FIGHT ON! CRIME

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Motivation

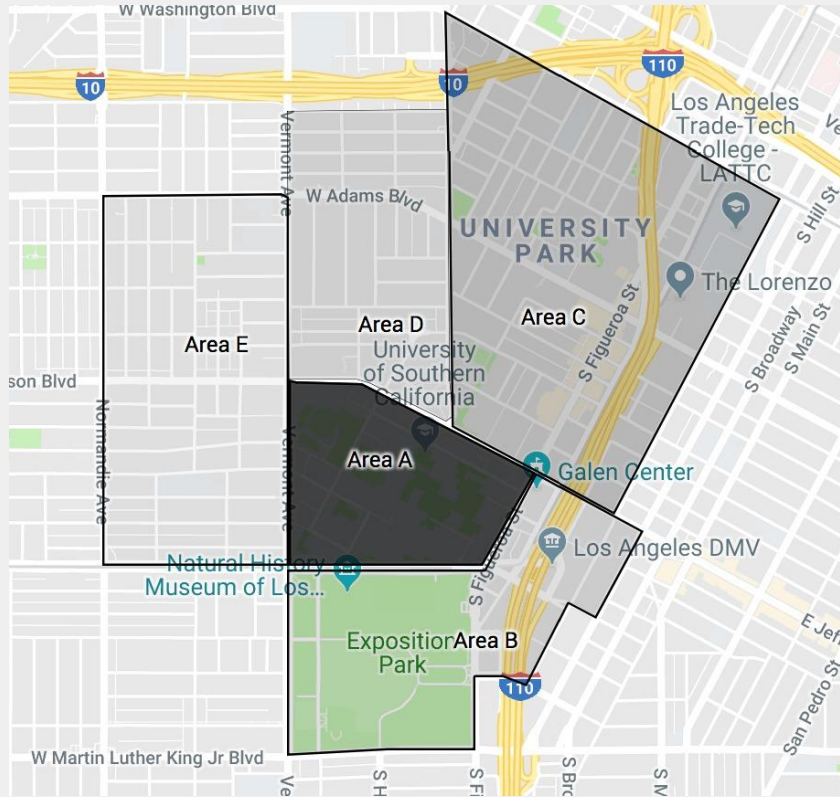A murder occurs every **33 minutes**

A robbery every **1 minute**

A violent crime every **26 seconds**

Can we do something to change this?

AIM: To analyze crime patterns better and give recommendations as well as make predictions that help agencies take actions.

- USC DPS Crime Dataset (2012-2017) -Obtained from DPS
- LA Crime Dataset (2010-2017) - data.lacity.org

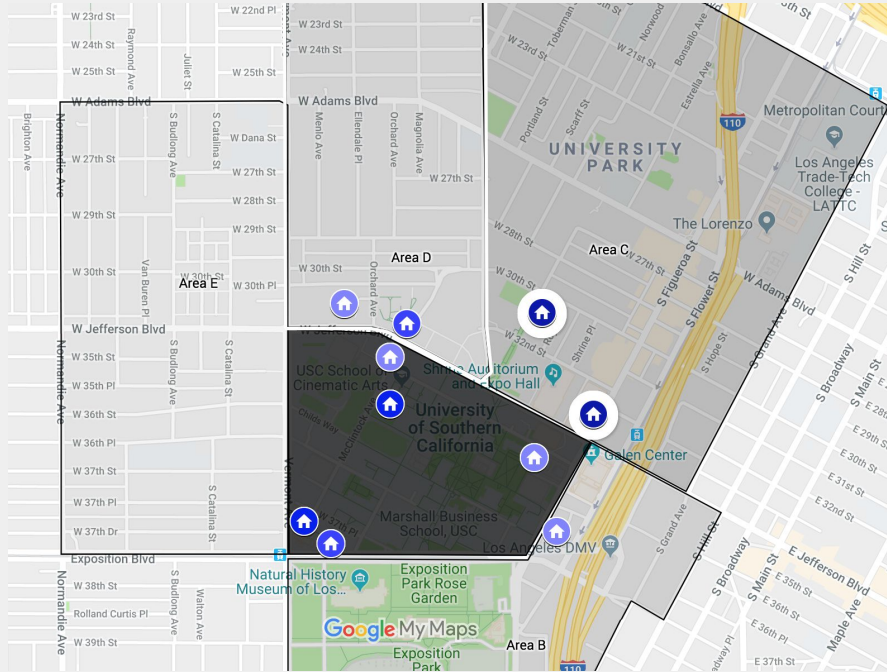# USC: General Analysis

Interesting Points

- Number of suicides have reduced to almost 1 or none in past two years
- Theft and Alcohol related crimes are on the rise.

