

Notable results

- *Puget Sound area traffic volumes and travel times in the second half of 2013 were impacted by a slightly improving economy*
- *Five commute routes on I-5 and I-405 experienced significant changes in travel times while 13 others had no changes*

Puget Sound area travel mirrors economic activity

Puget Sound area travel trends observed during the first half of 2013 continued into the second half of 2013. The slight increases in both traffic volumes and travel times on Puget Sound area freeways mirror a slight improvement in the region's economy.

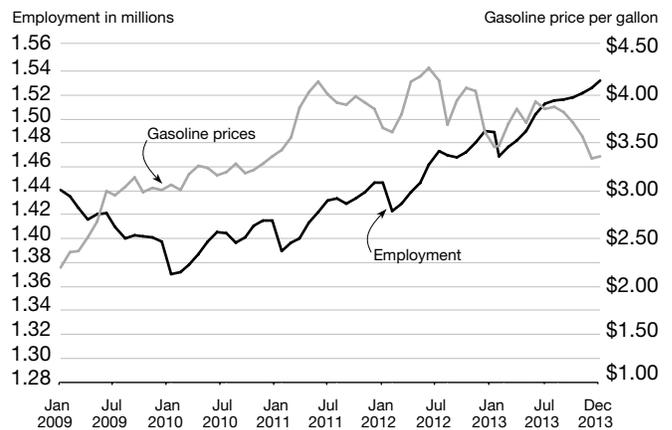
This travel time trends analysis looks at traffic conditions for the second half of 2013 (July through December) and changes relative to the same time period in 2012. Key observations include:

- **Economy:** Employment levels increased by 2.9 percent between December 2012 and December 2013 in the Seattle-Bellevue-Everett metropolitan area, indicating continued economic growth.
- **Traffic volumes:** During peak periods (Monday-Friday, 5-10 a.m. and 2-8 p.m.), 13 out of the 18 commute routes showed minor changes in traffic volumes (changes of 2 percent or less). The remaining five commute routes experienced significant variations in traffic volumes, ranging from a 7 percent decrease to a 7 percent increase.
- **Travel times:** Peak period travel times remained unchanged (fluctuating by two minutes or less) for 13 of the 18 commute routes. Of the five remaining routes, four morning commutes on Interstate 5 (I-5) and I-405 had three- to five-minute increases in travel times while one evening commute via I-405/State Route (SR) 520 from Bellevue to Seattle had a four-minute improvement.

Modest growth in employment puts more traffic on the roads

Employment in the region grew during the second half of 2013, continuing an upward trend that began in 2011. Seattle-Bellevue-Everett employment increased by 2.9 percent from 1,489,200 jobs in December 2012 to 1,532,400 jobs in December 2013. The employment data

Washington employment rises, gas prices stabilize January 2009 through December 2013; Seattle-Bellevue-Everett metropolitan area



Data source: Bureau of Labor Statistics – Current Employment Statistics; U.S. Department of Energy – Energy Information Administration.
Note: Gasoline prices are inflation-adjusted using the Consumer Price Index.

used in [Gray Notebook 52, pp. 14-16](#), has been revised and is no longer a 5.2 percent increase but rather a 2.7 percent increase between June 2012 and June 2013.

As experienced in 2008, large fluctuations in gas prices can influence traffic volumes and travel times. However, during the past year the average price per gallon did not fluctuate more than 15 cents from first half of 2013 to second half of 2013. This indicates the fluctuations were within a relatively narrow range for regular unleaded gasoline, with lower prices toward the end of the year.

Definitions:

Commute routes typically experience two peak periods during a work day – one in the morning and the other during the evening. The morning peak period is defined from 5-10 a.m., while the evening peak period is defined from 2-8 p.m.

The peak period traffic volume and travel time comparative analyses produced for the cross-lake (Lake Washington) and north-south corridors are for the second halves of 2011, 2012 and 2013.

