

READING THE METER

A Look Inside A Cleaner, Safer, Smarter Auto Industry.

August 12, 2021

Contents

Forecast Meter.....	2
Forecast Summary (Updated 8/4)	2
U.S. Light Vehicle Sales Outlook (Updated 8/4).....	3
North American Production & Inventory Outlook (Updated 8/4).....	3
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).....	7
Seasonally Adjusted Annual Rates (Updated 8/4)	8
Average Transaction Price (Updated 8/4)	9
Auto Loan Financing (Updated 8/12)	9
Crude Oil and Gas Prices (Updated 8/12).....	10
Production Meter	11
U.S. Light Vehicle Production (Updated 7/21).....	11
U.S. Light Vehicle Inventory and Days' Supply (Updated 8/4).....	12
Global Meter.....	13
Global Light Vehicle Sales Outlook (Updated 7/21)	13
Recovery Meter.....	14
Roadway Travel (Updated 8/12).....	14
Economic News (Updated 8/12).....	15
Consumer Confidence and Sales (Updated 8/4)	16
Employment (Updated 8/12).....	17
Sources.....	18

Forecast Meter

Forecast Summary (Updated 8/4)

2020-2021 Sales,¹ Extended Sales Forecast² and Production Forecasts³		
	U.S. Sales & Forecasts	North American Production
June '20	1,103,791 (-24% YoY)	1,135,807 (-19.7% YoY)
July '20	1,227,091 (-12.1% YoY)	1,261,884 (+2.2% YoY)
August '20	1,325,144 (-19.1% YoY)	951,983 (-1.1% YoY)
September '20	1,344,310 (6.4% YoY)	1,395,830 (+2.1% YoY)
October '20	1,345,401 (0.9% YoY)	1,413,207 (+3.7% YoY)
November '20	1,193,180 (-15.4% YoY)	1,260,763 (-6.4% YoY)
December '20	1,608,875 (5.9% YoY)	1,115,542 (+2.8% YoY)
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)	1,300,000 (forecast)
1st Quarter '20	3,476,512 (-12.7% YoY)	3,754,533 (-11.7% YoY)
2nd Quarter '20	2,948,410 (-33.3% YoY)	1,371,420 (-67.6% YoY)
3rd Quarter '20	3,904,539 (-9.2% YoY)	3,989,982 (-.5% YoY)
4th Quarter '20	4,159,622 (-2.1% YoY)	3,789,512 (-2.5% YoY)
1st Quarter '21	3,869,872 (+11.3 YoY)	3,688,512 (-4.7% YoY)
2nd Quarter '21	4,153,855 (+20.2% YoY)	3,309,000 (132% YoY)
3rd Quarter '21		4,191,000 (forecast)
2020 Calendar Year	14,463,935 (-14.7% YoY)	12,905,447 (-23.1%)
2021 Full Year Estimate	16.6 million units (15% YoY)	15.8 million units (22.7% YoY)

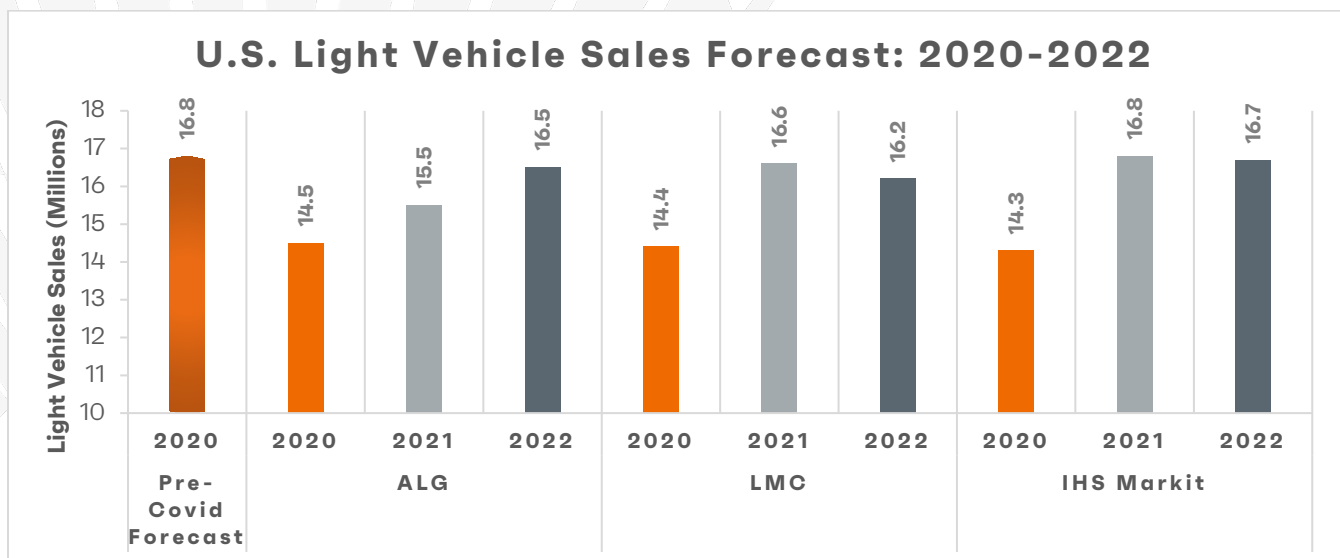
U.S. Light Vehicle Sales Outlook (Updated 8/4)

Wards Intelligence Outlook⁴: “If not for the dearth of inventory, sales in 2021 would be tracking above 17 million units for the entire year. Instead, the year-to-date seasonally adjusted annual rate through July is at 16.5 million units. Sales are expected to rebound before the end of the year but Wards Intelligence partner LMC Automotive has lowered its outlook for 2021 to 16.6 million units from 16.9 million. To get to the forecast, sales over the final five months will have to total a 16.7 million-unit SAAR.

“But sales are not likely to improve much, if at all, in August from July, and possibly could be worse.

“Since the inventory drain began, a higher percentage of a current month’s output is making its way through the pipeline to count as final sales within the same month to meet surging demand. That factor, combined with beginning-month inventory, could mean sales turn up in August on a seasonally adjusted basis, but WI’s initial outlook calls for a decline from July’s 14.8 million-unit SAAR.

“If sales don’t start to rebound in August, month-to-month growth should begin in September, and Q4 could be one of the strongest 3-month periods on record.”



North American Production & Inventory Outlook (Updated 8/4)

Wards Intelligence Inventory Outlook⁵: “Despite the current gloom, irrespective of whether sales strengthen or weaken in August from July, inventory should rise month-to-month for the first time since January, setting the stage for robust results in Q4.”

Wards Intelligence Production Outlook: “Currently, production is forecast to pick up significantly in August from July – in fact, despite a swath of known plant downtime caused by the chip issue, LMC expects August to be the strongest production month to-date this year.

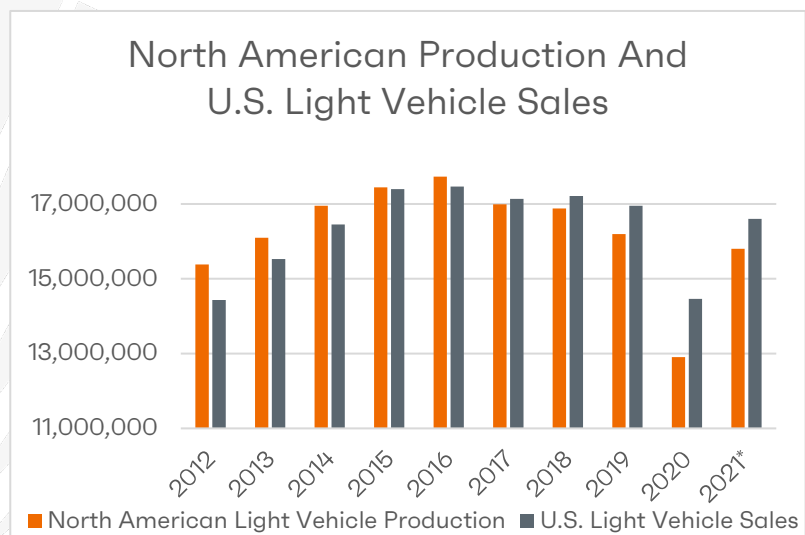
“However, as has been the trend through the first seven months of this year, supply-chain disruptions could continue to push future production totals below expectations, mainly from the microchip shortage - and there already is planned factory downtime as far ahead as October due to the chip shortage - but existing bottlenecks in shipments via water, rail and truck also loom large.

“Furthermore, the rise in Covid-19 cases in North America and abroad could cause an increase in safety measures that further limit vehicle production for the U.S.”⁶

“Wards Intelligence partner LMC Automotive slashed over 200,000 units from its July North America production estimate – nearly all due to the microchip shortage.”⁷

IHS Markit Outlook⁸: “The outlook for North America light vehicle production was reduced by 494,000 units and by 71,000 units for 2021 and 2022, respectively (and reduced by 48,000 units for 2023). The production outlook for 2021 was meaningfully reduced as the semiconductor issues are not improving at the pace that was previously expected. Production in the third quarter was expected to begin a marked improvement in the supply of semiconductors yet continued challenges on that front result in a forecast update that erases any increases compared to the benchmark

December 2020 forecast with production revised down 284,000 units. Production in the fourth quarter shows improvement compared to the December 2020 forecast, but was also revised down on reduced supply chain improvements. Production in 2022 was revised down a marginal 0.4% to 17.03 million units with most of the reduction occurring in the first quarter as supply chain issues are expected to spill over into 2022. Further downside potential exists as the industry continues to struggle with sluggish supply chain improvements. There is growing concern that the lack of industry wide inventory will begin to affect overall US vehicle demand with a June 2021 sales rate that came in at a lower than expected 15.37 million units on a seasonally adjusted annual rate (SAAR) basis pointing to possibly more constrained demand. With production also crimped in other key markets, US inventory is expected to remain severely constrained through 2022.”

