

READING THE METER

May 20, 2020

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Forecast Meter

Forecast Summary (Updated 5/6)

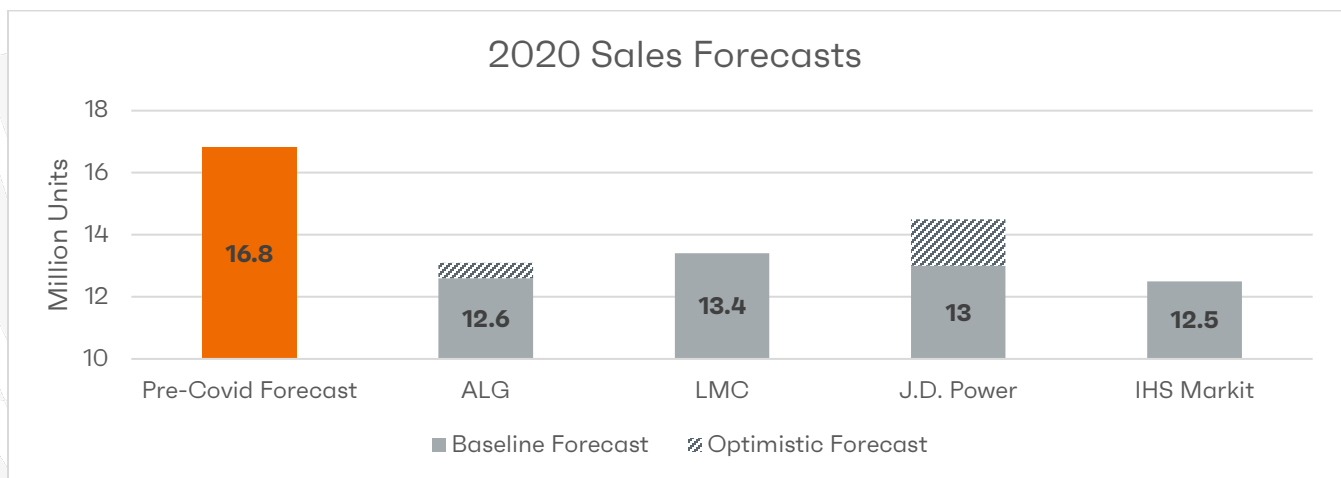
2020 March & April Sales, ⁱ Extended Sales Forecast ⁱⁱ and Production Forecasts ⁱⁱⁱ

	U.S. Sales & Forecasts	North American Production Forecast
March	992,392 (-33% YoY)	1.01 million units (-34% YoY 2019)
April Sales	707,852 (-48.7%YoY)	138,500 (-90% YoY)
1st Quarter	3,476,512 (-12.7% YoY)	3.86 million units (-11.7% YoY 2019)
Mid-year Estimate	10.0 Million SAAR	6.86 million units (-22% YoY 2019)

U.S. Light Vehicle Sales Outlook (Updated 5/20)

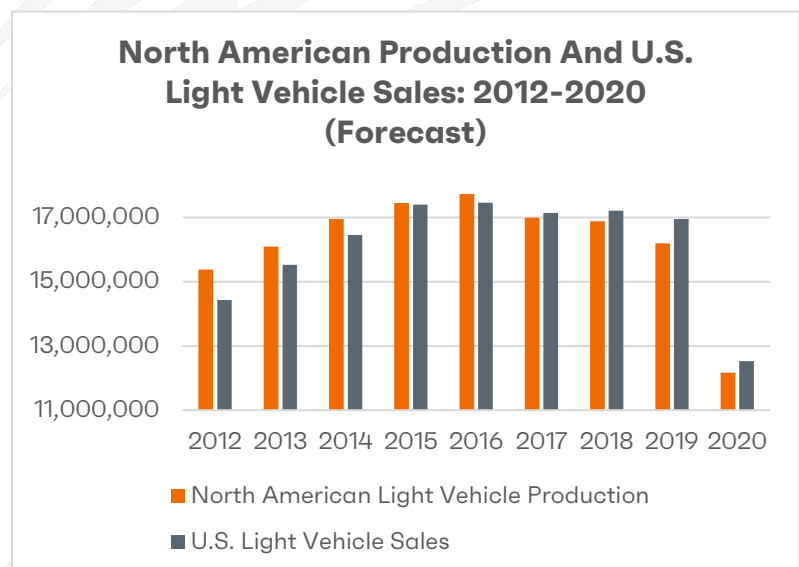
Wards Intelligence^{iv}: “Wards Intelligence partner LMC Automotive has upwardly revised its 2020 U.S. light-vehicle sales forecast to 13.4 million units. Previously, LMC was targeting 12.9 million units. The forecast for 2021 was raised slightly to 15.2 million units from 15.1 million, while 2022 remains at 16.2 million. On a seasonally adjusted basis, sales are not expected to resume pre-virus strength, or the 16.8 million forecast for 2020 prior to the virus’s impact, until sometime in 2023. Overall, sales in 2023 are pegged at 16.7 million units.”

J.D. Power Forecast: “J.D. Power May retail sales outlook is 961,000-1,064,000 units. This is a decline of 18-26% from our pre-virus forecast, or a sales drop of 239,000-341,000 units. Sales through May 17 were 427,000 units. . . . The virus is projected to remove 1.0-1.5million sales over the five months of March -July.”



