

READING THE METER

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



ALLIANCE FOR AUTOMOTIVE INNOVATION

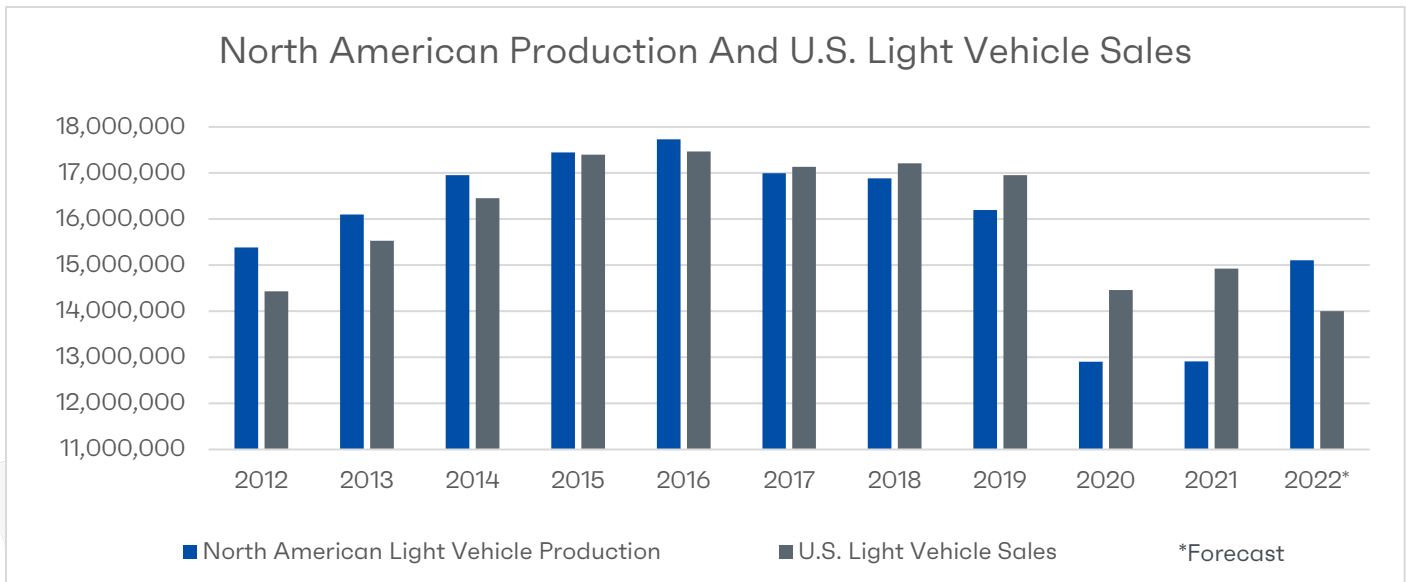
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Forecast Meter

Sales & Production Summary and Forecast (Updated 8/24)

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)	
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)
2021 Full Year	14,926,933 (+3.1% YoY)	8,899,632 (+4% YoY)
2022 Full Year Estimate	14 million units	15,107,419 (+17% YoY)



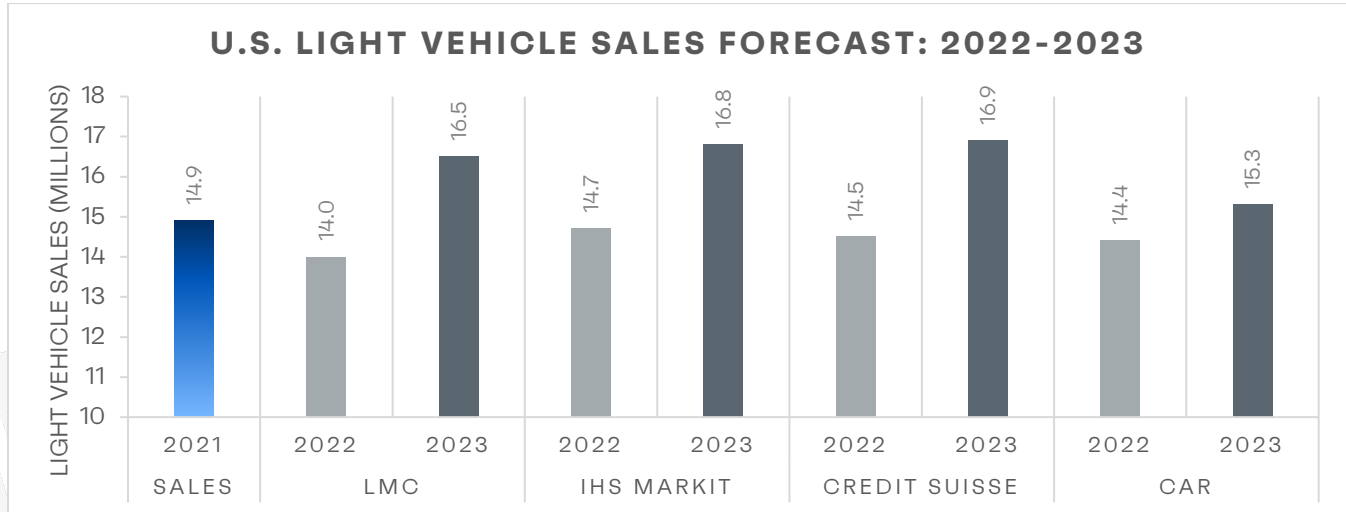
U.S. Light Vehicle Sales Outlook (Updated 9/7)

Wards Intelligence Outlook (9/7)⁴: “After totaling a 13.7 million-unit seasonally adjusted annual rate over the entire first half of 2022, sales fell to a 13.3 million SAAR in July-August. Initial modeling, based on a first look at the prior month’s sales and ending inventory, projects a September SAAR of 14.4 million units, putting the third quarter at 13.6 million. However, results in each of the past two months have ended well below what initial modeling indicated, and that could happen again in September. Whether September sales significantly increase from August’s 13.2 million-unit SAAR could depend on manufacturers continuing to raise incentives. TrueCar estimated that average incentives rose month-to-month in August to \$1,197. It was the first sequential increase since December 2020. That also was accompanied by a sequential decline in average transaction prices. If that trend continues in September, the probability is high that sales top a 14-million annualized rate. A pushback to optimism for a surge in September deliveries is that inventory of lower-cost vehicles still is falling while the mix increases for higher-priced vehicles, mainly fullsize gas guzzling trucks.

“Wards Intelligence partner LMC Automotive pegs entire-2022 sales at 14.0 million units – 15.5 million in 2023. If the Q3 estimate holds firm, Q4 sales will have to total a 15.0 million-unit SAAR to match the calendar-year outlook. That would be the highest quarterly SAAR since 16.9 million units in Q2-2021, when the market was last able to fight off the downward slide in inventory caused mostly by the global semiconductor shortage.”

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 9/7)

“Wards Intelligence Inventory Outlook (9/7)⁶: “U.S. light-vehicle inventory increased a solid 10.2% from the prior month at the end of August to 1.27 million units, 18.8% above the same year-ago period and highest for any month since 1.39 million in June 2021. The long-time high in new-vehicle availability, and that production for the U.S. market – especially from North America plants which source close to 80% of U.S. sales volume – is expected to total big double-digit year-over-year gains for both August and September, points to inventory generally rising over the final four months of the year. Rising inventory also should equate to stronger sales.”

Wards Intelligence Production Outlook (8/24)⁷: “Challenges with getting enough parts still abound for automakers in North America as they struggle to get back to capacity, and the Q3 production tracker was cut from month-ago’s projection for the period. . . . Although there will be some summer-related slowdowns in August, production is projected to jump to 1.42 million units in the month, which would be the highest for any month since 1.46 million in October 2020. However, the trend in most months since the semiconductor shortage hit hard at the end of Q1-2021 is of the industry underperforming from expectations, meaning more there is more downside than upside risk to August, as well as to the September production outlook of 1.33 million units. If the projections hold relatively firm, August’s total compared with the same month in pre-pandemic 2019 will narrow from July to a shortfall of 6.7% with September closing the gap to just 2.9% below its total of three years ago.

S&P Global Mobility Production Outlook (8/24)⁸: “North America: The outlook for North America light vehicle production was reduced by 126,000 units and by 574,000 units for 2022 and 2023, respectively (and was reduced by 555,000 units for 2024). The outlook for North America light vehicle

