

Select Crime Types:

ASSAULT BURGLARY BURGLARY\_THEFT\_FROM\_VEICHLE  
HOMICIDE LESS\_SEVERE\_CRIME OTHER\_THEFT  
PERSONAL\_THEFT RAPE ROBBERY VEHICLE\_THEFT

Weapon Used:

Yes No

Select Descent:

Descent is not Specified Hispanic White Black Asian Other  
Native American Pacific Islander

Severity:

Severe Less Severe

Start Point (Minimum Value of Duration Reported (Unit: days)):

0

Select Option (End point)

Show Heatmap

Crime Percentages by Area

I don't want to see percentage within area

I don't want to see percentage of selected crimes

Distance Between Crime Location and Nearest Police Station

Duration of Reported vs. Distance to Police Station

Capture

Reset

Explore Crime Across LA

Use the filters on the left to visualize crime occurrence, intensity, and distribution across different neighborhoods and conditions.

Subset category variables

Select Crime Types:

ASSAULT BURGLARY BURGLARY\_THEFT\_FROM\_VEICHLE  
HOMICIDE

Weapon Used:

Yes

Select Descent:

Descent is not Specified Hispanic

Severity:

Severe Less Severe

Select observation period

Start Point (Minimum Value of Duration Reported (Unit: days)):

7

Select Option (End point)

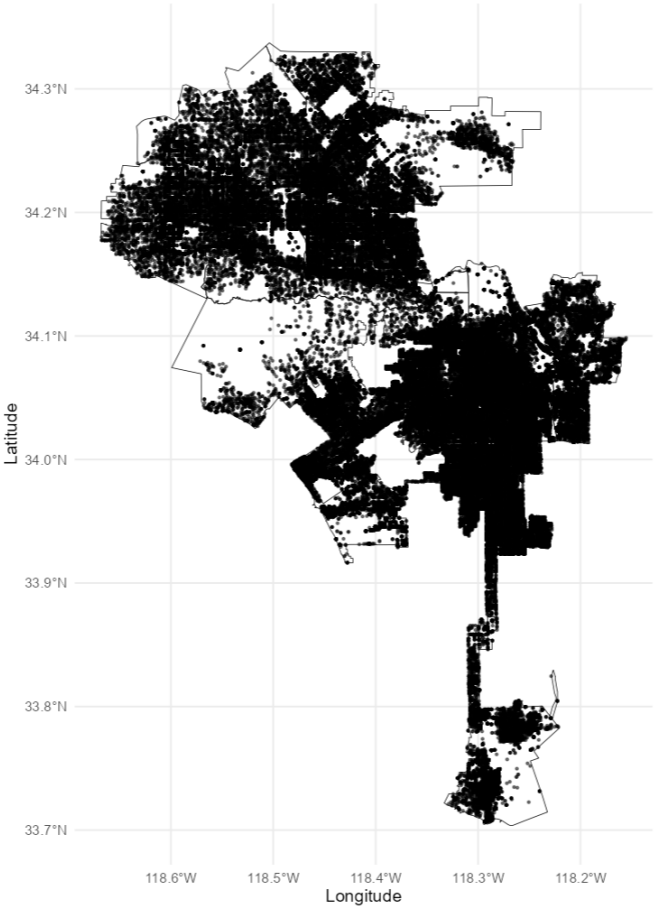
End Point (Maximum Value of Duration Reported (Unit: days)):

21

Crime Count in Selected Interval: 232265  
Percentage of Total Crimes: 100%  
Crime Percentages by Area

Current Plot

Crime Locations for Duration Reported 0 Days and Above



Select Crime Types:

ASSAULT

BURGLARY

BURGLARY\_THEFT\_FROM\_VEICHL

HOMICIDE

LESS\_SEVERE\_CRIME

OTHER\_THEFT

PERSONAL\_THEFT

RAPE

ROBBERY

VEHICLE\_THEFT

Weapon Used:

Yes

No

Select Descent:

Descent is not Specified

Hispanic

White

Black

Asian

Other

Native American

Pacific Islander

Severity:

Severe

Less Severe

Start Point (Minimum Value of Duration Reported (Unit: days)):

0

☐ Select Option (End point)

☒ Show Heatmap

What would you like to see?

