

J.D. POWER



PERSPECTIVE

SPRING 2018

2018 USED CAR AND LIGHT TRUCK INDUSTRY OUTLOOK

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Table of Contents

Used Market Update.....	2
Auction Volume Trends.....	3
2018 Used Car and Light Truck Outlook	3
2018 Forecast.....	6
New Vehicle Sales	6
Economic Update	9

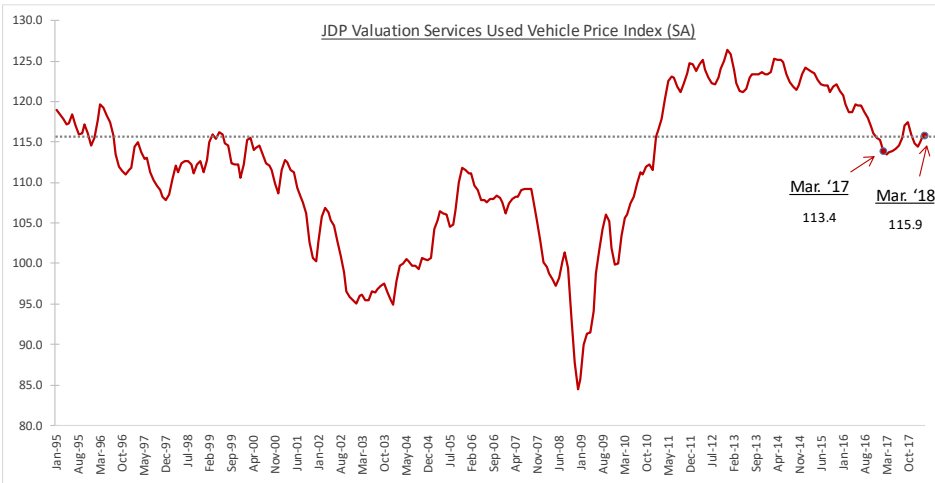
USED MARKET UPDATE

The used vehicle market performed exceptionally well in March. Wholesale prices of used vehicles up to 8 years in age increased by an average of 2.5%. While prices were expected to increase in March, the outcome was better than anticipated. As a result, the J.D. Power Valuation Services’ Seasonally Adjusted Used Vehicle Price Index increased 0.9 points to 115.9. This increase brought the index 2.5 points above March 2017’s level.

Mainstream car segments performed extremely well in March. Compact and Subcompact Car prices were the strongest in the industry and saw prices grow by 4.3% and 4.6% respectively. The pair’s result was about 2.5 points better than each segment’s previous 5-year average for the period. The Mid-Size Car segment also experienced a healthy 3.5% increase in price, followed by the Large Car segment which saw a bump of 3%.

In March, we explored the relationship between Subcompact, Compact and Midsize Car prices and federal tax returns. Buyers in these segments have historically been more sensitive when it comes to “cash down” payments, and federal tax returns have been a great source of down payments for these shoppers. Looking back, per the IRS, through the end of February, the total number of federal tax refunds issued was 1.8% lower than the same period in 2017. However, things improved in March as the deficit was reduced to 1.1%. Additionally, the average refund amount reached \$2,893, a figure 0.5% above 2017 levels. So, what does the occurrence mean? Ultimately, it there were more potential buyers in the marketplace armed with healthy down payments in March.

Remaining Mainstream segment results landed below the overall industry average for the month. While primarily positive, Large Utility experienced the only loss on the Mainstream side



of the market. Prices for the group fell by a slight 0.1%. While miniscule, this does mark the third month in a row that Large Utility prices have slipped.

