**Effect of Gasoline Prices on Consumer Behavior**

This group project seeks to understand the effect of gasoline prices on consumer behavior: namely, to compare gasoline prices to the number of registrations of conventional cars, sales of Hybrid Electric Vehicles (HEVs), and vehicle fuel consumption (all in the U.S.). We will use reported data tracked on a monthly basis from January 2000 through December 2017. Our task is to forecast 2018 based on analysis of past performance using R. We will measure the accuracy of the forecast by comparing our results to actual data published for 2018 using the RMSE.

The gas pricing data was obtained from Kaggle, which linked to the U.S. Energy Administration Information dataset for U.S. gasoline prices. Conventional car registration data was found at the U.S. Department of Transportation's Federal Highway Administration's Office of Highway Policy Information. Sales of Electric Vehicles were obtained from the U.S. Department of Energy's Alternative Fuels Data Center, and natural gas vehicle fuel consumption was found on the U.S. Energy Administration Information's website.

Links:

<https://www.kaggle.com/mruanova/us-gasoline-and-diesel-retail-prices-19952021> <https://www.eia.gov/dnav/pet/PET_PRI_GND_A_EPMRU_PTE_DPGAL_A.htm> <https://www.energy.gov/sites/prod/files/2016/09/f33/NY_Energy%20Sector%20Risk%20Profile_0.pdf> <https://www.fhwa.dot.gov/policyinformation/statistics/2019/mv1.cfm> <https://afdc.energy.gov/data/?q=electric+vehicles> <https://www.fhwa.dot.gov/policyinformation/statistics.cfm> <https://www.eia.gov/dnav/ng/hist/n3025us2m.htm>

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