

READING THE METER

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

October 6, 2021

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Forecast Meter

Forecast Summary (Updated 10/6)

2020-2021 Sales,¹ Extended Sales Forecast² and Production Forecasts³		
	U.S. Sales & Forecasts	North American Production
June '20	1,103,791 (-24% YoY)	1,135,807 (-19.7% 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)	729,879 (+271% YoY)
June '21	1,296,517 (+17% YoY)	1,107,958 (-1.9% YoY)
July '21	1,288,494 (-7.9% YoY)	926,035 (3% YoY)
August '21	1,090,446 (-11% YoY)	1,113,327 (-19% YoY)
September '21	1,006,875 (-25% 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)	3,925,709 (-2.5% YoY)
1st Quarter '21	3,869,872 (+11.3 YoY)	3,688,512 (-4.7% YoY)
2nd Quarter '21	4,153,855 (+20.2% YoY)	3,309,000 (132% YoY)
3rd Quarter '21	13.3 SAAR (-14% YoY)	3,230,000 (-21% YoY) (forecast)
4th Quarter '21	13.2 SAAR (forecast)	3,910,000 (-1% YoY) (forecast)
2020 Calendar Year	14,463,935 (-14.7% YoY)	12,905,447 (-23.1%)
2021 Full Year Estimate	15 million units (4% YoY)	14,140,000 (5.9% YoY)

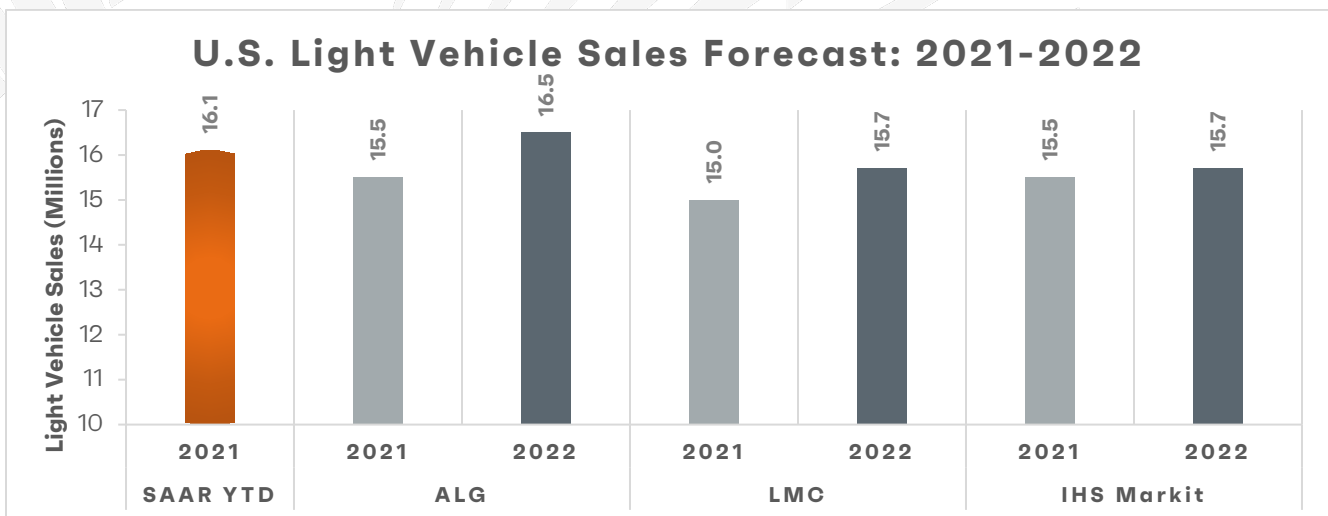
U.S. Light Vehicle Sales Outlook (Updated 10/6)

Wards Intelligence October Outlook (10/6)⁴: “For most automakers, the level of uncertainty that still exists relative to the supply-chain problems is making changes to short-term production plans – mostly cuts in this environment – a day-to-day process. If production for the U.S. does not decline significantly in October from current expectations, sales could remain relatively flat on an annualized basis with September’s 12.2 million units. In fact, the seasonal factors that will be used to calculate October’s results slightly favor a higher seasonally adjusted annual rate, meaning it can rise from September even if raw volume falls.

“Raw sales volume in October vs. September will be helped because of an additional two selling days. The fourth quarter is forecast for a 13.1 million-unit SAAR, with entire-2021 volume expected to finish at 15.0 million units.”

Wards Intelligence Outlook (9/30)⁵: “The global chip shortage remains the story in September for the U.S. market and is expected to heavily continue as the main topic for the remainder of this year and throughout 2022. . . . The bottom line is there is no surety sales in October improve on September. . . .

“Either way, sales in October, and even the entire fourth quarter, will not show much growth. In fact, WI partner LMC Automotive has reduced its calendar-year outlook for 2021 to 15.0 million units and chopped its 2022 outlook to 15.7 million. Sales in Q3-2021 are pegged at 13.4 million-unit SAAR, and Q4 will fall to a 13.2 million total. In Q1- and Q2-2021, the SAARs totaled 16.8 million and 16.9 million, respectively, and both those periods, albeit to much lesser degrees, also were negatively impacted by supply issues. Thus, there should be a large amount of pent-up demand building up in addition to leftover unmet demand from 2020. But tapping into that excess could mostly have to wait until 2023. . . . September’s raw volume is forecast to total 1.03 million units for a daily selling rate of 40,960, 23.6% below like-2020’s 53,644 – 25 selling days both periods.”



J.D. Power September Forecast (9/30)⁶: “New-vehicle retail sales for the month of September 2021 are expected to decline when compared with September 2020 and September 2019, according to a

joint forecast from J.D. Power and LMC Automotive. Retail sales of new vehicles this month are expected to reach 888,900 units, a 24.8% decrease compared with September 2020, and a 19.8% decrease compared with September 2019 when adjusted for selling days. September 2021 has the same number of selling days as September 2020 but two additional selling days than September 2019. Comparing the same sales volume without adjusting for the number of selling days translates to a decrease of 24.8% from 2020 and a 12.8% decrease from 2019. New-vehicle retail sales in Q3 2021 are projected to reach 2,990,500 units, a 14.3% decrease from Q3 2020 and an 18.8% decrease from Q3 2019 when adjusted for selling days.”

North American Production & Inventory Outlook (Updated 10/6)

Wards Intelligence Inventory Outlook (10/6)⁷: “For most automakers, the level of uncertainty that still exists relative to the supply-chain problems is making changes to short-term production plans – mostly cuts in this environment – a day-to-day process. If production for the U.S. does not decline significantly in October from current expectations, sales could remain relatively flat on an annualized basis with September’s 12.2 million units. In fact, the seasonal factors that will be used to calculate October’s results slightly favor a higher seasonally adjusted annual rate, meaning it can rise from September even if raw volume falls. . . . Based on current expectations for production and sales, inventory should start rising in October. However, nearly every month this year unplanned production cuts have led to lower-lower-than-expected output and final totals for inventory falling short of forecasted levels.”

Wards Intelligence Outlook For September (9/30)⁸: “The shortage of microchips for automotive parts has cut production for the U.S. market to the point capacity utilization rates at North America plants (excluding 2020) are at their lowest since the years just coming out of the 2008 financial crisis, and inventory is roughly at one-third the level it historically would total in a market with real demand above a 17 million annualized rate – or what U.S. sales would be running at in 2021 and 2022 if enough inventory was there to support it. Inventory ended August at 1.06 million units, 70% below the average for the month in the five years through 2019, a period which averaged annual sales of 17.2 million units. Inventory is forecast to rise 20% from August to 1.28 million units at the end of September and end a 7-month string of sequential declines. Ostensibly, an increase in inventory should mean an upturn in sales next month. However, the typical pattern nearly each month throughout this year is for volatility in the supply chain to cause unexpected production slowdowns and stoppages on top of known disruptions, meaning final inventory totals usually fall short of projections.”

Wards Intelligence Outlook For 2021 (9/22)⁹: “Production for the entire year is tracking at 14.14 million units, 5.9% above the pandemic-smacked total in 2020 of 13.36 million. Light-vehicle output is tracking toward 13.7 million units, 5.6% above 2020. The 2021 outlook is roughly 2 million units below expectations for the period at the beginning of the year. It’s safe to say the supply-chain disruptions also will have a major impact in 2022.”

