

Commute Trip Reduction and Telework in the Puget Sound Region

Washington state and the Puget Sound region have long been leaders in implementing innovative transportation demand management programs. The state's Commute Trip Reduction (CTR) Law, implemented in 1991, requires employers with over 100 employees at a single worksite to implement strategies to reduce the number of employees commuting via single-occupant vehicle (SOV) between the hours of 6:00 and 9:00 a.m., the morning peak period. In 2006 CTR was streamlined with the CTR Efficiency Act, which also created a new element called the Growth and Transportation Efficiency Center (GTEC) Program.

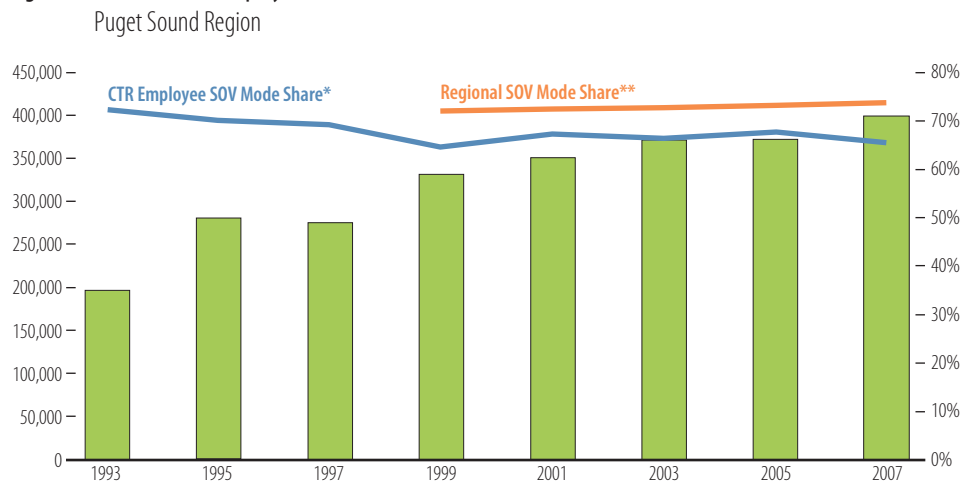
Based on data gathered by biennial WSDOT surveys of CTR-affected employees, this article examines some key differences in the modes of travel to these worksites as compared to trends in overall regional mode share interpolated from PSRC's 1999 and 2006 Household Surveys.

CTR Employees' Work Trip Mode Split

As with non-impacted employees, the single-occupant vehicle (SOV) continues to represent the primary mode of transportation for CTR-affected employees in the four-county region.

However, SOV mode share among these individuals has continued to decline, while overall regional SOV mode share for home-based work trips rose slightly between 1999 and 2006. As shown in Figure 1, SOV travel accounted for over 72 percent of morning commutes to Puget Sound region CTR sites in 1993, whereas in 2007 that figure dropped to under 67 percent.

Figure 1. CTR-Affected Employees and Mode Share, 1993–2007



* Source: WSDOT CTR Database.

** Source: Trend interpolated from 1999 and 2006 PSRC Household Surveys.

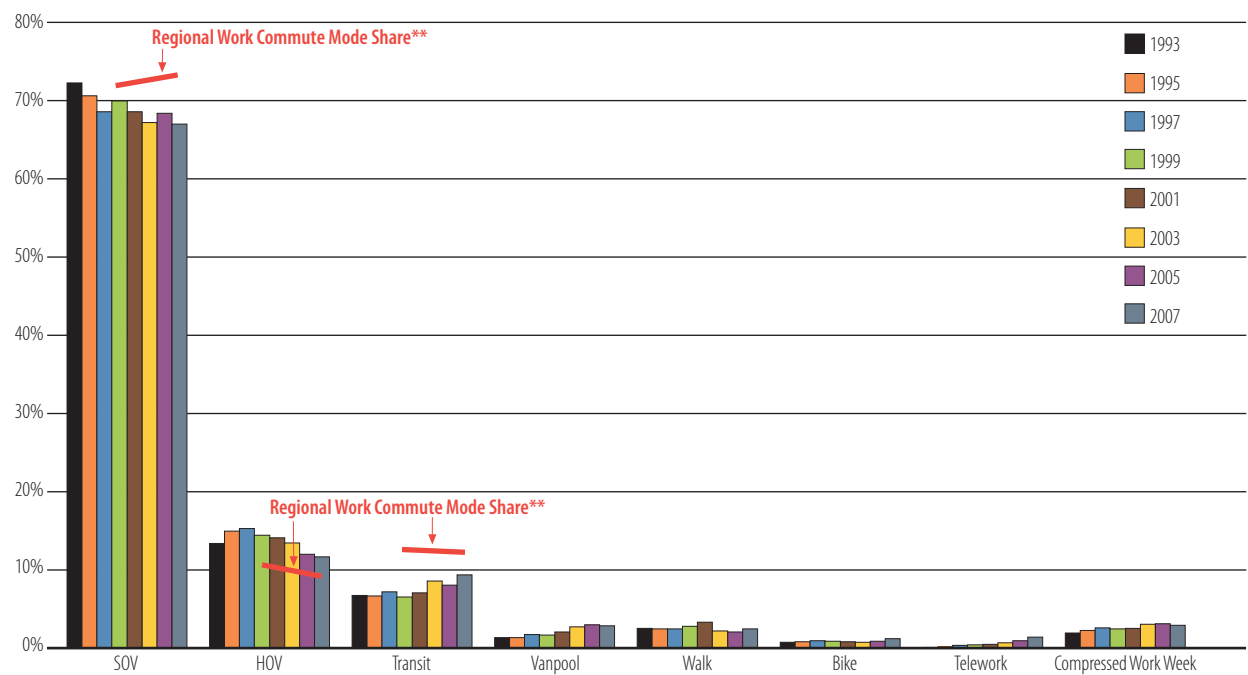
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The regional CTR mode share for carpools peaked in 1997 and has continued to drop steadily towards the regional average. Trips not made by SOV and carpool modes seem to have been absorbed by growth in vanpools, nonmotorized transportation, and alternative work arrangements such as telework and compressed work weeks. The most significant increase in CTR mode share between 1993 and 2007, particularly between 1999 and 2007, was in transit, which rose from approximately 6.7 percent mode share in 1993 to 9.4 percent in 2007. This is substantial growth in transit usage, especially given that the total number of individuals impacted by CTR steadily grew over that same period. A likely contributing factor to this mode share increase was additional regional investment in transit service between 1999 and 2006, including the beginning of Sound Transit bus service in 1999. Although transit's mode share within the CTR program has steadily increased, it still falls below the 12 percent regional average for work trips identified in the 2006 PSRC Household Survey.

