

# Nickel Price Forecasting, 1 Year Ahead

## Regression Analysis and Time Series Forecasting using KNN

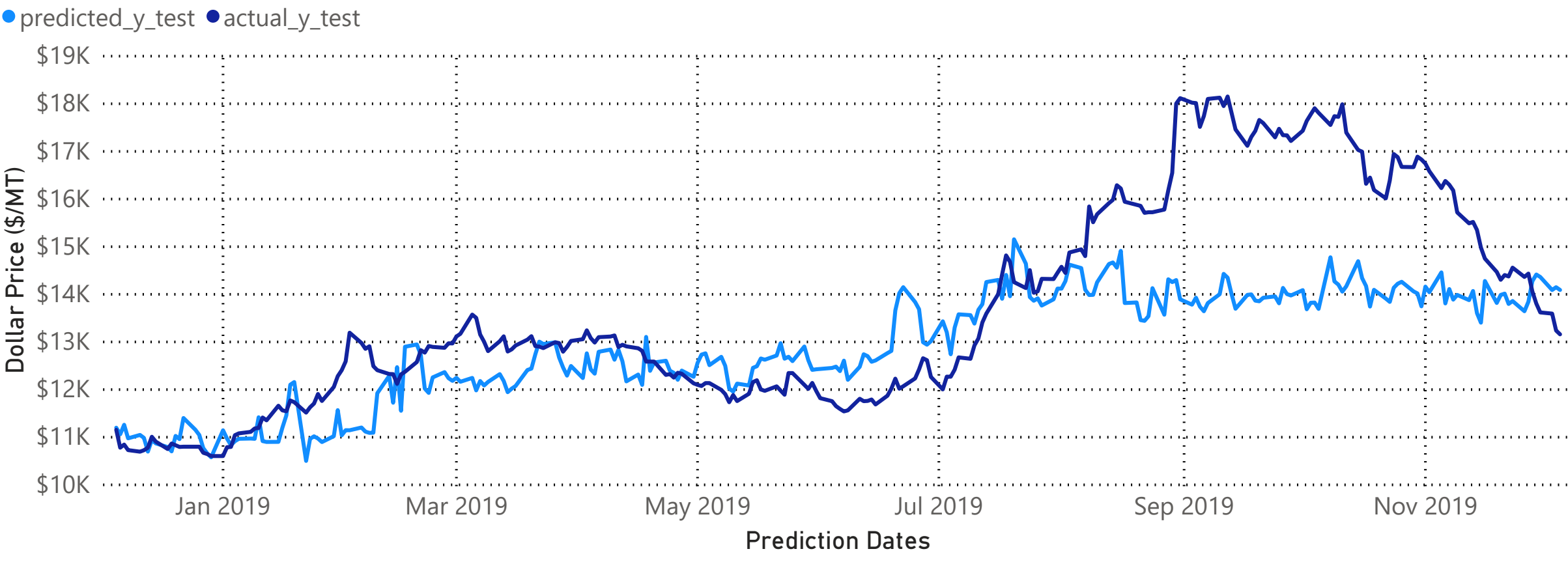
### Nickel Predictions Results



### Performance Analysis Using Backtesting

Backtesting means recursively testing how well the model makes predictions using older data where the "future prices" are already known.

