

US Maps (Proportion of Total Respondents)

Map Plots

```
source("state_politics.R")

## -- Attaching packages ----- tidyverse 1.3.0 --
## v ggplot2 3.3.3      v purrr  0.3.4
## v tibble  3.1.0      v dplyr  1.0.5
## v tidyr   1.1.3      v stringr 1.4.0
## v readr   1.4.0      v forcats 0.5.0

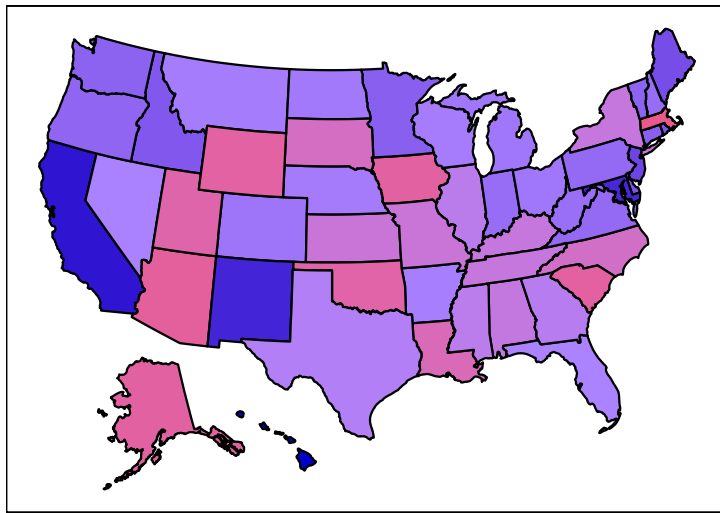
## -- Conflicts ----- tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()     masks stats::lag()

par(mfrow = c(1, 2))

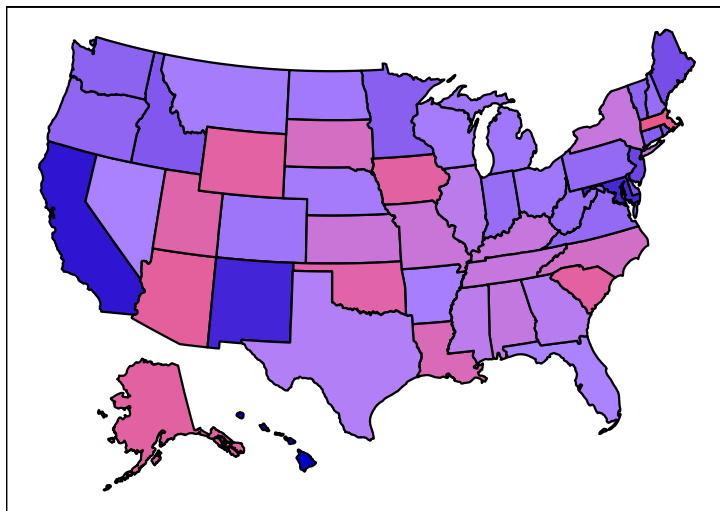
for (i in 2:19) {
  # political affiliation by 2018 election results ----
  print(plot_usmap(data = nmu_politics, values = "election",
    labels = FALSE) +
    scale_fill_gradient2(low = "red", mid = "mediumpurple1",
      high = "mediumblue", midpoint = 1,
      name = "Political Affiliation") +
    theme(legend.position = "right") +
    theme(panel.background = element_rect(color = "black")) +
    labs(title = "Political Affiliation by 2018 Election Results"))

  # average NMU by state ----
  print(plot_usmap(data = nmu_politics,
    values = names(nmu_politics)[i], labels = FALSE) +
    scale_fill_continuous(
      low = "white", high = "darkred", name = "Average NMU",
      limits = if (i < 19) {range(nmu_politics[, -c(1, 19:21)]})
    } else {NULL}) +
    theme(legend.position = "right") +
    theme(panel.background = element_rect(color = "black")) +
    labs(title =
      str_c("Average ", names(nmu_politics)[i], " NMU By State")))
}
```

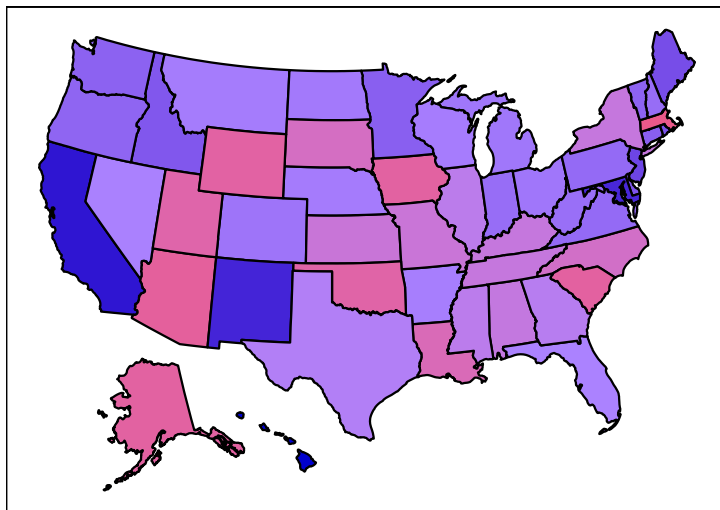
Political Affiliation by 2018 Election Results



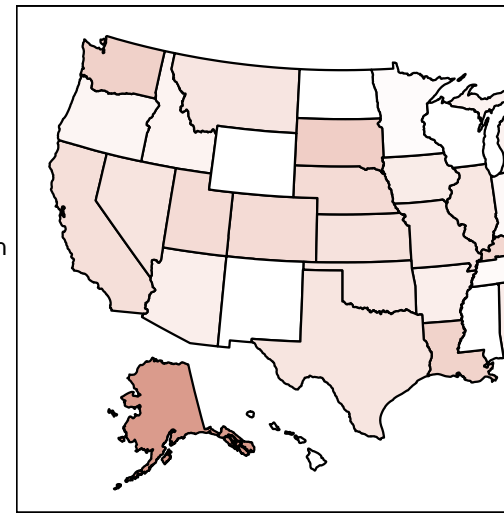
Political Affiliation by 2018 Election Results



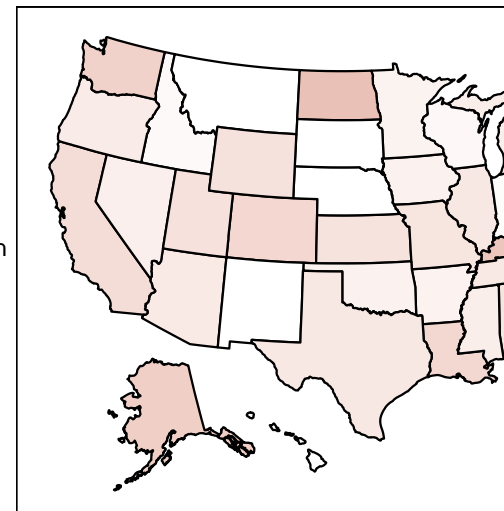
Political Affiliation by 2018 Election Results



