

J.D. POWER

USED CAR AND LIGHT TRUCK GUIDELINES

Industry Update

OCTOBER 2018

Wholesale Prices Slip in September

Prices down by an average of 1.4%

Used Vehicle Price Index Stalls

Index declines 0.4 points to 121.6

New Vehicle Sales Decline

Sales slip 2.2%, new vehicle SAAR reaches 17.36 million

Incentive Spending Slows

Incentives decline for the first time since April 2015

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TABLE OF CONTENTS

NEW & USED MARKET TRENDS.....	2
ECONOMIC UPDATE	7
AT J.D. POWER VALUATION SERVICES [FORMERLY NADA USED CAR GUIDE].....	8

NEW & USED MARKET UPDATE

USED MARKET UPDATE

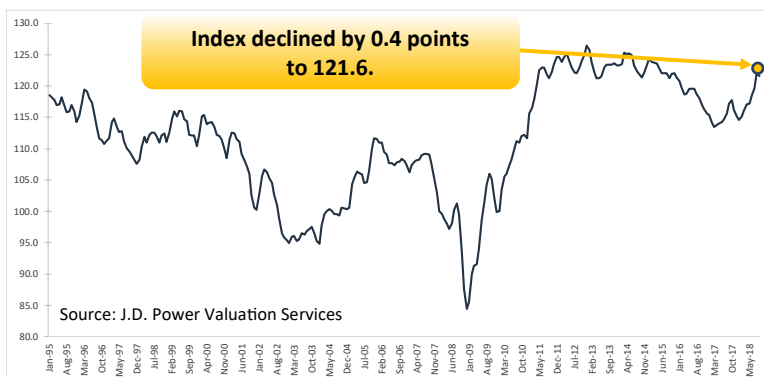
After three consecutive months of unprecedented strength, the used vehicle market slowed in September. As a result, the J.D. Power Valuation Services' Seasonally Adjusted Used Vehicle Price Index declined by 0.4 points – relative to August – to 121.6. Despite the index's small decline, it remains at its highest level since November 2015, and through September 2018, it has improved by an average of 2.5% compared to full-year 2017 results.

In recent editions we've emphasized the firmness in used prices, which really began in the middle half of 2017. While prices were down in September, the general trend of mainstream cars outperforming both their mainstream SUV and luxury counterparts continued during the period. In non-index terms, wholesale prices of used vehicles up to eight years in age declined by an average of 1.4% in September, which is mild for the month. Looking back to previous September results, wholesale prices typically decline by around 3% during the period.

Losses in September at the segment level were on average less than historic norms across the board for both mainstream and premium segments. However, declines were mixed across the board. On the mainstream side of the market, compact car prices continued to show strength in September as prices declined by under 1%. The month's result was significantly better than the 3.2% average decline the segment experienced over the past five Septembers. While small in

terms overall market share, mid-size pickup prices also performed better than the overall industry average for the month, however, the group's result was more in line with historic averages for the period.

Except for large utility and mid-size van respective losses of 2.8% and 2%, remaining mainstream segment performances each fell near the overall industry average for the month. Large utility prices continue to soften due primarily to their nearly 30% increase in wholesale auction volume for units up to

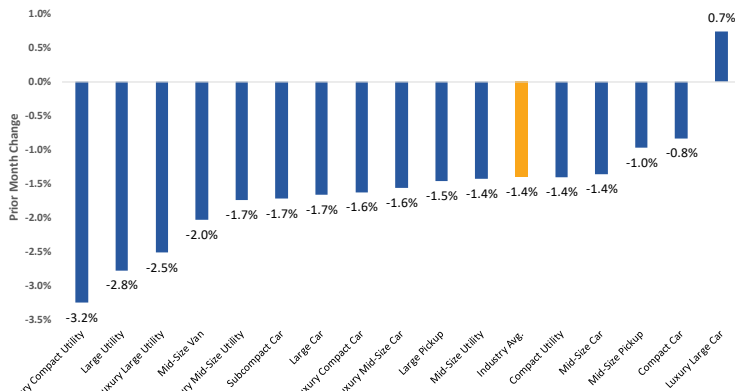


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New & Used Market Trends [cont.]