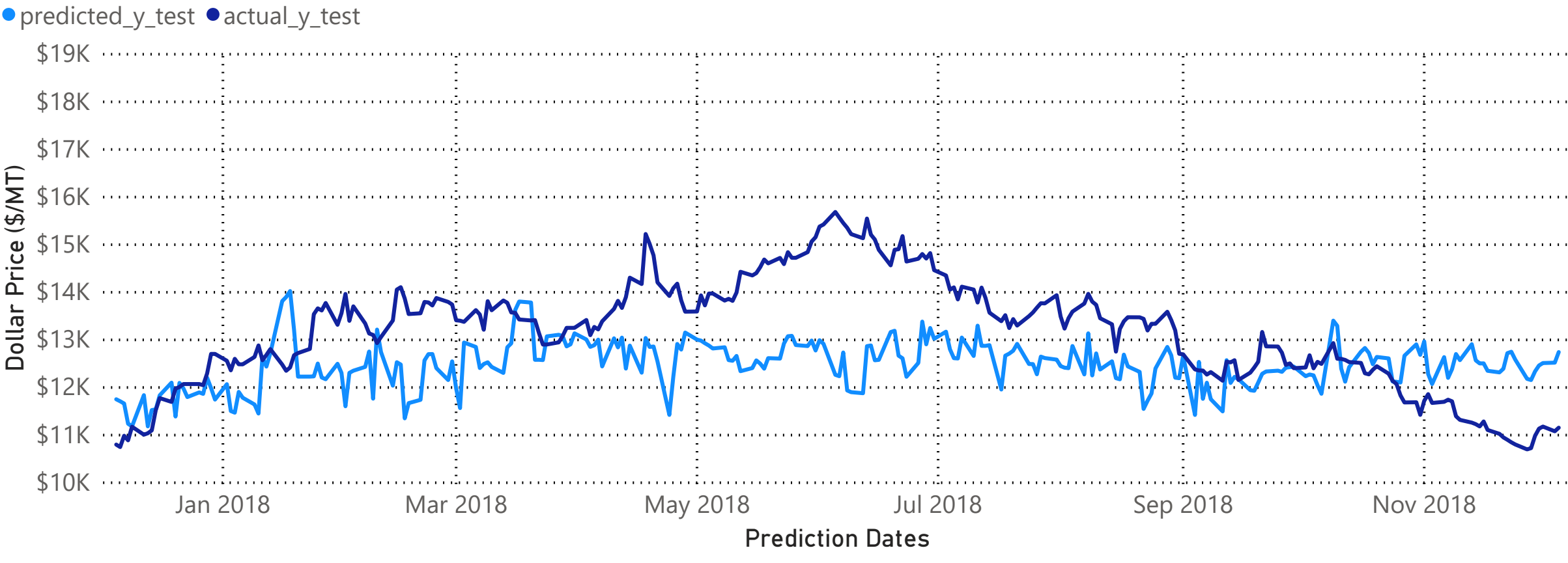
#### Prediction Results (2018-2019)



Mean Absolute Error (MAE)

\$1,197

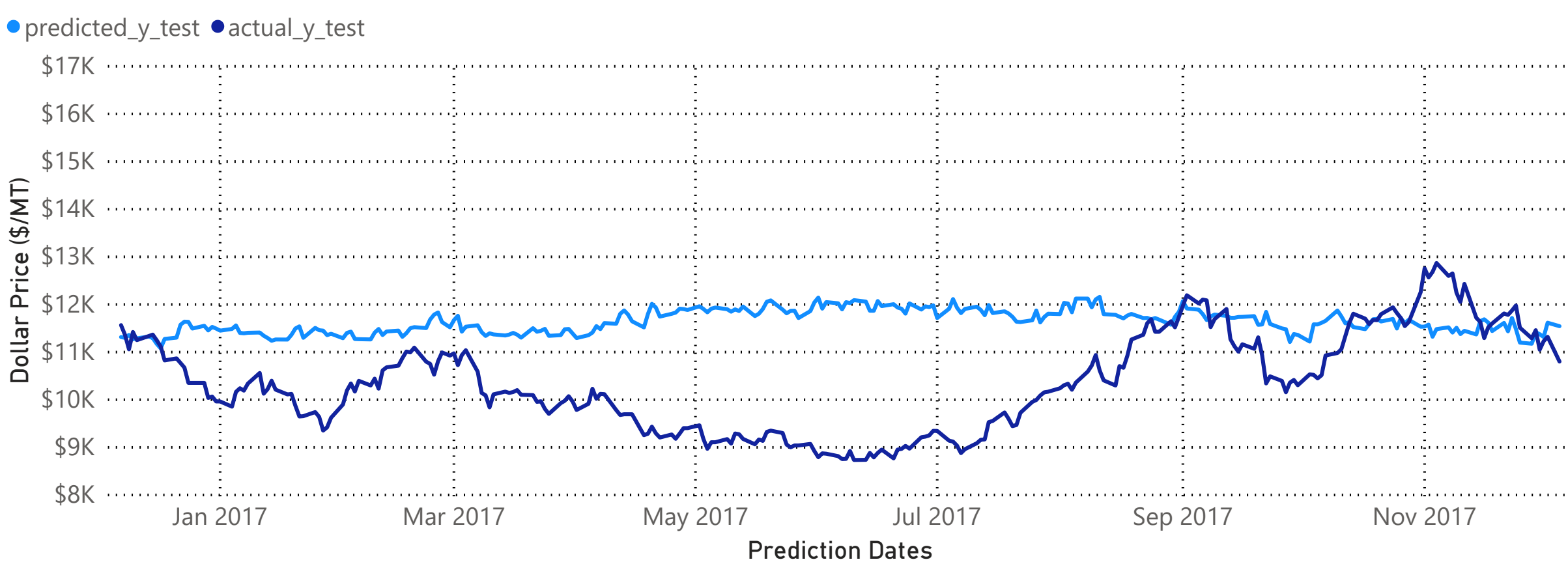
#### Prediction Results (2017-2018)



