

## **Appendix A**

---

### ***Measures of Effectiveness Table***

## SR 167 Corridor Project Measures of Effectiveness

Screening Criteria	Performance Indicators	Baseline 2030	Option 2 (3+1)	Option 2A (2+2)	Option 4 (3+2)	Option 4A (3N/2S+2)
<b>Objective: Move More People</b>						
Renton						
Person Trips Total	PM Peak Period	44,500	44,800	44,600	50,700	50,100
general purpose Lanes	PM Peak Period	27,100	27,400	26,800	27,000	27,000
HOV +3	PM Peak Period	15,400	15,400	15,800	21,700	21,100
Transit	PM Peak Period	2,000	2,000	2,000	2,000	2,000
Auburn						
Person Trips Total	PM Peak Period	43,300	47,100	47,900	56,400	54,900
general-purpose Lanes	PM Peak Period	24,900	29,800	24,000	29,300	28,800
HOV +3	PM Peak Period	17,500	16,400	23,000	26,200	25,100
Transit	PM Peak Period	900	900	900	900	1,000
Sumner						
Person Trips Total	PM Peak Period	34,300	41,000	41,000	47,000	41,500
general-purpose Lanes	PM Peak Period	20,100	26,900	19,800	26,600	20,100
HOV +3	PM Peak Period	13,900	13,800	20,900	20,100	21,100
Transit	PM Peak Period	300	300	300	300	300
<b>Objective: Save Time</b>						
Travel Time	PM Peak Period	SB/NB	SB/NB	SB/NB	SB/NB	SB/NB
General Traffic	Full Corridor Travel Time	88 / 25 min.	73 / 24 min.	78 / 25 min.	76 / 23 min.	74 / 24 min.
HOV/Transit/ Managed Lanes	Full Corridor Travel Time	27 / 25 min.	27 / 24 min.	27 / 25 min.	27 / 23 min.	27 / 24 min.
Speed (GP)	Average Speed (mph)	14 / 48 mph	16 / 50 mph	15 / 48 mph	16 / 52 mph	16 / 50 mph
Speed (HOV/HOT)	Average Speed (mph)	44 / 48 mph	44 / 50 mph	44 / 48 mph	44 / 52 mph	44 / 50 mph
<b>Objective: Reduce Congestion</b>						
Local Arterial Traffic						
Renton	Arterial Traffic Volume (PM Peak)	4,200	4,100	4,100	4,200	4,300
Auburn	Arterial Traffic Volume (PM Peak)	4,300	4,000	4,300	4,200	4,200
Sumner	Arterial Traffic Volume (PM Peak)	3,800	2,900	3,300	3,100	3,300
Hours of Travel	Daily Person Hours	122,900	138,300	116,600	139,000	126,400
Hours of Congestion	Daily Person Hours	27,000	29,300	25,400	29,600	27,150
Access Efficiency	Ease of Access		Improvement	Improvement	Improvement	Improvement
Freeway Operations Efficiency	Congestion		Improvement	Improvement	Improvement	Improvement

Source: 2030 PSRC EMME/2 Travel Demand Model, 2006.

## SR 167 Corridor Project Measures of Effectiveness (Cont).

Screening Criteria	Performance Indicators	Baseline 2030	Option 2 (3+1)	Option 2A (2+2)	Option 4 (3+2)	Option 4A (3N/2S+2)
<b>Objective: Improve Truck Mobility/Efficiency</b>						
Daily Hours of Travel	All Vehicle Hours	90,400	101,700	85,700	102,250	92,950
Large Trucks	Truck Hours	665	750	655	825	800
Medium Trucks	Truck Hours	1,310	1,560	1,320	1,635	1,500
Travel Time	PM Peak Period	SB/NB	SB/NB	SB/NB	SB/NB	SB/NB
Large Trucks	Point to Point Travel Time	88 / 25 min.	73 / 24 min.	78 / 25 min.	76 / 23 min.	74 / 24 min.
Medium Trucks	Point to Point Travel Time	88 / 25 min.	73 / 24 min.	78 / 25 min.	76 / 23 min.	74 / 24 min.
<b>Objective: Improve Safety</b>						
Collisions	Accidents at HALs/HACs		Reduced	Reduced	Reduced	Reduced
Truck Collisions	Truck Collisions		No Change	No Change	No Change	No Change
Total Collisions	Annual Total		May Increase	May Increase	May Increase	May Increase
<b>Objective: Be Cost Effective</b>						
Cost	Capitol Cost (in billions)	\$2 to \$2.4	\$3.4 to \$5.2	\$3.4 to \$5.2	\$6 to \$8	\$6 to \$8
Cost Effective	Annual Vehicle Hours of Delay Saved per \$1 million in investment		12,400	3,300	5,600	4,700
Collision Cost Savings	Annual Collision Savings		No Savings	No Savings	No Savings	No Savings
Freight Cost	Annual Operating Costs		Increases	Increases	Increases	Increases
<b>Objective: Be Environmentally Responsive</b>						
Streams	Impact		2.6 acres	2.6 acres	2.8 acres	2.8 acres
Wetlands	Impact		131 acres	131 acres	141 acres	141 acres
Floodplains	Impact		47 acres	47 acres	50 acres	50 acres
CARA	Impact		237 acres	237 acres	245 acres	245 acres
Geohazards (Liquefaction Areas)	Impact		28 acres	28 acres	29 acres	29 acres
Air Quality	Impact		Improvement	Improvement	Improvement	Improvement
Noise	Impact		Moderate	Moderate	Moderate	Moderate
Support GMA and Urban Center	Support Regional Links		Support	Support	Support	Support

Source: 2030 PSRC EMME/2 Travel Demand Model, 2006.