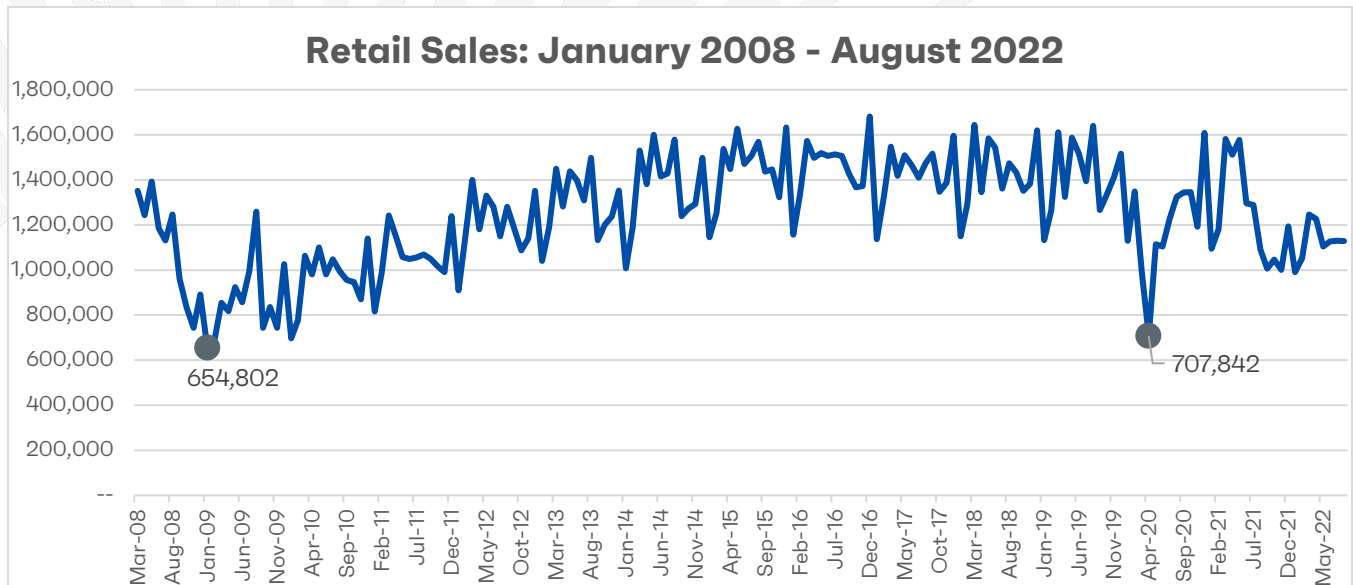
production for 2022 was revised down 0.9% to total 14.58 million units on continued supply chain, labor, and logistic issues. While semiconductor related downtime has slowed dramatically, automakers’ ability to produce vehicles at normal operating levels remains challenged particularly among the Japanese transplants, Toyota, Honda, Nissan, Subaru, and Mazda that represent 35% of total US sales. Concerns surrounding ongoing supply chain challenges, most notably for semiconductors, result in the outlook for 2023 being revised down a sharp 3.5% totaling 15.83 million units. With the outlook for US demand sharply reduced, inventory restocking is expected to occur sooner and reach over 2.0 million units by mid-2023. Despite heightened demand destruction concerns, faster inventory rebuilding may spur some demand as incentive levels are expected to increase. As production challenges extend into 2024, along with the effects of demand destruction, the outlook for 2024 was revised down an equally sharp 3.3% to total 16.26 million units.”

Market Meter

U.S. Light Vehicle Sales (Updated 9/7)

Monthly Sales (Updated 9/7)

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.



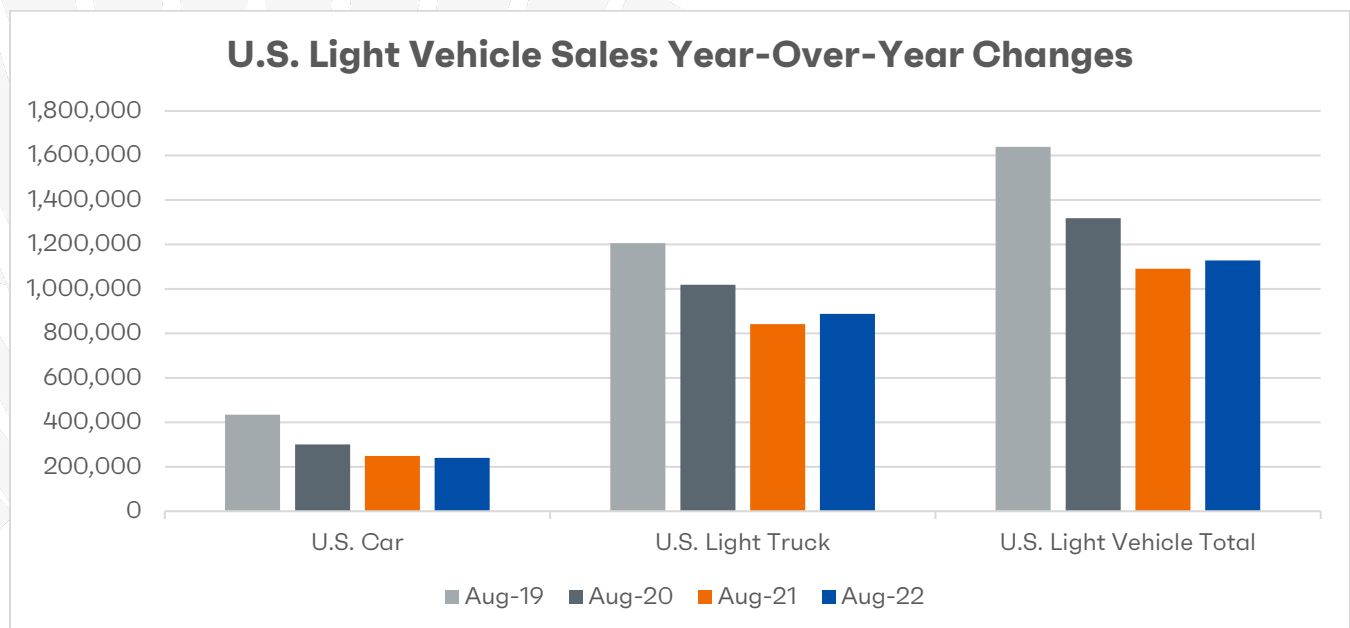
August Sales (Updated 9/7)

WardsIntelligence⁹: “U.S. light-vehicle sales in August finished slightly weaker than expected and fell from the prior month on an annualized basis.

“The large-truck juggernaut, plus a surge by Hyundai-Kia, was not enough to offset minor shortfalls from expectations among most other automakers as the month’s seasonally adjusted annual rate totaled 13.2 million units, down from the July’s 13.3 million. Raw volume of 1.28 million units was even with July.

“August’s SAAR did represent the first time since June 2021 a month’s results finished above the same year-ago period. August 2021’s SAAR was 13.1 million units and marked the point that the dearth of inventory caused by the semiconductor shortage put a full stranglehold on the market.

“August’s volume was 3.3% above like-2021’s 1.09 million units. The month’s daily selling rate of 43,392 over 26 selling days was 0.7% below August 2021’s 43,706 – 25 selling days.”



Fleet Sales (Updated 9/7)

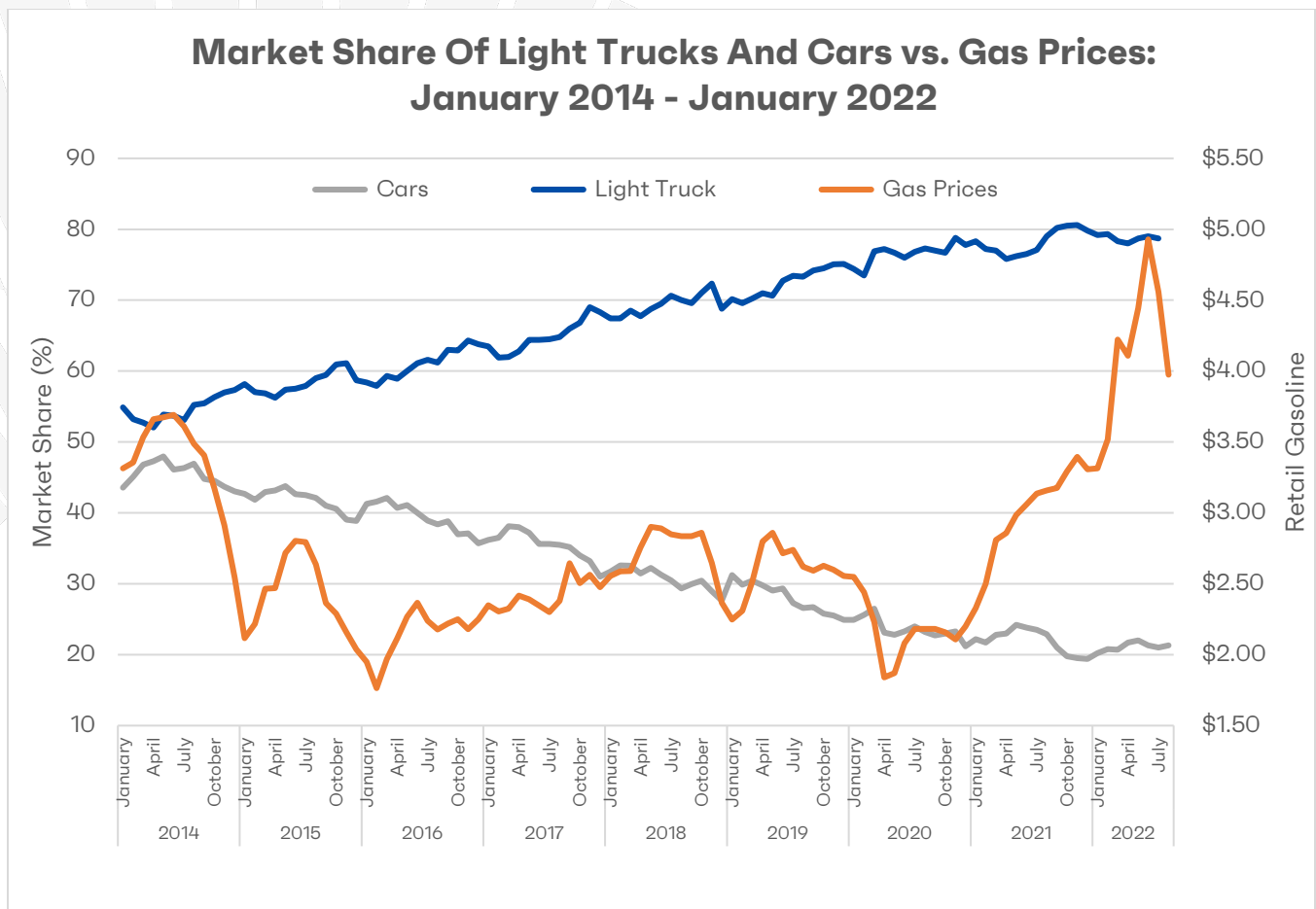
TrueCar¹⁰: “Fleet sales for August 2022 are expected to be up 40% from a year ago and down 12% from July 2022 when adjusted for the same number of selling days.”

