ALLIANCE FOR AUTOMOTIVE INNOVATION

Cleaner. Safer. Smarter.

READING THE METER

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

April 21, 2021

Contents

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Forecast Meter

Forecast Summary (Updated 4/21)

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)
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	15.5 million units (7.6% YoY)	15.8 million units (22.7% YoY)

U.S. Light Vehicle Sales Outlook (Updated 4/7)

Wards Intelligence Outlook: "The sales juggernaut in March served to pull more inventory out of the pipeline. Days' supply fell to 39 from the prior month's 54 and like-2020's 95 – skewed upward due to the pandemic beginning to negatively impact sales in March. It was the lowest days' supply for any month since August 2009's 29, when sales were bolstered, and inventory slashed, by a government program (dubbed Cash-for-Clunkers) as the country was emerging from the Great Recession. Normally March posts a days' supply in the upper 60s.

"The surge also tightened March's (start-of-month) inventory-to-sales ratio to 1.7, the second lowest in at least the past two decades, save August 2009's 1.4 ratio. In the pre-pandemic period, it would be safe to assume either sales would recede or production would rise enough so a that the ratio would start to increase from March's 1.7. However, given the amazing strength of the market since the start of the pandemic – and especially last month's results - it might be safe to assume sales remain high enough that the ratio stays even, and possibly goes lower. If so, April sales could generally be as strong as March, easily topping a 17 million-unit SAAR a second consecutive month.

"May would be the final breaking point where sales finally tank, possibly to less than a 14 million-unit SAAR. Although still unclear how much more damage the supply-chain disruptions might do to production for the U.S. market, sales in theory should start rising from May and could be back to 17 million-unit SAARs by Q4.

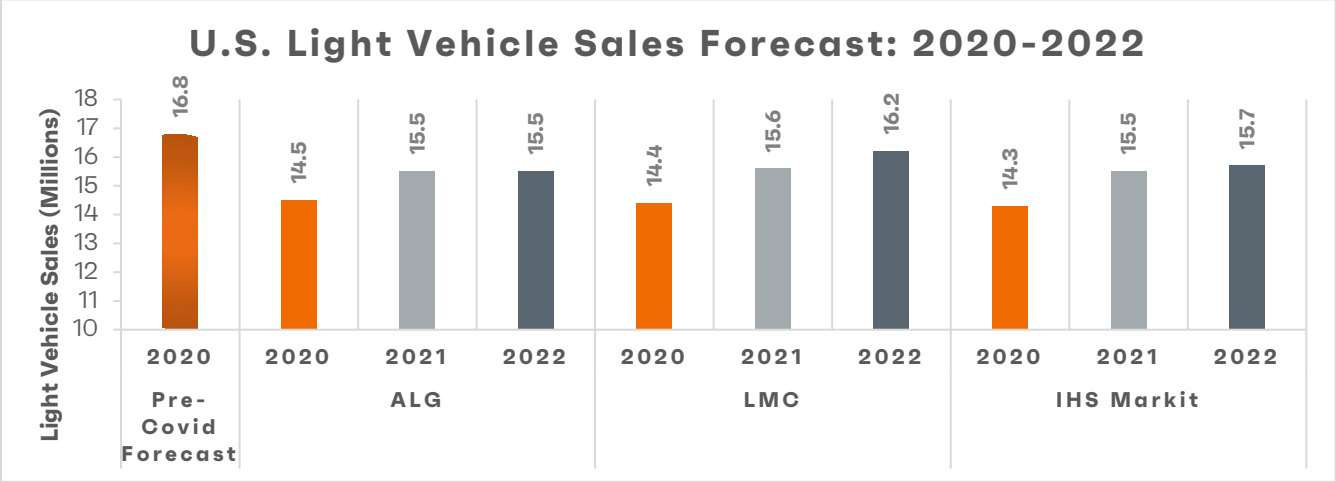
"However, that's assuming dealers can't turn over inventory even faster than in March. Demand could still surprise in May, as well as April. Conversely, the inventory nosedive could begin significantly adversely impacting demand in April. Whether it does could depend on the mix of vehicles that are available."[4]

Fitch Ratings Outlook: "Fitch Ratings has an improving outlook for the U.S. auto sector, reflecting Fitch's expectation that conditions in 2021 will be better than the pandemic-induced downturn in 2020. Fitch expects U.S. light vehicle sales in 2021 to total 15.6 million, up nearly 10% from our forecast of 14.2 million for 2020. Fitch's 2021 forecast assumes macroeconomic conditions improve in 2021 and widespread lockdowns do not return. Although the trend will be improving in 2021, sales are expected to be about 8% below 2019. Fitch does not expect sales to return to 2019 levels until 2022 at the earliest even if a coronavirus vaccine becomes widely available by mid-2021.

Despite an improving demand environment, the auto industry remains exposed to various secular pressures. For example, tightening emissions regulations in many global markets, especially China and Europe, are rapidly accelerating the pace of vehicle electrification. Dozens of new electric vehicles will be introduced over the next few years, but vehicle cost and customer acceptance remain challenges. Auto manufacturers, suppliers and others also continue to invest heavily in automated driving technologies, although the pace of development has been slower than expected. Technological, regulatory and social issues continue to impede a faster rollout of autonomous vehicles. [5]

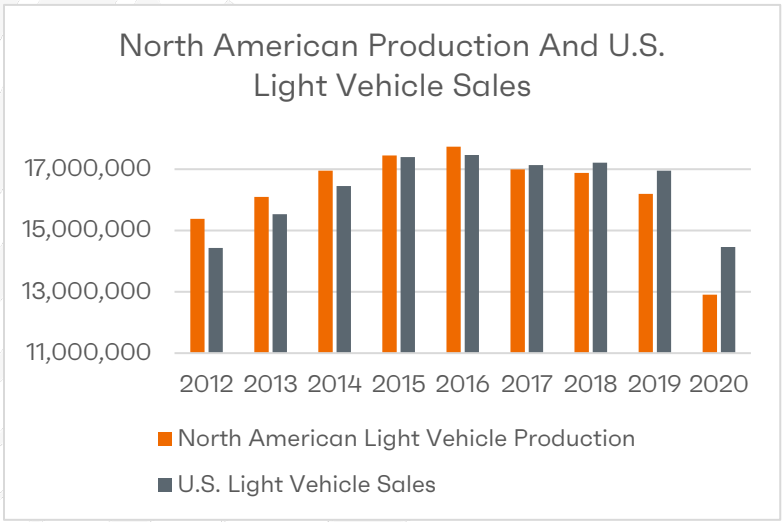
IHS Markit Update: "While the pace of growth for auto sales flattened out after September, IHS Markit expects continued growth in auto demand levels in 2021, supported by sustained economic development from better-than-expected news on vaccines and likely economic stimulus.

"Looking at 2021, US sales volumes are expected to reach 16 million units, up an estimated 10% from the projected 2020 level of approximately 14.5 million units. The pace of sales is anticipated to be stronger in the second half of the year, following the expected widespread availability of the vaccine by summer," according to Chris Hopson, principal automotive analyst at IHS Markit."[6]



North American Production Outlook (Updated 4/21)

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."[7]

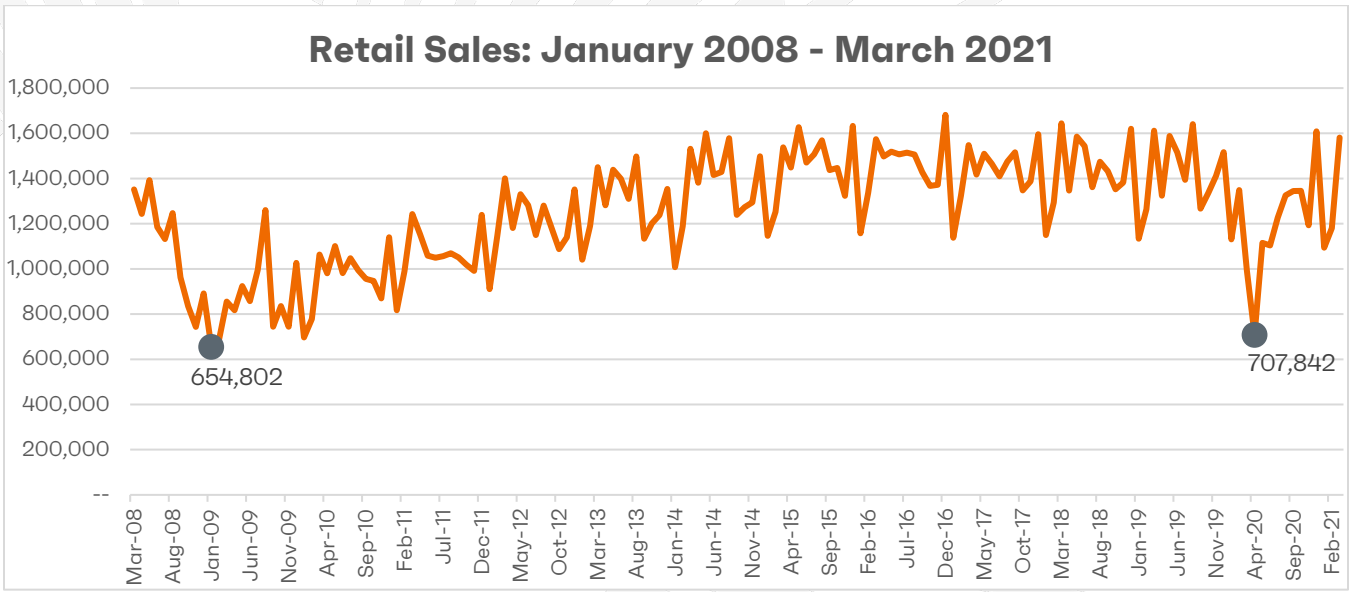
IHS Markit April Update: "The outlook for North America light vehicle production was reduced by 79,000 units and increased by 28,000 units for 2021 and 2022, respectively (and increased by 64,000 units for 2023). The production outlook for 2021 was reduced amid the ongoing semiconductor shortage and other supply chain and logistical issues. The quarterly progression for 2021 continues to reflect the first and second quarter as being most impacted by the shortages with a return closer to normal beginning in third quarter at baseline operating levels with minimal overtime to recover lost volume in fourth quarter. While actual production for Q1-2021 came in slightly ahead of expectations, given the ongoing impact of semiconductor shortages, more meaningful downward revisions were made to the forecast for the second quarter. The third quarter of 2021 remains a wild card as some automakers are reportedly reducing summer shutdown plans amid the prospect for at least a more consistent supply of semiconductors. Strength in average transaction prices and manufacturer profitability are expected to continue amid the resilient strength of US autos demand and further extension of constrained supply. As manufacturers and dealers enjoy improved profitability amid tighter supply, a new normal in inventory stocking may emerge as the various shortages subside."[8]

Market Meter

U.S. Light Vehicle Sales (Updated 4/7)

Monthly Sales (Updated 4/7)

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.



