Dataset Details

Road accidents by districts in Tamilnadu as per SHB 2019

Import required packages

In [1]:
```
import pandas as pd
import matplotlib.pyplot as plt
import matplotlib.font_manager as fm
import warnings
warnings.filterwarnings('ignore')
```

Reading the file

In [2]:
```
data=pd.read_csv("road_accidents_by_districts_2019.csv")
```

In [3]:
```
data.head(5)
```

Out[3]:

	S.No	City/District	Total Number of Accidents (2018)	Number of Persons Injured (2018)	Number of Persons Killed (2018)
0	1	Chennai City	7580	7438	1260
1	2	Coimbatore City	1136	1140	162
2	3	Madurai City	962	945	153
3	4	Salem City	902	997	142
4	5	Tirunelveli City	367	370	60

In [4]:
```
data.info()
```

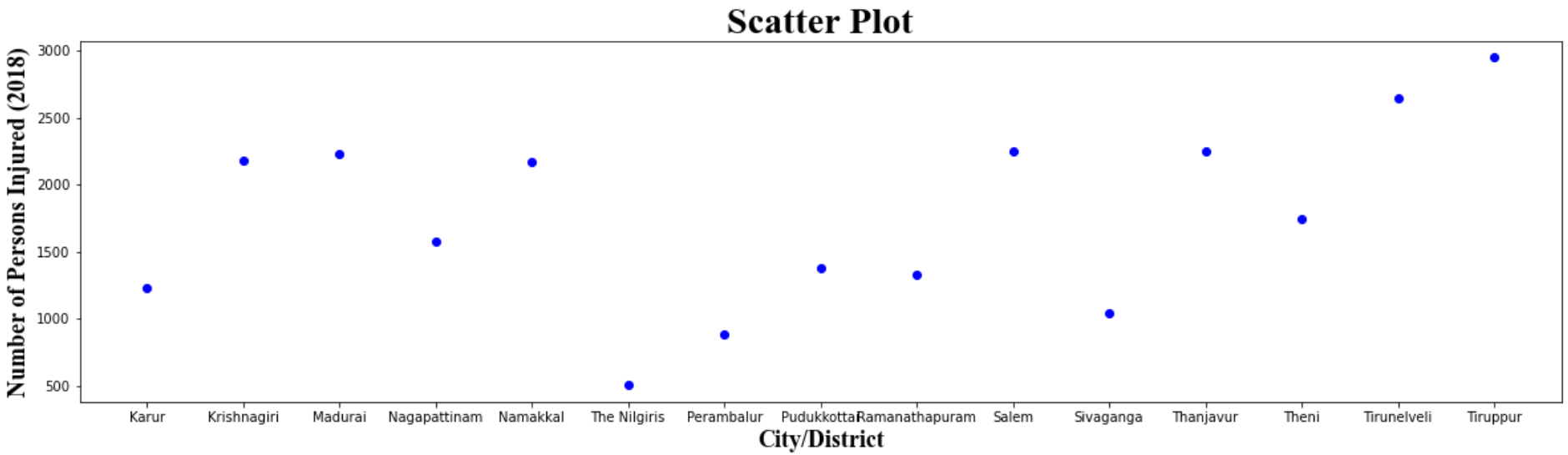
```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 41 entries, 0 to 40
Data columns (total 5 columns):
 #   Column                           Non-Null Count  Dtype
---  ------                           --------------  -----
 0   S.No                             41 non-null     object
```

```
 1   City/District                     41 non-null     object
 2   Total Number of Accidents (2018)  41 non-null     int64
 3   Number of Persons Injured (2018)  41 non-null     int64
 4   Number of Persons Killed (2018)   41 non-null     int64
dtypes: int64(3), object(2)
memory usage: 1.7+ KB
```

