ALLIANCE FOR AUTOMOTIVE INNOVATION

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# READING THE METER

*A Look Inside A Cleaner, Safer, Smarter Auto Industry.*

June 9, 2021

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# Forecast Meter

## Forecast Summary (Updated 6/3)

| 2020-2021 Sales,[1] Extended Sales Forecast[2] and Production Forecasts[3] | | |
|---|---|---|
| | **U.S. Sales & Forecasts** | **North American Production** |
| **June '20** | 1,103,791 (-24% YoY) | 743,216 (-17% YoY) |
| **July '20** | 1,227,091 (-12.1% YoY) | 1,261,884 (+2.2% YoY) |
| **August '20** | 1,325,144 (-19.1% YoY) | 951,983 (-1.1% YoY) |
| **September '20** | 1,344,310 (6.4% YoY) | 1,395,830 (+2.1% YoY) |
| **October '20** | 1,345,401 (0.9% YoY) | 1.413.207 (+3.7% YoY) |
| **November '20** | 1,193,180 (-15.4% YoY) | 1,260,763 (-6.4% YoY) |
| **December '20** | 1.608.875 (5.9% YoY) | 1,115,542 (+2.8% YoY) |
| **January '21** | 1,094,689 (-3.6% YoY) | 1,175,940 (-14.0% YoY) |
| **February '21** | 1,180,506 (-5.3% YoY) | 1,120,200 (-22.9% YoY) |
| **March '21** | 1,581,067 (+59.7% YoY) | 1,376,904 (31% YoY) |
| **April '21** | 1,512,186 (+111.4 YoY) | 1,094,891 (-21% YoY) |
| **May '21** | 1,577,941 (+41% YoY) | |
| **1st Quarter '20** | 3,476,512 (-12.7% YoY) | 3,754,533 (-11.7% YoY) |
| **2nd Quarter '20** | 2,948,410 (-33.3% YoY) | 1,371,420 (-67.6% YoY) |
| **3rd Quarter'20** | 3,904,539 (-9.2% YoY) | 3,989,982 (-.5% YoY) |
| **4th Quarter'20** | 4,159,622 (-2.1% YoY) | 3,789,512 (-2.5% YoY) |
| **1st Quarter '21** | 3,869,872 (+11.3 YoY) | 3,688,512 (-4.7% YoY) |
| **2020 Calendar Year** | 14,463,935 (-14.7% YoY) | 12,905,447 (-23.1%) |
| **2021 Full Year Estimate** | 17 million units (17.5% YoY) | 15.8 million units (22.7% YoY) |

## U.S. Light Vehicle Sales Outlook (Updated 6/3)

**Wards Intelligence Outlook[4]:** "Although May's results were above expectations, and still a healthy total, they indicate U.S. market volume likely will remain crimped – and probably get worse before starting to improve - until automakers can resume full production. The global microchip shortage still is causing production stoppages and slowdowns, and not likely to significantly improve until this summer. Even then, supply shortages for the automotive industry are expected to continue at some level through the end of the year, with North America likely bearing the brunt."

**J.D. Power June Outlook[5]:** ""Looking forward to June, with sales continuing to outpace production in aggregate, falling inventory levels may start to put pressure on the current sales pace. However, based on what we have seen so far, retailers may continue to adapt by turning inventory more quickly to maintain sales velocity. However, regardless of inventory position, manufacturers and retailers will continue to benefit from strong consumer demand and a higher profit per unit sold."

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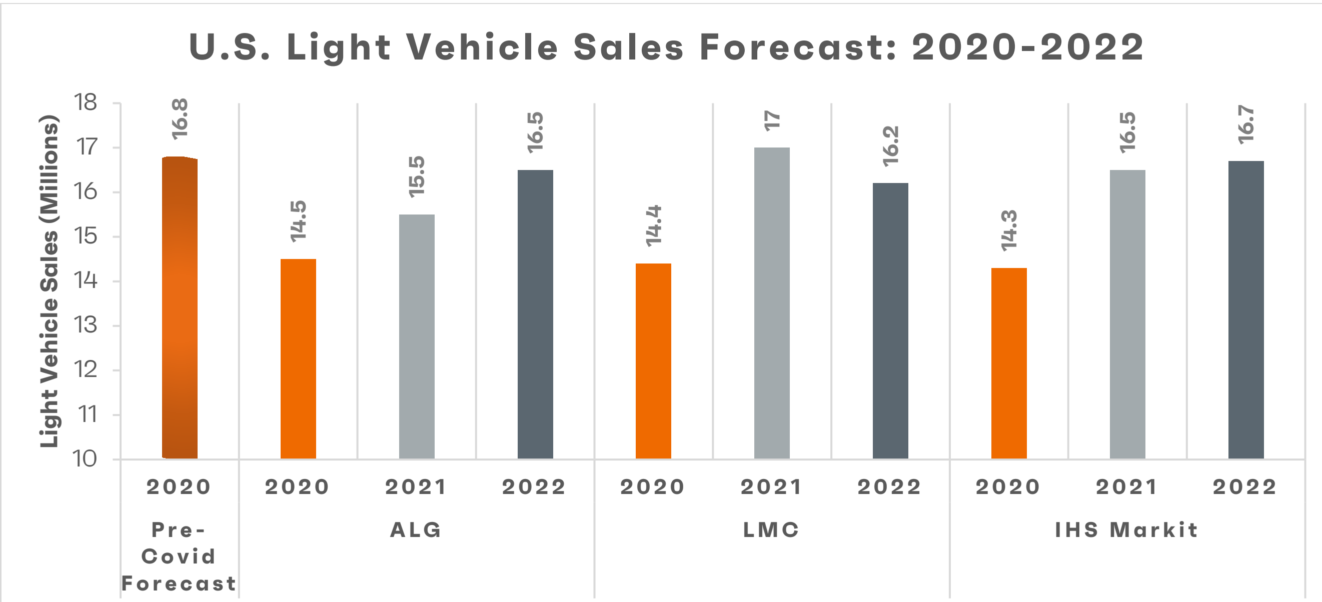
**Ward Intelligence 2021 Outlook[6]:** "WI's revised outlook for how the remainder of the year rolls out has June sales posting a 16.0 million-unit SAAR, which means Q2 will total 17.0 million. That will be followed by 16.6 million in Q3 and 17.4 million in Q4. The first quarter totaled 16.9 million."



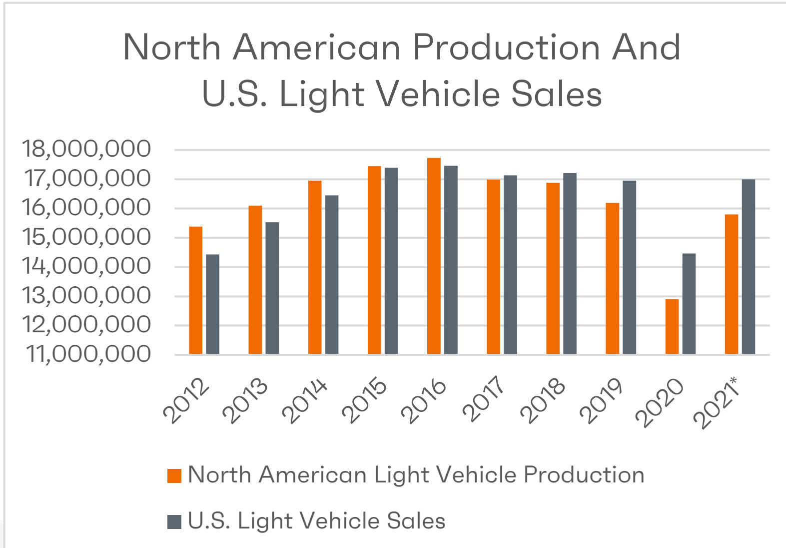

## North American Production Outlook (Updated 5/26)

**Wards Intelligence Outlook[7]:** "Second-quarter North America output is tracking toward 3.61 million units, 153% above April-June 2020's 1.43 million and 16.2% below Q2-2019's 4.4 million. The Q2-2021 total also was lowest for the period since 2011 – 3.21 million units. In fact, except for the year-ago period, it was lowest for any quarter since 3.54 million units in Q4-2011.

"May is tracking to 1.18 million units, a 193,000-unit reduction from month-ago's expectations, and 386% above like-2020. The June outlook was cut 96,300 units from month-ago's projection to 1.34 million units, 15.1% above like-2020 - both May and June 2021 totals are below same-period 2019.

The first-half of 2021 is pegged at 7.31 million units, 38.0% above January-June 2020's 5.30 million, and – save last 2020 - lowest 6-month year-to-date total since 2011.

