Python:

```python
plt.figure(figsize=(10,8))
plt.scatter(crime.robbery, crime.burglary)
plt.title('Robbery versus Burglary rates per State', fontsize=14)
plt.xlabel('Robbery Rate', fontsize=12), plt.ylabel('Burglary Rate', fontsize=12)
plt.ylim(0,1250)
for i in range(crime.shape[0]):
    plt.text(x=crime.robbery[i],y=crime.burglary[i],s=crime.state[i], fontdict=dict(size=8), horizontalalignment='center')
sns.despine(top=True, right=True, left=False, bottom=False)
plt.show()
```
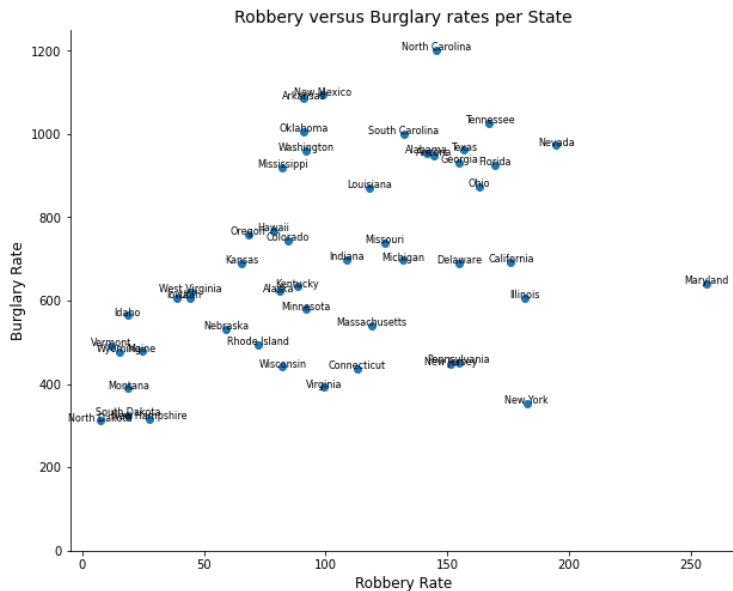


```python
plt.figure(figsize=(10,8))

