Safe Neighbourhood
Data Analysis

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01

Overview

Dataset Overview (1/3)

A quick peek into our data, sharing a snapshot of what information we have and where it comes from.

```
Total number of rows: 292761
Total number of columns: 16

Column: CrimeDate
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 2300
Three attribute values with the largest count:
CrimeDate
04/27/2015    421
06/05/2016    255
12/20/2018    212
Name: count, dtype: int64
Missingness: 0.00%

Column: CrimeTime
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 1475
Three attribute values with the largest count:
CrimeTime
18:00:00    6772
17:00:00    6463
12:00:00    6037
Name: count, dtype: int64
Missingness: 0.01%
```

```
Column: CrimeCode
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 81
Three attribute values with the largest count:
CrimeCode
4E    48061
6D    38977
5A    25351
Name: count, dtype: int64
Missingness: 0.00%

Column: Location
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 27064
Three attribute values with the largest count:
Location
1500 RUSSELL ST       847
3500 BOSTON ST        708
2400 FREDERICK AVE     558
Name: count, dtype: int64
Missingness: 0.46%
```

```
Column: Description
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 14
Three attribute values with the largest count:
Description
LARCENY            65508
COMMON ASSAULT     48061
BURGLARY           42237
Name: count, dtype: int64
Missingness: 0.00%

Column: Inside/Outside
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 4
Three attribute values with the largest count:
Inside/Outside
O          128776
I          124454
Outside     5113
Name: count, dtype: int64
Missingness: 11.53%
```

A quick peek into our data, sharing a snapshot of what information we have and where it comes from.

```
Column: Premise
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 125
Three attribute values with the largest count:
Premise
STREET                  104827
ROW/TOWNHOUSE-OCC        54077
APT/CONDO - OCCUPIED     11689
Name: count, dtype: int64
Missingness: 11.62%

Column: vri_name1
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 8
Three attribute values with the largest count:
vri_name1
Tri-District    6607
Western         5825
Central         5420
Name: count, dtype: int64
Missingness: 88.19%
```

```
Column: Weapon
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 5
Three attribute values with the largest count:
Weapon
FIREARM     29036
OTHER       17313
KNIFE       10023
Name: count, dtype: int64
Missingness: 78.98%

Column: Post
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 259
Three attribute values with the largest count:
Post
114.0    4171
913.0    4109
111.0    3950
Name: count, dtype: int64
Missingness: 0.81%
```

```
Column: Total Incidents
Data type: int64
Type of attribute: Numeric/Real/Continuous
Min: 1
Max: 1
Mean: 1.0
Median: 1.0
Standard Deviation: 0.0
Missingness: 0.00%
```

Dataset Overview (3/3)