J.D. Power¹¹: “Fleet sales are expected to total 156,300 units in August, up 26% from August 2021 on a selling day adjusted basis. Fleet volume is expected to account for 14% of total light-vehicle sales, up from 11% a year ago.”

Segments vs. Gas Prices (Updated 9/7)

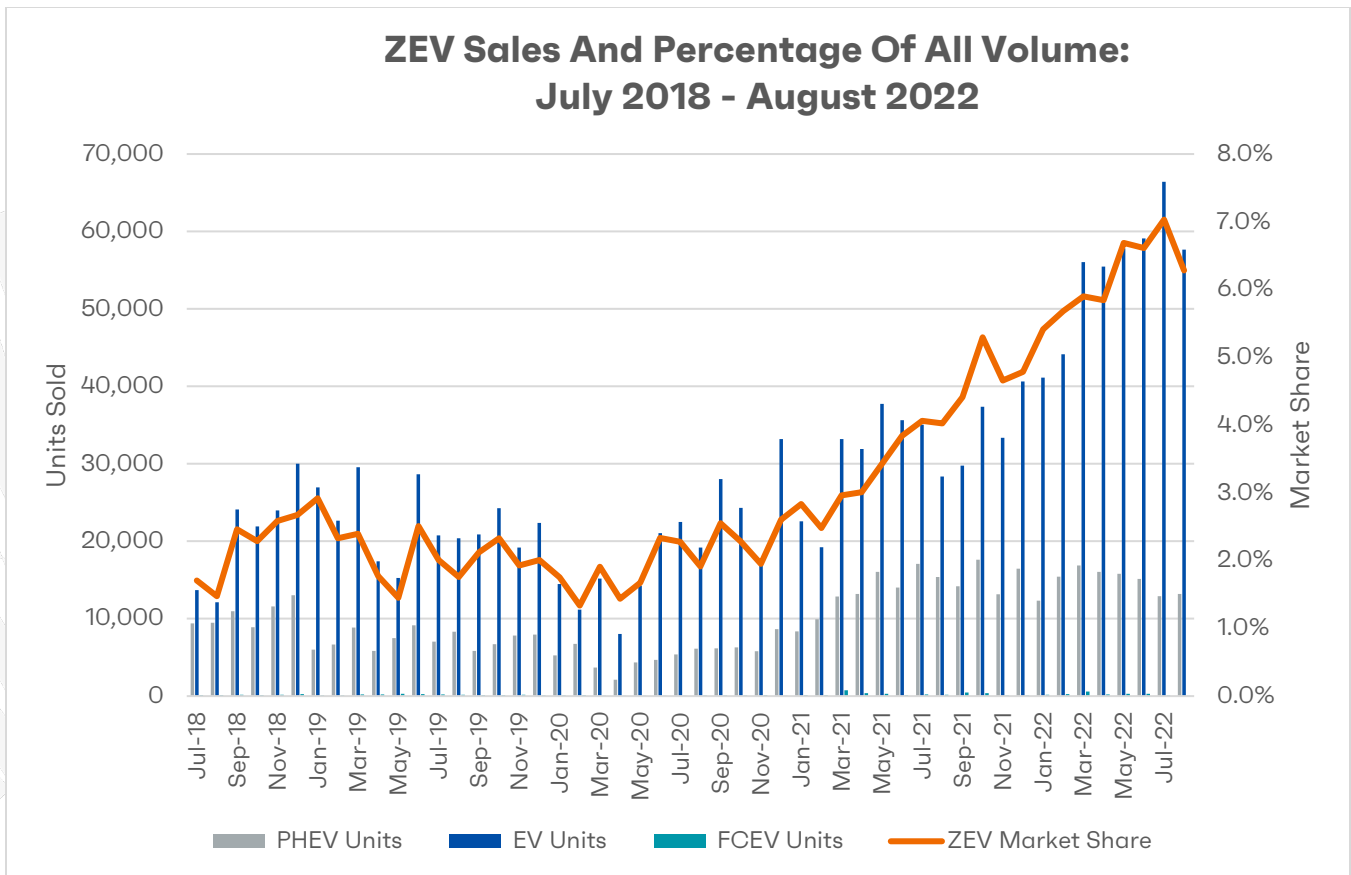
Monthly Sales For August: Light trucks accounted for nearly 79 percent of sales in August, a 0.3 pp decrease in market share from a year ago. Compared to the same period in 2021, sales of cars are down nearly 8,000, and down more than 190,000 from August 2019, when cars comprised 26.5% of the market 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



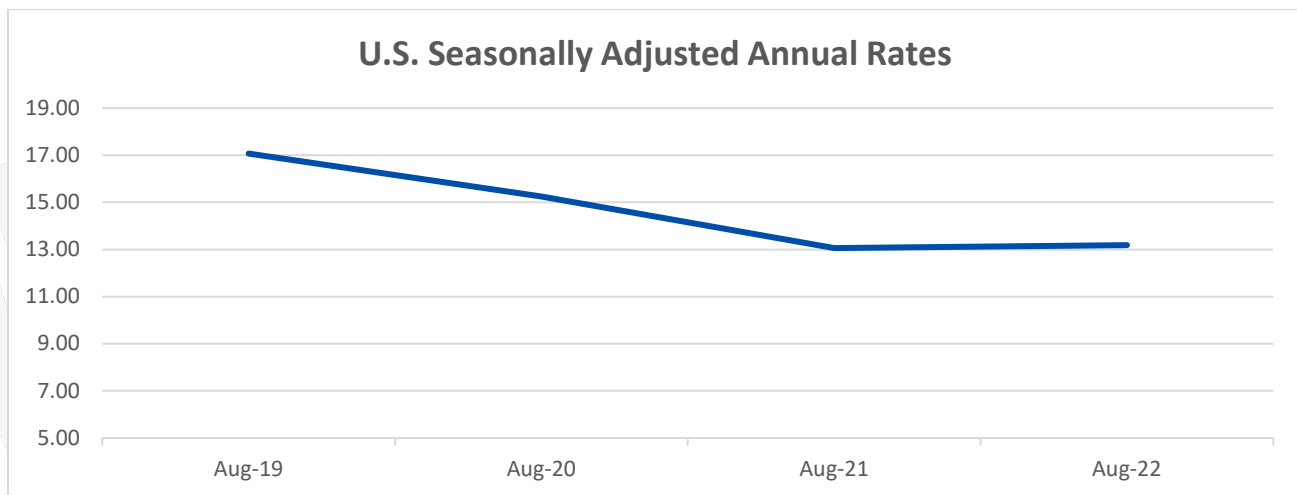
EV Powertrain Sales (Updated 9/7)

Sales of electric vehicles (BEV, PHEV, & Fuel Cell) accounted for 6.3% of total vehicle sales in August 2022 (70,899 units), up 2.3 pp from a year ago and down 0.7 pp from July 2022. Sales of battery electric vehicles led the way for ZEVs, accounting for 5.1% of total sales, up 2.5 pp from August 2021. Plug-in hybrids accounted for 1.17%, down 0.24 pp than the same time last year.¹⁵



Seasonally Adjusted Annual Rates (Updated 9/7)

WardsIntelligence: “[T]he month’s seasonally adjusted annual rate totaled 13.2 million units, down from the July’s 13.3 million. Raw volume of 1.28 million units was even with July. August’s SAAR did represent the first time since June 2021 a month’s results finished above the same year-ago period. August 2021’s SAAR was 13.1 million units and marked the point that the dearth of inventory caused by the semiconductor shortage put a full stranglehold on the market.¹⁶