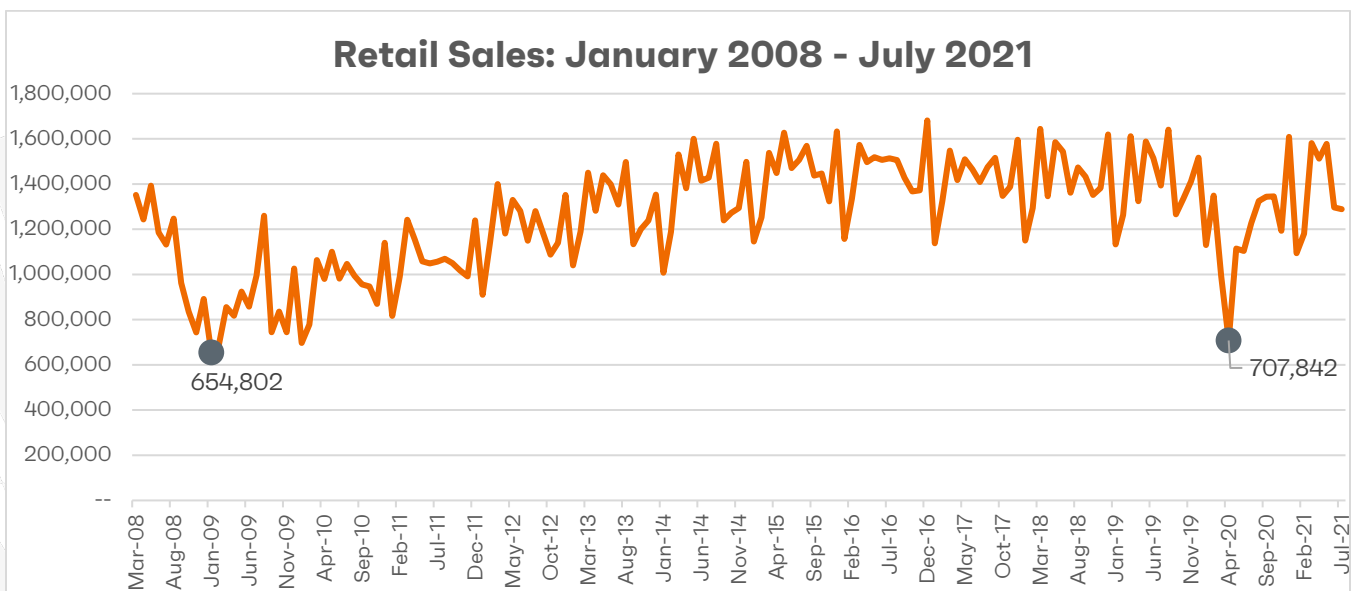


Market Meter

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.



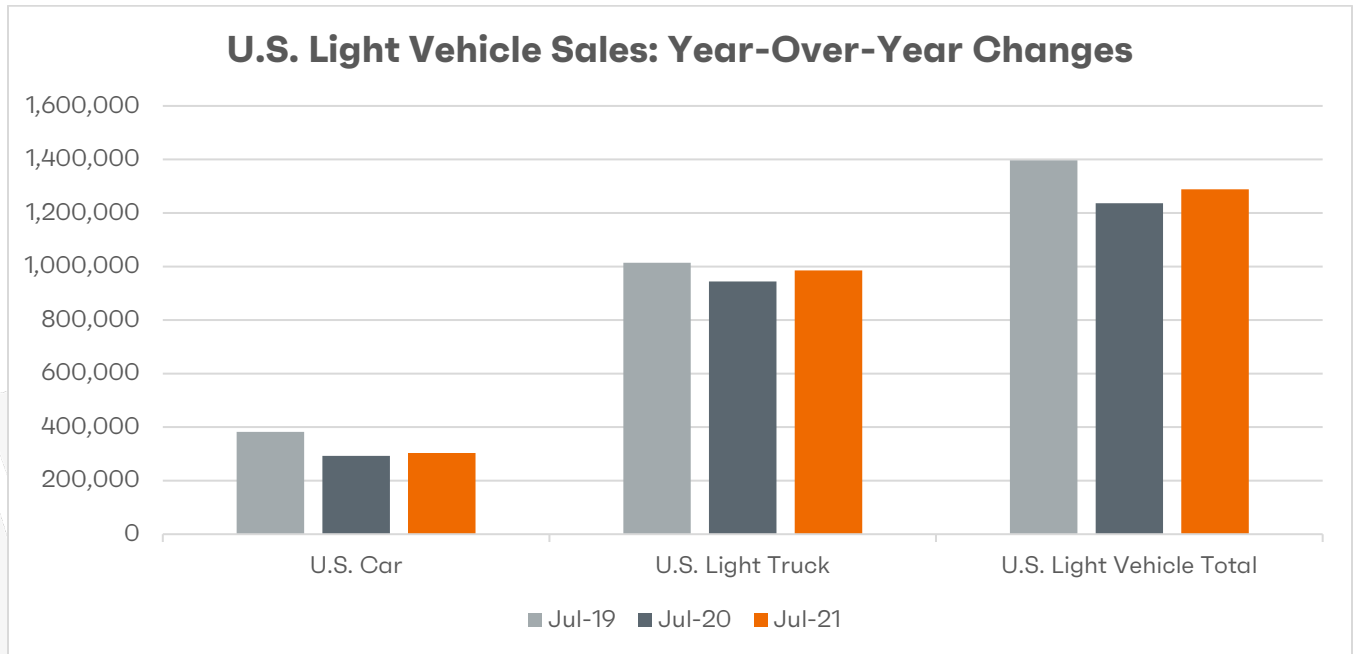
July Sales (Updated 8/4)

WardsIntelligence: “Ever-worsening product availability further capped U.S. light-vehicle sales in July, as deliveries on an annualized basis fell sequentially a third straight month to the lowest level outside of pandemic-ridden 2020 in over eight years.

“July sales totaled a seasonally adjusted annual rate of 14.8 million units, nearly the same as like-2020’s 14.7 million, but the third in a string of declines that began in May when sales fell to 17.0 million from April’s 18.3 million, followed by another huge drop to 15.4 million in June. Prior to 2020, the last time a monthly SAAR was lower than July’s total was 14.5 million units in October 2012.

“July’s raw volume totaled 1.289 million units, 4.2% above like-2020’s 1.237 million units, which was an 8-year low for the period due to lockdown measures taken last year to battle the Covid-19 pandemic. The daily selling rate over the month’s 27 selling days was 47,722, 0.3% above July 2020’s 47,563 – 26 selling days.

Calendar year-to-date volume through July totals 9.57 million units, 25.1% above 7-month 2020's 7.65 million. The year-to-date SAAR totals 16.5 million units vs. January-July 2020's 13.2 million."⁹



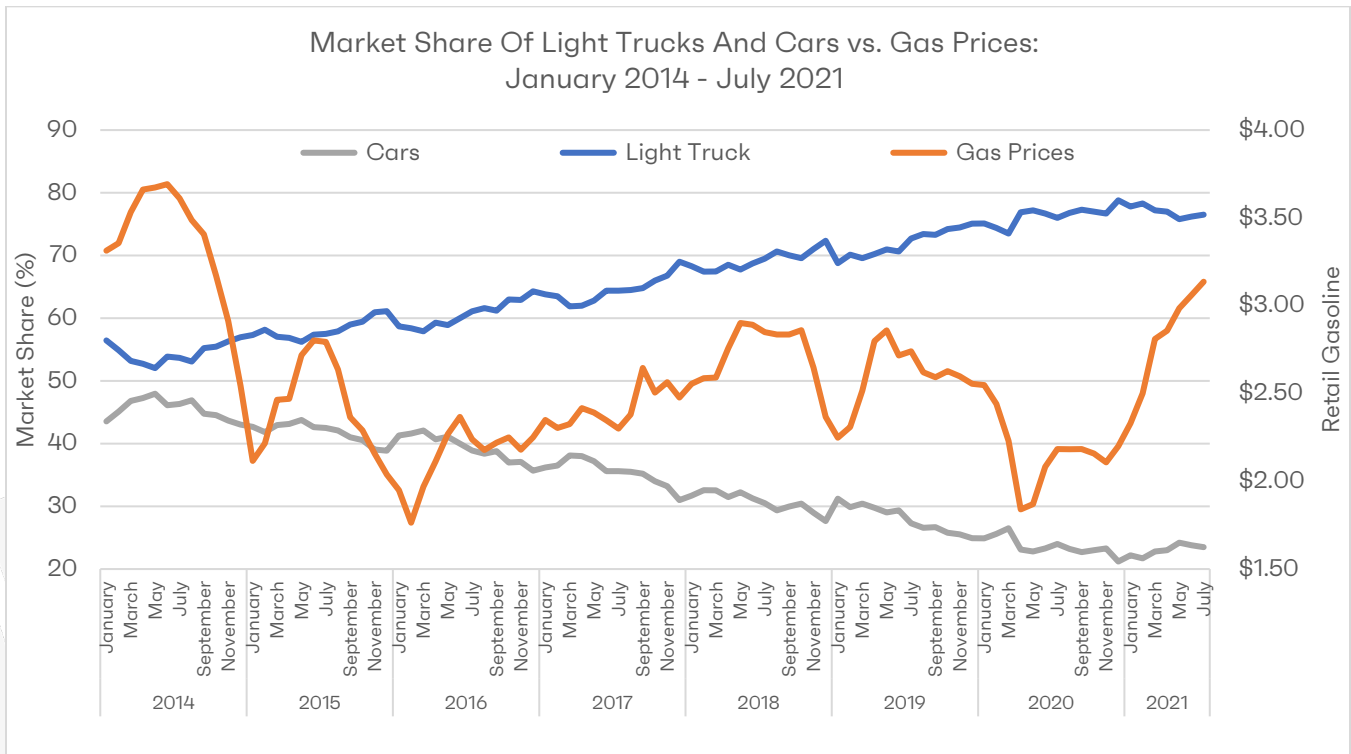
Fleet Sales (Updated 6/3)