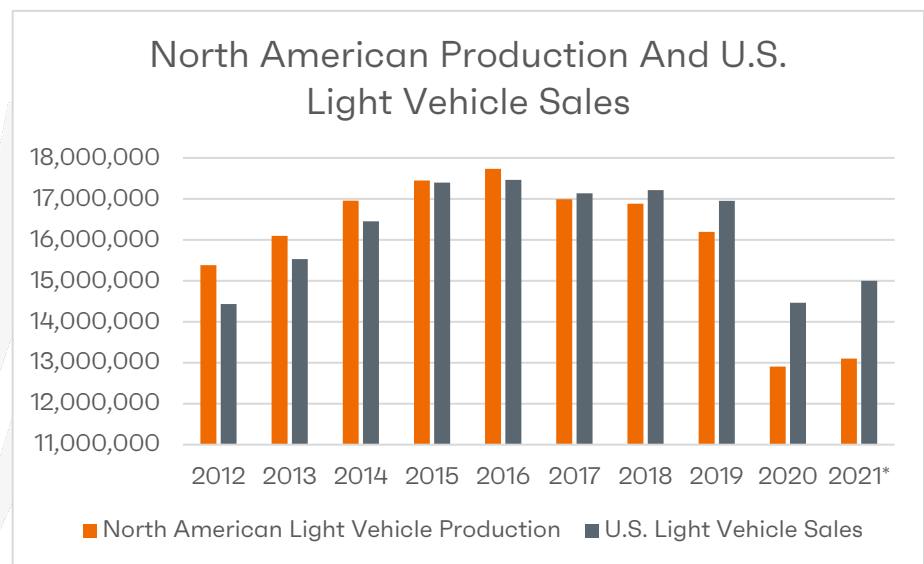
Wards Intelligence Third Quarter Outlook (9/22)¹⁰: “With the severity of the global semiconductor shortage becoming blatantly more evident, 573,400 units have been cut from estimated Q3 North

America production of light vehicles and medium-/heavy-duty trucks from what was expected for the period a month ago.

“The cuts also are related to other supply-chain disruptions, including from the rebooting of Covid-19 restrictions, clogged shipping lanes, higher prices for materials and parts and weather. But most of the lost production is related to chip shortage, and the crisis is expected to have a major impact on Q4.

“Including an underbuild in August of 224,000 units from what was projected a month ago, production in Q3 is tracking to 3.23 million units, 21.4% below like-2020, and lowest for the period since 3.04 million in 2010. Third-quarter production of light vehicles is pegged at 3.13 million, 21.6% below year-ago.”

Wards Intelligence 4th Quarter Outlook (9/22)¹¹: “Production in Q4 is projected at 3.91 million units, less than 1% below October-December 2020, but lowest for the quarter since 2012. Although several planned closures and slowdowns related to the semiconductor shortage through the end of the year are known, the level of what is unknown with the supply-chain issues puts more downside risk than upside to the Q4 outlook.”



IHS Markit North American Outlook For September (9/16)¹²: “The outlook for North America light vehicle production was sharply reduced by 733,000 units and by 1,991,000 units for 2021 and 2022, respectively (and reduced by 63,000 units for 2023). The production outlook was meaningfully reduced in the near-term as the semiconductor supply chain is not improving at the pace that was expected with renewed COVID-19 restrictions adding further weight to an already hamstrung global supply chain. Production in Q3-2021 was revised down 8.3% or 279,000 units with Q4 production revised down 12.3% or 453,000 units amid expectations for disruptions to continue for a more protracted period that extends through 2022. More significantly, production in 2022 was revised sharply lower by 11.6% to total 15.2 million units with reductions more heavily weighted in the first half as expectations are for the supply of semiconductors to improve steadily throughout the year, but at a reduced rate than previously forecast. Opportunities exist for manufacturers to outperform these reduced volumes based on their ability to secure the needed components and resources to support vehicle production. This is expected to vary by manufacturer and by vehicle program within a given manufacturer with volatility and visibility into weekly planning and scheduling to remain challenging over the coming months. The longer term forecast horizon now accounts for production to outpace sales for a time as inventory is replenished.”

IHS Global Outlook (9/22)¹³: “The IHS Markit light vehicle production forecast has been cut by 6.2% or 5.02M units in 2021, and by 9.3% or 8.45M units in 2022, to stand at 75.8M units and 82.6M units, respectively. For 2023 we have reduced the forecast by 1.05M units or 1.1% to 92.0M units; this is a front-loaded adjustment and from the second quarter we expect output levels will be able to accelerate as supply chains return to normal. If this is the case then strong pent-up demand and the pressure to rebuild stock levels is expected to support elevated levels of production in 2024 and 2025, with 2024 now forecast to hit 97.3M units, up 3.2% compared to the previous forecast and 2025 forecast at 98.9M units an increase of 2.4%.

“This is the largest single adjustment to the outlook in what has been a turbulent past nine months.

“We estimate that 1.44 million units of production were lost in Q1 and a further 2.60 million units in Q2; currently Q3 losses are running at 3.1 million units and rising. The outlook for Q4 now reflects heightened risk as challenges to the supply chain - primarily semiconductors - remain entrenched.”

Wards Intelligence Global Production Outlook (8/18)¹⁴: “Global light-vehicle production is forecast to end 2021 about 3.75 million units lower because of the shortage of microchips to the automotive industry, which has caused major cutbacks in vehicle output in all regions. Wards Intelligence partner LMC Automotive expects production to end 2021 at 83.2 million units but output could have totaled close to 87 million if not for the chip shortage. The estimated cuts exclude losses due to other unusual disruptions to the supply chain, meaning production ultimately could have topped 87 million in 2021. Forecast 2021 output still represents a big gain of 11.6% from 2020’s pandemic-slammed total of 74.6 million units, which was 15.9% below 2019’s 88.7 million and 21.5% below the record year of 2017 when production totaled 95.1 million.

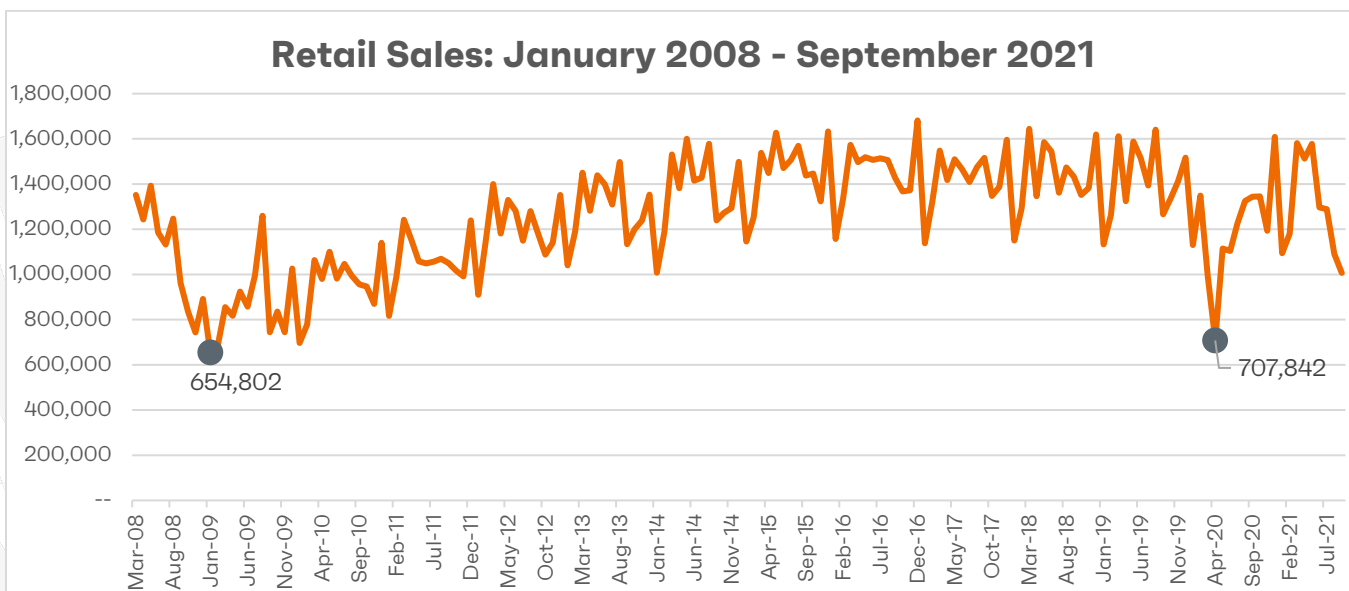
“By region, North America is forecast to lose the most output – 1.46 million units – from the chip shortage, followed by 938,000 in Europe. Combined, the two regions account for 64% of the estimated global losses. China, geographically the biggest volume manufacturer of light vehicles, is expected to account for 16% - 615,000 units - of the 2021 chip-related losses.”

Market Meter

U.S. Light Vehicle Sales (Updated 10/6)

Monthly Sales (Updated 10/6)

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.

