# READING THE NETER A look inside a cleaner, safer, smarter auto industry.



# Contents - August 24, 2022

Forecast Meter	2
Sales & Production Summary and Forecast (Updated 8/24)	2
U.S. Light Vehicle Sales Outlook (Updated 8/4)	
North American Production & Inventory Outlook (Updated 8/24)	
Market Meter	5
U.S. Light Vehicle Sales (Updated 8/4)	5
Segments vs. Gas Prices (Updated 8/4)	6
ZEV Powertrain Sales (Updated 8/4)	8
Seasonally Adjusted Annual Rates (Updated 8/4)	9
Average Transaction Price (Updated 8/24)	9
Auto Loan Financing (Updated 8/24)	11
Crude Oil and Gas Prices (Updated 8/24)	12
Production Meter	12
U.S. Light Vehicle Production (Updated 8/24)	12
U.S. Light Vehicle Inventory and Days' Supply (Updated 8/4)	
Global Meter	14
Global Light Vehicle Sales (Updated 8/4)	14
Global Light Vehicle Production (Updated 8/24)	15
Recovery Meter	
Roadway Travel (Updated 8/4)	
Economic News (Updated 8/24)	18
Consumer Confidence and Sales (Updated8/24)	
Employment (Updated 8/24)	20
Sources	00

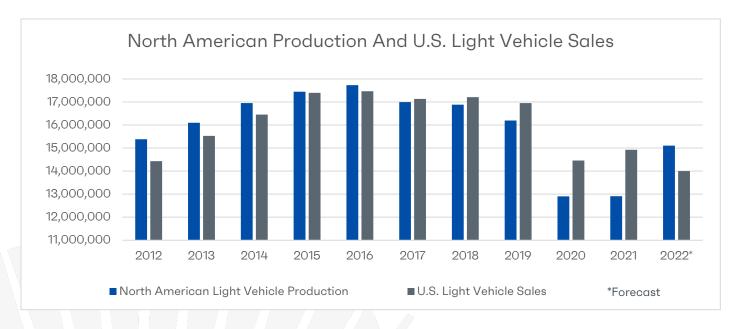


# Forecast Meter

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

2021-2022	2021-2022 Sales, <sup>1</sup> Extended Sales Forecast <sup>2</sup> and Production Forecasts <sup>3</sup>				
	U.S. Sales & Forecasts North American Product				
January '21	1,094,689 (-3.6% YoY)	1,175,940 (-14.0% YoY)			
February '21	1,180,506 (-5.3% YoY)	1,120,200 (-22.9% YoY)			
March '21	1,581,067 (+59.7% YoY)	1,376,904 (31% YoY)			
April '21	1,512,186 (+111.4 YoY)	1,094,891 (-21% YoY)			
May '21	1,577,941 (+41% YoY)	729,879 (+271% YoY)			
June '21	1,296,517 (+17% YoY)	1,107,958 (-1.9% YoY)			
July '21	1,288,494 (-7.9% YoY)	926,035 (3% YoY)			
August '21	1,090,446 (-11% YoY)	1,113,327 (-19% YoY)			
September '21	1,006,875 (-25% YoY)	907,470 (-33.4% YoY)			
October '21	1,046,282 (-20% YoY)	1,140,383 (-22.1% YoY)			
November '21	1,001,351, (-20% YoY)	1,168,245 (-9% YoY)			
December'21	1,194,313 (-22.9% YoY)	1,029,501 (-13.8% YoY)			
January '22	991,156 (-10% YoY)	1,111,390 (-4% YoY)			
February '22	1,052,524 (-11.8% YoY)	1,112,429 (-1% YoY)			
March '22	1,246,336 (-22% YoY)	1,350,102 (1% YoY)			
April '22	1,226,950 (-22% YoY)	1,177,851 (+8% YoY)			
May '22	1,104,993 (-23.8% YoY)	1,215,000 (+20.4% YoY)			
June '22	1,126,724 (-16.8% YoY)	1,259,515 (+13.8% YoY)			
July '22	1,129,371 (-8.4% YoY)	977,485 (+7% YoY)			
1 <sup>st</sup> Quarter '22	14.01 million-unit SAAR	3,458,480 (-1.4% YoY)			
2 <sup>nd</sup> Quarter '22	13.4 million-unit SAAR	3,584,093 (+13.2% YoY)			
2021 Full Year	14,926,933 (+3.1% YoY)	8,899,632 (+4% YoY)			
2022 Full Year Estimate	14 million units	15,107,419 (+17% YoY)			



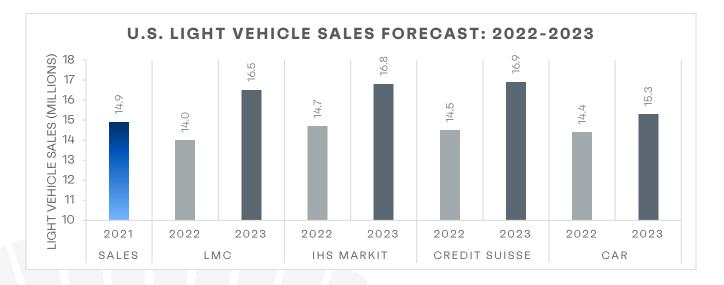


## U.S. Light Vehicle Sales Outlook (Updated 8/4)

**Wards Intelligence Outlook (8/4)** 4: "Initial modeling projects August's SAAR at 14.0 million units. If August's SAAR rises from July, it will be the fourth consecutive sequential increase. Wards intelligence partner LMC Automotive has lowered its calendar-year 2022 sales forecast to 14.0 million units. Assuming no recession in 2022, WI expects Q3 to total a 13.8 million-unit SAAR, followed by 14.8 million in Q4. However, there is a high amount of risk to Q4, including from falling consumer sentiment toward the economy, still-high uncertainty about the supply chain and inflation in general. Rising vehicle prices, combined with a lack of affordable vehicles in the inventory mix, could already be creating a headwind to deliveries."