Monthly Change in Wholesale Used Vehicle Prices - September 2018

Vehicles up to eight years in age.



Source: J.D. Power Valuation Services

five years in age. Across premium segments, losses were generally more severe than their mainstream counterparts, except for luxury large cars whose prices increased by an average of 0.7%. While positive, it's important to remember that this is a low volume segment, any material change in price of an individual model can really skew overall results.

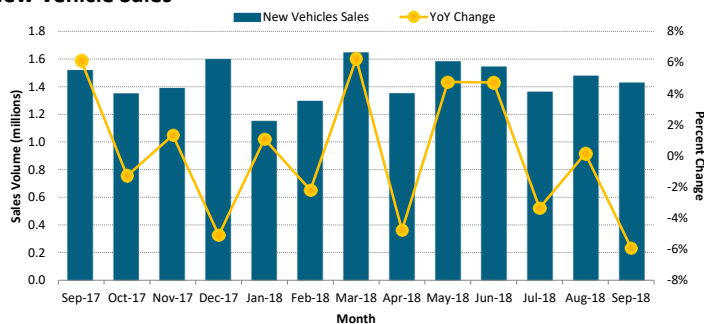
AUCTION VOLUME TRENDS

Auction volume for units up to five years in age declined by 19% compared to August, however, volume increased by 3.6% compared to September 2017. As a result, year-to-date late-model volume remains 4.5% above one-year ago levels for the second consecutive month. At the segment level, some of the largest volume increases year-to-date are still observed among SUV segments. Luxury compact utility volume is up nearly 47% and large utility volume is now up 29%. In terms of volume share, cars share reached 52% while truck share lags at 48%. Overall, J.D. Power Valuation Services is anticipating used supply to increase in 2018 relative to 2017 before peaking in 2019 and leveling off in subsequent years.

2018 FORECAST

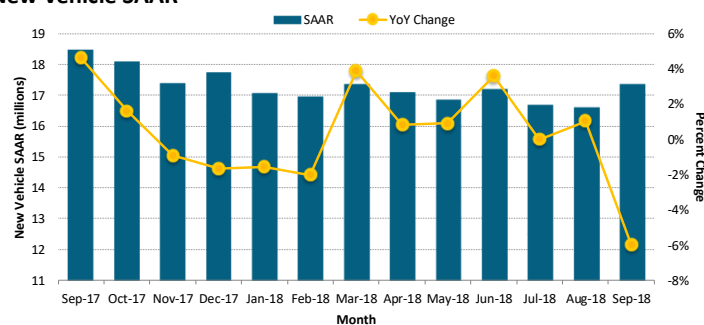
For October, wholesale prices of vehicles up to 8 years in age are expected to decline by around 0.5%. In terms of full-year expectations, with the exceptionally strong performances observed over the summer months, used prices are forecast to increase by 2.9% in 2018 relative to 2017. Negative forecast 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 Vehicle Sales



Source: WardsAuto

New Vehicle SAAR



Source: WardsAuto

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New & Used Market Trends [cont.]

NEW SALES DECLINE IN SEPTEMBER

After weakening in August, the new vehicle market declined again in September as overall demand could not match the levels from last year when consumers rushed to replace vehicles damaged by Hurricanes Harvey and Irma. U.S. new vehicle sales finished with a seasonally adjusted annual rate (SAAR) of 17.36 million units, which was about 4% below September 2017's 18.09 million, but above August 2018's 16.62 million.