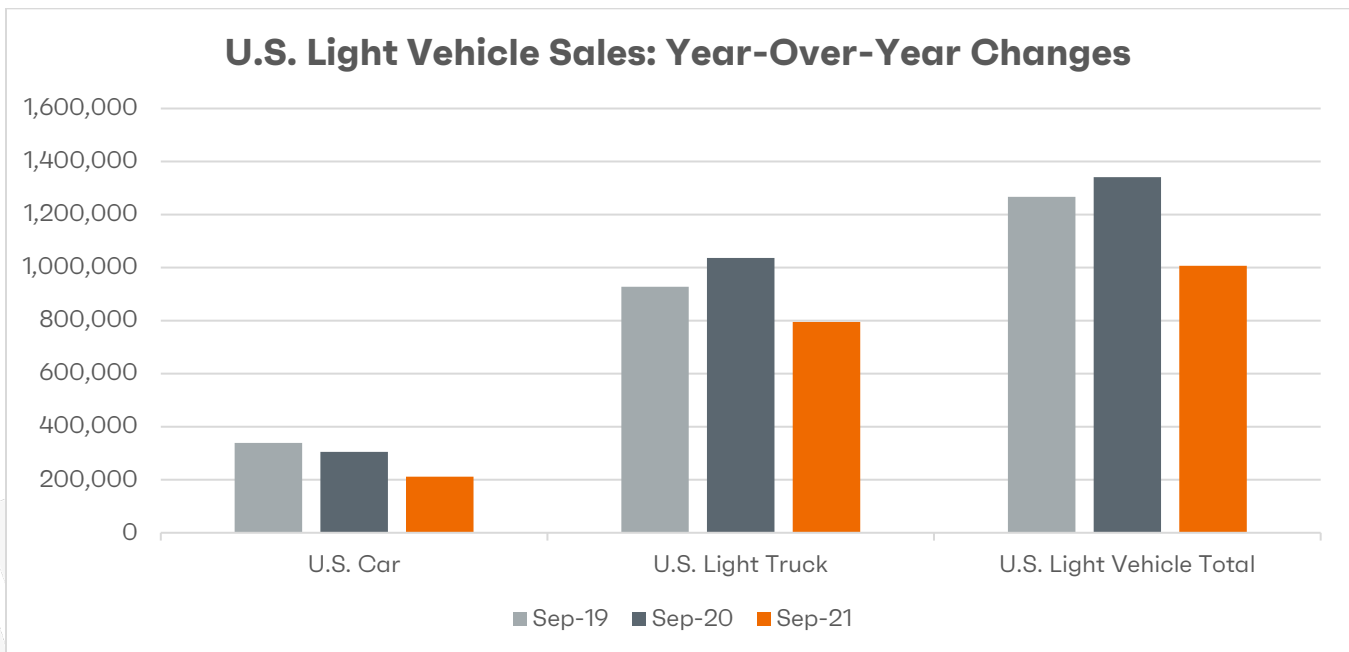


September Sales (Updated 10/6)

WardsIntelligence: “U.S. new-vehicle sales slumped for a fifth straight month in September, as the record deterioration of inventory in 2021 continued to plague the market. Supply-chain disruptions, mainly from a global shortage of microchips, continue to cause massive production cuts, with the situation not likely to improve much, if at all, over the remainder of this year.

“Thus, in a market with enough underlying demand to support 12-month volume of 17 million units or more, U.S. light-vehicle sales dropped to a 12.2 million-unit seasonally adjusted rate in September, well below like-2020’s 16.3 million, and lowest for the month since 11.7 million in 2010. It also was the fifth straight month-to-month decline since April’s peak SAAR of 18.3 million units.

“Raw volume, which totaled 1.01 million units in September, has declined month-to-month since May, and also was an 11-year-low for the period. September’s daily selling rate totaled 40,275, 24.9% below like-2020’s 53,644 – 25 selling days both periods.”¹⁵



Fleet Sales (Updated 10/6)

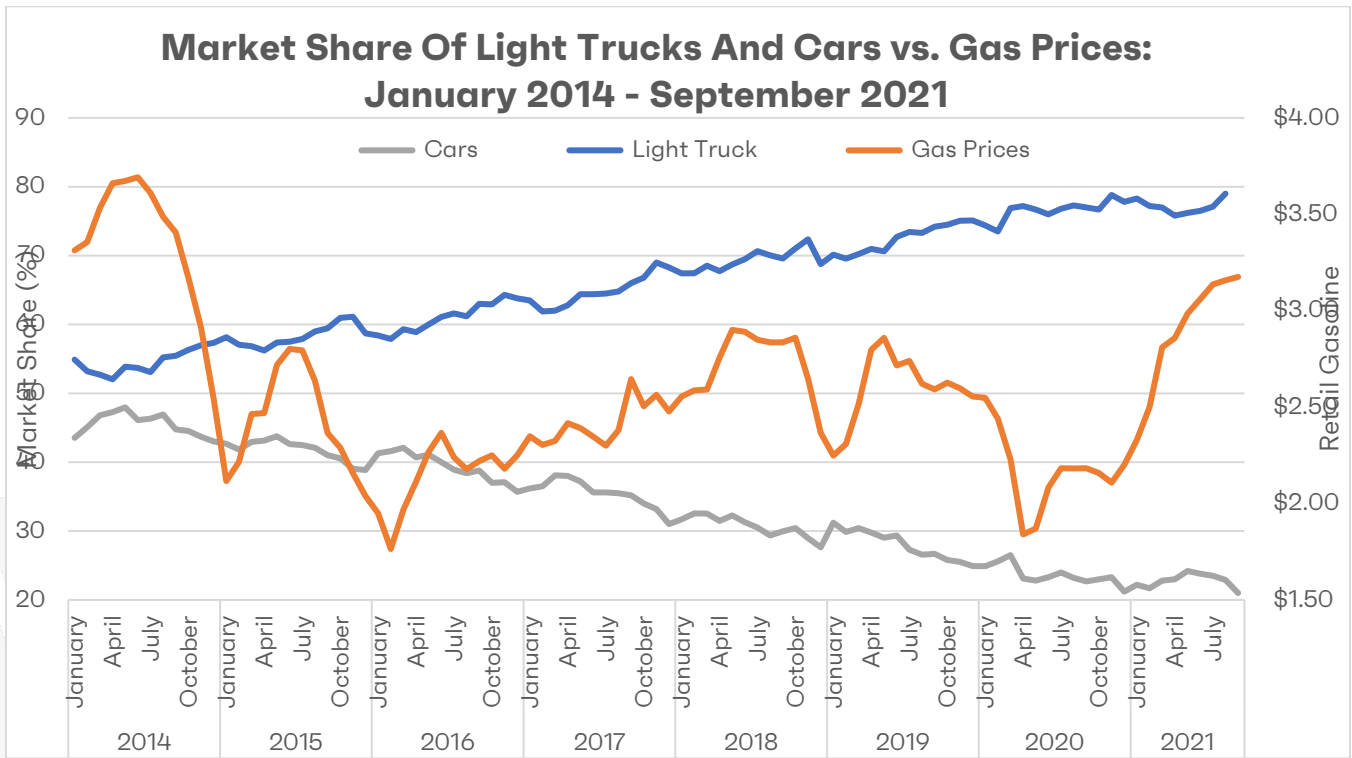
TrueCar¹⁶: “Fleet sales for September 2021 are expected to be down 19% from a year ago and down 5% from August 2021 when adjusted for the same number of selling days.”

J.D. Power¹⁷: “Fleet sales are expected to total 120,500 units in September, down 22.1% from September 2020 and down 55.8% from September 2019 on a selling day adjusted basis. Fleet volume is expected to account for 12% of total light-vehicle sales, flat from 12% a year ago.”

Segments vs. Gas Prices (Updated 10/6)

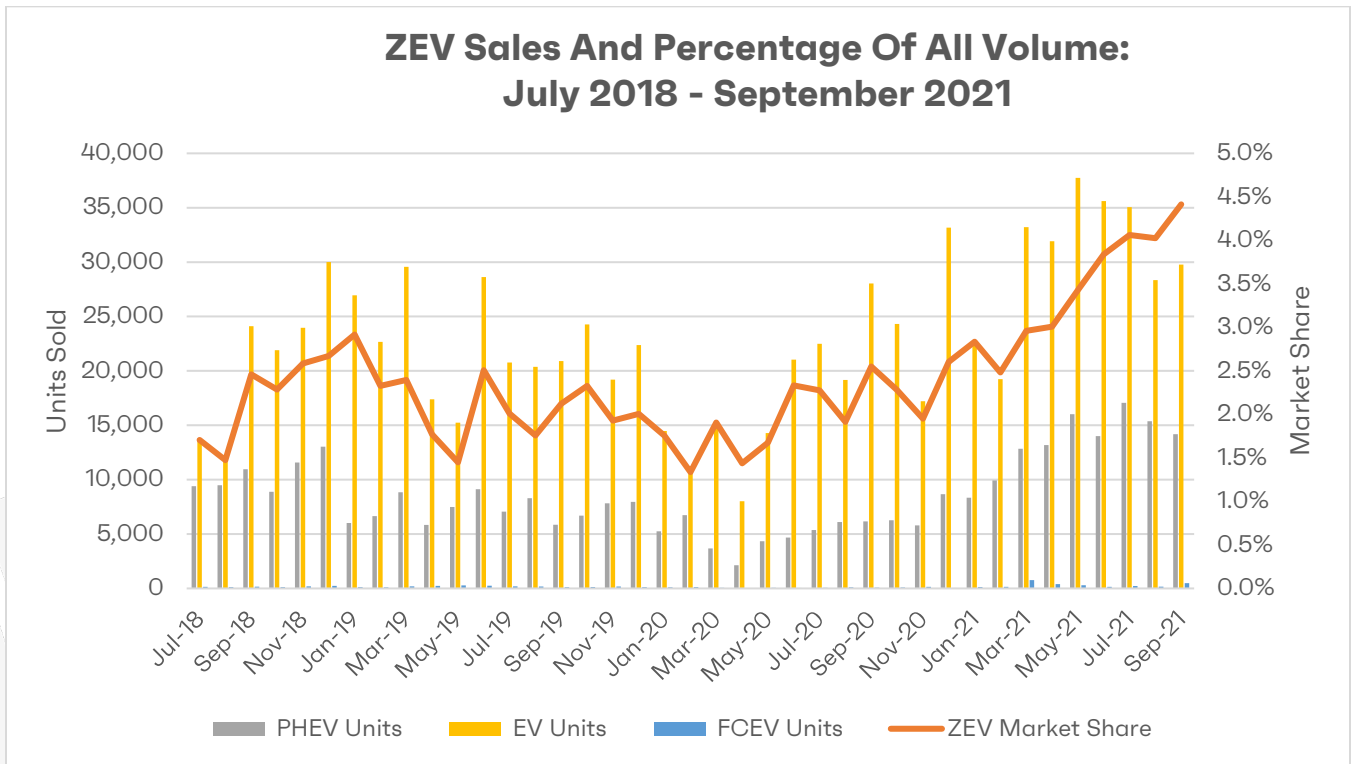
Monthly Sales For September: Light trucks accounted for 79% of sales in September, a 1.7% increase in market share from a year ago. Compared to 2020, sales of cars are down more than 93,000, and down more than 127,000 from September 2019, when cars comprised 27% of the market as opposed to the 21% of the market passenger cars have now.