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





## North American Production & Inventory Outlook (Updated 8/24)

Wards Intelligence Production Outlook (8/24) 6: "Challenges with getting enough parts still abound for automakers in North America as they struggle to get back to capacity, and the Q3 production tracker was cut from month-ago's projection for the period. . . . Although there will be some summer-related slowdowns in August, production is projected to jump to 1.42 million units in the month, which would be the highest for any month since 1.46 million in October 2020. However, the trend in most months since the semiconductor shortage hit hard at the end of Q1-2021 is of the industry under-performing from expectations, meaning more there is more downside than upside risk to August, as well as to the September production outlook of 1.33 million units. If the projections hold relatively firm, August's total compared with the same month in pre-pandemic 2019 will narrow from July to a shortfall of 6.7% with September closing the gap to just 2.9% below its total of three years ago.

**S&P Global Mobility Production Outlook (8/24)** <sup>7</sup>: "North America: The outlook for North America light vehicle production was reduced by 126,000 units and by 574,000 units for 2022 and 2023, respectively (and was reduced by 555,000 units for 2024). The outlook for North America light vehicle production for 2022 was revised down 0.9% to total 14.58 million units on continued supply chain, labor, and logistic issues. While semiconductor related downtime has slowed dramatically, automakers' ability to produce vehicles at normal operating levels remains challenged particularly among the Japanese transplants, Toyota, Honda, Nissan, Subaru, and Mazda that represent 35% of total US sales. Concerns surrounding ongoing supply chain challenges, most notably for semiconductors, result in the outlook for 2023 being revised down a sharp 3.5% totaling 15.83 million units. With the outlook for US demand sharply reduced, inventory restocking is expected to occur sooner and reach over 2.0 million units by mid-2023. Despite heightened demand destruction concerns, faster inventory rebuilding may spur some demand as incentive levels are expected to increase. As production challenges extend into 2024, along with the effects of demand destruction, the outlook for 2024 was revised down an equally sharp 3.3% to total 16.26 million units."



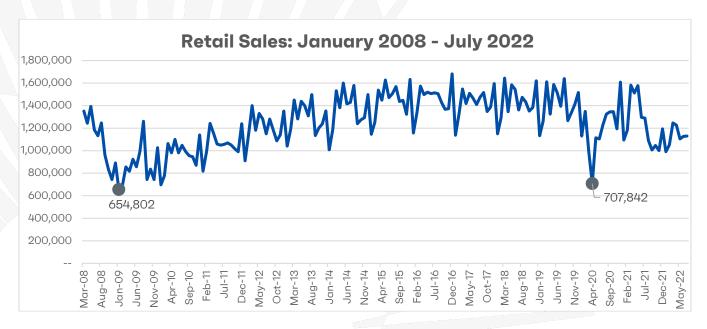
"Wards Intelligence Inventory Outlook (8/4)8: "Inventory should generally continue rising through the end of year, with December's total well above the year-ago month – though still far below prepandemic levels."

#### Market Meter

#### U.S. Light Vehicle Sales (Updated 8/4)

#### **Monthly Sales (Updated 8/4)**

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 8/4)

**WardsIntelligence** 9: "Results were still weak, but U.S. light-vehicle sales in July did improve sequentially for the second consecutive month on an annualized basis.

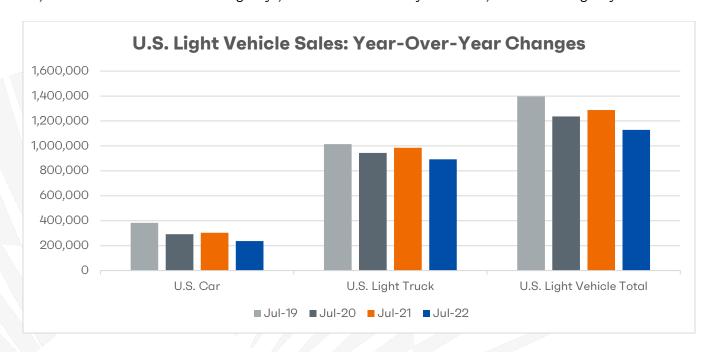
"Deliveries ended close to expectations, with the month totaling a 13.4 million-unit seasonally adjusted annual rate on volume of 1.13 million units. Although still weaker than the 14.2 million units the first four



months of 2022 totaled, July's SAAR was a slight increase from June's 13.0 million and May's 12.8 million.

"July's SAAR was below the same year-ago month's 14.7 million units. However, a year ago the industry was in a downward spiral resulting from dried-up inventory caused mostly by the global semiconductor shortage.

