Contents – June 6, 2023

Forecast Meter ........................................................................................................................................... 2

Sales & Production Summary and Forecast (Updated 6/6) ........................................................................ 2
U.S. Light Vehicle Sales Outlook (Updated 6/6) ....................................................................................... 3
North American Production & Inventory Outlook (Updated 6/6) ................................................................. 4

Market Meter .............................................................................................................................................. 4

U.S. Light Vehicle Sales (Updated 6/6) ........................................................................................................ 4
Segments vs. Gas Prices (Updated 6/6) ....................................................................................................... 6
EV Powertrain Sales (Updated 6/6) ............................................................................................................. 7
Seasonally Adjusted Annual Rates (Updated 6/6) ...................................................................................... 8
Average Transaction Price (Updated 6/6) .................................................................................................. 9
Auto Loan Financing (Updated 6/6) .......................................................................................................... 10
Crude Oil and Gas Prices (Updated 6/6) .................................................................................................. 12

Production Meter ....................................................................................................................................... 13

U.S. Light Vehicle Production (Updated 5/24) ........................................................................................ 13
U.S. Light Vehicle Inventory and Days’ Supply (Updated 6/6) ................................................................. 14

Global Meter .............................................................................................................................................. 14

Global Light Vehicle Sales (Updated 6/6) .................................................................................................. 14
Global Light Vehicle Production (Updated 5/24) ..................................................................................... 16

Recovery Meter ......................................................................................................................................... 17

Roadway Travel (Updated 5/24) .............................................................................................................. 17
Economic News (Updated 5/24) .............................................................................................................. 18
Consumer Confidence and Sales (Updated 6/6) ..................................................................................... 19
Employment (Updated 5/24) ................................................................................................................... 20

Sources ..................................................................................................................................................... 21
### Sales & Production Summary and Forecast (Updated 6/6)

#### 2022-2023 Sales, ¹ Extended Sales Forecast ² and Production Forecasts ³

<table>
<thead>
<tr>
<th>Month</th>
<th>U.S. Sales &amp; Forecasts</th>
<th>North American Production</th>
</tr>
</thead>
<tbody>
<tr>
<td>January '22</td>
<td>991,156 (-10% YoY)</td>
<td>1,111,390 (-4% YoY)</td>
</tr>
<tr>
<td>February '22</td>
<td>1,052,524 (-11.8% YoY)</td>
<td>1,112,429 (-1% YoY)</td>
</tr>
<tr>
<td>March '22</td>
<td>1,246,336 (-22% YoY)</td>
<td>1,350,102 (-1% YoY)</td>
</tr>
<tr>
<td>April '22</td>
<td>1,226,950 (-22% YoY)</td>
<td>1,177,851 (+8% YoY)</td>
</tr>
<tr>
<td>May '22</td>
<td>1,104,993 (-23.8% YoY)</td>
<td>1,215,000 (+20.4% YoY)</td>
</tr>
<tr>
<td>June '22</td>
<td>1,126,724 (-16.8% YoY)</td>
<td>1,259,515 (+13.8% YoY)</td>
</tr>
<tr>
<td>July '22</td>
<td>1,129,371 (-8.4% YoY)</td>
<td>977,485 (+7% YoY)</td>
</tr>
<tr>
<td>August '22</td>
<td>1,128,200 (-.7% YoY)</td>
<td>1,413,262 (+29 %)</td>
</tr>
<tr>
<td>September '22</td>
<td>1,112,245 (+3.9% YoY)</td>
<td>1,258,501 (+38% YoY)</td>
</tr>
<tr>
<td>October '22</td>
<td>1,151,774 (+13.8% YoY)</td>
<td>1,299,707 (+12.4% YoY)</td>
</tr>
<tr>
<td>November '22</td>
<td>1,120,673 (+6% YoY)</td>
<td>1,200,244 (+5.5% YoY)</td>
</tr>
<tr>
<td>December '22</td>
<td>1,263,268 (+4.9% YoY)</td>
<td>1,074,938 (+3.4% YoY)</td>
</tr>
<tr>
<td>January '23</td>
<td>1,033,002 (+4.2% YoY)</td>
<td>1,195,548 (+12.9% YoY)</td>
</tr>
<tr>
<td>February '23</td>
<td>1,136,332 (+8.7% YoY)</td>
<td>1,257,482 (+15% YoY)</td>
</tr>
<tr>
<td>March '23</td>
<td>1,365,966 (+8.6% YoY)</td>
<td>1,442,991 (+6.7 YoY)</td>
</tr>
<tr>
<td>April '23</td>
<td>1,347,159 (+13.1% YoY)</td>
<td>1,281,626 (+8.6 YoY)</td>
</tr>
<tr>
<td>May '23</td>
<td>1,362,019 (+18.0% YoY)</td>
<td></td>
</tr>
<tr>
<td><strong>2022 Full Year</strong></td>
<td><strong>15.3 million units (WardsIntelligence)</strong></td>
<td><strong>14,721,053 (+9.8% YoY) (U.S. 10,019,791)</strong></td>
</tr>
</tbody>
</table>
U.S. Light Vehicle Sales Outlook (Updated 6/6)

