

READING THE METER

May 6, 2020

Contents

Forecast Meter.....	1
Forecast Summary (Updated 5/6).....	1
U.S. Light Vehicle Sales Outlook (Updated 5/6).....	2
North American Production Outlook (Updated 4/29).....	2
Work Stoppage Meter.....	3
North American Assembly Facility Operating Status (Updated 5/6).....	3
Market Meter.....	4
U.S. Light Vehicle Sales (Updated 5/6).....	4
Segments vs. Gas Prices (Updated 5/1).....	5
ZEV Powertrain Sales (Updated 5/6).....	6
Seasonally Adjusted Annual Rates (Updated 5/6).....	7
Average Transaction Price (Updated 5/6).....	7
Auto Loan Financing (Updated 5/6).....	8
Crude Oil and Gas Prices (Updated 5/6).....	8
Production Meter.....	9
U.S. Light Vehicle Production (Updated 4/22).....	9
U.S. Light Vehicle Inventory and Days' Supply (Updated 5/6).....	10

Forecast Meter

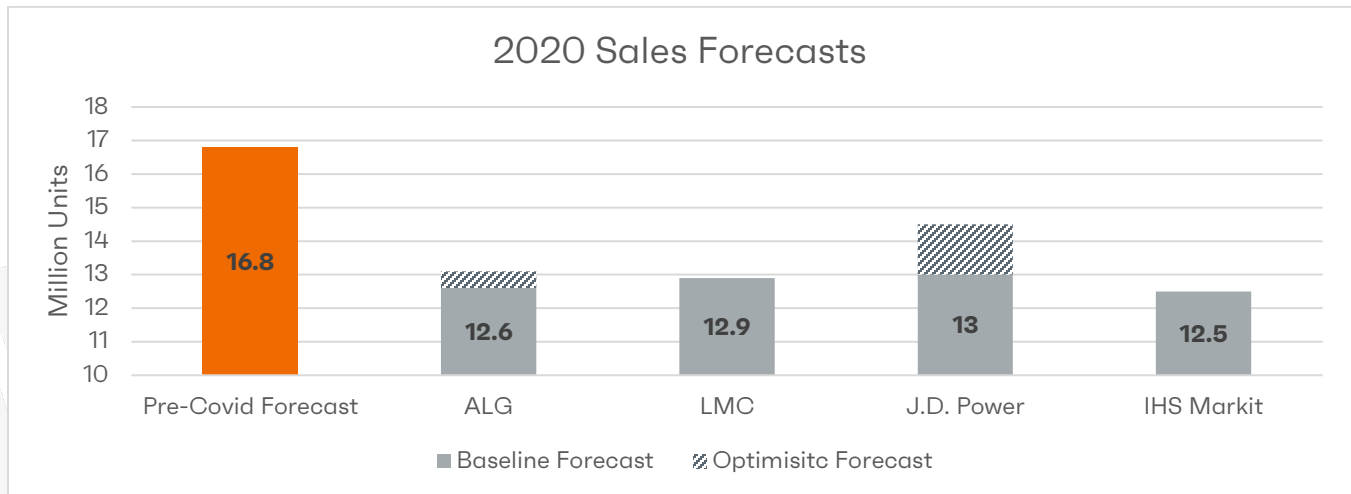
Forecast Summary (Updated 5/6)

2020 March & April Sales,ⁱ Extended Sales Forecastⁱⁱ and Production Forecastsⁱⁱⁱ

	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)

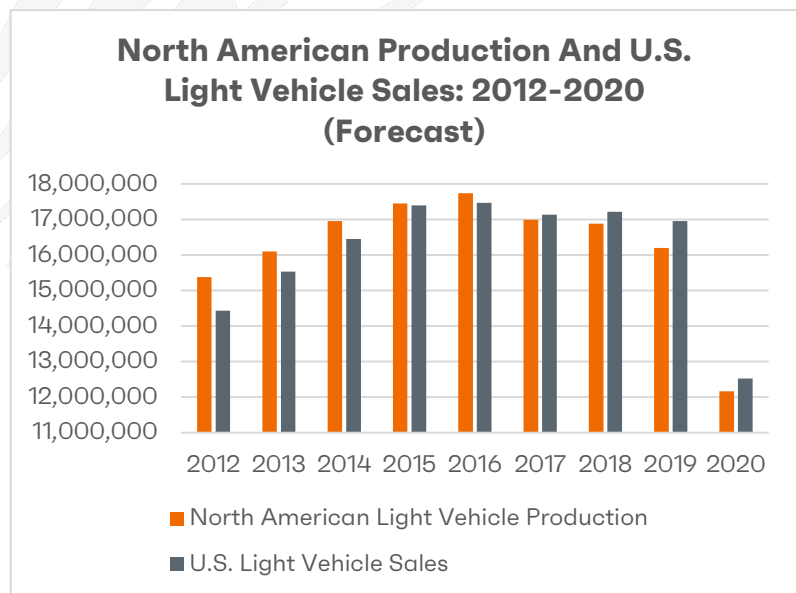
U.S. Light Vehicle Sales Outlook (Updated 5/6)