North American Production Outlook (Updated 5/20)^v

North America Production: “The May 2020 forecast fine-tuned the previous nine-week shutdown across North America with production resuming the week of May 18 or earlier depending on the manufacturer and country. As a result, North America production for 2020 was revised up 167,000 units to total 12.3 million units that remains the lowest level since 2010. . . . With production in North America forecast to decline nearly 4.0 million units in 2020 to 12.3 million units, 87% or 3.45 million units of the total volume loss is projected to occur between March and June



2020. Despite heading into an uncharted market, manufacturer’s robust production plans for third quarter 2020 are supported by the more than total US inventory being wiped out over the course of four-months and US sales projected to total roughly 3.5 million units over the same time span.”

Work Stoppage Meter

North American Assembly Facility Operating Status (Updated 5/20)

Most automakers have resumed production at plants across North America, but the extent to which production has begun or employment has been reinstated is unknown. The summary chart assumes full employment for those plants that have reopened. As plants come back online, we will continue to monitor additional closures due to outbreaks or parts shortages.

Open manufacturers include: BMW, FCA, Ford, General Motors, Honda, Hyundai, Kia, Mercedes-Benz, Subaru, Tesla, Toyota, Volkswagen, and Volvo.

To view the most updated information on plant operating status, please click [here](#).

North American Assembly Facilities (5-20-20)			
Country	Metric	Number	Percent of totals
U.S.	U.S. Employment	176,070	
	Closed 5/20/2020	27,515	16%
	Number of plants total	44	
	Number of plants Closed 5/20/2020	7	16%
Mexico	Mexico Employment	70,665	
	Closed 5/20/2020	50,932	72%
	Number of plants total	18	
	Number of plants Closed 5/20/2020	10	56%
Canada	Canada Employment	31,626	
	Closed 5/20/2020	4,500	14%
	Number of plants total	7	
	Number of plants Closed 5/20/2020	1	14%
North America	Total Employment	278,361	
	Closed 5/20/2020	82,947	30%
	Number of plants total	69	
	Number of plants Closed 5/20/2020	18	26%

*Assumes full employment at open plants

Market Meter

U.S. Light Vehicle Sales (Updated 5/20)

Weekly Sales^{vi}

J.D. Power Weekly Update: Retail sales through May 17 are 427,000 units, a decline vs. pre-virus forecast of 26% or 149,000 units.

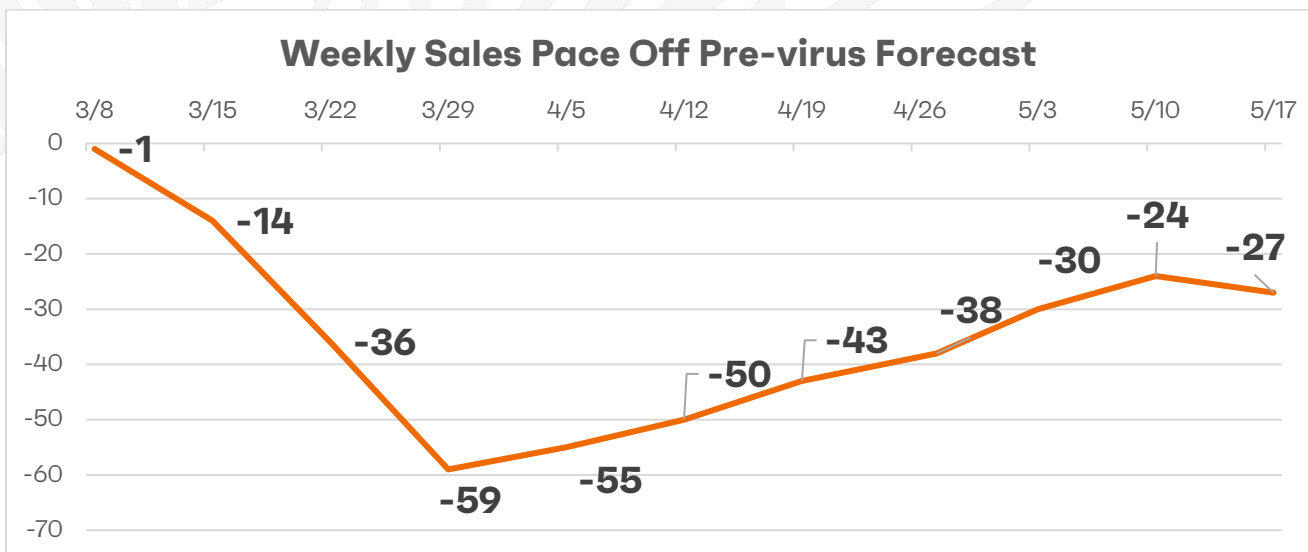
After six weeks of consecutive growth, the industry recovery paused for the week ending May 17.

The top 5 segments (60% of 2019's retail sales) fell 26% in week ending May 17, a 4-percentage point decline from last week. Recovery paused across most segments and pickups exhibited a decline.

Incentives hit record levels at over \$5,000 per unit during the week ending May 3rd. Week-over-week decreases in the week ending May 10 were driven by vehicle mix and lower supported finance incentive mix. Spending remained roughly flat in the week ending May 17.