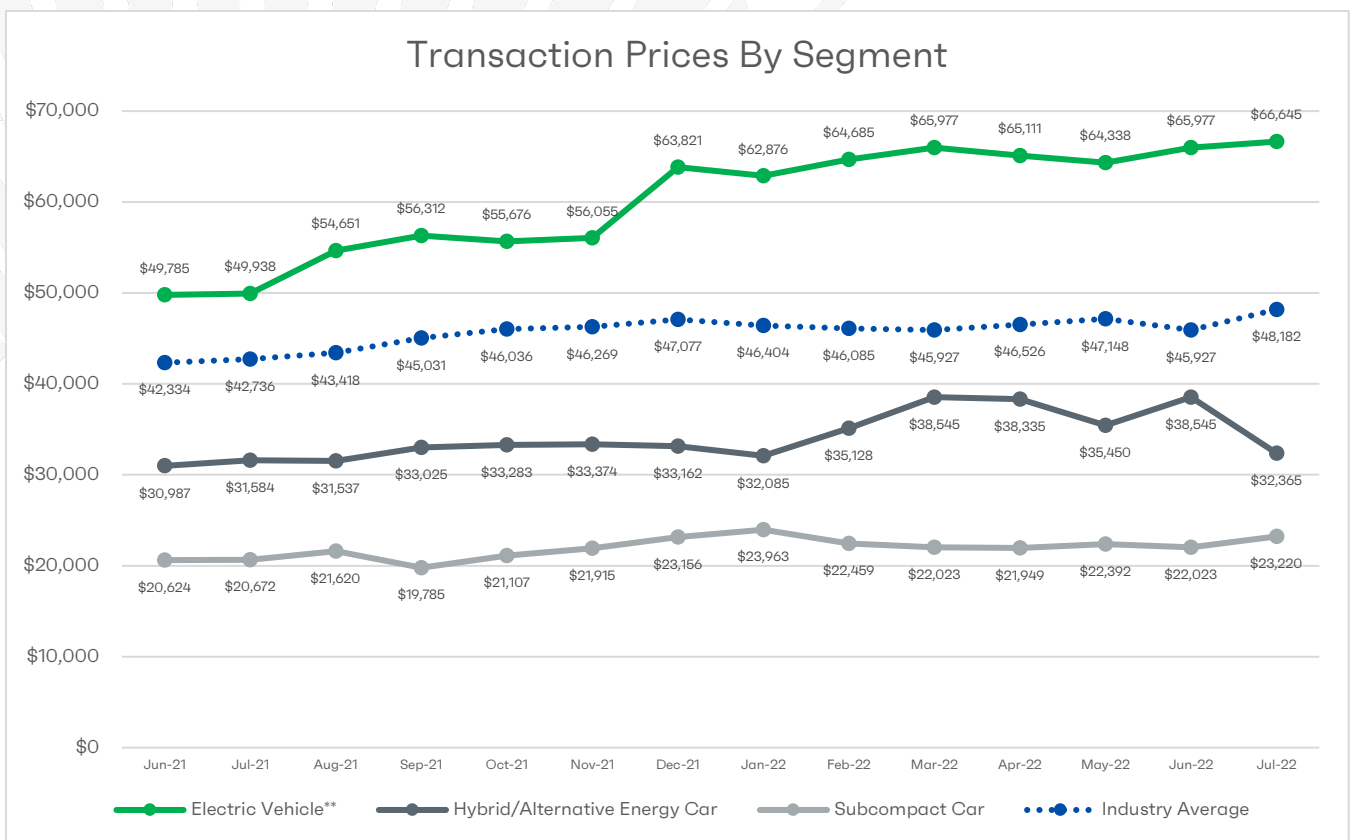
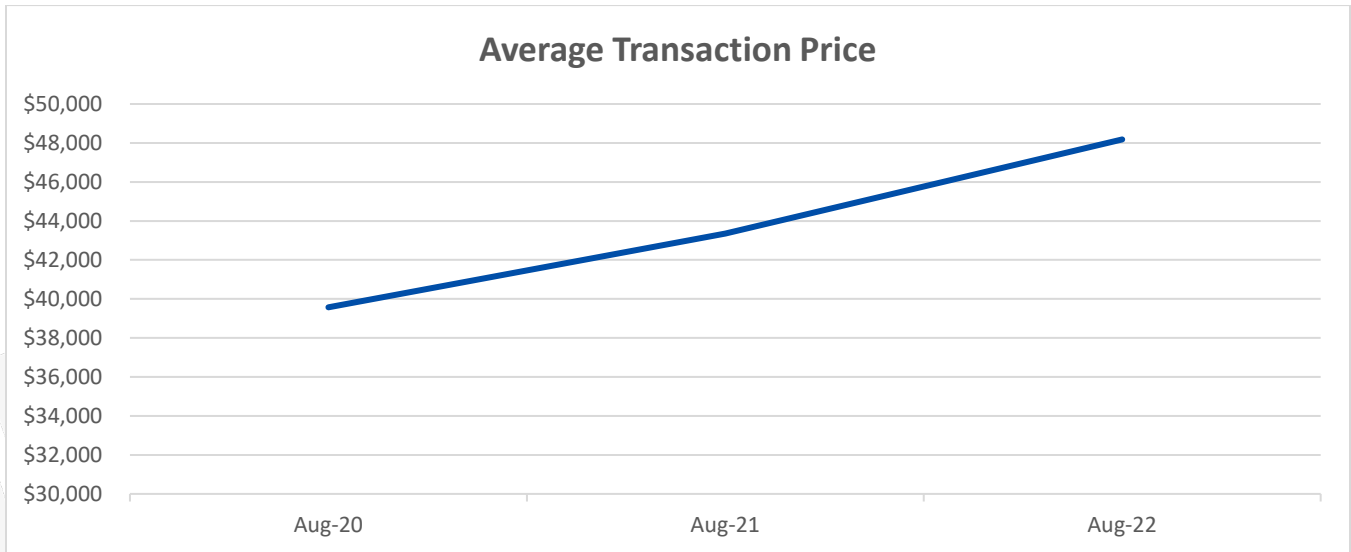
Average Transaction Price (Updated 9/7)

J.D. Power (Updated 9/7)¹⁷: “For August, new-vehicle prices continue to set records, with the average transaction price expected to reach \$46,259—an 11.5% increase from a year ago and the highest on record. Therefore, even though the sales pace is down 2.6% year over year, buyers will still spend nearly \$45.4 billion on new vehicles this month, the second-highest level ever for the month of August and up 13.0% from August 2021.”

Kelley Blue Book (July) (Updated 8/24)¹⁸: “The average price paid for a new vehicle in the U.S. in July 2022 topped June’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 brand. The Kelley Blue Book new-vehicle ATP increased to \$48,182 in July 2022, beating the previous high of \$48,043 set last month. July prices rose 0.3% (\$139) from June 2022 and 11.9% (\$5,126) from July 2021.”

- “The average price paid for a new electric vehicle (EV) dropped in July by 2.3% compared to June but increased by 18.8% 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 and more aligned with luxury prices versus mainstream prices.”
- “Incentives increased slightly in July versus June, but remain low, at only 2.4% of the average transaction price. A year ago, incentives averaged 5.9% of ATP. Full-size cars and luxury cars had

the highest incentives in July, while high-performance cars, full-size luxury SUVs, and electric vehicles had the lowest incentives.”

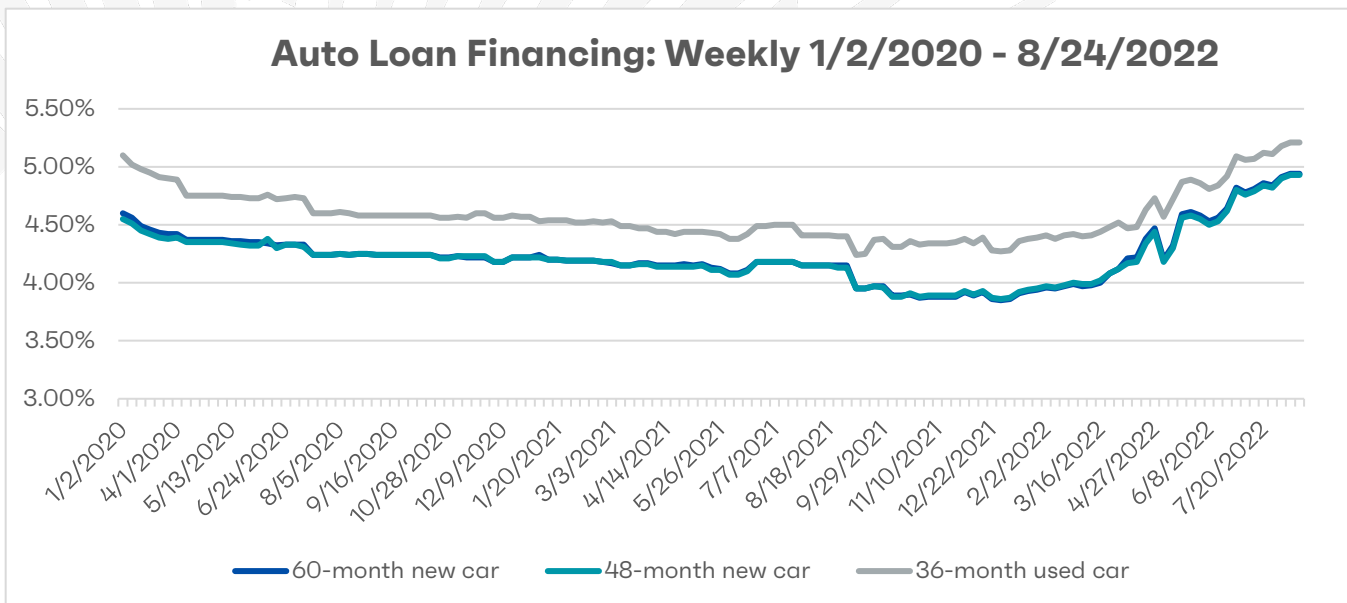


Auto Loan Financing (Updated 9/7)

JD Power (9/7)¹⁹: “Higher prices coupled with a rising interest rate environment are leading to monthly loan payments reaching new all-time highs. After breaking the \$700 level for the first time ever in July, the average monthly finance payment in August is on pace to hit a record \$716, up \$78 from August 2021. That translates to a 12.2% increase in monthly payments from a year ago, which is above the 11.5% increase in transaction prices. The average interest rate for new-vehicle loans is expected to increase 137 basis points from a year ago to 5.51%.