☒ Show Crime Count

☐ Show Crime Levels

☒ Crime Percentages by Area

☐ I don't want to see percentage within area

☐ I don't want to see percentage of selected crimes

☐ Distance Between Crime Location and Nearest Police Station

☐ Duration of Reported vs. Distance to Police Station

Capture

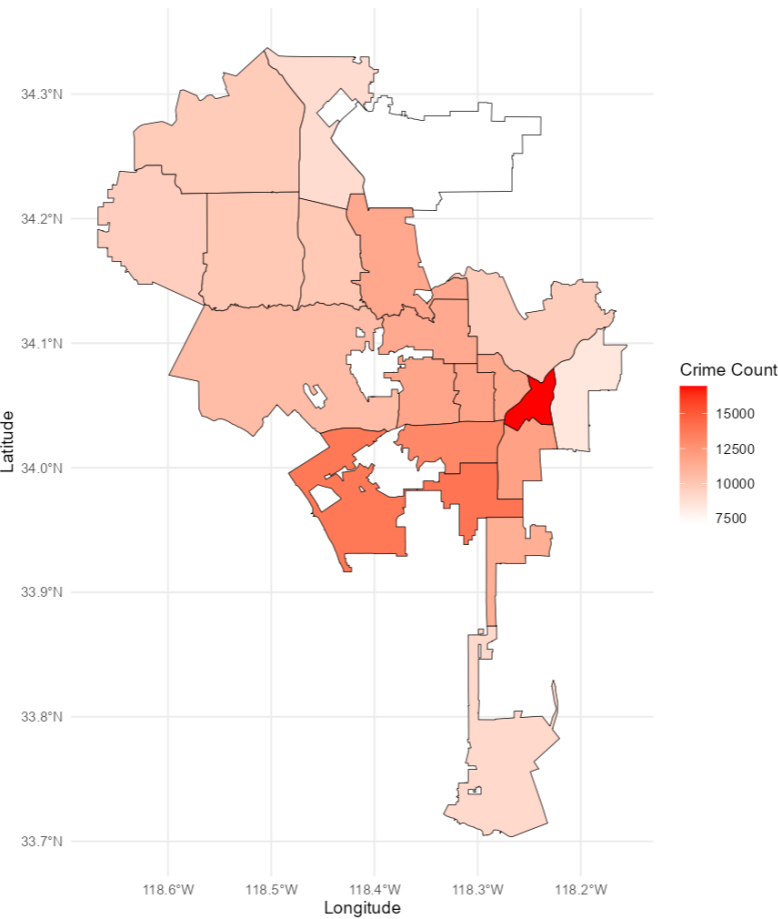
Reset

Explore Crime Across LA

Use the filters on the left to visualize crime occurrence, intensity, and distribution across different neighborhoods and conditions.

Current Plot

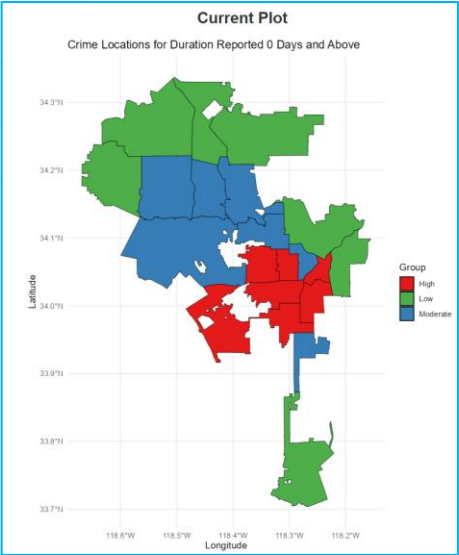
Crime Locations for Duration Reported 0 Days and Above



