Antonio Solorzano

Professor Phillip Thomas

CIS 320

March 2, 2016

LAPD Crime and Collision 2015

I will analyze crimes occurred in 2015 using LAPD Crime and Collision Raw Data – 2015, which includes all crimes and collisions reported in 2015. By analyzing the dataset, I will sort the safest month and the most dangerous month of the year, the safest area and most dangerous area, the most crimes occurred in the most dangerous area, and the safest areas most occurred crimes. This will help determine if the most dangerous areas crimes occurred are indeed violent dangerous crimes or not, same goes for the safest area.

LAPD Crime and Collision Raw Data – 2015 contains all crimes and collisions reported in 2015. I excludedall collisions reported in order to keep just the crimes. The data includes features like month, date reported, date occurred, time occurred, unique crime id, area code, area name, rd, crime code, crime description, status, status description, location, cross street, latitude and longitude. There are total of 190549 crimes that occurred in Los Angeles. The most occurred crime overall is 'battery - simple assault' which occurred 16499 times, and the least occurred crimes are 'bigamy', 'grand theft / auto repair', 'manslaughter, negligent', abortion', all occurred 1 time.

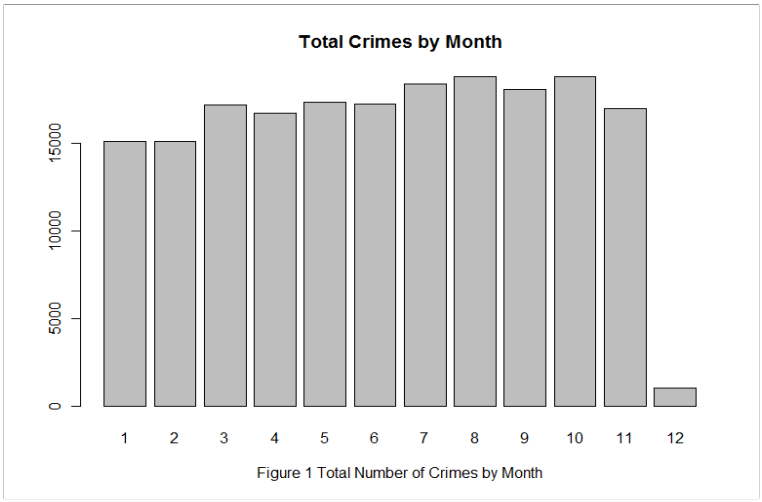


Figure 1 Total Number of Crimes by Month

Figure 1 shows the total number of crimes of each month. The most dangerous month of the year with a total of 18777 crimes occurred in both August and October. The safest month of the year witha total 1026 crimes occurred in December but only the first 3 days were recorded. So the next safest month would be February with a total of 15083 crimes occurred.

Figure 2 shows the total number of crimes of each area. The two most dangerous areas are Area 12 (77th Street) with a total of 13009 crimes occurred and 12426 crimes occurred in Area 3 (Southwest). On the other hand, the two safest areas with 6724 crimes occurred in Area 16 (Foothill) and 7179 crimes occurred in Area 4 (Hollenbeck).

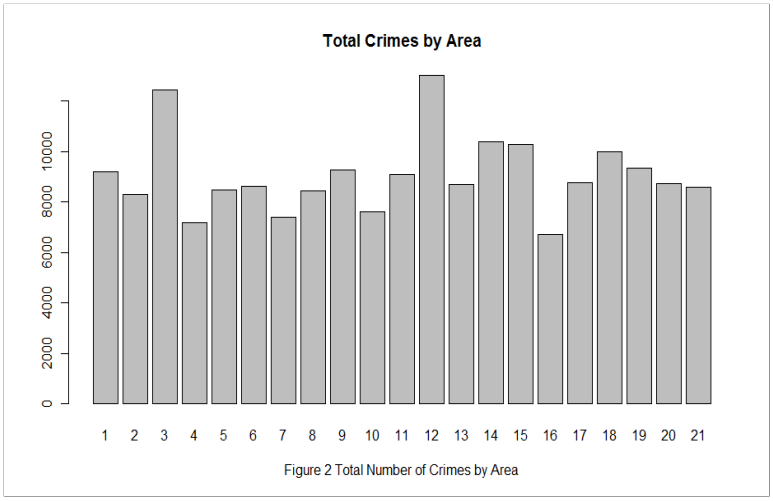


Figure 2 Total Number of Crimes by Area

Figure 3 shows the top 5 crimes that occurred in Area 12 (77th Street). There was 1274 'spousal abuse', 1238 'vehicle stolen', 1143 'battery assault', 1124 'assault with deadly weapon' and 846 'robbery' crimes that were the top record in Area 12. With 'battery assault' being the most occurred crime and 'stolen vehicle' right behind it, it confirms that Area 12 is the most dangerous.

