



July 2020 Fuel and Vehicle Trends Report

July 31, 2020

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.

Table of Contents

FUEL PRICE TRENDS.....	3
WASHINGTON RETAIL GAS AND DIESEL PRICES.....	10
BIODIESEL FUTURES AND PRICE TRENDS.....	13
FUEL PRICE TRENDS COMPARED TO FORECAST.....	16
MOTOR VEHICLE FUEL TAX COLLECTION TRENDS	18
VEHICLE TRENDS	19
SUBSCRIBING TO THE FUEL AND VEHICLE TRENDS REPORT.....	23
ARTICLES REFERENCED.....	23

FUEL PRICE TRENDS: Crude, Gasoline and Diesel Markets

Analysis by Scott Smith

National Crude Oil Prices

Figure 1 shows the recent price history for the U.S. benchmark crude, West Texas Intermediate (WTI) in dollars per barrel (bbl) through mid-July. After the cataclysmic fall in April, prices seem to have stabilized at the \$40/barrel (bbl) level for the last month.

Figure 1: Weekly WTI Spot Price: January 2006 to July 2020



Source: Data from Energy Information Administration

As noted in prior *Fuel and Vehicle Trends Reports*, there was a consensus that the United States and world entered 2020 oversupplied so there was already downward pressure on West Texas Intermediate (WTI) prices. Calendar year 2020 prices peaked in the first week of January at \$62.09/bbl. February WTI prices then averaged \$50.67/bbl before the implications of the COVID-19 pandemic hit the economy. Prices then crashed in March averaging \$30.40/bbl and in April crude oil prices collapsed; the price for FOB product averaged \$3.32/bbl in the week of April 24th. The WTI crude price for a May delivery futures contract reached -\$37.63/bbl on April 20th. May spot prices slowly recovered to average \$24.67/bbl in May and \$38.19/bbl in June. July WTI prices appear to

stabilize averaging \$40.6/bbl.

Figure 2 shows WTI and Brent prices and spreads since January 2006. The crude oil price of the world benchmark, Brent, is highly correlated to the price of WTI and has followed the same trajectory. January and February prices averaged \$63.75/bbl and \$55.92/bbl in January and February, respectively. The price then fell to \$32.01/bbl in March before bottoming at \$18.47/bbl in April. Prices started their recovery in May averaging \$40.27/bbl and \$43.14/bbl in June. The month- to-date average for July Brent price has also stabilized at \$42.92/bbl. Given historically low demand for crude, Permian basin transportation bottlenecks have almost disappeared. The July WTI-Brent spread is currently \$2.64/bbl and the year-to-date spread is only \$3.03/bbl. In comparison, the 2019 differential was \$7.33/bbl.

Figure 2: WTI - Brent Crude Oil Spot Price Spreads January 2008 to April 2020



Source: Data from Energy Information Administration

As noted in previous *Fuel and Vehicle Trends Reports* the price war between Saudi Arabia and Russia has affected supply. At the height of the shutdown, Saudi Arabia pumped every possible barrel for sale at rock-bottom prices, punishing Russia for refusing to support deeper OPEC+ output cuts in early March 2020. This accelerated a spate of bankruptcies declarations by overleveraged Permian Basin and Bakken Producers. As of May 1, Moscow and Riyadh reduced daily production by millions of barrels, spearheading a global agreement between almost all the world’s major oil producers to rein in output. Furthermore, the Saudi’s have made it clear that they will no longer tolerate the cheating habits among OPEC members. As reported by Lee in Bloomberg, the Saudis called out by name Iraq and Nigeria among others for cheating on their output quotas. Both countries pledged to make up the deficit and to abide by their future quotas.

Figures 3 and 4 should be viewed in tandem. Figure 3 has the world fuel production and consumption balance. Figure 4 shows the resulting Organization for Economic Cooperation and Development (OECD) Commercial Stocks of Crude Oil and Other Liquids. As world consumption for oil dropped dramatically during the

end of the first quarter and dropped more in the second quarter 2020, this caused a surge in stock buildups. As Figure 3 reveals, world consumption declined by more than world production during this recent downturn. It also provides a recent forecast that world production and consumption will resume consuming and producing around 100 million barrels per day by the later quarters of calendar year 2021. Figure 4 reveals the results of lower demand on OECD inventories. January OECD inventories represented 62 days of supply and prior to COVID-19 shutdowns, OECD inventories had always been within a tight monthly band ranging from a little less than 50 days of supply to nearly 70 days of supply of oil. By April 2020, OECD inventories represented 87 days of supply. Stocks are not anticipated to reach January 2020 levels until the end of 2021.

Figure 3: Fuel Production and Consumption: Since 2014 Through 2020

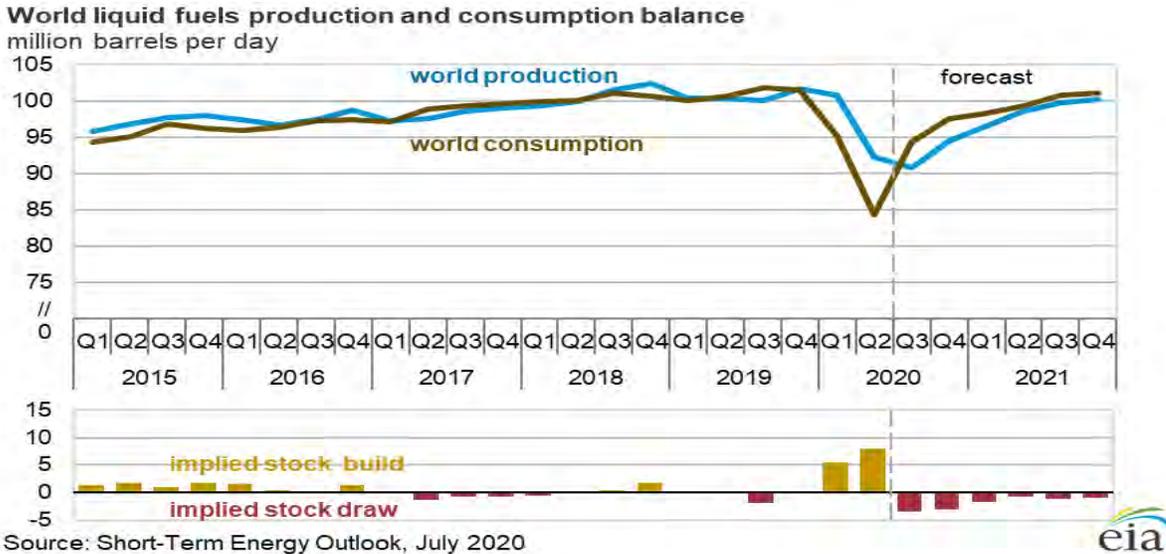


Figure 4: OECD Inventories of Crude Oil and Liquids

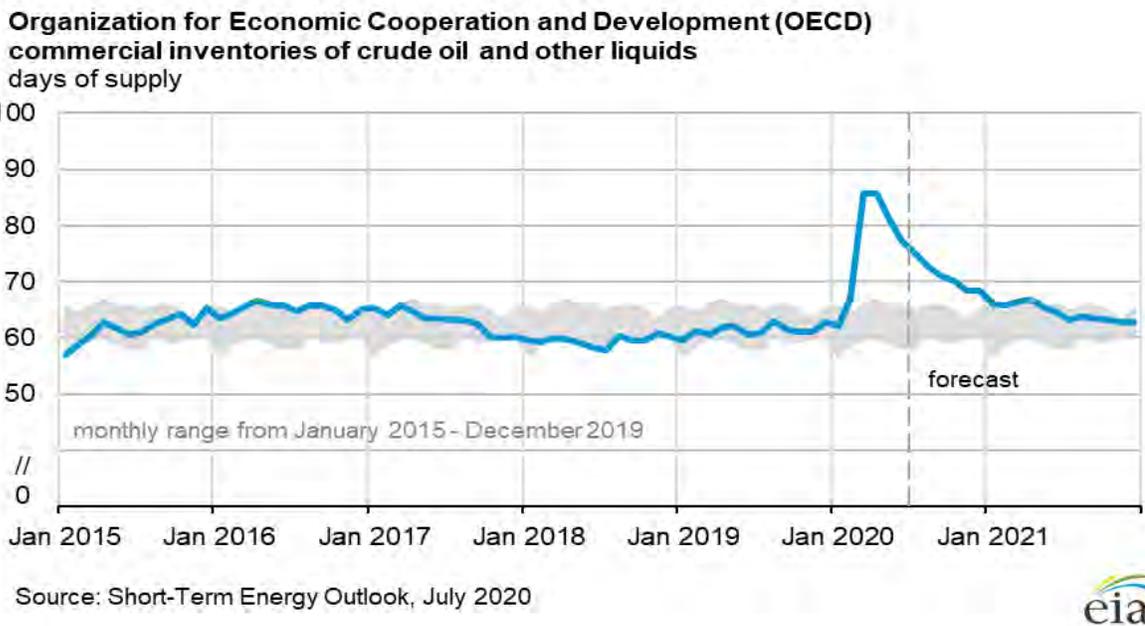
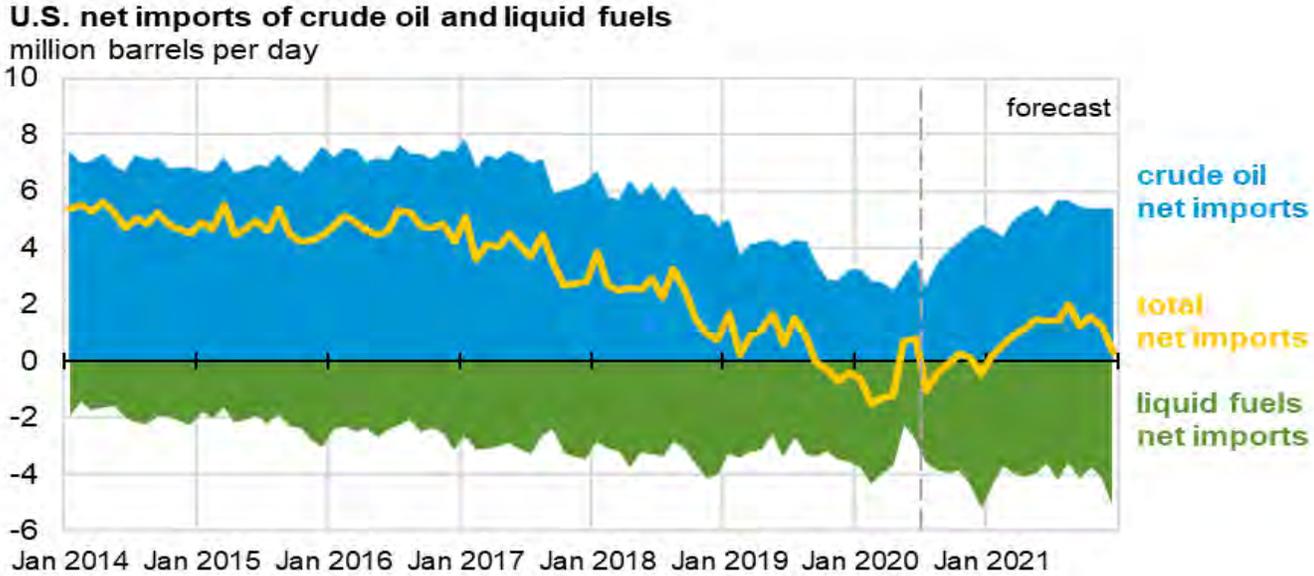


