Predicting Vehicle Collisions in San Francisco

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THE PROBLEM

Data from prior vehicle crashes (2011-2016) in San Francisco can be used to predict when and where crashes are likely to occur in San Francisco and the severity of them based on the location and time of day.

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THE DATA

- Focus only on San Francisco collision data
- Real-Time Data to scrape for most recent accident reports:
  - Traffic 511
  - Accident & Data Center
- Crash Stats (2004-2016)
- NHTSA (national highway traffic safety administration) 1994-2014
- SF Gov Data – Speed & Compliance
- 2011 US Fatal Car Crashes
- OTS Rankings (2008-2013)

- TASAS Data: Traffic Accident Surveillance and Analysis System- *find way to obtain*
  - http://ahmct.ucdavis.edu/?p=2368
  - http://gaiea.ahmct.ucdavis.edu/ar/index.php?pg=login
  - Resource
- *Create a way to evaluate severity of crash (1-10 or 1-5 scale)*

HYPOTHESIS

Peek hour for commute time (to work; from work) will be high indicators of crash prediction as well as areas that have a higher density of office buildings.