Wards Intelligence: “Estimated fleet volume in May, although up 95% from year-ago’s pandemic downward-skewed total, accounted for just 10% of the month’s volume after averaging 16% in the first four months of 2021 and well below its pre-pandemic mark of close to 20%.”¹⁰

Segments vs. Gas Prices (Updated 8/4)

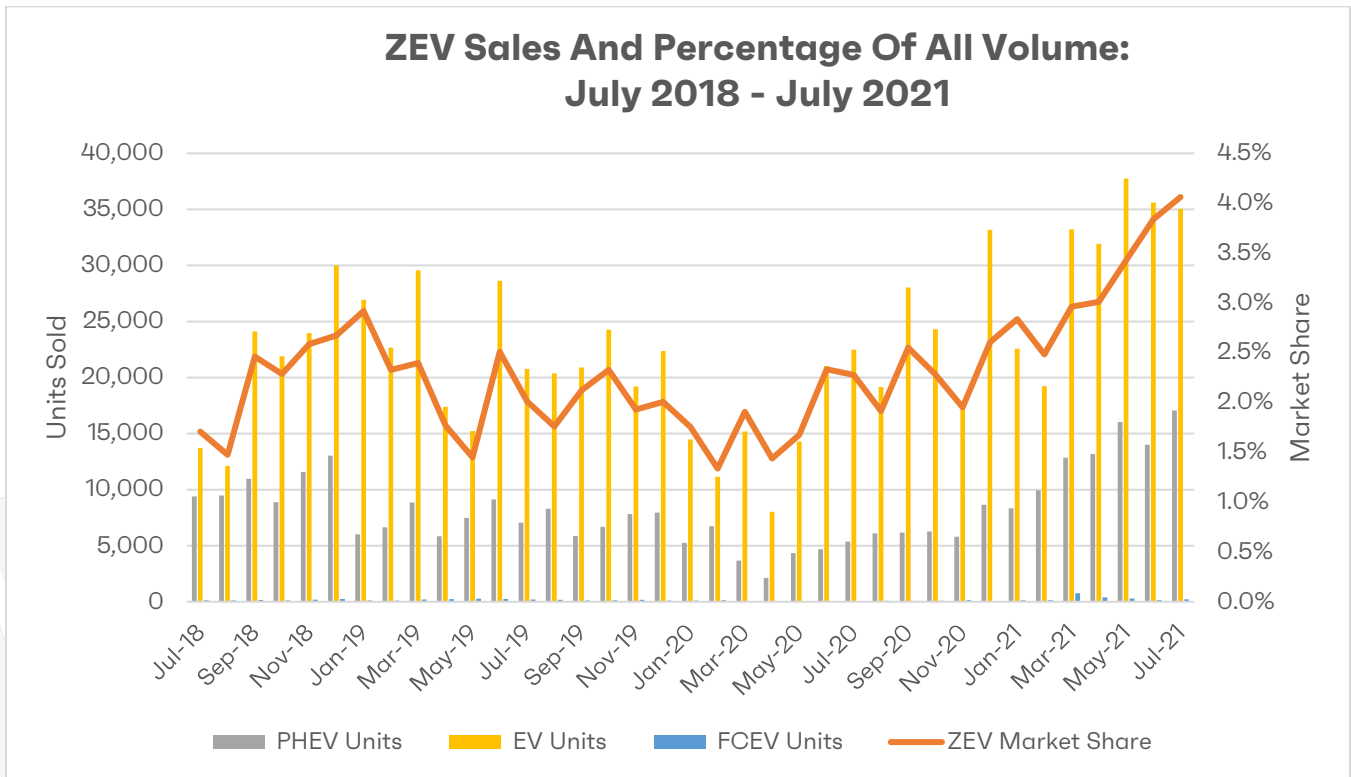
Monthly Sales For June: Light trucks accounted for 76.5% of sales in June, a .2% increase in market share from a year ago. Compared to 2020, sales of cars are up more than 10,000, but down nearly 80,000 from June 2019.

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 segments¹¹ and gas was over \$3.00¹² 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 \$2.67 a gallon (through June 2021) 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.¹³



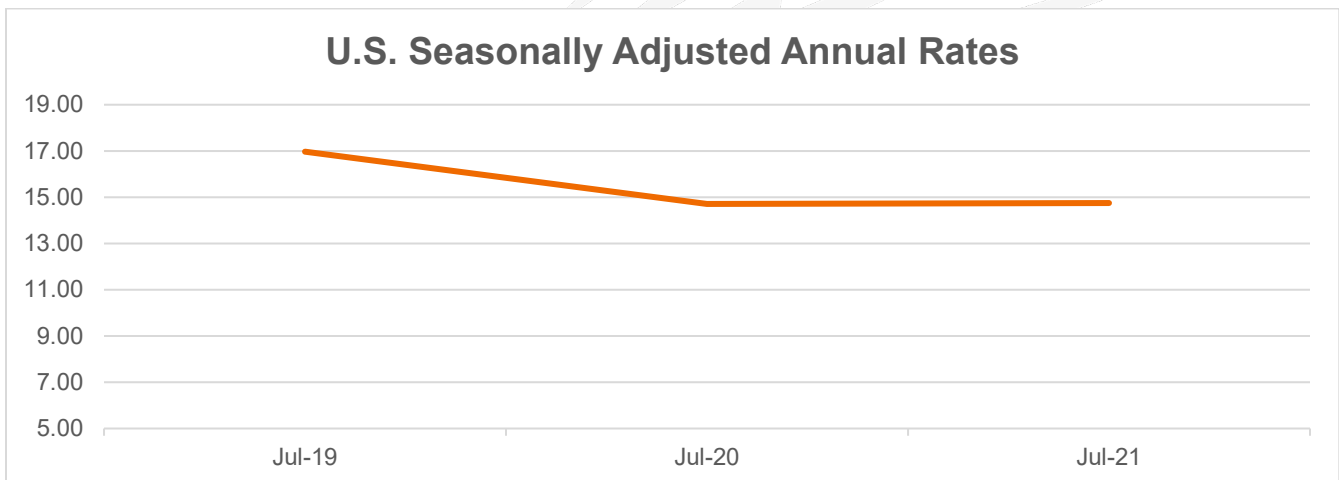
ZEV Powertrain Sales (Updated 8/4)

Sales of zero emission vehicles (BEV, PHEV, & Fuel Cell) accounted for 4.1% of total vehicle sales in June 2021, up 1.8% from a year ago and up .3% from June 2021. Sales of battery electric vehicles led the way for ZEVs, accounting for 2.72% of total sales, up .89% from July 2020. Plug-in hybrids accounted for 1.32%, three times the amount from the same time last year.¹⁴



Seasonally Adjusted Annual Rates (Updated 8/4)

WardsIntelligence: “July sales totaled a seasonally adjusted annual rate of 14.8 million units, nearly the same as like-2020’s 14.7 million, but the third in a string of declines that began in May when sales fell to 17.0 million from April’s 18.3 million, followed by another huge drop to 15.4 million in June. Prior to 2020, the last time a monthly SAAR was lower than July’s total was 14.5 million units in October 2012.”¹⁵

