

J.D. POWER

USED CAR AND LIGHT TRUCK GUIDELINES

Industry Update

SEPTEMBER 2018

Wholesale Prices Increase in August

Prices up by an average of 0.7%

Used Vehicle Price Index Increases

Index rises 2.2 points to 121.9

New Vehicle Sales Unchanged

Sales remain flat, new vehicle SAAR slips to 16.6 million

Incentive Spending Grows

Incentives grow for 41st straight month

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NEW & USED MARKET UPDATE

USED MARKET UPDATE

Used vehicle prices in August improved relative to July and ended the month even stronger than expected. As a result, the J.D. Power Valuation Services’ Seasonally Adjusted Used Vehicle Price Index increased by 2.2 points – relative to July – to 121.9. Additionally, the index ended the month 6.3 points above August 2017’s level. The August 2018 result marks the third consecutive month of index growth and helped it reach its highest level since late 2015.

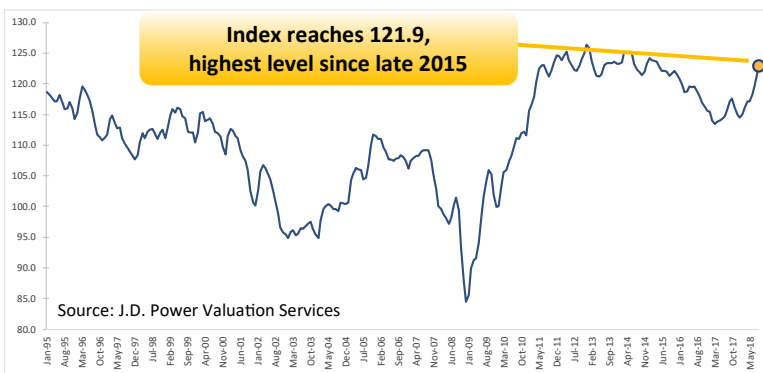
The used vehicle market started showing its strength in the middle half of 2017, and there are no signs of it letting up. Most of the market’s lift in prices has been driven primarily by mainstream car growth, however, mainstream utility segments continue to show firmness as well.

On the premium side of the market, luxury car and SUV segments are not experiencing the same positive trend as their mainstream counterparts due in part to higher incentive spend on the new side of the market. There are two primary factors behind why the used market continues to heat up; first, dealers are placing more emphasis on used vehicle operations, and second, vehicle affordability is becoming increasingly important to consumers.

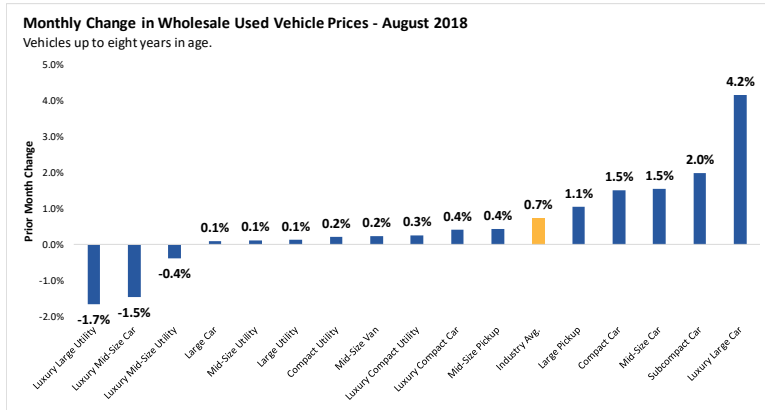
In non-index terms, wholesale prices of used vehicles up to eight years in age increased by 0.7% in August relative to July. The month’s performance was atypical relative to other recent August

performances and the best on record since 2009. Looking back, last year wholesale prices declined by an average of 0.7% in the August period. Mainstream segments continue to outperform their luxury counterparts and passenger car prices are still generally firmer than SUVs.

Most of the period’s success can be attributed towards strong performances of small and mid-size cars. In August, small car prices improved by 2% and mid-size car wholesale prices increased 1.5%. Large pickup prices also performed better than the overall



New & Used Market Trends [cont.]



industry average and increased by 1.1%. Remaining mainstream segments experienced small increases in prices, however, slightly less than the industry average for the month. Like their large pickup counterparts, mid-size pickups continue to perform well, and as a result prices increased by 0.4%

On the luxury side of the market, wholesale prices have not performed nearly as well as their mainstream counterparts. Losses in August were most severe for luxury large utility and luxury mid-size cars. Wholesale prices for the pair declined by 1.7% and 1.5%, respectively. While on the opposite end of the premium spectrum, luxury large car prices

grew by 4.2%. However, this is a very small segment in terms of overall share so any material changes for one model can skew overall segment results month-to-month.

