The Penguins of Madagascar Take on LA Crime

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Introduction and Motivation

Topic: Violent crime in Los Angeles (defined as homicide, rape, robbery, assault, and abuse)

Research Question: Looking across time of day, victim demographic, and location, who is the most susceptible to violent crime in Los Angeles?

Motivation: Inform public safety improvement, including where and when additional police patrols, emergency services, and community prevention programs are necessary.

About the Data

Source: Los Angeles Police Department (LAPD), published through the Los Angeles Open Data portal.

Time frame: Crime records from 2020–2024.

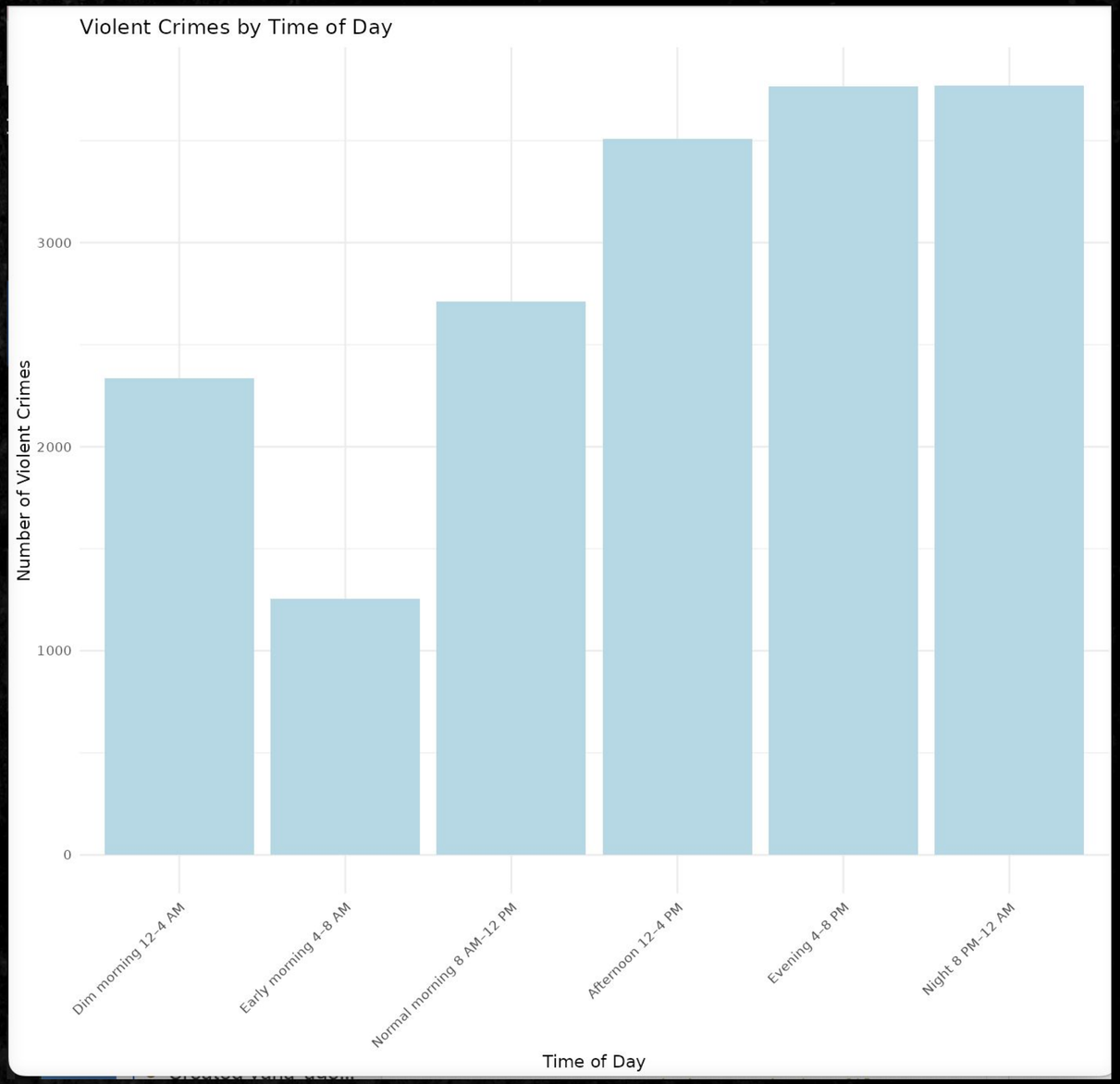
Dimensions: 17,345 observations, 18 columns

Key information: Crime type, incident date and time, location, and victim demographics.