A quick peek into our data, sharing a snapshot of what information we have and where it comes from.

```
Column: Longitude
Data type: float64
Type of attribute: Numeric/Real/Continuous
Min: -81.5291885
Max: -76.38322763
Mean: -76.61745184626443
Median: -76.6139769
Standard Deviation: 0.043734476079280486
Missingness: 0.56%

Column: Latitude
Data type: float64
Type of attribute: Numeric/Real/Continuous
Min: 37.57726184
Max: 39.66133158
Mean: 39.30674569832816
Median: 39.30267161
Standard Deviation: 0.02965788734702034
Missingness: 0.56%

Column: Location 1
Data type: float64
Type of attribute: Numeric/Real/Continuous
Min: nan
Max: nan
Mean: nan
Median: nan
Standard Deviation: nan
Missingness: 100.00%
```

```
Column: District
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 10
Three attribute values with the largest count:
District
NORTHEAST      44207
SOUTHEAST      41816
CENTRAL        33508
Name: count, dtype: int64
Missingness: 0.00%

Column: Neighborhood
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 278
Three attribute values with the largest count:
Neighborhood
DOWNTOWN            9312
FRANKFORD           6922
BELAIR-EDISON       6206
Name: count, dtype: int64
Missingness: 3.59%
```

```
Column: Weapon
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 5
Three attribute values with the largest count:
Weapon
FIREARM    29036
OTHER      17313
KNIFE      10023
Name: count, dtype: int64
Missingness: 78.98%

Column: Post
Data type: object
Type of attribute: Symbolic/Discrete
Number of unique values: 259
Three attribute values with the largest count:
Post
114.0    4171
913.0    4109
111.0    3950
Name: count, dtype: int64
Missingness: 0.81%
```
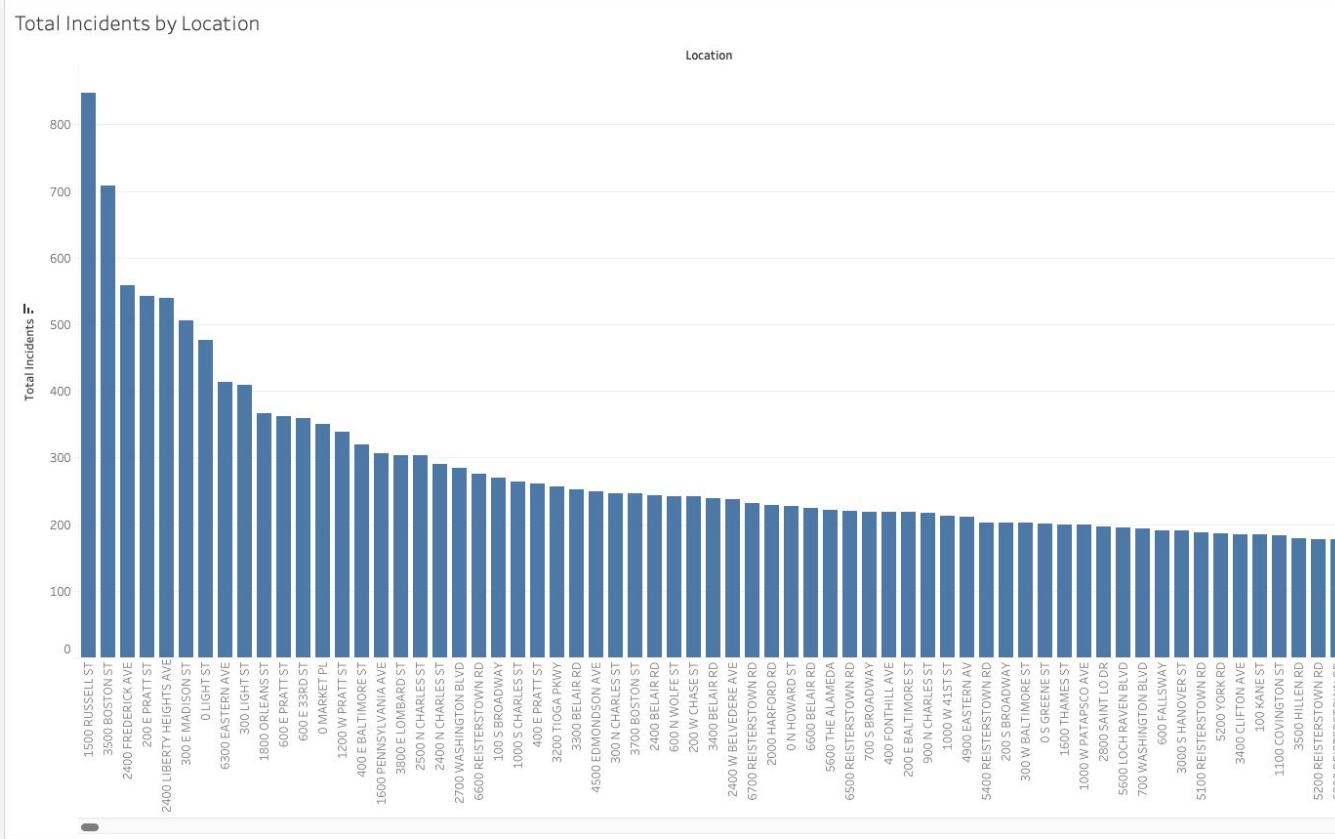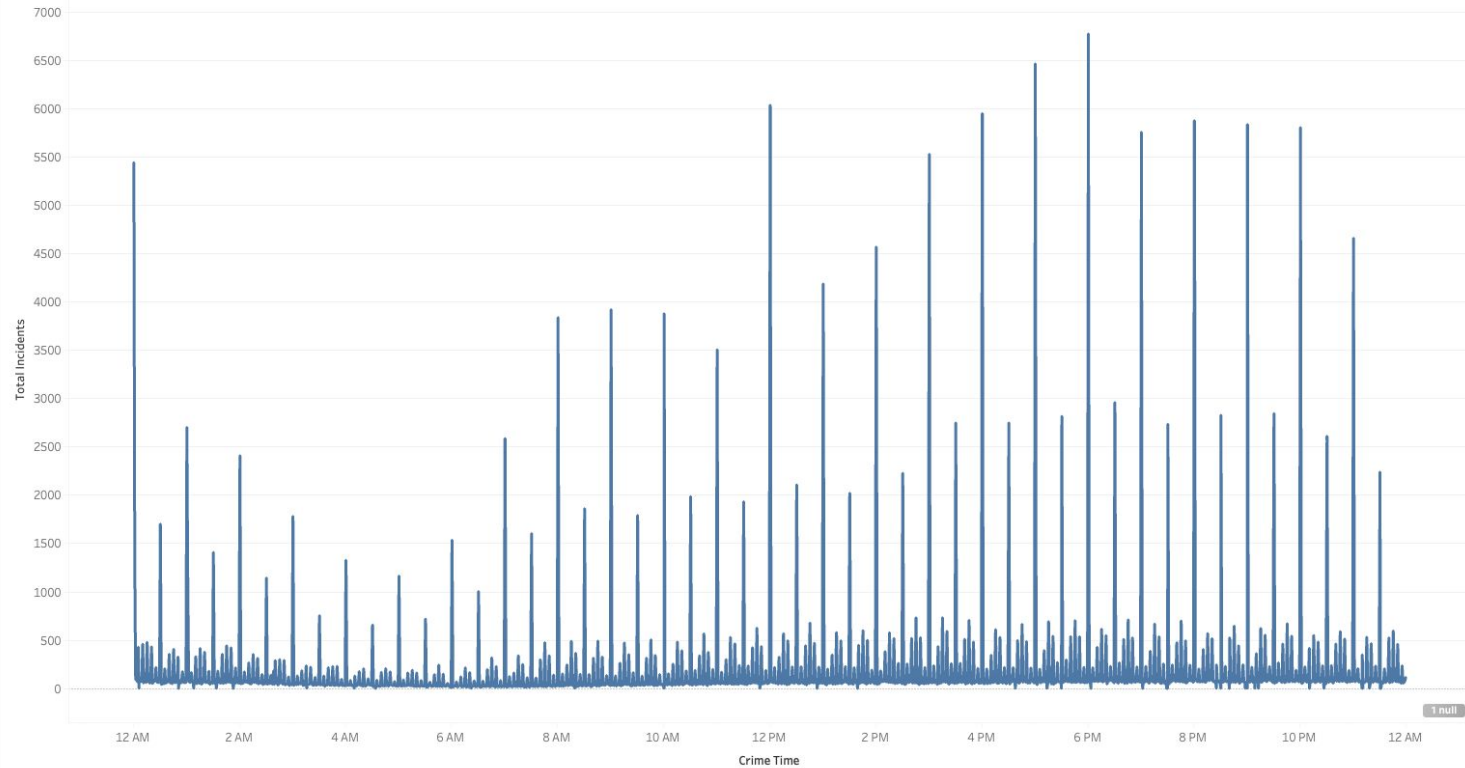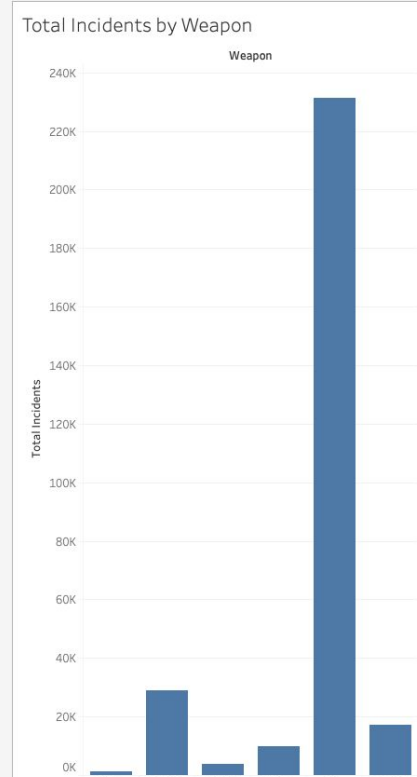
02

