

# READING THE METER

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



ALLIANCE FOR AUTOMOTIVE INNOVATION

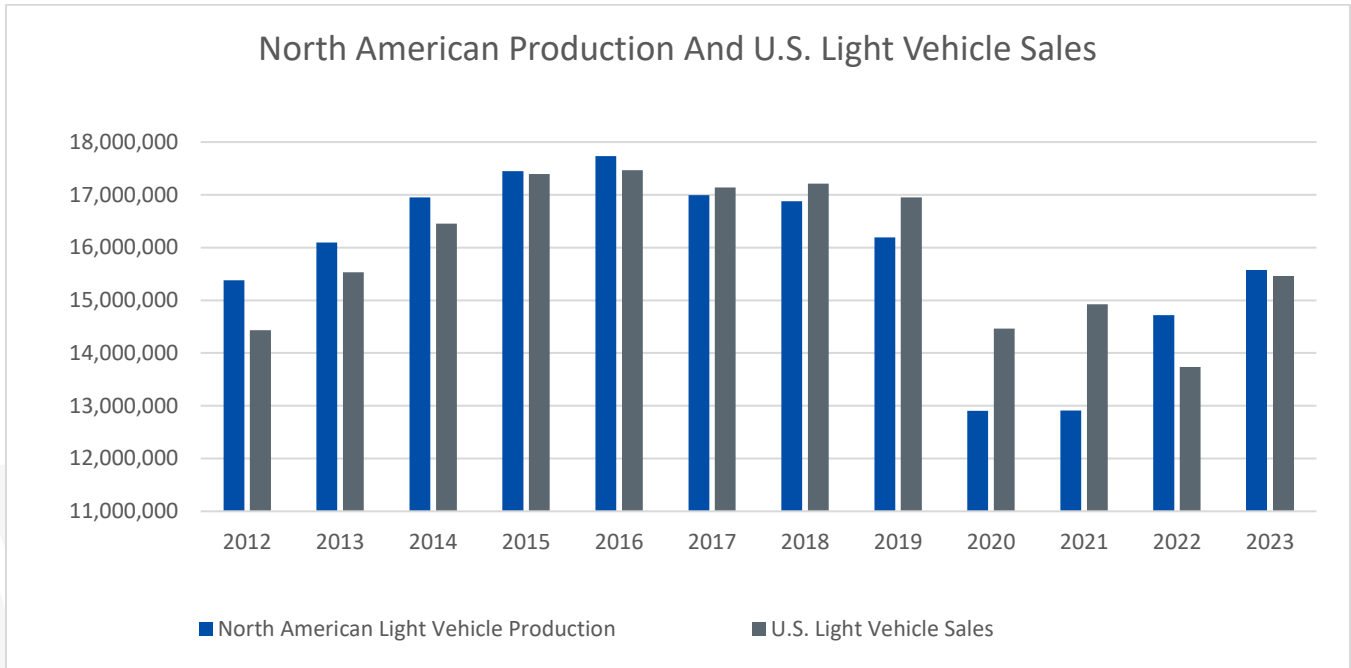
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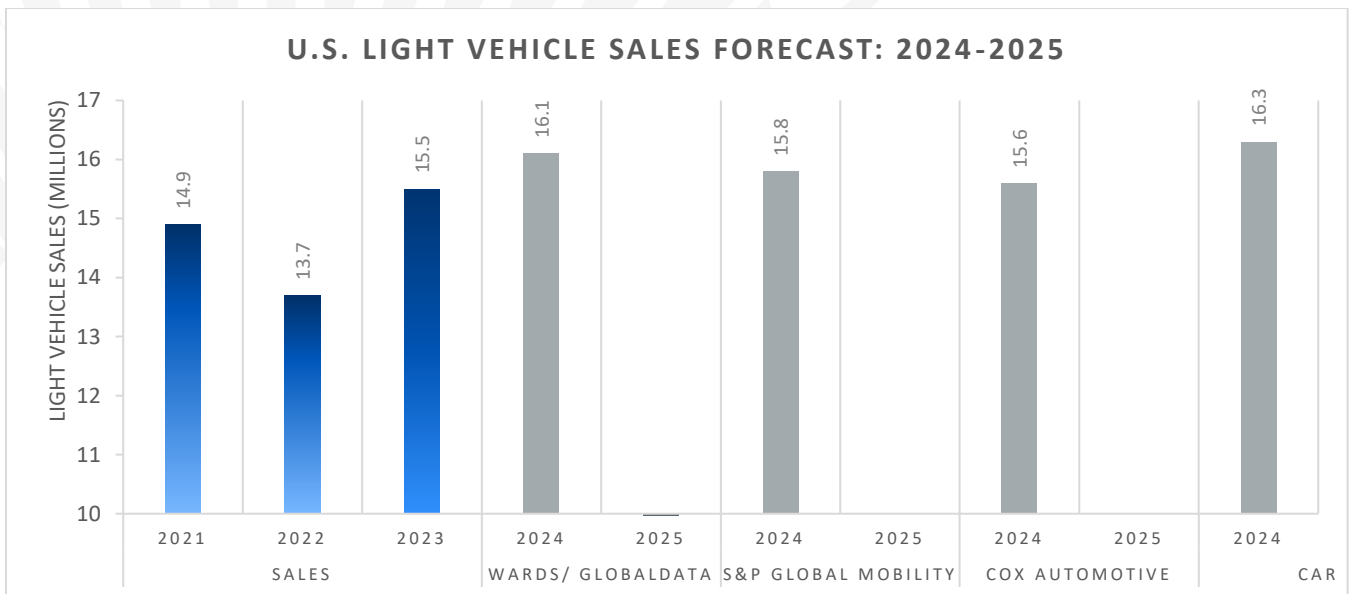
## Forecast Meter

### Sales & Production Summary and Forecast (Updated 1/25)

<b>2022-2023 Sales,<sup>1</sup> Extended Sales Forecast,<sup>2</sup> and Production Forecasts.<sup>3</sup></b>		
	<b>U.S. Sales &amp; Forecasts</b>	<b>North American Production</b>
<b>January '22</b>	991,156 (-10% YoY)	1,111,390 (-4% YoY)
<b>February '22</b>	1,052,524 (-11.8% YoY)	1,112,429 (-1% YoY)
<b>March '22</b>	1,246,336 (-22% YoY)	1,350,102 (-.1% YoY)
<b>April '22</b>	1,226,950 (-22% YoY)	1,177,851 (+8% YoY)
<b>May '22</b>	1,104,993 (-23.8% YoY)	1,215,000 (+20.4% YoY)
<b>June '22</b>	1,126,724 (-16.8% YoY)	1,259,515 (+13.8% YoY)
<b>July '22</b>	1,129,371 (-8.4% YoY)	977,485 (+7% YoY)
<b>August '22</b>	1,128,200 (-.7% YoY)	1,413,262 (+29 %)
<b>September '22</b>	1,112,245 (+3.9% YoY)	1,258,501 (+38% YoY)
<b>October '22</b>	1,151,774 (+13.8% YoY)	1,299,707 (+12.4% YoY)
<b>November '22</b>	1,120,067 (+6% YoY)	1,200,244 (+5.5% YoY)
<b>December '22</b>	1,263,268 (+4.9% YoY)	1,074,938 (+3.4% YoY)
<b>January '23</b>	1,033,002 (+4.2% YoY)	1,195,548 (+12.9% YoY)
<b>February '23</b>	1,136,332 (+8.7% YoY)	1,257,482 (+15% YoY)
<b>March '23</b>	1,365,966 (+8.6% YoY)	1,442,991 (+6.7% YoY)
<b>April '23</b>	1,347,159 (+13.1% YoY)	1,281,626 (+8.6% YoY)
<b>May '23</b>	1,362,019 (+18.0% YoY)	1,462,273 (+25.5% YoY)
<b>June '23</b>	1,370,976 (+19.9% YoY)	1,387,090 (+13.8% YoY)
<b>July '23</b>	1,299,199 (+19.9% YoY)	1,173,342 (+15.6 YoY)
<b>August '23</b>	1,328,526 (+12.8% YoY)	1,467,284 (+4.5% YoY)
<b>September '23</b>	1,331,952 (+13.9% YoY)	1,353,072 (+7.6% YoY)
<b>October '23</b>	1,200,286 (+5.7% YoY)	1,388,720 (+4.5% YoY)
<b>November '23</b>	1,218,647 (+7.3% YoY)	1,372,253 (+8.1 YoY)
<b>December '23</b>	1,433,266 (+17.3 YoY)	1,082,176 (-2.3% YoY)
<b>2022 Full Year</b>	13,734,203 (-8.1% YoY)	14,721,053 (+9.8% YoY) (U.S. 10,019,791)
<b>2023 Estimate</b>	15,457,447 (+12.4% YoY)	16,144,461 (+9.3% YoY) (U.S. 10,611,580)



## U.S. Light Vehicle Sales Outlook (Updated 1/25)



**Wards Intelligence Outlook (12/6)<sup>4</sup>:** “ January U.S. light-vehicle sales are tracking to a 15.4 million-unit seasonally adjusted annual rate, slightly lower than the 15.6 million posted in the final half of 2023. The results of this one month do not indicate a long-term downturn. For now, sales have settled into a generally steady pace. Demand is expected to pick up later in the year and total volume in 2024, based on the most recent

outlook from Wards Intelligence partner GlobalData, is pegged at 16.1 million units, a 3.8% gain from 2023's 15.5 million.

"As inventory continues to slowly rise from year-ago totals throughout the year, along with an expected increase in the mix of more affordable vehicles, sales on a seasonally adjusted basis will gradually rise from quarter to quarter.

"With the rise in inventory, average retail incentives should increase over the remainder of the year on a year-over-year basis, and if the Federal Reserve begins to lower interest rates at some point in 2024, monthly payments on financed vehicle purchases will become palatable to more consumers.

"Currently, WI expects the Q1 SAAR to total 15.6 million, followed by 16.0 million in Q2, 16.2 million in Q3 and 16.4 million in Q4. Looking ahead, GlobalData forecasts calendar-year 2025 sales at 16.6 million units.

"January's volume is forecast at 1.103 million units, 5.4% above like-2023. The daily selling rate of 44,120 over the month's 25 selling days is 1.1% above year-ago's 43,619 – 24 selling days."

## North American Production & Inventory Outlook (Updated 1/25)

**Wards Intelligence Inventory Outlook (1/25)**<sup>5</sup>: "Inventory came into the month at a 3-year high for December and is projected to rise 4.7% month-to-month at the end of January to 2.41 million units, 41% above like-2023. January days' supply is forecast at 55, up from December's 42 and year-ago's 39.

"The rise in inventory is higher than normal from December to January. There are some products, including electric vehicles, fullsize pickups and SUVs, plus individual models in other segments, that are starting to overfill dealer lots relative to demand.

"The excesses are leading to some Q1 production slowdowns. However, overall inventory remains lean relative to total demand, and production for the U.S. market is forecast to continue growing based on year-over-year comparisons."