"July's raw volume was 11.8% below like-2021's 1.28 million units. The daily selling rate equated to 43,437 over the month's 26 selling days, down 8.4% from July 2021's 47,437 – 27 selling days.



#### Fleet Sales (Updated 8/4)

**TrueCar** <sup>10</sup>: "Fleet sales for July 2022 are expected to be up 30% from a year ago and up 7% from June 2022 when adjusted for the same number of selling days."

**J.D. Power** <sup>11</sup>: "Fleet sales are expected to total 171,300 units in July, up 40% from July 2021 on a selling day adjusted basis. Fleet volume is expected to account for 15% of total light-vehicle sales, up from 10% a year ago."

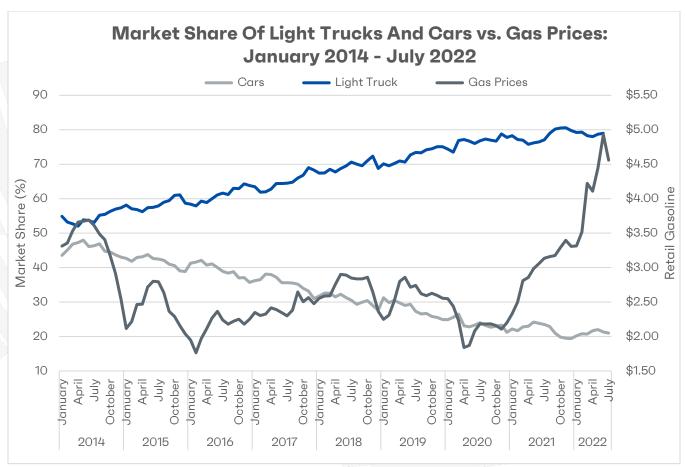
## Segments vs. Gas Prices (Updated 8/4)

**Monthly Sales For July:** Light trucks accounted for 79 percent of sales in July, a 2.8 pp increase in market share from a year ago. Compared to the same period in 2021, sales of cars are down more



than 66,000, and down more than 145,000 from June 2019, when cars comprised 27% of the market as opposed to the 21% of the market passenger cars have now.

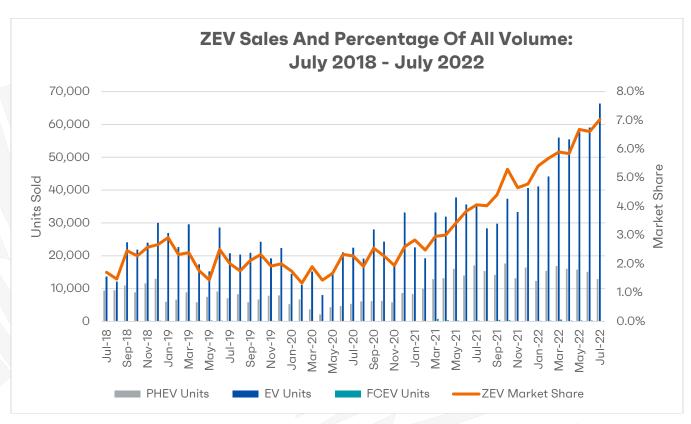
**Historic Perspective:** The upward trend in the popularity of light trucks over cars has been steady since 2013, when only 2% of annual market share separated the two segments <sup>12</sup> and gas was over \$3.00 <sup>13</sup> a gallon. As fuel prices dropped below the \$3.00 mark in mid-September 2014, light truck sales began to take off. Gas prices since have averaged only \$2.61 a gallon (through January 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>14</sup>





## ZEV Powertrain Sales (Updated 8/4)

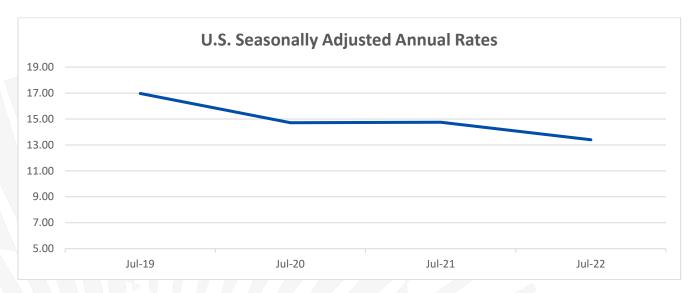
Sales of zero emission vehicles (BEV, PHEV, & Fuel Cell) accounted for 7.03% (highest to date and first time above 7%) of total vehicle sales in July 2022 (79,416 units – highest monthly volume to date), up 3.2 pp from a year ago and up 0.4 pp from June 2022. Sales of battery electric vehicles led the way for ZEVs, accounting for 5.9% of total sales, up 3.16 pp from July 2021. Plug-in hybrids accounted for 1.14%, 0.26 pp higher than the same time last year. This month also marks the first time BEVs outsold regular hybrid vehicles (63,366.) <sup>15</sup>





#### Seasonally Adjusted Annual Rates (Updated 8/4)

**WardsIntelligence:** "Deliveries ended close to expectations, with the month totaling a 13.4 million-unit seasonally adjusted annual rate on volume of 1.13 million units. Although still weaker than the 14.2 million units the first four months of 2022 totaled, July's SAAR was a slight increase from June's 13.0 million and May's 12.8 million. July's SAAR was below the same year-ago month's 14.7 million units. However, a year ago the industry was in a downward spiral resulting from dried-up inventory caused mostly by the global semiconductor shortage. 16