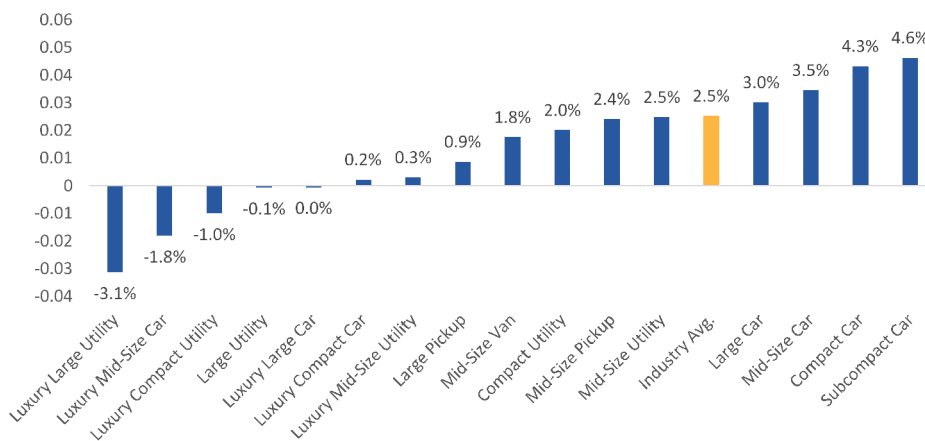
On the Luxury side of the market, segments on average didn't fare as well at their Non-Premium counterparts. However, Luxury Compact Car and Luxury Mid-Size Utility prices did increase by 0.2% and 0.3%, respectively. Like their Mainstream counterparts, Luxury Large Utility prices declined the most among Premium segments. Prices for the group were down by an average of 3.1%, which is somewhat out of character since over the past several years prices for the group have been flat to down ever so slightly in March. However, month-over-month Luxury Large Utility auction volume grew by nearly 24% in March and is now up 3.9% YTD compared to the same period in 2017, which isn't helping prices.

Large Utility prices declined the most among Premium segments. Prices for the group were down by an average of 3.1%, which is somewhat out of character since over the past several years prices for the group have been flat to down ever so slightly in March. However, month-over-month Luxury Large Utility auction volume grew by nearly 24% in March and is now up 3.9% YTD compared to the same period in 2017, which isn't helping prices.

AUCTION VOLUME TRENDS

Late-model auction volume increased by 13.4% compared to February, but was 11.7% lower than March 2017. Late model volume now sits 5.3% lower than the same period in 2017, which is slightly worse than the 5.8% we reported last month.

Monthly Change in Wholesale Used Vehicle Prices - March 2018
Vehicles up to eight years in age



At the segment level, so far year-to-date some of the largest volume increases have been observed among SUV segments. Luxury Compact Utility volume is up 71.7%, and Large Utility volume is up 27.8%. In terms of volume share, cars continue to dominate at 52% while truck share lags at 48%.

2018 USED CAR AND LIGHT TRUCK OUTLOOK

In 2017, used vehicle prices fell for the second straight year. Per J.D. Power Valuation Services' Used Vehicle Price Index, average prices for units up to 8 years in age decreased by 2.9% in 2017. For context, the figure ended the year 6.9% lower than where prices were in 2014.

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The year 2017 proved to be a tougher one for trucks and SUVs than their car counterparts. While depreciation was generally greater for car segments, truck and SUV losses accelerated at greater rates than in 2016. On average, car depreciation improved by 1.2 points and averaged 18.3% in 2017 compared to 2016, while truck and SUV depreciation worsened by 1.3 points over the same period (reaching a lower average of 14.9%).

The weakness observed in the used market over the past two years was primarily the result of ongoing increases in used supply, higher incentives, a normalizing credit environment and modestly higher fuel prices. As the market progresses through 2018, the market will experience a similar basket of positive and negative drivers, however, the degree of impact will increasingly vary based on market segment.

Credit

The J.D. Power Valuation Services' credit composite is composed of three main components:

1. A Household Debt Service and Financial Obligation Ratio

2. National Financial Conditions Index (NFCI) – The Chicago Fed's NFCI provides a comprehensive update on U.S. financial conditions in money markets, debt and equity markets as well as the traditional shadow banking systems, which are non-bank financial intermediaries that provide services to traditional commercial banks outside of normal banking regulations.

3. Interest Rates

It is anticipated that these components will worsen over the next 12 months which will have a negative impact on used vehicle prices. In March, the Fed raised the federal funds rate to a range of 1.5% to 1.75%, a 0.25-point increase. This proved to be the sixth increase since December 2015 when the Fed started tightening monetary policy for the first time after the Great Recession. In the Fed's March meeting, it was also suggested that it would follow a more aggressive pace and adjusted its plans to raise interest rates in 2019 three times instead of the previously expected two. Car buyers, new and used alike, will certainly feel the increase in monthly payments over the coming years.

Incentives

Per J.D. Power and LMC Automotive, new vehicle sales are expected to grow slightly in 2018, increasing from 16.93M units in 2017 to 17M units. Incentive spending has grown for 36 consecutive months and has reached an average of nearly \$3,800 per unit in March 2018. Incentive spending relative to MSRP reached 10.6% in March 2018, which is a figure 0.1-points ahead of the same period in 2017. Given the long-term trend in incentive growth and the outlook for another year of moderating new vehicle sales, higher incentives are expected to place additional downward pressure on used vehicle prices this year.

