

Investigated by:

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Baton Rouge: A City in Conflict

Key Events in 2016:

July 5

Alton Sterling shooting

Following Days

Protests and arrests of ~200 people

July 17

Attack on police officers

Systemic Challenges

- Lingering effects of systemic racism
- Segregation and income inequality
- Strained police-community relations

Our Focus



Exploring crime data in three dimensions:

- Geography: Where is crime most prevalent?
- 2. Time: How has crime changed over time?
- 3. Systemic Analysis: Where is data missing?

DATASET DESCRIPTION



Crime Incidents 1/1/2021 - 7/16/2024



East Baton Rouge Parish

Combined crime incidents for city and parish 1/1/2021 - 7/16/2024



Baton Rouge Legacy

Crime Incidents 1/1/2011 - 12/31/2020



NOAA Weather

Weather data for Baton Rouge metropolitan area 1/1/2011 - 7/19/2024

DATA CLEANING PROCESS



Baton Rouge

Combined legacy and current datasets



East Baton Rouge Parish

Dropped specific location data

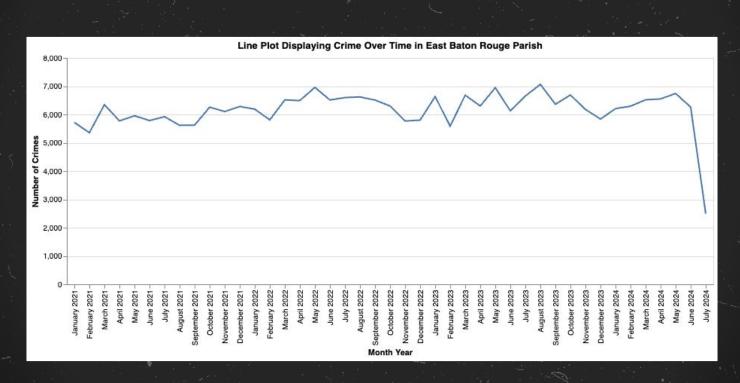
Corrected misspellings



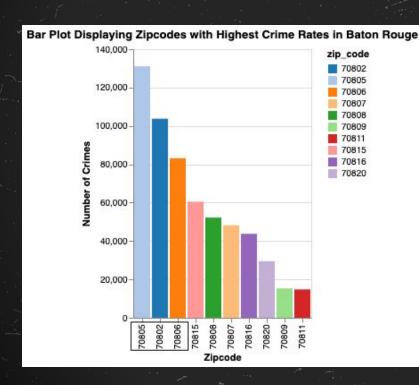
Weather

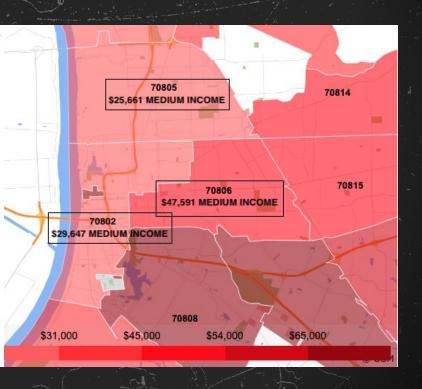
Decoded and renamed columns

OVERALL TRENDS

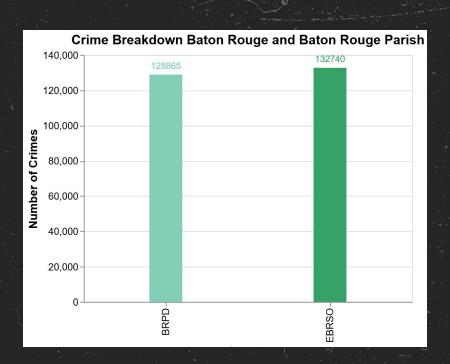


Geographical Analysis of Crime in Baton Rouge

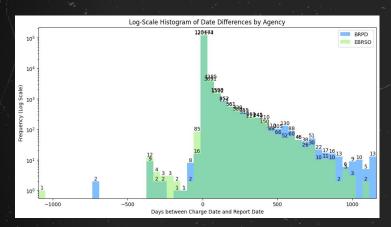




Systemic Analysis: Agency Reporting



Systemic Analysis: Charge Date vs. Report Date



Log-Scale

Due to huge dataset

Negative Values
(Report filed before incident charged)

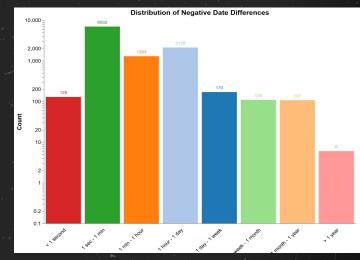
~7,000
Cases
<1-minute discrepancy

3,400 Cases

1 minute to 1 day discrepancy

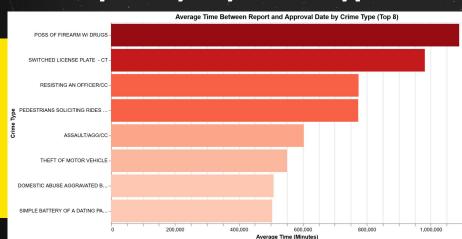
~390 Cases

Larger Discrepancy (data entry?)