J.D. Power Forecast: The retail sales forecast for May is 0.9-1.5 million, a 15% to 31% decline from the pre-virus forecast. The virus is projected to remove 0.9-1.5 million sales over the five months of March - July. The 2020 calendar year total sales are forecast in the range of 13.0-14.5 million vs baseline of 16.8 million.



North American Production Outlook (Updated 4/29)^{iv}

North America Production: The outlook for North American light vehicle production was reduced by 1,922,000 units and 1,057,000 units for 2020 and 2021, respectively (and reduced by 231,000 units for 2022). The forecast reductions stem primarily from further deterioration in economic fundamentals relating to the COVID-19 crisis and its impacts on US auto sales. The 2020 forecast now reflects a nine-week shutdown across North America with production for most plants expected to resume beginning the week of May 18. The estimated loss of production due to COVID-19 related shutdowns spanning the forecasted nine weeks totals 2.75 million units. Production in April 2020 is projected at roughly 4,300 units, marking the lowest monthly production level since 1945 following the end of World War II. Production is expected to return at a gradual pace with reduced shifts and



continue to ramp-up through 2Q-2020. Concern surrounds several Midwest and US South states that lagged in implementing “stay-at-home” orders which may result in production restarting at later dates. Further, despite restarting production, the forecast reflects manufacturers utilizing summer shutdowns to assess inventory and demand. The downtime will also allow manufacturers to make additional adjustments at plants to ensure worker safety while also resuming maintenance and retooling efforts where needed.

Work Stoppage Meter

North American Assembly Facility Operating Status (Updated 5/6)

There are currently five assembly plants that have reopened, 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.

Most OEM’s have announced a restart date to be up and running by mid-May for the U.S., though dates continue to change as situations warrant.

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

North American Assembly Facilities (5-6-20)			
Country	Metric	Number	Percent of totals
U.S.	U.S. Employment	176,070	
	Closed 5/6/2020	155,319	88%
	Number of plants total	44	
	Number of plants Closed 5/6/2020	39	89%
Mexico	Mexico Employment	70,665	
	Closed 5/6/2020	70,665	100%
	Number of plants total	18	
	Number of plants Closed 5/6/2020	18	100%
Canada	Canada Employment	31,626	
	Closed 5/6/2020	31,626	100%
	Number of plants total	7	
	Number of plants Closed 5/6/2020	7	100%
North America	Total Employment	278,361	
	Closed 5/6/2020	257,610	93%
	Number of plants total	69	
	Number of plants Closed 5/6/2020	64	93%

*Assumes full employment at open plants

Market Meter

U.S. Light Vehicle Sales (Updated 5/6)