## Average Transaction Price (Updated 8/24)

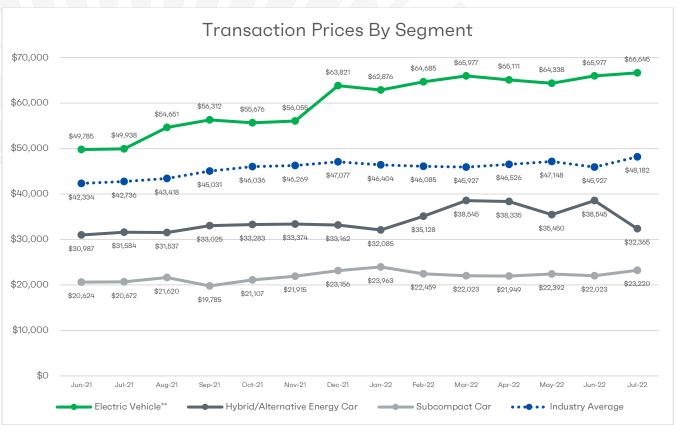
**Kelley Blue Book (July) (Updated 8/24)** <sup>17</sup>: "The average price paid for a new vehicle in the U.S. in July 2022 topped June's record and kept the average transaction price (ATP) solidly above the \$48,000 mark, according to new data released today by Kelley Blue Book, a Cox Automotive brand. The Kelley Blue Book new-vehicle ATP increased to \$48,182 in July 2022, beating the previous high of \$48,043 set last month. July prices rose 0.3% (\$139) from June 2022 and 11.9% (\$5,126) from July 2021."

- "The average price paid for a new electric vehicle (EV) dropped in July by 2.3% compared to June but increased by 18.8% versus a year ago. The average price for a new electric vehicle over \$66,000, according to Kelley Blue Book estimates remains well above the industry average and more aligned with luxury prices versus mainstream prices."
- "Incentives increased slightly in July versus June, but remain low, at only 2.4% of the average transaction price. A year ago, incentives averaged 5.9% of ATP. Full-size cars and luxury cars had the highest incentives in July, while high-performance cars, full-size luxury SUVs, and electric vehicles had the lowest incentives."



**J.D. Power (Updated 8/24)** <sup>18</sup>: "For August, new-vehicle prices continue to set records, with the average transaction price expected to reach \$46,259—an 11.5% increase from a year ago and the highest on record."







## Auto Loan Financing (Updated 8/24)

**JD Power (8/24)**<sup>19</sup>: "Higher prices coupled with a rising interest rate environment are leading to monthly loan payments reaching new all-time highs. After breaking the \$700 level for the first time ever in July, the average monthly finance payment in August is on pace to hit a record \$716, up \$78 from August 2021. That translates to a 12.2% increase in monthly payments from a year ago, which is above the 11.5% increase in transaction prices. The average interest rate for new-vehicle loans is expected to increase 137 basis points from a year ago to 5.51%.

**Interest Rates:** Interest rates, unchanged over the past week, now stand at 4.94%, 4.93%, and 5.21% on the 60-month new car, 48-month new car, and 36-month used car, respectively. Since the beginning of 2020, 60-month rates are up 0.34 pp, and are up 0.79 pp since the same time a year ago.  $^{20}$ 

Dates	60-month new car	48-month new car	36-month used car
1/2/2020	4.60%	4.55%	5.10%
8/18/2021	4.15%	4.15%	4.41%
8/10/2022	4.94%	4.93%	5.21%
8/17/2022	4.94%	4.93%	5.21%
One Week Change	0.00%	0.00%	0.00%
Two Week Change	0.03%	0.03%	0.03%
Change since 1/3/20	0.34%	0.38%	0.11%
One Year Change	0.79%	0.78%	0.80%



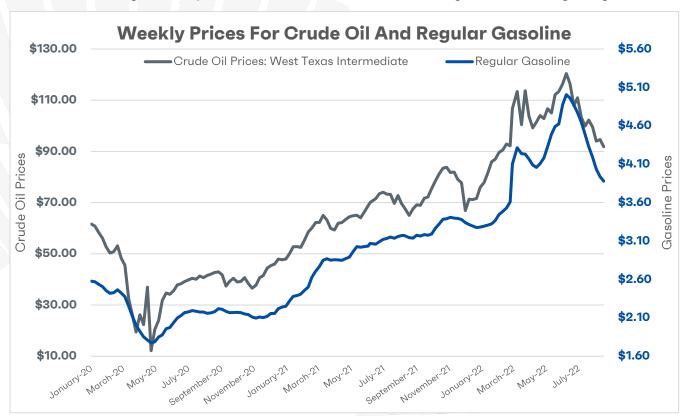


#### Crude Oil and Gas Prices (Updated 8/24)

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

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

**Gas And Oil Remain High, Though Continue To Decrease:** Oil prices, as benchmarked at West Texas Intermediate, fell \$2.84 to \$91.81 a barrel for the week of August 20. Since election day 2020, oil prices are \$55 a barrel higher. Gas prices fell \$0.06 to \$3.88. Gas is 50% higher than the beginning of 2020. <sup>23</sup>