Used Supply

In 2017, led by a 13.5% increase in off-lease maturities, total used supply of vehicles up to 5 years in age increased 7%. It is anticipated lease volume will continue to drive used supply growth moving in forward 2018. While total used supply is expected to grow by 4.1% in 2018, off-lease supply is forecast to grow by 14.2%, followed by a smaller 2.6% increase in retail purchase supply. However, rental and commercial supply is expected to experience its first material decline since 2014, down an estimated 3% in 2018.

Gas Prices

Regular grade gasoline prices are expected to rise moving forward, but just modestly. National prices are expected to remain below \$3 per gallon through 2021. In the short term, the latest gasoline forecast expects higher prices mainly due to increasing crude oil values. According to the EIA, April's Short-Term Energy Outlook raised the expected average price for WTI crude oil and Brent crude oil by 2.1% and 2%, respectively.

Macro-Factors

Labor Conditions – Labor market conditions are expected to improve throughout the course of 2018. According to the Bureau of Labor Statistics, unemployment reached 4.1% in December 2017 and is expected to decline by another 0.3 points by the end of 2018. Additionally, the current short-term unemployment rate (less than 6 months) is at its lowest level in 65 years.

House Prices – According to the National Association of Realtors, after 5 consecutive years of gains, home price growth in 2018 is expected to slow. However, prices are still expected to rise by 1.9% on average in 2018. The main drivers behind the expected slowing of growth is a new tax law that reduces the limit on deductible mortgage debt and limits the deductibility of the real estate tax up to \$10,000.

Driving Demand – This factor examines the demographic makeup of new drivers, the rate of vehicles being scrapped, and the number of vehicles per driver. These three series measure the number of new vehicles needed to meet demand of the U.S. driving population on a monthly and annual basis. Growth in the population of U.S. drivers equates to growth in demand for new vehicles; similarly, growth in the rate of vehicles per driver further increases this demand. Conversely, less vehicles being scrapped by U.S. drivers indicates drivers holding onto their vehicles longer leading to a negative impact on demand. Overall there is a strong correlation between the new and used market for vehicles and an increase in demand for driving equates to more potential consumers willing and able to purchase used vehicles. Over the course of 2018, J.D. Power Valuation Services' expects there will be more of these potential customers willing and able to purchase used vehicles.

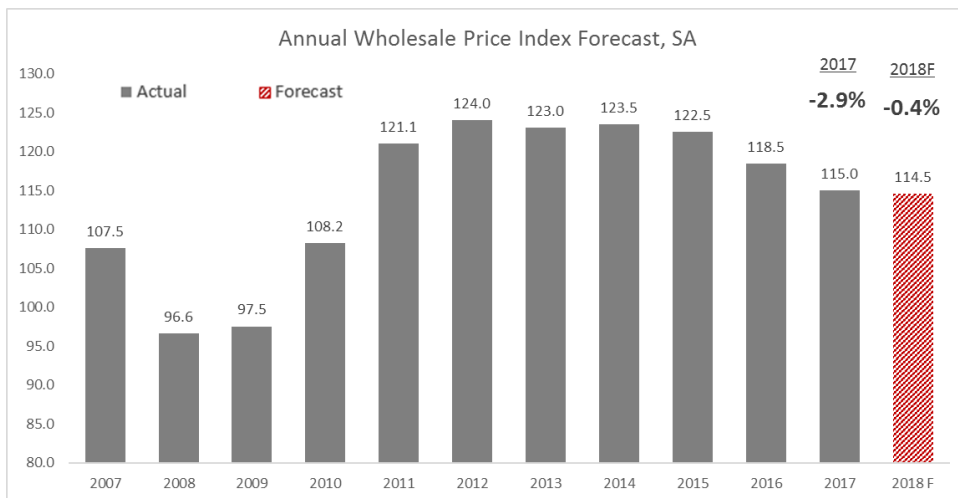
Quality Improvements

Ongoing improvements in quality and reliability also benefit used vehicle demand as consumers are less concerned about unexpected issues. Customer satisfaction with the quality of new vehicles is at its highest level ever according to the J.D. Power 2017 U.S. Initial Quality Study (IQS). In 2017's study, quality improved across seven of the eight categories measured, with 27 of the 33 brands in the study improving their quality compared with 2016. Overall customer satisfaction with new vehicles was up 8% from 2016's study.