March Sales (Updated 4/7)

WardsIntelligence: "With most automakers contributing to the party, March U.S. light-vehicle sales soared to a 17.7 million-unit seasonally adjusted annual rate, second highest total ever for the month behind 2000's 17.8 million.

"The first-quarter SAAR totaled 16.8 million units, well above like-2020's 14.8 million, and nearly equal to pre-pandemic Q1-2019's 16.9 million. The Q1 SAAR also was big improvement on Q4-2020's 16.1 million units.

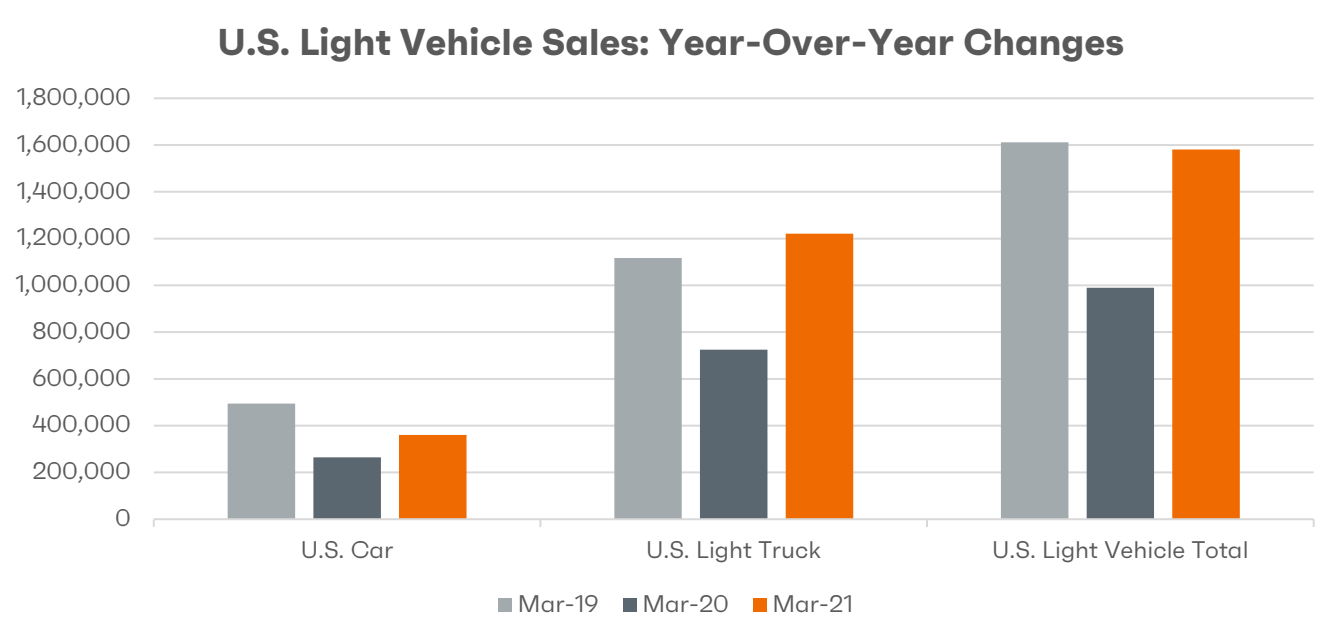
"Raw volume in March totaled 1.58 million units, 59.7% above the same year-ago period. The month's daily selling rate of 60,810 over 26 selling days was 53.6% above March 2020's 39,598 - 25 selling days – and highest for the period since 61,663 in 2015.

"January-March volume totaled 3.870 million units, 11.3% above like-2020's 3.477 million.
Based on daily selling rates, retail volume in March rose an estimated 75% year-over-year. Fleet volume fell an estimated 6.2% year-over-year in March.

"TrueCar estimated that average incentives were down 16.7% year-over-year, the fifth straight decline. Average transaction prices were up 3.3%.

"Among segment groups, CUVs and SUVs led year-over-year increases, rising 84.0% and 60.5%, respectively. The Small Pickup – up 59.6% - and Small Van (56.7%) segments also increased above the industry average.

"Cars were up 30.8% year-over-year in March, accounting for 22.8% market penetration vs. like-2020's 26.7%. All light trucks, including CUVs and SUVs, were up 61.9%."[9]



Fleet Sales (Updated 4/7)

Wards Intelligence: "Based on daily selling rates, retail volume in March rose an estimated 75% year-over-year. Fleet volume fell an estimated 6.2% year-over-year in March."[10]

Auto Rental News: "Commercial fleet sales through January 2021 were down 10.8% compared to same time last year, according to sales data from nine manufacturers, though the month had to compete with a strong January 2020 market that was pre-pandemic. The decline in commercial fleet sales saw its most significant drop in for the car segment, down 38.6%, year-over-year, though sedans represent the smallest segment volume for commercial fleets. Meanwhile, the truck and SUV segment saw a 8.3% decline. Total commercial fleet sales in January were at 50,363 units. Total fleet sales for the month — which is comprised of commercial, rental, and government sales — came in at 153,372, which represented a 25.5% drop from the same time last year. The rental and government fleet segments also both saw overall declines for the month of January 2021."[11]

J.D. Power: "Fleet sales are expected to total 180,200 units in March, down 33% from March 2020 and down 51% from March 2019 on a selling day adjusted basis. Fleet volume is expected to account for 12% of total light-vehicle sales, down from 26% a year ago."[12]

J.D. Power Retail and Fleet Sales Forecast

	Pessimistic Forecast	Optimistic Forecast	Pre-COVID Baseline Forecast
Retail Sales Forecast (million)	11.3	12.3	13.4
Fleet/Other Sales Forecast (million)	1.6	1.9	3.4
Total Sales Forecast (million)	12.9	14.2	16.8
Fleet Percent of Total Sales	12%	13%	20%
Retail Percent of Total Sales	88%	87%	80%
Fleet Loss From Baseline of 3.4 (million)	-1.8	-1.5	-
Fleet Loss as % Baseline Fleet Sales	-53%	-44%	-
Fleet Loss as % Total Sales	-14.0%	-10.6%	-

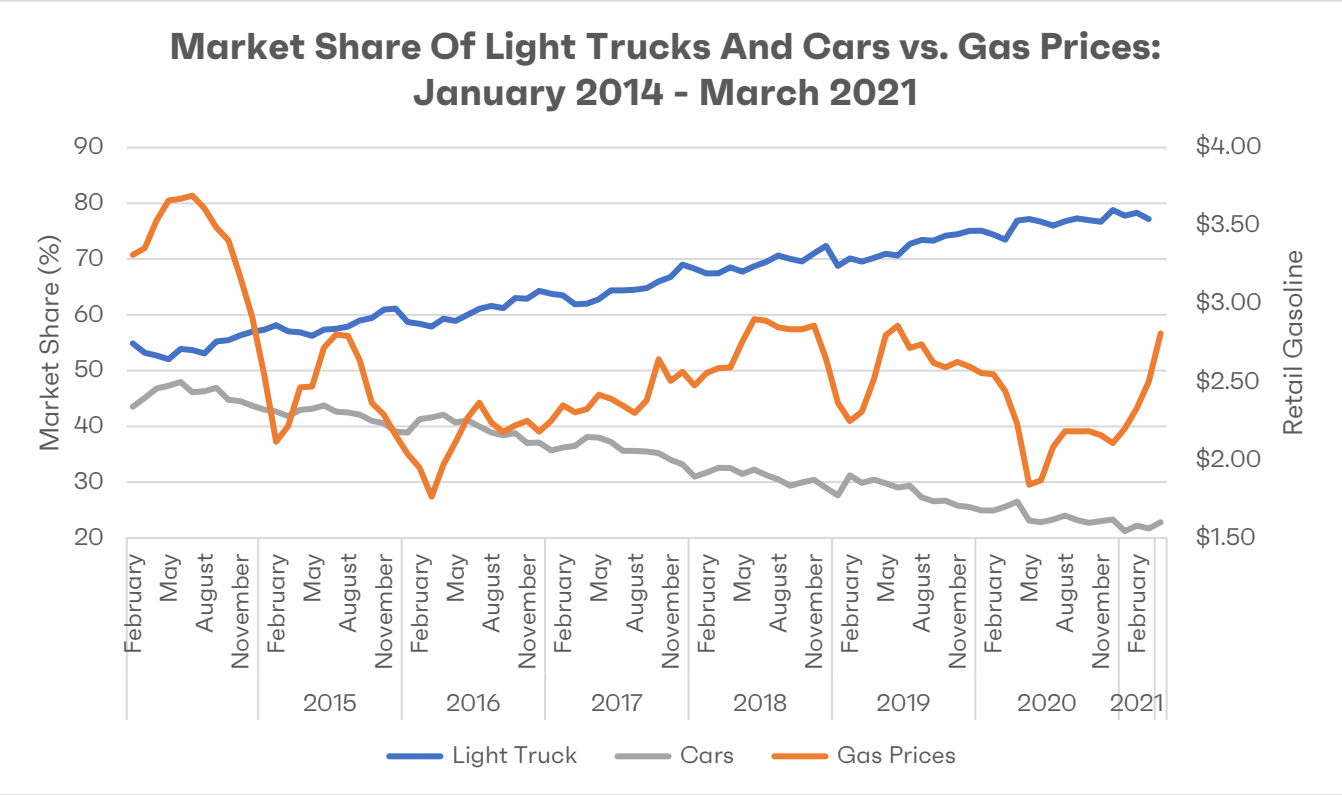
Segments vs. Gas Prices (Updated 4/7)