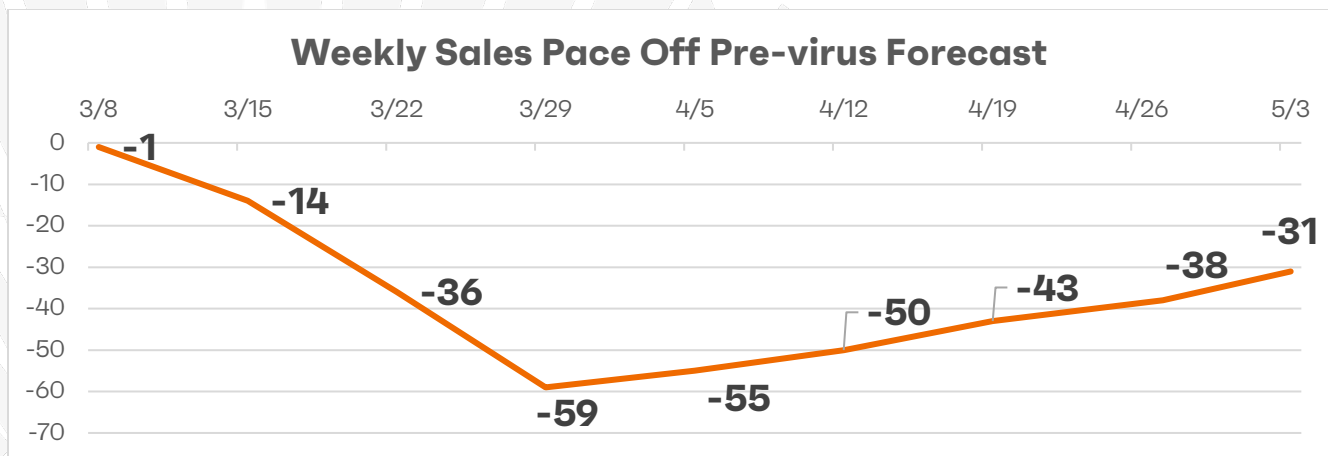
Weekly Sales^v

J.D. Power Weekly Update: For the week ending May 3, sales are down 31% or 99,000 units. This is now the 5th straight week of improved sales.

Volume grew in all top 25 markets last week, and all major markets are improving on a weekly basis. Dallas is only off 1% from expectations.

The top 5 segments (60% of 2019's retail sales) are down 29% for the week, a 9-percentage point improvement from last week.

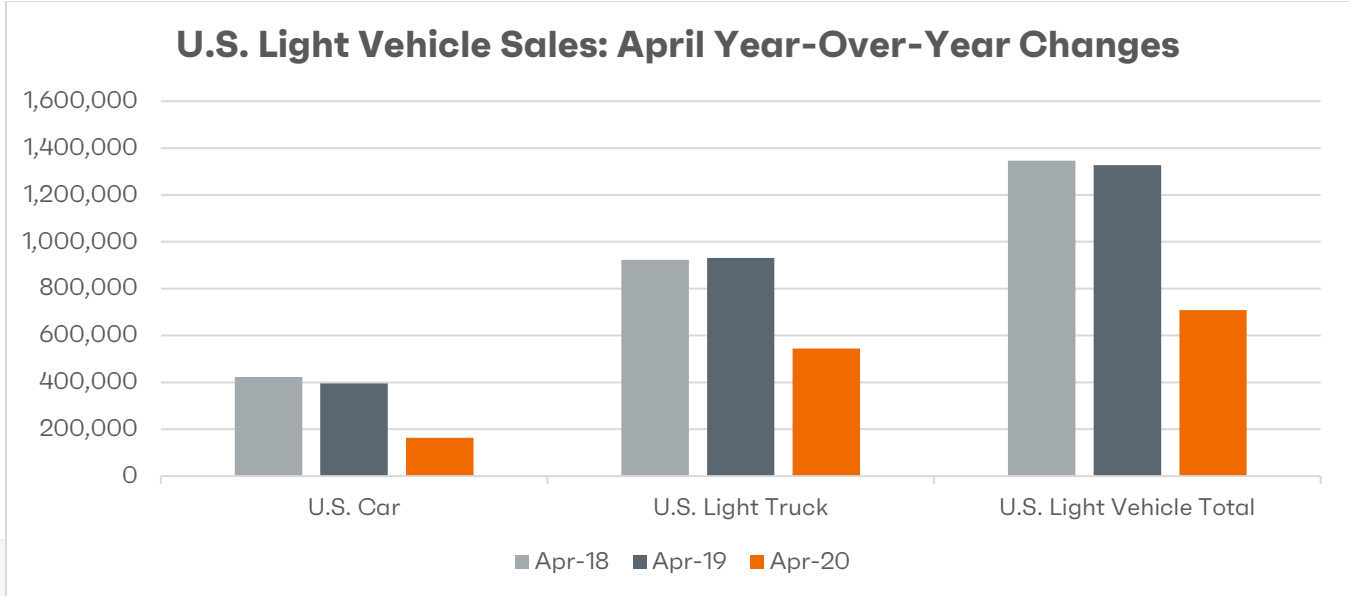
Average incentives hit record levels at over \$5,000 per unit during the week ending May 3.



Monthly Sales^{vi}

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.^{vii}

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.