Interest Rates: Interest rates, unchanged over the past week, now stand at 4.94%, 4.93%, and 5.21% on the 60-month new car, 48-month new car, and 36-month used car, respectively. Since the beginning of 2020, 60-month rates are up 0.34 pp, and are up 0.79 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%
8/18/2021	4.15%	4.15%	4.41%
8/10/2022	4.94%	4.93%	5.21%
8/17/2022	4.94%	4.93%	5.21%
One Week Change	0.00%	0.00%	0.00%
Two Week Change	0.03%	0.03%	0.03%
Change since 1/3/20	0.34%	0.38%	0.11%
One Year Change	0.79%	0.78%	0.80%

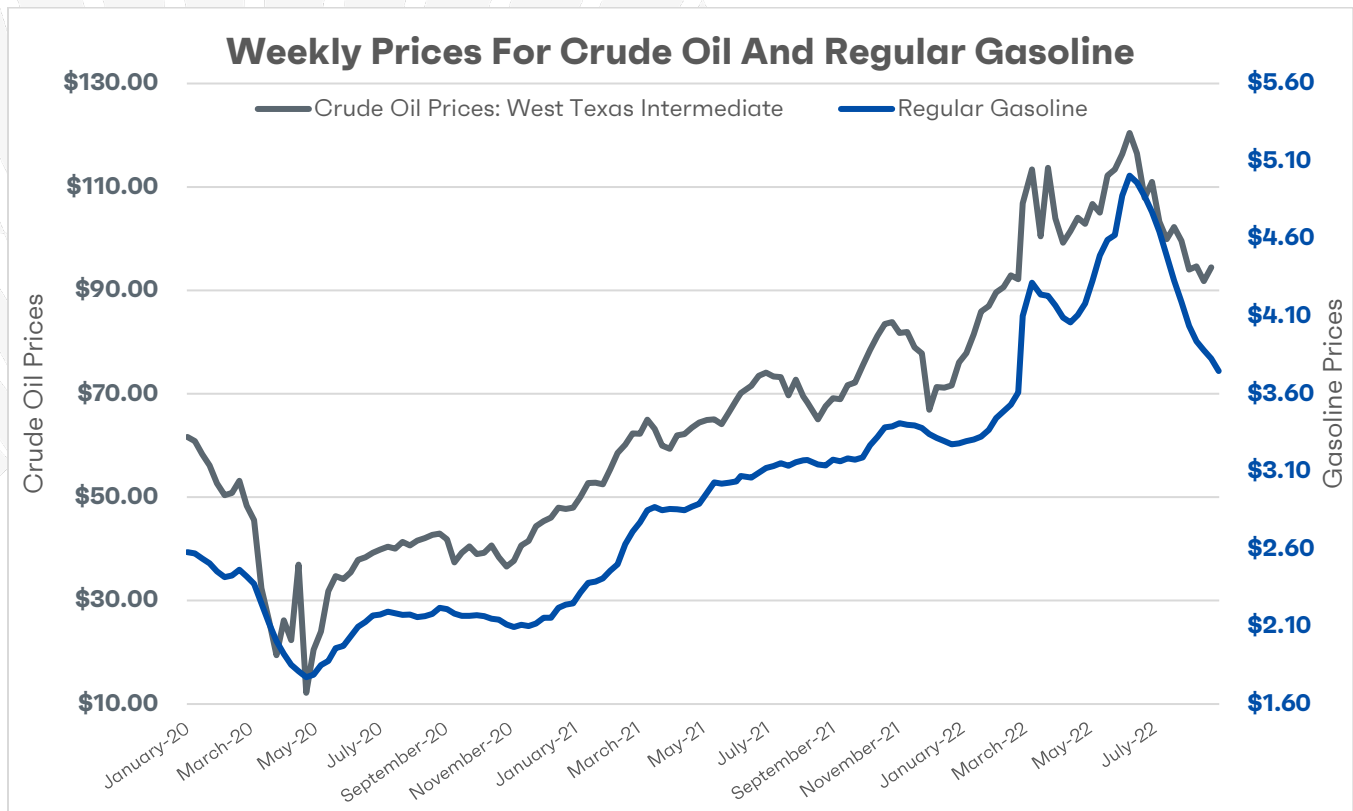


Crude Oil and Gas Prices (Updated 9/7)

EIA Outlook For Gasoline (8/24)²¹: “The U.S. retail price for regular grade gasoline averaged \$4.56 per gallon (gal) in July, and the average retail diesel price was \$5.49/gal. We expect retail gasoline prices to average \$4.29/gal in the third quarter of 2022 (3Q22) and fall to an average of \$3.78/gal in 4Q22. Retail diesel prices in our forecast average \$5.02/gal in 3Q22 and \$4.39/gal in 4Q22.”

EIA Outlook For Oil (8/24)²²: “U.S. crude oil production in our forecast averages 11.9 million barrels per day (b/d) in 2022 and 12.7 million b/d in 2023, which would set a record for most U.S. crude oil production in a year. The current record is 12.3 million b/d, set in 2019.”

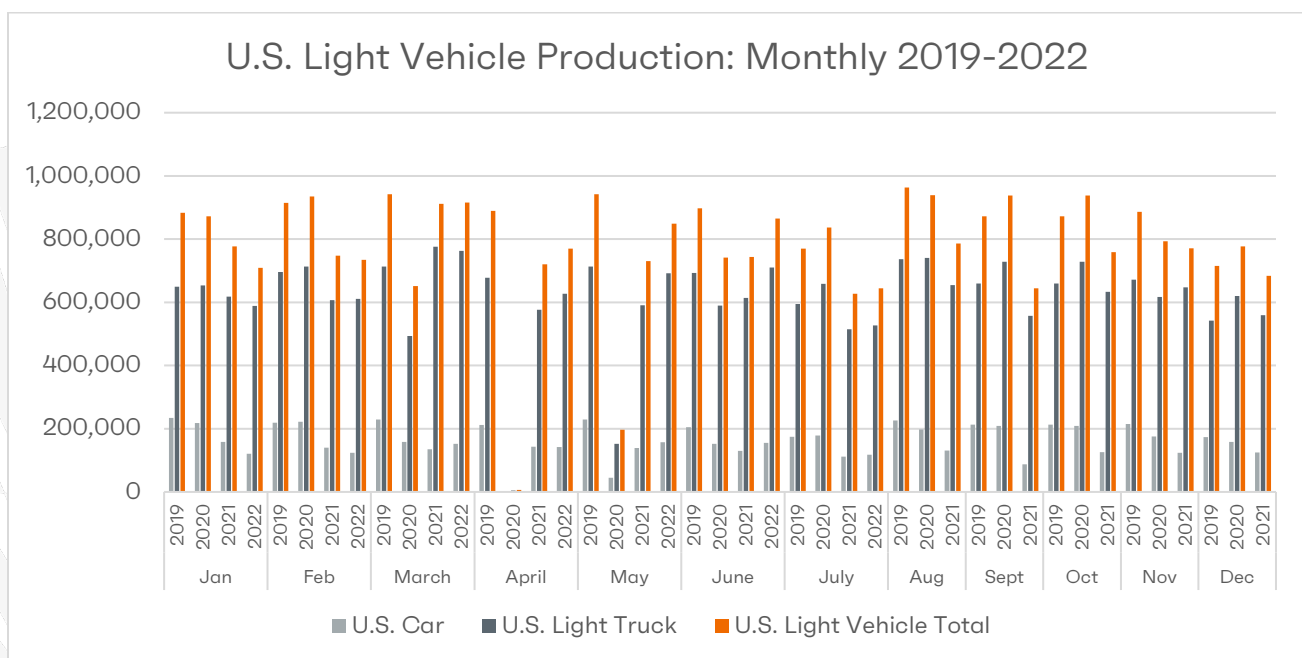
Gas And Oil Remain High, Though Continue To Decrease: Oil prices, as benchmarked at West Texas Intermediate, rose \$2.66 to \$94.47 a barrel for the last week of August. Since election day 2020, oil prices are \$58 a barrel higher. Gas prices fell \$0.05 to \$3.75. Gas is 48% higher than the beginning of 2020.²³



Production Meter

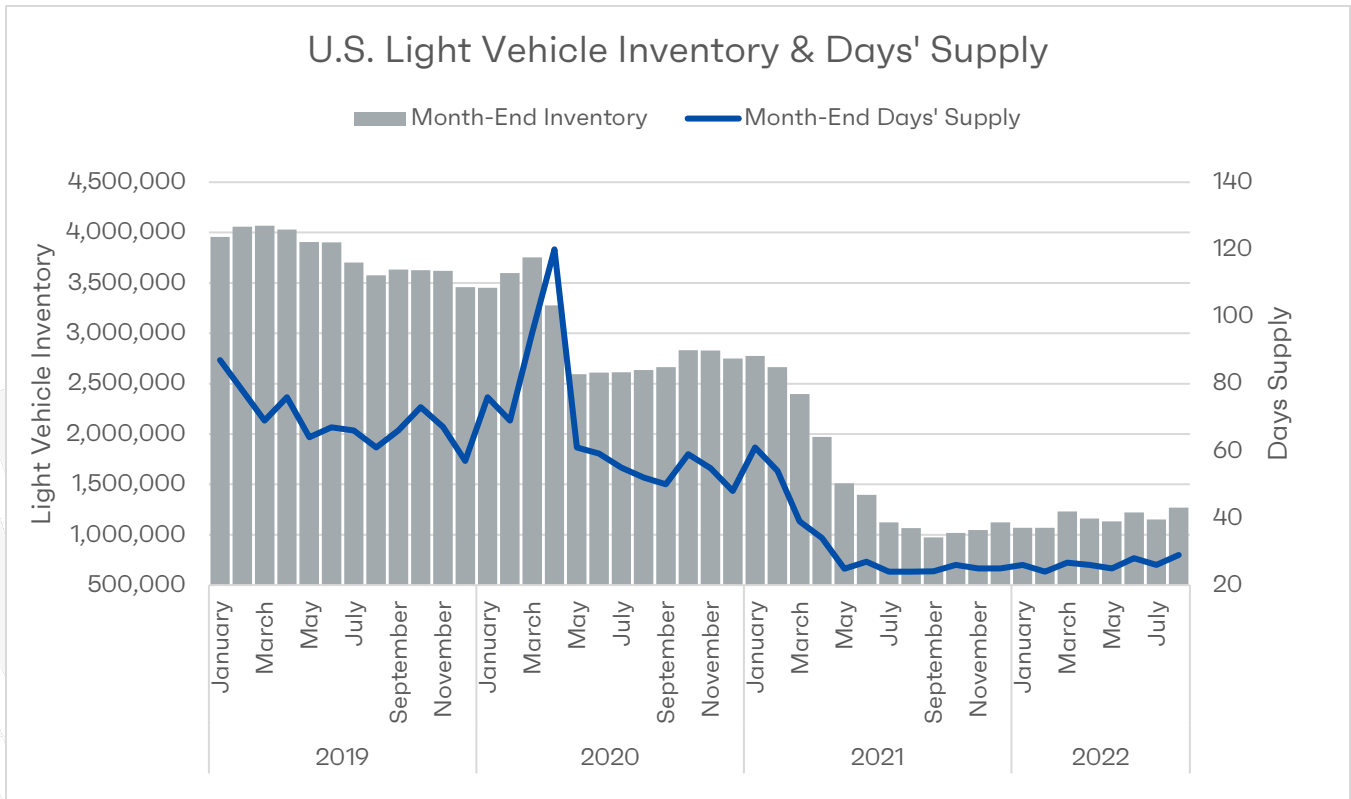
U.S. Light Vehicle Production (Updated 8/24)

