

The performance standard applied at each intersection depends on the jurisdiction, location, and facility type. The following describes the performance standards applied at County and ODOT intersections. A table displaying the standard applied at each study intersection is provided as well.

COUNTY INTERSECTIONS

Clackamas County intersections inside the Metro UGB are subject to the standards in the Metro Regional Transportation Plan (RTP). Metro has developed motor vehicle performance indicators that vary based on location of the facility. The standards are based on volume-to-capacity ratios for the 1st hour and 2nd hour during the PM 2-Hour Peak, as well as during the Mid-Day One-Hour Peak. The v/c ratio standards for the 1st hour during the PM 2-Hour Peak were used. For signalized intersections, the v/c ratio standard applies to the overall intersection v/c ratio. At roundabouts, all-way stop-controlled intersection, and two-way stop controlled intersections, the v/c ratio applies to the critical movement. *Table 3.08-2 is provided below.*

According to the Clackamas County Comprehensive Plan, County intersections outside the Metro UGB have a performance standard of LOS "D". This standard refers to the average LOS experienced by all vehicles entering the intersection at signalized, all-way stop-controlled intersections, and roundabouts. At two-way stop controlled intersections, this standard refers to the LOS experienced by the critical movement at the intersection, typically a left-turn from the stop-controlled road. The standards in the Metro Functional Plan are shown in Table 3.08-2.

Table 6: Volume to Capacity Ratio Targets for Peak Hour Operating Conditions

VOLUME TO CAPACITY RATIO TARGETS OUTSIDE METRO ^{A,B,C,D}							
Highway Category	Inside Urban Growth Boundary					Outside Urban Growth Boundary	
	STA ^E	MPO	Non-MPO Outside of STAs where non-freeway posted speed <= 35 mph, or a Designated UBA	Non-MPO outside of STAs where non-freeway speed > 35 mph, but <45 mph	Non-MPO where non-freeway speed limit >= 45 mph	Unincorporated Communities ^F	Rural Lands
Interstate Highways	N/A	0.85	N/A	N/A	0.80	0.70	0.70
Statewide Expressways	N/A	0.85	0.80	0.80	0.80	0.70	0.70
Freight Route on a Statewide Highway	0.90	0.85	0.85	0.80	0.80	0.70	0.70
Statewide (not a Freight Route)	0.95	0.90	0.90	0.85	0.80	0.75	0.70
Freight Route on a Regional or District Highway	0.95	0.90	0.90	0.85	0.85	0.75	0.70
Expressway on a Regional or District Highway	N/A	0.90	N/A	0.85	0.85	0.75	0.70
Regional Highways	1.0	0.95	0.90	0.85	0.85	0.75	0.70
District / Local Interest Roads	1.0	0.95	0.95	0.90	0.90	0.80	0.75

Notes for Table 6

^A Unless the Oregon Transportation Commission has adopted an alternative mobility target for the impacted facility, the mobility targets in Tables 6 are considered standards for purposes of determining compliance with OAR 660-012, the Transportation Planning Rule.

^B For the purposes of this policy, the peak hour shall be the 30th highest annual hour. This approximates weekday peak hour traffic in larger urban areas. Alternatives to the 30th highest annual hour may be considered and established through alternative mobility target processes.

^C Highway design requirements are addressed in the Highway Design Manual (HDM).

^D See Action 1F.1 for additional technical details.

^E Interstates and Expressways shall not be identified as Special Transportation Areas.

^F For unincorporated communities inside MPO boundaries, MPO mobility targets shall apply.

ODOT INTERSECTIONS

ODOT presently uses volume-to-capacity ratio standards to measure vehicular highway mobility performance and make initial determinations of facility needs necessary to maintain acceptable and reliably levels of mobility. However, achieving necessary v/c targets will not necessarily be the determinant of the transportation solutions. ODOT recognizes that other transportation modes and regional and local planning objectives need to be considered as well. Highway mobility targets are used in transportation system planning to provide a measure by which the existing and future performance of the highway system can be evaluated. The Oregon Highway Plan (OHP) provides maximum volume-to-capacity ratios for all signalized and unsignalized intersections and interchange ramp terminals. Performance standards vary based on the highway category, the location of the facility (within a Special Transportation Area, Metropolitan Planning Organization, Urban Growth Boundary, unincorporated community or rural lands), and the posted speed on the facility. The Portland metropolitan area has separate v/c targets that were adopted with the understanding of the unique context and policy choices that have been made by local governments in that area. Higher v/c ratios indicate that the area is anticipated to have more traffic congestion because of the land use pattern that a region or local jurisdiction has committed to through adopted local policy. Operations on ODOT facilities are compared to the performance standards outlined in the OHP to identify deficiencies.

