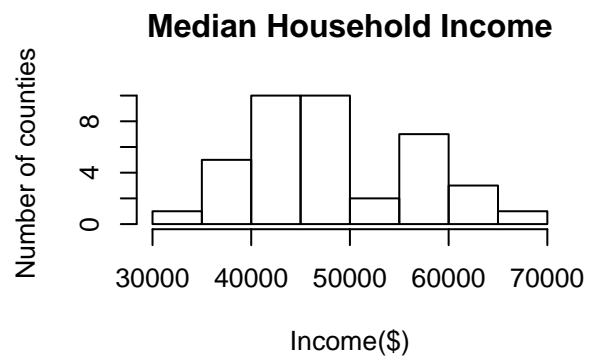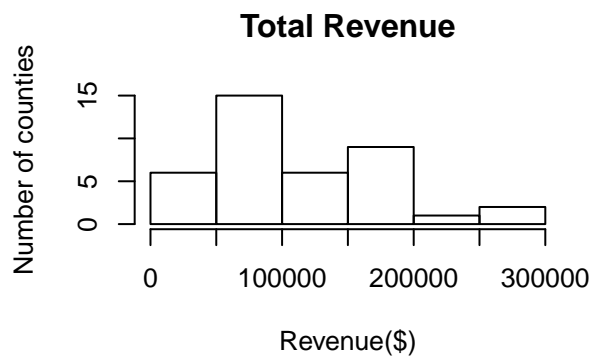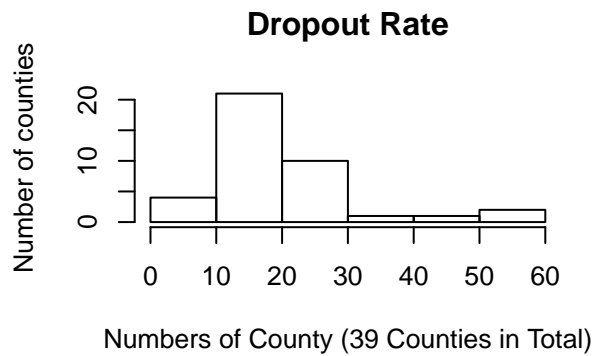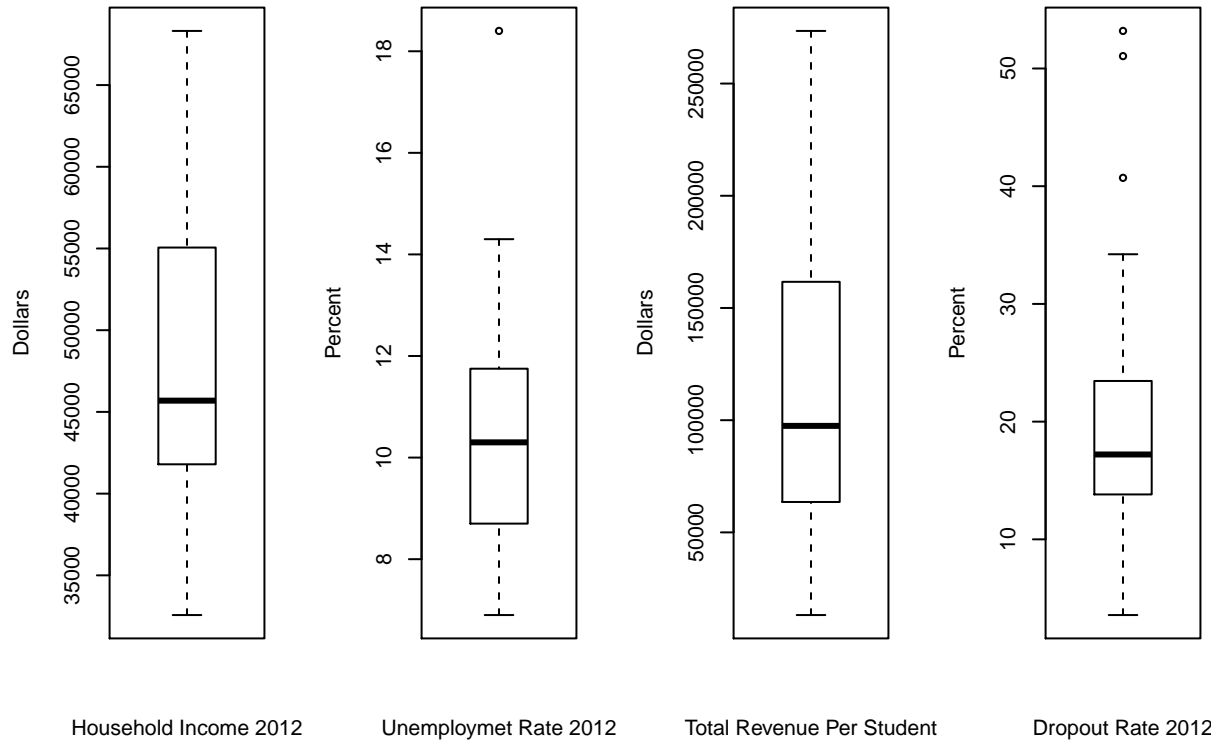# Executive Summary