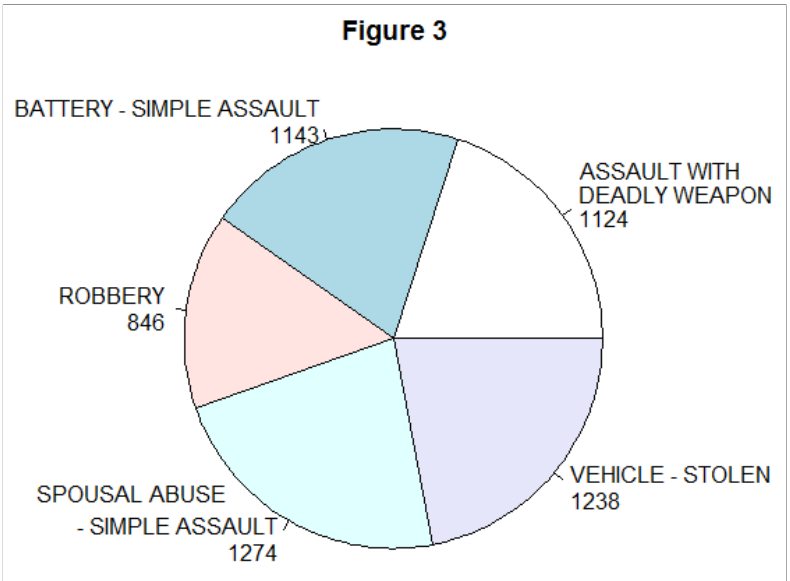
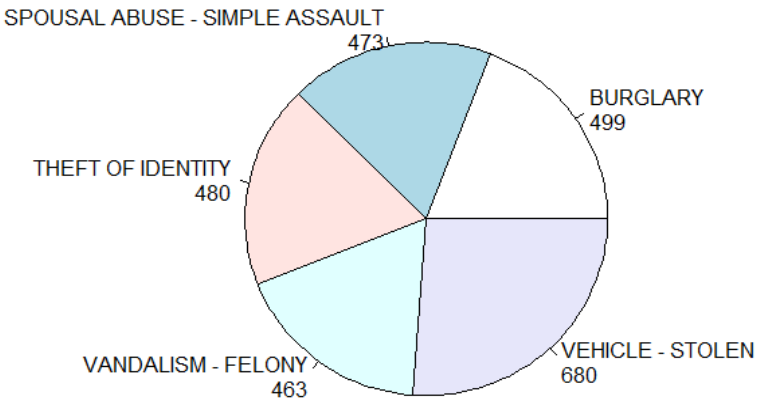


Figure 4 shows the top 5 crimes that occurred in Area 16 (Foothill). There was 680 'vehicle stolen', 499 'burglary', 480 'theft of identity', 473 'spousal abuse', and 463 'vandalism' were record in Area 16. Even though 'stolen vehicle' is the 2nd most committed crime, Area 16 had just about half of what Area 12 had. Thus confirming yet again that Area 12 is the most dangerous area in Los Angeles County.

Figure 4



Crime can be considered a difficult subject to analyze because people commit crimes at random. But with the help ofthe LAPD Crime and Collision Raw Data it can be possible to predict what crime can occur in certain areas. Analyzing these previous crimes can helpforesee possible felonieswhich could definitely help reduce crime rate and prevent future loss.

R Code

```
> LAPD <- read.csv(file.choose(), header=T)

> counts <- table(LAPD$Mon)

>barplot(counts, main="Total Crimes by Month",

+ xlab="Figure 1 Total Number of Crimes by Month")


>counts<- table(LAPD$AREA)

>barplot(counts, main="Total Crimes by Area",

+ xlab="Figure 2 Total Number of Crimes by Area")


> Area12 <- read.csv(file.choose(), header=T)

>mytable<- table(Area12$Crm.Cd.Desc)

>lbls<- paste(names(mytable), "\n", mytable, sep="")

>pie(mytable, labels = lbls,

+ main="Figure 3")


> AREA16 <- read.csv(file.choose(), header=T)

>mytable<- table(AREA16$Crm.Cd.Desc)

>lbls<- paste(names(mytable), "\n", mytable, sep="")

>pie(mytable, labels = lbls,

+ main="Figure 4")
```