Team B

1. Hamza Khalid (s4312186) : Worked on exploratory data analysis, the check trends on available dates, Correlations, geographical heatmaps, trends analysis (i.e. forecasting for the year 2015) and auto eda reporting using SweetViz in Python.
2. Hajra Batool (s4318303) : Worked on basic data cleaning and checks and some visualizations also.
3. Milind Dev Janghu (s4319403) : Worked on finding relationships in the data and comparitive analysis.
4. Sandeep Kumar (s4313281) : Worked on data cleaning and categorical data insights.

All group members worked collaberatively to complete and compile this notebook with different ideas. In each individual part other ideas helped to enhance it in an efficient manner.

In [1]:
```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import numpy as np
import plotly.express as px
import plotly.graph_objects as go

pd.set_option('display.max_columns', 500)

import warnings
warnings.filterwarnings("ignore")
```

In [2]:
```
# Read CSV File
data = pd.read_csv('accidents_2012_to_2014.csv')
```

In [3]:
```
# Print Top 5 Rows of Data
data.head()
```

Out[3]:

	Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Vehicles	Nu
0	201201BS70001	527200	178760	-0.169101	51.493429	1	3	2	
1	201201BS70002	524930	181430	-0.200838	51.517931	1	3	2	
2	201201BS70003	525860	178080	-0.188636	51.487618	1	3	2	
3	201201BS70004	524980	181030	-0.200259	51.514325	1	3	1	
4	201201BS70005	526170	179200	-0.183773	51.497614	1	3	1	

In [4]:
```
# Print Data Shape
data.shape
```

Out[4]:
```
(464697, 33)
```

In [5]:
```
# Print Data Columns
data.columns
```

Out[5]:
```
Index(['Accident_Index', 'Location_Easting_OSGR', 'Location_Northing_OSGR',
       'Longitude', 'Latitude', 'Police_Force', 'Accident_Severity',
       'Number_of_Vehicles', 'Number_of_Casualties', 'Date', 'Day_of_Week',
       'Time', 'Local_Authority_(District)', 'Local_Authority_(Highway)',
       '1st_Road_Class', '1st_Road_Number', 'Road_Type', 'Speed_limit',
       'Junction_Detail', 'Junction_Control', '2nd_Road_Class',
       '2nd_Road_Number', 'Pedestrian_Crossing-Human_Control',
       'Pedestrian_Crossing-Physical_Facilities', 'Light_Conditions',
       'Weather_Conditions', 'Road_Surface_Conditions',
       'Special_Conditions_at_Site', 'Carriageway_Hazards',
       'Urban_or_Rural_Area', 'Did_Police_Officer_Attend_Scene_of_Accident',
       'LSOA_of_Accident_Location', 'Year'],
      dtype='object')
```

In [6]:
```
# Print Information of the Data
data.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 464697 entries, 0 to 464696
Data columns (total 33 columns):
 #   Column                                       Non-Null Count   Dtype  
---  ------                                       --------------   -----  
 0   Accident_Index                               464697 non-null  object 
 1   Location_Easting_OSGR                        464697 non-null  int64  
 2   Location_Northing_OSGR                       464697 non-null  int64  
 3   Longitude                                    464697 non-null  float64
 4   Latitude                                     464697 non-null  float64
 5   Police_Force                                 464697 non-null  int64  
 6   Accident_Severity                            464697 non-null  int64  
 7   Number_of_Vehicles                           464697 non-null  int64  
 8   Number_of_Casualties                         464697 non-null  int64  
 9   Date                                         464697 non-null  object 
 10  Day_of_Week                                  464697 non-null  int64  
 11  Time                                         464684 non-null  object 
 12  Local_Authority_(District)                   464697 non-null  int64  
 13  Local_Authority_(Highway)                    464697 non-null  object 
 14  1st_Road_Class                               464697 non-null  int64  
 15  1st_Road_Number                              464697 non-null  int64  
 16  Road_Type                                    464697 non-null  object 
 17  Speed_limit                                  464697 non-null  int64  
 18  Junction_Detail                              0 non-null       float64
 19  Junction_Control                             286087 non-null  object 
 20  2nd_Road_Class                               464697 non-null  int64  
 21  2nd_Road_Number                              464697 non-null  int64  
 22  Pedestrian_Crossing-Human_Control            464697 non-null  object 
 23  Pedestrian_Crossing-Physical_Facilities      464697 non-null  object 
 24  Light_Conditions                             464697 non-null  object 
 25  Weather_Conditions                           464697 non-null  object 
 26  Road_Surface_Conditions                      463942 non-null  object 
 27  Special_Conditions_at_Site                   464695 non-null  object 
 28  Carriageway_Hazards                          464694 non-null  object 
 29  Urban_or_Rural_Area                          464697 non-null  int64  
 30  Did_Police_Officer_Attend_Scene_of_Accident  464695 non-null  object 
 31  LSOA_of_Accident_Location                    435979 non-null  object 
 32  Year                                         464697 non-null  int64  
dtypes: float64(3), int64(15), object(15)
memory usage: 117.0+ MB
```

In [7]:
```
# Data Description
data.describe().T.round(2)
```

Out[7]:

	count	mean	std	min	25%	50%	75%	max
Location_Easting_OSGR	464697.0	443834.28	94098.87	65510.00	379059.00	445539.00	525350.00	655370.00
Location_Northing_OSGR	464697.0	298625.82	159470.14	10290.00	177710.00	260680.00	398959.00	1190858.00
Longitude	464697.0	-1.38	1.38	-7.51	-2.32	-1.32	-0.19	1.76
Latitude	464697.0	52.58	1.44	49.91	51.48	52.23	53.49	60.60
Police_Force	464697.0	28.50	25.33	1.00	6.00	22.00	45.00	98.00
Accident_Severity	464697.0	2.83	0.40	1.00	3.00	3.00	3.00	3.00
Number_of_Vehicles	464697.0	1.83	0.71	1.00	1.00	2.00	2.00	67.00
Number_of_Casualties	464697.0	1.33	0.82	1.00	1.00	1.00	1.00	93.00
Day_of_Week	464697.0	4.11	1.92	1.00	2.00	4.00	6.00	7.00
Local_Authority_(District)	464697.0	329.12	259.22	1.00	95.00	300.00	511.00	941.00
1st_Road_Class	464697.0	4.07	1.41	1.00	3.00	3.00	6.00	6.00
1st_Road_Number	464697.0	1012.73	1810.52	0.00	0.00	147.00	759.00	9999.00
Speed_limit	464697.0	38.23	13.80	10.00	30.00	30.00	40.00	70.00
Junction_Detail	0.0	NaN	NaN	NaN	NaN	NaN	NaN	NaN
2nd_Road_Class	464697.0	2.79	3.19	-1.00	-1.00	3.00	6.00	6.00
2nd_Road_Number	464697.0	380.95	1289.79	-1.00	0.00	0.00	0.00	9999.00
Urban_or_Rural_Area	464697.0	1.34	0.47	1.00	1.00	1.00	2.00	2.00
Year	464697.0	2012.93	0.83	2012.00	2012.00	2013.00	2014.00	2014.00

In [8]:
```
# Total Missing Values in Each Column
data.isna().sum()
```

Out[8]:
```
Accident_Index                                  0
Location_Easting_OSGR                           0
Location_Northing_OSGR                          0
Longitude                                       0
Latitude                                        0
Police_Force                                    0
Accident_Severity                               0
Number_of_Vehicles                              0
Number_of_Casualties                            0
Date                                            0
Day_of_Week                                     0
Time                                           13
Local_Authority_(District)                      0
Local_Authority_(Highway)                       0
1st_Road_Class                                  0
1st_Road_Number                                 0
Road_Type                                       0
Speed_limit                                     0
Junction_Detail                            464697
Junction_Control                           178610
2nd_Road_Class                                  0
2nd_Road_Number                                 0
Pedestrian_Crossing-Human_Control               0
Pedestrian_Crossing-Physical_Facilities         0
Light_Conditions                                0
Weather_Conditions                              0
Road_Surface_Conditions                       755
Special_Conditions_at_Site                      2
Carriageway_Hazards                             3
Urban_or_Rural_Area                             0
Did_Police_Officer_Attend_Scene_of_Accident     2
LSOA_of_Accident_Location                   28718
Year                                            0
dtype: int64
```

In [9]:
```
# Removing Columns with Missing Values more than 80% in it.
# Set your threshold for non-null values (e.g., 0.8 means 80% non-null values required)
threshold = 0.6 * len(data)
data_filtered = data.dropna(thresh=threshold, axis=1)
```

In [10]:
```
data_filtered.isna().sum()
```

Out[10]:
```
Accident_Index                                  0
Location_Easting_OSGR                           0
Location_Northing_OSGR                          0
Longitude                                       0
Latitude                                        0
Police_Force                                    0
Accident_Severity                               0
Number_of_Vehicles                              0
Number_of_Casualties                            0
Date                                            0
Day_of_Week                                     0
Time                                           13
Local_Authority_(District)                      0
Local_Authority_(Highway)                       0
1st_Road_Class                                  0
1st_Road_Number                                 0
Road_Type                                       0
Speed_limit                                     0
Junction_Control                           178610
2nd_Road_Class                                  0
2nd_Road_Number                                 0
Pedestrian_Crossing-Human_Control               0
Pedestrian_Crossing-Physical_Facilities         0
Light_Conditions                                0
Weather_Conditions                              0
Road_Surface_Conditions                       755
Special_Conditions_at_Site                      2
Carriageway_Hazards                             3
Urban_or_Rural_Area                             0
Did_Police_Officer_Attend_Scene_of_Accident     2
LSOA_of_Accident_Location                   28718
Year                                            0
dtype: int64
```

In [11]:
```
# Drop NA values
data_filtered.dropna(inplace = True)
```

In [12]:
```
data_filtered.shape
```

Out[12]:
```
(270751, 32)
```

In [13]:
```
# Value Counts of Duplicates
data_filtered.duplicated().value_counts()
```

Out[13]:
```
False    247618
True      23133
dtype: int64
```

In [14]:
```
# Drop Duplicates
data_filtered_NoDuplicates = data_filtered.drop_duplicates()
data_filtered_NoDuplicates.shape
```

Out[14]:
```
(247618, 32)
```

In [15]:
```
data_filtered_NoDuplicates.head()
```

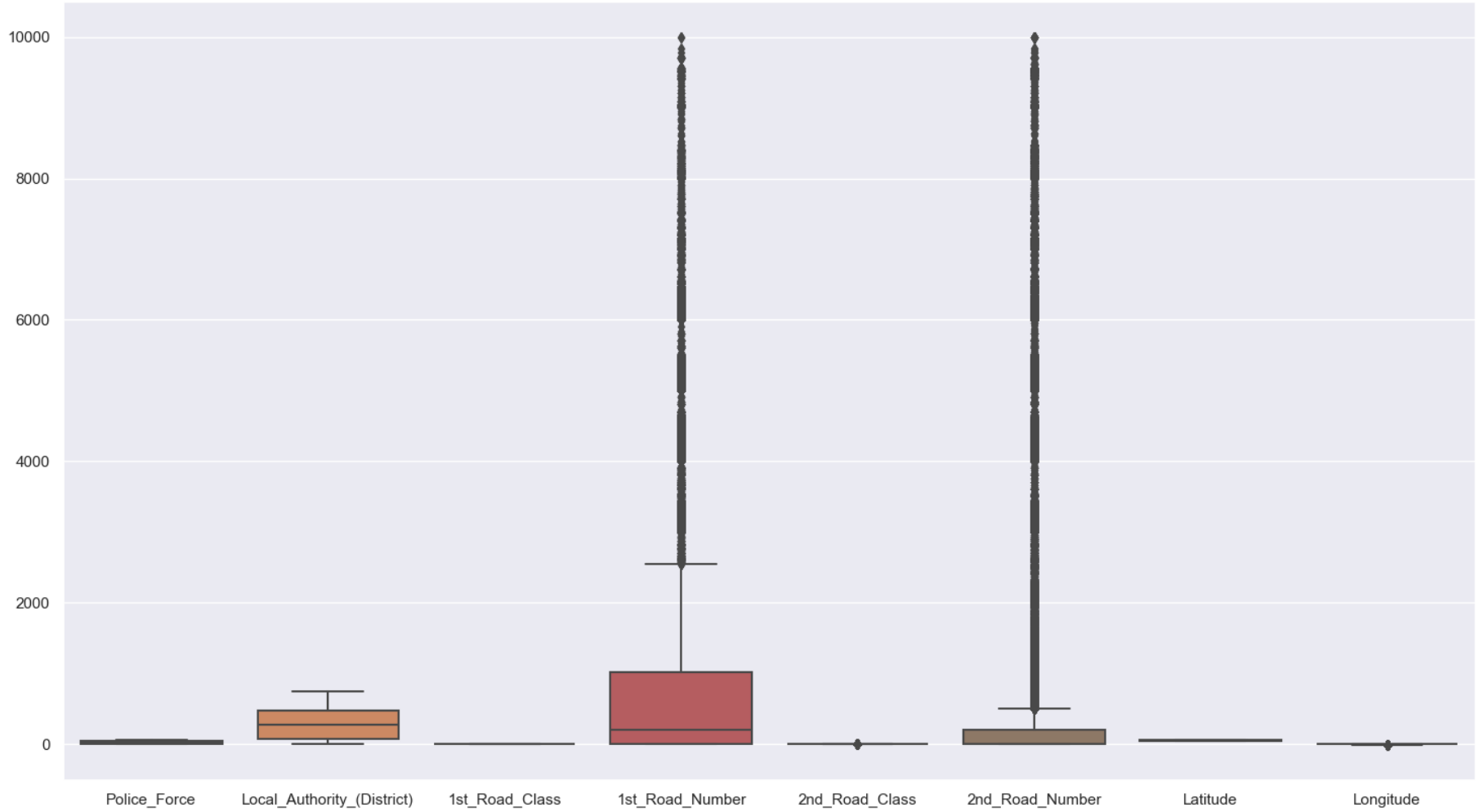
Out[15]:

	Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Vehicles	Nu
0	201201BS70001	527200	178760	-0.169101	51.493429	1	3	2	
1	201201BS70002	524930	181430	-0.200838	51.517931	1	3	2	
2	201201BS70003	525860	178080	-0.188636	51.487618	1	3	2	
3	201201BS70004	524980	181030	-0.200259	51.514325	1	3	1	
4	201201BS70005	526170	179200	-0.183773	51.497614	1	3	1	

03. Some Exploratory Data Analysis

In [16]:
```
checkBoxPlot = data_filtered_NoDuplicates[['Police_Force', 'Local_Authority_(District)',
                           '1st_Road_Class', '1st_Road_Number',
                                           '2nd_Road_Class', '2nd_Road_Number', 'Latitude', 'Longitude']]

sns.set(rc={'figure.figsize':(18,10)})
sns.boxplot(data=checkBoxPlot)
```

Out[16]:
```
<Axes: >
```


10000
8000
6000
4000
2000
0
Police_Force
Local_Authority_(District)
1st_Road_Class
1st_Road_Number
2nd_Road_Class
2nd_Road_Number
Latitude
Longitude

In [17]:
```
def remove_outliers_from_numeric_columns(dataframe):
    numeric_columns = dataframe.select_dtypes(include=np.number).columns
    for column in numeric_columns:
        Q1 = dataframe[column].quantile(0.25)
        Q3 = dataframe[column].quantile(0.75)
        IQR = Q3 - Q1

        lower_bound = Q1 - 1.5 * IQR
        upper_bound = Q3 + 1.5 * IQR

        outliers = (dataframe[column] < lower_bound) | (dataframe[column] > upper_bound)

        # Remove rows with outliers
        dataframe = dataframe[~outliers]

    return dataframe
```

In [18]:
```
finalDF = remove_outliers_from_numeric_columns(data_filtered_NoDuplicates)
finalDF.shape
```

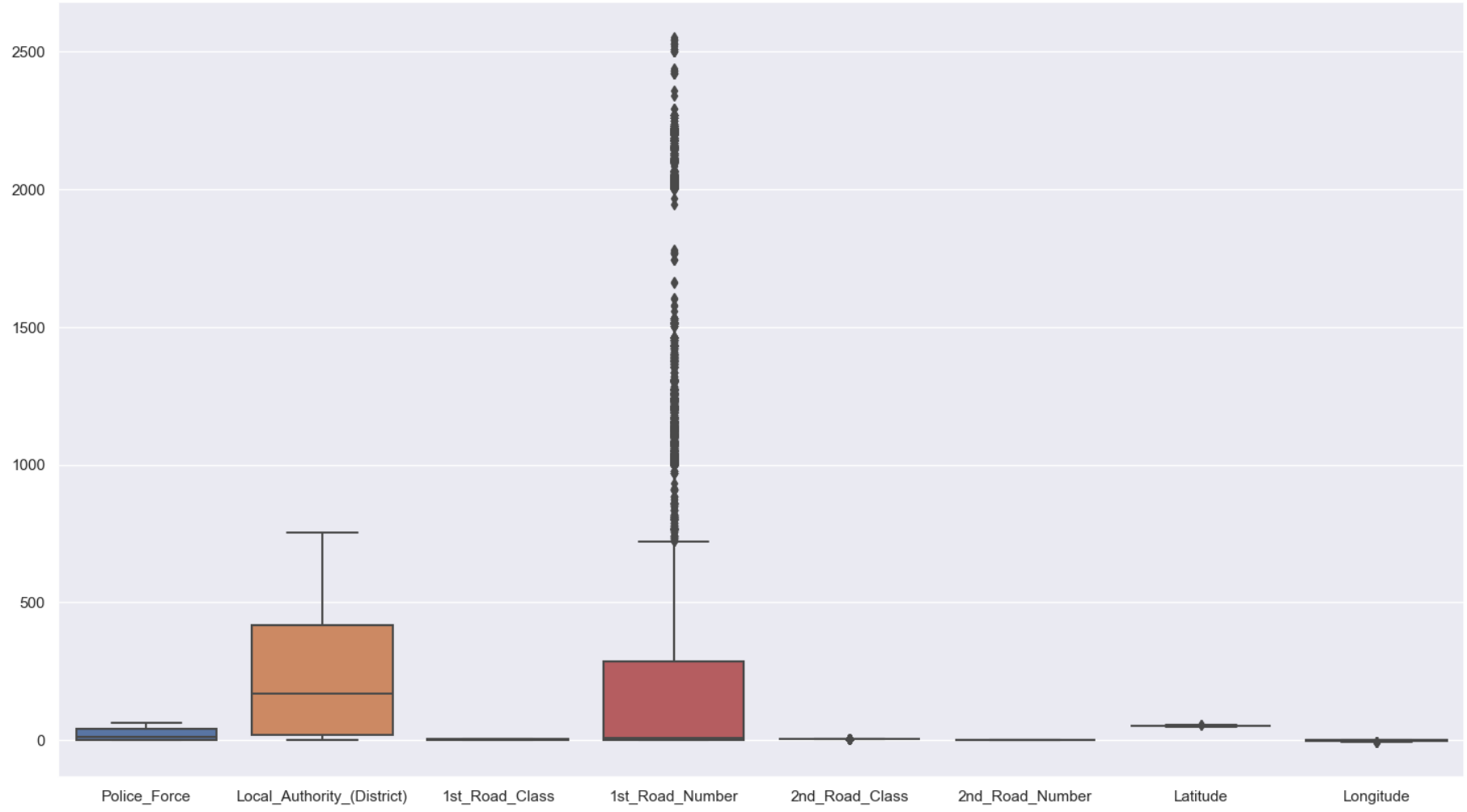
Out[18]:
```
(48123, 32)
```

In [19]:
```
finalDF.isna().sum()
```

Out[19]:
```
Accident_Index                                0
Location_Easting_OSGR                         0
Location_Northing_OSGR                        0
Longitude                                     0
Latitude                                      0
Police_Force                                  0
Accident_Severity                             0
Number_of_Vehicles                            0
Number_of_Casualties                          0
Date                                          0
Day_of_Week                                   0
Time                                          0
Local_Authority_(District)                    0
Local_Authority_(Highway)                     0
1st_Road_Class                                0
1st_Road_Number                               0
Road_Type                                     0
Speed_limit                                   0
Junction_Control                              0
2nd_Road_Class                                0
2nd_Road_Number                               0
Pedestrian_Crossing-Human_Control             0
Pedestrian_Crossing-Physical_Facilities       0
Light_Conditions                              0
Weather_Conditions                            0
Road_Surface_Conditions                       0
Special_Conditions_at_Site                    0
Carriageway_Hazards                           0
Urban_or_Rural_Area                           0
Did_Police_Officer_Attend_Scene_of_Accident   0
LSOA_of_Accident_Location                     0
Year                                          0
dtype: int64
```

In [20]:
```
# sns.boxplot(finalDF['Location_Northing_OSGR'])
# Box Plot to check Outliers
checkBoxPlot = finalDF[['Police_Force', 'Local_Authority_(District)',
                        '1st_Road_Class', '1st_Road_Number',
                                          '2nd_Road_Class', '2nd_Road_Number', 'Latitude', 'Longitude']]

sns.set(rc={'figure.figsize':(18,10)})
sns.boxplot(data=checkBoxPlot)
```

Out[20]: <Axes: >



In [21]:
```
# Unique Value Counts in Road_Type Column
finalDF['Road_Type'].value_counts()
```

Out[21]:
```
Single carriageway    41421
Roundabout             3345
Dual carriageway       2304
One way street          859
Unknown                 108
Slip road                86
Name: Road_Type, dtype: int64
```

In [22]:
```
finalDF.head()
```

Out[22]:

	Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Vehicles	Nu
0	201201BS70001	527200	178760	-0.169101	51.493429	1	3	2	
1	201201BS70002	524930	181430	-0.200838	51.517931	1	3	2	
7	201201BS70008	524010	182080	-0.213862	51.523975	1	3	2	
8	201201BS70010	527710	179290	-0.161567	51.498077	1	3	2	
9	201201BS70011	525120	180060	-0.198587	51.505576	1	3	2	

In [23]:
```
finalDF.columns
```

Out[23]:
```
Index(['Accident_Index', 'Location_Easting_OSGR', 'Location_Northing_OSGR',
       'Longitude', 'Latitude', 'Police_Force', 'Accident_Severity',
       'Number_of_Vehicles', 'Number_of_Casualties', 'Date', 'Day_of_Week',
       'Time', 'Local_Authority_(District)', 'Local_Authority_(Highway)',
       '1st_Road_Class', '1st_Road_Number', 'Road_Type', 'Speed_limit',
       'Junction_Control', '2nd_Road_Class', '2nd_Road_Number',
       'Pedestrian_Crossing-Human_Control',
       'Pedestrian_Crossing-Physical_Facilities', 'Light_Conditions',
       'Weather_Conditions', 'Road_Surface_Conditions',
       'Special_Conditions_at_Site', 'Carriageway_Hazards',
       'Urban_or_Rural_Area', 'Did_Police_Officer_Attend_Scene_of_Accident',
       'LSOA_of_Accident_Location', 'Year'],
      dtype='object')
```

In [24]:
```
finalDF["Date"] = pd.to_datetime(finalDF["Date"])
```

In [25]:
```
finalDF['Date'].dtype
```

Out[25]:
```
dtype('<M8[ns]')
```

In [26]:
```
finalDF['month'] = finalDF['Date'].dt.to_period('M')
```

In [27]:
```
finalDF['month']
```

Out[27]:
```
0         2012-01
1         2012-04
7         2012-07
8         2012-07
9         2012-04
           ...
455198    2014-10
455529    2014-05
455585    2014-04
455696    2014-05
455730    2014-12
Name: month, Length: 48123, dtype: period[M]
```

In [28]:
```
finalDF.head()
```

Out[28]:

	Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Vehicles	Nu
0	201201BS70001	527200	178760	-0.169101	51.493429	1	3	2	
1	201201BS70002	524930	181430	-0.200838	51.517931	1	3	2	
7	201201BS70008	524010	182080	-0.213862	51.523975	1	3	2	
8	201201BS70010	527710	179290	-0.161567	51.498077	1	3	2	
9	201201BS70011	525120	180060	-0.198587	51.505576	1	3	2	

In [29]:
```
finalDF
```

Out[29]:

	Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Vehicle
0	201201BS70001	527200	178760	-0.169101	51.493429	1	3	
1	201201BS70002	524930	181430	-0.200838	51.517931	1	3	
7	201201BS70008	524010	182080	-0.213862	51.523975	1	3	
8	201201BS70010	527710	179290	-0.161567	51.498077	1	3	
9	201201BS70011	525120	180060	-0.198587	51.505576	1	3	
...	...	...	...	...	...	...	...	...
455198	201463BC13614	259140	281860	-4.072653	52.416518	63	3	
455529	201463DP01114	310510	291060	-3.320056	52.510033	63	3	
455585	201463DP07014	310590	291090	-3.318886	52.510315	63	3	
455696	201463DP18514	278700	210340	-3.759722	51.778500	63	3	
455730	201463DP22014	309530	290790	-3.334419	52.507444	63	3	

48123 rows × 33 columns

In [30]:
```
finalDF.groupby(['Year', "month"]).count()
```

Out[30]:

		Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Ve
Year	**month**								
2012	**2012-01**	1356	1356	1356	1356	1356	1356	1356	
	2012-02	1145	1145	1145	1145	1145	1145	1145	
	2012-03	1399	1399	1399	1399	1399	1399	1399	
	2012-04	1241	1241	1241	1241	1241	1241	1241	
	2012-05	1438	1438	1438	1438	1438	1438	1438	
	2012-06	1344	1344	1344	1344	1344	1344	1344	
	2012-07	1385	1385	1385	1385	1385	1385	1385	
	2012-08	1224	1224	1224	1224	1224	1224	1224	
	2012-09	1394	1394	1394	1394	1394	1394	1394	
	2012-10	1414	1414	1414	1414	1414	1414	1414	
	2012-11	1417	1417	1417	1417	1417	1417	1417	
	2012-12	1169	1169	1169	1169	1169	1169	1169	

Year	month	Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Ve
2013	2013-01	1094	1094	1094	1094	1094	1094	1094	
	2013-02	1050	1050	1050	1050	1050	1050	1050	
	2013-03	1023	1023	1023	1023	1023	1023	1023	
	2013-04	1292	1292	1292	1292	1292	1292	1292	
	2013-05	1289	1289	1289	1289	1289	1289	1289	
	2013-06	1329	1329	1329	1329	1329	1329	1329	
	2013-07	1384	1384	1384	1384	1384	1384	1384	
	2013-08	1293	1293	1293	1293	1293	1293	1293	
	2013-09	1381	1381	1381	1381	1381	1381	1381	
	2013-10	1434	1434	1434	1434	1434	1434	1434	
	2013-11	1401	1401	1401	1401	1401	1401	1401	
	2013-12	1176	1176	1176	1176	1176	1176	1176	

		Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Ve
Year	**month**								
2014	**2014-01**	1504	1504	1504	1504	1504	1504	1504	
	2014-02	1223	1223	1223	1223	1223	1223	1223	
	2014-03	1471	1471	1471	1471	1471	1471	1471	
	2014-04	1329	1329	1329	1329	1329	1329	1329	
	2014-05	1423	1423	1423	1423	1423	1423	1423	
	2014-06	1463	1463	1463	1463	1463	1463	1463	
	2014-07	1438	1438	1438	1438	1438	1438	1438	
	2014-08	1379	1379	1379	1379	1379	1379	1379	
	2014-09	1478	1478	1478	1478	1478	1478	1478	
	2014-10	1571	1571	1571	1571	1571	1571	1571	
	2014-11	1553	1553	1553	1553	1553	1553	1553	
	2014-12	1219	1219	1219	1219	1219	1219	1219	

In [31]:
```
finalDF['month'].value_counts().sort_values(inplace=True)
```

In [32]:
```
finalDF['month']
```

Out[32]:
```
0         2012-01
1         2012-04
7         2012-07
8         2012-07
9         2012-04
            ...
455198    2014-10
455529    2014-05
455585    2014-04
455696    2014-05
455730    2014-12
Name: month, Length: 48123, dtype: period[M]
```

In [33]:
```
finalDF.head()
```

Out[33]:

	Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Vehicles	Nu
0	201201BS70001	527200	178760	-0.169101	51.493429	1	3	2	
1	201201BS70002	524930	181430	-0.200838	51.517931	1	3	2	
7	201201BS70008	524010	182080	-0.213862	51.523975	1	3	2	
8	201201BS70010	527710	179290	-0.161567	51.498077	1	3	2	
9	201201BS70011	525120	180060	-0.198587	51.505576	1	3	2	

In [34]:
```
finalDF['Local_Authority_(Highway)'].nunique()
```

Out[34]:
```
168
```

In [35]:
```
selected_columns = finalDF[['Police_Force', 'Accident_Severity', 'Number_of_Vehicles', 'Number_of_Casualties'
        '1st_Road_Number', '2nd_Road_Class', '2nd_Road_Number', 'Speed_limit']]

for la_highway, group in finalDF.groupby('Local_Authority_(Highway)'):
    print('----------------------------------')
    print(f"Statistics for {la_highway}:")
    print('----------------------------------')
    for column in selected_columns:
        mean_value = group[column].mean()
        median_value = group[column].median()

        print(f"{column} - Mean: {mean_value}, Median: {median_value}")
```

```
----------------------------------
Statistics for E06000001:
----------------------------------
Police_Force - Mean: 17.0, Median: 17.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.042105263157895, Median: 6.0
1st_Road_Number - Mean: 278.4947368421053, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000002:
----------------------------------
Police_Force - Mean: 17.0, Median: 17.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.78698224852071, Median: 5.0
1st_Road_Number - Mean: 298.72189349112426, Median: 120.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000003:
----------------------------------
Police_Force - Mean: 17.0, Median: 17.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.257575757575758, Median: 6.0
1st_Road_Number - Mean: 245.56060606060606, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000004:
----------------------------------
Police_Force - Mean: 17.0, Median: 17.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.8108108108108105, Median: 5.0
1st_Road_Number - Mean: 274.3716216216216, Median: 138.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000005:
----------------------------------
Police_Force - Mean: 11.0, Median: 11.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.842696629213483, Median: 5.0
1st_Road_Number - Mean: 88.62921348314607, Median: 46.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000006:
----------------------------------
Police_Force - Mean: 7.0, Median: 7.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.75, Median: 6.0
1st_Road_Number - Mean: 391.1363636363636, Median: 0.0
2nd_Road_Class - Mean: 5.965909090909091, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000007:
----------------------------------
Police_Force - Mean: 7.0, Median: 7.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.828828828828829, Median: 6.0
1st_Road_Number - Mean: 144.64864864864865, Median: 0.0
2nd_Road_Class - Mean: 5.990990990990991, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000008:
----------------------------------
Police_Force - Mean: 4.0, Median: 4.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.056410256410256, Median: 6.0
1st_Road_Number - Mean: 220.11282051282052, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000009:
----------------------------------
Police_Force - Mean: 4.0, Median: 4.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.147540983606557, Median: 6.0
1st_Road_Number - Mean: 166.47131147540983, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000010:
----------------------------------
Police_Force - Mean: 16.0, Median: 16.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.990154711673699, Median: 6.0
1st_Road_Number - Mean: 301.0478199718706, Median: 0.0
2nd_Road_Class - Mean: 5.9985935302391, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000011:
----------------------------------
Police_Force - Mean: 16.0, Median: 16.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.04954954954955, Median: 6.0
1st_Road_Number - Mean: 400.2927927927928, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000012:
----------------------------------
Police_Force - Mean: 16.0, Median: 16.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.857142857142857, Median: 6.0
1st_Road_Number - Mean: 284.5816326530612, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000013:
----------------------------------
Police_Force - Mean: 16.0, Median: 16.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.395061728395062, Median: 6.0
1st_Road_Number - Mean: 303.7345679012346, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000014:
----------------------------------
Police_Force - Mean: 12.0, Median: 12.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.876923076923077, Median: 3.0
1st_Road_Number - Mean: 530.2923076923076, Median: 415.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000015:
----------------------------------
Police_Force - Mean: 30.0, Median: 30.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.961783439490445, Median: 5.0
1st_Road_Number - Mean: 115.74203821656052, Median: 11.5
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000016:
----------------------------------
Police_Force - Mean: 33.0, Median: 33.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.826923076923077, Median: 5.0
1st_Road_Number - Mean: 1061.4423076923076, Median: 1202.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000017:
----------------------------------
Police_Force - Mean: 33.0, Median: 33.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.0, Median: 4.0
1st_Road_Number - Mean: 668.0, Median: 668.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000018:
----------------------------------
Police_Force - Mean: 31.0, Median: 31.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.761061946902655, Median: 5.0
1st_Road_Number - Mean: 233.60398230088495, Median: 60.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000019:
----------------------------------
Police_Force - Mean: 22.0, Median: 22.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.382352941176471, Median: 3.0
1st_Road_Number - Mean: 177.11764705882354, Median: 49.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000020:
----------------------------------
Police_Force - Mean: 22.0, Median: 22.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 6.0, Median: 6.0
1st_Road_Number - Mean: 0.0, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000021:
----------------------------------
Police_Force - Mean: 21.0, Median: 21.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.661087866108787, Median: 6.0
1st_Road_Number - Mean: 100.2050209205021, Median: 34.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000022:
----------------------------------
Police_Force - Mean: 52.0, Median: 52.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.848484848484849, Median: 6.0
1st_Road_Number - Mean: 46.27272727272727, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000023:
----------------------------------
Police_Force - Mean: 52.0, Median: 52.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.663306451612903, Median: 6.0
1st_Road_Number - Mean: 100.54435483870968, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000024:
----------------------------------
Police_Force - Mean: 52.0, Median: 52.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.636363636363637, Median: 6.0
1st_Road_Number - Mean: 44.84090909090909, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000025:
----------------------------------
Police_Force - Mean: 52.0, Median: 52.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.0, Median: 6.0
1st_Road_Number - Mean: 117.55555555555556, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000026:
----------------------------------
Police_Force - Mean: 50.0, Median: 50.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.531328320802005, Median: 6.0
1st_Road_Number - Mean: 59.175438596491226, Median: 0.0
2nd_Road_Class - Mean: 5.99749373433584, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000027:
----------------------------------
Police_Force - Mean: 50.0, Median: 50.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.6918238993710695, Median: 6.0
1st_Road_Number - Mean: 38.295597484276726, Median: 0.0
2nd_Road_Class - Mean: 5.9937106918239, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000028:
----------------------------------
Police_Force - Mean: 55.0, Median: 55.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.022508038585209, Median: 5.0
1st_Road_Number - Mean: 131.82636655948554, Median: 35.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000029:
----------------------------------
Police_Force - Mean: 55.0, Median: 55.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.143646408839779, Median: 6.0
1st_Road_Number - Mean: 25.171270718232044, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000030:
----------------------------------
Police_Force - Mean: 54.0, Median: 54.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.73109243697479, Median: 6.0
1st_Road_Number - Mean: 90.16806722689076, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000031:
----------------------------------
Police_Force - Mean: 35.0, Median: 35.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.243243243243243, Median: 6.0
1st_Road_Number - Mean: 221.2668918918919, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000032:
----------------------------------
Police_Force - Mean: 40.0, Median: 40.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.0, Median: 6.0
1st_Road_Number - Mean: 161.7712765957447, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000033:
----------------------------------
Police_Force - Mean: 42.0, Median: 42.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.700305810397554, Median: 6.0
1st_Road_Number - Mean: 186.7584097859327, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000034:
----------------------------------
Police_Force - Mean: 42.0, Median: 42.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.924812030075188, Median: 6.0
1st_Road_Number - Mean: 146.11278195488723, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000035:
----------------------------------
Police_Force - Mean: 46.0, Median: 46.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.6923076923076925, Median: 6.0
1st_Road_Number - Mean: 138.6737400530504, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000036:
---------------------------------
Police_Force - Mean: 43.0, Median: 43.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.0, Median: 3.0
1st_Road_Number - Mean: 321.0, Median: 321.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000037:
---------------------------------
Police_Force - Mean: 43.0, Median: 43.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.0, Median: 3.0
1st_Road_Number - Mean: 225.33333333333334, Median: 329.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000038:
---------------------------------
Police_Force - Mean: 43.0, Median: 43.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.076923076923077, Median: 3.0
1st_Road_Number - Mean: 165.69230769230768, Median: 4.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000039:
---------------------------------
Police_Force - Mean: 43.0, Median: 43.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.0, Median: 3.0
1st_Road_Number - Mean: 296.2, Median: 355.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000040:
----------------------------------
Police_Force - Mean: 43.0, Median: 43.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.0, Median: 3.0
1st_Road_Number - Mean: 214.66666666666666, Median: 308.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000041:
----------------------------------
Police_Force - Mean: 43.0, Median: 43.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.0, Median: 3.0
1st_Road_Number - Mean: 329.0, Median: 329.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000043:
----------------------------------
Police_Force - Mean: 47.0, Median: 47.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.210659898477157, Median: 3.0
1st_Road_Number - Mean: 398.0406091370558, Median: 23.0
2nd_Road_Class - Mean: 5.972081218274112, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000044:
---------------------------------
Police_Force - Mean: 44.0, Median: 44.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.340425531914893, Median: 4.0
1st_Road_Number - Mean: 739.0106382978723, Median: 127.5
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000045:
---------------------------------
Police_Force - Mean: 44.0, Median: 44.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.263403263403263, Median: 6.0
1st_Road_Number - Mean: 24.435897435897434, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000046:
---------------------------------
Police_Force - Mean: 44.0, Median: 44.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 6.0, Median: 6.0
1st_Road_Number - Mean: 0.0, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000047:
---------------------------------
Police_Force - Mean: 11.0, Median: 11.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.229268292682927, Median: 6.0
1st_Road_Number - Mean: 178.4048780487805, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000048:
----------------------------------
Police_Force - Mean: 10.0, Median: 10.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.6923076923076925, Median: 3.0
1st_Road_Number - Mean: 374.3076923076923, Median: 196.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000049:
----------------------------------
Police_Force - Mean: 7.0, Median: 7.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.797169811320755, Median: 5.0
1st_Road_Number - Mean: 220.71226415094338, Median: 0.0
2nd_Road_Class - Mean: 5.981132075471698, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000050:
----------------------------------
Police_Force - Mean: 7.0, Median: 7.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.13013698630137, Median: 6.0
1st_Road_Number - Mean: 96.92465753424658, Median: 0.0
2nd_Road_Class - Mean: 5.993150684931507, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000051:
---------------------------------
Police_Force - Mean: 22.0, Median: 22.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.263888888888889, Median: 6.0
1st_Road_Number - Mean: 125.45833333333333, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000052:
---------------------------------
Police_Force - Mean: 50.0, Median: 50.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.285714285714286, Median: 6.0
1st_Road_Number - Mean: 256.64285714285717, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000054:
---------------------------------
Police_Force - Mean: 54.0, Median: 54.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.318471337579618, Median: 5.0
1st_Road_Number - Mean: 193.4203821656051, Median: 329.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E06000055:
---------------------------------
Police_Force - Mean: 40.0, Median: 40.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.8655462184873945, Median: 6.0
1st_Road_Number - Mean: 214.57142857142858, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E06000056:
----------------------------------
Police_Force - Mean: 40.0, Median: 40.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.747126436781609, Median: 5.0
1st_Road_Number - Mean: 136.67816091954023, Median: 5.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000001:
----------------------------------
Police_Force - Mean: 6.0, Median: 6.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.221153846153846, Median: 3.0
1st_Road_Number - Mean: 282.375, Median: 6.0
2nd_Road_Class - Mean: 5.778846153846154, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000002:
----------------------------------
Police_Force - Mean: 6.0, Median: 6.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.9858156028368796, Median: 3.0
1st_Road_Number - Mean: 155.56737588652481, Median: 56.0
2nd_Road_Class - Mean: 5.822695035460993, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E08000003:
---------------------------------
Police_Force - Mean: 6.0, Median: 6.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.33648393194707, Median: 5.0
1st_Road_Number - Mean: 128.55576559546313, Median: 0.0
2nd_Road_Class - Mean: 5.7315689981096405, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E08000004:
---------------------------------
Police_Force - Mean: 6.0, Median: 6.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.3, Median: 5.0
1st_Road_Number - Mean: 227.06875, Median: 0.0
2nd_Road_Class - Mean: 5.79375, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E08000005:
---------------------------------
Police_Force - Mean: 6.0, Median: 6.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.064, Median: 3.0
1st_Road_Number - Mean: 278.584, Median: 58.0
2nd_Road_Class - Mean: 5.888, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E08000006:
---------------------------------
Police_Force - Mean: 6.0, Median: 6.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.9683544303797467, Median: 3.0
1st_Road_Number - Mean: 177.17088607594937, Median: 31.0
2nd_Road_Class - Mean: 5.822784810126582, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000007:
----------------------------------
Police_Force - Mean: 6.0, Median: 6.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.115646258503402, Median: 3.0
1st_Road_Number - Mean: 143.01360544217687, Median: 6.0
2nd_Road_Class - Mean: 5.741496598639456, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000008:
----------------------------------
Police_Force - Mean: 6.0, Median: 6.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.290909090909091, Median: 5.0
1st_Road_Number - Mean: 194.6727272727273, Median: 0.0
2nd_Road_Class - Mean: 5.790909090909091, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000009:
----------------------------------
Police_Force - Mean: 6.0, Median: 6.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.666666666666667, Median: 5.0
1st_Road_Number - Mean: 65.5042735042735, Median: 0.0
2nd_Road_Class - Mean: 5.632478632478633, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E08000010:
---------------------------------
Police_Force - Mean: 6.0, Median: 6.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.030769230769231, Median: 3.0
1st_Road_Number - Mean: 233.45641025641027, Median: 49.0
2nd_Road_Class - Mean: 5.876923076923077, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E08000011:
---------------------------------
Police_Force - Mean: 5.0, Median: 5.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.463917525773196, Median: 6.0
1st_Road_Number - Mean: 39.70103092783505, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E08000012:
---------------------------------
Police_Force - Mean: 5.0, Median: 5.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.118451025056948, Median: 6.0
1st_Road_Number - Mean: 124.5375854214123, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E08000013:
---------------------------------
Police_Force - Mean: 5.0, Median: 5.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.216216216216216, Median: 6.0
1st_Road_Number - Mean: 98.64864864864865, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000014:
----------------------------------
Police_Force - Mean: 5.0, Median: 5.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.159090909090909, Median: 6.0
1st_Road_Number - Mean: 145.96022727272728, Median: 0.0
2nd_Road_Class - Mean: 5.994318181818182, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000015:
----------------------------------
Police_Force - Mean: 5.0, Median: 5.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.954545454545454, Median: 6.0
1st_Road_Number - Mean: 176.67676767676767, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000016:
----------------------------------
Police_Force - Mean: 14.0, Median: 14.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.703703703703703, Median: 6.0
1st_Road_Number - Mean: 243.62962962962962, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000017:
----------------------------------
Police_Force - Mean: 14.0, Median: 14.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.341121495327103, Median: 6.0
1st_Road_Number - Mean: 163.1214953271028, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000018:
----------------------------------
Police_Force - Mean: 14.0, Median: 14.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.932038834951456, Median: 6.0
1st_Road_Number - Mean: 234.46601941747574, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000019:
----------------------------------
Police_Force - Mean: 14.0, Median: 14.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.946875, Median: 6.0
1st_Road_Number - Mean: 187.68125, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000020:
----------------------------------
Police_Force - Mean: 10.0, Median: 10.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.0, Median: 3.0
1st_Road_Number - Mean: 167.0, Median: 167.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000021:
----------------------------------
Police_Force - Mean: 10.0, Median: 10.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.846153846153846, Median: 6.0
1st_Road_Number - Mean: 1075.923076923077, Median: 1202.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000022:
----------------------------------
Police_Force - Mean: 10.0, Median: 10.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.0, Median: 6.0
1st_Road_Number - Mean: 1482.5555555555557, Median: 2111.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000025:
----------------------------------
Police_Force - Mean: 20.0, Median: 20.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.332027424094026, Median: 6.0
1st_Road_Number - Mean: 60.523016650342804, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000026:
----------------------------------
Police_Force - Mean: 20.0, Median: 20.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.796, Median: 6.0
1st_Road_Number - Mean: 27.828, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000027:
----------------------------------
Police_Force - Mean: 20.0, Median: 20.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.728813559322034, Median: 6.0
1st_Road_Number - Mean: 197.43502824858757, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000028:
----------------------------------
Police_Force - Mean: 20.0, Median: 20.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.224719101123595, Median: 6.0
1st_Road_Number - Mean: 90.26404494382022, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000029:
----------------------------------
Police_Force - Mean: 20.0, Median: 20.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.235772357723577, Median: 6.0
1st_Road_Number - Mean: 45.040650406504064, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000030:
----------------------------------
Police_Force - Mean: 20.0, Median: 20.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.014925373134329, Median: 6.0
1st_Road_Number - Mean: 109.58955223880596, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000031:
----------------------------------
Police_Force - Mean: 20.0, Median: 20.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.049382716049383, Median: 6.0
1st_Road_Number - Mean: 89.74897119341564, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000032:
----------------------------------
Police_Force - Mean: 13.0, Median: 13.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.969957081545064, Median: 6.0
1st_Road_Number - Mean: 223.83261802575106, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000033:
----------------------------------
Police_Force - Mean: 13.0, Median: 13.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.806629834254144, Median: 6.0
1st_Road_Number - Mean: 219.2707182320442, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000034:
----------------------------------
Police_Force - Mean: 13.0, Median: 13.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.656976744186046, Median: 6.0
1st_Road_Number - Mean: 225.54360465116278, Median: 0.0
2nd_Road_Class - Mean: 5.997093023255814, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000035:
----------------------------------
Police_Force - Mean: 13.0, Median: 13.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.09433962264151, Median: 6.0
1st_Road_Number - Mean: 113.17806603773585, Median: 0.0
2nd_Road_Class - Mean: 5.997641509433962, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E08000036:
----------------------------------
Police_Force - Mean: 13.0, Median: 13.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.644230769230769, Median: 6.0
1st_Road_Number - Mean: 257.16346153846155, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000001:
----------------------------------
Police_Force - Mean: 48.0, Median: 48.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.9069767441860463, Median: 3.0
1st_Road_Number - Mean: 160.07364341085272, Median: 10.0
2nd_Road_Class - Mean: 5.189922480620155, Median: 5.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000002:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.0469208211143695, Median: 3.0
1st_Road_Number - Mean: 355.2756598240469, Median: 118.0
2nd_Road_Class - Mean: 5.777126099706745, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000003:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.9907975460122698, Median: 3.0
1st_Road_Number - Mean: 353.50306748466255, Median: 41.0
2nd_Road_Class - Mean: 5.865030674846626, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000004:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.089887640449438, Median: 3.0
1st_Road_Number - Mean: 247.78370786516854, Median: 206.5
2nd_Road_Class - Mean: 5.786516853932584, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000005:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.2693069306930695, Median: 4.0
1st_Road_Number - Mean: 141.98217821782177, Median: 5.0
2nd_Road_Class - Mean: 5.811881188118812, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000006:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.016556291390729, Median: 3.0
1st_Road_Number - Mean: 229.86423841059602, Median: 213.5
2nd_Road_Class - Mean: 5.855960264900662, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000007:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.9390243902439024, Median: 3.0
1st_Road_Number - Mean: 258.1637630662021, Median: 400.0
2nd_Road_Class - Mean: 5.790940766550523, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000008:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.8821096173733194, Median: 3.0
1st_Road_Number - Mean: 189.0672182006205, Median: 212.0
2nd_Road_Class - Mean: 5.843846949327818, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000009:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.4792122538293215, Median: 5.0
1st_Road_Number - Mean: 184.17943107221006, Median: 0.0
2nd_Road_Class - Mean: 5.857768052516412, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000010:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.9762845849802373, Median: 3.0
1st_Road_Number - Mean: 335.6837944664032, Median: 110.0
2nd_Road_Class - Mean: 5.810276679841897, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000011:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.7326315789473683, Median: 3.0
1st_Road_Number - Mean: 259.3578947368421, Median: 206.0
2nd_Road_Class - Mean: 5.88421052631579, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000012:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.759259259259259, Median: 3.0
1st_Road_Number - Mean: 133.53935185185185, Median: 10.0
2nd_Road_Class - Mean: 5.652777777777778, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000013:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.834224598930481, Median: 3.0
1st_Road_Number - Mean: 197.0035650623886, Median: 219.0
2nd_Road_Class - Mean: 5.9162210338680925, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000014:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.6778425655976674, Median: 3.0
1st_Road_Number - Mean: 248.1268221574344, Median: 105.0
2nd_Road_Class - Mean: 5.896501457725948, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000015:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.444043321299639, Median: 5.0
1st_Road_Number - Mean: 158.1480144404332, Median: 0.0
2nd_Road_Class - Mean: 5.7328519855595665, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000016:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.474489795918367, Median: 5.0
1st_Road_Number - Mean: 154.1530612244898, Median: 0.0
2nd_Road_Class - Mean: 5.760204081632653, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000017:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.557951482479784, Median: 5.0
1st_Road_Number - Mean: 154.6765498652291, Median: 0.0
2nd_Road_Class - Mean: 5.800539083557951, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000018:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.910973084886128, Median: 3.0
1st_Road_Number - Mean: 195.87577639751552, Median: 312.0
2nd_Road_Class - Mean: 5.863354037267081, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000019:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.5848765432098766, Median: 3.0
1st_Road_Number - Mean: 276.0725308641975, Median: 104.0
2nd_Road_Class - Mean: 5.808641975308642, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000020:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.2392638036809815, Median: 4.0
1st_Road_Number - Mean: 178.97750511247443, Median: 4.0
2nd_Road_Class - Mean: 5.8343558282208585, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000021:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.720257234726688, Median: 3.0
1st_Road_Number - Mean: 591.6334405144695, Median: 243.0
2nd_Road_Class - Mean: 5.836012861736334, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000022:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.554856115107914, Median: 3.0
1st_Road_Number - Mean: 238.05845323741008, Median: 23.0
2nd_Road_Class - Mean: 5.857913669064748, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000023:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.7639751552795033, Median: 3.0
1st_Road_Number - Mean: 273.2335403726708, Median: 21.0
2nd_Road_Class - Mean: 5.883229813664596, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000024:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.7551487414187643, Median: 3.0
1st_Road_Number - Mean: 151.0800915331808, Median: 217.0
2nd_Road_Class - Mean: 5.814645308924485, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000025:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.738853503184713, Median: 3.0
1st_Road_Number - Mean: 99.60084925690022, Median: 117.0
2nd_Road_Class - Mean: 5.885350318471337, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000026:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.214, Median: 3.0
1st_Road_Number - Mean: 153.762, Median: 12.0
2nd_Road_Class - Mean: 5.858, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000027:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.5043731778425657, Median: 3.0
1st_Road_Number - Mean: 242.82798833819243, Median: 306.0
2nd_Road_Class - Mean: 5.822157434402333, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000028:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.7636786961583235, Median: 3.0
1st_Road_Number - Mean: 431.8079161816065, Median: 201.0
2nd_Road_Class - Mean: 5.870779976717113, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000029:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.135198135198135, Median: 4.0
1st_Road_Number - Mean: 433.1118881118881, Median: 232.0
2nd_Road_Class - Mean: 5.843822843822844, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000030:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.6388235294117646, Median: 3.0
1st_Road_Number - Mean: 294.6823529411765, Median: 13.0
2nd_Road_Class - Mean: 5.805882352941176, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000031:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.7155963302752295, Median: 3.0
1st_Road_Number - Mean: 222.1669724770642, Median: 112.0
2nd_Road_Class - Mean: 5.900917431192661, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000032:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.7667410714285716, Median: 3.0
1st_Road_Number - Mean: 93.77008928571429, Median: 24.0
2nd_Road_Class - Mean: 5.873883928571429, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E09000033:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.214857142857142, Median: 4.0
1st_Road_Number - Mean: 138.41257142857143, Median: 4.0
2nd_Road_Class - Mean: 5.757714285714286, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000002:
----------------------------------
Police_Force - Mean: 43.0, Median: 43.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.666666666666667, Median: 6.0
1st_Road_Number - Mean: 782.3333333333334, Median: 176.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000003:
----------------------------------
Police_Force - Mean: 35.0, Median: 35.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.449330783938814, Median: 5.0
1st_Road_Number - Mean: 585.7017208413002, Median: 298.0
2nd_Road_Class - Mean: 5.998087954110899, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000006:
----------------------------------
Police_Force - Mean: 3.0, Median: 3.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.976109215017065, Median: 6.0
1st_Road_Number - Mean: 95.73378839590444, Median: 0.0
2nd_Road_Class - Mean: 5.996587030716723, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000007:
----------------------------------
Police_Force - Mean: 30.0, Median: 30.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.795138888888889, Median: 5.0
1st_Road_Number - Mean: 197.3125, Median: 53.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000008:
----------------------------------
Police_Force - Mean: 50.0, Median: 50.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.951890034364261, Median: 6.0
1st_Road_Number - Mean: 124.20618556701031, Median: 0.0
2nd_Road_Class - Mean: 5.9965635738831615, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000009:
---------------------------------
Police_Force - Mean: 55.0, Median: 55.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.881481481481481, Median: 5.0
1st_Road_Number - Mean: 116.11851851851851, Median: 5.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000011:
---------------------------------
Police_Force - Mean: 47.0, Median: 47.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.477876106194691, Median: 4.0
1st_Road_Number - Mean: 621.9756637168142, Median: 259.0
2nd_Road_Class - Mean: 5.988938053097345, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000012:
---------------------------------
Police_Force - Mean: 42.0, Median: 42.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.982159624413145, Median: 6.0
1st_Road_Number - Mean: 303.51079812206575, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000014:
---------------------------------
Police_Force - Mean: 44.0, Median: 44.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.204188481675392, Median: 6.0
1st_Road_Number - Mean: 117.48795811518325, Median: 0.0
2nd_Road_Class - Mean: 5.998952879581152, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000016:
----------------------------------
Police_Force - Mean: 46.0, Median: 46.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.708498023715415, Median: 3.0
1st_Road_Number - Mean: 624.4792490118577, Median: 258.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000017:
----------------------------------
Police_Force - Mean: 4.0, Median: 4.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.90625, Median: 6.0
1st_Road_Number - Mean: 148.87379807692307, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000018:
----------------------------------
Police_Force - Mean: 33.0, Median: 33.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.533333333333333, Median: 4.0
1st_Road_Number - Mean: 503.6, Median: 582.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000019:
---------------------------------
Police_Force - Mean: 32.0, Median: 32.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.650224215246637, Median: 5.0
1st_Road_Number - Mean: 476.9529147982063, Median: 57.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000020:
---------------------------------
Police_Force - Mean: 36.0, Median: 36.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.466819221967963, Median: 5.0
1st_Road_Number - Mean: 534.1784897025171, Median: 605.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000021:
---------------------------------
Police_Force - Mean: 34.0, Median: 34.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.0, Median: 4.0
1st_Road_Number - Mean: 421.75, Median: 538.5
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000023:
---------------------------------
Police_Force - Mean: 12.0, Median: 12.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.586206896551724, Median: 5.0
1st_Road_Number - Mean: 501.8965517241379, Median: 251.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000024:
----------------------------------
Police_Force - Mean: 31.0, Median: 31.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.259958071278826, Median: 6.0
1st_Road_Number - Mean: 105.52830188679245, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000025:
----------------------------------
Police_Force - Mean: 43.0, Median: 43.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.073643410852713, Median: 6.0
1st_Road_Number - Mean: 289.5232558139535, Median: 320.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000027:
----------------------------------
Police_Force - Mean: 52.0, Median: 52.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.792828685258964, Median: 6.0
1st_Road_Number - Mean: 41.05577689243028, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000028:
---------------------------------
Police_Force - Mean: 21.0, Median: 21.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.649635036496351, Median: 5.0
1st_Road_Number - Mean: 194.97080291970804, Median: 73.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000029:
---------------------------------
Police_Force - Mean: 37.0, Median: 37.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.70042194092827, Median: 5.0
1st_Road_Number - Mean: 532.5569620253165, Median: 145.5
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000030:
---------------------------------
Police_Force - Mean: 45.0, Median: 45.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 3.994029850746269, Median: 4.0
1st_Road_Number - Mean: 523.9910447761195, Median: 287.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
---------------------------------
Statistics for E10000031:
---------------------------------
Police_Force - Mean: 23.0, Median: 23.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.96113074204947, Median: 6.0
1st_Road_Number - Mean: 136.57243816254416, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000032:
----------------------------------
Police_Force - Mean: 47.0, Median: 47.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.821522309711286, Median: 6.0
1st_Road_Number - Mean: 492.88188976377955, Median: 0.0
2nd_Road_Class - Mean: 5.973753280839895, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for E10000034:
----------------------------------
Police_Force - Mean: 22.0, Median: 22.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.933333333333334, Median: 6.0
1st_Road_Number - Mean: 105.22592592592592, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for EHEATHROW:
----------------------------------
Police_Force - Mean: 1.0, Median: 1.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 6.0, Median: 6.0
1st_Road_Number - Mean: 0.0, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000001:
----------------------------------
Police_Force - Mean: 60.0, Median: 60.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.5, Median: 4.5
1st_Road_Number - Mean: 2.5, Median: 2.5
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000002:
----------------------------------
Police_Force - Mean: 60.0, Median: 60.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.714285714285714, Median: 6.0
1st_Road_Number - Mean: 2.142857142857143, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000003:
----------------------------------
Police_Force - Mean: 60.0, Median: 60.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.423076923076923, Median: 3.0
1st_Road_Number - Mean: 283.62820512820514, Median: 470.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000004:
----------------------------------
Police_Force - Mean: 60.0, Median: 60.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.05, Median: 3.0
1st_Road_Number - Mean: 350.4, Median: 525.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000005:
----------------------------------
Police_Force - Mean: 60.0, Median: 60.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.23404255319149, Median: 6.0
1st_Road_Number - Mean: 139.4468085106383, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000006:
----------------------------------
Police_Force - Mean: 60.0, Median: 60.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.236363636363636, Median: 6.0
1st_Road_Number - Mean: 135.9090909090909, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000008:
----------------------------------
Police_Force - Mean: 63.0, Median: 63.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.538461538461538, Median: 5.0
1st_Road_Number - Mean: 262.2307692307692, Median: 487.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000010:
----------------------------------
Police_Force - Mean: 63.0, Median: 63.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.705882352941177, Median: 6.0
1st_Road_Number - Mean: 207.7843137254902, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000011:
----------------------------------
Police_Force - Mean: 62.0, Median: 62.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.323943661971831, Median: 6.0
1st_Road_Number - Mean: 75.14788732394366, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000012:
----------------------------------
Police_Force - Mean: 62.0, Median: 62.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.175, Median: 6.0
1st_Road_Number - Mean: 119.7, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000013:
----------------------------------
Police_Force - Mean: 62.0, Median: 62.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.441860465116279, Median: 6.0
1st_Road_Number - Mean: 88.0, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000014:
----------------------------------
Police_Force - Mean: 62.0, Median: 62.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.933333333333334, Median: 6.0
1st_Road_Number - Mean: 1.0666666666666667, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000015:
----------------------------------
Police_Force - Mean: 62.0, Median: 62.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.4324324324324325, Median: 6.0
1st_Road_Number - Mean: 68.88513513513513, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000016:
----------------------------------
Police_Force - Mean: 62.0, Median: 62.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.890909090909091, Median: 6.0
1st_Road_Number - Mean: 17.2, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
```

```
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000018:
----------------------------------
Police_Force - Mean: 61.0, Median: 61.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.338235294117647, Median: 6.0
1st_Road_Number - Mean: 103.69117647058823, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000019:
----------------------------------
Police_Force - Mean: 61.0, Median: 61.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.837837837837838, Median: 6.0
1st_Road_Number - Mean: 25.18918918918919, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000020:
----------------------------------
Police_Force - Mean: 61.0, Median: 61.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.857142857142857, Median: 6.0
1st_Road_Number - Mean: 29.0, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000021:
----------------------------------
Police_Force - Mean: 61.0, Median: 61.0
Accident_Severity - Mean: 3.0, Median: 3.0
```

```
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.0, Median: 6.0
1st_Road_Number - Mean: 14.666666666666666, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000022:
----------------------------------
Police_Force - Mean: 61.0, Median: 61.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 5.8023255813953485, Median: 6.0
1st_Road_Number - Mean: 27.209302325581394, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000023:
----------------------------------
Police_Force - Mean: 63.0, Median: 63.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 4.285714285714286, Median: 3.0
1st_Road_Number - Mean: 276.85714285714283, Median: 483.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
----------------------------------
Statistics for W06000024:
----------------------------------
Police_Force - Mean: 62.0, Median: 62.0
Accident_Severity - Mean: 3.0, Median: 3.0
Number_of_Vehicles - Mean: 2.0, Median: 2.0
Number_of_Casualties - Mean: 1.0, Median: 1.0
1st_Road_Class - Mean: 6.0, Median: 6.0
1st_Road_Number - Mean: 0.0, Median: 0.0
2nd_Road_Class - Mean: 6.0, Median: 6.0
```

