READING THE METER

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

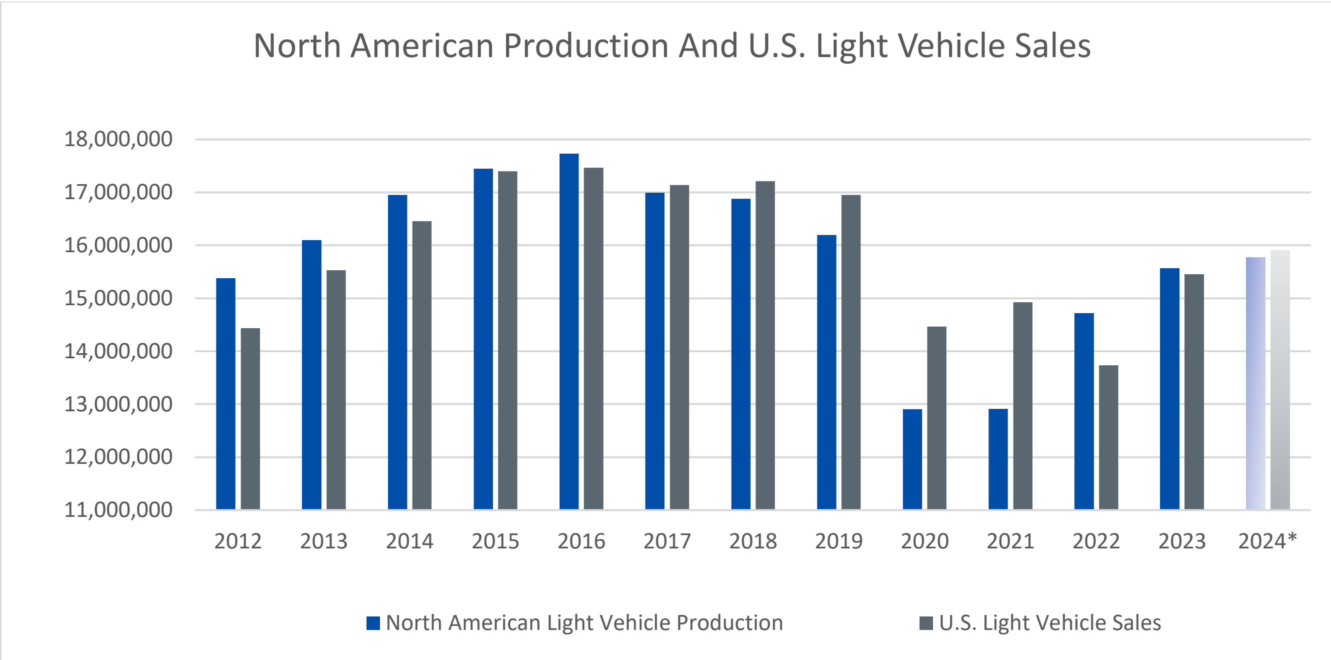
ALLIANCE FOR AUTOMOTIVE INNOVATION

Contents – September 26, 2024

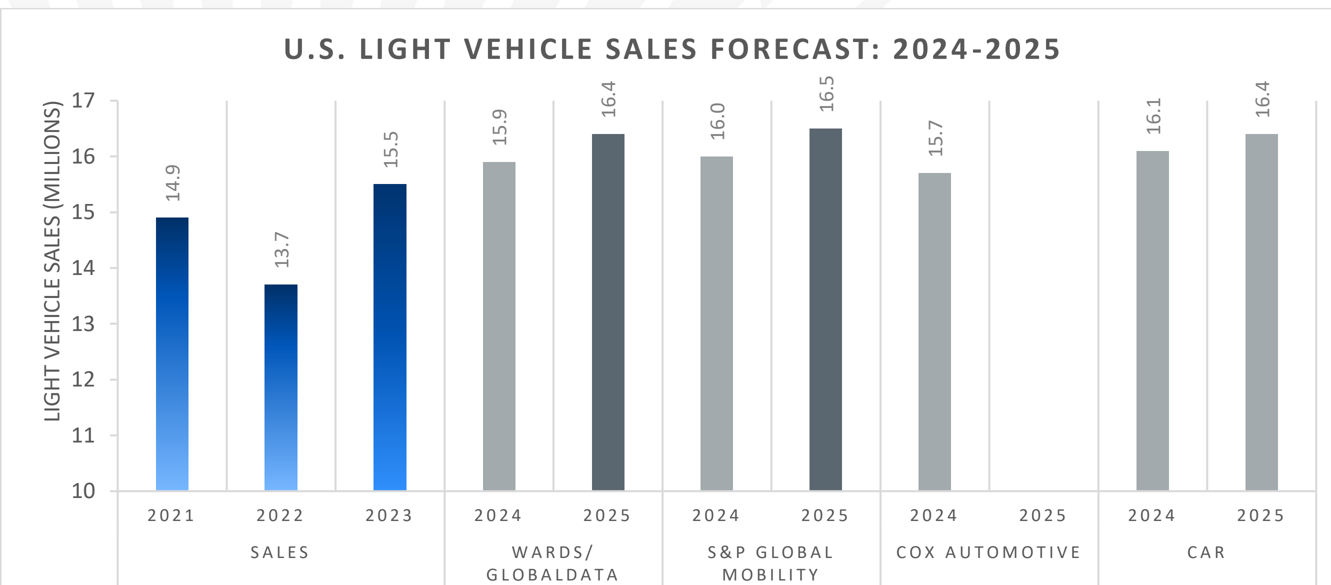
Forecast Meter

Sales & Production Summary and Forecast (Updated 9/26)

2023-2024 Sales,[1] Extended Sales Forecast[2] and Production Forecasts[3]		
	U.S. Sales & Forecasts	North American Production
January '23	1,033,002 (+4.2% YoY)	1,195,548 (+12.9% YoY)
February '23	1,136,332 (+8.7% YoY)	1,257,482 (+15% YoY)
March '23	1,365,966 (+8.6% YoY)	1,442,991 (+6.7% YoY)
April '23	1,347,159 (+13.1% YoY)	1,281,626 (+8.6% YoY)
May '23	1,362,019 (+18.0% YoY)	1,462,273 (+25.5% YoY)
June '23	1,370,976 (+19.9% YoY)	1,387,090 (+13.8% YoY)
July '23	1,299,199 (+19.9% YoY)	1,173,342 (+15.6 YoY)
August '23	1,328,526 (+12.8% YoY)	1,467,284 (+4.5% YoY)
September '23	1,331,952 (+13.9% YoY)	1,353,072 (+7.6% YoY)
October '23	1,200,286 (+5.7% YoY)	1,388,720 (+4.5% YoY)
November '23	1,218,647 (+7.3% YoY)	1,372,253 (+8.1 YoY)
December '23	1,433,266 (+17.3 YoY)	1,082,176 (-2.3% YoY)
January '24	1,076,047 (-1.3% YoY)	1,327,765 (+7.8% YoY)
February '24	1,247,516 (+5.2% YoY)	1,358,836 (+10% YoY)
March '24	1,438,012 (+4.6% YoY)	1,414,502 (-5.7% YoY)
April '24	1,313,512 (+0.6% YoY)	1,473,567 (+15.9% YoY)
May '24	1,429,028 (+0.8% YoY)	1,485,373 (-1.7% YoY)
June '24	1,321,932 (-3.4% YoY)	1,346,584 (-6.1% YoY)
July '24	1,273,115 (-2.0% YoY)	1,117,833 (-4.4% YoY)
August '24	1,419,245 (+3.8% YoY)	1,428,177 (+32.6% YoY)
2023 Full Year	15,457,447 (+12.4% YoY)	16,144,461 (+9.3% YoY) (U.S. 10,611,580)
2024 Estimate	15.9 M	15.77 (U.S. 10.8M)



U.S. Light Vehicle Sales Outlook (Updated 9/26)



Wards Intelligence Outlook (9/26)[4]: "Based on the seasonally adjusted annual rate, U.S. light-vehicle sales are showing some life in September, but volume – based on the daily selling rate – is expected to barely rise year-over-year, while total deliveries will fall from year-ago because of an unusually shorter sales period.

Wards Intelligence expects September sales to post a 16.1-million-unit SAAR, highest for any month since the same total in December 2023, and above same-month 2023's 15.8 million.

"Raw volume is tracking to 1.19 million units, 11.1% below the year-ago month. However, the daily selling rate, which equates to 51,826 over the month's 23 selling days, is 0.5% above year-ago's 51,576 – 26 selling days. Because August ended on a weekend, sales through Sept. 3 were included in that month's results. Accordingly, those results are excluded from September, whereas September 2023 included the first weekend.

"In September, the retail portion is forecast to be flat - based on DSRs – year-over-year, while fleet is estimated for a 3.4% rise, which will end three consecutive declines. Retail increased in seven of the first eight months of the year.

"September's results put Q3 sales at 3.89 million units, 1.8% below year-ago's 3.96 million. The Q3 SAAR totals 15.7 million, same as like-2023 and Q2-2024. The Q1-2024 SAAR was 15.3 million.

"The selling-day count will favor 2024 in the fourth quarter, with 78 vs. October-December 2023's 76. Fourth-quarter sales are forecast to total 4.18 million units, up 7.4% from like-2023.

"The Q4 SAAR is pegged at 16.6 million units, highest for any quarter since 16.9 million in Q2-2021 and well above the year-ago period's 15.7 million.

North American Production & Inventory Outlook (Updated 9/26)

Wards Intelligence Inventory Outlook (9/26) [5]: "U.S. light-vehicle inventory is forecast to end September up 4.2% from the prior month, totaling 2.81 million units – 36.2% above the year-ago period. Days' supply is pegged at 54, compared with 53 the prior month and 40 in same-month 2023."

Wards Intelligence Production Outlook (9/9)[6]: "Production for entire-2024 is forecast to total 15.77 million units, up just 1.1% from 2023, a marked slowdown from 2023's 9.6% gain."

S&P Global Mobility Outlook (8/22)[7]: "The outlook for North America light vehicle production was reduced by 173,000 units and by 102,000 units for 2024 and 2025, respectively (and reduced by 85,000 units for 2026). The outlook for North American production was revised down rather sharply to 15.6 million units on further inventory related reductions targeting the Detroit 3 automakers and production related issues, most notably at Toyota. Production at Toyota's Princetown West plant for the Toyota Grand Highlander and Lexus TX remains idled as it works with suppliers for a fix related to a recent airbag recall. Production was initially expected to resume in early August, but downtime was extended until late October resulting in the loss of an additional 51,000 units, representing 29% of the total reduction for the year. The outlook for Tesla continues to sour with generalized demand concerns for Tesla vehicles with the Cybertruck now forecast to be relegated to niche status within the lineup. Further out in 2026, production of the all-new entry level C-CUV EV is likely to slip into 2027 resulting in a proactive reduction in this forecast release. Regional production in 2025 was revised down 0.6% to total 15.84 million units as the inventory correction process is expected to continue into early 2025. Production in 2026 was revised down 0.5% to total 16.40 million units."