Wards Intelligence Outlook (5/4): “Smoother production schedules and higher inventory, as well as slightly stronger than expected sales over the first five months of 2023, has led to Wards Intelligence partner LMC Automotive to increase its sales outlook for 2023 to 15.3 million units from 15.1 million – the 2023 forecast remains 16.0 million.

“The initial look at June indicates sales rise to a 15.6 million-unit seasonally adjusted annual rate from May’s 15.1 million. If that holds firm, the second quarter will end at a 15.6 million-unit SAAR, up from Q1’s 15.2 million and well above year-ago’s 13.3 million.”
North American Production & Inventory Outlook (Updated 6/6)

Wards Intelligence Inventory Outlook (6/6)⁵: “Currently, inventory is projected to rise in June from May to 1.84 million units. But it is forecast to fall in July and August as manufacturers slow production for summer-related shutdowns. Over the final four months of 2023, the trend again reverses course and inventory rises to roughly 2 million units by the end of the year.”

Wards Intelligence Production Outlook (5/24)⁶: “Second-quarter light-vehicle output is tracking to 3.949 million units, 12.0% above like-2022.

S&P Global Mobility Outlook (5/4)⁷: “North America: The outlook for North America light vehicle production was essentially unchanged for the reporting period of 2023 through 2025. Despite lingering concerns surrounding the volatility of the supply chain and recessionary fears, the North American production outlook over the short-term remains largely unchanged. Most of the near-term production risk resides with the legacy US manufacturers, particularly for the all-important and highly profitable full-size pickup trucks that have experienced the largest increases in inventory. Combined full-size pickup inventory across Ford, GM and Stellantis totals nearly 470,000 units or a 69 days’ supply at the end of April 2023. Despite increasing inventory levels that are now above previously stated ambitions from each manufacturer, changes to product/trim mix are expected to further bolster sales of these trucks that are needed to fund their collective electric futures. 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 6/6)

Monthly Sales (Updated 6/6)

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.
May Sales (Updated 6/6)

WardsIntelligence®: “U.S. light-vehicle sales in May finished slightly below expectations, coming in at a 15.1 million-unit seasonally adjusted annual rate, but still well above like-2022’s 12.6 million.

“May’s daily selling rate over 25 selling days was 54,481, 27.8% above like-2022’s 42,618 – 24 selling days. Raw volume totaled 1.362 million units, up 22.9%.

“Based on DSRs, May marked the ninth straight year-over-year increase, and its DSR was the highest for any month since 60,397 in May 2021.

“May’s results show automakers are relying more on fleet deliveries to keep volume up, but also are raising retail incentives to keep dealer traffic flowing.

“According to TrueCar, the average incentive on retail sales rose to $1,931 in May, 64.2% above same-month 2022’s total and highest for any month since $2,001 in October 2021. April was up 28.4% and March increased 4.8%. For historical comparison, incentives in May 2019 – the year prior to the start of the pandemic and subsequent supply-chain disruptions – averaged $3,732.

“Along with pent-up demand, while the heavy mix of pricey vehicles continues to push average transaction prices up, they increased only 2.7% year-over-year in May, says TrueCar, a paltry uptick in comparison with the rise in incentive spending. Incentives as a percentage of ATPs increased to 4.2% in May from April’s 3.7%, and was the highest since 4.3% in December 2021 – May 2022 was 2.6%.
Manufacturers are building more vehicles that cost less to buy, but a good portion of them are flowing to fleet customers – most fleet volume never shows up in inventory. Wards Intelligence estimates fleet deliveries increased 53% year-over-year in May, accounting for 18% of total sales, up from 14% in like-2023. Retail was up an estimated 12%.