NEW VEHICLE SALES

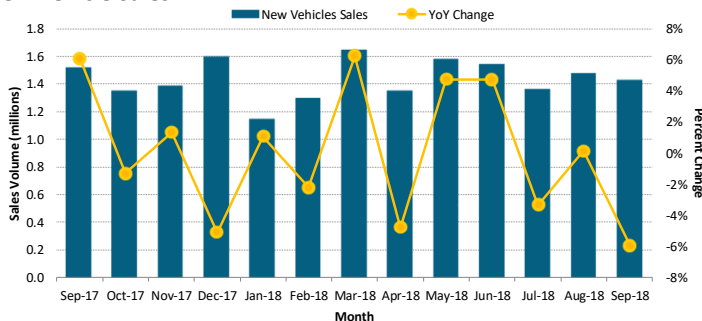
Overall, new vehicle sales slowed in September relative to the same period in 2017. Total volume reached 1.43 million units, a figure 2.2% below September 2017 on a daily selling rate (DSR) basis. It's important to note that there were 25 selling days in September 2018 compared with 26 in September 2017. September's result brought 2018's year-to-date tally to 12.84 million units, up a slight 0.3% compared to the same period in 2017. Truck share accounted for 70.3% of the total market in August and its market share likely will continue to grow over the rest of the year.

At the manufacturer and brand level, General Motors posted a 12% decrease of DSR in September compared with September of last year. Several other automakers posted decreases in September including Daimler, Ford, Honda, Jaguar, Mazda, Mitsubishi, Nissan, Toyota, and Volkswagen.

Fiat reported a strong month for sales and reported a 19.3% gain on a DSR basis compared with the year-earlier period. For September, Fiat's Dodge brand sales jumped 46%; Jeep brand sales rose 19% and Ram brand sales rose 14%. Volvo sales have increased every month in 2018 including

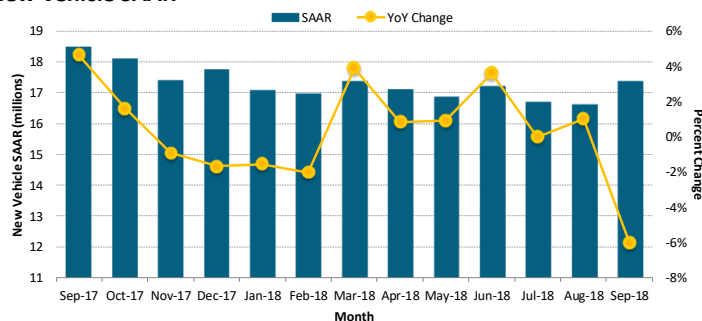
September's 14.7% increase. Tesla more than tripled its sales year-over-year in September, as the brand's growth has been supported by widespread availability of the Model 3.

New Vehicle Sales



Source: WardsAuto

New Vehicle SAAR

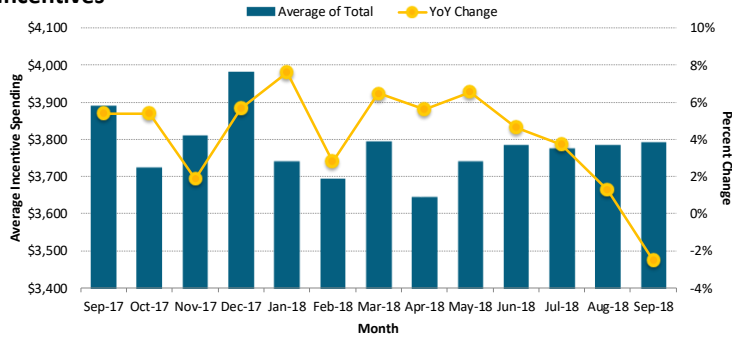


Source: WardsAuto

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New & Used

Incentives



Source: Autodata

INCENTIVES DECLINED BY 3%

Automakers decreased incentive spending in September for the first time since April 2015. According to Autodata, spending reached \$3,791 per unit versus \$3,898 per unit in September 2017.

Among the U.S. Big Three, GM decreased incentives by 15.5% in September to an average of \$4,450 per unit. Spending at Ford Motor Company grew by 6.3% to \$4,757 per unit, while FCA incentive spend decreased 0.4% to \$4,600 per unit.