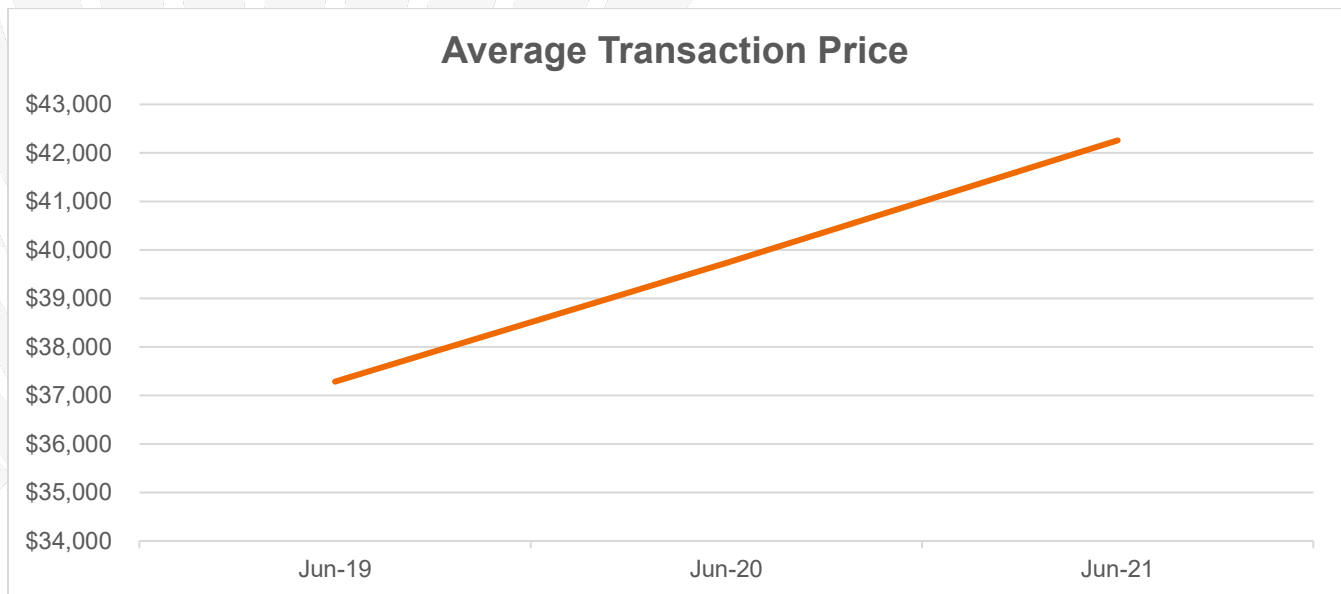


Average Transaction Price (Updated 8/4)

J.D. Power¹⁶: “For July 2021, average transaction prices are expected reach an all-time high of \$41,044. For context, average transaction prices are trending to be nearly 17% higher in July 2021 than they were in July 2020. This is partially due to the continued retraction in manufacturer incentives. The average manufacturer incentive per vehicle is on pace to be \$2,065, a decrease of \$2,170 from a year ago and the lowest amount on record for the month of July. Expressed as a percentage of the average vehicle MSRP, incentives for July 2021 are trending toward a record low of 4.8%, down nearly 5.5 percentage points from a year ago, and the first time on record below 5%.

“The combination of strong retail volumes and higher prices means that consumers are on track to spend \$48.7 billion on new vehicles this month, the highest on record for the month of July.”

Kelley Blue Book: “The estimated average transaction price for a light vehicle in the United States was \$41,263 in May 2021, according to the analysts at Kelley Blue Book. New-vehicle prices increased \$2,125 (up 5.4%) from May 2020, while increasing \$493 (up 1.2%) from April 2021.”¹⁷

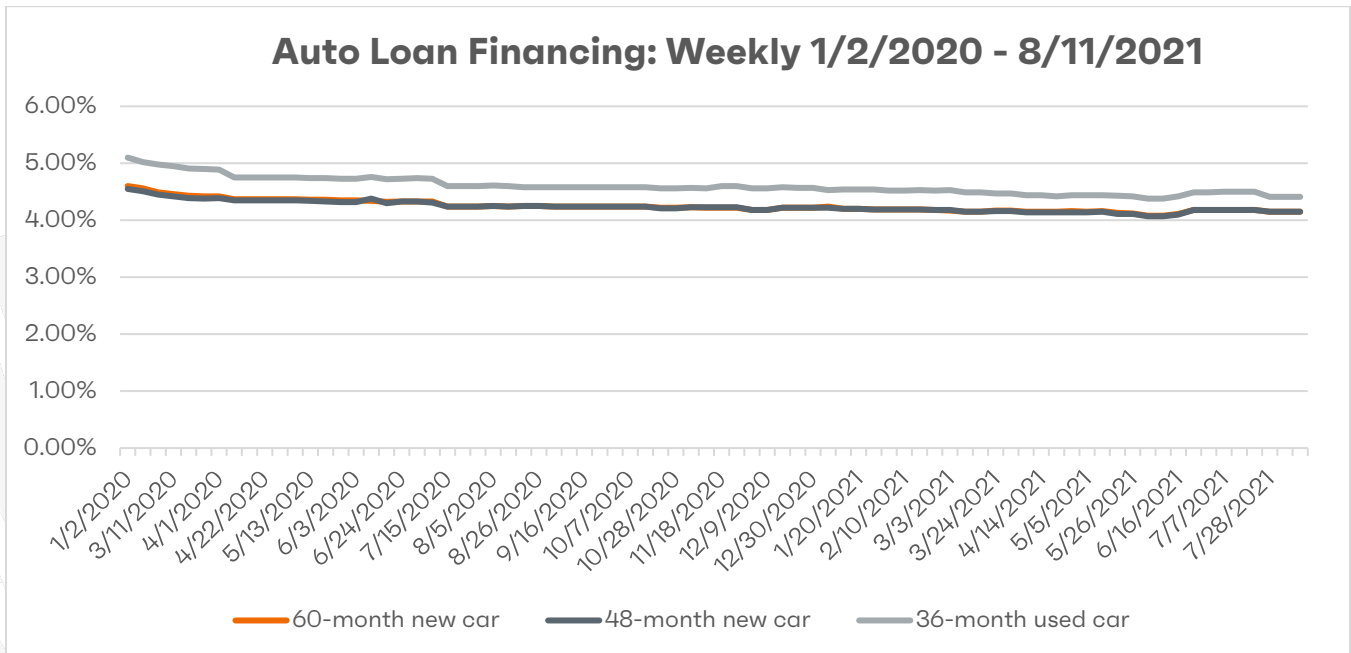


Auto Loan Financing (Updated 8/12)

Financing Steady: Interest rates for new cars and used cars held steady for the third week in a row. The interest rate for 60 months currently stands at 4.15%. Rates also remained the same for a 36-month used car loan at 4.41%. Since the beginning of last year, rates are down 0.45%, and down 0.09% since the same time a year ago.¹⁸

Dates	60-month new car	48-month new car	36-month used car
8/12/2020	4.24%	4.24%	4.60%
1/2/2020	4.60%	4.55%	5.10%

8/4/2021	4.15%	4.15%	4.41%
8/11/2021	4.15%	4.15%	4.41%
One Week Change	0.00%	0.00%	0.00%
Two Week Change	0.00%	0.00%	0.00%
Change since 1/3/20	-0.45%	-0.40%	-0.69%
One Year Change	-0.09%	-0.09%	-0.19%

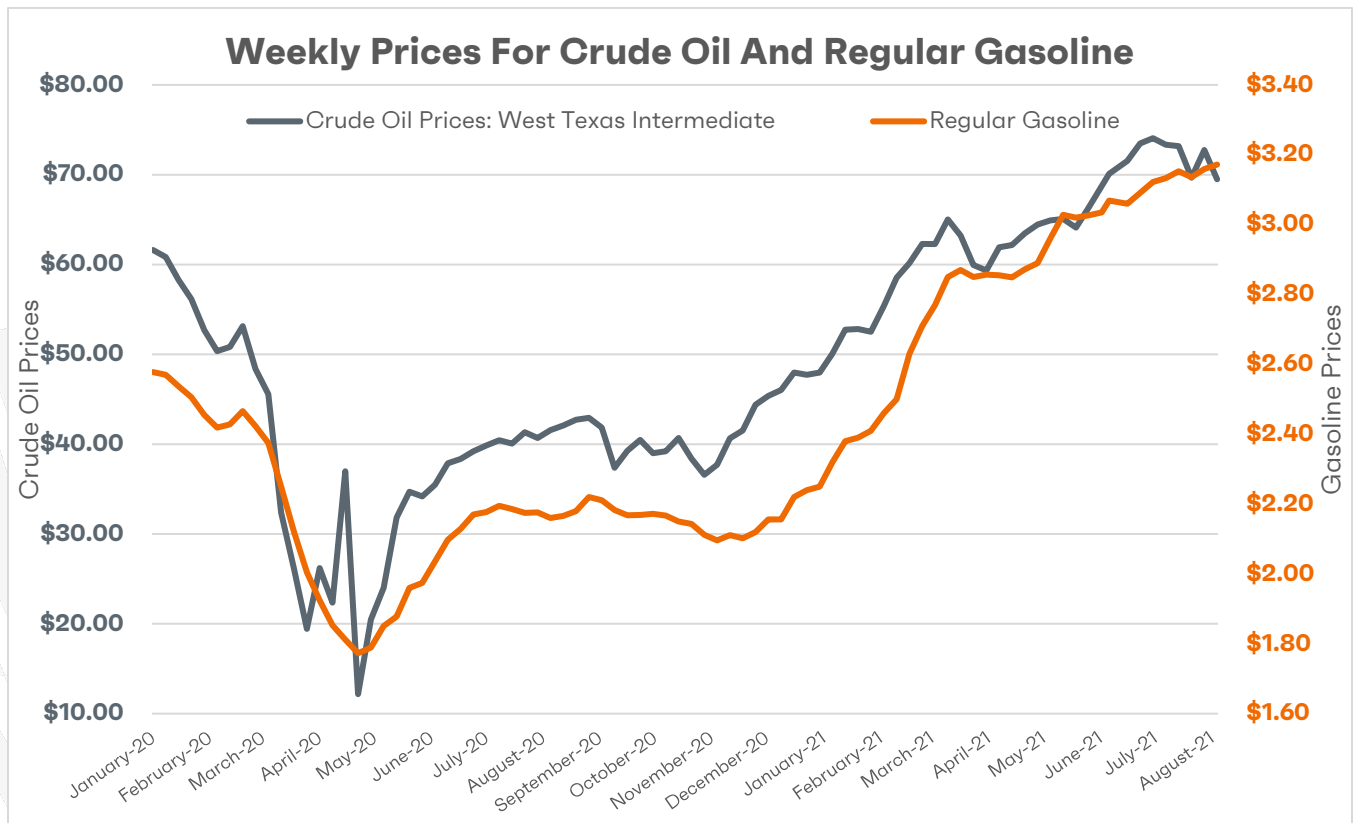


Crude Oil and Gas Prices (Updated 8/12)