Figure 5 shows the recent U.S. import /export history and EIA’s July 2020 forecast. As in April, the June forecast no longer anticipates the U.S. becoming a net exporter in the immediate future. In fact, in April the EIA forecasted that the U.S. would be a net importer in 2021. The June forecast now anticipates a rough balance between export and imports in 2020.

Figure 5: 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, July 2020

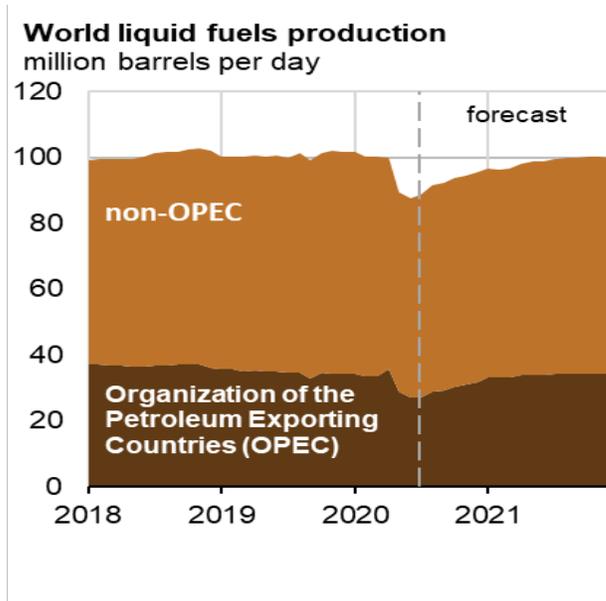


World and US Oil Production

Obviously, the major determinant in the world oil market is the reaction of world economies to the pandemic. As noted above, an overlay to this factor is the willingness of the Saudis to enforce output discipline on other producers. The pandemic and the price war has been quite costly to the Saudi government and economy; Nereim & Omar reported in Bloomberg that 2nd quarter revenue was down 45 percent and has caused the government to raise taxes and freeze government employees’ compensation. Ghadder, \$40.6/bbl in JulyEl Gamal and Lawler reported in Rueters that OPEC+ agreed to extend the crude oil supply cuts through July.

Figure 6 shows world liquid fuel production by OPEC and non-OPEC countries. The OPEC share of world production rose to 36 percent in April 2020. In contrast, its 2019 average was only 34 percent. Given the production cuts, OPEC share is expected to be only 31 percent of world production through August 2020 and not reach it historical average again until the end of this year.

Figure 6: World Liquid Fuels Production: 2017-2020



Source: Energy Information Administration

Figure 7 shows annual U.S. crude oil production by source. Production averaged 12.23 million barrels/day (bbd) in 2019. In April, EIA anticipated a year-over-year decline of 3.6 percent in calendar year 2020. EIA’s June forecast has little changed; production declines will be borne primarily by producers in the lower 48 states excluding the Gulf of Mexico. Calendar year 2020 production was revised down from April by 0.13 million bbd, or 1.0 percent. For 2021, EIA anticipates a year over year decline of 0.6 million bbd, with lower 48 producers responsible for almost the entire decline.

Figure 7: U.S. Crude Oil Production by Source

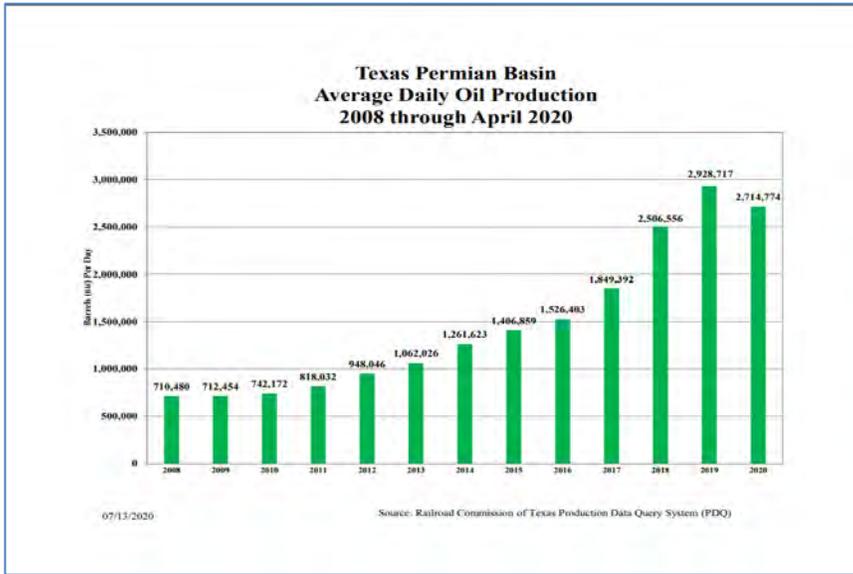
	U.S. crude oil production (million barrels/day)				
	2017	2018	2019	2020	2021
Alaska	0.49	0.48	0.47	0.46	0.49
Federal Gulf of Mexico	1.68	1.76	1.88	1.89	1.93
Lower 48 States (excl GOM)	7.18	8.75	9.88	9.29	8.60
Total U.S. production	9.35	10.99	12.23	11.63	11.01

Source: Short-Term Energy Outlook, July 2020

To examine US production of oil more closely, we examined the Permian production. The Permian production responded quickly to the pandemic events in April. Figure 8 shows crude oil production in Texas (roughly two-thirds of Permian production) as of April 2020 as calculated by the state’s regulatory agency. Production was down a full 7 percent as shown in Figure 8.

May data from the New Mexico Oil and Gas Conservation Division (roughly one-third of Permian production) shows output down by 11 percent. North Dakota regulators report an even greater decline in production from the Bakken Formation. The Department of Mineral Resources reported that production dropped 38 percent when compared to May 2019.

Figure 8: Texas Permian Basin Oil Production



Source: Texas Railroad Commission

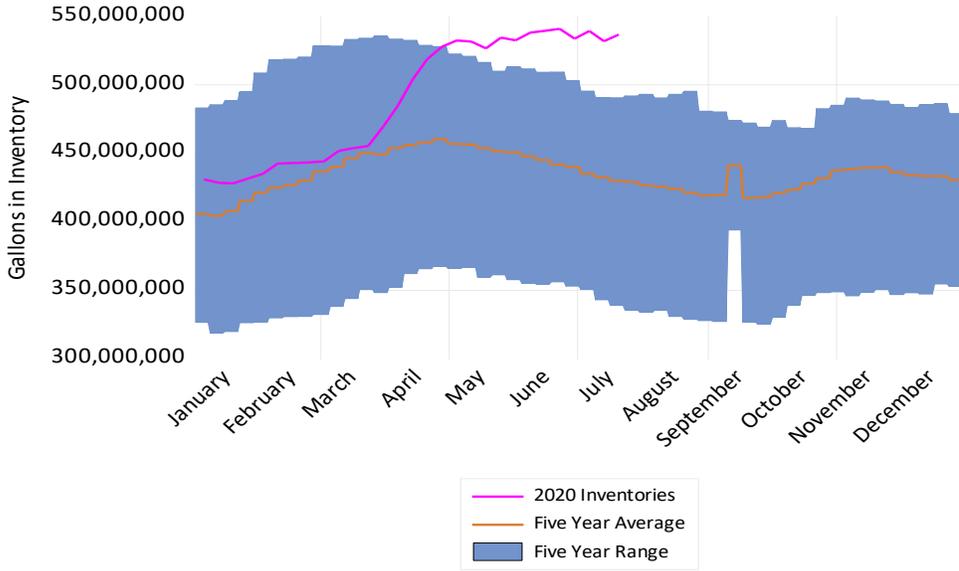
There have been reports in the press of a “bounce back” in crude oil production this summer. Hiller and Kumar reported in Reuters that recent price stability has caused U.S. shale producers to return at least a third of the 2 million barrels per day (bpd) curtailed since April. However, they also noted, “... output is unlikely to be sustained as shale wells loss up to half their initial output after the first year, and require constant drilling to maintain and increase production”.

