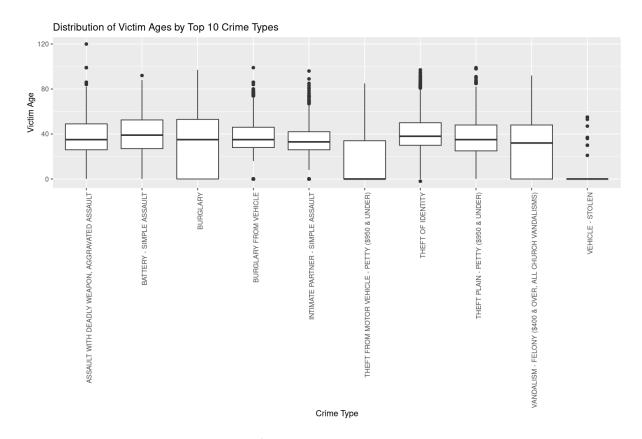
Name – Anusha Maniar

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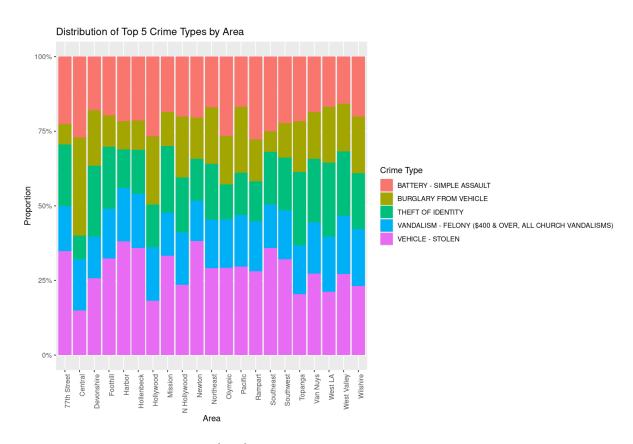
Batch - CSE(DS)



- 1. **Assault with a Deadly Weapon/Aggravated Assault**: Victim ages are widely distributed with a median around 40 years. There are many outliers, both young and old.
- 2. **Battery Simple Assault**: Similar age distribution to the first crime, with a median around 40 years, though slightly fewer outliers.
- 3. **Burglary**: The widest age range, with a median close to 50 years. There are many outliers on both ends.
- 4. **Burglary from Vehicle**: Victim ages are spread across a wide range with a median close to 40 years. Many outliers, especially among older victims.
- 5. **Intimate Partner Simple Assault**: Narrower age range with a median around 35 years, but a few significant outliers on the higher end.
- 6. **Theft from Motor Vehicle Petty (\$950 & Under)**: Median age around 30 years, with fewer outliers, indicating a narrower victim age distribution.
- 7. **Theft of Identity**: Median victim age is around 40 years, with a wide distribution of ages and numerous outliers, especially older victims.
- 8. **Theft Plain Petty (\$950 & Under)**: Median age is around 35 years, and a moderately wide distribution of victim ages with some outliers.

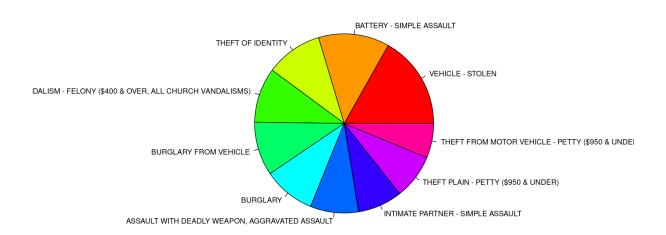
- 9. **Vandalism Felony (\$400 & Over, All Church Vandalisms)**: Victims show a slightly broader distribution with a median age around 40 years.
- 10. **Vehicle Stolen**: Victim age distribution is narrow, with a median age around 50 years, and a few outliers, both younger and older.

In general, the age distributions vary across crime types, with some crimes having more victims in older age groups (e.g., vehicle-related crimes) and others having a more balanced age distribution across different age ranges. There are also many outliers in the data, showing victims outside the typical age range.



- 1. **Battery Simple Assault (Red)**: This crime type consistently dominates across all areas, representing a significant proportion in every region, particularly in areas like Devonshire, Pacific, and Wilshire.
- 2. **Burglary from Vehicle (Green)**: Varies by area, but has a noticeable presence in Central, Devonshire, and Wilshire, while being less common in areas like 77th Street and Southeast.
- 3. **Theft of Identity (Blue)**: Prominent across most areas, especially in Newton, Northeast, and Olympic, making up a substantial portion of the crime distribution.
- 4. **Vandalism Felony (Yellow)**: Relatively low compared to other crime types, though it has a noticeable share in areas like Central and Wilshire.
- 5. **Vehicle Stolen (Pink)**: A significant portion in all areas, particularly high in 77th Street, Southeast, and Van Nuys, while being relatively lower in Central and Wilshire.