"With further production losses, capacity utilization, accordingly, has not returned to pre-Covid-19 levels. Light-vehicle capacity utilization in Q2-2021 is pegged at 78%, well below Q2-2019's 95%. Q1-2021's 82% capacity utilization also was well below like-2019 (96%). The 12-month trailing total, at 84% through the Q2 outlook, is turning up but still well below the 93% utilization rate through June 2019.




**IHS Markit May Update:** "The outlook for North America light vehicle production was reduced by 267,000 units and increased by 152,000 units for 2021 and 2022, respectively (and increased by 117,000 units for 2023). The production outlook for 2021 was reduced amid the ongoing semiconductor shortage and other supply chain and logistical issues. The quarterly progression for 2021 reflects the first and second quarter as being most impacted by the shortages with the second quarter impact having intensified. While US automakers are communicating plans to recover volume in the second half at select plants with a combination of reduced summer shutdowns and added overtime, the forecast does not represent a full progression given the issues still facing these manufacturers which have been more heavily impacted in North America compared to their transplant counterparts. Should the situation improve for the US manufacturers at a faster rate over the coming months, the forecast will begin to reflect more vigorous volume recovery efforts. Despite robust demand, production remains constrained further bolstering the outlook for 2022 and 2023. Market conditions support the need for around 1.0 million units of additional inventory to align with the industry norm of a 60 to 65 days' supply of vehicles. Inventory is projected to reach a low point of 1.58 million units or a 28 days' supply in July before beginning to improve, though forecasted to remain under 2.0 million units through the balance of 2021."[8]

**WardsIntelligence Update:** "Production losses mostly related to the microchip shortage continue to stack up. North America production of light-vehicles and medium-/heavy-duty trucks is tracking to 199,000 units less in the second quarter than what was projected for the period a month ago in Wards Intelligence's Production Tracker. It was offset partially by the first quarter finishing higher than expected, but total first-half 2021 output has been reduced 117,000 units from March's revision. Thanks to the global microchip shortage and a winter-storm-caused reduction in oil produced to make petrochemicals for automotive parts, the short-term production outlook remains shaky. During March, and in the first half of April, scheduled production slowdowns in the second quarter continually grew, creating a sense that the microchip shortage still has more to play out in terms of production stoppages before summer.

"Furthermore, although the messaging remains that most of the supply issues can be smoothed out heading in the second half of the year, there are rumblings that microchip capacity for the automotive industry still will be a problem throughout the remainder of the year. . . .

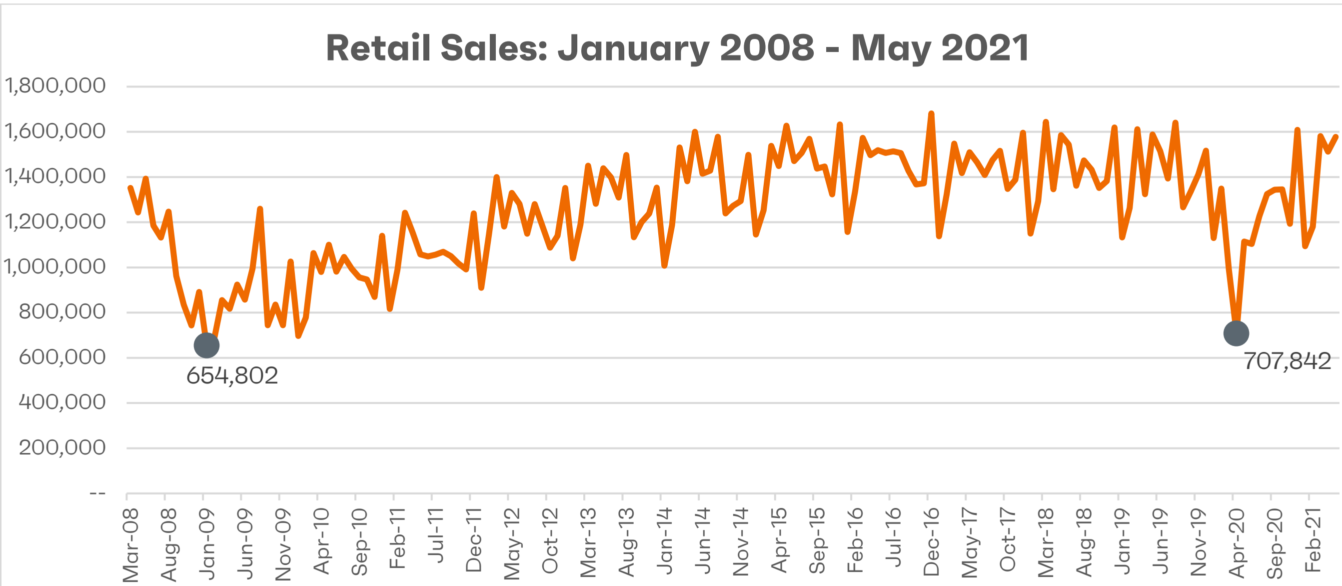
"The second-quarter outlook is 191,000 units below December's projection for the period. Thus, the estimated total first-half loss stands at 678,000 units. Second-quarter production is pegged at 3.941 million units, 176% above Q2-2020's pandemic-smacked total of 1.427 million units."[9]

Market Meter

## U.S. Light Vehicle Sales (Updated 6/3)

**Monthly Sales (Updated 6/3)**

This chart helps to put into context the monthly retail sales due to the COVID pandemic and showing the relative drop in sales compared to the 2008 financial crisis.



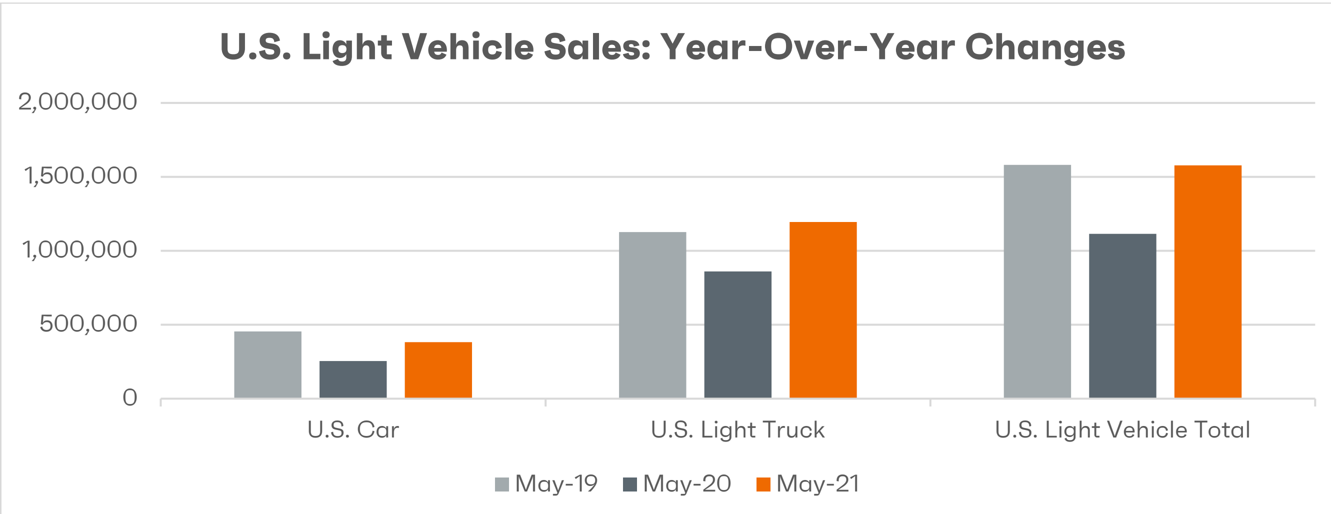

**May Sales (Updated 6/3)**

**WardsIntelligence:** "The ongoing inventory drain since the beginning of the year finally pulled sales to well below current demand in May, as the seasonally adjusted annual rate fell to 17.0 million units from April's revised 18.8 million and the 17.4 million year-to-date total.

"May's SAAR was a big increase from like-2020's pandemic-smacked 12.1 million units and relatively close to same-month 2019's 17.3 million. . . Raw volume in May totaled 1.578 million units, 41.0% above like-2020. The daily selling rate equaled 60,693 vs. 43,042 in the year-ago month – 26 selling days both periods….

"Another sign lean inventory is significantly drawing down sales is that car share increased year-over-year in May to 24.2% from 23.1%. It was the first year-over-year rise in car share since December 2012. "The increase, however, is due to inventory drying up faster for more popular light trucks – especially pickups - not a rebound in demand for cars.