sns.scatterplot(data=crime, x="murder", y="burglary", size="population", legend=False, sizes=(20, 2000))
plt.title('Murder versus Burglary Rate per State', fontsize=14)
plt.xlabel('Murder Rate', fontsize=12), plt.ylabel('Burglary Rate', fontsize=12)
plt.ylim(0,1300), plt.xlim(0,11)
sns.despine(top=True, right=True, left=False, bottom=False)
for i in range(crime.shape[0]):
    plt.text(x=crime.murder[i],y=crime.burglary[i],s=crime.state[i], fontdict=dict(size=8), horizontalalignment='center')
plt.show()
```
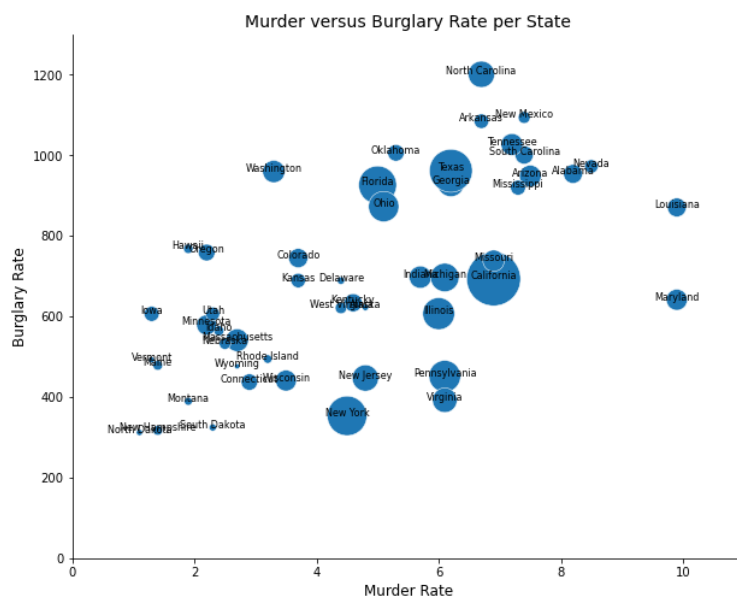
```
plt.figure(figsize=(10,8))