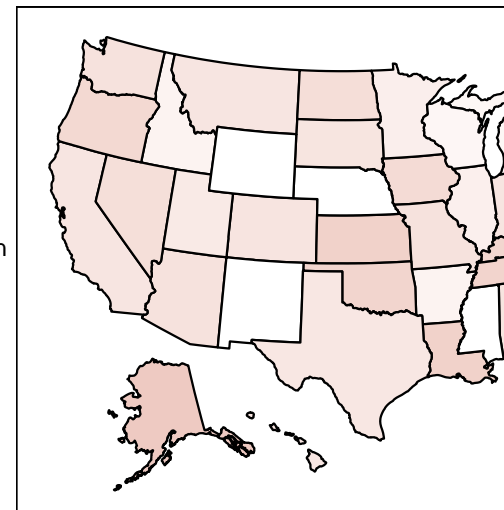
Average FENT NMU By State



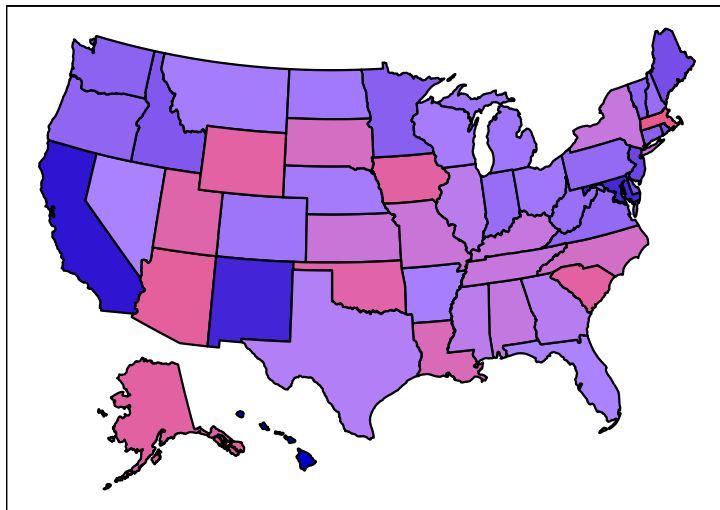
Average BUP NMU By State



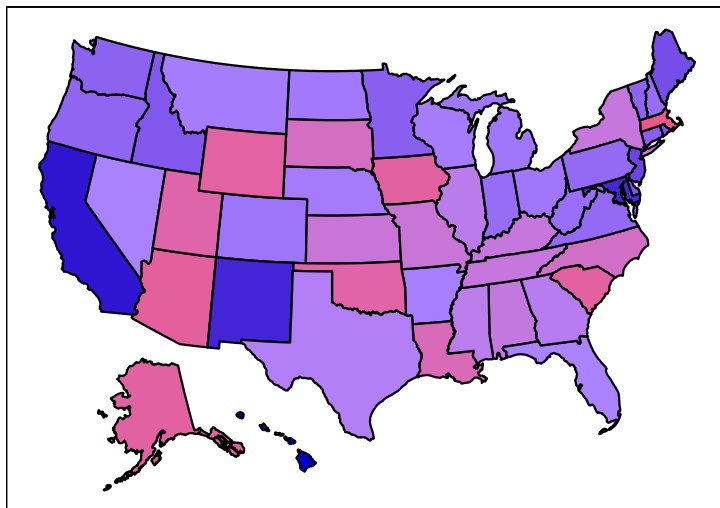
Average METH NMU By State



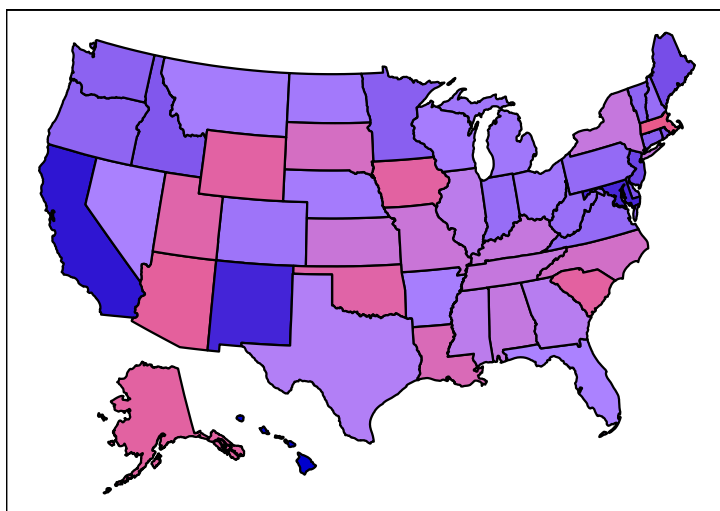
Political Affiliation by 2018 Election Results



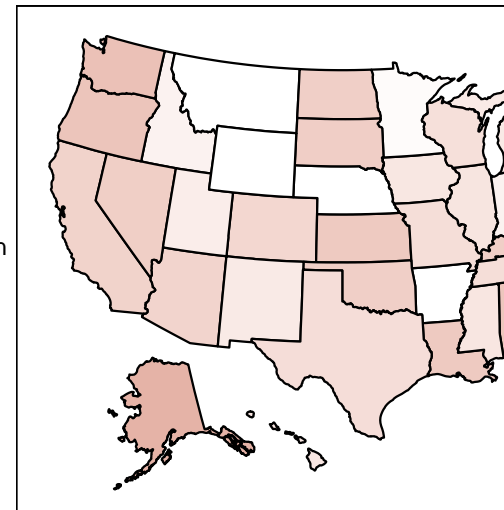
Political Affiliation by 2018 Election Results



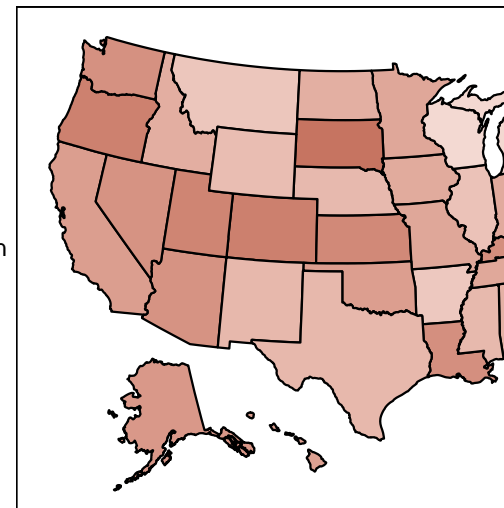
Political Affiliation by 2018 Election Results



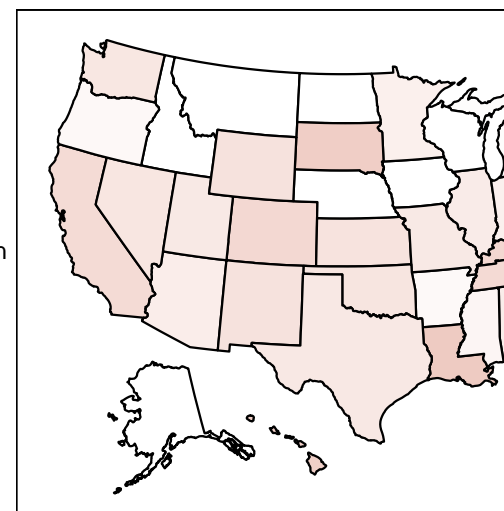
Average MORPH NMU By State



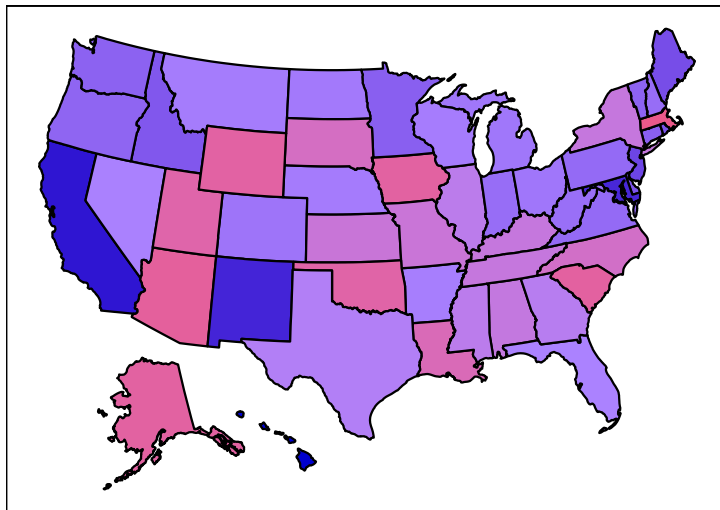
Average OXY NMU By State



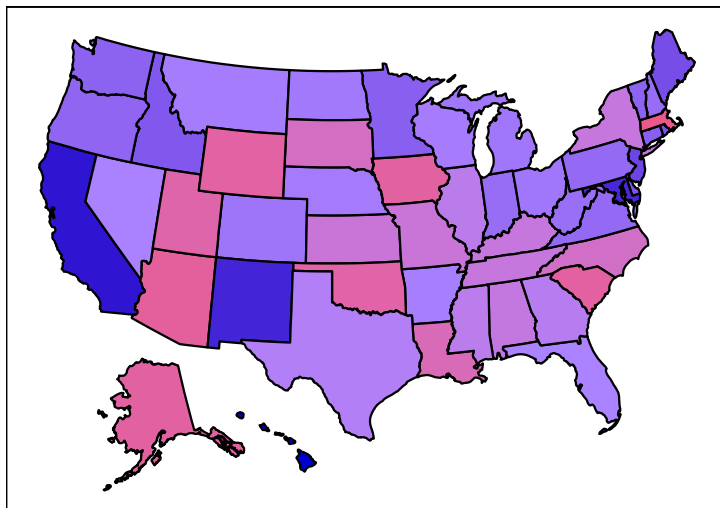
Average OXYM NMU By State



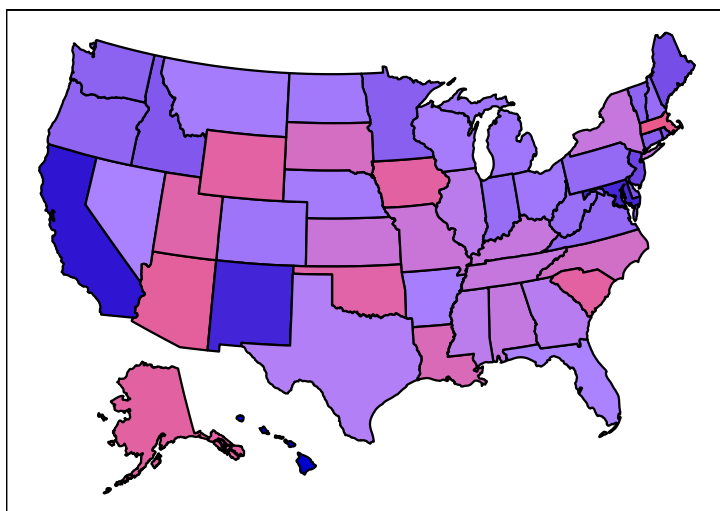
Political Affiliation by 2018 Election Results