"The decline in trucks was most evident in pickups. Pickup penetration in May dropped to 16.6%, lowest for any month since 16.0% in March 2019."[10]




**Fleet Sales (Updated 6/3)**

**Wards Intelligence:** "Estimated fleet volume in May, although up 95% from year-ago's pandemic downward-skewed total, accounted for just 10% of the month's volume after averaging 16% in the first four months of 2021 and well below its pre-pandemic mark of close to 20%."[11]

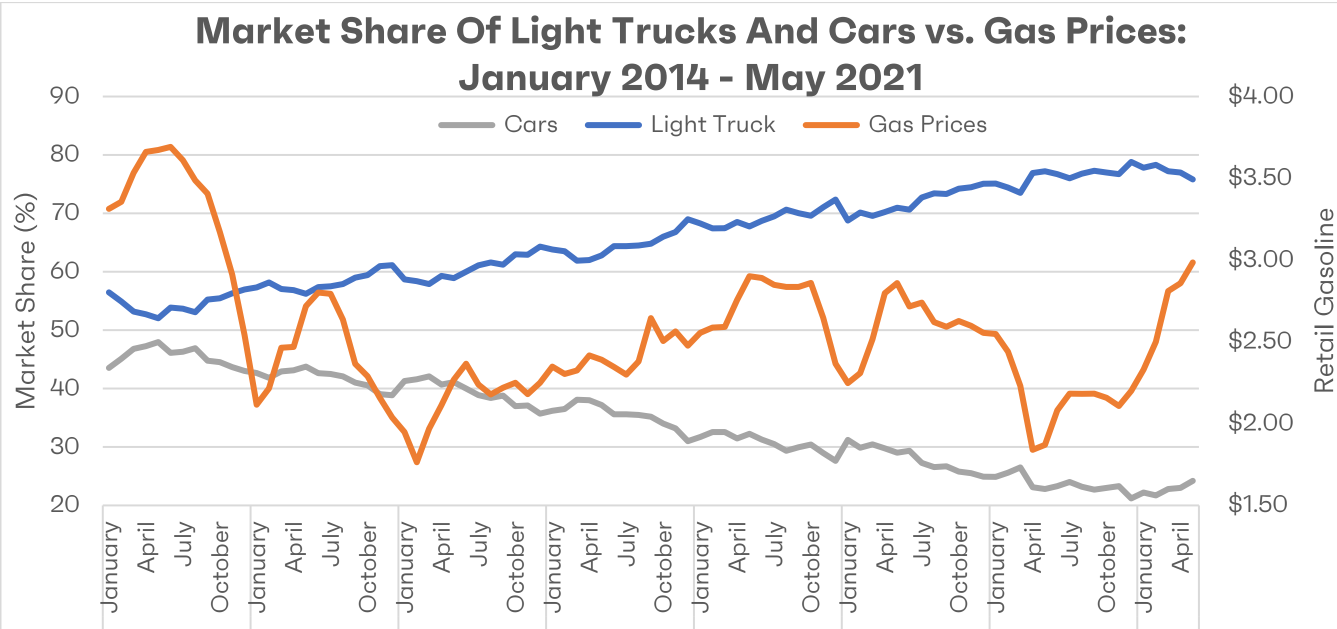
## Segments vs. Gas Prices (Updated 6/3)

**Monthly Sales For May:** Light trucks accounted for 75.8% of sales in May, a 1.1% drop in market share from a year ago. Compared to 2020, sales of cars are up more than 127,000, but down nearly 72,000 from May 2019.

**WardsIntelligence:** "Another sign lean inventory is significantly drawing down sales is that car share increased year-over-year in May to 24.2% from 23.1%. It was the first year-over-year rise in car share since December 2012. The increase, however, is due to inventory drying up faster for more popular light trucks – especially pickups - not a rebound in demand for cars.

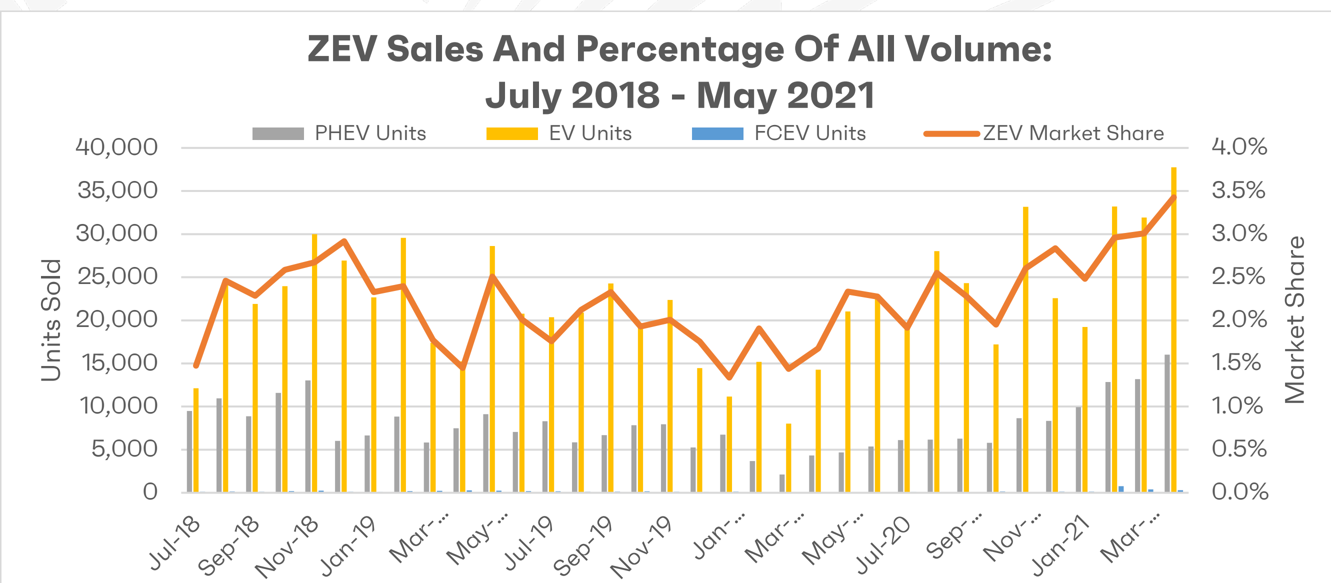
"The decline in trucks was most evident in pickups. Pickup penetration in May dropped to 16.6%, lowest for any month since 16.0% in March 2019."[12]

**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.[13] and gas was over $3.00.[14] 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 $2.68 a gallon (through October 2020) and when combined with increased fuel economy for light trucks, an increase of 4 mpg since 2013, the perfect conditions existed to continue fueling light truck market growth.[15]



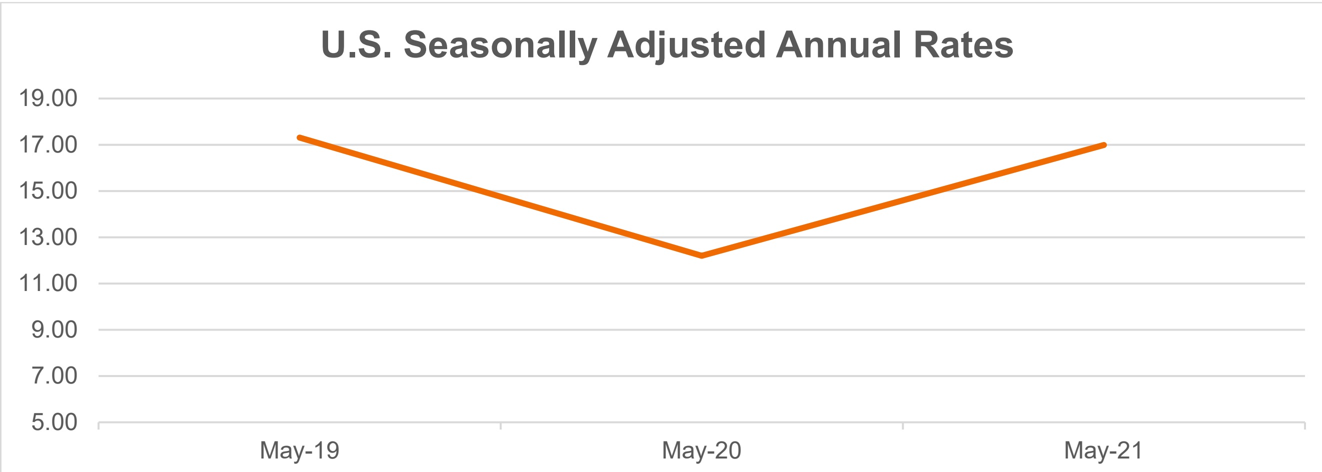

## ZEV Powertrain Sales (Updated 6/3)

Sales of zero emission vehicles (BEV, PHEV, & Fuel Cell) accounted for 3.4% of total vehicle sales in May 2021, up from 1.7% from a year ago and up .4% from April 2021. Sales of battery electric vehicles led the way for ZEVs, accounting for 2.39% of total sales, up .86% from May 2020. Plug-in hybrids accounted for 1.02%, nearly triple the amount from the same time last year.[16]