Crime Count in Selected Interval: 232265

Percentage of Total Crimes: 100%

Crime Percentages by Area

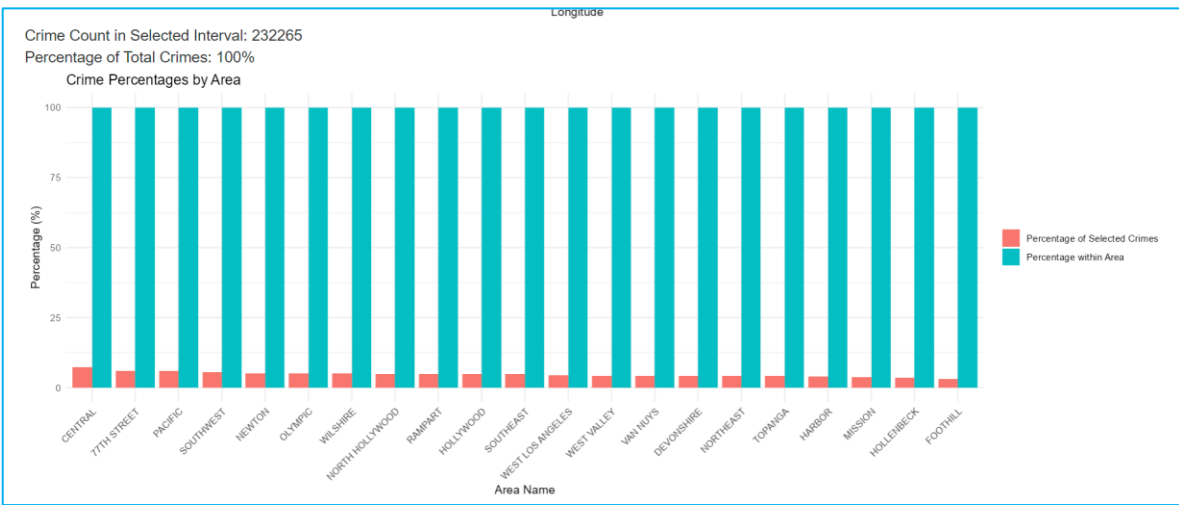
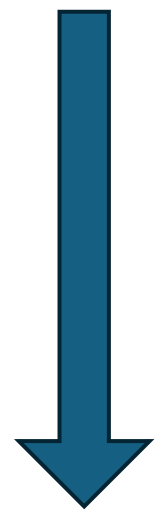


← Heatmap option

☒ Crime Percentages by Area

☐ I don't want to see percentage within area

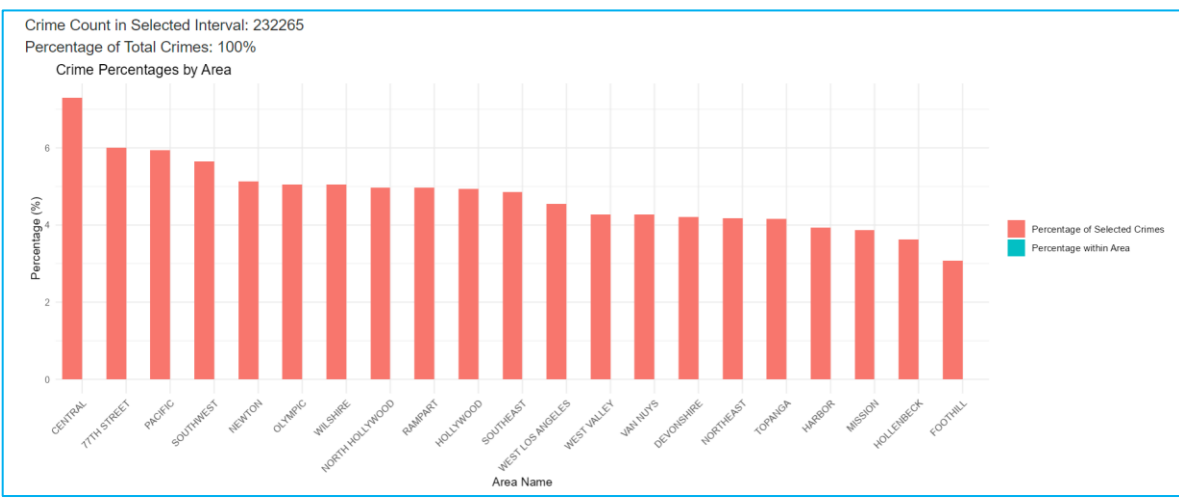
☐ I don't want to see percentage of selected crimes



☒ Crime Percentages by Area

☒ I don't want to see percentage within area

☐ I don't want to see percentage of selected crimes



Select Crime Types:

ASSAULT

BURGLARY

BURGLARY\_THEFT\_FROM\_VEICHLE

HOMICIDE

LESS\_SEVERE\_CRIME

OTHER\_THEFT

PERSONAL\_THEFT

RAPE

ROBBERY

VEHICLE\_THEFT

Weapon Used:

Yes

No

☒ Distance Between Crime Location and Nearest Police Station

☐ Calculate distance by L2 Metric (Default: L1 Metric)

Severity:

Severe

Less Severe

Start Point (Minimum Value of Duration Reported (Unit: days)):

0

☐ Select Option (End point)

☒ Show Heatmap

What would you like to see?