Graph 1: Violent Crime by Time of Day

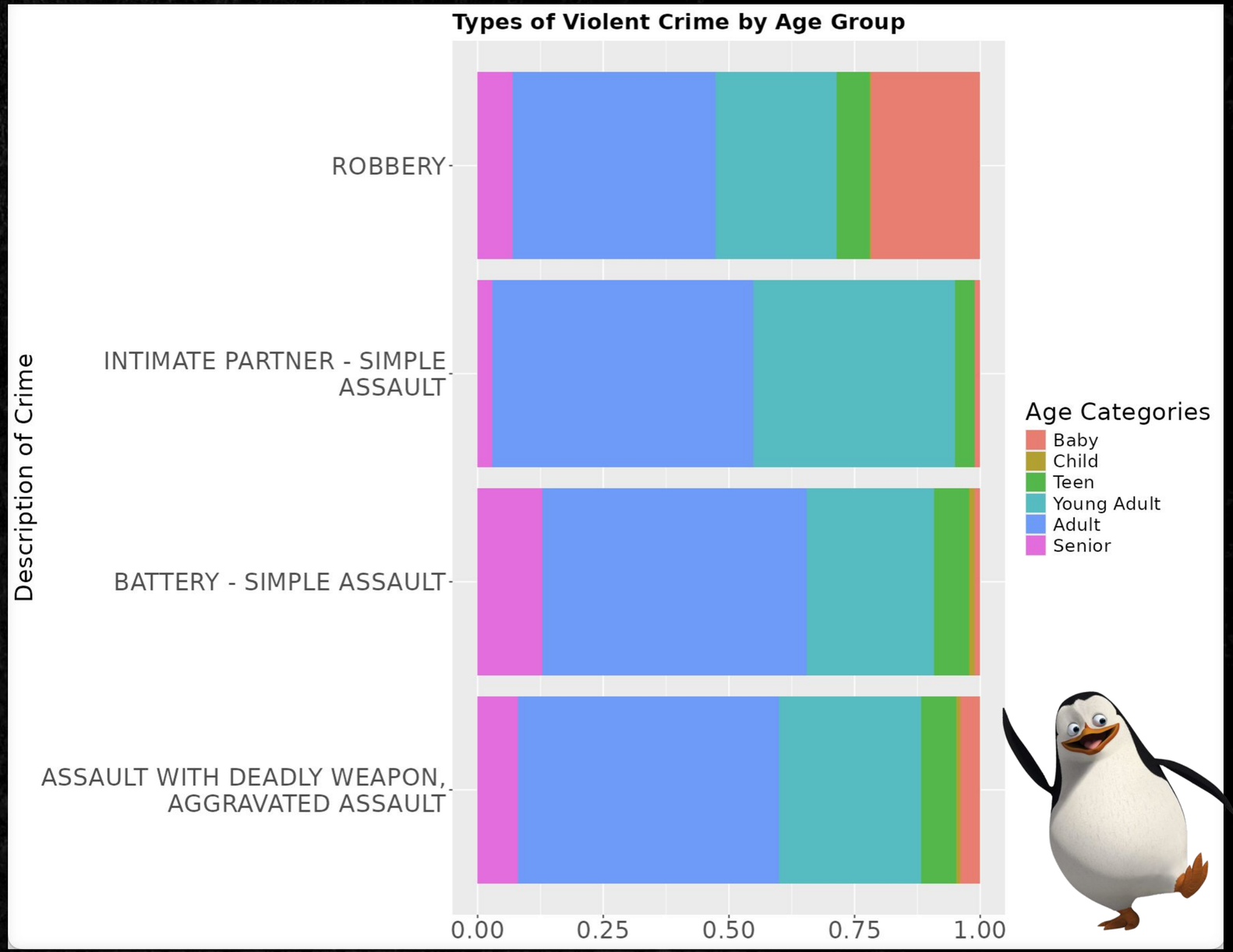
- Evening and night: HIGHEST count of violent crime
- Early morning: LOWEST count of violent crime