## Seasonally Adjusted Annual Rates (Updated 6/3)

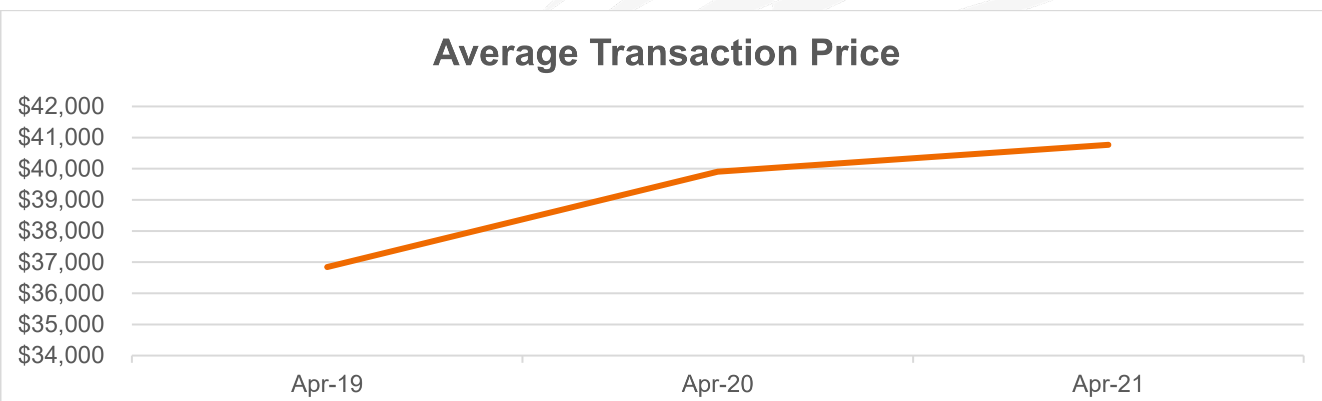
"The ongoing inventory drain since the beginning of the year finally pulled sales to well below current demand in May, as the seasonally adjusted annual rate fell to 17.0 million units from April's revised 18.8 million and the 17.4 million year-to-date total. May's SAAR was a big increase from like-2020's pandemic-smacked 12.1 million units and relatively close to same-month 2019's 17.3 million."[17]




## Average Transaction Price (Updated 6/3)

**J.D. Power:** "Consumers are on track to spend $53.1 billion on new vehicles this month, the highest on record for any month. . . . The average new-vehicle retail transaction price in May is expected to reach a record $38,255. The previous high for any month, $37,966, was set in December 2020."[18]

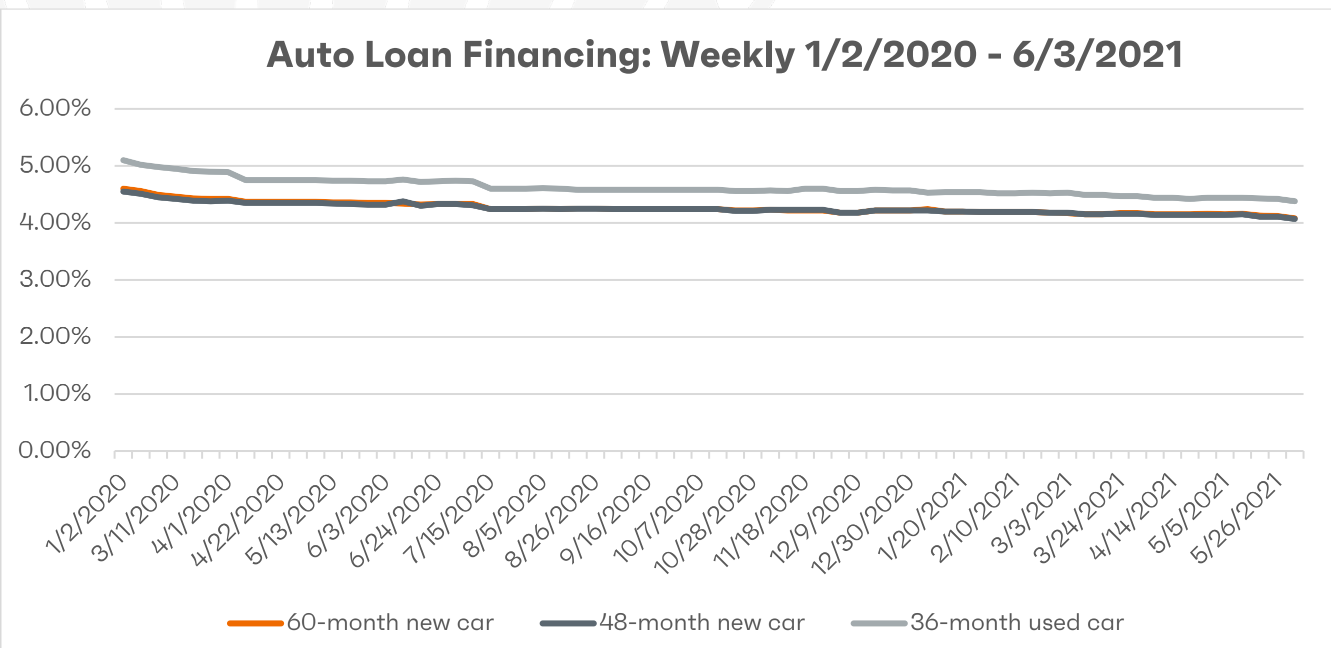
**Kelley Blue Book:** "he estimated average transaction price for a light vehicle in the United States was $40,768 in April 2021, according to the analysts at Kelley Blue Book. New-vehicle prices increased $864 (up 2.2%) from April 2020, while increasing $92 (up 0.23%) from March 2021.[19]



## Auto Loan Financing (Updated 6/3)

**Financing Rates Dip To Lowest Level In More Than A Year:** Interest rates for new cars and used cars continued to slide lower, dropping .04% from last week. The interest rate for 60 months currently stands at 4.08%, the lowest rate since at least the beginning of 2020. Rates dipped to 4.38% for a 36-month used car loan. Since the beginning of last year, rates are down 0.52%, and down 0.27% since the same time a year ago.[20]

| Dates | 60-month new car | 48-month new car | 36-month used car |
|---|---|---|---|
| 6/3/2020 | 4.35% | 4.32% | 4.73% |
| 1/2/2020 | 4.60% | 4.55% | 5.10% |
| 5/26/2021 | 4.12% | 4.11% | 4.42% |
| 6/2/2021 | 4.08% | 4.07% | 4.38% |
| One Week Change | -0.04% | -0.04% | -0.04% |
| Two Week Change | -0.05% | -0.04% | -0.05% |
| Change since 1/3/20 | -0.52% | -0.48% | -0.72% |
| One Year Change | -0.27% | -0.25% | -0.35% |