Mean Absolute Error (MAE)

\$1,065

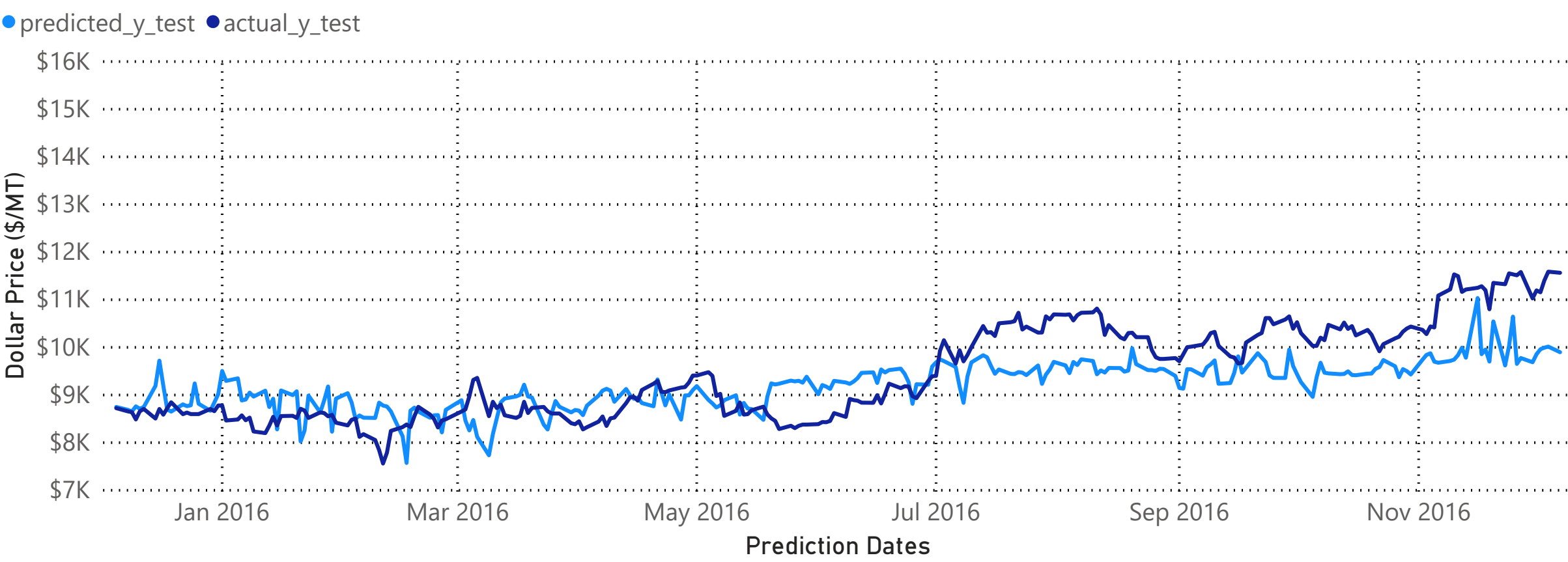
#### Prediction Results (2016-2017)



Mean Absolute Error (MAE)

\$1,402

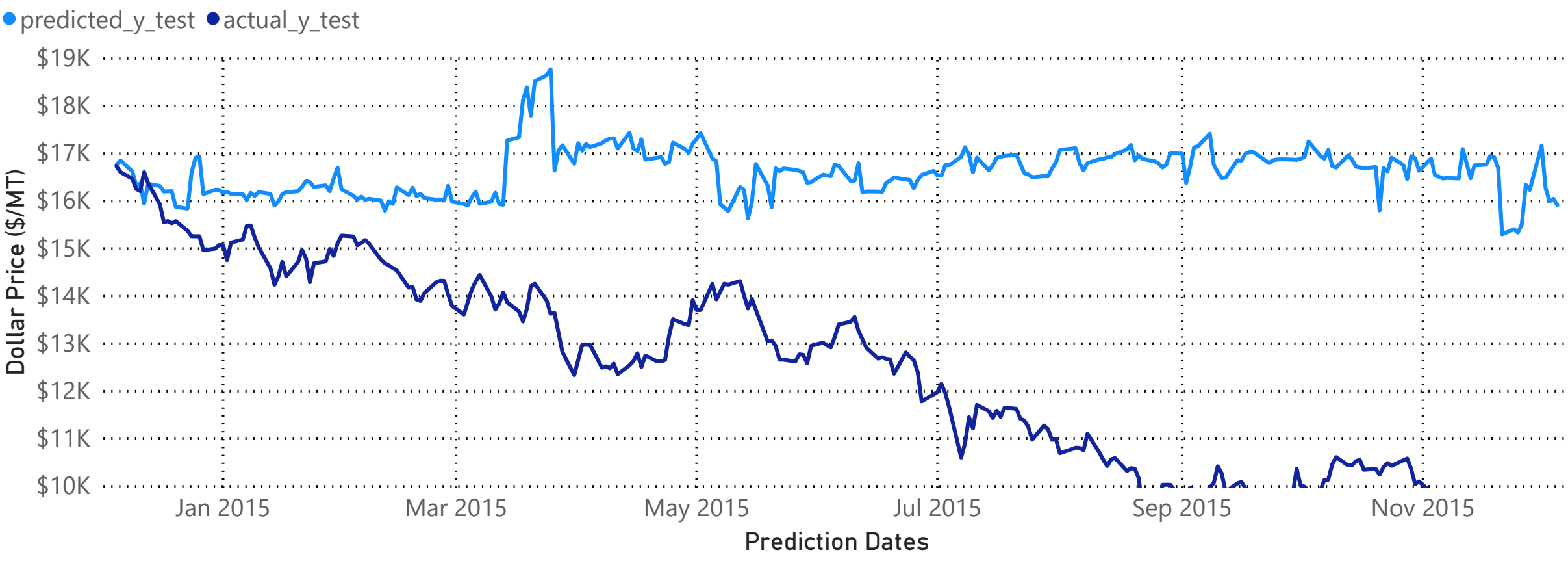
#### Prediction Results (2015-2016)



Mean Absolute Error (MAE)

\$604

#### Prediction Results (2014-2015)



Mean Absolute Error (MAE)