Introduction

This documents shows the three main variables I used in the project(Unemployment Rate,Total Revenue(school district) and Median Household Income) and it's a brief of my previous work.
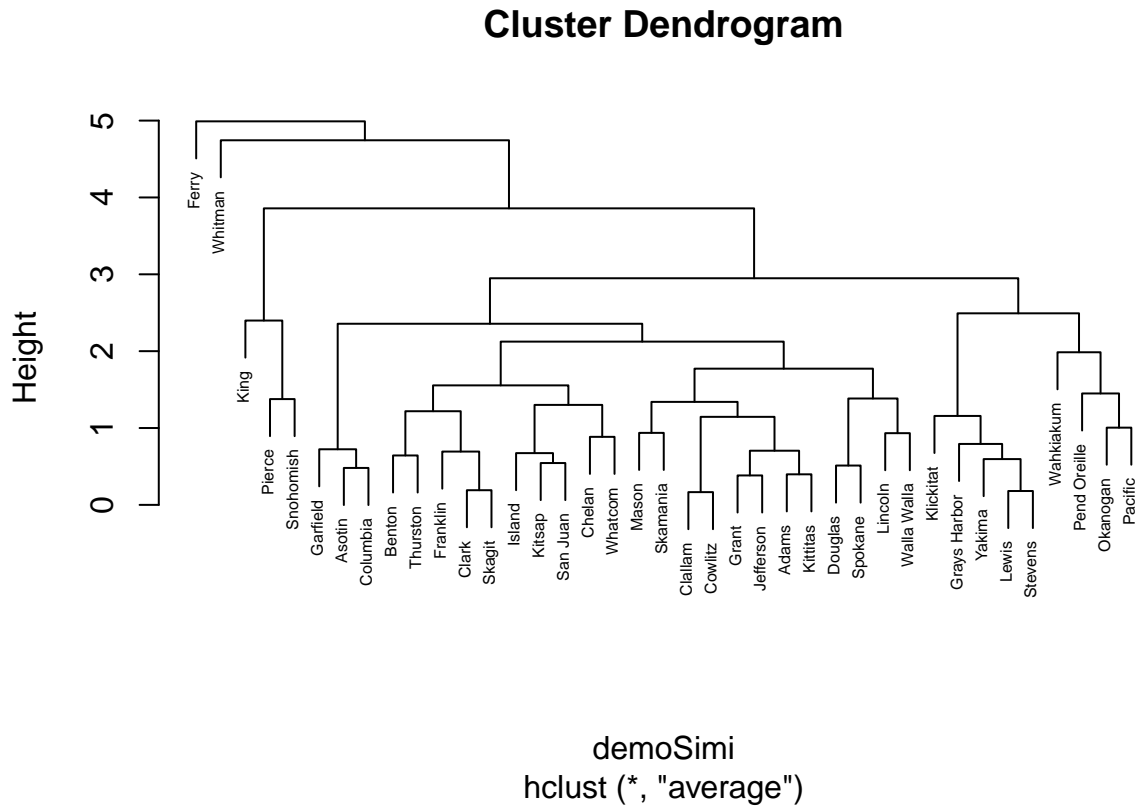
Narrative Statistics and plots

We can understand the characteristics of my three data by the following histograms and boxplots.

Household Income 2012   Unemploymet Rate 2012   Total Revenue Per Student   Dropout Rate 2012

Clustering

Here, the dendrogram is different from the two I used in my MASTER. I classify counties into different groups based on only three main variables here, and the two in my MASTER are based on more than ten variables. We can see that Ferry County and Whitman County here are classified as outliers because their high unemployment rates and low median household income.

Cluster Dendrogram

demoSimi
hclust (*, "average")

Regression

```
## [1] "Pearson: -0.140666395003632  - Is significative? FALSE"
## [1] "Pearson: 0.306238793010843  - Is significative? FALSE"
## [1] "Pearson: -0.0338792201701959  - Is significative? FALSE"
```

As I mentioned in the MASTER, the three variables don't have strong relationship with the dropout rate. In fact, none of my 14 variables are significative enough to the dropout rate.

```
##
## Please cite as:

##  Hlavac, Marek (2018). stargazer: Well-Formatted Regression and Summary Statistics Tables.

##  R package version 5.2.1. https://CRAN.R-project.org/package=stargazer
```

Table 1: matrix

	TotalRevenuePerStudent	unemployment_rate	Median_household_income_201
TotalRevenuePerStudent	1	-0.093	0.057
unemployment_rate	-0.093	1	-0.501
Median_household_income_2012	0.057	-0.501	1

From the matrix, we can see that the unemployment rate is relative to the median householde income, if we would like to dive deep to what really causes the high dropout rate, we might want to avoid choose variables like this. We can also understand the complexity in social phenomenon from here because all the potential indenpendent variables I thought might have relationship with the dropout rate fail to properly explain it. If

anyone want to have a thorough understanding of dropout rate in WA state, we recommend they seeking theoretical support before collecting data.