US Crude Oil Inventories

This *Fuel Price and Vehicle Trends Report* employs five-year averages and bands of inventories to compare to current inventory levels. Weekly inventories for crude oil, gasoline, and distillate span five years from 2015 to July 2020. Inventories have traditionally 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.

Figure 9 shows monthly crude oil inventories. As noted in the April *Fuel and Vehicle Trends Report*, oil inventories have approached their maximum in the sense of conventional storage. This was one of the major factors contributing to negative future prices earlier this year in April. Cushing, Oklahoma (the principal depot for WTI) storage was 70 percent filled but 100 percent reserved as of April 17. Current storage as of July 17 is a little over 50 million barrels, which is roughly 55 percent of capacity.

Figure 9: Weekly 2020 U.S. Ending Inventories of Crude Oil (Excluding Strategic Petroleum Reserve)

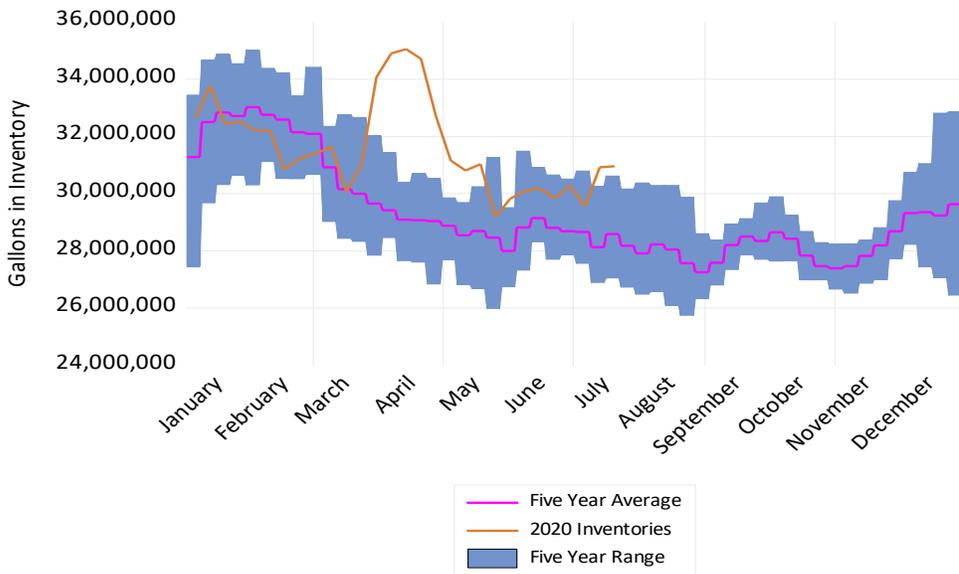


Source: Energy Information Administration

Petroleum Products Inventories: The West Coast Oil Market

Figure 10 shows gasoline inventories for the west coast, PADD5. March/April West Coast gasoline inventories have skyrocketed in 2020 to nearly 35 million gallons, which reflected the decline in consumption. Obviously, inventories are building because demand declined more than anticipated. The current run-up shows that the summer driving season has had an effect of lowering inventories from their high point to April but they are still currently above the five-year inventory range.

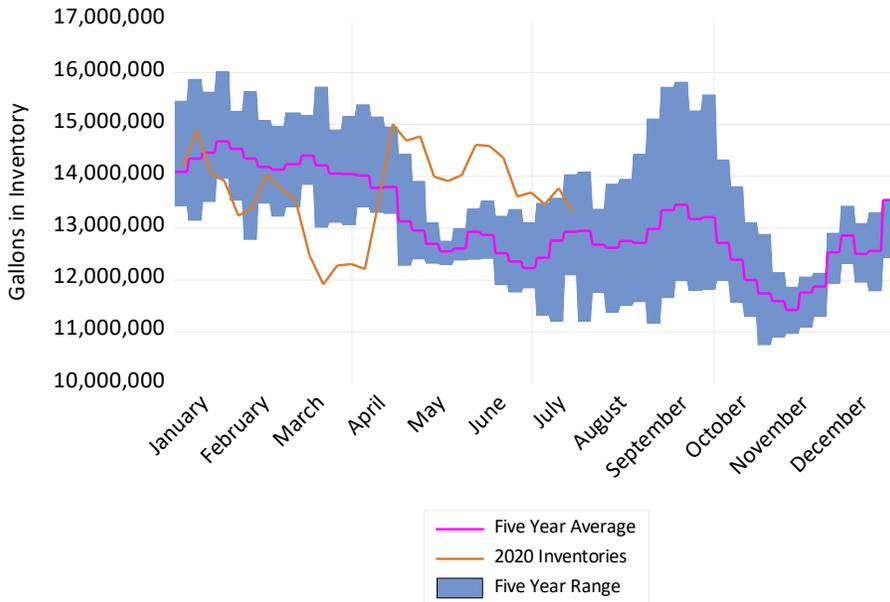
Figure 10: 2020 Weekly Ending Gasoline Inventories (West Coast PADD5)



Source: Energy Information Administration

Sanicola reported in Reuters that Refineries are expected to post their worst earnings results in a decade. Further, these losses will be sharply amplified on the west coast due to the lockdown in California. Paraskova reported in Oilprice.com that Marathon Petroleum, for instance, idled its Martinez refinery in California. EIA data shows that Washington refineries are about 22 percent of PADD 5 total capacity.

Figure 11: 2020 Weekly Ending Diesel Inventories (West Coast PADD5)



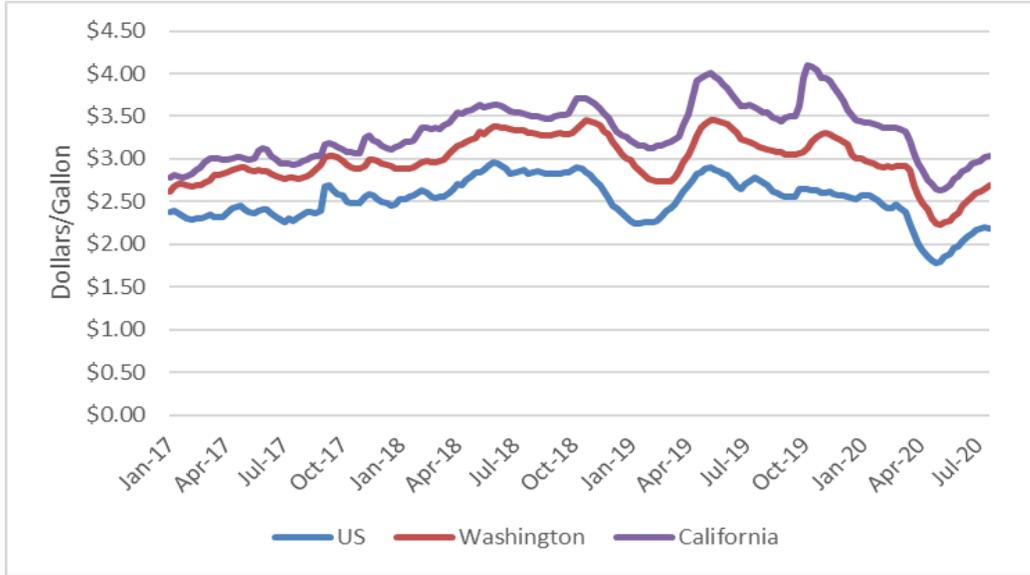
Source: Energy Information Administration

Figure 11 shows West Coast distillate inventories. The drop in the worse months of the pandemic is a result of refiners underestimating the demand for diesel. Analysts in Washington have also been surprised by the strength in diesel consumption. At a little over 13 million gallons, West Coast distillate inventory levels have been decreasing and are now approaching their 5-year average. EIA notes that national June distillate production dropped to its lowest June level since 2011, and June consumption dropped to its lowest June level since 2009.

Washington Retail Gasoline and Diesel Prices

Washington is tightly integrated into the West Coast/PADD 5 fuel market. The five Washington refineries are major exporters to California, Alaska and Hawaii. Figure 12 shows the history of the monthly gasoline prices for the Washington, California and the national market since 2010. Both California and Washington follow the inflections in national price trends. This makes sense since the major determinant of the national price trends are crude oil prices. Calendar year 2020 prices have fallen in tandem with the collapse in demand and have slightly risen with the recent stabilization in oil prices and some increase in demand for retail fuel in recent months.