Fourteen percent of buyers during the week ending May 17 took an 84-month loan, down 4-percentage points from two weeks ago and 8-percentage points from peak levels. While still elevated, 84-month loans are now halfway back to pre-virus levels.

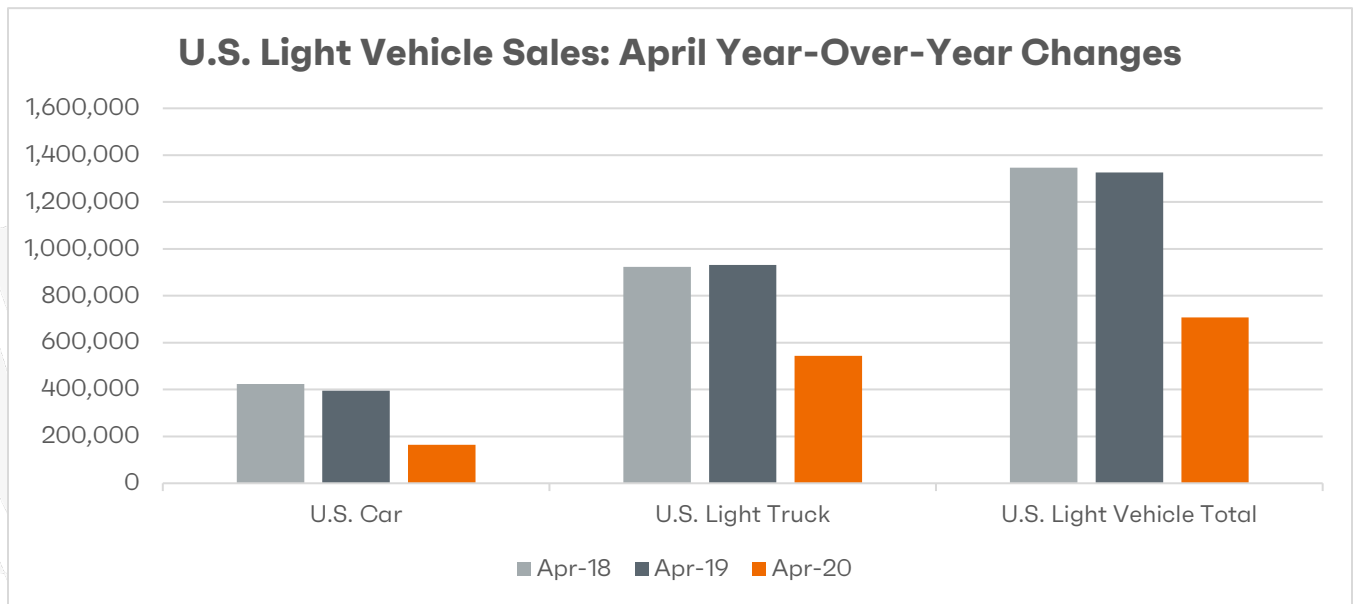
Twenty two percent of buyers during the week ending May 17 took a lease, the best weekly performance since mid-March, but still well below pre-virus levels. Many lessees who extended their leases have not yet returned to market, due to the monthly cadence of lease extensions.



Monthly Sales^{vii}

According to J.D. Power’s analysis, retail sales in April were 629,300 units, a decline vs. pre-virus forecast of 42% or 455,600 units.^{viii}

Year over year, April light vehicle sales are down 47% from 2019. The segment trend continues to favor light trucks over cars, with trucks capturing more three-quarters of the market (76.9%), and gaining nearly 5% market share over 2019, however the overall truck volume was down more than 387,000.



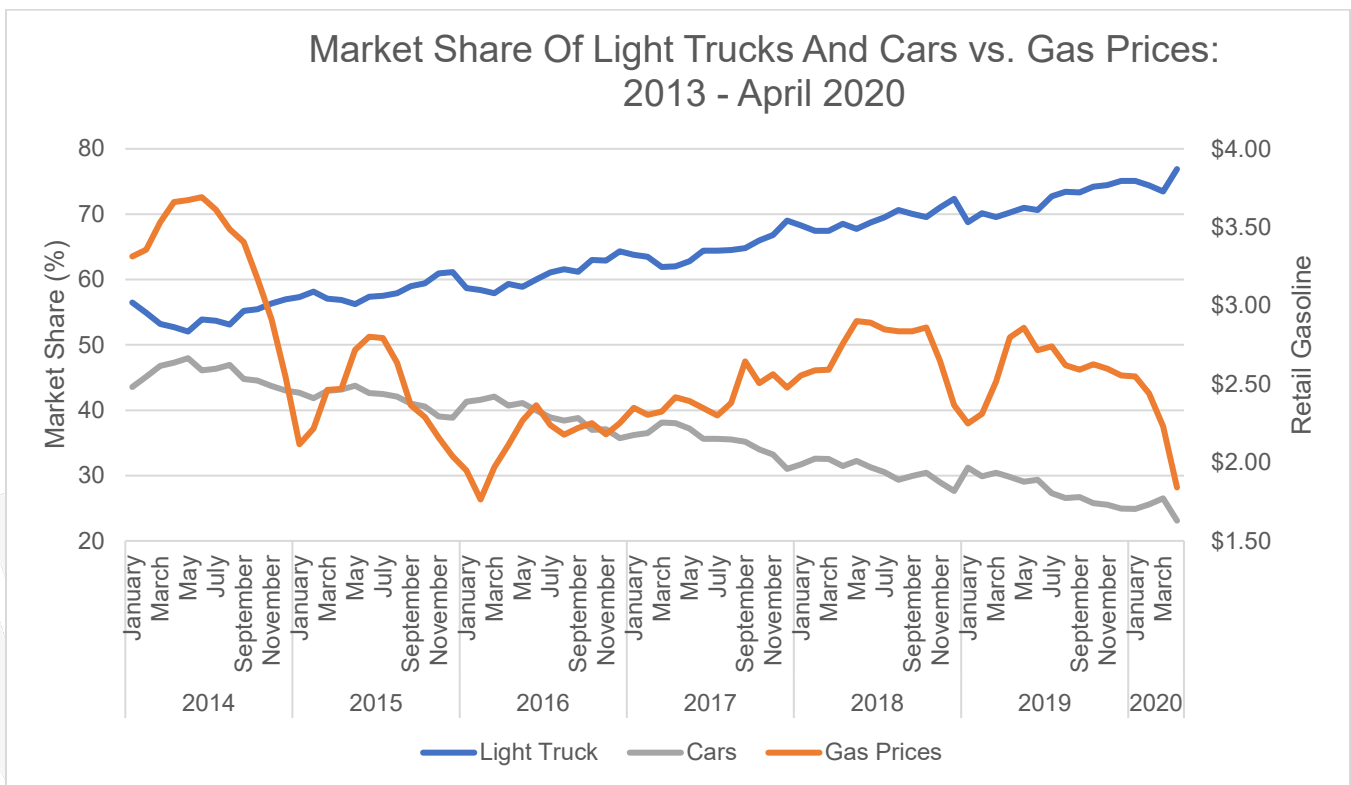
Segments vs. Gas Prices (Updated 5/20)