sns.kdeplot(x=crime.robbery, shade='blue', bw_adjust=0.5)
plt.title('Robbery Density Plot', fontsize=14)
plt.xlabel('Robbery', fontsize=12), plt.ylabel('Density', fontsize=12)
sns.despine(top=True, right=True, left=False, bottom=False)
plt.show()
```
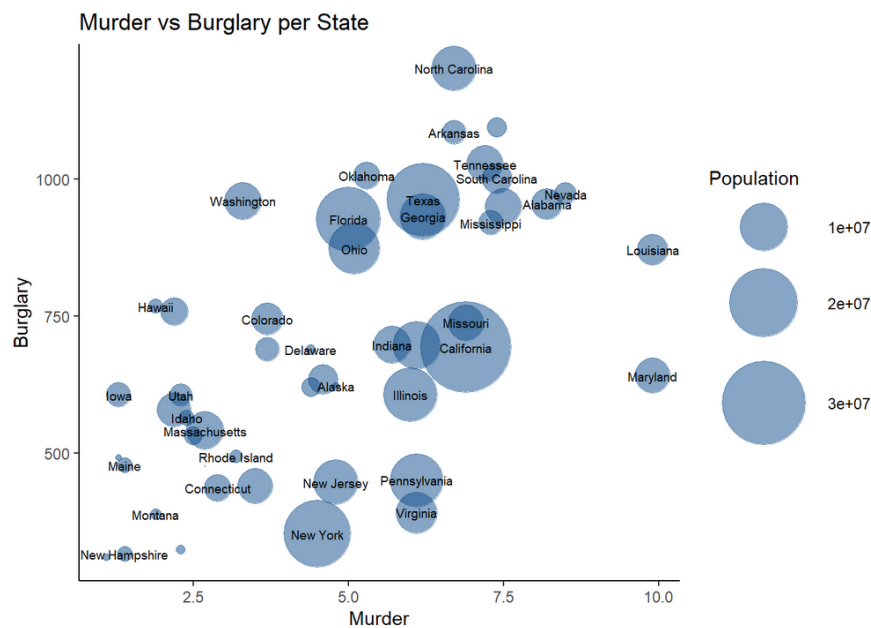

Robbery Density Plot
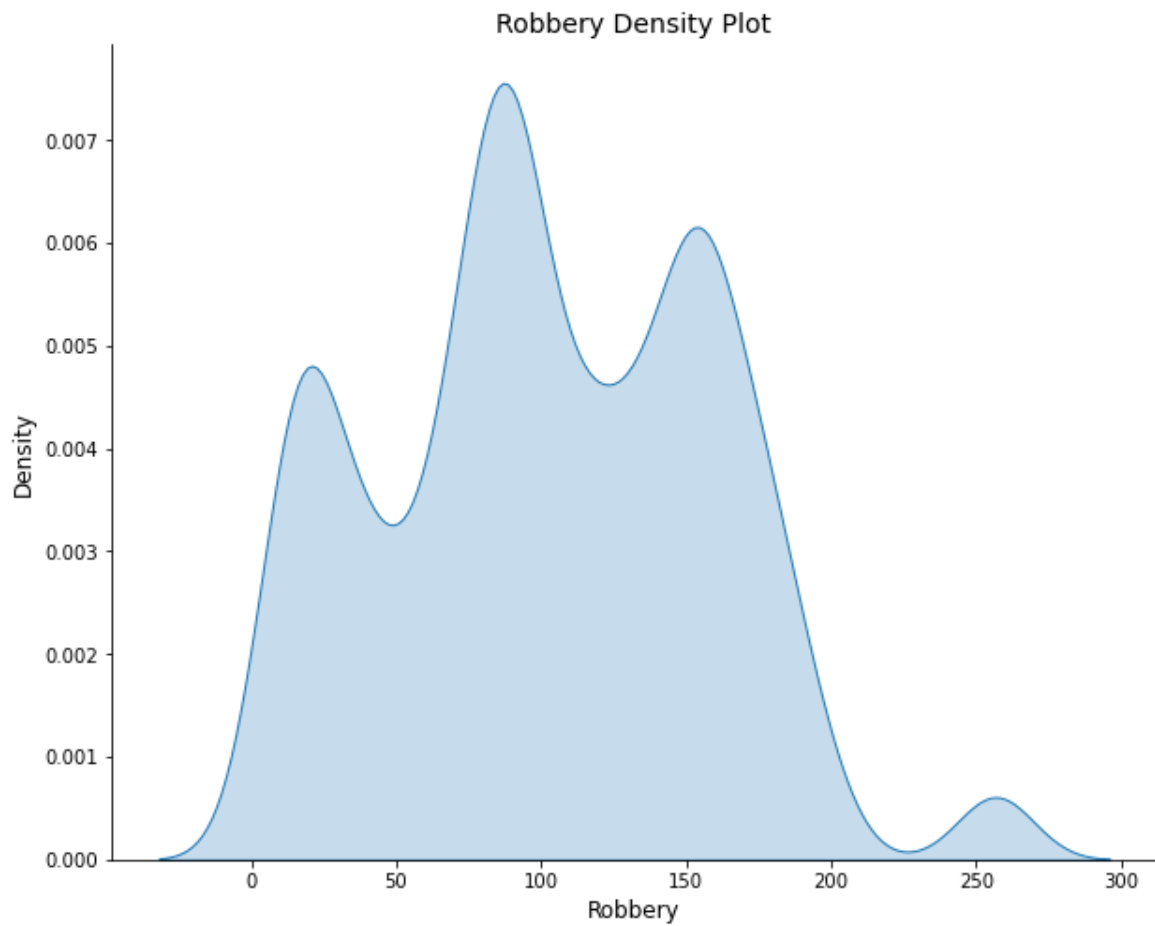
R:

```
scatter <- ggplot(crime, aes(x=murder, y=aggravated_assault))+ geom_point() + geom_text(aes(label=state), check_ov
erlap=TRUE, vjust=1, hjust=0.5, size=2.5) + theme_classic() + labs(title="Murder vs Aggravated Assault by State",