Figure 12: Retail Gasoline Prices: WA, CA & the U.S. January 2008- April 2020



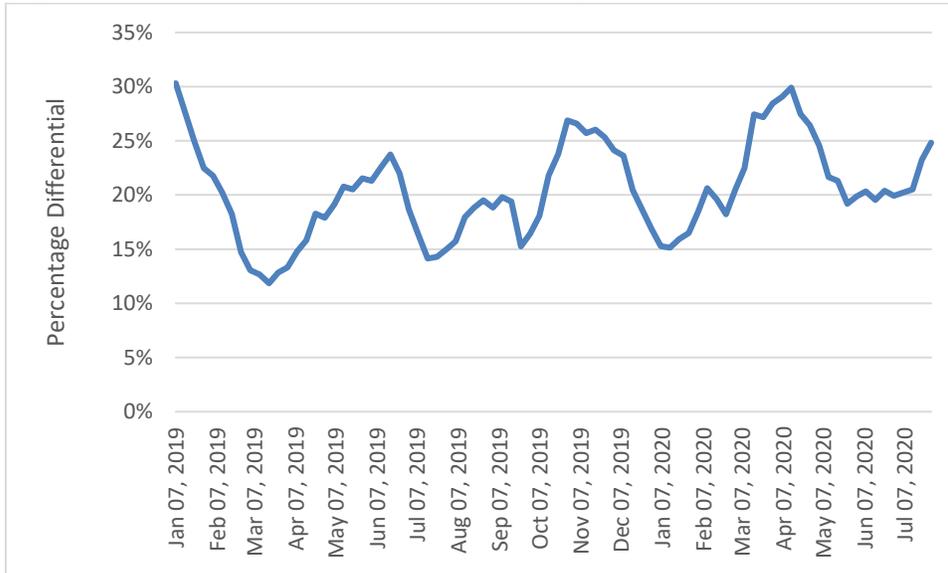
Source: Energy Information Administration US, WA and CA gas prices

Nationally, May consumption was down around 25 percent. EIA reports June consumption down nationwide by only 15 percent from the equivalent month last year.

Diesel consumption has been impacted less by the COVID-19 shutdowns than gasoline. Nationally, diesel consumption was down 15 percent in May when compared to May 2019. June Activity is down 13 percent so analysts are hopeful that diesel traffic has stabilized.

This *Fuel Price and Vehicle Trends Report* has often noted that Washington refineries have considerable market power because they are insulated from east coast competition and the rest of the west coast states are undersupplied by in-state refineries as reported in Slav's April Oilprice.com article. Figure 13 shows Washington/National retail gasoline price spreads in percentage terms. The Washington/U.S. gas price spread averaged 20 percent or \$0.51 per gallon in calendar year 2019. In January 2020, price spreads averaged around 15 percent, or \$0.43 per gallon and then they started to rise. By March the price spread spiked to 21 percent or \$0.55 per gallon and in April and May it rose more to as high as 30 percent. June through July average spreads fell down to just below 20 percent, or \$0.41 per gallon and then in July they rose again to nearly 25 percent. The spike (in percentage terms) of the price differential during the very height of the pandemic is puzzling; California, Oregon, and Washington went into a very strict lockdown during this period and suppressed travel more than many other parts of the country so it is not clear why WA gas prices would rise faster than the rest of the US.

Figure 13: WA/US Retail Gasoline Price Spreads



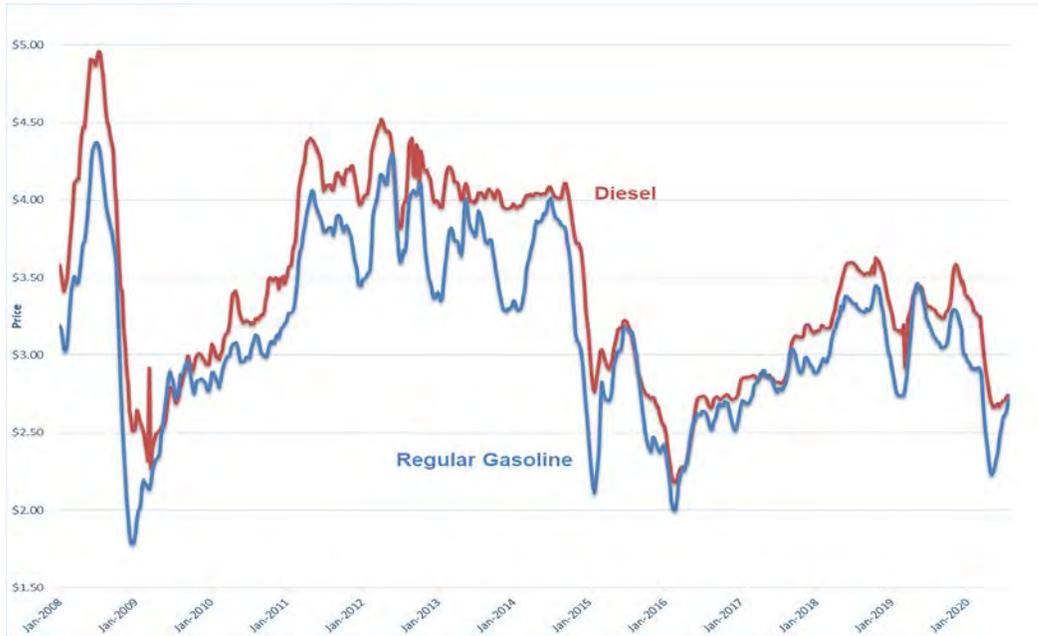
Source: Energy Information Administration

Figure 14 shows Washington regular retail gasoline and diesel prices since January 2006. As expected, both WA retail gas and diesel prices followed the same 2020 trajectory and have declined since the onset of the pandemic. However, diesel prices have not collapsed as much as gasoline prices. This is because the drivers of demand are different; gasoline is principally a fuel used in personal transportation while diesel is a fuel used in commerce. At the beginning of 2020, regular gas prices average \$2.95 per gallon. In February, WA gas prices fell only a little to \$2.91 per gallon but by March, the weekly average WA retail gas price fell to \$2.79 per gallon. Then in April, retail gas prices to an average of \$2.36 per gallon. The average price for May and June was \$2.27 per gallon and \$2.53 per gallon, respectively. The July month-to-date average increased to \$2.67 per gallon and this reflects the stabilization of the oil market and improving gasoline demand.

Washington retail diesel prices started 2020 at \$3.36 per gallon. Diesel prices declined month over month February to \$3.28 per gallon. In March, Washington retail diesel prices fell to \$3.13 per gallon. Finally, in April, Washington diesel prices fell to \$2.80 per gallon. Prices averaged \$2.67 per gallon and \$2.69 per gallon in May and June, respectively. The July month-to-date average is \$2.67 per gallon and most likely is reflective of the stabilization of oil markets.

The price differential between the two fuels has been mostly driven by the variability in gasoline demand. The spread between retail gasoline and diesel averaged 9 percent in 2019. Prior to March 2020 spreads averaged 13 percent. Spreads have averaged 15 percent in April and May. Since May, the differential has narrowed to only 4 percent. That is because gas prices have risen faster than diesel prices in recent months.

Figure 14: Washington Retail Regular Gasoline and Diesel Prices 2006-2020



Source: AAA, Energy Information Administration

BIODIESEL PRICE PREMIUM TRENDS

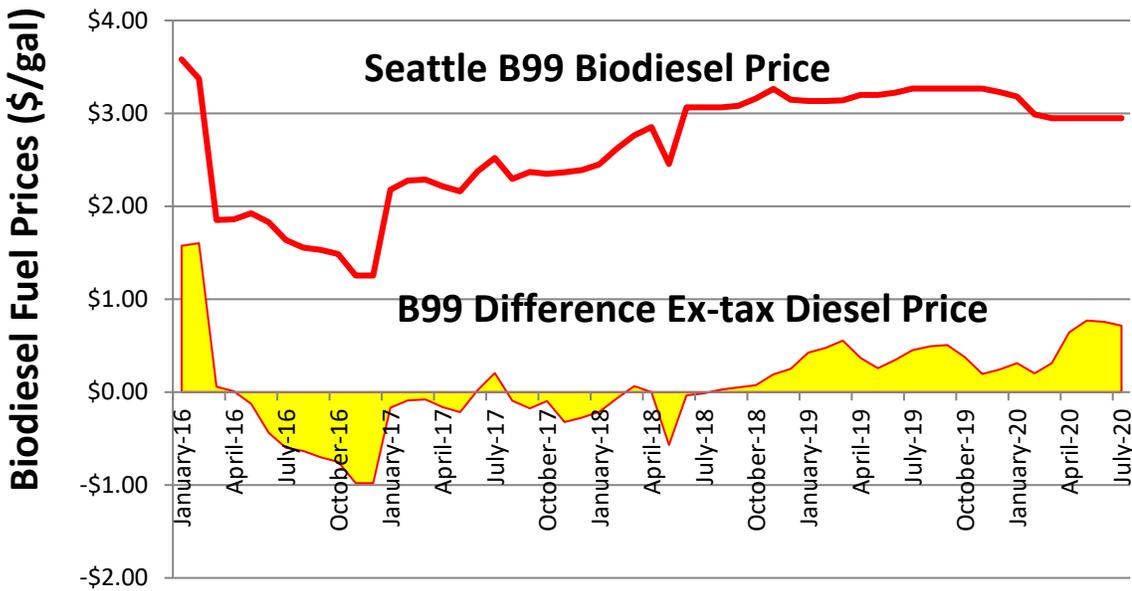
Analysis by Lizbeth Martin-Mahar, Ph.D.

