



Crimes of Passion: Testing the Association Between Boston Crime Rates and Local Professional Sports Teams Losses

Huynh Nguyen

Paul Lagarde

Sai Nikhil Thirandas

Anjali Patil

Our team is proposing to study if any of the Boston Red Sox, Celtics, Bruins, and New England Patriots (located in neighboring Foxborough, MA) losing a game is associated with higher crime rates in the city of Boston; and if so, which association is the strongest. We will use historical crime data from 2012-2020 from the City of Boston's data archive (data.boston.gov), alongside historical MLB, NBA, NHL, and NFL data on the Boston professional sports teams win/loss record and date of games, to study any association between crime and lost games.

Our 4 null hypotheses are that the mean daily crime rate for the city of Boston on days a professional sports team loses is equal to the mean daily crime rate over the whole 8 year period. We will test this hypothesis for all four teams. The alternate hypothesis in all four tests is that on days on which one of the Boston-area professional sports teams lose a game the city of Boston suffers from a higher than average crime rate.

Additionally, if we fail to reject more than one of our hypotheses, we will compare the associations and see which team's loss is most strongly associated with higher crime incidence.