Scatter plot

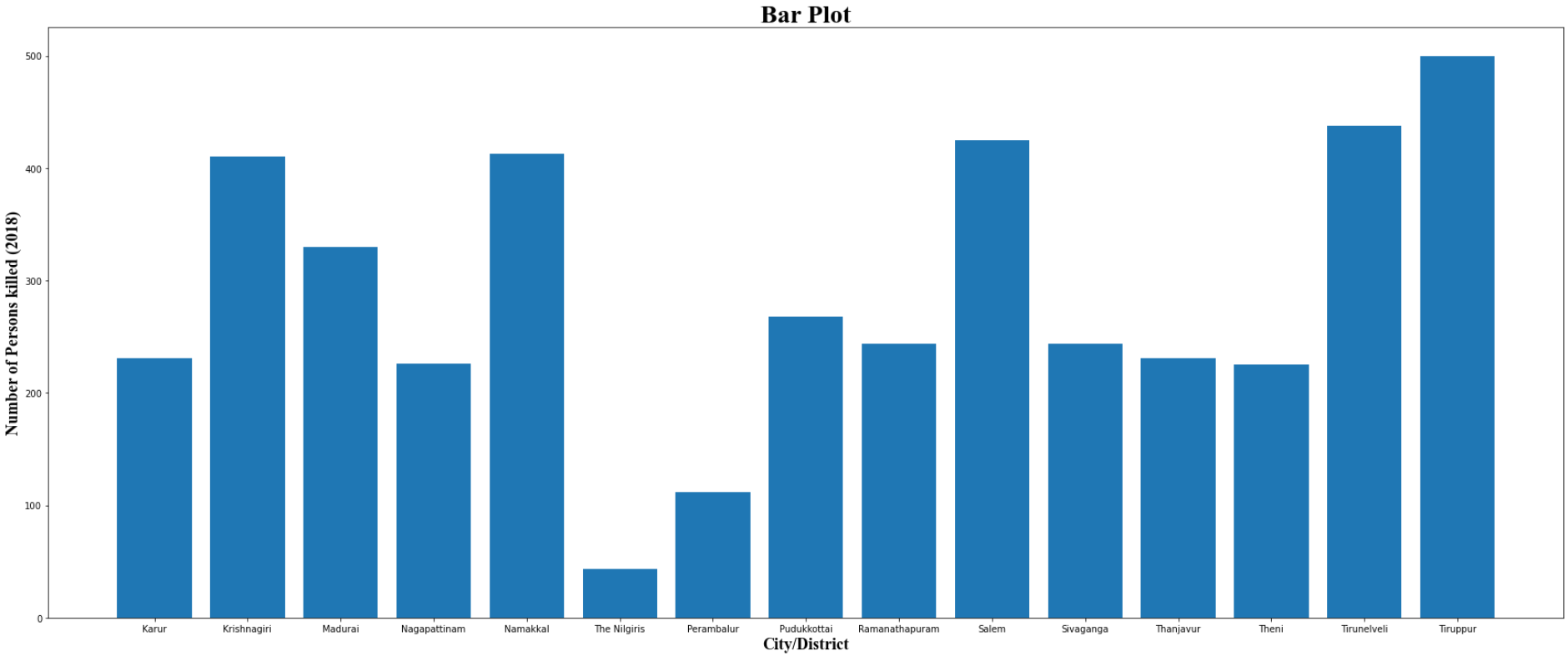
In [16]:
```
x1=data["City/District"]
y1=data["Number of Persons Injured (2018)"]
```

In [17]:
```
x1=x1[15:30]
y1=y1[15:30]
plt.figure(figsize=(20,5))
plt.scatter(x1, y1, c ="blue")
plt.ylabel("Number of Persons Injured (2018)",fontname="Times New Roman", size=18,fontweight="bold")
plt.xlabel("City/District",fontname="Times New Roman", size=18,fontweight="bold")
plt.title('Scatter Plot', fontname="Times New Roman", size=28,fontweight="bold")
plt.show()
```



