**Multiple boxplots of each type of AQI**

The first plot is a box plot showing each type of AQI including CO AQI, SO2 AQI, NO2 AQI, and O3 AQI. In this plot, it can be seen that the median of the O3 AQI is the highest follow by NO2, CO and SO2 which CO and SO2 is closely together at the median. The median told us that most of the time the AQI levels of all types does not surpass level 50 which consider to be good for health. However, seeing the outliers on CO and SO2, the SO2 seem to have more dense outliers around 100 which is unsafe level of AQI while CO maintain at around 60 which is acceptable. On the bad day, it can be seen that the AQI level can surpass 200 which is at extremely unhealthy level that cause entire population affect by the pollution.

Average CO AQI by state
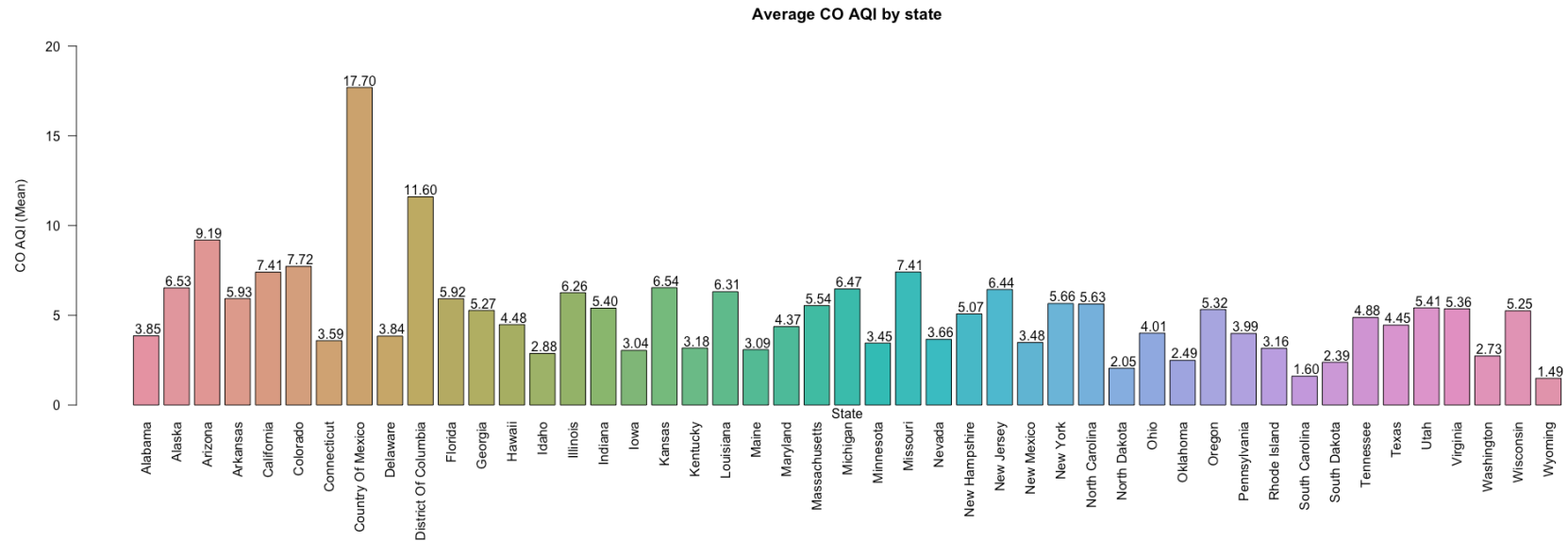
In this second graph, it is a bar chart showing mean CO AQI for each state. It can be seen from the graph that the highest AQI level is at Mexico. However, all of the mean AQI for each state still lower than 50 which is good for people's health. The lowest AQI is at Wyiming which is also a least population dense state, so it makes sense that it has lowest AQI level.
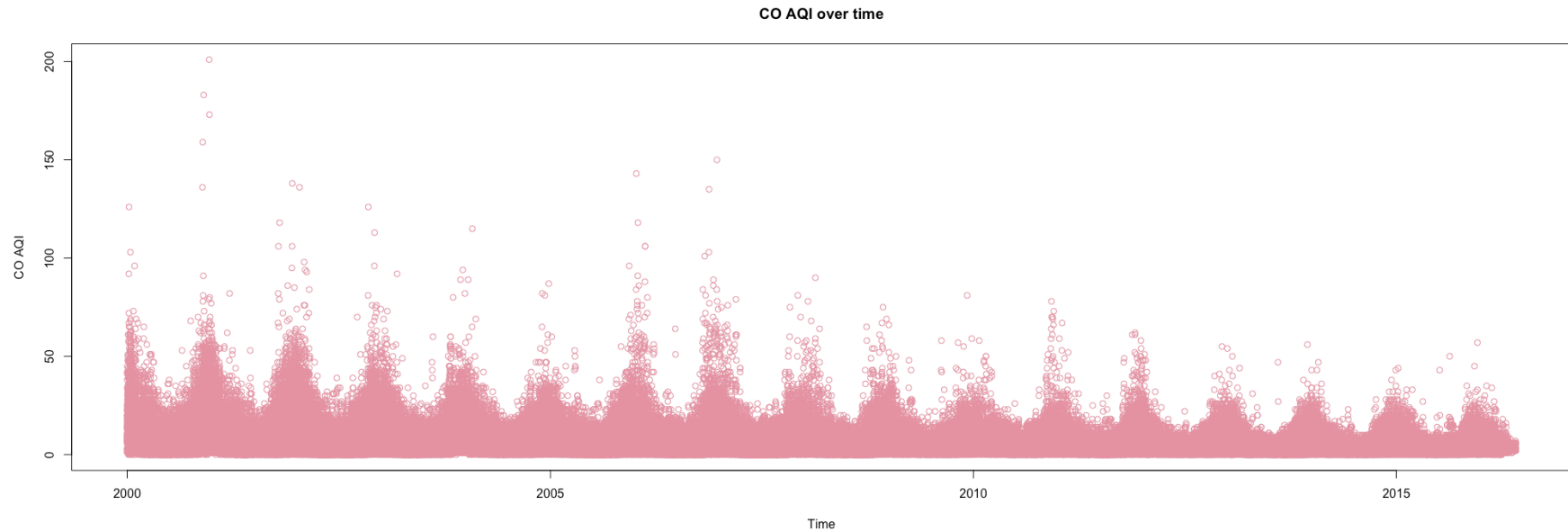
CO AQI over time

In this plot, it is a CO AQI over time. Some seasonality appears in the chart. Trend can be seen from the slope, where peak is at middle of the year, so the CO AQI is starting to ramp up on the start of the year and once it reaches peak around middle of the year it seem to go down and repeat. However, some year has very high peak, for example around year 2001, AQI level reach around 200, while on the later year (2012+) situation seem to be better and maintainable in each year.