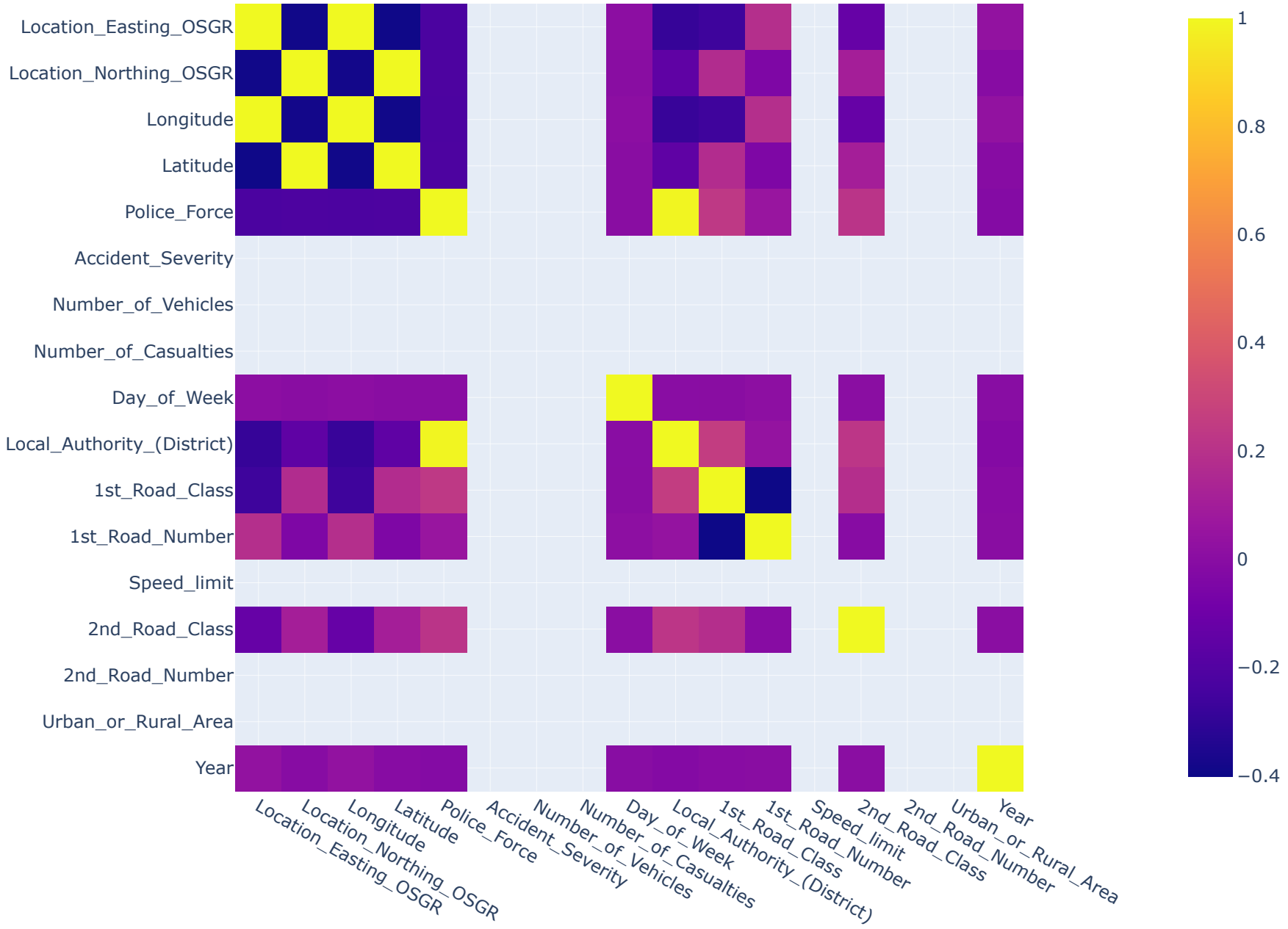
```
2nd_Road_Number - Mean: 0.0, Median: 0.0
Speed_limit - Mean: 30.0, Median: 30.0
```

In [36]:
```
finalDF.corr()
```

Out[36]:

	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Vehicl
Location_Easting_OSGR	1.000000	-0.391284	0.999786	-0.396755	-0.227497	NaN	Na
Location_Northing_OSGR	-0.391284	1.000000	-0.384939	0.999962	-0.221444	NaN	Na
Longitude	0.999786	-0.384939	1.000000	-0.390440	-0.224209	NaN	Na
Latitude	-0.396755	0.999962	-0.390440	1.000000	-0.220901	NaN	Na
Police_Force	-0.227497	-0.221444	-0.224209	-0.220901	1.000000	NaN	Na
Accident_Severity	NaN	NaN	NaN	NaN	NaN	NaN	Na
Number_of_Vehicles	NaN	NaN	NaN	NaN	NaN	NaN	Na
Number_of_Casualties	NaN	NaN	NaN	NaN	NaN	NaN	Na
Day_of_Week	0.004820	-0.003244	0.004743	-0.003275	-0.003718	NaN	Na
Local_Authority_(District)	-0.288372	-0.158429	-0.284760	-0.157605	0.988353	NaN	Na
1st_Road_Class	-0.266669	0.166330	-0.263737	0.167456	0.229450	NaN	Na
1st_Road_Number	0.180513	-0.045752	0.180573	-0.047238	0.049947	NaN	Na
Speed_limit	NaN	NaN	NaN	NaN	NaN	NaN	Na
2nd_Road_Class	-0.132798	0.101679	-0.130861	0.101933	0.208119	NaN	Na
2nd_Road_Number	NaN	NaN	NaN	NaN	NaN	NaN	Na
Urban_or_Rural_Area	NaN	NaN	NaN	NaN	NaN	NaN	Na
Year	0.029416	-0.011485	0.029289	-0.011633	-0.022043	NaN	Na

In [37]:
```
fig = px.imshow(finalDF.corr())
fig.update_layout(width=900, height=700)
fig.show()
```

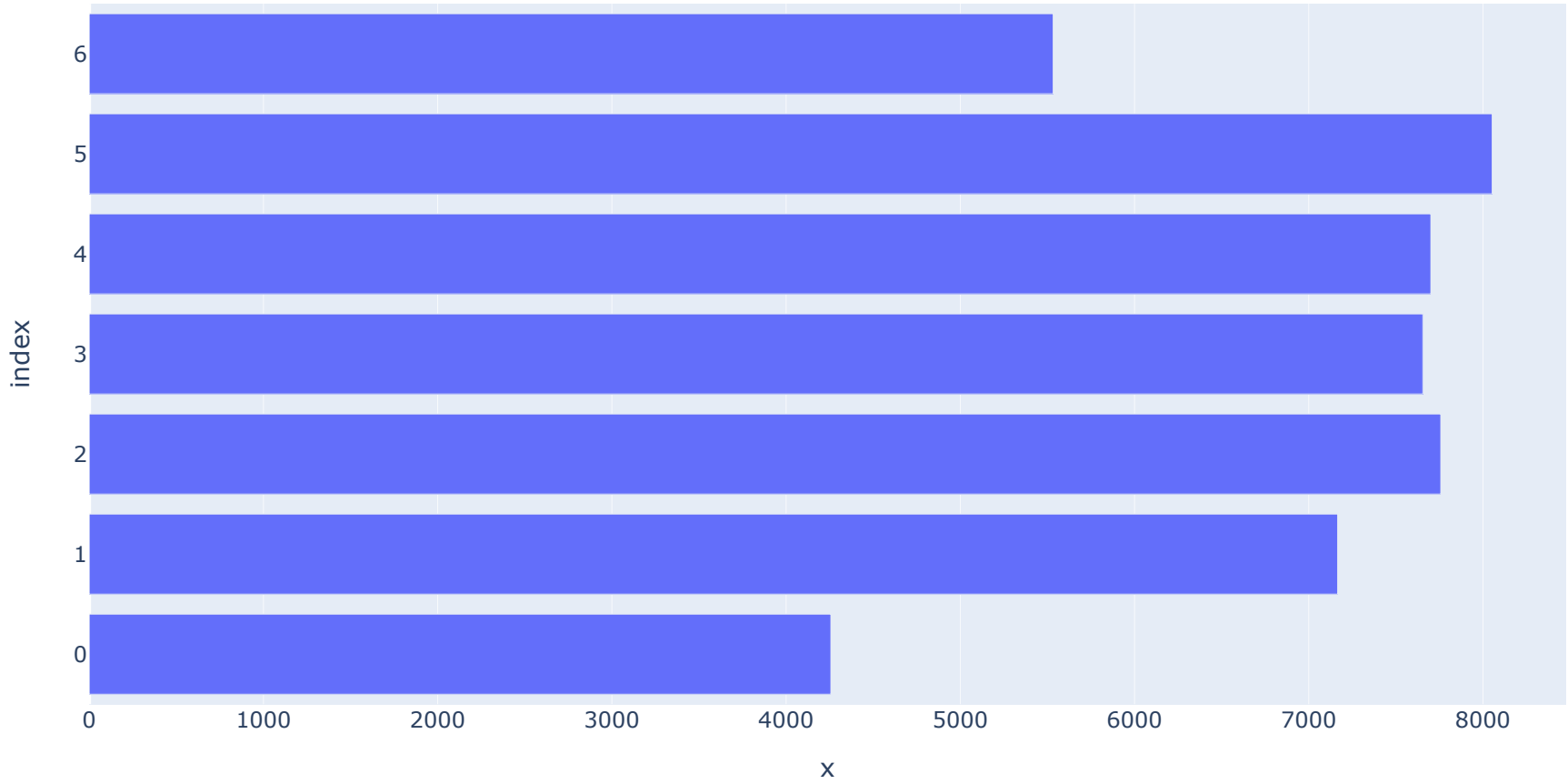

Location_Easting_OSGR
Location_Northing_OSGR
Longitude
Latitude
Police_Force
Accident_Severity
Number_of_Vehicles
Number_of_Casualties
Day_of_Week
Local_Authority_(District)
1st_Road_Class
1st_Road_Number
Speed_limit
2nd_Road_Class
2nd_Road_Number
Urban_or_Rural_Area
Year
1
0.8
0.6
0.4
0.2
0
−0.2
−0.4

In [38]:
```
dayofWeek = pd.DataFrame(finalDF.groupby('Day_of_Week')['Accident_Index'].count()).reset_index()
dayofWeek
```

Out[38]:

	Day_of_Week	Accident_Index
0	1	4257
1	2	7166
2	3	7758
3	4	7655
4	5	7701
5	6	8053
6	7	5533

In [39]:
```
px.bar(dayofWeek['Day_of_Week'], dayofWeek['Accident_Index'])
```

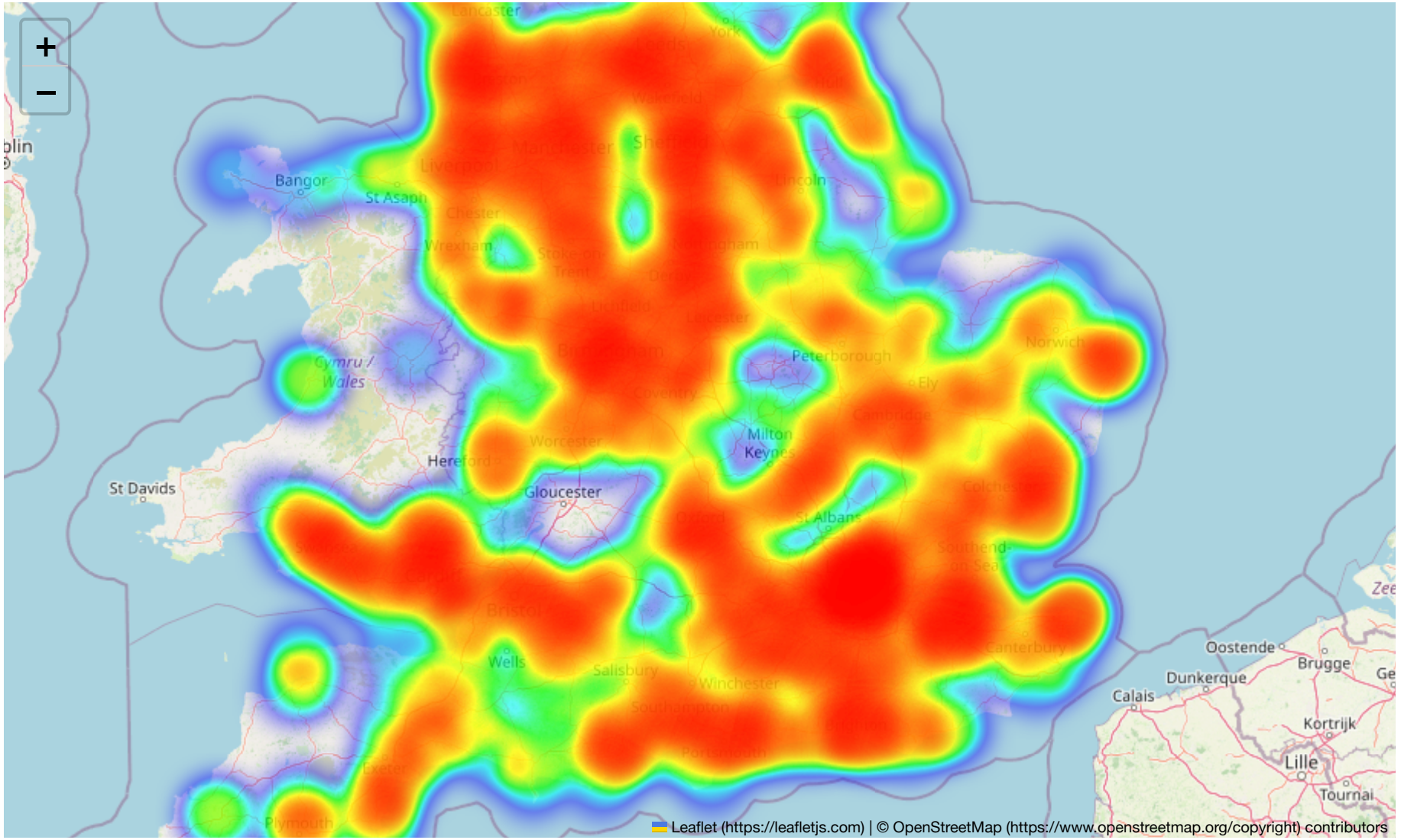


In [40]:
```
# Heat Map of Areas
import numpy as np
import folium
import folium.plugins as plugins
```