☐ Show Crime Count

☒ Show Crime Levels

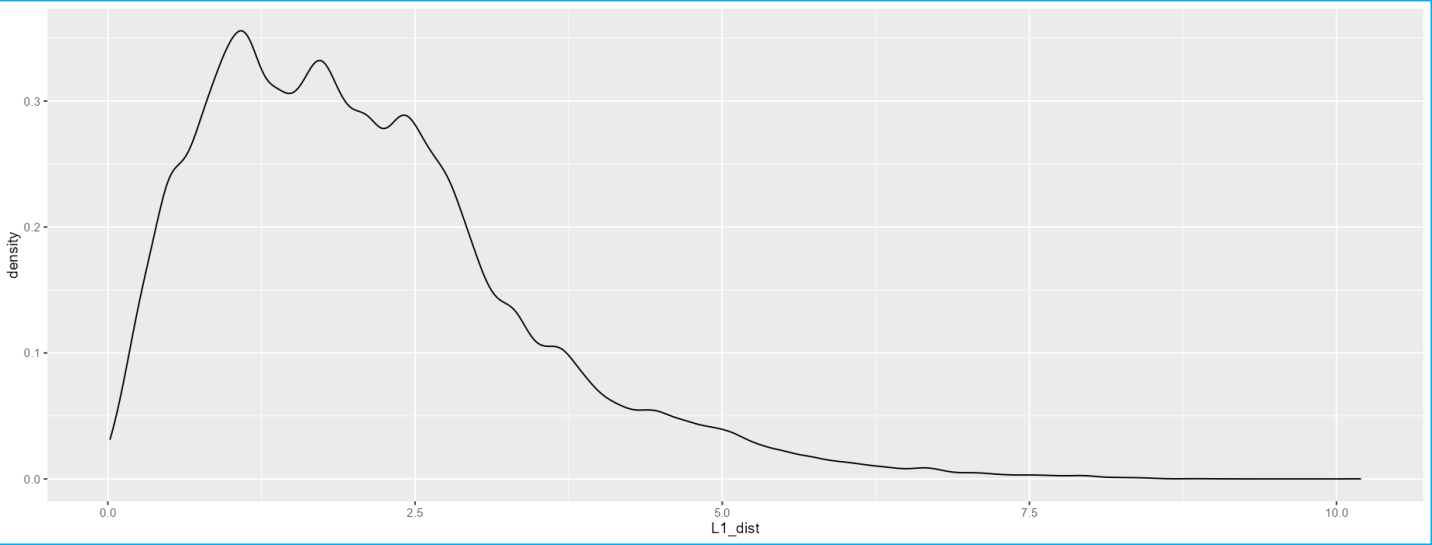
☐ Crime Percentages by Area

☐ Distance Between Crime Location and Nearest Police Station

☐ Duration of Reported vs. Distance to Police Station

Capture

Reset



	Min	1st Quantile	Median	Mean	3rd Quantile	Max	Mode
0~6 days	0.01	1.09	1.85	2.07	2.75	10.19	1.08
7~49 days	0.01	1.18	2.01	2.20	2.91	8.84	2.41
50~100 days	0.02	1.21	2.07	2.25	2.96	8.24	3.06
101~365 days	0.02	1.22	2.04	2.26	2.96	8.39	2.46
365+ days	0.03	1.26	2.12	2.29	2.90	7.71	1.79

Select Crime Types:

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HOMICIDE LESS\_SEVERE\_CRIME OTHER\_THEFT  
PERSONAL\_THEFT RAPE ROBBERY VEHICLE\_THEFT

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Select Descent:

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Severity:

Severe Less Severe

Start Point (Minimum Value of Duration Reported (Unit: days)):

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☐ Select Option (End point)

☒ Show Heatmap

What would you like to see?

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☐ Crime Percentages by Area

☐ Distance Between Crime Location and Nearest Police Station

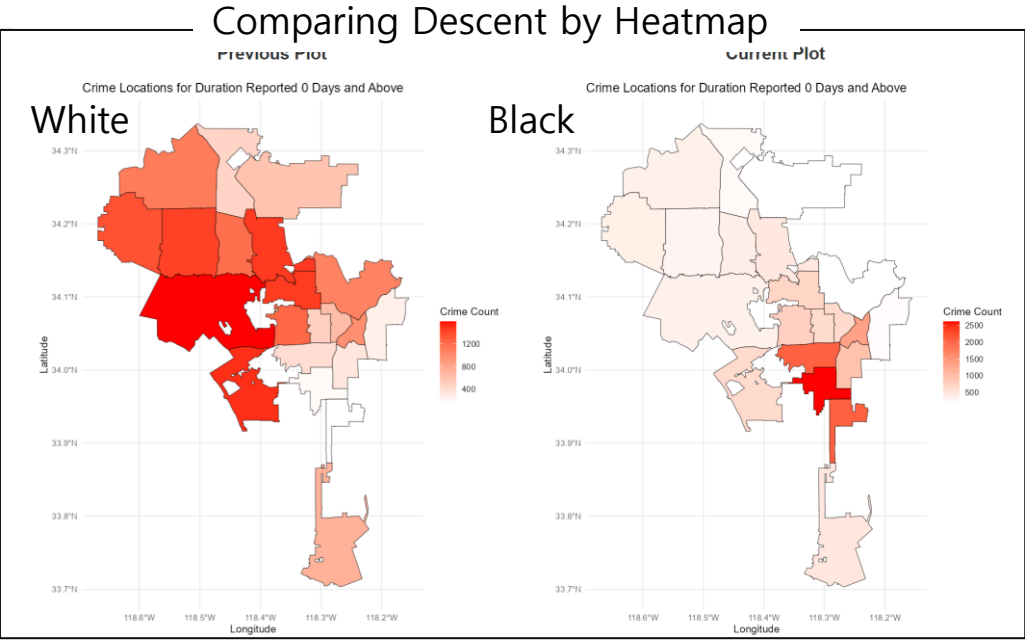
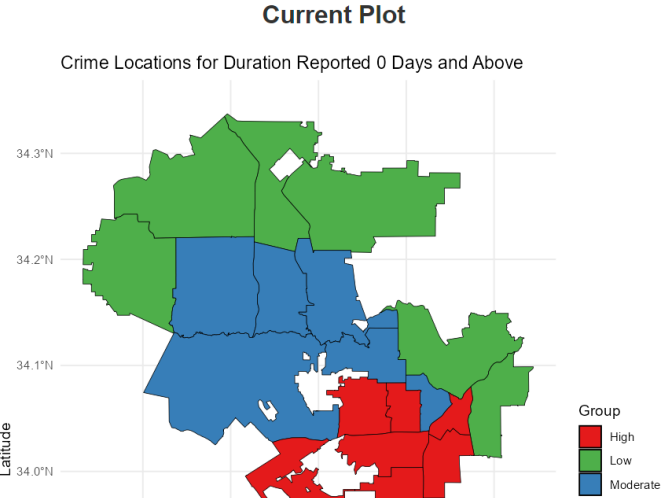
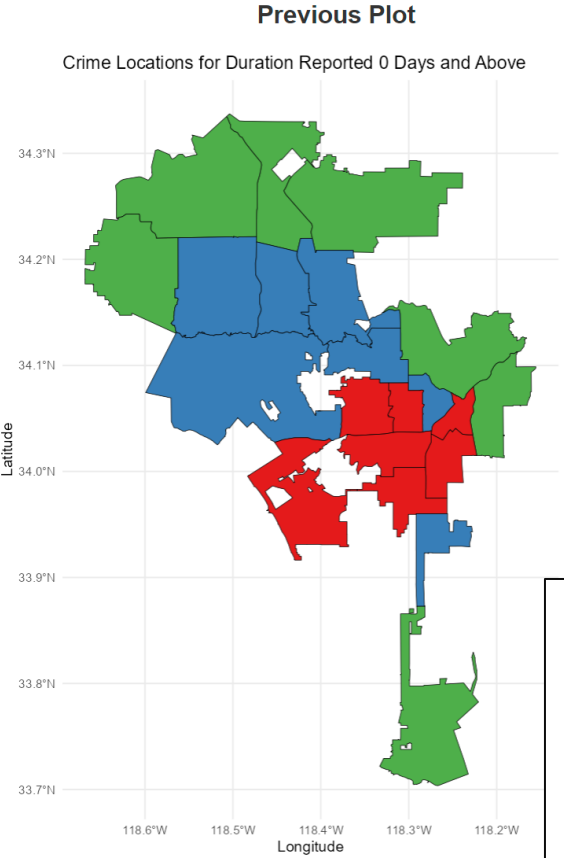
☐ Duration of Reported vs. Distance to Police Station

Capture

Reset

Explore Crime Across LA

Use the filters on the left to visualize crime occurrence, intensity, and distribution across different neighborhoods and conditions.



Select Plots

- ☒ Mosaic Plot
- ☐ Duration of Reported vs Distance Between Police Station
- ☐ Time-Based Crime Analysis
- ☐ Density Plot (Duration of Reported)
- ☐ Crime Proportions by Time
- ☐ Crime and Socioeconomic Factors

Select Area(s):

- HOLLYWOOD
- CENTRAL
- NORTH HOLLYWOOD
- TOPANGA
- HARBOR
- WEST VALLEY
- OLYMPIC
- 77TH STREET
- MISSION
- RAMPART
- WEST LOS ANGELES
- SOUTHEAST
- HOLLENBECK
- WILSHIRE
- VAN NUYS
- NEWTON
- SOUTHWEST
- NORTHEAST
- FOOTHILL
- DEVONSHIRE
- PACIFIC

Select Plot:

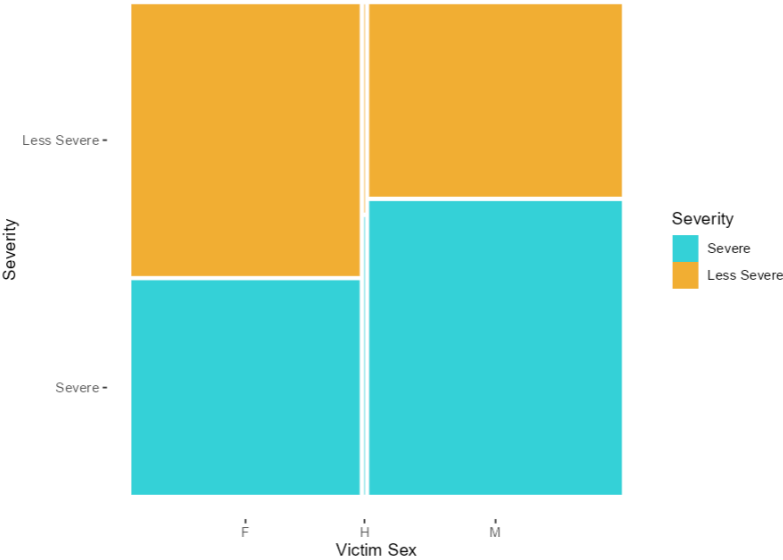
Victim Sex vs Severity

← Select plots

Explore Temporal and Socioeconomic Crime Patterns

Dive deeper into how crime relates to time, demographic factors, and socio-economic conditions.

Victim Sex vs Severity



← Options for each plot

Contingency Table:

	F	H	M	Total
Severe	36577	12	55444	92033
Less Severe	46371	9	36312	82692
Total	82948	21	91756	174725

Chi-squared Test:

Pearson's Chi-squared test

data: tbl  
X-squared = 4660, df = 2, p-value < 2.2e-16

Select Plots

- ☐ Mosaic Plot
- ☐ Duration of Reported vs Distance Between Police Station
- ☐ Time-Based Crime Analysis
- ☒ Density Plot (Duration of Reported)
- ☐ Crime Proportions by Time
- ☐ Crime and Socioeconomic Factors

Select Area(s):

HOLLYWOODCENTRALNORTH HOLLYWOODTOPANGA

HARBORWEST VALLEYOLYMPIC77TH STREETMISSION

RAMPARTWEST LOS ANGELESSOUTHEASTHOLLENBECK

WILSHIREVAN NUYSNEWTONSOUTHWESTNORTHEAST

FOOTHILLDEVONSHIREPACIFIC

Start Point (Minimum Value of Duration Reported (Unit: days)):

0

End Point (Maximum Value of Duration Reported (Unit: days)):

21

☐ Scale by Log (10)