WardsIntelligence: "Among segment groups, CUVs and SUVs led year-over-year increases, rising 84.0% and 60.5%, respectively. The Small Pickup – up 59.6% - and Small Van (56.7%) segments also increased above the industry average. Cars were up 30.8% year-over-year in March, accounting for 22.8% market penetration vs. like-2020's 26.7%. All light trucks, including CUVs and SUVs, were up 61.9%."[13]

Segment Sales Last Year: For the year, the CUV segment group posted record market penetration of 43.3%. Except 2012, CUV penetration has risen every year since the first one hit the market it 1995. The SUV group recorded its highest annual market share (8.7%) since 9.0% in 2008. In entire-2020, CUVs and SUVs for the first time accounted for over half the market – 52%. With 19.7% of the market in 2020, the Pickup group recorded its highest market share since at least 1970 – when WI's digital

records begin – and probably for the post-World War II era, if not before then. Inside the group, the Large Pickup segment's 15.5% market share in 2020 also was a likely post-World War record.[14]

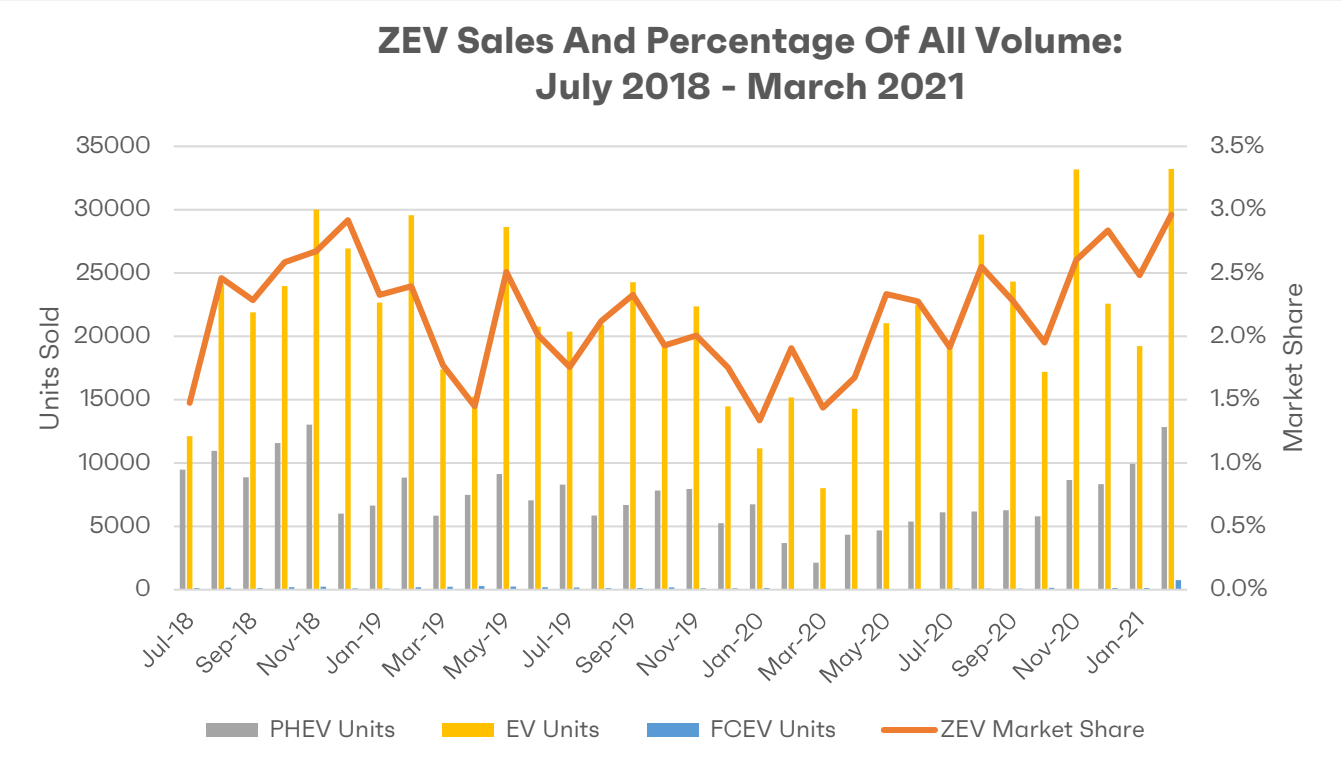
Historic Perspective: The upward trend in the popularity of light trucks over cars has been steady since 2013, when only 2% of annual market share separated the two segments.[15] and gas was over $3.00.[16] a gallon. As fuel prices dropped below the $3.00 mark in mid-September 2014, light truck sales 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.[17]



ZEV Powertrain Sales (Updated 4/7)

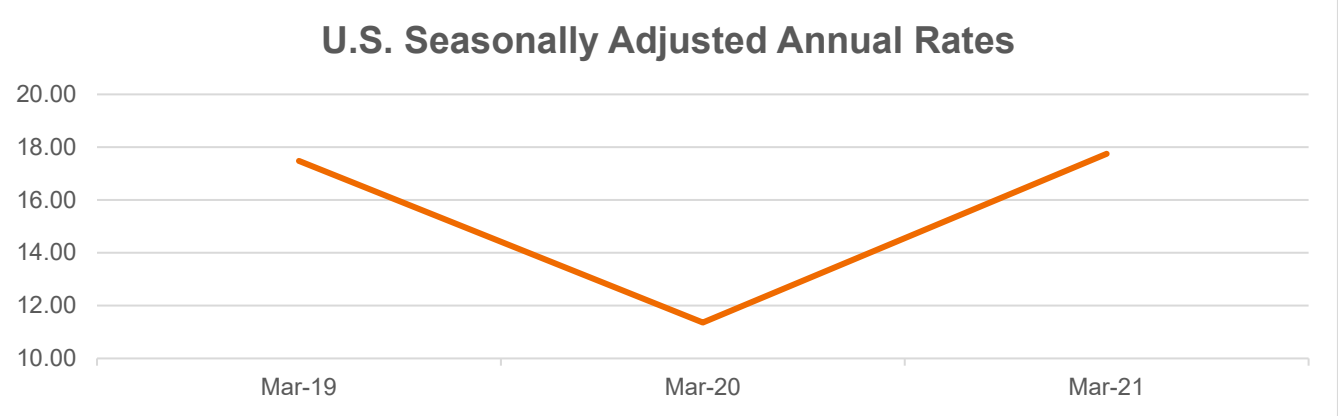
Sales of zero emission vehicles (BEV, PHEV, & Fuel Cell) accounted for 3% of total vehicle sales in March 2021, up from 2.2% from a year ago and up .6% from February 2021. Sales of battery electric vehicles led the way for ZEVs, accounting for 2.1% of total sales, up .3% from March 2020. Plug-in hybrids accounted for 0.8%, double the amount from the same time last year.[18]

Credit Suisse: "For all the hype around EV euphoria, we still haven't seen the inflection in the US. YTD BEV+PHEV sales in the US are down ~12% y/y, outpacing the industry decline of -17%...albeit EV sales in the last 3 months are up 20%+ y/y; BEV+PHEV have accounted for 2.0% of vehicle sales YTD."[19]



Seasonally Adjusted Annual Rates (Updated 4/7)

