



December 2019 Fuel and Vehicle Trends Report

December 26, 2019

This report is a summary of the latest fuel prices and other oil industry key statistics. In addition, this report provides the latest trends in vehicle registrations and transportation tax collections for the state of Washington. It also summarizes articles appearing in popular, business, and technical media referring to fuel price, production and supplies as well as vehicle sales and registration trends. At the end of the report is a listing of all articles summarized, with hyperlinks to internet sources where available. Some hyperlinks may require free registration or paid subscriptions to access. The appearance of articles, products, opinions, and links in this summary does not constitute an endorsement by the Washington State Department of Transportation. Photos and other artwork included in the report are either included with permission or are in the public domain. *The Fuel and Vehicle Trends Report* (ISSN 1948-2388) is compiled by Scott, Smith, Lizbeth Martin-Mahar, Ph. D., and David Ding, Ph. D., Economic Analysis Section, Budget and Financial Analysis Office of the Washington State Department of Transportation. Contact the editors by email at smithsc@wsdot.wa.gov martinli@wsdot.wa.gov or DingDav@wsdot.wa.gov by telephone at (360) 705-7991 (360) 705-7942 or (360) 705-7502.

FUEL PRICE TRENDS: Crude, Gasoline and Diesel Markets

Analysis by Scott Smith

National Crude Oil Prices

Oil production from the Permian basin in Texas and New Mexico is the balancing factor which drives U.S. and world prices. Figure 1 shows the recent price history for the U.S. benchmark crude, West Texas Intermediate (WTI) in dollars per barrel (bbl).

Figure 1: Weekly WTI Spot Price: January 2006 to December 2019



Source: Energy Information Administration

WTI crude spot prices averaged \$57.03 per barrel (bbl), \$53.77 (bbl) and 56.73(bbl) in September, October, and November 2019 respectively. During the first two weeks of December, WTI crude oil price has averaged \$58.44 per barrel. These prices are quite similar to the pattern shown over the summer. As noted in the last *Trends* report, prices have proven to be resistant to upward pressure. For example, the September attack on Saudi production facilities caused a very brief and moderate spike in weekly prices. In fact, the September price spike was not even the highest price for the summer months. Now, in December, WTI spot prices have increased a little but nothing of significance.

The crude oil price of the world benchmark, Brent, usually follows a similar pattern to WTI. spot oil prices (bbl) were \$62.92 in September, \$59.67 in October and \$62.74 in November. During the first two weeks of December, Brent prices have been slightly higher than last month at \$65.6 per barrel, which is a similar trend with

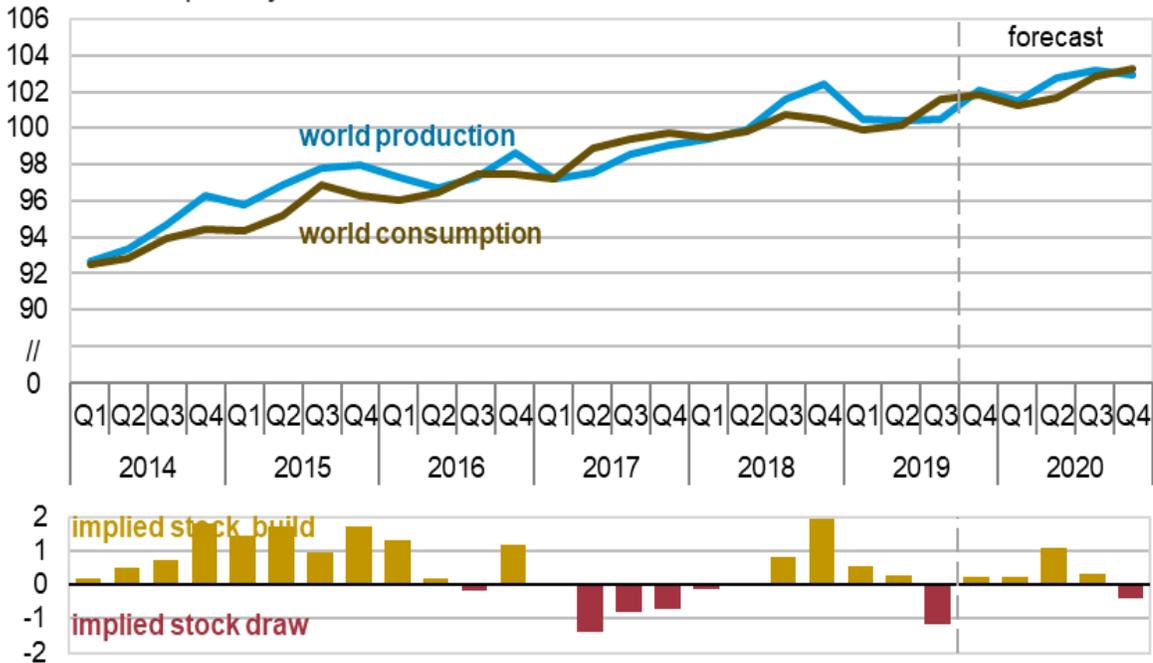
WTI prices. As reported in last *Trends* report, weak world demand is the major factor affecting world oil prices.

Figure 2 shows the US Energy Information Administration (EIA) forecast of the world oil market. This is little changed from September; world production will fully supply or oversupply the market for 2020. Note that this is in spite of 2.5 million barrels per day (bbd) of Iranian oil being withheld from the market due to U.S. sanctions and the collapse of Venezuelan production.