U.S. Light vehicle production for July 2022 decreased month-over-month by 24 percent, totaling 644,229 vehicles (117,638 cars, 526,591 light trucks), year-over-year, production is up 4.5 percent from 2021. ²⁴



U.S. Light Vehicle Inventory and Days' Supply (Updated 9/7)

WardsIntelligence Inventory Update (9/7) ²⁵: “U.S. light-vehicle inventory increased a solid 10.2% from the prior month at the end of August to 1.27 million units, 18.8% above the same year-ago period and highest for any month since 1.39 million in June 2021. The long-time high in new-vehicle availability, and that production for the U.S. market – especially from North America plants which source close to 80% of U.S. sales volume – is expected to total big double-digit year-over-year gains for both August and September, points to inventory generally rising over the final four months of the year. . . . Light-vehicle days’ supply ended August at 29, up from July’s 27 and like-2021’s 24. Aug. 31 inventory included 1.07 domestically built vehicles, 31.8% above same-month 2021, and highest since 1.10 million in May 2021. Days’ supply rose to 32 from the prior month’s 27 and like-2021’s 25. Import inventory totaled 201,595 units, 21.9% below like-2021, but highest since March 2022. Days’ supply totaled 21, down from 23 in both July and the year-ago month.”



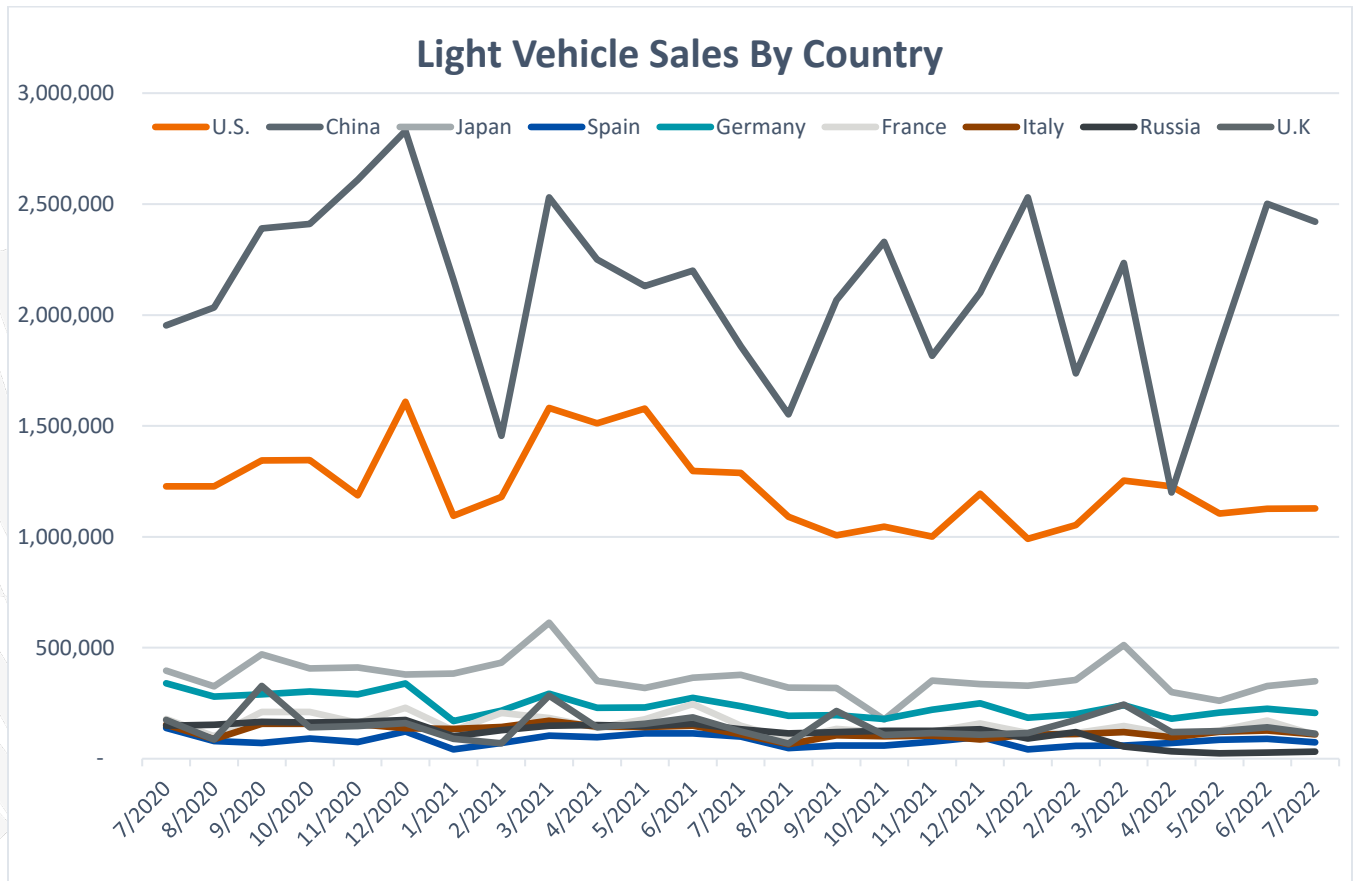
Global Meter

Global Light Vehicle Sales (Updated 9/7)

Wards Intelligence ²⁶: “Global vehicle sales increased year-over-year in July for the first time since June 2021. Based on the countries Wards Intelligence collects data for, including some estimates, July global sales volume totaled 6.99 million units, up 4.1% from same-month 2021’s 6.71 million. Excluding medium- and heavy-duty trucks, light-vehicle sales totaled 6.73 million units, 4.3% above like-2021’s 6.46 million. Due to seasonal trends, volume declined from June. Total vehicles fell 4.5% from the prior month and light vehicles were down 4.8%.

Growth in July was strongest in the Asia-Pacific region – with global market leader China accounting for nearly the entire gain – and in South America. The AP’s July volume was up 19.7% year-over-year – light vehicles increased 20.5% - and South America rose 4.5%, including light-vehicle volume up 4.8%.

The gains offset big year-over-year declines in Europe and North America of 18.4% and 9.5%, respectively. Declines in the light-vehicle totals in both regions were nearly the same as the drops in total vehicles. The year-to-date global total - including in all major regions - through July remains below same-period 2021. Global volume year-to-date totals 46.77 million units, down 7.8% year-over-year. Light-vehicle volume of 45.03 million units is down 6.8%.”



Global Light Vehicle Production (Updated 8/24)

S&P Global Mobility Forecast (8/24)²⁷: “The August 2022 light vehicle production forecast update reflects deterioration in the near-term expectations for semiconductor supply coupled with enhanced risk for demand destruction due to macroeconomic conditions being pulled ahead into 2023. The implications are that the transition from “supply constrained” to “demand driven” will happen sooner rather than later and will also influence the amount of inventory rebuilding that will be required. Automakers are expected to be somewhat less aggressive in their inventory builds, with many signaling concerns over aforementioned demand destruction, in order to avoid what could be a rapid shift from a low inventory profile to a return to overstock conditions. This month’s 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. However, more consequential 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/capacity has been marked down impacting the ability to accelerate production recovery. Further, we are seeing demand destruction pulling ahead into 2023 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 328,000 units and by 670,000 units for 2022 and 2023, respectively (and reduced by 556,000 units for 2024). The 2022 production forecast for Europe has been reduced by 327,000 units this month, of which 319,000 units are cut from H2. Russia has been slightly downgraded but higher volumes in other CIS countries compensate, meaning total volume in these markets are little changed. Semiconductor supplies continue to improve gradually but we are more conservative in our view of how quickly this can be translated to the automotive sector and this caution carries into 2023, where we think the effects of demand destruction will become more obvious earlier in the cycle given concerns over energy supplies and other macro headwinds. Despite these downgrades, we expect an ongoing recovery of volumes in 2023-2024, though at a slower pace than previously assumed. Slowing demand will help alleviate short-term inventory pressures but we expect OEMs to limit the levels of stock held given the visible headwinds. Europe has been downgraded across the forecast horizon by 300k-500k each year reflecting a mix of supply chain disruptions, war in Ukraine and demand evolution.

