

# R Plots

```
In [1]: library('magrittr')
library('ggmap')
library('ggplot2')
library('usmap')
```

Loading required package: ggplot2

Google's Terms of Service: <https://cloud.google.com/maps-platform/terms/>.

Please cite ggmap if you use it! See `citation("ggmap")` for details.

Attaching package: 'ggmap'

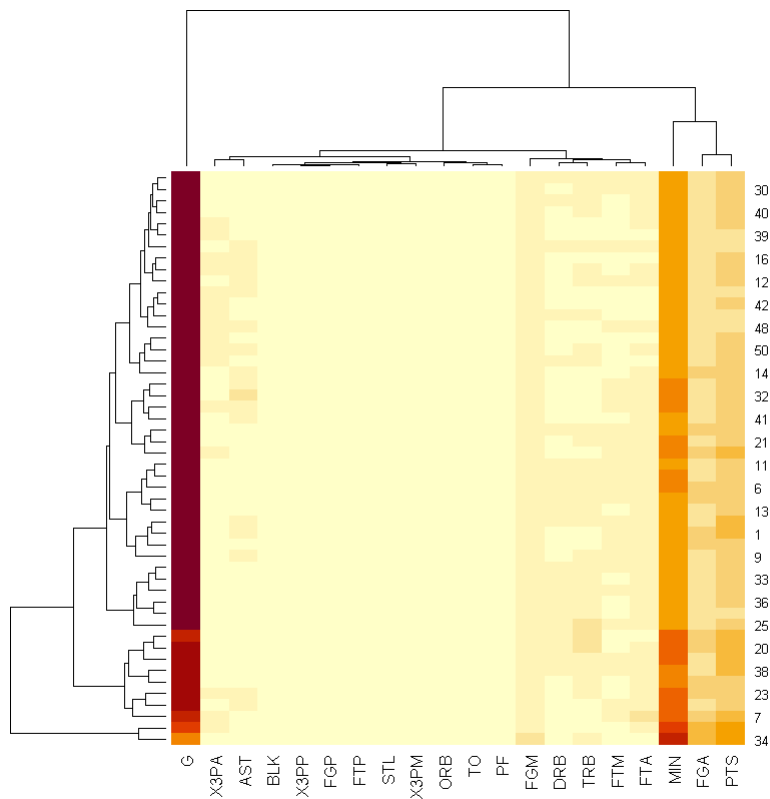
The following object is masked from 'package:magrittr':

`inset`

```
In [2]: costco <- read.csv('costcos-geocoded.csv')
ppg <- read.csv('ppg2008.csv')
costco_sum <- costco %>%
  dplyr::mutate(state = State) %>%
  dplyr::group_by(state) %>%
  dplyr::summarise(store_count = dplyr::n())
```

## R- Heat Map

```
In [3]: # options(repr.plot.width = 10, repr.plot.height = 7)
heatmap(as.matrix(ppg[,2:ncol(ppg)]))
```



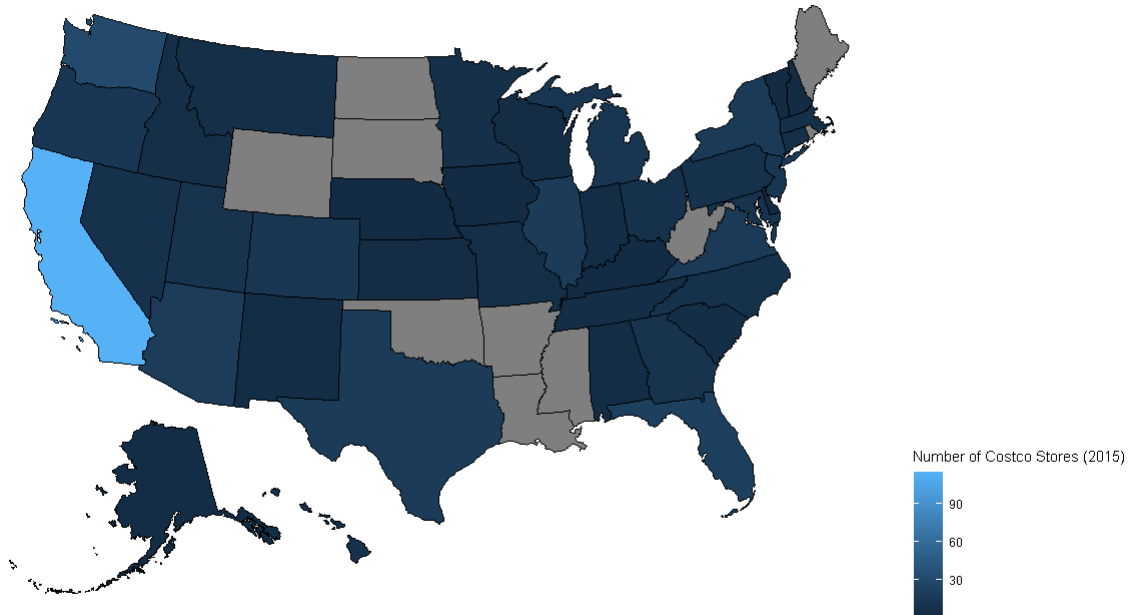
## R - Spatial Chart

In [4]:

```
options(repr.plot.width = 10, repr.plot.height = 7)

plot_usmap(data = costco_sum, values = "store_count", lines = "white") +
  scale_fill_continuous(name = "Number of Costco Stores (2015)", label = scales::comma)
  theme(legend.position = "right")
```

Warning message:  
"Ignoring unknown parameters: lines"



## R - Contour plot

In [5]:

```
options(repr.plot.width = 10, repr.plot.height = 7)
ggplot(ppg, aes(x=FTM, y=FTA))+
  theme_bw()+
  geom_point(alpha=0.1, col='red')+
  geom_density2d(color='black')+
  ggtitle('Contour Plot')+
  theme(plot.title = element_text(hjust = 0.5))+
  labs(x='FTM', y='FTA')
```

