

Region Comparisons

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```
library(readxl)

library(readr)

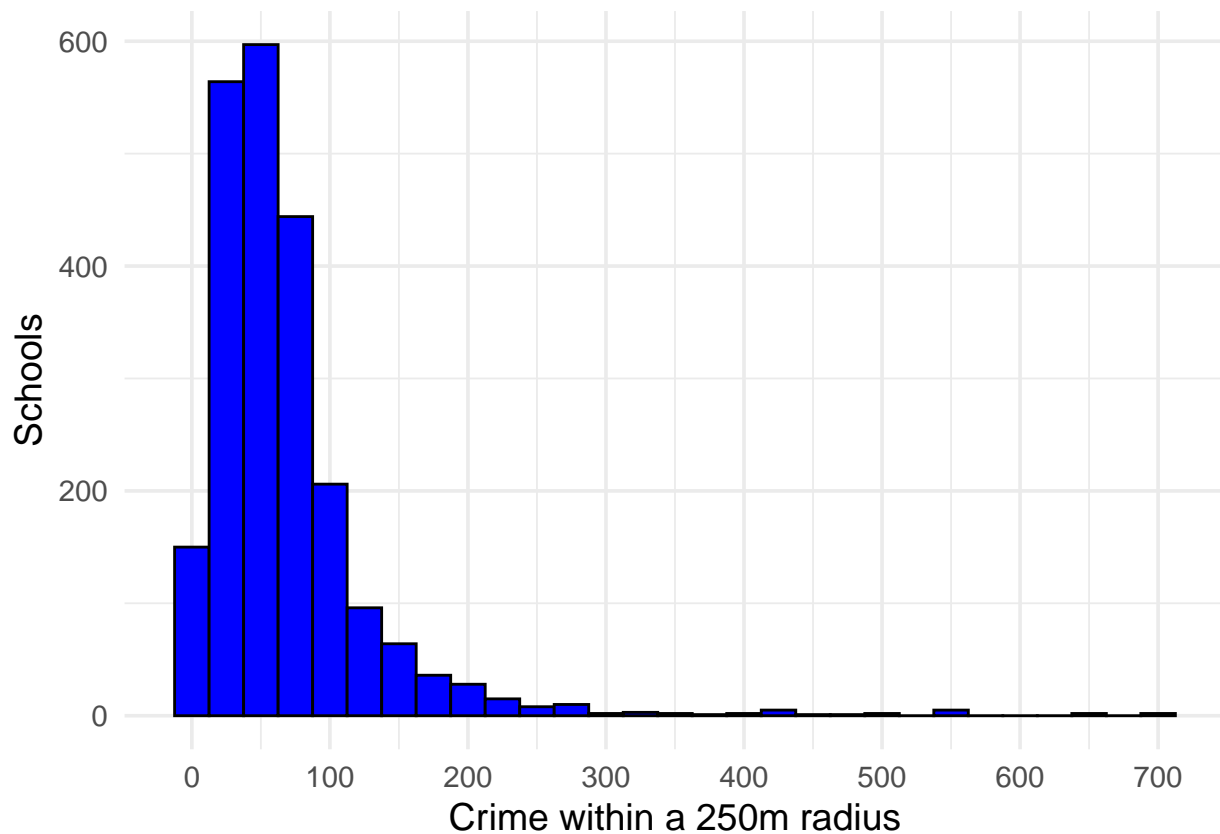
data_250 <- read_xlsx('C://Users//LW//Box//Mexico City 2020//data//buffer_250_crime1_TableToExcel.xlsx')

data_150 <- read_xlsx('C://Users//LW//Box//Mexico City 2020//data//buffer_150_crime2.xlsx')

data_100 <- read_xlsx('C://Users//LW//Box//Mexico City 2020//data//buffer_100_crime2_TableToExcel.xlsx')

library(ggplot2)