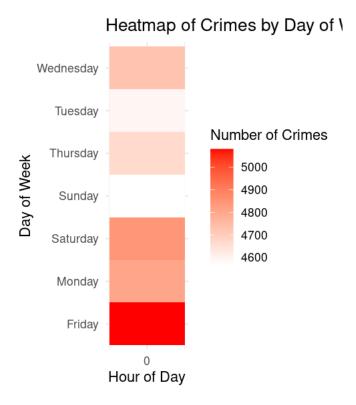
The overall crime distribution varies across areas, but battery and vehicle-related crimes are consistently significant



Top 10 Crimes by Crime Code Description

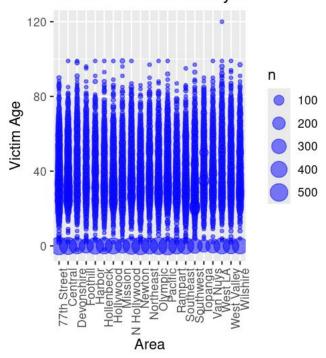
- 1. **Battery Simple Assault (Orange)**: This crime occupies a substantial portion, indicating its prevalence among the top 10 crimes.
- 2. **Vehicle Stolen (Red)**: Represents a significant share, highlighting vehicle theft as a major crime.
- 3. **Theft of Identity (Yellow)**: Prominent within the chart, showing a high occurrence of identity theft.
- 4. **Theft from Motor Vehicle Petty (Pink)**: Also a notable category, contributing significantly to overall crime.
- 5. **Theft Plain Petty (Purple)**: Another major category, reflecting general petty theft as a frequent issue.
- 6. **Intimate Partner Simple Assault (Light Purple)**: Represents a smaller but still considerable slice.
- 7. **Burglary (Blue)**: Shows that burglary is a common offense, taking up a good portion of the chart.
- 8. **Burglary from Vehicle (Light Green)**: Similar in proportion to general burglary, vehicle burglary is frequent.
- 9. Vandalism Felony (Green): Represents crimes related to vandalism of high-value property.
- 10. **Assault with Deadly Weapon, Aggravated Assault (Cyan)**: Another significant type of crime, reflecting more serious assaults.

Overall, the pie chart highlights a variety of theft and assault-related crimes, with some crimes like battery and vehicle theft being particularly common.



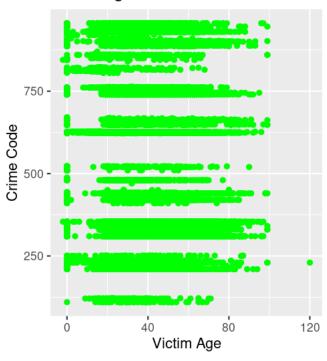
- 1. Friday at midnight (hour 0) shows the highest crime rate, indicated by the darkest red color.
- 2. Weekends (Friday, Saturday) appear to have higher crime rates overall compared to weekdays.
- 3. There's a noticeable pattern of increased crime activity during nighttime hours across most days.
- 4. Wednesday and Tuesday seem to have the lowest crime rates, shown by the lightest colors.
- 5. The early morning hours (around 3-5 AM) generally show lower crime rates across all days.
- 6. There's a gradual increase in crime rates as the week progresses from Monday to Friday.
- 7. The heatmap only shows data for hour 0 (midnight), which limits our ability to see patterns throughout the full 24-hour cycle.
- 8. The color gradient suggests a range of about 4600 to 5000+ crimes at the peak times.

## Bubble Plot: Crimes by Area and Vic



- 1. Most crimes appear to affect victims between ages 20-60 across all areas, as indicated by the dense concentration of bubbles in this range.
- 2. There's a notable cluster of large bubbles near the bottom of each area column, suggesting a high number of crimes against very young victims (age 0-5) in all areas.
- 3. Some areas (e.g., Central, 77th Street) seem to have larger bubbles overall, indicating a higher crime rate in these locations.
- 4. There are occasional outliers with victims over 100 years old, which could be data errors or very rare cases.
- 5. The distribution of bubble sizes is fairly consistent across areas, suggesting similar age patterns of victimization citywide.
- 6. Smaller bubbles (fewer crimes) are more common for victims aged 80 and above in most areas.
- 7. The legend indicates that the largest bubbles represent around 500 crimes, while the smallest represent about 100.
- 8. There doesn't appear to be a strong correlation between specific areas and victim age patterns, as the overall distribution looks similar across columns.
- 9. The plot shows a continuous spread of victim ages from very young to very old, indicating that crime affects all age groups to some extent.
- 10. Some areas (e.g., Hollywood, Northeast) appear to have slightly fewer large bubbles, which might suggest lower overall crime rates in these locations.