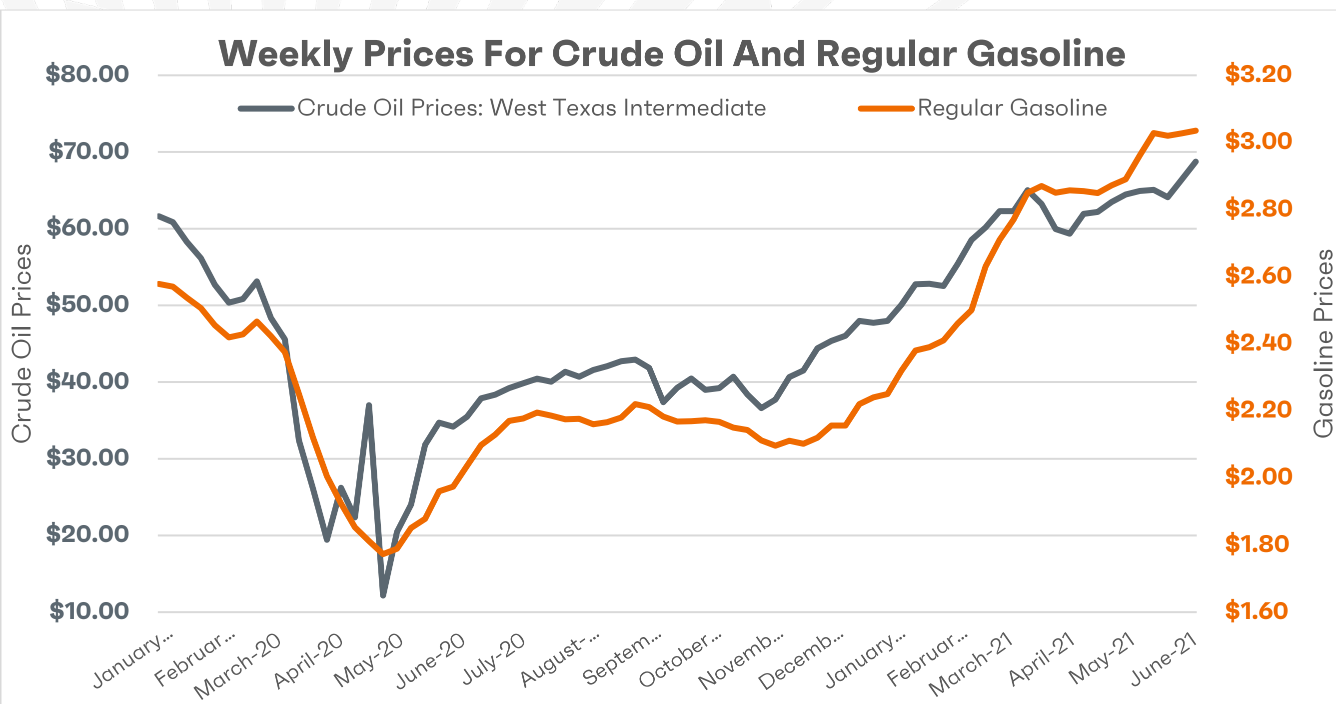



## Crude Oil and Gas Prices (Updated 6/9)

**EIA Outlook For Gasoline:** "For the 2021 April–September summer driving season, we forecast U.S. regular gasoline retail prices will average $2.92 per gallon (gal), up from an average of $2.07/gal last summer. The higher forecast gasoline prices reflect higher crude oil prices and higher wholesale gasoline margins. Wholesale gasoline margins have risen as a result of relatively low inventories and rising gasoline demand. Margins also temporarily widened because of outages on the Colonial Pipeline. These developments caused U.S. average regular gasoline retail prices to reach a monthly average of $2.99/gal in May, peaking at $3.03/gal on May 17, which were the highest monthly and weekly prices since 2014. We expect that prices will average $3.03/gal in June before falling to $2.76/gal by September."[21]

**EIA Outlook For Oil:** "Brent crude oil spot prices averaged $68 per barrel (b) in May, up $4/b from April. Brent prices were higher in May as global oil inventories continued to decline, albeit at a slower pace than in the first four months of the year. In the coming months, we expect that global oil production will increase to match rising levels of global oil consumption. The rising oil production in the forecast is largely a result of the OPEC+ decision to raise production. We expect rising production will end the persistent global oil inventory draws that have occurred for much of the past year and lead to relatively balanced global oil markets in the second half of 2021 (2H21). We expect Brent prices will remain near current levels in 3Q21, averaging $68/b. However, in 2022, we expect that continuing growth in production from OPEC+ and accelerating growth in U.S. tight oil production—along with other supply growth—will outpace decelerating growth in global oil consumption and contribute to declining oil prices. Based on these factors, we expect Brent to average $60/b in 2022.[22]

**Gas Prices Remail Above $3 A Gallon:** Oil prices, as benchmarked at West Texas Intermediate, jumped more than $2 a barrel the first week of June to $68.74. Since election day, oil prices have climbed over $31 a barrel. Gas increased by a penny this week to $3.04. Gas first rose above $3 a gallon in mid-May, for the first time since October 2014. Gas is more than 17 percent higher than the beginning of 2020.[23]

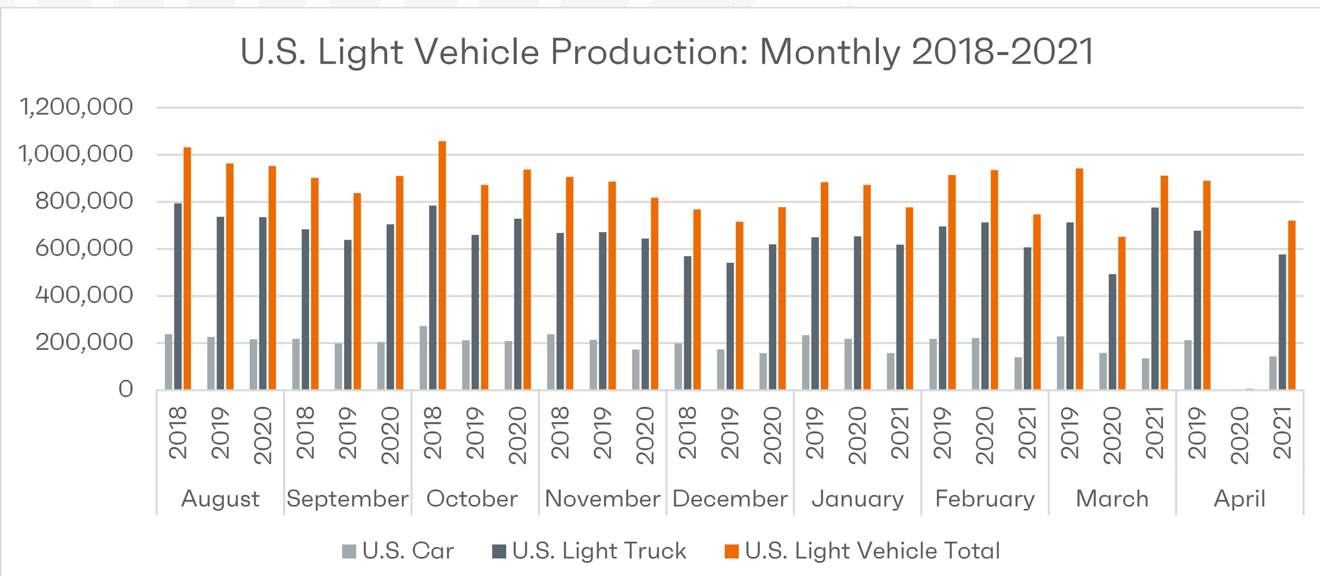


## U.S. Light Vehicle Production (Updated 5/26)

**WardsIntelligence[24]:** "The downward bias noted in month-ago's outlook came to fruition as production in April finished nearly 39,000 units below expectations and 328,000 units were cut from the entire second quarter in Wards Intelligence's most recent North American Production Tracker. The totals include light vehicles and medium-/heavy-duty trucks. The production cuts are almost totally due to fallout from the global microchip shortage, which continues to worsen, and though still expected to improve by Q3, is looking like it will impact the second half of the year to a larger degree than the consensus of automakers and suppliers expected earlier in the year.

"April's production totaled 1.095 million units, a huge improvement on like-2020's 18,828 units when most plants were closed for the entire month after the Covid-19 virus hit North America in March. A better comparison for April's results is that it was a 22.5% decline from same-month 2019, and it was the lowest for the month since 968,874 in 2011."

