1. Introduction
   1. Is Chicago a war zone?
   2. “Compared to other cities of similar sizes (250,000 or more people served), Chicago is by no means the “murder capital” or “crime capital” of the U.S. Chicago had a citywide violent rate of 1045.15 per 100,000 in 2012, a rate closer to Houston and Minneapolis, and half that of cities like Detroit and St. Louis.” (Yale paper, pg. 3)
2. Data
   1. From the city of city of Chicago
      1. Potential for human error due to misclassification
   2. Filtered to only armed robberies
   3. Years 2003-2016 there is at least armed robbery every day
3. Time Series Modeling
   1. Differenced data – only need AR(1)
      1. ACF plot of the differenced data is evidence of this
      2. Negative relationship, autocorrelation at lag 1 is about -0.5
   2. Fit AR(1)
4. Sources
   1. http://isps.yale.edu/sites/default/files/publication/2013/12/48yearsofcrime\_final\_ispsworkingpaper023.pdf

Questions for Colin

- PACF shows negative exponential decay