Dashboard
Capture

Dashboard (1/3)

Total Incidents by Location

Dashboard (2/3)

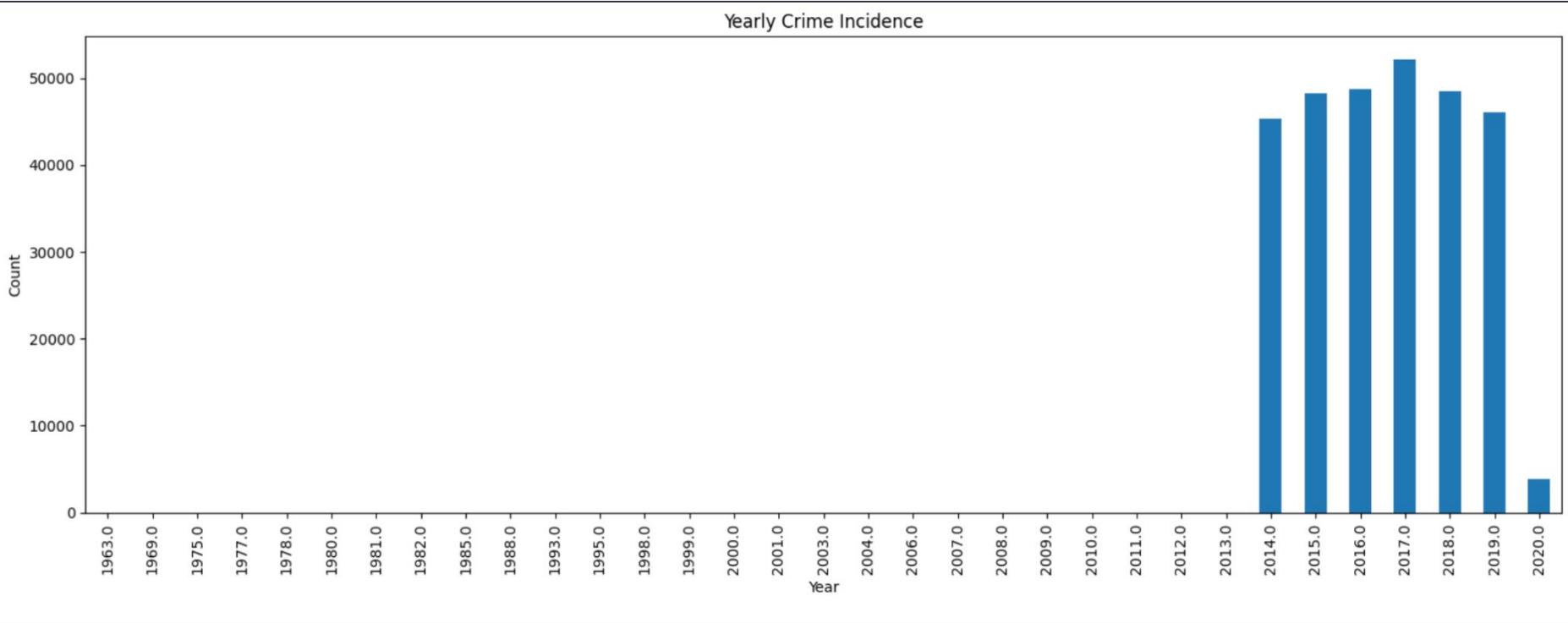Total Incidents by Crime Time

Total Incidents by Weapon

03

Deep Dive