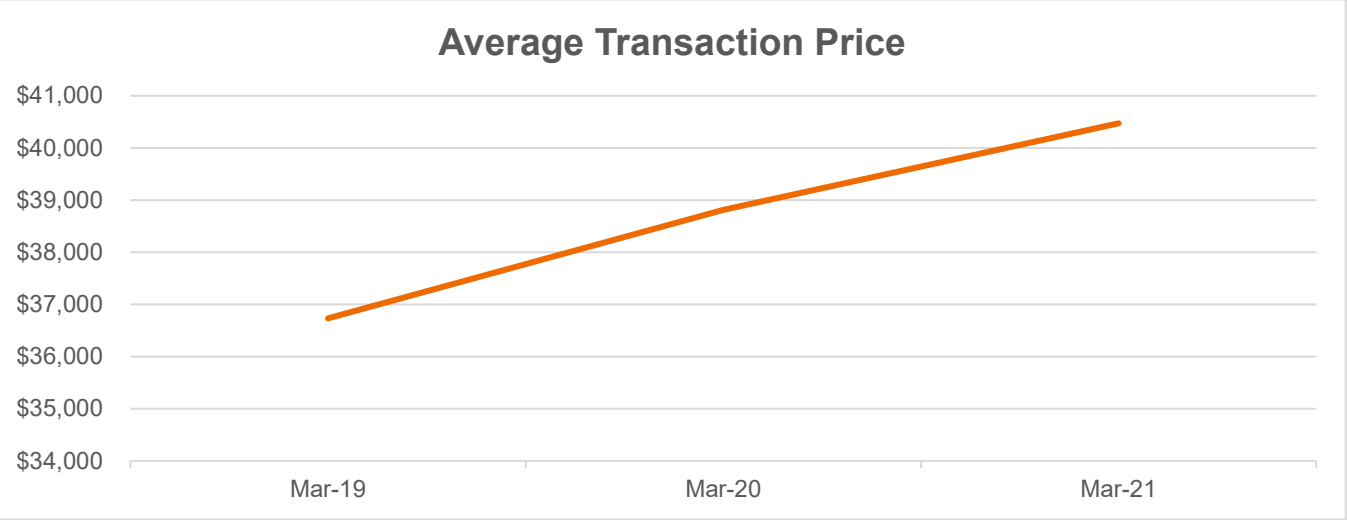
"March U.S. light-vehicle sales soared to a 17.7 million-unit seasonally adjusted annual rate, second highest total ever for the month behind 2000's 17.8 million. In the face of 10-year-low inventory and greatly reduced incentive spending, March's SAAR – a 41-month high - is somewhat inexplicable under the circumstances first created by the Covid-19 pandemic a year ago. Furthermore, if fleet demand – and enough vehicles were available – was even remotely up to pre-Covid-19 levels, the SAAR would have reached 18 million units."[20]



Average Transaction Price (Updated 4/21)

J.D. Power: "The average price of a new vehicle is on pace to reach $37,314 in Q1—the highest ever for the first quarter—nearly $3,000 higher than 2020 and more than $4,000 higher than 2019. The combination of strong retail volumes and higher prices means that consumer expenditures on new vehicles is expected to reach a Q1 record of $177.9 billion, up 31% from 2020 and up 18% from 2019.[21]

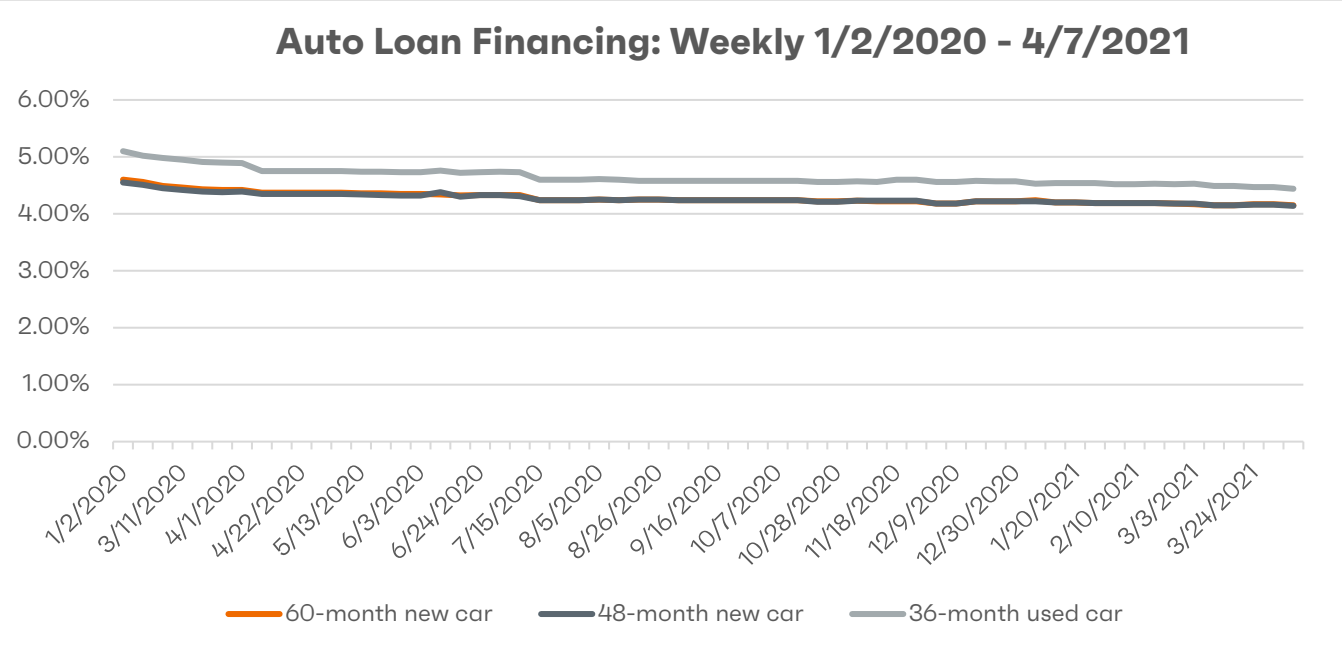
Kelley Blue Book: "The valuation analysts at Kelley Blue Book today reported the estimated average transaction price for a light vehicle in the United States was $40,472 in March 2021. New-vehicle prices increased $1,660 (up 4.3%) from March 2020, while dropping $608 (down 1.5%) from February 2021."[22]



Auto Loan Financing (Updated 4/14)

Financing Rates Generally Holding Steady: Interest rates for new cars dipped slightly this week, as did the 36-month rate for used cars. The interest rate for 60 months currently stands at 4.15%, down .02%. Rates dropped .03% to 4.44% for a 36-month used car loan. Rates have remained relatively static since mid-July until starting to dip in November. Since the beginning of last year, rates are down 0.45%, but only down 0.22% since the same time a year ago.[23]

Dates	60-month new car	48-month new car	36-month used car
4/8/2020	4.37%	4.35%	4.75%
1/2/2020	4.60%	4.55%	5.10%
3/31/2021	4.17%	4.16%	4.47%
4/7/2021	4.15%	4.14%	4.44%
One Week Change	-0.02%	-0.02%	-0.03%
Two Week Change	-0.02%	-0.02%	-0.03%
Change since 1/2/20	-0.45%	-0.41%	-0.66%
One Year Change	-0.22%	-0.21%	-0.31%



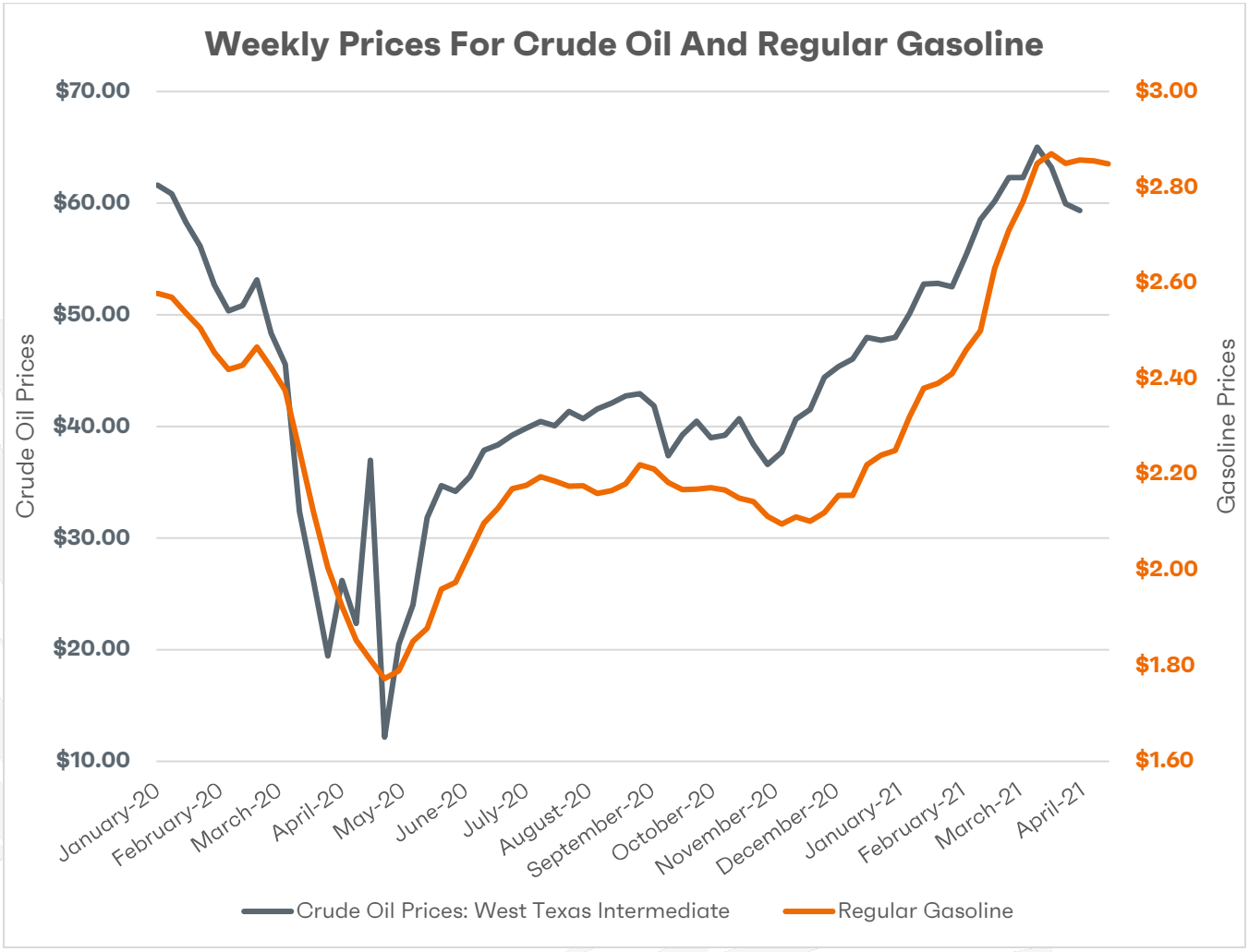
Crude Oil and Gas Prices (Updated 4/21)