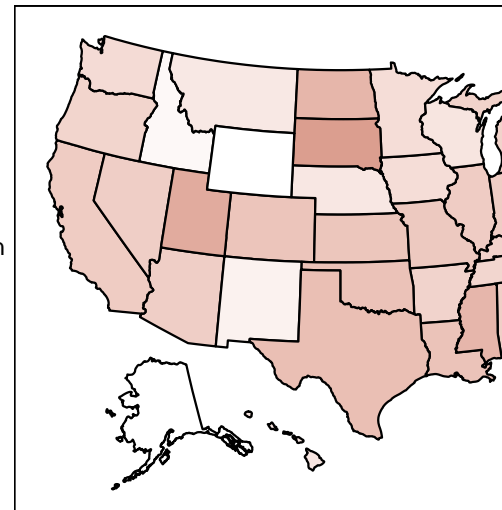
Political Affiliation by 2018 Election Results



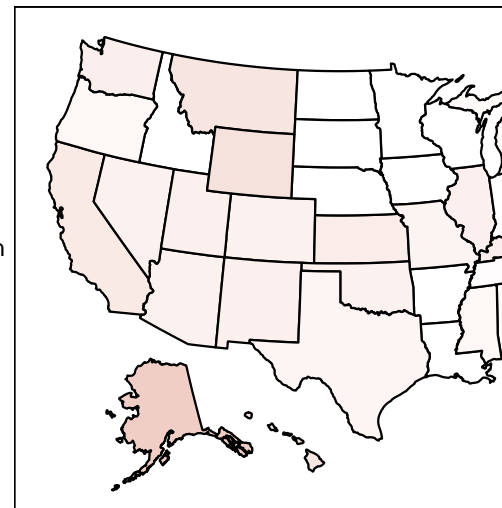
Political Affiliation by 2018 Election Results



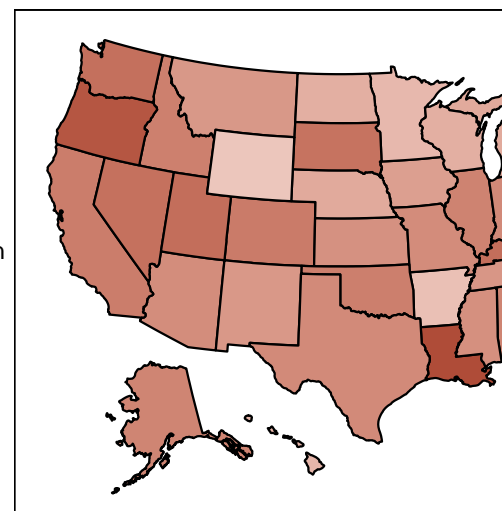
Average TRAM NMU By State



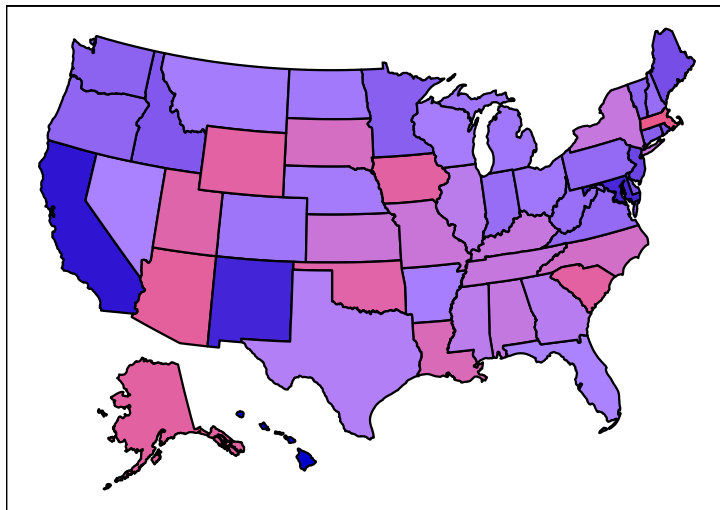
Average TAP NMU By State



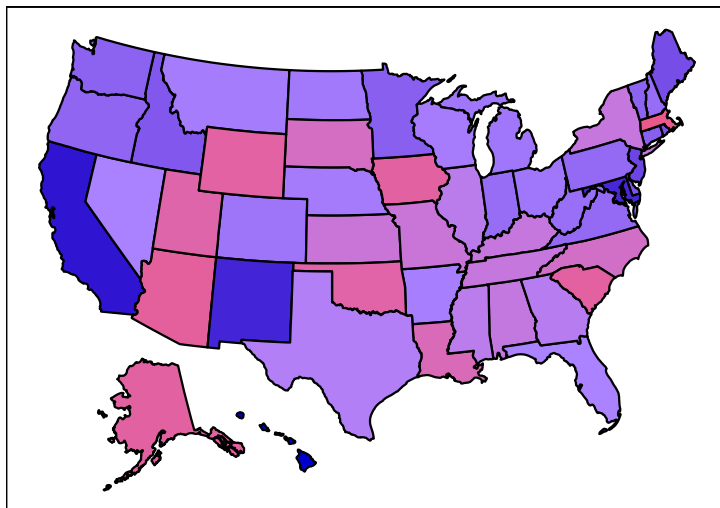
Average HYD NMU By State



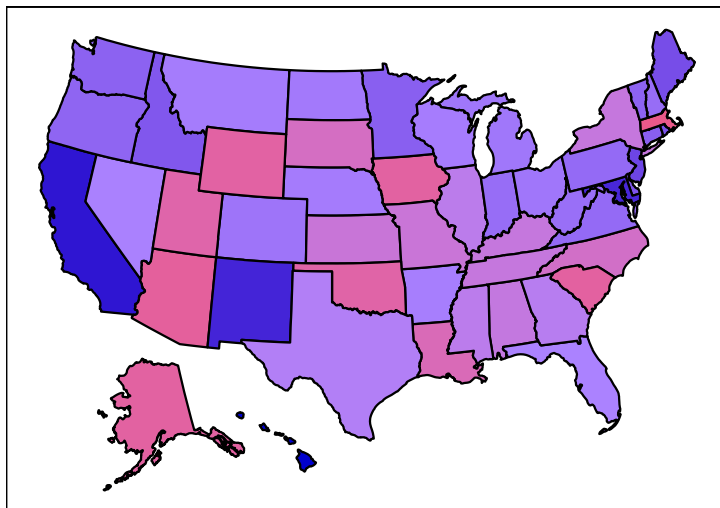
Political Affiliation by 2018 Election Results



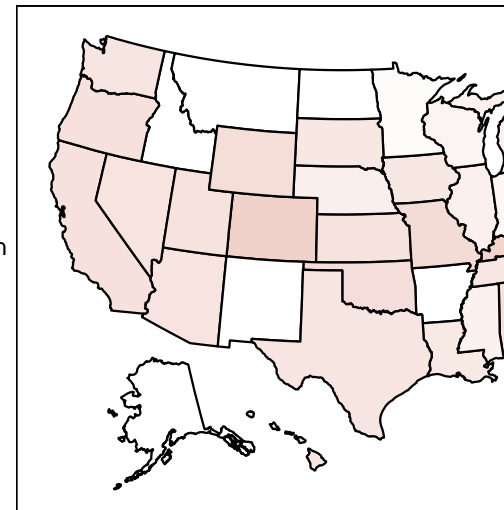
Political Affiliation by 2018 Election Results



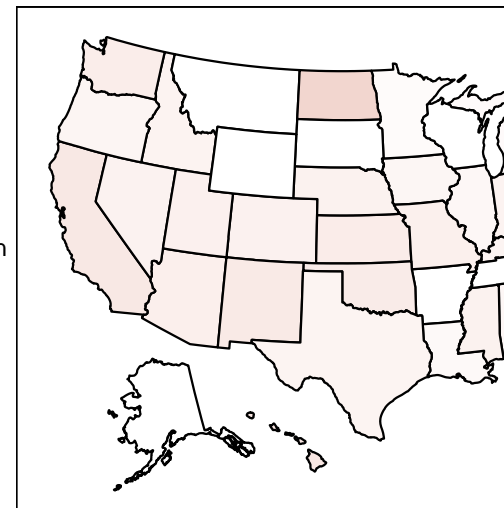
Political Affiliation by 2018 Election Results



