READING THE METER

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

ALLIANCE FOR AUTOMOTIVE INNOVATION

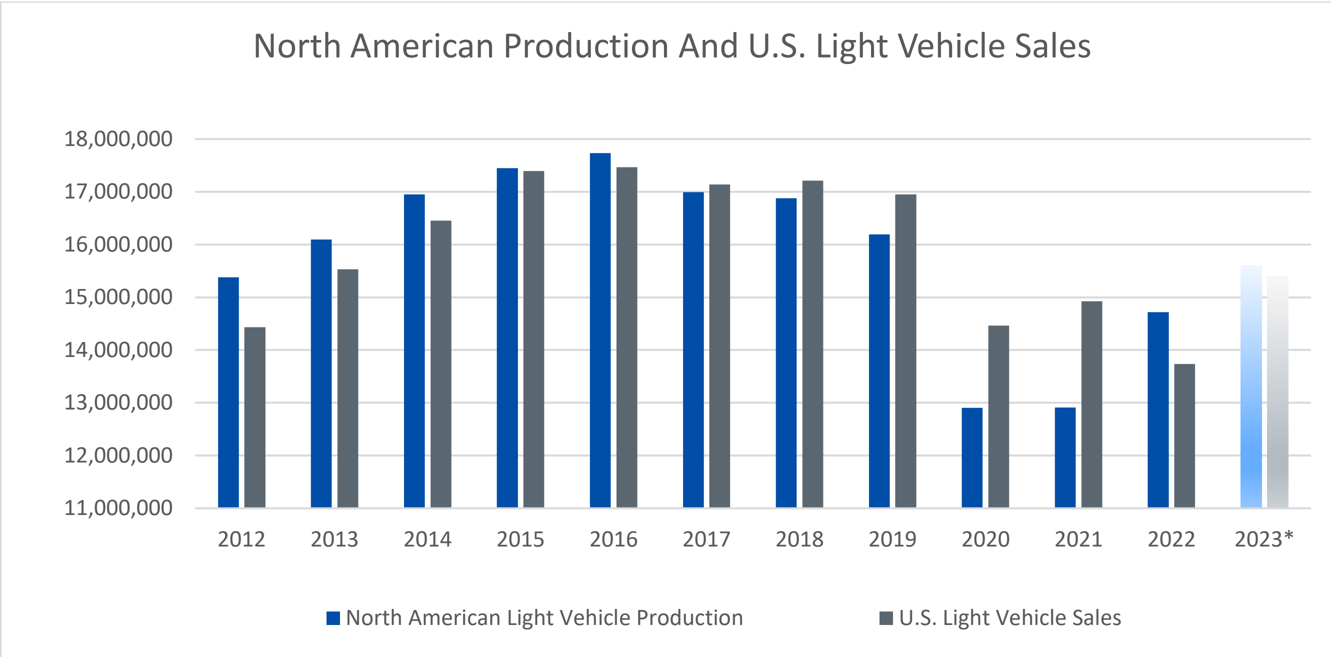
Contents – August 3, 2023

Cleaner. Safer. Smarter.

Forecast Meter

Sales & Production Summary and Forecast (Updated 8/3)

2022-2023 Sales,[1] Extended Sales Forecast[2] and Production Forecasts[3]		
	U.S. Sales & Forecasts	**North American Production**
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)	1,258,501 (+38% YoY)
October '22	1,151,774 (+13.8% YoY)	1,299,707 (+12.4% YoY)
November '22	1,120,067 (+6% YoY)	1,200,244 (+5.5% YoY)
December '22	1,263,268 (+4.9% YoY)	1,074,938 (+3.4% YoY)
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)	
2022 Full Year	15.3 million units (WardsIntelligence)	14,721,053 (+9.8% YoY) (U.S. 10,019,791)



U.S. Light Vehicle Sales Outlook (Updated 8/3)

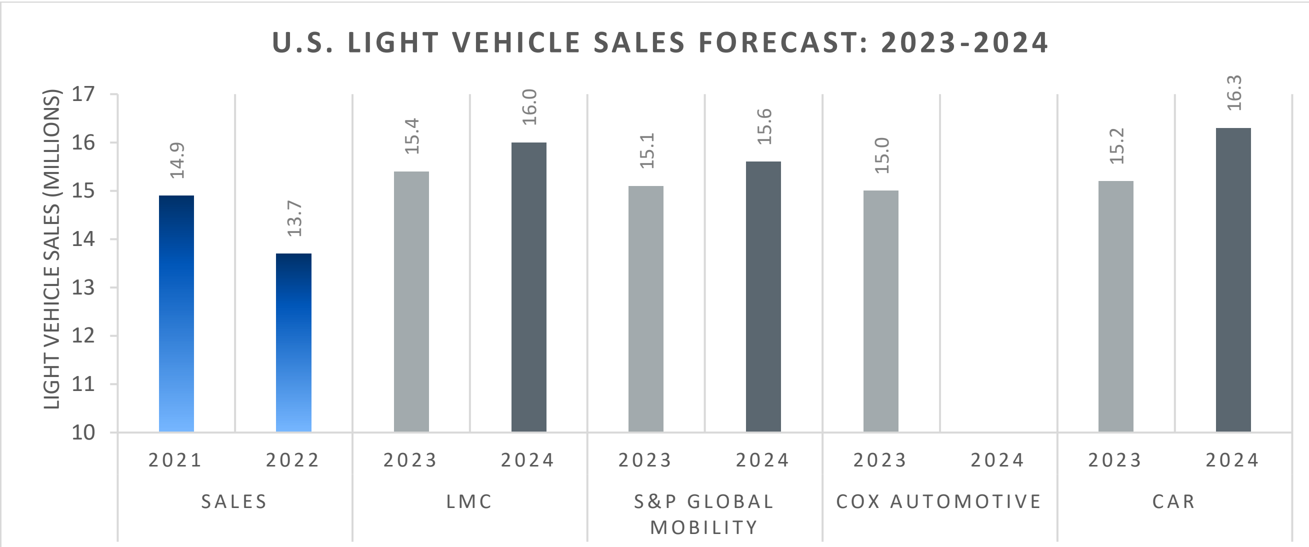
Wards Intelligence Outlook (8/3)[4]: "Wards Intelligence partner GlobalData's light-vehicle sales forecast for the U.S. of 15.4 million units in 2023 assumes a slowdown in economic growth at the end of the year. If the economy surprises on the high side, sales could end higher than expected.

"Right now, Q3 is forecast for a 15.6 million-unit seasonally adjusted annual rate – same as Q2 - with Q4 falling to 15.3 million. The first quarter posted a 15.2 million-unit SAAR.

"Part of the optimism for stronger sales over the last five months of the year is that the inventory mix is gradually growing for less costly vehicles, which also has been borne out in the past three months by gains in market share for more affordable cars and light trucks.

"Availability, as well as sales, has increased year-over-year for small and midsize non-luxury CUVs and cars in each of the past three months. Inventory for these "affordable" vehicles rose to a light-vehicle share of 34.3% in July, up from like-2022's 32.5%.

"The sales share over the past three months of affordable vehicles increased to 46.4% from May-July 2022's 45.2%. In July, the share rose to 46.8% from like- 2022's 44.9%."



North American Production & Inventory Outlook (Updated 8/3)

Wards Intelligence Inventory Outlook (7/7)[5]: "As expected, inventory declined from the prior month due to normal summer shutdowns at some vehicle assembly plants in North America, which reduces the volume available to ship to dealers. Inventory is forecast to start rising again on a month-to-month basis in August and continue sequential increases through the end of the year. Based on the current sales and production outlooks for the remainder of the year, inventory is expected to top 2 million units by the end of October – the first time above that level since March 2021 – and end the year at 2.2 million units, 30% above December 2022, and highest for the month since 2.7 million in 2020."

Wards Intelligence Production Outlook (7/24)[6]: "Light-vehicle production in Q3 is tracking to 3.910 million units, 7.5% above like-2022, and equal to over 98% of July-September 2019's total.

"There remains a strong chance the United Autoworkers in the U.S. and/or Unifor in Canada initiate work stoppages at one or more of Ford, GM or Stellantis when their national labor contracts are up in mid-September. Union leadership already is taking tough stances on the upcoming negotiations. Production at the union plants negotiating new contracts this year accounts for roughly 35% of total North America output."

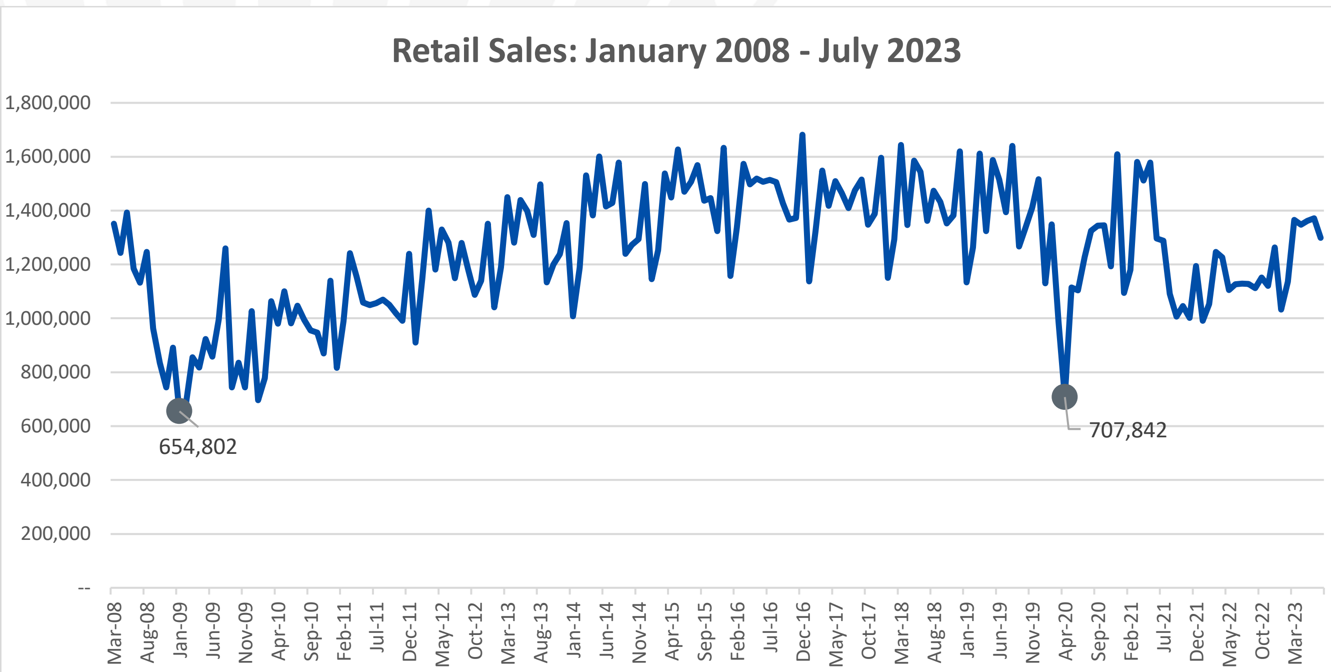
S&P Global Mobility Outlook (6/22)[7]: "North America: The outlook for North America light vehicle production was increased by 317,000 units and reduced by 75,000 units for 2023 and 2024, respectively (and reduced by 37,000 units for 2025). With persistent demand and improving supply chain conditions, most notable among the Japanese manufacturers in the region, the outlook for 2023 was revised upwards by 2.1% to total 15.35 million units. While the immediate near-term outlook improves, rising interest rates and tightening credit standards are expected to begin to take their toll in the coming months with production in 2024 revised down 0.5% to total 15.48 million units. While production support exists in the form of inventory restocking, there are signs that manufacturers are working to preserve their strong pricing power at the expense of building back inventory levels at an excessive pace. Despite the supply chain improvements, the manufacturing environment remains vulnerable with renewed logistics concerns surrounding the US West Coast ports tempering the overall outlook. Additional concern surrounds the upcoming union negotiations between the United Auto Workers (UAW) in the US and Unifor in Canada when their respective contracts expire in September 2023. Hard-line stances from union leadership along with strong pay and benefits expectations from rank-and-file members create a ripe environment for higher strike probabilities. However, a strike event is not reflected in our baseline forecast settings."

