

Tukwila CTR Pilot Project

2013-2017

Project Analysis

PERFORMANCE MEASUREMENT:

Performance measurement for the Pilot Project was tracked using two existing sources, the State CTR surveys and RideshareOnline.com participant data. The goal for the program was to achieve the State CTR Program Drive-Along Rate (DAR) and Vehicle Miles Traveled (VMT) targets. CTR survey data for NDAT and VMT was used to track performance at CTR-affected and voluntary CTR sites. Data from Rideshareonline.com (RSO) participants was intended to supplement the CTR Program data; this measure provided a convenient means to observe the participation of small employers and individuals/residents in TDM programming.

GOALS:

When the goals were established for the Pilot Project, the State goals of reducing the DAR by 10% from the 2007/2008 baseline of 77%, and decreasing the VMT by 18% from a baseline of 16.9 were adopted. In 2015, a group of South King County jurisdictions took advantage of new flexibility in the program to adopt local targets for the state goals. These targets were adjusted to reflect more realistic targets for suburban jurisdictions. Note the DAR has been adjusted to reflect non-drive alone rate (NDAT). These new targets are:

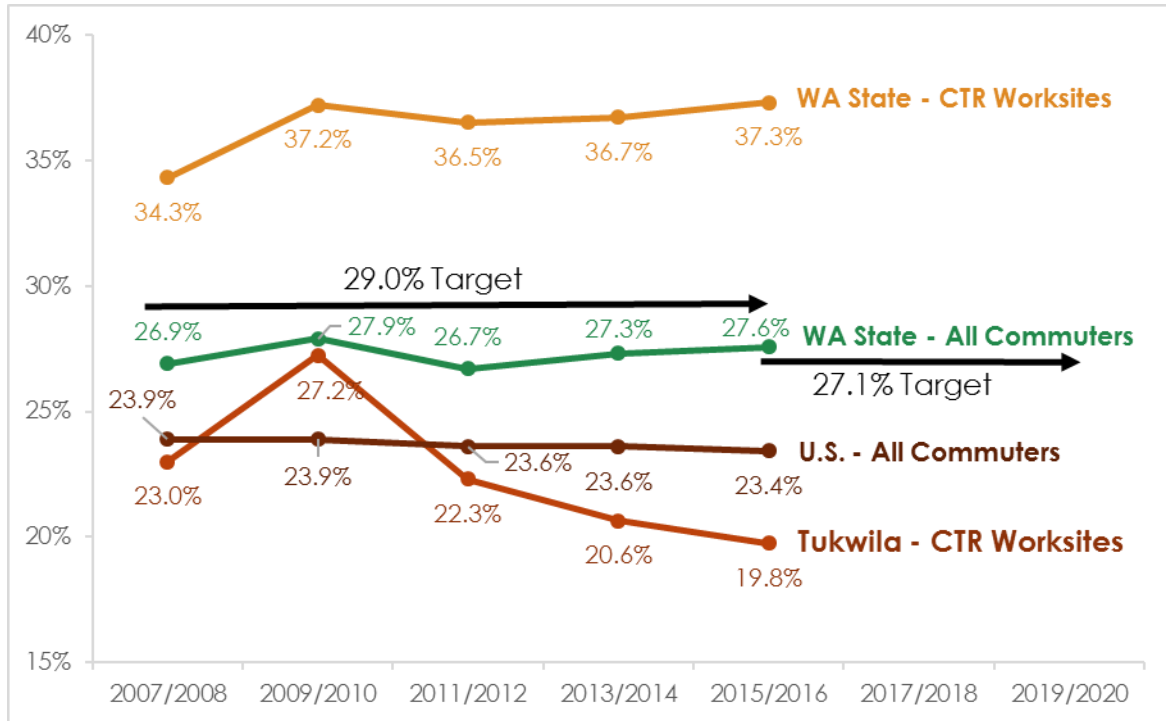
<u>2007-2008</u>	<u>Percent Change</u>	<u>2019-2020</u>
NDAT 23%	+17.6	27.1%
VMT 16.9	-18%	13.9
GHG 33.5	-18%	27.5

RESULTS AND ANALYSIS:

CTR Employer Survey Data

Biennial NDAT and VMT data from the CTR Program survey of affected and voluntary sites is provided from 2007/2008 baseline to present in the charts below.

