10 Years of Philadelphia Crime Statistics

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This data was obtained from OpenDataPhilly.

The column names are as follows:

```
## [1] "Dc_Dist" "Psa" "Dispatch_Date_Time"

## [4] "Dispatch_Date" "Dispatch_Time" "Hour"

## [7] "Dc_Key" "Location_Block" "UCR_General"

## [10] "Text_General_Code" "Police_Districts" "Month"

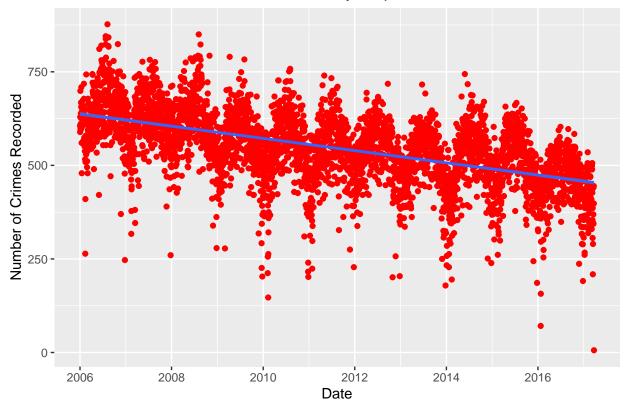
## [13] "Lon" "Lat"
```

The number of rows are as follows:

[1] 2237605

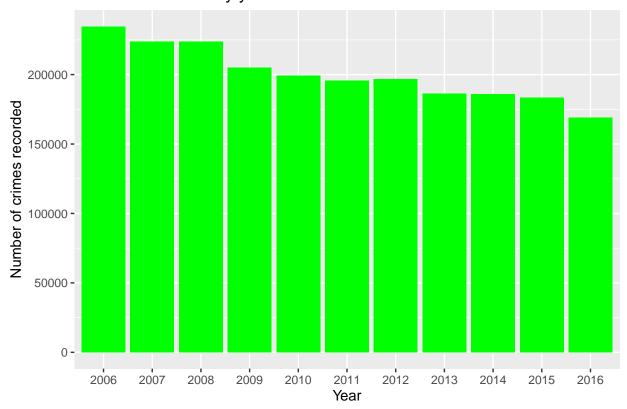
Taking a broad look at the data, there has been a general downwards trend in the number of crimes recorded in these 10 years. Monthly variances repeat themselves in all years in a similar manner.

Number of crimes recorded over a 10 year period



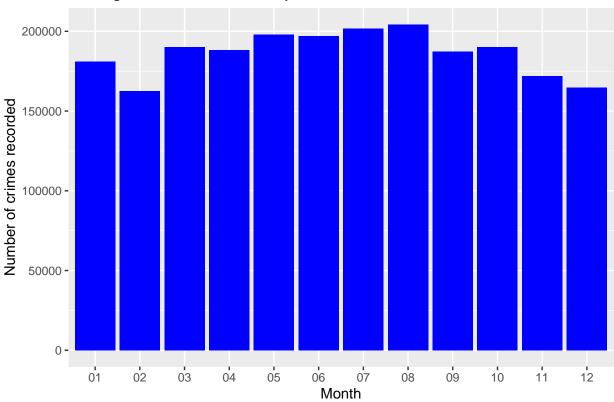
The negative trend can be seen here again when clearly grouped into years.

Number of crimes by year



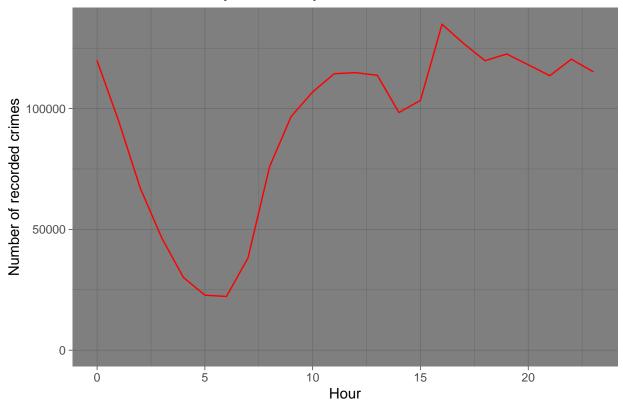
Throughout these 10 years, the months with the highest average crimes were in the summer months. Winter months had lower crime rates with February showing a noticeable drop.

Average number of crimes by month

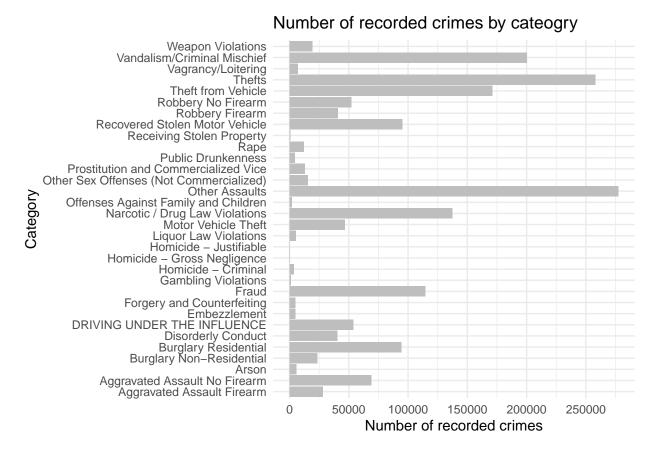


The time of day is a variable that clearly changes the number of crimes committed. Throughout the 10 years it is clear that there is a big drop in the early morning hours between about 2-8 AM. There is a second, minor dip around 3 PM before the number of crimes increases to their highest levels in the evening.

Number of crimes by time of day

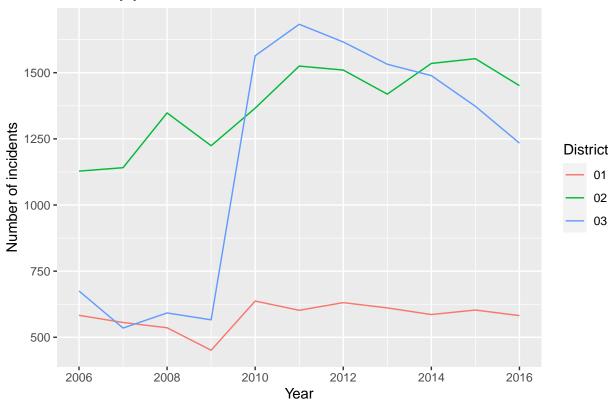


When grouped by category, there were a number of groups that contributed to much of the recorded crimes. Non-aggravated assaults, vandalism/criminal mischief, and non-vehicle thefts were the 3 largest segments.



Looking more closely at thefts, one can see that the number of yearly thefts differs quite significantly by police district. This example is from the first 3 districts.

Thefts by year in first 3 districts



Daily reports of driving under the influence, a major cause of concern, has seen a decline throughout the 10 year period as well.