BIKES

- Bike Crimes **decreased** overall
- Bikes Stolen at Troy Hall **decreased** by 50% from previous two years.
- Almost **no decrease** for cycle theft at Annenberg for past two years.

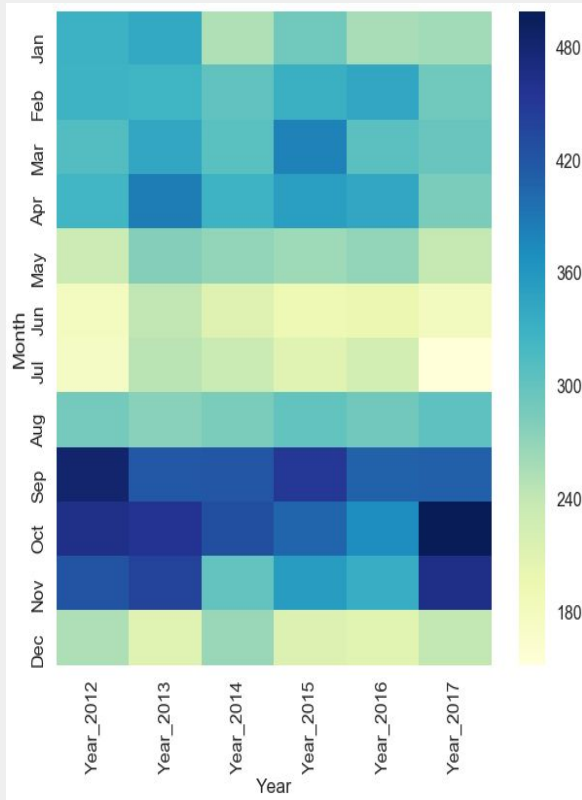# USC: Spatial Analysis

Safe Housings near USC?

Explore Crimes in Fraternities & Sororities

- Fraternity Crime Count (2012-17) : 1073
- Sororities Crime Count (2012-17) : 270
- Crime Categories : Alcohol, Battery, Thefts

Does Parking Structures need more patrolling?

- Unsafe : Grand Avenue Structure
- Isolated Off-Campus
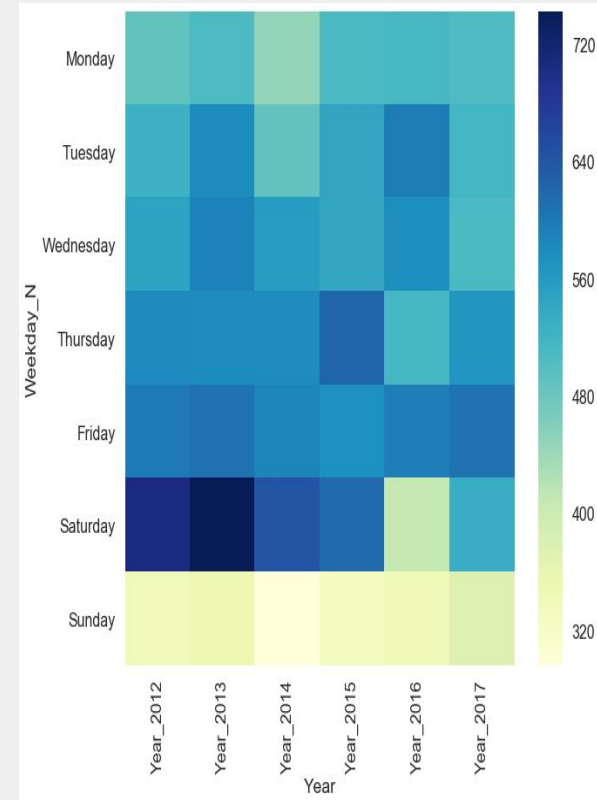- Less populated