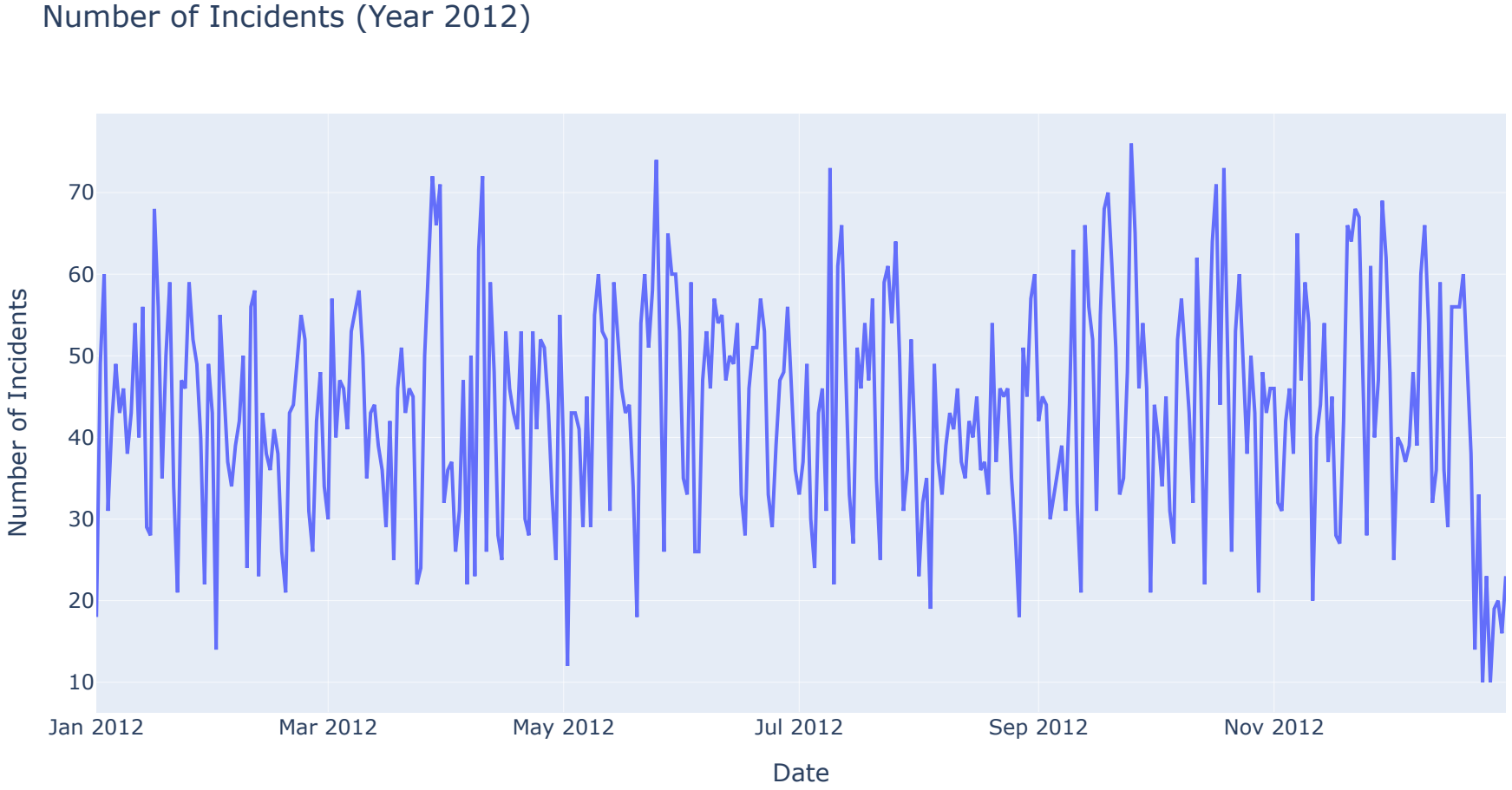
In [41]:
```
finalDF['Location'] = finalDF['Latitude'].astype(str) + ', ' + finalDF['Longitude'].astype(str)

locationMean = pd.DataFrame(finalDF['Location'].value_counts())
locationMean.reset_index(inplace=True)
locationMean[['Latitude', 'Longitude']] = locationMean['index'].str.split(', ', expand=True)
locationMean.rename(columns={'Location': 'Number of Incidents'}, inplace=True)

del locationMean['index']
locationMean[['Latitude', 'Longitude']] = locationMean[['Latitude', 'Longitude']].apply(pd.to_numeric)

location = locationMean['Latitude'].mean(), locationMean['Longitude'].mean()
data_heat = locationMean[['Latitude','Longitude','Number of Incidents']].values.tolist()
```

In [42]:
```
m = folium.Map(location=location, zoom_start=7)
plugins.HeatMap(data_heat).add_to(m)
m
```

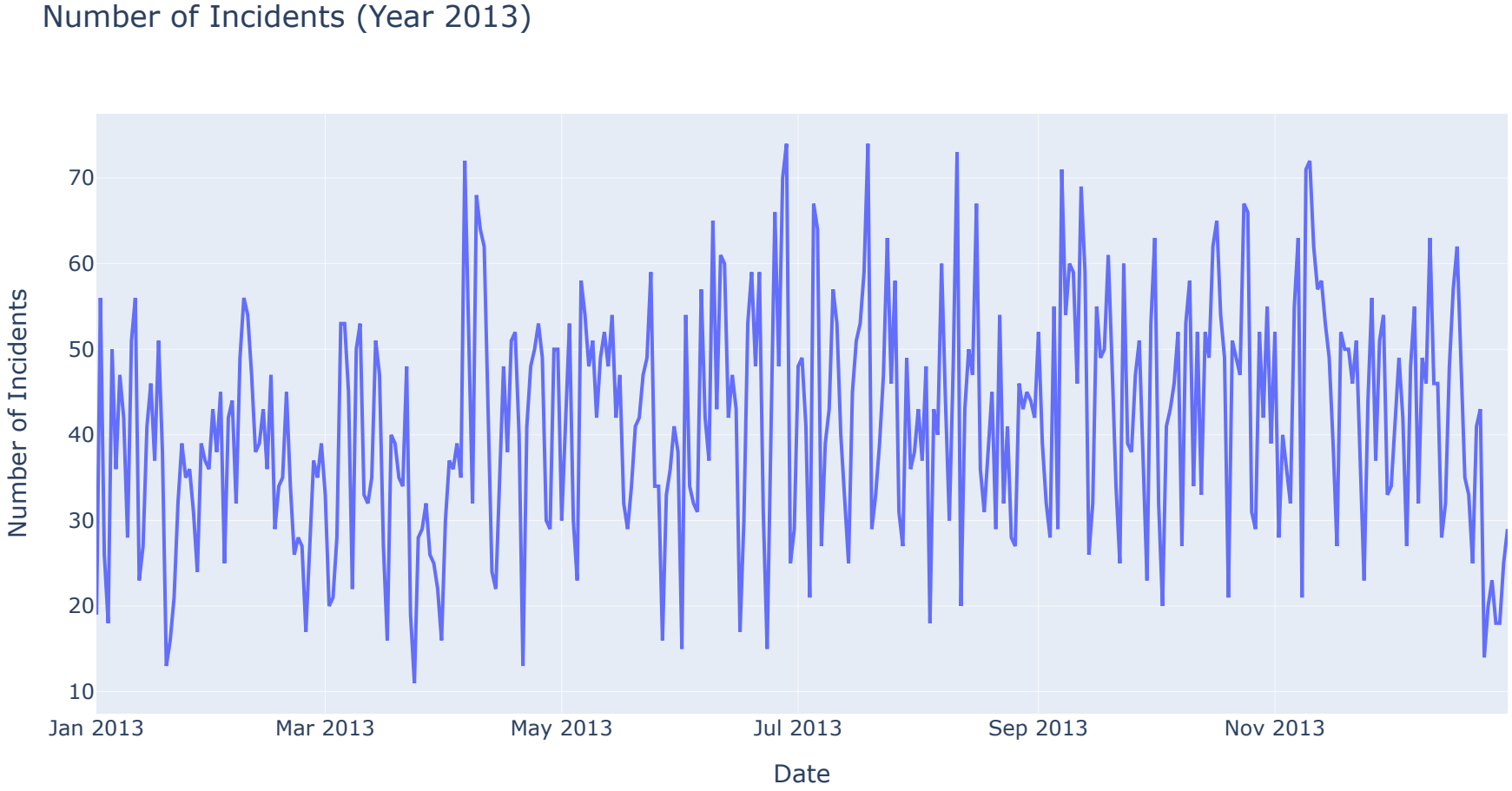
Out[42]:



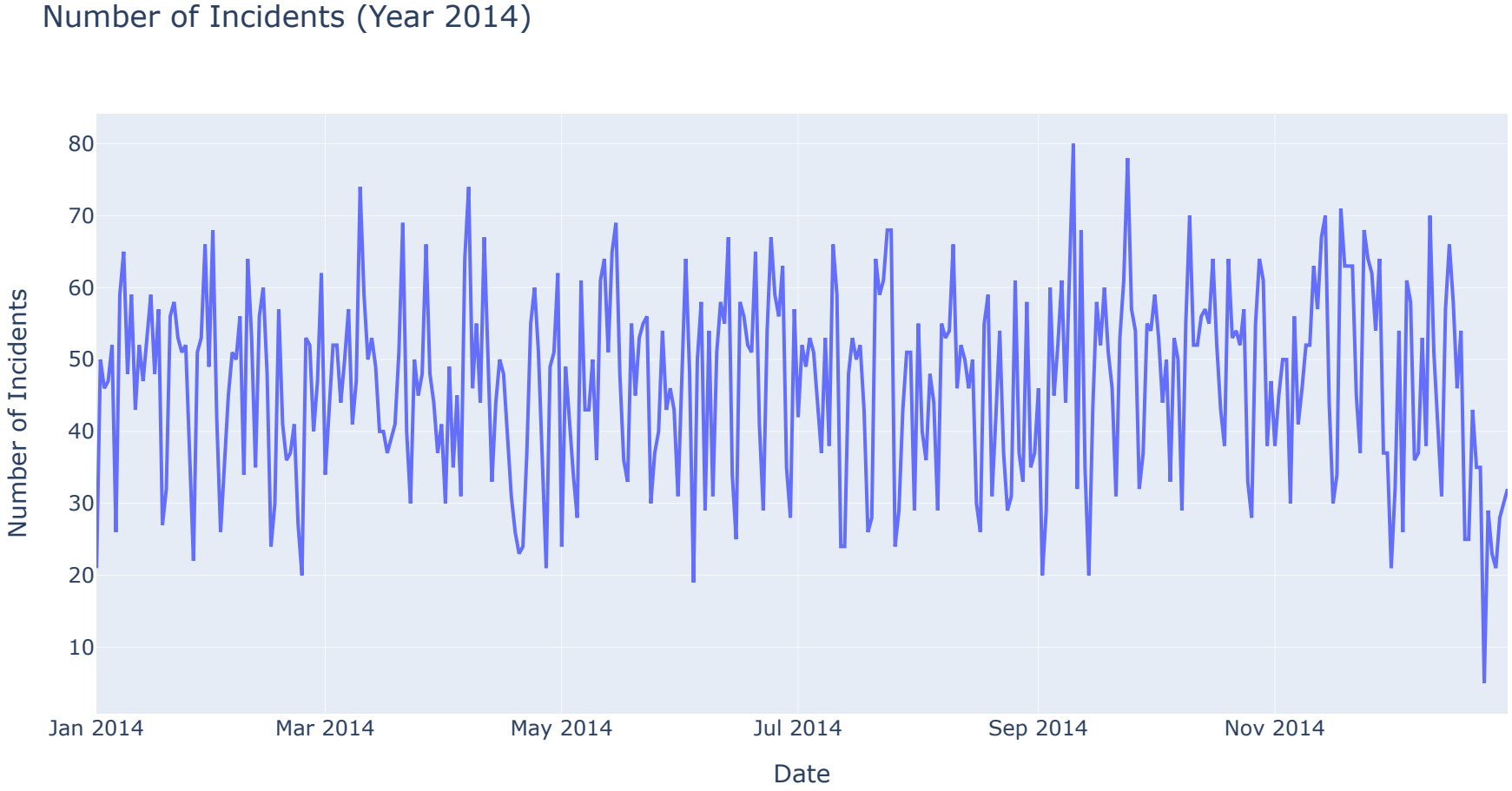
In [43]:
```
# Year Wise : 2012
sampData = finalDF[finalDF['Year']==2012]
samp = pd.DataFrame(sampData['Date'].value_counts())
samp.reset_index(inplace=True)
samp.sort_values(by='index', inplace=True)
samp['index'] = samp['index'].astype('str')
samp.rename(columns={'index': 'Date', 'Date':'Number of Incidents'}, inplace=True)

fig = px.line(samp, x="Date", y="Number of Incidents", title='Number of Incidents (Year 2012)')
fig.show()
```


Number of Incidents (Year 2012)
Number of Incidents
70
60
50
40
30
20
10
Jan 2012
Mar 2012
May 2012
Jul 2012
Sep 2012
Nov 2012
Date

In [44]:
```
# Year Wise : 2013
sampData = finalDF[finalDF['Year']==2013]
samp = pd.DataFrame(sampData['Date'].value_counts())
samp.reset_index(inplace=True)
samp.sort_values(by='index', inplace=True)
samp['index'] = samp['index'].astype('str')
samp.rename(columns={'index': 'Date', 'Date':'Number of Incidents'}, inplace=True)

fig = px.line(samp, x="Date", y="Number of Incidents", title='Number of Incidents (Year 2013)')
fig.show()
```

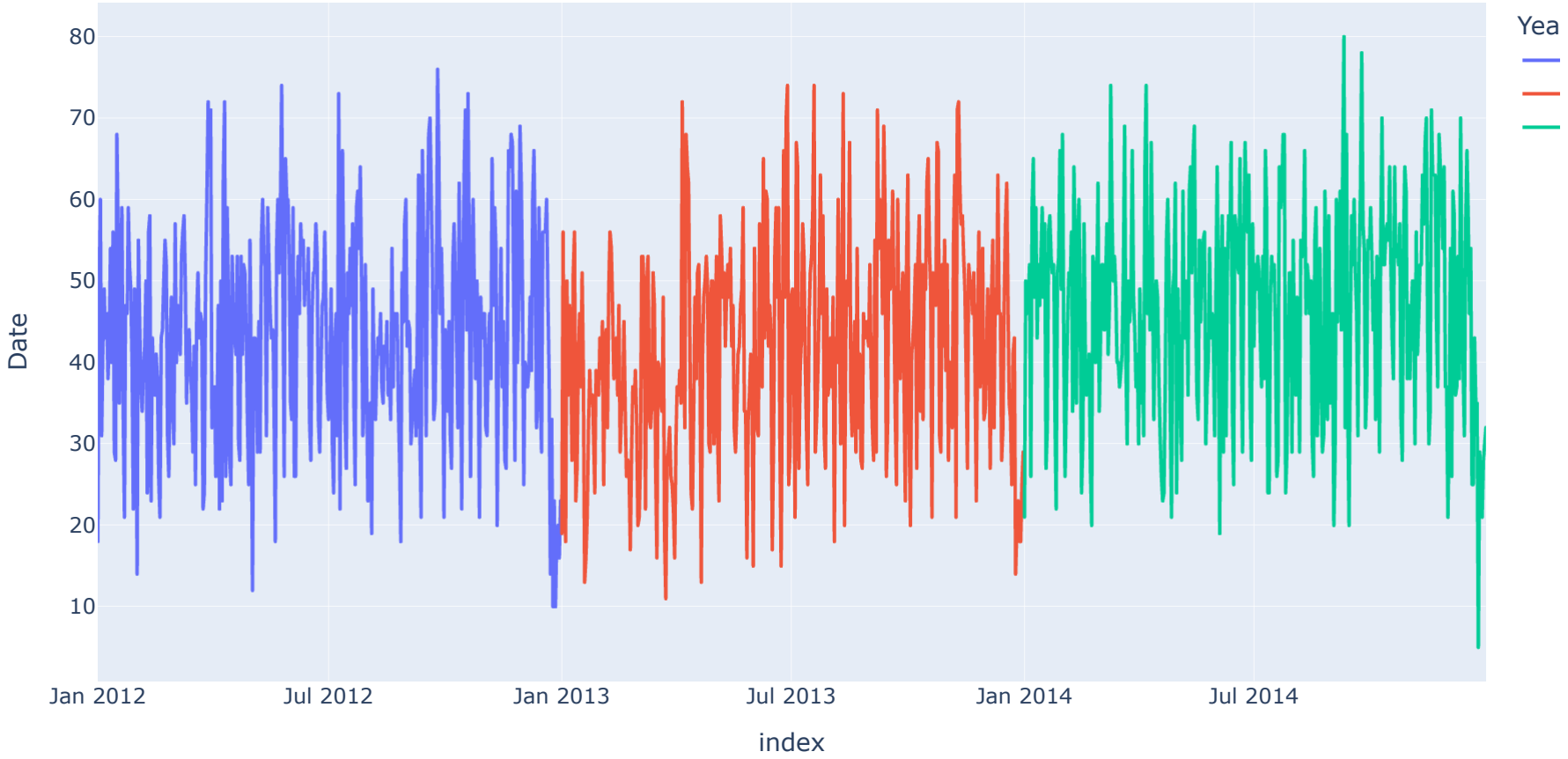

Number of Incidents (Year 2013)
Number of Incidents
70
60
50
40
30
20
10
Jan 2013
Mar 2013
May 2013
Jul 2013
Sep 2013
Nov 2013
Date

In [45]:
```
# Year Wise : 2014
sampData = finalDF[finalDF['Year']==2014]
samp = pd.DataFrame(sampData['Date'].value_counts())
samp.reset_index(inplace=True)
samp.sort_values(by='index', inplace=True)
samp['index'] = samp['index'].astype('str')
samp.rename(columns={'index': 'Date', 'Date':'Number of Incidents'}, inplace=True)

fig = px.line(samp, x="Date", y="Number of Incidents", title='Number of Incidents (Year 2014)')
fig.show()
```

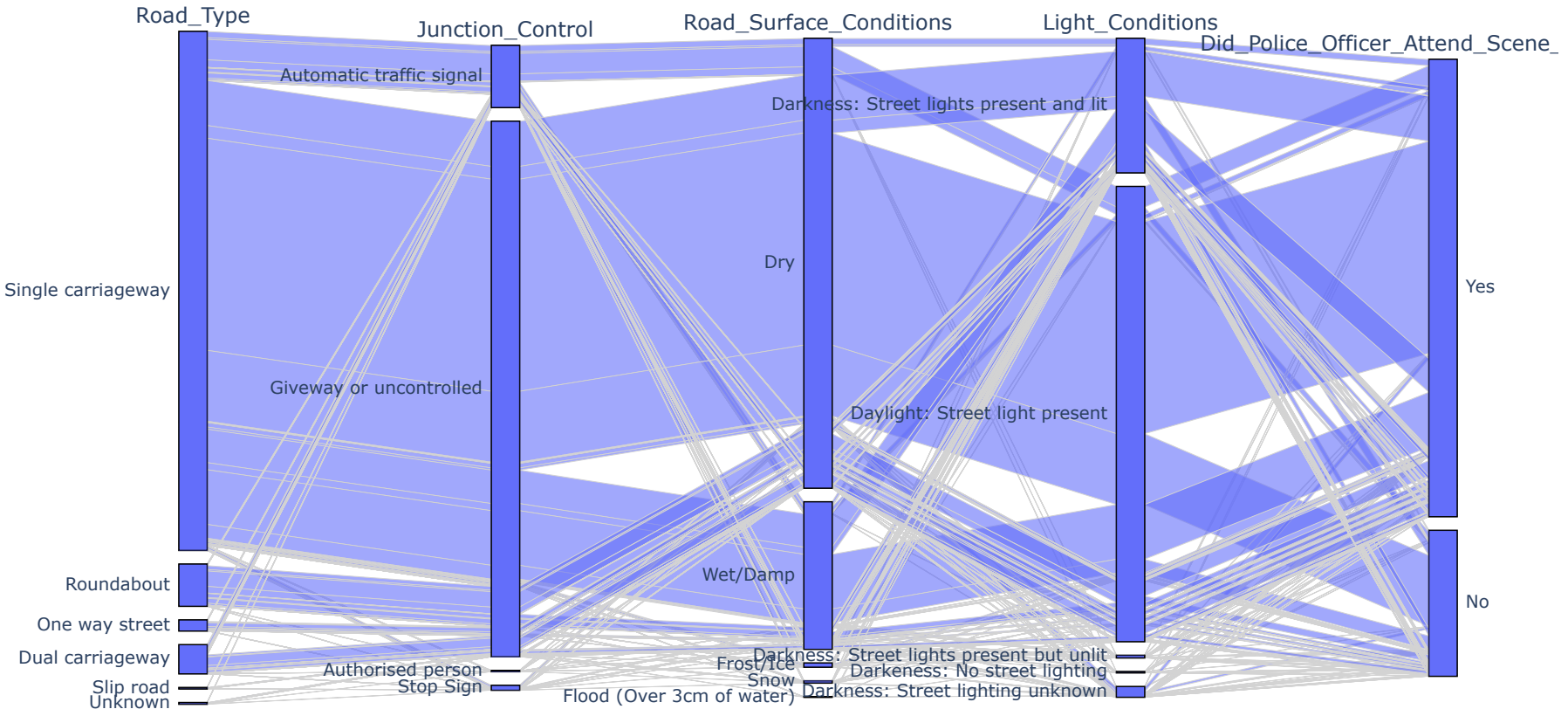

Number of Incidents (Year 2014)
Number of Incidents
80
70
60
50
40
30
20
10
Jan 2014
Mar 2014
May 2014
Jul 2014
Sep 2014
Nov 2014
Date

In [46]:
```
samp2 = pd.DataFrame(finalDF['Date'].value_counts())
samp2.reset_index(inplace=True)
samp2.sort_values(by='index', inplace=True)

samp2['index'] = pd.to_datetime(samp2['index'])
samp2['Year'] = samp2['index'].dt.year

print(samp2)

fig = px.line(samp2, x="index", y="Date", color='Year')
fig.show()
```

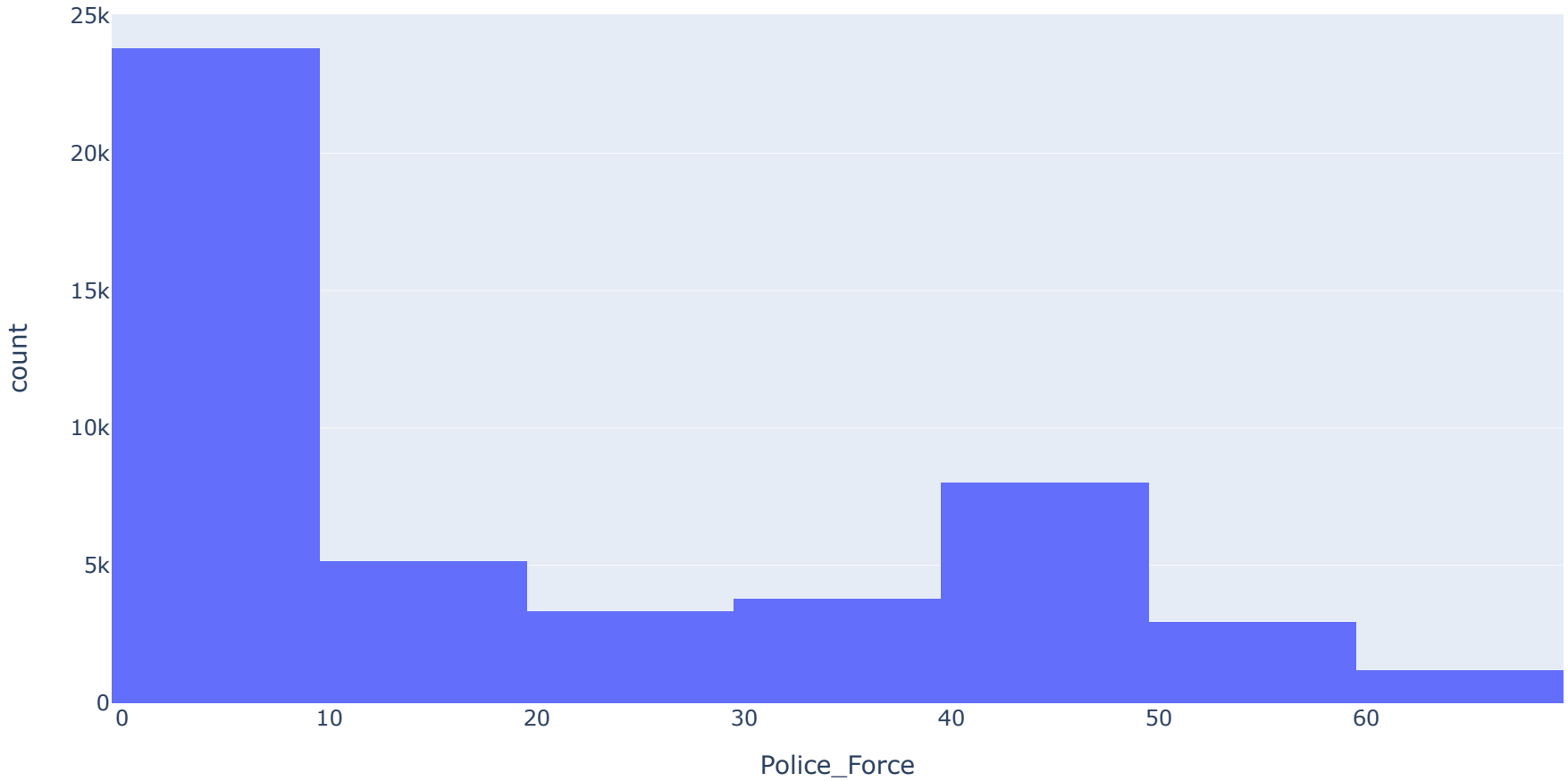
```
          index  Date  Year
1071 2012-01-01    18  2012
428  2012-01-02    49  2012
121  2012-01-03    60  2012
880  2012-01-04    31  2012
629  2012-01-05    42  2012
...         ...   ...   ...
1030 2014-12-27    23  2014
1055 2014-12-28    21  2014
960  2014-12-29    28  2014
914  2014-12-30    30  2014
854  2014-12-31    32  2014

[1096 rows x 3 columns]
```