As for import automakers, Toyota Motor Sales dropped incentives by 4% in September, reaching an average of \$2,300 per unit, while Nissan North America decreased spending by 0.8% to \$4,160 per unit. At the same time, American Honda increased incentives by 4.5% to \$1,758. Luxury automaker BMW increased incentives by 5.2% to an average of \$5,823 in September. Audi increased spending by 17.8% to \$4,122 per unit, while Mercedes-Benz boosted spending by 19.3% to \$5,938.

At the mainstream brand level, Chrysler's \$5,670 average incentive spend was the highest among the non-luxury brands. At the other end of the spectrum, Subaru spent only \$1,252 per unit, up 16.2% compared to the same period in 2017.

Mainstream Brand Performance (Units Sold)

	Sep-18	Sep-17	CYTD-18	CYTD-17	Y/Y Change	CYTD/CYTD
Buick	15,131	16,737	155,606	159,830	-9.6%	-2.6%
Chevrolet	159,597	199,634	1,502,557	1,514,702	-20.1%	-0.8%
Chrysler	14,683	15,759	127,156	143,809	-6.8%	-11.6%
Dodge	42,101	29,938	359,728	365,790	40.6%	-1.7%
Fiat	1,185	2,206	12,084	21,252	-46.3%	-43.1%
Ford	182,745	207,067	1,755,036	1,795,844	-11.7%	-2.3%
GMC	48,564	47,329	395,924	405,634	2.6%	-2.4%
Honda	119,157	129,776	1,092,514	1,117,477	-8.2%	-2.2%
Hyundai	56,940	55,271	492,792	496,656	3.0%	-0.8%
Isuzu Truck	415	423	2,812	2,290	-1.9%	22.8%
Jeep	83,764	73,409	746,194	622,242	14.1%	19.9%
Kia	51,503	52,468	452,042	457,930	-1.8%	-1.3%
Mazda	21,257	25,738	235,122	220,297	-17.4%	6.7%
Mini	3,461	3,736	34,193	34,787	-7.4%	-1.7%
Mitsubishi	7,705	8,430	93,398	79,195	-8.6%	17.9%
Mitsubishi Fuso	3	14	35	80	-78.6%	-56.3%
Nissan	110,283	127,187	1,019,433	1,082,527	-13.3%	-5.8%
Ram	55,218	50,491	405,033	405,950	9.4%	-0.2%
Scion	0	8	2	197	-100.0%	-99.0%
Smart	98	241	959	2,635	-59.3%	-63.6%
Subaru	57,044	55,120	503,418	478,848	3.5%	5.1%
Toyota	178,501	200,428	1,610,611	1,611,623	-10.9%	-0.1%
Volkswagen	30,555	32,112	266,228	252,456	-4.8%	5.5%

Source: WardsAuto

Luxury Brand Performance (Units Sold)

	Sep-18	Sep-17	CYTD-18	CYTD-17	Y/Y Change	CYTD/CYTD
Acura	13,511	12,946	114,483	114,126	4.4%	0.3%
Alfa Romeo	1,639	1,268	18,160	7,352	29.3%	147.0%
Audi	19,350	19,308	167,420	160,914	0.2%	4.0%
BMW	25,908	25,571	225,065	220,175	1.3%	2.2%
Cadillac	12,478	15,530	113,240	113,846	-19.7%	-0.5%
Genesis	419	1,736	8,909	15,084	-75.9%	-40.9%
Infiniti	12,536	12,745	105,249	113,714	-1.6%	-7.4%
Jaguar	2,040	3,296	21,176	30,228	-38.1%	-29.9%
Land Rover	6,966	6,407	65,133	54,481	8.7%	19.6%
Lexus	24,597	26,196	213,622	219,659	-6.1%	-2.7%
Lincoln	8,168	8,802	75,280	82,722	-7.2%	-9.0%
Mercedes-Benz	30,617	32,096	253,414	267,474	-4.6%	-5.3%
Porsche	5,102	5,059	42,626	41,237	0.8%	3.4%
Tesla	15,175	4,694	81,142	31,960	223.3%	153.9%
Volvo	8,715	7,900	73,929	56,965	10.3%	29.8%