Monthly Sales For April: Light trucks accounted for nearly 77% of sales in April, a 3.5% gain in market share over March.

Additional Insight^{ix}: Following a strong performance in week ending May 10, Midsize Pickup matched light duty pickups against forecast. Light Duty Large Pickup declined vs. pre-virus forecast, likely due growing inventory constraints.

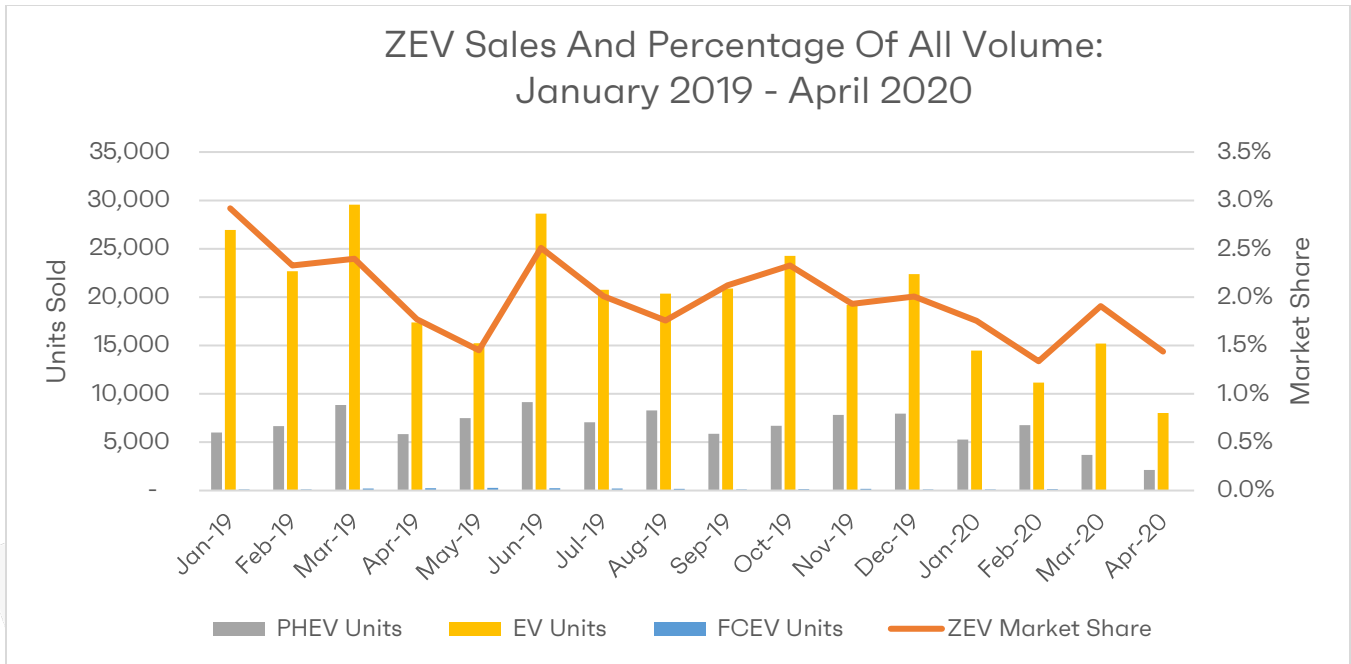
Historic Perspective: The upward trend in the popularity of light trucks over cars has been steady since 2013, when only 2% of annual market share separated the two segments^x and gas was over \$3.00^{xi} a gallon. As fuel prices dropped below the \$3.00 mark in mid-September 2014, light truck sales began to take off – and never looked back. Gas prices since have averaged only \$2.47 a gallon (through April 2020) and when combined with increased fuel economy for light trucks, an increase of 4 mpg since 2013^{xii}, the perfect conditions existed to continue fueling light truck market growth.