Yea
Date
80
70
60
50
40
30
20
10
Jan 2012
Jul 2012
Jan 2013
Jul 2013
Jan 2014
Jul 2014
index

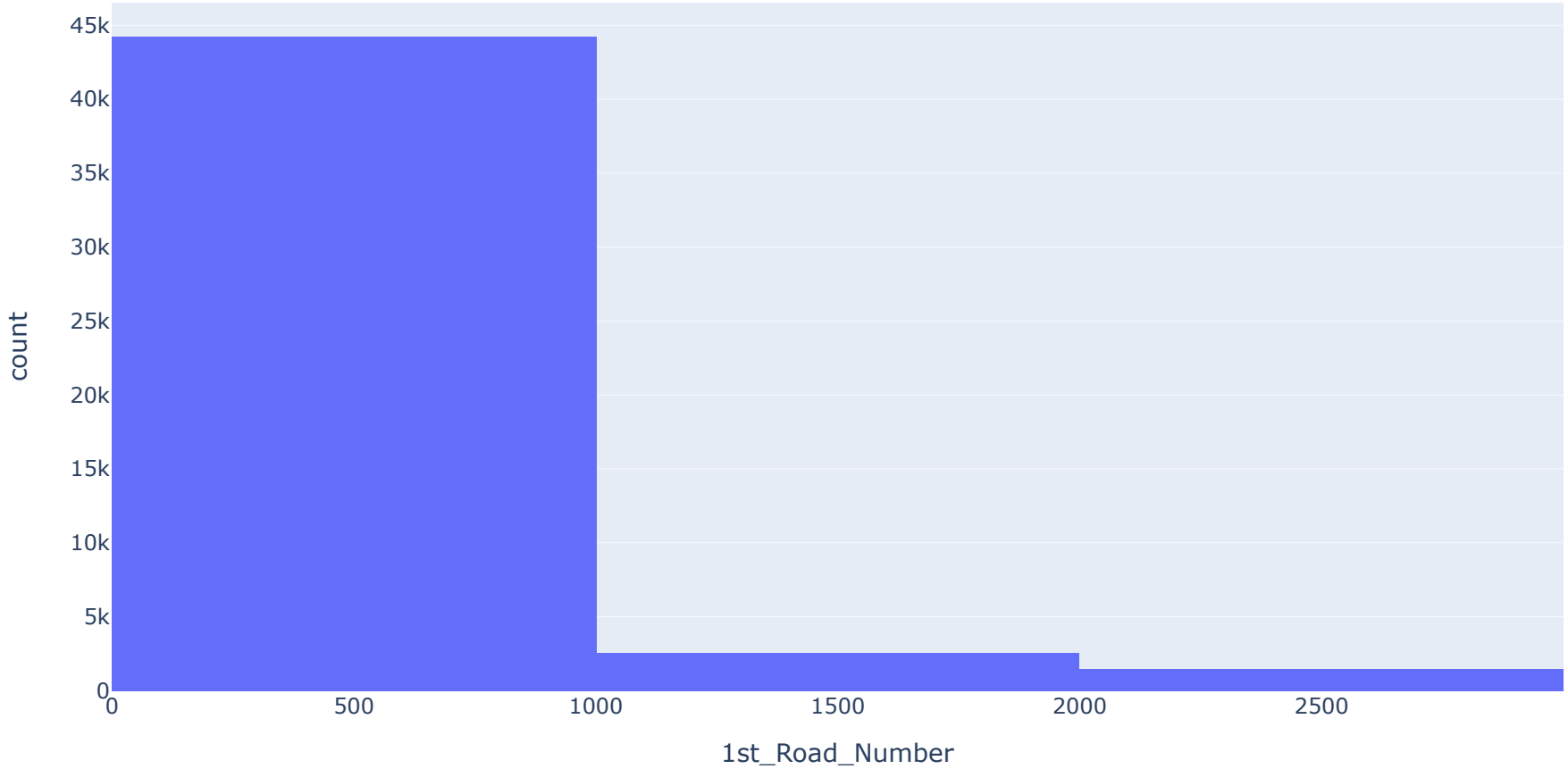
In [47]:
```
df_categorical = finalDF.select_dtypes(include=['category', 'object'])
df_categorical_LIMITED = df_categorical[['Road_Type', 'Junction_Control', 'Road_Surface_Conditions',
                'Light_Conditions', 'Did_Police_Officer_Attend_Scene_of_Accident']]

fig = px.parallel_categories(df_categorical_LIMITED)
fig.show()
```



In [48]:
```
fig = px.histogram(finalDF, x=finalDF['Police_Force'], nbins=7)
fig.show()
```



In [49]:
```
fig = px.histogram(finalDF, x=finalDF['1st_Road_Number'], nbins=5)
fig.show()
```



In [50]:
```
finalDF.head()
```

Out[50]:

	Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Vehicles	Nu
0	201201BS70001	527200	178760	-0.169101	51.493429	1	3	2	
1	201201BS70002	524930	181430	-0.200838	51.517931	1	3	2	
7	201201BS70008	524010	182080	-0.213862	51.523975	1	3	2	
8	201201BS70010	527710	179290	-0.161567	51.498077	1	3	2	
9	201201BS70011	525120	180060	-0.198587	51.505576	1	3	2	

In [51]:
```
for i in finalDF.columns:
    print('-------------------------')
    print('Column: ', i)
    print('-------------------------')
    print(finalDF[i].unique())
    print('Total Count of Unique Values: ', finalDF[i].nunique())
```

```
--------------------------
Column:  Accident_Index
--------------------------
['201201BS70001' '201201BS70002' '201201BS70008' ... '201463DP07014'
 '201463DP18514' '201463DP22014']
Total Count of Unique Values:  35484
--------------------------
Column:  Location_Easting_OSGR
--------------------------
[527200 524930 524010 ... 310510 278700 309530]
Total Count of Unique Values:  26737
--------------------------
Column:  Location_Northing_OSGR
--------------------------
[178760 181430 182080 ... 220160 210340 290790]
Total Count of Unique Values:  26007
--------------------------
Column:  Longitude
--------------------------
[-0.169101 -0.200838 -0.213862 ... -3.318886 -3.759722 -3.334419]
Total Count of Unique Values:  43793
--------------------------
Column:  Latitude
--------------------------
[51.493429 51.517931 51.523975 ... 52.510315 51.7785   52.507444]
Total Count of Unique Values:  43423
--------------------------
Column:  Police_Force
--------------------------
[ 1 48  3  4  5  6  7 10 11 12 13 14 16 17 20 21 22 23 30 31 32 33 34 35
 36 37 40 42 43 44 45 46 47 50 52 54 55 60 61 62 63]
Total Count of Unique Values:  41
--------------------------
Column:  Accident_Severity
--------------------------
[3]
Total Count of Unique Values:  1
--------------------------
Column:  Number_of_Vehicles
--------------------------
[2]
```

```
Total Count of Unique Values:  1
--------------------------
Column:  Number_of_Casualties
--------------------------
[1]
Total Count of Unique Values:  1
--------------------------
Column:  Date
--------------------------
['2012-01-19T00:00:00.000000000' '2012-04-01T00:00:00.000000000'
 '2012-07-01T00:00:00.000000000' ... '2014-12-14T00:00:00.000000000'
 '2014-02-19T00:00:00.000000000' '2014-12-25T00:00:00.000000000']
Total Count of Unique Values:  1096
--------------------------
Column:  Day_of_Week
--------------------------
[5 4 7 2 1 6 3]
Total Count of Unique Values:  7
--------------------------
Column:  Time
--------------------------
['20:35' '17:00' '11:29' ... '02:01' '05:31' '02:48']
Total Count of Unique Values:  1362
--------------------------
Column:  Local_Authority_(District)
--------------------------
[ 12   1  11 570   5   2  28   3   4  31  25  27  17  57  13  14  16  15
   9  10   8  20   7   6  19  29  30  18  32  24  23  22  21  26  62  63
  65  60  64  61  74  71  76  79  85  73  84  83  70  75  80  72  77  82
  91  93  95  90  92 102 107 110 109 100 114 112 101 106 104 130 129 128
 124 147 148 139 146 169 161 189 182 186 181 187 184 204 203 200 206 202
 211 210 213 215 233 232 231 228 240 241 243 245 309 307 303 305 306 302
 300 254 253 250 257 256 255 251 252 258 273 276 277 270 274 278 284 285
 286 290 294 291 293 292 325 329 327 321 320 322 324 323 328 340 344 345
 341 346 347 343 342 350 354 351 352 356 353 355 364 365 367 362 361 382
 390 395 394 393 392 391 404 406 402 400 407 401 405 416 412 414 410 411
 413 415 420 424 421 462 451 450 460 456 453 454 461 455 463 459 452 458
 457 476 484 482 483 481 485 471 492 502 500 497 491 499 496 493 498 495
 490 494 505 501 518 513  38 517 511 514 516  40 512 510 515 532 535 533
 544 541 531 530 542 538 543 540 536 539 563 558 560 565 555 552 564 562
 551 554 557 559 556 596 582 588 581 583 587 585 589 580 586 610 608 607
 606 609 612 601 611 605 635 633 643 640 641 644 646 647 642 721 724 723
```

```
 725 722 733 730 731 734 732 741 746 745 744 740 743 742 751 750 753 185
 368 366 384 470 473 474 475 472 584 645 720 180 386 477]
Total Count of Unique Values:  320
--------------------------
Column:  Local_Authority_(Highway)
--------------------------
['E09000020' 'E09000033' 'E09000013' 'E09000001' 'E09000030' 'E09000007'
 'E09000005' 'E09000019' 'E09000012' 'E09000014' 'E09000018' 'E09000009'
 'E09000025' 'EHEATHROW' 'E09000031' 'E09000026' 'E09000002' 'E09000016'
 'E09000022' 'E09000032' 'E09000028' 'E09000008' 'E09000023' 'E09000011'
 'E09000006' 'E09000015' 'E09000003' 'E09000004' 'E09000010' 'E09000027'
 'E09000021' 'E09000024' 'E09000029' 'E09000017' 'E10000006' 'E10000017'
 'E06000009' 'E06000008' 'E08000012' 'E08000014' 'E08000015' 'E08000011'
 'E08000013' 'E08000003' 'E08000006' 'E08000008' 'E08000007' 'E08000001'
 'E08000010' 'E08000009' 'E08000002' 'E08000005' 'E08000004' 'E06000050'
 'E06000049' 'E06000007' 'E06000006' 'E08000021' 'E08000022' 'E06000048'
 'E08000020' 'E06000047' 'E06000005' 'E06000014' 'E10000023' 'E08000035'
 'E08000034' 'E08000032' 'E08000036' 'E08000033' 'E08000017' 'E08000016'
 'E08000018' 'E08000019' 'E06000012' 'E06000013' 'E06000011' 'E06000010'
 'E06000001' 'E06000003' 'E06000002' 'E06000004' 'E08000031' 'E08000030'
 'E08000027' 'E08000028' 'E08000029' 'E08000026' 'E08000025' 'E10000028'
 'E06000021' 'E10000034' 'E06000020' 'E06000019' 'E06000051' 'E10000031'
 'E10000007' 'E06000015' 'E10000024' 'E06000018' 'E10000019' 'E06000016'
 'E10000018' 'E10000021' 'E10000003' 'E06000031' 'E10000020' 'E10000029'
 'E06000055' 'E06000056' 'E06000032' 'E06000034' 'E10000012' 'E06000033'
 'E10000002' 'E10000025' 'E06000037' 'E10000014' 'E06000045' 'E06000044'
 'E06000046' 'E10000030' 'E10000016' 'E06000035' 'E10000032' 'E06000043'
 'E10000011' 'E06000052' 'E10000008' 'E06000026' 'E06000027' 'E10000027'
 'E06000025' 'E06000023' 'E06000022' 'E06000024' 'E06000054' 'E06000030'
 'E06000029' 'E06000028' 'E10000009' 'W06000003' 'W06000005' 'W06000004'
 'W06000006' 'W06000002' 'W06000022' 'W06000019' 'W06000018' 'W06000020'
 'W06000021' 'W06000015' 'W06000014' 'W06000011' 'W06000016' 'W06000013'
 'W06000012' 'W06000024' 'W06000010' 'W06000008' 'W06000023' 'E06000017'
 'E06000036' 'E06000039' 'E06000040' 'E06000041' 'E06000038' 'W06000001']
Total Count of Unique Values:  168
--------------------------
Column:  1st_Road_Class
--------------------------
[3 4 6 5 2 1]
Total Count of Unique Values:  6
--------------------------
Column:  1st_Road_Number
```

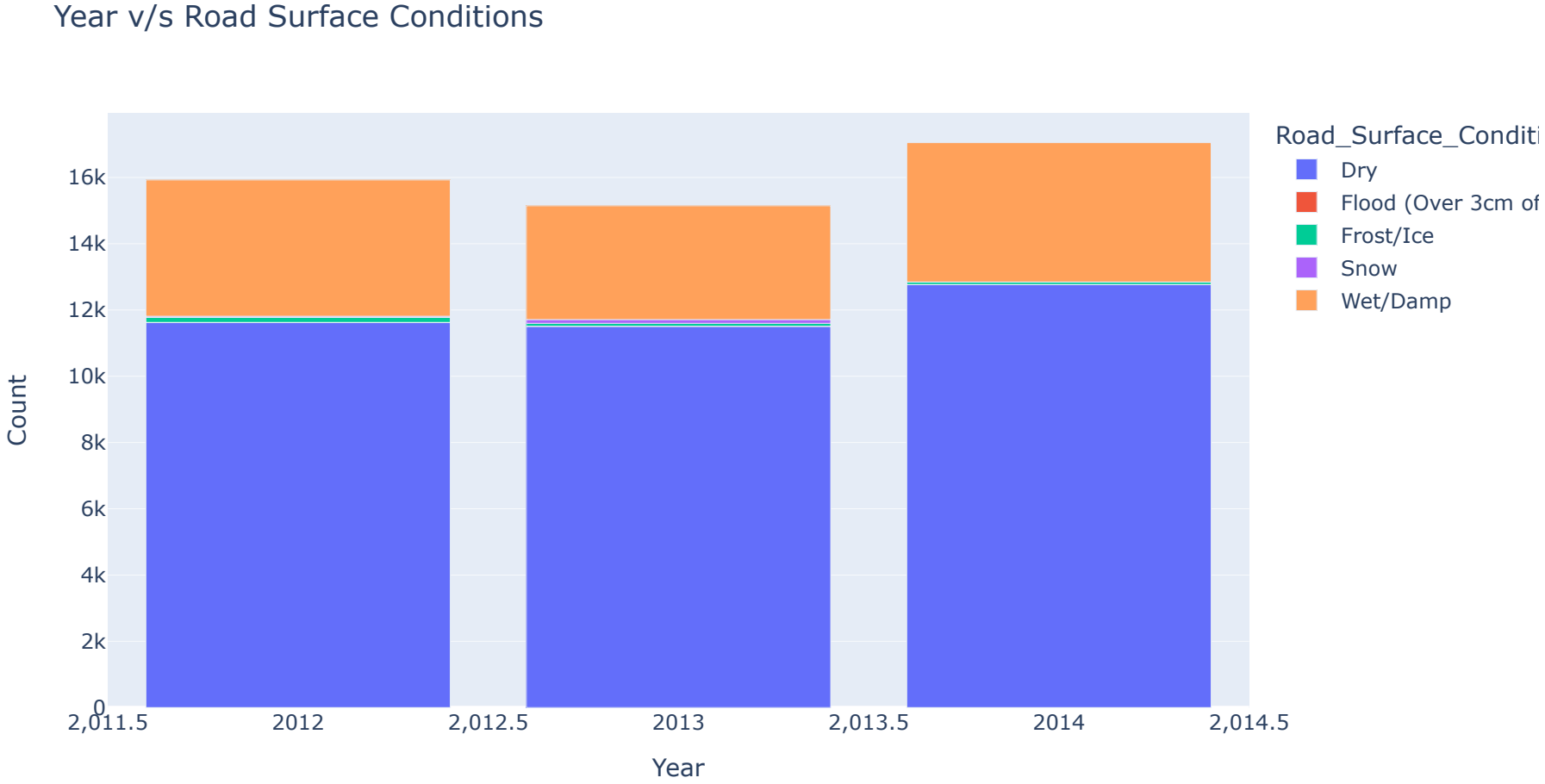
```
--------------------------
[ 308  412  450 ... 2136 2233  163]
Total Count of Unique Values:  1190
--------------------------
Column:  Road_Type
--------------------------
['Single carriageway' 'Roundabout' 'One way street' 'Dual carriageway'
 'Slip road' 'Unknown']
Total Count of Unique Values:  6
--------------------------
Column:  Speed_limit
--------------------------
[30]
Total Count of Unique Values:  1
--------------------------
Column:  Junction_Control
--------------------------
['Automatic traffic signal' 'Giveway or uncontrolled' 'Authorised person'
 'Stop Sign']
Total Count of Unique Values:  4
--------------------------
Column:  2nd_Road_Class
--------------------------
[5 6]
Total Count of Unique Values:  2
--------------------------
Column:  2nd_Road_Number
--------------------------
[0]
Total Count of Unique Values:  1
--------------------------
Column:  Pedestrian_Crossing-Human_Control
--------------------------
['None within 50 metres' 'Control by school crossing patrol'
 'Control by other authorised person']
Total Count of Unique Values:  3
--------------------------
Column:  Pedestrian_Crossing-Physical_Facilities
--------------------------
['Pedestrian phase at traffic signal junction'
 'No physical crossing within 50 meters' 'Zebra crossing'
 'non-junction pedestrian crossing' 'Central refuge'
```

```
 'Footbridge or subway']
Total Count of Unique Values:  6
--------------------------
Column:  Light_Conditions
--------------------------
['Darkness: Street lights present and lit'
 'Daylight: Street light present'
 'Darkness: Street lights present but unlit'
 'Darkeness: No street lighting' 'Darkness: Street lighting unknown']
Total Count of Unique Values:  5
--------------------------
Column:  Weather_Conditions
--------------------------
['Fine without high winds' 'Raining without high winds' 'Other'
 'Fine with high winds' 'Unknown' 'Raining with high winds'
 'Snowing without high winds' 'Fog or mist' 'Snowing with high winds']
Total Count of Unique Values:  9
--------------------------
Column:  Road_Surface_Conditions
--------------------------
['Dry' 'Wet/Damp' 'Frost/Ice' 'Snow' 'Flood (Over 3cm of water)']
Total Count of Unique Values:  5
--------------------------
Column:  Special_Conditions_at_Site
--------------------------
['None' 'Roadworks' 'Auto traffic singal out'
 'Permanent sign or marking defective or obscured'
 'Road surface defective' 'Auto traffic signal partly defective'
 'Ol or diesel' 'Mud']
Total Count of Unique Values:  8
--------------------------
Column:  Carriageway_Hazards
--------------------------
['None' 'Pedestrian in carriageway (not injured)'
 'Dislodged vehicle load in carriageway' 'Other object in carriageway'
 'Involvement with previous accident' 'Any animal (except a ridden horse)']
Total Count of Unique Values:  6
--------------------------
Column:  Urban_or_Rural_Area
--------------------------
[1]
Total Count of Unique Values:  1
```

```
--------------------------
Column:  Did_Police_Officer_Attend_Scene_of_Accident
--------------------------
['Yes' 'No']
Total Count of Unique Values:  2
--------------------------
Column:  LSOA_of_Accident_Location
--------------------------
['E01002821' 'E01004760' 'E01002905' ... 'W01000479' 'W01000502'
 'W01000478']
Total Count of Unique Values:  15877
--------------------------
Column:  Year
--------------------------
[2012 2013 2014]
Total Count of Unique Values:  3
--------------------------
Column:  month
--------------------------
<PeriodArray>
['2012-01', '2012-04', '2012-07', '2012-02', '2012-03', '2012-09', '2012-05',
 '2012-06', '2012-10', '2012-12', '2012-08', '2012-11', '2013-10', '2013-01',
 '2013-06', '2013-05', '2013-08', '2013-02', '2013-12', '2013-03', '2013-07',
 '2013-04', '2013-09', '2013-11', '2014-01', '2014-10', '2014-05', '2014-06',
 '2014-02', '2014-03', '2014-08', '2014-04', '2014-09', '2014-12', '2014-11',
 '2014-07']
Length: 36, dtype: period[M]
Total Count of Unique Values:  36
--------------------------
Column:  Location
--------------------------
['51.493429, -0.169101' '51.517931, -0.200838' '51.523975, -0.213862' ...
 '52.510315, -3.318886' '51.7785, -3.759722' '52.507444, -3.334419']
Total Count of Unique Values:  44817
```

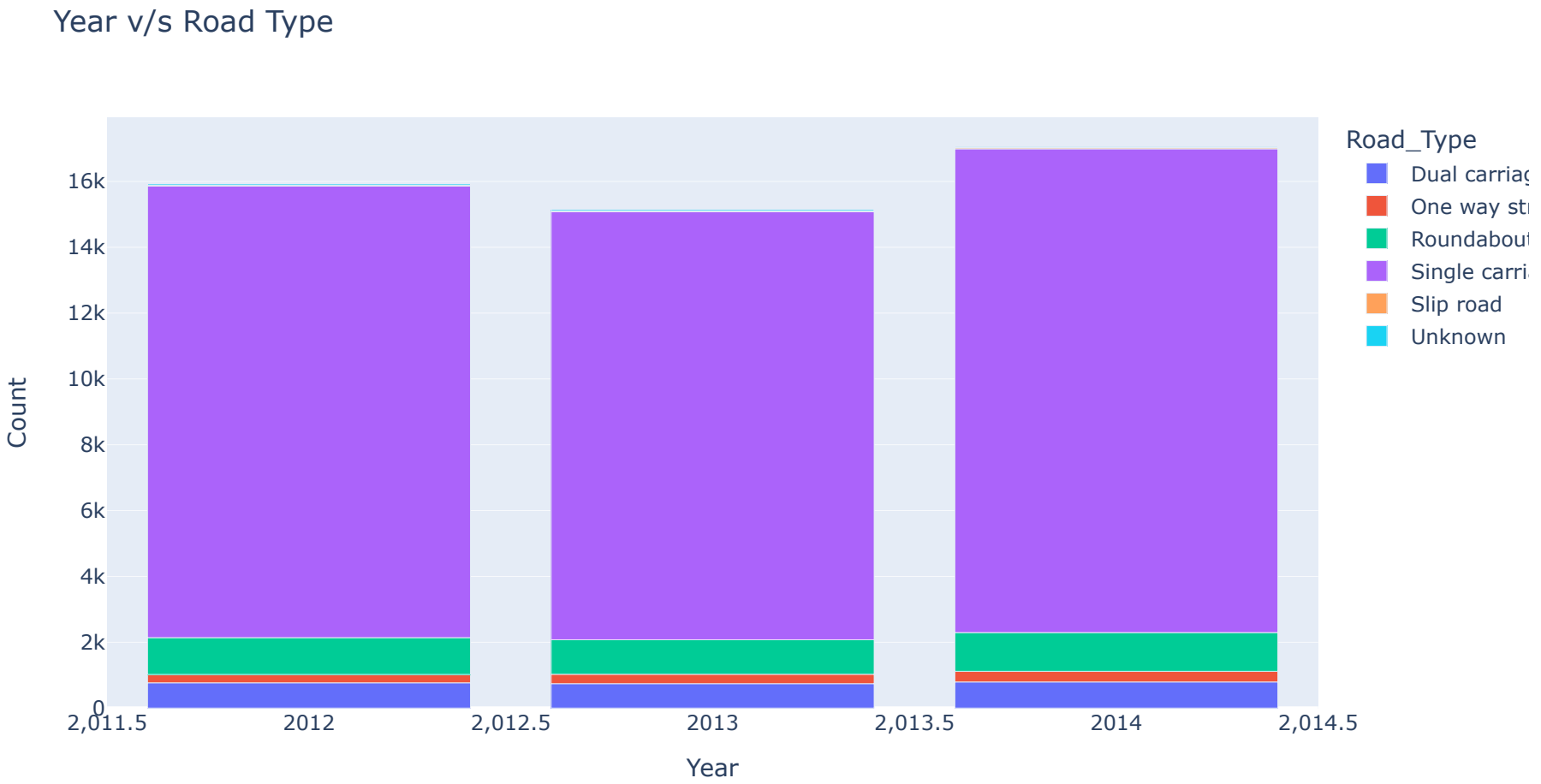
In [52]:
```
groupingYearDF = pd.DataFrame(finalDF.groupby(['Year', 'Road_Surface_Conditions'])
                              ['Road_Surface_Conditions'].count())
groupingYearDF.rename(columns={'Road_Surface_Conditions': 'Count'}, inplace=True)
groupingYearDF.reset_index(inplace=True)

print(groupingYearDF)

fig = px.bar(groupingYearDF, x="Year", y="Count", color="Road_Surface_Conditions", title="Year v/s Road Surfa
fig.show()
```

```
    Year    Road_Surface_Conditions  Count
0   2012                        Dry  11622
1   2012  Flood (Over 3cm of water)      3
2   2012                  Frost/Ice    150
3   2012                       Snow     36
4   2012                   Wet/Damp   4115
5   2013                        Dry  11506
6   2013  Flood (Over 3cm of water)      6
7   2013                  Frost/Ice     86
8   2013                       Snow    114
9   2013                   Wet/Damp   3434
10  2014                        Dry  12763
11  2014  Flood (Over 3cm of water)      7
12  2014                  Frost/Ice     72
13  2014                       Snow      4
14  2014                   Wet/Damp   4205
```