I-5, I-405 corridors experience increased congestion

Lake Washington commutes stabilize

Between 2012 and 2013, travel times along SR 520 and I-90 commute routes remained unchanged (fluctuating by two minutes or less) on seven of the eight cross-lake commute routes. The remaining 10-mile Bellevue to Seattle evening commute saw a travel time drop of four-minutes, from 25 minutes in 2012 to 21 minutes in 2013. This improved travel time was realized despite a 3 percent increase in traffic volume on SR 520 due to available capacity.

SR 520 traffic volumes increased up to 7 percent depending on the direction of travel and the time of day. The morning westbound traffic volume on SR 520 increased 7 percent between 2012 and 2013, with no significant increase to the commute travel time. The Bellevue to Seattle evening commute via SR 520 accommodated 3 percent more traffic while experiencing four-minute faster travel times. Similarly, the Bellevue to Seattle evening commute via I-90 had 3 percent more traffic with no significant increase in trip time.

North-south corridors experience longer travel times in 2013

Between 2012 and 2013, travel times along the north-south (I-5, I-405, SR 167) commute routes remained unchanged on six out of 10 commute routes. The remaining four largest and most congested trips occurred on I-5 and I-405 during the morning commute. The increase in travel time ranged between three and five minutes.

I-5 corridor: I-5 experienced minor traffic volume changes during the peak periods. The Everett to Seattle and Federal Way to Seattle morning commutes on I-5 experienced increased travel times while the evening commutes saw no significant change.

The 24-mile morning trip from Everett to Seattle, which at a posted speed of 60 mph should take approximately 24 minutes, instead took about 52 minutes in 2013. This is five minutes longer than the 47-minute travel time experienced in 2012 and 13 minutes longer than the 39-minute travel time experienced in 2011. This increase in travel time might be related to bottlenecks on the commute corridor at the I-5/I-405 interchange near Lynnwood, near the King/Snohomish County line, and a section of I-5 from Northgate to the Ship Canal Bridge.

The 22-mile commute between Federal Way and Seattle takes 22 minutes when traveled at the posted speed.

However, the morning commute took 52 minutes in 2013, four minutes longer than the 48-minute travel time experienced in 2012 and eight minutes longer than the 44-minute travel time experienced in 2011. This increase in travel time might be related to distinct bottlenecks on the commute corridor between Federal Way and Des Moines at the north end of Boeing Field and entering downtown Seattle.

I-405 corridor: The I-405 saw minor traffic volume changes during the peak periods except on the Everett to Bellevue morning commute, which experienced a 7 percent reduction in travel volume. Both the Everett to Bellevue and Tukwila to Bellevue morning commutes had increased travel time of three minutes while the evening commutes saw no significant change.

The 24-mile morning trip from Everett to Bellevue, which at a posted speed of 60 mph should take approximately 24 minutes, instead took about 57 minutes in 2013. This is three minutes longer than the 54-minute travel time experienced in 2012 and nine minutes longer than the 48-minute travel time experienced in 2011. The increase in travel time despite a reduction in traffic volume might be due to the construction activity associated with the I-405 Express Toll Lanes project.

Based on the trip length, the Tukwila to Bellevue morning commute should have a travel time of 13 minutes. However, due to congestion on I-405 it took 37 minutes in 2013, an increase from 34 minutes in 2012, which is almost three times the travel time experienced at the posted speed. Data shows there was no significant change in traffic volume experienced on this route.

SR 167 corridor: SR 167 saw a 5 percent decline in traffic volume on the Auburn to Renton morning commute while the Renton to Auburn evening commute traffic volume remained unchanged. For both of these commutes, travel times remained unchanged at 18 minutes in both directions of the 10-mile trip.

A list of the 18 sampled high demand Puget Sound area commute travel times and volume changes during the second half of 2013 can be accessed at http://wsdot.wa.gov/publications/fulltext/graynotebook/GNB54-Extra/2013_SecondSemi-AnnualTravelTimes.pdf.

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