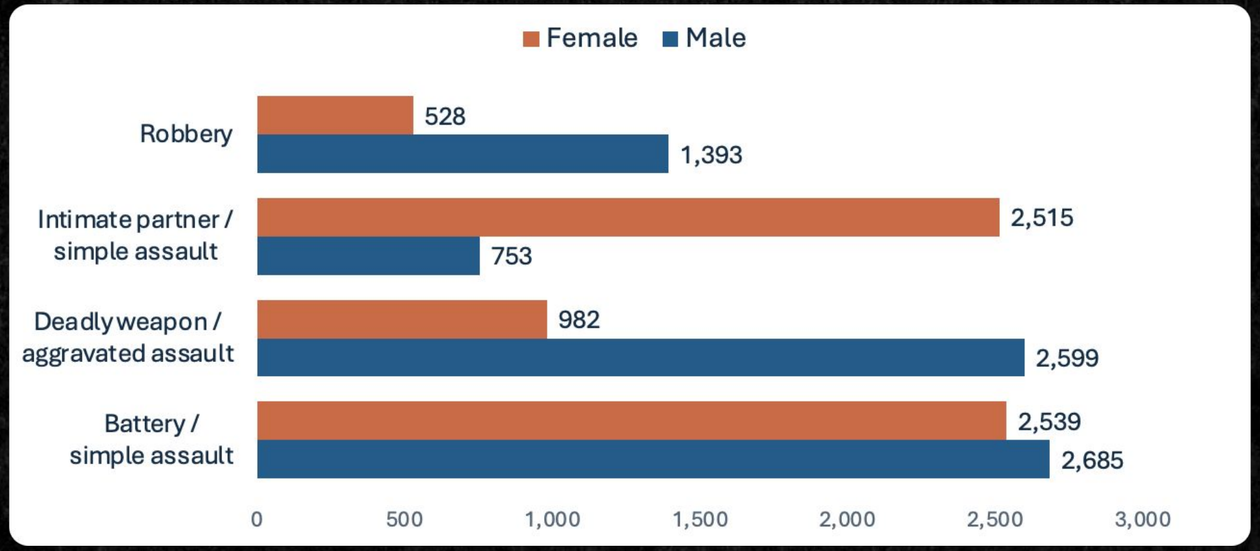
Graph 2: Victim Age and Crime Types

- Only Top Four Crimes Represented
- Majority of crimes against adults/young adults
- Robbery & babies
- Battery - simple assault & seniors



Graphs 3 & 4: More Victim Demographics

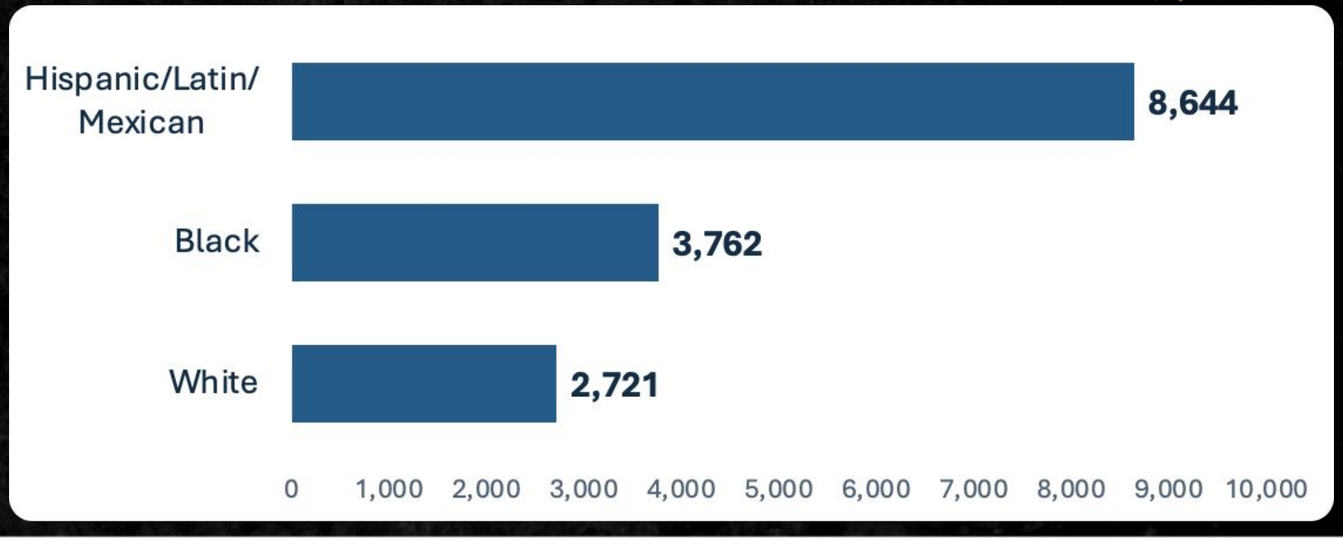
Male: 8,376 records Female: 8,331 records Unknown: 632 records