Market Meter

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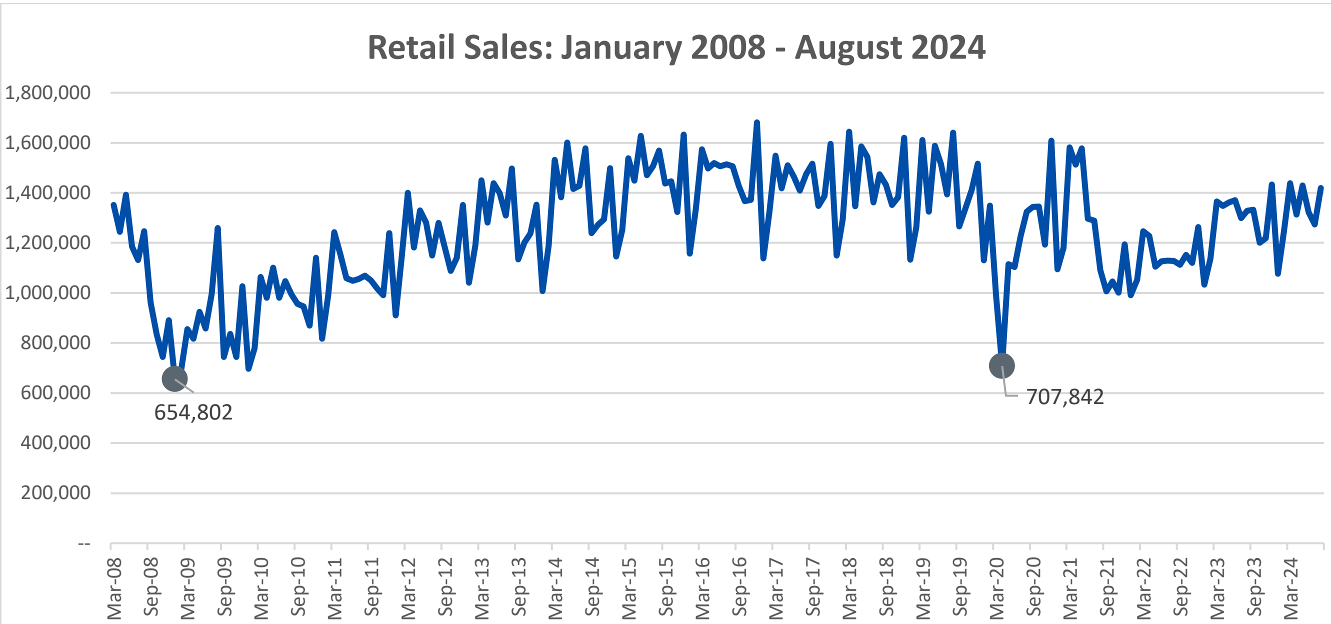
U.S. Light Vehicle Sales (Updated 9/9)

Monthly Sales (Updated 9/9)

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.



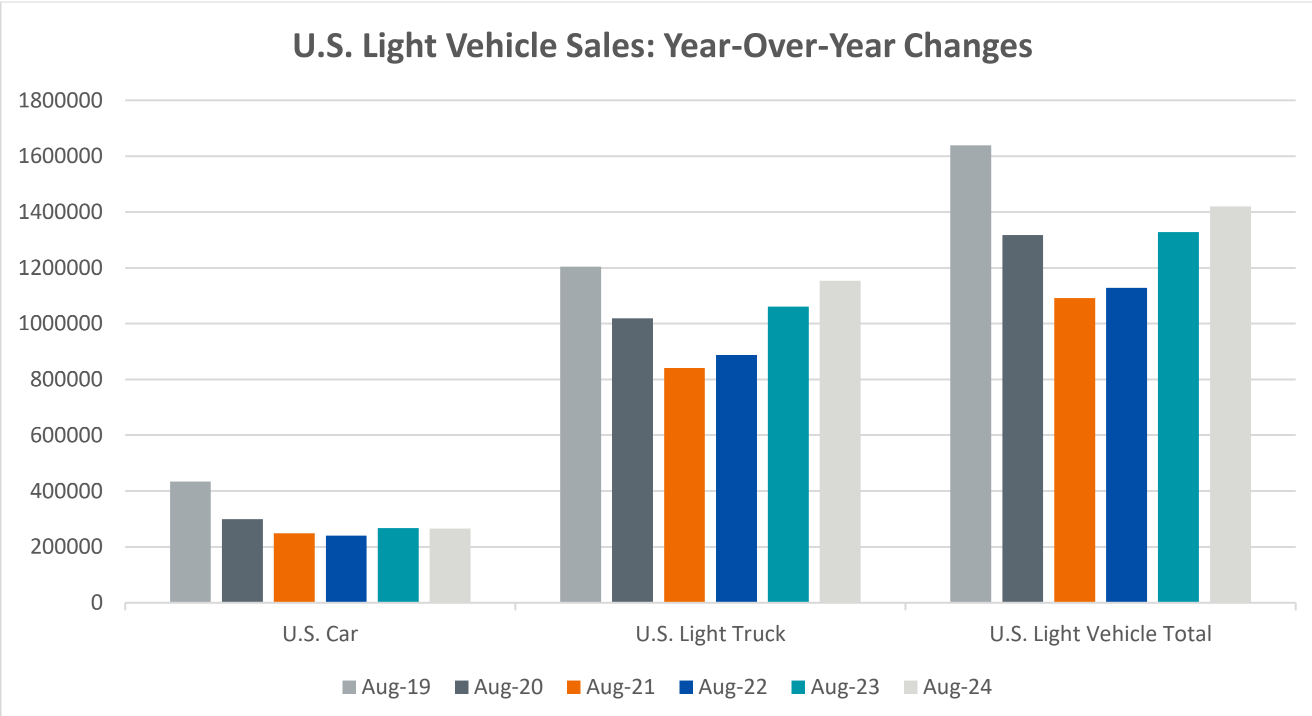
August Sales (Updated 9/9)

WardsIntelligence[8]: "U.S. light-vehicle sales finished August above expectations, with volume showing tepid growth but with the seasonally adjusted annual rate still at a long-time low.

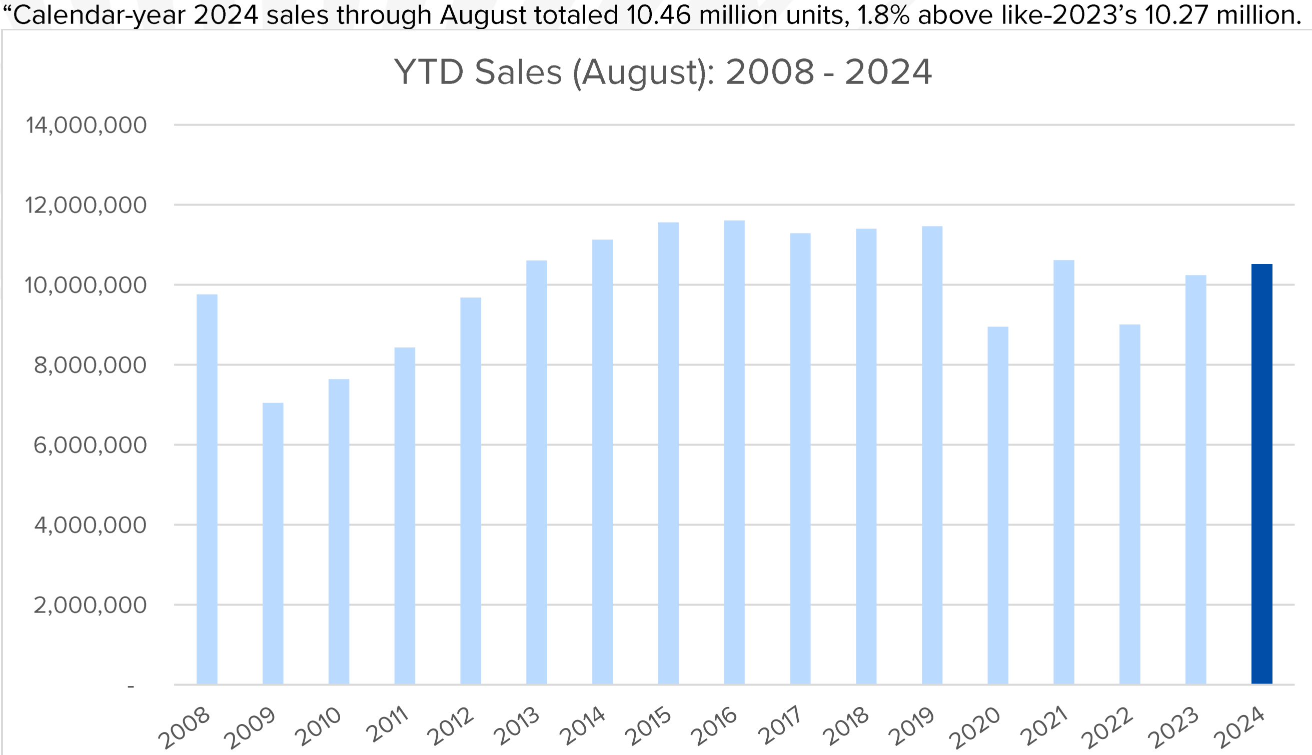
Although higher than expected, August's 15.1-million-unit SAAR was the lowest for any month since January's 14.9 million units and slightly below like-2023's 15.3 million. It also was the third straight year-over-year decline.

However, raw volume, as well as the daily selling rate, were above the year-ago month in August for the first time since May. Deliveries totaled 1.42 million units, up 7.6% from August 2023. The DSR was 50,670 over the month's 28 selling days, up 3.8% from like-2023's 48,837 – 27 selling days.

Based on daily selling rates, retail volume increased 9.7% year-over-year in August, while fleet deliveries fell 23.5%."



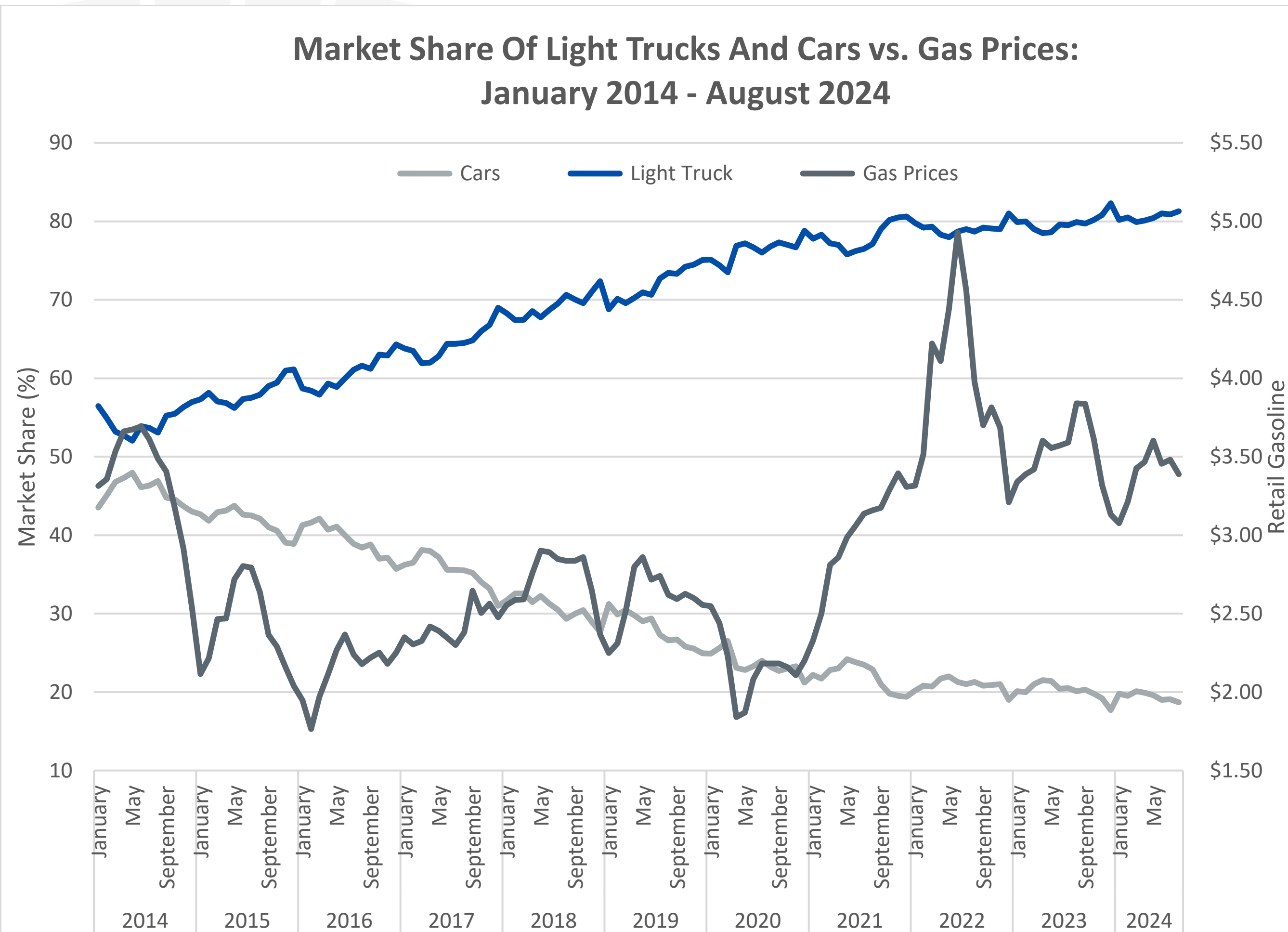
"Calendar-year 2024 sales through August totaled 10.46 million units, 1.8% above like-2023's 10.27 million.