Figure 2: Fuel Production and Consumption: Since 2014 Through 2020

World liquid fuels production and consumption balance

million barrels per day

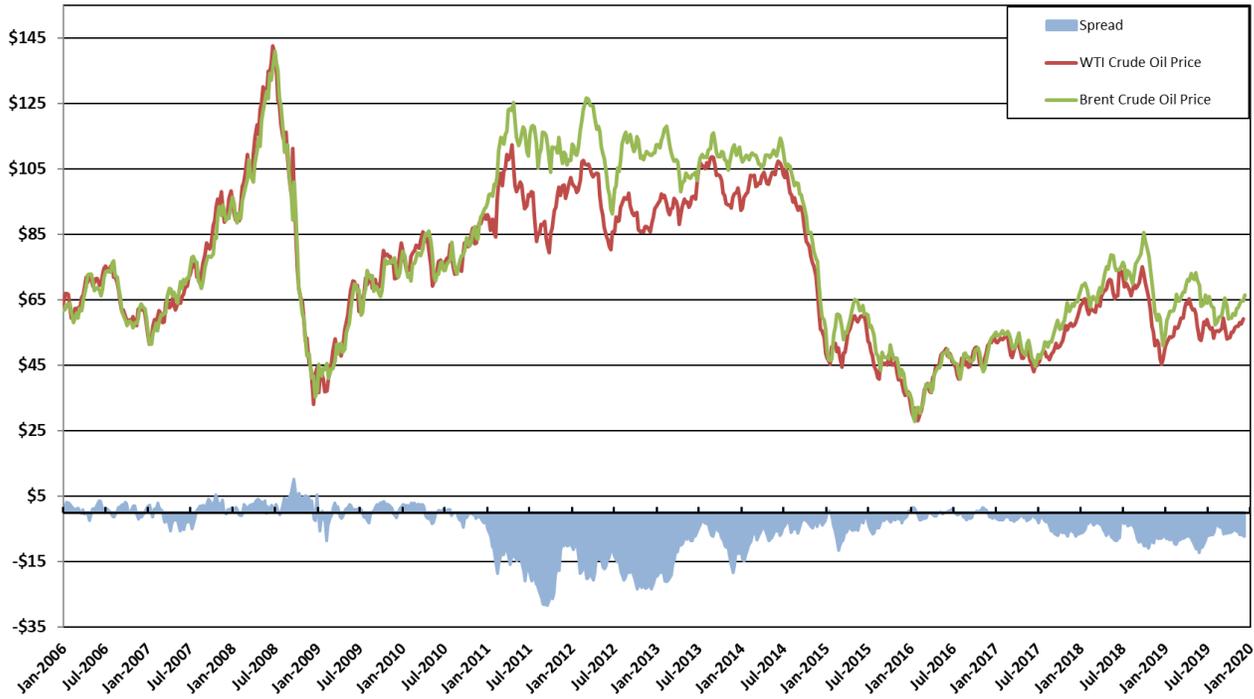


Source: Short-Term Energy Outlook, November 2019



Figure 3 shows prices and spreads between WTI and the world benchmark, Brent, which is produced in the North Sea. Prior to 2007, U.S. production could not legally be exported and was therefore a separate internal market. The premium to discount pattern shown in Figure 3 coincides with the linking of the U.S. market to the world market and the emergence of U.S. exports of crude oil. The spread between these two commodities can be thought of as a basin and quality differential for WTI compared to Brent. Changes in the WTI–Brent spread reflect the relative ability to transport the products to market and refineries’ demand for different qualities of oil.

Figure 3: WTI - Brent Crude Oil Spot Price Spreads: January 2008 to December 2019



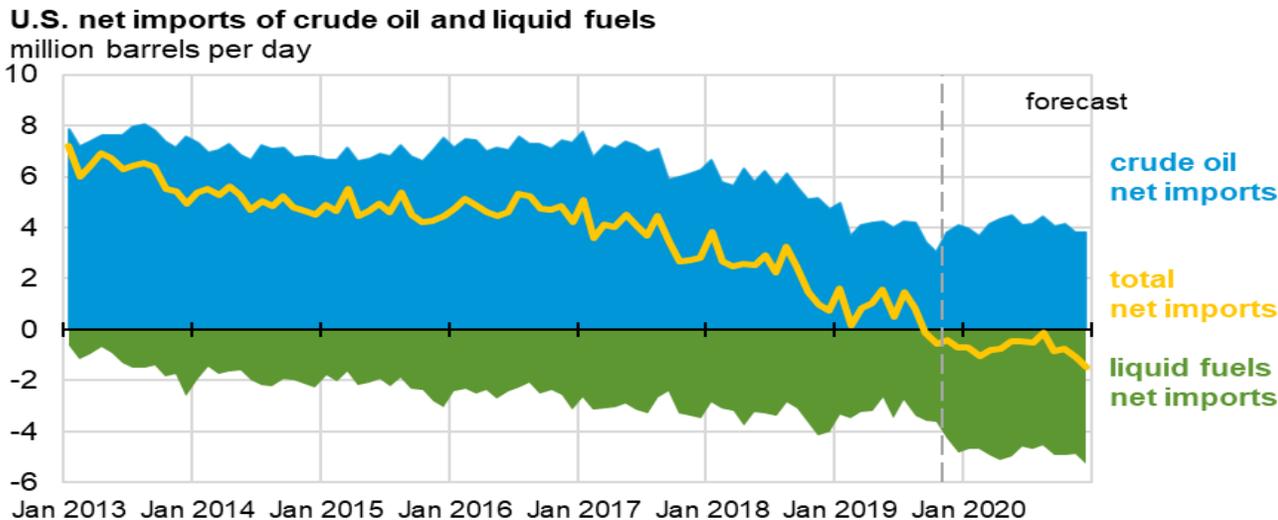
Source: Energy Information Administration

In general, the WTI-Brent price spread in recent months has declined. The spread between WTI and Brent in calendar year 2018 averaged about \$6.10/bbl, and due to logistical constraints, the spread at times hit more than \$12/bbl. Since then, the spread has dropped to around \$5.90/bbl in October and \$6.00/bbl in November. During the first two weeks of December, the price spread has continued to rise to \$7.16/bbl. This price spread increase is in spite of new WTI pipeline capacity. *Reuters* has previously reported on the new Cactus II pipeline system. It transports Permian basin crude to the Corpus Christi oil hub in Texas and has a capacity of 670,000/bbl daily and this is now at full capacity. A likely explanation is that WTI monthly production increased enough to cause increased capacity constraints in spite of the new pipeline addition.

U.S. Imports/Exports

Figure 4 shows the recent U.S. import /export history and EIA’s November 2019 forecast. The November forecast is slightly stronger in the near term than the August forecast reported in the last *Trends* report. The new forecast still implies the U.S. will become a net exporter in 2020.

Figure 4: EIA History and Forecasts of U.S. Net Imports of Crude Oil and Liquid Fuels



Note: Liquids fuels include: gasoline, distillate fuels, hydrocarbon gas liquids, jet fuel, residual fuel oil, unfinished oils, other hydrocarbons/oxygenates, and other oils.

Source: Short-Term Energy Outlook, November 2019



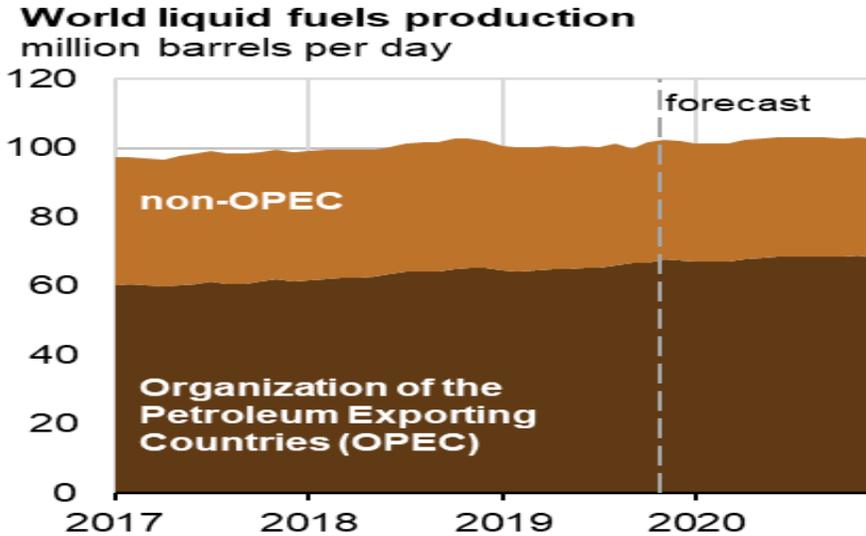
World and US Oil Production

World markets have recently focused on Saudi Arabia. The state-controlled Saudi Arabian Oil Co., commonly known as Aramco, sold 3 billion shares, or a 1.5% stake of the company, for a total of \$25.6 billion. As reported in the Wall street Journal there has been wide spread skepticism about the pricing of the initial public offering (IPO). In fact, global investors have largely avoided subscribing to the deal and the Saudis have relied on their own internal market to meet their targets. Simultaneously, the Saudis have been pushing for major production cuts within the OPEC+ Russia (known as OPEC+) cartel. Production cuts were finalized this month at the Cartel’s meeting in Vienna.