Bar plot

In [7]:
```
y2=data["Number of Persons Killed (2018)"]
y2=y2[15:30]
x2=x1[15:30]
plt.figure(figsize=(30,12))
plt.bar(x2,y2)
plt.ylabel("Number of Persons killed (2018)",fontname="Times New Roman", size=18,fontweight="bold")
plt.xlabel("City/District", fontname="Times New Roman", size=18,fontweight="bold")
plt.title('Bar Plot', fontname="Times New Roman", size=28,fontweight="bold")
plt.show()
```



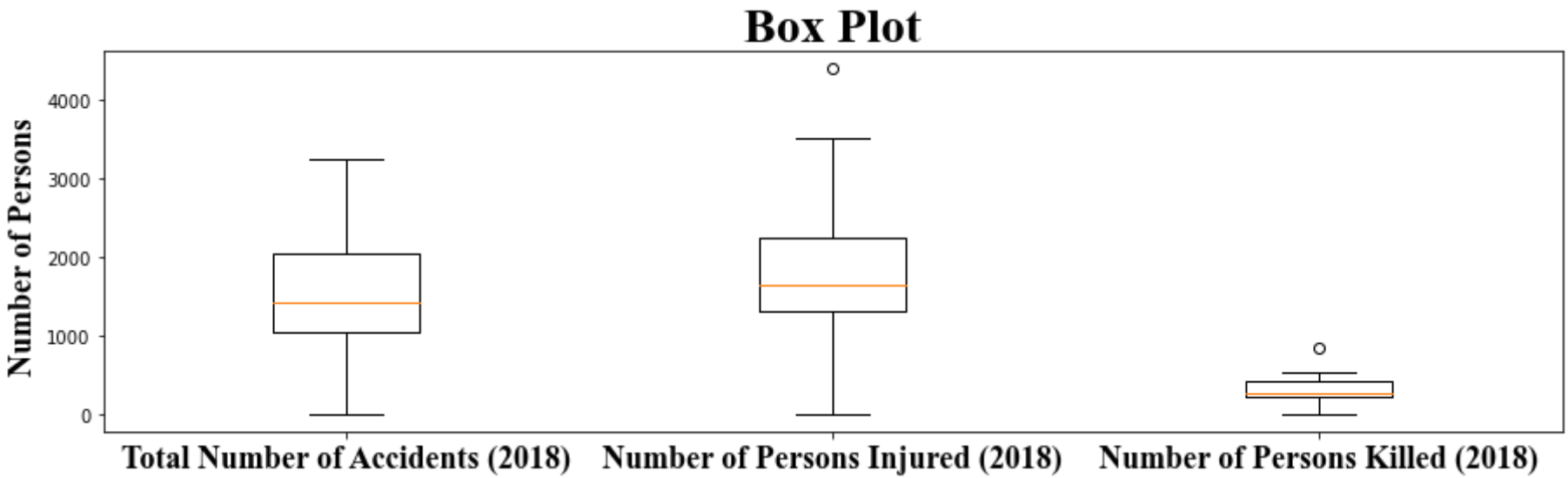
Box Plot

In [11]:
```
c1=data["City/District"]
c2=data["Total Number of Accidents (2018)"]
                of Persons Injured (2018)"]
```

```
c4=data["Number of Persons Killed (2018)"]
c2=c2[10:40]
c3=c3[10:40]
c4=c4[10:40]
fig = plt.figure(figsize =(15, 4))
ax = fig.add_subplot(111)

ax.set_xticklabels(['Total Number of Accidents (2018)', 'Number of Persons Injured (2018)',
                    'Number of Persons Killed (2018)'], fontname="Times New Roman", size=18,fontweight="bold")
plt.ylabel("Number of Persons ",fontname="Times New Roman", size=18,fontweight="bold")

# Adding title
plt.title("box plot")
plot_data = [c2,c3,c4]
plt.boxplot(plot_data)
#plt.boxplot(y2)
plt.title('Box Plot', fontname="Times New Roman", size=28,fontweight="bold")
plt.show()
```



In [ ]:

In [ ]: