

READING THE METER

*A look inside a cleaner, safer,
smarter auto industry.*



ALLIANCE FOR AUTOMOTIVE INNOVATION

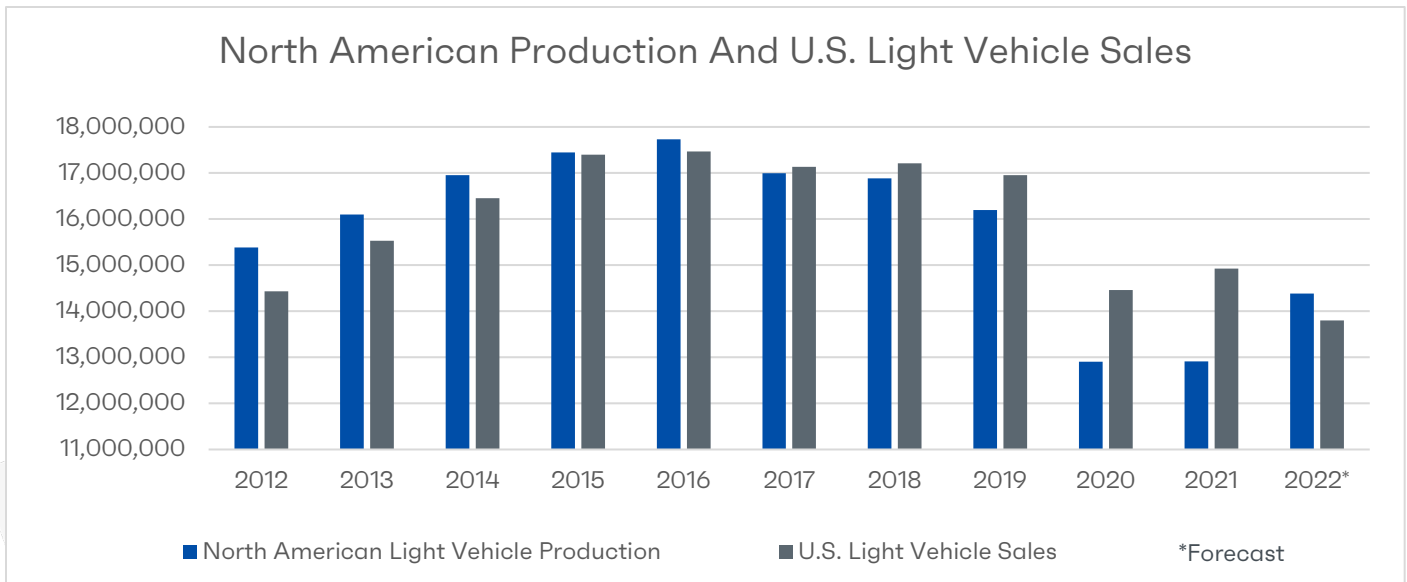
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Forecast Meter

Sales & Production Summary and Forecast (Updated 10/6)

2021-2022 Sales, ¹ Extended Sales Forecast ² and Production Forecasts ³		
	U.S. Sales & Forecasts	North American Production
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)	907,470 (-33.4% YoY)
October '21	1,046,282 (-20% YoY)	1,140,383 (-22.1% YoY)
November '21	1,001,351, (-20% YoY)	1,168,245 (-9% YoY)
December '21	1,194,313 (-22.9% YoY)	1,029,501 (-13.8% YoY)
January '22	991,156 (-10% YoY)	1,111,390 (-4% YoY)
February '22	1,052,524 (-11.8% YoY)	1,112,429 (-1% YoY)
March '22	1,246,336 (-22% YoY)	1,350,102 (-.1% YoY)
April '22	1,226,950 (-22% YoY)	1,177,851 (+8% YoY)
May '22	1,104,993 (-23.8% YoY)	1,215,000 (+20.4% YoY)
June '22	1,126,724 (-16.8% YoY)	1,259,515 (+13.8% YoY)
July '22	1,129,371 (-8.4% YoY)	977,485 (+7% YoY)
August '22	1,128,200 (-.7% YoY)	1,413,262 (+29 %)
September '22	1,112,245 (+3.9% YoY)	
1st Quarter '22	14.01 million-unit SAAR	3,458,480 (-1.4% YoY)
2nd Quarter '22	13.4 million-unit SAAR	3,584,093 (+13.2% YoY)
3rd Quarter '22	3,358,116 (-.9% YoY)	
2021 Full Year	14,926,933 (+3.1% YoY)	12,919,000 (+4% YoY) (U.S. 8,871,661)
2022 Full Year Estimate	13.8 million units (WardsIntelligence)	14,386,000 (+11.4% YoY)

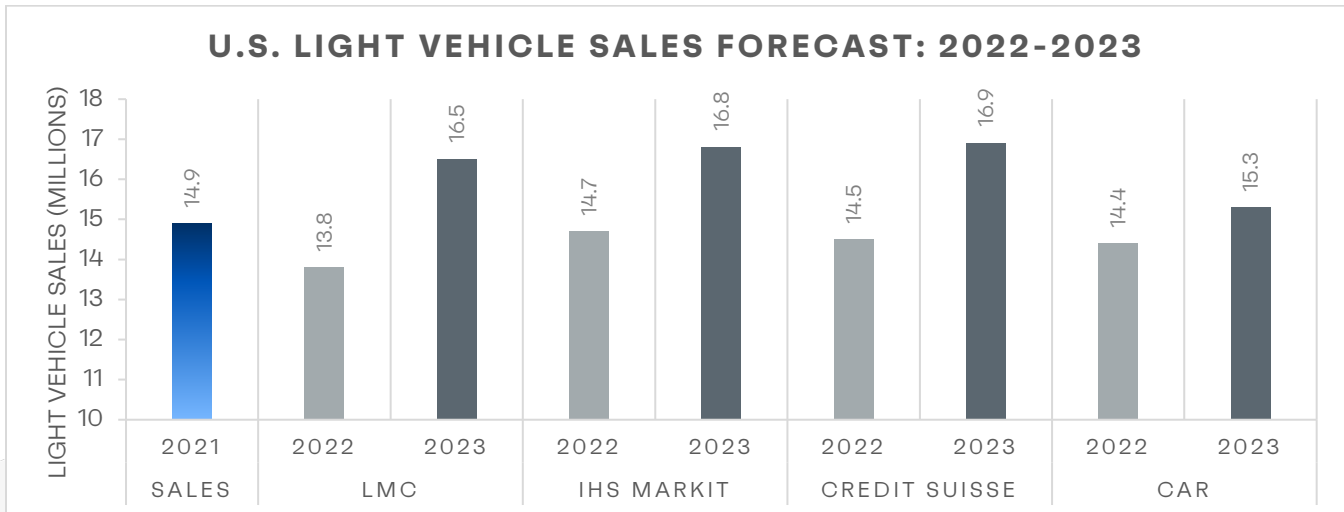


U.S. Light Vehicle Sales Outlook (Updated 10/6)

Wards Intelligence Outlook (10/6)⁴: “Rising inventory should mean sales in Q4 will improve on the 13.3-million-unit seasonally adjusted annual rate posted in both Q2 and Q3. A preliminary look at October indicates a SAAR of 14.2 million units, up from September’s 13.5 million.”

“Wards Intelligence partner LMC Automotive expects calendar-year-2022 volume to total 13.8 million units. To finish at that level, the Q4 SAAR will need to total 14.5 million units. With inventory expected to continue month-to-month increases in both October and November, a Q4 surge to a 14.5-million-unit SAAR from Q3’s 13.3 million is doable. However, besides the potential negative impact from economic headwinds, it will depend on consumer confidence and reaction to further sticker shock coming in Q4 when most ’23 models come available. Most strong-selling ’23s have significant price increases over their ’22-model versions.”

Credit Suisse Outlook For 2022 (7/6)⁵: “We reduce our 2022 US auto sales forecast to 14.5mn from 15.1mn prior. The central theme of the US auto sales market YTD (and for that matter over the past year) has been historic inventory constraints limiting sales volume. Indeed, 1H22 SAAR ended at 13.8mn, and to meet our prior forecast would have required an overly-challenging 2H ramp. Given inventory constraints are likely to linger in 2H, even if easing, we reduce our forecast; our revised forecast implies 2H SAAR of ~15.0mn, which is still below the normalized SAAR we would expect of 16-17mn.”



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

“Wards Intelligence Inventory Outlook (10/6)”⁶: “U.S. light-vehicle inventory took another big step up with automakers reporting Sept. 30 stocks 12.6% higher from the prior month, which followed a strong 10.2% increase in August. Inventory heading into October totaled 1.43 million units, highest since 1.51 million in May 2021, when the semiconductor shortage was leading to production cuts and causing a huge depletion of new vehicles available to consumers. The Sept. 30 level is 46.8% above like-2021’s 972,655 units. Days’ supply ended September at a 17-month high 32, up from August’s 29 and same-month 2021’s 24.”

Wards Intelligence Production Outlook (9/29)⁷: “September is tracking close to month-ago’s outlook for the period, although an increase in trucks was slightly short of totally offsetting a drop in cars. Production in the month is tracking to 1.328 million units, 40.2% above year-ago. Light vehicles in September are pegged at 1.283 million units, 41.0% above year-ago.

“Production for entire-Q3 is tracking to 3.808 million units, 25.9% above year-ago, but 7.7% below the 2019 July-September total. The projected Q3 total is 34,500 units above month-ago’s expectations. Light vehicles in Q3 are expected to total 3.674 million units, also 25.9% above like-2021, but 7.6% below the 2019 total.

“In the first look at the period, production in Q4 is tracking to 3.791 million units, 12.3% above the same year-ago quarter, and only 2.7% below like-2019. The projection for light-vehicle output in Q4 is 3.664 million units, 13.2% above year-ago but 2.9% below like-2019.

“Production for entire 2022 is estimated at 14.904 million units, 11.2% above 2021’s 13.407 million. Based on the tracking for the final four months of the year, light vehicles will end the year at 14.386 million units, 11.4% above 2021’s 12.919 million.”