Market Meter

U.S. Light Vehicle Sales (Updated 8/3)

Monthly Sales (Updated 8/3)

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.



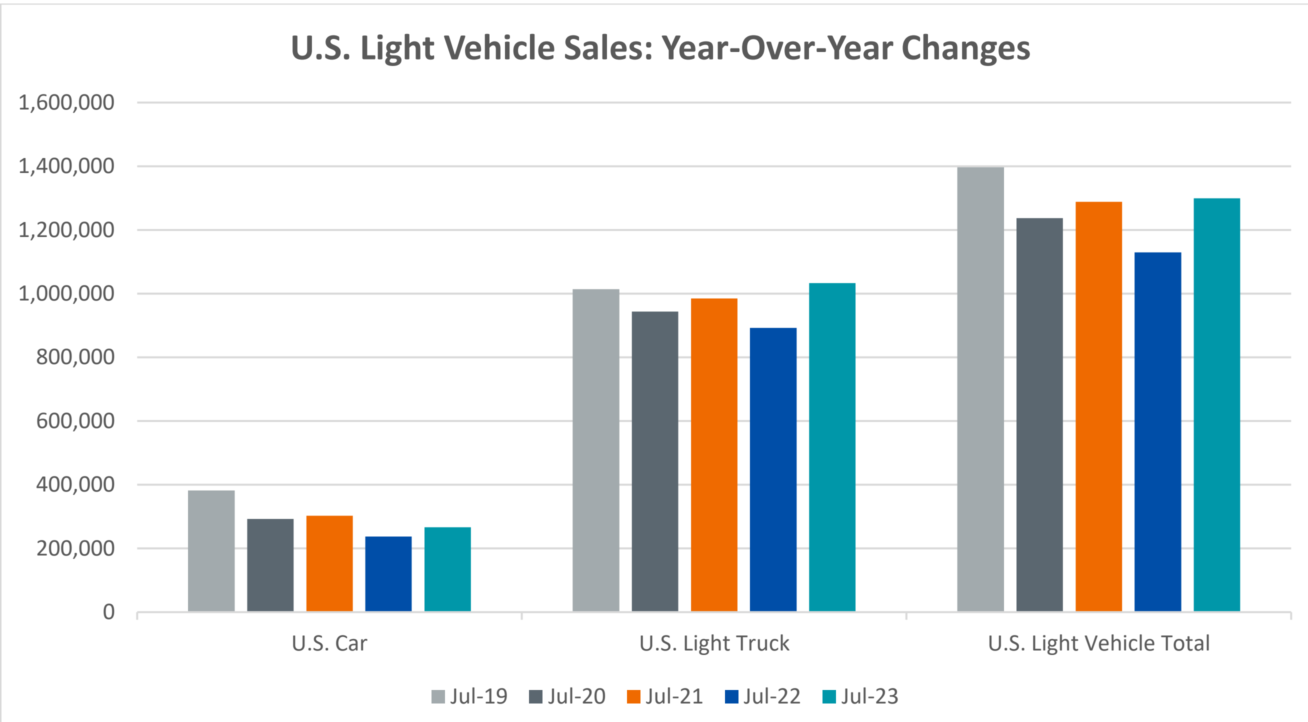
July Sales (Updated 8/3)

WardsIntelligence[8]: "U.S. light-vehicle sales in July hit nearly spot-on to expectations, finishing the month at a 15.7 million-unit seasonally adjusted annual rate.

"The SAAR was flat with June's results, highest since April's 16.0 million, and well above like-2022's 13.3 million.

"Raw volume totaled 1.299 million units, was 15.3% above July 2022, and equated to a daily selling rate over the month's 25 selling days of 51,968, 19.9% above same-month year-ago's 43,328 – 26 selling days.

"July's estimated retail volume was 13% above the same year-ago month, while fleet was up 35%. Fleet penetration fell to 15.4% from June's 18.0%, though a month-to-month decline is a normal seasonal trend in July. Estimated fleet penetration in July 2022 was 13.2%."



Segments vs. Gas Prices (Updated 8/3)

Monthly Sales For July: Light trucks accounted for 79.5 percent of sales in July, nearly flat with the market share a year ago. Compared to the same period in 2022, sales of cars are up about 30,000, and down more than 116,000 from June 2019, when cars comprised 27% of the market as opposed to the 20.5% 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 $2.83 a gallon (through December 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.[11]

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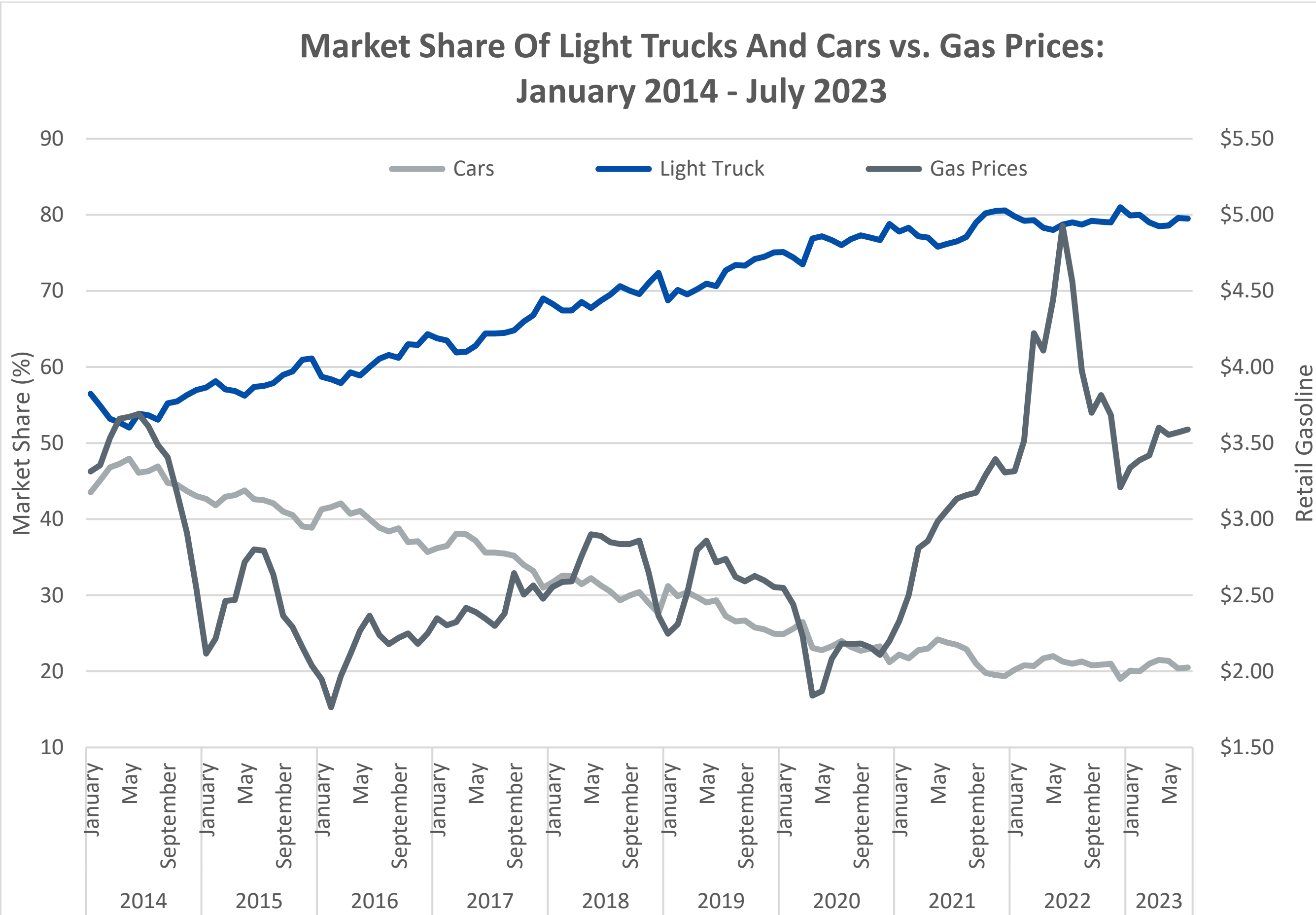
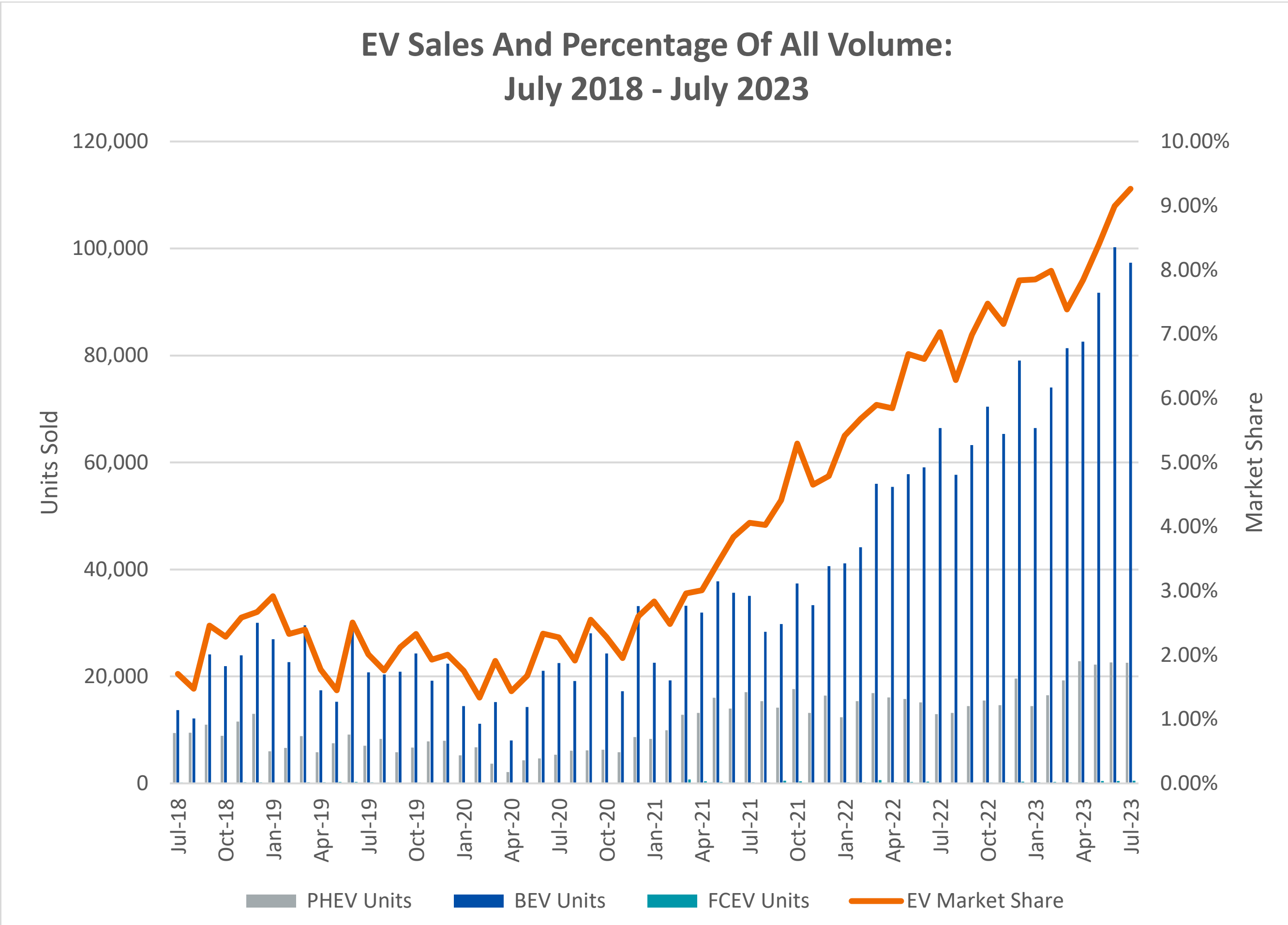