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 segments¹⁸ and gas was over \$3.00¹⁹ a gallon. As fuel prices dropped below the \$3.00 mark in mid-September 2014, light truck sales began to take off. Gas prices since have averaged only \$2.57 a gallon (through August 2021) 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.²⁰



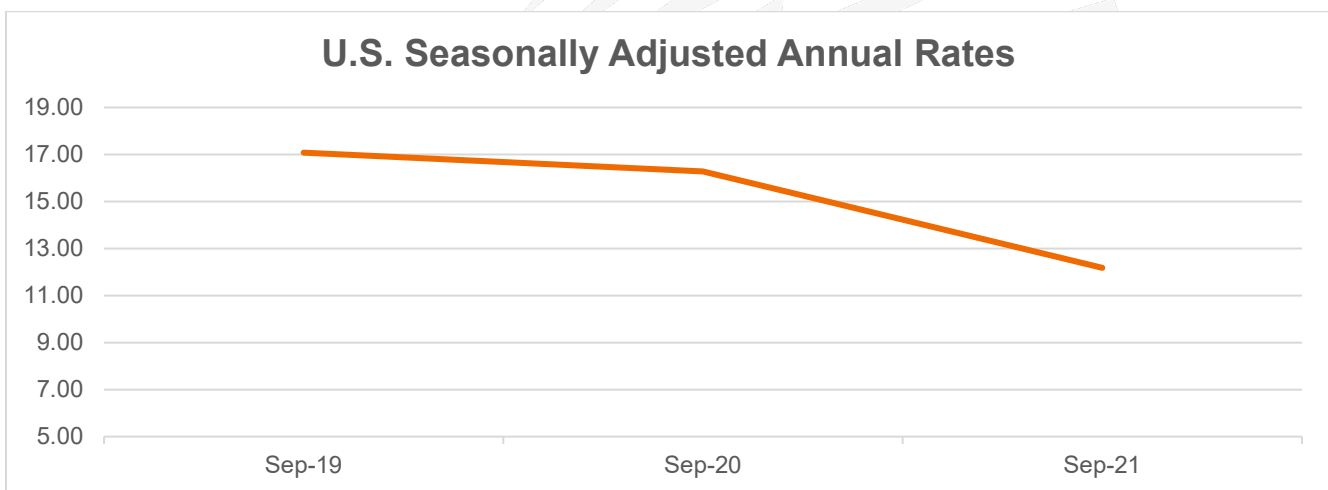
ZEV Powertrain Sales (Updated 10/6)

Sales of zero emission vehicles (BEV, PHEV, & Fuel Cell) accounted for 4.4% of total vehicle sales in September 2021, up 1.8 pp from a year ago and up .4 from August 2021. Sales of battery electric vehicles led the way for ZEVs, accounting for 3% of total sales, up .9 pp from September 2020. Plug-in hybrids accounted for 1.41%, more than three times the amount from the same time last year.²¹



Seasonally Adjusted Annual Rates (Updated 10/6)

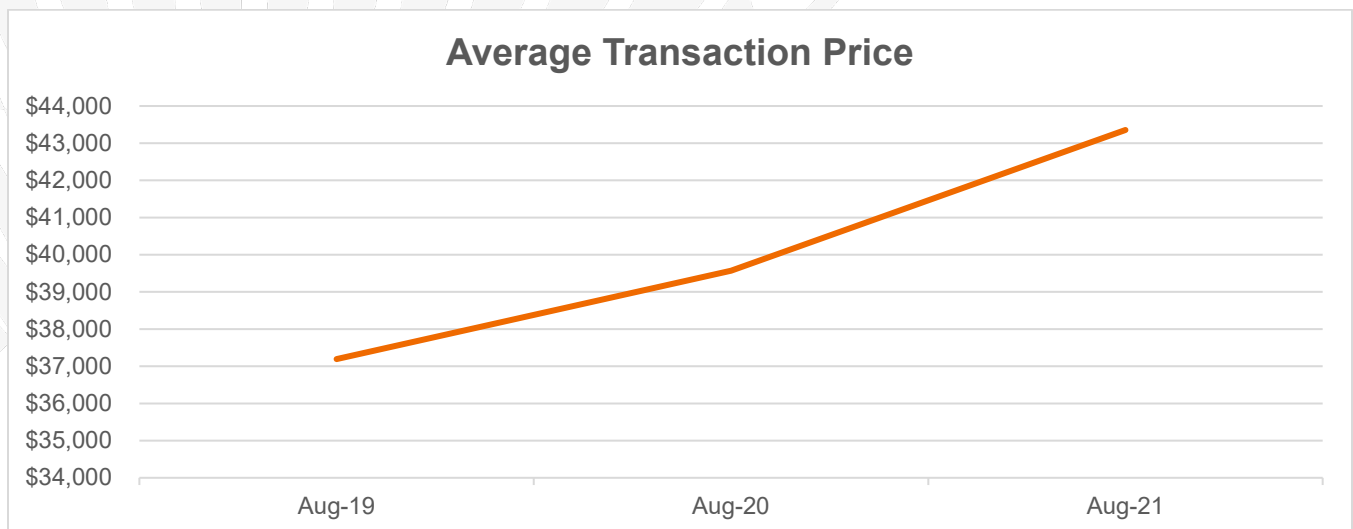
WardsIntelligence: “[I]n a market with enough underlying demand to support 12-month volume of 17 million units or more, U.S. light-vehicle sales dropped to a 12.2 million-unit seasonally adjusted rate in September, well below like-2020’s 16.3 million, and lowest for the month since 11.7 million in 2010. It also was the fifth straight month-to-month decline since April’s peak SAAR of 18.3 million units.”²²



Average Transaction Price (Updated 10/6)

J.D. Power²³: “In September 2021, average transaction prices are expected reach an all-time high of \$42,802, the fourth consecutive month over \$40,000. For context, average transaction prices are trending to be 18.6% higher in September 2021 than they were in September 2020 when prices broke the \$36,000 level for the first time ever. This is partially due to continued compression of manufacturer incentives. The average manufacturer incentive per vehicle is on pace to be \$1,755, a decrease of \$2,037 from a year ago and the lowest amount on record. . . . Despite retail volumes in September being down significantly, the higher prices mean that consumers are on track to spend \$38.0 billion on new vehicles this month, the fourth highest on record for the month of September.”

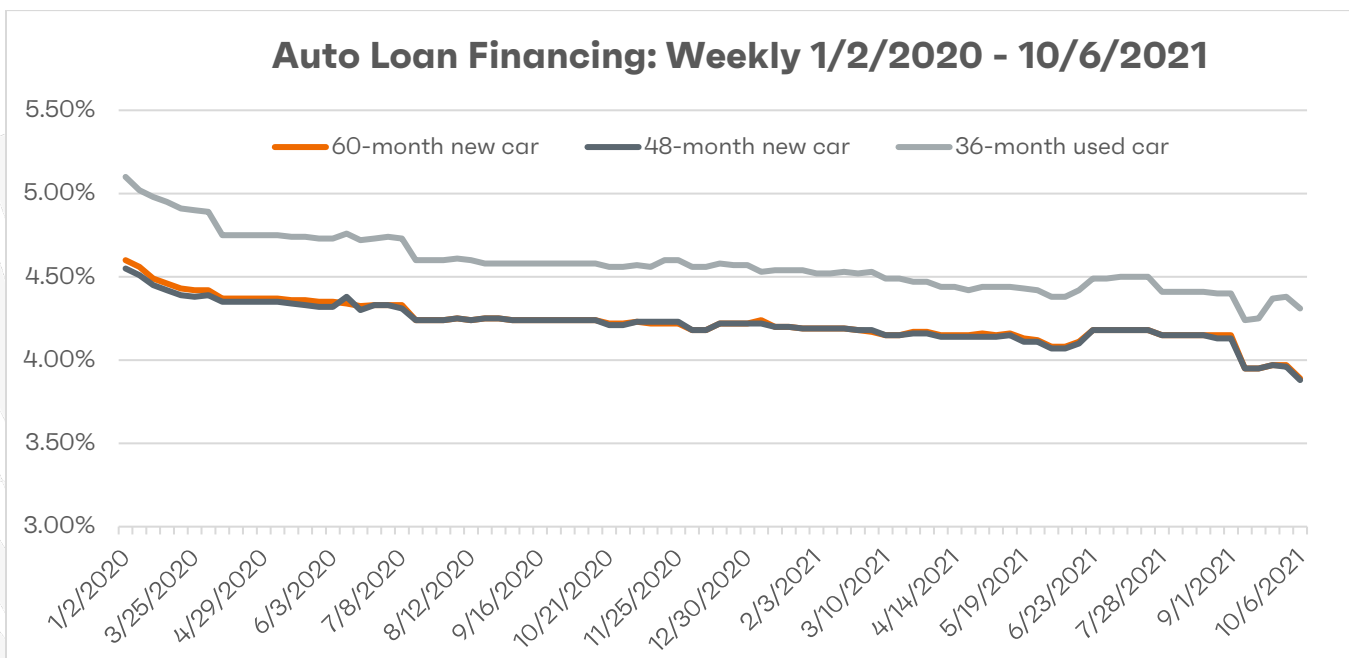
Kelley Blue Book: “According to a new report from Kelley Blue Book, new-vehicle prices hit another all-time high in August 2021, marking the fifth straight record-setting month. At \$43,355, the average transaction price (ATP) for a new vehicle was up nearly 10% (\$3,789) from one year ago in August 2020, and up 1.6% (\$685) from July 2021. . . . Incentive spending continued to fall as well, dropping to 5.6% of ATP last month, a decrease from 5.9% in July 2021 and well below the 10.1% of ATP recorded in August 2020. Porsche, Genesis, Land Rover and Subaru had among the lowest incentive spend last month, all less than 4% of ATP. On the other hand, Alfa Romeo, Buick and Infiniti each had incentive levels at more than twice the industry average.”²⁴