EIA Outlook For Gasoline: "For the 2021 summer driving season (April–September), the U.S. Energy Information Administration (EIA) forecasts U.S. regular gasoline retail prices will average $2.78 per gallon (gal), up from an average of $2.07/gal last summer (Summer Fuels Outlook). Higher forecast gasoline prices reflect higher forecast crude oil prices, higher wholesale gasoline refining margins, and higher U.S. consumption of motor gasoline. For all of 2021, we expect U.S. retail prices of regular-grade gasoline to average $2.66/gal and retail prices for all grades to average $2.78/gal, which would result in the average U.S. household spending about $480 (31%) more on motor fuel in 2021 compared with 2020."[24]

EIA Outlook For Production: "According to EIA's most recent data, U.S. domestic crude oil production averaged 11.1 million b/d in January 2021. We estimate that U.S. domestic crude oil production declined by 0.8 million b/d in February, mostly because of cold temperatures that affected much of the country, particularly Texas. We forecast crude oil production will average 10.9 million b/d in the second quarter of 2021 and increase to almost 11.4 million b/d by the fourth quarter of 2021. We expect U.S. crude oil production will average 11.9 million b/d in 2022. The forecast of rising U.S. crude oil production is the result of our expectation that West Texas Intermediate crude oil prices will remain above $55/b through the forecast period."[25]

Gas Prices Remain Flat: Oil prices, as benchmarked at West Texas Intermediate, fell the week of April 5 by $.60 to $59.35 per barrel – now about 3.7 percent lower than the beginning of 2020. Since election day, oil prices have climbed over $21 a barrel. For the sixth week in a row, prices at the pumps

remained basically the same, dropping just a penny to $2.85 after weeks of increases since early December. Gas is about 11 percent higher than the beginning of 2020.[26]

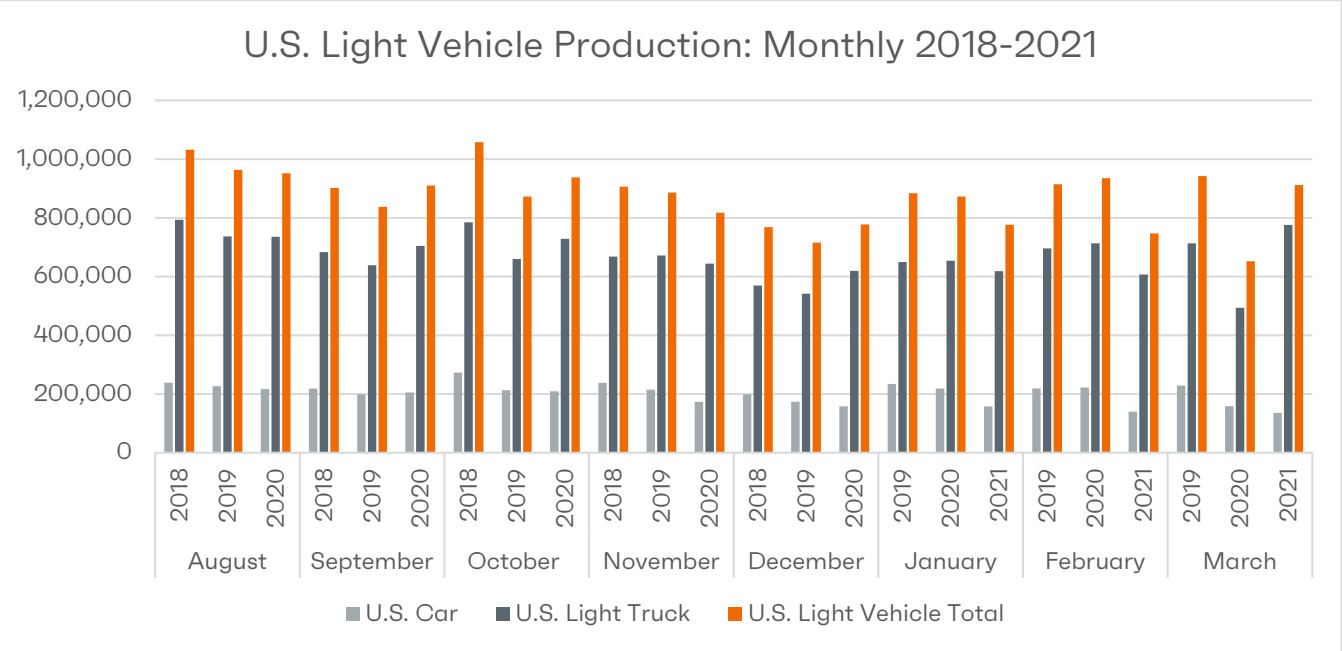


Production Meter

U.S. Light Vehicle Production (Updated 4/21)

WardsIntelligence: "Production losses mostly related to the microchip shortage continue to stack up. . . . Production in March, which temporarily includes some estimates for medium-/heavy-duty trucks, totaled 1.377 million units, 31.0% above like-2020's 1.051 million - the pandemic first impacted North American manufacturers in March 2020 cutting 475,000 units from what was expected in that month. . . . First-quarter 2021 production totaled 3.689 million units, 4.7% below like-2020's 3.872 million. Compared with the outlook for the period in December, prior to the development of the chip shortage, petrochemical issue and severe weather that temporarily closed some plants in February, the Q1 total was down 487,000 units. Most of the losses are related to the chip issue."[27]

Light vehicle production for March 2021 totaled 911,245, 40% higher than March 2020, and down 3% from 2019:



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U.S. Light Vehicle Inventory and Days' Supply (Updated 4/7)

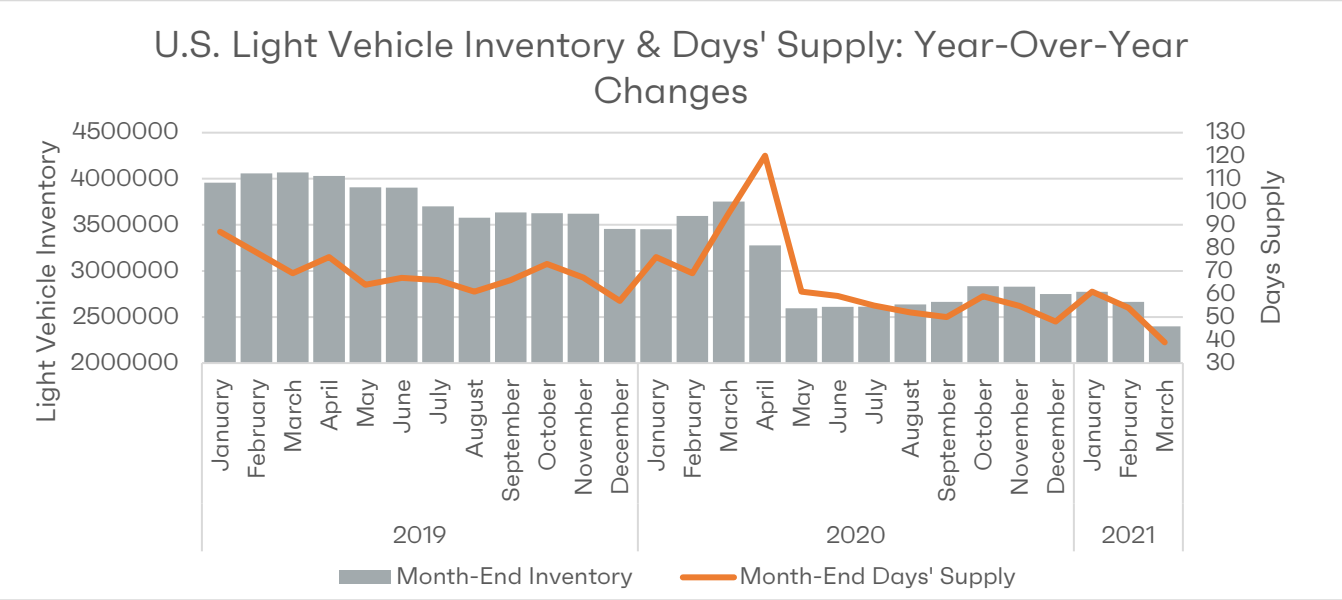
WardsIntelligence Inventory Update: "As in February, inventory fell month-to-month at the end of March, but based on last month's results, sales in April might still hold firm, even though new-vehicle availability continues to dry up due to worldwide supply-chain disruptions.

"Inventory fell 10.0% from Feb. 28 to 2.40 million units on Mar. 31. Automakers typically raise inventory throughout the first quarter in anticipation of second-quarter sales, the highest volume quarter most years. Normally, inventory at the end of March is 6% to 7% higher vs. the end of the prior quarter - this year March's total is 13% lower than December.

"Inventory of CUVs, which account for roughly 45% of U.S. sales, remains relatively in good shape compared with other segment groups. Compared with the overall industry being down 36.0% year-over-year in March, CUV inventory was a lesser 28.2% below the year-ago period. Also, although CUV days' supply is at a long-time low 40, compared to the total industry gap of 39 vs. a normal in the high 60s, it's not as far below the segment group's normal total in March, which is the high 50s. Thus, there is some foundation coming from the biggest vehicle sector heading into the second quarter.