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 per gallon. Since July 2019, B99 biodiesel prices have fallen from \$3.27 per gallon to \$2.95 per gallon beginning in March 2020. Since March, B99 biodiesel prices have been the same at \$2.95 per gallon. Figure 13 shows the B99 price and the price premium since January 2016. This chart reveals a positive trend recently in the B99 difference compared to the ex-tax diesel prices. That is due to the recent fall in diesel prices while B99 prices have remained the same. Currently in July 2020, the B99 price premium was \$0.7 or 32 percent higher than the ex-tax diesel price. This has been roughly the same premium since April 2020.

Figure 14: Monthly B99 Biodiesel Prices since January 2016



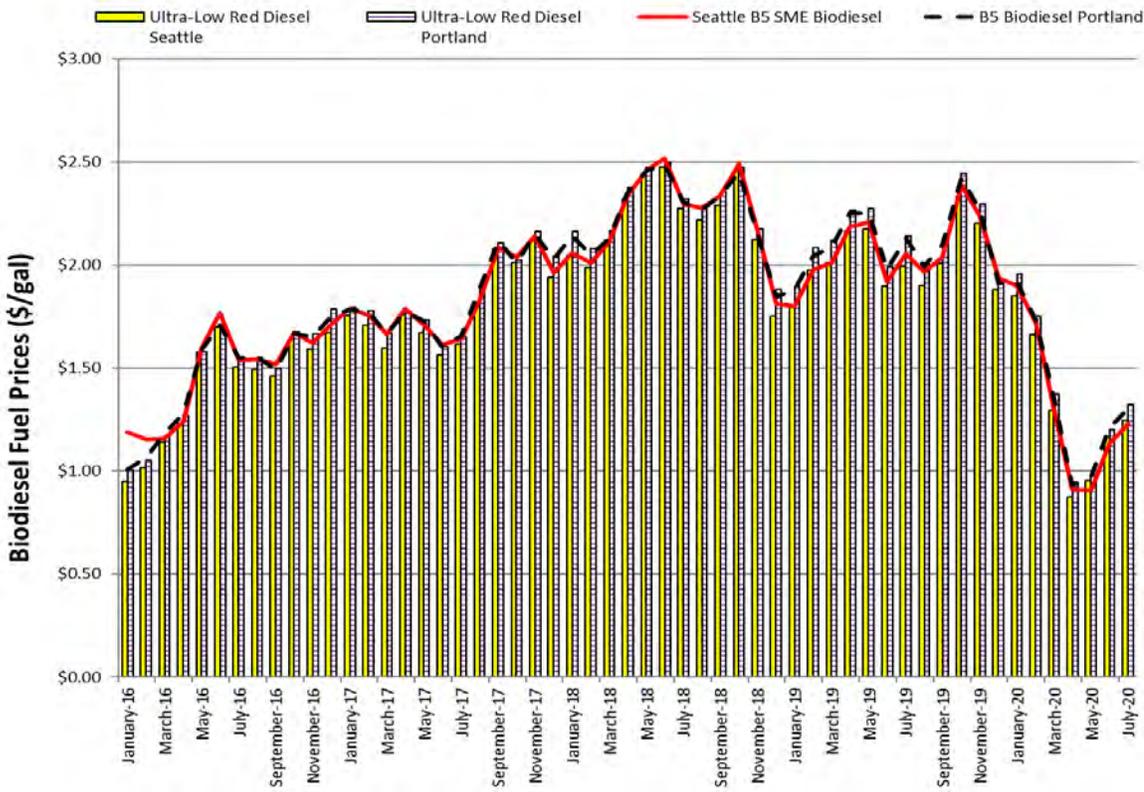
Source: B99, Seattle biodiesel price data - OPIS Fuel Price Survey

Recent Trends: Seattle and Portland B5 Biodiesel Prices

Seattle and Portland B5 red dyed biodiesel prices are tracked because the Washington State Ferries 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 15 and 16 reveal the significant declines in B5 prices beginning in March through July mostly due to COVID-19 shutdowns beginning during the last few weeks of March. The results also reveal that B5 prices in Portland and Seattle are typically moving in the same direction with similar declines and both B5 prices have declined significantly from a year ago. The difference in red dyed diesel prices between the two cities in recent months is minor and mirrors the difference in B5 biodiesel price trends. Over the past three months beginning in May 2020, Portland B5 dyed diesel prices have averaged 4% higher than red dyed diesel prices in Seattle.

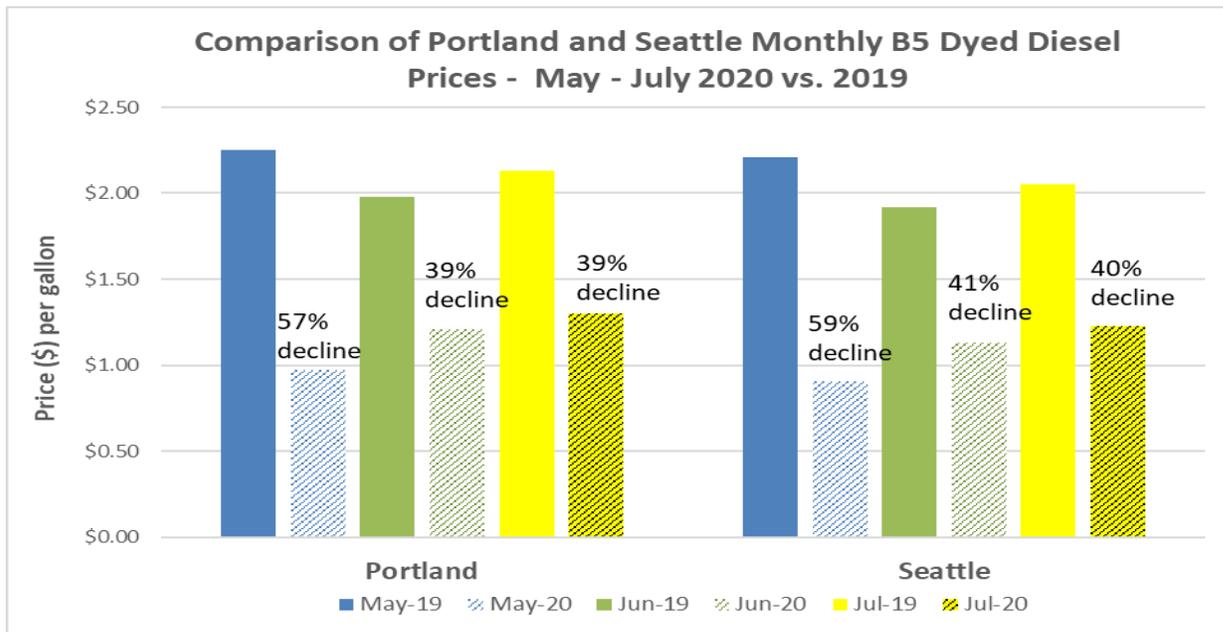
In addition, the recent declines in B5 red dyed biodiesel prices in both cities are revealed in Figure 16. Beginning in January 2020, B5 prices were both below \$2 per gallon and very close in price at \$1.92 and \$1.90 per gallon for Portland and Seattle respectively. Since January 2020, both Portland and Seattle B5 prices have fallen significantly to less than \$1 per gallon in April and May 2020. Portland’s lowest monthly average B5 price was in April at \$0.93 per gallon while Seattle B5 prices bottomed out in May at \$0.91 per gallon. By May, both B5 dyed diesel prices in Portland and Seattle fell 57 and 59 percent respectively from a year ago. In June 2020, the B5 prices have started to rise to \$1.2 and \$1.1 per gallon in Portland and Seattle. These recent B5 prices are roughly a 4 percent decline from a year ago. In July 2020, B5 prices started to rise a little by \$0.1 per gallon month over month to \$1.3 and \$1.2 per gallon in Portland and Seattle. July 2020 B5 prices are still around 40 percent of the Portland and Seattle B5 prices a year ago. Even though Portland and Seattle B5 prices have risen a little in recent months, they are still well below where they were a year ago.

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.

Figure 16: Seattle and Portland OPIS B5 Biodiesel Prices: May – July 2020



Source: B5, Seattle and Portland 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.