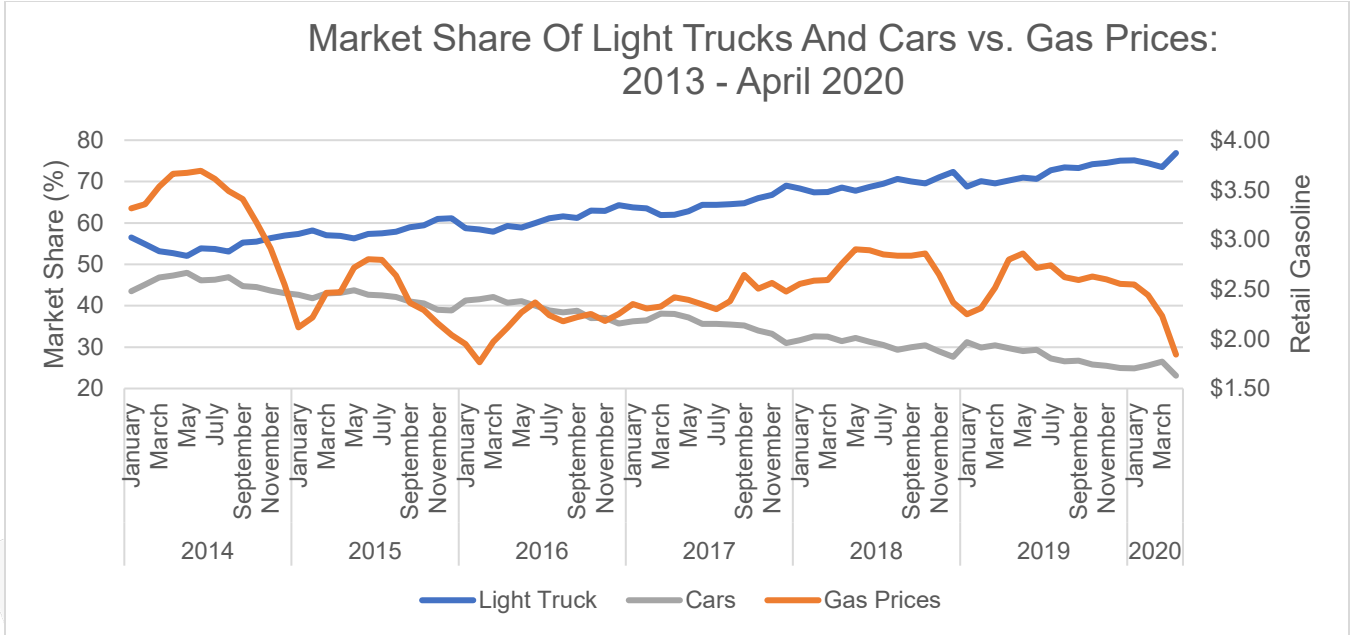
Segments vs. Gas Prices (Updated 5/1)

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 ^{viii}: All major segments are showing improvements in recovery. Large pickup trucks are only off 1% from expected sales; all three major SUV categories have improved for three straight weeks – gaining between 7-10 percentage points in sales improvements

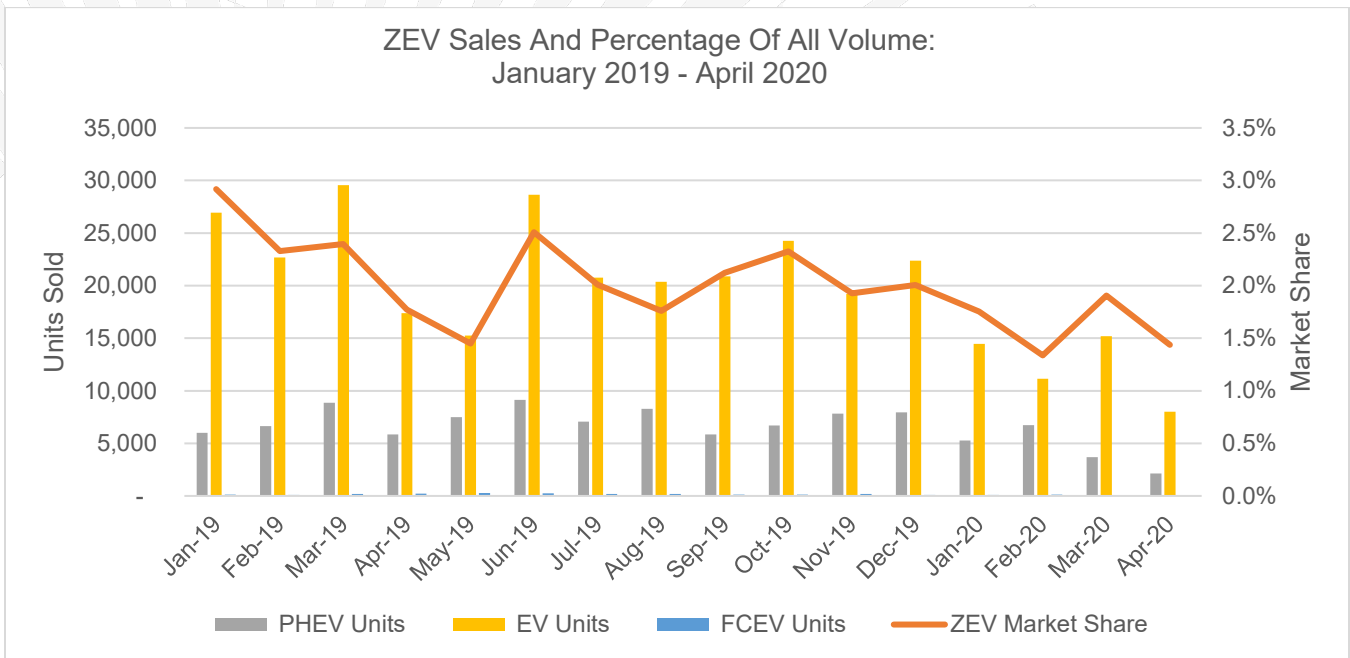
Historic Perspective: The upward trend in the popularity of light trucks over cars has been steady since 2013, when only 2% of annual market share separated the two segments ^{ix} and gas was over \$3.00^x a gallon. As fuel prices dropped below the \$3.00 mark in mid-September 2014, light truck sales 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^{xi}, 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 ^{xii}, a further hit to the car segment is entirely possible.