x="Murder", y="Aggravated Assault")
scatter
```


Murder vs Aggravated Assault by State
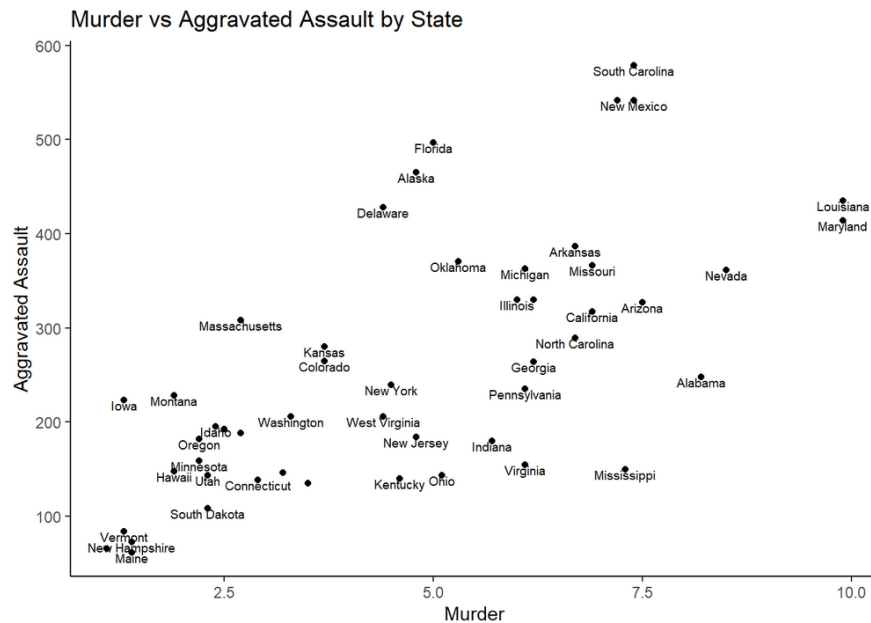
```
ggplot(crime, aes(x=murder, y=burglary, size=population)) + geom_point(alpha=0.5, color="dodgerblue4") + scale_siz
e(range = c(.1, 24), name="Population") + geom_text(aes(label=state), check_overlap=TRUE, size=2.5) + theme_classi
c() + labs(title="Murder vs Burglary per State", x="Murder", y="Burglary")
```


Murder vs Burglary per State

```
ggplot(birth, aes(x=X1999)) + geom_density(color="darkblue", fill="lightblue") + theme_classic() + xlim(0,60) + la