Year v/s Road Surface Conditions
Count
16k
14k
12k
10k
8k
6k
4k
2k
0
2,011.5
2012
2,012.5
2013
2,013.5
2014
2,014.5
Year
Road_Surface_Conditi
Dry
Flood (Over 3cm of
Frost/Ice
Snow
Wet/Damp

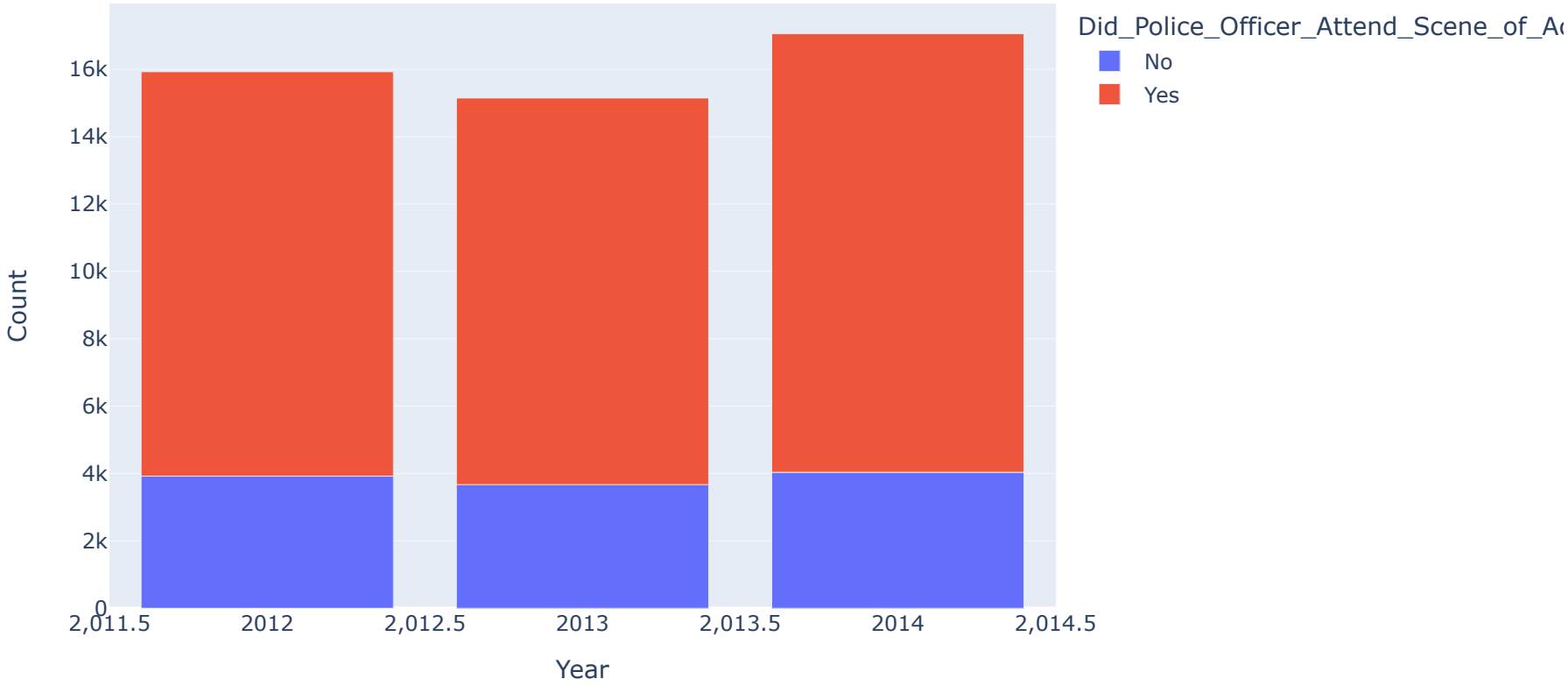
In [53]:
```
groupingYearDF = pd.DataFrame(finalDF.groupby(['Year', 'Road_Type'])
                              ['Road_Type'].count())
groupingYearDF.rename(columns={'Road_Type': 'Count'}, inplace=True)
groupingYearDF.reset_index(inplace=True)

print(groupingYearDF)

fig = px.bar(groupingYearDF, x="Year", y="Count", color="Road_Type", title="Year v/s Road Type")
fig.show()
```

	Year	Road_Type	Count
0	2012	Dual carriageway	768
1	2012	One way street	252
2	2012	Roundabout	1120
3	2012	Single carriageway	13718
4	2012	Slip road	27
5	2012	Unknown	41
6	2013	Dual carriageway	742
7	2013	One way street	285
8	2013	Roundabout	1048
9	2013	Single carriageway	13005
10	2013	Slip road	25
11	2013	Unknown	41
12	2014	Dual carriageway	794
13	2014	One way street	322
14	2014	Roundabout	1177
15	2014	Single carriageway	14698
16	2014	Slip road	34
17	2014	Unknown	26


Year v/s Road Type
Count
16k
14k
12k
10k
8k
6k
4k
2k
0
2,011.5
2012
2,012.5
2013
2,013.5
2014
2,014.5
Year
Road_Type
Dual carriag
One way str
Roundabout
Single carri
Slip road
Unknown

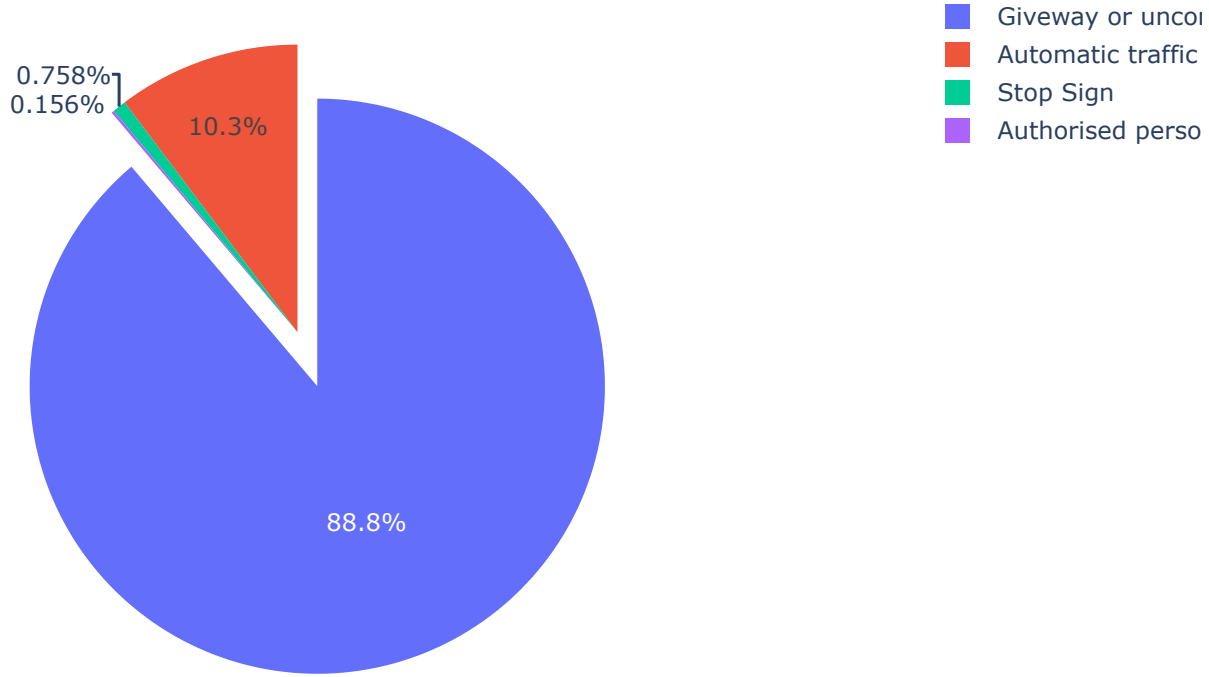
In [54]:
```
groupingYearDF = pd.DataFrame(finalDF.groupby(['Year', 'Did_Police_Officer_Attend_Scene_of_Accident'])
                              ['Did_Police_Officer_Attend_Scene_of_Accident'].count())
groupingYearDF.rename(columns={'Did_Police_Officer_Attend_Scene_of_Accident': 'Count'}, inplace=True)
groupingYearDF.reset_index(inplace=True)

print(groupingYearDF)

fig = px.bar(groupingYearDF, x="Year", y="Count", color="Did_Police_Officer_Attend_Scene_of_Accident", title=
fig.show()
```

```
   Year Did_Police_Officer_Attend_Scene_of_Accident  Count
0  2012                                        No   3922
1  2012                                       Yes  12004
2  2013                                        No   3670
3  2013                                       Yes  11476
4  2014                                        No   4036
5  2014                                       Yes  13015
```


Year v/s Did_Police_Officer_Attend_Scene_of_Accident
Did_Police_Officer_Attend_Scene_of_A
No
Yes
Count
16k
14k
12k
10k
8k
6k
4k
2k
0
2,011.5
2012
2,012.5
2013
2,013.5
2014
2,014.5
Year

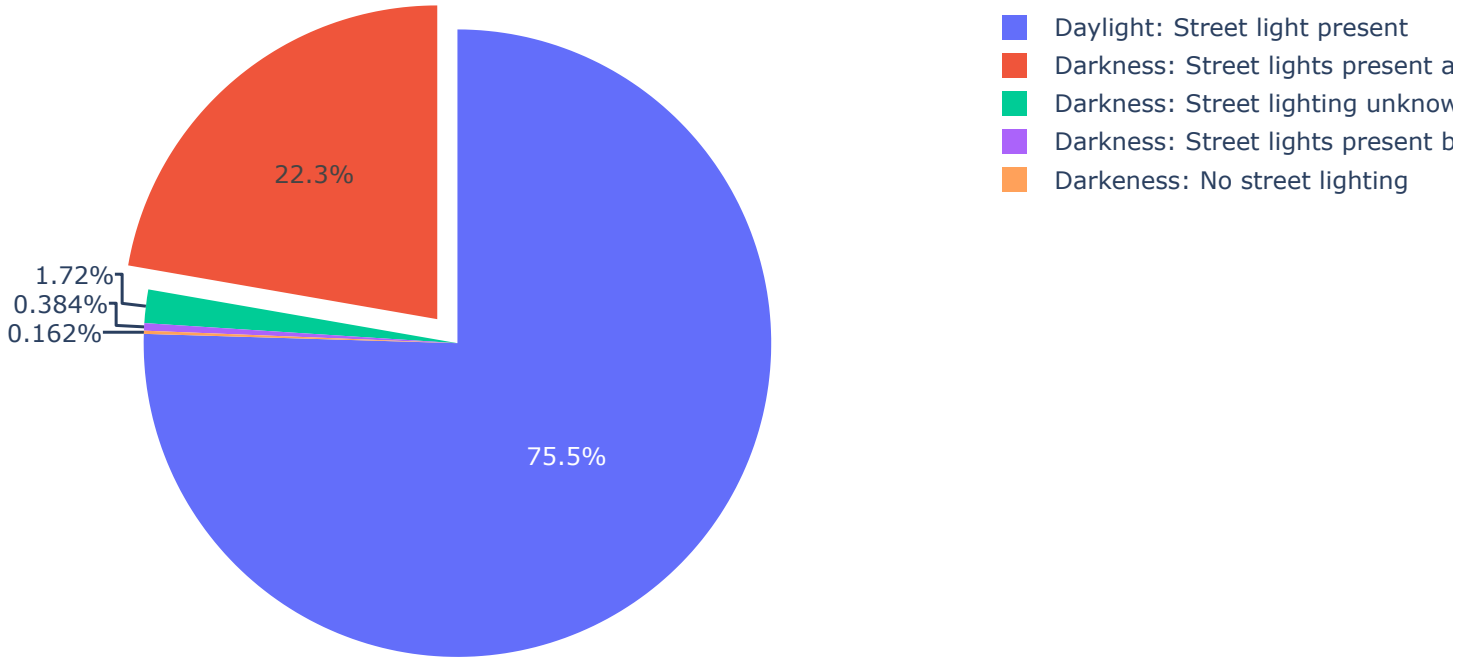
In [55]:
```
groupingYearDF = pd.DataFrame(finalDF.groupby(['Junction_Control'])
                              ['Junction_Control'].count())
groupingYearDF.rename(columns={'Junction_Control': 'Count'}, inplace=True)
groupingYearDF.reset_index(inplace=True)

print(groupingYearDF)

fig = go.Figure(data=[go.Pie(labels=groupingYearDF['Junction_Control'], values=groupingYearDF['Count'], pull=
fig.show()
```

```
           Junction_Control  Count
0         Authorised person     75
1  Automatic traffic signal   4941
2   Giveway or uncontrolled  42742
3                 Stop Sign    365
```


0.758%
0.156%
10.3%
88.8%
Giveway or uncoı
Automatic traffic
Stop Sign
Authorised perso

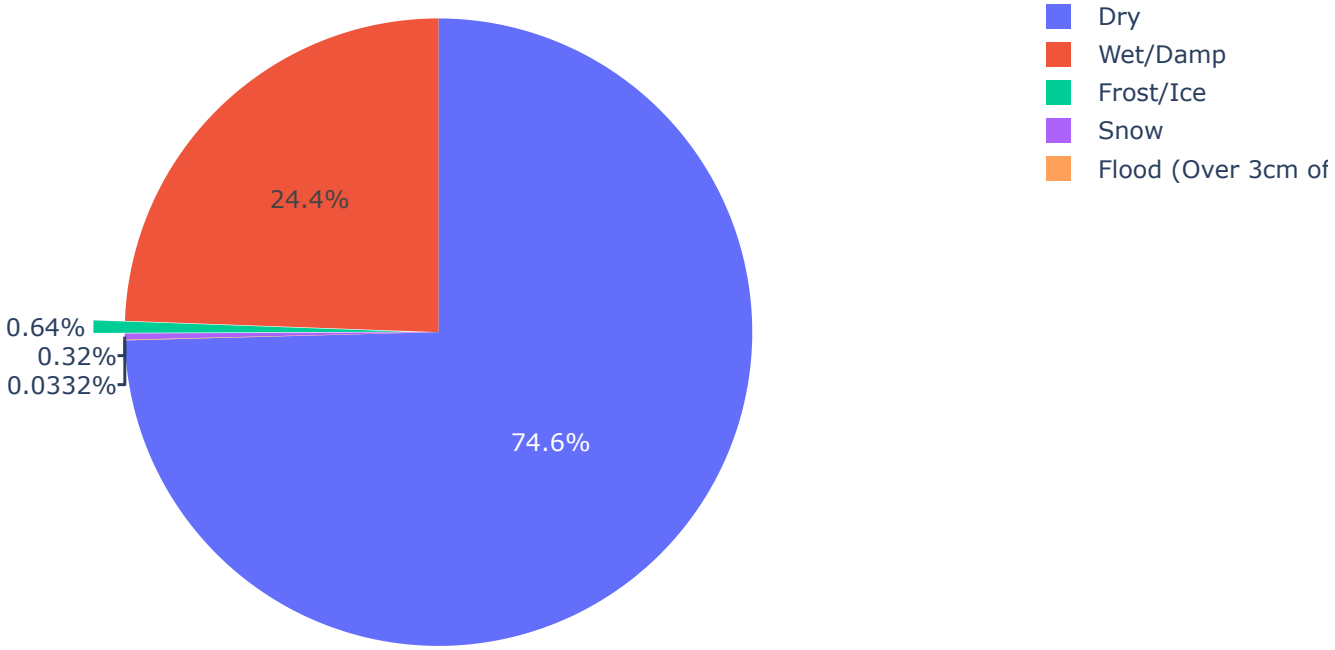
In [56]:
```
groupingYearDF = pd.DataFrame(finalDF.groupby(['Light_Conditions'])
                              ['Light_Conditions'].count())
groupingYearDF.rename(columns={'Light_Conditions': 'Count'}, inplace=True)
groupingYearDF.reset_index(inplace=True)

print(groupingYearDF)

fig = go.Figure(data=[go.Pie(labels=groupingYearDF['Light_Conditions'], values=groupingYearDF['Count'], pull=
fig.show()
```

```
                          Light_Conditions  Count
0             Darkeness: No street lighting     78
1         Darkness: Street lighting unknown    829
2   Darkness: Street lights present and lit  10711
3  Darkness: Street lights present but unlit    185
4            Daylight: Street light present  36320
```

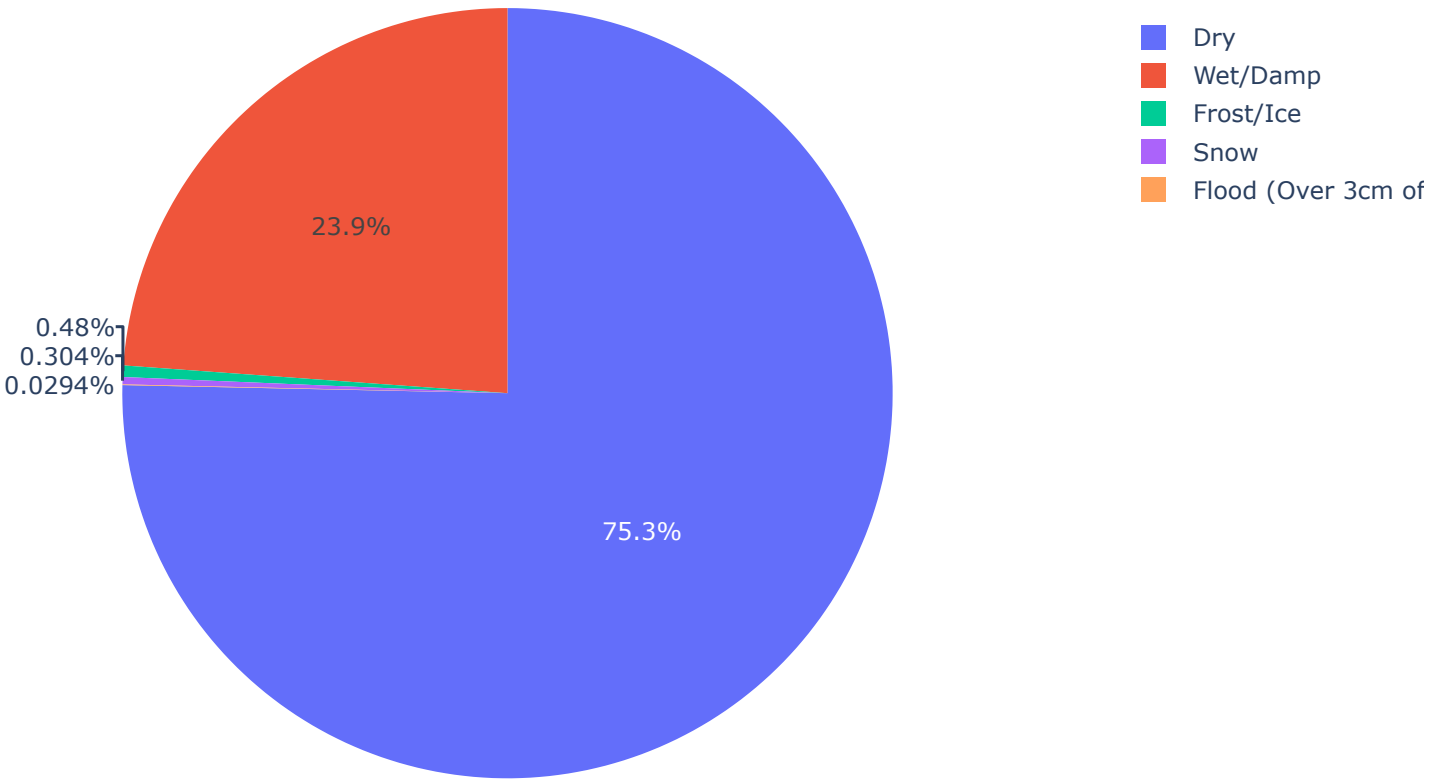

22.3%
1.72%
0.384%
0.162%
75.5%
Daylight: Street light present
Darkness: Street lights present a
Darkness: Street lighting unknow
Darkness: Street lights present b
Darkeness: No street lighting

In [57]:
```
groupingYearDF = pd.DataFrame(finalDF.groupby(['Road_Surface_Conditions'])
                              ['Road_Surface_Conditions'].count())
groupingYearDF.rename(columns={'Road_Surface_Conditions': 'Count'}, inplace=True)
groupingYearDF.reset_index(inplace=True)

print(groupingYearDF)

fig = go.Figure(data=[go.Pie(labels=groupingYearDF['Road_Surface_Conditions'], values=groupingYearDF['Count']
fig.show()
```

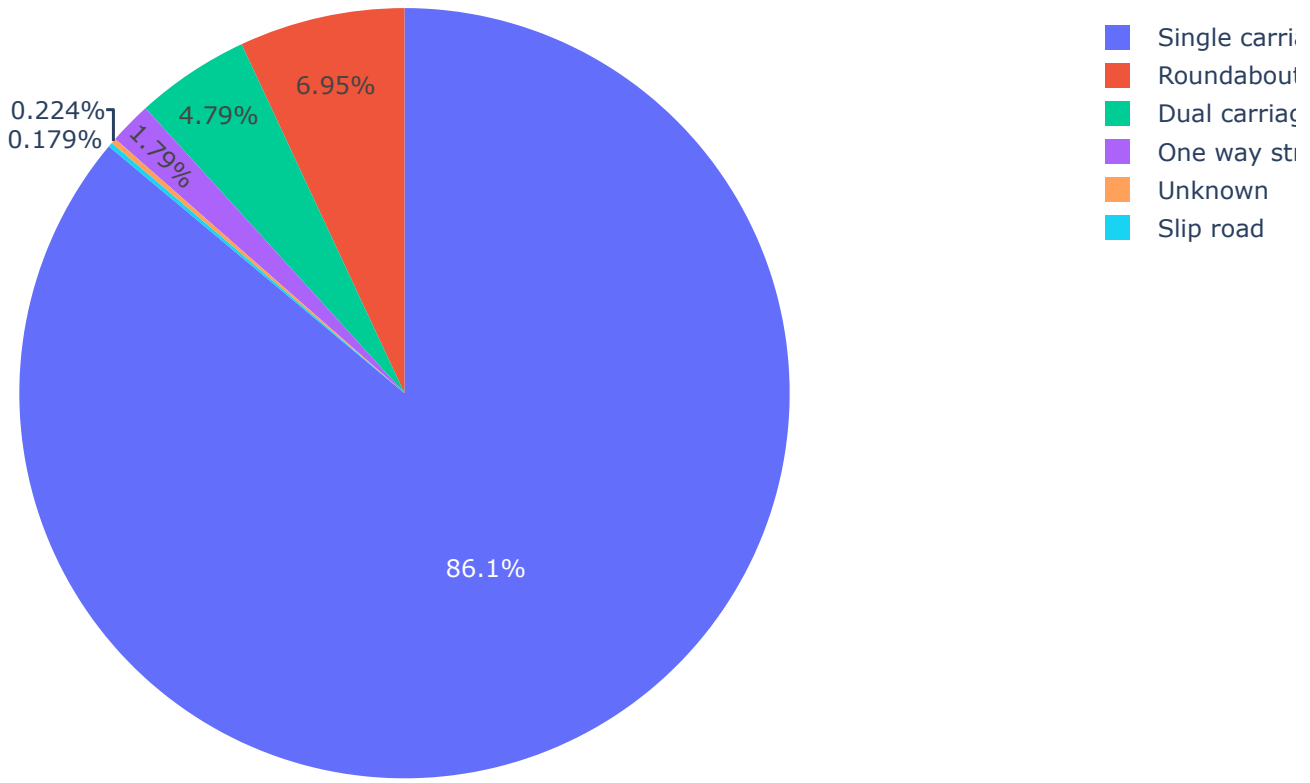
```
     Road_Surface_Conditions  Count
0                        Dry  35891
1  Flood (Over 3cm of water)     16
2                  Frost/Ice    308
3                       Snow    154
4                   Wet/Damp  11754
```