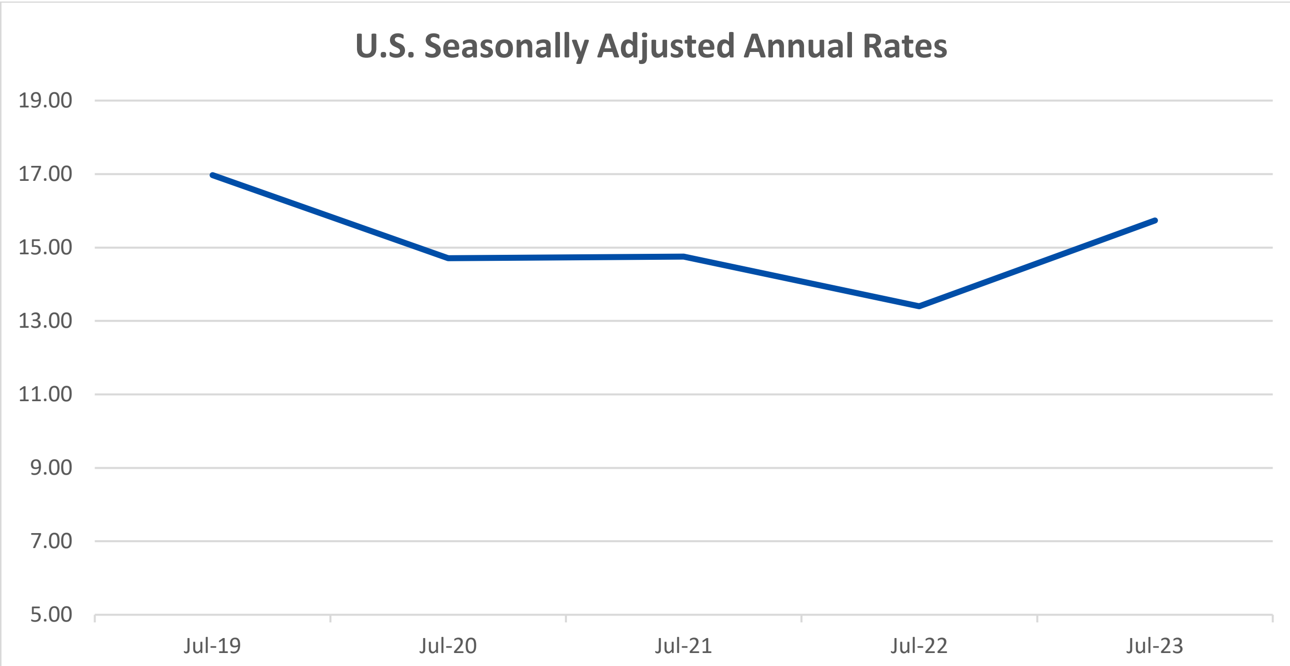
EV Powertrain Sales (Updated 8/3)

Sales of electric vehicles (BEV, PHEV, & Fuel Cell) accounted for 9.26% of total vehicle sales in July 2023 (120,350) – the highest market share to date, per Wards estimates. Market share increased 0.27 percentage points from June 2023. July's EV market share is up 2.23 pp from a year ago. Sales of battery electric vehicles led the way for EVs, accounting for 7.5 percent of total sales, up 1.6 pp from July 2022. Plug-in hybrids accounted for 1.6%, up 0.6 pp from the same time last year.[12]



Seasonally Adjusted Annual Rates (Updated 8/3)

WardsIntelligence[13]: “U.S. light-vehicle sales in July hit nearly spot-on to expectations, finishing the month at a 15.7 million-unit seasonally adjusted annual rate.The SAAR was flat with June’s results, highest since April’s 16.0 million, and well above like-2022’s 13.3 million.”



Average Transaction Price (Updated 8/3)

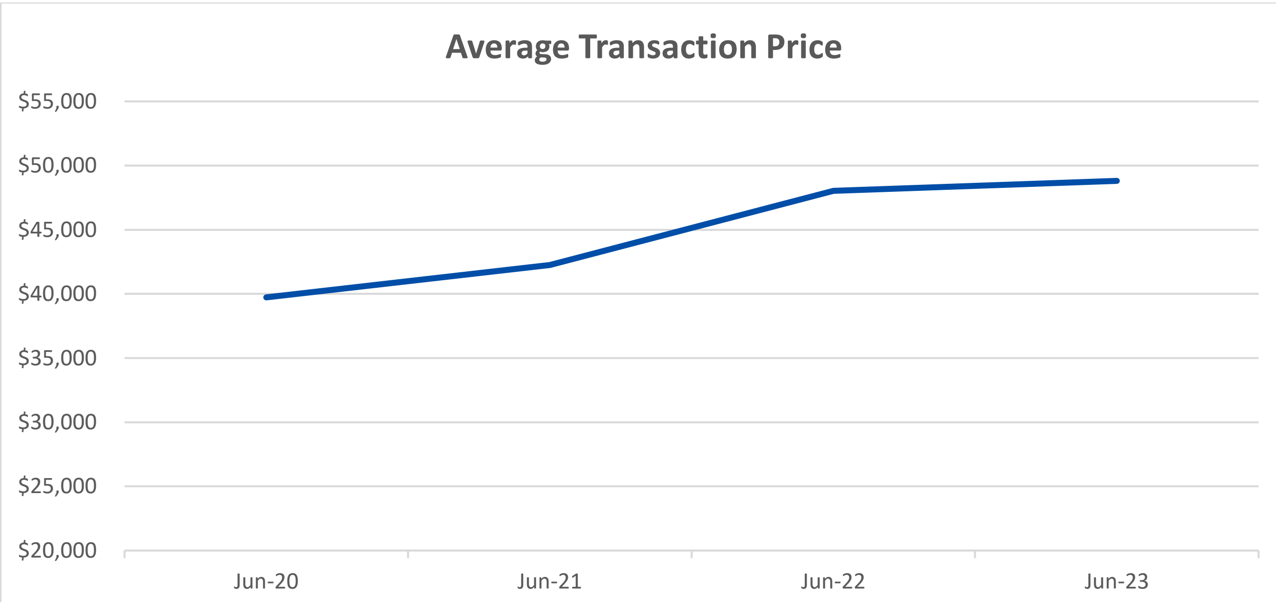
J.D. Power (Updated 8/3) [14]**:** "The average new-vehicle retail transaction price in July is expected to reach $45,305, down $866 from July 2022. The previous high for any month—$47,362—was set in December 2022. Average incentive spending per unit in July is expected to reach $1,888, up from $977 in July 2022. Spending as a percentage of the average MSRP is expected to increase to 3.7%, up 1.7 percentage points from July 2022."