EIA Outlook For Gasoline¹⁹: “U.S. regular gasoline retail prices averaged \$3.14 per gallon (gal) in July, the highest monthly average price since October 2014. Recent gasoline price increases reflect rising crude oil prices and rising wholesale gasoline margins, amid relatively low gasoline inventories. We expect that prices will average \$3.12/gal in August before falling to \$2.82/gal, on average, in 4Q21. The expected drop in retail gasoline prices reflects our forecast that gasoline margins will decline from elevated levels, as is typical in the United States during the second half of the year.”

EIA Outlook For Oil²⁰: “Brent crude oil spot prices averaged \$75 per barrel (b) in July, up \$2/b from June and up \$25/b from the end of 2020. Brent prices have been rising this year as result of steady draws on global oil inventories, which averaged 1.8 million barrels per day (b/d) during the first half of 2021 (1H21) and remained at almost 1.4 million b/d in July. We expect Brent prices will remain near current levels for the remainder of 2021, averaging \$72/b from August through November. However, in 2022, we expect that continuing growth in production from OPEC+ and accelerating growth in U.S. tight oil production—along with other supply growth—will outpace decelerating growth in global oil consumption and contribute to Brent prices declining to an average of \$66/b in 2022.”

Gas Prices Continue To Climb, Remain Above \$3 A Gallon: Oil prices, as benchmarked at West Texas Intermediate, fell slightly in the beginning of August to just under \$70 a barrel, remaining near three year highs. Since election day, oil prices have climbed nearly \$32 a barrel. Gas prices rose again this week to \$3.17, the highest mark since October 2014. Gas is 23% higher than the beginning of 2020.²¹

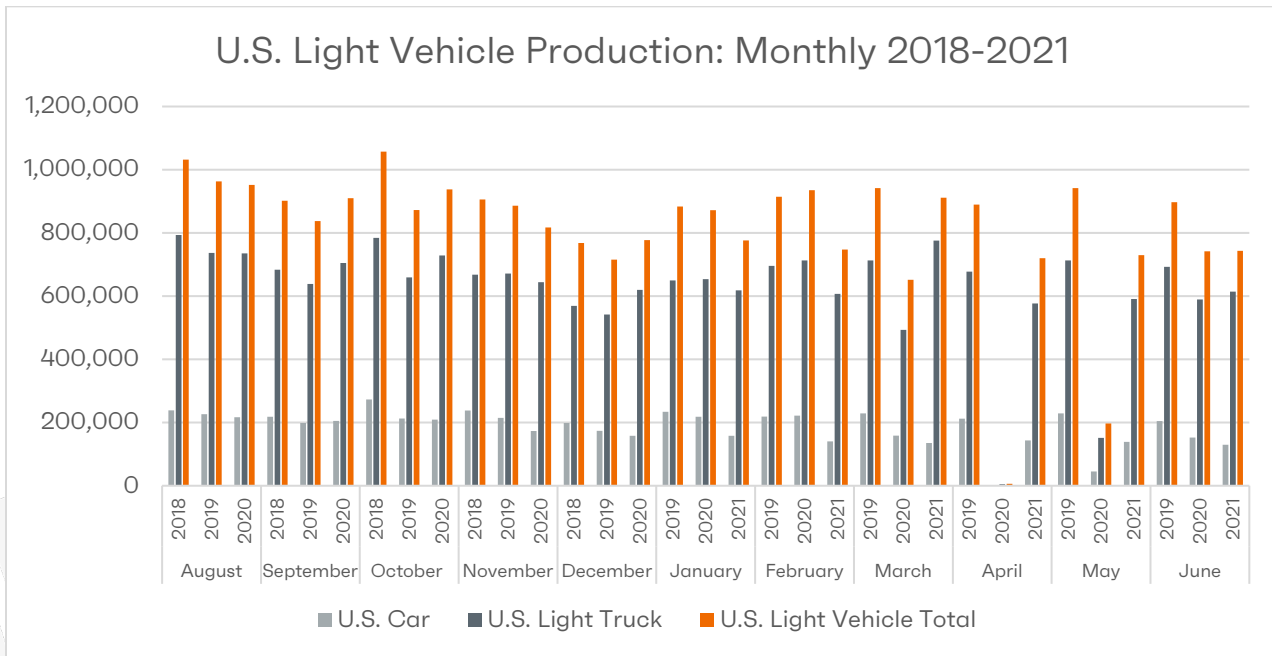


Production Meter

U.S. Light Vehicle Production (Updated 7/21)

WardsIntelligence²²: “Combined production of light-vehicles and medium-/heavy-duty trucks in June fell short of expectations to the tune of 134,000 units, finishing at 1.147 million units. The total even was 1.6% below like-2020’s pandemic-caused downward-skewed total of 1.166 million units. . . . June light-vehicle output totaled 1.108 million units, 1.9% below same-month 2020, which capped a Q2 tally of 3.309 million – 132% above Q2-2020’s Covid-impacted 1.427 million.”

U.S. Light vehicle production for June 2021 totaled 743,550, down 17% from 2019:



23

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

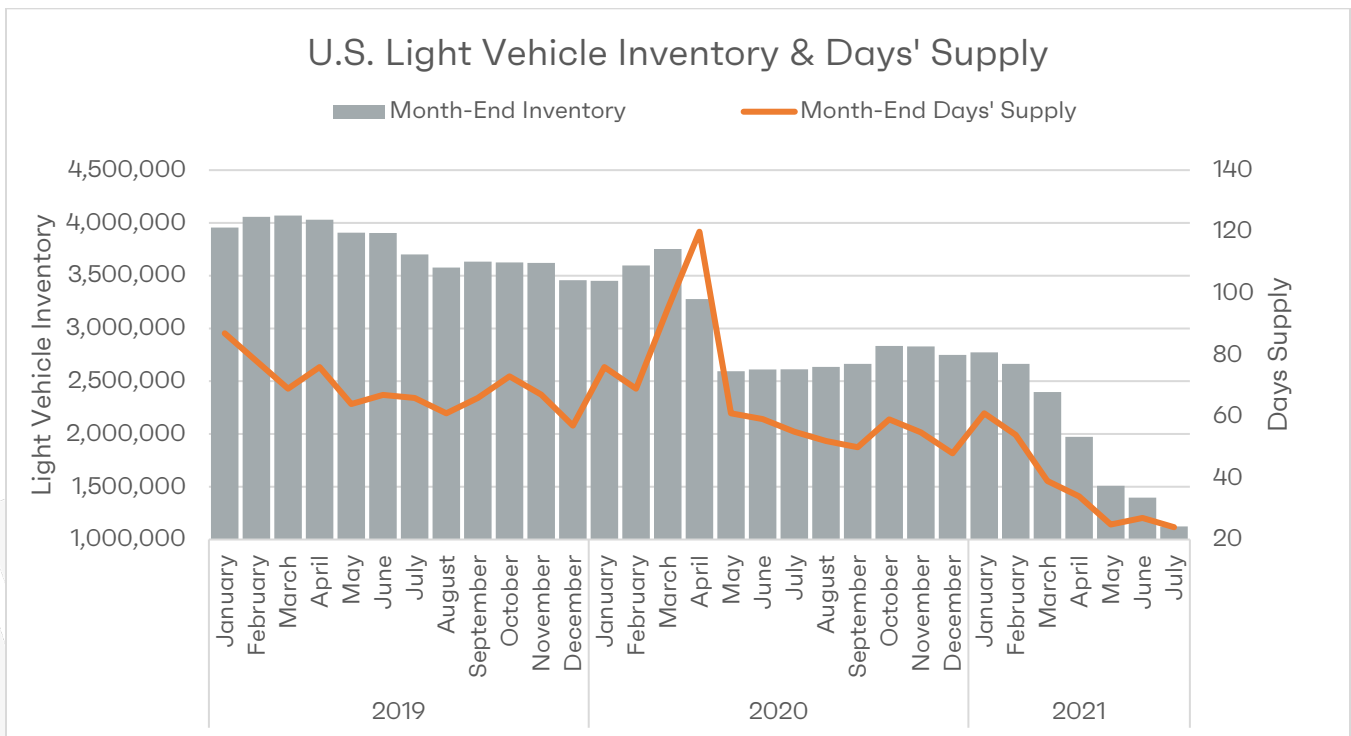
WardsIntelligence Inventory Update²⁴: “U.S. light-vehicle inventory fell 19.4% from June, finishing July at 1.12 million units, 56% below the same year-ago period.

