Lab 3: Reducing Crime

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Stage 1: Draft Report

```r
crime = read.csv('crime_v2.csv')
# Delete the 6 empty rows at the end
crime = crime[1:91, ]

# Convert columns to factors.
crime$county = as.factor(crime$county)
crime$year = as.factor(crime$year)
crime$west = as.factor(crime$west)
crime$central = as.factor(crime$central)
crime$urban = as.factor(crime$urban)

# Fix prbconv, convert from factor to numeric
crime$prbconv = as.numeric(crime$prbconv)

summary(crime)
```

```
##      county    year        crmrte            prbarr            prbconv
##  193    : 2   87:91   Min.   :0.005533   Min.   :0.09277   Min.   : 3.00
##  1      : 1           1st Qu.:0.020927   1st Qu.:0.20568   1st Qu.:25.50
##  3      : 1           Median :0.029986   Median :0.27095   Median :48.00
##  5      : 1           Mean   :0.033400   Mean   :0.29492   Mean   :47.75
##  7      : 1           3rd Qu.:0.039642   3rd Qu.:0.34438   3rd Qu.:70.00
##  9      : 1           Max.   :0.098966   Max.   :1.09091   Max.   :92.00
##  (Other):84
##      prbpris          avgsen           polpc             density
##  Min.   :0.1500   Min.   : 5.380   Min.   :0.0007459   Min.   :0.00002
##  1st Qu.:0.3648   1st Qu.: 7.340   1st Qu.:0.0012308   1st Qu.:0.54741
##  Median :0.4234   Median : 9.100   Median :0.0014853   Median :0.96226
##  Mean   :0.4108   Mean   : 9.647   Mean   :0.0017022   Mean   :1.42884
##  3rd Qu.:0.4568   3rd Qu.:11.420   3rd Qu.:0.0018768   3rd Qu.:1.56824
##  Max.   :0.6000   Max.   :20.700   Max.   :0.0090543   Max.   :8.82765
##
##      taxpc        west   central urban     pctmin80           wcon
##  Min.   : 25.69   0:68   0:57    0:83   Min.   : 1.284   Min.   :193.6
##  1st Qu.: 30.66   1:23   1:34    1: 8   1st Qu.: 9.845   1st Qu.:250.8
##  Median : 34.87                        Median :24.312   Median :281.4
##  Mean   : 38.06                        Mean   :25.495   Mean   :285.4
##  3rd Qu.: 40.95                        3rd Qu.:38.142   3rd Qu.:314.8
##  Max.   :119.76                        Max.   :64.348   Max.   :436.8
##
##      wtuc            wtrd            wfir            wser
##  Min.   :187.6   Min.   :154.2   Min.   :170.9   Min.   : 133.0
##  1st Qu.:374.6   1st Qu.:190.9   1st Qu.:286.5   1st Qu.: 229.7
##  Median :406.5   Median :203.0   Median :317.3   Median : 253.2
```

```
##  Mean    :411.7   Mean    :211.6   Mean    :322.1   Mean    : 275.6
##  3rd Qu.:443.4   3rd Qu.:225.1   3rd Qu.:345.4   3rd Qu.: 280.5
##  Max.    :613.2   Max.    :354.7   Max.    :509.5   Max.    :2177.1
##
##       wmfg            wfed            wsta            wloc
##  Min.   :157.4   Min.   :326.1   Min.   :258.3   Min.   :239.2
##  1st Qu.:288.9   1st Qu.:400.2   1st Qu.:329.3   1st Qu.:297.3
##  Median :320.2   Median :449.8   Median :357.7   Median :308.1
##  Mean   :335.6   Mean   :442.9   Mean   :357.5   Mean   :312.7
##  3rd Qu.:359.6   3rd Qu.:478.0   3rd Qu.:382.6   3rd Qu.:329.2
##  Max.   :646.9   Max.   :598.0   Max.   :499.6   Max.   :388.1
##
##       mix             pctymle
##  Min.   :0.01961   Min.   :0.06216
##  1st Qu.:0.08073   1st Qu.:0.07443
##  Median :0.10186   Median :0.07771
##  Mean   :0.12884   Mean   :0.08396
##  3rd Qu.:0.15175   3rd Qu.:0.08350
##  Max.   :0.46512   Max.   :0.24871
##

# Note county 192 occurs twice
```