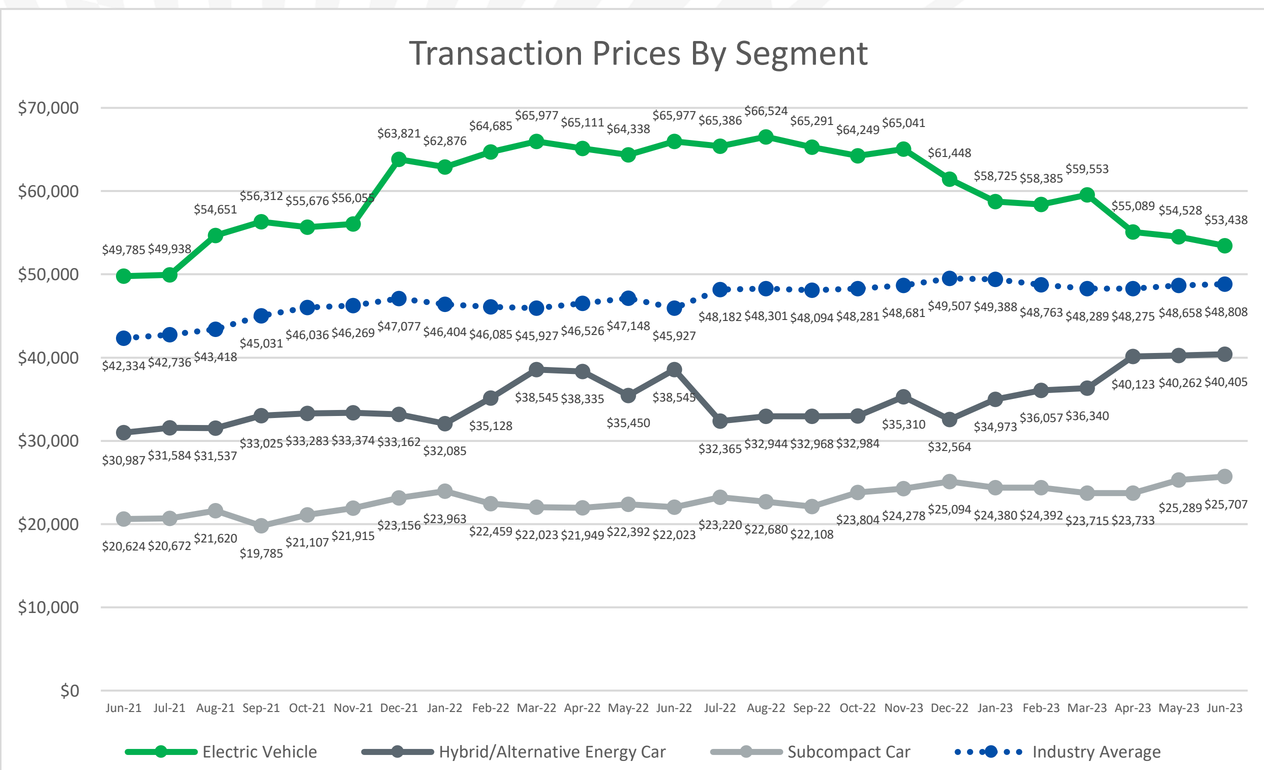
Kelley Blue Book (June) (Updated 7/24) [15]**:** "The average price Americans paid for a new vehicle in June 2023 was 1.6% higher than one year ago, the smallest year-over-year price increase since the start of the global pandemic. According to Kelley Blue Book, a Cox Automotive company, the average transaction price (ATP) of a new vehicle in June was $48,808, a month-over-month increase of 0.3% ($150) from an upwardly revised May reading of $48,658. Compared to the start of the year, however, transaction prices are down 1.7%, or $865, the largest January to June tumble in the past decade.

"For comparison, in June 2022, new-vehicle transaction prices were up 12.4% year over year. In all of 2022, the smallest year-over-year gain was in October, when prices were higher by only 4.2%. A year earlier, in October 2021, prices were up 14% year over year as inflation raged in the new-vehicle market. Meanwhile, auto manufacturers' incentive spend increased for the ninth consecutive month in June to the highest level since October 2021, averaging $2,048, or 4.2%, of the average transaction price. One year ago, average incentive spending was 2.3% of ATP."

"EV prices continue to fall, again led by market leader Tesla. In June, the average EV ATP was $53,438, down from a revised $54,528 in May and down from more than $61,000 in January. Incentives for EVs in June were 7.1% of ATP, behind only luxury vehicles.

“EV ATPs are down nearly 20% from their recent peak of $66,390 in June 2022. The price declines in the EV segment follow inventory increases experienced by some automakers in 2023. Overall, as measured by days' supply, the EV category is well above the overall industry. At the end of June, the EV segment days' supply was 103 days, while industry days' supply stood at 53.”



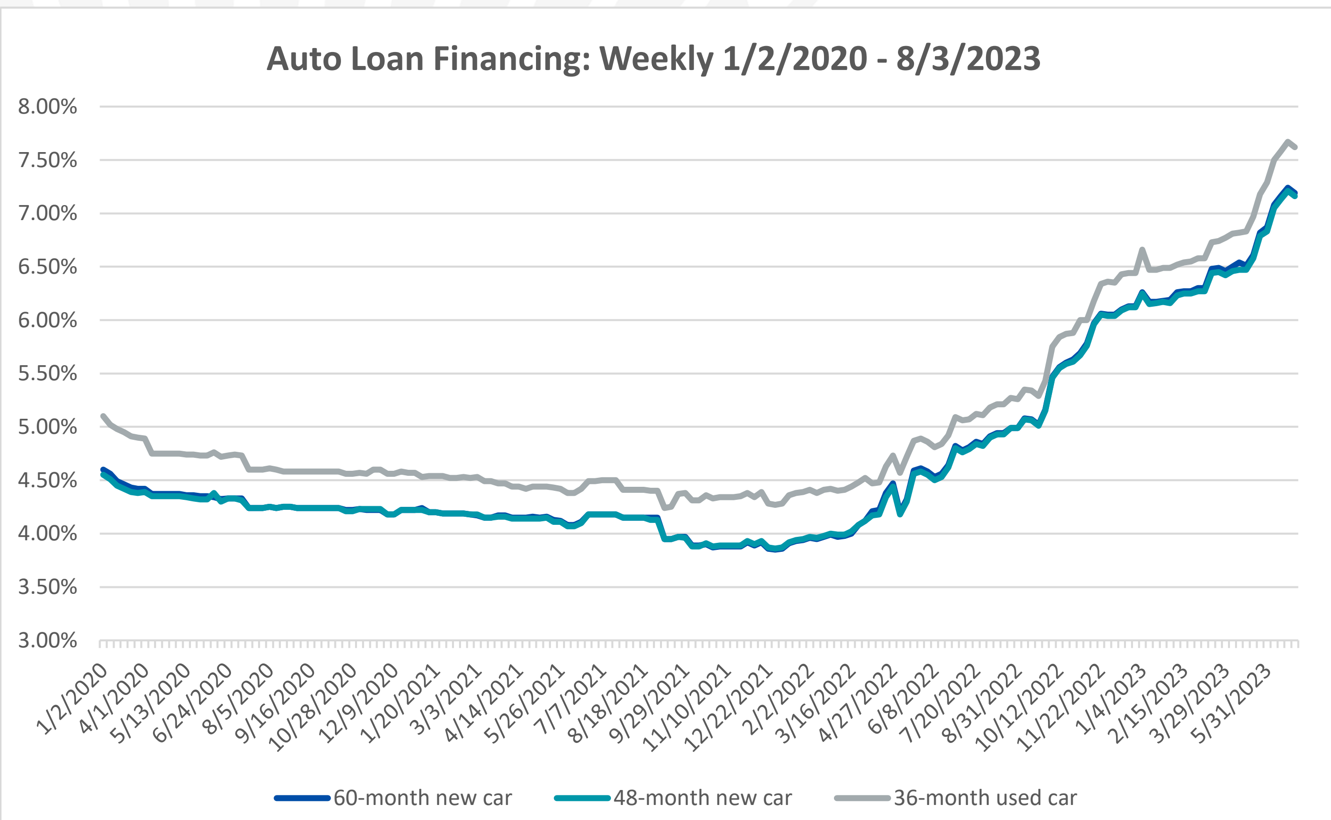


Auto Loan Financing (Updated 8/3)

Interest Rates (updated 8/3): Interest rates held mostly steady on the 60-month, 48-month and 36-month used car loans. Rates now stand at 7.19%, 7.16%, and 7.62%, respectively. Since the beginning of 2020, 60-month rates are up 2.59 pp, and are up 2.28 pp since the same time a year ago.[16]

JD Power (8/3)[17]: "Elevated pricing coupled with interest rate increases continue to inflate monthly loan payments. The average monthly finance payment in July is on pace to be $720, up $16 from July 2022. That translates to a 2.3% increase in monthly payments from a year ago. The average interest rate for new-vehicle loans is expected to be 7.1%, an increase of 180 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%
8/3/2022	4.91%	4.90%	5.18%
7/24/2023	7.24%	7.21%	7.67%
8/3/2023	7.19%	7.16%	7.62%
Two Week Change	-0.05%	-0.05%	-0.05%
Change since 1/3/20	2.59%	2.61%	2.52%
One Year Change	2.28%	2.26%	2.44%

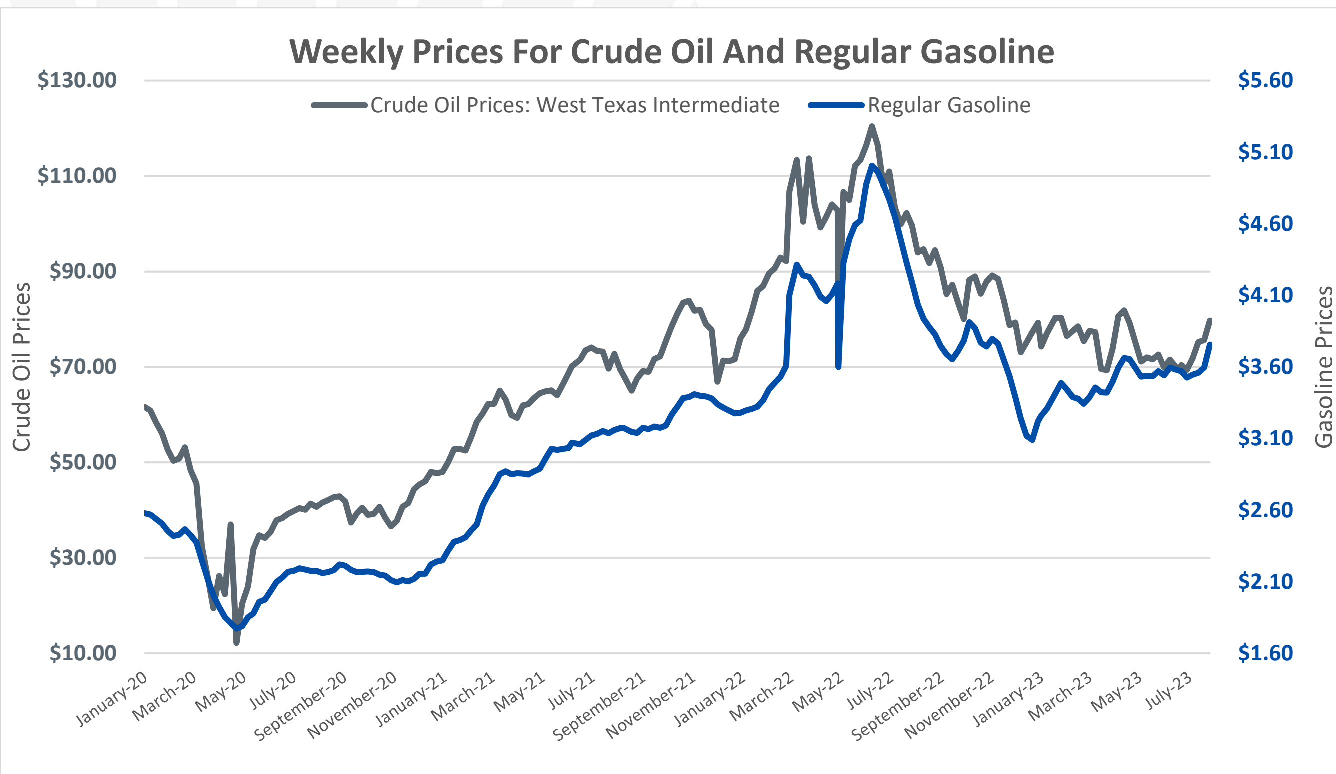


Crude Oil and Gas Prices (Updated 8/3)