Like the IPO, The OPEC+ reduction plan has been met with wide-spread skepticism. The *Wall Street Journal* quoted Sara Vakhshouri, president of consulting firm SVB Energy International. “This is playing with facts and not the cut. It’s basically an assurance to the market that the current overall output will continue for the next three more months.” *Bloomberg.com* ran an opinion piece titled “OPEC+ Deal Isn’t Worth the Paper It’s Written On”. The International Energy Agency predicted that global oil inventories will rise in the first quarter of 2020 despite attempts by the Organization of the Petroleum Exporting Countries and its allies to balance the market.

In past *Fuel Prices and Vehicle Trends* reports, it has often been noted that the major tension in world oil markets is interplay between the OPEC+ Russia cartel and shale oil (fracking) producers in the Permian Basin. Figure 5 shows OPEC and Non OPEC production as a share of the world total.

Figure 5: World Liquid Fuels Production: 2017-2020



Source: Energy Information Administration

U.S. crude oil production averaged 10.99 million bbd in 2018. EIA forecasts 12.29 million bbd in calendar year 2019 and even higher in 2020 averaging 13.29 million bbd. Compared to the August forecast, this December forecast is an increase of 20 thousand bbd in 2019 and 30 thousand bbd in 2020. As Figure 6 shows, the vast majority of the production increase originates from the lower 48 excluding the Gulf of Mexico. Production in the lower 48 states grew by 30 percent from 6.74 million bbd to 8.75 million bbd in 2018 and is anticipated to grow to 9.92 million bbd. EIA expects the lower 48 production to increase annually by 9 and 13 percent for 2019 and 2020, respectively. This current 2020 EIA estimate is 130 thousand/bbd greater than was forecasted in August.

Figure 6: U.S. Crude Oil Production by Source

	U.S. crude oil production (million barrels/day)				
	2016	2017	2018	2019	2020
Alaska	0.49	0.49	0.48	0.47	0.49
Federal Gulf of Mexico(GOM)	1.60	1.68	1.76	1.90	2.01
Lower 48 States (excl GOM)	6.75	7.18	8.75	9.92	10.79
Total U.S. production	8.84	9.35	10.99	12.29	13.29

Source: Energy Information Administration

The largest amount of U.S production by far comes from the Permian Basin in West Texas and Eastern New Mexico. The Permian basin produced roughly 3 million bbd in 2018 and currently produces around 4.7 million bbd as of December 2019. If the Permian basin were an OPEC country, it would rank number 4 behind Saudi Arabia, Iran, and Iraq.

Risks to the EIA Oil Production Forecast

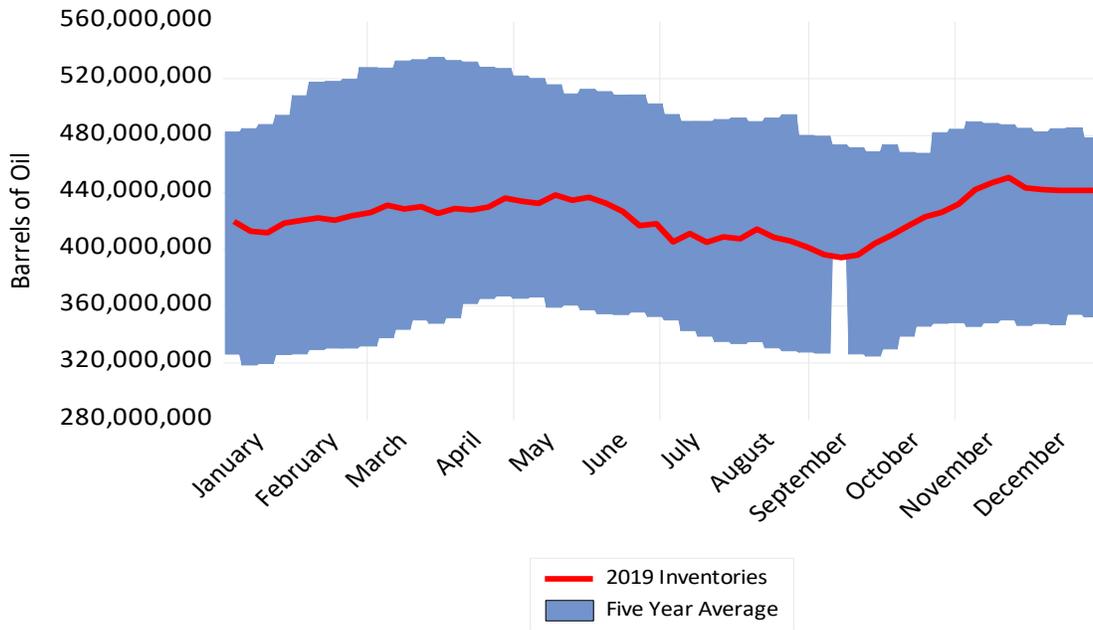
As noted in the April and August *Fuel Prices and Vehicle Trends* reports, capital markets are increasingly reluctant to finance new drilling. *The Wall Journal* reported that from 2014 to 2018, the 43 biggest stand-alone U.S. oil companies lost more than \$90 billion. Given the low price environment, market discipline has caused the companies to emphasize cash flow. IHS Market (who produces the econometric forecast used for WSDOT's and ERFC's revenue estimates) believes that U.S. production growth will be only 480,000 bbd in 2020 and flat in 2021. IHS states that "the combination of closed capital markets and weak prices are pulling cash out of the system. Investors are imposing capital discipline on E&P's by pushing down equity prices and pushing up the cost of capital on debt markets."

Part of the risk to the EIA oil production forecast stems from the geology of shale plays in the Permian Basin. An abstract in the *Philosophical Transactions of the Royal Society* notes that typically well depletion rates are between 4 to 8 percent. In contrast, IHS states that "Unless intentionally choked back, new, individual unconventional wells in the US decline very rapidly, often 65% to 85% in the first year, so oil companies with many young wells in their inventory see significant declines in production compared to companies with a balance of younger and older wells." This information implies that oil producers in the US have to drill more to keep production at its current level. This could prove difficult in a capital constrained environment.

US Crude Inventories

Our *Trends* Report uses historical five-year averages for inventories to compare to current inventory levels. Weekly inventories for crude oil, gasoline, and distillate span five years from 2013 to December 2019. Inventories have traditionally been used as a measure of over/ undersupply and includes all of the U.S. crude oil and lease condensate (mixture of heavy hydrocarbons and pentanes) currently held at refineries, within pipelines, and at pipeline terminals. Weekly U.S. stocks of crude oil were 439.8 million bbl as of the first week in January 2019. The latest December 2019 inventories shows little change at 441.4 million bbl.