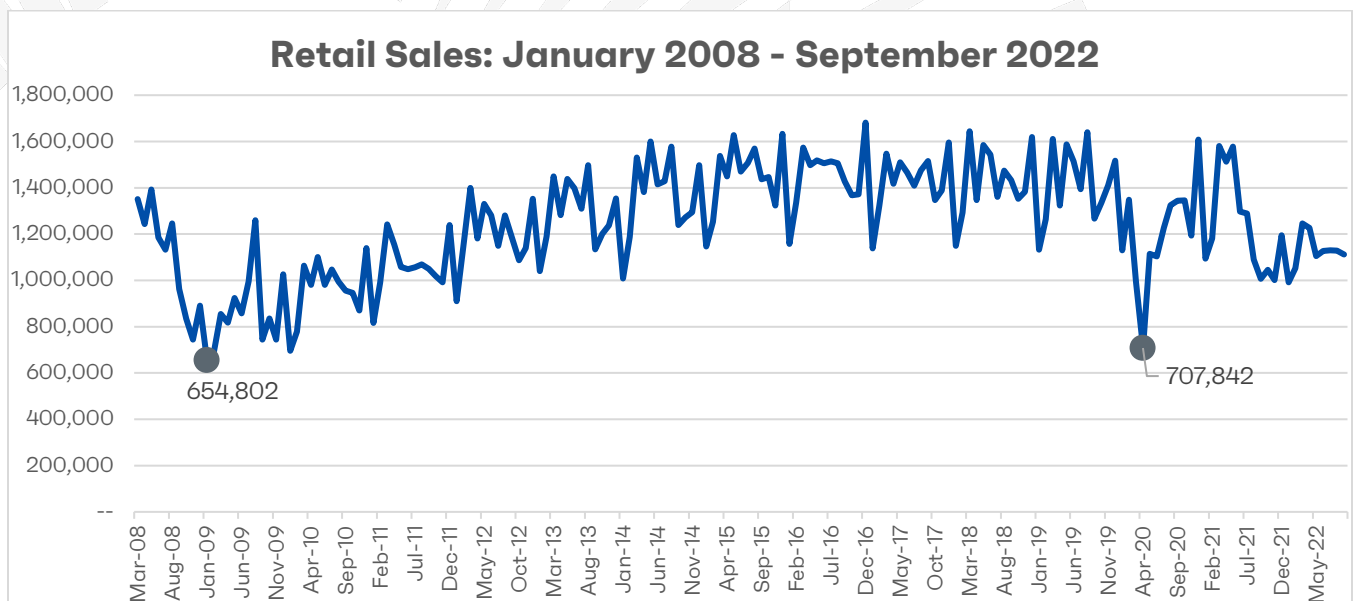
S&P Global Mobility Production Outlook (9/29) ⁸: “The outlook for North America light vehicle production was largely unchanged for 2022 and reduced by 211,000 units for 2023 (and was reduced by 42,000 units for 2024). The outlook for North America light vehicle production for 2022 remains steady at 14.58 million units on continued supply chain, labor, and logistic issues. While semiconductor related downtime has slowed, manufacturers’ ability to produce vehicles at normal operating levels remains problematic, particularly among the Japanese transplants. The short-term production forecast continues to be derived from automakers’ ability to produce vehicles remaining divorced from economic, demand and inventory conditions amid ongoing supply chain issues. Concerns surrounding supply chain constraints, most notably for semiconductors, results in the outlook for 2023 being revised down 1.3% to 15.62 million units. With the outlook for US demand sharply reduced, inventory creation has entered its formative stages and projected to reach nearly 2.0 million units by the end of 2023. Following significant reductions last month due to production constraints extending further into 2024 along with the effects of demand destruction, the outlook for 2024 was revised down 0.3% to 16.21 million units.”

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.



August Sales (Updated 10/6)

WardsIntelligence®: “U.S. light-vehicles sales eked out a month-to-month increase on an annualized basis in September but still finished below forecast and gave further indication consumers are pulling back from high-priced new vehicles despite heavy pent-up demand and recent gains in inventory.

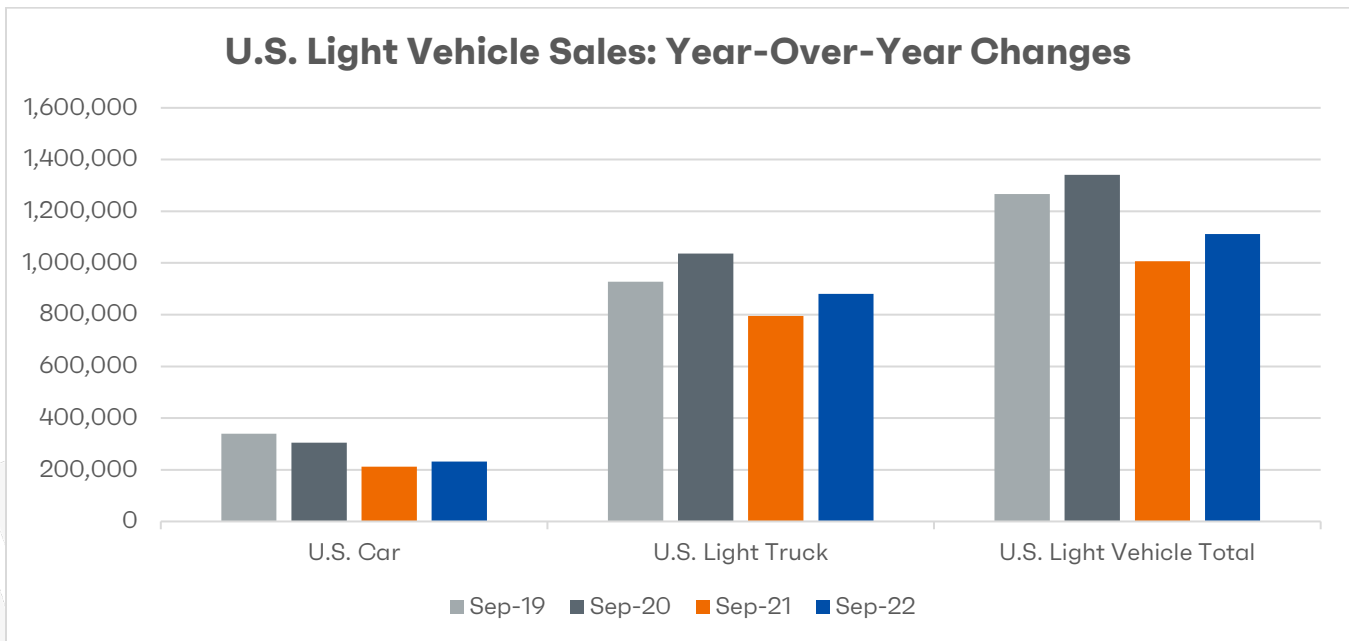
“Hurricane Ian, which beginning Sept. 28 pummeled Florida and other parts of the Southeast, put a dent in deliveries, although how much currently is unclear. Despite coming at the end of the month, Florida is one of the bigger markets in the U.S. and lost sales there – plus some in other states - means the month’s 13.5-million-unit seasonally adjusted annual rate probably was 100,00 to 200,000 below what it could have been. The SAAR loss translates to lost volume between 8,000 and 16,000 units.

“September’s SAAR was an improvement on August’s 13.1 million units, and well above like-2021’s 12.3 million, but still disappointing considering inventory coming into the month was up 10% from July and a 14-month high.

“The month’s raw volume of 1.11 million units was a 1.0% decline from August’s 1.12 million. But based on daily selling rates, September – 25 selling days - increased 2.9% to a DSR of 44,490 from August’s 43,231 – 26 selling days. Also, the DSR was 9.5% above September 2021’s 40,637 – 25 selling days – and the first year-over-year rise since June 2021.

“The third-quarter SAAR of 13.3 million units was flat with Q2 and slightly below July-September 2021’s 13.4 million. The year-to-date SAAR through Q3 was 13.5 million units, compared with like-2021’s 15.6 million. Year-to-date volume totaled 10.1 million units, 13.2% below 9-months 2021. Sales for entire-2022 are forecast to total 13.8 million units, compared with 2021’s 14.9 million.

“Also bucking trends were cars, which increased 3.9% year-over-year, the first gain for the vehicle type since a 0.3% rise in July 2021. However, car penetration still fell, dropping to 20.8% in September from same-month 2021’s 21.9%.



Fleet Sales (Updated 10/6)

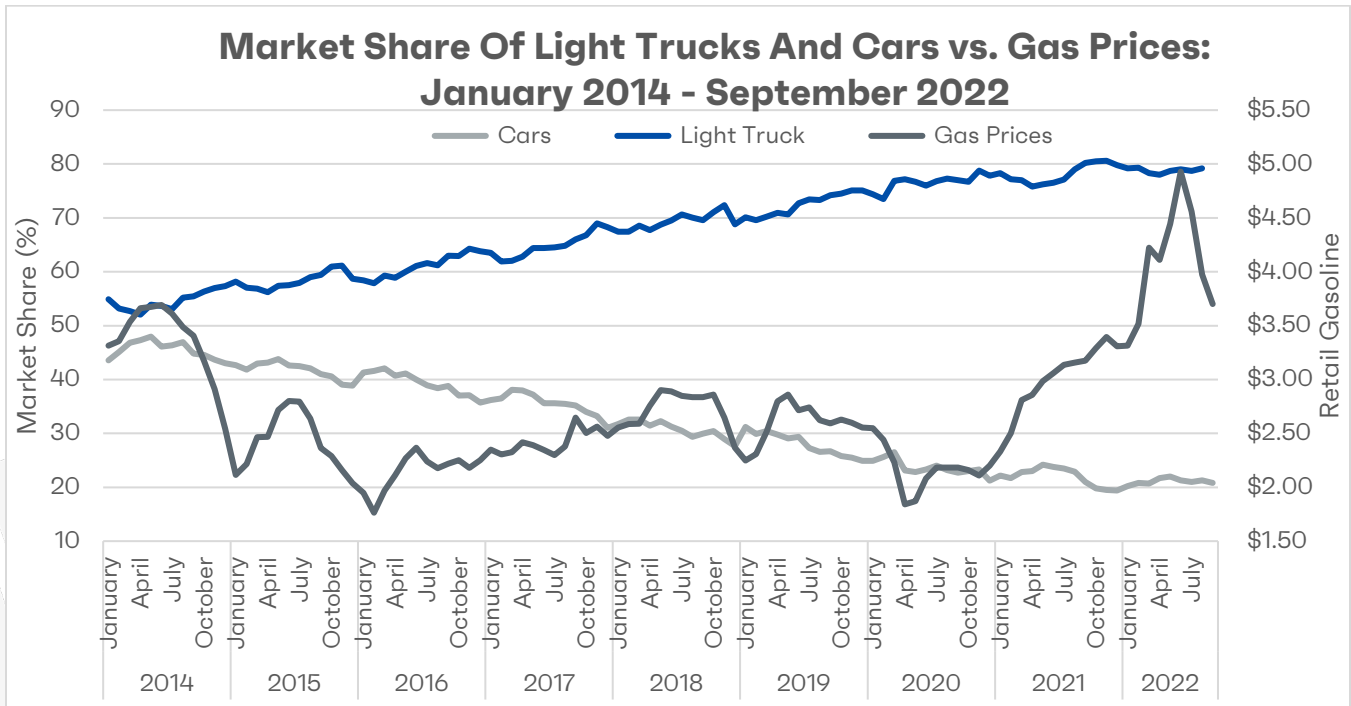
TrueCar¹⁰: “Fleet sales for September 2022 are expected to be up 57% from a year ago and up 5% from August 2022 when adjusted for the same number of selling days.”