EIA Outlook For Oil (7/24) [18]**:** "Crude oil prices. We forecast that the Brent crude oil spot price will average $78 per barrel (b) in July. Crude oil prices gradually increase throughout our forecast, reaching about $80/b in 4Q23 and averaging about $84/b in 2024 because we expect that global oil inventories will decline over the next five quarters."

EIA Outlook For Gasoline (6/22) [19]**:** "So far, gasoline crack spreads (the difference between the wholesale price of gasoline and crude oil) have been at or above the 2018–2022 average during 2Q23 in response to low gasoline inventories. U.S. gasoline consumption has been above 2022 levels, while significant refinery maintenance during the spring turnaround season reduced gasoline production. U.S. refiners are required to change over to producing summer-grade gasoline by the start of May, which also contributes to higher gasoline prices and crack spreads."

Gas And Oil Holding Mostly Steady (8/3): Oil prices, as benchmarked at West Texas Intermediate increased $4 to $80 a barrel. Since election day 2020, oil prices are $43 a barrel higher. Gas prices are up $.20 from two weeks prior. Gas is 46% higher than the beginning of 2020. [20]



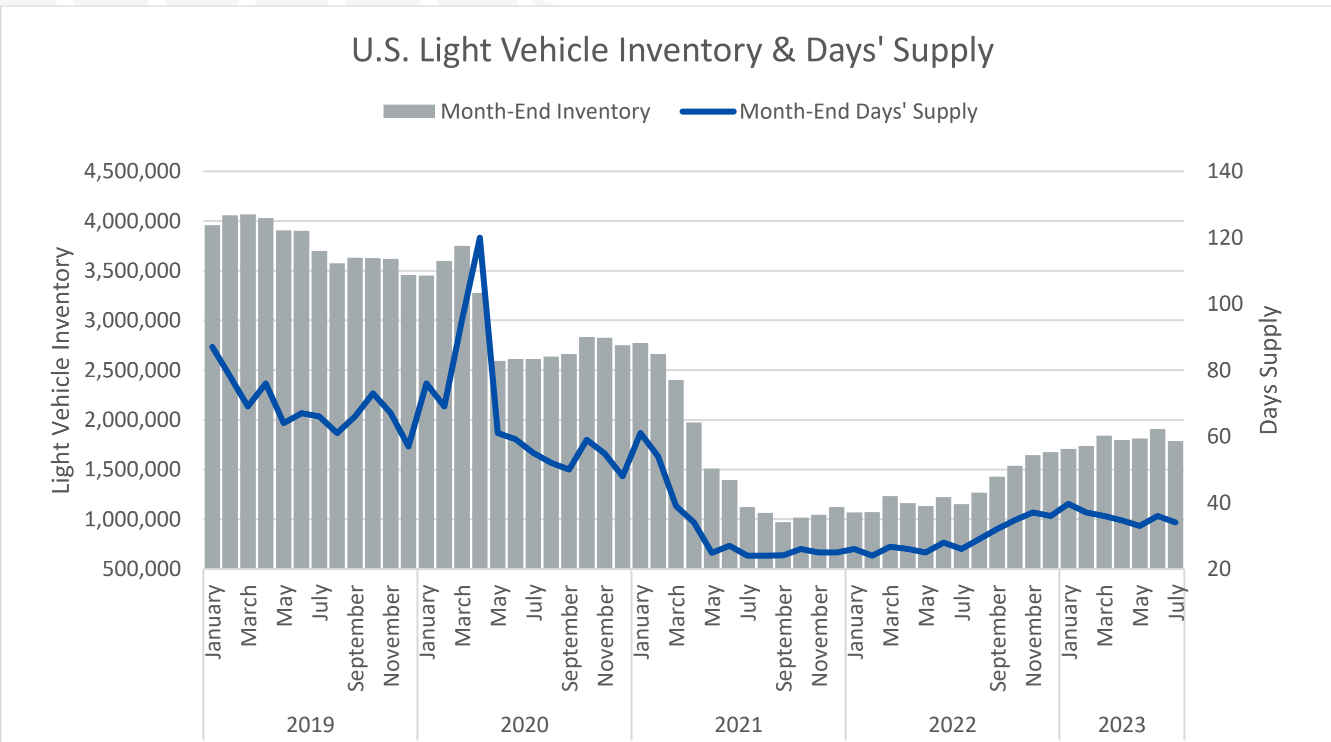
Production Meter

U.S. Light Vehicle Inventory and Days' Supply (Updated 8/3)

WardsIntelligence Inventory Update (7/7)[21]: "U.S. new-vehicle inventory continued to show strong year-over-year growth for all segments in July, but increased availability of more affordable vehicles is accelerating faster than for higher priced models.

"U.S. light-vehicle inventory ended July at 1.79 million units, a 55.5% year-over-year increase, with days' supply equating to 34, compared with like-2022's 27.

"As expected, inventory declined from the prior month due to normal summer shutdowns at some vehicle assembly plants in North America, which reduces the volume available to ship to dealers."



North American Production (Updated 7/24)

Wards Intelligence[22]: "Production in North America in June, as well as the final tally for Q2, finished relatively in line with the month-ago outlook for the period. Output of light vehicles and medium-/heavy-duty trucks totaled 1.438 million units in June, 13.3% above like-2022, and nearly spot on with expectations coming into the month. . . . Excluding medium- and heavy-duty trucks, light-vehicle production totaled 1.387 million units in June, up 13.8% from same-month 2022. Light-vehicle output in Q2 totaled 4.074 million units, up 15.8% year-over-year. It was the highest for any quarter since 4.239 million units in Q2-2019. The total was equal to 96%

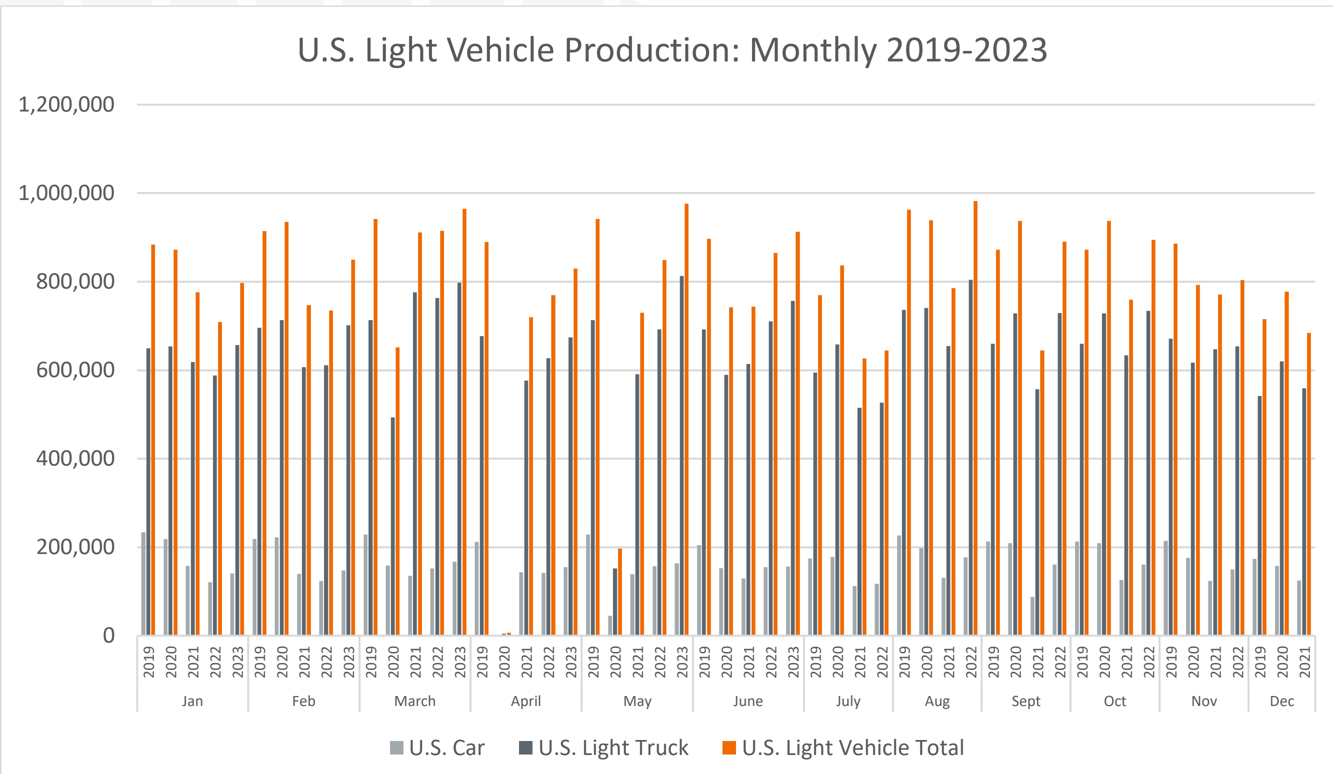
of Q2-2019, which was in the last year before the pandemic/supply disruptions fully impacted North America. . . . Light-vehicle production in Q3 is tracking to 3.910 million units, 7.5% above like-2022, and equal to over 98% of July-September 2019's total.