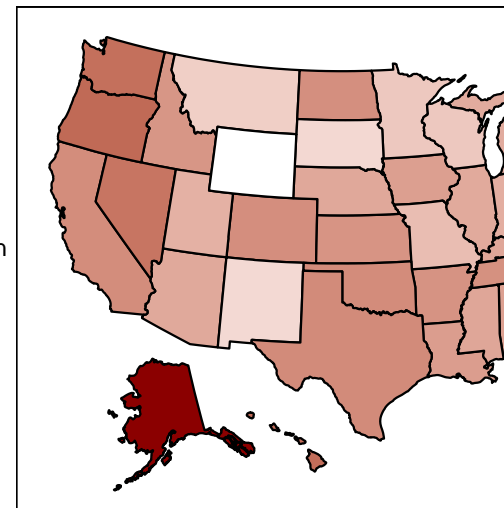
Average HYDM NMU By State



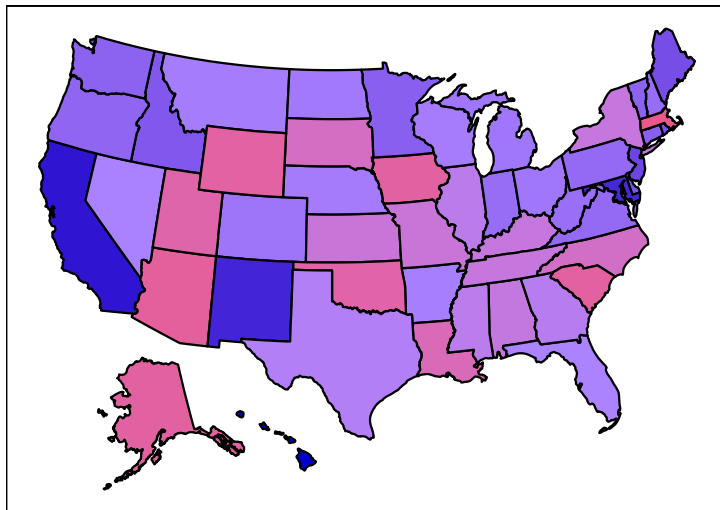
Average SUF NMU By State



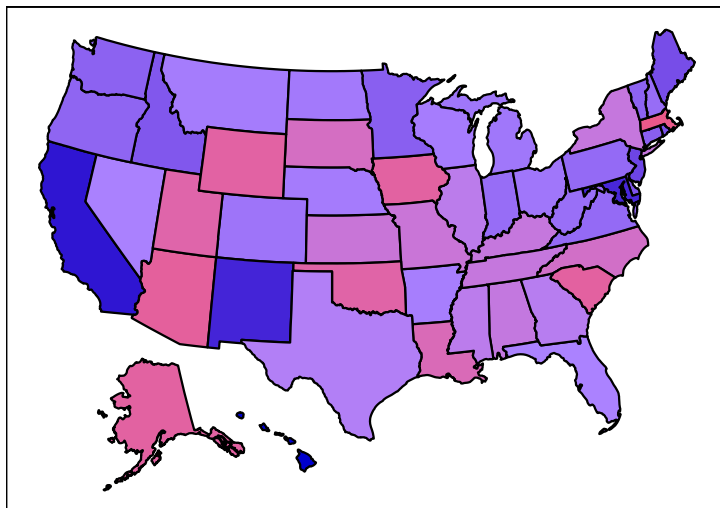
Average COD NMU By State



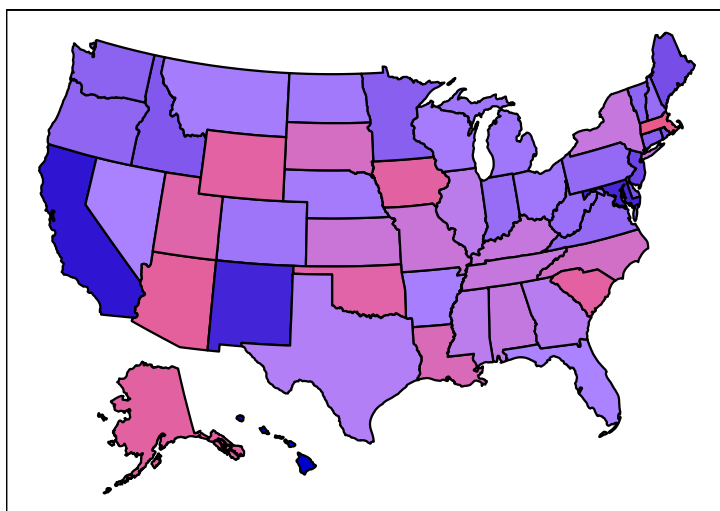
Political Affiliation by 2018 Election Results



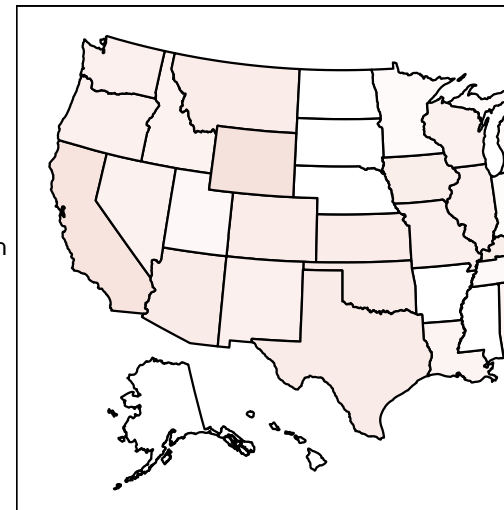
Political Affiliation by 2018 Election Results



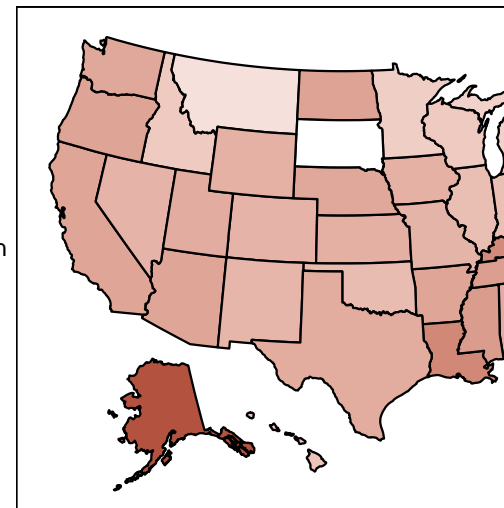
Political Affiliation by 2018 Election Results



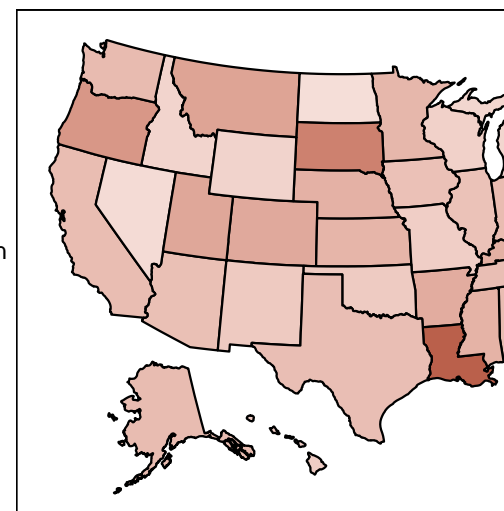
Average DIHY NMU By State



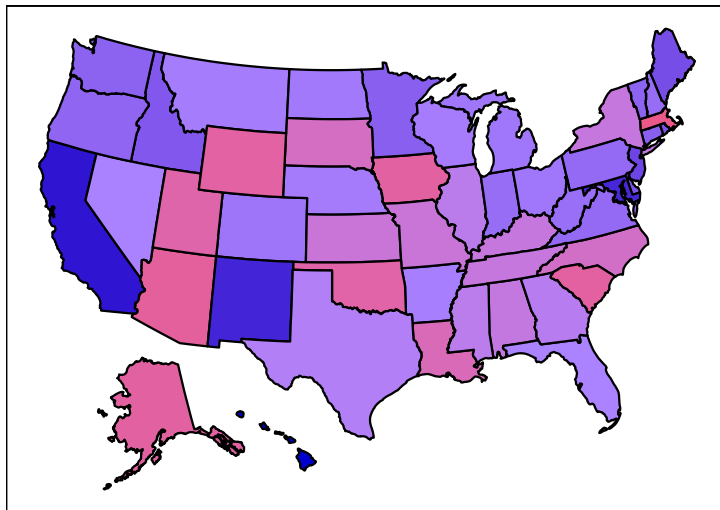
Average BENZ NMU By State



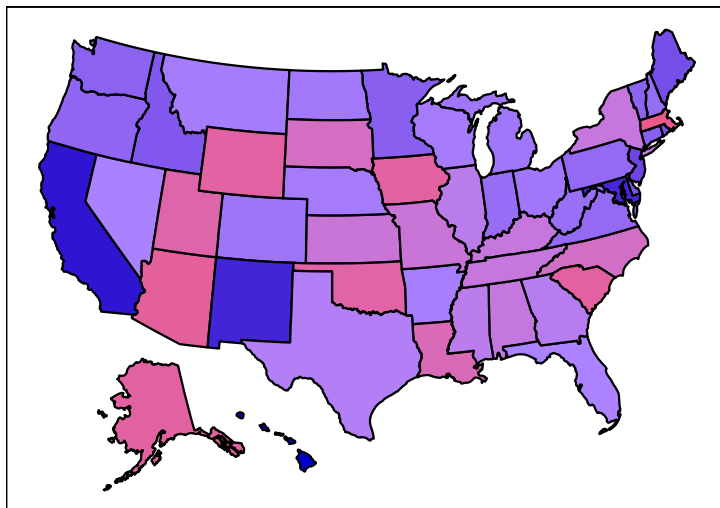
Average STIM NMU By State



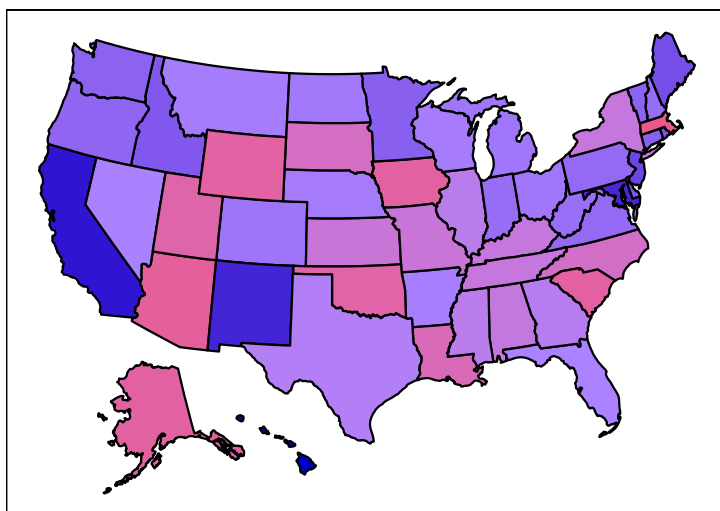
Political Affiliation by 2018 Election Results