J.D. Power¹¹: “Fleet sales are expected to total 161,300 units in September, up 75% from September 2021 on a selling day adjusted basis. Fleet volume is expected to account for 14% of total light-vehicle sales, up from 9% a year ago.”

Segments vs. Gas Prices (Updated 10/6)

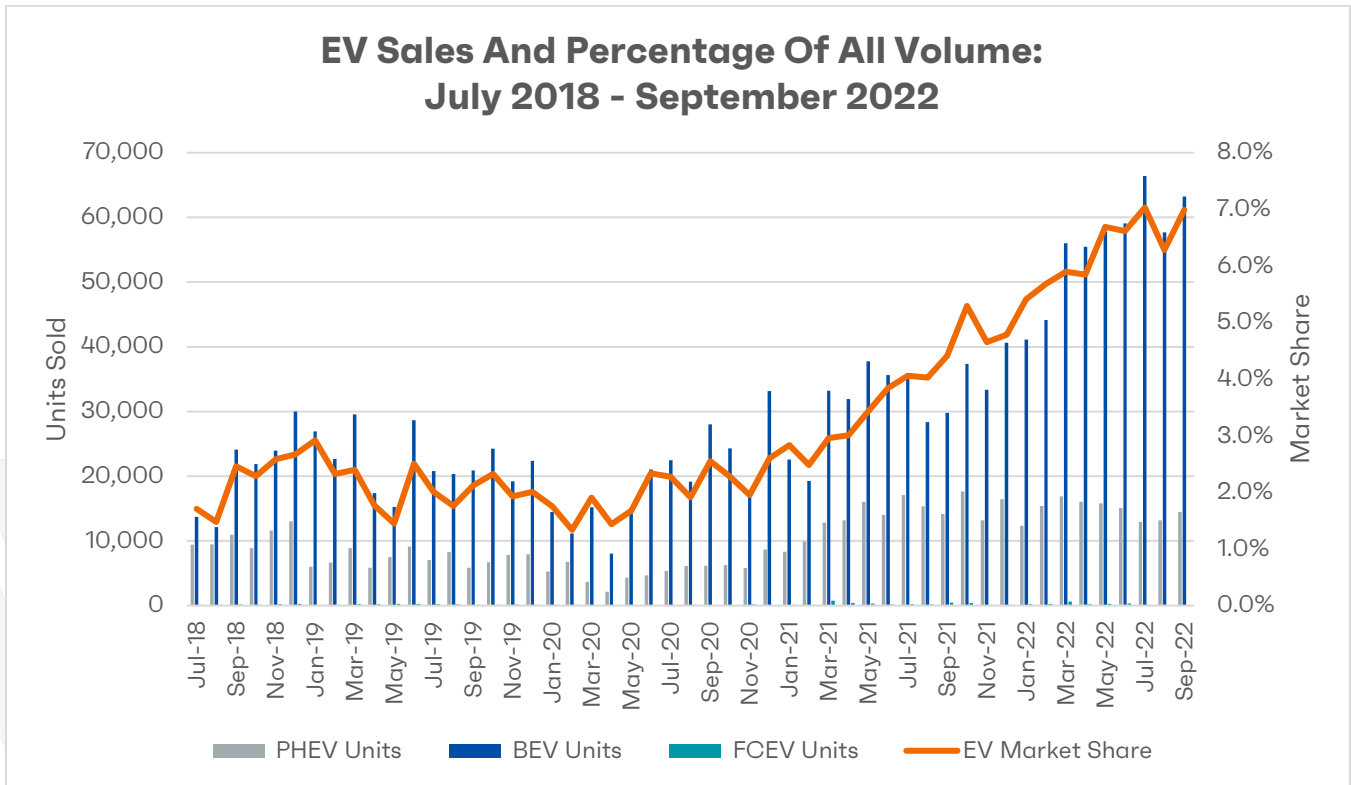
Monthly Sales For September: Light trucks accounted for nearly 79 percent of sales in September, a 1.1 pp increase in market share from a year ago. Compared to the same period in 2021, sales of cars are down nearly 20,000, and down more than 107,000 from September 2019, when cars comprised 27% of the 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 segments¹² and gas was over \$3.00¹³ 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 \$2.80 a gallon (through August 2022) 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.¹⁴



EV Powertrain Sales (Updated 10/6)

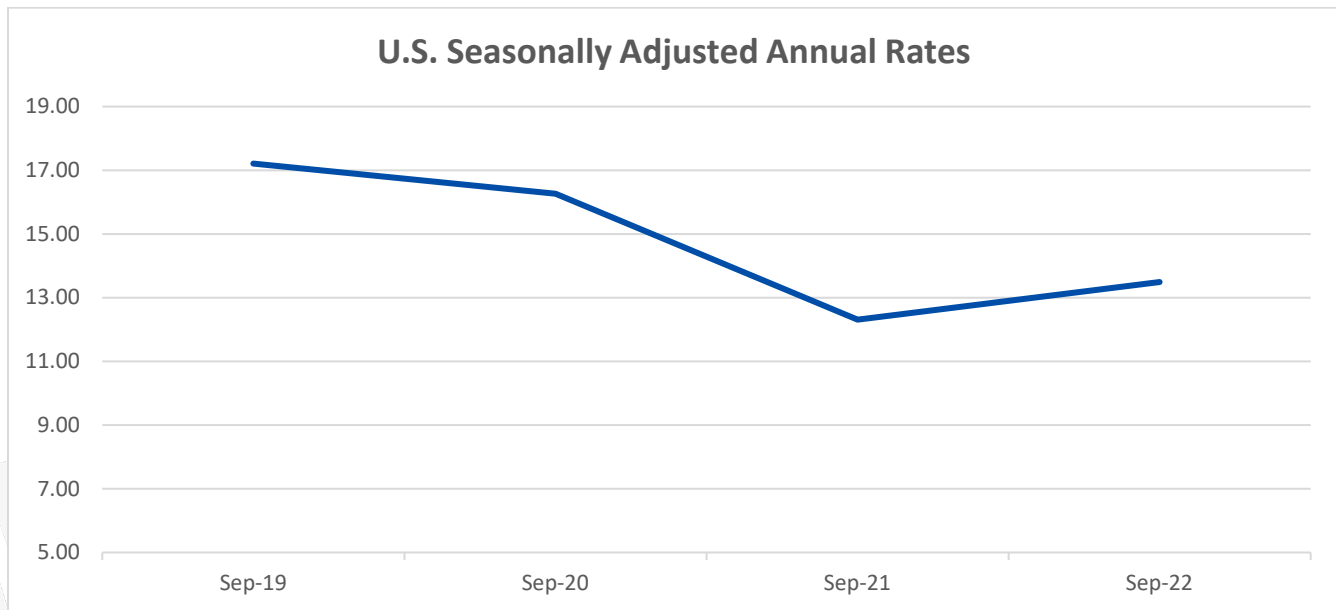
Sales of electric vehicles (BEV, PHEV, & Fuel Cell) accounted for 7% of total vehicle sales in September 2022 (77,721 units), matching the previous high set in July 2022. September's market share is up 2.6 pp from a year ago and up 0.7 pp from August 2022. Sales of battery electric vehicles led the way for ZEVs, accounting for 5.7% of total sales, up 2.7 pp from September 2021. Plug-in hybrids accounted for 1.3%, down 0.11 pp than the same time last year.¹⁵



Seasonally Adjusted Annual Rates (Updated 10/6)

WardsIntelligence: “Hurricane Ian, which beginning Sept. 28 pummeled Florida and other parts of the Southeast, put a dent in deliveries, although how much currently is unclear. Despite coming at the end of the month, Florida is one of the bigger markets in the U.S. and lost sales there – plus some in other states - means the month’s 13.5-million-unit seasonally adjusted annual rate probably was 100,00 to 200,000 below what it could have been. The SAAR loss translates to lost volume between 8,000 and 16,000 units. September’s SAAR was an improvement on August’s 13.1 million units, and well above like-2021’s 12.3 million, but still disappointing considering inventory coming into the month was up 10% from July and a 14-month high.