The Mobility Standard Guidelines for unsignalized intersections and signalized intersections other than crossroads of freeway ramps are provided in Table 6 and Table 7 of the OHP. At unsignalized intersections, the volume to capacity ratios in Tables 6 and 7 shall not be exceeded for either of the state highway approaches that are not stopped. Approaches at which traffic must stop, or otherwise yield the right of way, shall not exceed the volume to capacity ratios for District/Local Interest Roads in Table 6 and Table 7 within urban growth boundaries or 0.80 outside of urban growth boundaries. At signalized intersections other than crossroads of freeway ramps, the volume to capacity ratio for the intersection shall not exceed the volume to capacity ratios in Tables 6 and 7. Where two state highways of different classifications intersect, the lower of the volume to capacity ratios in the tables shall apply. Where a state highway intersects with a local road or street, the volume to capacity ratio for the state highway shall apply. At crossroads of freeway ramps, the maximum volume to capacity ratio for the ramp terminals of the interchange shall be the smaller of the values of the volume to capacity ratios for the crossroad, or 0.85.

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Interstate Highways	N/A	0.85	N/A	N/A	0.80	0.70	0.70
Statewide Expressways	N/A	0.85	0.80	0.80	0.80	0.70	0.70
Freight Route on a Statewide Highway	0.90	0.85	0.85	0.80	0.80	0.70	0.70
Statewide (not a Freight Route)	0.95	0.90	0.90	0.85	0.80	0.75	0.70
Freight Route on a Regional or District Highway	0.95	0.90	0.90	0.85	0.85	0.75	0.70
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^E Interstates and Expressways shall not be identified as Special Transportation Areas.

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Table 7: Volume to Capacity Ratio Targets within Portland Metropolitan Region

VOLUME TO CAPACITY RATIO TARGETS INSIDE METRO^{A,B}		
Location	Target	
	1st hour	2nd hour
Central City Regional Centers Town Centers Main Streets Station Communities	1.1	.99
Corridors Industrial Areas Intermodal Facilities Employment Areas Inner Neighborhoods Outer Neighborhoods	.99	.99
I-84 (from I-5 to I-205)	1.1	.99
I-5 North (from Marquam Bridge to Interstate Bridge)	1.1	.99
OR 99E (from Lincoln Street to OR 224 Interchange)	1.1	.99
US 26 (from I-405 to Sylvan Interchange)	1.1	.99
I-405 ^C (I-5 South to I-5 North)	1.1	.99
Other Principal Arterial Routes	.99	.99
I-205 ^C		
I-84 (east of I-205)		
I-5 (Marquam Bridge to Wilsonville) ^C		
OR 217		
US 26 (west of Sylvan)		
US 30		
OR 8 (Murray Blvd to Brookwood Avenue) ^C		
OR 224		
OR 47		
OR 213		
242 nd /US26 in Gresham		
OR 99W		

Notes for Table 7: Deficiency thresholds for two hour peak operating conditions through the planning horizon for state highway sections within the Portland metropolitan area urban growth boundary.

^A Unless the Oregon Transportation Commission has adopted an alternative mobility target for the impacted facility, the mobility targets in Tables 7 are considered standards for purposes of determining compliance with OAR 660-012, the Transportation Planning Rule.

^B The volume-to-capacity ratios in Table 7 are for the highest two consecutive hours of weekday traffic volumes. The second hour is defined as the single 60-minute period either before or after the peak 60-minute period, whichever is highest. See Action 1.F.1 for additional technical details.

^C A corridor refinement plan, which will likely include a tailored mobility policy, is required by the Metro 2035 Regional Transportation Plan for this corridor.