Segments vs. Gas Prices (Updated 9/9)

Monthly Sales For August: Light trucks accounted for 81 percent of sales in August, up slightly from the market share a year ago. Compared to the same period in 2023, sales of cars are down by 1,627 units, and down more than 168,000 from August 2019, when cars comprised 26% of the market as opposed to the 19 percent of the market passenger cars have now.

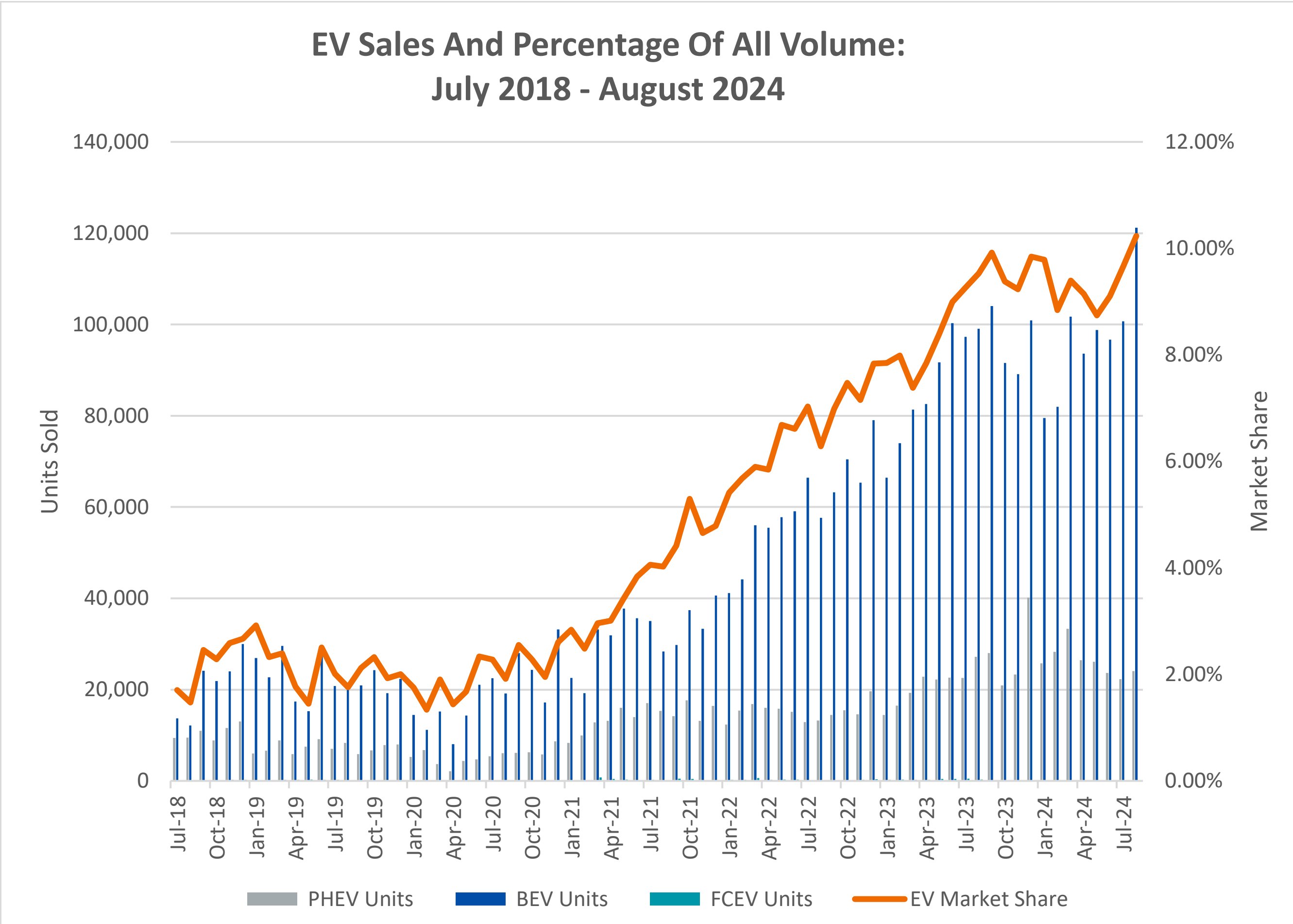
Historic Perspective: The upward trend in the popularity of light trucks over cars has been steady since 2013, when only 2% of annual market share separated the two segments.[9] and gas was over $3.00.[10] a gallon. As fuel prices dropped below the $3.00 mark in mid-September 2014, light truck sales began to take off. Gas prices since have averaged only $2.92 a gallon (through July 2024) 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.[11]



EV Powertrain Sales (Updated 9/9)

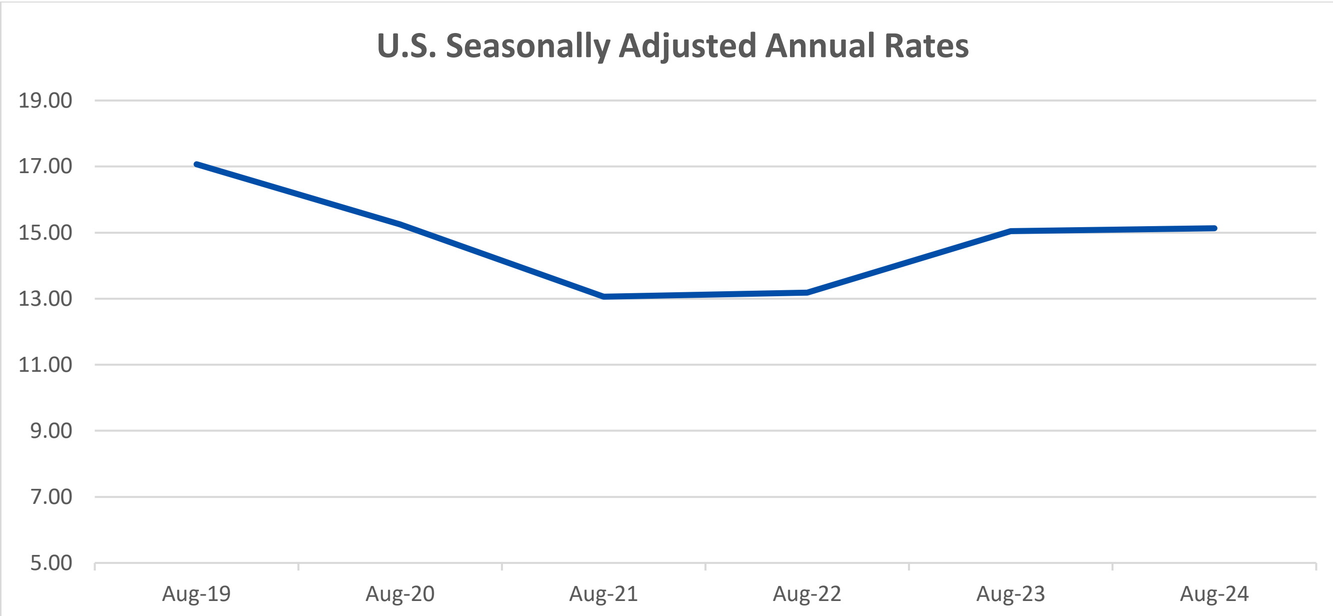
Sales of electric vehicles (BEV, PHEV, & Fuel Cell) accounted for 10.2 percent of total vehicle sales in August 2024 (145,252), per Wards estimates. Market share increased 0.57 percentage points (pp) from

July 2024. August's EV market share is up 0.7 pp from a year ago. Sales of battery electric vehicles led the way for EVs, accounting for 8.5 percent of total sales, up 1.1 pp from August 2023. Plug-in hybrids accounted for 1.7 percent, down 1.35 pp from the same time last year.[12]



Seasonally Adjusted Annual Rates (Updated 9/9)

WardsIntelligence[13]: "August's 15.1-million-unit SAAR was the lowest for any month since January's 14.9 million units and slightly below like-2023's 15.3 million. It also was the third straight year-over-year decline."



Average Transaction Price (Updated 9/26)

J.D. Power (Updated 9/9)[14]: "The average new-vehicle retail transaction price is declining from a year ago due to higher manufacturer incentives, larger retailer discounts and rising availability of lower-priced vehicles. Transaction prices are trending towards $44,039—down $1,895 or 4.1%—from August 2023."

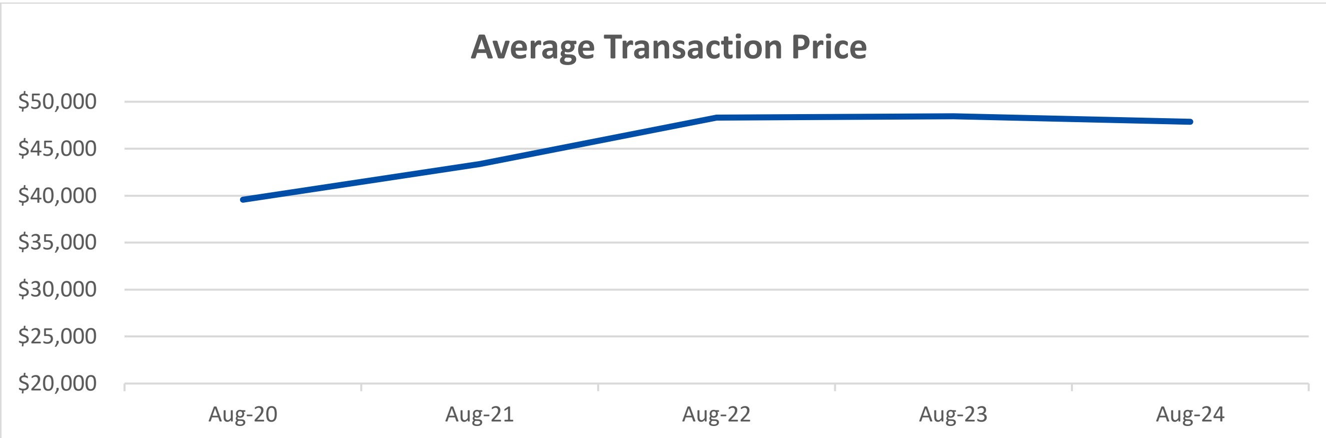
Kelley Blue Book (July) (Updated 8/22)[15]: "For the 11th straight month, the average transaction price (ATP) for a new vehicle in the U.S. was lower year over year, according to data released today by Kelley Blue Book, as higher inventories continue to add price pressure to the market. At $47,870, the new-vehicle ATP in August was also lower by 0.6% compared to the revised July ATP of $48,166.