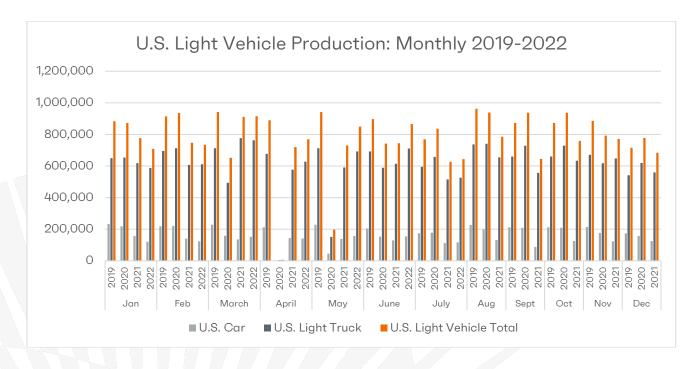


#### **Production Meter**

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



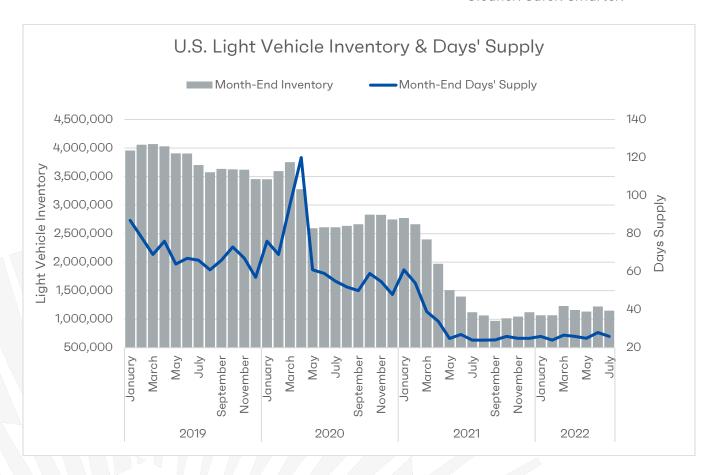
U.S. Light vehicle production for July 2022 decreased month-over-month by 24 percent, totaling 644,229 vehicles (117,638 cars, 526,591 light trucks), year-over-year, production is up 4.5 percent from 2021. <sup>24</sup>



# U.S. Light Vehicle Inventory and Days' Supply (Updated 8/4)

**WardsIntelligence Inventory Update (7/6)** <sup>25</sup>: "As expected, inventory at the end of July declined from the prior month due to typical summer plant shutdowns in North America that temporarily slowed production and cut the number of shipments to dealers, but the total was higher than the same yearago period, the first time for any month since July 2019. Inventory ended July at 1.15 million units, 2.4% above same-month 2021's 1.12 million. Although July's total was a 5.9% decline from June – which had increased from May after two consecutive sequential declines - the drop should not by itself stop sales in August from improving on the prior month's 13.4 million-unit seasonally adjusted annual rate."





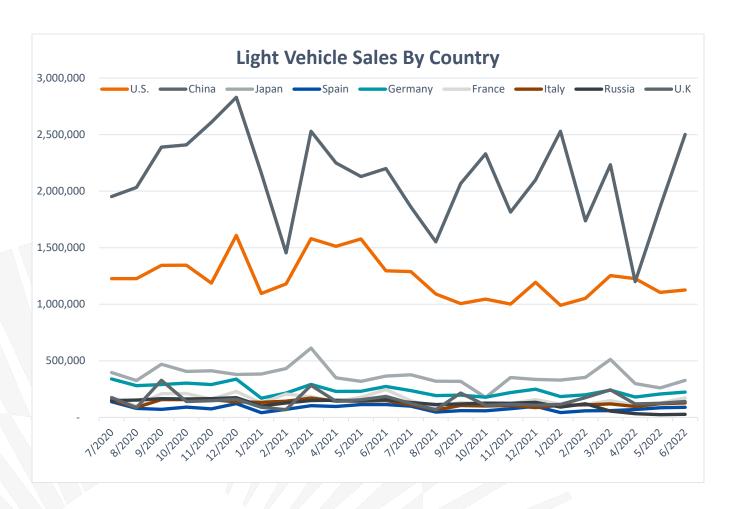
## Global Meter

## Global Light Vehicle Sales (Updated 8/4)

**Wards Intelligence** <sup>26</sup>: "Global sales of all cars and trucks in the first half of 2022 fell 11.3% from January-June 2021, but deliveries were picking up at the end of the period. First-half 2022 total vehicle volume was 39.03 million units vs. 44.02 million in like-2021. All major regions recorded declines, with North America and Europe posting the biggest drops. Boosted by a rebound in China, after pandemic-related lockdowns pummeled volume earlier in the year, the Asia-Pacific region recorded a year-over-year gain in June of 9.5%, narrowing its year-to-date year-over-year shortfall to 7.1%.

"Globally, June sales totaled 7.03 million units vs. like-2021's 7.37 million. However, perhaps confirming supply-chain disruptions are easing enough that inventory levels are rising, June's total was 15.1% above May's 6.11 million units. Excluding medium- and heavy-duty trucks, light-vehicle sales totaled 37.55 million units during January-June 2022, down 10.3% from like-2021's 41.84 million. June light-vehicle sales fell 3.6% year-over-year to 6.76 million units – the year-ago total was 7.01 million."