**Fleet Sales (Updated 6/6)**

**TrueCar**⁹: “Fleet sales for May 2023 are expected to be up almost 40% from a year ago and up 4% from April 2023 when adjusted for the same number of selling days.”

**J.D. Power**¹⁰: “Fleet sales are expected to total 258,500 units in May, up 49.6% from May 2022 on a selling day adjusted basis. Fleet volume is expected to account for 19% of total light-vehicle sales, up from 15% a year ago.”

**Segments vs. Gas Prices (Updated 6/6)**

**Monthly Sales For May:** Light trucks accounted for 78.6 percent of sales in May, nearly flat with the market share a year ago. Compared to the same period in 2022, sales of cars are up about 50,000, and down more than 162,000 from May 2019, when cars comprised 29% of the market as opposed to the 21.4% 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.¹¹ and gas was over $3.00 ¹² 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.\textsuperscript{13}

**Market Share Of Light Trucks And Cars vs. Gas Prices:**

**January 2014 - May 2023**

<table>
<thead>
<tr>
<th>Market Share (%)</th>
<th>Cars</th>
<th>Light Truck</th>
<th>Gas Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 2014</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>April 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>July 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 2015</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EV Powertrain Sales (Updated 6/6)**

Sales of electric vehicles (BEV, PHEV, & Fuel Cell) accounted for 8.4% of total vehicle sales in May 2023 (114,333) – the highest monthly volume and market share to date. Market share increase .55 percentage points from April 2023 according to Wards Intelligence data. May’s EV market share is up 1.7 pp from a year ago. Sales of battery electric vehicles led the way for EVs, accounting for 6.7 percent of total sales, up 1.5 pp from May 2022. Plug-in hybrids accounted for 1.6%, up 0.2 pp from the same time last year.\textsuperscript{14}
Seasonally Adjusted Annual Rates (Updated 6/6)

WardsIntelligence\textsuperscript{15}: “U.S. light-vehicle sales in May finished slightly below expectations, coming in at a 15.1 million-unit seasonally adjusted annual rate, but still well above like-2022’s 12.6 million.”
Average Transaction Price (Updated 6/6)

**J.D. Power (Updated 6/6)**: “New-vehicle transaction prices continue to rise, with the average price reaching a May record of $45,838. This is a 0.7% increase from a year ago. The record transaction prices means that consumers are on track to spend nearly $46.9 billion on new vehicles this month—the second highest for the month of May and 13% higher than May 2022.

“Manufacturer discounts have remained relatively consistent compared with April but have increased materially from a year ago. The average incentive spend per vehicle has risen 88.1% from May 2022 and is currently on track to reach $1,788. Expressed as a percentage of MSRP, incentive spending is currently trending at 3.7%, an increase of 1.6 percentage points from May 2022. One of the factors contributing to this low level of spending relative to historical norms is the lower discounts on leased vehicles.”

**Kelley Blue Book (April) (Updated 5/24)**: “The average price Americans paid for a new vehicle in April remained below the manufacturer’s suggested retail price (MSRP) for the second consecutive month, according to data released today by Kelley Blue Book, a Cox Automotive company. The average transaction price (ATP) of a new vehicle in the U.S. remained relatively flat in April 2023 at $48,275, a month-over-month decrease of 0.03% ($14) from an upwardly revised March reading of $48,289.

“New-vehicle transaction prices in April were up 3.7% ($1,744) compared to year-ago levels. Meanwhile, auto manufacturers’ incentive spend rose to the highest level in the last year at 3.6% of the ATP in April, averaging $1,714.

“After 20 months of new-vehicle ATPs holding above average MSRP, or sticker price, transaction prices are now trending downward. In April 2023, the average price consumers paid fell to $378 below sticker price. For comparison, a year ago, the average ATP was $600 above MSRP.

“Initial estimates for the average price paid for a new electric vehicle (EV) in April decreased from March by $4,464 (down 7.5%) to reach $55,089. The ATP for EVs in April 2023 is down a noteworthy $10,096 compared to one year ago. The average new EV sold for an upwardly revised $59,553 in March, according to Kelley Blue Book estimates, which still is well above the industry average. New EV pricing peaked in June 2022 and has fallen significantly so far in 2023. ‘April’s downward movement of EV average transaction prices reflects EV automakers, particularly Ford and Tesla, seeking a balance between pricing and profitability,’ said Michelle Krebs, executive analyst at Cox Automotive. ‘With average EV prices trending lower, we are seeing EV sales increase. For example, EV sales estimates in April were up by 26% year over year.’”