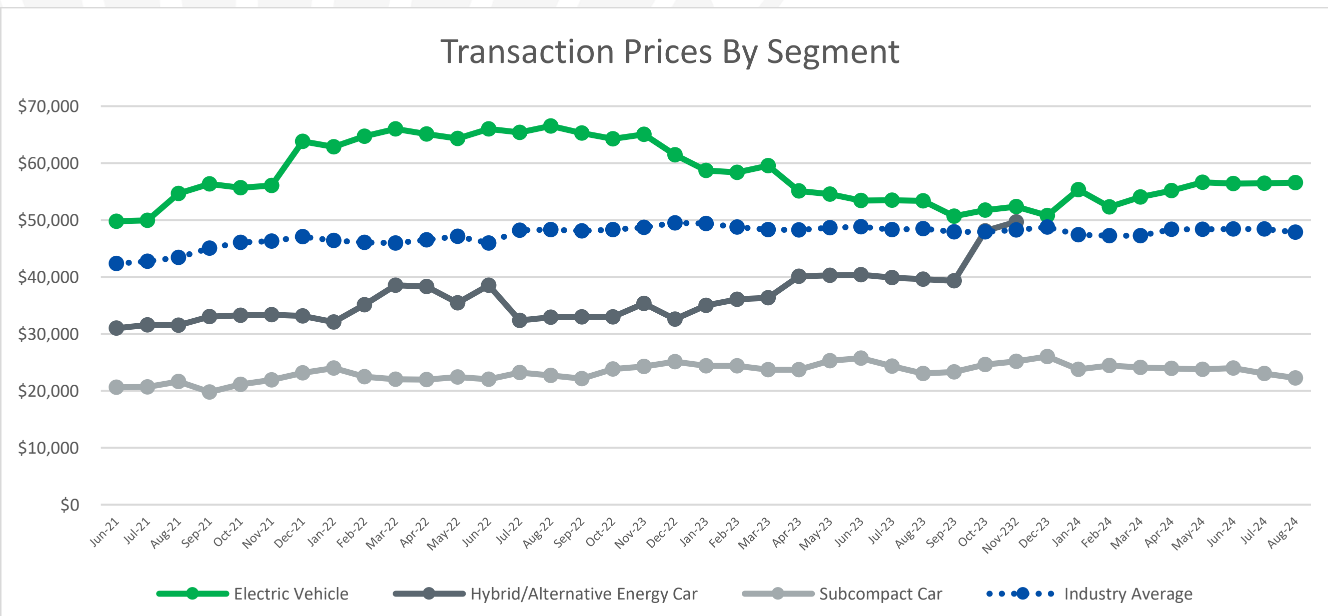
"Incentive levels increased month over month and year over year in August, according to data from Kelley Blue Book. The average incentive package in August equaled 7.2% of ATP, up from 7.0% in July to the highest level since the first half of 2021. A year ago, incentive spending was 4.8% of ATP. In the past decade, incentive spending peaked at 10.8% of ATP in December 2019.

"With new-vehicle inventory in early August higher by more than 40% year over year, consumers enjoyed more choices last month and, in many cases, notably higher incentive levels.

"On average, trucks and SUVs carried higher incentives last month than cars and vans. Compact SUVs, the market's most popular segment by volume, had average incentives at 9.2% of ATP, with an average transaction price of $36,506 in August. Incentives in the full-size pickup truck segment averaged 8.4% of ATP in August, up from 8.2% in July and 6.1% in August 2023. Full-size pickup ATPs in August increased slightly month over month to $65,531. High-end luxury cars had the highest incentives last month, with incentives at 10% of ATP, while vans, sports cars and small/midsize pickups had some of the lowest incentives.

EV incentives in August continue to trend well above industry averages. Last month, EV incentives averaged 13.3% of ATP, higher than July and at the highest point of 2024. On average, EV incentives last month were more than 80% higher than traditional ICE product. The average transaction price for an EV in July, at $56,575, was marginally higher than the revised July ATP of $56,435 but lower year over year by more than 1.2%, suggesting the EV price declines are slowing. A year ago, in August 2023, EV ATPs were lower year over year by nearly 13%."



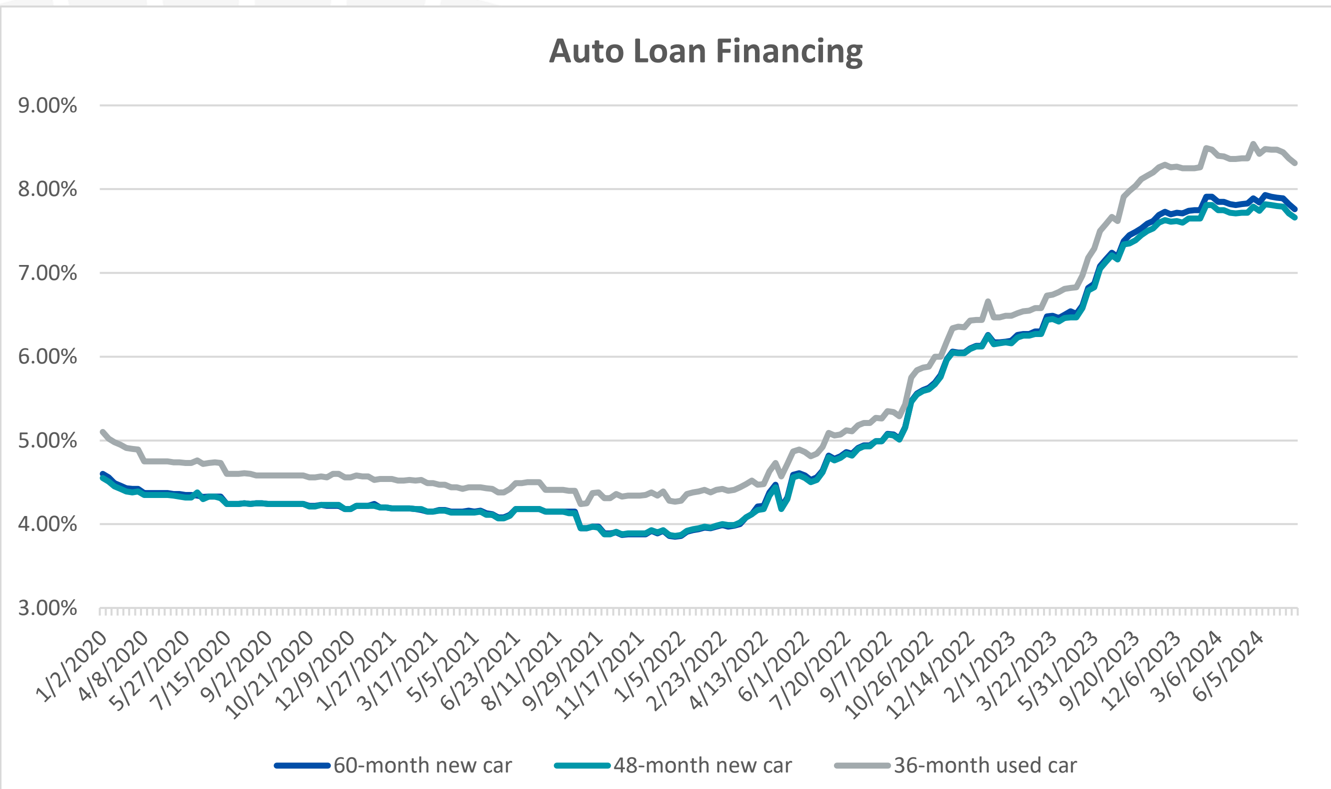


Auto Loan Financing (Updated 9/9)

Interest Rates (updated 9/9): Interest rates dipped slightly on the 60-month, 48-month and the 36-month used car loans over the past two weeks. Rates now stand at 7.76%, 7.66%, and 8.31%, respectively. Since the beginning of 2020, 60-month rates are up 3.16 pp, and are up 0.38 pp since the same time a year ago.[16]

JD Power (9/9)[17]: "Average monthly finance payments this month are on pace to be $729, up $4 from August 2023. The average interest rate for new-vehicle loans is expected to be 6.87%, down 36 basis points from a year ago.

Dates	60-month new car	48-month new car	36-month used car
1/2/2020	4.60%	4.55%	5.10%
8/16/2023	7.38%	7.34%	7.91%
8/14/2024	7.82%	7.71%	8.37%
8/28/2024	7.76%	7.66%	8.31%
Two Week Change	-0.06%	-0.05%	-0.06%
Change since 1/3/20	3.16%	3.11%	3.21%
One Year Change	0.38%	0.32%	0.40%

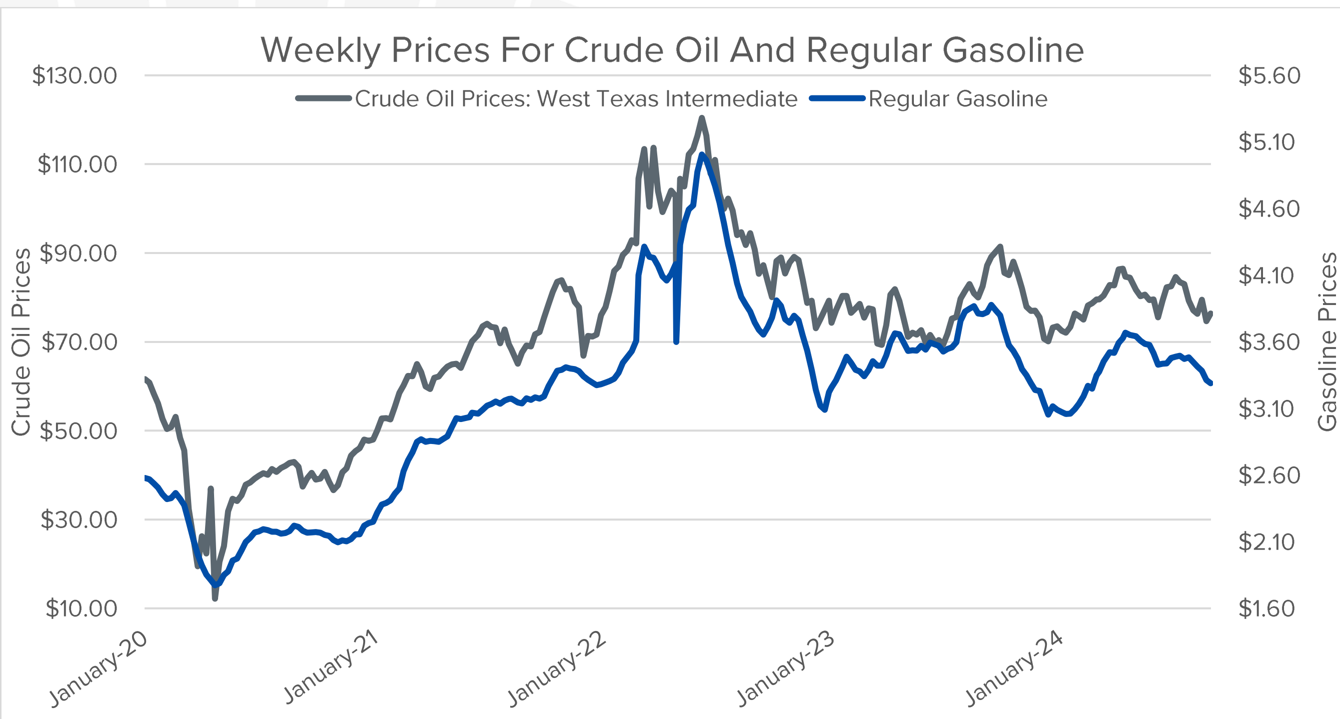


Crude Oil and Gas Prices (Updated 9/9)

Gas And Oil Remain Elevated (9/9): Oil prices, as benchmarked at West Texas Intermediate were $76.36, up $1.68 from the prior week. Since election day 2020, oil prices are $40 a barrel higher. Gas is down slightly from a week ago at $3.29. Gas is 28% higher than the beginning of 2020 and has not been below $3 a gallon since May 2021.[18]

EIA Outlook For Oil (8/7):[19] "Crude oil prices. Although crude oil prices have fallen recently, we continue to expect crude oil prices will rise in the second half of 2024 (2H24). The Brent crude oil spot price ended July at $81 per barrel (b), compared with an average for the month of $85/b. We expect the Brent price will return to between $85/b and $90/b by the end of the year. Rising crude oil prices in our forecast are the result of falling global oil inventories. We estimate global oil inventories decreased by 0.4 million barrels per day (b/d) in 1H24 and will fall by 0.8 million b/d in 2H24. Inventory withdrawals stem in part from ongoing OPEC+ production cuts. Although we expect crude oil prices to rise in the coming months, our forecast for the annual average Brent crude oil price in 2025 is down from a forecast of $88/b in our July STEO, owing mostly to reduced oil consumption."