PERFORMANCE STANDARDS AT STUDY INTERSECTIONS

The following table lists the performance standard applied at each study intersection.

ID	Intersection	Jurisdiction	In Metro UGB?	Category	Performance Standard (LOS or v/c)
101	SE Johnson Creek Blvd/SE Flavel Dr	County	Y	Arterial	0.99
102	SE Johnson Creek Blvd/SE Bell Ave	County	Y	Corridor	0.99
103	SE Johnson Creek Blvd/SE 79th Pla	County	Y	Corridor	0.99
104	SE Johnson Creek Blvd/80th Ave	County	Y	Corridor	0.99
105	SE Johnson Creek Blvd/82nd Ave	ODOT	Y	Corridor	0.99
106	SE Johnson Creek Blvd/SE Fuller Rd	County	Y	Corridor	0.99
107	SE Johnson Creek Blvd/I-205 SB Ramps	ODOT	Y	Freeway Ramp	0.85
108	SE Johnson Creek Blvd/I-205 NB Ramps	ODOT	Y	Freeway Ramp	0.85
109	SE Johnson Creek Blvd/SE 92nd Ave	County	Y	Corridor	0.99
110	SE Overland Street/SE 82nd Ave	ODOT	Y	Corridor	0.99
111	SE Otty Road/SE 82nd Ave	ODOT	Y	Corridor	0.99
112	SE Otty Road/SE Fuller Rd	County	Y	Station Community	1.1
113	SE Otty Road/SE 92nd Ave	County	Y	Regional Center	1.1
114	SE Glencoe Rd/SE 82nd Ave	ODOT	Y	Corridor	0.99
115	SE King Rd/SE Bell Ave	County	Y	Arterial	0.99
116	SE King Rd/SE Fuller Rd	County	Y	Corridor	0.99
117	SE King Rd/SE 82nd Ave	ODOT	Y	Corridor	0.99
118	SE 82nd Ave/SE Boyer	ODOT	Y	Corridor	0.99
119	SE Causey Ave/SE 82nd Ave	ODOT	Y	Regional Center	1.1
120	SE Monterey Ave/SE 82nd Ave	ODOT	Y	Regional Center	1.1
121	SE Monterey Ave/SE Bob Schumacher Rd	County	Y	Regional Center	1.1
122	SE Bob Schumacher Rd/SE Stevens Rd	County	Y	Regional Center	1.1
123	SE Lake Rd/SE International Way	County	Y	Arterial	0.99
124	SE Harmony Rd/SE Linwood Ave	County	Y	Arterial	0.99
125	SE Harmony Rd/SE Fuller Rd	County	Y	Regional Center	1.1
126	SE Sunnyside Rd/SE Harmony Rd/SE 82nd Ave	ODOT	Y	Regional Center	1.1
127	SE Sunnyside Rd/8600 Block	County	Y	Regional Center	1.1
128	SE Sunnyside Rd/9000 Block	County	Y	Regional Center	1.1
129	SE Sunnyside Rd/SE 93rd Ave	County	Y	Regional Center	1.1
130	SE Sunnyside Rd/I-205 SB Ramps	ODOT	Y	Freeway Ramp	0.85
131	SE Sunnyside Rd/I-205 NB Ramps	ODOT	Y	Freeway Ramp	0.85
132	SE Sunnyside Rd/SE Stevens Rd	County	Y	Regional Center	1.1
133	SE Sunnyside Rd/SE 101st Ave	County	Y	Regional Center	1.1
134	SE Sunnyside Rd/SE Sunnybrook Blvd	County	Y	Corridor	0.99
135	SE Sunnyside Rd/SE Valley View Terrace	County	Y	Corridor	0.99
136	SE Sunnybrook Blvd/SE 82nd Ave	ODOT	Y	Regional Center	1.1
137	SE Sunnybrook Blvd/I-205 SB Ramps	ODOT	Y	Freeway Ramp	0.85
138	SE Sunnybrook Blvd/I-205 NB Ramps	ODOT	Y	Freeway Ramp	0.85
139	SE Sunnybrook Blvd/97th Ave	County	Y	Regional Center	1.1
140	OR 224/SE Rusk Rd	ODOT	Y	OR 224	0.99
141	OR 224/SE Lake Rd/SE Webster Rd	ODOT	Y	OR 224	0.99