AUCTION VOLUME TRENDS

Auction volume for units up to five years in age grew by 13.8% compared to July and increased by 5.4% compared to August 2017. As a result, year-to-date late-model volume now sits 4.5% above one-year ago levels and continues to increase with each passing month.

At the segment level, some of the largest volume increases year-to-date are still observed among SUV segments. Compact premium SUV volume is up 49.1% and large SUV volume is now up 28.1%. In terms of volume share, cars share reached 52% while truck share lags at 48%.

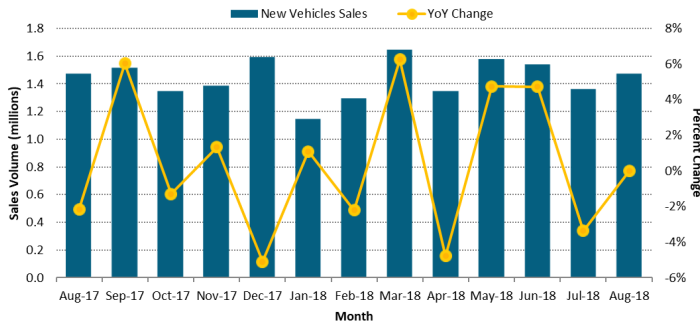
Overall, J.D. Power Valuation Services is anticipating a 6.5% increase in supply for vehicles up to 5 years in age this year, which is slightly less than the 6.6% increase recorded in 2017. Most of 2018's increase will be driven by a 14.2% increase in off-lease volume followed by an 8% increase in rental supply and 2.7% increase in regular retail purchase supply. Supply is expected to peak in 2019 before leveling off.

2018 FORECAST

For September, wholesale prices of vehicles up to 8 years in age are expected to decline by around 0.5%. In terms of full-year expectations, with the exceptional performances of the past few months and strong August showing, used prices are forecast to increase by around 2.9% in 2018. Negative forecast factors hurting used vehicles continue to be incentives, an anticipated increase in used supply, worsening credit conditions, and increasing gasoline prices. However, positive factors—such as favorable labor conditions, strengthening housing prices along with long-term quality improvements—will outweigh the negatives.

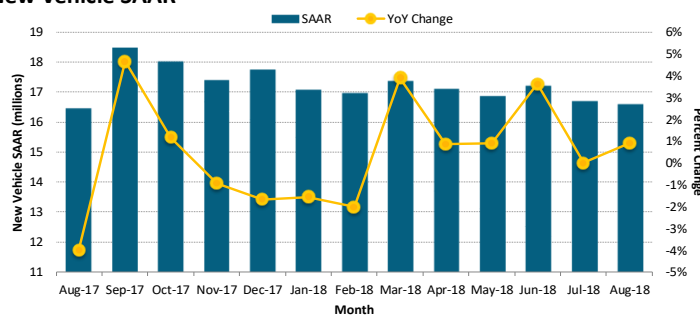
New & Used Market Trends [cont.]

New Vehicle Sales



Source: WardsAuto

New Vehicle SAAR



Source: WardsAuto

NEW SALES WEAKEN IN AUGUST

After slowing in July, the new vehicle market weakened again in August. U.S. new vehicle sales finished with a seasonally adjusted annual rate (SAAR) of 16.6 million units, slightly below July's 16.7 million, but above August 2017's 16.5 million. However, the year-ago results were impacted by a severe hurricane. Excluding the year-ago month, August's SAAR was the lowest recorded since February 2015's 16.4 million units.

NEW VEHICLE SALES

Overall, new vehicle sales were flat in August relative to the same period in 2017. August's result brought 2018's year-to-date tally to 11.41 million units, up 1.1% compared to the same period in 2017. Total volume in August reached 1.47 million units, nearly the same figure as a year ago. August was the first month since February when the DSR of 54,588 did not increase from the same year-ago month. Both periods had 27 selling days.

Truck share topped 70% and accounted for 70.6% of the total market in August, which is a new all-time high and likely will continue to improve over the rest of the year.