USC: Temporal Analysis
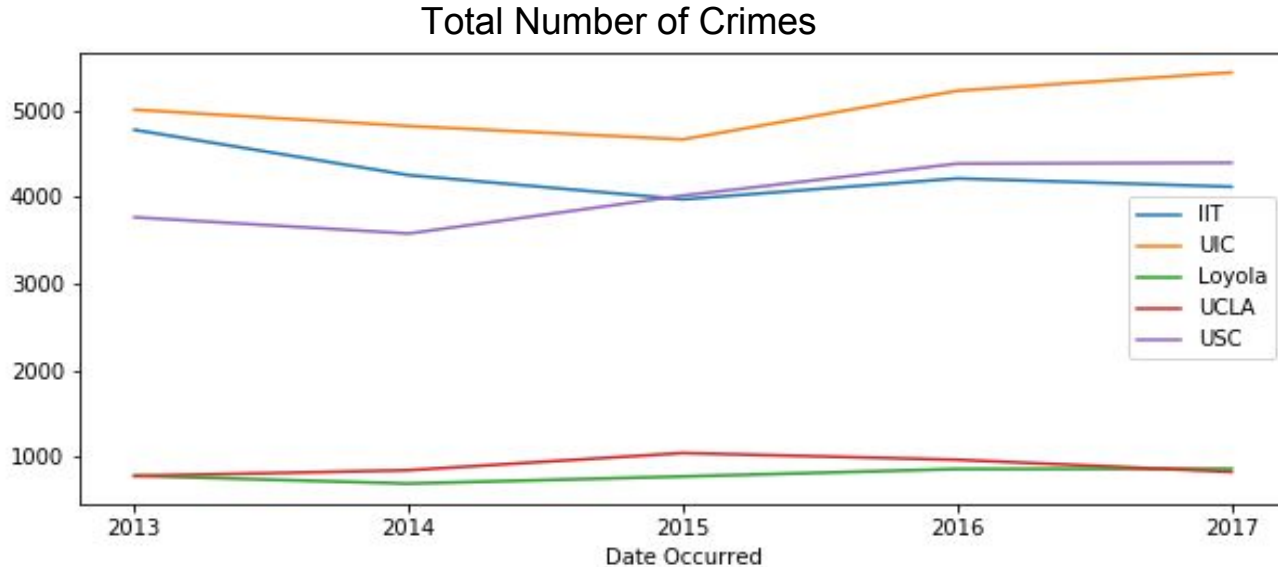

Trend between Crime Occurred and Reported: -
Barring the last year when it was 6 months, sexual offense has the maximum reporting time of 2 years.

Highest Average Crime Month-Wise Trend: -

October last week trend in the past five years has an average crime rate of 140
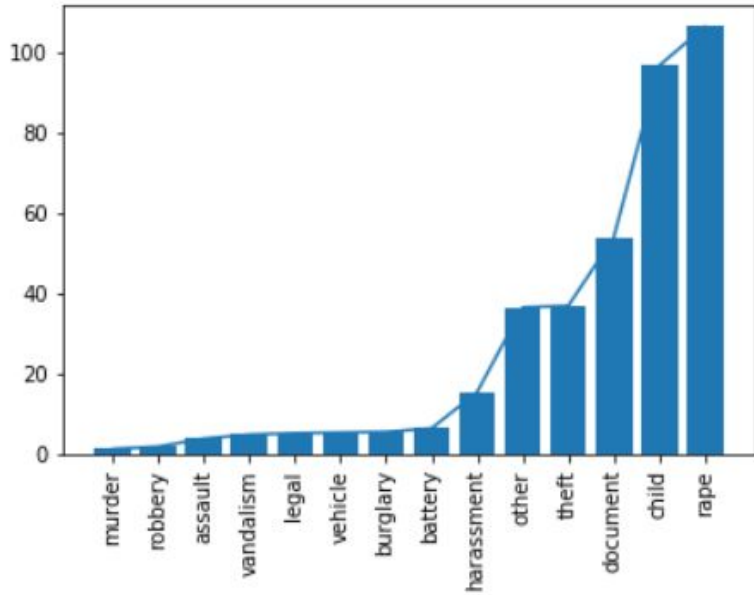
USC VS Other Universities