24.4%
0.64%
0.32%
0.0332%
74.6%
Dry
Wet/Damp
Frost/Ice
Snow
Flood (Over 3cm of

In [58]:
```
fig = px.pie(finalDF, values='1st_Road_Number', names='Road_Surface_Conditions')
fig.show()
```



In [59]:
```
fig = px.pie(finalDF, values='Number_of_Vehicles', names='Road_Type')
fig.show()
```



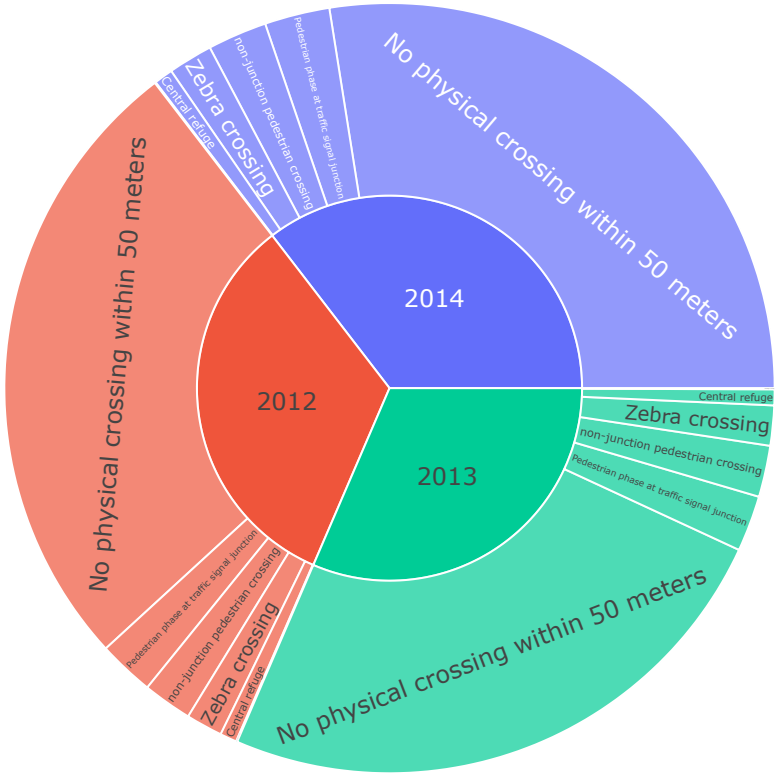
In [60]:
```
finalDF.head()
```

Out[60]:

	Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Vehicles	Nu
0	201201BS70001	527200	178760	-0.169101	51.493429	1	3	2	
1	201201BS70002	524930	181430	-0.200838	51.517931	1	3	2	
7	201201BS70008	524010	182080	-0.213862	51.523975	1	3	2	
8	201201BS70010	527710	179290	-0.161567	51.498077	1	3	2	
9	201201BS70011	525120	180060	-0.198587	51.505576	1	3	2	

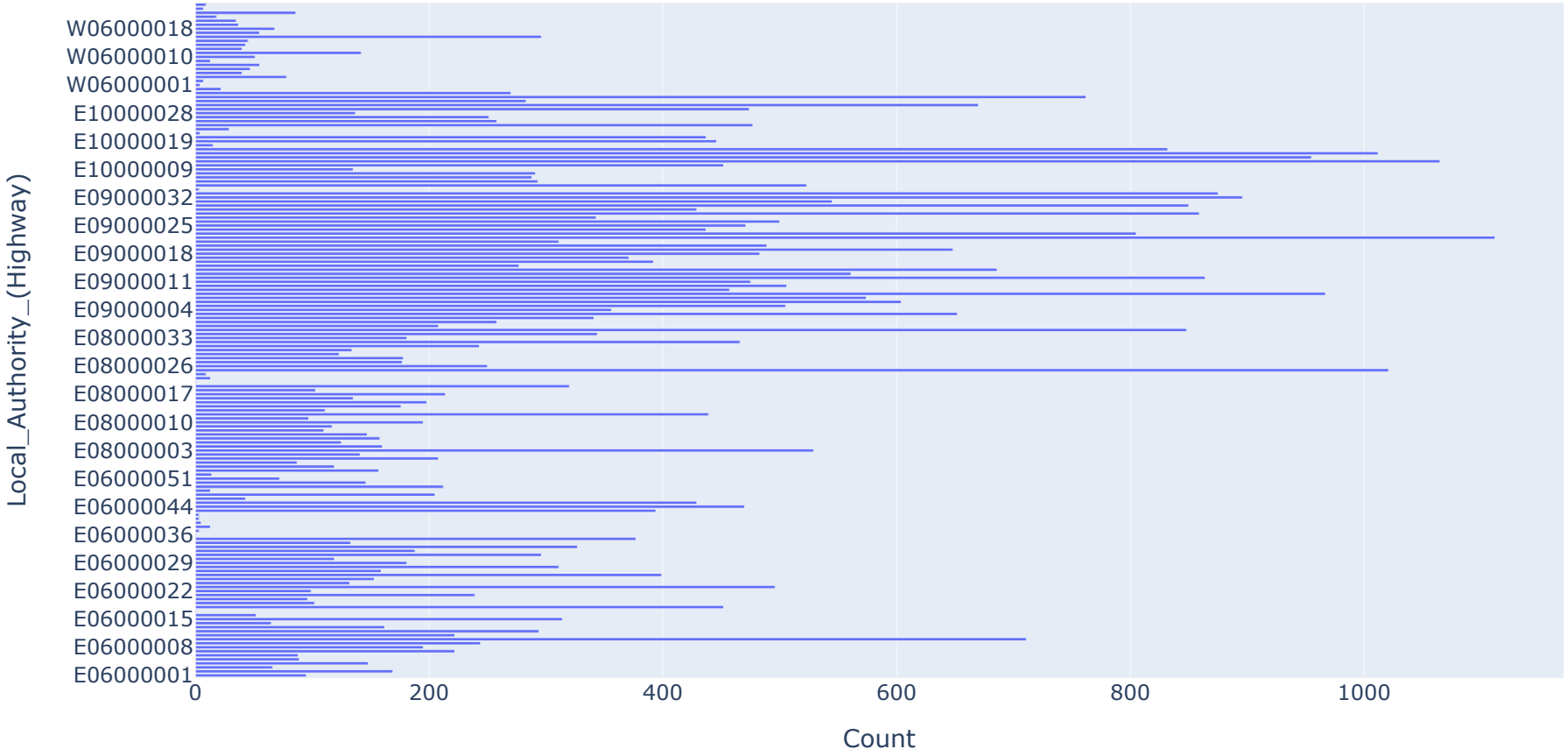
In [61]:
```
groupingYearDF = pd.DataFrame(finalDF.groupby(['Year', 'Pedestrian_Crossing-Physical_Facilities'])
                              ['Pedestrian_Crossing-Physical_Facilities'].count())
groupingYearDF.rename(columns={'Pedestrian_Crossing-Physical_Facilities': 'Count'}, inplace=True)
groupingYearDF.reset_index(inplace=True)

print(groupingYearDF)

fig = px.sunburst(groupingYearDF, path=['Year', 'Pedestrian_Crossing-Physical_Facilities'], values='Count')
fig.show()
```

	Year	Pedestrian_Crossing-Physical_Facilities	Count
0	2012	Central refuge	339
1	2012	Footbridge or subway	22
2	2012	No physical crossing within 50 meters	12697
3	2012	Pedestrian phase at traffic signal junction	1134
4	2012	Zebra crossing	738
5	2012	non-junction pedestrian crossing	996
6	2013	Central refuge	321
7	2013	Footbridge or subway	23
8	2013	No physical crossing within 50 meters	11826
9	2013	Pedestrian phase at traffic signal junction	1130
10	2013	Zebra crossing	808
11	2013	non-junction pedestrian crossing	1038
12	2014	Central refuge	382
13	2014	Footbridge or subway	21
14	2014	No physical crossing within 50 meters	13234
15	2014	Pedestrian phase at traffic signal junction	1315
16	2014	Zebra crossing	899
17	2014	non-junction pedestrian crossing	1200


2014
2012
2013
No physical crossing within 50 meters
Zebra crossing
non-junction pedestrian crossing
Pedestrian phase at traffic signal junction
Central refuge
No physical crossing within 50 meters
Zebra crossing
non-junction pedestrian crossing
Pedestrian phase at traffic signal junction
Central refuge
No physical crossing within 50 meters
Central refuge
Zebra crossing
non-junction pedestrian crossing
Pedestrian phase at traffic signal junction

In [62]:
```
groupingYearDF = pd.DataFrame(finalDF.groupby(['Local_Authority_(Highway)'])
                              ['Local_Authority_(Highway)'].count())
groupingYearDF.rename(columns={'Local_Authority_(Highway)': 'Count'}, inplace=True)
groupingYearDF.reset_index(inplace=True)

print(groupingYearDF)

fig = px.bar(groupingYearDF, x="Count", y="Local_Authority_(Highway)")
fig.show()
```

```
    Local_Authority_(Highway)  Count
0                   E06000001     95
1                   E06000002    169
2                   E06000003     66
3                   E06000004    148
4                   E06000005     89
..                        ...    ...
163                 W06000020     35
164                 W06000021     18
165                 W06000022     86
166                 W06000023      7
167                 W06000024      9

[168 rows x 2 columns]
```


W06000018
W06000010
W06000001
E10000028
E10000019
E10000009
E09000032
E09000025
E09000018
E09000011
E09000004
E08000033
E08000026
E08000017
E08000010
E08000003
E06000051
E06000044
E06000036
E06000029
E06000022
E06000015
E06000008
E06000001
Local_Authority_(Highway)
0
200
400
600
800
1000
Count

In [63]:
```
finalDF
```

Out[63]:

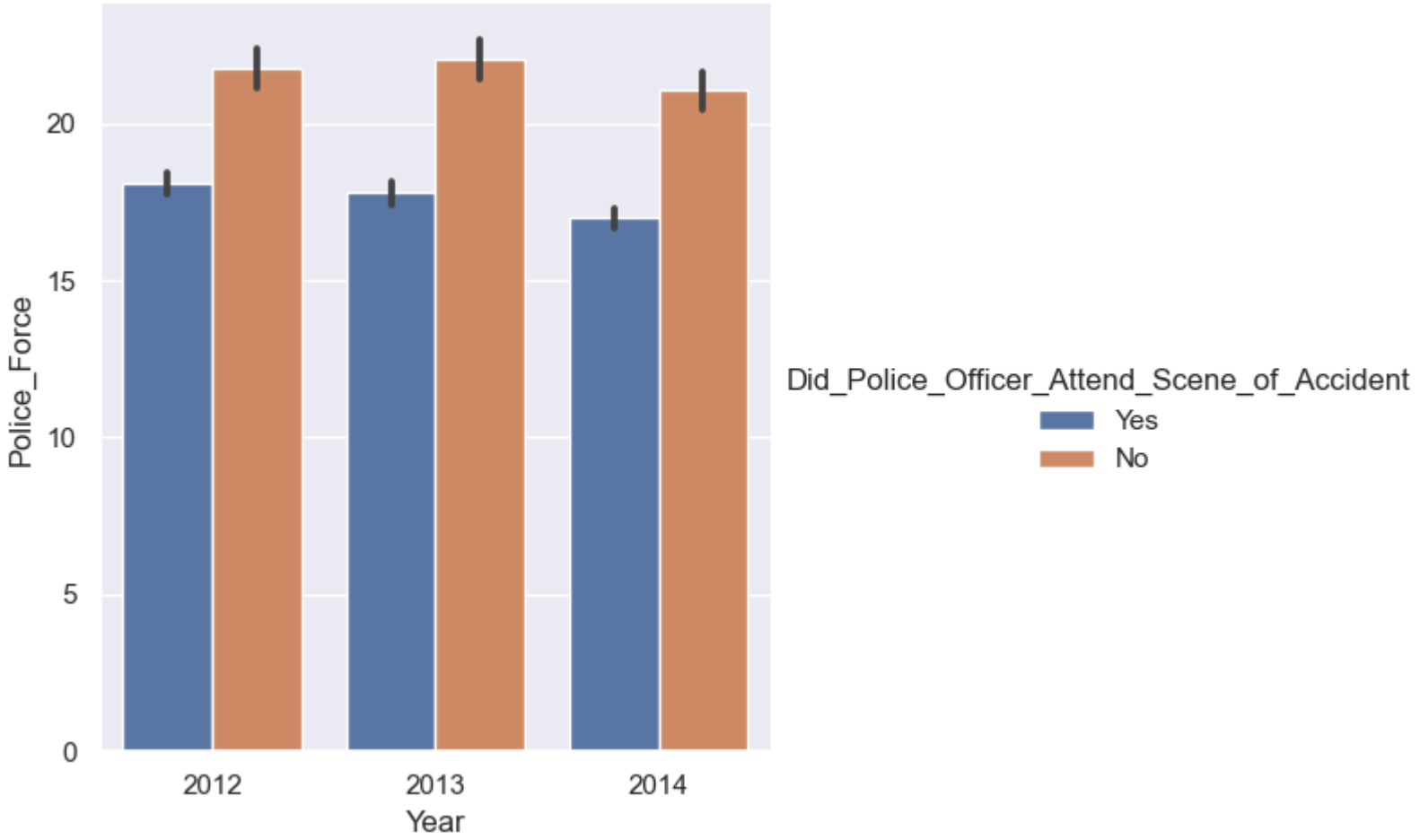
	Accident_Index	Location_Easting_OSGR	Location_Northing_OSGR	Longitude	Latitude	Police_Force	Accident_Severity	Number_of_Vehicle
0	201201BS70001	527200	178760	-0.169101	51.493429	1	3	
1	201201BS70002	524930	181430	-0.200838	51.517931	1	3	
7	201201BS70008	524010	182080	-0.213862	51.523975	1	3	
8	201201BS70010	527710	179290	-0.161567	51.498077	1	3	
9	201201BS70011	525120	180060	-0.198587	51.505576	1	3	
...	...	...	...	...	...	...	...	...
455198	201463BC13614	259140	281860	-4.072653	52.416518	63	3	
455529	201463DP01114	310510	291060	-3.320056	52.510033	63	3	
455585	201463DP07014	310590	291090	-3.318886	52.510315	63	3	
455696	201463DP18514	278700	210340	-3.759722	51.778500	63	3	
455730	201463DP22014	309530	290790	-3.334419	52.507444	63	3	

48123 rows × 34 columns

In [64]:
```
groupingYearDF = pd.DataFrame(finalDF.groupby(['Year', 'Local_Authority_(Highway)'])
                              ['Local_Authority_(Highway)'].count())
groupingYearDF.rename(columns={'Local_Authority_(Highway)': 'Count'}, inplace=True)
groupingYearDF.reset_index(inplace=True)

print(groupingYearDF)
```

```
     Year Local_Authority_(Highway)  Count
0    2012                E06000001     37
1    2012                E06000002     60
2    2012                E06000003     23
3    2012                E06000004     56
4    2012                E06000005     22
..    ...                      ...    ...
484  2014                W06000020      7
485  2014                W06000021      3
486  2014                W06000022     28
487  2014                W06000023      4
488  2014                W06000024      6

[489 rows x 3 columns]
```

In [65]:
```
g = sns.catplot(
    data=finalDF, kind="bar",
    x="Year", y="Police_Force", hue="Did_Police_Officer_Attend_Scene_of_Accident"
)
```



Forecasting using FB Prophet

In [66]:
```
# !pip install prophet
```

In [67]:
```
from prophet import Prophet
from prophet.plot import plot_plotly, plot_components_plotly
```

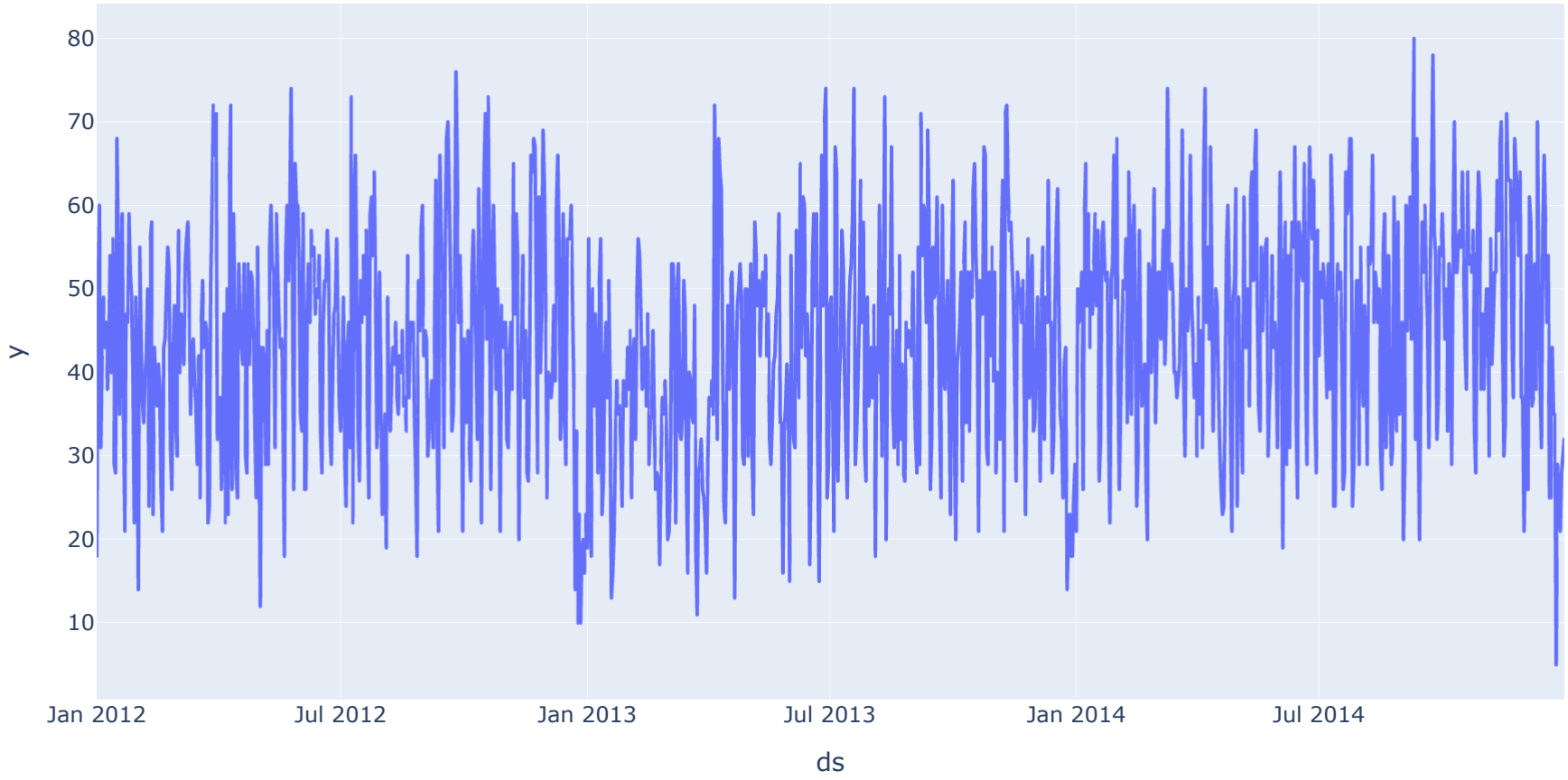
In [68]:
```
dateIncidents = pd.DataFrame(finalDF['Date'].value_counts())
dateIncidents.reset_index(inplace=True)
dateIncidents.rename(columns={'Date': 'y', 'index': 'ds'}, inplace=True)
dateIncidents.sort_values('ds', inplace=True)

dateIncidents
```

Out[68]:

	ds	y
1071	2012-01-01	18
428	2012-01-02	49
121	2012-01-03	60
880	2012-01-04	31
629	2012-01-05	42
...	...	...
1030	2014-12-27	23
1055	2014-12-28	21
960	2014-12-29	28
914	2014-12-30	30
854	2014-12-31	32

1096 rows × 2 columns

In [69]:
```
px.line(dateIncidents, x='ds', y='y')
```



In [70]:
```
m = Prophet()
m.fit(dateIncidents)
```

```
21:05:15 - cmdstanpy - INFO - Chain [1] start processing
21:05:15 - cmdstanpy - INFO - Chain [1] done processing
```

Out[70]:
```
<prophet.forecaster.Prophet at 0x2a793ce80>
```

In [71]:
```
future = m.make_future_dataframe(periods=365)
```

In [72]:
```
future
```

Out[72]:

	ds
0	2012-01-01
1	2012-01-02
2	2012-01-03
3	2012-01-04
4	2012-01-05
...	...
1456	2015-12-27
1457	2015-12-28
1458	2015-12-29
1459	2015-12-30
1460	2015-12-31

1461 rows × 1 columns

In [73]:
```
forecast = m.predict(future)
forecast
```

Out[73]:

	ds	trend	yhat_lower	yhat_upper	trend_lower	trend_upper	additive_terms	additive_terms_lower	additive_terms_upper	weekly	w
0	2012-01-01	44.030640	9.060862	39.458729	44.030640	44.030640	-20.521200	-20.521200	-20.521200	-10.638729	
1	2012-01-02	44.025266	21.249852	51.543041	44.025266	44.025266	-7.624530	-7.624530	-7.624530	1.865618	
2	2012-01-03	44.019892	23.577036	53.232411	44.019892	44.019892	-5.609431	-5.609431	-5.609431	3.409124	
3	2012-01-04	44.014518	23.361949	52.937883	44.014518	44.014518	-6.064238	-6.064238	-6.064238	2.411238	
4	2012-01-05	44.009144	25.774464	54.454795	44.009144	44.009144	-3.982163	-3.982163	-3.982163	3.887686	
...	...	...	...	...	...	...	...	...	...	...	...
1456	2015-12-27	50.543532	15.066188	44.640041	49.949447	51.090898	-21.115583	-21.115583	-21.115583	-10.638729	
1457	2015-12-28	50.552156	27.805263	55.612517	49.955522	51.101672	-8.684356	-8.684356	-8.684356	1.865618	
1458	2015-12-29	50.560779	28.635822	57.684996	49.961571	51.112616	-7.116564	-7.116564	-7.116564	3.409124	
1459	2015-12-30	50.569403	28.053012	57.468940	49.967568	51.123560	-7.993405	-7.993405	-7.993405	2.411238	
1460	2015-12-31	50.578027	29.833028	59.018346	49.973565	51.134659	-6.301327	-6.301327	-6.301327	3.887686	