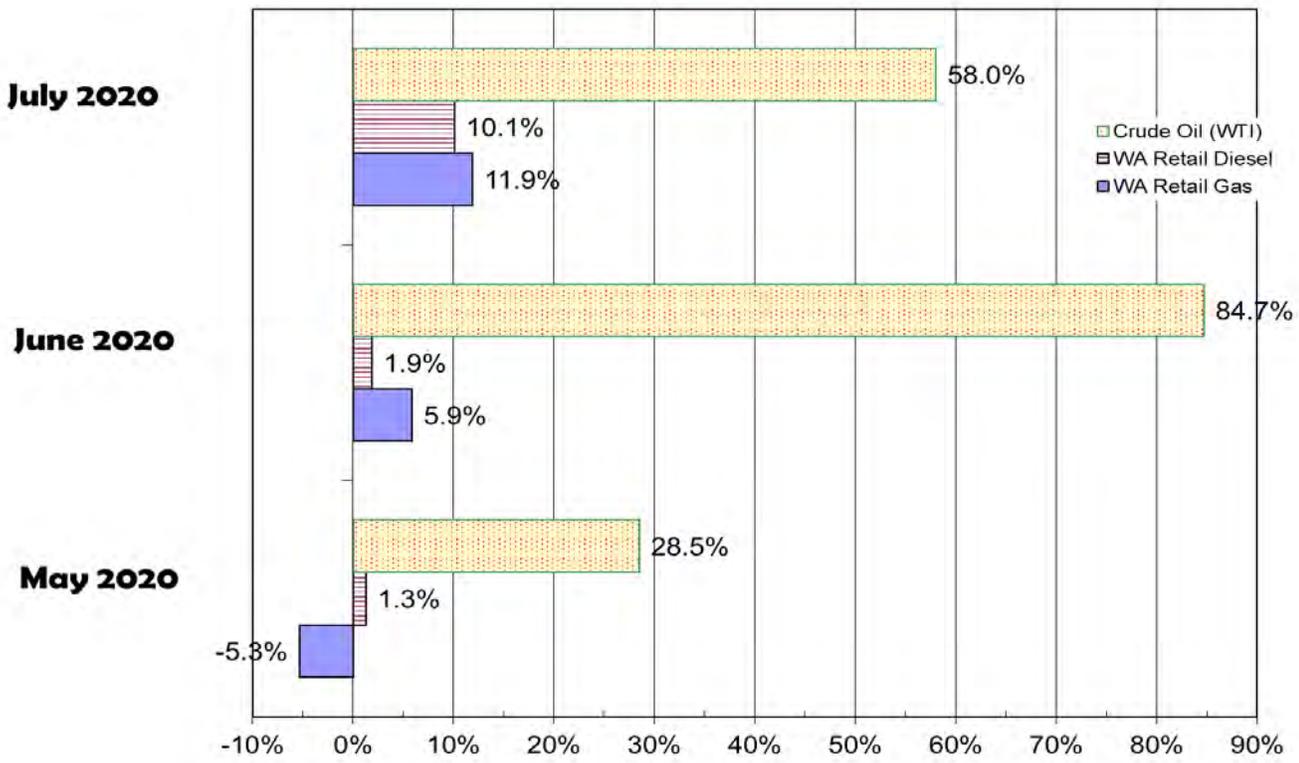
In this July edition of the *Fuel and Vehicle Trends Report*, we have seen significant drops in West Texas Intermediate (WTI) crude oil prices and fuel prices in the later part of March and April and these low prices continued in May as well. Since May, crude oil and retail fuel prices have started to rise again. The recent dramatic fall in crude oil prices is due to the significant reduction in worldwide demand from the COVID-19 shutdowns and stay home orders throughout the world. The monthly average crude oil prices were still low in May at an average of \$26.6 per barrel which was still slightly higher than the second quarter 2020 forecast from June at \$20.7 per barrel. In May the price change from the forecast was 28.5 percent above the forecast. In June, the monthly average crude oil price increased by more than \$11 per barrel from May. June's actual price was nearly 85 percent higher than the second quarter price forecast in June. In July, crude oil prices have averaged a little higher than in June at \$40.3 per barrel for the month and this was still 58 percent higher than in the June forecasts. See Figure 17 for more detail.

Even though WTI crude oil prices increased much faster than forecasted in June, retail fuel prices have not seen the steep increase in prices in recent months. In May, retail gas prices were still low at an average of \$2.24 per gallon. This May actual average gas price was below the June projection for the second quarter 2020 by 5 percent. In June, the average retail gas price rose to \$2.50 per gallon or \$0.26 per gallon, which was a 11.6 percent, month over month increase. The following month in July also showed a \$0.15 per gallon increase from June to \$2.65 per gallon. This higher July retail gas price was nearly 12 percent above the June forecast.

The recent trends in retail diesel prices are similar to the retail gas price trends but the increases in diesel prices were a bit smaller than the retail gas price increases. The May monthly average diesel price was \$2.67 per gallon, which tracked the second quarter diesel price forecast in June by 1.3 percent. The June average retail diesel price of \$2.69 per gallon was only \$0.02 per gallon higher than in May so it was also tracking the recent forecast. Then in July, retail diesel prices rose by \$0.04 per gallon to \$2.73 per gallon which was 10 percent higher than the third quarter 2020 price forecast for diesel.

In the past three months (May through July), we have seen the difference between retail gas and diesel prices go from \$0.44 per gallon in May to a low of \$0.08 per gallon by July. The reason for the decline in the retail fuel price difference recently is due to retail gas prices rising faster than retail diesel prices.

Figure 17: Percent Change in 2020 Monthly Average Fuel Prices Compared to the June Forecast



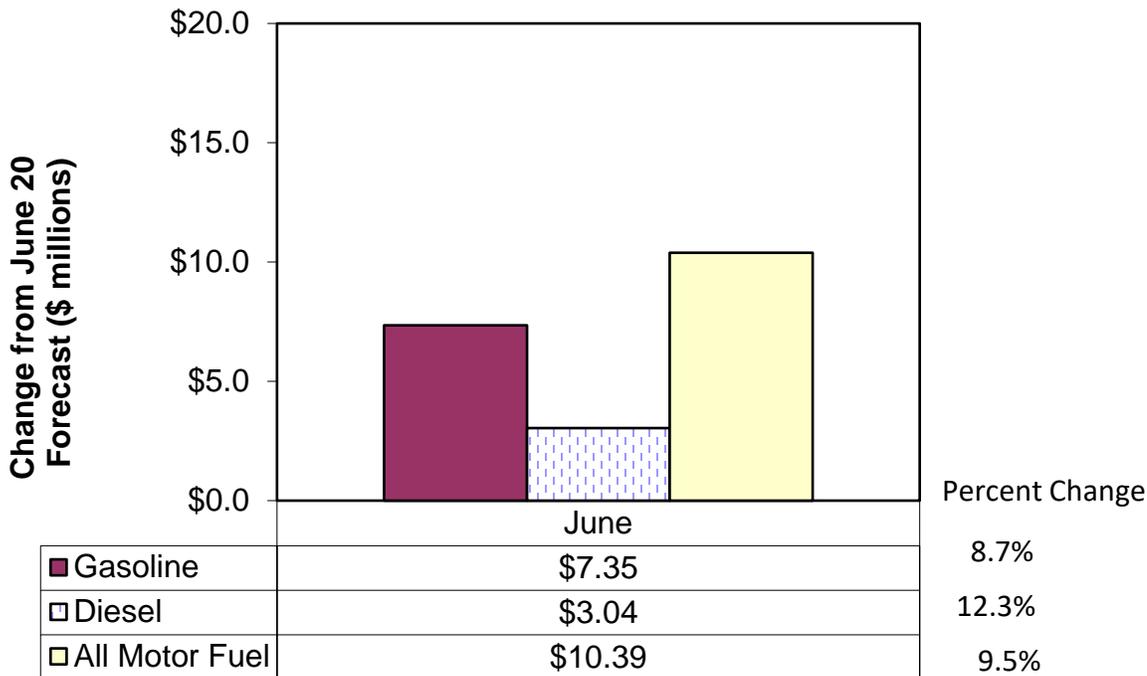
Source: Washington TRFC June 2020 Forecast, EIA and AAA weekly fuel prices

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 June 2020 forecast, one month of fuel tax collections have been reported. Please note that these recent fuel tax collections now include the negative impacts from COVID-19 shutdowns in the state since March 2020. In June, gasoline tax collections came in at \$92.3 million, which was above the June projections by \$7.35 million or 8.7 percent. Please note that June 2020 gas tax collections were still well below “normal” gas tax collections for June. For example for the past three years in June, gas tax collections totaled \$125.5, \$106.8 and \$129.3 million respectively for 2017-2019. June 2020 gas tax collections are more than 30 percent below the most recent 3-year average June gas tax collections. Diesel tax collections came in at \$27.8 million, which was \$3 million or 12.3 percent above the June forecast. Diesel tax collections for June 2020 also down some from prior years’ June diesel tax collections. For the past three years in June, diesel tax collections totaled \$32.1, \$27.3 and \$36.7 million respectively for 2017-2019. June 2020 diesel tax collections were 15% below the average diesel tax collections for the past three years. Overall, for both gas and diesel taxes combined, fuel tax collections were above the June forecast by 10.4 million or 9.5 percent. Figure 18 reveals the June 2020 results. Just note that the positive variance for fuel taxes from the June forecast can be explained by the fact that we anticipated a lower than “normal” June 2020 collections due to the COVID-19 shutdowns and reduced demand in the June forecast. We could have underestimated the summer months consumption in 2020 but we also projected a strong recovery in the last six months of FY 2021, which still remains to be seen if those future consumption levels materialize.