ZEV Powertrain Sales (Updated 5/6)

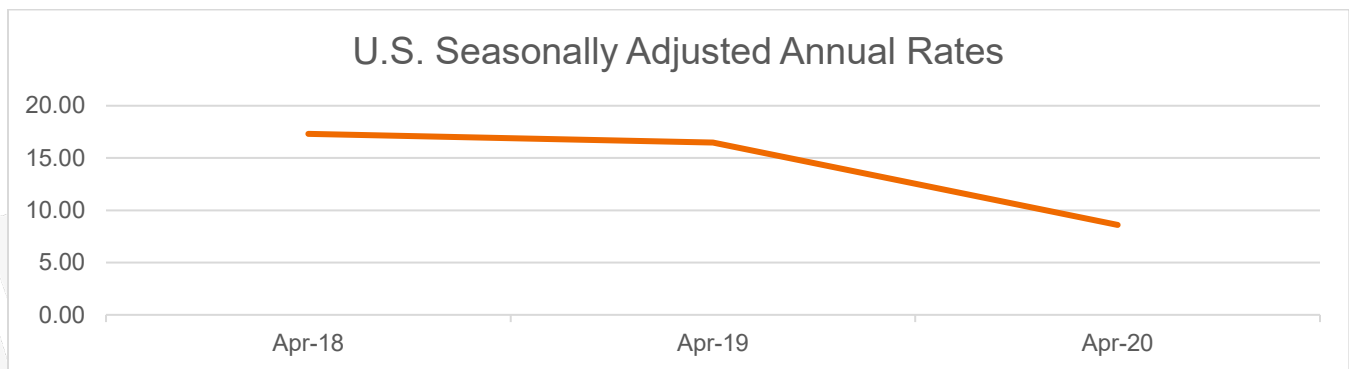
Sales of zero emission vehicles (BEV, PHEV, & Fuel Cell) accounted for only 1.4% of total vehicle sales in April 2020, down .4% from a year ago and .5% from March 2020. Sales of battery electric vehicles led the way for ZEVs accounting for 1.1%, but down from 1.31% in April 2019. Plug-in hybrids accounted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

“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.”^{xiv}

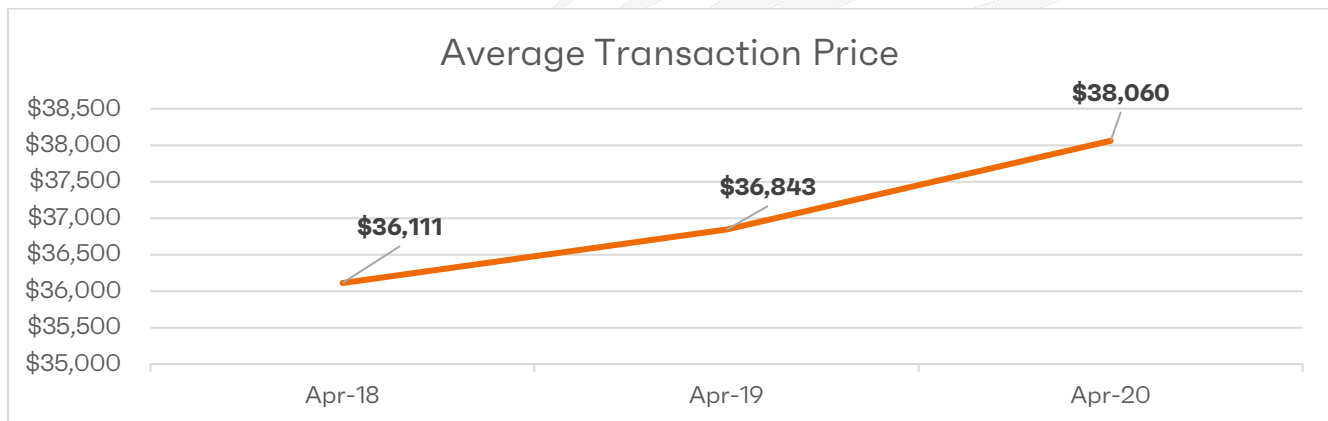


Average Transaction Price (Updated 5/6)