As gas prices are predicted to average only \$1.58 through the summer season^{xiii}, a further hit to the car segment is entirely possible.



ZEV Powertrain Sales (Updated 5/6)

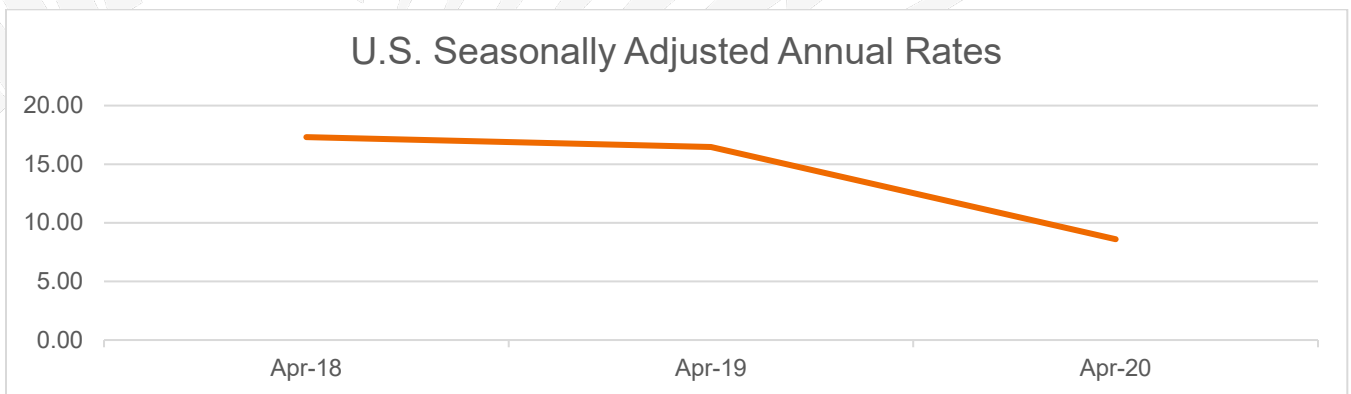
Sales of zero emission vehicles (BEV, PHEV, & Fuel Cell) accounted for only 1.4% of total vehicle sales in April 2020, down .4% from a year ago and .5% from March 2020. Sales of battery electric vehicles led the way for ZEVs accounting for 1.1%, but down from 1.31% in April 2019. Plug-in hybrids accounted for .3%, down .1% in market share, year-over-year.



Seasonally Adjusted Annual Rates (Updated 5/6)

“Current modeling pegs May-June at an 11 million-unit SAAR, which puts entire-Q2 at 10.0 million. The July-September period is forecast at 13 million units, followed by 14 million in Q4.”^{xiv}

“The seasonally adjusted annual rate totaled 8.6 million units, well above the 7-million SAAR sales appeared to be heading for at mid-month, and lowest for any month since 7.8 million in December 1970.”^{xv}

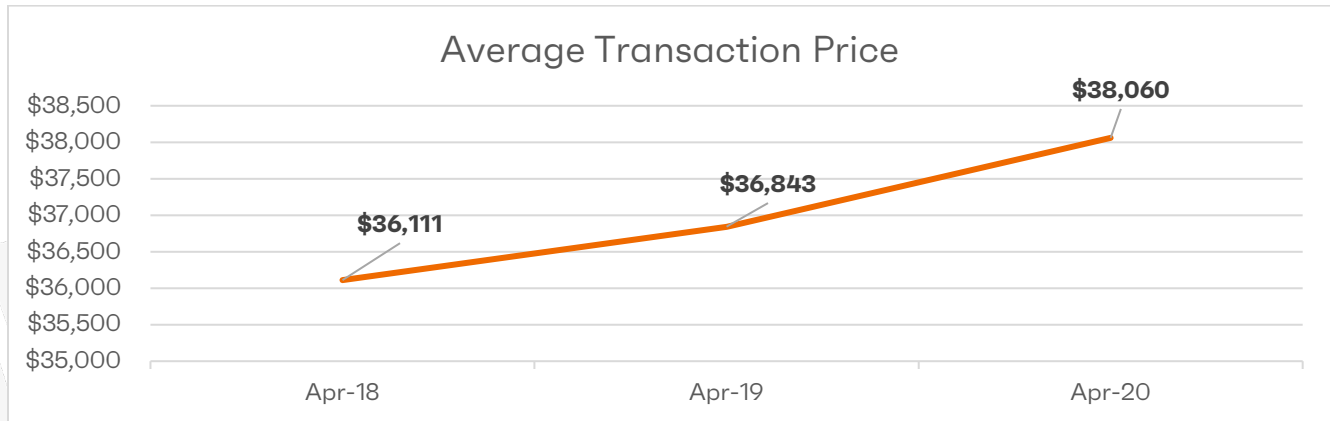


Average Transaction Price (Updated 5/20)

The average vehicle transaction price in April 2020, per Kelley Blue Book, was up 3% over April 2019, and 5.4% over April 2018.^{xvi}

Additional Insight From J.D. Power^{xvii}: “Transaction prices reached their highest-level on record at \$35,700 during the week ending April 05, but have since declined. Average transaction prices declined week-over-week in week ending May 17, with the variance driven largely by changes in segment mix and product mix within segments.

