

# Compile-Years-2014-2021

MCC

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```
library(readr)
gva_2014 <- read_csv("gva-2014.csv",
                    col_types = cols(`Incident ID` = col_skip(),
                                     `Incident Date` = col_date(format = "%B %d, %Y"),
                                     Address = col_skip(), `# Killed` = col_integer(),
                                     `# Injured` = col_integer(), Operations = col_skip()))
#View(gva_2014)
```

Change Column names # Killed & # Injured to eliminate #

```
# Change colnames of all columns
colnames(gva_2014) <- c("Date", "State", "City", "Killed", "Injured")

# Produce Month columns
gva_2014$Month <- format(as.Date(gva_2014$Date, format="%Y-%m-%d"), "%m")

gva_2014$Total <- gva_2014$Killed + gva_2014$Injured

#View(gva_2014)
```

Break down data into State groupings

```
library(tidyverse)
```

```
## -- Attaching packages ----- tidyverse 1.3.1 --
```

```
## v ggplot2 3.3.6      v dplyr   1.0.9
## v tibble  3.1.7      v stringr 1.4.0
## v tidyr   1.2.0      v forcats 0.5.1
## v purrr   0.3.4
```

```
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()
```

```
library(dplyr)
```

```
# Group by State
gva_2014_by_month <- gva_2014 %>%
```

```
group_by(Month) %>%
  summarize(Avg_Monthly=mean(Total))

print(gva_2014_by_month)
```

```
## # A tibble: 12 x 2
##   Month Avg_Monthly
##   <chr>    <dbl>
## 1 01      4.59
## 2 02      5
## 3 03      4.62
## 4 04      5.35
## 5 05      5.38
## 6 06      5.11
## 7 07      5.09
## 8 08      4.95
## 9 09      5.62
## 10 10      4.39
## 11 11      4.61
## 12 12      4.81
```