**Light vehicle production for April 2021 totaled 719,982, down 19% from 2019:**

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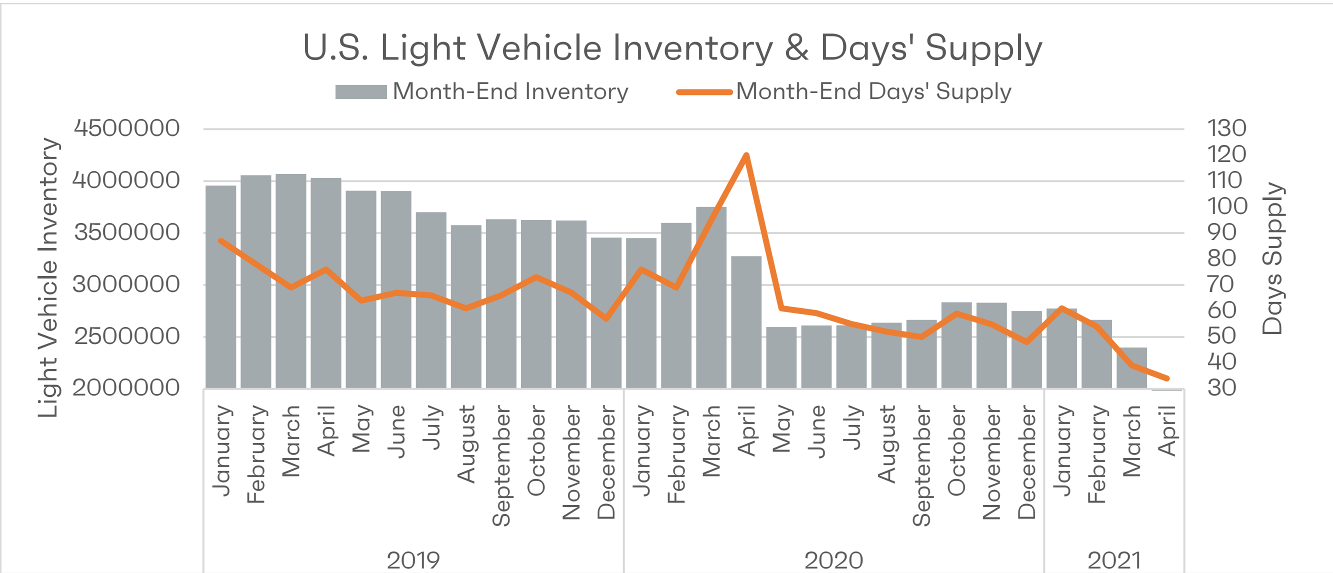
## U.S. Light Vehicle Inventory and Days' Supply (Updated 5/26)

**WardsIntelligence Inventory Update[26]:** "Beginning-month-inventory as a ratio to sales averaged 2.6 per month over the past 20 years. The ratio fell to 1.7 and 1.6, respectively, in March and April. May's forecast drops it further to 1.3, the lowest for any month in at least the past two decades, including peak years such as record-year 2016 when sales totaled 17.5 million units and the ratio averaged the historically typical 2.6.

"Based on Wards Intelligence's projections and utilizing partner LMC Automotive's forecast that sales will total 17.0 million units in 2021, inventory from April will continue to get leaner in comparison with demand until the fourth quarter. Besides May, the leaner inventory is expected to dampen sales over the next few months. But assuming the global shortage of microchips improves for the automotive industry, and other supply issues get ironed out by this summer, production should improve enough to allow sales to end the year with a bang."




# Global Meter

## Global Light Vehicle Sales Outlook (Updated 5/19)

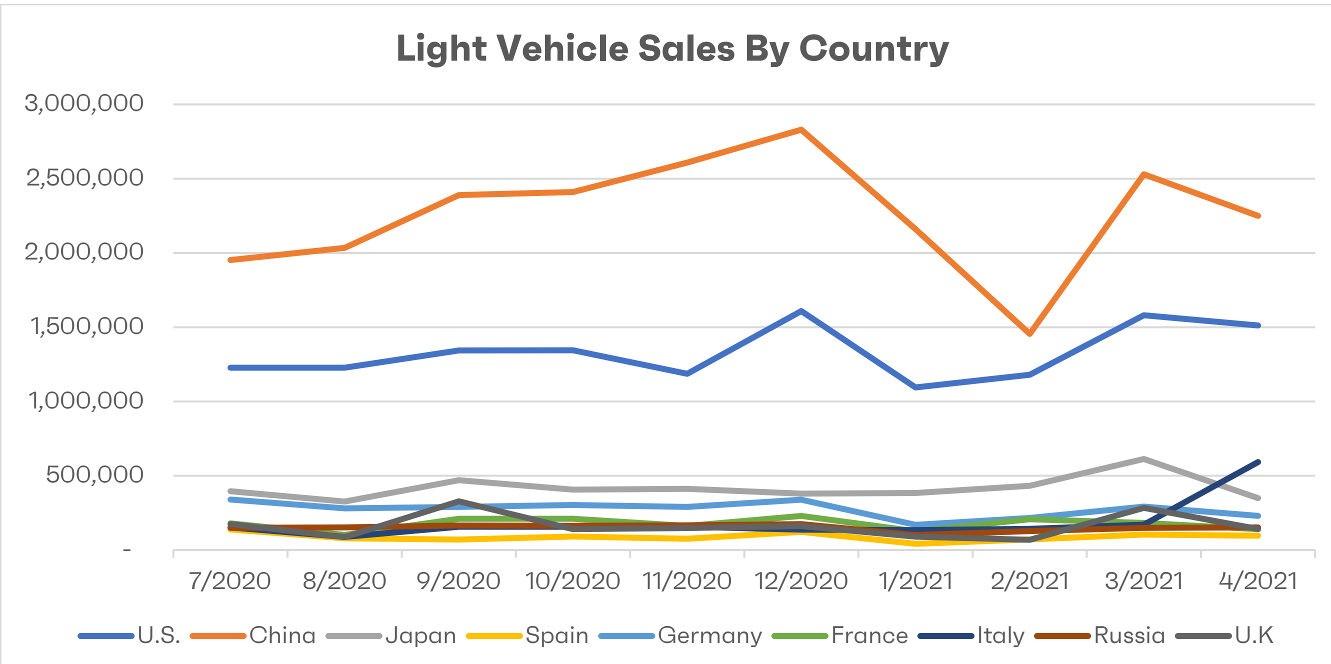
**Wards Intelligence Outlook:** "Global vehicle sales totaled 8.75 million in March, jumping 53.1% over year-ago's early pandemic low of 5.72 million. Despite the impressive growth, the month still fell 4.5% short of March 2019's 9.16 million tally.

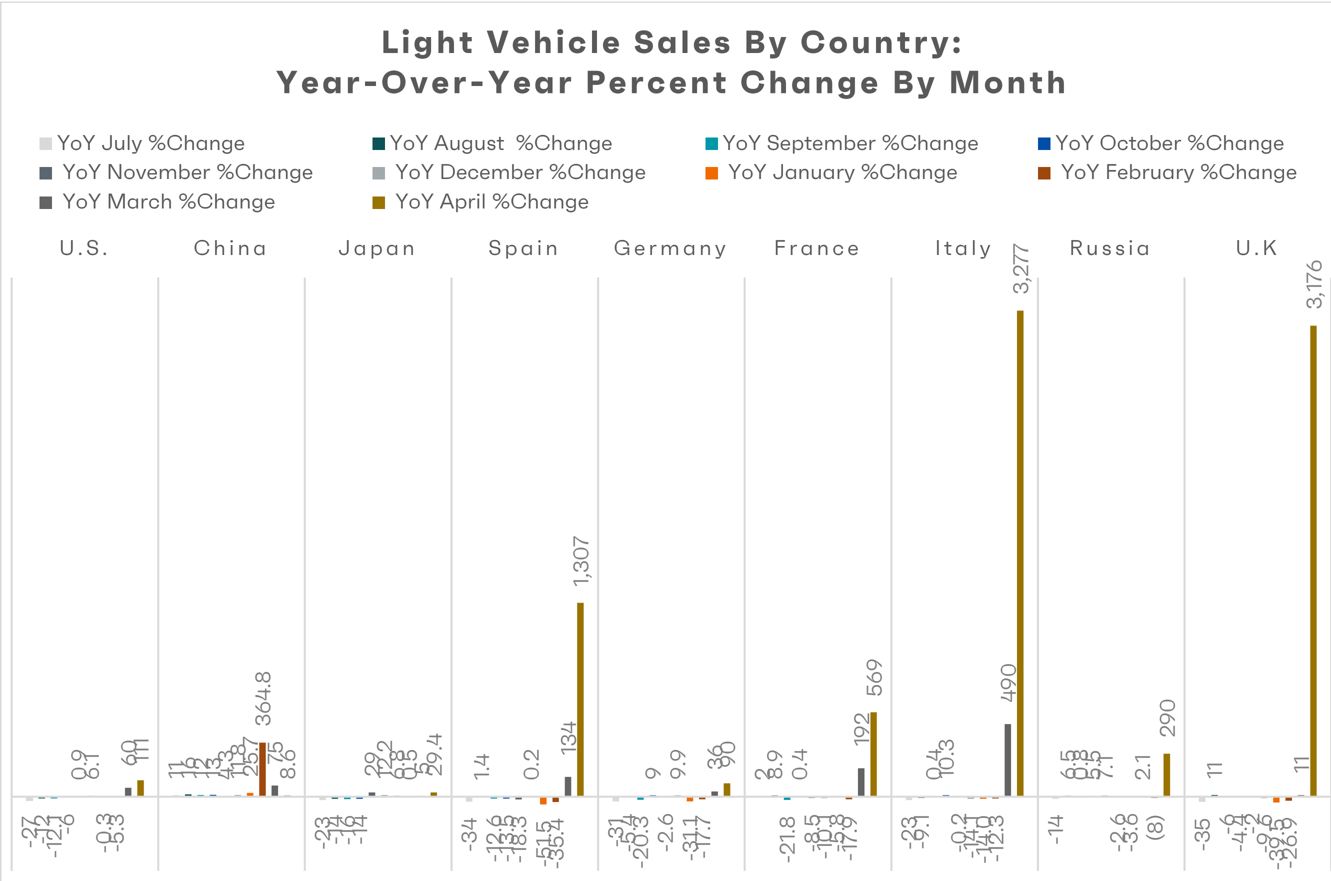
"The rebound over year-ago's dramatic slowdown was seen in every region, with Europe seeing the highest increase. Sales soared 57.6% to 1.93 million from year-ago's 1.22 million. It was the region's first positive result since October 2020. Several countries posted triple-digit gains, including Austria (+173.9%), France (+185.7%) and Spain (+132.3%).