**S&P Global Mobility Outlook (1/25)**<sup>6</sup>: "North America: The outlook for North America light vehicle production was increased by 153,000 units and by 155,000 units for 2024 and 2025, respectively (and increased by 212,000 units for 2026). The North America light vehicle production outlook for 2024 was revised higher by 1.0% to 15.82 million units on the resiliency of vehicle demand as US sales are expected to increase 2.2% to 15.94 million units. The short-term forecast moves increasingly towards being derived from market fundamentals with the wide array of issues that have hampered production in recent years dissipating. As a result, the forecast is built around a new, lower level of inventory that works to maintain vehicle stocks at around 2.5 million units or a 45-day supply compared to history that would have inventory between 3.0 to 4.0-million units in a US market ranging from 16.0 to 17.5-million units selling rates. With the UAW strikes and a strong general close to sales for 2023, inventories have been reduced somewhat, bolstering production planning for 2024. Locally produced Detroit 3 inventory in December was at a roughly 61-day supply while Asian and German locally produced inventory was at a sharply lower 29 and 32-day supply, respectively, affording them a restocking profile for 2024. The production outlook for 2025 was boosted by 1.0% to 16.18 million units on an improved demand outlook and product launch activity.

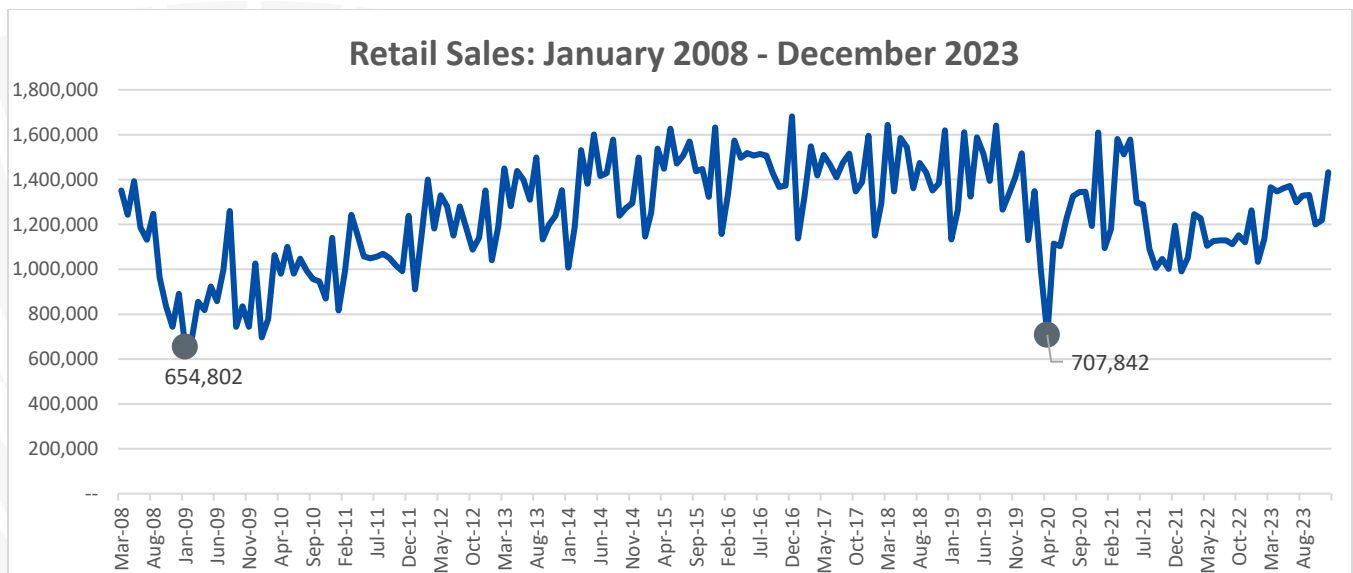
**Wards Intelligence Production Outlook (1/25)**<sup>7</sup>: "The first-quarter 2024 outlook has been pared by 36,000 units to a total of 4.143 million units, 3.3% above like-2023's 4.012 million."

## Market Meter

### U.S. Light Vehicle Sales (Updated 1/5)

#### **Monthly Sales (Updated 1/5)**

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.



#### **December Sales (Updated 1/5)**

**WardsIntelligence**<sup>8</sup>: “U.S. light-vehicle sales ended 2023 with December results slightly higher than expected, as increased availability, more discounting and a rebound in fleet deliveries lifted the seasonally adjusted annual rate to 15.8 million units.

“December’s SAAR was the highest since July’s 15.9 million units and well above like-2022’s 13.5 million.

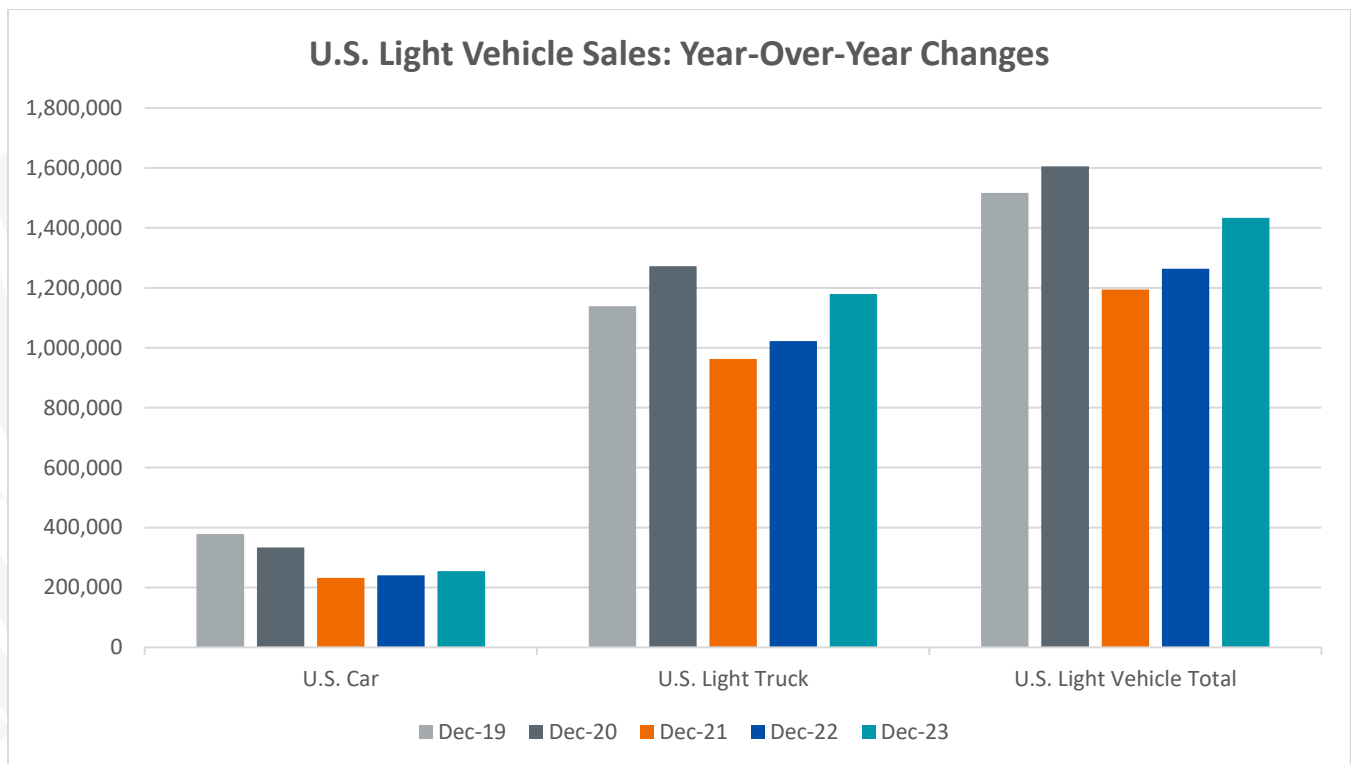
“Raw volume in December totaled 1.433 million units, up 13.0% year-over-year, while the daily selling rate of 55,126 over the month’s 26 selling days was 17.3% above like-2022’s 46,996 – 27 selling days.

“Sales in 2023 totaled 15.46 million units, highest since 16.96 million in 2019 and 12.4% above inventory-depleted 2022’s 13.75 million, which was an 11-year low. Fourth-quarter 2023 totaled a 15.5 million-unit SAAR, down from Q3’s 15.6 million, but significantly above Q4-2022’s 14.1 million. Volume in Q4 totaled 3.85 million units, up 7.3% from like-2022’s 3.59 million.

“In 2023, light-truck sales increased 13.5% from 2022 to 12.4 million units. Truck penetration hit a new high of 80.0% in 2023, beating 2022’s 79.2%. Truck penetration in December rose to an any-month record 82.3%, beating the previous high of 80.9% in same-month 2022.

“Trucks deliveries in 2023 were led by a 31.9% increase in CUVs, which also posted record penetration of 47.9%, capped by Q4 share of 51%.

“Accordingly, car share fell to its lowest – 20.0% - calendar-year total, even though volume increased 8.3% to 3.1 million units.”