"However, other segment groups are getting tighter, including the most resilient during the pandemic, pickups. March inventory of pickups was down 54.4% from like-2020 and its inventory-to-sales ratio stood at 1.5 in March vs. a typical total of more than 3-to-1. Days' supply for pickups was 35, well below both like-2020's 99 and the mid-80s the segment usually finishes at in March."[29]

J.D. Power: "Lean inventories mean that vehicles are selling quickly once they arrive at dealerships, and they are selling with lower discounts. The average number of days a new vehicle sits on a dealer lot before being sold is on pace to fall to 51 days, down 19 days from last year."[30]



Global Meter

Global Light Vehicle Sales Outlook (Updated 4/14)

Wards Intelligence Outlook: "World light-vehicle sales jumped 13.6% to 5.96 million units in February. The growth was almost exclusively from soaring results in China and several other Asia-Pacific markets, while the rest of the world saw steep declines. Still, the global total fell well short of the February record of 7.0 million in 2017.

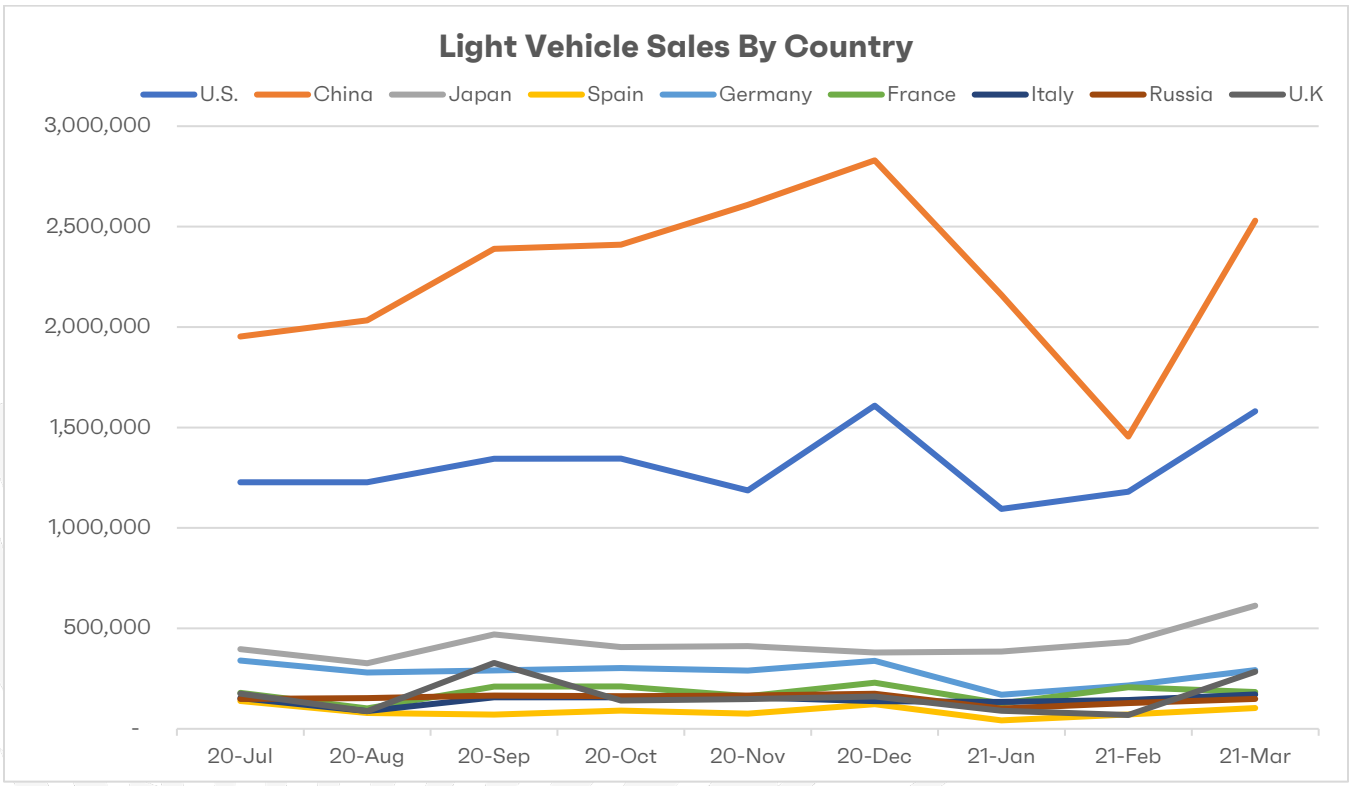
"Sales in China jumped a stunning 346.5% to 1.45 million for the month and were up 69.6% year-to-date with 3.96 million deliveries. Though marking an encouraging recovery, the growth was mostly artificial because February 2020 was China's lowest total of any month in over 15 years. This year's result still was below the 2010-2019 February average of 1.58 million.

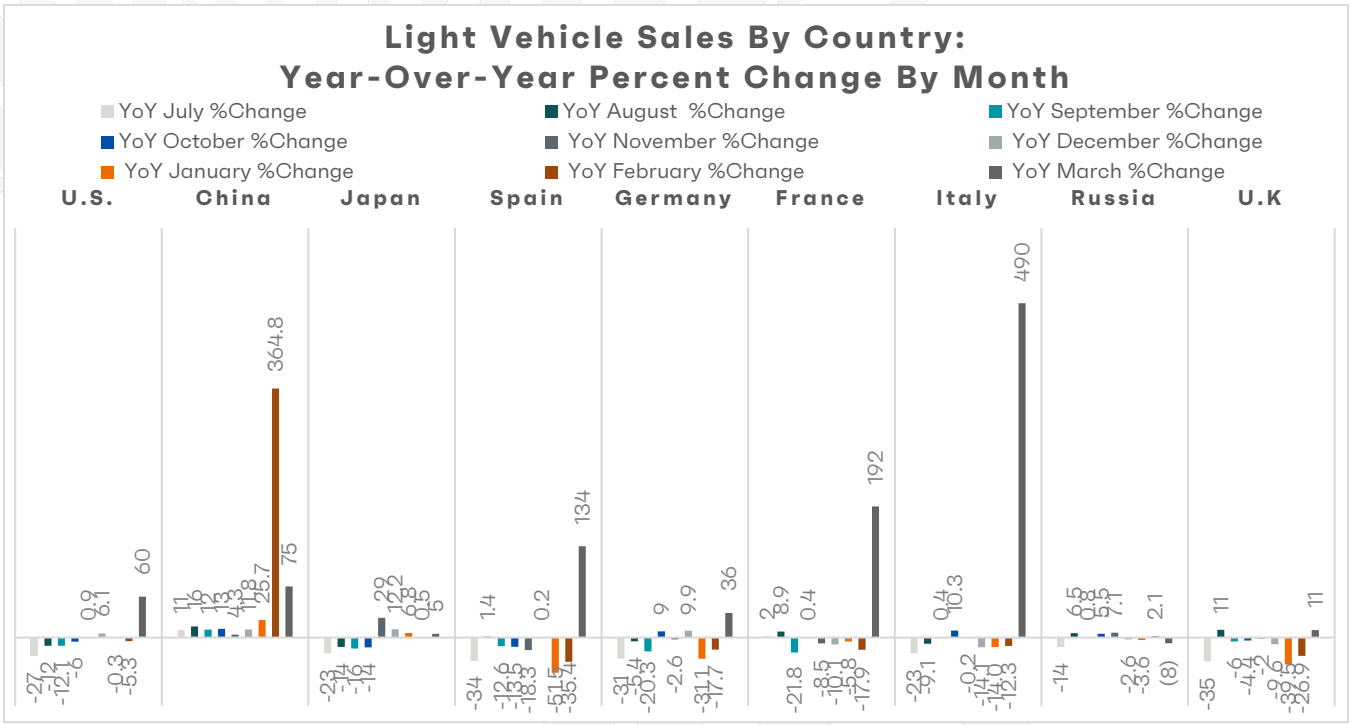
"Several other countries in the Asia-Pacific region saw impressive growth over year-ago's lows, including India (+18.1%), Pakistan (+30.0%) and South Korea (+25.6%). The region's total was up 76.9% at 2.73 million for the month and 36.6% ahead for the year. Global market share increased from 39.4% in same-period 2020 to 50.2% in 2021.

"It was a different story in Europe, where many countries still were struggling with high COVID-19 case counts and February sales dropped 14.1% to 1.22 million vehicles.