“The third-quarter SAAR of 13.3 million units was flat with Q2 and slightly below July-September 2021’s 13.4 million. The year-to-date SAAR through Q3 was 13.5 million units, compared with like-2021’s 15.6 million.”¹⁶

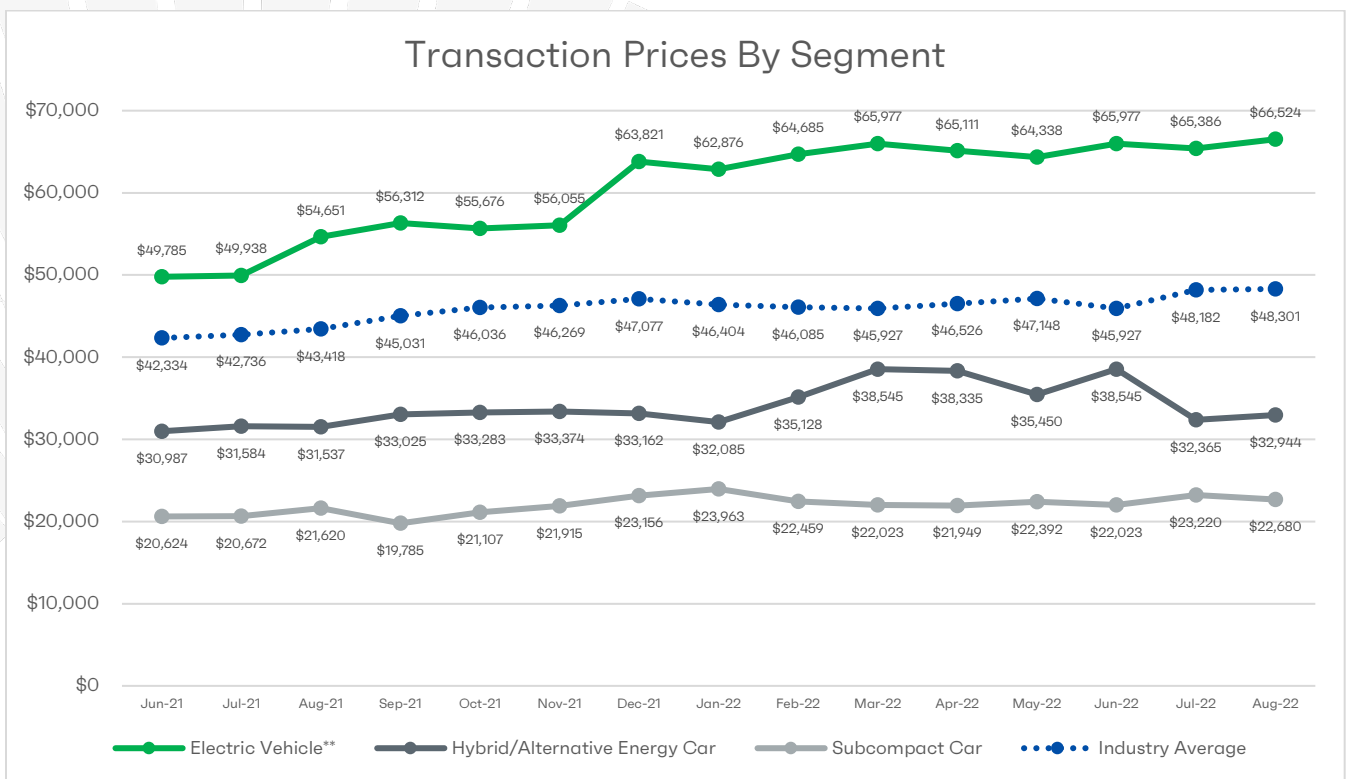
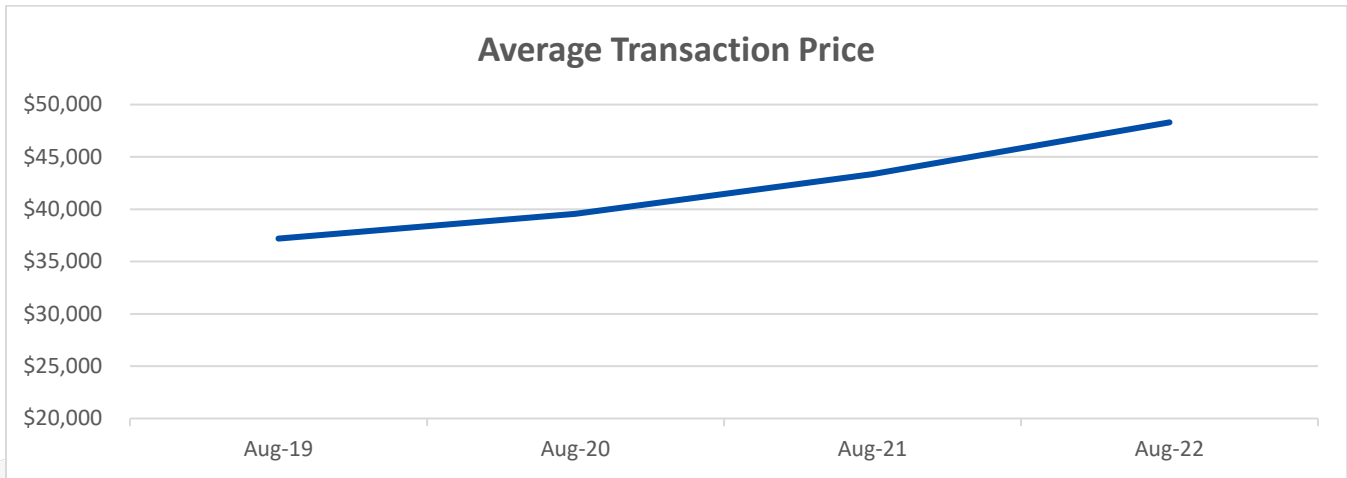


Average Transaction Price (Updated 10/6)

J.D. Power (Updated 10/6)¹⁷: “For September, new-vehicle prices remain at record levels, with the average transaction price expected to reach \$45,622—a record for September, a 6.3% increase from a year ago and the fourth highest of any month on record. The increase in sales volume, coupled with the near record level transaction prices, is resulting in consumers being on track to spend nearly \$43.7 billion on new vehicles this month—the highest level ever for the month of September and a 12% increase from September 2021.”

Kelley Blue Book (July) (Updated 8/24)¹⁸: “The average price paid for a new vehicle in the U.S. in August topped July's record and kept the average transaction price (ATP) solidly above the \$48,000 mark, according to new data released today by Kelley Blue Book, a Cox Automotive company. The Kelley Blue Book new-vehicle ATP increased to \$48,301 in August 2022, beating the previous high of \$48,080 set in the prior month. August 2022 prices rose 0.5% (\$222) month over month from July, and 10.8% (\$4,712) year over year from August 2021.

- “Luxury vehicle share remains historically high as well, although share decreased to 17.5% of total sales in August from 17.7% in July. The high share of luxury sales is helping to push the overall industry ATP higher.
- “The average price paid for a new electric vehicle (EV) rose in August by 1.7% compared to July and increased by 15.6% versus a year ago. The average price for a new electric vehicle – over \$66,000, according to Kelley Blue Book estimates – remains well above the industry average, aligning more with luxury prices versus mainstream prices.”



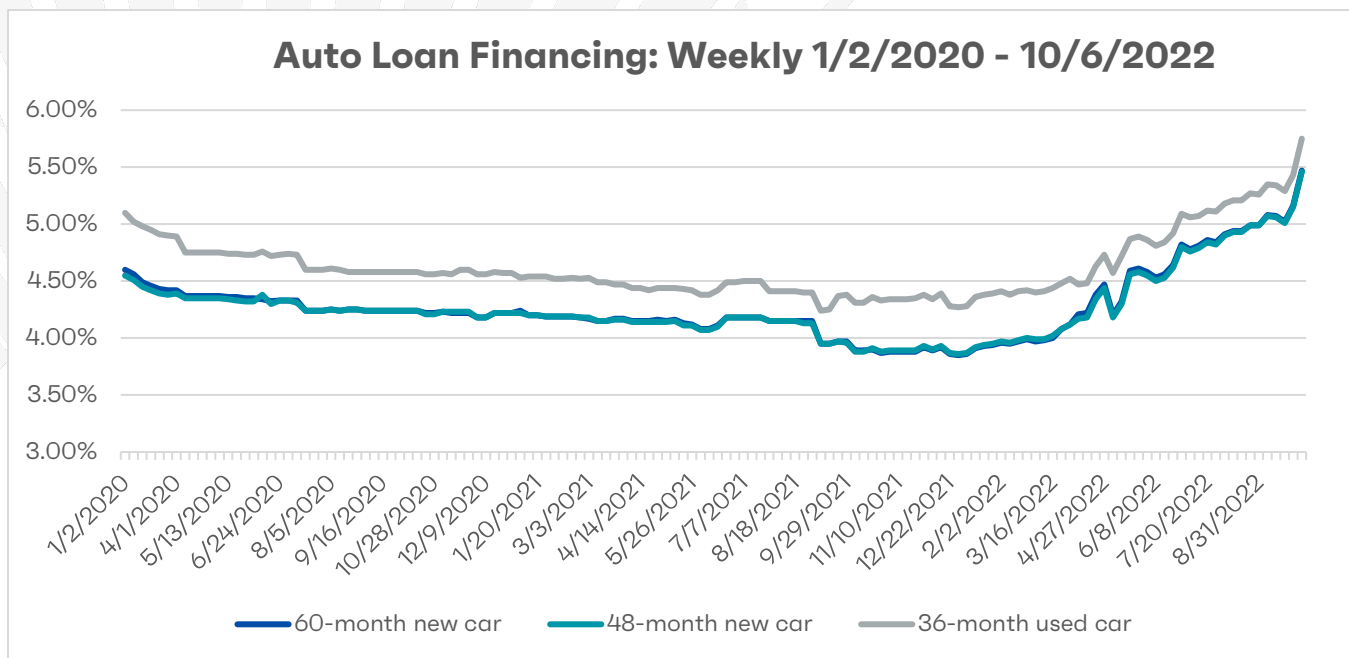
Auto Loan Financing (Updated 10/6)

JD Power (10/6)¹⁹: “Higher prices coupled with a rising interest rate environment are elevating monthly loan payments. After breaking the \$700 level for the first time ever in July, the average monthly finance payment in September is on pace to be \$711, up \$56 from September 2021. That

translates to an 8.5% increase in monthly payments from a year ago, which is above the 6.3% increase in transaction prices. The average interest rate for new-vehicle loans is expected to increase 169 basis points from a year ago to 5.71%.”