## Global Light Vehicle Production (Updated 8/24)

**S&P Global Mobility Forecast (8/24)** <sup>27</sup>: "The August 2022 light vehicle production forecast update reflects deterioration in the near-term expectations for semiconductor supply coupled with enhanced risk for demand destruction due to macroeconomic conditions being pulled ahead into 2023. The implications are that the transition from "supply constrained" to "demand driven" will happen sooner rather than later and will also influence the amount of inventory rebuilding that will be required. Automakers are expected to be somewhat less aggressive in their inventory builds, with many signaling concerns over aforementioned demand destruction, in order to avoid what could be a rapid shift from a low inventory profile to a return to overstock conditions. This month's forecast update reflects a near-term upgrade for Greater China due to stronger demand post-COVID lockdowns and robust stimulus effects as well as a stronger near-term outlook for South Asia. However, more consequential are the near-to-intermediate term downward revisions, particularly focused on Europe and North America, among other regions. In the extreme near-term, semiconductor availability/capacity has been marked



down impacting the ability to accelerate production recovery. Further, we are seeing demand destruction pulling ahead into 2023 which has direct implications to production and impacts the magnitude/need for inventory restocking. The more noteworthy regional adjustments with the latest forecast update are detailed below:

**"Europe**: The outlook for Europe light vehicle production was reduced by 328,000 units and by 670,000 units for 2022 and 2023, respectively (and reduced by 556,000 units for 2024). The 2022 production forecast for Europe has been reduced by 327,000 units this month, of which 319,000 units are cut from H2. Russia has been slightly downgraded but higher volumes in other CIS countries compensate, meaning total volume in these markets are little changed. Semiconductor supplies continue to improve gradually but we are more conservative in our view of how quickly this can be translated to the automotive sector and this caution carries into 2023, where we think the effects of demand destruction will become more obvious earlier in the cycle given concerns over energy supplies and other macro headwinds. Despite these downgrades, we expect an ongoing recovery of volumes in 2023-2024, though at a slower pace than previously assumed. Slowing demand will help alleviate short-term inventory pressures but we expect OEMs to limit the levels of stock held given the visible headwinds. Europe has been downgraded across the forecast horizon by 300k-500k each year reflecting a mix of supply chain disruptions, war in Ukraine and demand evolution.

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

"Japan/Korea: Full-year 2022 Japan production volume was increased by 65,000 units relative to the July forecast. After recovering from supply chain disruptions due to COVID lockdowns in China; Mazda, Subaru and Suzuki are showing quicker recovery and stronger momentum than previously expected. Conversely, Toyota was downgraded in August and September, primarily due to a recent rise in COVD-19 infection rates both at Toyota and key suppliers. In the long-term, Japan production volumes were reduced by 1.4% compared to the prior forecast. This was primarily due to depressed demand in the global market, influenced by the Russia/Ukraine crisis and general macroeconomic deterioration. Full-year 2022 South Korea production was upgraded by 20,000 units relative to the previous forecast. Although the domestic market remains challenged, production continues to recover



due to an increase in exports with improved semiconductor supply. The upward momentum is expected to continue through 2023, resulting in a 45,000 unit increase for next year. However, additional demand destruction from a worsening economic outlook particularly for the US and Europe will remain a headwind to broader growth. In the long-term, production was reduced by an average of 68,000 units per year or 2.0%, primarily due to increased demand destruction and expected reduced OEM inventory restocking requirements.

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

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

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

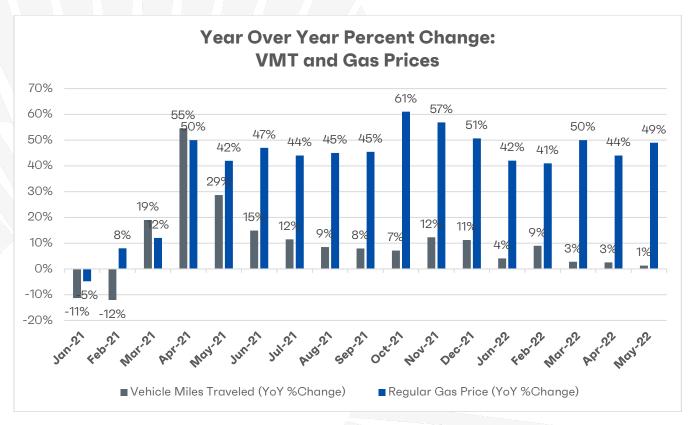


## Recovery Meter

## Roadway Travel (Updated 8/4)

According to the U.S. Department of Transportation, seasonally-adjusted vehicle miles traveled in April rose 0.9% from the same time a year ago. The cumulative travel estimate for 2022 is 1,304.8 billion vehicle miles. <sup>28</sup>

- Travel on all roads and streets changed by +1.3% (+3.6 billion vehicle miles) for May 2022 as compared with May 2021. Travel for the month is estimated to be 288.0 billion vehicle miles.
- The seasonally adjusted vehicle miles traveled for May 2022 is 271.3 billion miles, a 0.90% (2.4 billion vehicle miles) change over May 2021. It also represents a 0.30% change (0.8 billion vehicle miles) compared with April 2022.
- Cumulative Travel for 2022 changed by +3.8% (+47.8 billion vehicle miles). The cumulative estimate for the year is 1,304.8 billion vehicle miles of travel.



