003, arterial units in arrears on 20th ST SE and 228th ST SE were significantly impacting concurrency for development applications. In late 2003 both of these arterial units were taken out of arrears.

Developers impacting the arterial unit in arrears on 35th AV SE have agreed to make improvements to the intersection of 35th AV SE and 180th SE that will remedy the level-of-service deficiency. A similar situation exists on the arterial unit in arrears on 180th ST SE west of SR 9.

The arterial units in arrears on Airport Way, Bunk Foss Road, and 180th ST SE east of SR 9 have not been significantly impacted by development proposals.

In 2004 Public Works will continue to work on measuring level of service on the road system, making concurrency determinations, and finding ways to remedy level-of-service deficiencies to take arterial units out of arrears.