EIA Outlook For Gasoline (7/9)[20]**:** "We forecast regular-grade gasoline prices will average around $3.50 per gallon in 2025 and gasoline consumption will average 8.9 million b/d. Continued increases in vehicle efficiency mean U.S. drivers will drive more miles in 2025 than before, but we expect 1% less U.S. gasoline consumption than in 2023 and 5% less than the record set in 2018."



Production Meter

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

WardsIntelligence Inventory Update (9/9)[21]**:** "U.S. light-vehicle inventory rose from the prior month in August, continuing its steady climb from rock-bottom levels in 2021 and 2022, but the gain, combined with sluggish growth in demand, is leading to production slowdowns in North America.

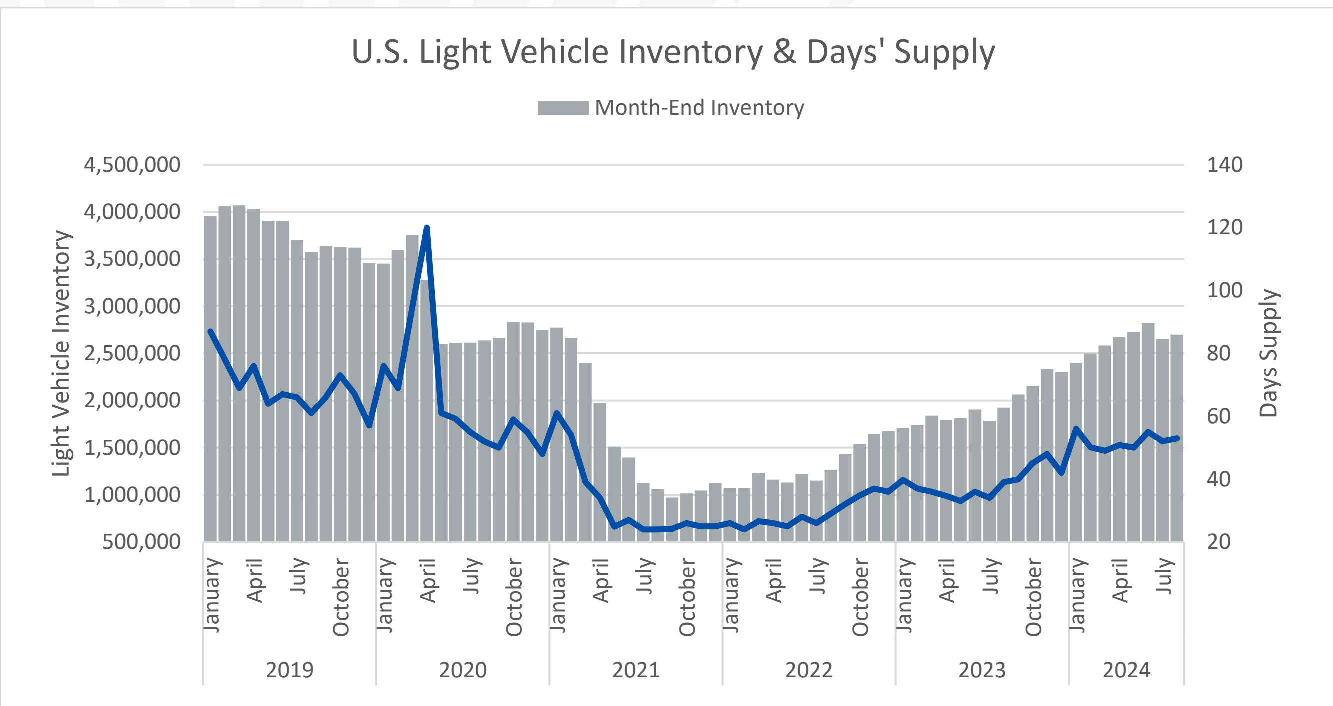
"Aug. 31 inventory totaled 2.70 million units, 1.7% above July, and 39.9% higher than the year-ago total. It was the highest for the month since 3.58 million in 2019. Days' supply ended August at 53, up slightly from July's 52, and well above like-2023's 40. In the five years through pre-pandemic 2019, August days' supply averaged 63.

"Sales perked up in August but not enough to make up for the weakness of the prior two months. Demand overall in the three months through August grew a lackluster 1% year-over-year, after rising 3.4% in the first five months of 2024.

"Inventory, when compared with typical historical trends prior to pre-pandemic/supply-chain-disruption 2020, remains lean when looking at days' supply – or inventory-to-sales ratios – which measures inventory relative to current demand. However, a lot of the inventory gap when using that measure is heavily weighted to entry-price CUVs and cars, the sector where most replacement demand exists.

"Compared with pre-2020 norms, the lack of lower-price vehicles, average higher prices and monthly payments in most other segments, and a dearth of fresh (non-electrified) products on dealer lots, all are contributing to keeping growth from being stronger.

"However, in general, it can still be said that the overall lower level of inventory is a damper to demand – the lower the stock on dealer lots, the more pricing power they have."



North American Production (Updated 9/26)

Wards Intelligence[22]: "Production slowdowns are the buzzword as North America manufacturers underbuilt to plan in August and output in Wards Intelligence's Tracker has been reduced for each month from September through December.

"The reductions are mainly from attempts to keep inventory in check because sales are running below expectations. However, 11,000 of September's 46,000-unit reduction was due to estimated losses from unexpected plant shutdowns for inventory control and parts shortages, including 6,000 at General Motors and 5,000 at Stellantis. None of the lost output is expected to be recouped.

"Production of light vehicles and medium-/heavy-duty trucks in August totaled 1.474 million units, 2.7% below same-month 2023's 1.516 million. August's total was 52,900 below month-ago's projections for the period and marked the fourth straight month of year-over-year declines. Calendar year-to-date production through August totaled 10.924 million, 0.1% above 8-month 2023's 10.911 million.

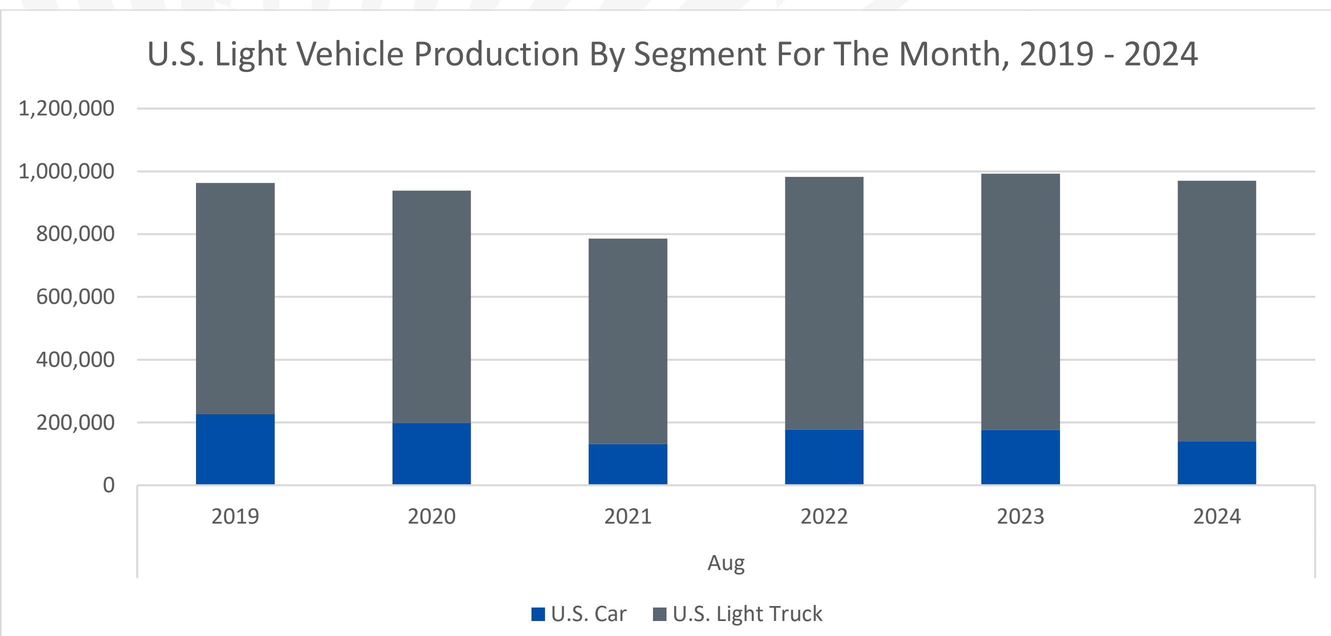
"The August underbuild, as well as the cut in expected output in September, brought down forecasted output for the third-quarter to 3.960 million units, 2.8% below like-2023.