142	SE Lake Rd/SE Webster Rd	County	Y	Arterial	0.99
143	OR 224/SE Johnson Rd	ODOT	Y	OR 224	0.99
144	SE Sunnyside Rd/SE 122nd Ave	County	Y	Arterial	0.99
145	SE Sunnyside Rd/SE 132nd Ave	County	Y	Arterial	0.99
146	SE Sunnyside Rd/SE 142nd Ave	County	Y	Arterial	0.99
147	SE Sunnyside Rd/SE 152nd Ave	County	Y	Arterial	0.99
148	SE Sunnyside Rd/SE 162nd Ave	County	Y	Arterial	0.99
149	SE Sunnyside Rd/SE 172nd Ave	County	Y	Arterial	0.99
150	SE Mather Rd/SE 122nd Ave	County	Y	Arterial	0.99
151	SE Summers Lane/SE 122nd Ave	County	Y	Arterial	0.99
152	SE Hubbard Rd/SE 132nd Ave	County	Y	Arterial	0.99
153	OR 212/I-205 SB Ramps	ODOT	Y	Freeway Ramp	0.85
154	OR 212/I-205 NB Ramps	ODOT	Y	Freeway Ramp	0.85
155	OR 212/SE 82nd Dr	ODOT	Y	OR 224	0.99
156	OR 212/224/SE 102nd Ave	ODOT	Y	OR 224	0.99
157	OR 224/SE Hubbard Rd/135th Ave	ODOT	Y	OR 224	0.99
158	OR 224/SE 142nd Ave	ODOT	Y	OR 224	0.99
159	OR 212/OR 224	ODOT	Y	OR 224	0.99
160	OR 212/SE 162nd Ave	ODOT	Y	OR 212	0.99
161	OR 212/SE 172nd Ave	ODOT	Y	OR 212	0.99
162	SE Jennifer St/SE Evelyn St	County	Y	Arterial	0.99
163	SE 82nd Dr/SE Jennifer Street	County	Y	Arterial	0.99
164	SE Strawberry Lane/SE 82nd Dr	County	Y	Arterial	0.99
165	OR 224/Springwater Rd	ODOT	Y	OR 224	0.99
201	SE Park Ave/SE River Rd	County	Y	Arterial	0.99
202	SE Park Ave/OR 99E	ODOT	Y	OR 99E (Lincoln to 224 interchange)	1.1
203	SE Oatfield Rd/SE Park Ave	County	Y	Arterial	0.99
204	SE Courtney Ave/SE River Rd	County	Y	Arterial	0.99
205	SE Courtney Ave/OR 99E	ODOT	Y	OR 99E (Lincoln to 224 interchange)	1.1
206	SE Courtney Ave/SE Oatfield Rd	County	Y	Arterial	0.99
207	SE Oak Grove Blvd/SE Courtney Ave	County	Y	Arterial	0.99
208	SE Oak Grove Blvd/OR 99E	ODOT	Y	OR 99E (Lincoln to 224 interchange)	1.1
209	SE Hill Rd/SE Oatfield Rd	County	Y	Arterial	0.99
210	SE Concord Rd/SE River Rd	County	Y	Arterial	0.99
211	SE Concord Rd/OR 99E	ODOT	Y	OR 99E (Lincoln to 224 interchange)	1.1
212	SE Oatfield Rd/SE Concord Rd	County	Y	Arterial	0.99
213	SE Roathe Rd/OR 99E	ODOT	Y	OR 99E (Lincoln to 224 interchange)	1.1
214	SE Jennings Ave/SE River Rd	County	Y	Arterial	0.99
215	SE Jennings Ave/OR 99E	ODOT	Y	OR 99E (Lincoln to 224 interchange)	1.1
216	SE Jennings Ave/SE Oatfield Rd	County	Y	Arterial	0.99
217	SE Glen Echo Ave/SE River Rd	County	Y	Arterial	0.99
218	SE Glen Echo Ave/OR 99E	ODOT	Y	OR 99E (Lincoln to 224 interchange)	1.1
219	SE Thiessen Rd/SE Hill Rd	County	Y	Arterial	0.99
220	SE Thiessen Rd/SE Aldercrest Rd	County	Y	Arterial	0.99
221	SE Thiessen Rd/SE Webster Rd	County	Y	Arterial	0.99
222	SE Thiessen Rd/SE Johnson Rd	County	Y	Arterial	0.99
223	SE Roots Rd/SE Webster Rd	County	Y	Arterial	0.99