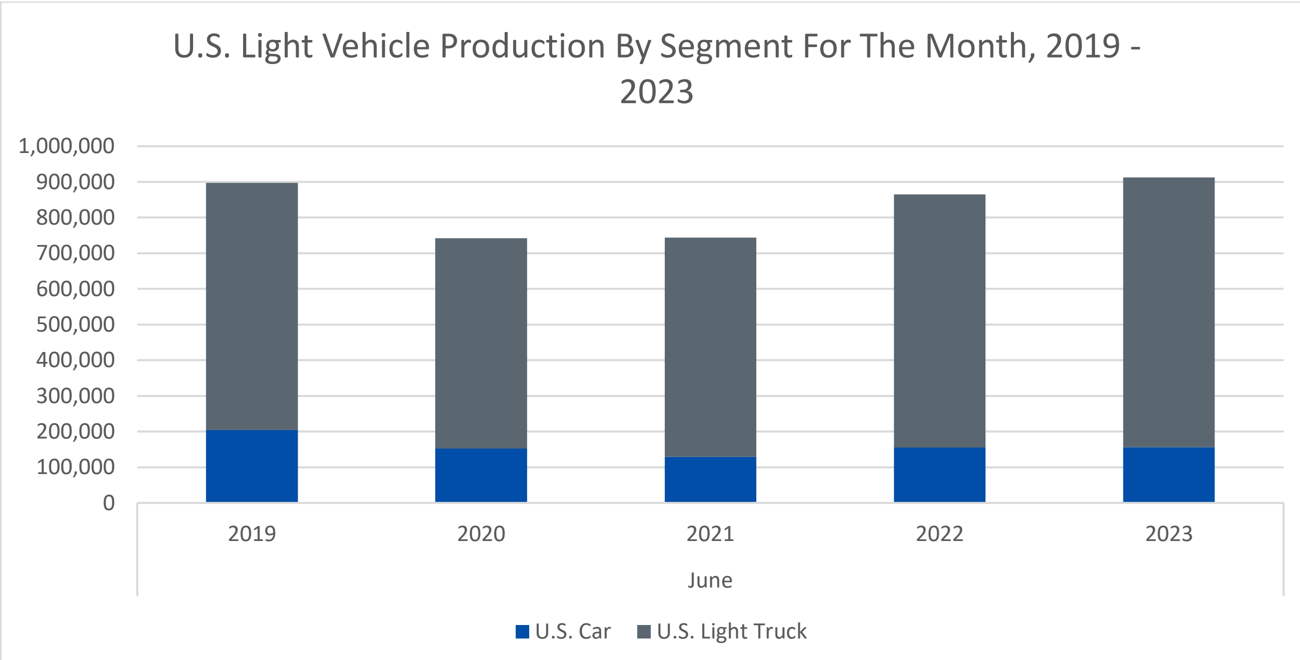
"There remains a strong chance the United Autoworkers in the U.S. and/or Unifor in Canada initiate work stoppages at one or more of Ford, GM or Stellantis when their national labor contracts are up in mid-September. Union leadership already is taking tough stances on the upcoming negotiations. Production at the union plants negotiating new contracts this year accounts for roughly 35% of total North America output."

U.S. Light Vehicle Production (Updated 7/24)

Monthly Production (Updated 7/24)

U.S. Light vehicle production for June 2023 decreased month-over-month by 6.2 percent, totaling 912,715 vehicles (156,192 cars, 756,523 light trucks), year-over-year, production is up 10 percent from 2022. [23]





Global Meter

Global Light Vehicle Sales (Updated 8/3)

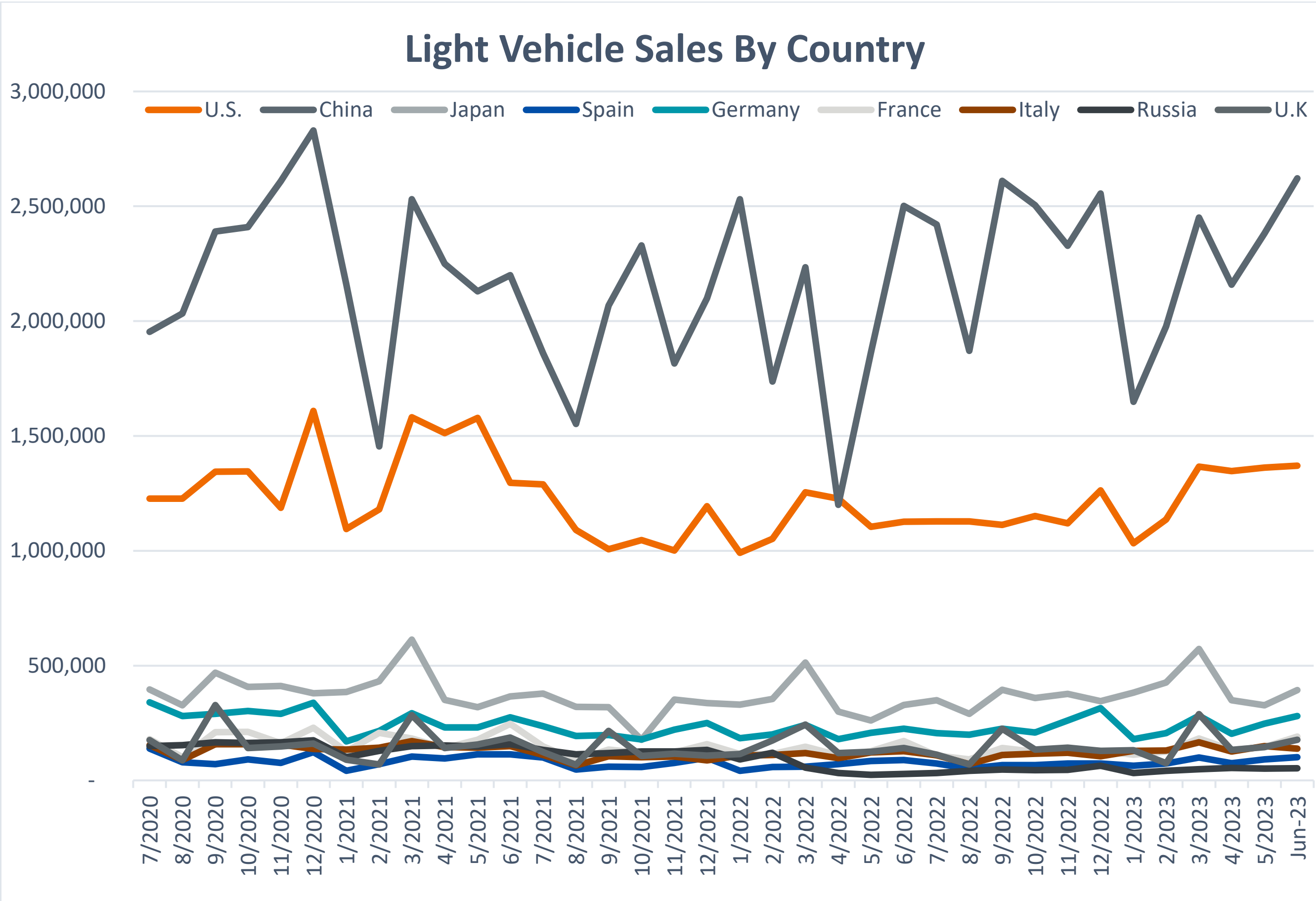
Wards Intelligence[24]: "Global vehicle sales grew year-over-year for the fifth straight month in June and deliveries in first-half 2023 rose 10.9% from January-June 2022. June sales of light vehicles and medium-/heavy-duty trucks totaled 8.12 million units, up 10.7% from same-month 2022's 7.334 million. Volume also increased from May, rising 6.9%.

"June gains were led by a 23.4% year-over-year increase in Europe and a rise of 18.7% in North America. Sales in the Asia-Pacific region increased a weaker 4.3%, while volume in South America declined 2.7%, the region's second straight downturn.

"Excluding medium- and heavy-duty trucks, light-vehicle sales totaled 7.81 million units in June, up 10.4% from same-month 2022.

"Global volume for all vehicles in first-half 2023 totaled 44.12 million units, well above like-2022's 39.78 million. All major regions booked first-half increases, with Europe up 18.0%, North America up 13.1%, AP up 8.8% and South America deliveries rising a tepid 0.7%. First-half 2023 sales in China totaled 13.59 million units, up 9.4%. Demand in the rest-of-AP was up 7.7% year-over-year.

"Light vehicles in January-June 2023 increased 10.9% to 42.45 million units from like-2022's 38.29 million."



Global Light Vehicle Production (Updated 6/22)

S&P Global Mobility Forecast (6/22) [25]**:** "As we approach mid-year, the pace and cadence of production recovery across various markets is becoming more apparent. Many regions have finally transitioned away from supply chain disruptions in favor of supporting recovering vehicle demand and inventory restocking. There remains a keen focus on the state of consumer demand and underlying conditions to support the release of pent-up demand. Elevated vehicle pricing in some markets and weakening credit conditions remain critical considerations. Yet, for many areas, vehicle sales have been running at or near recessionary levels for several years and consumers are finally considering a new vehicle purchase. Looking beyond 2023, the general production outlook reflects a more constrained position given the aforementioned pull-ahead in inventory restocking in many markets. The June 2023 forecast update reflects a mix of upgrades and downgrades, yet net to the upside in the immediate near-term, as the industry shifts away from supply chain issues and supports demand recovery in select markets. The acceleration in inventory restocking supported by strengthening output in the near-term results in downward revisions beyond 2023 as the production profile more closely aligns to demand expectations. The more noteworthy regional adjustments with the latest forecast update are detailed below:

"Europe: The outlook for Europe light vehicle production was increased by 166,000 units and reduced by 189,000 units for 2023 and 2024, respectively (and reduced by 48,000 units for 2025). Production activity in

Europe continues to outperform expectations. As a result of that strength, our outlook for H1-2023 has been increased by 99,000 units. However, our Q2-2023 estimates indicate that sequential deceleration is already occurring after several consecutive quarters of growth. As a result, although we have increased H2-2023 by around 67,000 units, we maintain the view that growth will slow throughout the year. Reflecting the current softness of order intakes reported in key European countries (and likely to feed the next 6-9 months of production), we have reduced the forecast for 2024 by 1.1% relative to the May forecast update, mainly on the first quarter of the year. While 2023 volumes are somewhat secured by inventory restocking and a reduction of the sales backlog, we believe that the backlog will decrease rather quickly in H2-2023, and lingering weak underlying demand given the context of higher prices and tighter credit conditions will guide volumes next year once corrections to inventory and backlog levels are completed.