Interest Rates: Interest rates increased 0.14 pp for the 60-month, 48-month, and 36-month used car, and now stand at 5.16%, 5.15%, and 5.43%, respectively. Since the beginning of 2020, 60-month rates are up 0.59 pp, and are up 1.19 pp since the same time a year ago.²⁰

Dates	60-month new car	48-month new car	36-month used car
1/2/2020	4.60%	4.55%	5.10%
10/6/2021	3.89%	3.88%	4.31%
9/28/2022	5.16%	5.15%	5.43%
10/5/2022	5.47%	5.46%	5.75%
One Week Change	0.31%	0.31%	0.32%
Two Week Change	0.45%	0.45%	0.46%
Change since 1/3/20	0.87%	0.91%	0.65%
One Year Change	1.58%	1.58%	1.44%

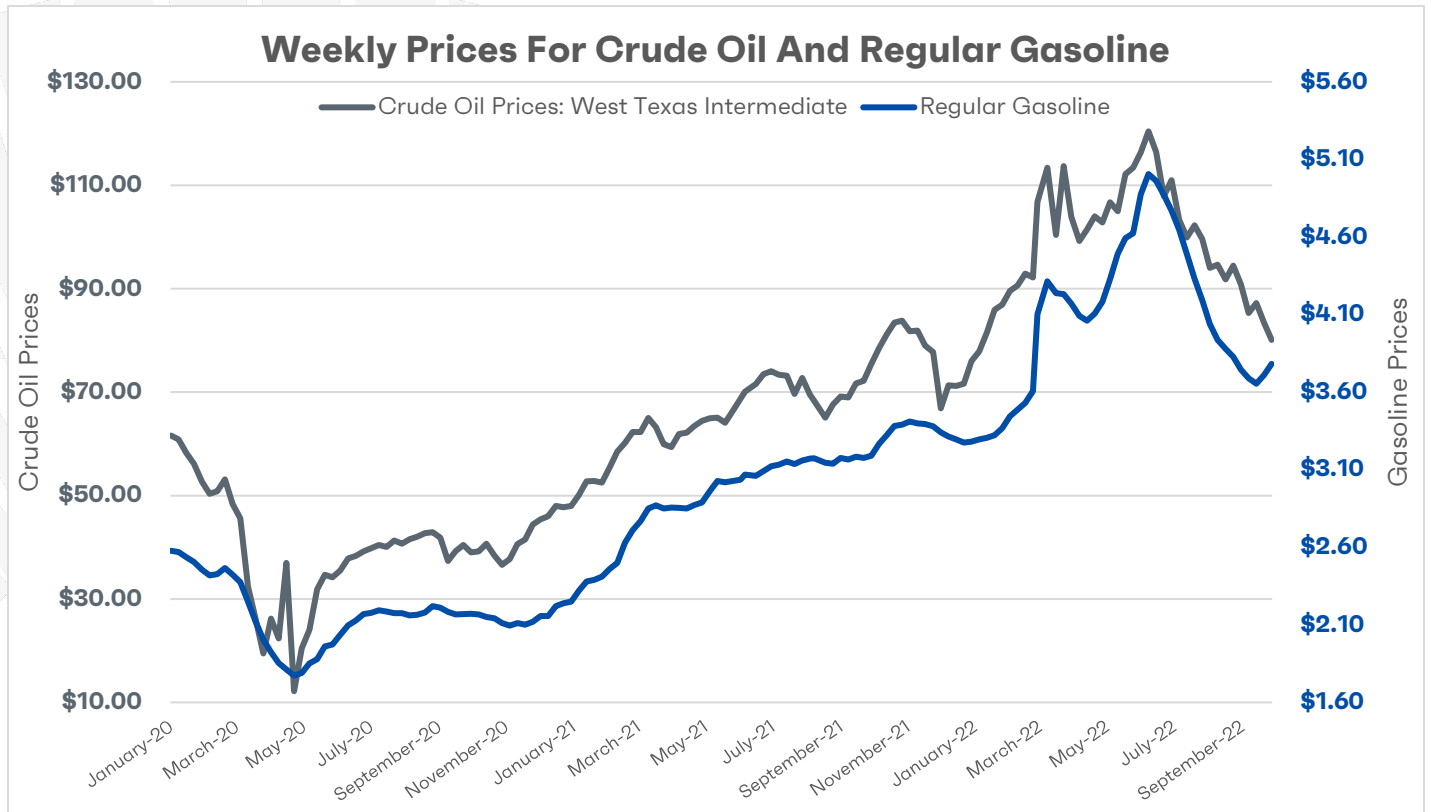


Crude Oil and Gas Prices (Updated 10/6)

EIA Outlook For Gasoline (9/29)²¹: “We expect retail gasoline prices will average \$3.60 per gallon (gal) in 4Q22 and \$3.61/gal in 2023. Retail diesel prices in our forecast average \$4.90/gal in 4Q22 and \$4.28/gal in 2023.”

EIA Outlook For Oil (9/29) ²²: “The Brent crude oil spot price in our forecast averages \$98 per barrel (b) in the fourth quarter of 2022 (4Q22) and \$97/b in 2023. The possibility of petroleum supply disruptions and slower-than-expected crude oil production growth continues to create the potential for higher oil prices, while the possibility of slower-than-forecast economic growth creates the potential for lower prices. U.S. crude oil production in our forecast averages 11.8 million barrels per day (b/d) in 2022 and 12.6 million b/d in 2023, which would set a record for the most U.S. crude oil production during a year. The current record is 12.3 million b/d, set in 2019.”

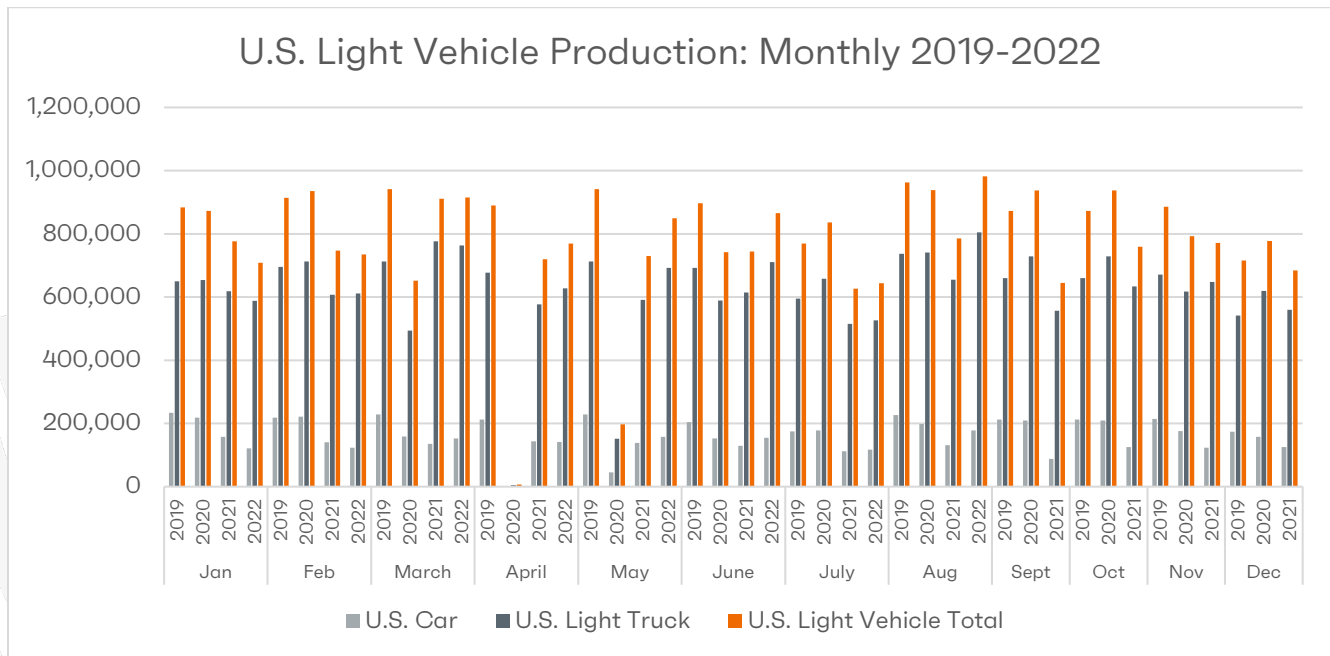
Gas And Oil Remain High: Oil prices, as benchmarked at West Texas Intermediate, fell \$3.38 to \$80.08 a barrel for the last week of September. Since election day 2020, oil prices are \$43.50 a barrel higher. Gas prices increased \$0.07 to \$3.78. Gas is 47% higher than the beginning of 2020. ²³



Production Meter

U.S. Light Vehicle Production (Updated 9/29)

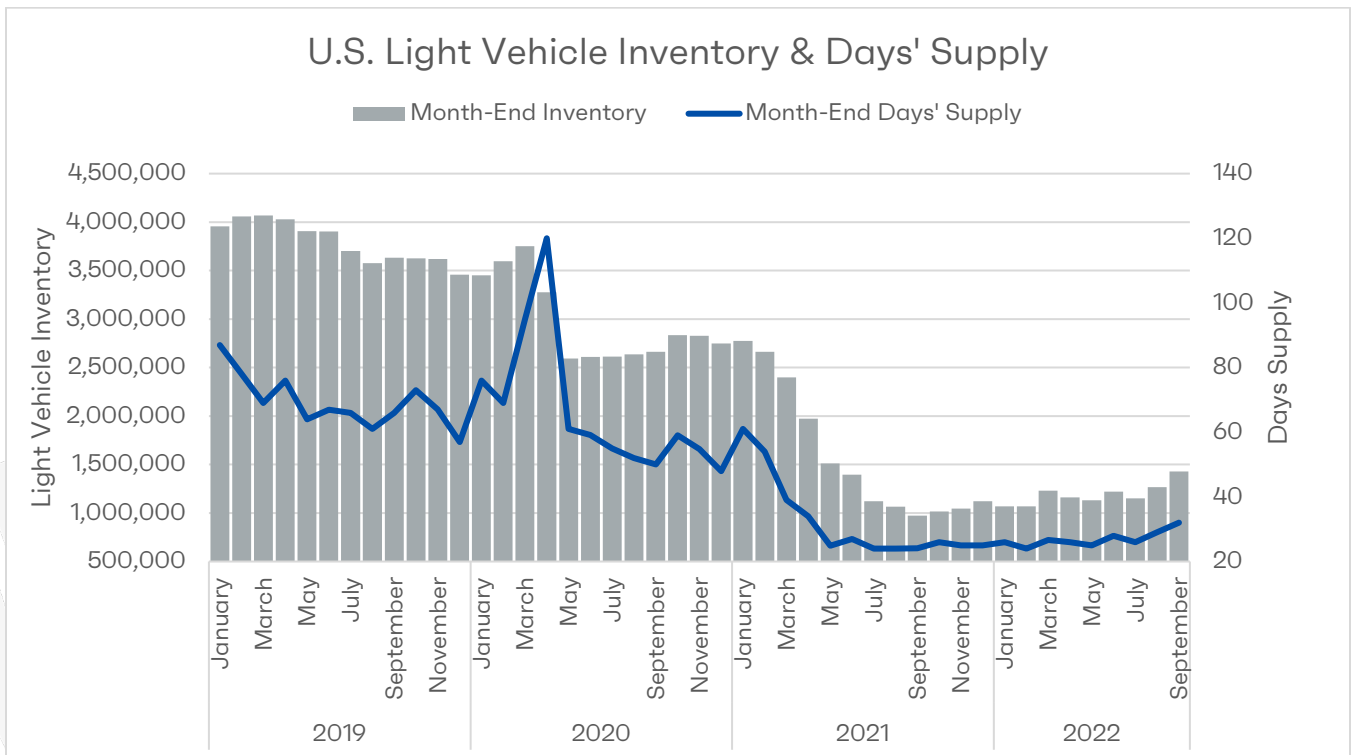
U.S. Light vehicle production for August 2022 increased month-over-month by 52 percent, totaling 982,161 vehicles (177,634 cars, 804,527 light trucks), year-over-year, production is up 28 percent from 2021. ²⁴



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

WardsIntelligence Inventory Update (9/7) ²⁵: “U.S. light-vehicle inventory took another big step up with automakers reporting Sept. 30 stocks 12.6% higher from the prior month, which followed a strong 10.2% increase in August. Inventory heading into October totaled 1.43 million units, highest since 1.51 million in May 2021, when the semiconductor shortage was leading to production cuts and causing a huge depletion of new vehicles available to consumers.