Auto Loan Financing (Updated 10/6)

Interest Rates At Lowest Level In More Than A Year: Interest rates for new cars are currently at the lowest level in more than a year at 3.89%. Rates also remained near a year-long low on the 36-month used car loan at 4.31%. Since the beginning of last year, rates are down 0.71%, and down 0.35% since the same time a year ago.²⁵

Dates	60-month new car	48-month new car	36-month used car
1/2/2020	4.60%	4.55%	5.10%
10/7/2020	4.24%	4.24%	4.58%
9/29/2021	3.97%	3.96%	4.38%
10/6/2021	3.89%	3.88%	4.31%
One Week Change	-0.08%	-0.08%	-0.07%
Two Week Change	-0.08%	-0.09%	-0.06%
Change since 1/3/20	-0.71%	-0.67%	-0.79%
One Year Change	-0.35%	-0.36%	-0.27%

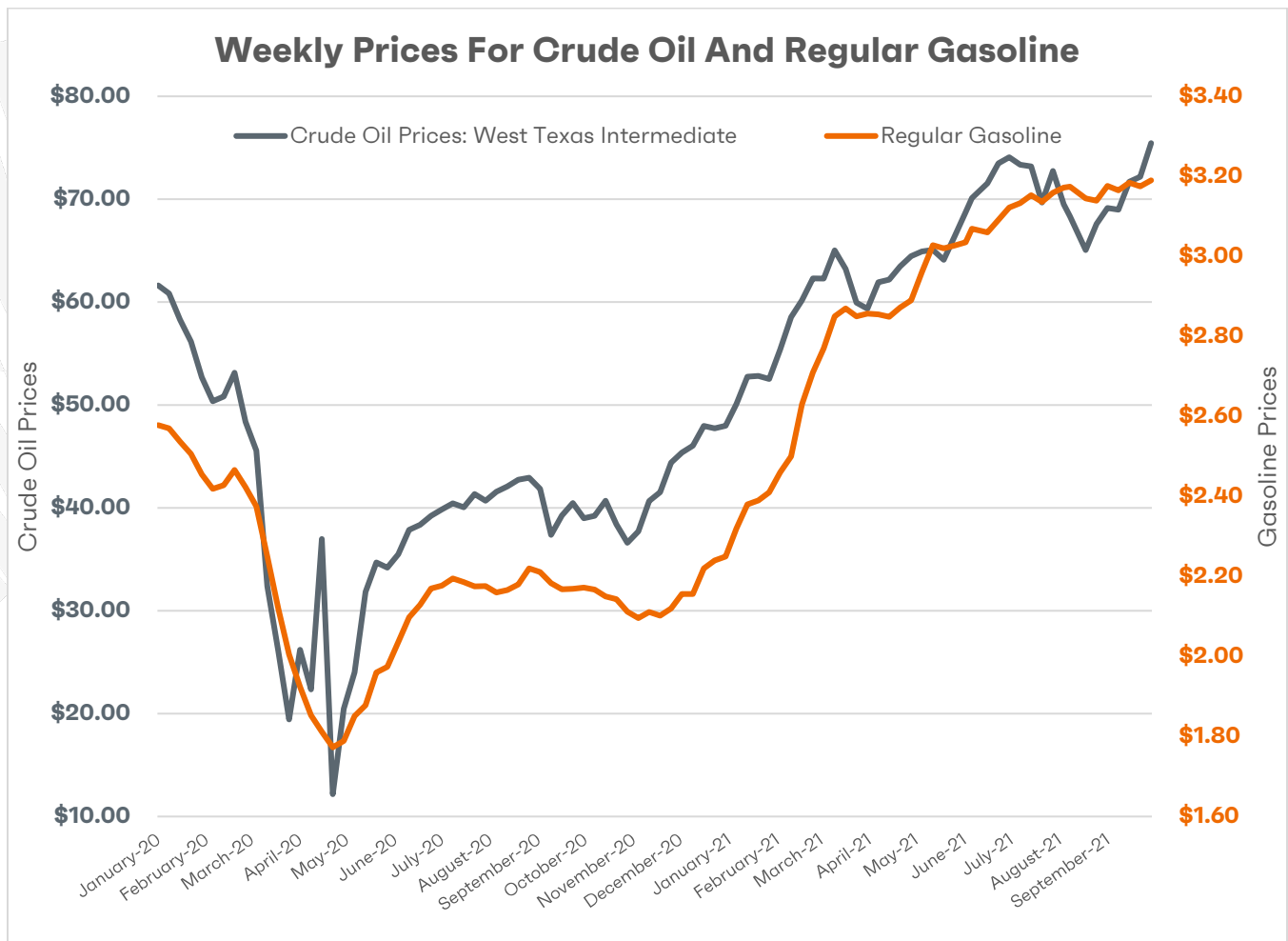


Crude Oil and Gas Prices (Updated 10/6)

EIA Outlook For Gasoline (9/8)²⁶: “U.S. regular gasoline retail prices averaged \$3.16 per gallon (gal) in August, the highest monthly average price since October 2014. Recent gasoline price increases reflect rising wholesale gasoline margins amid relatively low gasoline inventories. In addition, recent impacts from Hurricane Ida on several U.S. Gulf Coast refineries are adding upward price pressures in the near term. Estimated gasoline margins surpassed 70 cents/gal in late August. We expect margins will remain elevated in the coming weeks as refining operations as U.S. Gulf Coast remain disrupted. We forecast that retail gasoline prices will average \$3.14/gal in September before falling to \$2.91/gal, on average, in 4Q21. The expected drop in retail gasoline prices reflects our forecast that gasoline margins will decline from currently elevated levels, both as a result of rising refinery runs as operations return in the first half of September following Hurricane Ida and because of typical seasonality.”

EIA Outlook For Oil²⁷: “Brent crude oil spot prices averaged \$71 per barrel (b) in August, down \$4/b from July but up \$26/b from August 2020. Brent prices have risen over the past year as result of steady draws on global oil inventories, which averaged 1.8 million barrels per day (b/d) during the first half of 2021 (1H21). We expect Brent prices will remain near current levels for the remainder of 2021, averaging \$71/b during the fourth quarter of 2021 (4Q21). In 2022, we expect that growth in production from OPEC+, U.S. tight oil, and other non-OPEC countries will outpace slowing growth in global oil consumption and contribute to Brent prices declining to an annual average of \$66/b.”