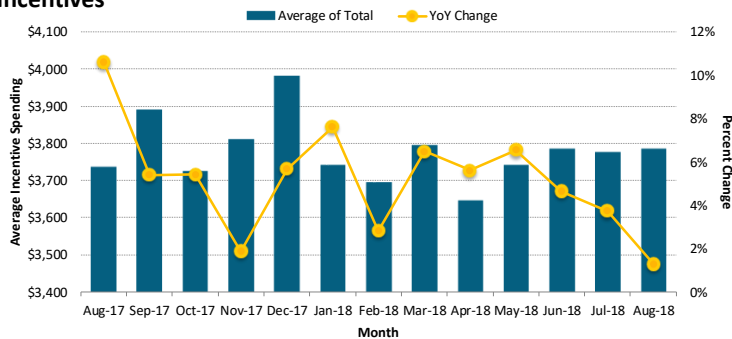
At the manufacturer and brand level, General Motors posted a 13% decrease in August as the automaker lowered sales incentives by 6% a vehicle on average compared with August of last year. Several other automakers posted decreases in August including BMW, Daimler, Mazda, Porsche and Toyota.

Ford managed a 4.5% gain, its 3rd increase in 2018. Fiat Chrysler sales rose by 10%, powered by record sales for RAM 1500 and Jeep Wrangler. Volvo sales have increased every month in 2018 including August's 12.2% increase. Tesla more than tripled its sales year-over-year in August, the brand's growth has been supported by widespread availability of the Model 3.

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New & Used Market Trends [cont.]

Incentives



Source: Autodata

INCENTIVES GROW BY 1%

Automakers grew incentive spending once again in August, making it the 41st month in a row spending increased. On average, according to Autodata, spending reached \$3,784 per unit versus \$3,746 per unit in August 2017.

Among the U.S. Big Three, GM decreased incentives by 5.7% in August to an average of \$4,720 per unit. Spending at Ford Motor Company grew by 10.2% to \$4,736 per unit, while FCA incentive spend increased by 4.2% to \$4,621 per unit.

As for import automakers, Toyota Motor Sales dropped incentives by 9.6% in August, reaching an average of \$2,590 per unit. American Honda decreased incentives by 1.4% to \$1,930, while Nissan North America decreased spending by 1.4% to \$4,380 per unit.

Luxury automaker BMW increased incentives by 11.1% to an average of \$5,715 in August. Audi increased spending by a massive 41.2% to \$4,657 per unit, while Mercedes-Benz boosted spending by 27.4% to \$5,847.

At the mainstream brand level, Chrysler's \$6,088 average incentive spend was the highest among the non-luxury brands. At the other end of the spectrum, Subaru spent only \$1,507 per unit, up 46.9% compared to the same period in 2017.

AUGUST INVENTORY UP TO 68 DAYS

Compared to July, days' supply went up by 3 days in August. Total supply level increased to 68 days for the period, compared to 70 days in August 2017, according to WardsAuto.

General Motors' inventory stretched to 88 days, up 6 days from July. Ford Motor Company's supply

Mainstream Brand Performance (Units Sold)

	Aug-18	Aug-17	CYTD-18	CYTD-17	Y/Y Change	CYTD/CYTD
Buick	15,965	16,811	140,475	143,093	-5.0%	-1.8%
Chevrolet	168,953	195,842	1,342,960	1,315,068	-13.7%	2.1%
Chrysler	12,219	12,652	112,473	128,050	-3.4%	-12.2%
Dodge	35,575	43,608	317,627	335,852	-18.4%	-5.4%
Fiat	1,374	2,120	10,899	19,046	-35.2%	-42.8%
Ford	203,448	194,448	1,572,291	1,588,777	4.6%	-1.0%
GMC	41,196	47,718	347,360	358,305	-13.7%	-3.1%
Honda	132,831	132,916	973,357	987,701	-0.1%	-1.5%
Hyundai	56,929	52,507	435,852	441,385	8.4%	-1.3%
Isuzu Truck	319	181	2,346	1,867	76.2%	25.7%
Jeep	87,502	73,191	662,430	548,833	19.6%	20.7%
Kia	53,864	53,323	400,539	405,462	1.0%	-1.2%
Mazda	25,816	25,846	213,865	194,559	-0.1%	9.9%
Mini	3,800	4,448	30,732	31,051	-14.6%	-1.0%
Mitsubishi	8,416	8,164	85,693	70,765	3.1%	21.1%
Mitsubishi Fuso	3	16	32	66	-81.3%	-51.5%
Nissan	101,580	97,340	909,150	955,340	4.4%	-4.8%
Ram	53,278	42,081	349,815	355,459	26.6%	-1.6%
Scion	0	8	2	189	100.0%	-98.9%
Smart	108	229	861	2,394	-52.8%	-64.0%
Subaru	64,088	63,215	446,374	423,728	1.4%	5.3%
Toyota	194,433	196,816	1,432,110	1,411,195	-1.2%	1.5%
Volkswagen	32,255	32,015	235,673	220,344	0.7%	7.0%