Select Categories

Victim Descent

Select Categories

HispanicWhiteBlackAsianOtherNative American

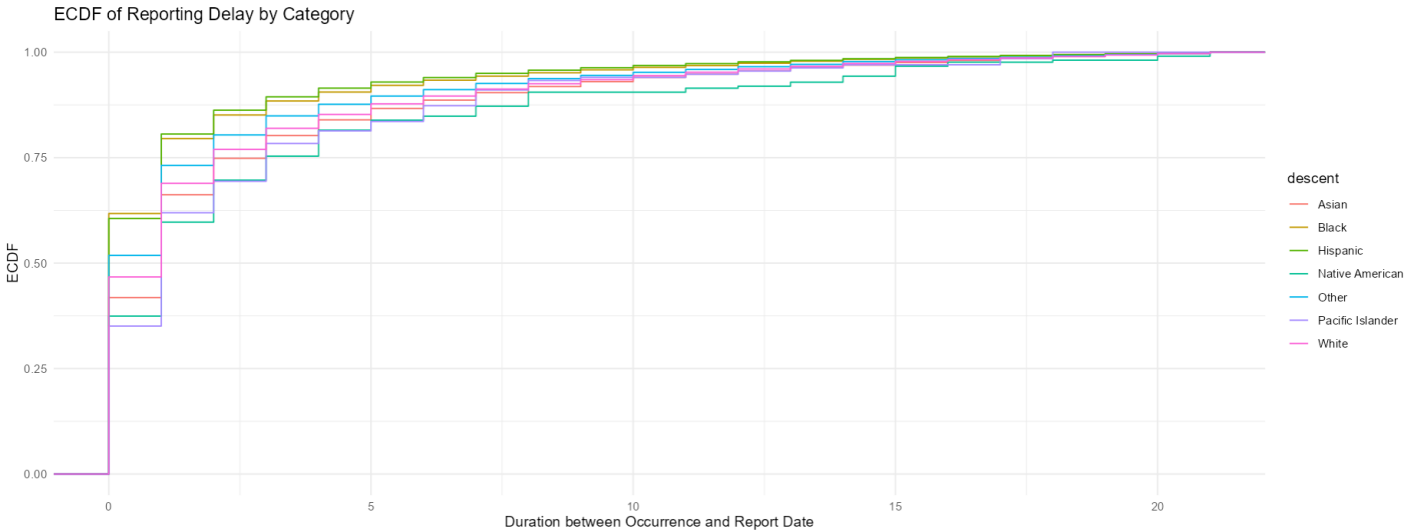
Pacific Islander

Select Metric

Ecdf

Explore Temporal and Socioeconomic Crime Patterns

Dive deeper into how crime relates to time, demographic factors, and socio-economic conditions.



category	0 day	1 day	2 day	3 day	4 day	5 day	6 day	7 day	8~49 day	50~100 day	101~365 day	365+ day
Asian	0.38	0.60	0.68	0.73	0.76	0.79	0.80	0.82	0.95	0.97	1.00	1.00
Black	0.58	0.74	0.80	0.83	0.85	0.86	0.87	0.88	0.96	0.98	1.00	1.00
Hispanic	0.57	0.76	0.81	0.84	0.86	0.88	0.89	0.90	0.97	0.98	1.00	1.00
Native American	0.33	0.52	0.61	0.66	0.71	0.73	0.74	0.76	0.94	0.97	1.00	1.00
Other	0.47	0.67	0.74	0.78	0.80	0.82	0.83	0.85	0.95	0.97	1.00	1.00
Pacific Islander	0.32	0.56	0.62	0.70	0.73	0.75	0.79	0.82	0.96	0.97	1.00	0.00
White	0.42	0.62	0.70	0.74	0.77	0.79	0.81	0.83	0.95	0.97	1.00	1.00

Select Victim Age Group:

Youth (0~14)

Youth (0~14)

Adult (15~64)

Elderly (65~)

Select Victim Sex:

M

M

F

Select Victim Descent:

Descent is not Specified

Descent is not Specified

Hispanic

White

Black

Asian

Other

Native American

Pacific Islander

Select Period:

Morning

Morning

Afternoon

Night

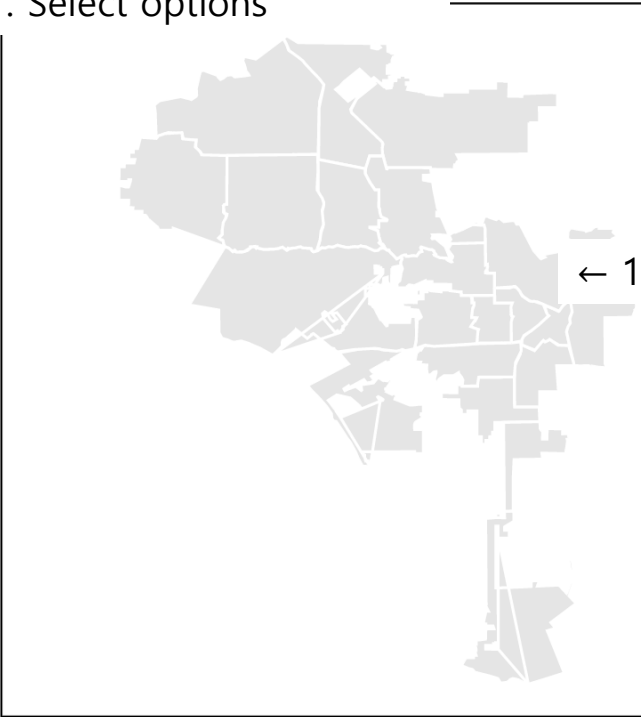
Late Night

Predict

# Crime Prediction by Modeling

Apply advanced models to predict the likelihood of various crime types based on victim and time characteristics. Adjust parameters and visualize outcomes below.