224	SE Jennings Ave/SE Webster Rd	County	Y	Arterial	0.99
225	SE Strawberry Lane/SE Webster Rd	County	Y	Arterial	0.99
301	SW Childs Rd/SW Stafford Rd	County	N	Arterial	D
302	SW Borland Rd/SW Stafford Rd	County	N	Arterial	D
303	SW Mountain Rd/SW Stafford Rd	County	N	Arterial	D
304	SW Ellingson Rd/SW 65th Ave	County	N	Arterial	D
305	SW 65th Ave/SW Stafford Rd	County	N	Arterial	D
401	Clackamas River Dr & Springwater Rd	County	N	Arterial	D
402	S. Redland Road/S. Holly Lane	County	Y	Arterial	0.99
403	S. Redland Rd/S. Ferguson Rd	County	N	Arterial	D
404	S. Redland Rd/S. Bradley Rd	County	N	Arterial	D
405	S. Beaver creek Rd/S. Maple Lane Rd	County	Y	Arterial	0.99
406	S. Henrici Rd/OR 213	ODOT	N	District Highway, Rural	0.75
407	S. Henrici Rd/S. Beaver creek Rd	County	N	Arterial	D
408	South End Rd./OR 99E	ODOT	N	District Highway, Rural	0.75
409	S. Leland Rd/OR 213	ODOT	N	District Highway, Unincorporated Community (Beaver creek)	0.8
410	S. Leland Rd/S. Beaver creek Rd	County	N	Arterial	D
411	NE Miley Rd/NE Airport Rd	County	N	Arterial	D
412	Arndt Rd/NE Airport Rd	County	N	Arterial	D
413	Knights Bridge Rd/S. Barlow Rd	County	N	Arterial	D
414	Arndt Rd/Knights Bridge Rd	County	N	Arterial	D
415	Arndt Rd/S. Barlow Rd	County	N	Arterial	D
416	OR 99E/S. Barlow Rd	ODOT	N	District Highway, Rural	0.75
417	SE 13th Ave/S. Mulino Rd	County	N	Arterial	D
418	S. Spangler Rd/OR 213	ODOT	N	District Highway, Rural	0.75
419	Mulino Rd/OR 213	ODOT	N	District Highway, Unincorporated Community (Mulino)	0.8
420	S. Union Mills Rd/OR 213	ODOT	N	District Highway, Rural	0.75
421	S. Barnards Rd/OR 213	ODOT	N	District Highway, Rural	0.75
422	S. Union Mills Rd/S. Beaver creek Rd	ODOT	N	District Highway, Rural	0.75
423	OR 211/Barlow Rd	ODOT	N	District Highway, Rural	0.75
424	OR 211/Canby Marquam	ODOT	N	District Highway, Rural	0.75
501	OR 212 /SE 282nd Ave	ODOT	N	State Hwy, NHS, FR, Unincorporated Community (Boring)	0.7
502	OR 224 /SE 232nd Ave	ODOT	N	District Hwy, Rural	0.75
503	OR 224/OR 211	ODOT	N	District Hwy, Unincorporated Community (Eagle Creek)	0.8
504	US 26/Salmon River Rd	ODOT	N	State Hwy, NHS, FR, Unincorporated Community (Mt. Hood Village)	0.7
505	US 26/Government Camp West	ODOT	N	State Hwy, NHS, FR, Unincorporated Community (Government Camp)	0.7
506	US 26/Government Camp East	ODOT	N	State Hwy, NHS, FR, Unincorporated Community (Government Camp)	0.7

NHS = National Highway System, FR = Freight Route