Figure 7: 2019 Weekly U.S. Ending Inventories of Crude Oil (Excluding Strategic Petroleum Reserve)

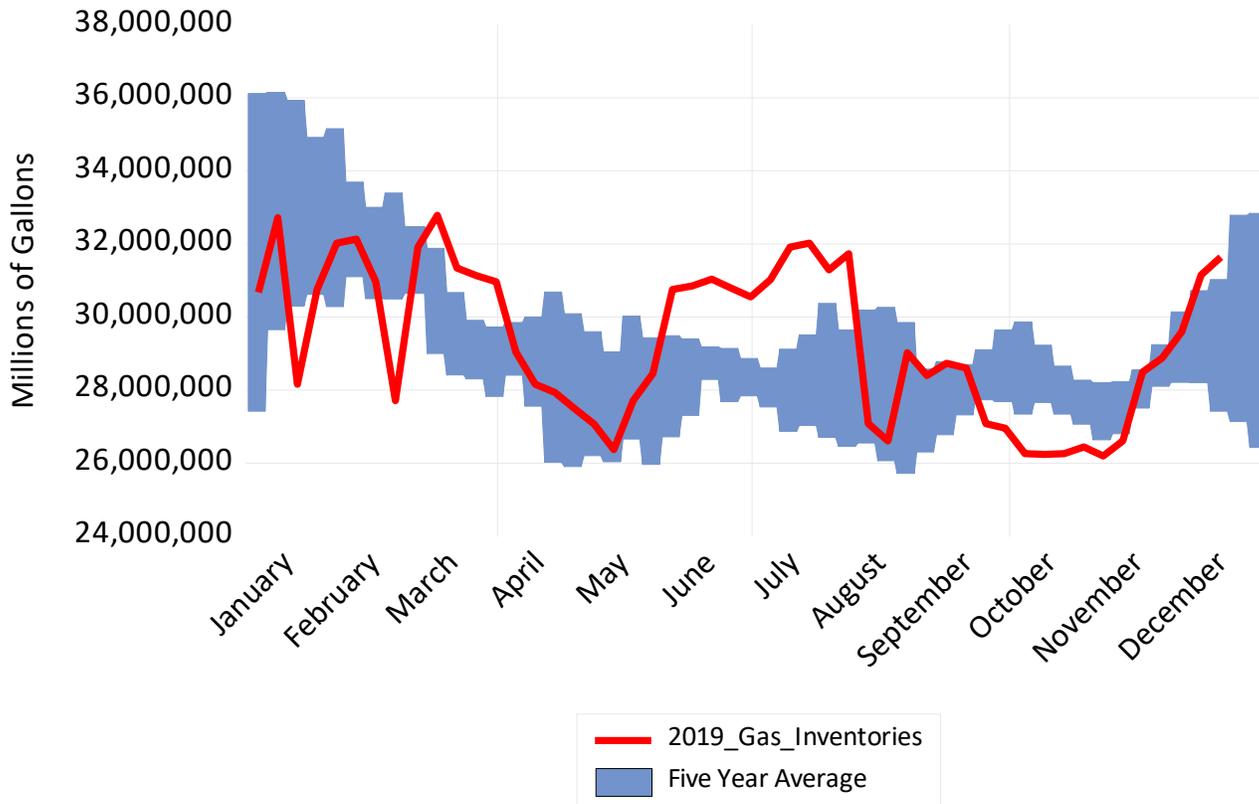


Source: Energy Information Administration

Inventories: The West Coast Oil Market

Figure 8 shows gasoline inventories for the west coast, PADD5. Summer inventories in 2019 were markedly above the five-year range. Fall inventories overcorrected for the high summer inventories and were below the 5-year range. Weekly west coast (PADD 5) ending stocks of gasoline were 30.7 million bbl as of the first week of January, 2019. The latest second week of December actual is at 31.7 million bbl for gasoline inventories. This is slightly above the 5-year average for this time period.

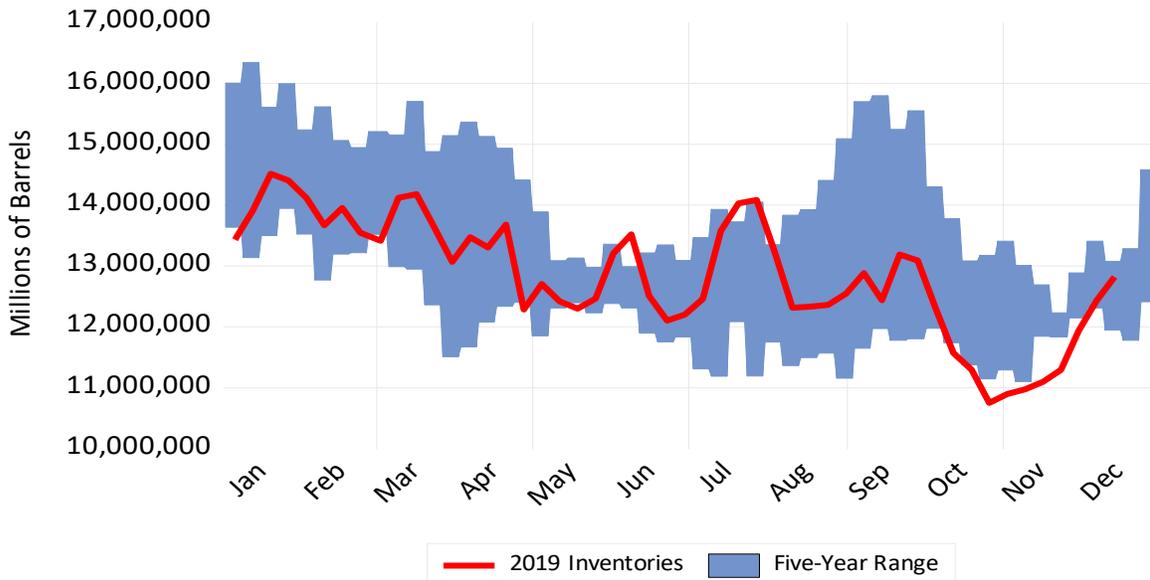
Figure 8: 2019 Weekly Ending Gasoline Inventories (West Coast PADD5)



Source: Energy Information Administration

Figure 9 shows west coast (PADD 5) distillate inventories. Since few west coast structures use home heating oil, the vast majority of this production consists of diesel used as transportation fuels. As with gasoline, inventories were above their historical range before overcorrecting and hovering below the five-year range. Weekly west coast ending stocks of distillate fuel oil were 13.4 million bbl as of the first week of 2019. The latest second week of December actual is 12.8 million bbl which is up from prior months in the fall and down slightly from the beginning of the year.

Figure 9: 2019 Weekly Ending Distillate Inventories (West Coast PADD5)



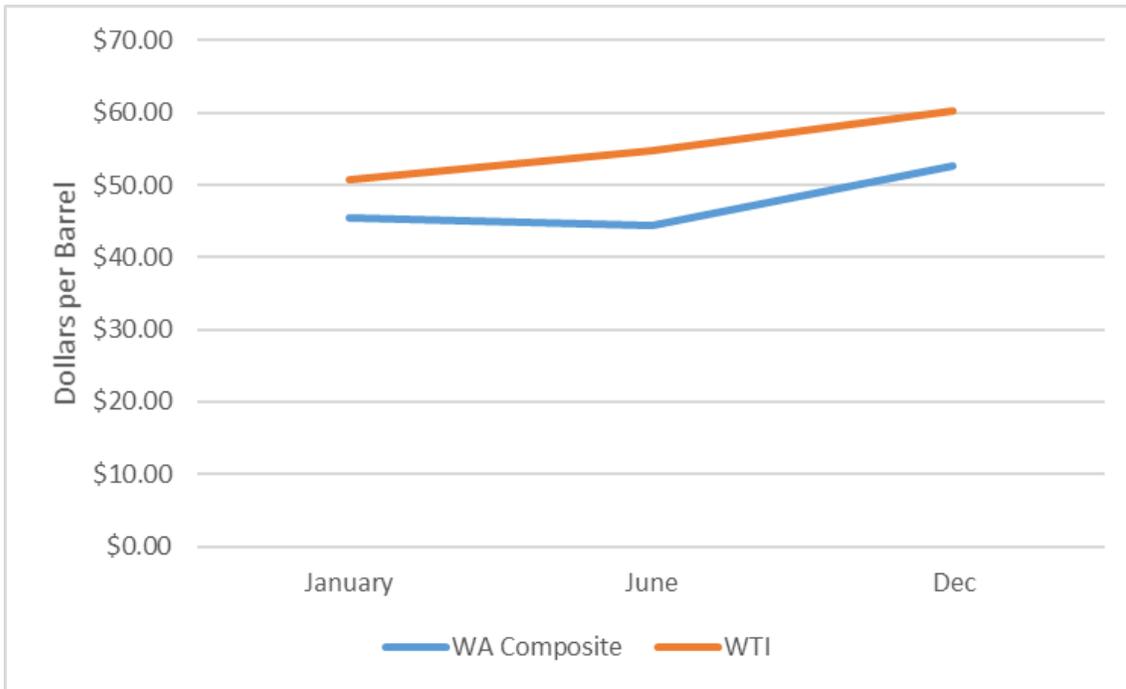
Source: Energy Information Administration

The Washington Oil Market

Washington crude oil prices are a function of where and how the state receives crude oil. The Washington state Department of Ecology tracks the movement of oil across the state for risk management purposes. Economists at WSDOT have combined this oil movement data with price information to estimate a production weighted average cost of oil.