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

Additional Insight From J.D. Power^{xvi}: “Incentives hit record levels at over \$5,000 per unit during the week ending May 3. Week-over-week increases were driven by higher premium share and lease mix.

“Extended term offers are the primary driver of the recent rapid escalation of incentives. Discounts for cash and lease customers have not yet risen to match the escalation available to finance customers. A key variable for the coming weeks and months will be the extent to which manufacturers maintain the current strategy vs. escalating cash and lease incentives.”



Auto Loan Financing (Updated 5/6)

Financing Down Nearly A Quarter Percent Year-Over-Year. Financing for the week of April 29, 2020 was unchanged over the past two weeks on the 60-month new car financing interest rate, and down .23% since the beginning of the year. Rates remained stable on the 48 and 36-month used car loans over the past two weeks as well.^{xvii}

Additional Insight From J.D. Power: “Captive lenders captured 77% of loans and leases in week ending May 3, the highest level in recent history. Higher captive mix is due to supported 84-month loans from the Detroit 3 and continued rebound in leasing across most SUV & pickup segments.”^{xviii}

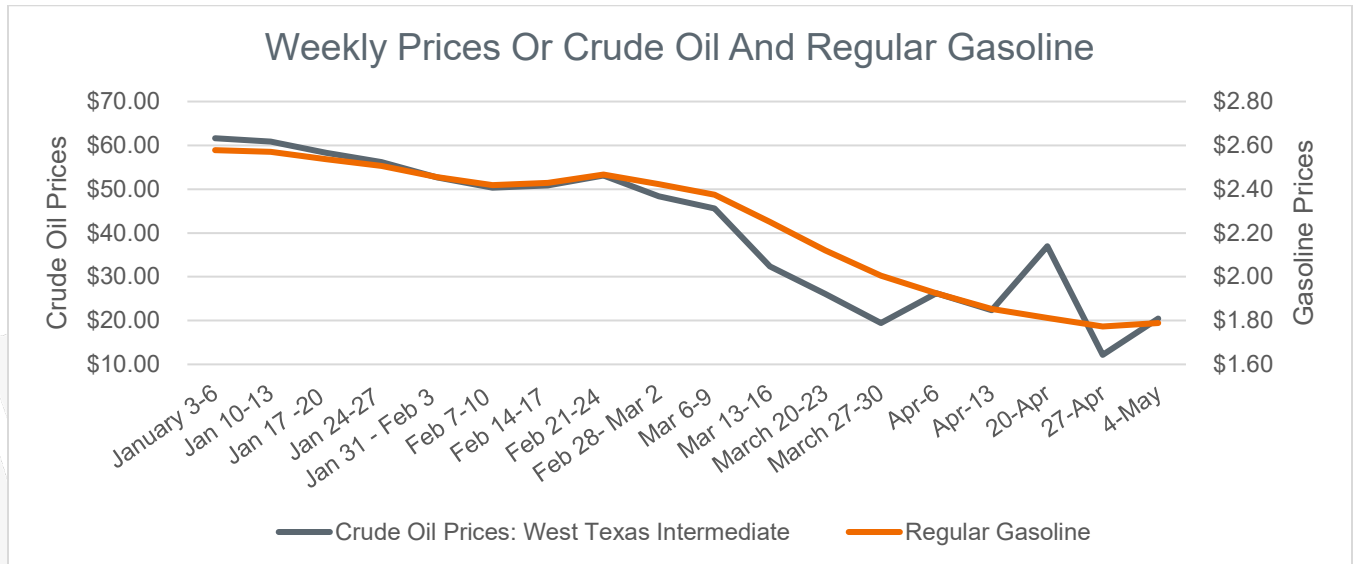
Auto Loan Financing			
Dates	60-month new car	48-month new car	36-month used car
4/29/2020	4.37%	4.35%	4.75%
4/22/2020	4.37%	4.35%	4.75%
4/15/2020	4.37%	4.35%	4.75%
4/8/2020	4.37%	4.35%	4.75%
4/1/2020	4.42%	4.39%	4.89%
3/25/2020	4.42%	4.38%	4.90%
3/18/2020	4.43%	4.39%	4.91%
3/11/2020	4.46%	4.42%	4.95%
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%
4/10/2019	4.75%	4.70%	5.33%
One Week Change	0.00%	0.00%	0.00%
Two Week Change	0.00%	0.00%	0.00%
Change since 1/3/20	-0.23%	-0.20%	-0.35%
One Year Change	-0.38%	-0.35%	-0.58%