Economic News (Updated 8/24)



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

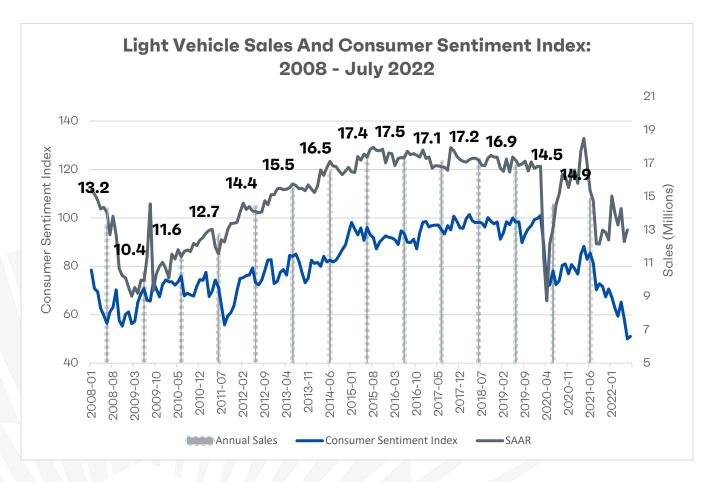
**The ISM Index Fell Slightly In July.** "Manufacturing slowed slightly in July but still ran at a strong rate overall, the Institute for Supply Management said today. The Tempe, Ariz.-based group's manufacturing index, known as the PMI, registered at 52.8 percent last month, down from 53 percent in June . . . . The index has been in positive territory for 26 consecutive months. The PMI has averaged 57.6 percent over the past 12 months. The July PMI was the lowest during that period." 30

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

#### Consumer Confidence and Sales (Updated8/24)

**Surveys of Consumers Director Joanne Hsu**<sup>32</sup>: "Consumer sentiment moved up very slightly this month to about 5 index points above the all-time low reached in June. All components of the expectations index improved this month, particularly among low and middle income consumers for whom inflation is particularly salient. The year-ahead economic outlook rose substantially to just above its average reading from the second quarter 2022, while the two other expectations index components remain at or below their second quarter averages. At the same time, high income consumers, who generate a disproportionate share of spending, registered large declines in both their current personal finances as well as buying conditions for durables. With continued declines in energy prices, the median expected year-ahead inflation rate fell to 5.0%, its lowest reading since February but still well above the 4.6% reading from a year ago. At 3.0%, median long run inflation expectations remained within the 2.9-3.1% range seen over the past year. Uncertainty over long run inflation receded a bit, with the interquartile range in expectations falling from 4.7 last month to 3.8 this month, remaining above the 3.3 range seen last August. Still, the share of consumers blaming inflation for eroding their living standards remained near 48%."



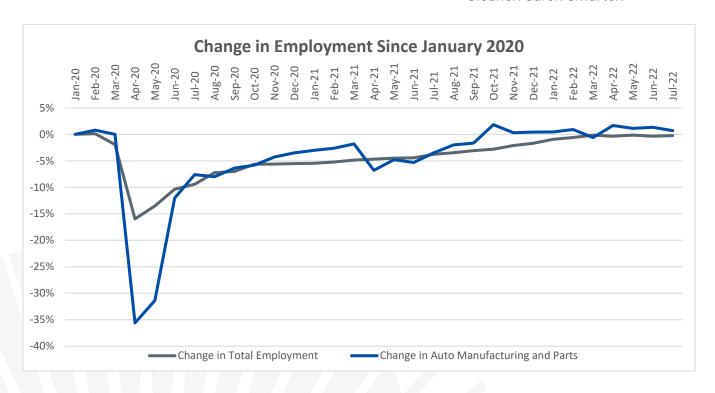


# Employment (Updated 8/24)

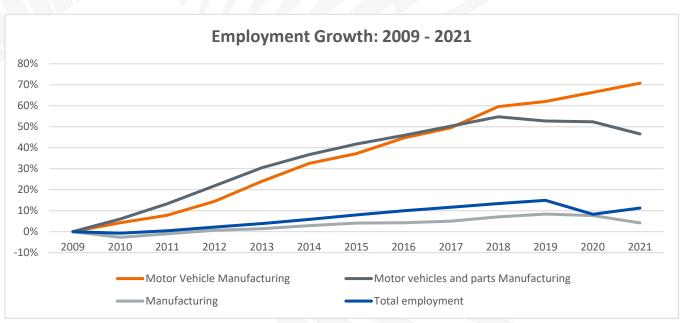
#### Motor Vehicle And Parts Manufacturing Lost 2,200 Jobs In July. 33

After a loss of nearly 350,000 employees (about 35% of the workforce) in the height of the pandemic, employment in the Automobile Manufacturing and Parts sectors raced back but is now fighting losses due to supply chain disruptions with semiconductors. 34





After the recession in 2009, the auto industry was credited with being on the leading edge of the recovery, which began a ripple effect through other parts of the country. <sup>35</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.





