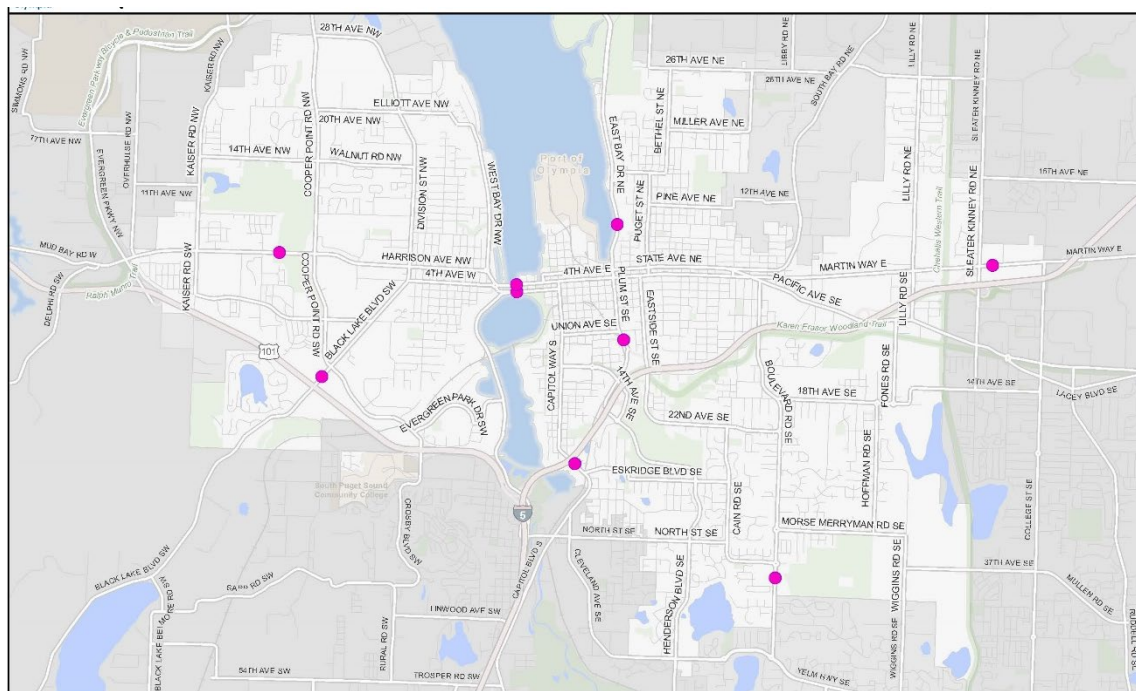


Vehicle volumes in Olympia: recent trends

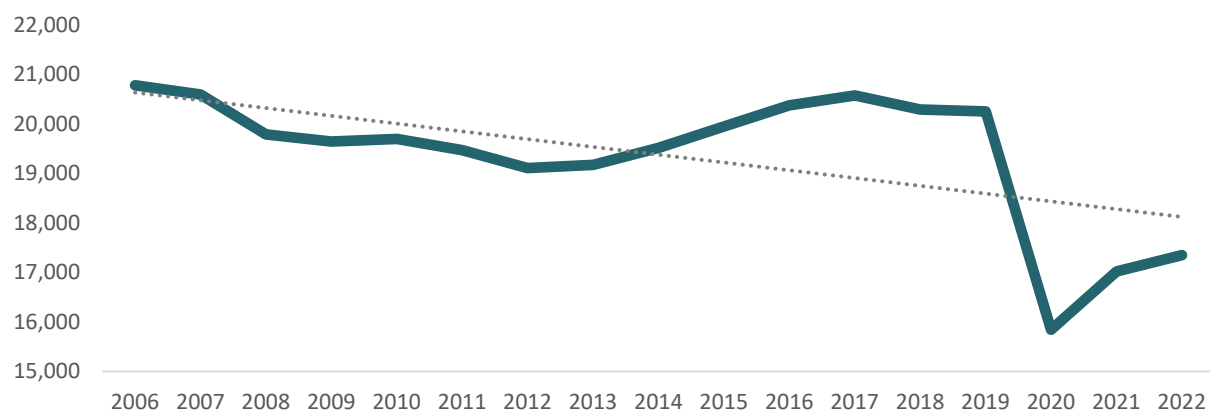
Since 2006, City of Olympia Public Works Transportation staff have counted motor vehicles at nine locations throughout Olympia on a monthly basis. We call these “control count” locations because these are the locations we monitor consistently. They serve as a constant point of comparison when we consider changes to the street system as a whole.

The control count locations are shown on the map below:



At the end of each year, staff average the volumes at each location to get a sense of how the annual volumes compare to previous years. Below is a graph of what that looks like. We added a dotted trendline for more context:

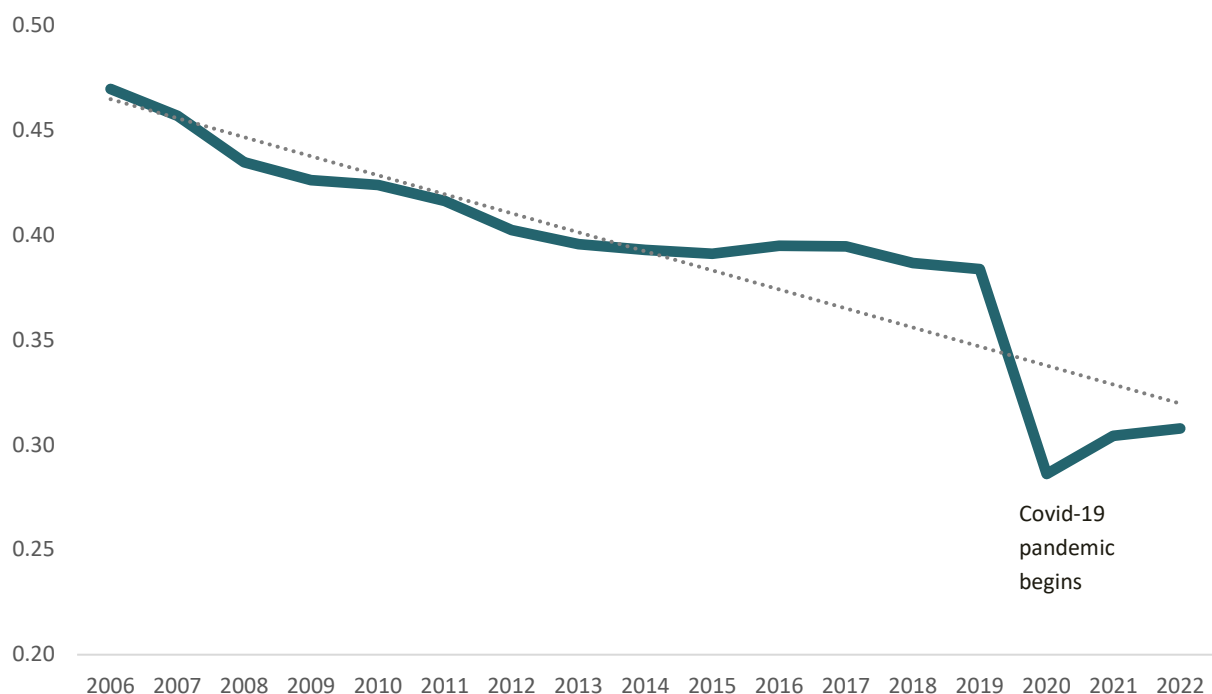
Control count average annual volumes



While the control count average volumes show a downward trend from 2006 – 2012, they picked up from 2013 through 2017 and then leveled off in 2018 and 2019. Vehicle volumes typically rise and fall with economic cycles; they slow down during recessions and increase in economic peaks. While the economic cycle is certainly not the only factor that explains the changes in vehicle volumes in Olympia from 2006 to 2019, it is likely significant.

However, Olympia and the Thurston region’s population has also increased during the same time period, so we added Olympia’s population as a denominator to the control count averages shown above. The resulting ratio shows how many vehicles were counted on average at these locations relative to Olympia’s population:

Control count volumes over population



The decline is more dramatic than when we just count vehicle volumes alone. This graph clearly indicates that people in general are driving less, or at least driving less past the control count locations.

Why are vehicle volumes per capita apparently decreasing?

Prior to 2020, there is likely no single explanation for the relative decrease in travel patterns. In general, in our region commute trips only account for about 10% of tripsⁱ, and the Commute Trip Reduction surveys conducted at state agencies and large employers in the region prior to 2020 do not indicate that people started driving to work lessⁱⁱ. Transit numbers decreased after 2012ⁱⁱⁱ, and our pedestrian and bicycle counts remained fairly static, so it is unlikely that people were replacing driving trips by taking the bus, walking, or biking to their destinations in significant numbers.

Increases in online shopping between 2006 to 2019 likely account for some of the decrease, as delivery vehicles with items for multiple homes are much more efficient than individuals driving to a store to make a purchase^{iv}. The increasing density of our region may also be a factor, as denser land use patterns typically result in people driving less to get their needs met. In Olympia, our residential density has increased in recent decades. For example, housing built in Olympia during the time period of 2000-2004 had a net residential density of a little over 6 dwelling units per acre^v. In 2015-2019, it was over 11 dwelling units per acre^{vi}.

We do not know all the factors, but we know this is a positive trend, both in terms of supporting our greenhouse gas emissions reduction targets and our region's vehicle miles traveled reduction targets.

Covid-19

In 2020, vehicle volumes dropped dramatically when the Covid-19 pandemic began and emergency health measures went into effect. While vehicle volumes in 2021 and 2022 increased over what they were in 2020, the long-term impacts on how we get around may not be clear for a few more years. This is especially true for Olympia compared to other cities, as a large percentage of state employees are teleworking at much greater numbers than before the Covid-19 pandemic.

¹ Thurston Regional Planning Council. (2022). *Household Travel Survey*, via email from Michael Ambroggi, Senior Planner, March 31, 2023.

¹ Washington State Department of Transportation. (2022). *Statewide CTR Aggregate Report*, via email from Veronica Jarvis, Senior Planner (TRPC), March 31, 2023.

ⁱ¹ Thurston Regional Planning Council. (n.d.). *Transit Ridership*. Retrieved from Thurston Regional Planning Council: <https://www.trpc.org/418/Transit-Ridership>

^{iv} Cortright, J. (2019, November 25). *Why Cyber-Monday doesn't mean delivery gridlock Tuesday*. Retrieved from City Observatory: https://cityobservatory.org/cyber-monday-delivery_gridlock/

^v Thurston Regional Planning Council. (2021). *2021 Buildable Lands Report*.

^{vi} Ibid.