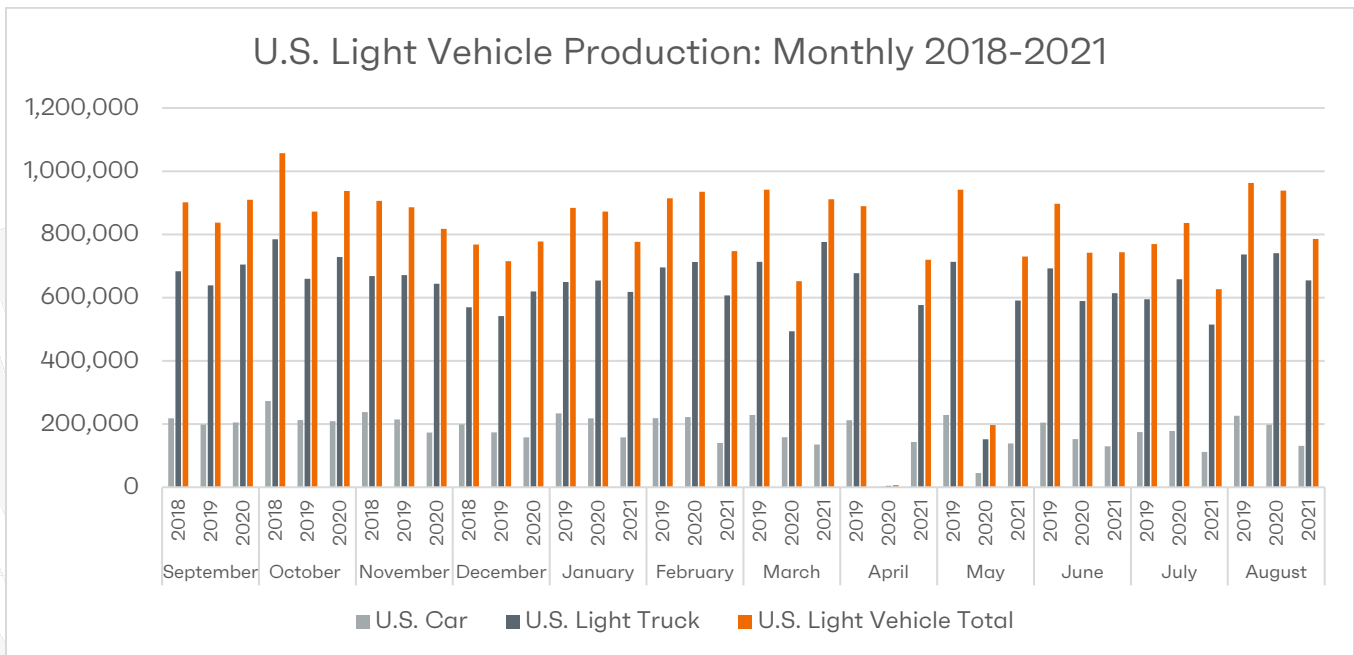
Gas and Oil Hit New Multi-Year Highs: Oil prices, as benchmarked at West Texas Intermediate, have raised to over \$75 a barrel, highest since 2014. Since election day, oil prices have climbed nearly \$38 a barrel. Gas prices rose to \$3.19, highest since October 2014. Gas is 23% higher than the beginning of 2020.²⁸



Production Meter

U.S. Light Vehicle Production (Updated 9/22)

U.S. Light vehicle production for August 2021 improved month-over-month, totaling 785,703 (131,259 cars, 654,444 light trucks) but was down 16% from the same period in 2020.



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U.S. Light Vehicle Inventory and Days' Supply (Updated 10/6)

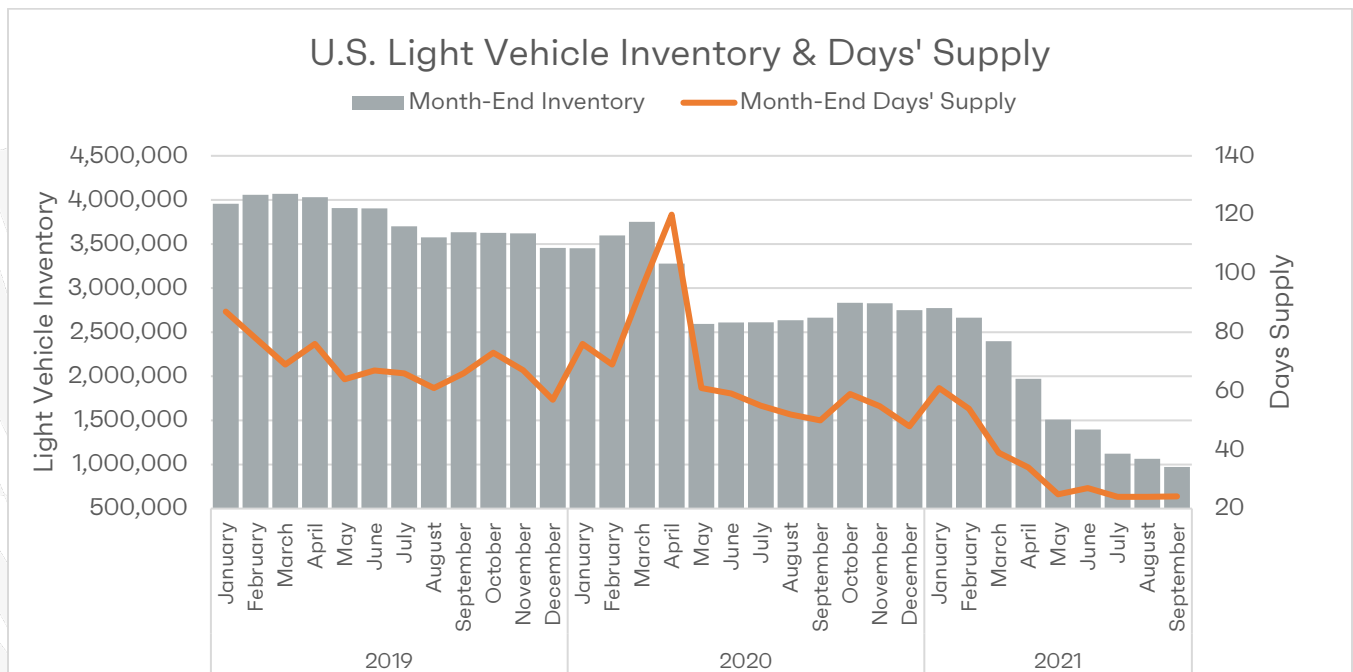
WardsIntelligence Inventory Update (10/6)³⁰: “Light-vehicle inventory reported by U.S. automakers fell below one million units for the first time in decades at the end of September, indicating that the on-going supply chain disruptions – mainly from a shortage of semiconductors – worsened over the past month.

“Inventory was expected to rise from August’s 1.06 million units, but until production data for September is available later this month, it will be nearly impossible to gauge how much of the decline vs. other reasons was due to production cuts not already accounted for in month-ago’s expected output for the period.

“There could have been a surge in partially built vehicles, or vehicles built without all their required microchips, which are not included in inventory data until they are considered a saleable unit. But, as throughout the year, even when September production data is published, it mostly will remain unclear how many of those vehicles exist.

“Inventory ended September at 972,278 units, 8.8% below August and 64% below like-2020. Days’ supply dropped to 24 from August’s 25 and same-month 2020’s 50. Prior to 2020, days’ supply ranging from 60 to 65 was normal for September.

“Inventory of both North America-built and import vehicles fell from August, with imports dropping a whopping 18.1% - domestically built inventory dropped a lesser 5.9%. Through August, import inventory had been holding up better than domestically built models, and that translated to higher sales penetration.”



Global Meter

Global Light Vehicle Sales Outlook (Updated 10/6)

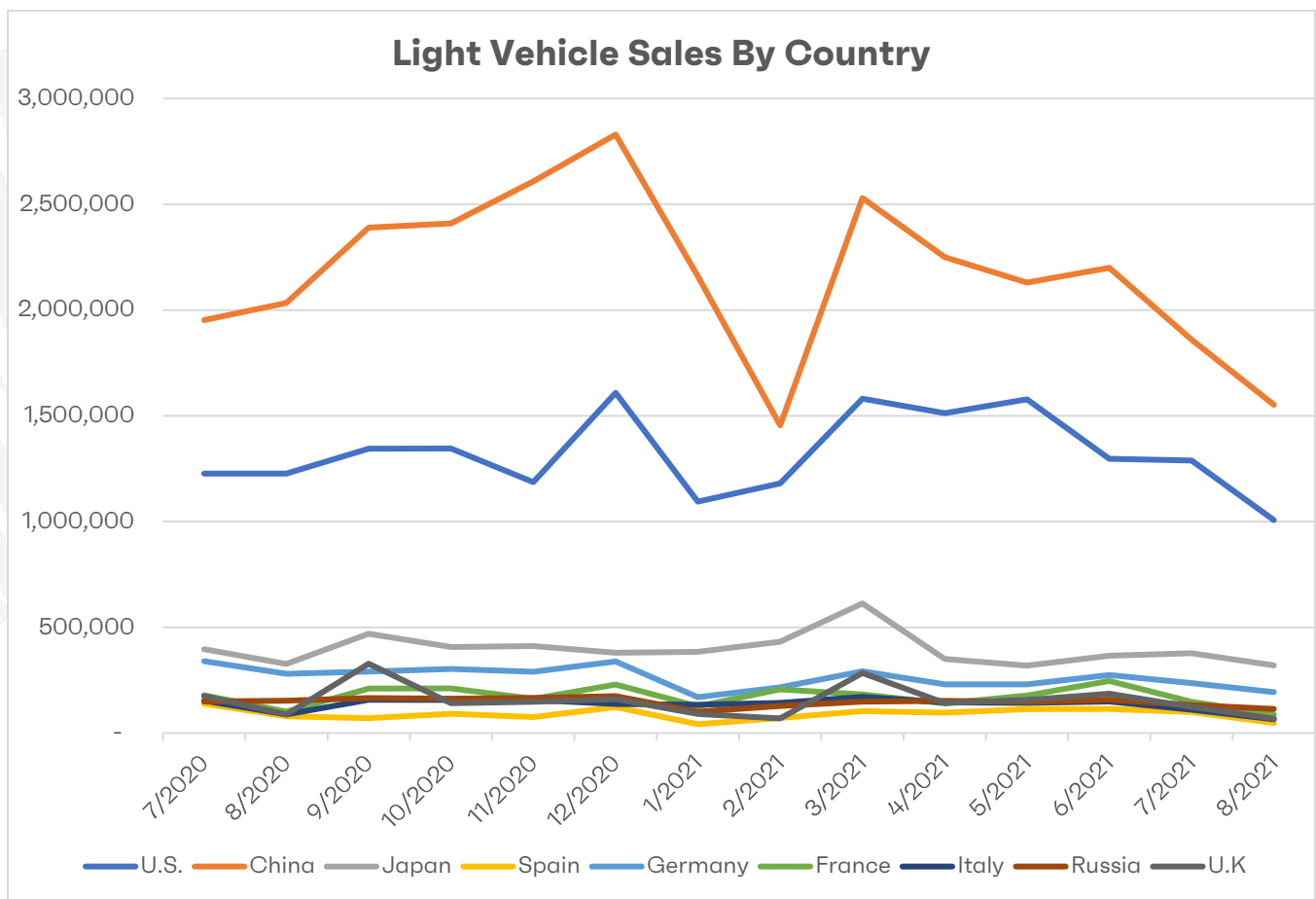
Wards Intelligence Outlook: “World vehicle sales in August were down 10.9% year-over-year at 6.03 million. August marked the second consecutive month of losses, as the global microchip shortage continued hampering the industry’s recovery. The biggest drop for the month was in North America, where sales tumbled 15.8% to 1.35 million, compared to 2020’s 1.61 million. The region’s market share slightly dropped to 22.5% from year-ago’s 23.8%.