Source: WardsAuto

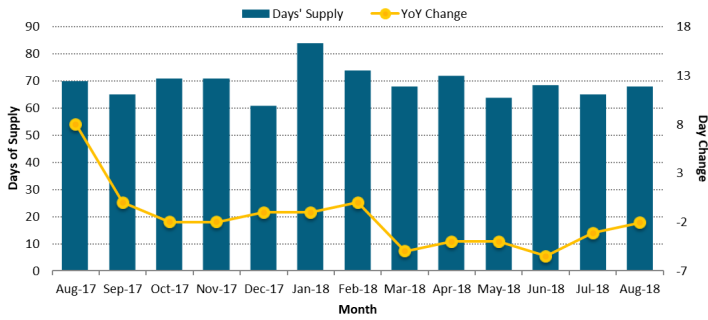
Luxury Brand Performance (Units Sold)

	Aug-18	Aug-17	CYTD-18	CYTD-17	Y/Y Change	CYTD/CYTD
Acura	15,072	13,132	100,972	101,180	14.8%	-0.2%
Alfa Romeo	2,240	1,140	16,521	6,084	96.5%	171.5%
Audi	20,907	19,811	148,070	141,606	5.5%	4.6%
BMW	23,789	23,553	199,157	194,604	1.0%	2.3%
Cadillac	13,653	15,016	100,762	98,316	-9.1%	2.5%
Genesis	613	1,803	8,490	13,348	-66.0%	-36.4%
Infiniti	10,796	10,986	92,713	100,969	-1.7%	-8.2%
Jaguar	2,469	3,101	19,136	26,932	-20.4%	-28.9%
Land Rover	7,179	6,320	58,167	48,074	13.6%	21.0%
Lexus	28,622	30,801	189,025	193,463	-7.1%	-2.3%
Lincoln	8,945	8,708	67,112	73,920	2.7%	-9.2%
Mercedes-Benz	24,084	28,954	222,797	235,378	-16.8%	-5.3%
Porsche	4,083	4,709	37,524	36,178	-13.3%	3.7%
Tesla	8,514	2,372	62,278	27,266	258.9%	128.4%
Volvo	8,970	7,993	65,214	49,065	12.2%	32.9%

Source: WardsAuto

New & Used Market Trends [cont.]

New Vehicle Days' Supply



Source: WardsAuto

declined 1 days to 74, while FCA's inventory increased by 2 days to 89 days. On the import side, Toyota Motor Sales' supply declined by 1 day to 54 days. Inventory for American Honda Motors stayed flat at 57 days, while, Nissan North America's supply increased by 4 days to reach 67 days.

Subaru's 23 days of supply remained lowest on the mainstream side of the industry. As for luxury automakers, Tesla's 3-day inventory was the lowest on the premium side of the market.

ECONOMIC UPDATE

The Bureau of Economic Analysis' (BEA) second estimate for second quarter 2018 GDP growth is 4.2%. This is based on source data that is subject to further revision by the agency. The increase in GDP reflected an increase in personal consumption expenditures (PCE), exports, nonresidential fixed investment, federal government spending, and state and local government spending. These increases were partly offset by negative contributions from private inventory investment and residential fixed investment. The second quarter GDP growth compares favorably to the first quarter 2018 GDP growth rate of 2.2%. Real GDP grew by an annual average of 2.6% in 2017, a marked increase from 1.8% growth during 2016.

Employment

The unemployment rate remained the same 3.9% in August as compared to the previous month. Employment grew in wholesale trade, transportation and warehousing, health care, mining, and professional and business services. The U-6 unemployment rate which measures discouraged, part-time, or underemployed workers in the economy, is at 7.4% for the month of August which is slightly down from 7.5% in July.

Non-farm employment increased by 201,000 jobs in August which was a larger increase in job growth following July's revised growth of 147,000 jobs. Employment continued to trend up in several industries including wholesale, construction, and health care while the retail sector, financial, and hospitality remained stagnant. The average monthly gain in jobs over the past 3 months stands at 185,000.

Wages

In August, average hourly earnings for all employees on private non-farm payrolls rose by 10 cents to \$27.16. Over the year, average hourly earnings have increased by 77 cents, or 2.9 percent. Hourly wages in nonfarm payrolls went from \$27.06 to \$27.16 and average weekly earnings increased by \$3.45 from \$933.57 to \$937.02 compared to July. The wage growth hit a post-recession high last month however it continues to trend relatively flat even as the unemployment rate has hit historic lows.