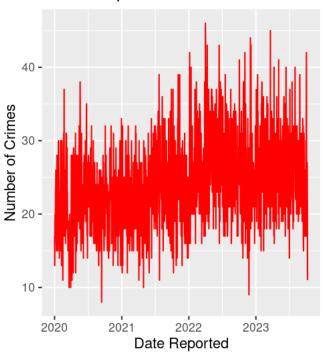
## Victim Age vs Crime Code



- 1. There are distinct horizontal bands, suggesting certain crime codes are more common across all age groups.
- 2. Victim ages range from 0 to about 120 years old, with most concentrated between 20-80.
- 3. Some crime codes (e.g., around 300, 600, 900) show denser clusters of points, indicating higher frequency.
- 4. There are fewer data points for very young (0-10) and very old (90+) victims.
- 5. No strong correlation is visible between victim age and specific crime codes.
- 6. Some crime codes appear to have a more even distribution across ages than others.
- 7. Vertical gaps in the data may indicate certain ages are less commonly reported or affected.
- 8. The highest crime code numbers (around 900) seem to have a fairly consistent distribution across ages.
- 9. There are some outliers, particularly for higher crime codes with older victim ages.
- 10. The green color makes it easy to see the overall pattern, but may obscure density differences in heavily populated areas of the plot.

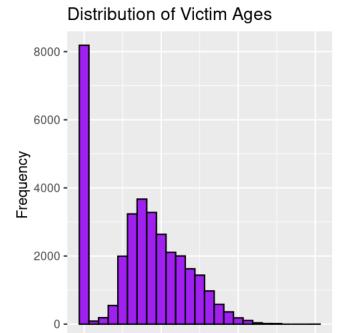
This chart provides a high-level view of how different types of crimes (represented by codes) relate to victim ages, showing general patterns rather than specific trends for individual crime types.

## Crime Reports Over Time



- 1. The data covers approximately 2020 to 2023, showing a multi-year trend.
- 2. There's a general upward trend in the number of crime reports from 2020 to 2023.
- 3. The number of daily crime reports typically ranges from about 10 to 45.
- 4. There are regular patterns of peaks and troughs, suggesting possible weekly or monthly cycles.
- 5. The variation in crime reports seems to increase over time, with wider ranges in later years.
- 6. 2020 shows lower overall crime reports, possibly due to COVID-19 lockdowns.
- 7. The highest peaks appear in late 2022 and 2023, reaching around 45 reports per day.
- 8. There are occasional sharp drops to very low numbers, which might indicate holidays or data collection issues.
- 9. The density of the red lines increases in later years, suggesting more frequent fluctuations.
- 10. No clear seasonal pattern is immediately obvious, though a more detailed analysis might reveal one.
- 11. The overall trend suggests that crime reporting has been increasing in frequency and variability over the observed period.

This chart provides a good overview of how crime reporting has changed over time, showing both short-term fluctuations and longer-term trends.



40

1. There's a very large spike at age 0, a data entry issue for unknown ages.

80

Age

2. Excluding the age 0 spike, the distribution roughly follows a normal curve with a right skew.

120

- 3. The peak of the distribution (mode) appears to be around 25-30 years old.
- 4. There's a gradual decline in frequency as age increases beyond the peak.
- 5. Very few victims are reported in the 100+ age range, as expected.
- 6. There's a noticeable dip in frequency for victims in their early teens (around 10-15 years old).
- 7. The frequency starts to increase rapidly from about age 15 onwards.
- 8. The distribution extends to about 120 years, which might include some data errors for very old ages.
- 9. The majority of victims appear to be between 20 and 60 years old.
- 10. There's a small but consistent number of victims in the elderly age ranges (70+).

This histogram provides a clear visual representation of how crime victimization varies with age in the dataset, highlighting vulnerable age groups and overall trends in age-related crime patterns.

## Crime Frequency by Area 2000 - 1500 - 500

N Hollywood Newton

Olympic Pacific

Rampart Southeast

Vortheast

Area

Central Devonshire Foothill

Harbor Hollenbeck Hollywood Mission

- 1. **Highest Crime Frequency**: 77th Street area has the highest crime frequency, surpassing 2000 incidents.
- 2. **Other High Crime Areas**: Pacific and Rampart areas also show relatively high crime rates, each exceeding 1750 incidents.

Southwest Topanga Van Nuys West LA

- 3. **Mid-Range Crime Frequency**: Areas like Olympic, Southwest, and Mission hover around 1500 incidents.
- 4. **Lower Crime Frequency**: Devonshire, Van Nuys, and West Valley have noticeably lower crime rates, with counts closer to 1000.
- 5. **Consistency**: Most areas seem to have crime frequencies between 1200 and 1800, with some outliers.

The chart provides a clear comparison of crime distribution across different areas.