“The U.S. saw a 16.8% decline in vehicle sales to 1.13 million units for the month from like-2020’s 1.35 million. Sales in Canada fell 15.7% to 145,704, while sales in Mexico slightly improved (+2.0%) as light-truck deliveries accounted for the gain. The region’s 8-month total was up 18.7% to 12.84 million.

“The picture was similar in Europe, where sales shrank 15.2% to 1.06 million for the month. Russia (-14.2%), France (-14.6%), and the U.K. (-16.6%) experienced declines in August. The drop in vehicle sales was even higher for Germany (-21.8%), Italy (-25.4%) and Spain (-28.7%).

“Year-to-date vehicle sales for Europe were up 16.1% to 11.51 million. In Asia Pacific, regional vehicle sales dropped 11.8% to 2.95 million compared to August 2020’s 3.35 million. In China vehicle sales shrank 17.6% to 1.88 million compared to last year’s 2.28 million, although year-to-date sales improved 13.5% to 17.21 million. Sales in Japan (-2.1%) and South Korea (-2.9) slightly declined, reaching 319,600 and 130,000 deliveries, respectively.”³¹

Sales in select countries around the globe, raw volume by month:

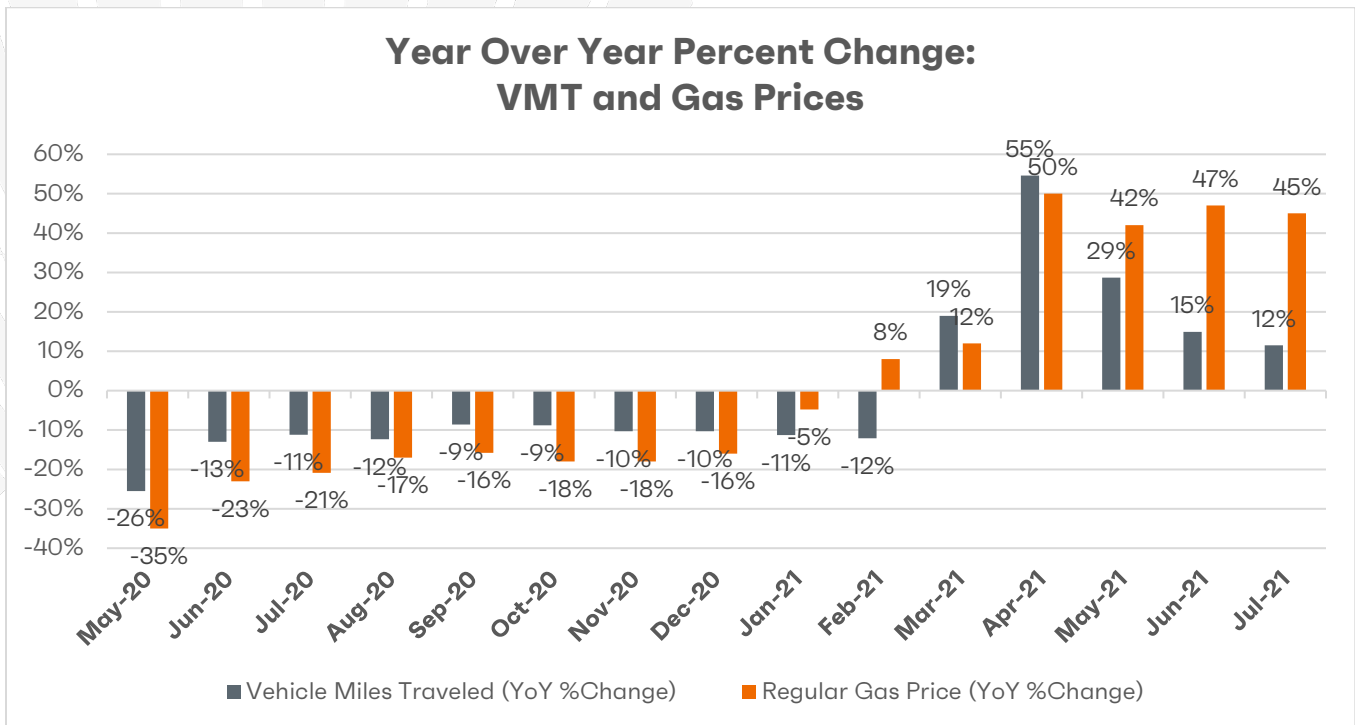


Recovery Meter

Roadway Travel (Updated 9/22)

According to the U.S. Department of Transportation, seasonally-adjusted vehicle miles traveled in July rose 11.5% from the same time a year ago. The cumulative travel estimate for 2021 is 1,795 billion vehicle miles.³²

- Travel on all roads and streets changed by 11.5% (30.0 billion vehicle miles) for July 2021 as compared with July 2020. Travel for the month is estimated to be 290.1 billion vehicle miles.
- The seasonally adjusted vehicle miles traveled for July 2021 is 267.6 billion miles, a 13.1% (31 billion vehicle miles) increase over July 2020. It also represents 0.2% increase (0.4 billion vehicle miles) compared with June 2021.
- Cumulative Travel for 2021 changed by 12.8% (203.4 billion vehicle miles). The cumulative estimate for the year is 1,795.0 billion vehicle miles of travel.



Economic News (Updated 9/9)

Manufacturing Added 37,000 Jobs In August, Led By Motor Vehicles And Parts. “Manufacturing employment increased by 37,000 jobs last month, with motor vehicles and parts leading the way. The

figures were included in a breakdown by industry issued today by the U.S. Bureau of Labor Statistics.”

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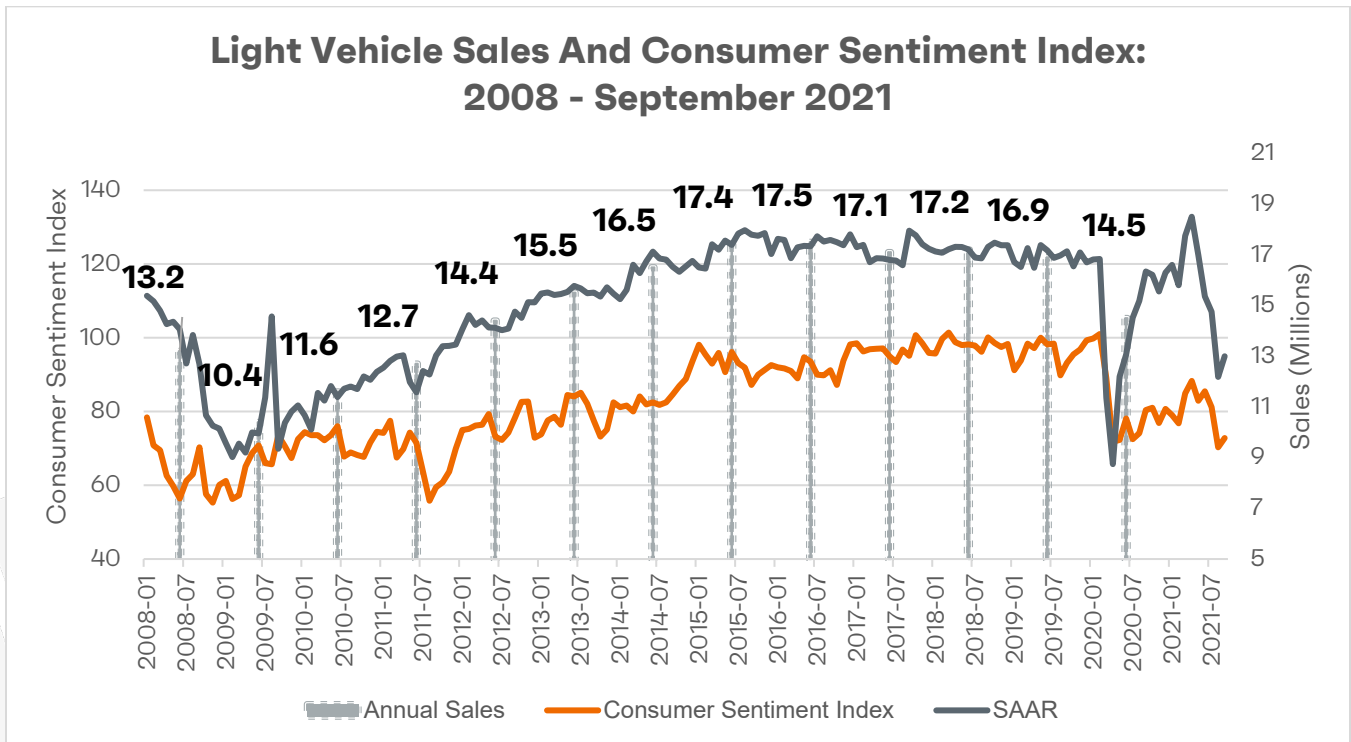
Motor Vehicles And Parts Added 24,100 Jobs In August. “The motor vehicles and parts category added 24,100 jobs in August. Auto industry employment has been erratic this year, affected by temporary plant shutdowns due to a global shortage of semiconductors.”³⁴