Initial quality is reported as the number of problems experienced per 100 vehicles (PP100) during the first 90 days of ownership, with a lower score reflecting higher quality.

2018 FORECAST

Taken as a collective, the factors described above will lead to a relatively mild decline in used vehicle prices in 2018. Overall, industry-level prices for vehicles up to 8 years in age are expected to decline by 0.4%. On the Mainstream side of the market, car prices are forecast to be stronger than those of their truck and SUV counterparts. While losses are expected to be more severe and consistent across the Luxury segment board.



- Incentives
- Used Supply
- Credit
- Gas Prices
- Labor Conditions
- Home Prices
- Driving Demand
- Other (long-term quality improvements, used vehicle preference)

NEW VEHICLE SALES IMPROVED

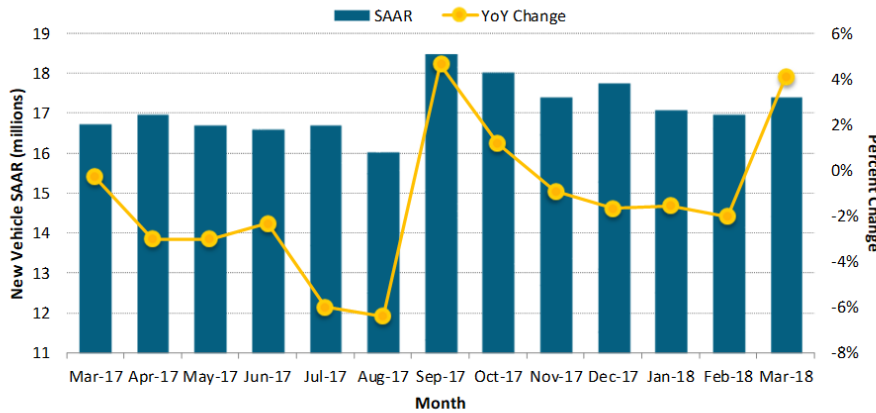
After falling by 2% in February, March's U.S. light-vehicle sales improved by 6% above same-month 2017's marking the industry's largest year-over-year increase since February 2016. Sales were fueled by high incentives and a continued surge in light-truck demand. February's result brought 2017's year-to-date tally to 4.09M units, up 2.1% compared to the same period in 2017. The seasonally adjusted annual rate (SAAR) of 17.40 was above March 2017's 16.72M. The share of new light truck deliveries accounted for 67% of the market in March. Looking back

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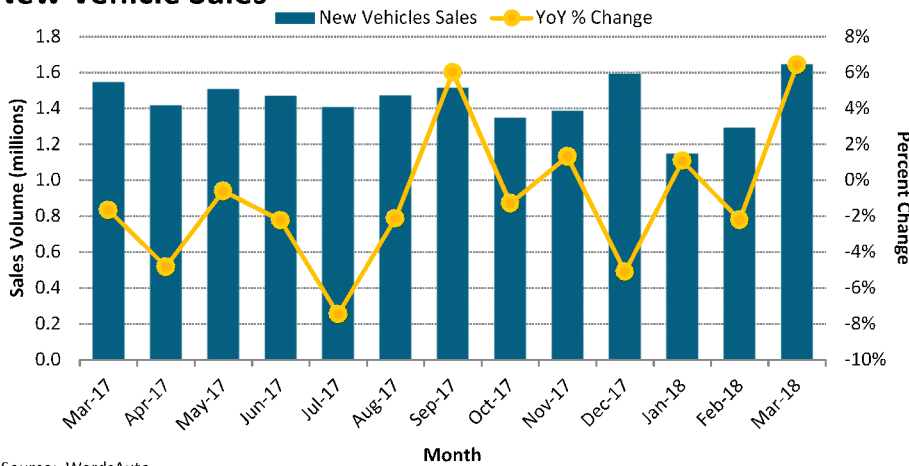
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New Vehicle SAAR



Source: WardsAuto

New Vehicle Sales



Source: WardsAuto

a year to March 2017, trucks accounted for 62% of the market. At the same time, car sales remained weak and accounted for 33% of total new sales compared to 38% in March 2017.

NEW VEHICLE SALES

General Motors reported 296,186 new vehicle deliveries in the U.S market for the month, a 16% decrease compared to March 2017. GM's best-seller, the Chevrolet Silverado pickup, raised sales by 24%, from a year earlier, to 52,547 units. Sales were up for every make and increased at GMC (+11%), Chevrolet (+16%), Buick (+28%), and Cadillac (+13%) compared to a year ago.

