# Diesel Fuel Prices for 2017

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## Current Situation

Diesel prices the last two years have behaved much differently than they did a few years ago. Diesel prices used to peak in the spring and fall and were at their lowest in January and February. For the last two years, diesel prices have either increased or decreased the majority of the year. Also, from 2012 through 2015, highway diesel prices were much higher than they were in 2015 and 2016. Whether fracking is the cause or if there is some other factor in play, pricing patterns have been noticeably different these past two years.

Figure 1 below show the highway diesel prices by week for the last five years. The last two years have seen prices move in opposite directions. During 2015, prices declined nearly the entire year. The decline actually started during the fall of 2014 and continued through February of 2016. During most of 2016, diesel prices continued their slow rise.

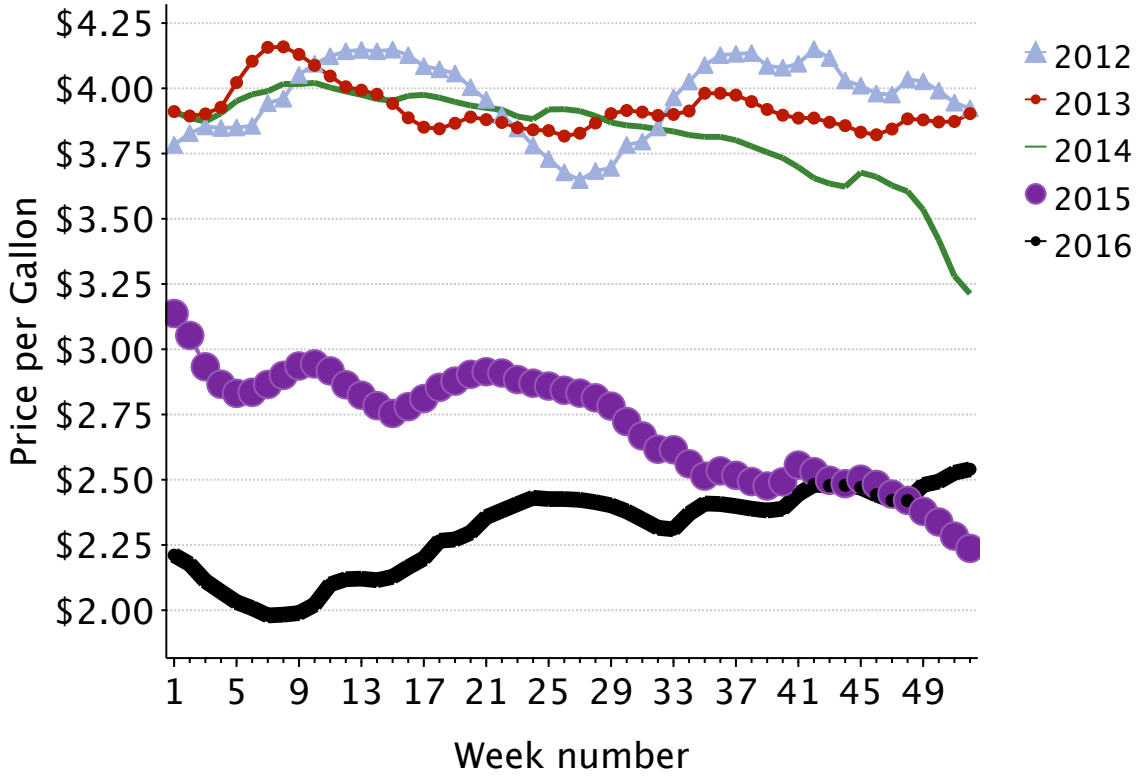


Figure 1. Five Year Weekly Highway Diesel Prices

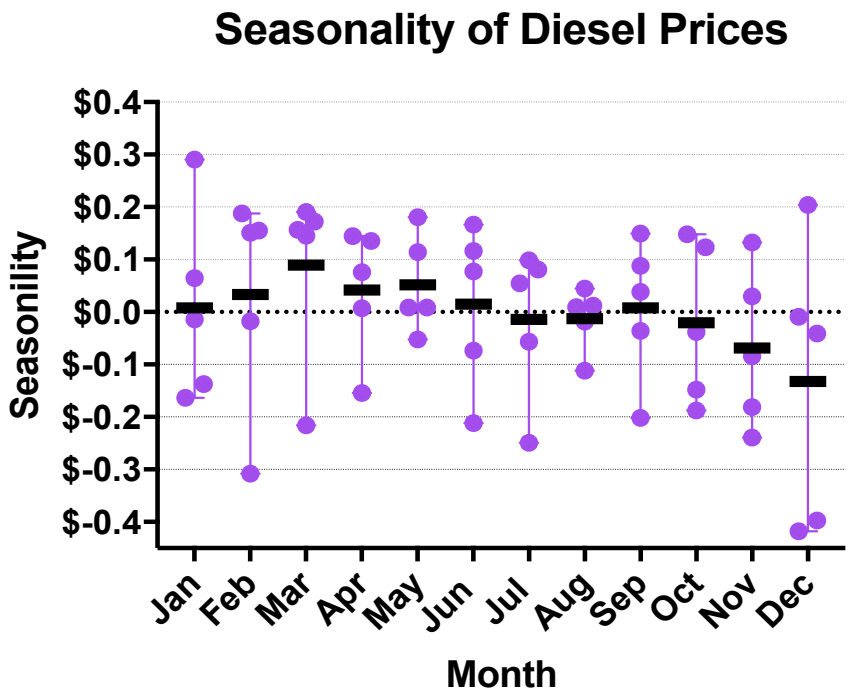


Figure 2. Monthly Seasonality of Highway Diesel Prices

Although diesel prices ended 2016 at their high point for the year, prices are still low when looking at a five year history of diesel prices. The question for farmers is what are diesel prices going to do in 2017. With grain prices low, farmers will really need to watch their expenses closely.

## When to Purchase Diesel Fuel

There are two questions to address. First when might be the best opportunity to purchase diesel fuel during the year and what might happen to prices during the course of 2017. To answer the first question, the seasonality of diesel prices might provide some guidance. The seasonality of diesel prices is shown in Figure 2. Here, the monthly price is compared to the average yearly price to determine the difference. The last five years of these monthly price differences were then averaged by month to get a monthly seasonal price difference. The black bar is this average while the purple points are the seasonal differences in a given year.

As shown in the figure, March tends to have the highest price in a given year that typically is $0.10 higher than the yearly average price. In four of the last five years, the March diesel price has been above average. The exception being last year when March had nearly the lowest price of the year.

From a farmer perspective, high prices just before spring planting could present problems. If farmers are filling their tanks at that point, they could be paying more than necessary. Farmers would likely pay less for diesel by filling their diesel tanks at the end of the year.

December has the lowest price of the year on average although there is a wide variation in the December seasonality. In 2016, Diesel prices were actually the highest in December. Still, in four of the last five years, December diesel prices were either near the yearly average or below the average.

August is an interesting month for diesel prices as this month's seasonality shows very little seasonal changes. In all of the past five years, the August diesel price has been nearly the yearly average price.

## Price Predictions for 2017

As might be expected, diesel prices and oil prices are highly correlated. Using the last three years of weekly oil and diesel prices we can develop a model that estimates diesel

prices as a function of oil prices. The future oil prices can then be used to gauge where traders think diesel prices are headed.

The model used in this analysis predicts a $0.27 increase in diesel price for a $10 increase in oil price. The current crude oil futures quotes for the rest of 2017 peak at $56. This is $4 above the December oil price. Thus, diesel prices could rise another $0.10 during 2017. Of course this price projection assumes no big shocks to the market occurring. If this projection is accurate then farmers could expect higher prices in 2017 when compared to 2016. Still diesel prices would be below where they where from 2012 through 2014.