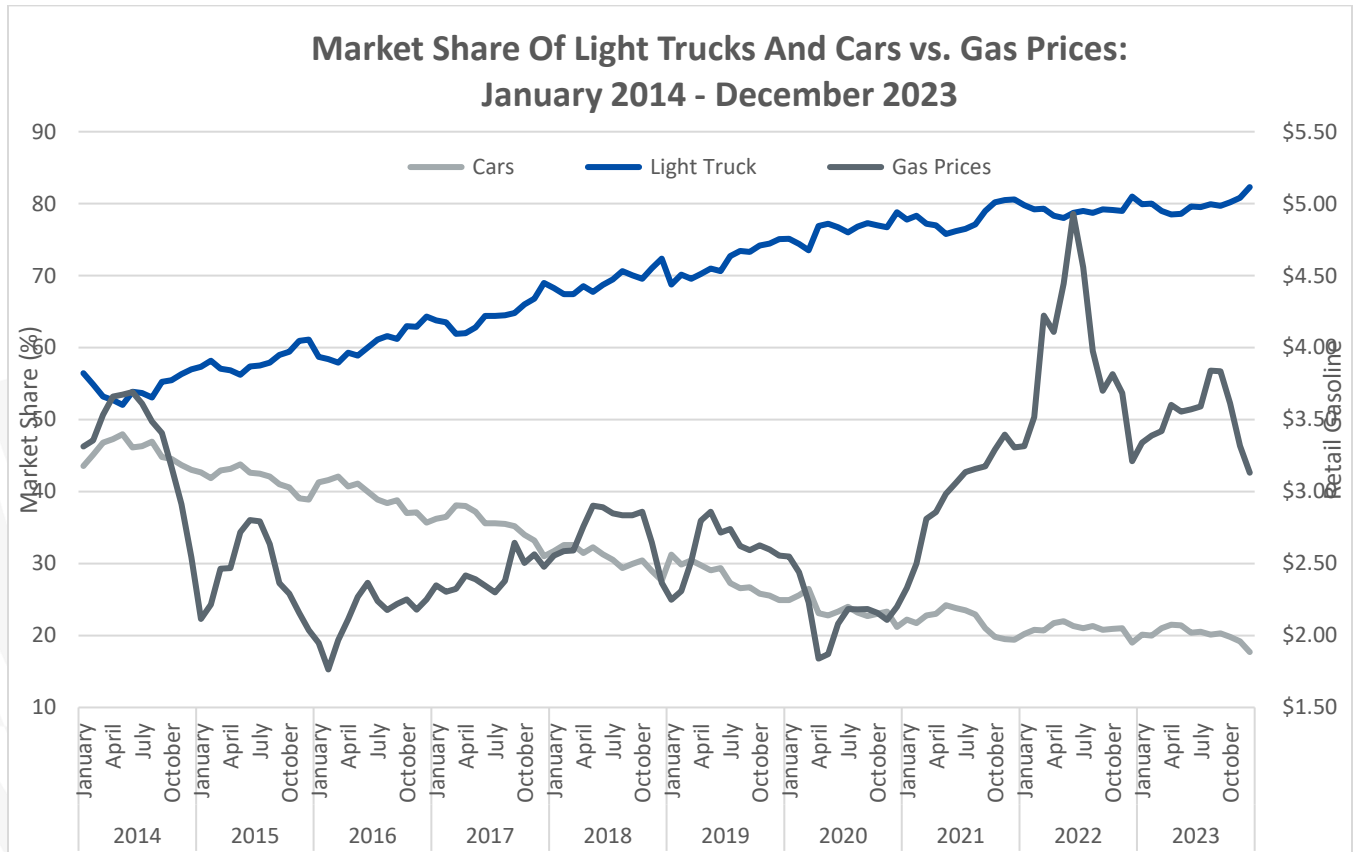


## Segments vs. Gas Prices (Updated 1/5)

**Monthly Sales For December:** Light trucks accounted for 82.3 percent of sales in December, up slightly from the market share a year ago. Compared to the same period in 2022, sales of cars are down by 14,000 units, and down more than 123,000 from December 2019, when cars comprised 25% of the market as opposed to the 17.3 percent of the market passenger cars have now.

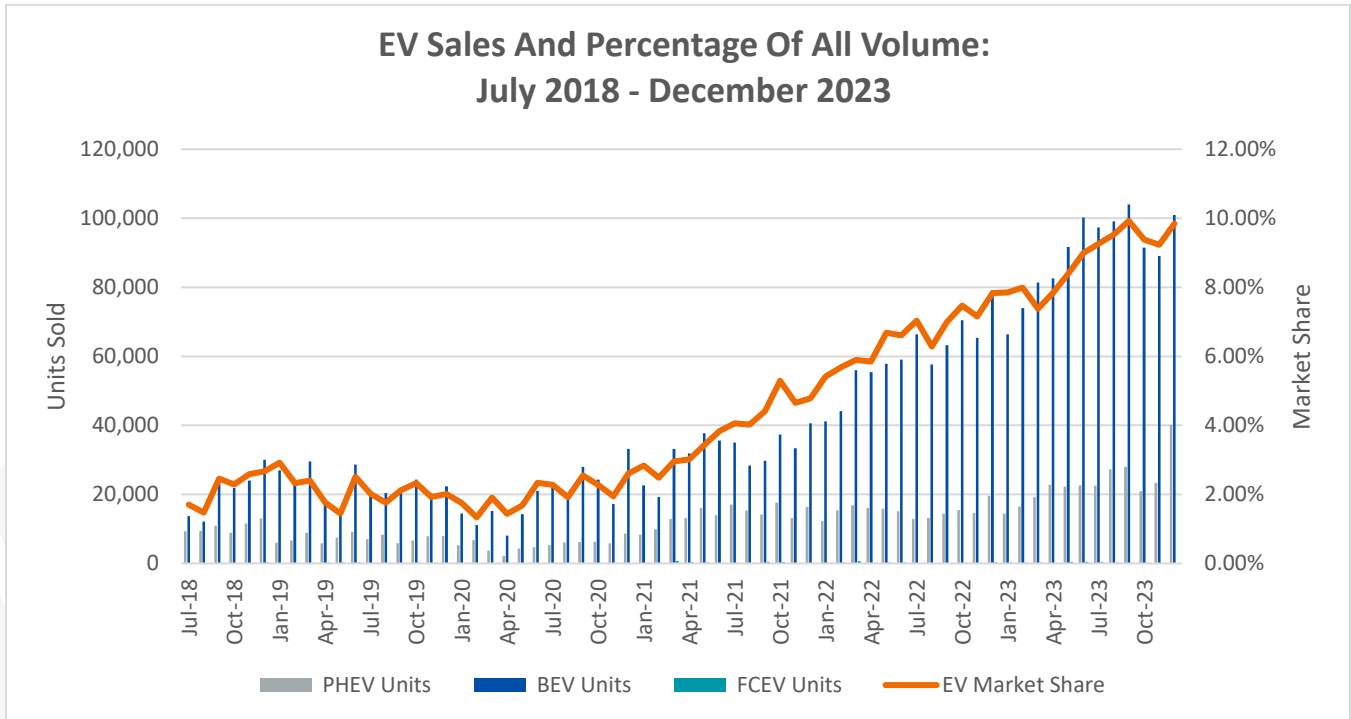
**Historic Perspective:** The upward trend in the popularity of light trucks over cars has been steady since 2013, when only 2% of annual market share separated the two segments...<sup>9</sup> and gas was over \$3.00...<sup>10</sup> a gallon. As fuel prices dropped below the \$3.00 mark in mid-September 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...<sup>11</sup>



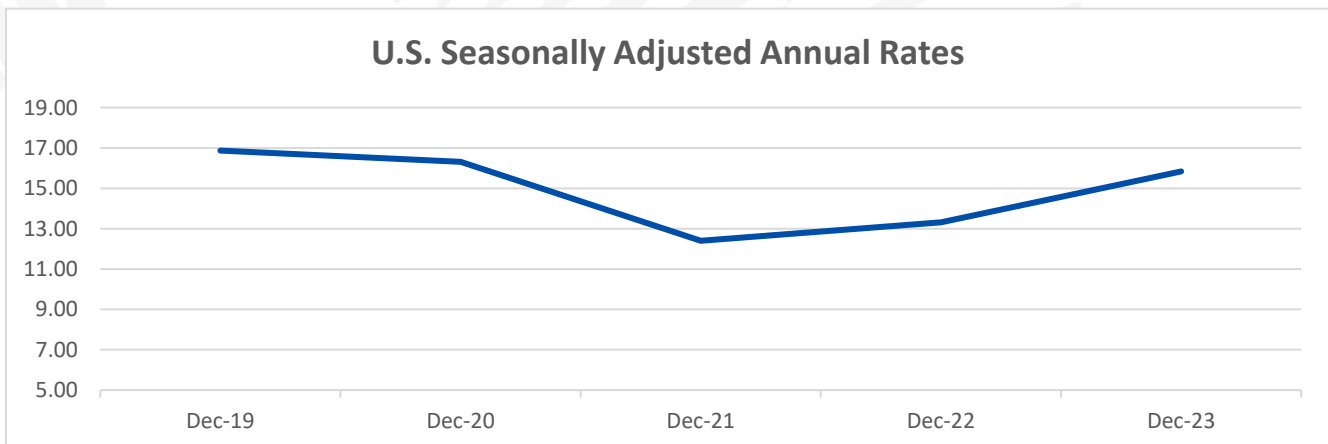
## EV Powertrain Sales (Updated 1/5)

Sales of electric vehicles (BEV, PHEV, & Fuel Cell) accounted for 9.8 percent of total vehicle sales in December 2023 (141,103), per Wards estimates. Market share increased 0.6 percentage points (pp) from November 2023. December's EV market share is up 2.0 pp from a year ago. Sales of battery electric vehicles led the way for EVs, accounting for 7.0 percent of total sales, up 0.78 pp from December 2022. Plug-in hybrids accounted for 2.8 percent, up 1.2 pp from the same time last year...<sup>12</sup>



## Seasonally Adjusted Annual Rates (Updated 1/5)

**WardsIntelligence<sup>13</sup>:** “U.S. light-vehicle sales ended 2023 with December results slightly higher than expected, as increased availability, more discounting and a rebound in fleet deliveries lifted the seasonally adjusted annual rate to 15.8 million units. December’s SAAR was the highest since July’s 15.9 million units and well above like-2022’s 13.5 million.