Ford Motor Company had a first advance of the year as sales for the automaker increased by 3% to 236,936 in March. Looking at mainstream sales, Blue Oval deliveries improved by 3% compared to March 2017 levels with F-Series sales growing by 6% and reaching 80,926 trucks sold in March.

Ford's Lincoln luxury brand saw deliveries decrease by 2% during March.

FCA reported a 14% sales increase for the March 2018 period and reached 214,834 units. Fiat brand sales fell by 47%, followed by a 13% decline at Ram, while Jeep posted a 45% increase.

In February, Toyota sales rose 4%, with deliveries increasing 5% at Toyota brand and decreasing by 3% at Lexus. Strong demand for the RAV4 increased sales by 9% reaching 34,937 units in March.

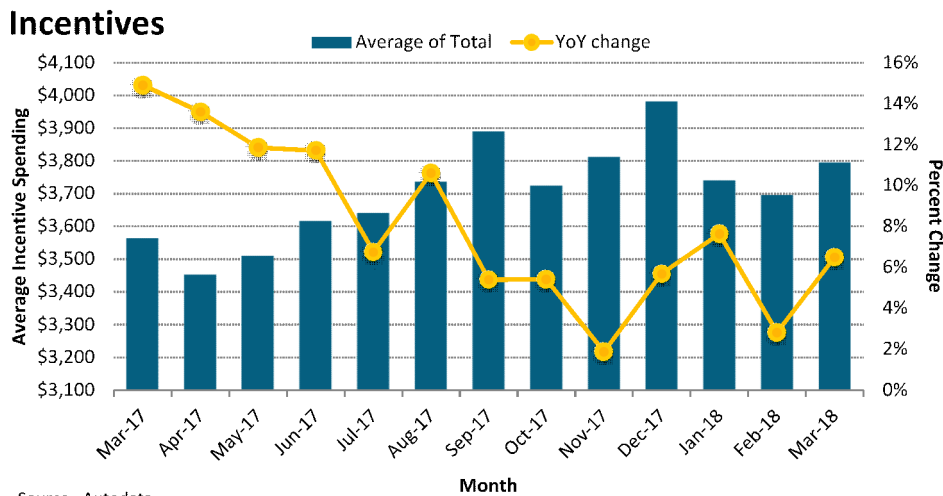
American Honda sales increased by 4% in March. The mainstream Honda brand saw a 3% increase in deliveries, and its luxury Acura brand posted a 16% increase in units sold. Nissan

North America’s sales declined by 4% in March and reached 162,535 units. Mainstream Nissan brand saw a decrease of 4%, while luxury arm Infiniti posted a 5% decline.

INCENTIVES GROW BY 6%

Automakers grew incentive spending once again in March, making it the 36th month in a row spending increased. On average, according to Autodata, spending reached \$3,794 per unit versus \$3,563 per unit in March 2017.

Among the U.S. Big Three, GM increased incentives by 17% in March to an average of \$5,667 per unit. Spending at Ford Motor Company grew by 9% to \$4,167 per unit, while FCA decreased their incentives by 0.2% to an average of \$4,576 per unit.



As for import automakers, Toyota Motor Sales dropped incentives by 4% in March, reaching an average of \$2,347 per unit. American Honda decreased incentives by 28% to \$1,188, while Nissan North America decreased spending by 9% to \$3,483 per unit.

Luxury automaker BMW increased incentives by 30% to an average of \$5,871 in March. Audi increased spending by 6% to \$3,836 per unit, while Mercedes-Benz remained spending at \$4,772.

