Project Title

CRASH!

Team Members

Rahul Ughade | Andy Hartman | Jamie Retz | Melissa Mielke | Chris Rieck

Project Description

Our team will be researching MN automobile accident and fatality information (see defined ***Data Sets*** below) in order to determine variables/trends that appear to have a correlation with rate (or potentially specific types) of auto accidents and fatalities.

Research Questions to Answer

* Does month of year (winter conditions particularly) have an impact?
* Does time of day (day, night, post bar close) have an impact?
* What is the impact of drug/alcohol use and/or intoxication have?
* What impact does distracted driving (by specific reason e.g. texting if possible) have an impact?
* Does the type of road accidents occur on (e.g. residential vs. single lane highway vs. three lane freeway) have any impact?
* What is the rate of accidents (potentially over time) that occur in construction zones? What is the impact of detours and diverted routes, if any?
* For those variables that seem to have a statistically significant impact, how has the impact changed over time? Which are on the decline? Incline?
* Which variable (or combination with relationship) do we think has the most significant impact in the most recent data year available?
* Which variable seems to have the most data available to mine? Why might that be the case? How might that skew our findings?
* Where would we be interested in researching further?

Data Sets to be Used

* National Highway Transportation Association
  + GES (All automobile accidents)
  + FARS (automobile fatalities)
    - [FARS Trends Alchol URL](https://www-fars.nhtsa.dot.gov/Trends/TrendsAlcohol.aspx)
* Data.gov - Crash Data
  + [Data Gov Crash Data URL](https://catalog.data.gov/dataset?tags=crash)
* MN Department of Transportation
  + [MNDOT URL](https://www.dot.state.mn.us/trafficeng/safety/crashdata.html)
* 311 data (non-emergency calls)
* 911 data (emergency calls)
* City of Chicago (gov) API
* National Highway Traffic Safety Administration (NHTSA)
  + Office of: National Center for Stats and Analysis (NCSA)
* National Motor Vehicle Crash Causation Survey (NMVCCS) - NMVCCS XML Case

Completed Tasks

* Create Project GitHub repository – TeamPillow (Andy/team 12/22/18)
* Create Branches for each team member (All 12/22/18)
* Complete Project Proposal Doc (Melissa/team 12/22/2018)

Rough Breakdown of Future Tasks

All team members will do further exploratory data analysis (EDA) over the break to determine what specific data sets are available at each site location we’ve identified. Will determine if the data set(s) available fit into the scope of our project and how we would mine and use the data to execute our project.

When we have determined the top 5 variables of impact, each team member will be responsible for cleaning, analyzing, creating visuals, and presenting on that variable.

Team will collaborate on working on summary findings and break those tasks down at that time.