“The decline continues a trend of sharply falling inventory due to supply disruptions caused mostly by the global microchip shortage that have sharply curtailed production for the U.S. market in North America and overseas plants. The downward slide has been ongoing since January, with declines accelerating in Q2.

“July 31 days’ supply totaled 24, down from like-2020’s 54 and well below the 60-65 range normal for the month.

“Inventory of domestically made vehicles totaled 829,889 units, down 58% from like-2020, and equal to a 23 days’ supply. Import inventory totaled 293,252 units, down 51% year-over-year, and equal to a 24 days’ supply.

“Despite the current gloom, irrespective of whether sales strengthen or weaken in August from July, inventory should rise month-to-month for the first time since January, setting the stage for robust results in Q4.”



Global Meter

Global Light Vehicle Sales Outlook (Updated 7/21)

Wards Intelligence Outlook: “Global vehicle sales reached 7.15 million in May, jumping 34.6% over year-ago’s 5.31 million. Despite the growth, sales for the month fell 8% compared to May 2019’s 7.78 million.

“Improvement in vehicle sales was seen in every region, with South America recording the highest increase (+158.3%). Several countries across all regions experienced three-digit gains in sales.

“Through the first five months of 2021, world light-vehicle sales jumped 34.9% to 34.91 million, compared to year-ago’s 25.88 million. The recovery in vehicle sales is visible since the market is slowly approaching 2019’s levels.

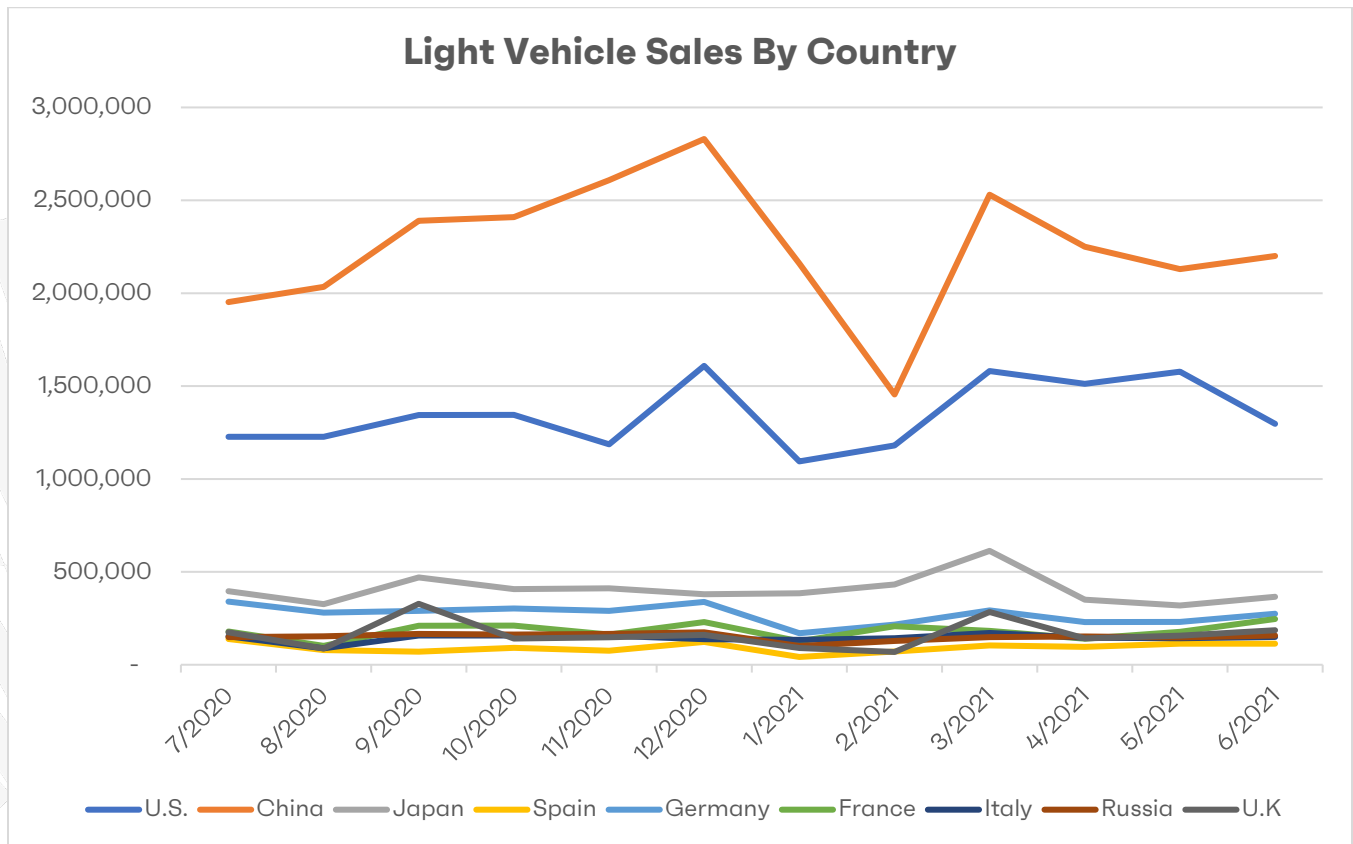
“Vehicle sales in Asia-Pacific saw an 8.1% year-on-year increase, reaching 3.15 million. But May deliveries were 12.5% lower than prior month. Most countries saw a strong uptake in total vehicle sales except for China and South Korea.

“In Europe, all countries saw vehicle sales increase in May, raising the region’s global market share to 21.1%. Total deliveries jumped 76.9% to 1.51 million. The U.K. and Ireland experienced the biggest jumps in vehicle sales at 554.6% and 264.5%, respectively.

“South America experienced the highest growth at 158.3% reaching 279,000 vehicle sales in May. Brazil, Chile, and Venezuela deliveries increased more than 200%. Year-to-date sales were up 37.7% to 1.39 million for the region.

“World sales saw slower growth in May compared to prior month, while year-to-date deliveries were down 4% compared to 2019.”²⁵

Sales in select countries around the globe, raw volume by month:

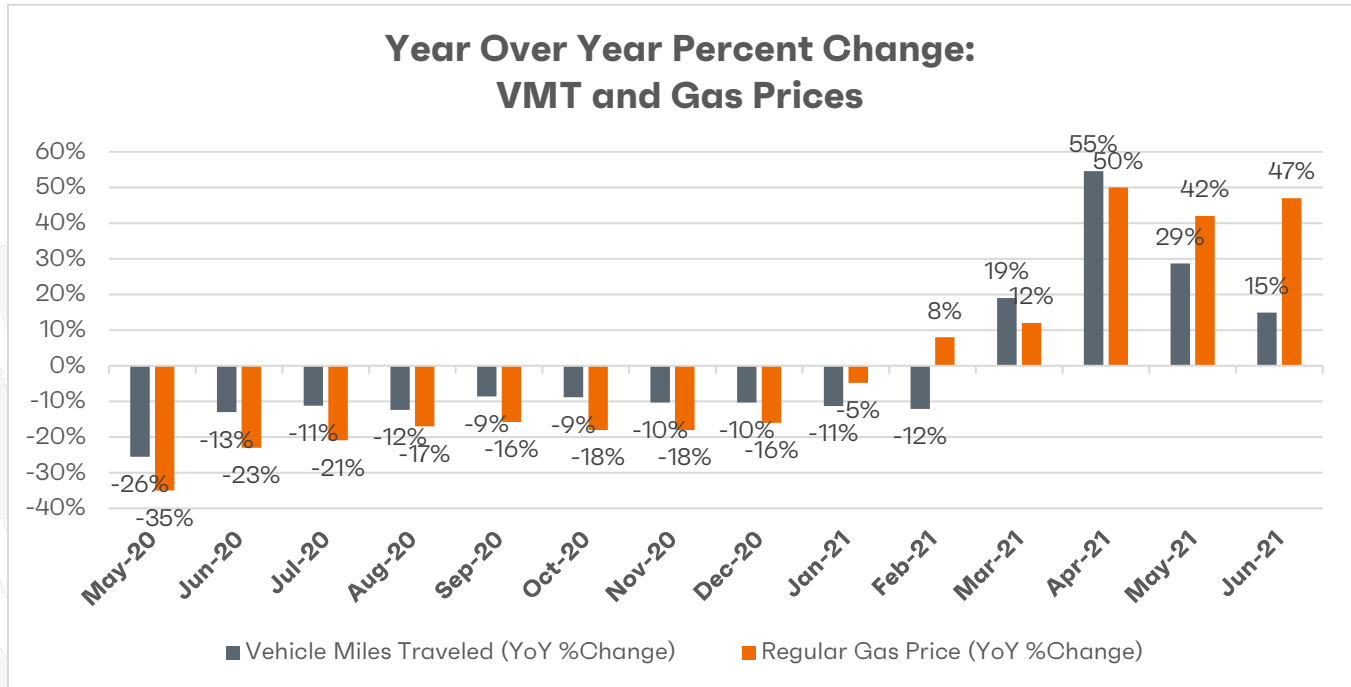


Recovery Meter

Roadway Travel (Updated 8/12)

According to the U.S. Department of Transportation, seasonally-adjusted vehicle miles traveled in June rose 14.9% from the same time a year ago. The cumulative travel estimate for 2021 is 1,504.6 billion vehicle miles.²⁶

- Travel on all roads and streets changed by 14.5% (35.7 billion vehicle miles) for June 2021 as compared with June 2020. Travel for the month is estimated to be 282.5 billion vehicle miles.
- The seasonally adjusted vehicle miles traveled for June 2021 is 267 billion miles, a 14.9% (34.7 billion vehicle miles) increase over June 2020. It also represents 1.7% increase (4.5 billion vehicle miles) compared with May 2021.
- The cumulative estimate for the year is 1,504.6 billion vehicle miles of travel.



