

# Circulation Report

## Updates

- added some text to ReadMe.md files
- added session info

## Introduction

We are interested in comparing weight of vehicles with their gas mileage. We hypothesize that vehicles with a higher weight will have worse gas mileage compared to vehicles with a lower weight.

**Note this (circulation) report will only contain what is pertinent to the manuscript**

## Statistical methods

A linear model including mpg as the outcome and weight (per 1000lbs) as a covariate was utilized.

## Results

Linear model indicated that with every additional thousand pound increase in vehicle weight resulting in 5.34 less miles per gallon ( $p < 0.01$ ), indicating an inverse relationship between vehicle weight and gas mileage.

Characteristic	Beta	95% CI	p-value
Weight	-5.3	-6.5, -4.2	<0.001