## Average Transaction Price (Updated 1/25)

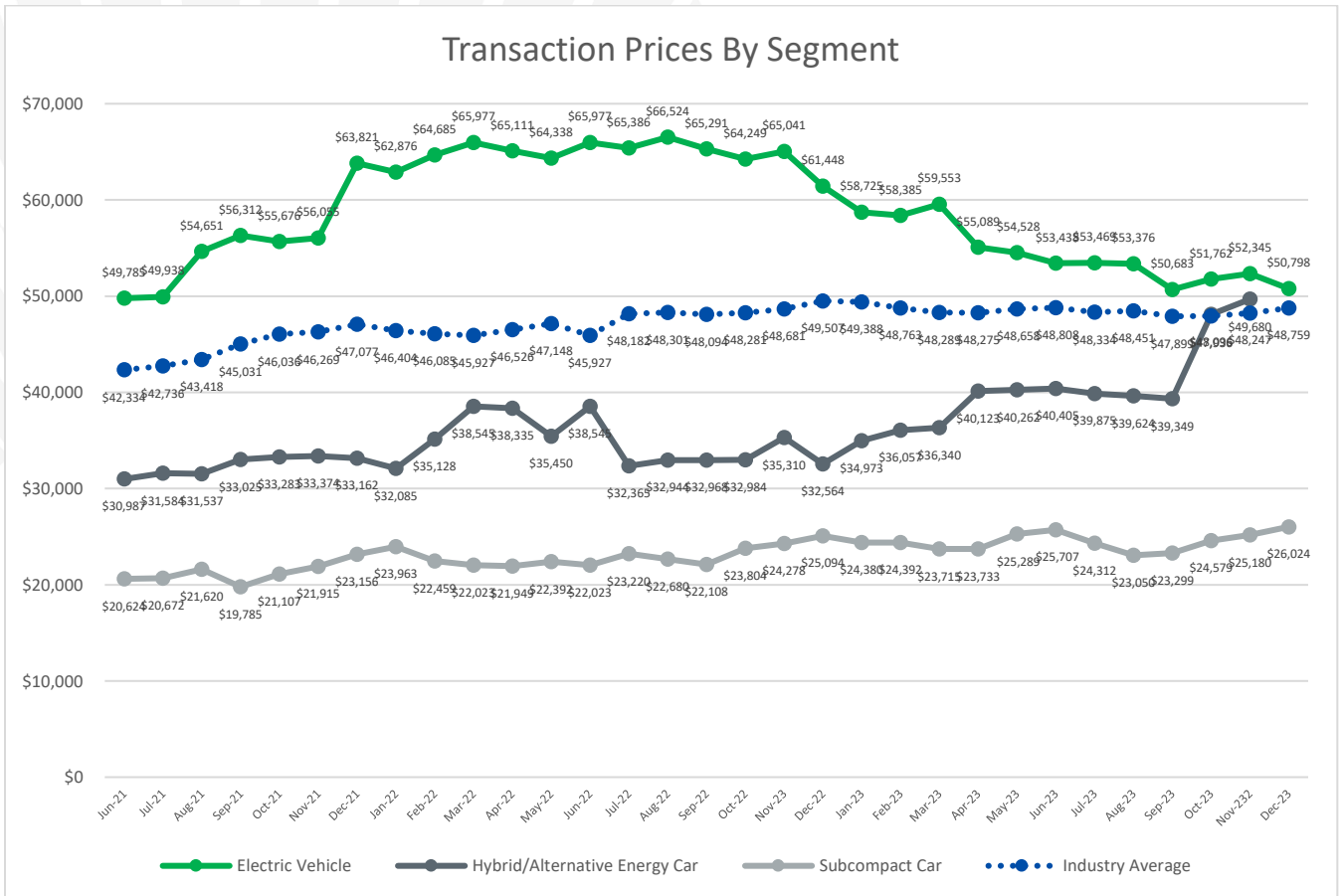
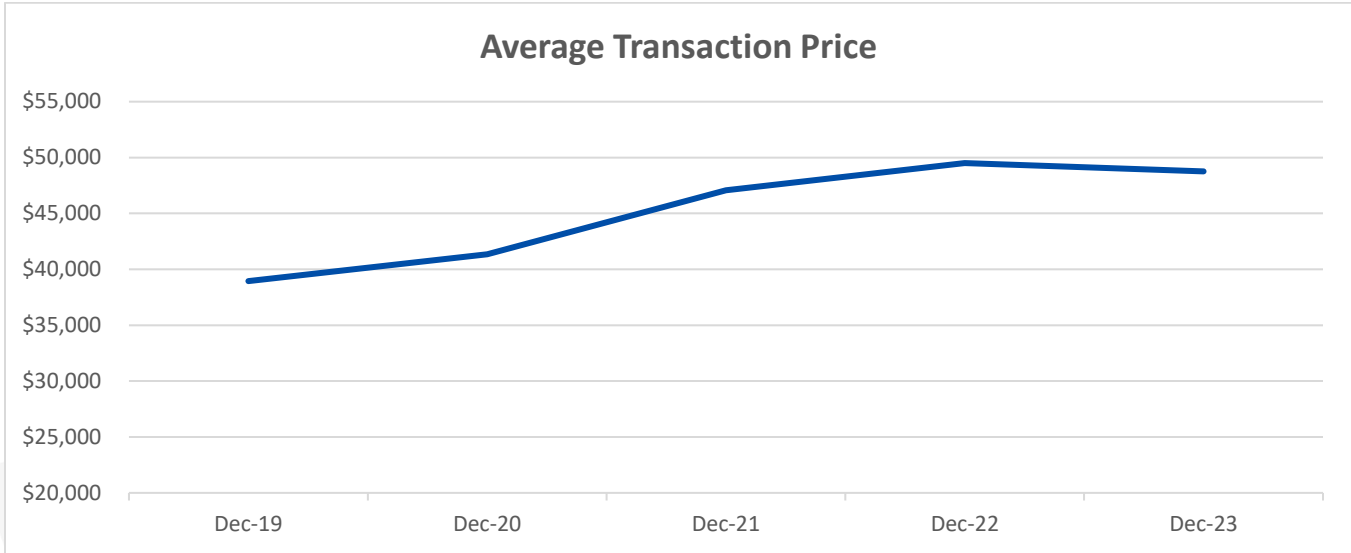
**Kelley Blue Book (December) (Updated 1/25)**<sup>14</sup>: “The U.S. new-vehicle average transaction price in December 2023 was \$48,759, an increase of 1.3% month over month but down 2.4% year over year, according to data released today from Kelley Blue Book, a Cox Automotive company. December marks the fourth consecutive month that new-vehicle transaction prices were lower year over year, a unique milestone for the industry, which typically sees year-over-year increases.

“When we look at price strength, the pandemic created a seller's market in which new vehicles were transacting above manufacturers' suggested retail price in 2022,” said Michelle Krebs, executive analyst for Cox Automotive. “That market is all but gone now, as higher inventory has led to higher incentives and discounts – lower margins for dealers – and vehicles are now typically selling for under MSRP. The shift from a seller's market to a buyer's market is well underway.”

“New-vehicle sales incentives climbed for the second month in a row in December after retreating slightly in October, reaching 5.5% of the average transaction price (ATP) for the first time since August 2021. For comparison, one year ago, incentives were 2.7% of ATP. In December, incentives for luxury cars and electric vehicles were higher than 8%, well above the industry average. Conversely, full-size SUVs, minivans and small/mid-size pickups had some of the smallest incentives last month, all well below 3%.

“The average price paid for a new electric vehicle in December 2023 was \$50,798, down from a revised \$52,362 in November and supported by incentive levels well above the industry average. In December, EV incentives reached their highest point of 2023 at 10.6% of ATP. A year ago, EV incentives were less than 2% of ATP. Thanks mostly to significant price cuts from Tesla, average EV prices in December were down 17.7% from January 2023. According to estimates by Kelley Blue Book, EV sales in the U.S. reached a record 1.2 million units in 2023, up 46.3% from 2022.”

**J.D. Power (Updated 1/5)**<sup>15</sup>: “As inventory improves, the average new-vehicle retail transaction price is declining. Transaction prices in December are trending towards \$46,055, down \$1,274—or 2.7%—from December 2022. . . Manufacturer discounts in December are expected to be up \$145 from November and have materially increased from a year ago when incentives were at record lows. The average incentive spend per vehicle has grown 90.7% from December 2022 and is currently on track to reach \$2,458. Expressed as a percentage of MSRP, incentive spending is currently at 4.9%, an increase of 2.3 percentage points from December 2022.”

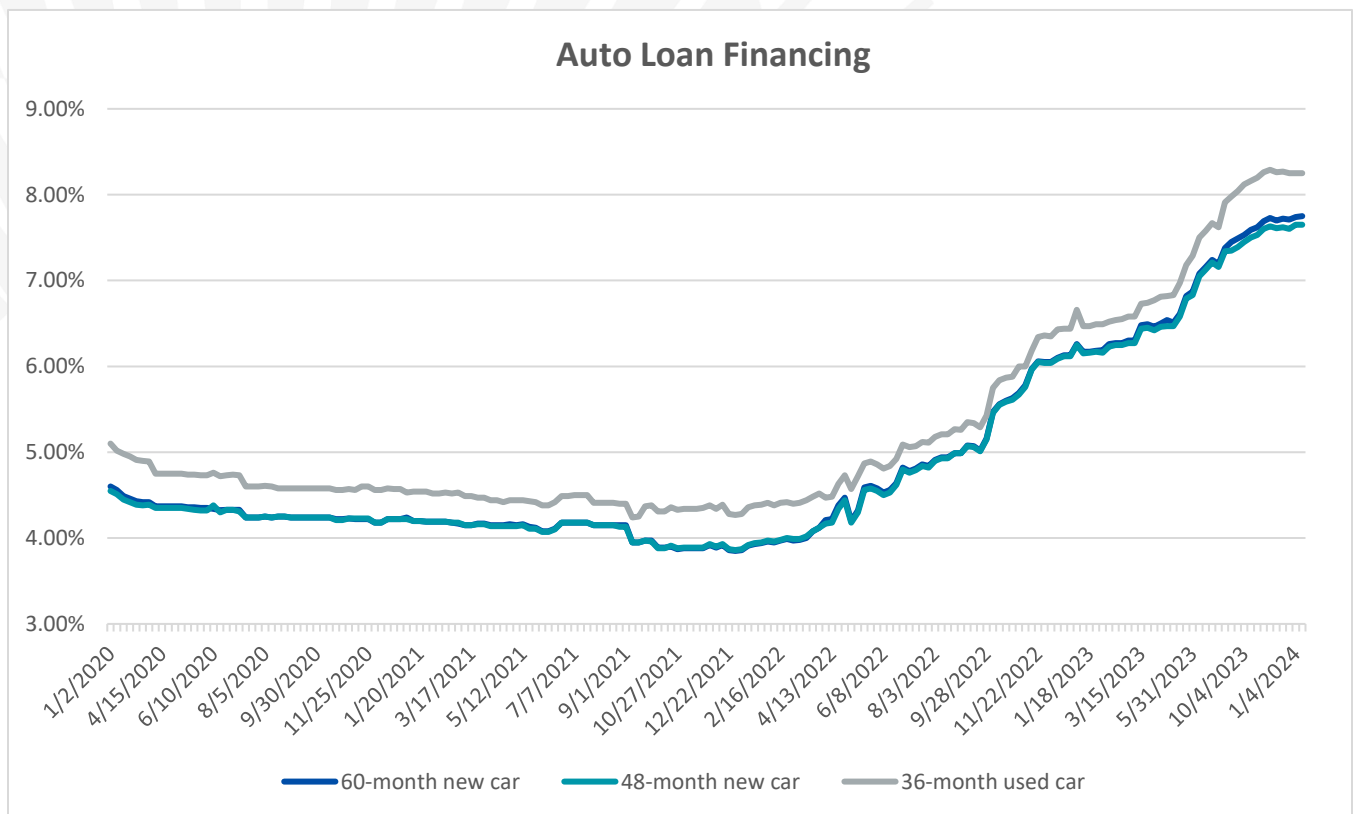


## Auto Loan Financing (Updated 1/25)

**Interest Rates (updated 1/25):** Interest rates continued their steady increase on the 60-month, 48-month and 36-month used car loans. Rates now stand at 7.75%, 7.65%, and 8.25%, respectively. Since the beginning of 2020, 60-month rates are up 3.15 pp, and are up 1.58 pp since the same time a year ago...<sup>16</sup>

**JD Power (1/5)<sup>17</sup>:** “Despite falling transaction prices, higher interest rates and reduced trade equity are contributing to the escalation of monthly loan installments. The average monthly finance payment in December is on pace to be \$739, up \$9 from December 2022. That translates to a 1.1% increase in monthly payments from a year ago. The average interest rate for new-vehicle loans is expected to be 6.9%, an increase of 46 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%
1/18/2023	6.17%	6.16%	6.47%
1/4/2024	7.74%	7.65%	8.25%
1/17/2024	7.75%	7.65%	8.25%
Two Week Change	0.01%	0.05%	0.00%
Change since 1/3/20	3.15%	3.10%	3.15%
One Year Change	1.58%	1.40%	1.59%