ggplot(data_250) +
  geom_histogram(aes(x = data_250$Join_Count),
    binwidth = 25, fill = "blue", color = "black") + theme_minimal(14) + scale_x_continuous
```

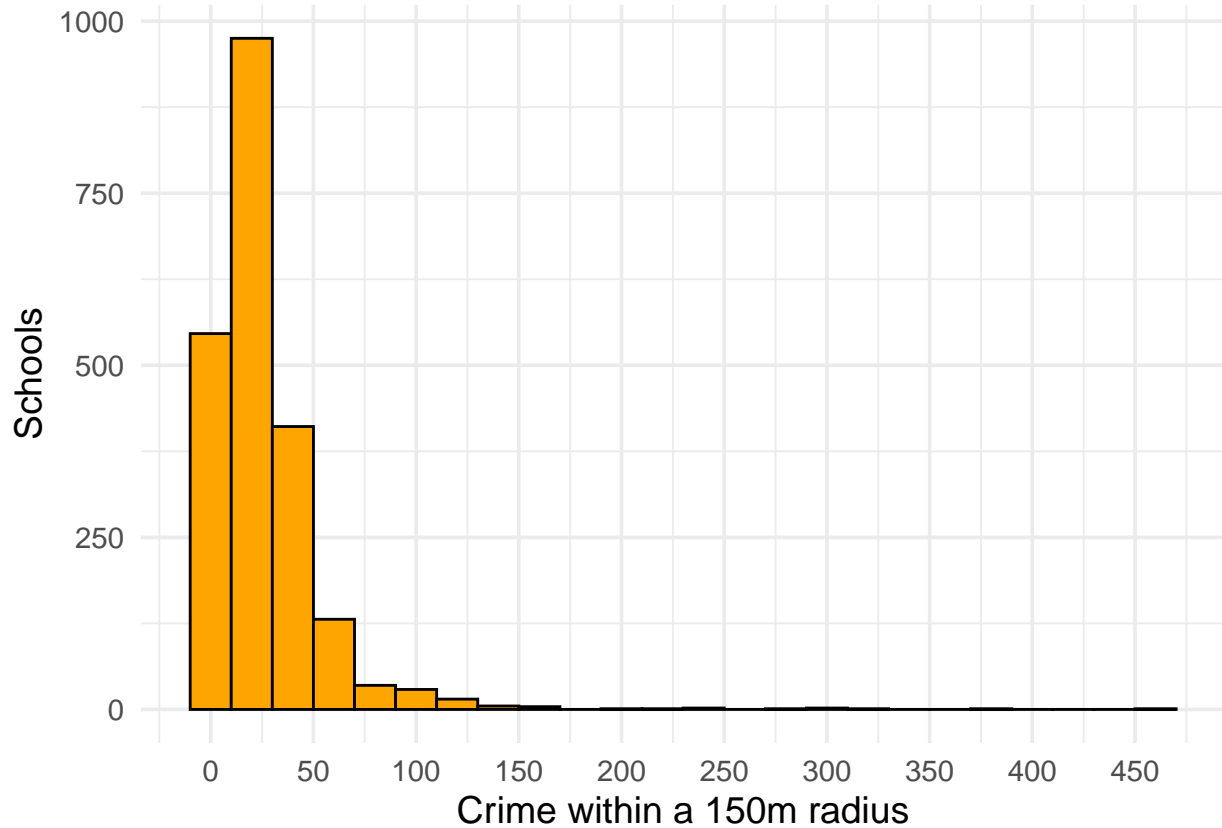


```
summary(data_250$Join_Count)
```

##	Min.	1st Qu.	Median	Mean	3rd Qu.	Max.
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```
##      0.00   31.00   55.00   67.69   82.00  691.00
```