“Incentives hit record levels at over \$5,000 per unit during the week ending May 3rd. Week-over-week decreases in the week ending May 10 were driven by vehicle mix and lower supported finance incentive mix. Spending remained roughly flat in the week ending May 17.”



Auto Loan Financing (Updated 5/20)

Financing Down Nearly A Quarter Percent From The Beginning Of The Year. Financing for the week of May 13, 2020 dropped .01% after remaining unchanged over the past 5 weeks on the 60-month new car financing interest rate. Rates are down .24% since the beginning of the year. Rates have remained similarly stable on the 48 and 36-month used car loans over the past several weeks as well.^{xviii}

Additional Insight From J.D. Power: “Captive lenders captured 72.9% of loans and leases in week ending May 17, up from the previous week.”^{xix}

Auto Loan Financing			
Dates	60-month new car	48-month new car	36-month used car
5/13/2020	4.36%	4.34%	4.74%
5/6/2020	4.37%	4.35%	4.75%
4/29/2020	4.37%	4.35%	4.75%
4/22/2020	4.37%	4.35%	4.75%
4/15/2020	4.37%	4.35%	4.75%
4/8/2020	4.37%	4.35%	4.75%
4/1/2020	4.42%	4.39%	4.89%
3/25/2020	4.42%	4.38%	4.90%
3/18/2020	4.43%	4.39%	4.91%

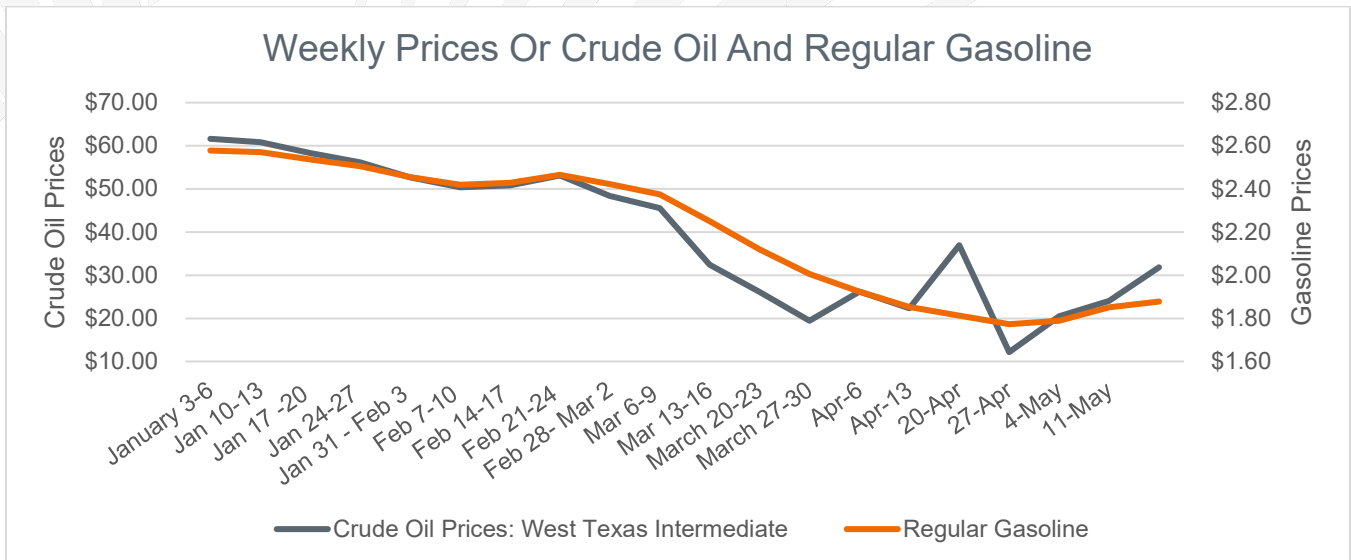
3/11/2020	4.46%	4.42%	4.95%
3/4/2020	4.49%	4.45%	4.98%
2/26/2020	4.56%	4.51%	5.02%
1/2/2020	4.60%	4.55%	5.10%
5/15/2019	4.75%	4.71%	5.25%
One Week Change	0.01%	0.01%	0.01%
Two Week Change	0.01%	0.01%	0.01%
Change since 1/3/20	-0.24%	-0.21%	-0.36%
One Year Change	-0.39%	-0.37%	-0.51%

Crude Oil and Gas Prices (Updated 5/20)

Oil Forecasts For The Year Down More Than A Million Barrels A Day. “The U.S. cut its 2020 oil production forecast by more than 1 million barrels a day, as collapsing crude prices and plummeting demand threaten to shutter production in the country’s biggest fields. Production is expected to average 11.76 million barrels a day through December, down from a previous forecast of 12.99 million barrels, the Energy Information Administration said on Tuesday.”^{xx}

Retail Gas Forecast To Average \$1.58 For The Summer Driving Season. “For the April–September 2020 summer driving season, EIA forecasts U.S. regular gasoline retail prices will average \$1.58 per gallon (gal), down from an average of \$2.72/gal last summer”^{xxi}

