

# Regression Model - Course Project

*Jordan Woloschuk*

*9/21/2019*

## Motor Trend: Analysis on Variables and the Impact on Miles per Gallon

### 1) Executive Summary

The purpose of this analysis is to examine a collection of cars and determine the relationship between vehicle variables (e.g. number of cylinders) and fuel economy (i.e. miles per gallon).

This analysis will seek to answer the following questions:

1. Is an automatic or manual transmission better for MPG?
2. Quantify the MPG difference between automatic and manual transmissions?

### 2) Data Processing

#### 2.1) Loading Libraries

### 2) Data Processing

#### 2.1) Loading Libraries

Load necessary libraries for data analysis and developing results.

```
library(ggplot2)
library(dplyr)
# GGally for .....
library(GGally)
# ggfortify
library(ggfortify)
```

#### 2.2) Loading Data

Load necessary mtcars dataset.

```
data(mtcars)
```