Source: WardsAuto

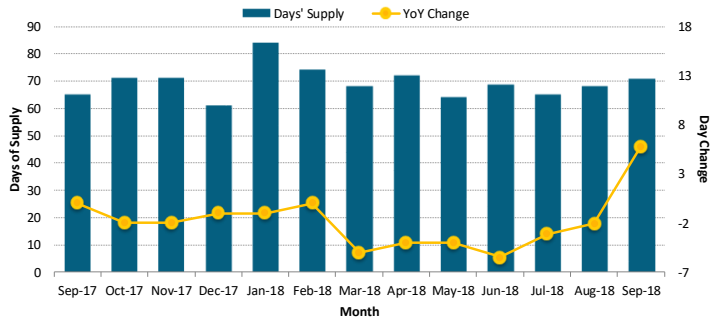
SEPTEMBER INVENTORY REDUCED TO 65 DAYS

Compared to August, days' supply went down by 3 days in September. Total supply level decreased to 65 days for the period, compared to 64 days in September 2017, according to WardsAuto.

General Motors' inventory decreased to 85 days, down 3 days from August. Ford Motor Company's supply stretched by 2 days to 77, while FCA's inventory

New & Used Market Trends [cont.]

New Vehicle Days' Supply



Source: WardsAuto

decreased by 7 days to 82 days. On the import side, Toyota Motor Sales' supply declined by 2 days to 53 days. Inventory for American Honda Motors increased by 2 days to 58 days, while Nissan North America's supply decreased by 14 days to reach 53 days.

Subaru's 24 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) third 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, 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 declined to 3.7% in September as compared to 3.9% the previous month. Employment grew in transportation and warehousing, health care, and professional and business services. The U-6 unemployment rate which measures discouraged, part-time, or underemployed workers in the economy, is at 7.5% for the month of September which is slightly higher from 7.4% in August.

Non-farm employment increased by 134,000 jobs in September which was a less than the job growth following August's growth of 270,000 jobs. Employment continued to trend up in several industries including manufacturing, construction, and health care while the wholesale and retail trade, information, and financial activities remained stagnant. The average monthly gain in jobs over the past 12 months stands at 201,000.

Wages

In September, average hourly earnings for all employees on private non-farm payrolls rose by 8 cents to \$27.24. Over the year, average hourly earnings have increased by 73 cents, or 2.7 percent. Hourly wages in nonfarm payrolls went from \$27.16 to \$27.24 and average weekly earnings increased by \$2.75 from \$937.03 to \$939.78 compared to August. The wage growth hit post-recession high 2 months ago 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 August. This was essentially in line with sales from July but a decrease of 1.5% from August of last year. The median home price for existing home sales decreased to \$264,800 in August however, it is still up 4.6% from August of last year. Total housing inventory at the end of August remained the same at 1.92 million existing homes available for sale and reflects a 2.7% increase from a year ago.

Energy, Oil, Gas

Energy prices rose in September due to global demand and geopolitical tensions. This caused crude oil prices to remain at multi-year highs. U.S. gasoline prices remained the same at \$2.84 per gallon in September as compared to August. The year-over-year increase in gasoline prices was approximately \$0.19 per gallon (7%) higher than the prior year.

Brent crude oil prices averaged \$79 per barrel in September which is up almost \$6 from the August average. EIA estimates that U.S. crude oil production averaged 11.1 million barrels per day (b/d) in September, up slightly from the August 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 11.8 million b/d in 2019.

AT J.D. POWER VALUATION SERVICES [FORMERLY NADA USED CAR GUIDE]

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.



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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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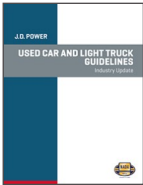
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ADDITIONAL RESOURCES



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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