



FP₁: Potential Projects

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Predicting HS graduation from early drug use

- + Substance abuse, especially early in life, can greatly influence one's development.
- + **National Survey on Drug Use and Health, 2014** : 3,148 variables, covering substance (Tobacco, marijuana, cocaine, heroin,...) usage and general demographic data.
- + Hypothesis: By examining if and when someone started using certain drugs, we might be able to predict the likelihood that they completed high school or received a GED.

Predicting employment from Major statistics

- + Some college majors generally earn more than others
- + Employment for graduates can be affected by a number of factors, including median earnings, number with that majors
- + **538** compiled census data from 2010-2012 on the careers of college majors
- + Hypothesis: Factors such as the median earnings and number of people in that major can be used to predict the employment or employment-level rates for that major.

Predicting population shifts by energy usage

- + Energy usage can reflect changes in the population.
- + **United States Energy, Census, and GDP** 2010-2014, through Kaggle.
- + Census (region, population, migration) information by state.
- + Energy (consumption, production, expenditures, price) by type of energy.
- + Hypothesis: The changes in energy use over the years can be used to predict shifts in the population of a state.