Yearly Crime Incidence

Monthly Crime Incidence

Day-of-Week Crime Incidence
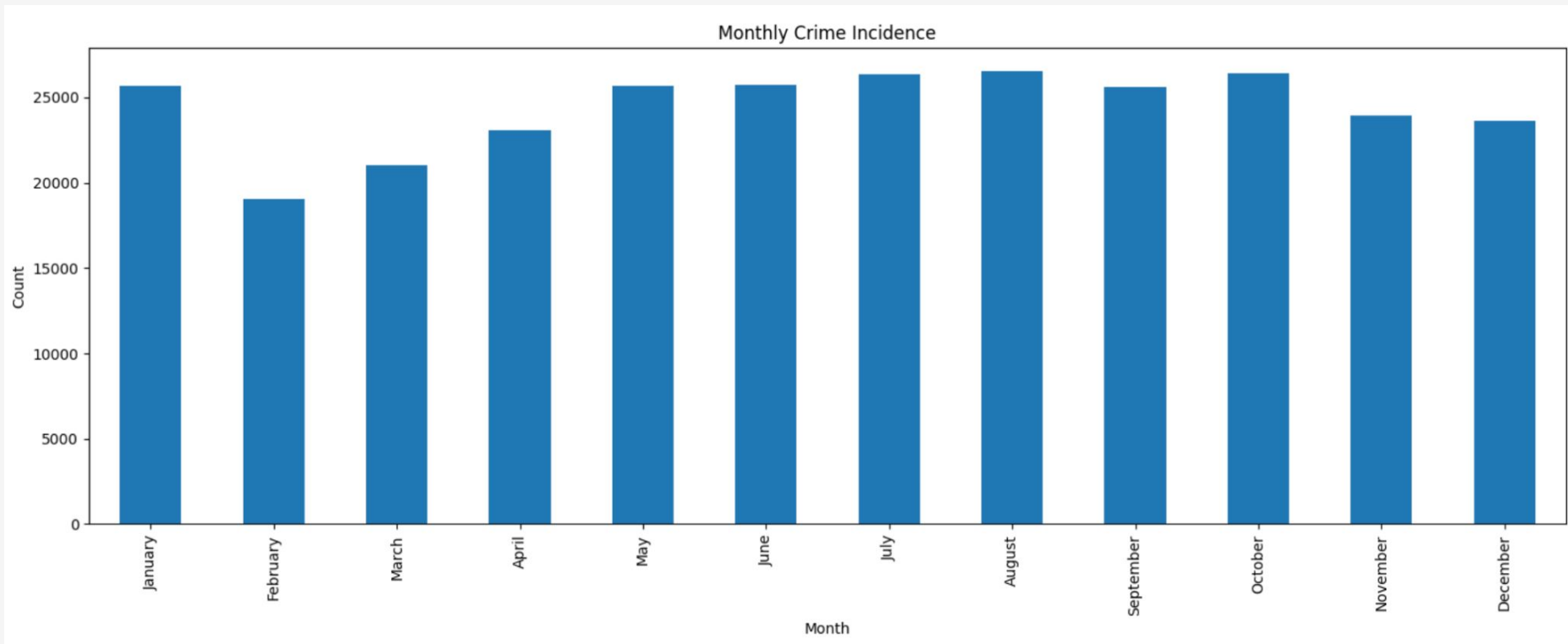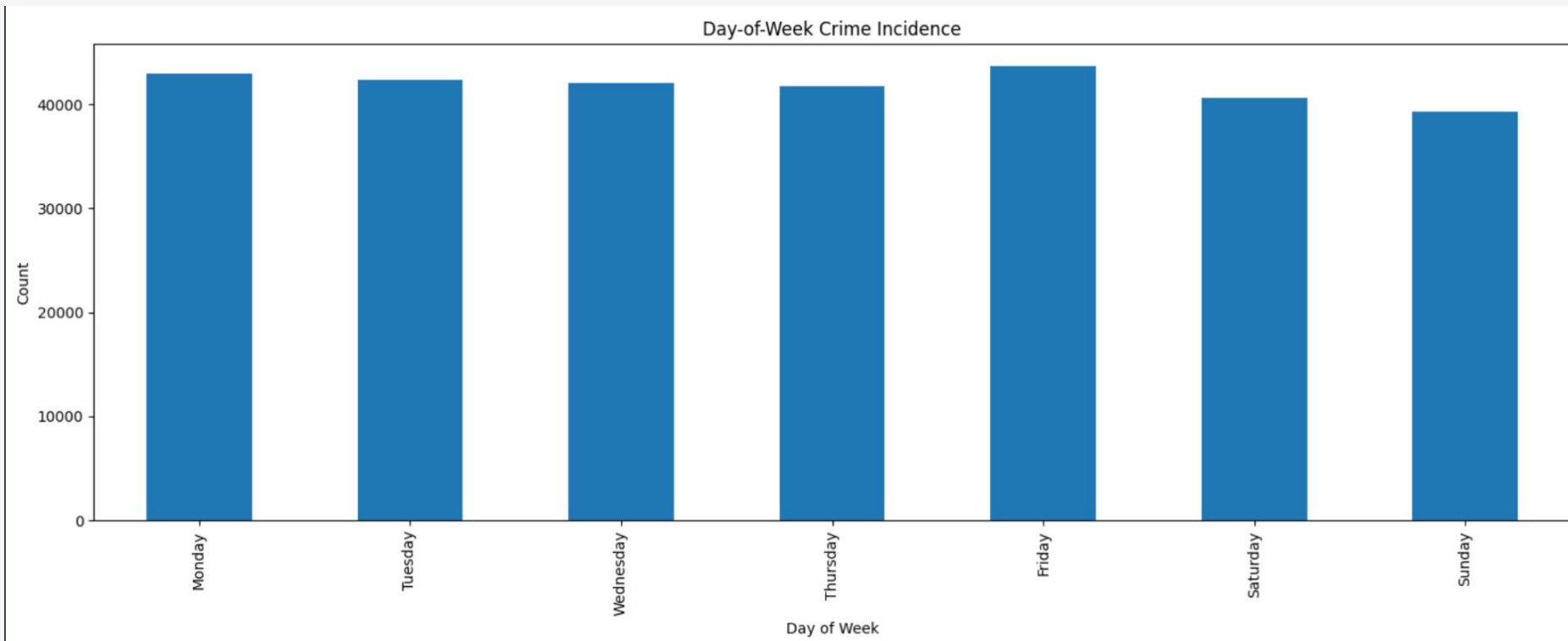
Crime Type by Geolocation and Time Period

