**IST 718**

**Big Data Analytics**

**Group Project: Proposal**

Nash Delcamp

Allison Roth

Keith Kunz

**Problem Statement:**

Suicide is thought to be a preventable cause of death and the reasons behind such an act may vary widely. There are many factors that could contribute to suicide rates including socioeconomic, political, geospatial or medical.

The goal of this analysis is to identify factors that contribute to the suicide rate in an attempt to better understand what drives the number of suicides and, potentially, how to reduce the unnecessary deaths.

A reduction in suicide rates would be beneficial to society. “In the United States it is estimated that an episode of suicide results in costs of about $1.3 million in lost productivity, medical costs and other economic impacts.” Money spent on appropriated interventions is estimated to result in a decrease in economic losses that are 2.5 fold greater than the amount spent (Costs of Suicide, 2019).

**Project Scope and Data**

The scope of this project encompasses data from many disciplines gathered between 1986 through 2016. The main data were obtained from <https://www.kaggle.com/russellyates88/suicide-rates-overview-1985-to-2016/downloads/suicide-rates-overview-1985-to-2016.zip/1> and contains information about suicides broken down into age, sex, year, generation and country. Other categories include country meta-data such as population, GDP for the year, GDP per capita for the year and total population. The original data set contains 27.8K rows and 12 columns.

Some outside data sources that are being considered include information about gun prevalence, social media access and prevalence, computer access, access to mental health care, unemployment rate and whether or not universal health care is provided.

**Team members:**

Nash Delcamp, Allison Roth and Keith Kunz

All members will participate in cleaning, visualizations, and model building. The team will communicate what each member will work on prior to the next meeting so members don't spend time on identical tasks.

# Works Cited

*Costs of Suicide*. (2019). Retrieved May 13, 2019, from Suicide Prevention Resource Center: https://www.sprc.org/about-suicide/costs/