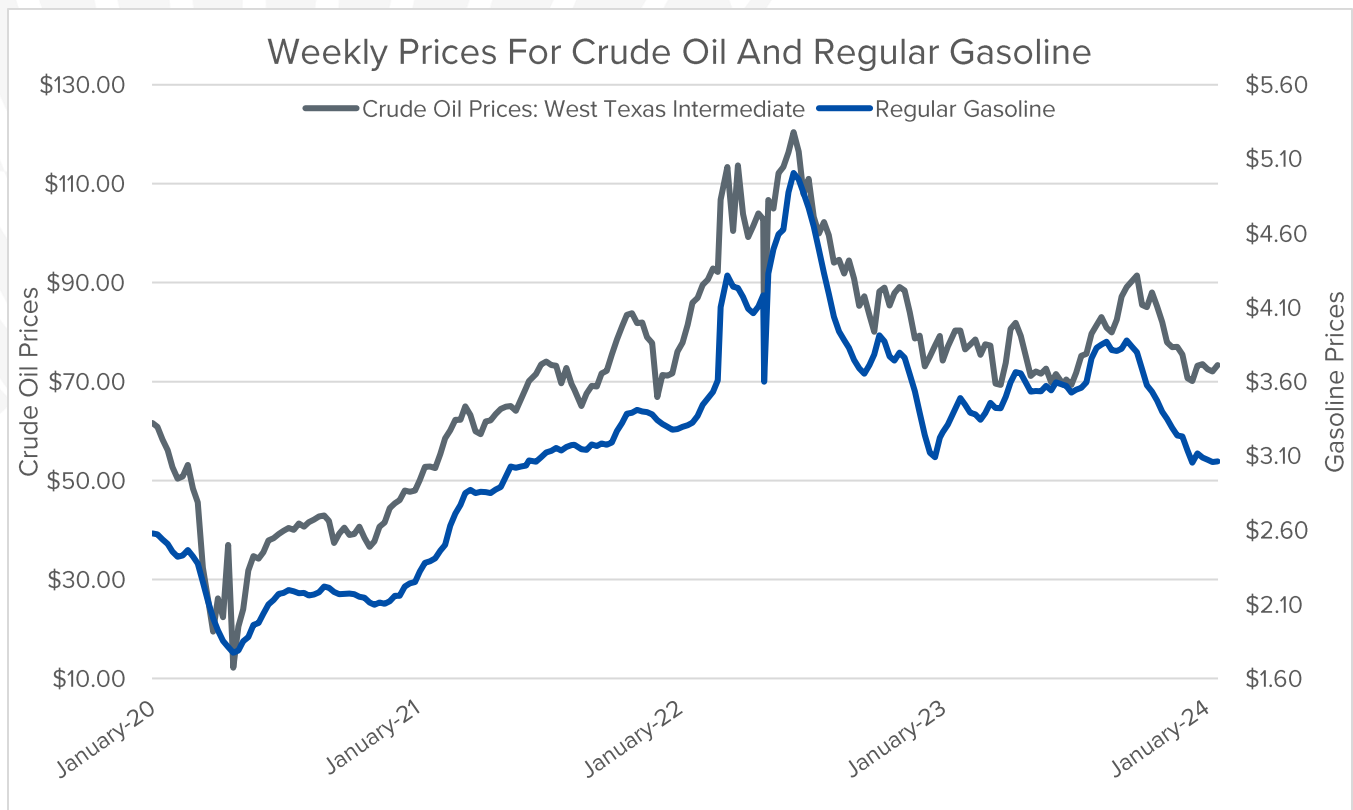


## Crude Oil and Gas Prices (Updated 1/25)

**Gas And Oil Remain Elevated (12/6):** Oil prices, as benchmarked at West Texas Intermediate remained mostly flat at \$73 a barrel. Since election day 2020, oil prices are \$37 a barrel higher. Gas prices are flat from last week. Gas is 19% higher than the beginning of 2020.<sup>18</sup>

**EIA Outlook For Oil (1/5):**<sup>19</sup> “The United States will remain a net importer of crude oil next year, averaging about 2.2 million barrels per day (b/d). However, net crude oil imports will decline slightly from 2023. Growing U.S. crude oil production continues to support increased crude oil exports, which averaged more than 4.0 million b/d in 2023 through September. Although some U.S. refiners have added capacity to process additional light and sweet crude oil, such as the ExxonMobil Beaumont expansion, demand for U.S.-produced crude oil increasingly comes from refiners in Europe and Asia. Growth in refinery processing from overseas refiners means the growth in U.S. crude oil production in 2024 will mostly be exported, increasing net U.S. petroleum exports.”

**EIA Outlook For Gasoline (1/5)**<sup>20</sup>: “We expect more gasoline in U.S. inventories to contribute to U.S. gasoline crack spreads falling by 15 cents/gal in 2024 compared with 2023. Lower crack spreads reduce our forecast of the annual average U.S. retail gasoline price from more than \$3.50/gal this year to less than \$3.40/gal in 2024.”



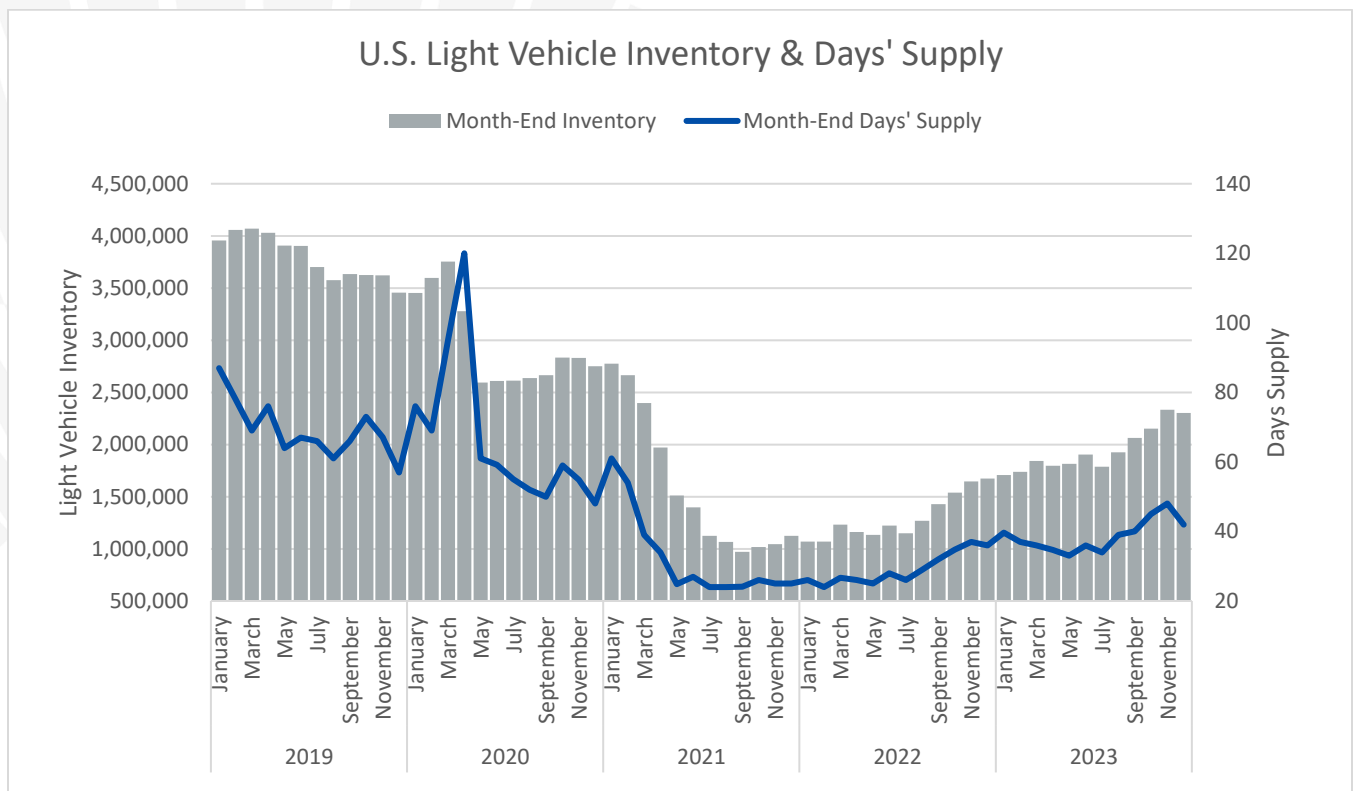
## Production Meter

### U.S. Light Vehicle Inventory and Days' Supply (Updated 1/5)

**WardsIntelligence Inventory Update (10/6)**<sup>21</sup>: “In another sign industry trends are returning to normal, U.S. light-vehicle inventory declined month-to-month to end 2023 at 2.30 million units.

“December inventory, despite falling 1.3% from November, was up 37.8% from same-month 2022’s 1.64 million units and was the highest December total since 2.75 million in 2020. The total was well below the 3.68 million units averaged in the five years through 2019.

“December days’ supply totaled 42, down from November’s 48 but above like-2022’s 36. The total was the highest for the month since 48 in 2020 – the 5-year pre-pandemic average for December was 60. Inventory is expected to rise in January from the prior month.”



### North American Production (Updated 1/25)

**Wards Intelligence**<sup>22</sup>: “North America production ended 2023 at a 4-year high, despite output in December posting the first year-over-year decline in 22 months.

Including end-of-year estimates for most medium- and heavy-duty trucks, as well as some light-vehicle manufacturers, production in 2023 totaled 16.14 million units, highest since 16.80 million in 2019, and 9.3% above the prior year’s 14.76 million.

“Fourth-quarter production totaled 3.846 million units, 3.8% above Q4-2022’s 3.706 million. However, the period, thanks to an underbuild in December, finished 27,800 units below month-ago’s expectations for the period.

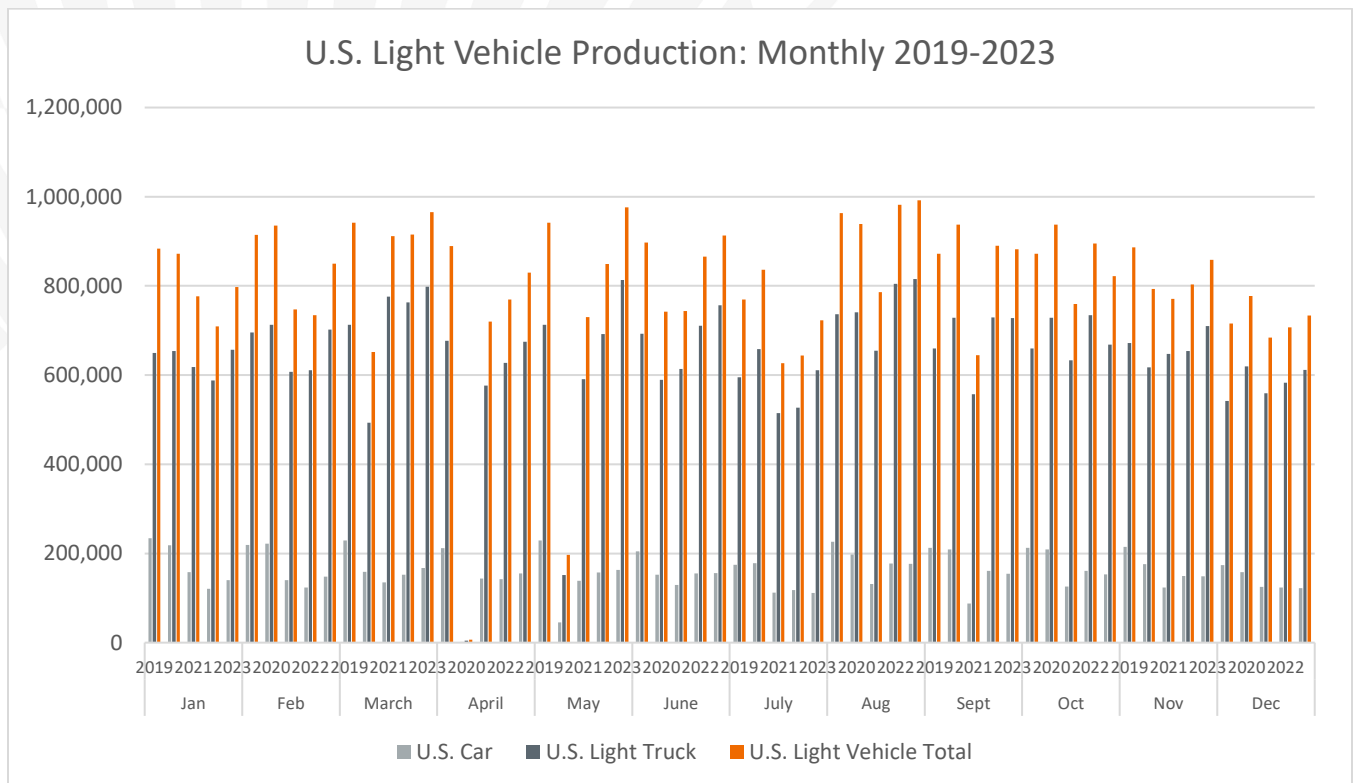
“December’s output, largely because of a shortfall from expectations at General Motors, and to a lesser extent, Toyota and Volkswagen, finished 2.3% below like-2022, totaling 1.082 million units, vs. 1.108 million. It was the first time since a 0.2% drop in February 2022 that monthly production fell from the year-ago period.