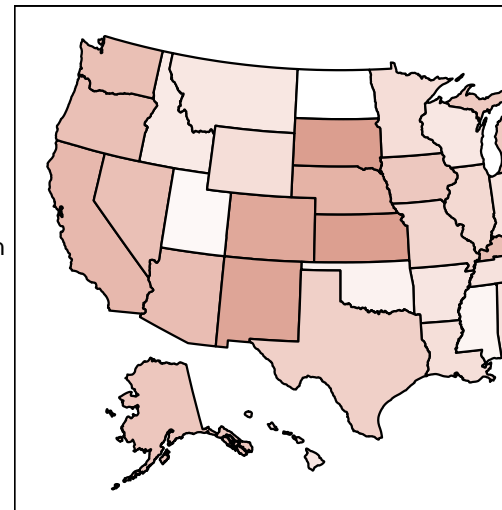
Political Affiliation by 2018 Election Results



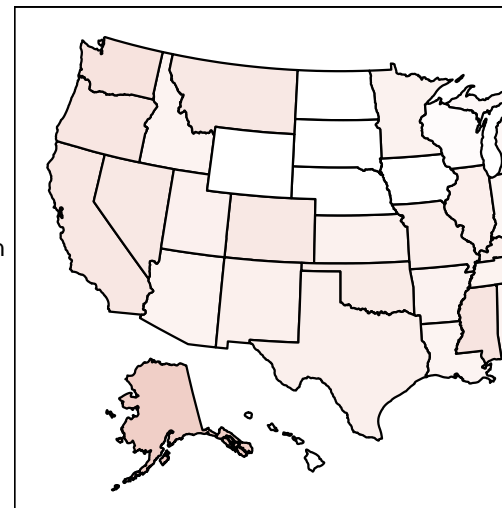
Political Affiliation by 2018 Election Results



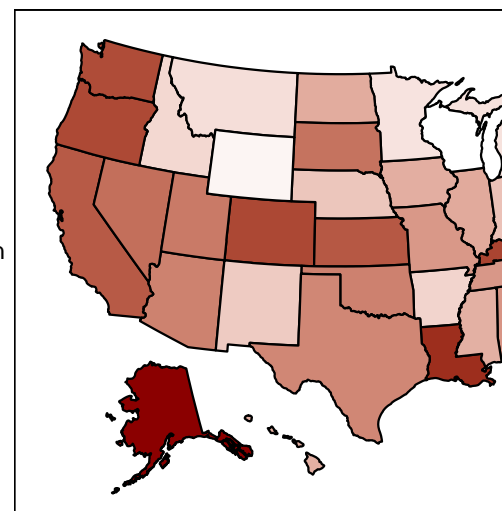
Average THC NMU By State



Average KTM NMU By State



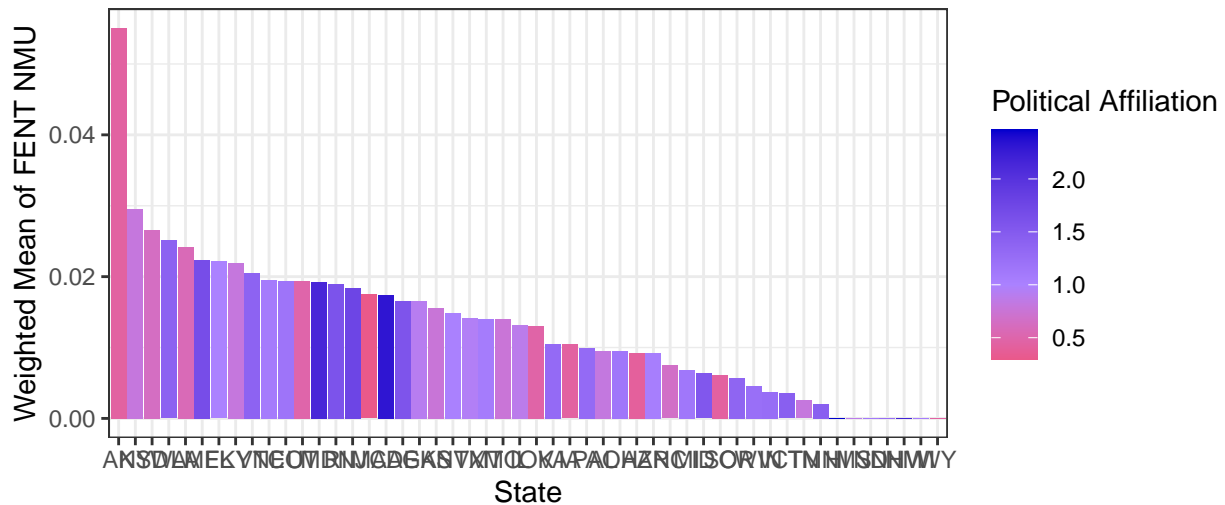
Average Total NMU By State



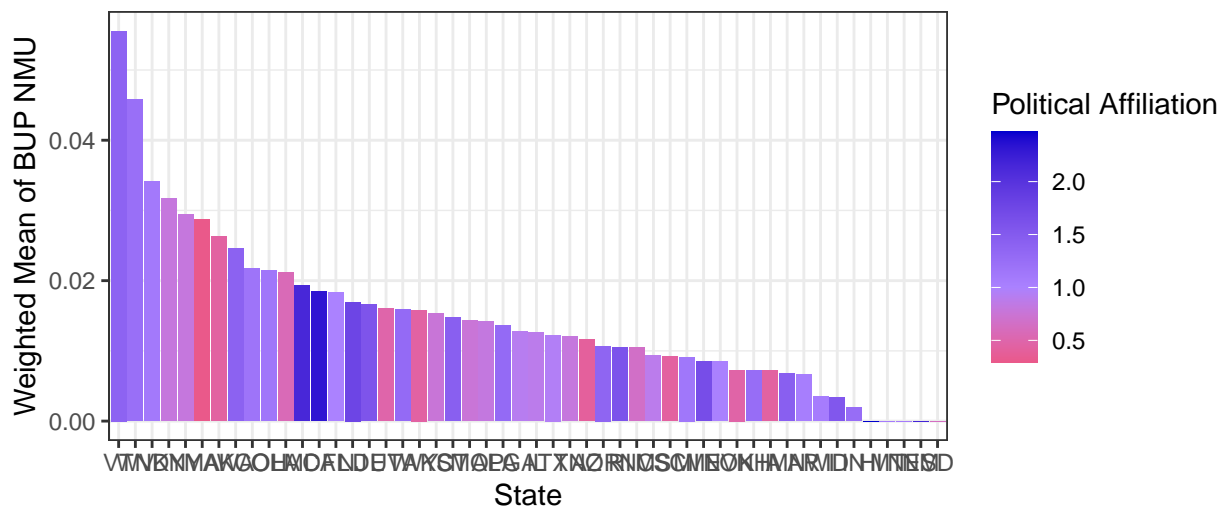
Bar Plots

```
par(mfrow = c(1, 2))  
  
for (i in 2:19) {  
  df <- nmu_politics %>% select(state, election, nm_u = names(nmu_politics)[i])  
  print(df %>% ggplot() +  
    geom_col(aes(reorder(state, -nm_u), nm_u, fill = election)) +  
    scale_fill_gradient2(low = "red", mid = "mediumpurple1",  
                        high = "mediumblue", midpoint = 1,  
                        name = "Political Affiliation") +  
    theme_bw() +  
    labs(title = str_c("Weighted Mean of ", names(nmu_politics)[i],  
                      " NMU by State and Political Affiliation"),  
         x = "State", y = str_c("Weighted Mean of ",  
                                names(nmu_politics)[i], " NMU")))  
}
```