Economic News (Updated 8/12)

Manufacturing Added 27,000 Jobs In July. “Manufacturing boosted employment by 27,000 jobs in July, with durable goods doing the heavy lifting. Durable goods accounted for 20,000 jobs of last month’s gain, according to a breakdown by industry issued today by the U.S. Bureau of Labor Statistics. . . . Manufacturing totaled 12.366 million jobs on a seasonally adjusted basis in July. That was up from an adjusted 12.339 million the month before and 12.037 million in July 2020. In 2020, manufacturing felt the impact of the COVID-19 pandemic. Some industries shut plants to implement new safety procures to deal with the virus. Manufacturing employment still lags pre-pandemic levels. The manufacturing job total is 433,000 below February 2020, the last month before COVID-19 began to hit the U.S. economy.”²⁷

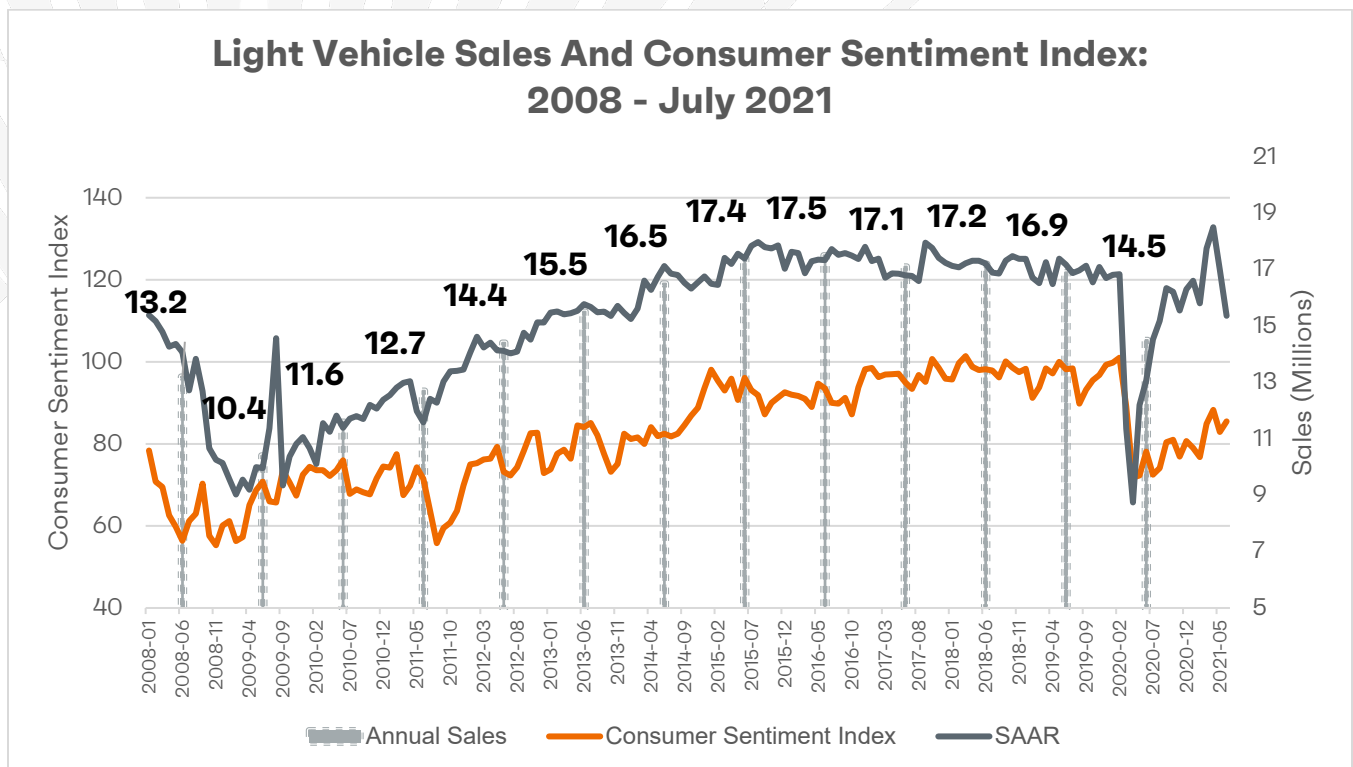
Motor Vehicles And Parts Were Up 800 (Seasonally Adjusted). “Transportation equipment, a major category, was down 1,500 jobs, although the motor vehicles and parts category was up 800.”²⁸

For July, The ISM Ticked Down To 59.5 From 60.6 In June. “U.S. manufacturing continued to grow in July, though the pace slowed for the second straight month as spending rotates back to services from goods and shortages of raw materials persist. The Institute for Supply Management (ISM) said on Monday its index of national factory activity fell to 59.5 last month, the lowest reading since January, from 60.6 in June. A reading above 50 indicates expansion in manufacturing, which accounts for 11.9% of the U.S. economy. Economists polled by Reuters had forecast the index little changed at 60.9.”²⁹

The Index Of Prices For Raw Materials Fell To 85.7, The Largest Drop Since March 2020. “The ISM survey's measure of prices paid by manufacturers fell to a reading of 85.7 last month from a record 92.1 in June, reflecting an easing in commodity prices. The drop - the largest pullback in the index since March 2020 - supports Federal Reserve Chair Jerome Powell's contention that inflation will moderate as supply constraints abate.”³⁰

Consumer Confidence and Sales (Updated 8/4)

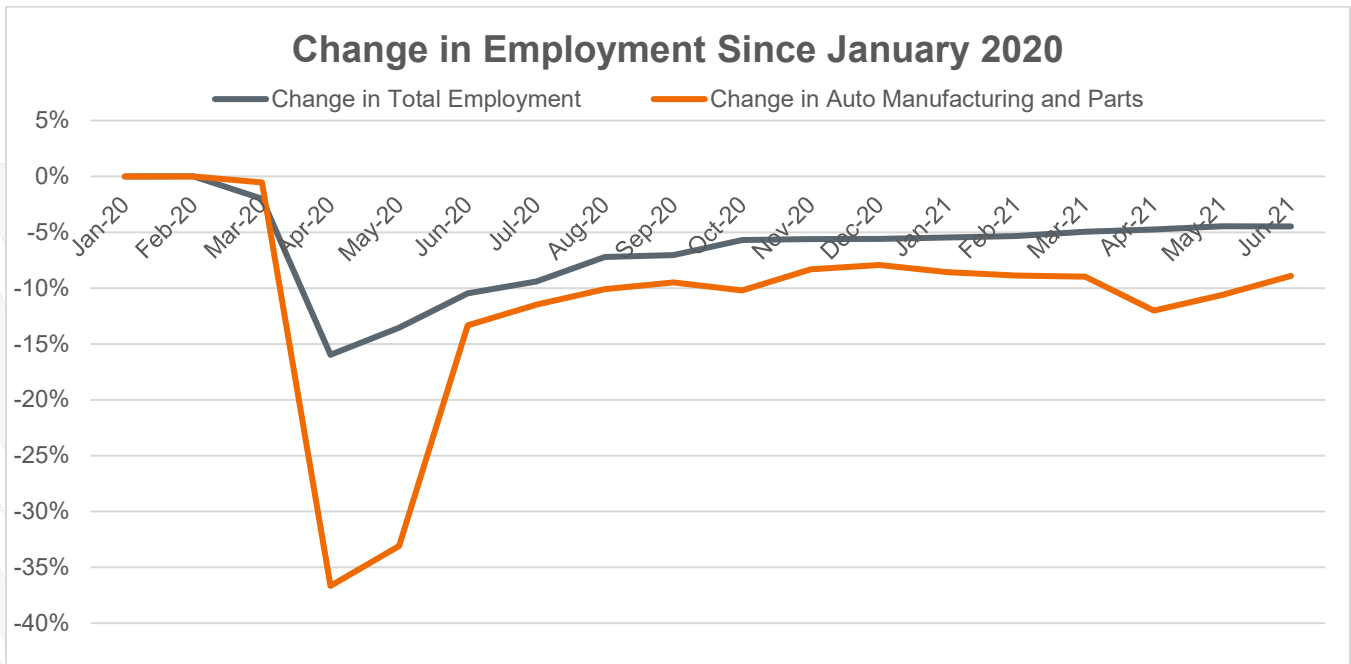
“Consumer sentiment edged upward at the end of July, although it still posted a monthly decline of 5.0%. The largest monthly declines remained concentrated in the outlook for the national economy and complaints about high prices for homes, vehicles, and household durables. While most consumers still expect inflation to be transitory, there is growing evidence that an inflation storm is likely to develop on the not too distant horizon. The improved finances of consumers have greatly reduced consumers' resistance to price increases.”³¹