"The global 2-month tally was 12.94 million, up 7.3% from year-ago's 12.06 million."[31]

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



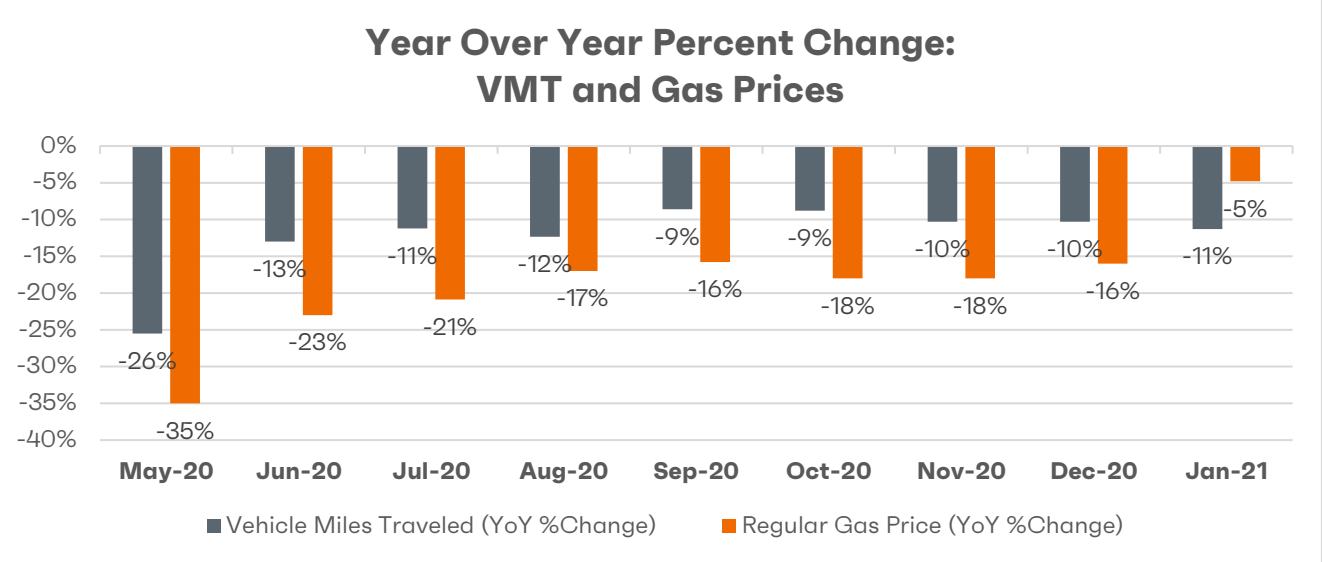


Recovery Meter

Roadway Travel (Updated 3/24)

According to the U.S. Department of Transportation, seasonally-adjusted vehicle miles traveled in January fell over 11 percent from the same time a year ago, with year-over-year VMT rising ever so slightly after four months of lower year-over-year change. The cumulative travel estimate for 2021 is 223 billion vehicle miles.[32]

- Travel on all roads and streets changed by -11.3% (-28.4 billion vehicle miles) for January 2021 as compared with January 2020. Travel for the month is estimated to be 223.3 billion vehicle miles.
- The seasonally adjusted vehicle miles traveled for January 2021 is 247.1 billion miles, a -9.6% (-26.2 billion vehicle miles) decline from January 2020. It also represents 1.2% increase (2.8 billion vehicle miles) compared with December 2020.
- Cumulative Travel for 2021 changed by -11.3% (-28.4 billion vehicle miles). The cumulative estimate for the year is 223.3 billion vehicle miles of travel.



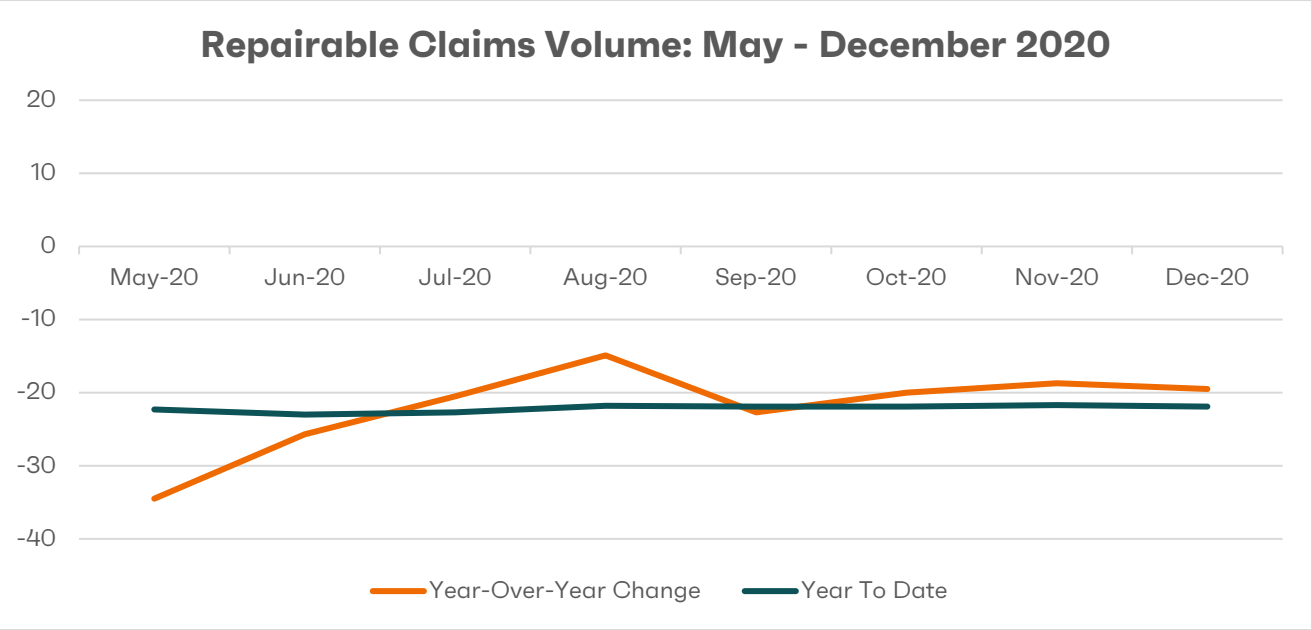
Repairable Claims (Updated 1/13)

At the beginning of 2020, the economy was strong, unemployment rates were low, congestion levels were high in many urban areas, and miles driven continued to grow. Auto accident and claim frequency had started to flatten, but average vehicle repair costs continued to rise. And then the pandemic. In response to rising diagnoses, hospitalizations, deaths, and immense uncertainty, many states began issuing shelter-at-home orders in mid-March. All but essential and frontline workers sheltered at home; many companies furloughed or let employees go, while those that could have their

employees work remotely, quickly set them up to do so. Daily trips and miles driven in the U.S. plummeted, and auto accidents and claim counts followed suit.

Latest Data From CCC: "Repairable appraisal counts for the full calendar year were down -21.3 percent versus CY 2019; when excluding comprehensive losses, repairable counts were down -26 percent for the full year.

- After plunging -35 percent in Q2, repairable appraisal counts improved to -20.2 percent in Q3 and to -19.7 percent in Q4, with bad weather in many parts of the U.S. helping to counter decline in volume due to less driving, particularly during rush hour.
- Non-comprehensive repairable appraisal counts however reversed course again in Nov'20 and Dec'20, as the CDC recommended people forgo holiday travel, and a third wave of the virus drove up new COVID-19 cases, hospitalizations, and fatalities.
- Even numerous winter storms with lots of ice failed to lift accident counts in December, since many drivers were off the roads altogether, working remote and doing much of their holiday shopping online.[33]



Economic News (Updated 4/7)

Manufacturing Added 53,000 Jobs In March, Including 30,000 In Durable Goods. "U.S. manufacturing added 53,000 jobs in March, with contributions from both durable and non-durable goods, the U.S. Bureau of Labor Statistics said. Durable goods added 30,000 jobs, with non-durable goods contributing a 23,000-job gain, according to a breakdown by industry issued by the bureau on April 2."[34]

- **Motor Vehicle And Parts Manufacturing added 3,000 Jobs In March (not seasonally adjusted).**

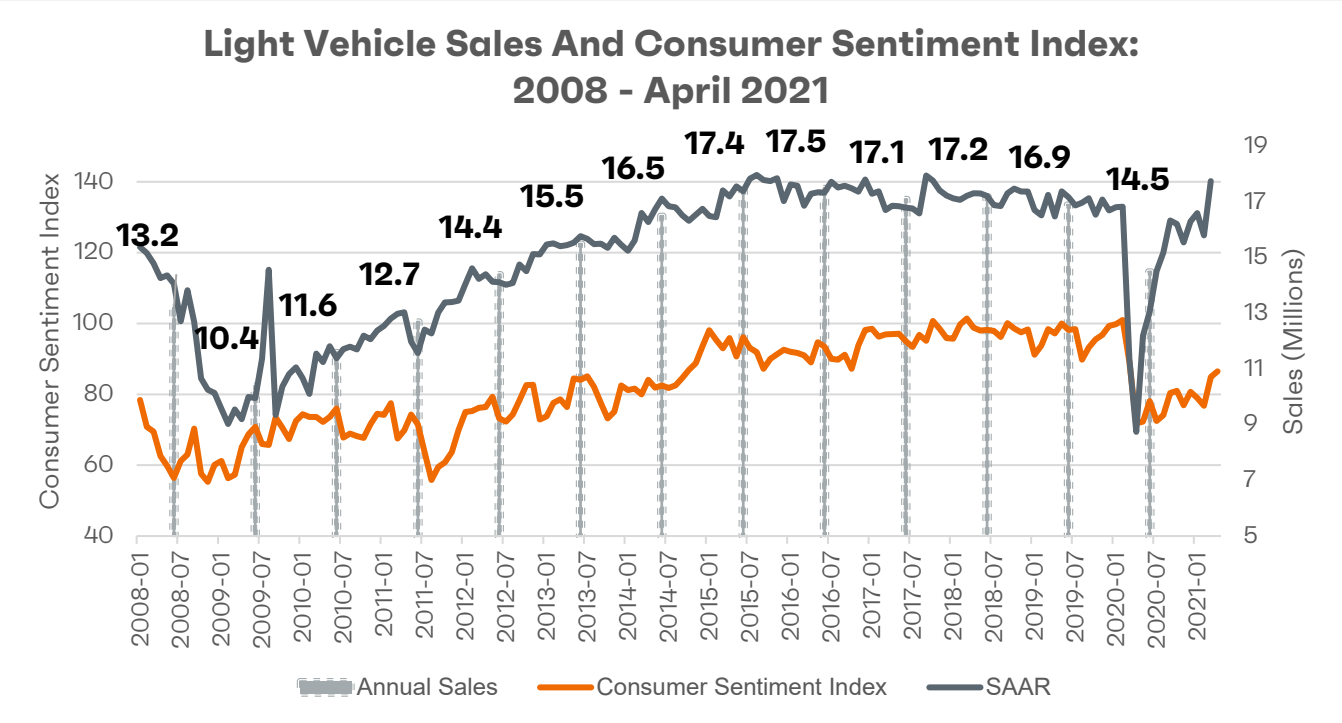
- **Motor Vehicle And Parts Manufacturing lost 1,000 Jobs In March On A Seasonally Adjusted Basis.** [35]