“**Greater China:** The outlook for Greater China light vehicle production was reduced by 99,000 units and by 250,000 for 2023 and 2024, respectively (and reduced by 141,000 units for 2025). Chinese light vehicle output continued to exhibit relative strength in April with passenger vehicle production surging 76% relative to the prior year owing to both a weak base of comparison as well as strong New Energy Vehicle (NEV) business and export activity. Reflecting the ongoing recent momentum, the production outlook for Q2-2023 has been increased by 171,000 units; however, it should be noted that the outlook for Q4-2023 has been reduced by 276,000 on the expected need to maintain inventory discipline and given the recent extension of the NEV tax cut policy to next year, negatively impacting potential pre-buying activity that would have occurred at the end of this year. Given the demographic impacts of revised expectations around an increasingly aging and declining population, the intermediate-to-longer term production forecast has been recast, including the outlook for 2024 and 2025 being reduced and now reflecting growth rates of 5.0% and 5.3%, respectively, for the region.

“**Japan/Korea:** Full-year 2023 Japan production was increased by 26,000 units. Toyota is the main driver for the modest increase as the company satisfies pent-up demand with semiconductor shortage issues continuing to improve. Long-term volumes were largely downgraded by 3.3% per year. Japan exports are expected to lose momentum, primarily to North America, China and Europe, as the export portfolio remains centered on internal combustion engines. Full-year 2023 South Korea production was increased by 62,000 units relative to the previous forecast, reflecting continued steady production recovery without disruptions in the supply chain and given continued export growth. Furthermore, 2024 production was rebalanced and increased by 81,000 units as momentum is expected to remain intact. However, production for 2025 was reduced by 23,000 units in consideration of a quicker fulfillment of outstanding backlog orders. In the longer-term, higher global demand for the Chevrolet Trax, extended production of the Kia Stonic and the addition of the KG Mobility Torres Pickup increased production by about 40,000 units per year.

“**North America:** The outlook for North America light vehicle production was increased by 317,000 units and reduced by 75,000 units for 2023 and 2024, respectively (and reduced by 37,000 units for 2025). With persistent demand and improving supply chain conditions, most notable among the Japanese manufacturers in the region, the outlook for 2023 was revised upwards by 2.1% to total 15.35 million units. While the immediate near-term outlook improves, rising interest rates and tightening credit standards are expected to begin to take their toll in the coming months with production in 2024 revised down 0.5% to total 15.48 million units. While production support exists in the form of inventory restocking, there are signs that manufacturers are working to preserve their strong pricing power at the expense of building back inventory levels at an excessive pace. Despite the supply chain improvements, the manufacturing environment remains vulnerable with renewed logistics concerns surrounding the US West Coast ports tempering the overall outlook. Additional concern surrounds the upcoming union negotiations between the United Auto Workers (UAW) in the US and Unifor in Canada when their respective contracts expire in September 2023. Hard-line stances from union leadership along with strong pay and benefits expectations from rank-and-file members create a ripe environment for higher strike probabilities. However, a strike event is not reflected in our baseline forecast settings.

"South America: The outlook for South America light vehicle production was reduced by 37,000 units and by 117,000 units for 2023 and 2024, respectively (and reduced by 112,000 units for 2025). The near-term forecast downgrade was primarily focused on Brazil and Colombia on reduced demand expectations as affordability remains a central issue further complicated by high interest rates and deteriorating credit conditions. The downward production revisions for 2024 and 2025 were primarily spread between Brazil and Argentina and were more aggressive than the underlying demand reductions on expectations that manufacturers will seek to maintain inventory discipline with post-pandemic restocking largely complete.

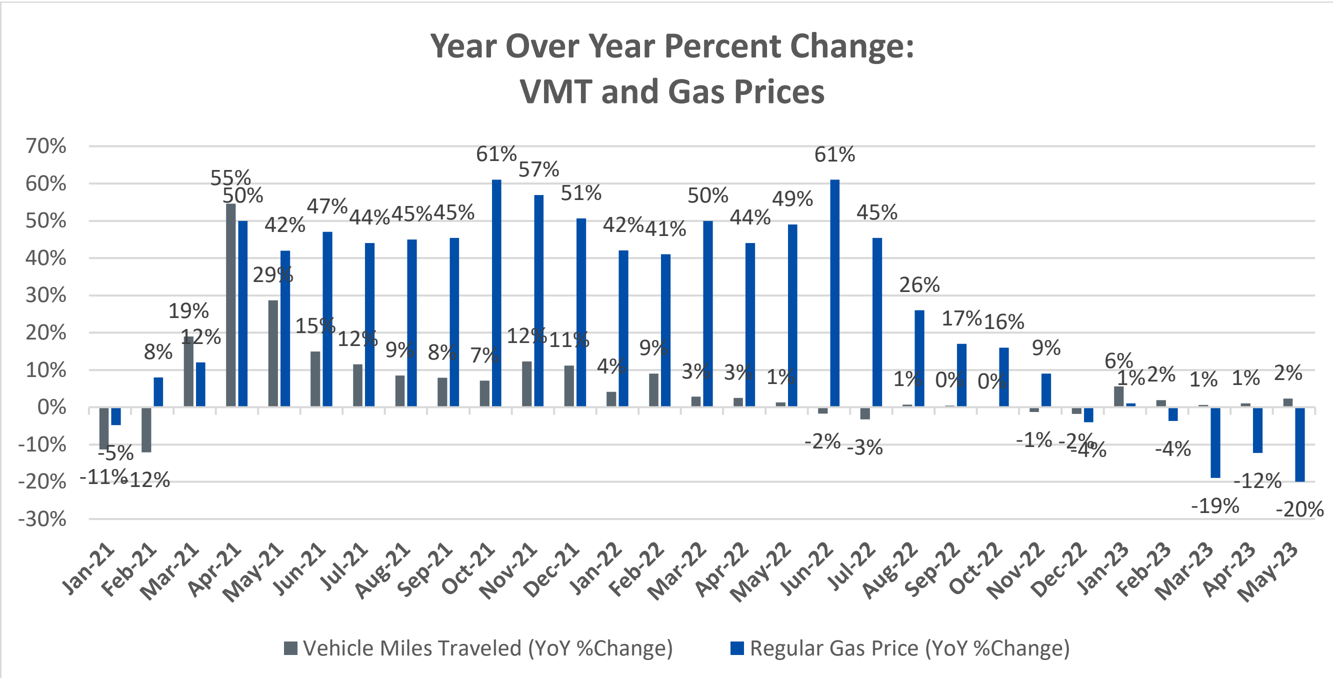
"South Asia: The outlook for South Asia light vehicle production was reduced by 34,000 units and by 25,000 units for 2023 and 2024, respectively (and reduced by 11,000 units for 2025). Production downgrades for this month were focused primarily on deterioration in the ASEAN market as well as Pakistan. Regarding the ASEAN market, while efforts remain underway to fulfill order backlogs, automakers are adjusting to somewhat modestly reduced domestic demand and export expectations through the near-term forecast horizon. One exception is Thailand with automakers continuing to maintain robust output of midsize pickups and subcompact cars to satisfy outstanding orders and rebuild inventories. Forecast expectations for Pakistan were revised downward again this month on deteriorating conditions in the country. The recent political crisis resulting in the former prime minister Imran Khan's removal and the formation of a new government could undermine the government's effectiveness at economic management, further weaken the Pakistani currency and threaten the renewed International Monetary Fund (IMF) financing program. The resulting uncertainty has the potential to negatively impact vehicle sales and production in the near-term."

Recovery Meter

Roadway Travel (Updated 7/24)

According to the U.S. Department of Transportation, seasonally-adjusted vehicle miles traveled in May increased 2.3 percent from the same time a year ago. The cumulative travel estimate for 2023 is 1,296 billion vehicle miles.[26]

- "Travel on all roads and streets changed by +2.5% (+7.1 billion vehicle miles) for May 2023 as compared with May 2022. Travel for the month is estimated to be 287.3 billion vehicle miles.
- "The seasonally adjusted vehicle miles traveled for May 2023 is 269.3 billion miles, a 2.30% (6.1 billion vehicle miles) change over May 2022. It also represents a 0.8% change (2.1 billion vehicle miles) compared with April 2023.
- "Cumulative Travel for 2023 changed by +2.1% (+26.8 billion vehicle miles). The cumulative estimate for the year is 1,296.0 billion vehicle miles of travel.



Economic News (Updated7/24)