"In Italy, the early epicenter of the pandemic in Europe, sales surged 441.7% to 191,000 vehicles over year-ago's 35,000.

"Through the first quarter, Europe sales were up 5.2% to 4.31 million, with many countries still not pulling ahead of same-period 2019. The full impact of the early broad lockdowns to slow the spread of the coronavirus was seen in April, so next month is expected to show an even bigger year-over-year increase for most markets."[27]

**Sales in select countries around the globe, including year-over-year percent change by month as well as raw volume by month:**



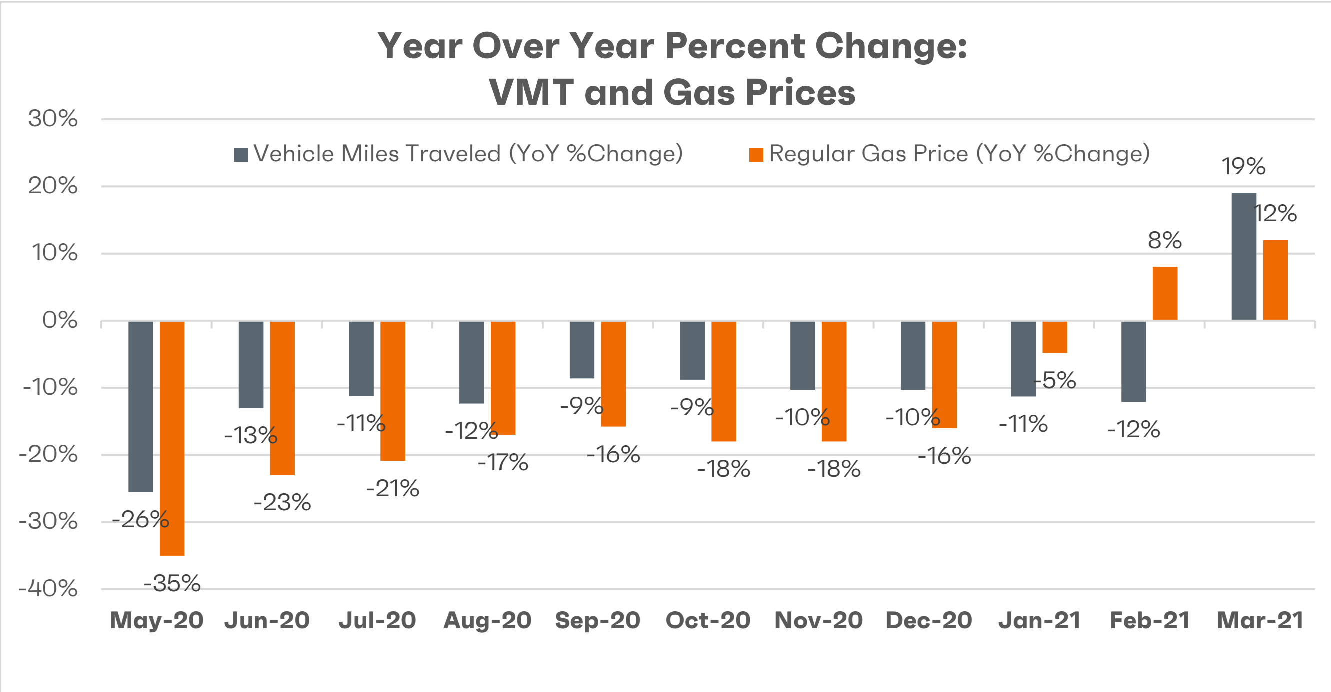



## Recovery Meter

## Roadway Travel (Updated 5/19)

According to the U.S. Department of Transportation, seasonally-adjusted vehicle miles traveled in March rose 19 percent from the same time a year ago. The cumulative travel estimate for 2021 is 691.5 billion vehicle miles.[28]

- Travel on all roads and streets changed by +19.0% (+42.0 billion vehicle miles) for March 2021 as compared with March 2020. Travel for the month is estimated to be 263.0 billion vehicle miles.
- The seasonally adjusted vehicle miles traveled for March 2021 is 261.1 billion miles, an 18.5% (40.7 billion vehicle miles) increase over March 2020. It also represents a 6.2% increase (15.2 billion vehicle miles) compared with February 2021.
- Cumulative Travel for 2021 changed by -2.1% (-14.9 billion vehicle miles). The Cumulative estimate for the year is 691.5 billion vehicle miles of travel.




## Economic News (Updated 6/9)

**Manufacturing Added 23,000 Jobs In May.** “Job creation disappointed again in May, with nonfarm payrolls up what normally would be considered a solid 559,000 but still short of lofty expectations, the Labor Department reported Friday. . . .Other gains came from health care and social assistance (46,000), information (29,000), manufacturing (23,000), transportation and warehousing (23,000), wholesale trade (20,000) and professional and business services (35,000).”

- **Motor Vehicle And Parts Manufacturing Added 19,200 Jobs In May (not seasonally adjusted).**[29]

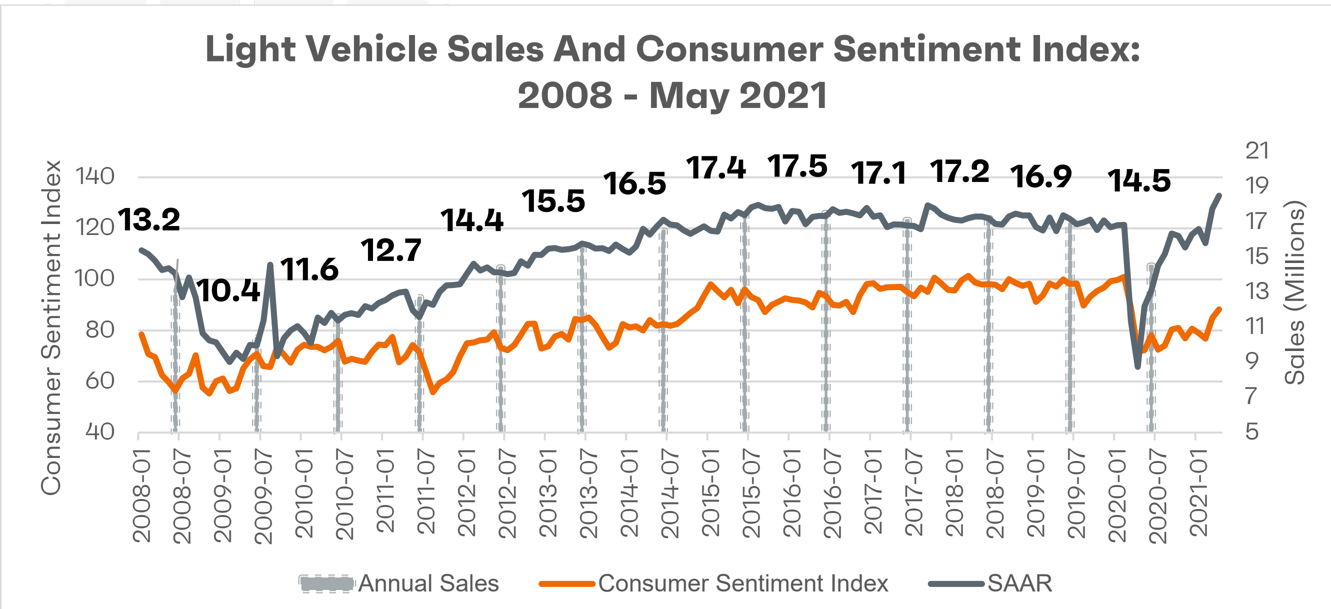
**“U.S. Manufacturing Activity Picked Up In May As Pent-Up Demand Amid A Reopening Economy Boosted Orders, But Unfinished Work Piled Up Because Of Shortages Of Raw Materials And Labor.** The Institute for Supply Management (ISM) survey on Tuesday found companies and their suppliers ‘continue to struggle to meet increasing levels of demand,’ noting that ‘record-long lead times, wide-scale shortages of critical basic materials, rising commodities prices and difficulties in transporting products are continuing to affect all segments’ of manufacturing.” [30]