Distribution of Crime Types
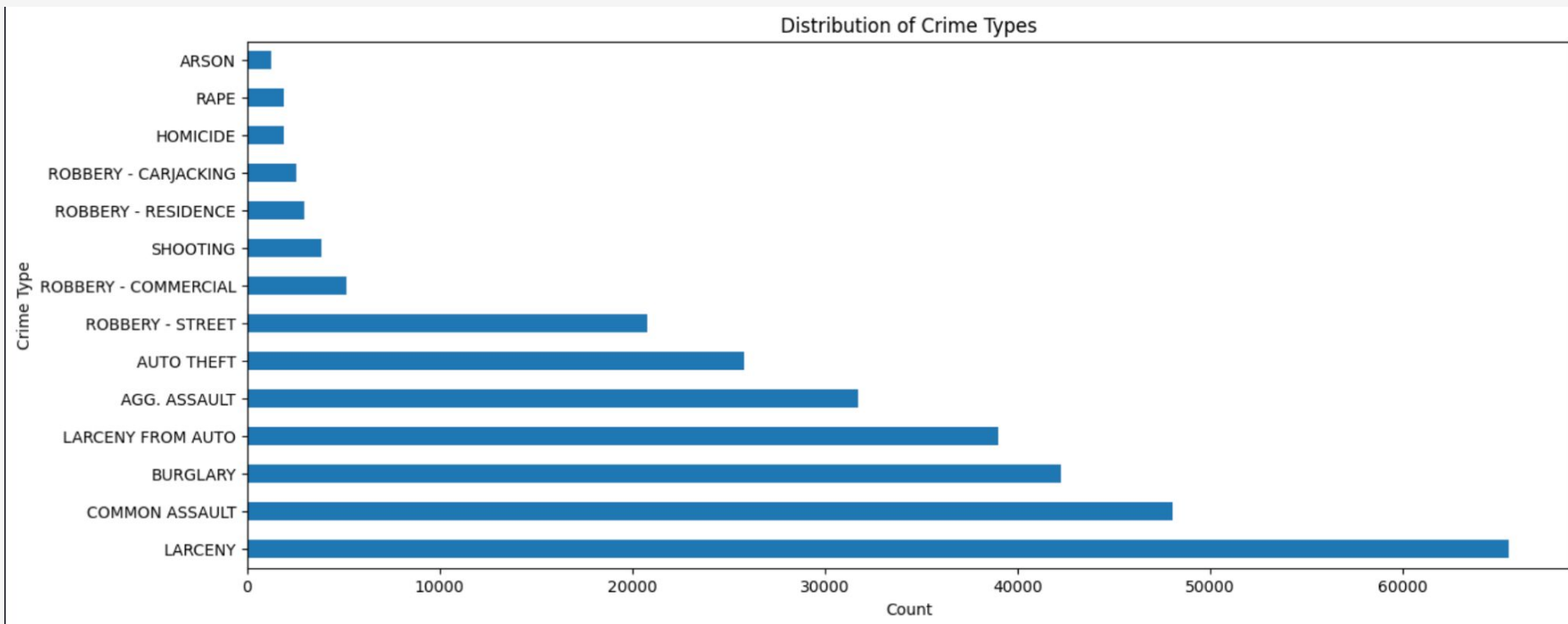
Crime Type Variance Analysis - (1/3)

Yearly Variation of Crime Types

Monthly Variation of Crime Types

Day-of-Week Crime Variation - (3/3)

Day-of-Week Variation of Crime Types

Description
- AGG. ASSAULT
- ARSON
- AUTO THEFT
- BURGLARY
- COMMON ASSAULT
- HOMICIDE
- LARCENY
- LARCENY FROM AUTO
- RAPE
- ROBBERY - CARJACKING
- ROBBERY - COMMERCIAL
- ROBBERY - RESIDENCE
- ROBBERY - STREET
- SHOOTING