“Greater China: The outlook for Greater China light vehicle production was increased by 371,000 units and reduced by 290,000 units for 2022 and 2023, respectively (and increased by 88,000 units for 2024). With COVID lockdowns ended and demand strongly stimulated by purchase tax reductions, China light vehicle production is rapidly recovering. In fact, following strong June performance, production in July for mainland China were up over 30% year-over-year. Strength in the passenger vehicle sector continue to offset lingering weakness with light commercial vehicles due to economic headwinds in the region. While the near-term outlook for production has been upgraded, we are mindful of growing inventory levels, which will somewhat limit the absolute level of growth for full-year 2022 production, which now stands at 25.3 million units for the region, representing year-over-year growth of 1.8%. The outlook for 2023 was reduced based on the expectation of a level of payback from the stimulus supporting demand in the near-term and reflects the potential for increasing macroeconomic headwinds. Nevertheless, Greater China light vehicle production is still expected to post gains of 4.0% in 2023 and 7.8% in 2024.

“Japan/Korea: Full-year 2022 Japan production volume was increased by 65,000 units relative to the July forecast. After recovering from supply chain disruptions due to COVID lockdowns in China; Mazda, Subaru and Suzuki are showing quicker recovery and stronger momentum than previously expected. Conversely, Toyota was downgraded in August and September, primarily due to a recent rise in COVID-19 infection rates both at Toyota and key suppliers. In the long-term, Japan production

volumes were reduced by 1.4% compared to the prior forecast. This was primarily due to depressed demand in the global market, influenced by the Russia/Ukraine crisis and general macroeconomic deterioration. Full-year 2022 South Korea production was upgraded by 20,000 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 a 45,000 unit increase for next year. However, additional demand destruction from a worsening economic outlook particularly for the US and Europe will remain a headwind to broader growth. In the long-term, production was reduced by an average of 68,000 units per year or 2.0%, primarily due to increased demand destruction and expected reduced OEM inventory restocking requirements.

“North America: The outlook for North America light vehicle production was reduced by 126,000 units and by 574,000 units for 2022 and 2023, respectively (and was reduced by 555,000 units for 2024). The outlook for North America light vehicle production for 2022 was revised down 0.9% to total 14.58 million units on continued supply chain, labor, and logistic issues. While semiconductor related downtime has slowed dramatically, automakers’ ability to produce vehicles at normal operating levels remains challenged particularly among the Japanese transplants, Toyota, Honda, Nissan, Subaru, and Mazda that represent 35% of total US sales. Concerns surrounding ongoing supply chain challenges, most notably for semiconductors, result in the outlook for 2023 being revised down a sharp 3.5% totaling 15.83 million units. With the outlook for US demand sharply reduced, inventory restocking is expected to occur sooner and reach over 2.0 million units by mid-2023. Despite heightened demand destruction concerns, faster inventory rebuilding may spur some demand as incentive levels are expected to increase. As production challenges extend into 2024, along with the effects of demand destruction, the outlook for 2024 was revised down an equally sharp 3.3% to total 16.26 million units.

“South America: The outlook for South America light vehicle production was reduced by 6,000 units and by 88,000 units for 2022 and 2023, respectively (and reduced by 61,000 units for 2024). While there were more modest overall revisions for 2022 in South America, stronger recent production results are offset by concerns later in the year and into 2023 regarding semiconductor availability and supply chain conditions. Further, in Argentina, there are growing concerns over the lack of dollar availability to pay for imported parts. Looking ahead to 2023, the downward revisions are focused on twin challenges regarding semiconductor availability as well as concerns over demand destruction becoming a greater factor in the near-term as consumers face increasingly difficult macro headwinds.

“South Asia: The outlook for South Asia light vehicle production was increased by 221,000 units and by 256,000 units for 2022 and 2023, respectively (and increased by 36,000 units for 2024). The upgraded outlook for 2022 was largely driven by stronger than expected actual production for both India and the ASEAN market along with a generally more robust near-term outlook. While the region navigates semiconductor shortages and supply chain challenges, it continues to benefit from improving/recovering demand and de-contenting efforts by automakers in the market to optimize semiconductor supplies amid what is still a dynamic environment. The outlook for 2023 was boosted materially to reflect an improved near-term recovery outlook particularly in India; however, the longer-

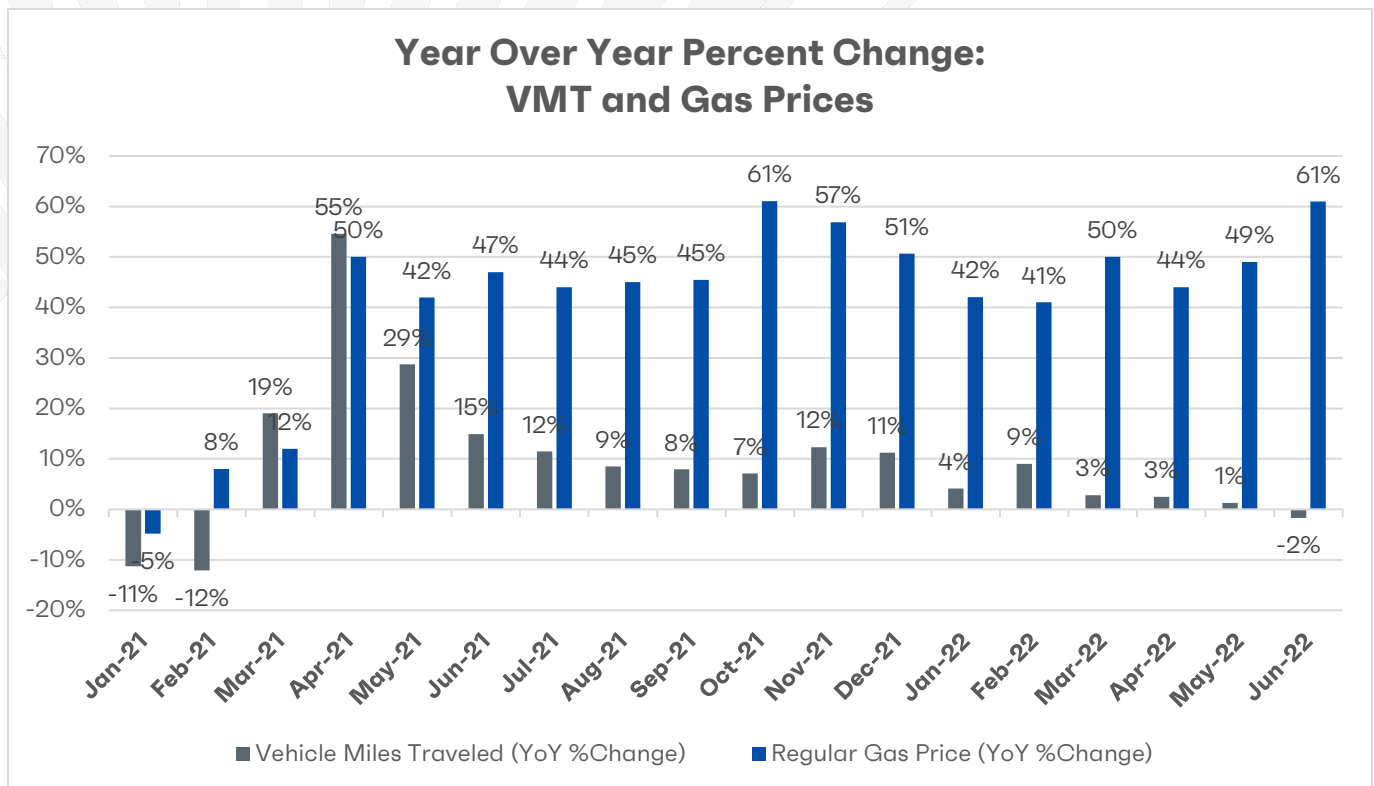
term outlook for the region beyond 2024 was revised down to reflect the impact of expected demand destruction due to lowered macroeconomic expectations.

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 8/24)

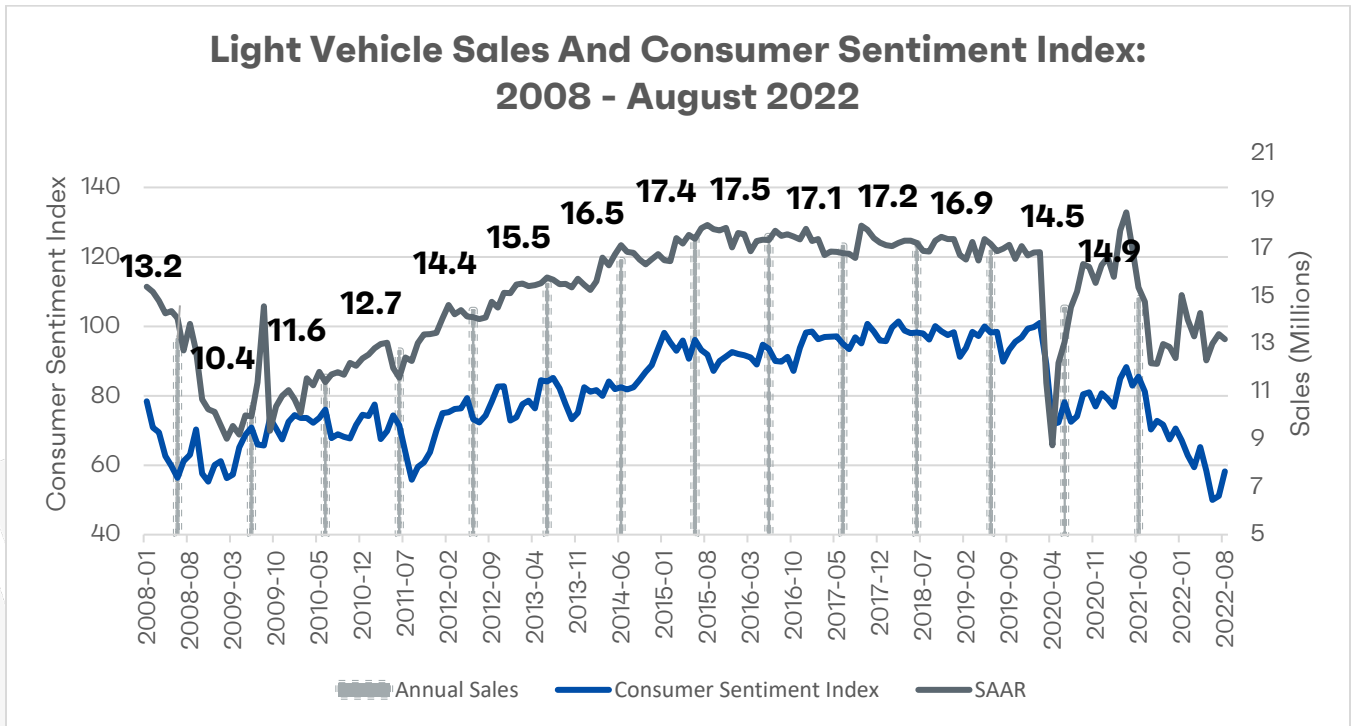
Manufacturing Gained 30,000 Jobs In July. “Manufacturing employment climbed in July, with the bulk of the gain coming from durable goods. The economy added 30,000 manufacturing jobs last month, with 21,000 of that coming from durable goods, according to a breakdown by industry issued today by the U.S. Bureau of Labor Statistics. Industries adding jobs included fabricated metal products, up 4,200; miscellaneous manufacturing, up 3,700; semiconductors, up 3,500; machinery, up 3,400; and transportation equipment, up 2,200.”²⁹