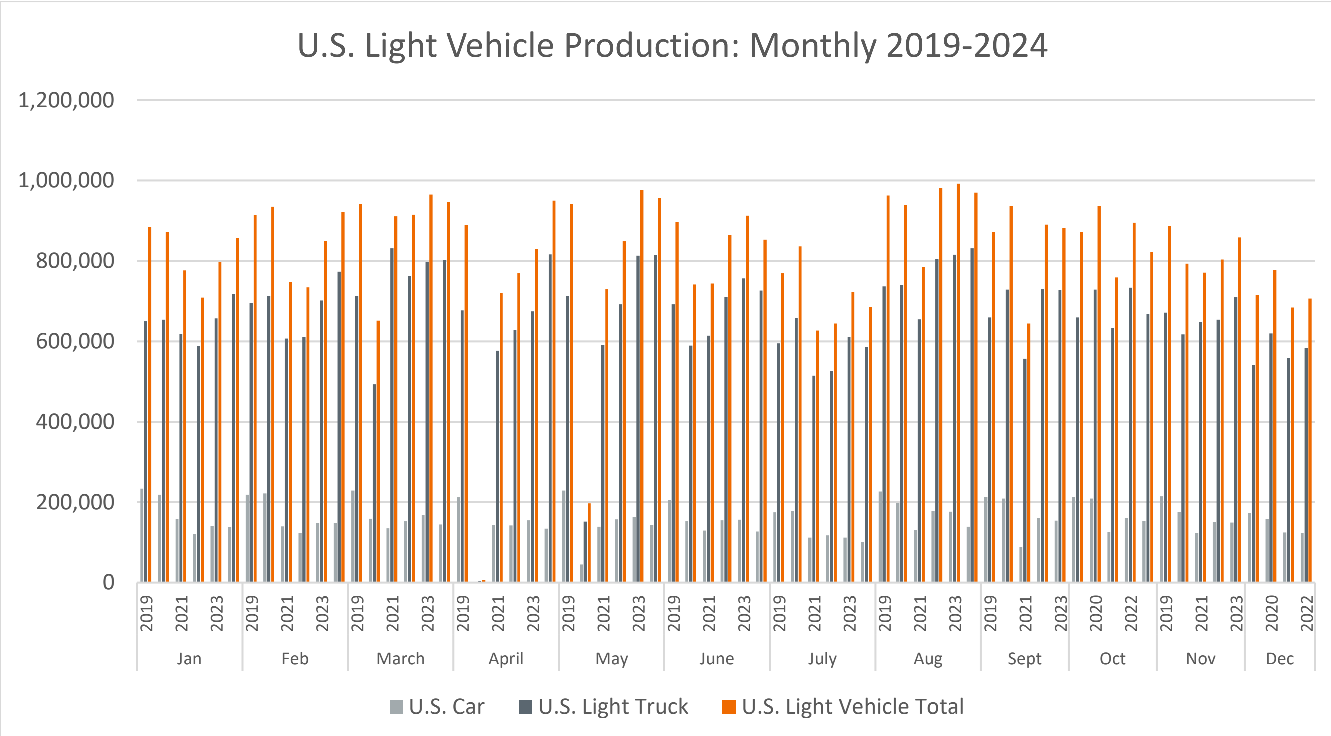
"Excluding medium/heavy trucks, light-vehicle production in August totaled 1.428 million units, 2.3% below the year-ago month. Third-quarter light-vehicle output is tracking to 3.817 million, 2.8% below year-ago, while Q4 production is pegged at 3.782 million, 1.3% above like-2023."

U.S. Light Vehicle Production (Updated 9/26)

U.S. Monthly Production (Updated 9/26)

U.S. Light vehicle production for Augutst 2024 was up 41 percent month-over-month, totaling 969,968 vehicles (138,594 cars, 831,374 light trucks), year-over-year, production is down 2 percent from 2023.[23]





Global Meter

Global Light Vehicle Sales (Updated 9/9)

Wards Intelligence[24]: "World sales of all vehicles, including light vehicles and medium- and heavy-duty trucks, declined an estimated 0.3% year-over-year in July, dragged down mainly by weakness in China, the largest global market.

"Including estimates for some markets, July sales totaled 7.503 million units, down slightly from like-2023's 7.525 million.

"While sales increased 6.1% year-over-year in South America, 2.1% in Europe and were negligibly higher in North America, demand in the Asia-Pacific region fell 2.2%.

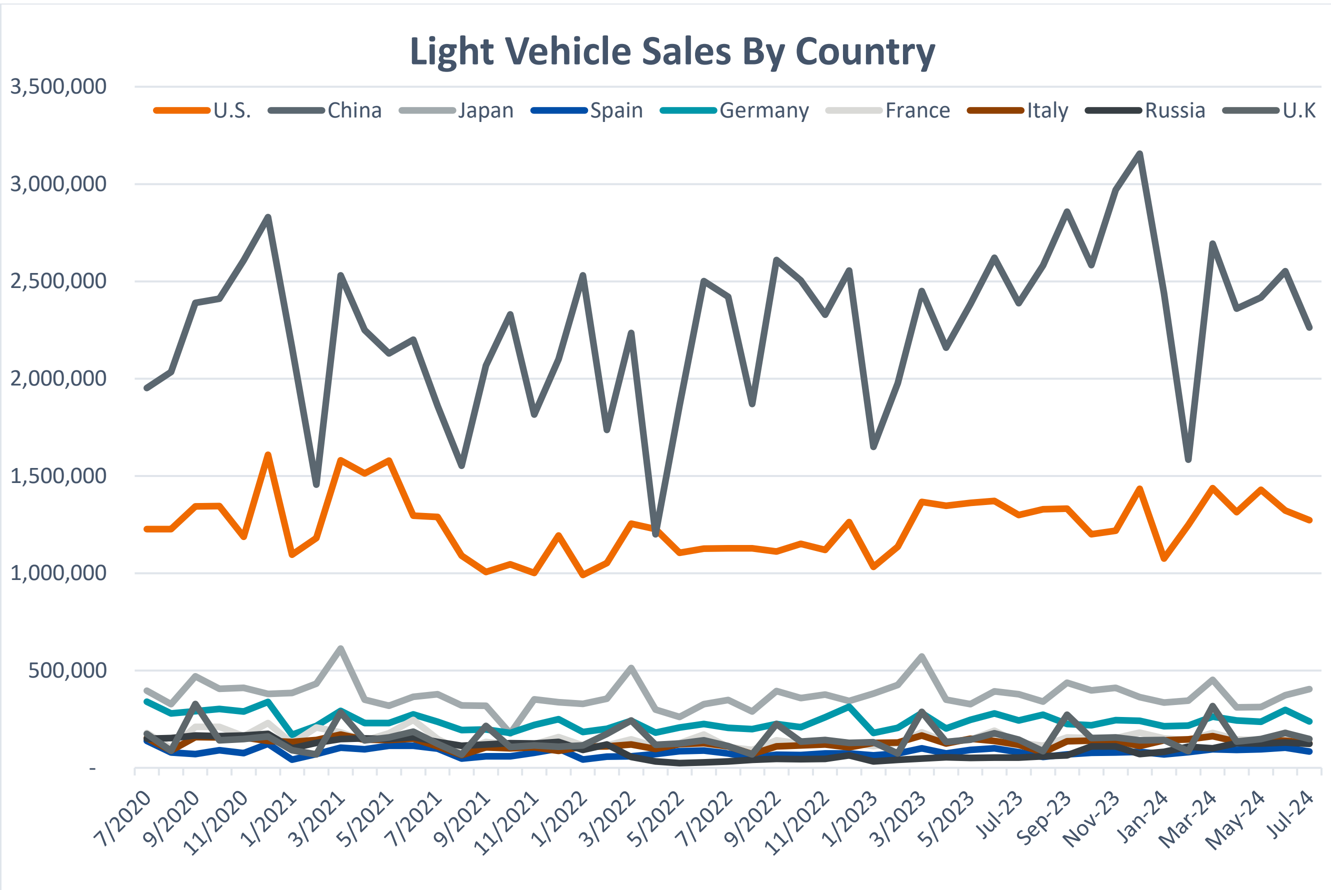
"Calendar year-to-date global sales through July totaled 53.05 million units, 2.6% above like-2023's 51.71 million.

"Excluding medium- and heavy-duty trucks, global light-vehicle sales in July totaled 7.23 million units, 0.5% below same-month 2023's 7.26 million. Calendar year-to-date light-vehicle deliveries totaled 50.99 million units, 2.5% above seven-months 2023's 49.75 million.

"Wards Intelligence partner GlobalData estimates July's global light-vehicle seasonally adjusted annual rate at 89.9 million units, 200,000 above June but well below same-month 2023's 92.2 million. GlobalData expects light-vehicle sales in August to maintain at least a 90-million-unit SAAR but with volume down from a year ago.

"The forecaster expects the August downturn to be heavily impacted by year-over-year declines in the Western Europe – especially Germany - and China markets, overwhelming increases in Japan, North America and Eastern Europe.

"GlobalData's global light-vehicle forecast for 2024 remains at 88.7 million units, up 2.2% from 2023, but risk to the final five months of the year is weighted more to the downside than upside.



Global Light Vehicle Production (Updated 9/26)

S&P Global Mobility Forecast (9/26)[25]: "The global auto industry remains focused on the delicate balance of managing production and associated inventories amidst volatile launch schedules and regional demand dynamics that include slowing growth in select regions and uncertainties around battery electric vehicle adoption. The production outlook reflects these ongoing challenges with this month's forecast update particularly focused on noteworthy downward revisions for North America factoring in a reduced demand outlook for the United States and meaningful production impacts due to vehicle timing actions. Also, continued underwhelming support from expanded policy action in China as well as an uncertain macroeconomic environment result in downgrades for that key market. Propulsion mix developments continue to vary by region as some markets face slower EV adoption growth rates while other areas continue to see rather encouraging results. The September forecast update reflects a mix of downgrades of varying magnitudes in the near-to-intermediate term, with adjustments spread across several regions. Downward revisions are primarily focused on North America, Greater China and South Asia, among others, as those markets navigate dynamic demand fundamentals, inventory management and volatile vehicle launch activity. The more noteworthy regional adjustments with the latest forecast update are detailed below:

"Europe: The outlook for Europe light vehicle production was reduced by 14,000 units for 2024 and essentially unchanged for 2025 (and increased by 38,000 units for 2026). The near-term outlook for the region was only modestly revised with the latest forecast update. The European market continues to navigate still recovering, yet rather uninspiring, demand fundamentals amidst a continued focus on inventory management and mixed BEV adoption results (particularly when not supported by government sponsored incentives). Specifically regarding 2024, the outlook for Western and Central Europe, including Turkey, was cut by 14,000 units. The downgrade was attributed to weaker actualized production; however, some volume is expected to be partially recovered within Q3-2024. From an automaker perspective, Volkswagen was reduced primarily due to worse-than-expected actual production, offsetting positive revisions in prior months. Stronger actuals for the German premium manufacturers and Toyota counterbalanced some of the other output revisions for 2024. Looking ahead to 2025 and 2026, the revisions are fairly limited, with a mix of upgrades and downgrades amongst various countries in the broader region. A modest overall upgrade in 2026 supports a slightly improved demand outlook for the market, primarily associated with Russia.

"Greater China: The outlook for Greater China light vehicle production was reduced by 19,000 units and by 205,000 for 2024 and 2025, respectively (and reduced by 286,000 units for 2026). Despite two waves of incentives and subsidies to support demand and promote the scrappage of ICE vehicles, domestic demand remains fairly subdued. According to CPCA, passenger vehicle retail sales in July dropped 5.7% year-on-year. With the recently enhanced stimulus program, August passenger vehicle sales improved modestly sequentially to down 3.8% year-over-year. Amid aggressive price competition, consumers are more hesitant to buy and expect further discounting by automakers in the coming months. As a result, a fundamental demand resurgence is not expected in the near future. In the meantime, given the relative sales stagnation and conventional seasonality, mainland China light vehicle production declined by 4.7% and 3.0% year-over-year in July and August, respectively. Given the rather uncertain macro environment and underwhelming results from the scrapping policy, the outlook for 2024 was revised down modestly to 29.3 million units, representing 0.8% growth year-over-year. The outlook for 2025 and 2026 were reduced more meaningfully considering a still expected payback effect related to the scrapping policy (even with its reduced effectiveness) and a weaker market recovery amid macroeconomic headwinds.

"Japan/Korea: Full-year 2025 Japan production was reduced by 29,000 units relative to last month's forecast. The downward revision is primarily associated with the risk of Daihatsu being unable to comply with new regulations from November 2024 onward and having to halt parts of production. Full-year 2026 Japan production was increased by 39,000 units. The ICE and FHEV models such as the Toyota ES and the Corolla Cross continue to gain momentum in the global market as global BEV development slows. GM Korea's production fell more than expected due to partial strikes that occurred while wage negotiations in August continued until finally reaching an agreement. Accordingly, 2024 was downgraded by 42,000 units to 4.11 million units. For 2025, to manage production due to somewhat stagnant demand in the US and Europe, South Korea's production was reduced by 31,000 units to 4.08 million units (with no material change for 2026). In the long-term, annual output was reduced by approximately 40,000 units with the removal of the Hyundai Ioniq 4, PBV-M, and Genesis G70, and associated volume fluctuation due to timing changes of all Genesis models.