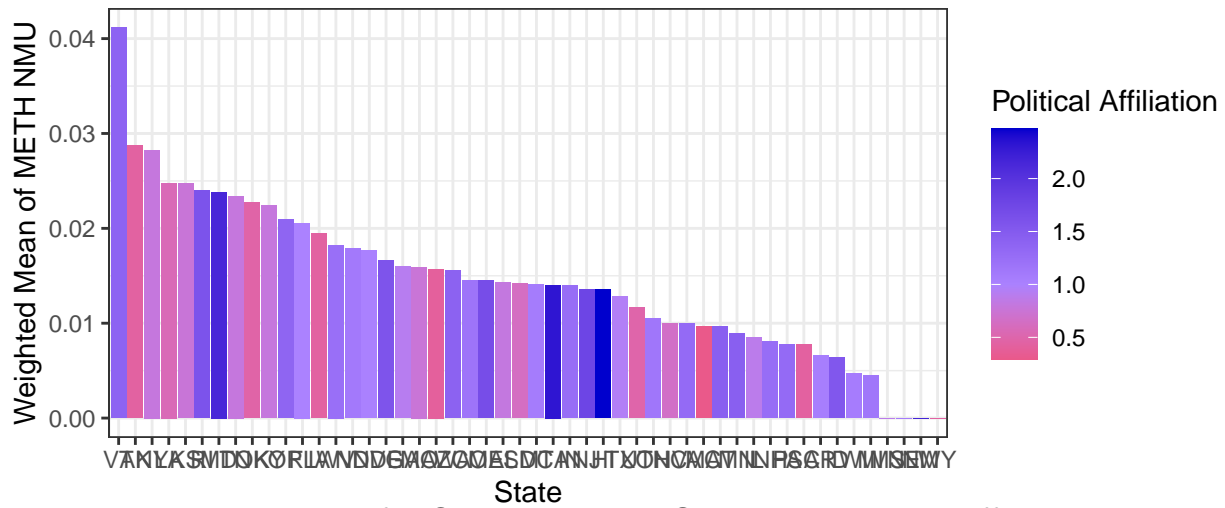
Weighted Mean of FENT NMU by State and Political Affiliation



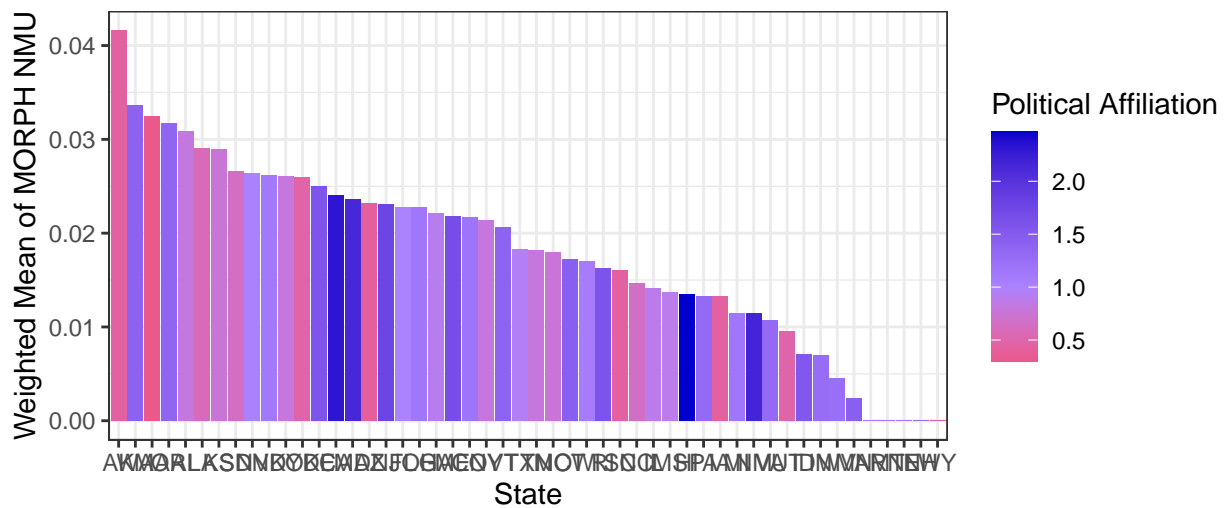
Weighted Mean of BUP NMU by State and Political Affiliation



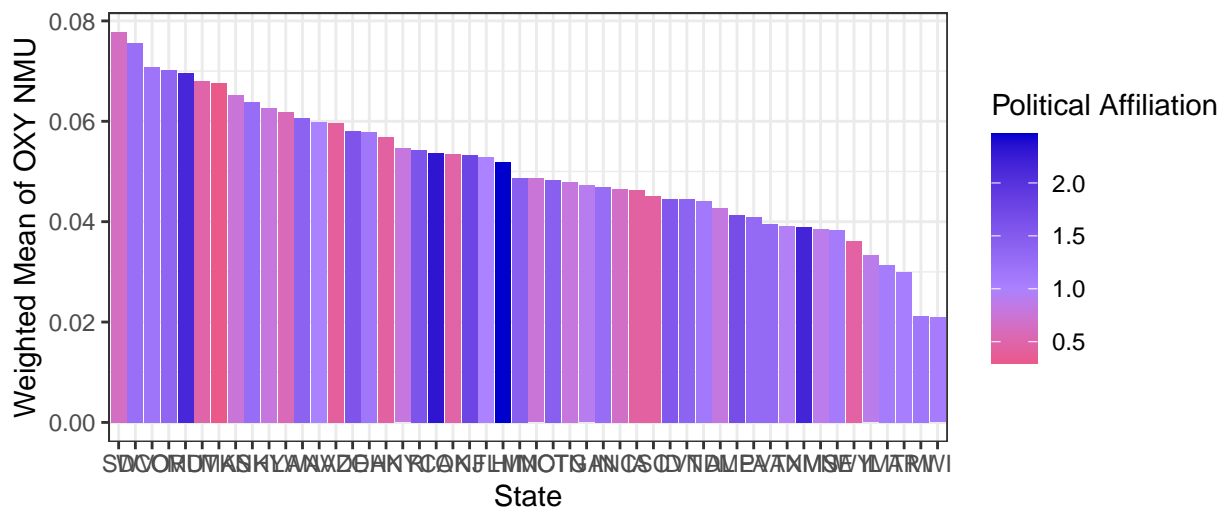
Weighted Mean of METH NMU by State and Political Affiliation



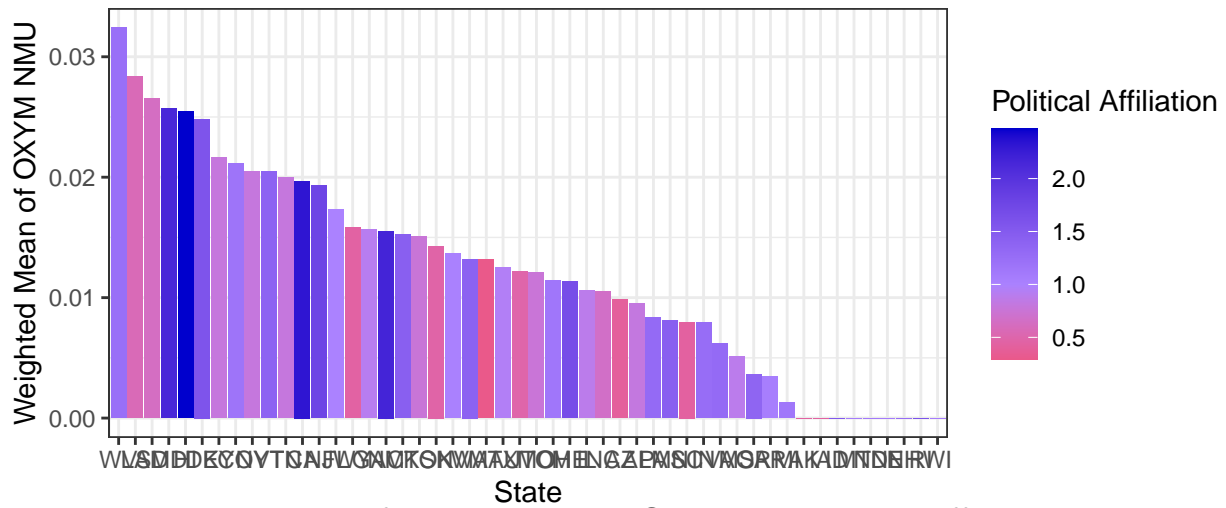
Weighted Mean of MORPH NMU by State and Political Affiliation