The spread between the Washington composite and WTI has been compressed in recent months. The spread is now around \$7.60/bbl. There is a consistent price differential between the oil used in WA refiners and West Texas Intermediate. This does not imply that refineries in Washington have a \$7.60 advantage over the “average” U.S. refinery; the composite does not take into account transportation costs. The cause of this spread decrease has to do with the substitution of pipeline borne Canadian crude and Alaska North Slope oil for North Dakota crude oil shipped via rail.

Figure 10: Calculated Composite Washington Crude Oil Average Prices



Source: Washington Department of Ecology and OilPrice.com

WASHINGTON RETAIL GASOLINE AND DIESEL PRICES

BIODIESEL PRICE PREMIUM TRENDS

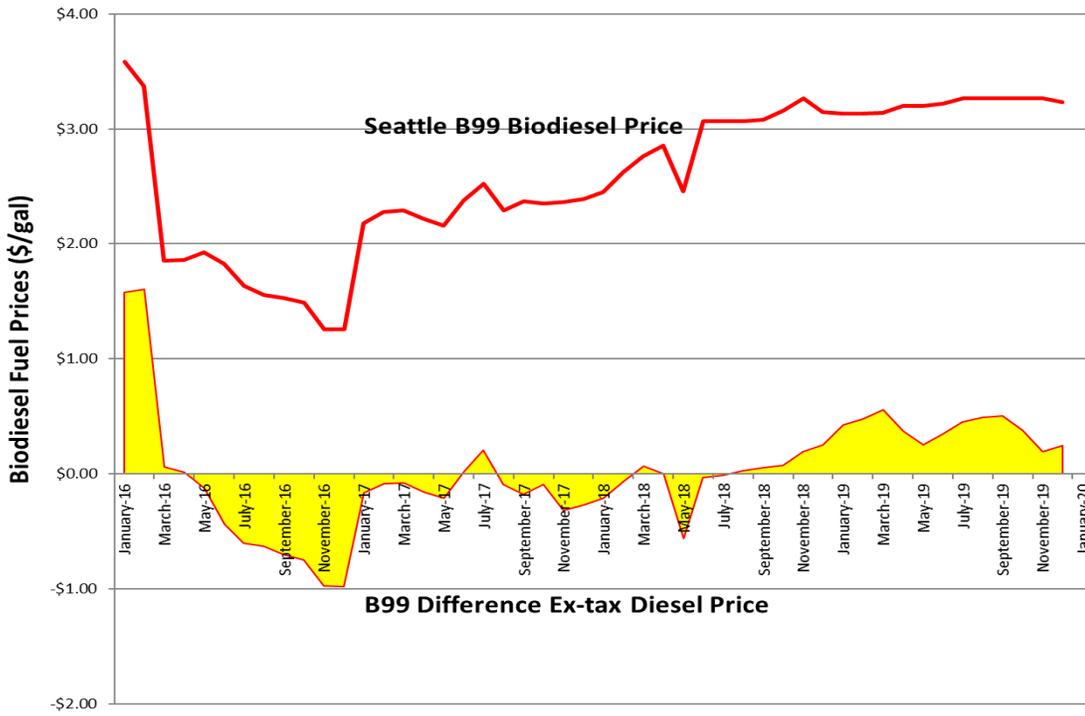
Analysis by Lizbeth Martin-Mahar, Ph.D.

Biodiesel Prices: Comparison of Historical and Recent Prices

Recent Trends: Washington B99 Biodiesel Prices

Since January 2019, the B99 price has remained at an average price of \$3.13 per gallon. In April, the B99 biodiesel price did increase slightly to \$3.20 per gallon. In June the B99 biodiesel price increased to \$3.22 per gallon and by July the average B99 monthly price was \$3.27 per gallon. It has remained at that price through November and fell a little to an average of \$3.23 per gallon in December. Figure 13 shows the B99 price and the price premium since January 2016. This chart reveals a negative trend through calendar year 2016. During calendar year 2017 and 2018, B99 biodiesel prices rose for the most part except for a slight drop in May 2018. Now in calendar year 2019, the B99 price premiums above the regular diesel prices have grown to as high as \$0.55 per gallon in March 2019 and then it fell back again. Currently in November and the first weeks of December the B99 price premium was \$0.2 and \$0.24 respectively.

Figure 13: Monthly B99 Biodiesel Prices since January 2016



Source: B99, Seattle biodiesel price data - OPIS Fuel Price Survey

Recent Trends: Seattle and Portland B5 Biodiesel Prices

Seattle and Portland B5 red dyed biodiesel prices are tracked because the Washington State Ferries new contract for fuel purchases is based on the Portland B5 red dyed biodiesel prices. We have also compared the B5 red dyed biodiesel price with red dyed diesel as well. Figures 14 and 15 reveal that B5 prices in Portland and Seattle are typically pretty close in price. Recently in December, B5 prices in Portland have fallen below Seattle B5 prices and the difference was 1.5 percent below Seattle prices. As Figure 14 reveals, Seattle and Portland B5 prices have been about 1.3 percent different from Portland B5 prices being slightly higher than Portland at \$2.42 per gallon and \$2.27 per gallon in October and November respectively. So far in December, Portland prices have declined to average \$1.91 per gallon which was \$0.3 lower than Seattle B5 average price.

Figure 14: Seattle and Portland OPIS B5 Biodiesel Prices: October – December 2019