The Institute For Supply Management's Manufacturing Index For March Reached Its Highest Level In Nearly 40 Years. "The manufacturing economy has been strengthening in recent months as it recovers from the COVID-19 pandemic. The Institute for Supply Management said last week its manufacturing index for March reached its highest level in almost 40 years. That index is considered a leading indicator and is a barometer of where manufacturing is headed economically."[36]

Paul Traub Of The Federal Reserve Bank of Chicago Predicted The U.S. Economy Will Rebound In 2021 From Previous Peaks If Vaccines And Public Action Stops The Virus. "The economy recovered relatively quickly after the initial hit of the Covid-19 pandemic. We saw a V-shape recovery in GDP. 'We spent our way out of it,' Paul said. While personal consumption expenditures on service were down greatly, spending on durable and non-durable goods shot up. The new-car-buying population is high-income, the group least affected by unemployment and reduced wages. Employment figures look better than they really are. Unemployment looks low, but participation is down (people, especially women, have given up looking for a job, and thus are no longer counted as 'unemployed'). Wages seem to have risen, but the lower-income population was hit most by job losses, shifting the average to those who were able to retain their position. Economic forecasts estimate the U.S. economy could get back to its previous peak sometime in 2021, but only if vaccines and public action are successful at controlling the spread of the virus. Current trends that could have a negative impact on light-vehicle sales in the future: decline in the rate of licensed drivers, lower number of households plus household size declining, normalizing of working from home, and overall drop in average vehicles miles traveled."[37]

Consumer Confidence and Sales (Updated 4/21)

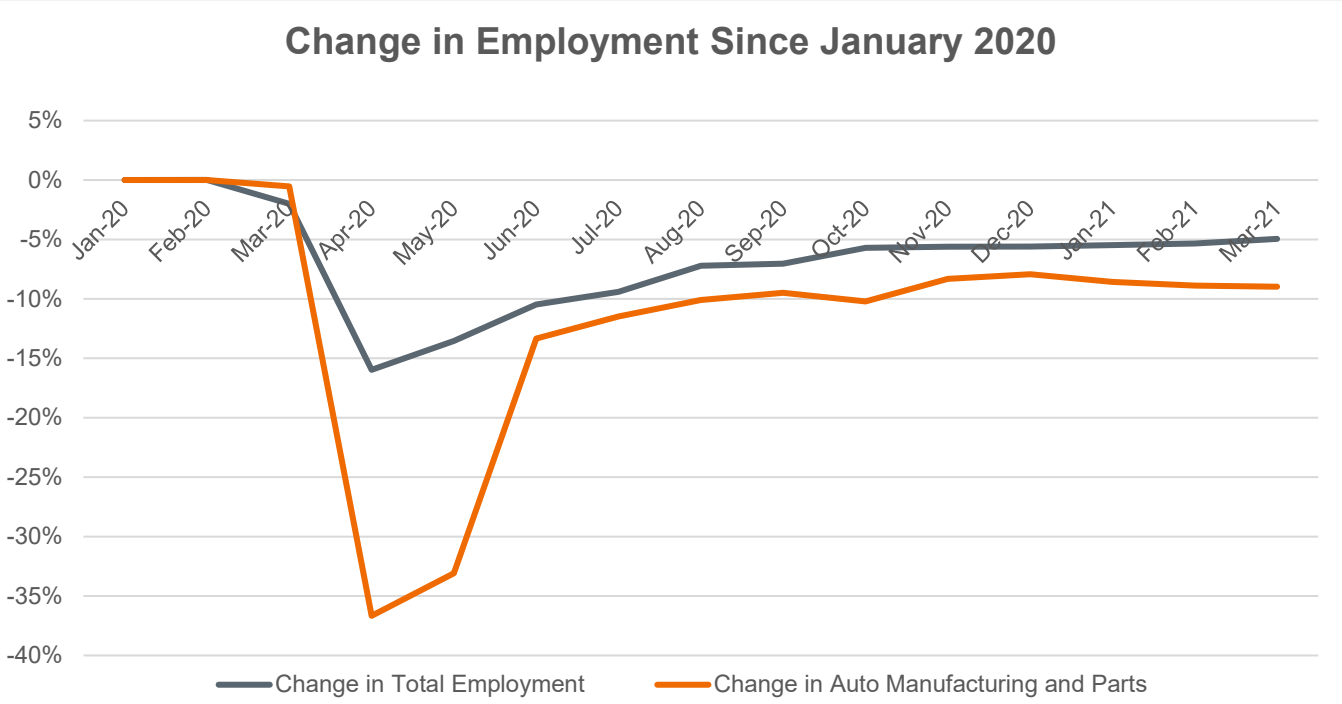
"Consumers in early April reported surging economic growth and strong job gains due to record stimulus spending, low interest rates, and the positive impact of vaccinations. The Sentiment Index rose to its best level in a year on the strength of recent gains in current economic conditions, while future economic prospects remained unchanged from March. This is opposite of the usual pattern over the past fifty years, when recoveries were paced by larger and earlier gains in expectations. The strength in current economic conditions reflects much larger than usual stimulus payments during the past year, and much larger than usual economic gains due to comparisons with last year's shutdowns. Other factors suppressed the pace of expected gains, including persistent concerns with vaccine safety as well as a surge in year-ahead inflation expectations to 3.7%, the highest level in nearly a decade. Fortunately, this surge in inflation expectations was still well anchored by much lower inflation expectations over the next five years (2.7%). Perhaps more importantly, half of all consumers expected declines in unemployment, the highest level ever recorded."[38]



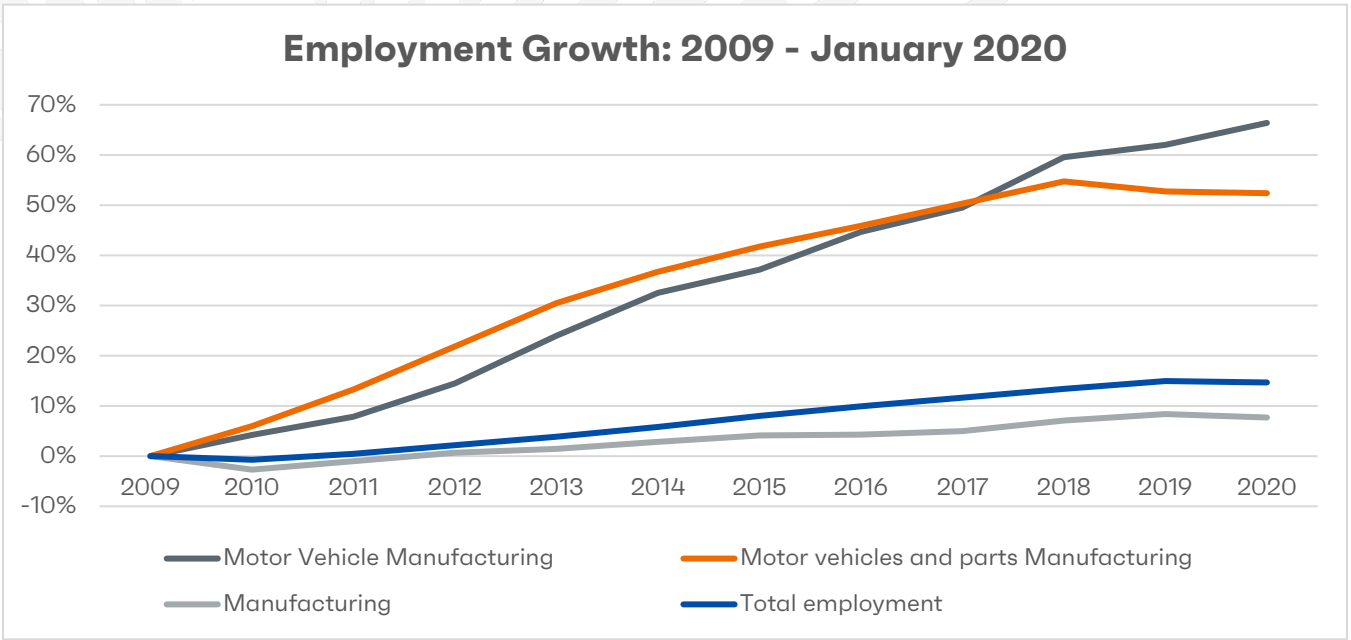
Employment (Updated 4/7)

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 has raced back and is now only down about 76,000 employees, constituting a 9% loss since January.[39]

- **Motor Vehicle And Parts Manufacturing added 3,000 Jobs In March (not seasonally adjusted).**
- **Motor Vehicle And Parts Manufacturing lost 1,000 Jobs In March On A Seasonally Adjusted Basis. [40]**



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.[41] 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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