Oil And Gas Remain Low: Oil prices, as benchmarked at West Texas Intermediate, as well as gasoline prices, both continued their slight rebound. For the week beginning May 18, Oil was up to nearly \$32 while gas was \$1.88. Since the start of the year, crude oil has fallen 48%, while gas prices has fallen 27%^{xxii}

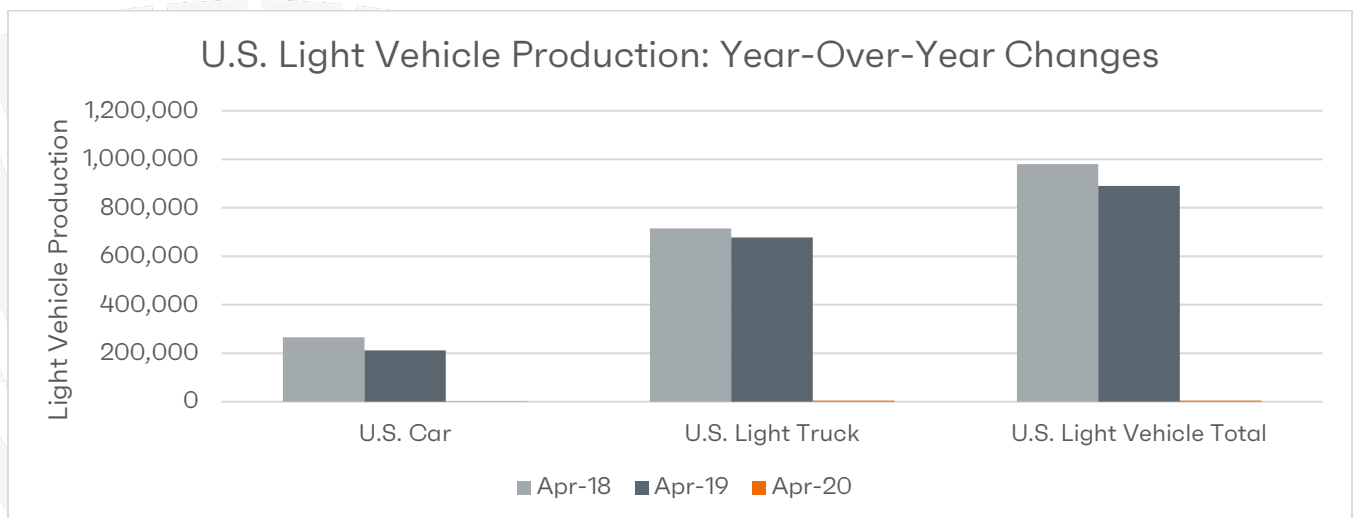


Production Meter

U.S. Light Vehicle Production^{xxiii} (Updated 5/20)

U.S. Light vehicle production dropped 99.47% year-over-year in April. Only General Motors, Mercedes-Benz and Hyundai produced any vehicles in the U.S. during the month, for a light vehicle total of less than 5,000 (897 cars; 3,844 light trucks).

“North America light-vehicle production shrank 99.4% to 8,463 units in April, with most plants closed the entire month to slow the spread of the coronavirus. . . . Closures in the region began at the end of March, leaving the year-to-date tally down 32.2% at 3,772,027 LVs. It was the lowest 4-month total since 2009’s 2,341,925.”



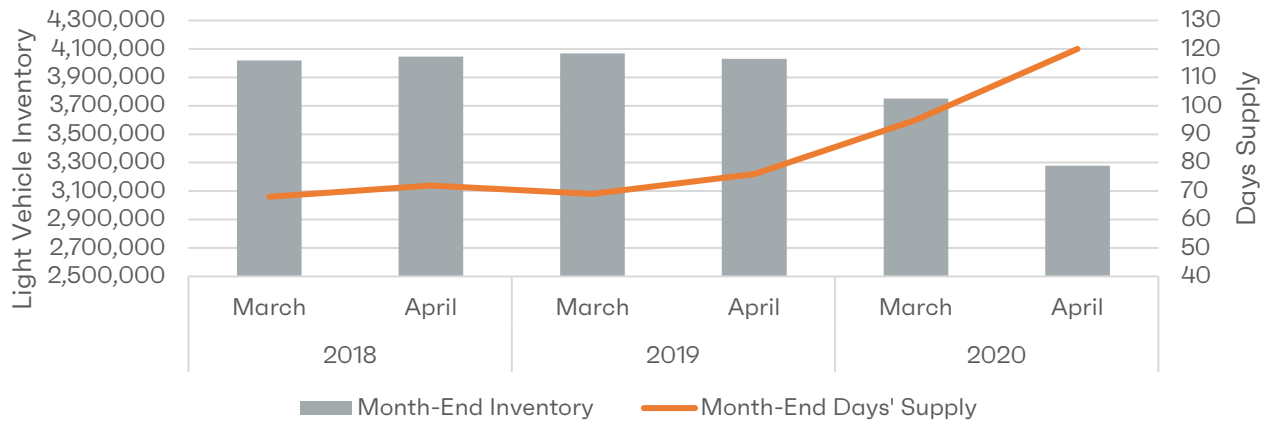
U.S. Light Vehicle Inventory and Days' Supply^{xxiv} (Updated 5/6)

April Inventory Status: “Stronger than expected sales in April, combined with even lower production for the market than initially estimated, capped U.S. light-vehicle inventory at a 120 days’ supply on April 30. . . .Raw inventory on April 30 totaled 3.3 million units, lowest for the month since 2013, and 18.7% below like-2019’s 4.0 million. Based on outlooks for sales and production for the U.S. market, the initial model for May shows inventory falling below 3 million units for the first time since August 2013. The total is expected to range between 2.9 million and 3.1 million through the end of September.