“Incentives averaged $1,714 in April to reach the highest point in a year, increasing to 3.6% of the average transaction price compared to 3.2% in March. While April incentives increased by $170 month over month, they remain at a historically low level. For comparison, Kelley Blue Book estimates incentives averaged 7.8% of ATP in April 2021 and 9.0% in April 2019.”
Cleaner. Safer. Smarter.

Auto Loan Financing (Updated 6/6)
Interest Rates (updated 6/6): Interest rates continued their upward trajectory on the 60-month, 48-month and 36-month used car loans. Rates now stand at 6.82%, 6.79%, and 7.18%, respectively. Since the beginning of 2020, 60-month rates are up 2.22 pp, and are up 2.23 pp since the same time a year ago.18

JD Power (5/4)19: “Elevated pricing coupled with interest rate increases continue to inflate monthly loan payments. The average monthly finance payment in May is on pace to be $736, up $48 from May 2022. That translates to a 7.0% increase in monthly payments from a year ago. The average interest rate for new-vehicle loans is expected to be 7.0%, an increase of 206 basis points from a year ago.”

<table>
<thead>
<tr>
<th>Dates</th>
<th>60-month new car</th>
<th>48-month new car</th>
<th>36-month used car</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2/2020</td>
<td>4.60%</td>
<td>4.55%</td>
<td>5.10%</td>
</tr>
<tr>
<td>6/1/2022</td>
<td>4.58%</td>
<td>4.55%</td>
<td>4.86%</td>
</tr>
<tr>
<td>5/17/2023</td>
<td>6.82%</td>
<td>6.79%</td>
<td>7.18%</td>
</tr>
<tr>
<td>5/31/2023</td>
<td>6.87%</td>
<td>6.83%</td>
<td>7.29%</td>
</tr>
<tr>
<td>Two Week Change</td>
<td>0.05%</td>
<td>0.04%</td>
<td>0.11%</td>
</tr>
<tr>
<td>Change since 1/3/20</td>
<td>2.27%</td>
<td>2.28%</td>
<td>2.19%</td>
</tr>
<tr>
<td>One Year Change</td>
<td>2.29%</td>
<td>2.28%</td>
<td>2.43%</td>
</tr>
</tbody>
</table>

Auto Loan Financing: Weekly 1/2/2020 - 6/6/2023
Crude Oil and Gas Prices (Updated 6/6)

EIA Outlook For Gasoline (5/24): “The average U.S. regular gasoline retail price for April was $3.60 per gallon (gal), which is higher than the $3.53/gal we forecast in the April STEO. Inventory draws in April left U.S. gasoline inventories 3% below the five-year (2018–2022) minimum and contributed to rising retail gasoline prices. Because we reduced our crude oil price forecast in the May STEO, we now forecast gasoline prices in the summer driving months (April through September) to be slightly lower than previously expected across all regions of the United States. Overall, we expect retail gasoline prices to remain below summer 2022 prices, which reflects both lower crude oil prices this summer and lower refining margins for gasoline.”

EIA Outlook For Oil (5/24): “The Brent crude oil spot price fell from an average of $85 dollars per barrel (b) in April to close at $73/b on May 4. At the beginning of April, OPEC and partner countries (OPEC+) announced a cut to crude oil production of 1.2 million barrels per day (b/d) through the end of 2023, which increased crude oil prices on expectations of tightening oil supplies. However, ongoing considerations about weakening global economic conditions, perceived risk around the global banking sector, and persistent inflation outweighed the initial increase in oil prices and have led to lower prices.

Gas And Oil Holding Mostly Steady (6/6): Oil prices, as benchmarked at West Texas Intermediate, held steady at $72. Since election day 2020, oil prices are $36 a barrel higher. Gas prices are unchanged from two weeks prior. Gas is 37% higher than the beginning of 2020.”