Figure 18: Motor Vehicle Fuel Tax Collections Compared to the June 2020 Revenue Forecast



Source: Washington TRFC June 2020 Forecast and State Treasurer’s Office monthly fuel reports

VEHICLE TRENDS

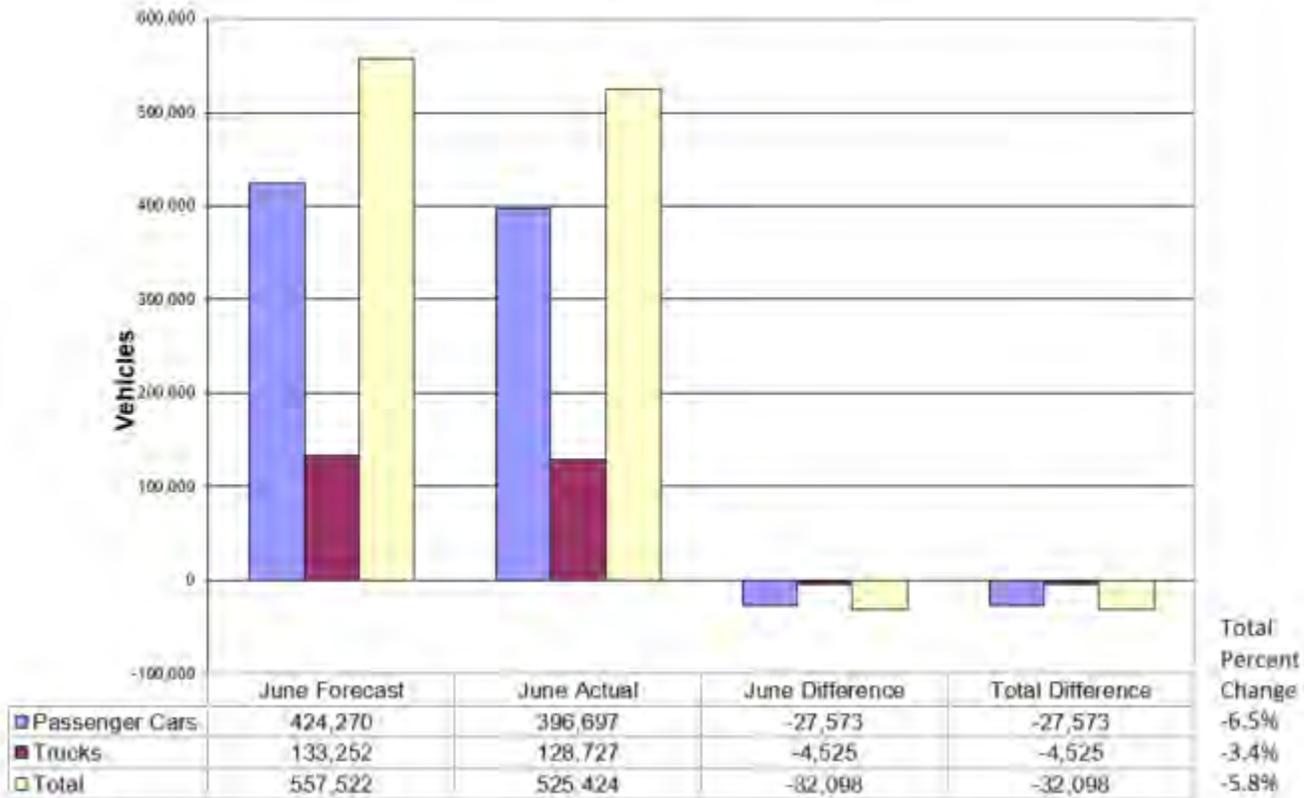
For the one month of licensing registrations and revenue data we have received since the June forecast, vehicle registrations were down, see Figure 19. Passenger car registrations came in at 396,697 vehicles for June. On the other hand, we forecasted them at 424,270 vehicles. June’s actual passenger car registration was 6.5 percent lower or 27,573 vehicles less than projected for the month. The lower actual registrations for June showed the continued impact of COVID-19 shutdowns on car registrations and by lower new car sales and new car registrations.

Truck registrations had a similar pattern to passenger cars. The truck registrations were reported as 128,727 vehicles. Meanwhile, the June forecast was 133,252. The latest actual truck registrations were below the forecast by 3.4 percent. Just like the car registrations, the June truck registration actual being 3.4 percent below the projection indicated the continued impact of COVID-19 shutdowns and lower new truck sales and new registrations.

For both passenger cars and trucks combined for this period, vehicle registrations came in 32,098 vehicles below the June forecast, which translated to a 5.8 percent decrease.

Figure 19: Vehicle registration, June 2020, Forecast vs. Actual

June Registration Trend



Source: Washington Transportation Revenue Forecast Council June 2020 Forecast and Department of Licensing Reports 13, June 2020

We also had one month of revenue to discuss in this report (Figure 20). In June, for \$30 basic license fee, the revenue came in at \$14.2 million. It's \$1 million less than the \$15.2 million forecasted, which represented a 6.6 percent decrease. This revenue loss result is in line with the lower passenger car registrations trend, which was also down 6.5 percent for June.

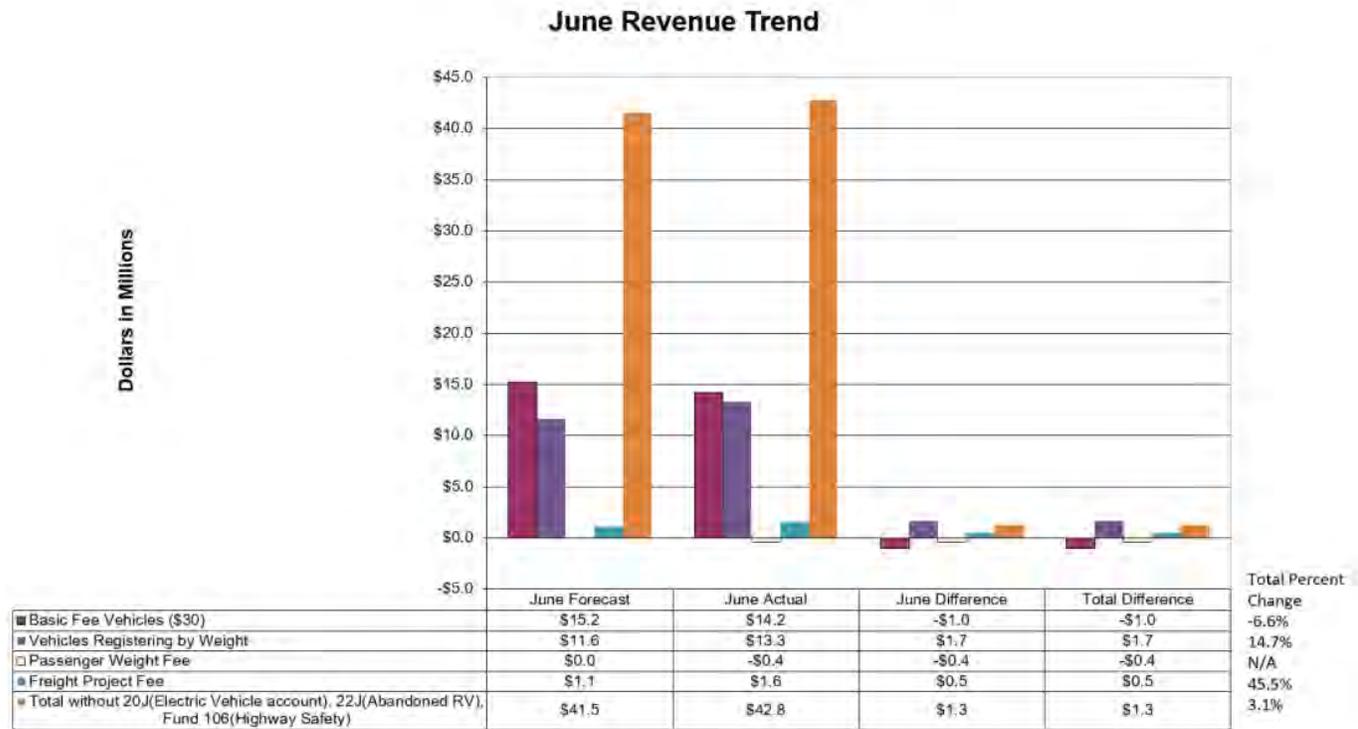
Revenue for truck weight fee was higher than expected for June by \$1.7 million at \$13.3 million, which was 14.7 percent more than the last forecast. The 14.7 percent increase in truck weight fee revenue was contrary to the 3.4 percent decrease in truck registrations for the same period. Revenues coming in higher than truck registrations could be the result of more heavier trucks registering that month than projected for June.

Figure 20 also reveals that there were revenues posted for the passenger weight fee in June for the amount of -\$0.4 million. Note that the I-976 already requires that all passenger weight fees to be eliminated after December 5, 2019. So the reason we saw posted revenue in this fee category was due to a DOL accounting adjustment for prior months. In the future, we should not see any passenger weight fees due to the passage of I-976.

The freight project fee in June came in at \$1.6 million, which was \$0.5 million higher or 54 percent more than the projection. Similar to the truck weight fees, the higher actual revenue could be the result of heavier trucks registering this month than projected for June.

Finally, total License, Permit, and Fee (LPF) revenues were \$42.8 million, which was 3.1 percent or \$1.3 million above the June forecast. There were other LPF revenues, which also came in above the June forecast.

Figure 20: Vehicle revenues, June 2020, Forecast vs. Actual.



Source: Washington Transportation Revenue Forecast Council June 2020 Forecast and Department of Licensing ARFS Revenue Report, June 2020.