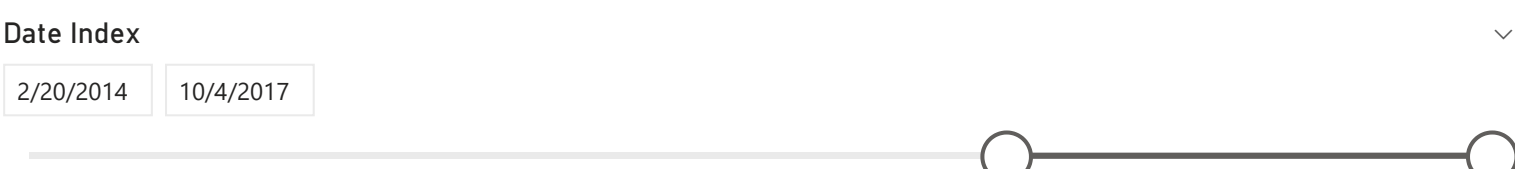
\$4,280

### Overall Performance Results (Mean Absolute Error)



Mean Absolute Error (MAE) - Over Multiple Models

\$1,353





# Nickel Price Forecasting, 2 Years Ahead

## Regression Analysis and Time Series Forecasting using KNN

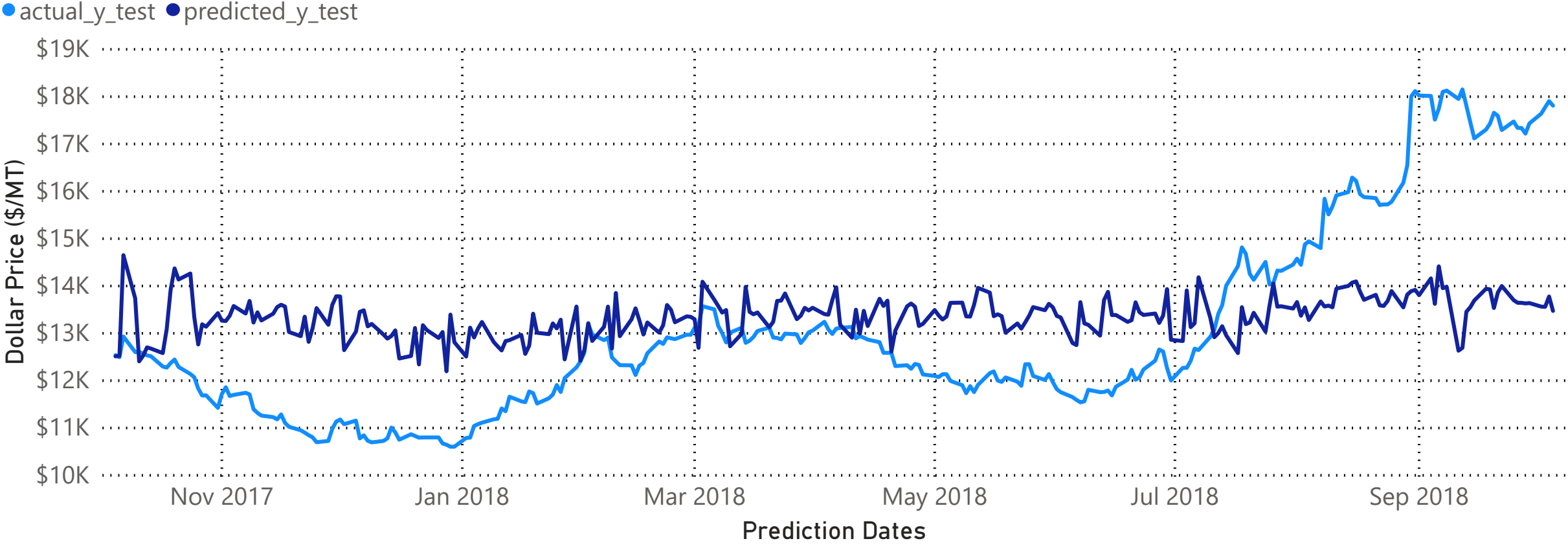
### Nickel Predictions Results



### Performance Analysis Using Backtesting

Backtesting means recursively testing how well the model makes predictions using older data where the "future prices" are already known.

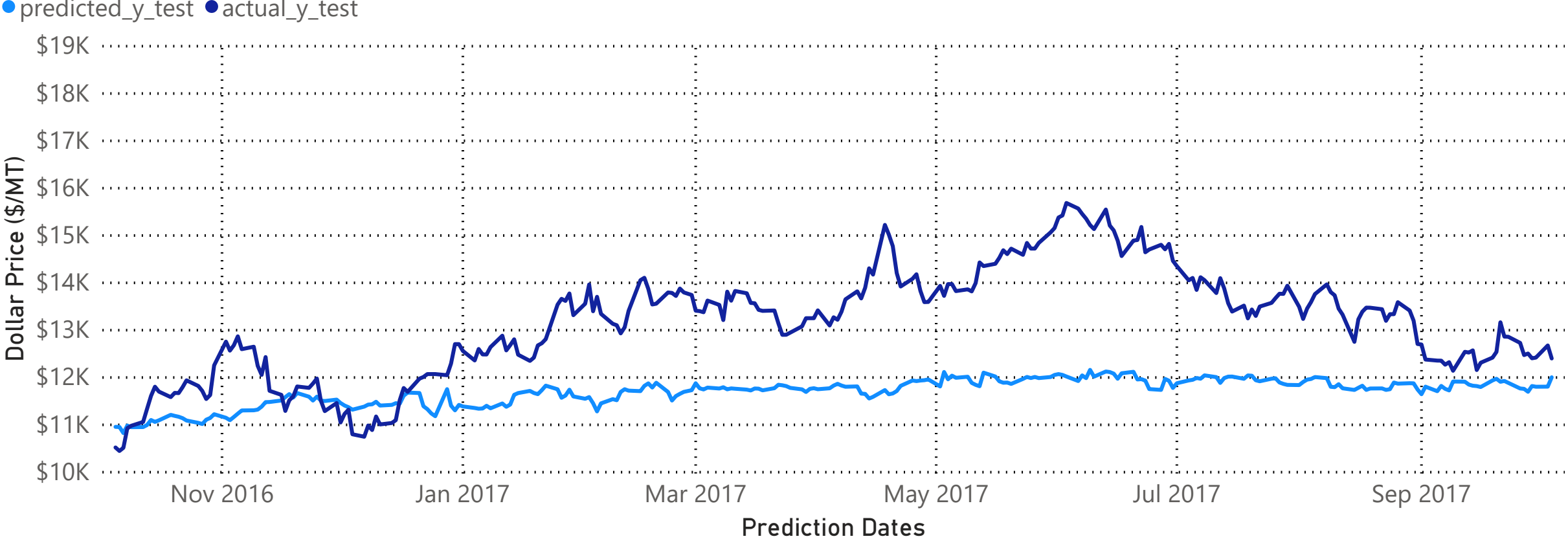
#### Prediction Results (2017-2018)