Figure 1: Historic CTR Non-Drive-Alone Targets and Results and 2019/2020 Target [Percent of trips by non-drive-alone mode]



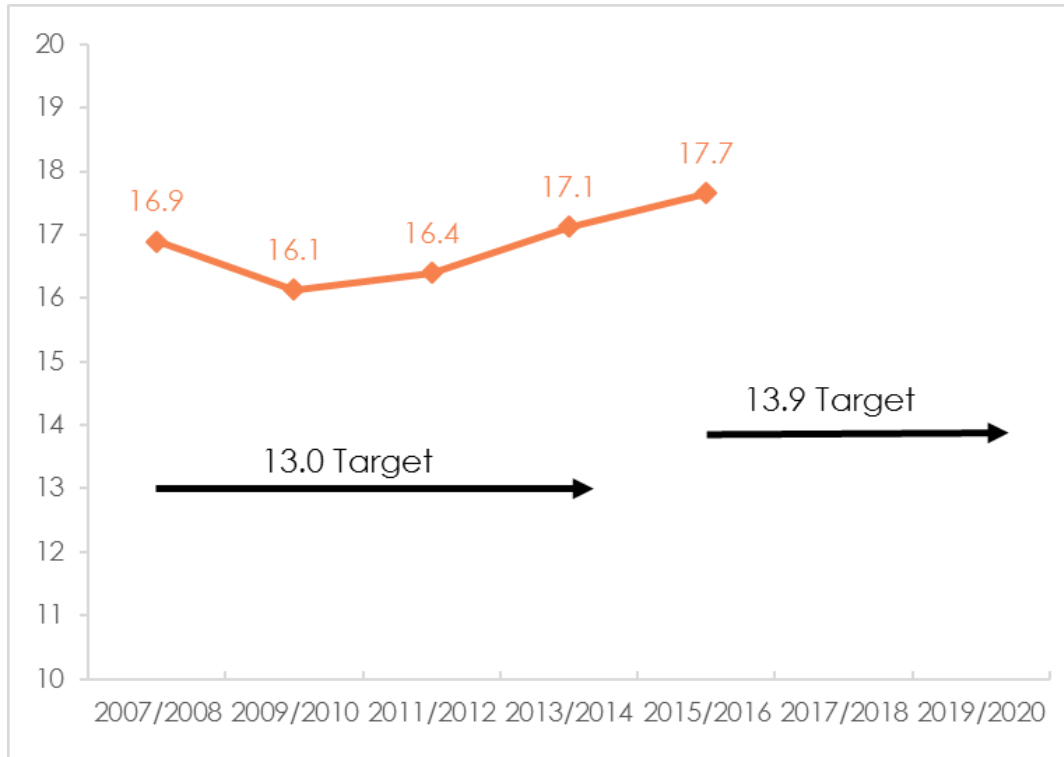
Source: U.S. and Washington State data from U.S. Census American Community Survey (as cited in the Bellevue Transportation Demand Management Plan 2015-2023)

NDAT rates for the state CTR worksites and all commuters for the state and country have been included as a means of comparison. One cannot interpret the results without speculation due to the presence of many confounding variables, however the sharp increase in NDAT in the 2009/2010 biennium may be in part due to the impacts of the great recession, which likely made it harder to afford owning and driving a personal vehicle.

Economic downturns may be felt more sharply in areas that are less affluent, so it is not surprising that Tukwila (which according to the 2010 Census has a median income that is only 61% of the median income of all of King County and 24.3% of residents living in poverty compared to only 11.3% in all of King County) showed a greater increase in NDAT than the state averages or the country as a whole in the years immediately following the great recession (2009/2010). Similarly, the continued impact of a recovering economy and falling gas prices in recent years may help explain why the NDAT for Tukwila commuters has continued to decrease.

As you can see, Tukwila has not met its NDAT targets in any biennial cycle, according to the data. It is important to keep in mind that the way the survey is set up data from one week is used to represent two years of activity and does not capture nuances such as seasonal variation in NDAT, or more subtle trends.

Figure 2: Historic CTR Vehicle Miles Traveled (VMT) Targets and Results and 2019/2020 Target [All citywide CTR Commute trips, VMT per employee, one way]



The VMT data shows an inverse relationship with the NDAT, decreasing in 2009/2010 and then slowly increasing again above baseline measures. This trend may reflect the impact of increased housing costs, which continue to push many people out of cities and therefore further from the region’s major employment centers. The price of gas and other economic conditions likely also influenced how many people drove and how far they drove. Unfortunately, Tukwila did not achieve its VMT targets during the course of the Pilot Program and appears to be slowly increasing over time.

