

## Puget Sound Highways are Critical Infrastructure for Transit and Carpools

(A working paper from John Niles, Research Associate, Mineta Transportation Institute, March 1, 2004)

Decision makers seeking the right “balance” between road and transit funding in the coming Regional Transportation Investment District (RTID) package can find indicators in the projected 2010 modal split modeled by the Puget Sound Regional Council in its latest Metropolitan Transportation Plan, *Destination 2030*.

Transit in the Puget Sound Region includes both trains and buses. In addition, the promotion of carpools – including vanpools – is carried out by transit agencies. Often, general purpose lanes are used by HOVs. For example, the Alaska Way Viaduct in Seattle provides access to downtown Seattle for about 440 buses per day, carrying over 10,000 passengers. Buses and carpools are thus dependent on the adequacy of both HOV lanes and general purpose lanes.

The officially approved PSRC 2010 Action Strategy assumes light rail completion from Northgate to South 200<sup>th</sup> in SeaTac. The results of this Strategy show that even with trains in operation, the carpool and bus HOV modes in 2010 are forecast to move more than ten times the number of peak period travelers in the I-5 corridor than rail transit will carry. The mode share of bus transit is twice the mode share of rail transit.

The table below summarizes the modal split across four screenlines selected to highlight the role of rail transit. The screenlines divide north from south at the Alderwood Mall, the Ship Canal, the City of Seattle in the SODO district, and the Pierce-King County Line. They measure travel along all corridors at these dividing lines. They capture the 2010 transit ridership resulting from Sounder commuter rail from Seattle to Tacoma and to Everett on existing tracks, and from Central Link light rail in Seattle running between Northgate and Tukwila.

Across these four screenlines, as shown in the table below, the 2010 peak period mode share for rail calculates to a 4 percent average, while the bus mode share comes in at 9 percent and the carpool share at 36 percent.

These percentages suggest that funding for the preservation and upgrading of roadways in the RTID package is critical to the importance of personal travel in modes other than SOV.

**Person Trips Modeled Across Five Screenlines  
Measuring AM Peak Period Trips in North-South Rail Corridors**

Screenline (*)	SOV	Carpool	Bus	Rail	Total
North-South @ Alderwood Mall (46)	57,900 (64%)	28,500 (32%)	3,300 (4%)	300 (0.3%)	90,000 (100%)
North-South @ Ship Canal (35)	84,700 (46%)	65,500 (35%)	24,600 (13%)	11,900 (6%)	186,700 (100%)
North-South across Seattle @ SODO (32)	67,300 (45%)	56,600 (38%)	19,600 (13%)	6,200 (4%)	149,700 (100%)
North-South @ King-Pierce Line(10-11)	66,400 (60%)	41,400 (37%)	2,000 (2%)	1,000 (1%)	110,800 (100%)
<b>Weighted Average Mode Share</b>	<b>51%</b>	<b>36%</b>	<b>9%</b>	<b>4%</b>	<b>100%</b>

Source: *Destination 2030: PSRC Metropolitan Transportation Plan*, Appendix 8, Table 8-13 and communications from PSRC. Trips rounded to the nearest 100. Screenlines selected to emphasize the rail transit share in the I-5 corridor. \*PSRC reference number indicated. The cooperation of PSRC staff in providing data is appreciated.