“Days’ supply is expected to decline to a level in the 80s at the end of May and continue falling until August with a total in the mid-60s.”

The three-year range in the chart below reflects the steep drop in inventory due to auto plant closures for last the 7 weeks despite a drop in sales of 38% during that time frame.

U.S. Light Vehicle Inventory & Days' Supply: Year-Over-Year Changes



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- ⁱ WardsIntelligence, “U.S. Light Vehicle Sales, March,” 4/1/2020; WardsIntelligence, “U.S. Light vehicle Sales, April,” 5/1/2020
- ⁱⁱ Haig Stoddard, “COVID-19 Impact Will Tank March, Second-Quarter U.S. Light-Vehicle Sales,” *WardsIntelligence*, 3/25/20; Haig Stoddard, “March 25 COVID-19 Update: 2020 North America Production, U.S. Sales Forecasts,” *WardsIntelligence*, 3/30/20
- ⁱⁱⁱ Haig Stoddard, “COVID-19’s Toll on North America Vehicle Production in March, Q2,” *WardsIntelligence*, 3/30/20
- ^{iv} Haig Stoddard, “U.S. Sales Outlook Brightens Slightly for 2020-2021 But Still a Lot of Uncertainty as to How the Recovery Ultimately Plays Out,” *WardsIntelligence*, 5/18/20
- ^v IHS Markit, “North America Production Update Short-term implications of COVID-19,” 5/18/2020
- ^{vi} J.D. Power, Presentation, “COVID-19: J.D. Power Auto Industry Impact Report,” 5/20/20
- ^{vii} WardsIntelligence, “U.S. Light Vehicle Sales, April 2020,” 5/1/20; WardsIntelligence, “U.S. Light Vehicle Sales, April 2018, 5/1/18
- ^{viii} J.D. Power, Presentation, “COVID-19: J.D. Power Auto Industry Impact Report,” 5/6/20
- ^{ix} J.D. Power, Presentation, “COVID-19: J.D. Power Auto Industry Impact Report,” 5/20/20
- ^x WardsIntelligence, U.S. Light Vehicle Sales, January 2013 – December 2019
- ^{xi} U.S. Energy Information Administration, Weekly Retail Gasoline and Diesel Prices, Regular price per gallon, including taxes
- ^{xii} WardsIntelligence, Fuel Economy Index, December 2013 & 2019
- ^{xiii} U.S. Energy Information Administration, Press Release, “Short-Term Energy Outlook,” 4/7/20
- ^{xiv} Haig Stoddard, “Unexpectedly Strong Demand in April Helps Accelerate Inventory Decline,” *WardsIntelligence*, 4/4/20
- ^{xv} Haig Stoddard, “April U.S. Light-Vehicle Sales Record Decades-Long Low, But Results Were Stronger Than Expected,” *WardsIntelligence*, 5/1/20
- ^{xvi} Kelley Blue Book, Press Release, “Average New-Vehicle Prices Up Nearly 3% Year-Over-Year in March 2020, Despite COVID-19 Impact on the Economy, According to Kelley Blue Book,” 4/1/20; Kelley Blue Book, Press Release, “Average New-Car Prices Jump 2 Percent for March 2018 on SUV Sales Strength, According to Kelley Blue Book,” 4/3/18
- ^{xvii} J.D. Power, Presentation, “COVID-19: J.D. Power Auto Industry Impact Report,” 5/20/2020
- ^{xviii} Bankrate, “[Current Car Loan Interest Rates](#),” Accessed 5/20/20; Internet Archive, Bankrate, “Current Car Loan Interest Rates, cached image from July 24, 2019
- ^{xix} J.D. Power, Presentation, “COVID-19: J.D. Power Auto Industry Impact Report,” 5/20/20
- ^{xx} Stephen Cunningham, “U.S. Slashes 2020 Oil-Output Forecast Ahead of OPEC+ Meeting,” *Bloomberg*, 4/7/20
- ^{xxi} U.S. Energy Information Administration, Press Release, “Short-Term Energy Outlook,” 4/7/20
- ^{xxii} U.S. Energy Information Administration, Regular Conventional Gasoline, https://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_nus_m.htm, Accessed 5/20/20; U.S. Energy Information Administration, Weekly Cushing, OK WTI Spot Price, <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RWTC&f=W>, Accessed 4/6/20; YCharts, https://ycharts.com/indicators/wti_crude_oil_spot_price, Accessed 5/20/20
- ^{xxiii} Sarah Petit, “North America Light-Vehicle Production All But Stopped in April,” *WardsIntelligence*, 5/19/2020
- ^{xxiv} Haig Stoddard, “Unexpectedly Strong Demand in April Helps Accelerate Inventory Decline,” *WardsIntelligence*, 4/4/20
- ^{xxv} WardsIntelligence, “U.S. Light Vehicle Inventory, March 2020,” 4/2/2020; WardsIntelligence, “U.S. Light Vehicle Inventory, April 2018,” 5/3/18