**“The ISM's Index Of National Factory Activity Increased To A Reading Of 61.2 Last Month From 60.7 In April.** A reading above 50 indicates expansion in manufacturing, which accounts for 11.9% of the U.S. economy. Economists polled by Reuters had forecast the index rising to 60.9 in May.”[31]

**Auto Sales Make Big Contribution To Increase In GDP In The First Quarter.** “In the first months of 2021, what was good for the auto industry was decidedly good for the American economy. Spending on motor vehicles and parts rose almost 13 percent in the first quarter, making a big contribution to the increase in gross domestic product, the Commerce Department reported Thursday. .. In fact, demand in the first quarter was robust enough that the auto industry was able to post healthy results despite a shortage of computer chips that forced temporary shutdowns of many auto plants."[32]

## Consumer Confidence and Sales (Updated 6/3)

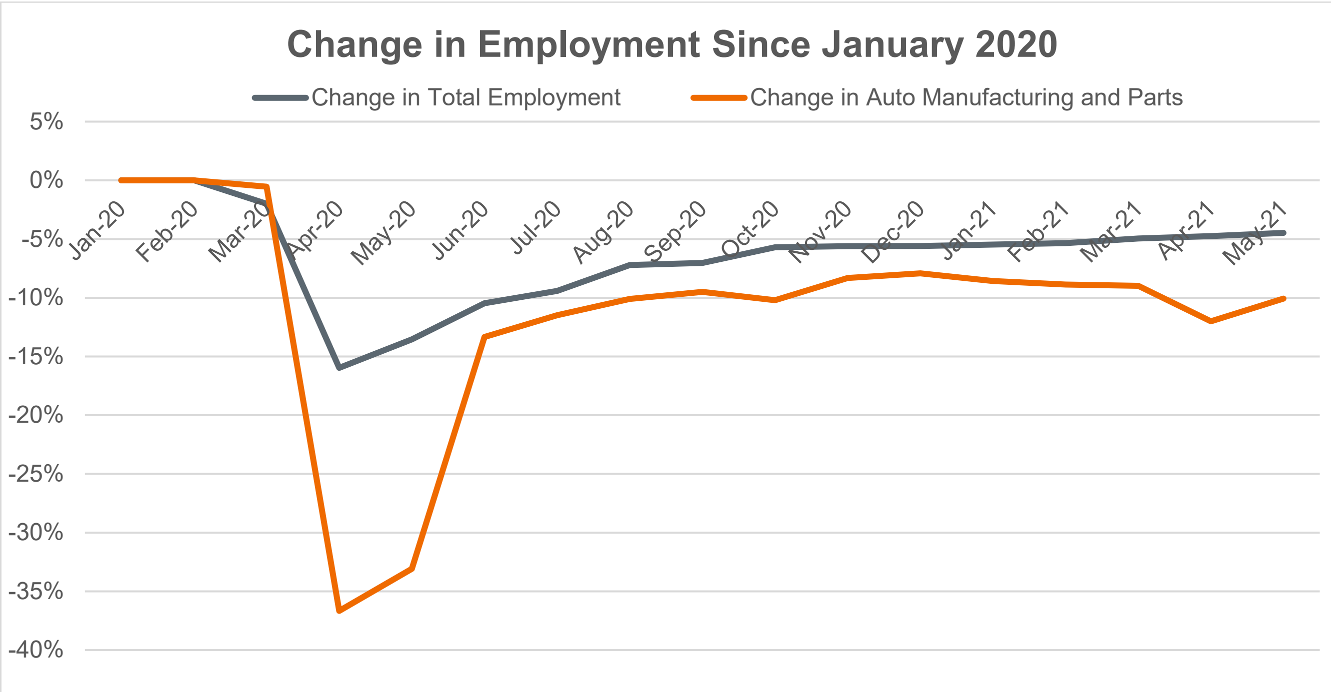
"Consumer confidence remained largely unchanged at the reduced level recorded at mid-month. It is hardly surprising that the resurgent strength of the economy produced more immediate gains in demand than supply, causing consumers to expect a surge in inflation. Record proportions of consumers reported higher prices across a wide range of discretionary purchases, including homes, vehicles, and household durables - the average change in May vastly exceeds all prior monthly changes (see the chart). The impact of higher prices on discretionary spending will be offset by the more than $2 trillion increase in savings in the past year as well as by improving job prospects - an all-time peak proportion of consumers anticipated declines in the national unemployment rate during the year ahead. While higher inflation will diminish real incomes, the gains in spending will nonetheless be substantial."[33]



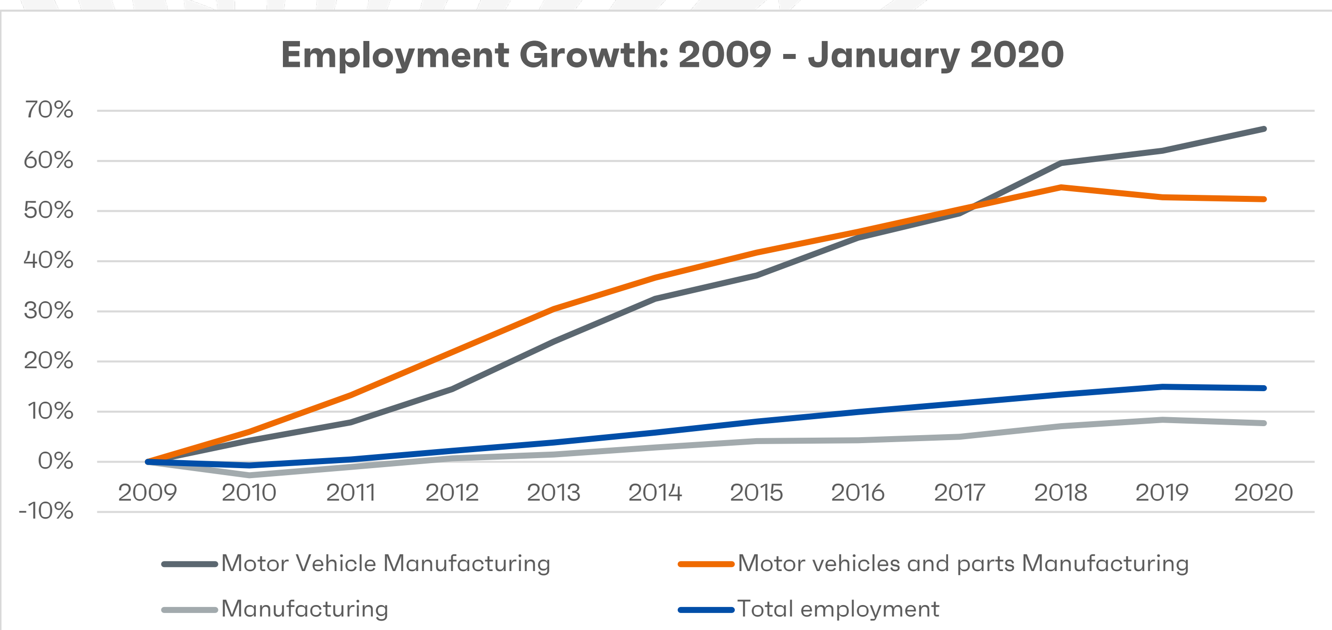

## Employment (Updated 6/9)

After a loss of nearly 350,000 employees (about 35% of the workforce) in the height of the pandemic, employment in the Automobile Manufacturing and Parts sectors raced back but is now fighting losses due to supply chain disruptions with semiconductors. Employment in motor vehicles and parts is down 86,000 since January 2020.[34]

- **Motor Vehicle And Parts Manufacturing Added 19,200 Jobs In May (not seasonally adjusted).[35]**




After the recession in 2009, the auto industry was credited with being on the leading edge of the recovery, which began a ripple effect through other parts of the country.[36] Additionally, the chart below shows how the recovery of jobs in motor vehicle manufacturing alone and motor vehicle and parts manufacturing far outpaced the recovery of manufacturing and total jobs.



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