Weekly Prices For Crude Oil And Regular Gasoline

Crude Oil Prices: West Texas Intermediate

Regular Gasoline

- $130.00
- $110.00
- $90.00
- $70.00
- $50.00
- $30.00
- $10.00

- $5.60
- $5.10
- $4.60
- $4.10
- $3.60
- $3.10
- $2.60
- $2.10
- $1.60

Gasoline Prices
U.S. Light vehicle production for April 2023 decreased month-over-month by 13.5 percent, totaling 829,672 vehicles (155,218 cars, 674,454 light trucks), year-over-year, production is up 8.5 percent from 2022.
**U.S. Light Vehicle Inventory and Days’ Supply (Updated 6/6)**

WardsIntelligence Inventory Update (6/6): “Perhaps a sign that supply-chain disruptions are improving even better than thought, U.S. light-vehicle inventory increased at the end of May from April, totaling 1.813 million units, up 1% from the prior month and 60.4% above like-2022.

“May 31 days’ supply was 33, down from the prior month’s 34, but a solid increase from same-month 2022’s 24. In the five years prior to the pandemic impacting the market in 2020, May days’ supply averaged 62 and inventory averaged 3.76 million units. Although a small increase, significant about the month-to-month gain is that the last time May inventory increased from April was in 1990.

The aberration is a consequence of the volatility created in the past three years by the pandemic and subsequent supply-chain problems, which threw off several typical seasonal trends. However, it also is an indication most automakers still want more inventory on dealer lots in order to tap deeper into the pent-up demand that has built up since March 2020, when the pandemic first hit the U.S. market. In accordance with that, it also points to strengthening production for the U.S. market from North America and overseas plants.”

---

**Global Meter**

Global Light Vehicle Sales (Updated 6/6)
Wards Intelligence ²⁵: “Global sales of light vehicles and medium-/heavy-duty trucks increased year-over-year for the third straight month in April, based on Wards Intelligence’s world data.

Including temporary estimates for some countries, global volume totaled 6.947 million units in April, 23.7% above like-2022’s 5.618 million. Excluding medium/heavy trucks, light vehicles totaled 6.274 million units, up 16.1% from April 2022.

Calendar year-to-date through April, total-vehicle sales were up 8.6% to 28.343 million units. The year-to-date light-vehicle total of 26.844 million units was 6.9% above January-April 2022.

All major regions except South America posted increases in April.

The biggest gain was in the Asia-Pacific where demand rose 39.8% in April from same-month 2022. AP global market share rose to 49.6% from like-2022’s 43.9%.

WI partner LMC Automotive forecasts global light-vehicle sales to rise 6.2% year-over-year in 2023 to 86.1 million units, with 2024 pegged at 90.3 million, up 4.9%.”
Global Light Vehicle Production (Updated 5/24)

S&P Global Mobility Forecast (4/20) 26: “The global auto market continues to benefit from the theme of ongoing production recovery on improved supply chain conditions. This production activity is effectively accelerating inventory restocking while also supporting nascent demand recovery in several key markets. 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 more recently deteriorating credit conditions remain critical considerations. Yet, in some markets, vehicle sales have been running at or near recessionary levels for several years. We continue to monitor vehicle demand in Greater China on concerns that recent weak sales performance may extend deeper into the year. Looking beyond 2023, the general production outlook reflects a bit more constrained outlook given the aforementioned pull-ahead in inventory restocking in many markets. The May 2023 forecast update reflects a mix of upgrades and downgrades, albeit mostly modest in nature, yet net to the upside in the immediate near-term, as the industry recovers from supply chain issues and supports demand recovery in select markets. The acceleration in inventory restocking supported by strengthening output 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 113,000 units and reduced by 6,000 units for 2023 and 2024, respectively (and increased by 8,000 units for 2025). The production forecast upgrade for 2023 is the result of both stronger actualized production as well as a slightly improved outlook for the remainder of the year. As expected, April production was sequentially weaker than March. While the Easter break is a valid justification for the decrease, we believe the reduction also signals a bit of a correction in OEM builds as inventories start to accumulate, order backlogs begin to fade and a new natural demand sets in given the context of higher prices and tighter credit conditions. Notwithstanding those constraints, the near-term forecast reflects both stronger recent production activity as well as some incremental production support through H2-2023. For the 2024-2027 period, the volume changes are marginal and from 2028 onwards there is some transfer of volume between Europe and Middle East/Africa that is due to changes at Stellantis with future Fiat and Citroën programs on the Smart Cars platform being relocated to their plant in Morocco.

