# Question 3: which of these four sources have seen decreases in emissions from 1999–2008 for Baltimore City? Which have seen increases in emissions from 1999–2008?

#Get the data

NEI <- readRDS("summarySCC\_PM25.rds")

SCC <- readRDS("Source\_Classification\_Code.rds")

# Subset to Baltimore then aggregate emissions by year

Baltimore<-subset(NEI, NEI$fips=="24510")

BaltByYear<-aggregate(Emissions ~ year + type, data=Baltimore, sum)

BaltByYear$type <-factor(BaltByYear$type)

# Plot the data

library(ggplot2)

BaltByYear$type <- factor(BaltByYear$type,levels = c("ON-ROAD", "NON-ROAD", "POINT", "NONPOINT"))

plot3<- qplot(x=year, y=Emissions, data=BaltByYear, stat="identity", geom="bar", fill= type, xlab="Year", ylab="Total Emissions",

main="Total Emissions by Year and Type \n Baltimore, Maryland")

plot3 + facet\_grid(type ~ ., ) + scale\_x\_continuous(breaks=seq(1999, 2008, 3)) +

theme(axis.title.x = element\_text(size=16),axis.title.y = element\_text(size=16),

plot.title =element\_text(face="bold", size = 18)) + scale\_fill\_hue(l=40)

# Save the plot

dev.copy(png,'plot3.png')

dev.off()