Project 1 Proposal

Group Members: Amber Reynolds, Asher Collings,

Edgar Mendez, Jonathan Vallecillo, and Lisa Ashway

Discussion:

As society faces one of the most pressing economic downturns in history, many headlines have emerged touting its environmental effects. Dolphins have been seen returning to the canals in Venice, smog is disappearing over Los Angeles, and people in the Jalandhar area of India can see the Himalayas for the first time in 30 years. This has begged us to ask the question: “What are the environmental effects of economic activity?” Particularly in the United States, which has one of the most robust economies in the world, while having less regulation on environmental policy than other countries.

Hypotheses:

1a) There is a positive correlation between decreases in GDP and decreases in the pollutants released into the atmosphere.

1b) There is a positive correlation between decreases in GDP and decreases in the rate of air pollution.

2a) There is a positive correlation between decreases in total employment and a decrease in the pollutants released into the atmosphere.

2b) There is a positive correlation between decreases in total employment and decreases in the rate of air pollution.

Data Sources:

1. Historic Econometric Data:
   1. GDP by State, Adjusted Seasonally from 2005 to 2016
      1. Source: Bureau of Economic Analysis
      2. Type: CSV
   2. Total Employment by State, Adjusted Annually, from 2000 to 2016
      1. Source: Bureau of Economic Analysis
      2. Type: CSV
2. Historic Environmental Data:
   1. US Pollution Data, 2000 to 2016
      1. Source: <https://data.world/data-society/us-air-pollution-data>
      2. Type: CSV
   2. State Carbon Dioxide Emissions Data
      1. Source: U.S. Energy Information Administration
      2. Type: CSV
3. Other Data:
   1. Population of US States
      1. Source: United States Census Bureau
      2. Type: API or CSV
   2. Google Maps API

Assumptions:

1. Data representing The United States is sufficient enough to examine both economic activity and environmental factors worldwide.
2. A time interval of 11 years will have significant rises and falls of economic productivity.
3. Increases/Decreases in Air Pollution and Carbon Emissions are ample factors to determine environmental effects.