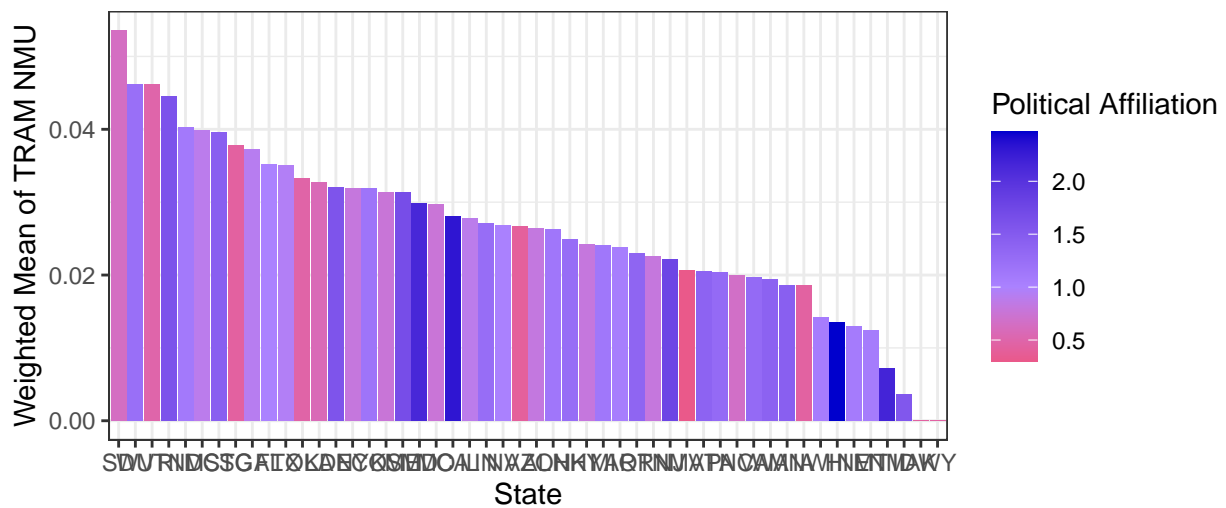
Weighted Mean of OXY NMU by State and Political Affiliation



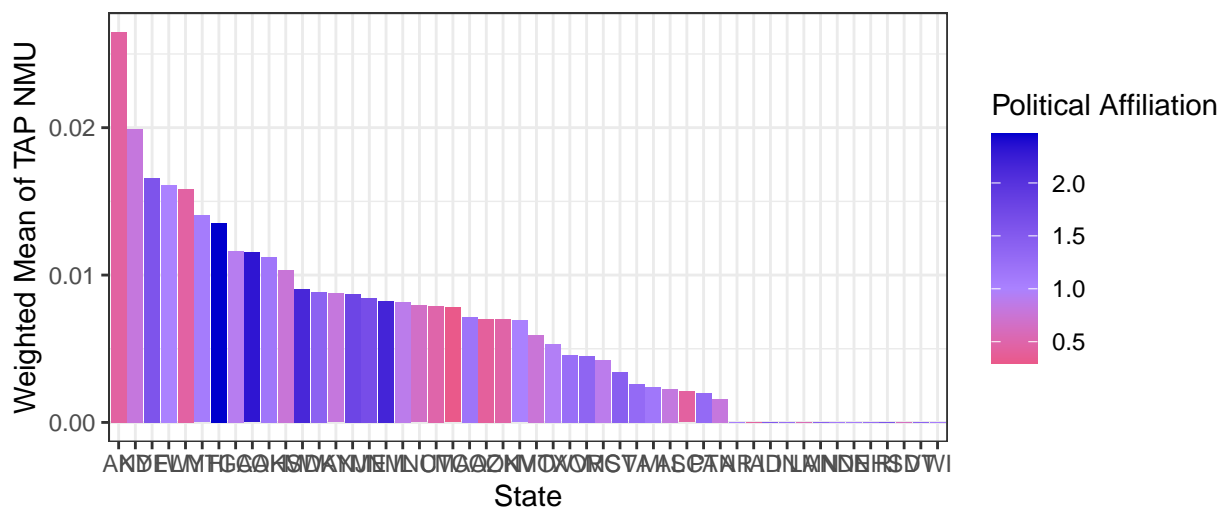
Weighted Mean of OXYM NMU by State and Political Affiliation



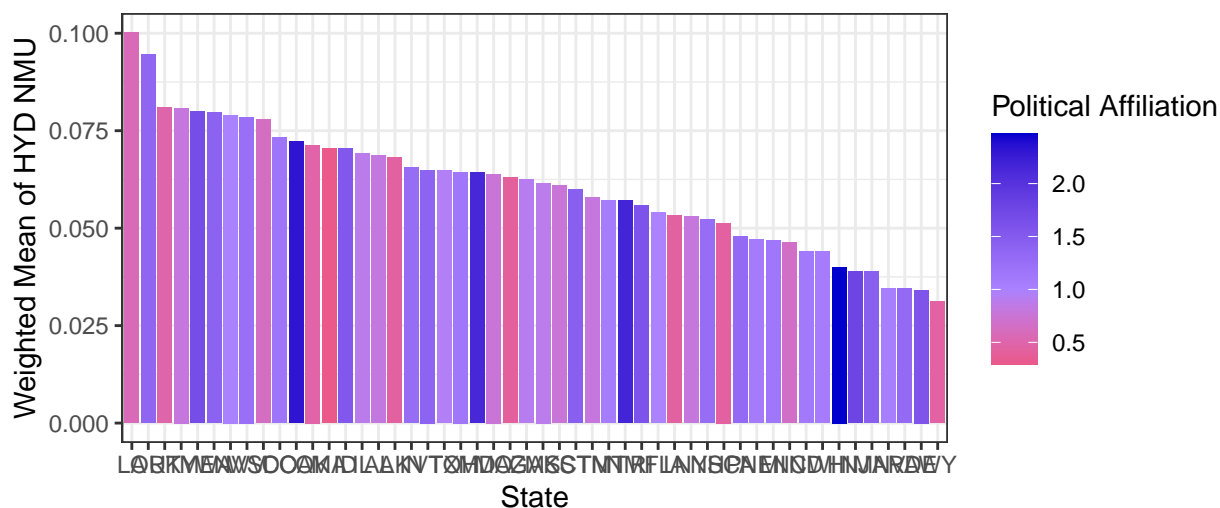
Weighted Mean of TRAM NMU by State and Political Affiliation



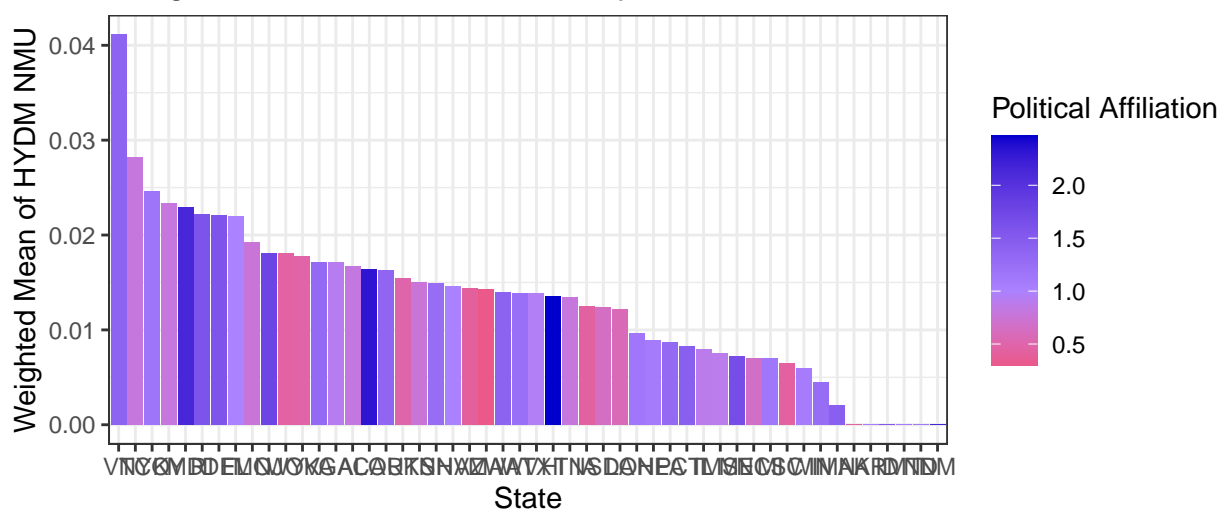
Weighted Mean of TAP NMU by State and Political Affiliation



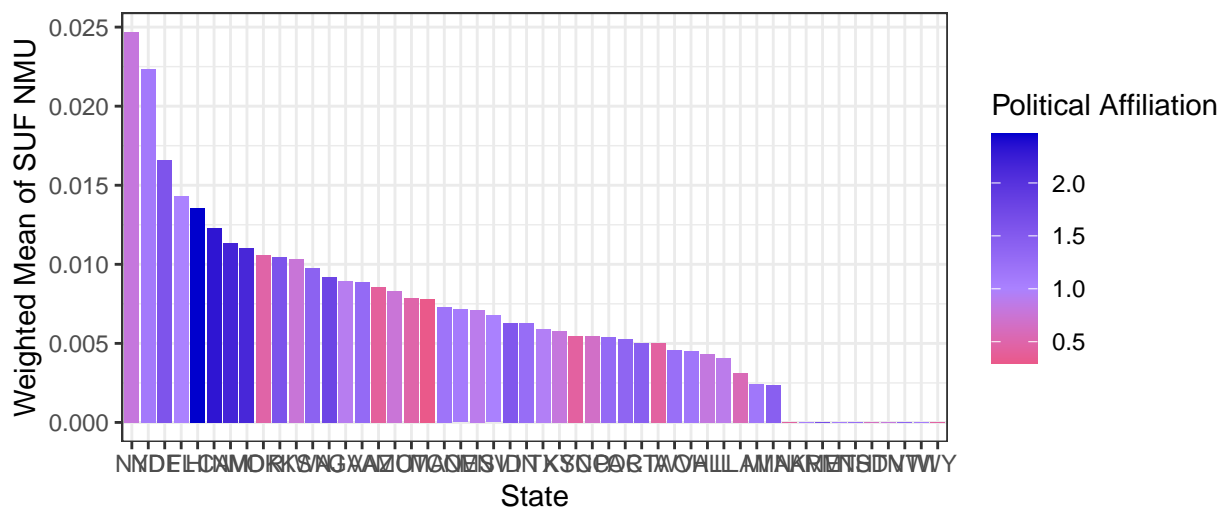
Weighted Mean of HYD NMU by State and Political Affiliation