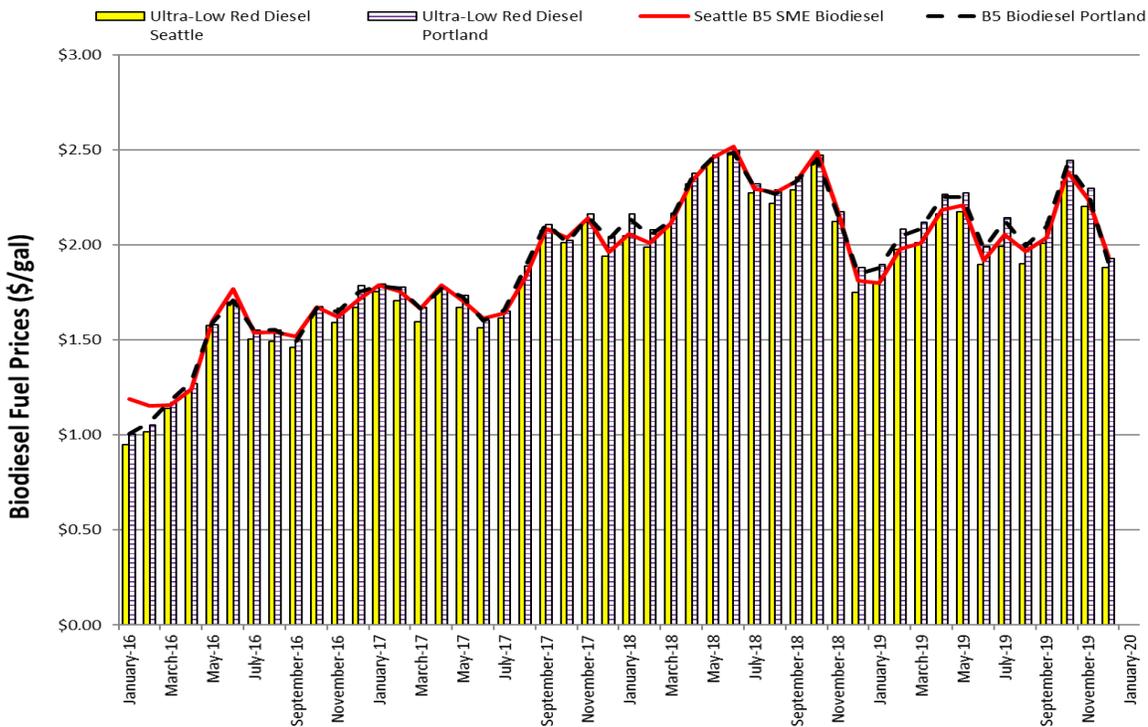
B5 Prices			
Monthly Average Price	Portland Price (\$/gal)	Seattle Price (\$/gal)	% Difference Portland vs Seattle Prices
October 2018	\$2.45	\$2.49	-1.6%
October 2019	\$2.42	\$2.39	1.3%
November 2018	\$2.15	\$2.17	-0.9%
November 2019	\$2.27	\$2.24	1.3%
December 2019*	\$1.91	\$1.94	-1.5%

Source: B5, Seattle and Portland biodiesel price data - OPIS Fuel Price Survey.

* December 2019 is a partial month of average B5 prices

In addition, the changes in the B5 red dyed biodiesel prices can also be seen in the changes in the red dyed diesel prices as well. The difference in red dyed diesel prices in recent months mirrors the difference in biodiesel and diesel trends. In January 2019, the difference between Portland and Seattle dyed diesel was \$0.10 or 5 percent and now 12 months later the difference is still lower still at \$0.05 or 2.5 percent. This is the same trend seen in the differences between Portland and Seattle B5 dyed biodiesel prices only difference is that now Portland B5 prices are lower than Seattle B5 prices for the first two weeks of December.

Figure 15: Seattle and Portland OPIS Red Dyed Diesel and B5 Biodiesel Prices: Since January 2016



Source: Seattle and Portland red dyed diesel and B5 biodiesel price data - OPIS Fuel Price Survey.

FUEL PRICES AND CRUDE OIL PRICE TRENDS COMPARED TO RECENT FORECASTS: US crude oil prices, Washington retail prices of gasoline and diesel

Analysis by Lizbeth Martin-Mahar, Ph.D.

In this edition of the *Fuel and Vehicle Trends Report*, we have seen West Texas Intermediate (WTI) crude oil prices rise some above our last projections in November 2019. In October, November and December (2 weeks), actual crude oil prices for WTI came in at \$53.8, \$56.7 and \$58.5 per barrel respectively each month. In October 2019, the average WTI crude oil price was \$53.8 per barrel which was 1.6 percent below the 2019 fourth quarter average forecast in November. The WTI price increased a little, \$2.9 per barrel, in November over the prior month and was 3.8 percent above the fourth quarter 2019 projection in November. Then in December, WTI crude oil prices increased again to \$58.5 per barrel on average for the first 2 weeks. This increase in oil prices was higher than anticipated in the last forecast so actual WTI prices in December are now 7 percent above the 2019 fourth quarter crude oil price average. See Figure 16 for more detail.

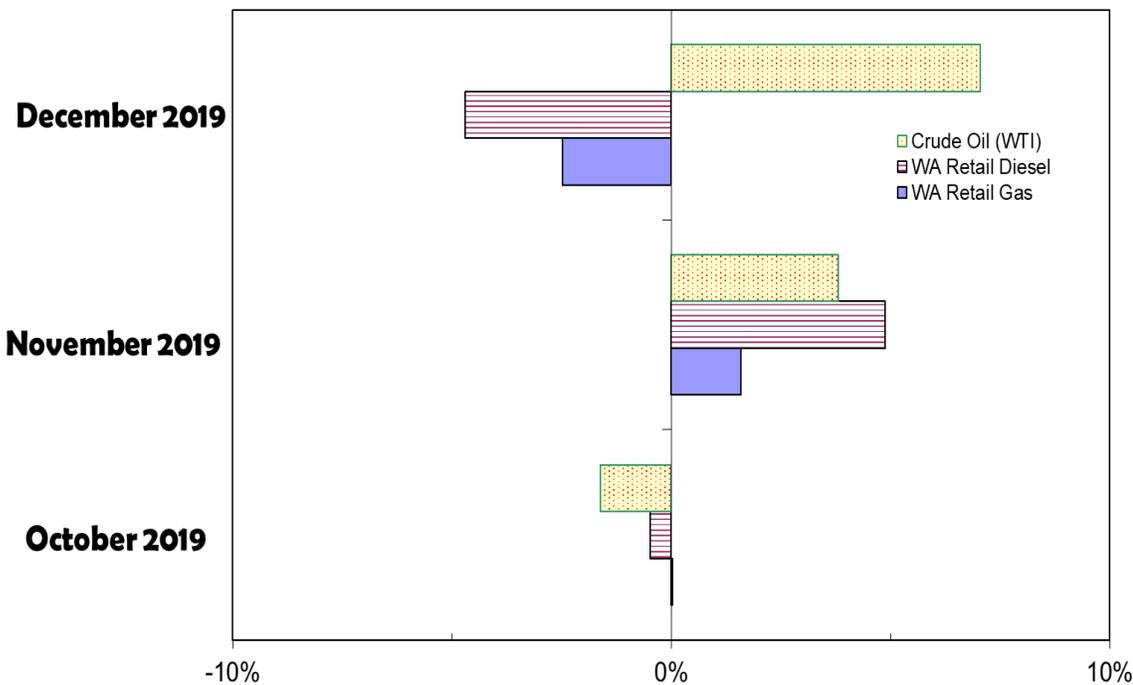
October retail gas prices averaged \$3.22 per gallon which was right on with the November 2019 fourth quarter forecast for retail gas prices. Then in November, retail gas prices increased to \$3.27 per gallon which was 1.6 percent above the fourth quarter retail gas price average. Then in December, the first three week average of

retail gas prices was \$3.14 per gallon which was below the fourth quarter forecast of \$3.22 per gallon by 2.5 percent.

The recent trends in retail diesel prices are very similar to the retail gas price trends. In the month of October, retail diesel prices averaged \$3.38 per gallon, which was close to forecast by -0.5 percent below the November projection for fourth quarter 2019. Then in November, retail diesel prices rose quite a bit month over month to \$3.57 per gallon which put the actual diesel price 4.9 percent above the fourth quarter 2019 forecast. In December 2019, retail diesel prices for the first three weeks fell significantly back down again to \$3.24 per gallon which was 4.7 percent lower than the forecast for the fourth quarter 2019 in November.