The ISM Index Fell Slightly In July. “Manufacturing slowed slightly in July but still ran at a strong rate overall, 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, down from 53 percent in June The index has been in positive territory for 26 consecutive months. The PMI has averaged 57.6 percent over the past 12 months. The July PMI was the lowest during that period.”³⁰

Inflation Eases Off 40-Year High. “The pace of price increases slowed in July as energy costs dropped, pulling annual U.S. inflation down slightly from a four-decade high. The Labor Department on Wednesday said the consumer-price index, a measure of what consumers pay for goods and services, rose 8.5% in July from the same month a year earlier, down from 9.1% in June. June marked the fastest pace of inflation since November 1981.”³¹

Consumer Confidence and Sales (Updated 9/7)

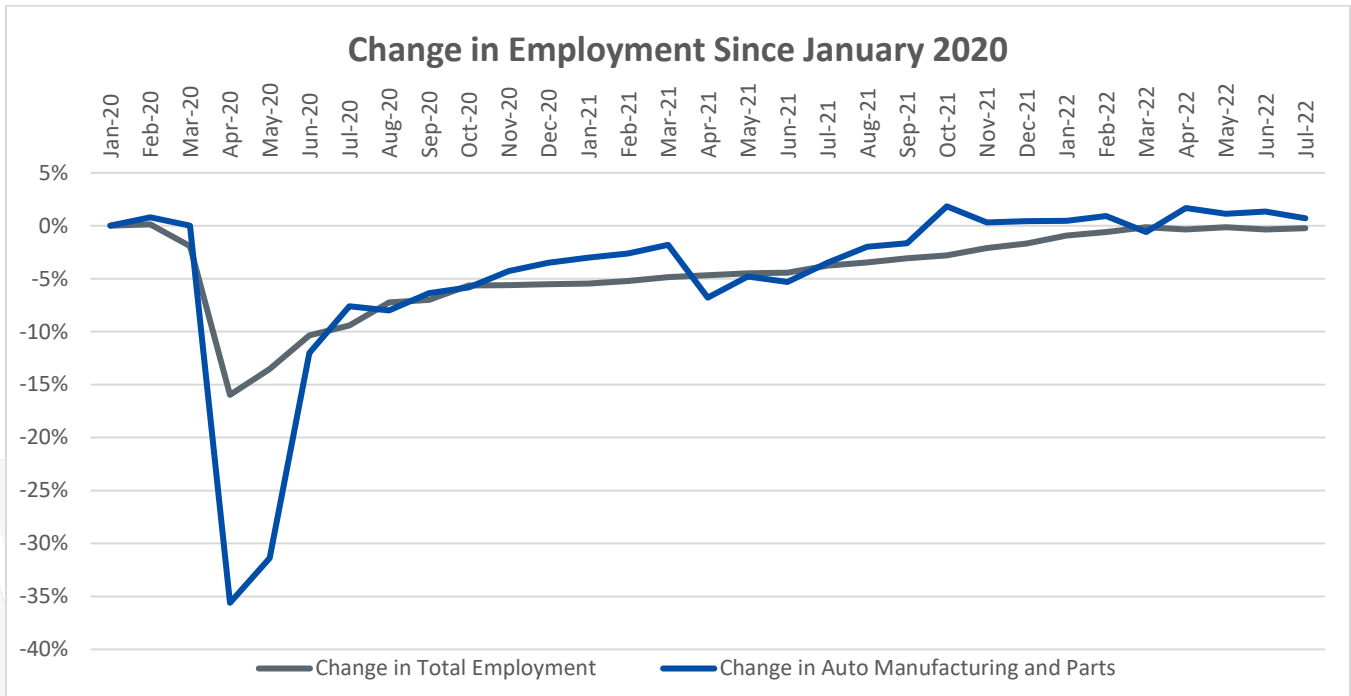
Surveys of Consumers Director Joanne Hsu³²: “The final August reading continued the early month improvement in consumer sentiment, rising 13.0% above July but remaining 17% below a year ago. Most of this increase was concentrated in expectations, with a 59% surge in the year-ahead outlook for the economy following two months at its lowest reading since the Great Recession (see chart). In addition, personal financial expectations rose 12% since July. The gains in sentiment were seen across age, education, income, region, and political affiliation, and can be attributed to the recent deceleration in inflation. Lower-income consumers, who have fewer resources to buffer against inflation, posted particularly large gains on all index components. Their sentiment now even exceeds that of higher-income consumers, when it typically lags higher-income sentiment by over 15 points. Hopefully this tentative improvement will continue, as overall sentiment remains extremely low by historical standards. The relative relief felt by consumers reflected in their inflation expectations. The median expected year-ahead inflation rate was 4.8%, down from 5.2% last month and its lowest reading in 8 months. Uncertainty over expectations rose considerably, particularly among lower-educated consumers. Long run expectations came in at 2.9%, remaining within the 2.9-3.1% range seen in the past year.”



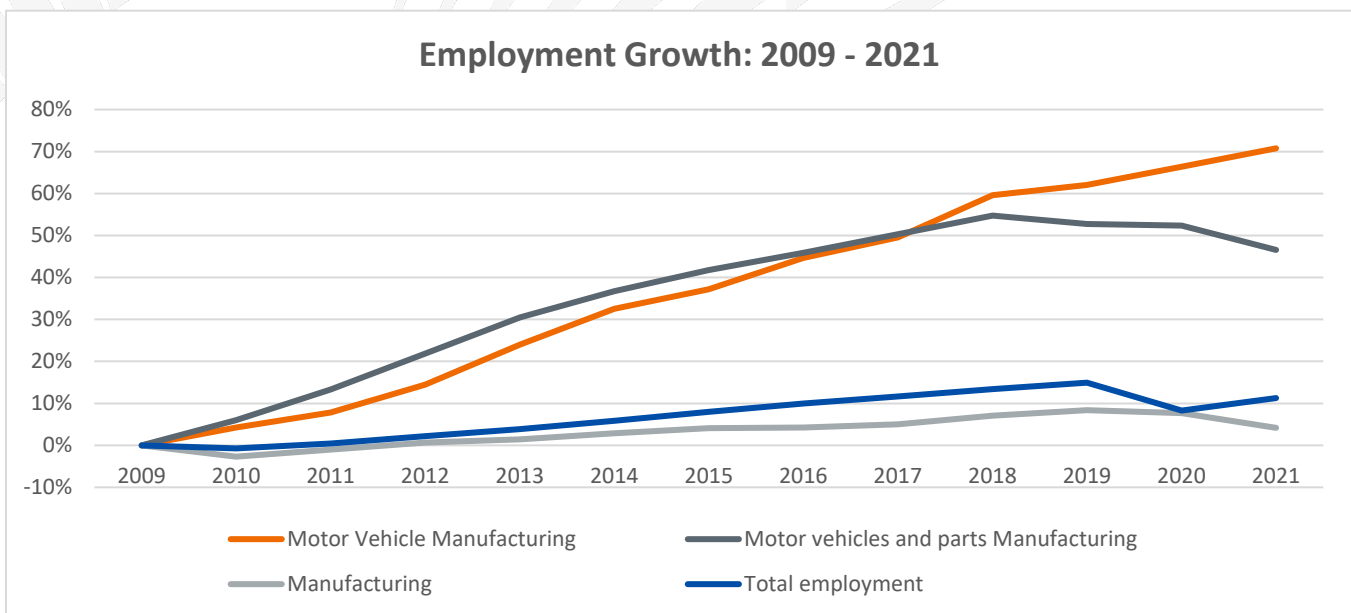
Employment (Updated 8/24)

Motor Vehicle And Parts Manufacturing Lost 2,200 Jobs In July. ³³

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. ³⁴



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.³⁵ 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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- ²¹ EIA, “[Short-Term Energy Outlook](#),” 8/22
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