

## Gas prices and their influence on auto sales

Following a three-year period of relative stability, gas prices are now at their highest point since 2014, with a gallon costing motorists $\$ 2.90$ on average. Historically, rises in gas prices can be attributed to a combination of factors, from political unrest to commodity speculation to supply issues and beyond - and the nature of these factors is what ultimately determines the impact on the automotive market.

When gas prices increase due to a temporary issue, such as a natural disaster, or when gas prices rise but the rest of the economy is strong, car buyers tend to stay the course and buy what they want - notably, trucks and SUVs. But when gas prices rise when other economic factors such as unemployment, loan delinquency and consumer confidence show weakness, history illustrates that's the recipe for shoppers to start second-guessing putting a new SUV in the garage.

WHAT AFFECTS GAS PRICES


[^0]
## Gas prices: Then and now

When the United States faced a major gas price spike in 2008, it shook the entire automotive industry. Fuel economy went from an important consideration to the deciding factor for shoppers. Automakers started cranking up production of passenger cars and accelerating development of efficient engines and alternative vehicles (which also served the convenient dual purpose of getting ahead of impending aggressive CAFE targets).

In the 10 years since, as the economy has rebounded and gas prices dropped, the preferences of car shoppers swung in the complete opposite direction. In June and July of 2008 when gas prices hit their peak, SUVs accounted for just $23 \%$ of sales half of what they make up today. Now, automakers are cutting production of slow-selling, low-profitmargin passenger cars. While on the surface, it may seem as though rising gas prices could be the catalyst to swing the pendulum back again, Edmunds analysts say the economic and market factors are so much stronger now that shoppers are likely to absorb these extra costs without changing their immediate shopping habits.

| Economic Factors | Second Half of 2008 | First Half of 2018 |
| :--- | :---: | :---: |
| ${ }^{1}$ Unemployment | $7.2 \%$ | $4.1 \%$ |
| ${ }^{2}$ Median Household Income (Adj) | $\$ 56,076$ | $\$ 59,039$ |
| ${ }^{3}$ Average Transaction Price (Adj) | $\$ 32,195$ | $\$ 36,094$ |
| ${ }^{4}$ Dow Jones Industrial Average | 8,827 | 24,716 |
| ${ }^{5}$ Housing Costs | $\$ 171,746$ | $\$ 213,146$ |
| ${ }^{6}$ Consumer Confidence | 60.1 | 99.7 |
| ${ }^{7}$ Delinquency Rates | $5.6 \%$ | $2.5 \%$ |
| ${ }^{8}$ Fuel | $\$ 3.13$ | $\$ 2.95$ |
| ${ }^{9}$ Compact Crossover Combined MPG | 24 | 27 |
| ${ }^{10}$ Average Car MPG | 22.1 (3.5 gap from SUVs) | 30.8 (7.3 gap from SUVs) |
| ${ }^{17}$ Average SUV MPG | 18.6 ( $-76 \%$ gap from cars $)$ | 23.4 (-24\% gap from cars) |

Sources: ${ }^{1}$ 'https://data.bls.gov/timeseries/LNS14000000
${ }^{2}$ https://fred.stlouisfed.org/series/MEHOINUSA672N
${ }^{3}$ Edmunds
${ }^{4}$ https://finance.yahoo.com/quote/\^DJI/history/
${ }^{5}$ https://www.zillow.com/research/data/
${ }^{6}$ https://fred.stlouisfed.org/series/UMCSENT
${ }^{7}$ https://fred.stlouisfed.org/series/DRSFRMACBS
${ }^{8}$ eia.gov
${ }^{9}$ Edmunds
${ }^{10} E d m u n d s$
"Edmunds

## The reality of rising gas costs for car shoppers

Even though the economy is strong, car shoppers go to great lengths to keep their monthly payment down, as indicated by the current high levels of leasing (31.5\%) and record loan term length (69.3 months). While this could indicate that shoppers are more price-aware now and that rising fuel costs could be a budget buster, the reality is that the incremental monthly costs associated with the current gas price spike are relatively minor. Assuming 1,000 miles driven per month, the owner of a vehicle that gets 25 miles per gallon will see monthly fuel costs rise by $\$ 20$ per month for every 50 cent per gallon increase in gas prices. This means that driver is now paying about \$120 per month for fuel, compared to \$100 in January.