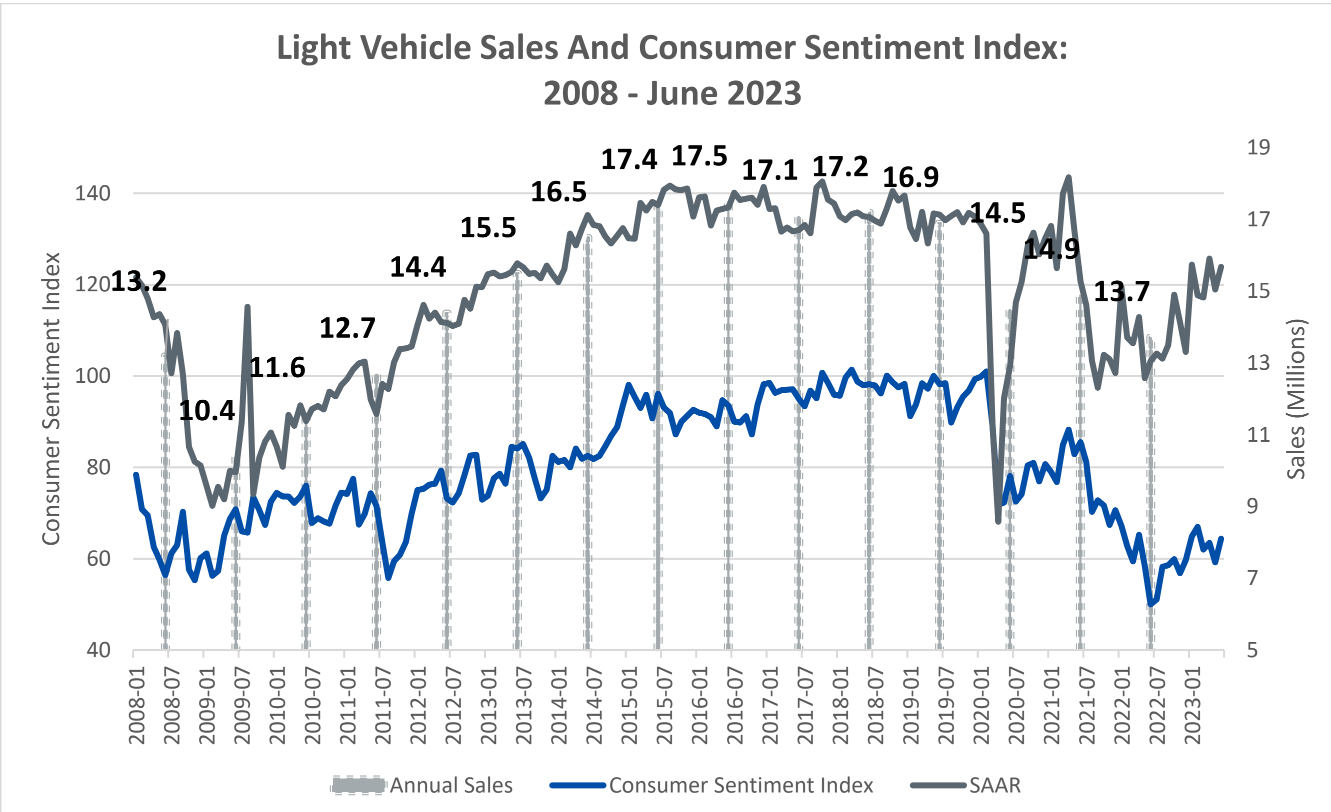
Manufacturing Gained 7,000 Jobs in June, While Motor Vehicles And Parts Gained 4,300. "The manufacturing industry gained 7,000 jobs in June, according to a report today by the United States Bureau of Labor Statistics (BLS). The gain is only the second month of growth in 2023. The increase comes from durable goods, which added 15,000 jobs; nondurable goods lost 8,000 jobs. Transportation manufacturing had the bulk of the gains, responsible for 7,200 of the new durable goods jobs (4,300 of which came from motor vehicles and parts manufacturing)."[27]

The ISM Index Slips To 46 Percent In June. "Economic activity in the manufacturing sector contracted for the eighth consecutive month in June, according to a report from the Institute for Supply Management (ISM). By comparison, the overall economy has contracted seven straight months after a 30-month expansion. ISM's June Manufacturing PMI registered 46%, a decline of 0.9% from May's figure of 46.9%—anything below 50% signifies contraction.."[28]

Consumer Confidence and Sales (Updated 7/24)

Surveys of Consumers Director Joanne Hsu[29]: "Consumer sentiment rose for the second straight month, soaring 13% above June and reaching its most favorable reading since September 2021. All components of the index improved considerably, led by a 19% surge in long-term business conditions and 16% increase in short-run business conditions. Overall, sentiment climbed for all demographic groups except for lower-income consumers. The sharp rise in sentiment was largely attributable to the continued slowdown in inflation along with stability in labor markets. As seen in the chart, sentiment is now about halfway between the all-time historic low of 50 from June 2022 and the February 2020 pre-pandemic reading of 101.

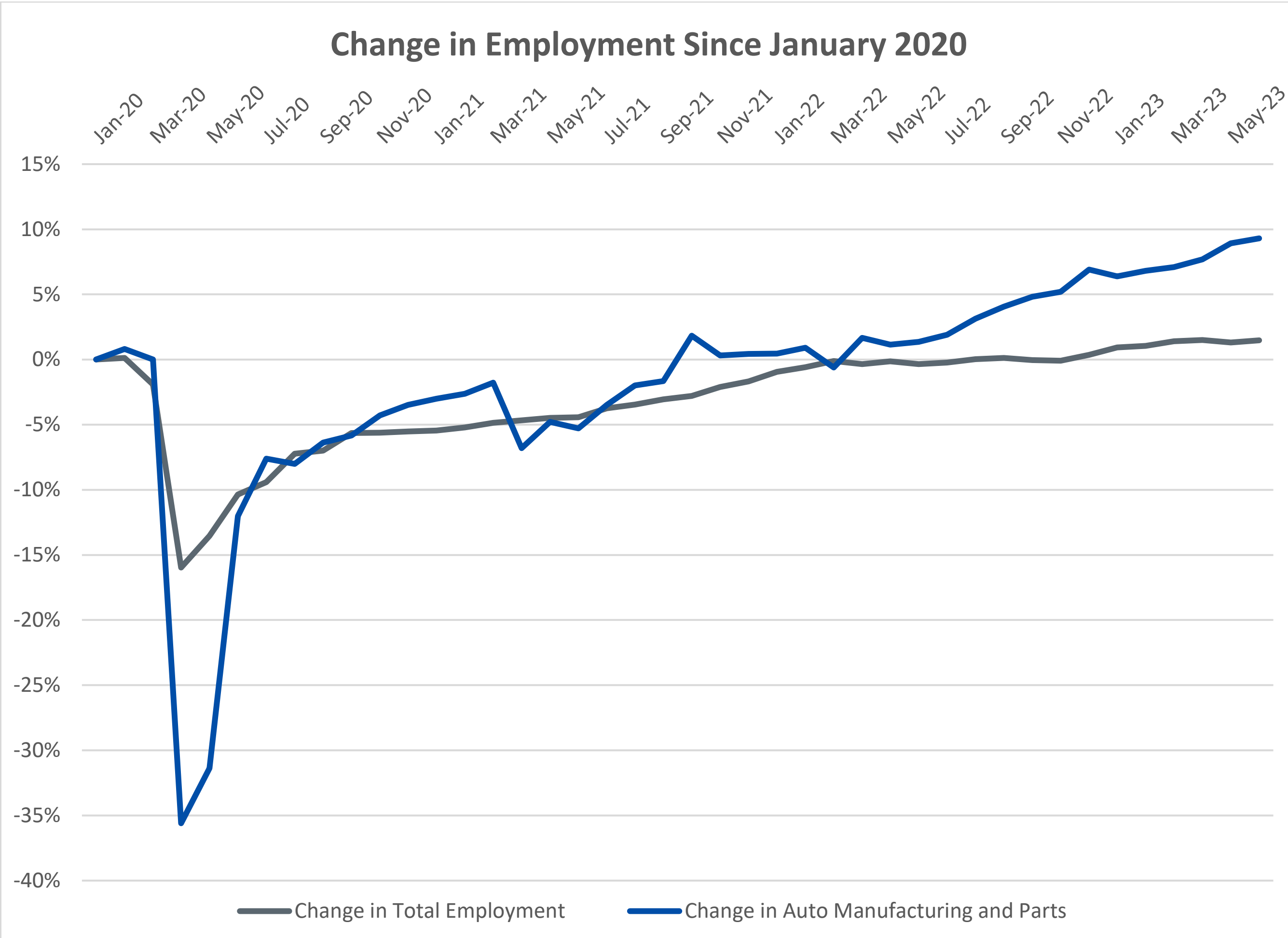
Year-ahead inflation expectations were little changed, inching up from 3.3% in June to 3.4% in July and down from the high point of 5.4% from April 2022. Long-run inflation expectations were also virtually unchanged from June at 3.1%, again staying within the narrow 2.9-3.1% range for 23 of the last 24 months."



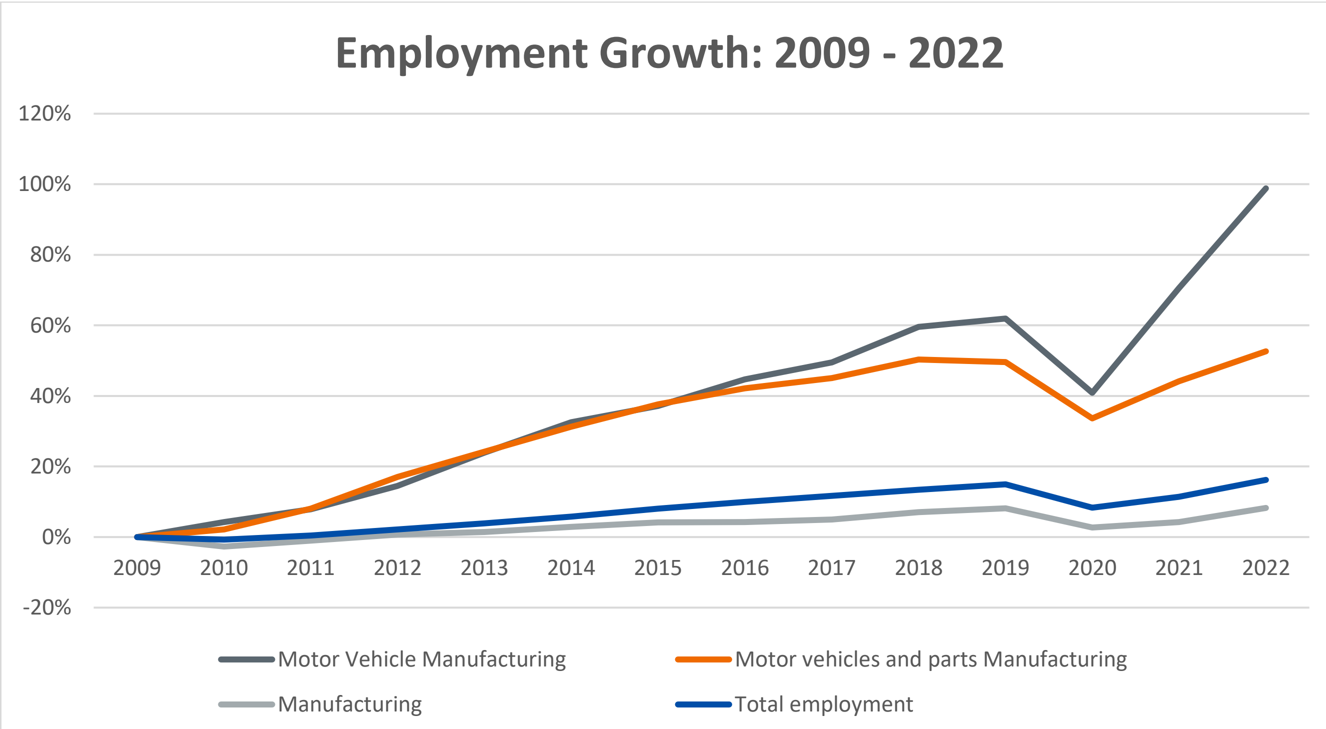
Employment (Updated 7/24)

Motor Vehicle And Parts Manufacturing Gained 4,300 Jobs In June.[30]

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.[31]



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.[32] 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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