Housing

The National Association of Realtors reported existing home sales at a seasonally adjusted annual rate of approximately 5.34 million homes during the month of July. This was essentially in line with sales from June but a decrease of 1.5% from July of last year. The median home price for existing home sales decreased to \$269,600 in July however, it is still up 4.5% from July of last year. Total housing inventory at the end of July decreased .5% to 1.92 million existing homes available for sale and is unchanged from a year ago.

Energy, Oil, Gas

Energy prices remained relatively flat in August, however global demand and geopolitical tensions caused crude oil prices to remain at multi-year highs. U.S. gasoline prices decreased slightly to \$2.84 per gallon in August compared to \$2.85 in July. The year-over-year increase in gasoline prices was approximately \$0.46 per gallon (16.20%) higher than the prior year.

Brent crude oil prices averaged \$73 per barrel in August which is down almost \$2 from the July average. EIA estimates that U.S. crude oil production averaged 10.9 million barrels per day (b/d) in August, up 120,000 b/d from the June level. EIA projects that U.S. crude oil production will average 10.7 million b/d in 2018, up from 9.4 million b/d in 2017, and will average 11.5 million b/d in 2019.

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What's New

J.D. Power is pleased to offer a new **Residual Values** product suite designed to help manufacturers, captive finance companies, and lenders make informed decisions on residual setting, lease support, and risk management. This benchmark product incorporates industry-leading data from three trusted sources. Coupled with a seasoned team of data scientists and analysts, the product suite's sophisticated valuation forecast methodology provides a fresh, reliable approach based on objective expertise and complete transparency.

For more information go to www.nada.com/residualvalues.



About J.D. Power

J.D. Power is a global leader in consumer insights, advisory services, and data and analytics to help clients measure and improve the key performance metrics that drive growth and profitability. J.D. Power's industry benchmarks, robust proprietary data, advanced analytics capabilities, and reputation for independence and integrity has established the company as one of the world's most well-known and trusted providers of consumer and market insights for more than a dozen industries. Established in 1968, J.D. Power is headquartered in Costa Mesa, California, and has 17 global locations serving North/South America, Asia Pacific, and Europe.

About J.D. Power Valuation Services (formerly NADA Used Car Guide)

J.D. Power Valuation Services (formerly NADA Used Car Guide) is a leading provider of vehicle valuation products, services and information to businesses. Its team collects and analyzes over 1 million combined automotive and truck wholesale and retail transactions per month, and delivers a range of guidebooks, auction data, analysis and data solutions. J.D. Power acquired NADA Used Car Guide in 2015, forming a powerful combination that brings the automotive industry rich data sets, strong analytics and over 130 years of market experience. Residual Values is the first product to be launched by J.D. Power Valuation Services.

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CONSULTING SERVICES

J.D. Power Valuation Services' market intelligence team leverages a database of nearly 200 million automotive transactions and more than 100 economic and automotive market-related series to describe the factors driving current trends to help industry stakeholders make more informed decisions. Analyzing data at both wholesale and retail levels, the team continuously provides content that is both useful and usable to the automotive industry, financial institutions, businesses and consumers.

Complemented by J.D. Power Valuation Services' analytics team, which maintains and advances its internal forecasting models and develops customized forecasting solutions for automotive clients, the market intelligence team is responsible for publishing white papers, special reports and the Used Car & Truck Blog. Throughout every piece of content, the team strives to go beyond what is happening in the automotive industry to confidently answer why it is happening and how it will impact the market in the future.

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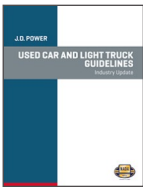
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ADDITIONAL RESOURCES



Guidelines

Updated monthly with a robust data set from various industry sources and J.D. Power Valuation Services' proprietary analysis, *Guidelines* provides the insight needed to make decisions in today's market.



Perspective

Leveraging data from various industry sources and J.D. Power Valuation Services' analysts, *Perspective* takes a deep dive into a range of industry trends to determine why they are happening and what to expect in the future.



White Papers

J.D. Power Valuation Services' white papers and special reports aim to inform industry stakeholders on current and expected used vehicle price movement to better maximize today's opportunities and manage tomorrow's risk.



Used Car & Truck Blog

Written and managed by the Market Intelligence team, the Used Car & Truck Blog analyzes market data, lends insight into industry trends and highlights relevant events.

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