Figure 2. CTR Mode Share, 1993–2007
Comparison to Regional Mode Share*



* Source: WSDOT CTR Database.

** Source: Trend interpolated from 1999 and 2006 PSRC Household Surveys.

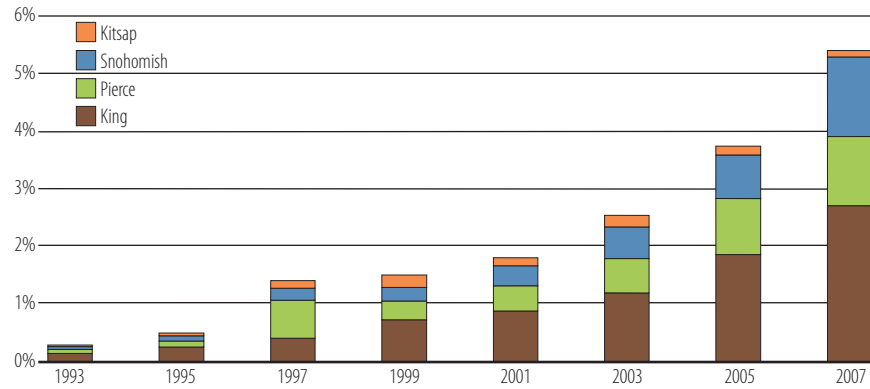
Vanpools have also been an increasingly popular mode of transportation to CTR worksites. The central Puget Sound region operates one of the largest vanpool programs in the country, which primarily serves longer-distance commuters. As average distance to CTR worksites increases (by approximately 10 percent between 1993 and 2007), it is logical to see a corresponding jump in the popularity of vanpooling.

Another developing trend is the increasing number of teleworkers among CTR-affected employees. In 1993 telework was the least-used mode of transportation within the CTR program, with only .07 percent of the regional mode share. In 2007, that figure increased to just under 1.4 percent, surpassing bicycling in popularity in the central Puget Sound CTR market. As illustrated in Figure 3, King County has seen the most growth in teleworkers, followed by Snohomish County, Pierce, and finally Kitsap. Based on 2009 CTR employee mode share information obtained from WSDOT for the central Puget Sound, telework achieved a 3.8 percent average mode share. While not directly comparable to data between 1993 and 2007¹, these new figures suggest that telework's appeal continues to grow.

¹ For the 2007 to 2011 CTR survey cycle WSDOT made a number of refinements to survey instruments, program parameters, and measurement methodologies which preclude making any direct comparisons to prior years' survey data.

The rise in popularity of telework is probably due to a number of factors, including advances in business technology and software, as well as companies becoming educated about the benefits of a strong telework policy.

Figure 3. Telework Mode Share by County, 1993–2007
CTR-Affected Employees



For more information about this *Trend* and Commute Trip Reduction, contact Benjamin Brackett at 206-971-3280 or bbrackett@psrc.org.

Additional 2007–2009 CTR Analysis Highlights

For CTR sites in the central Puget Sound region:

- Overall program drive-alone rate declined by 3.2 percent.*
- Vehicle miles traveled per employee declined by 2.5 percent.
- Teleworking as a mode share increased from 2.9 in 2007 to 3.8 percent in 2009.
- Vanpooling as a mode share increased from 2.6 percent in 2007 to 3.1 percent in 2009.

* Drive-alone rate includes one-person motorcycles.