In the past three months (October through December), we have seen the difference between retail gas and diesel prices go from \$0.16 per gallon in October and rise to \$0.30 per gallon in November and then fall down again to \$0.10 per gallon in the first three weeks of December. Retail diesel prices fell more in December than gasoline prices so the price premium per gallon over gasoline prices fell back down again.

Figure 16: Percent Change in 2019 Average Fuel Prices Compared to the November Forecast



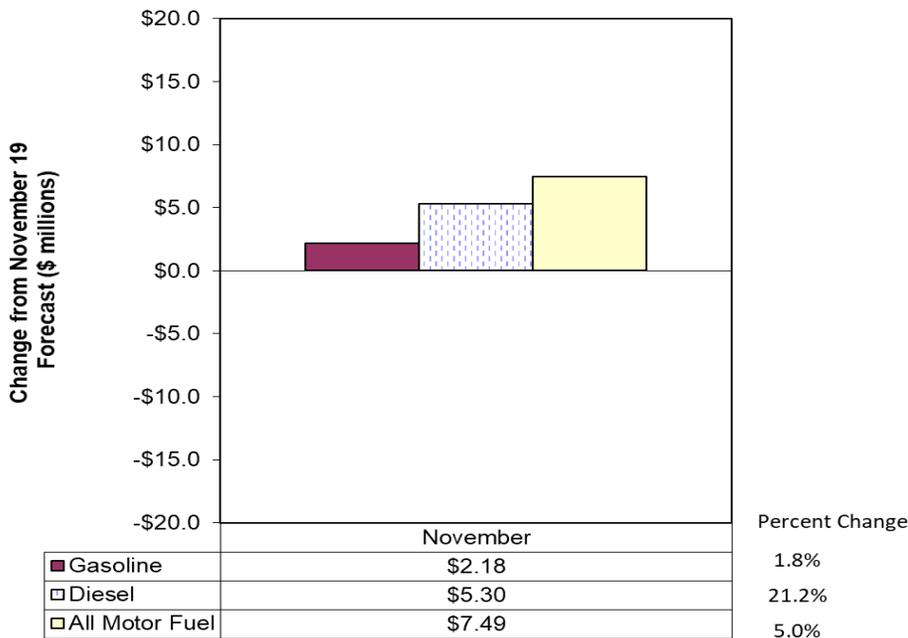
Source: Washington TRFC November 2019 Forecast, EIA and AAA weekly fuel prices

WA MOTOR VEHICLE FUEL TAX COLLECTION TRENDS COMPARED TO RECENT FORECASTS: Gasoline and Diesel Tax Collections

Analysis by Lizbeth Martin-Mahar, Ph.D.

Since the adoption of the November 2019 forecast, one month of fuel tax collections have been reported. The November fuel tax collection reports from the Department of Licensing have shown \$155.8 million in total fuel tax revenue, which is above the November forecast by \$7.5 million for both fuel types. In November, gasoline tax collections came in at \$125.5 million, which was above the November projections by \$2.2 million or 1.8 percent. Diesel tax collections came in at \$30.3 million, which was \$5.3 million or 21 percent above the November forecast. For all motor fuel, November fuel tax collections came in at \$7.5 million or 5 percent above the forecast. Figure 17 reveals the November results.

Figure 17: Motor Vehicle Fuel Tax Collections in November 2019 Compared to the November 2019 Revenue Forecast



Source: Washington TRFC November 2019 Forecast and State Treasurer’s Office monthly fuel reports

VEHICLE TRENDS

Analysis by David Ding, Ph.D.

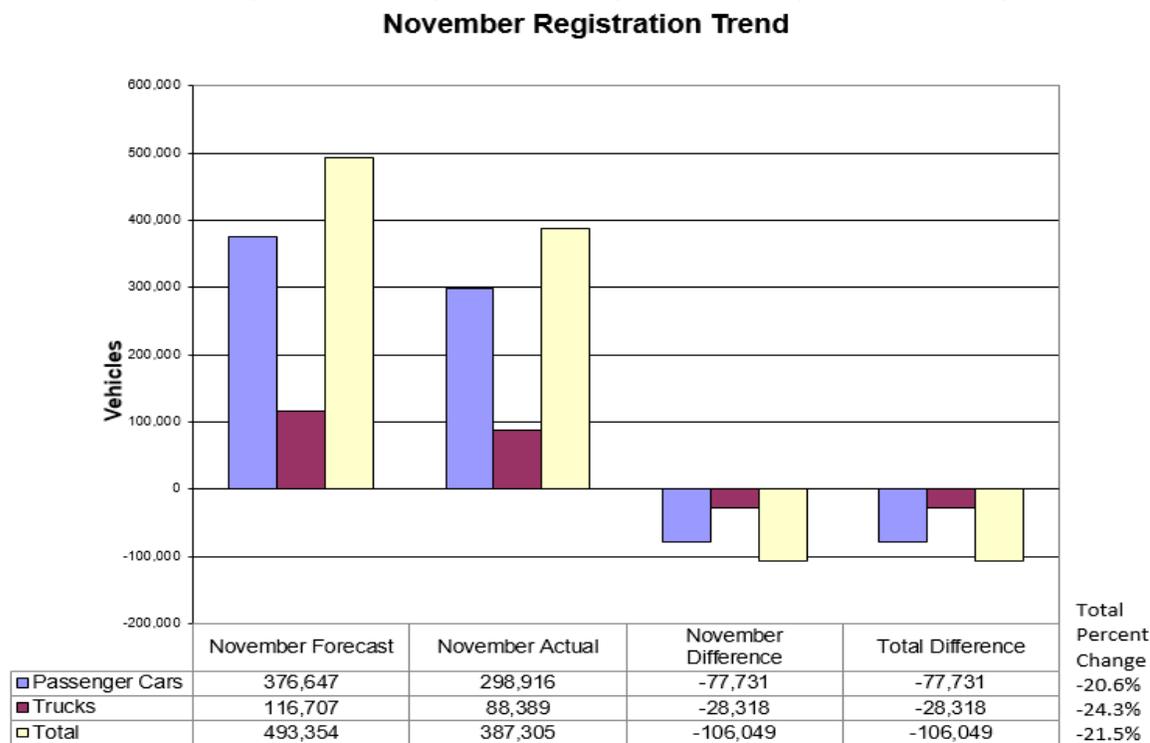
For the one month of licensing registrations data we have received since the November forecast, vehicle registrations were down sharply, see Figure 18. Passenger car registrations came in at 298,916 vehicles for

November. The actual was -20.6 percent different from November projection of 376,647 vehicles. The lower actual registrations in November shows that people may have delayed to register their vehicles after the passage of I-976 in early November. Many people might have thought they would pay a lower registration fee after December 5, the day I-976 was supposed to go into effect. Since I-976 was stayed by the court and did not go into effect on December 5th, we expect higher than forecasted registrations in December to make up for some of this shortfall in November registrations.

Truck registrations had a similar pattern to passenger cars registrations in November. The truck registrations were reported as 88,389 vehicles for November. The actual registration was below the last forecast by -24.3 percent. Just like car registrations, this sharp decline in truck registrations in the month that the initiative was passed indicates that some people might have postponed their truck registrations thinking they would pay less after December 5th which turned out to not be the case. We will wait to see how December truck registrations come in to view how many additional registrations might be picked up in next month's registrations.

For both passenger cars and trucks combined in November, vehicle registrations came in 106,049 vehicles below the November forecast. This represents a 21.5 percent decrease.