Crude Oil and Gas Prices (Updated 5/6)

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.”^{xix}

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”^{xx}

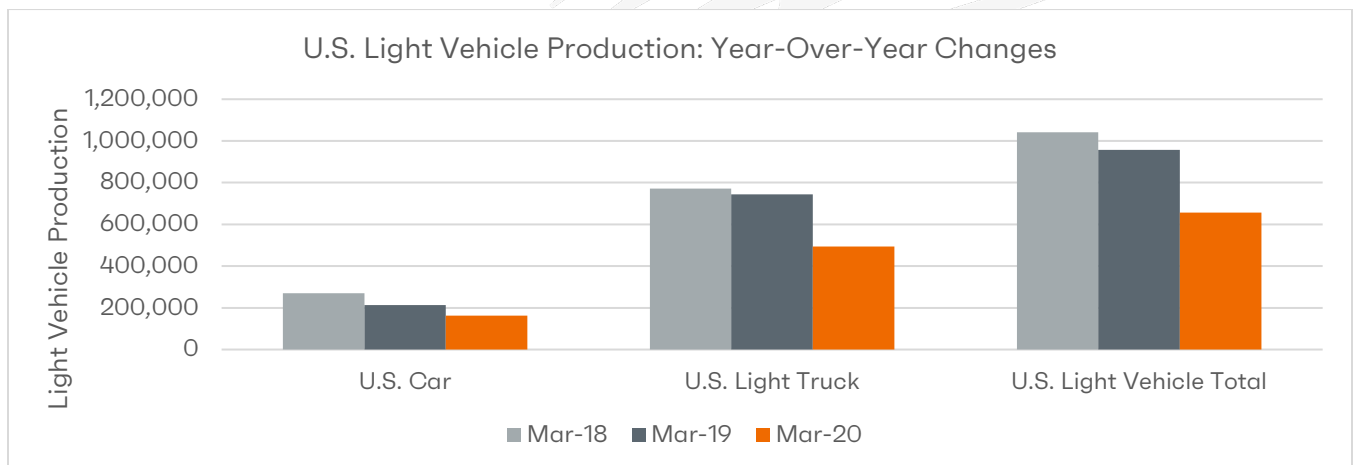
Oil And Gas Remain Low: Oil prices, as benchmarked at West Texas Intermediate, continued their volatility. After hitting \$12.17 on April 27, prices rose to \$20 for May 4. The fall in gasoline prices have steadily declined, but seemingly plateaued in the past week, with prices raising for the first time since March. Since the start of the year, crude oil has fallen 67%, while gas prices, regular conventional blend, has fallen 31%.^{xxi}



Production Meter

U.S. Light Vehicle Production (Updated 4/22)

As light vehicle production shutdown across the country through the month of March, car production dropped nearly a quarter, truck production fell a third, and overall light vehicles were down 31% over March 2019.^{xxii}