“North America: The outlook for North America light vehicle production was reduced by 120,000 units and by 429,000 units for 2024 and 2025, respectively (and reduced by 714,000 units for 2026). Over 1.26 million units were cut from the short-term forecast spanning 2024 through 2026 with three driving factors behind the steep reductions. First, the outlook for US light vehicle sales was cut 717,000 units spanning the same period which also secondarily fuels the need for additional inventory correction over the next 12 months. Finally, a total of 20 vehicle timing actions along with program cancellations and resourcing decisions account for a loss of 730,000 units or around 57.8% of the overall reduction between 2024 and 2026. The outlook for 2025 production in North American was revised down 2.7% to total 15.41 million units which results in production for 2025 now being projected to decline year-over-year for a second straight year. Steeper cuts affect the outlook in 2026 with production in North America revised down 4.4% to total 15.69 million units. The outlook in 2026 is most dramatically affected by program-related actions with 82.4% or 589,000 units of the reduction being attributable to such product related actions as timing revisions, cancellations and resourcing, including for dedicated BEV nameplates.

“South America: The outlook for South America light vehicle production was increased by 30,000 units and by 79,000 units for 2024 and 2025, respectively (and increased by 58,000 units for 2026). In the extreme near-term, the outlook has been upgraded reflecting stronger actualized production, particularly for Brazil, and an upgraded demand outlook for both Brazil and Argentina, although we remain somewhat guarded from a production perspective given seasonality effects and the general need for ongoing inventory management. For 2025 and 2026, production volumes were upgraded primarily due to improved demand expectations for Argentina as well as a stronger production outlook for key Fiat and Hyundai models (principally the Fiat Strada pickup and Hyundai HB20).

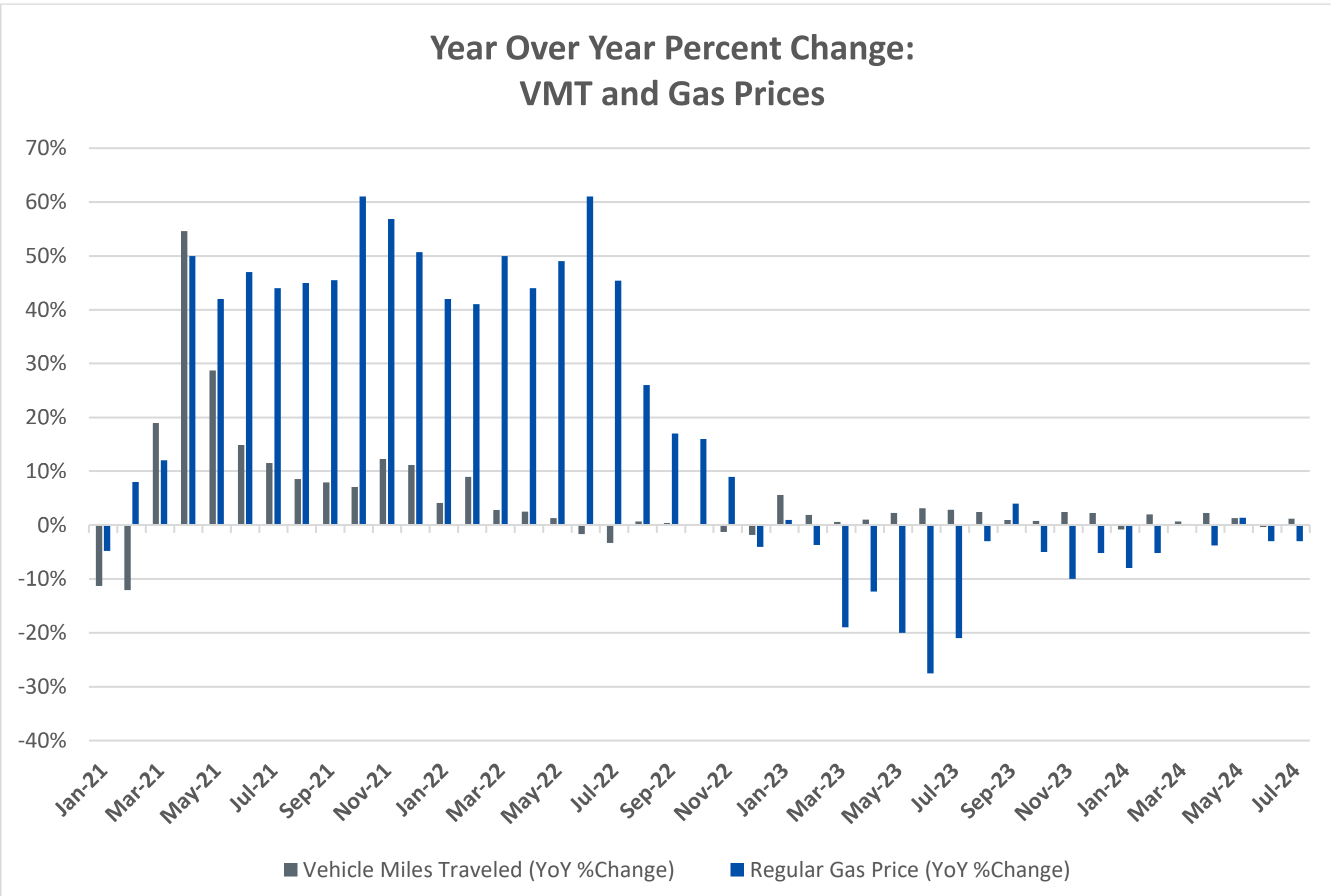
“South Asia: The outlook for South Asia light vehicle production was reduced by 50,000 units and by 139,000 units for 2024 and 2025, respectively (and reduced by 117,000 units for 2026). South Asia's light vehicle production forecast for 2024 was reduced by 36,000 units due to ongoing weakness associated with the ASEAN market given stricter auto loan approvals amidst general market headwinds. The challenges in ASEAN continue to be primarily focused on Thailand and Indonesia. Thailand’s auto market has been significantly impacted by stricter auto loan policies, exacerbating the challenges posed by ongoing economic headwinds. Meanwhile, Indonesia’s auto production sector has been adversely affected by weaker household spending, elevated interest rates and a slowdown in exports. Regarding the Indian subcontinent, production was reduced by 14,000 units for 2024 to reflect slightly weaker recent actual production and other short-term adjustments. More meaningful downward revisions incorporated for India in 2025 and beyond in part reflect the ongoing influence of the weaker rupee and elevated interest rates as well as a shift in automaker sales reporting from wholesale to retail suggesting companies will seek to reduce excess inventory and streamline inventory management from dealers to the production line.

Recovery Meter

Roadway Travel (Updated 9/9)

According to the U.S. Department of Transportation, seasonally-adjusted vehicle miles traveled in July increased .6 percent from the same time a year ago. The cumulative travel estimate for 2024 is 1,898 billion vehicle miles.[26]

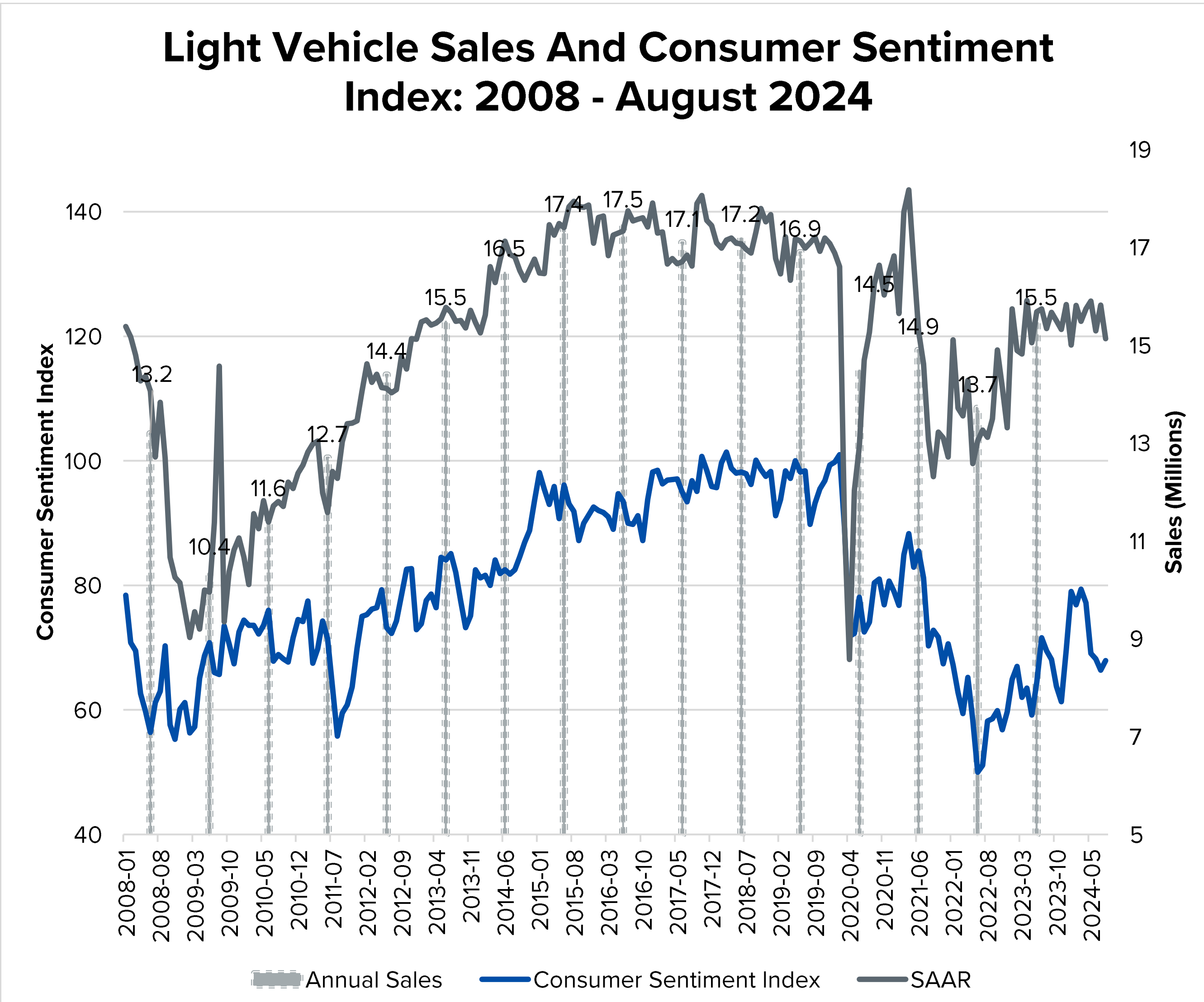
- Travel on all roads and streets changed by +1.2% (+3.5 billion vehicle miles) for July 2024 as compared with July 2023. Travel for the month is estimated to be 293.3 billion vehicle miles.
- The seasonally adjusted vehicle miles traveled for July 2024 is 274.3 billion miles, a +0.6% (+1.6 billion vehicle miles) change over July 2023. It also represents a 0.04% change (0.1 billion vehicle miles) compared with June 2024.
- Cumulative Travel for 2024 changed by +0.9% (+16.6 billion vehicle miles). The cumulative estimate for the year is 1,898.0 billion vehicle miles of travel.