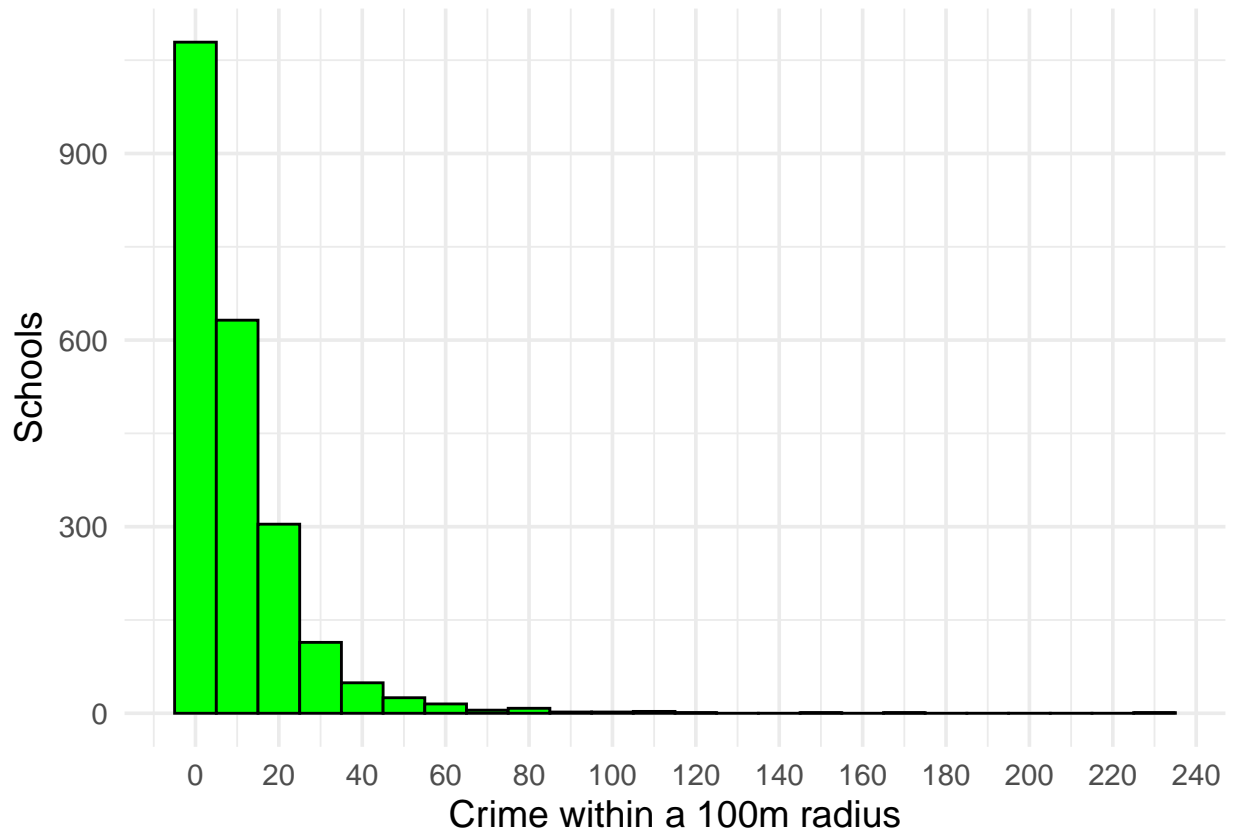
```
ggplot(data_150) +  
  geom_histogram(aes(x = data_150$Join_Count),  
    binwidth = 20, fill = "orange", color = "black") + theme_minimal(14) + scale_x_continuous
```



```
summary(data_150$Join_Count)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.   
##      1.00  10.00   18.00   25.73  34.00  468.00
```

```
ggplot(data_100) +  
  geom_histogram(aes(x = data_100$Join_Count),  
    binwidth = 10, fill = "green", color = "black") + theme_minimal(14) + scale_x_continuous
```



```
summary(data_100$Join_Count)
```

```
##      Min. 1st Qu.  Median    Mean 3rd Qu.    Max.
##      0.00   1.00    8.00   11.28   15.00   232.00
```

The overall number of crime lowers as the radius around the school lowers. For example, in a radius of 100m, the maximum number of crimes committed was 232 with an average of 11.28 crimes in the region overall.

For a radius of 150m, the maximum number of crimes committed was 468 with an average of 26 crimes in the region overall.

Lastly, for a radius of 250m, the maximum number of crimes committed was 691 with an average of 68 crimes throughout the region.

Next steps: Locate regions (schools) with top crime counts and review from there.