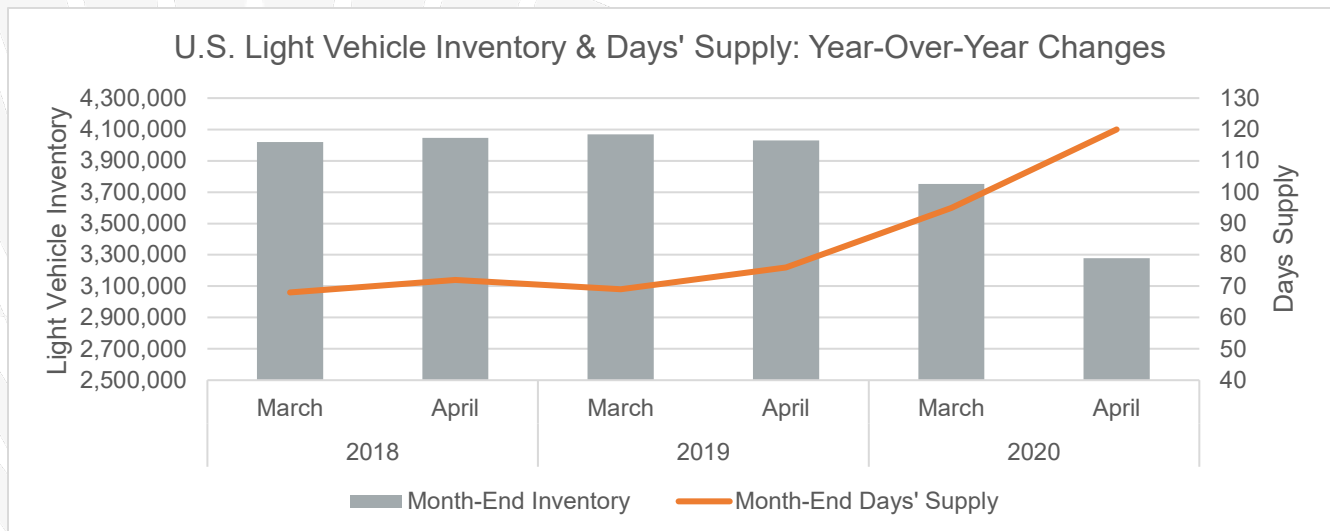


U.S. Light Vehicle Inventory and Days' Supply^{xxiii} (Updated 5/6)

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.



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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} IHS Markit, “Monthly Automotive Update - April 2020 *2nd Update*,” 4/27/2020
- ^v J.D. Power, Presentation, “COVID-19: J.D. Power Auto Industry Impact Report,” 5/6/20
- ^{vi} WardsIntelligence, “U.S. Light Vehicle Sales, April 2020,” 5/1/20; WardsIntelligence, “U.S. Light Vehicle Sales, April 2018, 5/1/18
- ^{vii} J.D. Power, Presentation, “COVID-19: J.D. Power Auto Industry Impact Report,” 5/6/20
- ^{viii} J.D. Power, Presentation, “COVID-19: J.D. Power Auto Industry Impact Report,” 5/6/20
- ^{ix} WardsIntelligence, U.S. Light Vehicle Sales, January 2013 – December 2019
- ^x U.S. Energy Information Administration, Weekly Retail Gasoline and Diesel Prices, Regular price per gallon, including taxes
- ^{xi} WardsIntelligence, Fuel Economy Index, December 2013 & 2019
- ^{xii} U.S. Energy Information Administration, Press Release, “Short-Term Energy Outlook,” 4/7/20
- ^{xiii} Haig Stoddard, “Unexpectedly Strong Demand in April Helps Accelerate Inventory Decline,” *WardsIntelligence*, 4/4/20
- ^{xiv} Haig Stoddard, “April U.S. Light-Vehicle Sales Record Decades-Long Low, But Results Were Stronger Than Expected,” *WardsIntelligence*, 5/1/20
- ^{xv} 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
- ^{xvi} J.D. Power, Presentation, “COVID-19: J.D. Power Auto Industry Impact Report,” 5/6/2020
- ^{xvii} Bankrate, “[Current Car Loan Interest Rates](#),” Accessed 4/22/20; Internet Archive, Bankrate, “Current Car Loan Interest Rates, cached image from July 24, 2019
- ^{xviii} J.D. Power, Presentation, “COVID-19: J.D. Power Auto Industry Impact Report,” 5/6/20
- ^{xix} Stephen Cunningham, “U.S. Slashes 2020 Oil-Output Forecast Ahead of OPEC+ Meeting,” *Bloomberg*, 4/7/20
- ^{xx} U.S. Energy Information Administration, Press Release, “Short-Term Energy Outlook,” 4/7/20
- ^{xxi} U.S. Energy Information Administration, Regular Conventional Gasoline, https://www.eia.gov/dnav/pet/pet_pri_gnd_dcus_nus_m.htm, Accessed 5/6/20; U.S. Energy Information Administration, Weekly Cushing, OK WTI Spot Price, <https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=RWTG&f=W>, Accessed 4/6/20; YCharts, https://ycharts.com/indicators/wti_crude_oil_spot_price, Accessed 5/6/20
- ^{xxii} WardsIntelligence, “North America Production,” 4/21/20; WardsIntelligence, “North America Production, March 2018,” 4/19/18
- ^{xxiii} Haig Stoddard, “Unexpectedly Strong Demand in April Helps Accelerate Inventory Decline,” *WardsIntelligence*, 4/4/20
- ^{xxiv} WardsIntelligence, “U.S. Light Vehicle Inventory, March 2020,” 4/2/2020; WardsIntelligence, “U.S. Light Vehicle Inventory, April 2018,” 5/3/18