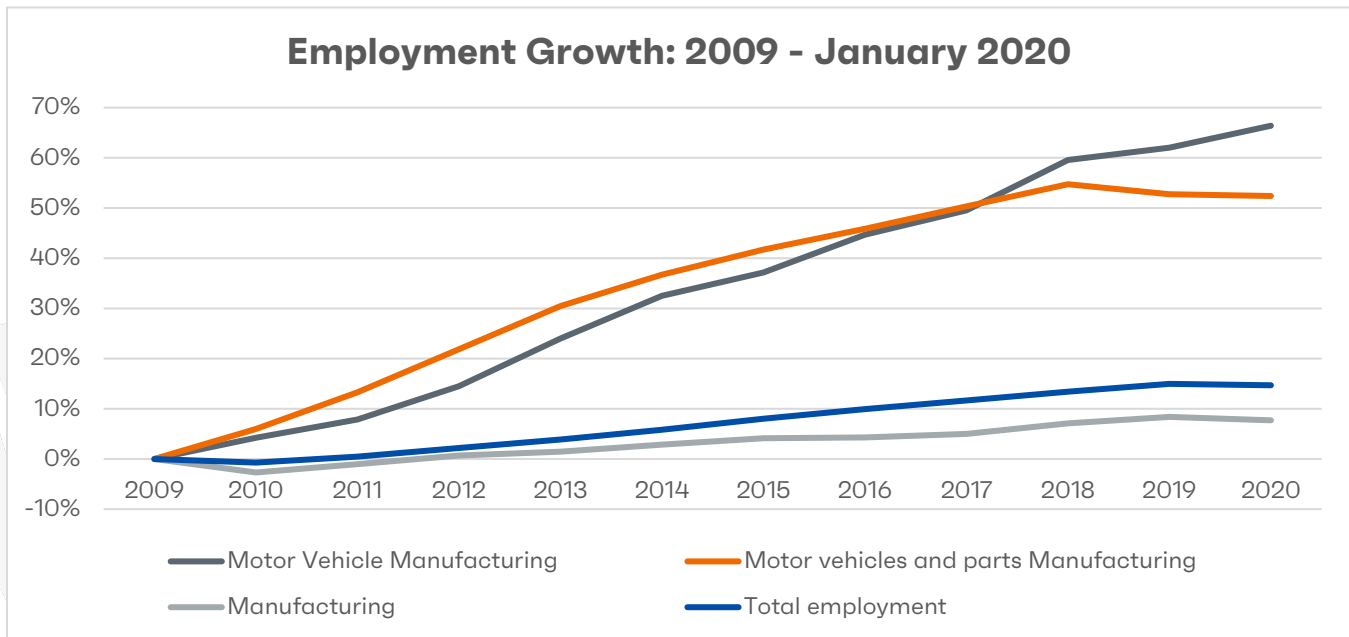
Employment (Updated 8/12)

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. Employment in motor vehicles and parts is down 96,000 jobs since January 2020.³²

- **Motor Vehicle And Parts Manufacturing Added 800 Jobs In July.**³³



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.³⁴ Additionally, the chart below shows how the recovery of jobs in motor vehicle manufacturing alone and motor vehicle and parts manufacturing far outpaced the recovery of manufacturing and total jobs.



Sources

¹ WardsIntelligence, "U.S. Light Vehicle Sales, April," 5/1/20; WardsIntelligence, "U.S. Light Vehicle Sales, May 2020," 6/2/20; WardsIntelligence, "U.S. Light Vehicle Sales, June 2020," 7/1/20; WardsIntelligence, "U.S. Light Vehicle Sales, July 2020," 8/3/20; WardsIntelligence, "U.S. Light Vehicle Sales, August 2020," 9/1/20; WardsIntelligence, "U.S. Light Vehicle Sales, September 2020," 10/1/20; WardsIntelligence, "U.S. Light Vehicle Sales, October 2020," 11/3/2020; WardsIntelligence, "U.S. Light Vehicle Sales, November 2020," 12/1/2020; "U.S. Light Vehicle Sales, December 2020," 1/5/2021

² Haig Stoddard, "COVID-19 Impact Will Tank March, Second-Quarter U.S. Light-Vehicle Sales," *WardsIntelligence*, 3/25/20; Haig Stoddard, "March 25 COVID-19 Update: 2020 North America Production, U.S. Sales Forecasts," *WardsIntelligence*, 3/30/20; Haig Stoddard, "U.S. Light-Vehicle Sales Start on the Road Back in May," *WardsIntelligence*, 5/21/20

³ Haig Stoddard, "COVID-19's Toll on North America Vehicle Production in March, Q2," *WardsIntelligence*, 3/30/20; Haig Stoddard, "North America Platform by Plant Production Forecast - 2020-2022," *WardsIntelligence*, 1/8/21

⁴ Haig Stoddard, "July U.S. Light-Vehicle Inventory Falls 19%; 2021 Sales Outlook Chopped," *WardsIntelligence*, 8/4/21

⁵ Haig Stoddard, "July U.S. Light-Vehicle Inventory Falls 19%; 2021 Sales Outlook Chopped," *WardsIntelligence*, 8/4/21

⁶ Haig Stoddard, "July U.S. Light-Vehicle Inventory Falls 19%; 2021 Sales Outlook Chopped," *WardsIntelligence*, 8/4/21

⁷ Haig Stoddard, "U.S. Light-Vehicle Sales Continue Downward Slide in July," *WardsIntelligence*, 8/4/21

⁸ IHS Markit, email, "IHS Markit Monthly Automotive Update - July 2021," 7/16/21

⁹ Haig Stoddard, "U.S. Light-Vehicle Sales Continue Downward Slide in July," *WardsIntelligence*, 8/4/21

¹⁰ Haig Stoddard, "U.S. Light-Vehicle Sales Still Solid, But Dried-Up Inventory Dents May's Results," *WardsIntelligence*, 6/2/21

¹¹ WardsIntelligence, U.S. Light Vehicle Sales, January 2013 – June 2021

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, June 2020; U.S. Light Vehicle Sales, June, 2021
- ¹⁵ Haig Stoddard, "U.S. Light-Vehicle Sales Continue Downward Slide in July," *WardsIntelligence*, 8/4/21
- ¹⁶ J.D. Power, Press Release, "Inventory Shortages Cause July Sales Pace to Weaken but Demand Drives Average Transaction Price Above \$41,000 for First Time," 7/28/21
- ¹⁷ Kelley Blue Book, Press Release, "Average New-Car Prices Up Nearly 4 Percent Year-Over-Year for May 2019, According to Kelley Blue Book," 6/3/19; Kelley Blue Book, Press Release, "Average New-Vehicle Prices Rise More Than \$2,000 from Last Year, Hitting All-Time Record High for May, According to Kelley Blue Book," 6/22/2021
- ¹⁸ Bankrate, "[Current Car Loan Interest Rates](#)," Accessed 7/14/21; Internet Archive, Bankrate, "Current Car Loan Interest Rates, cached image from 12/4/19
- ¹⁹ EIA, "[Short-Term Energy Outlook](#)," 7/7/21
- ²⁰ EIA, "[Short-Term Energy Outlook](#)," 7/7/21
- ²¹ U.S. Energy Information Administration, Regular Gasoline, www.eia.gov, Accessed 6/30/21; U.S. Energy Information Administration, Weekly Cushing, OK WTI Spot Price, www.eia.gov, Accessed 6/30/2021; YCharts, ycharts.com, Accessed 11/4/20
- ²² Haig Stoddard, "U.S. Light-Vehicle Sales Expected to Weaken in May as Impact of Lean Inventory Takes Hold," *WardsIntelligence*, 5/25/21
- ²³ WardsIntelligence, "North America Production, November 2019," 12/18/19; WardsIntelligence, "North America Production, November 2020," 12/17/20
- ²⁴ Haig Stoddard, "July U.S. Light-Vehicle Inventory Falls 19%; 2021 Sales Outlook Chopped," *WardsIntelligence*, 8/4/21
- ²⁵ Olympia Fotiadi Mouzala, "World Sales Rose 34.6% in May," *WardsIntelligence*, 7/121
- ²⁶ U.S Department of Transportation, https://www.fhwa.dot.gov/policyinformation/travel_monitoring/20novvtv/, Accessed 5/19/2021
- ²⁷ Bill Koenig, "Manufacturing Adds 27,000 Jobs, Paced by Durable Goods," *SME*, 8/6/21
- ²⁸ Bill Koenig, "Manufacturing Adds 27,000 Jobs, Paced by Durable Goods," *SME*, 8/6/21
- ²⁹ "U.S. Manufacturing Sector Growth Slowing-ISM," *Reuters*, 8/2/21
- ³⁰ "U.S. Manufacturing Sector Growth Slowing-ISM," *Reuters*, 8/2/21
- ³¹ Surveys of Consumers, University of Michigan, <http://www.sca.isr.umich.edu/>, 7/14/21
- ³² Bureau of Labor Statistics, Current Employment Statistics, Accessed 3/17/2021
- ³³ Bureau of Labor Statistics, Table B-1. Employees on nonfarm payrolls by industry sector and selected industry detail, June 2021
- ³⁴ Jerry Hirsch, "[Auto Industry Has Soared Since 2010, Leading Economic Recovery](#)," *Los Angeles Times*, 1/3/14