Sara LaPlante* (sara.cox.laplante@gmail.com), Jessica Mao (jmao@smith.edu) and Madison Laethem (mlaethem@smith.edu). Predicting Arrest from NYPD Stop, Question and Frisk Data. Preliminary report.

In 2014, the New York City Police Department recorded 46235 stops of pedestrians that comprise the Stop, Question and Frisk database. The Stop, Question and Frisk database contains 111 variables, such as race, age, gender, whether a stop was preceded by a radio call, and others. This research investigates whether a collection of variables from the database can predict whether a stop resulted in an arrest. Using a training set of the 2014 database, we develop a logistic regression model to determine which variables in the dataset best predict an arrest. Testing the model on the remaining cases determines how well this model fits the data. Such a model highlights the common characteristics that pedestrians arrested during 2014 share across the database. (Received September 22, 2015)