|  | MPG |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fuel Price | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
| *Monthly Fuel Costs | \$2.50** | \$167 | \$125 | \$100 | \$83 | \$71 | \$63 | \$56 | \$50 |
| Additional Monthly Cost | \$3.00*** | +\$33 | +\$25 | +\$20 | +\$17 | +\$14 | +\$13 | +\$11 | +\$10 |
|  | \$3.50 | +\$67 | +\$50 | +\$40 | +\$33 | +\$29 | +\$25 | +\$22 | +\$20 |
|  | \$4.00 | +\$100 | +\$75 | +\$60 | +\$50 | +\$43 | +\$38 | +\$33 | +\$30 |
|  | \$4.50 | +\$133 | +\$100 | +\$80 | +\$67 | +\$57 | +\$50 | +\$44 | +\$40 |
|  | \$5.00 | +\$167 | +\$125 | +\$100 | +\$83 | +\$71 | +\$63 | +\$56 | +\$50 |

*Assuming 1,000 miles driven per month
**The average gas price (regular) in January 2018 was $\$ 2.56$
***The average gas price (regular) in May 2018 was \$2.90

## States with the most heightened fuel price anxiety

Rising gas prices will impact various parts of the U.S. in different ways, depending on vehicle preferences (areas that have higher concentrations of lowefficiency trucks and SUVs will be hit harder), and local price fluctuations (how much gas prices rise as a percentage of where they've been historically). However, the Edmunds analysis reveals that the people who should be most concerned largely aren't, and the people who may not be as impacted are showing signs of anxiety.

According to Google Trends, people in the Midwest - namely, Ohio, Michigan and Indiana - are overindexing on searches for "gas prices" compared to the rest of the country, although these states don't have the highest concentration of trucks and SUVs on the road. Additionally, gas prices in the Midwest are among the lowest in the country at $\$ 2.80$ per gallon on average in May.

In comparison, Alaska, Wyoming, North Dakota and Montana have the highest percentage of truck and SUV owners - with Ohio, Michigan and Indiana ranking 40th, 21st and 19th, respectively. However, Alaskans and North Dakotans rank near the bottom of Google searches for "gas prices."

Edmunds analysts attribute this phenomenon in part to the fact that car shoppers in the Midwest, Michigan in particular, have more recently and more aggressively made the switch from passenger cars to trucks and SUVs, making them more sensitive to the higher cost of fueling these less efficient vehicles. So far this year, $56 \%$ of vehicles sold in Michigan were SUVs, a jump of $49 \%$ compared to five years ago. Shoppers in Alaska, North Dakota and Wyoming have long preferred trucks and SUVs over cars, and they are likely more used to the higher fuel costs that come with owning a larger vehicle.


[^1]HI

## \$4 per gallon: The breaking point for SUVs

Acclimation to higher fuel prices and efficiency gains across the industry have helped reinforce shopper decisions to stick with relatively less fuel-efficient vehicles. The roller coaster seems a lot less scary the second time around - the gas price spikes of 2012 influenced shopper choices much less than in 2008, in 2014 less than 2012. However, this complacency doesn't mean that the SUV boom will last forever.

Edmunds forecasts subtle shifts in consumer preferences would start to take hold should gas prices rise to and stay around $\$ 3.60$ for a sustained amount of time. Edmunds predicts this shift wouldn' $\dagger$ be enough for buyers to abandon SUVs completely, but that they would show more interest in and likely prefer to purchase the more efficient option in the segment (for example, shopping a Subaru Outback instead of a Jeep Grand Cherokee), or conceding size for the sake of efficiency (for example, shopping a compact SUV instead of a midsize SUV). This price would also begin to spur interest and sales of green cars.

But once gas prices hit - and stay at - \$4 per gallon, Edmunds experts say that will be the tipping point for car buyers to break their addiction to big vehicles and start moving toward passenger cars and alternative fuel vehicles en masse. Efficiency gains in vehicles like compact SUVs no longer hold their sticking power at this point. When gas is cheaper, compact SUVs are a perfect substitute for cars, but when gas is expensive, they are not. Current indications show that prices aren't expected to reach that territory anytime soon, however, so for the near-term, it appears the automakers' bets on SUVs are safe ones - for now.

## Questions?

strategicinsights@edmunds.com


[^0]:    Source: eia.gov

[^1]:    Source: Google Trends