“The Sept. 30 level is 46.8% above like-2021’s 972,655 units. Days’ supply ended September at a 17-month high 32, up from August’s 29 and same-month 2021’s 24.”



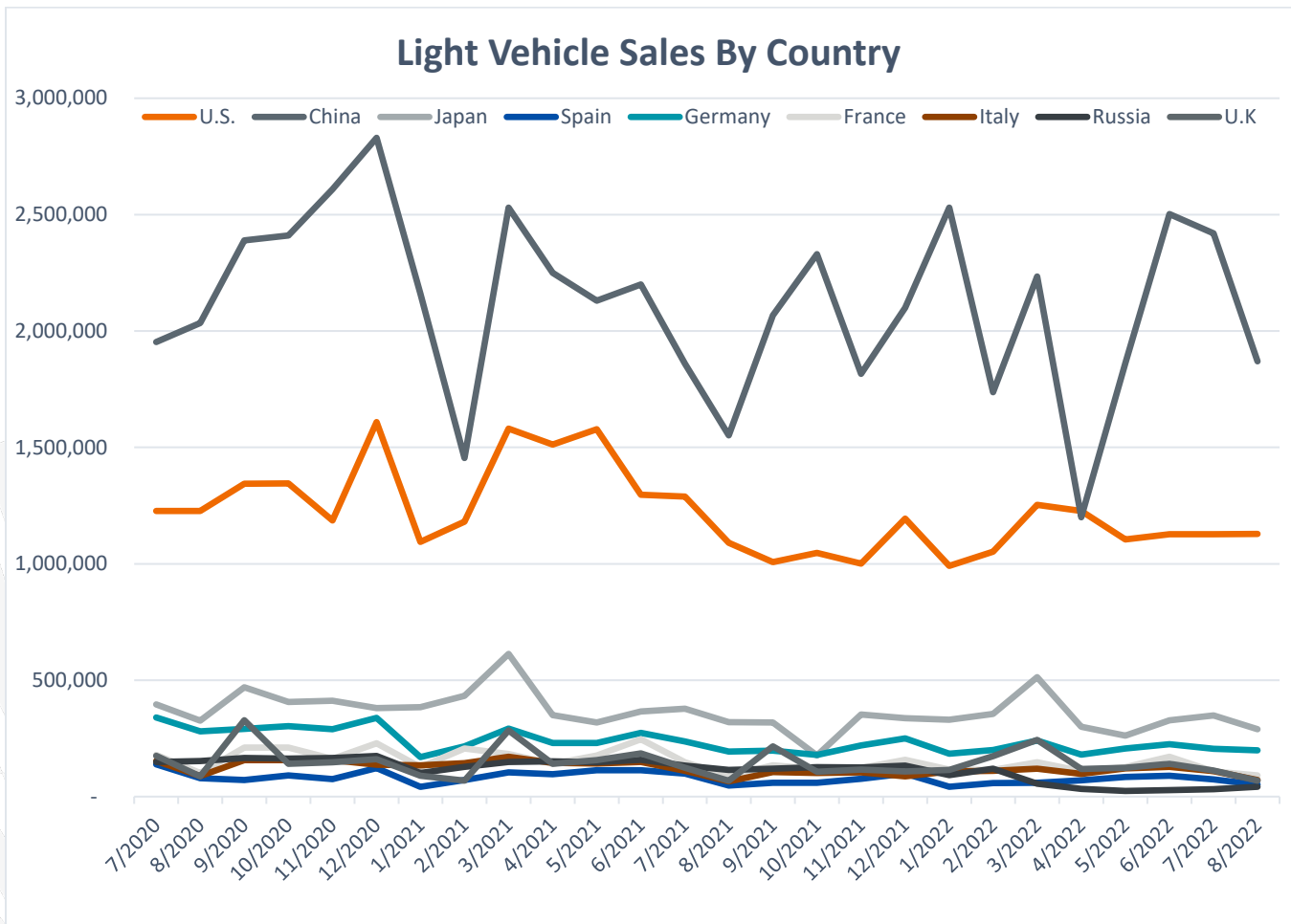
Global Meter

Global Light Vehicle Sales (Updated 10/6)

Wards Intelligence ²⁶: “A return to growth in North America added to momentum previously started in China and South America as global vehicle deliveries in August recorded a second straight year-over-year increase.

“Global sales in August, including light vehicles and medium-/heavy-duty trucks, totaled 6.82 million units, a 2.4% decline from July’s revised 6.82 million, but 12.6% above like-2021’s 6.06 million. August’s data includes some preliminary estimates. Light-vehicle volume totaled 6.59 million units, 2.6% below July’s 6.77 million and 12.9% above August 2021’s 5.84 million.

“Global year-to-date volume through August is pegged at 53.6 million units, 5.6% below like-2021’s 56.8 million. Light-vehicle volume during 8-months 2022 totaled 51.7 million units, 4.6% below same-period 2021’s 54.1 million.”



Global Light Vehicle Production (Updated 9/29)

S&P Global Mobility Forecast (8/24)²⁷: “The global auto industry continues to be influenced by near-term challenges of navigating ongoing supply chain pressures coupled with economic headwinds and intermediate-to-longer term dynamics involving a structural shift from internal combustion to electric propulsion. While semiconductor availability continues to improve, having the right chip for the right vehicle at the right plant can still prove elusive and impact the ability to accelerate production. Further, in several markets, we continue to adjust for macro deterioration contributing to demand destruction. In the longer term, vehicle pricing will be a key consideration and a potential headwind to demand, particularly as many markets shift to much higher levels of electrification. The September 2022 forecast update reflects a near-term upgrade for Greater China due to stronger demand post-COVID lockdowns and robust stimulus effects as well as a stronger near-term outlook for South Asia and Middle East/Africa. However, equally important are the near-to-intermediate term downward revisions particularly focused on Europe and North America, among other regions. In the extreme near-term,

semiconductor availability remains a key factor in the ability to accelerate production growth. Further, we continue to see demand destruction pulling ahead into 2023 for key markets which has direct implications to production and impacts the magnitude/need for inventory restocking. The more noteworthy regional adjustments with the latest forecast update are detailed below:

“Europe: The outlook for Europe light vehicle production was reduced by 211,000 units and by 349,000 units for 2022 and 2023, respectively (and reduced by 250,000 units for 2024). This month’s forecast update for Europe now reflects a baseline that embeds production disruptions related to pressures on gas supplies and energy prices. We believe that the situation will cause rescheduling in the supply chain to save on the cost of power and will eventually impact vehicle production on top of other supply constraints. However, we are not adopting our pessimistic scenario that anticipates mandatory gas rationing. This could materialize if additional adverse elements such as prolonged severe weather or failure of another source of gas arises this winter. The near-term forecast revisions for this month follow already sizable downgrades made to the Europe forecast last month. Beyond 2023, we expect supply chain shortages will give way to demand challenges influenced by a weakening macro environment and heightened pressure due to rising costs amid the proliferation of electrification. The resulting negative impact carries through the forecast horizon.

“Greater China: The outlook for Greater China light vehicle production was increased by 504,000 units and by 351,000 units for 2022 and 2023, respectively (and reduced by 167,000 units for 2024). Despite electric power shortages under the summer heat, particularly in the middle-west provinces, mainland China light vehicle production maintained its momentum and outperformed expectations in August. Passenger vehicles achieved close to 2.1 million units of production with year-over-year growth of 40%. Conversely, light commercial vehicle production remains challenged and declined by 6%, impacted by economic headwinds and stagnate domestic demand. Production for Q3-2022 and Q4-2022 was upgraded by 452,000 and 52,000 units, respectively, and full-year 2022 production for the region now stands at 25.8 million units representing year-over-year growth of 3.8%. The outlook for 2023 was increased based on the expectation that NEV incentives will be extended and support momentum in the domestic market in spite of macroeconomic headwinds. Consequently, Greater China light vehicle production is expected to post gains of 3.3% in 2023 and 5.8% in 2024.

“Japan/Korea: Full-year 2022 Japan production volume was reduced by 102,000 units relative to the August forecast. The primary focus of the downward revision was related to Toyota due to ongoing semiconductor availability constraints, volume loss from the Hino emission-related production halt, and production challenges at the Motomachi plant triggered by Toyota bZ4X quality issues. In the intermediate-term, Japan production volumes were upgraded for 2023 and 2024 primarily due to Mazda planning to continue to sell the CX-5 in the US market in order to maintain market share. Also, the next-generation version of the CX-5 was added starting in 2026. Full-year 2022 South Korea production was increased by 27,000 units relative to the previous forecast. Although the domestic market remains challenged, production continues to recover due to an increase in exports with improved semiconductor supply. The upward momentum is expected to continue through 2023, resulting in an upgrade of 19,000 units. However, production was reduced by 9,000 units for 2024 as

additional demand destruction is expected from high inflation, particularly for the US and Europe. In the long-term, production was reduced primarily due to ongoing global economic headwinds. However, an increase in demand for electric vehicles is expected to lead production recovery starting in 2028.