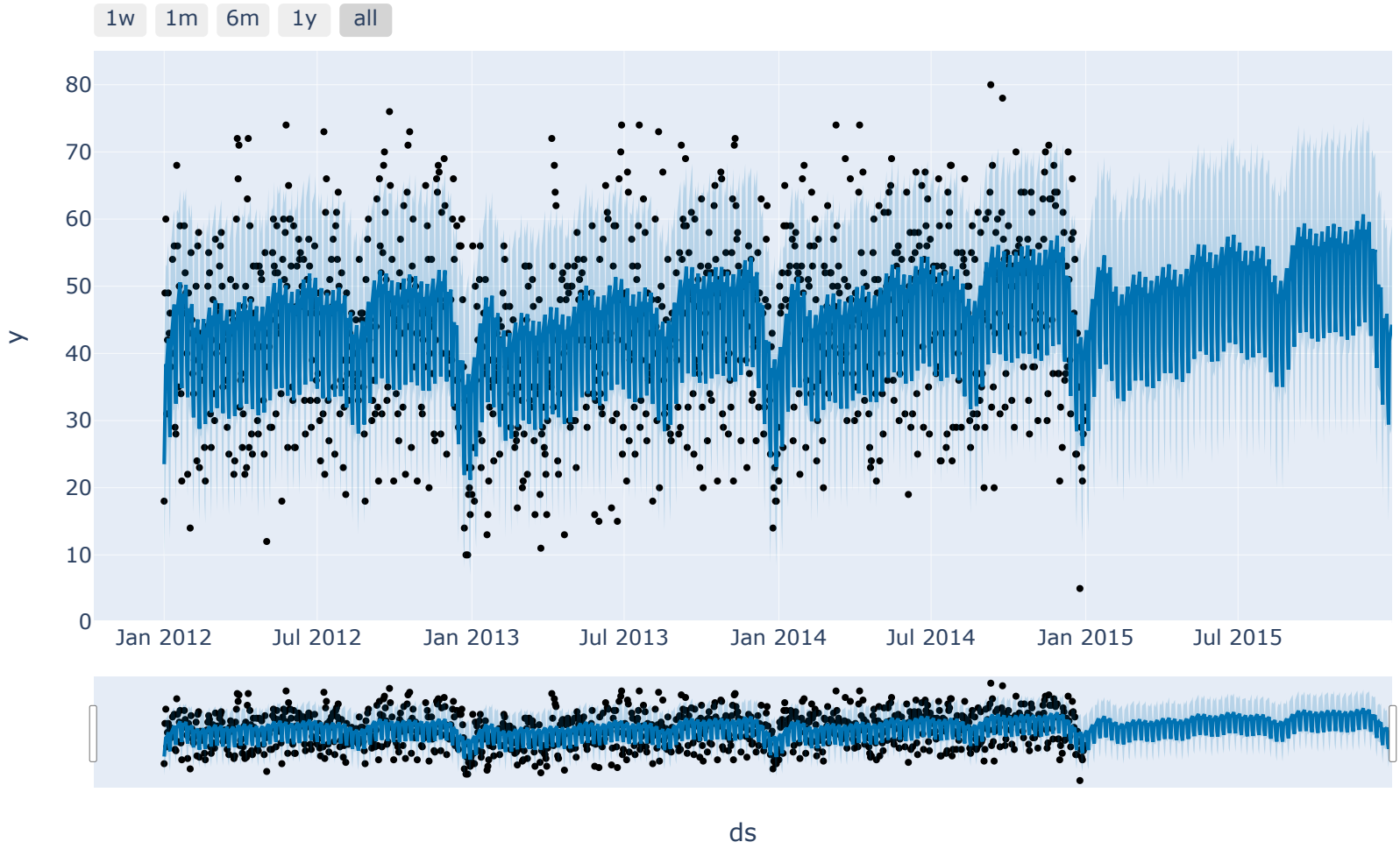
1461 rows × 19 columns

In [74]:
```
forecast[['ds', 'yhat', 'yhat_lower', 'yhat_upper']].tail()
```

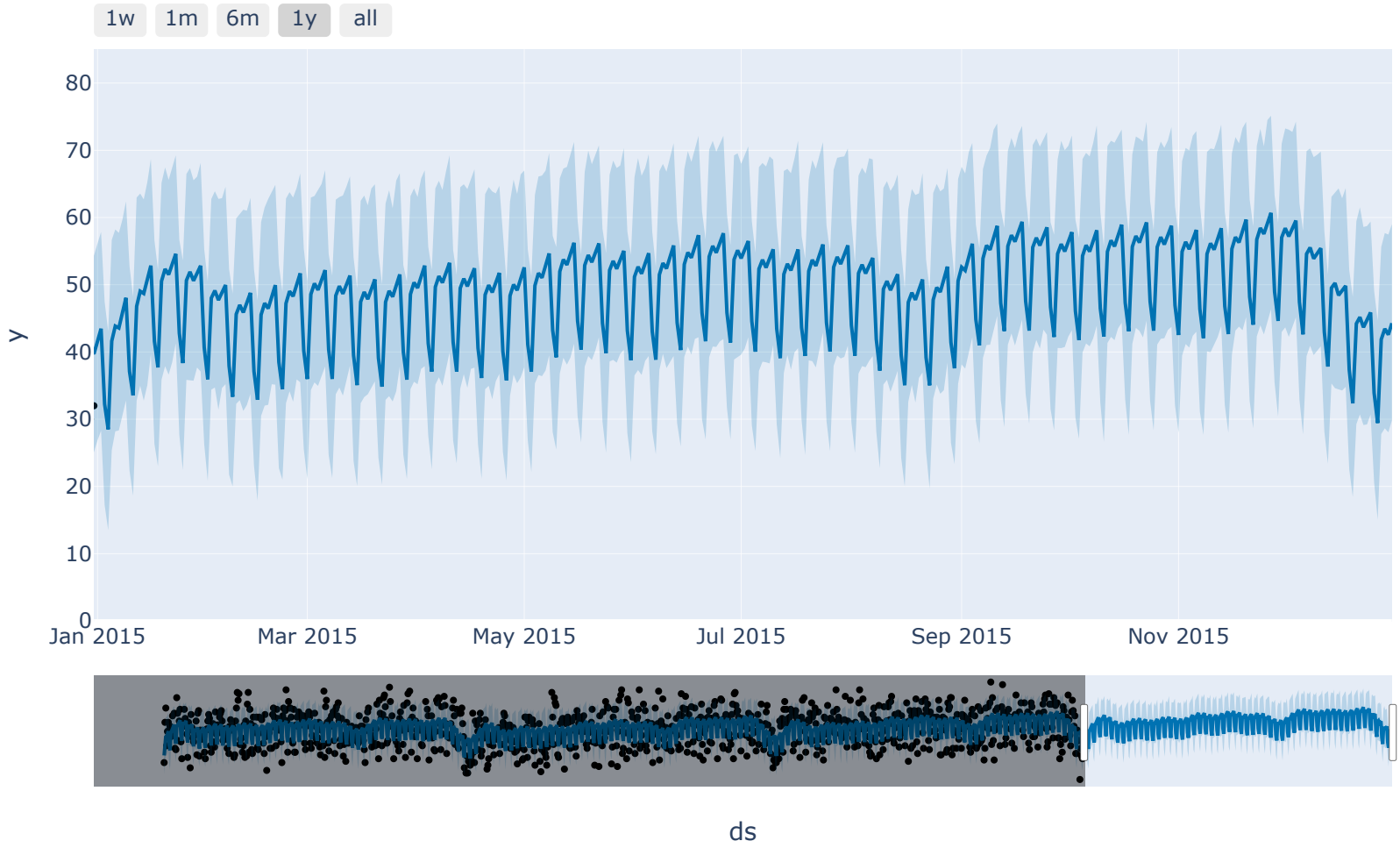
Out[74]:

	ds	yhat	yhat_lower	yhat_upper
1456	2015-12-27	29.427949	15.066188	44.640041
1457	2015-12-28	41.867800	27.805263	55.612517
1458	2015-12-29	43.444216	28.635822	57.684996
1459	2015-12-30	42.575998	28.053012	57.468940
1460	2015-12-31	44.276700	29.833028	59.018346

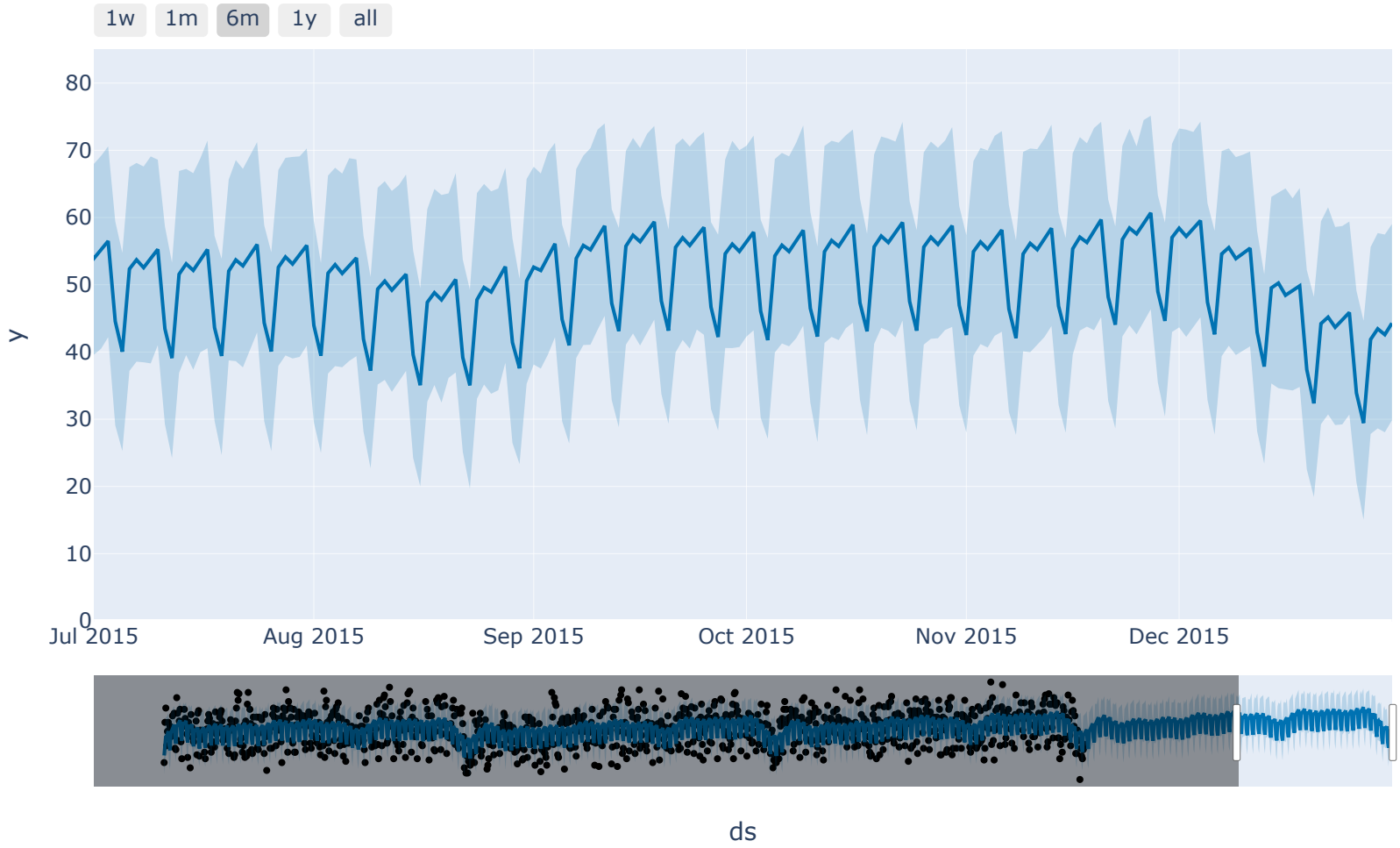
In [75]:
```
# All Time Graph
plot_plotly(m, forecast)
```



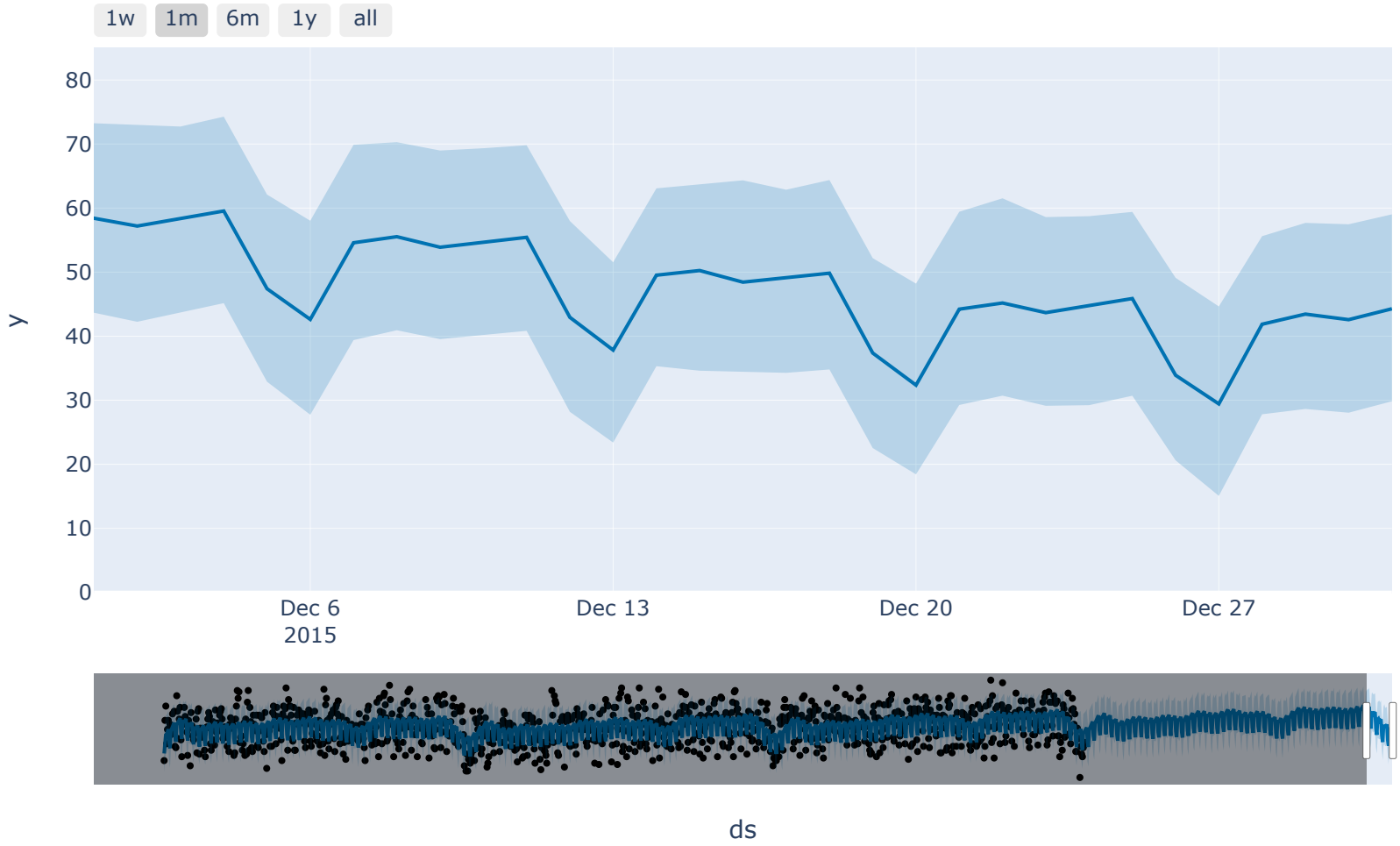
In [76]:
```
# Predicted Year Graph
plot_plotly(m, forecast)
```



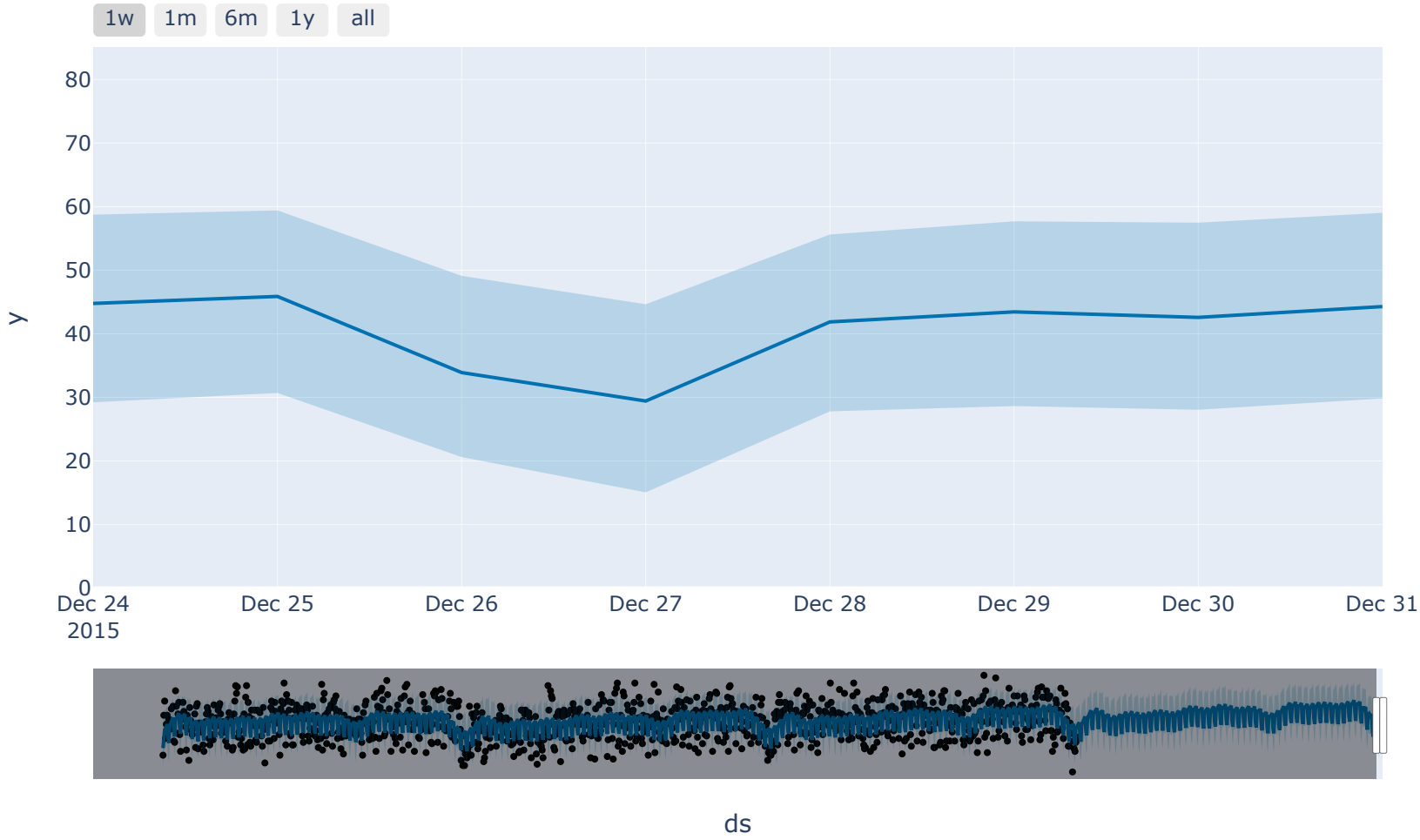
In [77]:
```
# Predicted 6 months Graph
plot_plotly(m, forecast)
```



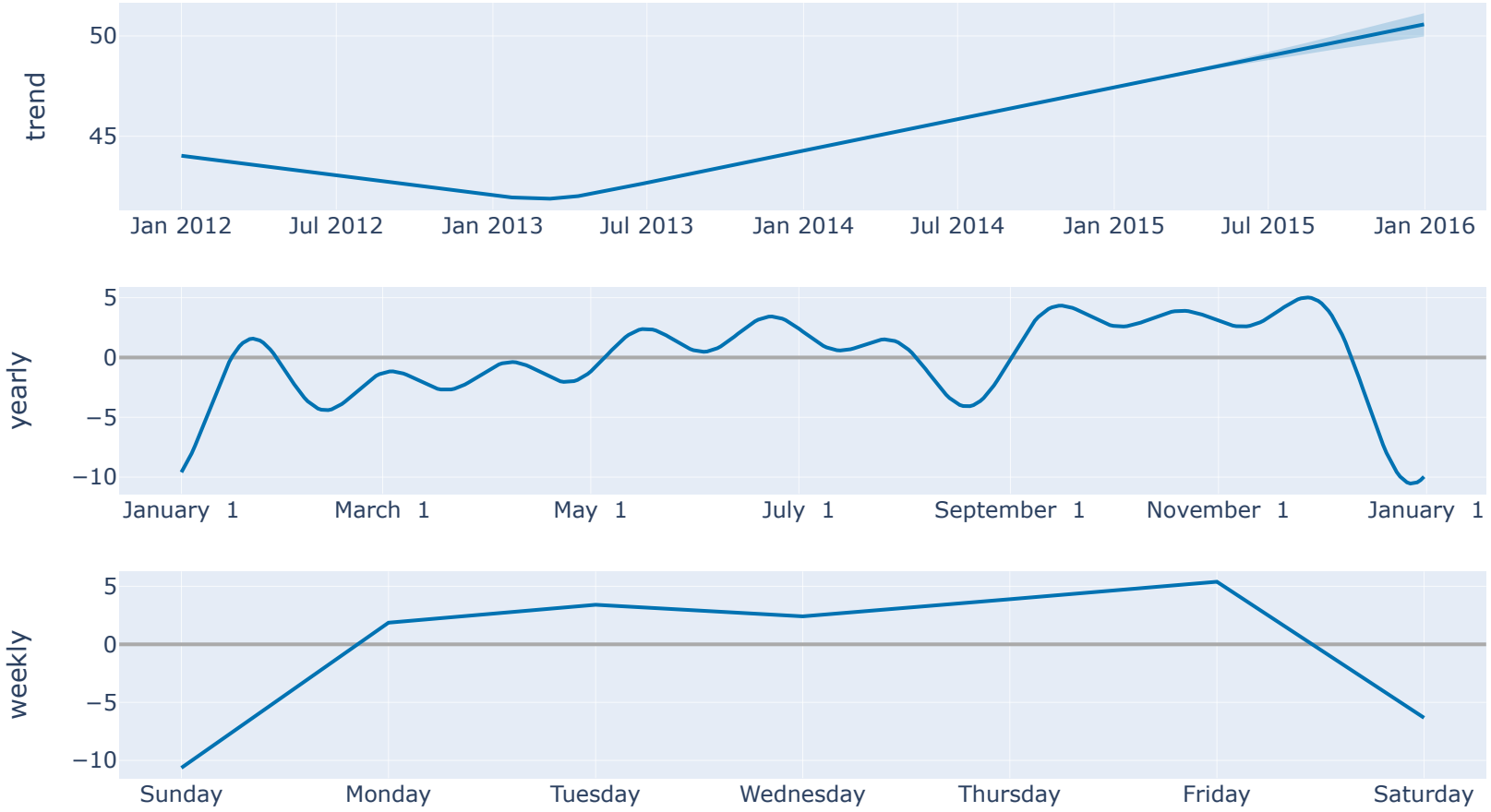
In [78]:
```
# Predicted 1 month Graph
plot_plotly(m, forecast)
```



In [79]:
```
# Predicted 1 week Graph
plot_plotly(m, forecast)
```



In [80]:
```
plot_components_plotly(m, forecast)
```



Auto Analysis in Python

- In Python their is a module named "Sweetviz" which helps to generate some descriptive analysis in Python based on your data as shown below.

In [81]:
```
# !pip install sweetviz
```

In [82]:
```
import sweetviz as sv
```

In [83]:
```
my_report = sv.analyze(finalDF)
my_report
```

Done! Use 'show' commands to display/save. [100%] 00:00 -> (00:00 left)

Out[83]:
```
<sweetviz.dataframe_report.DataframeReport at 0x107d0ef70>
```

In [84]:
```
my_report.show_notebook()
```

Sweetviz
2.3.1
Get updates, docs & report issues here
Created & maintained by Francois Bertrand
Graphic design by Jean-Francois Hains

DataFrame

NO COMPARISON TAR

ASSOCIATIONS

48123	ROWS
0	DUPLICATES
59.5 MB	RAM
34	FEATURES
21	CATEGORICAL
7	NUMERICAL
6	TEXT

DataFrame

1 Accident_Index

VALUES:	48,123 (100%)
MISSING:	---
DISTINCT:	35,484 (74%)

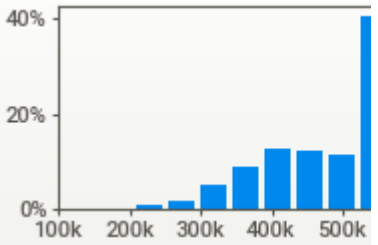
12,640	26%	2.01E+12
1	<1%	201201BS70001
1	<1%	201401FH10367
1	<1%	201401FH10359
1	<1%	201401FH10360
1	<1%	201401FH10363
1	<1%	201401FH10364
35,477	74%	(Other)

2 Location_Easting_OSGR

VALUES:	48,123 (100%)
MISSING:	---
DISTINCT:	26,737 (56%)
ZEROES:	---

MAX	655k
95%	578k
Q3	533k
MEDIAN	517k
AVG	477k
Q1	414k
5%	331k
MIN	206k

RANGE	449k
IQR	120k
STD	81,742
VAR	6.7B
KURT.	-0.312
SKEW	-0.670
SUM	23.0B

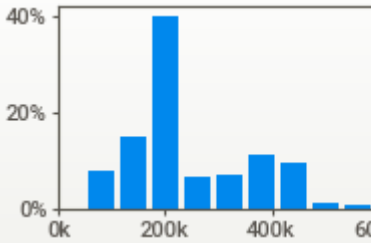


3 Location_Northing_OSGR

VALUES:	48,123 (100%)
MISSING:	---
DISTINCT:	26,007 (54%)
ZEROES:	---

MAX	652k
95%	434k
Q3	340k
AVG	243k
MEDIAN	186k
Q1	173k
5%	103k
MIN	52k

RANGE	600k
IQR	167k
STD	112k
VAR	12.6B
KURT.	-0.519
SKEW	0.787
SUM	11.7B



4 Longitude

VALUES: 48,123 (100%) MAX 1.76 RANGE 6.50

VALUES:	48,123 (100%)	MAX	1.76	RANGE	6.56
MISSING:	---	95%	0.55	IQR	1.72
		Q3	-0.08	STD	1.18