Mean Absolute Error (MAE)

\$1,562

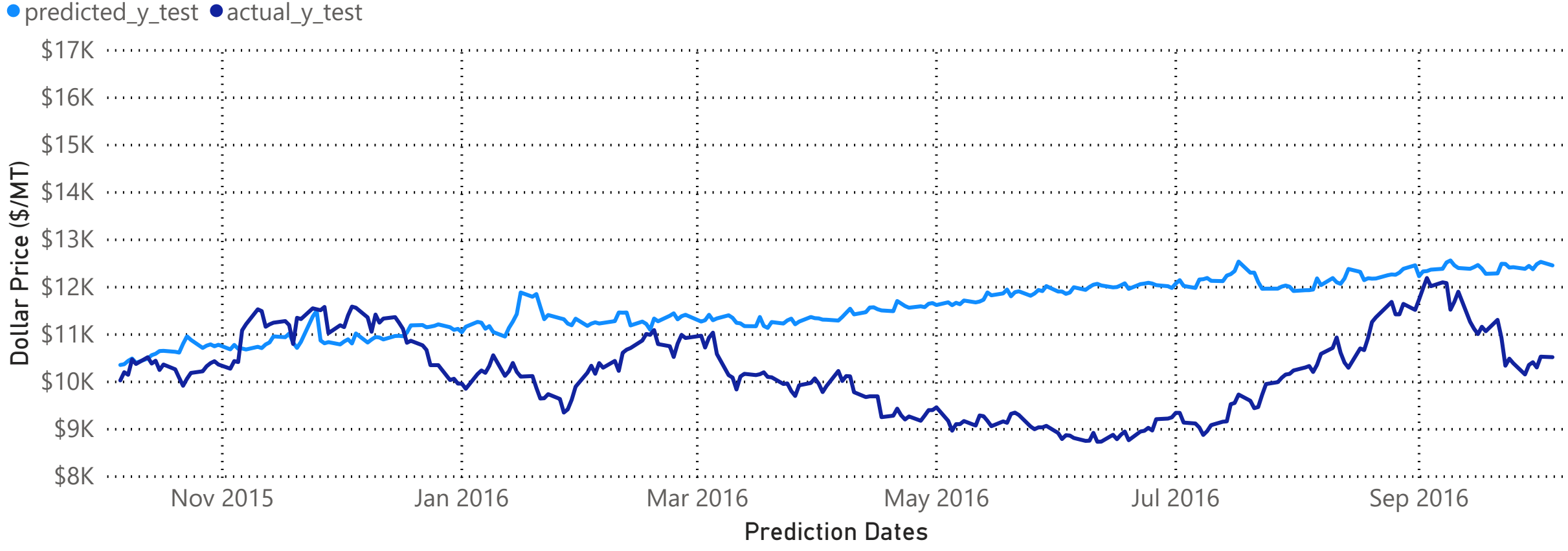
#### Prediction Results (2016-2017)



Mean Absolute Error (MAE)

\$1,513

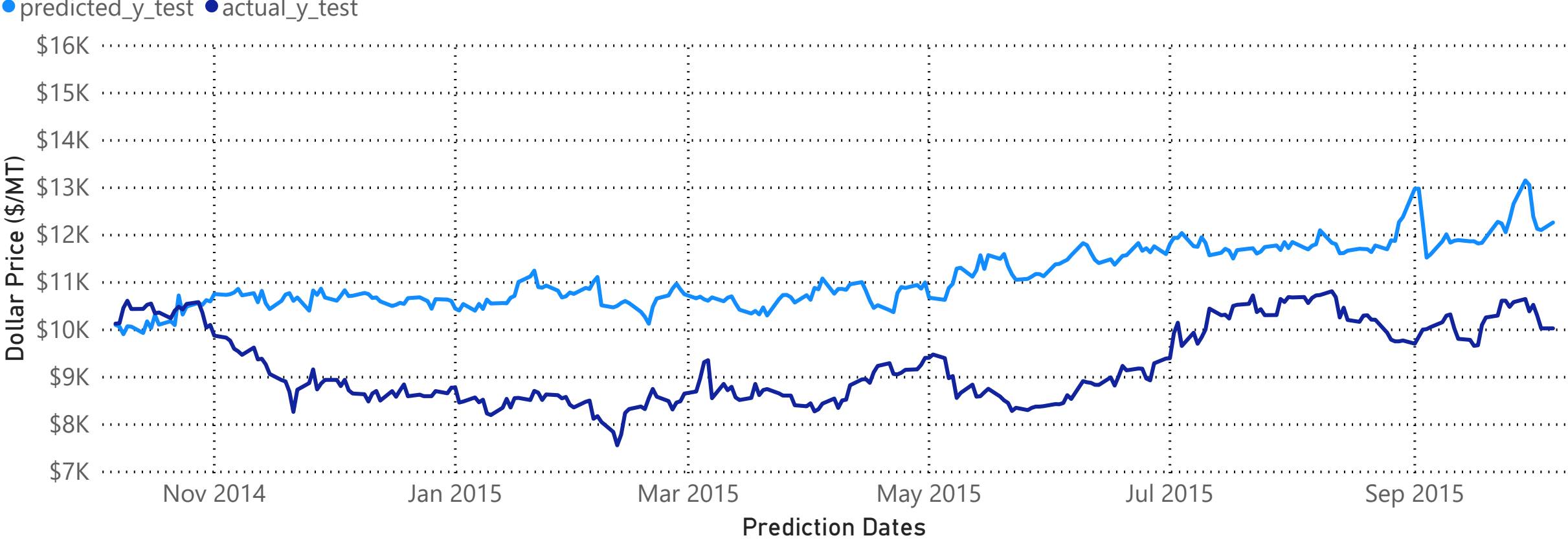
#### Prediction Results (2015-2016)



Mean Absolute Error (MAE)

\$1,449

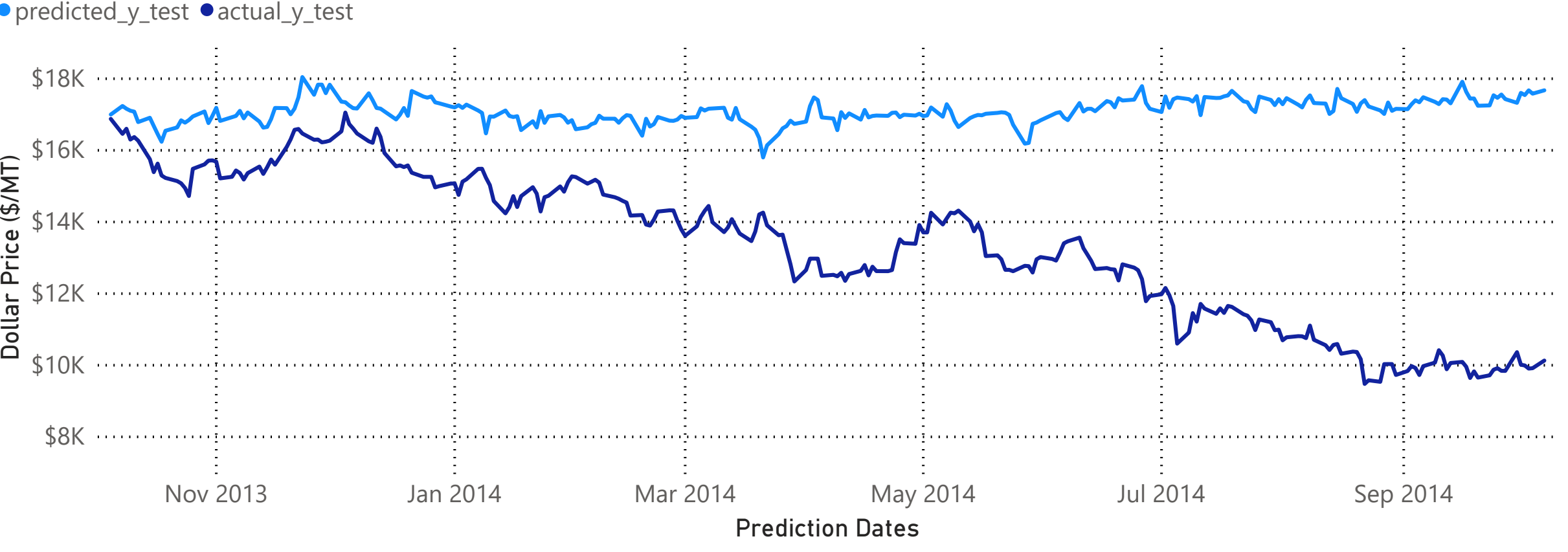
#### Prediction Results (2014-2015)



Mean Absolute Error (MAE)

\$1,873

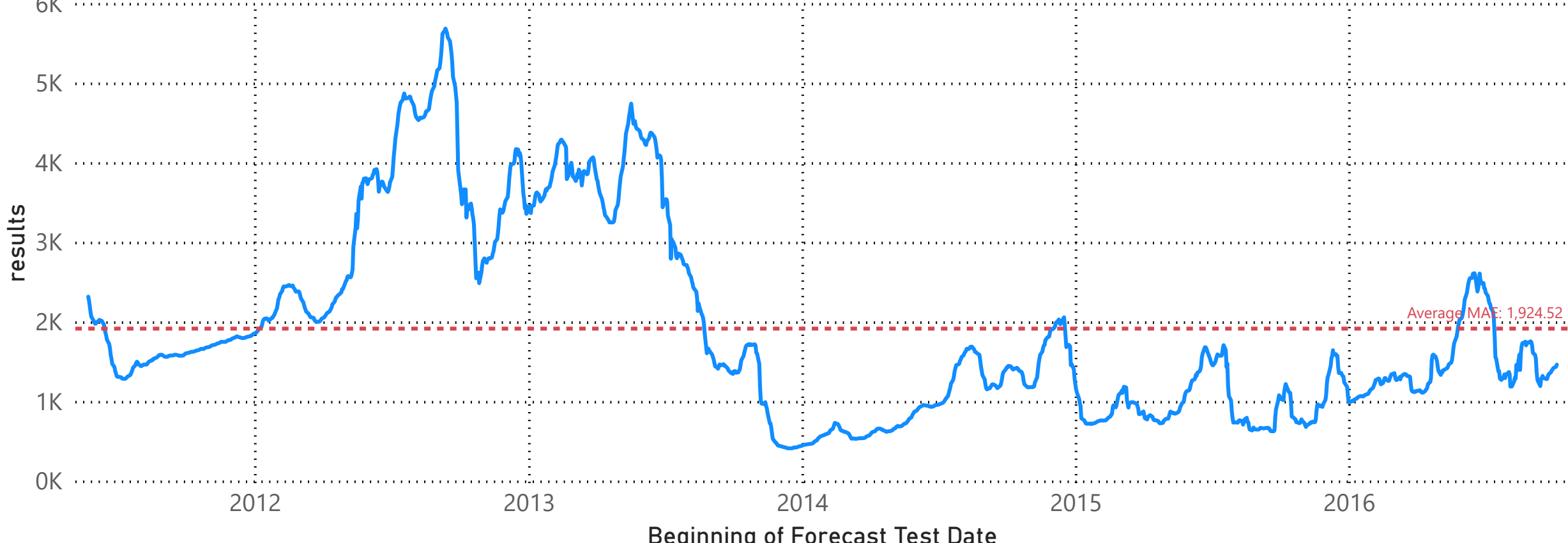
#### Prediction Results (2013-2014)



Mean Absolute Error (MAE)

\$3,749

### Overall Performance Results (Mean Absolute Error)



Mean Absolute Error (MAE) - Over Multiple Models

1,925