“North America: The outlook for North America light vehicle production was largely unchanged for 2022 and reduced by 211,000 units for 2023 (and was reduced by 42,000 units for 2024). The outlook for North America light vehicle production for 2022 remains steady at 14.58 million units on continued supply chain, labor, and logistic issues. While semiconductor related downtime has slowed, manufacturers’ ability to produce vehicles at normal operating levels remains problematic, particularly among the Japanese transplants. The short-term production forecast continues to be derived from automakers’ ability to produce vehicles remaining divorced from economic, demand and inventory conditions amid ongoing supply chain issues. Concerns surrounding supply chain constraints, most notably for semiconductors, results in the outlook for 2023 being revised down 1.3% to 15.62 million units. With the outlook for US demand sharply reduced, inventory creation has entered its formative stages and projected to reach nearly 2.0 million units by the end of 2023. Following significant reductions last month due to production constraints extending further into 2024 along with the effects of demand destruction, the outlook for 2024 was revised down 0.3% to 16.21 million units.

“South America: The outlook for South America light vehicle production was increased by 6,000 units and by 2,000 units for 2022 and 2023, respectively (and reduced by 1,000 units for 2024). The outlook for 2022 was upgraded modestly based largely on stronger actual production results; however, volumes for 2023 and 2024 were largely unchanged with only fairly minimal revisions. The longer-term outlook was slightly upgraded over the full forecast horizon by 0.2% (around 7,000 units added per year on average). The uptick is mostly centered around 2026/2027 as we have applied new timings for most Volkswagen models (with earlier redesigns than previously expected).

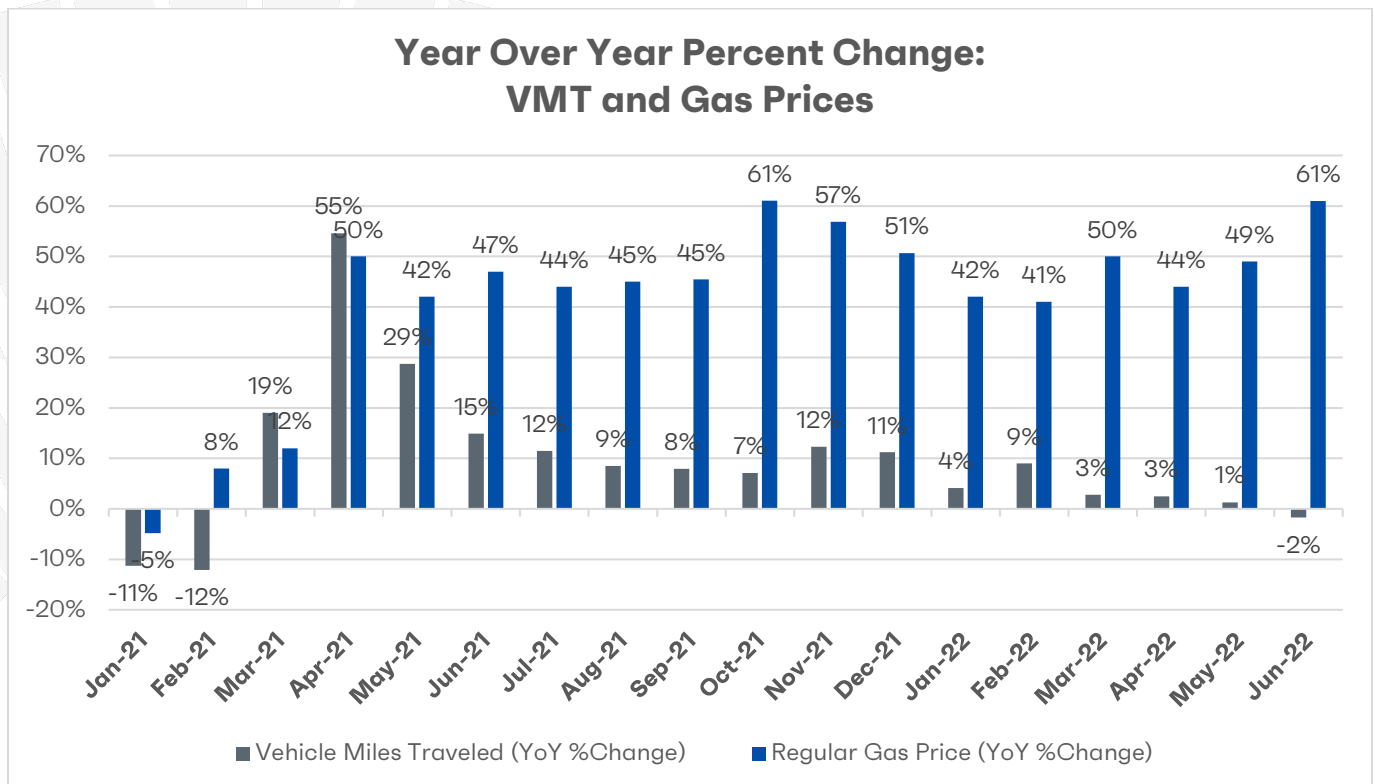
“South Asia: The outlook for South Asia light vehicle production was increased by 121,000 units and by 93,000 units for 2022 and 2023, respectively (and increased by 91,000 units for 2024). The upgraded outlook for 2022 was largely driven by stronger actual production for both the India subcontinent and the ASEAN market. India continues to post solid production growth on renewed demand for personal mobility and improved consumer confidence in rural and semi-urban markets. Further, market participants have thus far rather effectively navigated semiconductor and other supply chain challenges. Regarding the ASEAN market, a somewhat cautious upgrade reflects recent supply chain improvements resulting in stronger actualized production, yet the forecast continues to incorporate some risk to automaker planning schedules through the balance of 2022. The improved production outlook for 2023 and 2024 focuses on the India subcontinent as a result of growing auto demand in the market.

Recovery Meter

Roadway Travel (Updated 9/7)

According to the U.S. Department of Transportation, seasonally-adjusted vehicle miles traveled in June declined 1.7% from the same time a year ago. The cumulative travel estimate for 2022 is 1,587.1 billion vehicle miles.²⁸

- Travel on all roads and streets changed by -1.7% (-4.8 billion vehicle miles) for June 2022 as compared with June 2021. Travel for the month is estimated to be 282.1 billion vehicle miles.
- The seasonally adjusted vehicle miles traveled for June 2022 is 268.0 billion miles, a -1.80% (-4.8 billion vehicle miles) change over June 2021. It also represents a -1.0% change (-2.7 billion vehicle miles) compared with May 2022.
- Cumulative Travel for 2022 changed by +2.8% (+43.2 billion vehicle miles). The cumulative estimate for the year is 1,587.1 billion vehicle miles of travel.



Economic News (Updated 9/29)

Manufacturing Gained 22,000 Jobs In August, Though Motor Vehicles And Parts Lost 1,900.

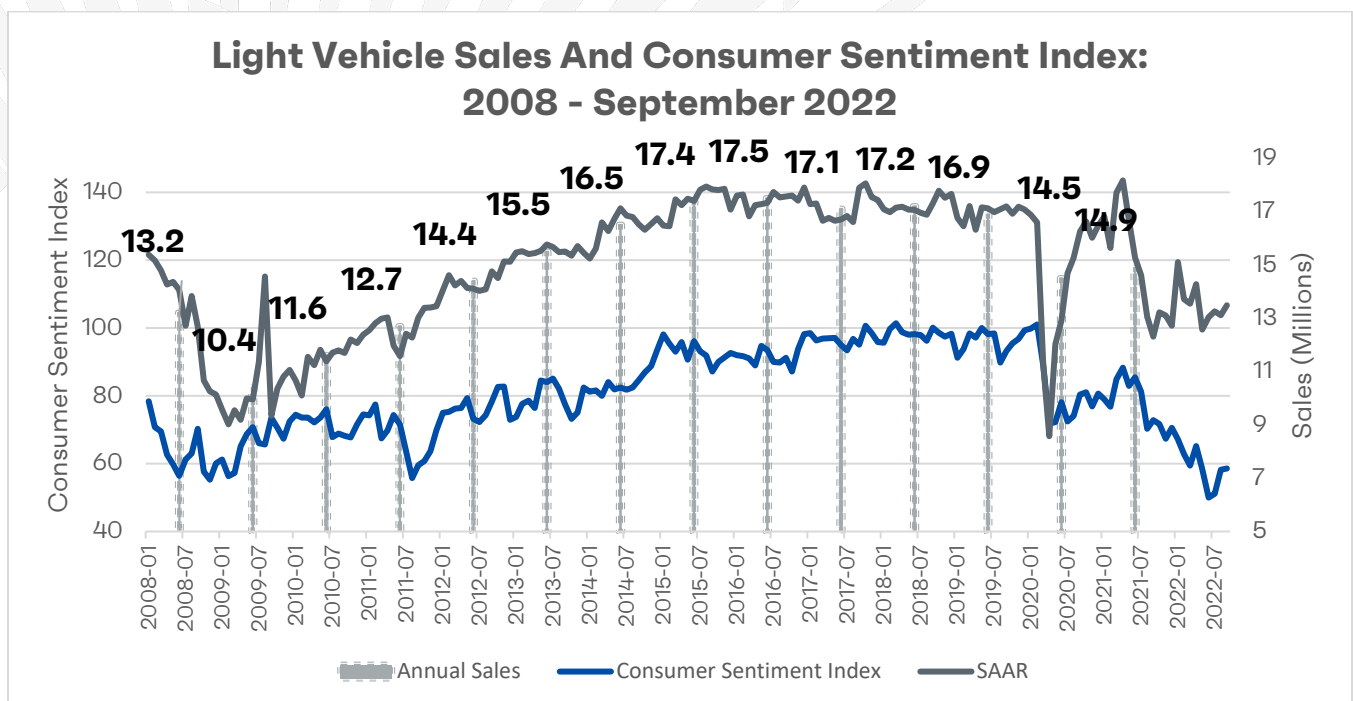
“Manufacturing employment rose by 22,000 jobs in August, mostly in durable goods, the Bureau of Labor Statistics reported today. Durable goods accounted a gain of 19,000 jobs, according to a breakdown by sector. Industries with job increases included fabricated metal products (up 4,700), computer and electronic products (up 4,500), and machinery (up 2,800). Transportation equipment