For August, The ISM Ticked Up To 59.9 From 59.5 In July. “U.S. manufacturing activity unexpectedly picked up in August amid strong order growth, but a measure of factory employment dropped to a nine-month low, likely as workers remained scarce. The Institute for Supply Management (ISM) said on Wednesday its index of national factory activity inched up to 59.9 last month from a reading of 59.5 in July.”³⁵

The Index Of Prices For Raw Materials Fell To 79.4, An Eight-Month Low. “The survey's measure of prices paid by manufacturers fell to an eight-month low of 79.4 from a reading of 85.7 in July. This measure has dropped from a record 92.1 in June. It was the latest indication that inflation has probably peaked. Data last week showed the Federal Reserve's preferred inflation measure recorded its smallest monthly gain in five months in July.”³⁶

Consumer Confidence and Sales (Updated 10/6)

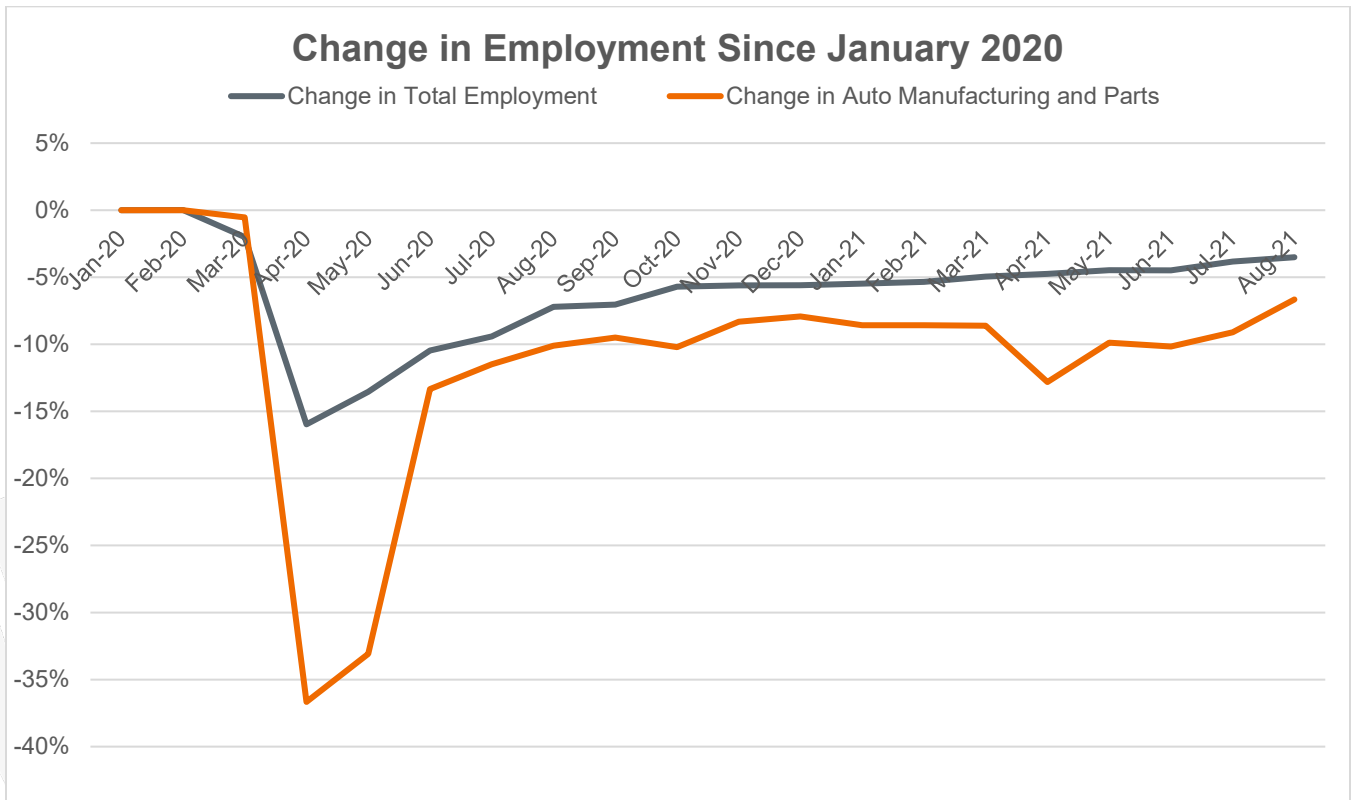
“Consumer sentiment edged upward in late September, although the overall gain still meant the continuation of depressed optimism, initially sparked by the Delta variant and supported by persistent inflation and unfavorable long-term prospects for the national economy. Consumers do not view economic conditions as conducive to establishing an inflationary psychology, a self-fulfilling prophecy. Instead, consumers have favored postponement due to what they still consider a transient spike in prices. While this reaction may well fade in the months ahead, the shift toward postponement of purchases has been so significant that it could not be quickly reversed. Indeed, favorable buying attitudes posted some small further declines due to complaints about prices for homes, vehicles, and durables, all of which were already near all-time lows. Even if transient, higher inflation has already decreased living standards, and further damage is anticipated as just 18% of all households anticipated income gains would be larger than the expected inflation rate (see the chart). While the decline in real income expectations has been tempered by more generous pandemic relief, the partisan wrangling over a debt extension of a few months is likely to only lengthen the period of uncertainty about federal policies. Market interest rates have also recently risen and those increases are likely to add additional restraints on consumer purchases.”³⁷



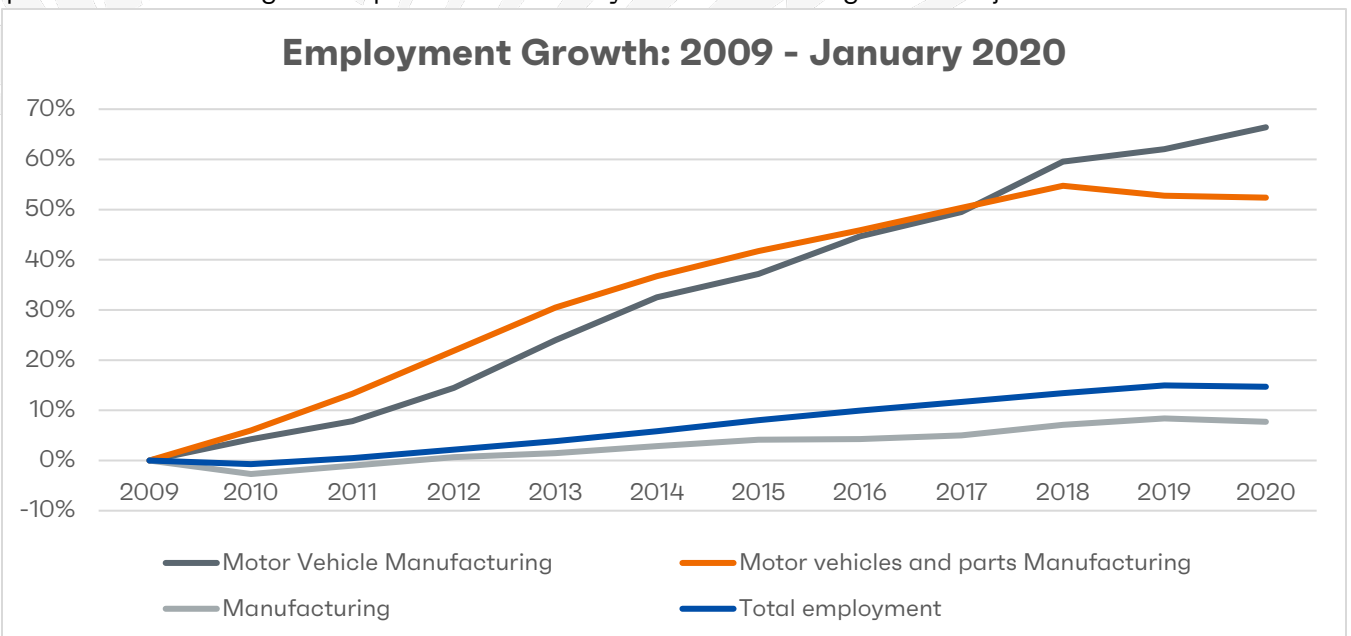
Employment (Updated 9/9)

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 52,700 jobs since January 2020.³⁸

- **Motor Vehicle And Parts Manufacturing Added 24,100 Jobs In July.**³⁹



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.⁴⁰ 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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