#### Sources

- <sup>1</sup> WardsIntelligence, U.S. Light Vehicle Sales, January 2021 December 2021
- <sup>2</sup> WardsIntelligence, North America Production, January 2021 December 2021
- <sup>3</sup> WardsIntelligence, North America Platform by Plant Production Forecast, Q1
- <sup>4</sup> Haig Stoddard, "U.S. Light-Vehicle Inventory in July Records First Year-Over-Year Increase Since 2019," WardsIntelligence, 8/3/22
- <sup>5</sup> Credit Suisse, Email, "US Autos & Auto Parts: June US Sales Report Card:," 7/5/22
- <sup>6</sup> Haig Stoddard, "North America Production is Growing, But Can't Shake Trend of Underperforming," WardsIntelligence, 8/23/22
- <sup>7</sup> S&P Global Mobility, email, "S&P Global Mobility Monthly Automotive Update August 2022," 8/15/22
- <sup>8</sup> Haig Stoddard, "U.S. Light-Vehicle Inventory in July Records First Year-Over-Year Increase Since 2019," WardsIntelligence, 8/3/22
- <sup>9</sup> Haig Stoddard, "Haig Stoddard, "June U.S. Light-Vehicle Sales Continue May's Weakness," WardsIntelligence, 7/5/22," WardsIntelligence, 5/3/22
- <sup>10</sup> TrueCar, Press Release, "TrueCar Releases Analysis of July Industry Sales," 7/29/22
- <sup>11</sup> J.D. Power, Press Release, "July New-Vehicle Sales Pace Still Constrained but Transaction Prices and Dealer Profits Remain at Record Levels," 7/27/22
- <sup>12</sup> WardsIntelligence, U.S. Light Vehicle Sales, January 2013 July 2022
- 13 U.S. Energy Information Administration, Weekly Retail Gasoline and Diesel Prices, Regular price per gallon, including taxes
- <sup>14</sup> WardsIntelligence, Fuel Economy Index, December 2013 & 2019
- <sup>15</sup> WardsIntelligence, U.S. Light Vehicle Sales, March 2020; U.S. Light Vehicle Sales, March, 2021
- <sup>16</sup> Haig Stoddard, "June U.S. Light-Vehicle Sales Continue May's Weakness," WardsIntelligence, 7/5/22
- <sup>17</sup> Kelley Blue Book, Press Release, "New-Vehicle Prices Set Record in July 2022, According to Kelley Blue Book, as Inventory Improves Year-Over-Year and Luxury Share Remains Elevated," 8/10/22
- <sup>18</sup> J.D. Power, Press Release, "Vehicle Inventory Shortages Constrain August Sales Pace as Average Transaction Prices Reach All-Time High," 8/24/22
- <sup>19</sup> J.D. Power, Press Release, "Vehicle Inventory Shortages Constrain August Sales Pace as Average Transaction Prices Reach All-Time High," 8/24/22
- <sup>20</sup> Bankrate, "Current Car Loan Interest Rates," Accessed 8/24/22
- <sup>21</sup> EIA, "Short-Term Energy Outlook," 8/22
- <sup>22</sup> EIA, "Short-Term Energy Outlook," 8/22
- <sup>23</sup> U.S. Energy Information Administration, Regular Gasoline, <a href="www.eia.gov">www.eia.gov</a>, Accessed 8/24/22; U.S. Energy Information Administration, Weekly Cushing, OK WTI Spot Price, <a href="www.eia.gov">www.eia.gov</a>, Accessed 8/24/22
- <sup>24</sup> WardsIntelligence, "North America Production, July," 2019, 2020, 2021, 2022
- <sup>25</sup> Haig Stoddard, "U.S. Light-Vehicle Inventory in July Records First Year-Over-Year Increase Since 2019," WardsIntelligence, 8/3/22
- <sup>26</sup> Haig Stoddard, "First-Half 2022 Global Vehicle Sales Fall 11%; June Signals Some Improvement," WardsIntelligence, 8/1/22
- <sup>27</sup> S&P Global Mobility, email, "S&P Global Mobility Monthly Automotive Update August 2022," 8/15/22
- <sup>28</sup> U.S Department of Transportation, <a href="https://www.fhwa.dot.gov/policyinformation/travel\_monitoring/21septvt/">https://www.fhwa.dot.gov/policyinformation/travel\_monitoring/21septvt/</a>, Accessed 8/4/2021
- .<sup>29</sup> Bill Koenig, "Manufacturing Employment Rises in July, Paced by Durable Goods," SME, 8/5/2022
- <sup>30</sup> Bill Koenig, "Manufacturing Dips Slightly in July," SME, 8/1/2022
- <sup>31</sup> Gwynn Guilford, "U.S. Inflation Eased Slightly to 8.5% in July," Wall Street Journal, 8/10/2022
- 32 University of Michigan, Survey of Consumers, http://www.sca.isr.umich.edu/, Accessed July 22, 2022
- 33 Bureau of Labor Statistics, Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail, October 2021
- 34 Bureau of Labor Statistics, Current Employment Statistics, Accessed 11/11/2021
- 35 Jerry Hirsch, "Auto Industry Has Soared Since 2010, Leading Economic Recovery," Los Angeles Times, 1/3/14