Total Number of Crimes

Enrollment Statistics (2017):
USC - 45,000
UCLA - 44,000
UIC - 30,000

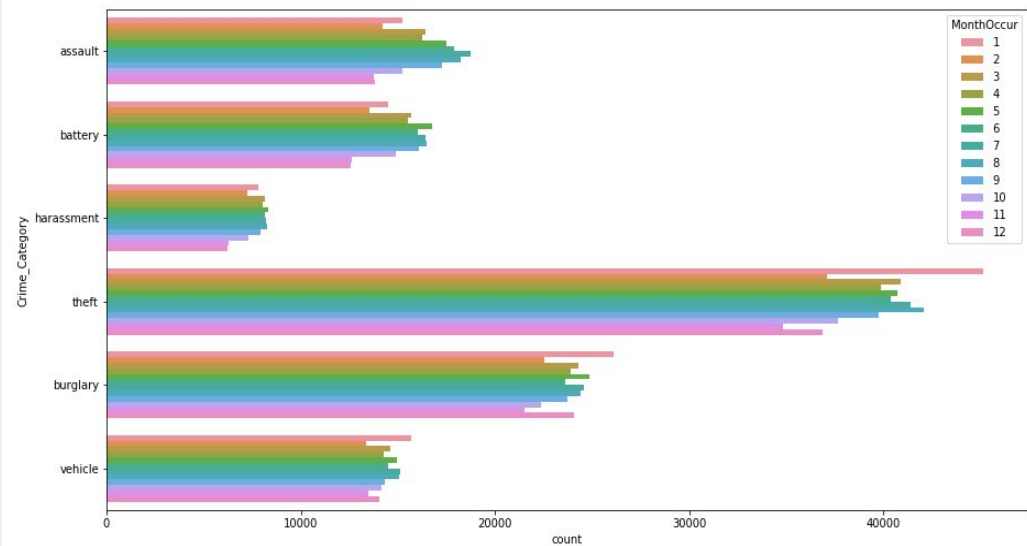**Social Media Activity:**
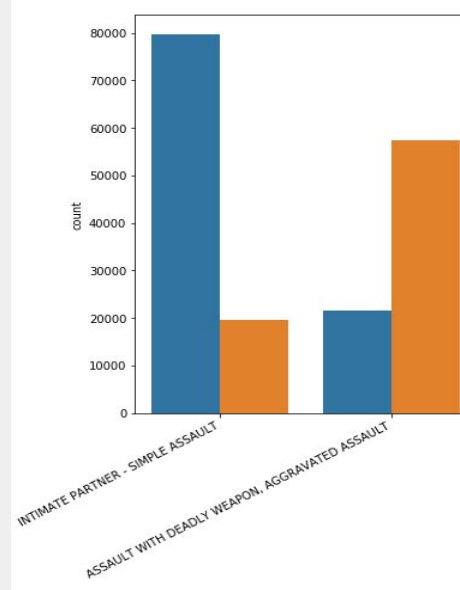USC DPS > UCLA PD > UIC PD
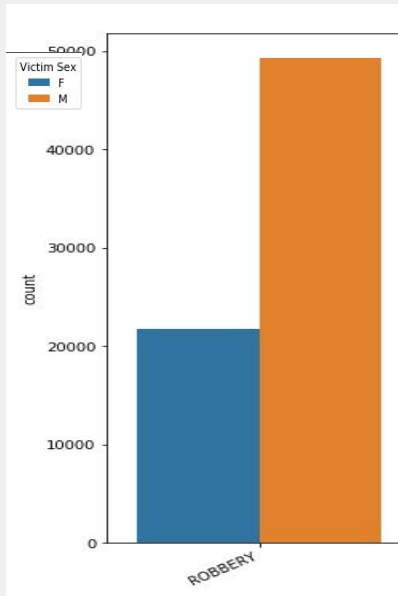
LA: Crime Analysis