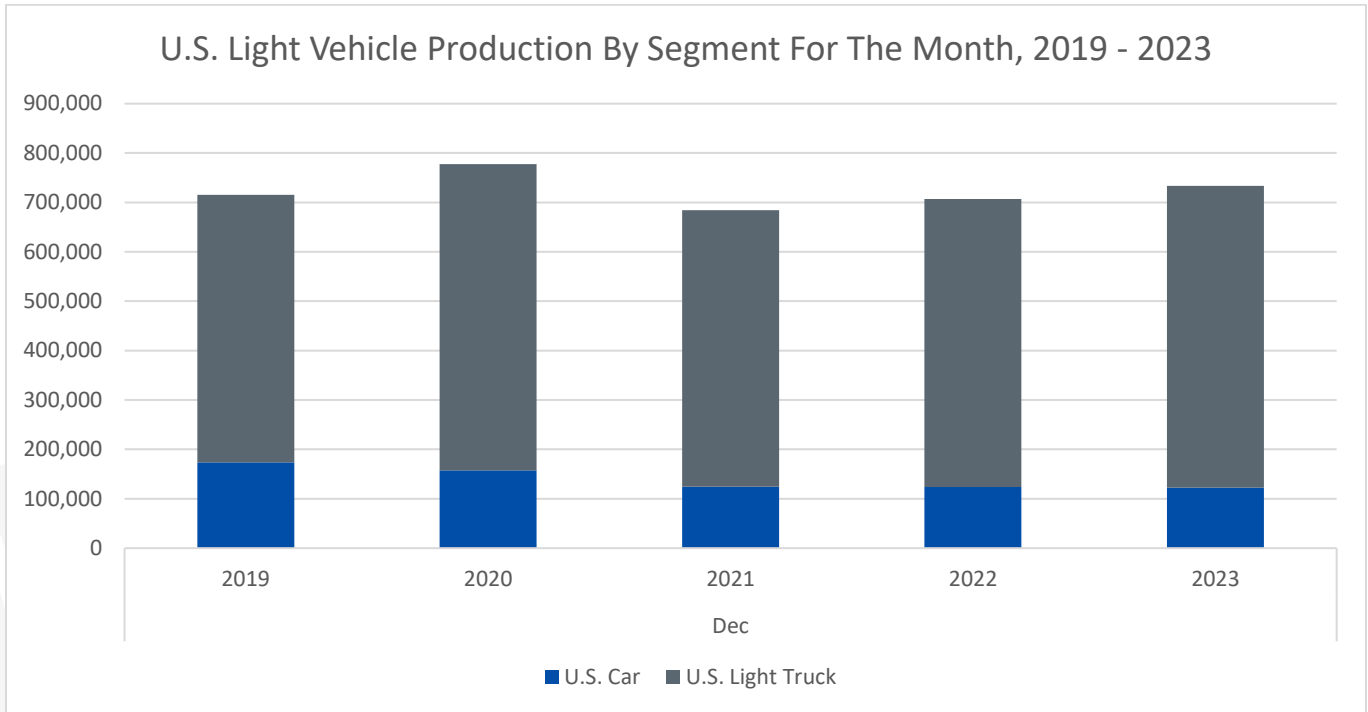
“Excluding medium- and heavy-duty trucks, light-vehicle production in 2023 totaled 15.56 million units, 9.5% above 2022’s 14.22 million. Fourth-quarter 2023 totaled 3.708 million, 4.1% above Q4-2022’s 3.561 million.”

## U.S. Light Vehicle Production (Updated 1/25)

### Monthly Production (Updated 1/25)

U.S. Light vehicle production for December 2023 decreased month-over-month by 14.5 percent, totaling 733,827 vehicles (122,321 cars, 611,506 light trucks), year-over-year, production is up 0.4 percent from 2022.<sup>23</sup>



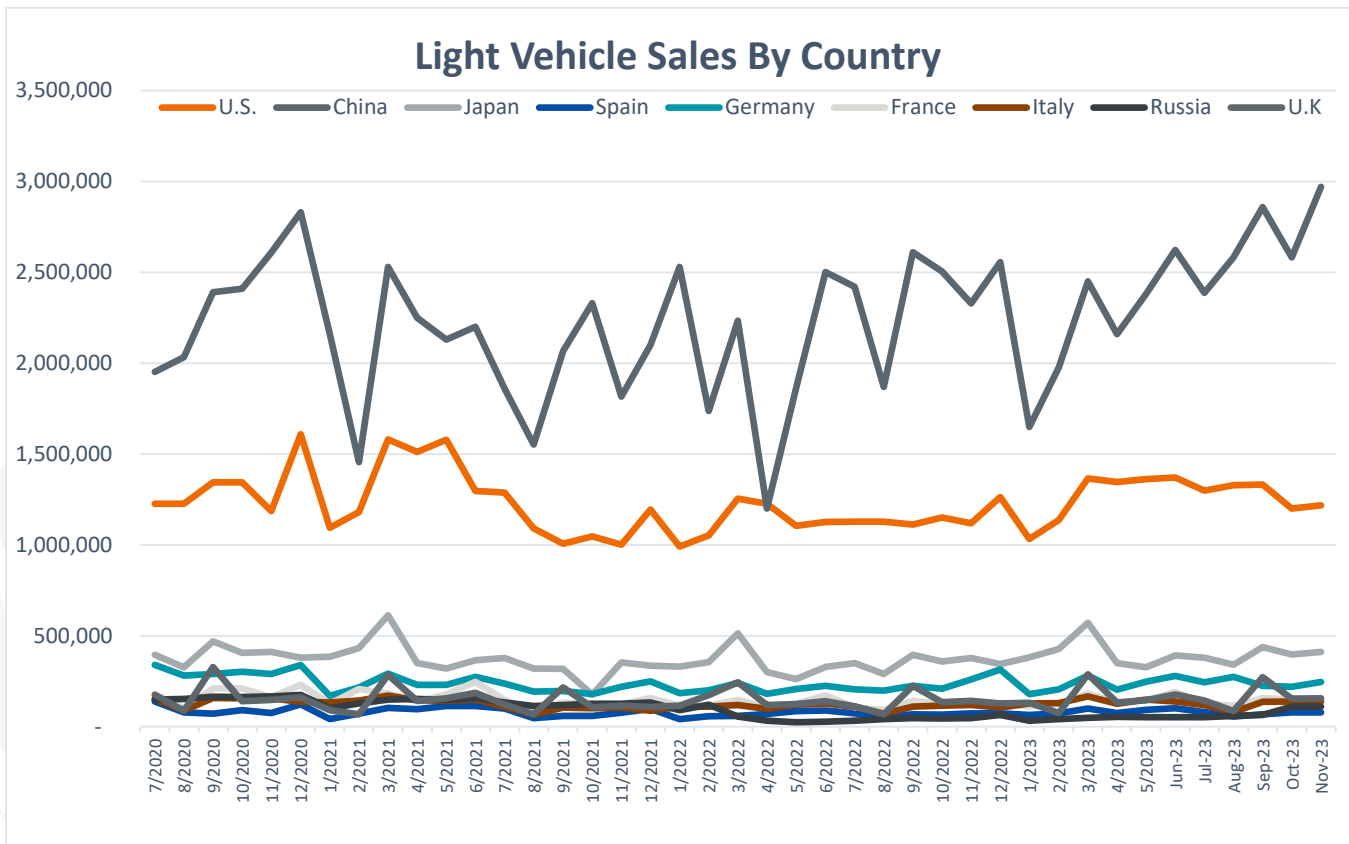


## Global Meter

### Global Light Vehicle Sales (Updated 1/5)

**Wards Intelligence**<sup>24</sup>: “Global sales are tracking to a 4-year high in 2023, as November deliveries of light vehicles and medium-/heavy-duty trucks rose 12.0% year-over-year, the 10th straight gain and largest since May’s 20.4% increase.

November’s total-vehicle volume of 8.11 million units lifted year-to-date 2023 volume to 83.67 million units, 10.7% above like-2022’s 75.58 million. Sales in December were expected to have easily out-performed the year-ago total of 7.33 million units, meaning calendar-year 2023 volume topped 90 million for the first time since 2019. December results for most markets will be reported by the end of January.



## Global Light Vehicle Production (Updated 1/25)

**S&P Global Mobility Forecast (1/25)**<sup>25</sup>: “After a year where the global auto industry finally reached (and exceeded) pre-pandemic volumes, 2024 is shaping up to be something of a more transitional year. With many regions having already rebuilt inventories, we continue to see a general production outlook that is reliant on a more traditional demand-driven model in the context of a still-elevated interest rate environment and vehicle affordability concerns, among other influences. As a result, the state of consumer demand will remain a key consideration and will be monitored very closely. Further, while we continue to forecast an industry with average inventory levels generally below what was reported pre-pandemic, this year could put that to the test in several markets given underlying demand fundamentals playing a greater role in directly supporting vehicle production. The January 2024 forecast update reflects mostly modest upgrades in the near-term on a mix of regional impacts including increases for Greater China given ongoing strength in export activity and improving domestic sales and North America on a mix of residual inventory restocking and improved demand fundamentals. These upgrades were only partially offset by a noteworthy reduction production outlook for Japan in the extreme near-term on lost production at Daihatsu due to vehicle certification issues. The more noteworthy regional adjustments with the latest forecast update are detailed below:

**“Europe:** The outlook for Europe light vehicle production was increased by 3,000 units and by 81,000 units for 2024 and 2025, respectively (and increased by 158,000 units for 2026). The European production outlook for 2024 was only modestly upgraded as production in Q4-2023 finished nearly as strong as Q1 and Q2. The slight positive adjustments for 2024 are primarily related to Russia where we show grey market imports being



substituted by local kit assembly and production by domestic automakers. The European sales outlook for 2024 remains marginally positive, provided that automaker pricing policies will succeed in sustaining demand. Nevertheless, production is expected to decline overall as inventory restock will no longer boost output as was the case over the last two years. We show production going down by 2% in 2024 after an increase of 13% in 2023. Underneath the overall stability of the forecast, we have re-balanced volumes from passenger cars to light commercial vehicles, and from electric to internal combustion vehicles. From an automaker standpoint, Volkswagen was downgraded while Renault and BMW have been raised.