bs(title="Density Plot of 1999 Birth Rates", x="1999 Birth Rates", y="Density")
```

```
## Warning: Removed 19 rows containing non-finite values (stat_density).
```
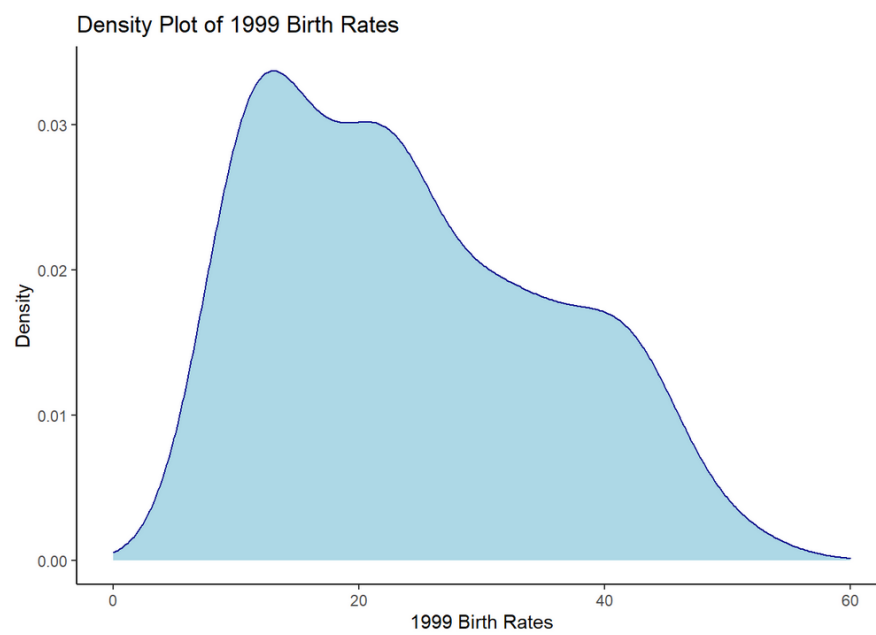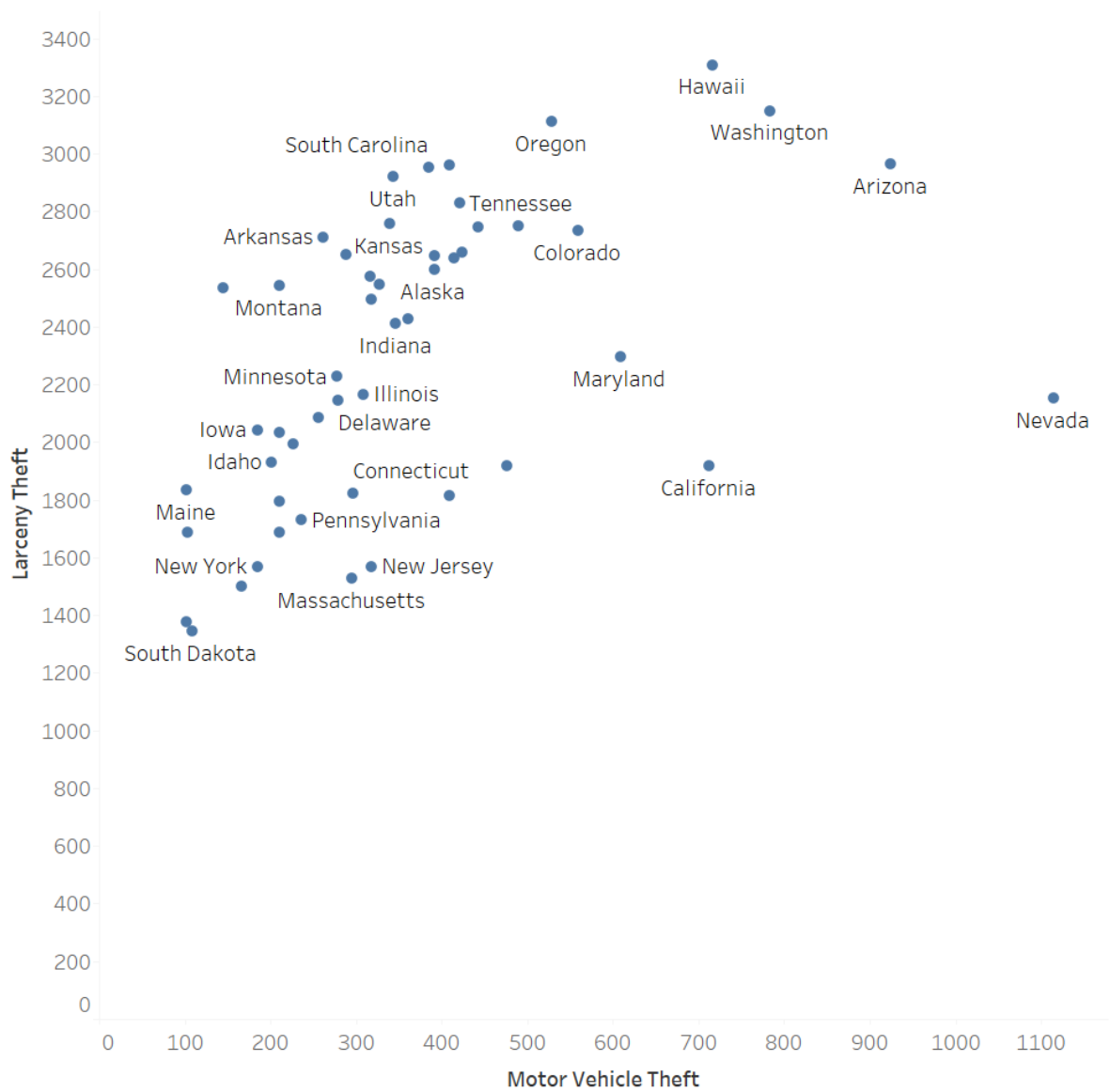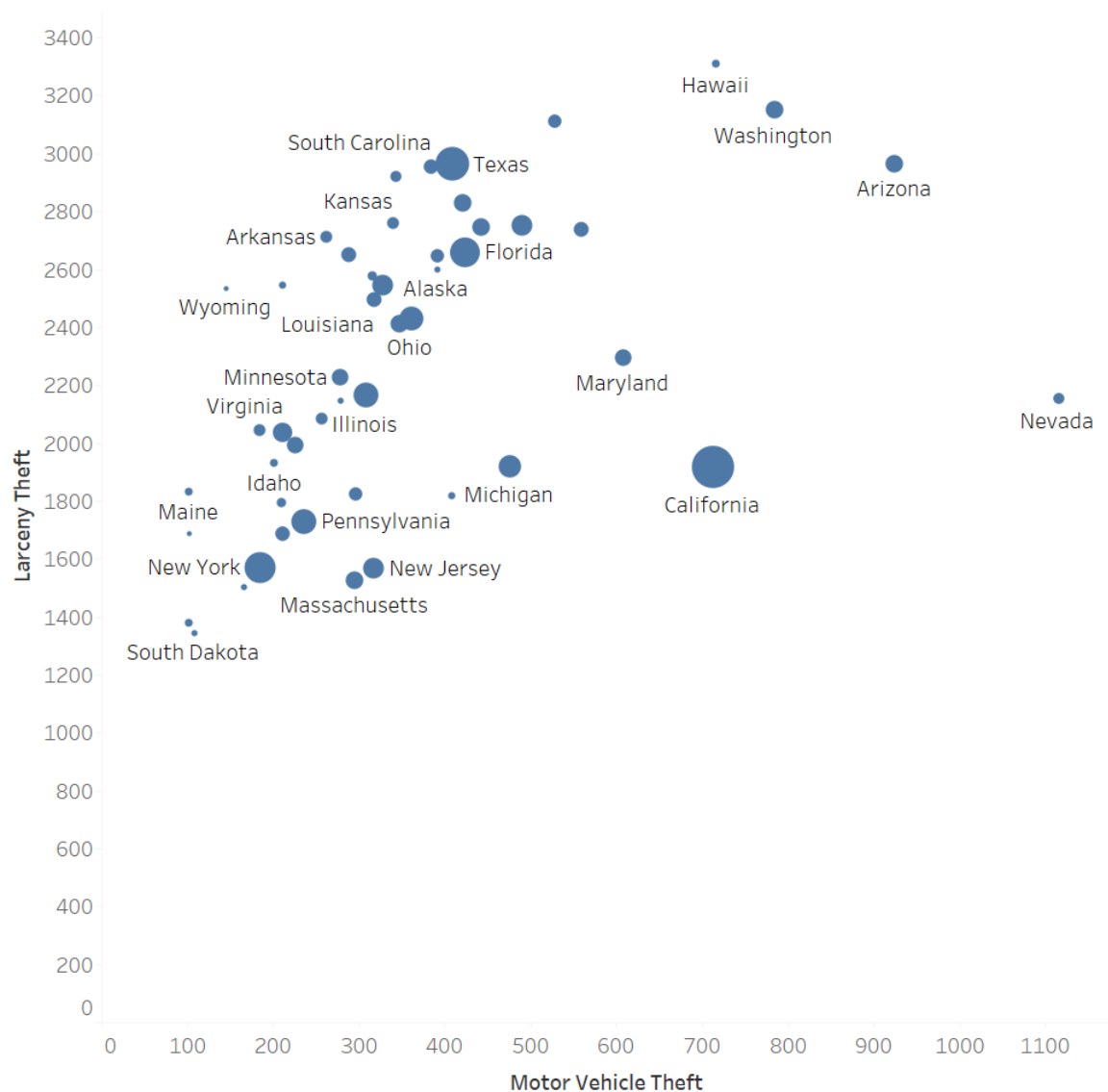

Density Plot of 1999 Birth Rates

Tableau:

Scatterplot of Vehicle Theft vs Larceny Theft

Vehicle Theft vs Larceny Theft Bubble Chart

Density Plot:
Soooo… we couldn't figure this out. There is a 45 post thread on teams (as I write this, I assume there will be more soon) trying to figure it out. Only one person was able to figure this out, and that is Michael who figures out everything and is really good with this stuff. Even following his steps we couldn't get it done and ended up with no help from google. Turns out there are lots of different plots named "density plots" and we couldn't get it. If I had to make a density plot I would make it in R or Python, or if I needed to make something in Tableau, I would make a histogram. But other than that, we had no fix. If it is something easy we are all missing, I am sorry.