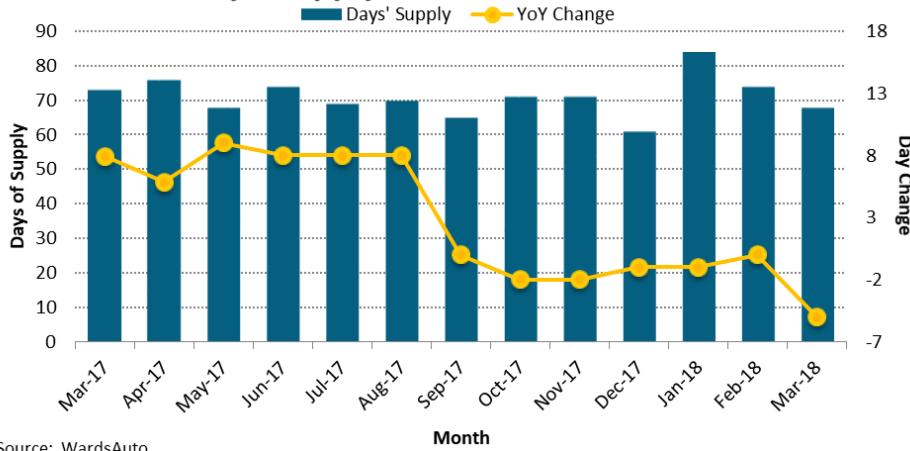
At the mainstream brand level, Ram’s \$7,451 average incentive spend was the highest among non-luxury nameplates. Buick, Chevrolet, Chrysler, and GMC each spent more than \$5,000 per unit on incentives in March. At the other end of the spectrum, Honda spent only \$1,188 per unit, down by 29% compared to the same period in 2017.

MARCH INVENTORY DECREASED TO 68 DAYS

Compared to February, days’ supply decreased by 5 days in March. The total supply level landed at 68 days for the period, at the same level of carried supply as in May 2017, according to WardsAuto.

General Motors’ inventories decreased to 72 days, down from 85 days in February. Ford Motor Company’s supply went down by six days to 82 days, while FCA’s inventory decreased by five

New Vehicle Days' Supply



Source: WardsAuto

days to 80 days. Nissan North America's supply decreased by 6 days and reached 54 days. Inventory for American Honda Motors increased by two days to 74 days. Meanwhile, Toyota Motor Sales' supply shrunk by two days to 62 days. Buick's 67 days of supply fell from 100 days in February.

Subaru's 48 days of supply remained lowest on the mainstream side of the industry. As for luxury automakers, BMW's inventory fell to the lowest in the industry at 36 days (except Tesla's 3-day inventory).

ECONOMIC UPDATE

The United States Bureau of Economic Analysis (BEA) revised estimates of Q4 2017 GDP growth upward last month. The estimate lifted from 2.5% to an annual rate of 2.9%. The primary causes for growth have remained consistent over the past several months: personal consumer expenditure, nonresidential fixed investments, exports, and federal government spending. Real GDP grew by an annual average of 2.6% in 2017, a marked increase from 1.8% growth during 2016. The BEA expects a similar growth trend as analysis evolves into 2018.

Employment

The unemployment rate remained unchanged at 4.1% in March as employment grew in manufacturing, health care, mining, and professional and business services. The March 2018 U-6 unemployment rate—which measures discouraged, part-time, or underemployed workers in the economy—sits at 8%, which is slightly down from 8.2% in February.

Non-farm employment increased by 103,000 jobs in March with most jobs coming from manufacturing, health care, and mining. This was a marginal increase in job growth following February's growth of 326,000 jobs.

Wages

Wage growth continued to stall in February with real average hourly earnings for all employees increasing by 0.2%. Hourly wages in nonfarm payrolls went from \$26.71 to \$26.75, and average weekly earnings increased by \$4.06 from \$918.82 to \$922.88. This marginal increase in wage growth continues the trend of relatively flat growth trending into 2018.

Housing

The National Association of Realtors reported existing home sales at a seasonally adjusted annual rate of approximately 5.54 million homes during the month of February. This was an increase of 0.3% from January and an increase of 0.1% from February of last year. The median home price for existing home sales marginally increased to \$241,700 in February, up .06% from January and 5.9% from February 2017. There was a 5.9-month supply of housing inventory this past February, which was up 1.7% from January. The total number of available homes for sale increased by 15.6% compared to February 2017.

Energy, Oil and Gas

Energy prices remained relatively flat in the months of February and March as global demand remained flat. Seasonal expectations counteracted any downward pressure on fuel prices from an excess supply of fuel the past month. U.S. gas prices remained the same in March (\$2.59 per gallon) as they were in February. The year-over-year increase in gas prices was approximately \$0.26 per gallon (9.8%) higher than 2017.

WTI futures remained the same with prices averaging of \$62.72 per barrel in February and Brent futures reached an average \$66.02 per barrel during the same timeframe. Despite U.S. production surpassing 10 million barrels per day, gasoline stockpiles have declined for five consecutive weeks as OPEC's production cuts helped offset the growing production from U.S. shale. Experts debate whether the current uptick in global demand for oil will taper off (which would lead to depressed prices), or if gas prices will marginally increase as demand remains constant.