**“Greater China:** The outlook for Greater China light vehicle production was increased by 341,000 units and by 524,000 for 2024 and 2025, respectively (and increased by 308,000 units for 2026). Supported by continued strong export activity, government incentives and rebounding domestic demand, production finished strong in 2023. Last quarter, production grew nearly 20% year-over-year and reached over 8.6 million units, representing record results relative to the prior record set in Q4-2017. We expect continued robust export activity in the near-term. According to the CPCA, over 3.5 million passenger vehicles were exported in 2023, representing growth of over 50%. Further, driven by recovering demand and strong price incentives, private vehicle consumption started to rebound further starting in September 2023. According to the CPCA, 2023 passenger car retail sales rebounded by 5.6% year-over-year after continued solid growth in November and December. This strong momentum helped reduce the dealership inventory index to 1.2 in December. Given expectations for continued fiscal and monetary policy support to serve as a hedge against ongoing real estate risk and support GDP growth and vehicle demand, the production outlook for 2025 was also boosted and now represents growth of 4.1% relative to 2024.

**“Japan/Korea:** Japan production volumes were reduced by 231,000 units and increased by 37,000 units for 2024 and 2025, respectively. For 2024, the sizeable reduction in output is driven by the negative impact from issues with Daihatsu’s vehicle certification process which has caused production downtime at all four of Daihatsu’s Japan plants starting in late December 2023. Our current expectation is that Daihatsu will resume production in February, with full ramp-up by June 2024, resulting in roughly 300,000 units in lost volume for the company for the year. Note, the lost production will be partially offset by gains at Suzuki, Honda and Nissan/Mitsubishi as the companies are expected to benefit somewhat from Daihatsu’s production challenges in the near-term. With regard to the impact from the Noto Peninsula earthquake, we have not included any vehicle production halts in Japan in the January forecast round. Even though the Hokuriku region (centered on the Noto Peninsula) has a concentration of component production, we understand there were no major vehicle production cuts due to component shortages supplied by the region thus far. Full-year 2024 production in South Korea was increased by 65,000 units. The strong recovery that occurred last year decreased in the second half of the year. It is expected that the overall decline in production in 2024 will be somewhat offset (compared to the previous forecast) as exports focused on the United States continue to support production in the near-term. In the longer-term, output fluctuates only modestly and remains largely unchanged overall.

**“North America:** The outlook for North America light vehicle production was increased by 153,000 units and by 155,000 units for 2024 and 2025, respectively (and increased by 212,000 units for 2026). The North America light vehicle production outlook for 2024 was revised higher by 1.0% to 15.82 million units on the resiliency of vehicle demand as US sales are expected to increase 2.2% to 15.94 million units. The short-term forecast moves increasingly towards being derived from market fundamentals with the wide array of issues that have hampered production in recent years dissipating. As a result, the forecast is built around a new, lower level of inventory that works to maintain vehicle stocks at around 2.5 million units or a 45-day supply compared to history that would have inventory between 3.0 to 4.0-million units in a US market ranging from 16.0 to 17.5-million units selling rates. With the UAW strikes and a strong general close to sales for 2023, inventories have been reduced somewhat, bolstering production planning for 2024. Locally produced Detroit

3 inventory in December was at a roughly 61-day supply while Asian and German locally produced inventory was at a sharply lower 29 and 32-day supply, respectively, affording them a restocking profile for 2024. The production outlook for 2025 was boosted by 1.0% to 16.18 million units on an improved demand outlook and product launch activity.

**“South America:** The outlook for South America light vehicle production was reduced by 26,000 units and by 76,000 units for 2024 and 2025, respectively (and reduced by 29,000 units for 2026). The outlook for 2024 was downgraded slightly, driven primarily by reduced demand expectations for Argentina. Going forward, we will be closely watching the impact (potentially disruptive) of the newly elected administration in Argentina. The overall production outlook and forecast reductions for the remainder of the short-term horizon largely align with a somewhat reduced demand outlook for the broader region. With regard to the change in political leadership in Argentina, the current expectation is that some of the more disruptive policies announced by president-elect Milei may not be easily and/or quickly implemented. As a result, significant changes to the production outlook have not been reflected at this time.

**“South Asia:** The outlook for South Asia light vehicle production was reduced by 46,000 units and by 5,000 units for 2024 and 2025, respectively (and increased by 15,000 units for 2026). In the near-term, output for the region was modestly downgraded for 2024 on production adjustments to reflect a bit more demand and order book variability influenced by lingering vehicle pricing and general inflation pressures, among other factors. There were only marginal production revisions for 2024 and 2025 with production upgrades for India offset by weakness elsewhere. With regard to the ASEAN market, for 2024 and 2025 the outlook for the market is largely impacted by a somewhat deteriorating outlook for Indonesia and Thailand amid economic headwinds which is only partially offset by stronger performance for Malaysia in the near-term.”

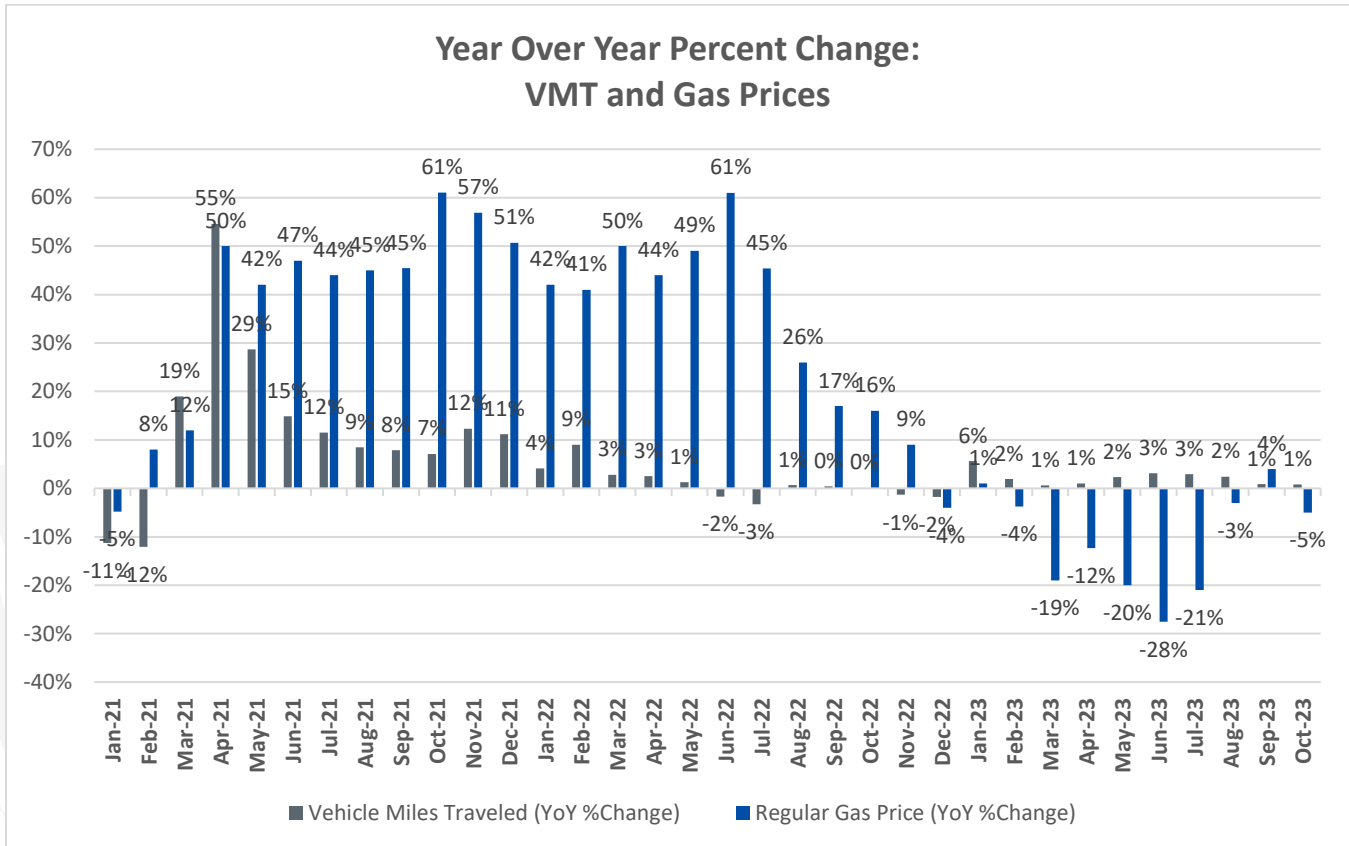
## Recovery Meter

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### Roadway Travel (Updated 1/5)

According to the U.S. Department of Transportation, seasonally-adjusted vehicle miles traveled in October increased .8 percent from the same time a year ago. The cumulative travel estimate for 2023 is 2,711.7 billion vehicle miles.<sup>26</sup>

- Travel on all roads and streets changed by +1.3% (+3.5 billion vehicle miles) for October 2023 as compared with October 2022. Travel for the month is estimated to be 281.6 billion vehicle miles.
- The seasonally adjusted vehicle miles traveled for October 2023 is 269.5 billion miles, a +0.8% (+2.0 billion vehicle miles) change over October 2022. It also represents a -0.2% change (-0.6 billion vehicle miles) compared with September 2023.
- Cumulative Travel for 2023 changed by +2.1% (+55.9 billion vehicle miles). The cumulative estimate for the year is 2,711.7 billion vehicle miles of travel.



## Economic News (Updated 1/5)

**The ISM Index Drops to 46.7 Percent In October – Twelfth Consecutive Month of Contraction.** “The manufacturing economy finished full-year 2023 in contraction, registering a PMI of 47.4% in December the Institute for Supply Management (ISM) reported today. That’s makes for a 0.7-point increase from the 46.7% recorded in November, and 14 consecutive months of contraction following a 28-month period of growth.

Demand remains soft and production execution is stable compared to November, as panelists’ companies continue to manage outputs, material inputs and labor costs. Suppliers continue to have capacity.” says Timothy Fiore, chair of ISM’s Manufacturing Business Survey Committee.

