

Top 3 In Seattle: Burglary is the most common uniformly distributed incident type across the city, and most common incident type is Car Prowl localized at the city center.

1. The Code:

The Summer 2014 data for Seattle Incidents is analyzed using R to compare top 3 incident types. First data is pulled into a data frame and top 3 occurrences were identified by sorting the data.

Input:

```
se_df<-read.csv("seattle_incidents_summer_2014.csv", stringsAsFactors = FALSE)
str(se_df)
sort(summary((as.factor(se_df$Summarized.Offense.Description))), decreasing = TRUE)[1:3]
se_df_t1<-subset(se_df, se_df$Summarized.Offense.Description=="CAR PROWL")
se_df_t2<-subset(se_df, se_df$Summarized.Offense.Description=="OTHER PROPERTY")
se_df_t3<-subset(se_df, se_df$Summarized.Offense.Description=="BURGLARY")
```

Top 3 incidents are identified as:

CAR PROWL	6230
OTHER PROPERTY	3755
BURGLARY	3212

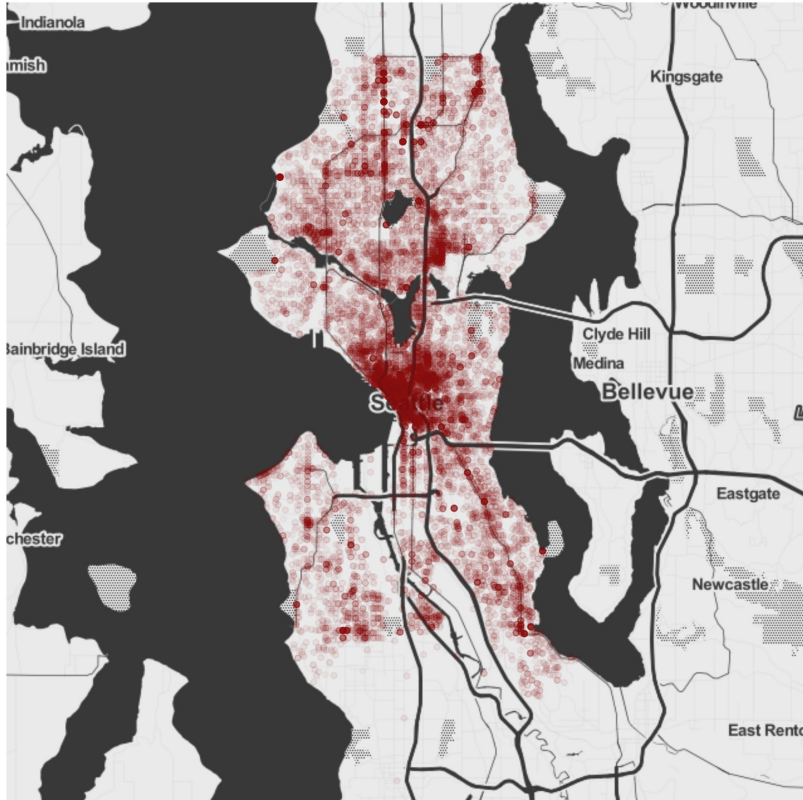
The map of Seattle is pulled using ggmap package. The map is as shown below:

```
library(ggmap)
mapofseattle <- qmap("seattle", zoom = 11, source="stamen", maptype="toner",darken =
c(.3,"#BBBBBB"))
print(mapofseattle)
```

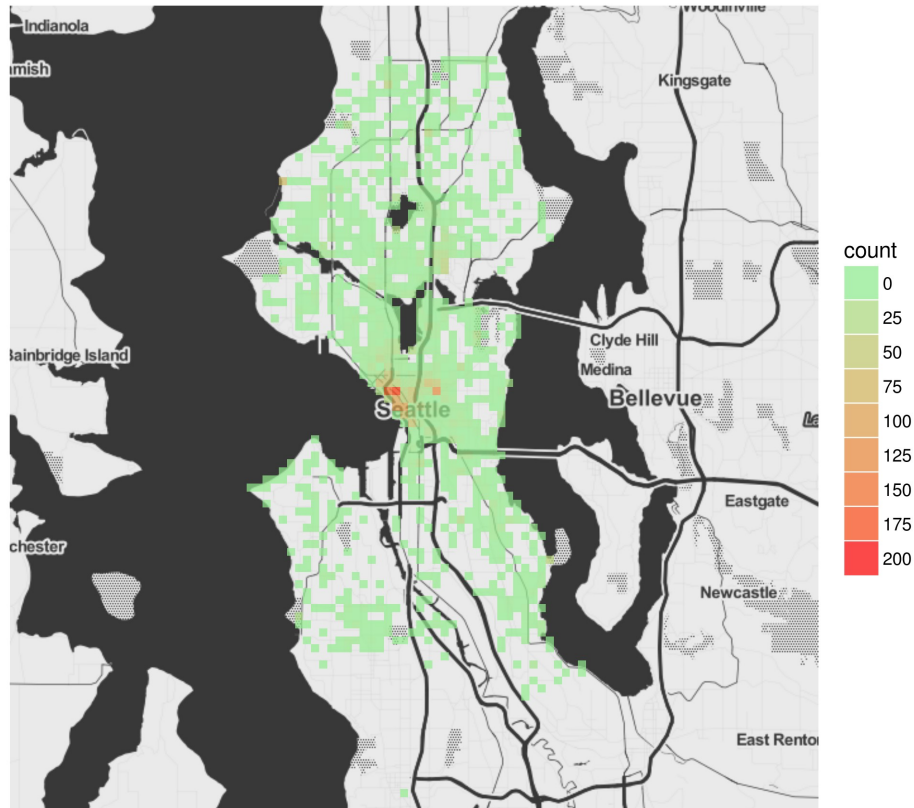

2. Analysis and Data Visualization

Distributions of all types of incidents over the city are shown below. Most of the incidents happen at the city center and along major roads. There are some regions where incidents are localized across the city. Northern side of the city has more incidents occurring than the southern side with much denser hot spots.

Summer 2014 Seattle Crime Statistics



Summer 2014 Seattle Crime Statistics TOP-3: #1 CAR PROWL



Indianola

Woodville



Third highest occurring incidence was burglary. This type of incident was more distributed across the city with maximum occurrence per bin as low as 30. The northern and southern side have both incidence occurring, and incidents seem to be uniformly distributed across the city. This distribution contradicts with highest occurring top two incident types despite burglary being as common as other property, which are localized in the city center and same hot spot locations on the northern side of the city.

Summer 2014 Seattle Crime Statistics TOP-3: #3 BURGLARY