“Greater China: The outlook for Greater China light vehicle production was reduced by 43,000 units and by 153,000 for 2023 and 2024, respectively (and reduced by 169,000 units for 2025). Chinese light vehicle production maintained momentum in March with nearly 2.5 million units produced representing growth of 15% relative to the prior year. A significant driver supporting production more recently is an ongoing price war amongst most automakers. As inventories have increased, internal combustion engine vehicle producers are faced with the need to de-stock all CN6a emission models in the near-term as the government implements the new CN6b standard. Of note, both ICE models and new energy vehicles (NEVs) are being influenced by automaker discounting strategies. The market remains vulnerable to demand conditions impacted by a pay-back from purchase tax cuts which extended through last year contributing to strong sales through the end of the year. The influences of the pay-back effect and the expected need for inventory discipline have resulted in the near-term downward production revisions, particularly impacting Q2-2023 volumes. Reflecting increasing economic uncertainties, the outlook for 2024 and 2025 have been reduced and now reflect growth rates of 5.6% and 4.9%, respectively, for the region.

“Japan/Korea: Full-year 2023 Japan production was increased by 100,000 units. Toyota is the main contributor to the upgrade as its daily production pace has approached more normalized levels since February. The semiconductor shortage issues have improved materially, contributing to a more positive near-term outlook supporting the release
of pent-up demand in Japan and North America. Production upgrades for 2024 and 2025 reflect continued improvement in supply chain and output conditions and align with global demand requirements. Full-year 2023 South Korea production was increased by 62,000 units relative to the previous forecast, reflecting steady production recovery without disruptions in the supply chain and given continued export growth. Production in 2024 and 2025 was largely unchanged after more noteworthy upgrades with the April 2023 forecast update. In the longer-term, there were no significant changes relative to the previous forecast.

“North America: The outlook for North America light vehicle production was essentially unchanged for the reporting period of 2023 through 2025. Despite lingering concerns surrounding the volatility of the supply chain and recessionary fears, the North American production outlook over the short-term remains largely unchanged. Most of the near-term production risk resides with the legacy US manufacturers, particularly for the all-important and highly profitable full-size pickup trucks that have experienced the largest increases in inventory. Combined full-size pickup inventory across Ford, GM and Stellantis totals nearly 470,000 units or a 69 days’ supply at the end of April 2023. Despite increasing inventory levels that are now above previously stated ambitions from each manufacturer, changes to product/trim mix are expected to further bolster sales of these trucks that are needed to fund their collective electric futures. 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 23,000 units and increased by 13,000 units for 2023 and 2024, respectively (and was largely unchanged for 2025). The near-term outlook was reduced rather modestly, primarily focused on Brazil and incorporates recent announcements by automakers adjusting production to better reflect lower demand expectations. Conversely, Argentina continues to defy the odds and exhibit near-term strength but not enough to offset the revisions for Brazil and other markets. The production adjustments for 2024 and 2025 were relatively modest and reflects primarily timing changes applied on the production side.

“South Asia: The outlook for South Asia light vehicle production was increased by 73,000 units and by 37,000 units for 2023 and 2024, respectively (and reduced by 32,000 units for 2025). Production strength for the ASEAN market, particularly Thailand, Indonesia and Malaysia, was only partially offset by recent semiconductor shortages impacting India production. Regarding the ASEAN market, automakers continue to accelerate production in an effort to fulfill backlogs from 2022. Forecast revisions through the intermediate term, while overall fairly modest in nature, were supported by continued strong activity in Indonesia and Malaysia and reflect a return to a more emerging market-oriented growth profile.”

Recovery Meter

Roadway Travel (Updated 5/24)

According to the U.S. Department of Transportation, seasonally-adjusted vehicle miles traveled in March increased 0.3 percent from the same time a year ago. The cumulative travel estimate for 2023 is 752 billion vehicle miles.  

- Travel on all roads and streets changed by +0.6% (+1.7 billion vehicle miles) for March 2023 as compared with March 2022. Travel for the month is estimated to be 271.2 billion vehicle miles.
The seasonally adjusted vehicle miles traveled for March 2023 is 266.8 billion miles, a 0.3% (0.9 billion vehicle miles) change over March 2022. It also represents a -1.1% change (-3.0 billion vehicle miles) compared with February 2023.

Cumulative Travel for 2023 changed by +2.6% (+19.2 billion vehicle miles). The cumulative estimate for the year is 752.0 billion vehicle miles of travel.