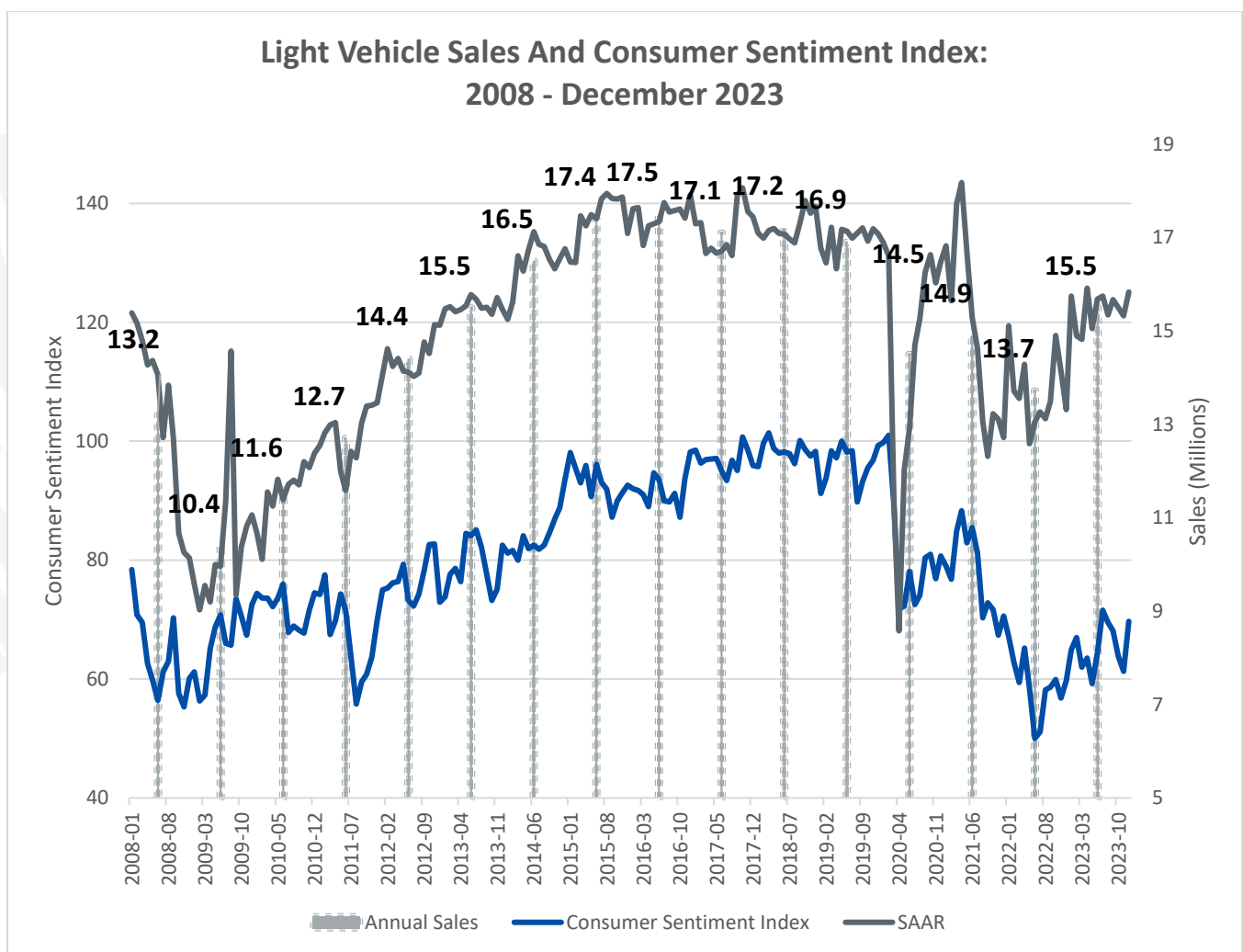
None of the six biggest manufacturing industries registered growth in December.”<sup>27</sup>

## Consumer Confidence and Sales (Updated 1/5)

**Surveys of Consumers Director Joanne Hsu<sup>28</sup>:** “Consumer sentiment confirmed its mid-month reading and soared 14% in December, reversing all declines from the previous four months. These trends are rooted in substantial improvements in how consumers view the trajectory of inflation. All five index components rose this month, which has only occurred in 10% of readings since 1978. Expected business conditions surged over 25% for both the short and long run. All age, income, education, geographic, and political identification

groups saw gains in sentiment this month. The index is now just shy of the midpoint between the pre-pandemic reading and the historic low reached in June 2022.

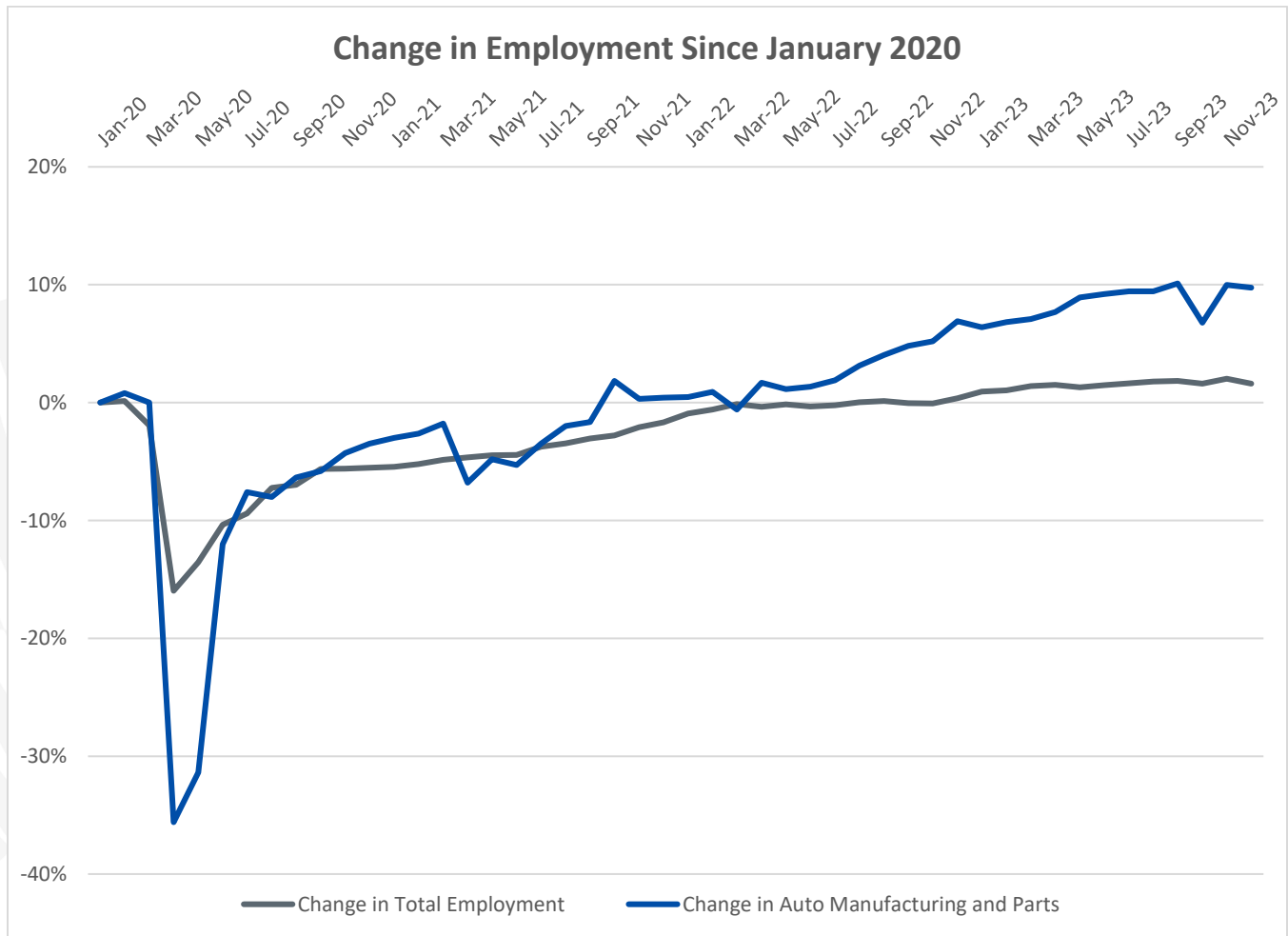
Year-ahead inflation expectations plunged from 4.5% last month to 3.1% this month. The current reading is the lowest since March 2021 and sits just above the 2.3-3.0% range seen in the two years prior to the pandemic. Long-run inflation expectations fell from 3.2% last month to 2.9% this month, staying within the narrow 2.9-3.1% range for 26 of the last 29 months. Long-run inflation expectations remain elevated relative to the 2.2-2.6% range seen in the two years pre-pandemic.”



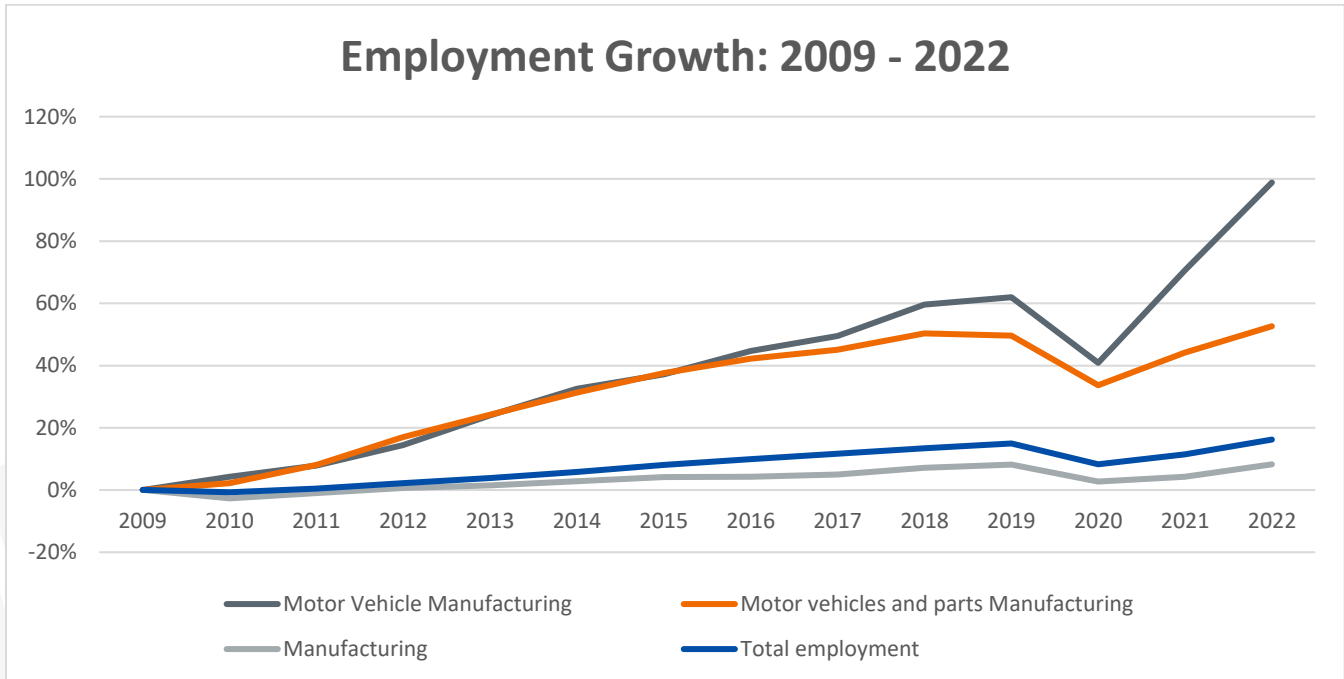
## Employment (Updated 1/5)

**Motor Vehicle And Parts Manufacturing Lost 2,100 Jobs In December.**

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.<sup>29</sup>



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.<sup>30</sup> 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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- <sup>6</sup> S&P Global Mobility, email, "S&P Global Mobility Monthly Automotive Update – January 2024," 1/18/23
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