Consumer Confidence and Sales (Updated 9/9)

Surveys of Consumers Director Joanne Hsu[27]: "Consumer sentiment has remained virtually unchanged in the last three months. July's reading was a statistically insignificant 1.8 index points below June, well under the margin of error. Sentiment has lifted 33% above the June 2022 historic low, but it remains guarded as high prices continue to drag down attitudes, particularly for those with lower incomes. Labor market expectations remain relatively stable, providing continued support to consumer spending. However, continued election uncertainty is likely to generate volatility in economic attitudes in the months ahead.

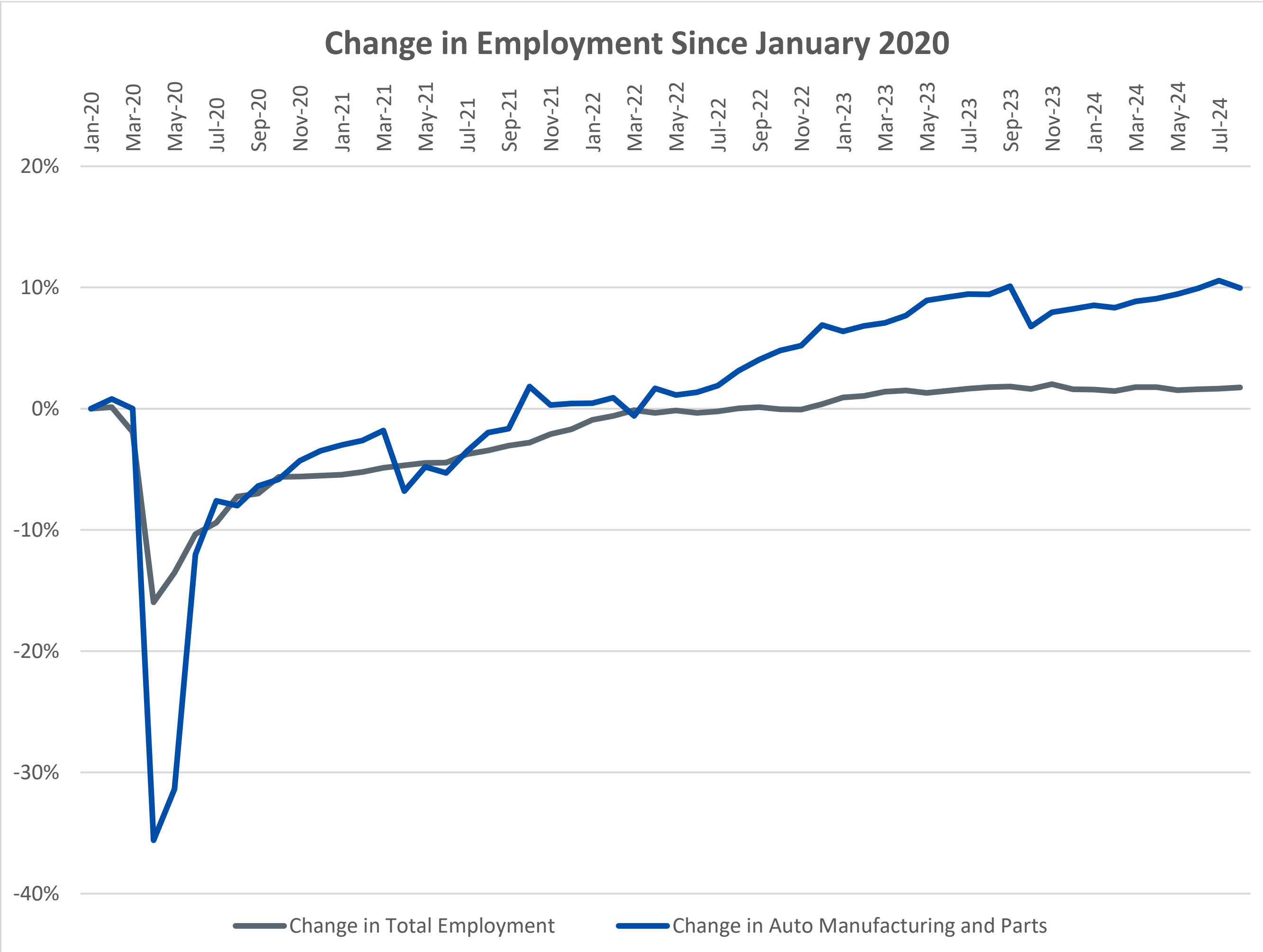
"Year-ahead inflation expectations fell for the second straight month, reaching 2.9%. In comparison, these expectations ranged between 2.3 to 3.0% in the two years prior to the pandemic. Long-run inflation expectations came in at 3.0%, unchanged from last month and remaining remarkably stable over the last three years. These expectations remain somewhat elevated relative to the 2.2-2.6% range seen in the two years pre-pandemic.



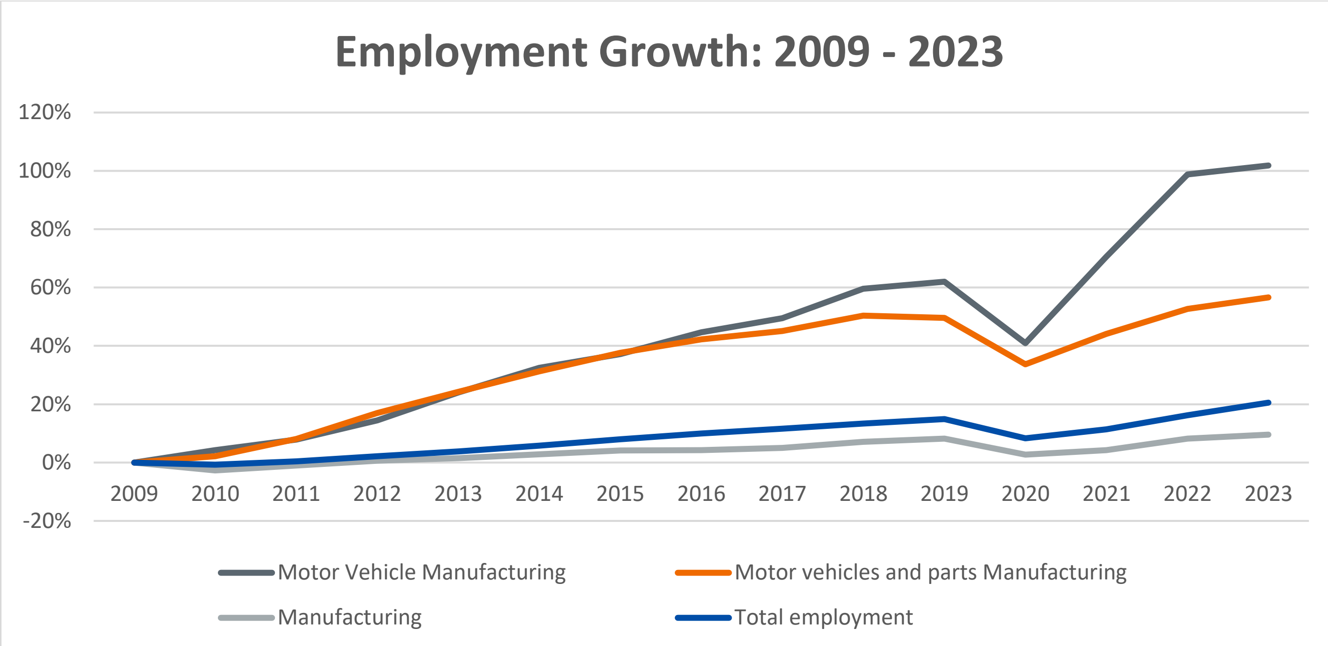
Employment (Updated 9/9)

Motor Vehicle And Parts Manufacturing Lost 5,900 Jobs in August.

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.[28]



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.[29] 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.



Sources

[1] WardsIntelligence, U.S. Light Vehicle Sales, January 2021 – June 2023
[2] WardsIntelligence, North America Production, January 2021 – June 2023
[3] WardsIntelligence, North America Platform by Plant Production Forecast, Q1
[4] Haig Stoddard, "September U.S. Light-Vehicle Sales Forecast for 9-Month-High SAAR Despite Drop in Volume," WardsIntelligence, 9/25/2024
[5] Haig Stoddard, "September U.S. Light-Vehicle Sales Forecast for 9-Month-High SAAR Despite Drop in Volume," WardsIntelligence, 9/25/2024
[6] Haig Stoddard, "Rising U.S. Light-Vehicle Inventory in August, Sluggish Demand Spur Production Slowdowns," WardsIntelligence, 9/5/2024
[6] WardsIntelligence, "North America Production, December," 2019, 2020, 2021, 2022
[7] S&P Global Mobility, email, "S&P Global Mobility Monthly Automotive Update – August 2024," 8/19/2024
[8] Haig Stoddard, "August U.S. Light-Vehicle Sales Rise 4%, Ending Two Straight Declines," WardsIntelligence, 9/4/2024
[9] WardsIntelligence, U.S. Light Vehicle Sales, January 2013 – August 2024
[10] U.S. Energy Information Administration, Weekly Retail Gasoline and Diesel Prices, Regular price per gallon, including taxes
[11] WardsIntelligence, Fuel Economy Index, December 2013 & 2019
[12] WardsIntelligence, U.S. Light Vehicle Sales, August 2022 - 2024
[13] Haig Stoddard, "August U.S. Light-Vehicle Sales Rise 4%, Ending Two Straight Declines," WardsIntelligence, 9/4/2024
[14] J.D. Power, Press Release, "August Sales to Get Boost from Labor Day Retail Sales Surge," 8/29/2024
[15] Kelley Blue Book, Press Release, "New-Vehicle Sales Incentives Climb Higher in July, According to Kelley Blue Book Estimates," 8/13/2024
[16] Bankrate, "Current Car Loan Interest Rates," Accessed 7/22/2024
[17] J.D. Power, Press Release, "August Sales to Get Boost from Labor Day Retail Sales Surge," 8/29/2024," 6/26/2024
[18] U.S. Energy Information Administration, Regular Gasoline, www.eia.gov, Accessed 9/9/2024; U.S. Energy Information Administration, Weekly Cushing, OK WTI Spot Price, www.eia.gov, Accessed 9/9/2024
[19] EIA, "Short-Term Energy Outlook," 7/9/2024
[20] EIA, "Short-Term Energy Outlook," 7/9/2024
[21] Haig Stoddard, "Rising U.S. Light-Vehicle Inventory in August, Sluggish Demand Spur Production Slowdowns," WardsIntelligence, 9/5/2024
[22] Haig Stoddard, "August North America Production Continues String of Underbuilds," WardsIntelligence, 9/19/2024
[23] WardsIntelligence, "North America Production, August ," 2019, 2020, 2021, 2022, 2023, 2024
[24] Haig Stoddard, "Global Vehicle Sales Rise Third Straight Month in May," *WardsIntelligence*, 6/27/2024
[25] S&P Global Mobility, email, "S&P Global Mobility Monthly Automotive Update – September 2024," 9/16/2024
[26] U.S Department of Transportation, https://www.fhwa.dot.gov/policyinformation/travel_monitoring/21septvt/, Accessed 5/3//2024
[27] University of Michigan, Survey of Consumers, http://www.sca.isr.umich.edu/, Accessed 7/9/2024
[28] Bureau of Labor Statistics, Current Employment Statistics, Accessed 7/9/2024
[29] Jerry Hirsch, "Auto Industry Has Soared Since 2010, Leading Economic Recovery," *Los Angeles Times*, 1/3/14