- Male records: higher counts for aggravated assault and robbery
- Female records: higher counts for intimate-partner simple assault



- 17,340 records with descent
- Top three: Hispanic, Black, and White (other races not included in the graph)



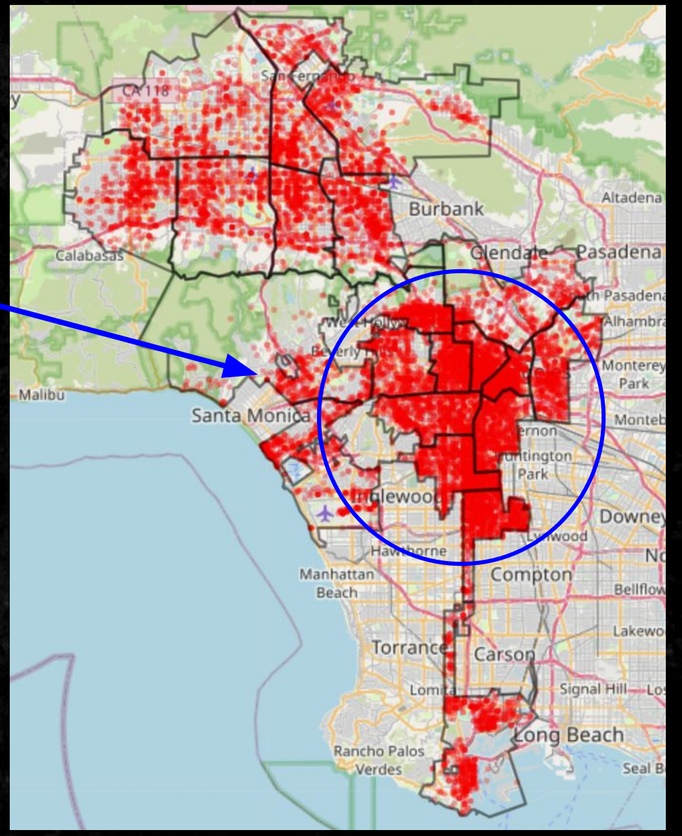


Graph 5: Location Hotspot Analysis

Location	Percent of Total
Street	22.1%
Single Family Dwelling	17.5%
Multi-Unit Dwelling	17.1%
Sidewalk	10.7%

- 4 most prevalent location types account for ~67.4% of crimes
- Most violent crimes occur on streets and in homes

	area_name	crimes_per_km2
*	<chr>	<dbl>
1	Central	108.
2	Rampart	67.2
3	Olympic	56.3
4	77th Street	52.6
5	Southeast	50.7
6	Newton	40.2
7	Southwest	34.5
8	Hollywood	27.3
9	Wilshire	20.9
10	Hollenbeck	17.5



- The top 10 areas with highest violent crime densities cluster in one region (downtown)

Conclusions, Discussion, and Limitations

Based on the data we collected and the most committed crimes, the most susceptible victim of violent crime in LA would:

- Participate in nightlife/ consume alcohol
- Adult or young adult
- Man
- Hispanic
- Downtown
- Street or home

Recommendations:

- Site assessments, community outreach, and support services in crime hotspots
  - Improve street environment
  - Violence intervention/dispute mediation
- Domestic violence hotlines and advocacy

Limitations:

- Our analysis focuses on most **common** violent crimes rather than the most dangerous/long-lasting/destructive crimes
- Random sampling could have impacted our results



Thank you!