New Car and Truck Registrations from Sales

Since the recent pandemic began, new passenger car and truck registrations have been more negatively impacted than renewal vehicle registrations. Figures 21 and 22 show the monthly new passenger car and truck registrations for the past 5 years. As Figure 21 reveals, since the pandemic hit, new passenger car registrations dropped significantly beginning in March with a year over year decline of 10 percent. This year over year

Figure 21: Monthly history new passenger car registrations – Last 5 Years

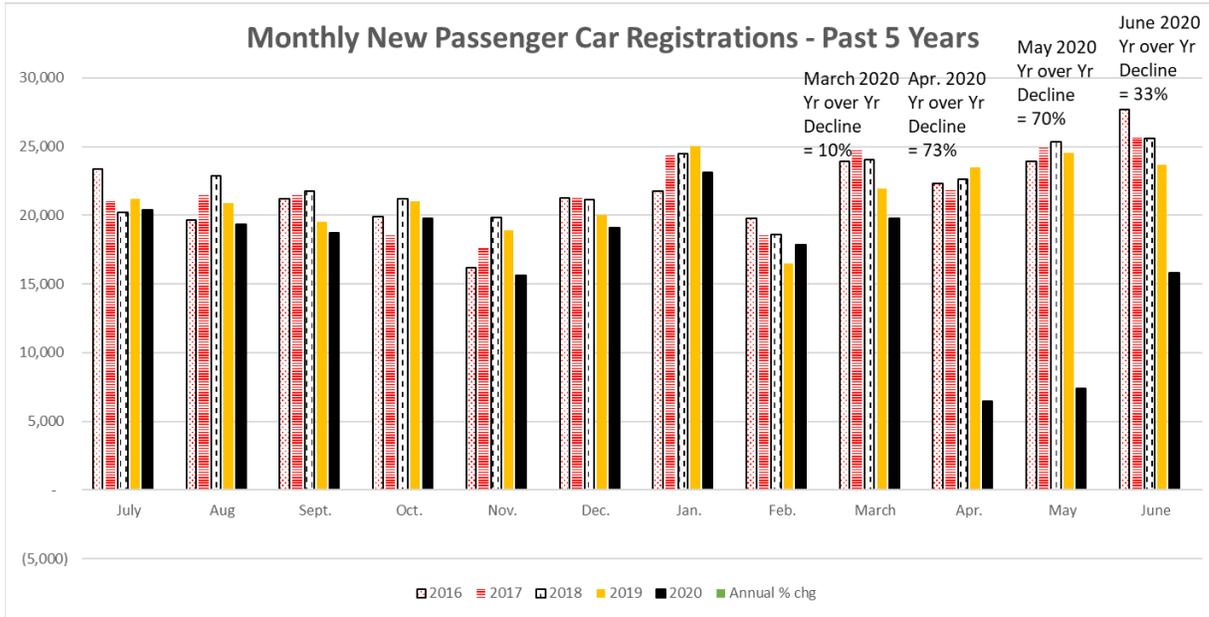
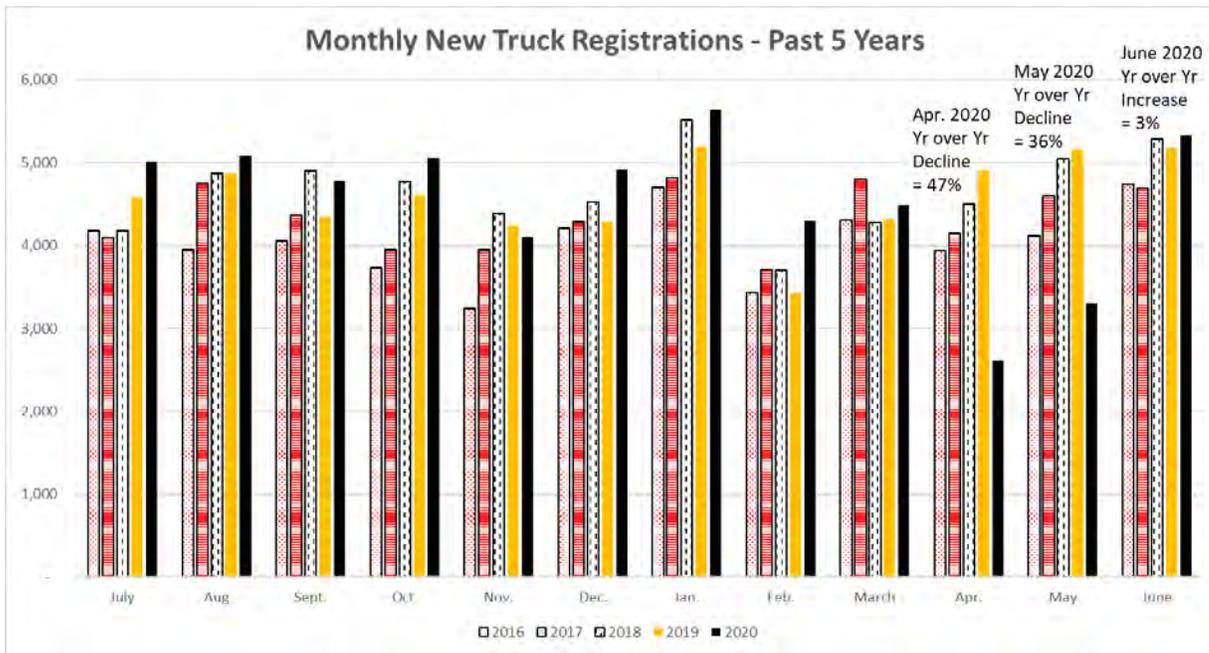


Figure 22: Monthly history truck registrations – Last 5 Years



Source: Department of Licensing Report 14 for various months and years.

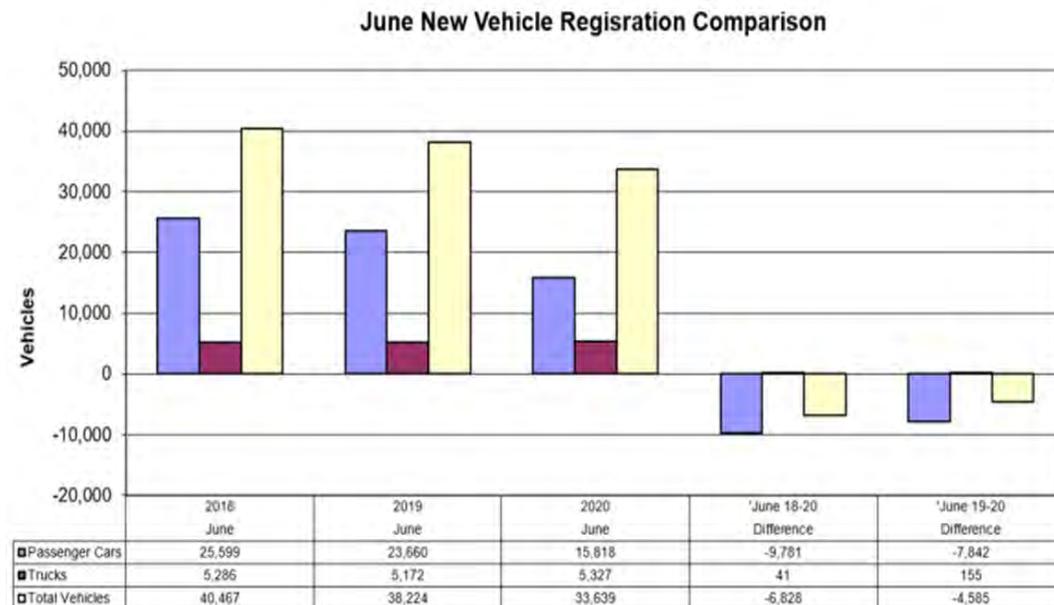
decline grew bigger in April at a decline of 73 percent. Then the new car registration decline continued in May and June also by 70 and 33 percent respectively. New truck registrations have seen declines as well but they were not as severe as passenger car registrations year over year and they have recovered in June, see Figure 22. New truck registrations fell year over year beginning in April 2020 by 47 percent. Then in May, the year over year decline was still 36 percent and then in June new truck registrations were even up 3 percent from the prior year.

We examined the most recent month of registrations in more detail, see Figure 23. The results reveal that June 2020 new car registrations went down by 7,842 vehicles compared with June 2019, which indicated a 33.1 percent reduction. This decrease is the result of broad negative impacts of COVID-19. The new vehicle sales/registrations have not come close to recovering yet in June registrations but the new registrations are higher than when COVID-19 shutdowns first occurred in March 2020. We are past our lowest point in new vehicle registrations in April.

Different from the new car registrations, new truck registrations in Washington State showed a moderate growth during the same period. The June actual came in as 5,327 new truck registrations. The registrations exceeded the previous year monthly total by 155 trucks, which represented a 3.0 percent growth over same period in last year. When comparing to June 2018, the new truck registrations were still 41 vehicles more or 0.8 percent higher than two years ago. New truck registrations, in general, have not been as impacted by the COVID-19 shutdowns and reduced demand as new passenger car registrations.

Overall, total new vehicle registrations decreased by 4,585 vehicles or 12.0 percent, year over year compared to June 2019. The comparison with the following year showed a reduction of 6,828 vehicles or 16.8 percent less. Looking ahead, we are not sure when the new car sales will return to previous years' levels. We have already seen the trend of reduction in total new vehicle registrations for straight 4 months since March. With the impact of COVID-19 persisting, we anticipate seeing future reductions for new car registrations.

Figure 23: June 2020 New vehicle registration Comparison



Source: Department of Licensing Report 14 for various months and years.

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