REPORTING TRENDS
- 106 : Rape
- 96 : Child related crime
- 53 : Document related crimes
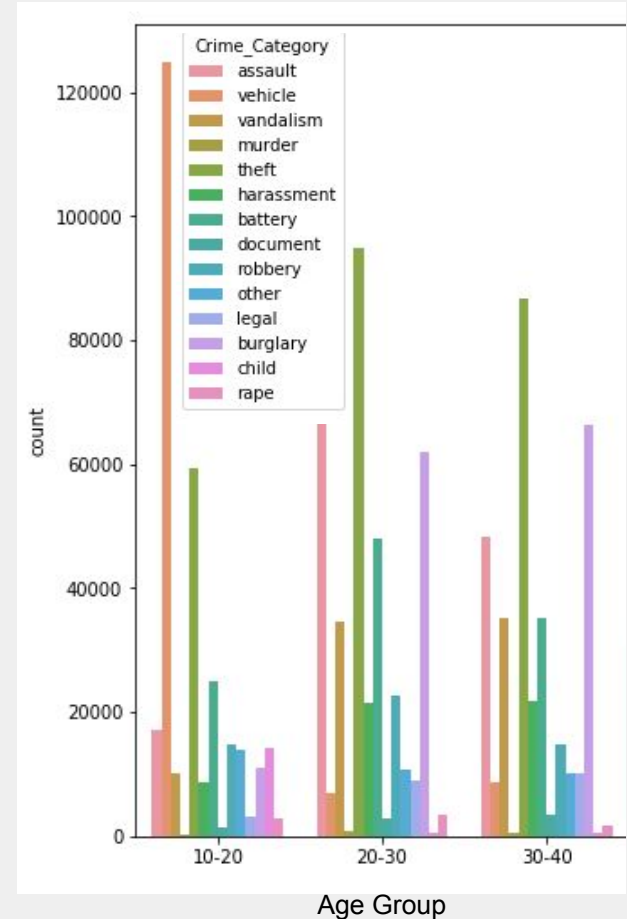
CRIMES ACROSS MONTHS OF YEAR
- Assault, Battery and Harassment
  - Peak: Jul-Aug
  - Decrease: Nov-Dec
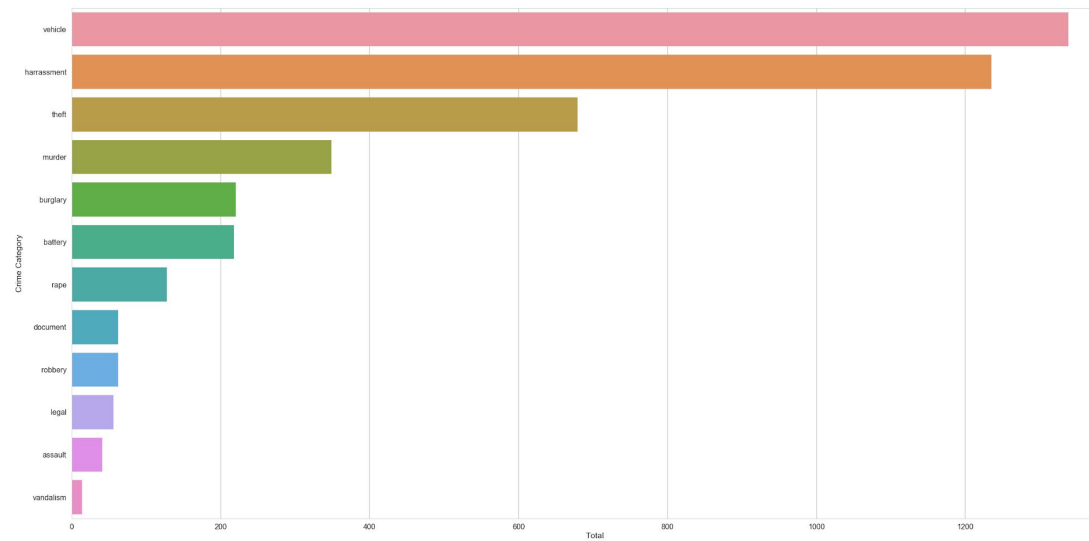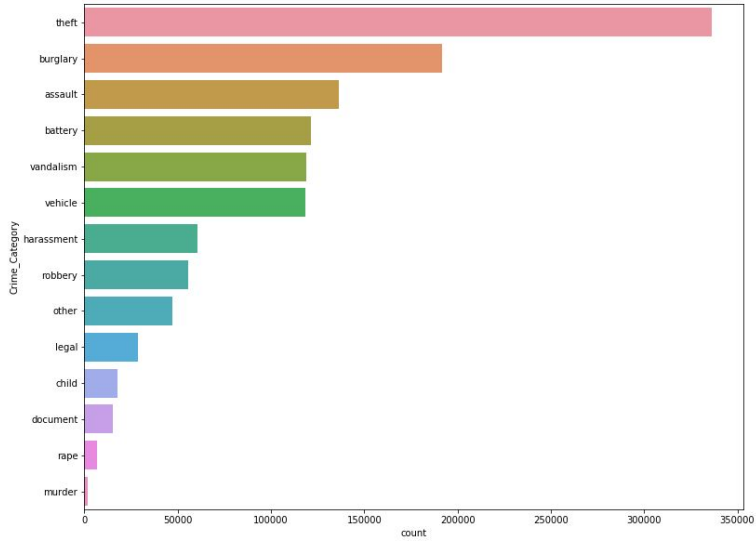- Theft, Burglary and Vehicle
  - Peak: Dec-Jan

Let's Analyze!!

Facts based on Victim Demographics:

- 8000 : 1 ratio of Female : Male rapes
- Maximum no of crimes against Hispanics (43%)

LA vs USC: Comparison

Time Slot	USC	Los Angeles
12.01am-6am	16%	13%
6.01am-12pm	28%	21%
12.01pm-6pm	36%	33%
6.01pm-12am	20%	33%

FUTURE SCOPE

- Can we predict patterns in crime by seeing what people are tweeting about (LA Crime Dataset + Twitter Data)

- Is there a sequential nature in certain crimes?

- Predictive Policing - Space & Time