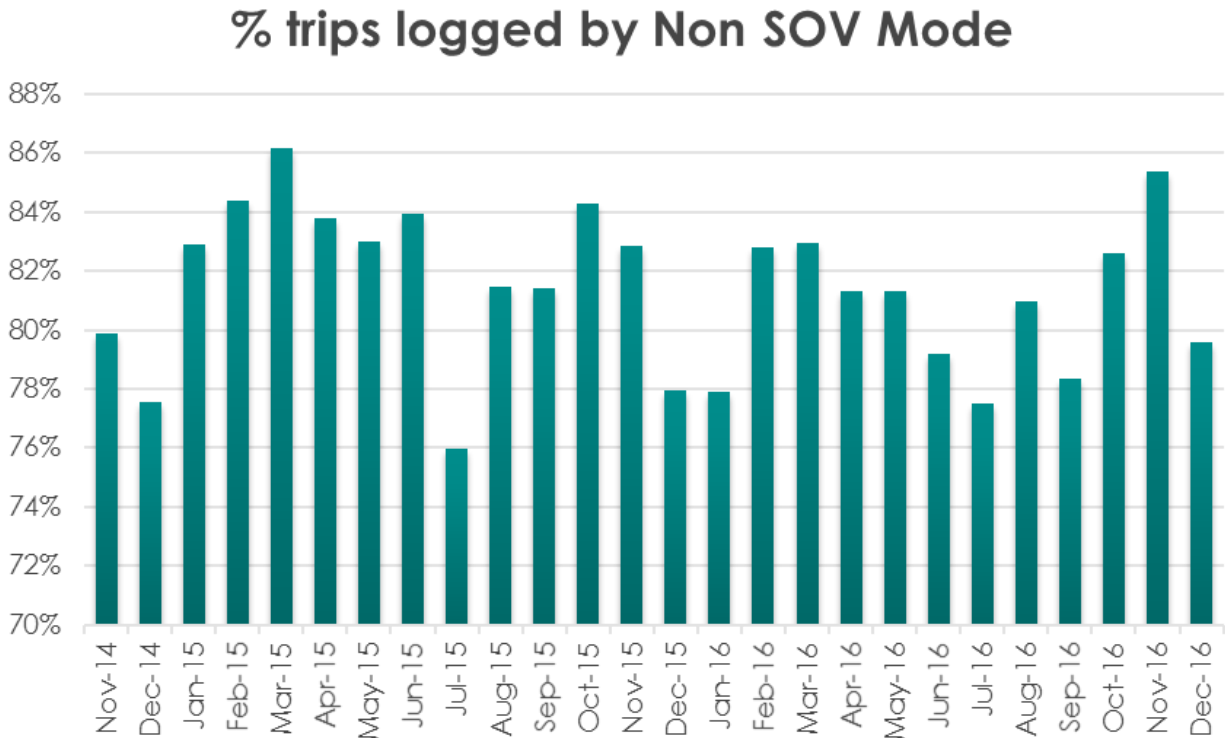
Although not required as part of the Pilot Program measurement, the current Greenhouse Gas Emissions target for the regular CTR program is 27.50 daily pounds per employee. The level attained at CTR-affected sites in Tukwila between 2007/2008 and 2015/2016 has ranged between 31.78 to 33.54 daily pounds per employee, with the 2015/2016 level at 32.73 daily pounds per employee.

Rideshare Online Data

Data from RideshareOnline.com (RSO) helps paint a bigger picture of the impact that TDM programming has had on trip behavior in Tukwila. Although the majority of RSO users are likely employees from CTR-affected sites, the website has provided a venue for tracking the travel behavior of employees at non CTR-affected sites and of those who live and spend leisure time in Tukwila.

Unfortunately, the data on RSO prior to November 2014 has been deleted, so we were unable to access pre-Pilot Program data to compare with post-program data. However, data from the past two years reveals some interesting trends (see figures 3 and 4 below).