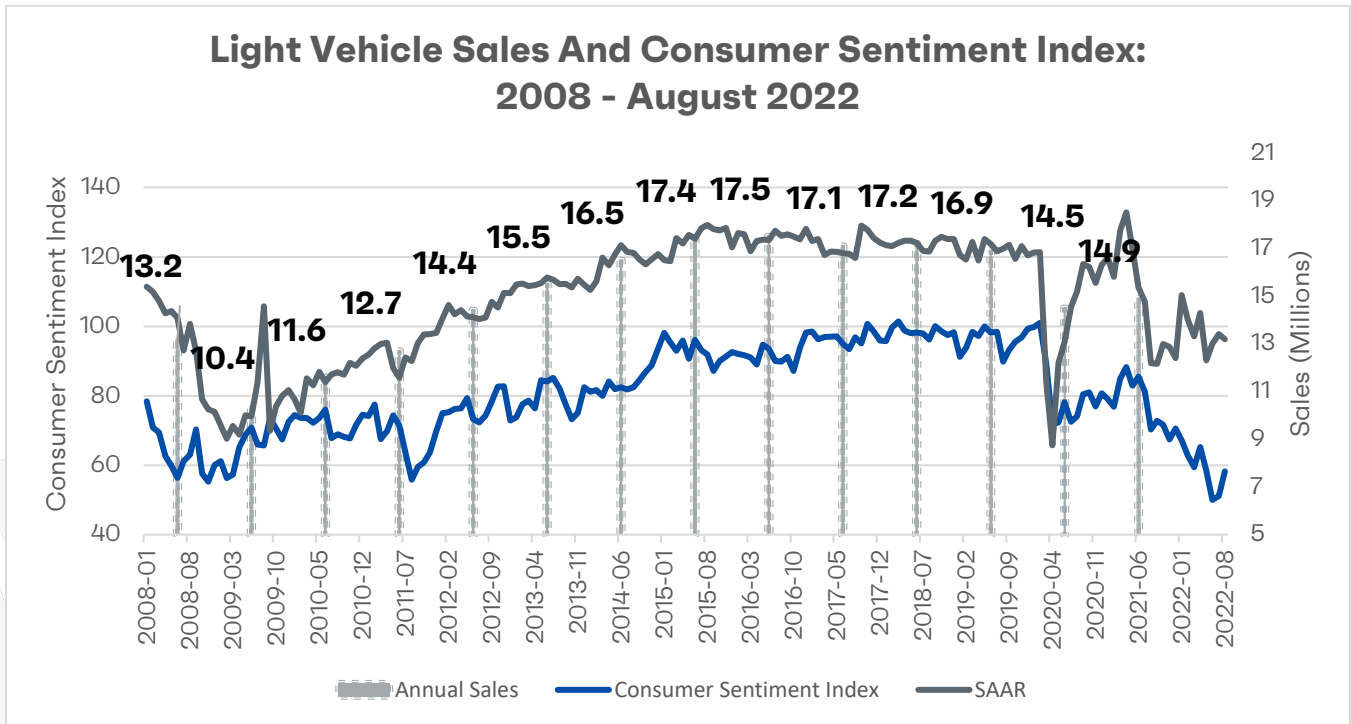
had mixed results. The overall category had an increase of 2,400 jobs. That was despite a decrease of 1,900 jobs in motor vehicles and parts.²⁹

The ISM Index Held Steady In August. “Manufacturing remained on a steady course in August, the Institute for Supply Management said today. The Tempe, Ariz.-based group’s manufacturing index, known as the PMI, registered at 52.8 percent last month, the same as July.”³⁰

Consumer Confidence and Sales (Updated 10/6)

Surveys of Consumers Director Joanne Hsu³¹: “Consumer sentiment confirmed the preliminary reading earlier this month and was essentially unchanged from the month prior, at less than one index point above August. Buying conditions for durables and the one-year economic outlook continued lifting from the extremely low readings earlier in the summer, but these gains were largely offset by modest declines in the long run outlook for business conditions. As seen in the chart, sentiment for consumers across the income distribution has declined in a remarkably close fashion for the last 6 months, reflecting shared concerns over the impact of inflation, even among higher-income consumers who have historically generated the lion's share of spending. The median expected year-ahead inflation rate declined to 4.7%, the lowest reading since last September. At 2.7%, median long run inflation expectations fell below the 2.9-3.1% range for the first time since July 2021. Inflation expectations are likely to remain relatively unstable in the months ahead, as consumer uncertainty over these expectations remained high and is unlikely to wane in the face of continued global pressures on inflation.”

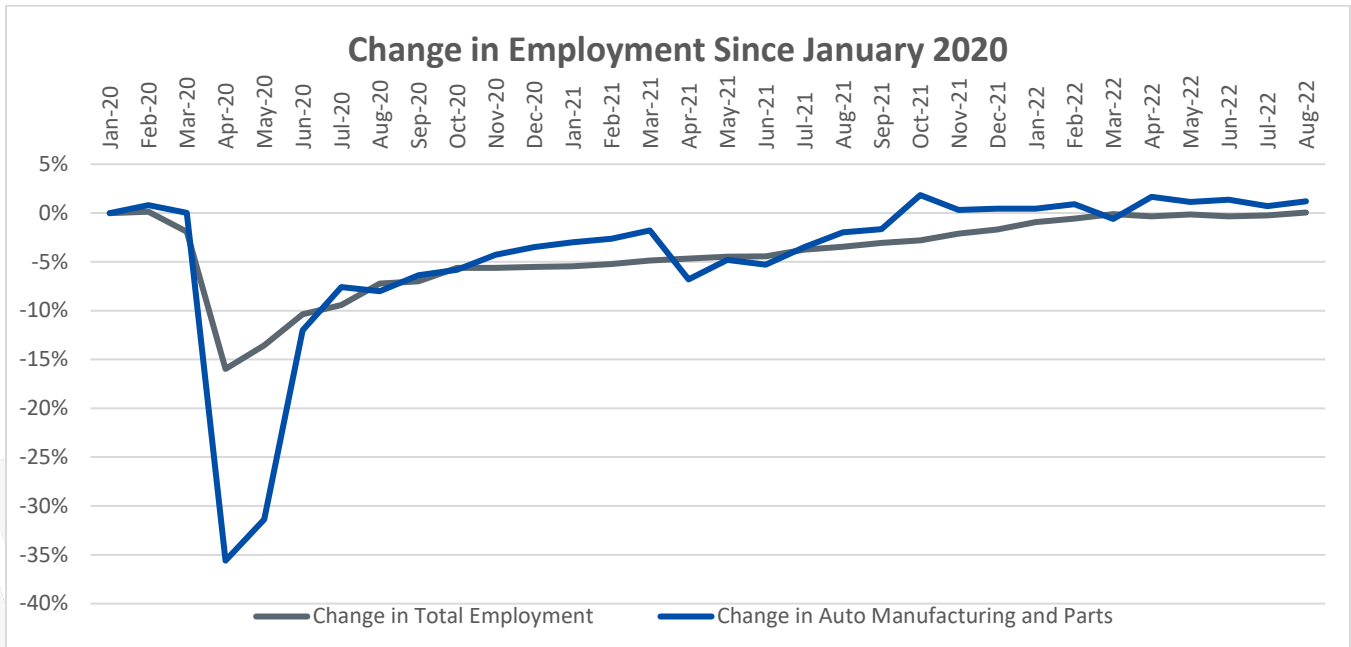




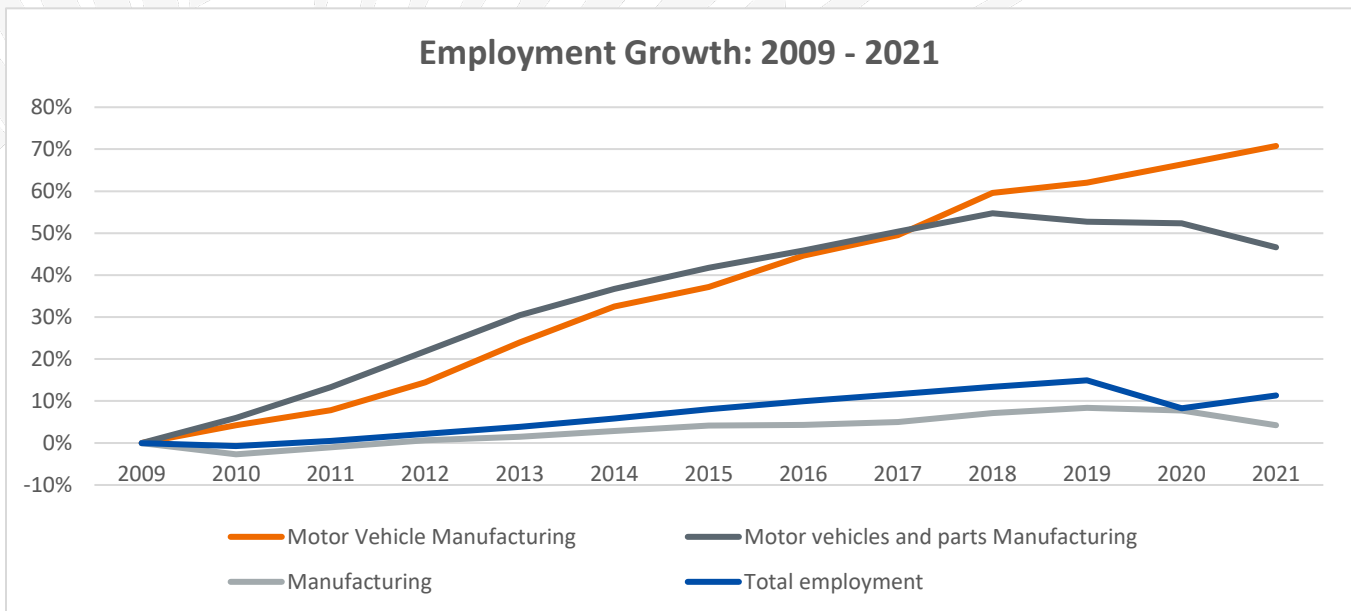
Employment (Updated 9/29)

Motor Vehicle And Parts Manufacturing Lost 1,900 Jobs In August. ³²

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. ³³



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.³⁴ 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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