← 1. Select options



← 1. Double click area

Selected Area Info

Selected Region:

WILSHIRE

Daily Crime Probability per 1 people:

0.0273%

(Derived as  $[(\text{Total Crime} / \text{Population} / 365) * 100]$ )

Don't worry! The actual crime likelihood is calculated by multiplying SELECTED AREA's crime probability.

## Selected Area Info

Select Region.

## Crime Prediction Table



# Crime Prediction by Modeling

Apply advanced models to predict the likelihood of various crime types based on victim and time characteristics. Adjust parameters and visualize outcomes below.

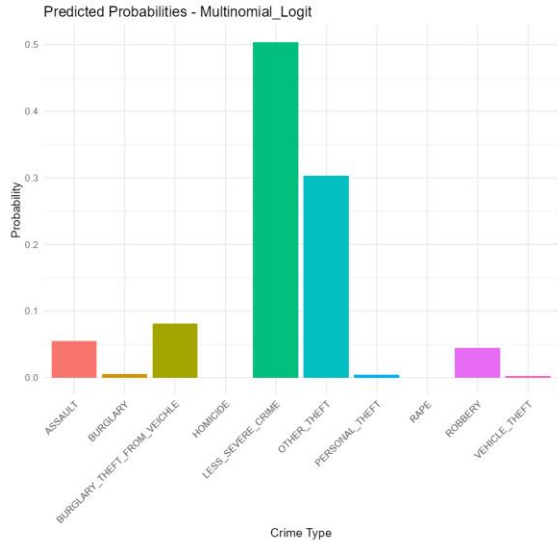
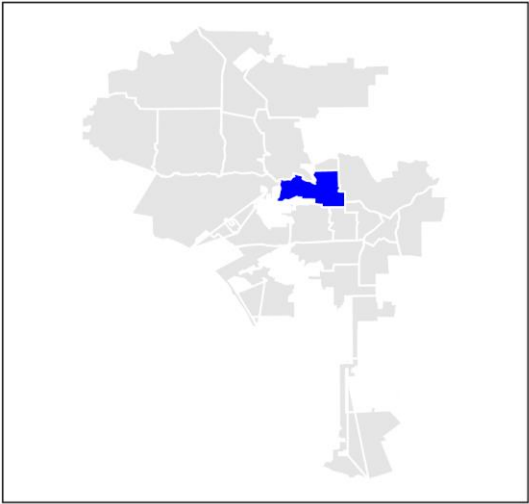
Predict

Select Model for Visualization:

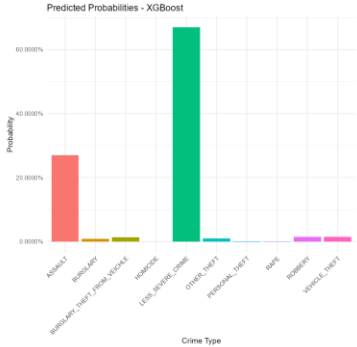
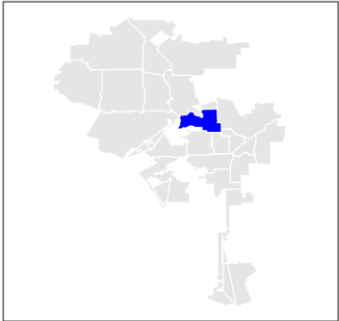
☒ Multinomial\_Logit

☐ Random\_Forest

☐ XGBoost



☒ XGBoost



## Selected Area Info

Selected Region:  
HOLLYWOOD  
Daily Crime Probability per 1 people:  
0.0212%  
(Derived as  $[(\text{Total Crime} / \text{Population} / 365) * 100]$ )  
Don't worry! The actual crime likelihood is calculated by multiplying SELECTED AREA's crime probability.

## Crime Prediction Table

Model	First 5 Crimes				
	ASSAULT	BURGLARY	BURGLARY_THEFT_FROM_VEICLLE	HOMICIDE	LESS_SEVERE_CRIME
Multinomial_Logit	5.4510%	8.1468%	0.5703%	0.0003%	30.3486%
Random_Forest	28.0000%	3.0000%	1.0000%	0.0000%	62.0000%
XGBoost	26.9372%	1.2919%	0.7825%	0.0164%	0.9768%

Model	Next 5 Crimes				
	OTHER_THEFT	PERSONAL_THEFT	RAPE	ROBBERY	VEHICLE_THEFT
Multinomial_Logit	50.3453%	0.4390%	0.0007%	4.4758%	0.2224%
Random_Forest	6.0000%	0.0000%	0.0000%	0.0000%	0.0000%
XGBoost	66.9666%	0.0788%	0.0780%	1.4354%	1.4364%