**Economic News (Updated 5/24)**

**Manufacturing Added 11,000 Jobs In April, While Motor Vehicles And Parts Gained 5,800.** “Manufacturing added 11,000 jobs in April with durable goods doing the heavy lifting. Durable goods accounted for a gain of 10,000 jobs, according to a breakdown by industry issued by the Bureau of Labor Statistics. Non-durable goods accounted for the rest. In durable goods, job gainers included motor vehicles and parts, up 5,800 jobs and the overall transportation equipment category was up 6,700. Fabricated metal products posted an increase of 6,300 jobs. Transportation has been one of the steadiest economic performers in manufacturing. Demand for trucks and SUVs has remained strong and shortages of computer chips have eased. That has meant better supplies of vehicles available for sale.”

**The ISM Index Remains Below 50 For The Sixth Consecutive Month; Improve Slightly.** “The manufacturing economy remained in contraction last month while improving slightly, the Institute for Supply Management said today. The
Tempe, Ariz.-based group’s manufacturing index, known as the PMI, registered at 47.1% in April. That was better than March’s 46.3%. An index reading above 50% indicates economic expansion, below that mark shows contraction. April was the sixth consecutive month in negative territory.  

**Consumer Confidence and Sales (Updated 6/6)**

**Surveys of Consumers** Director Joanne Hsu: “Consumer sentiment slid 7% amid worries about the path of the economy, erasing nearly half of the gains achieved after the all-time historic low from last June. This decline mirrors the 2011 debt ceiling crisis, during which sentiment also plunged. This month, sentiment fell severely for consumers in the West and those with middle incomes. The year-ahead economic outlook plummeted 17% from last month. Long-run expectations plunged by 13% as well, indicating that consumers are concerned that any recession to come may cause lasting pain. That said, consumer views over their personal finances are little changed from April, with stable income expectations supporting consumer spending for the time being.

Year-ahead inflation expectations receded to 4.2% in May after spiking to 4.6% in April. Uncertainty, as measured by the interquartile range of these expectations has been elevated, averaging 7.8 over the last 12 months, but fell this month to 5.7, the lowest level of uncertainty in almost two years. This suggests that consumer views over short-run inflation may be stabilizing following four months of vacillation. Long-run inflation expectations inched up for the second straight month but remained within the narrow 2.9-3.1% range for 21 of the last 22 months.
Employment (Updated 5/24)

Motor Vehicle And Parts Manufacturing Gained 5,800 Jobs In March.\textsuperscript{31}

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.\textsuperscript{32}

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.\textsuperscript{33} 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.
Employment Growth: 2009 - 2022

Sources

1. WardsIntelligence, U.S. Light Vehicle Sales, January 2021 – December 2022
2. WardsIntelligence, North America Production, January 2021 – December 2022
3. WardsIntelligence, North America Platform by Plant Production Forecast, Q1
4. Haig Stoddard, “U.S. Light-Vehicle Inventory Rises in May from April as Affordable Vehicles Gain Some Traction,” WardsIntelligence, 6/2/23
5. Haig Stoddard, “U.S. Light-Vehicle Inventory Rises in May from April as Affordable Vehicles Gain Some Traction,” WardsIntelligence, 6/2/23
8. Haig Stoddard, “U.S. Light-Vehicle Sales Record 28% Year-Over-Year Increase in May,” WardsIntelligence, 6/1/23
11. WardsIntelligence, U.S. Light Vehicle Sales, January 2013 – May 2023
12. U.S. Energy Information Administration, Weekly Retail Gasoline and Diesel Prices, Regular price per gallon, including taxes
13. WardsIntelligence, Fuel Economy Index, December 2013 & 2019
14. WardsIntelligence, U.S. Light Vehicle Sales, September 2020; U.S. Light Vehicle Sales, September, 2021
15. Haig Stoddard, “U.S. Light-Vehicle Sales Record 28% Year-Over-Year Increase in May,” WardsIntelligence, 6/1/23
20. EIA, “Short-Term Energy Outlook,” 2/2023
24 Haig Stoddard, “U.S. Light-Vehicle Inventory Rises in May from April as Affordable Vehicles Gain Some Traction,” WardsIntelligence, 6/2/23
25 Haig Stoddard, “April Marks Third Straight Increase in Global Sales,” WardsIntelligence, 6/1/23
28 Bill Koenig, “Manufacturing Gains 11,000 Jobs in April on Durable Goods,” SME, 5/5/23
29 Bill Koenig, “Manufacturing Improves While Remaining in Contraction,” SME, 3/1/2023
31 Bureau of Labor Statistics, Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail, October 2022