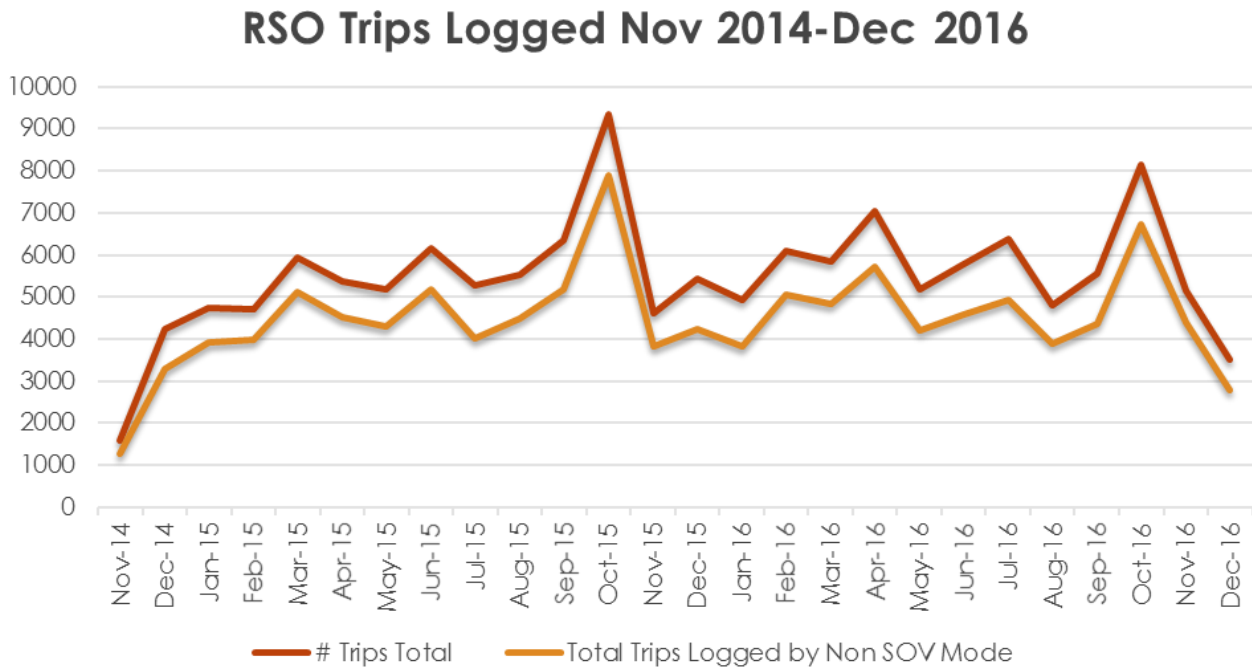
Figure 3: Percentage of trips logged by non-SOV mode (a similar measure to the NDAT)



Predictably, the percentage of non-Single Occupant Vehicle (SOV) trips logged decreases during the hottest and coldest/wettest/darkest months of the year, when facing the elements makes the choice to take an alternative mode less desirable.

Over the course of the past two years, Tukwila RSO participants logged a fairly consistent percentage of non-SOV mode trips, fluctuating between 76-86% of all trips logged on RSO. This proxy for NDAT likely reflects the fact that most people use RSO for logging non-drive-alone trips, not all trips. By changing the requirements for eligibility in RSO challenges to capture SOV use, it may be possible to more accurately assess this measure. Additionally, not all participants remained active users over that course of time; people became inactive, changed jobs or moved, and new participants joined, so the sample population was not consistent over time, further impeding analysis.

Figure 4: Tukwila network RideshareOnline trips logged from November 2014–December 2016



Reviewing the total number of trips logged between November 2014 and November 2016, there is an initial increase in the number of trips logged by non-SOV modes (and total trips logged) and then maintenance of the number of trips logged within a couple thousand trips. It is interesting to note the significant spikes in number of total trips and non-SOV trips in October of 2015 and 2016, which is likely due to the success of the annual Wheel Options Campaign. It is encouraging to see these peaks because it demonstrates the ability of one campaign to impact behavior.

The smaller peaks may be related to other RSO campaigns or increased outreach activities. For instance, the spike in total and non-SOV trips logged in April of 2016 may have been influenced by our Tukwila “Rock Your Ride” challenge, during which 71 participants logged an average of 16 trips over the course of the month.

CONCLUSIONS

It is important to contextualize the data with several situational factors that likely have an impact on the success of TDM programs in Tukwila. These include the hilly topography and barriers such as large freeways (I-405, I-5) that geographically separate residents and businesses. There is also an abundant supply of free parking in the GTEC and MIC, a factor that is widely understood to have a significant impact on travel behavior. It is also worthwhile to assess the impact that capital facilities have on travel behavior. Tukwila is relatively small and while the state of transit and bicycling/walking infrastructure has improved over the past several years, we have received qualitative feedback from residents and employees that it is difficult to get to where they are going without driving a personal vehicle. These and other factors have likely contributed to the non-attainment of the program’s VMT and NDAT goals.

While Tukwila has not achieved the stated targets for any of these metrics, had the CTR Pilot and other TDM programs not been in place over this time period, the city may have experienced more severe declines in NDAT and increases in VMT. Due to the presence of the many confounding variables that influence travel behavior, we cannot accurately assess the impact of the program.

Qualitative feedback from employers and individuals over the course of the Program has affirmed the need for continued in-person outreach to provide people with information, resources, and encouragement necessary to make non-drive alone travel a widely adopted practice in the city and region. Other aspects of the program will have future impacts on the TDM programs in Tukwila, such as the development of a TDM Plan for the city, which will help staff to better target and coordinate efforts moving forward.