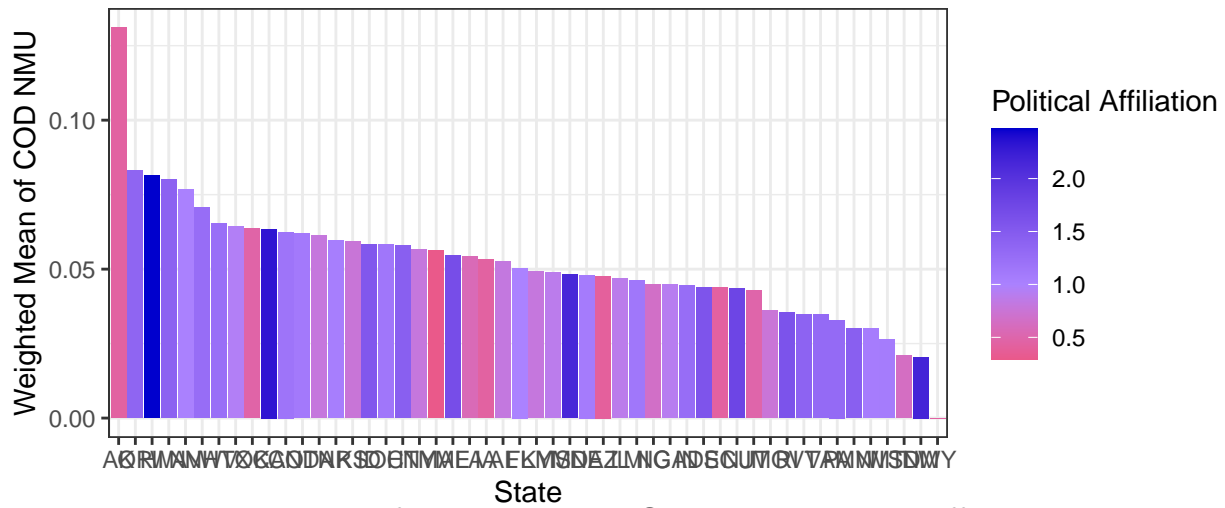
Weighted Mean of HYDM NMU by State and Political Affiliation



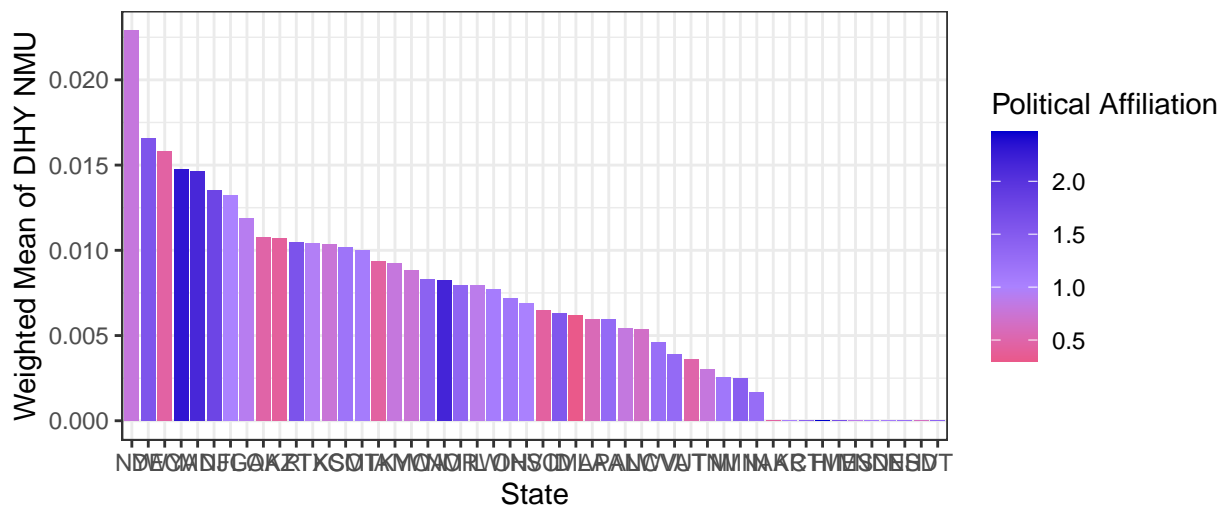
Weighted Mean of SUF NMU by State and Political Affiliation



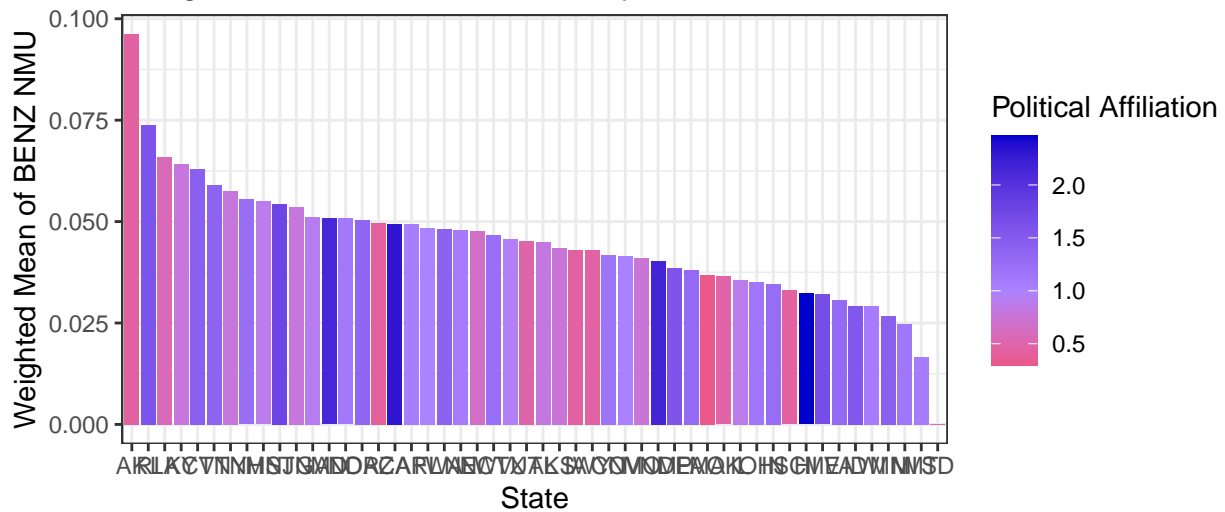
Weighted Mean of COD NMU by State and Political Affiliation



Weighted Mean of DIHY NMU by State and Political Affiliation



Weighted Mean of BENZ NMU by State and Political Affiliation



A bar chart titled 'Weighted Mean of STIM NMU by State'. The y-axis is labeled 'Weighted Mean of STIM NMU' and ranges from 0.000 to 0.075. The x-axis is labeled 'State' and lists 50 US states. The bars are colored based on 'Political Affiliation', with a color scale ranging from 0.5 (red) to 2.0 (dark blue). The chart shows a general downward trend in the weighted mean of STIM NMU from left to right, with the highest values in the red states (e.g., LA, SD, AR, NM) and the lowest values in the dark blue states (e.g., VT, NH, ME, HI, WA, OR, ID, MT, WY, UT, AZ, NV, CA, AK, VT, NH, ME, HI, WA, OR, ID, MT, WY, UT, AZ, NV, CA, AK).

A bar chart titled 'Weighted Mean of THC NMU by State'. The y-axis is labeled 'Weighted Mean of THC NMU' and ranges from 0.00 to 0.04. The x-axis is labeled 'State' and lists 50 US states. The bars are colored based on 'Political Affiliation', with a color scale ranging from 0.5 (red) to 2.0 (blue). The chart shows that states with higher political affiliation scores (blue) generally have higher weighted mean THC NMU values, while states with lower scores (red) have lower values. The bars are grouped by state, with each state having a single bar.

A bar chart titled 'Weighted Mean of KTM NMU by State'. The y-axis is labeled 'Weighted Mean of KTM NMU' and ranges from 0.00 to 0.02. The x-axis is labeled 'State' and lists 50 US states. The bars are colored based on 'Political Affiliation', with a color scale from 0.5 (red) to 2.0 (blue). The chart shows that the weighted mean of KTM NMU is highest in states like AK, VT, NH, and ME, and lowest in states like HI and DC. The color of the bars indicates that states with higher KTM NMU values tend to have a higher political affiliation score (blue/purple), while states with lower values tend to have a lower score (red/pink).