Figure 18: Vehicle registrations, November 2019, Forecast vs. Actual



Source: Washington TRFC November 2019 Forecast and DOL Reports 13, November 2019.

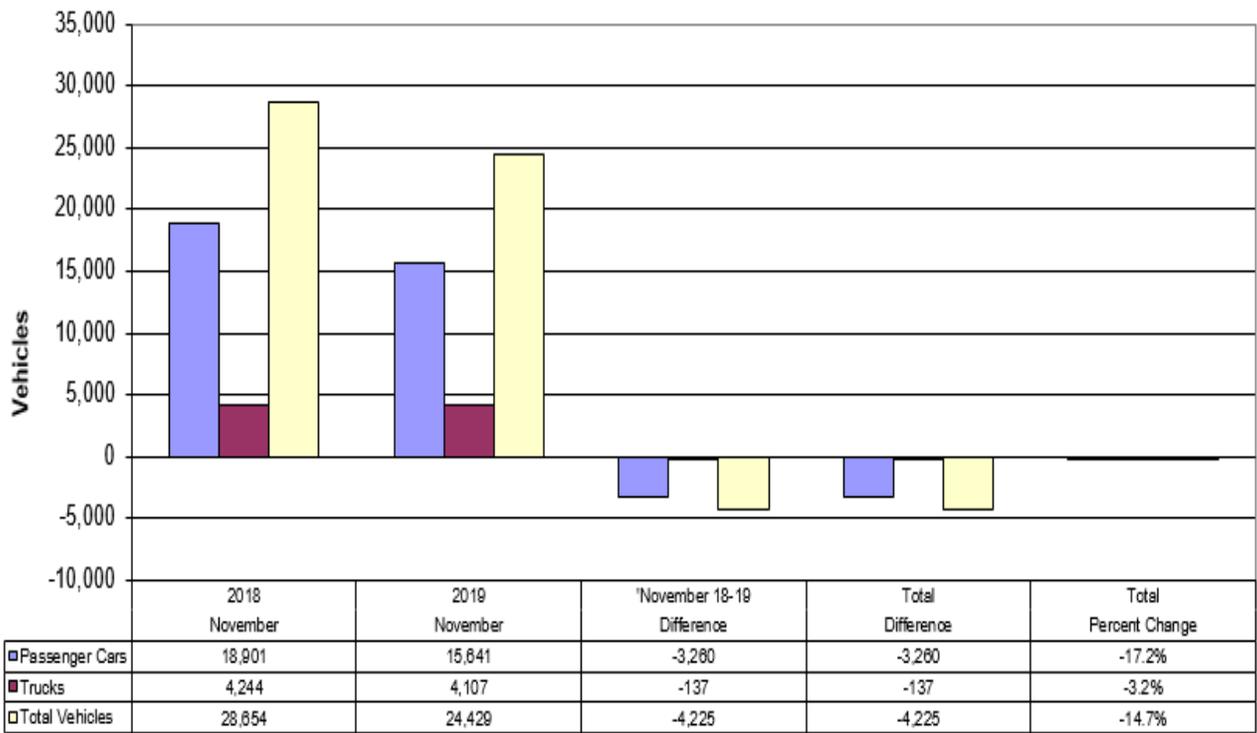
At the time of this publication release, we did not have the November revenue report yet.

New Car and Truck Registrations from Sales

This report also covers new car and truck registrations for November 2019, see Figure 19. In November, new car registrations were 3,260 vehicles less than the registrations in the same period a year ago, which was 17.2 percent below the previous year.

New truck registrations in Washington State showed a decrease during the month of November 2019. The registrations went down by 137 trucks compared with the previous year monthly total, which represents a 3.2 percent decrease over last year. Considering the passage of I-976 at the beginning of November, the decreased registrations in new cars and trucks may reflect that people held their purchase of new vehicles in order to pay less fees later on. Overall, total new vehicle registrations decreased by 4,225 vehicles or 14.7 percent, year over year.

Figure 19: New vehicle registrations Comparisons



Source: Department of Licensing Report 14, November 2019.

Subscribing to This Report

SUBSCRIBING TO *THE FUEL AND VEHICLE TRENDS REPORT*. **The Fuel and Vehicle Trends** is available at this [link](#). From there, you can download the current report in a PDF, look at back issues, or subscribe to a notification service that lets you know when the next report is available. You may also click this [link](#) to subscribe.

ARTICLES REFERENCED

Transportation Revenue Forecast Council November 2019 Transportation and Revenue Forecasts.

Fuel Trends:

AAA - <https://gasprices.aaa.com/>

Associated Press- *North Dakota to sue Washington state over oil train standard*

Bloomberg-OPEC+ Deal Isn't Worth the Paper It's Written On
<https://www.yahoo.com/finance/news/opec-deal-isnt-worth-paper-070002195.html>

Energy Information Administration Short Term Energy Outlook December 2019

Energy Information Administration West Coast Transportation Fuels Markets September 2015

Energy Information Administration- Permian Region Drilling Productivity Report December 2019
[Link to Permian Region Drilling Productivity Report for December 2019](#)

Washington Department of Ecology *Crude Oil Movement by Rail and Pipeline July 2019*

Oilprice.com- <https://oilprice.com/oil-price-charts>

IHS-U.S. Oil Production Growth Heading for a “Major Slowdown,” as Capital Discipline and Weak Prices Play Out, IHS Markit Says
https://news.ihsmarkit.com/prviewer/release_only/slug/energy-us-oil-production-growth-heading-major-slowdown-capital-discipline-and-weak-pri

IHS- “Base Decline” Rate of Oil and Gas Output in Permian Basin has Increased Dramatically Because of Recent Growth; Operators Must Drill More Wells to Maintain Production Levels, IHS Markit Says
[Link to Base Decline Report](#)

Reuters -U.S. removed almost 2.7 million barrels of Iranian oil from market: Pompeo
<https://www.reuters.com/article/us-oil-iran-exports-pompeo/u-s-removed-almost-2-7-million-barrels-of-iranian-oil-from-market-pompeo-idUSKCN1VA1HY>

Reuters- *Trafigura starts shipping Permian crude on new Cactus II pipeline*
<https://www.reuters.com/article/us-trafigura-united-states-oil/trafigura-starts-shipping-permian-crude-on-new-cactus-ii-pipeline-idUSKCN1V21IF>

RBN LLC - Sweet Dreams Are Made Of This - Cheap Crude And Captive Market Boost PNW Refineries
<https://rbnenergy.com/sweet-dreams-are-made-of-this-cheap-crude-and-captive-market-boost-pnw-refineries>

Wall Street Journal- OPEC Agrees to Deeper Cuts Ahead of Aramco IPO
<https://www.wsj.com/articles/opec-agrees-to-deeper-cuts-ahead-of-aramco-ipo-11575570843>

Wall Street Journal-Oil Inventories to Rise Despite OPEC Cuts, IEA Says
<https://www.wsj.com/articles/oil-stocks-to-rise-despite-opec-cuts-iea-says-11576143987>

Wall Street Journal-Hess Has Been 2019's Top Oil and Gas Stock. It Has Nothing to Do With Shale.

<https://www.wsj.com/articles/hess-has-been-2019s-top-oil-and-gas-stock-it-has-nothing-to-do-with-shale-11566303565>

Vehicle Trends:

Washington State Department of Licensing. November 2019. State of Washington Vehicle Registration Reports 7, 13 and 14.

Washington State Department of Licensing. November 2019. ARFS Revenue Report and PRFT Revenue Report.