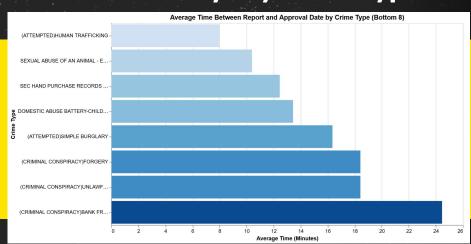


Systemic Analysis: Report Approval Delays

Top Delays by Crime Type



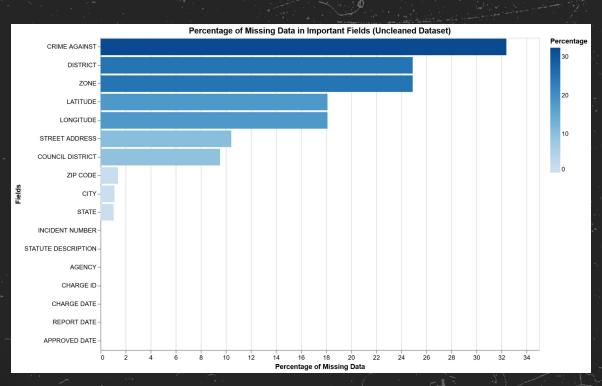
Lowest Delays by Crime Type



Top Delay by District: District 1.

Average delay = 38 days

Systemic Analysis: Missing Data



POPULAR CRIMES BATON ROUGE

OTHER

140,300 crimes 23%



THEFT

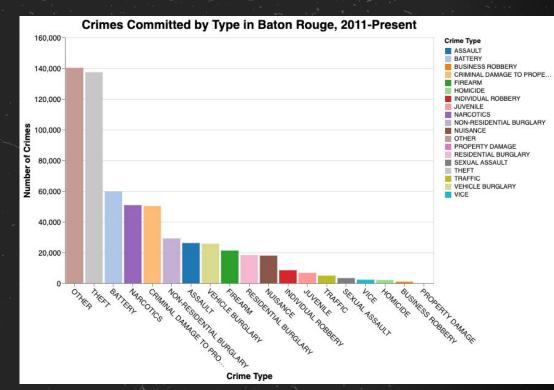
137,362 thefts 22.6%



BATTERY

59,757 batteries 9.8%

₹



POPULAR CRIMES EAST BATON ROUGE

OTHER

77,483 crimes 30.6%



THEFT

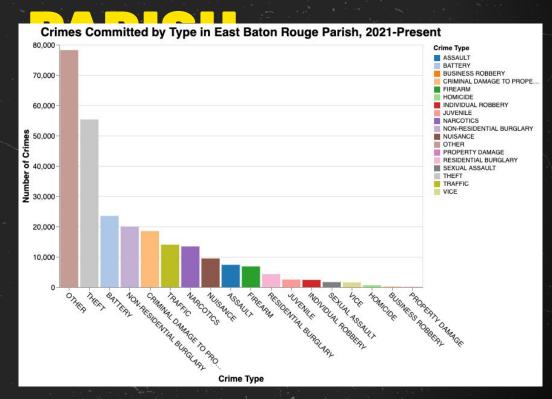
53,604 thefts 21.2%



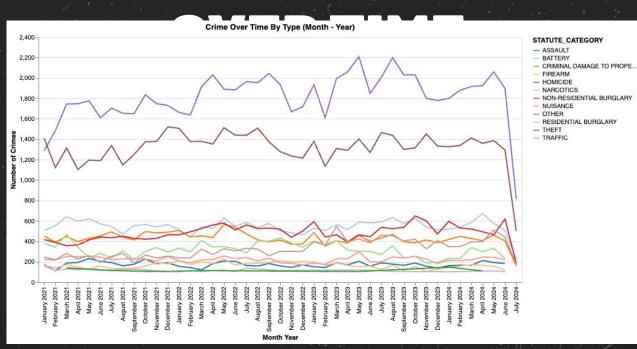
BATTERY

22,616 batteries 8.9%





TYPES OF CRIME



"OTHER" CRIMES

MARS

Mars is actually a very cold place



MERCURY

Mercury is the closest planet to the Sun



VENUS

This planet has extremely high temperatures



What Makes Up the 'OTHER' Crime Category?

COMMITTED **CRIMES**

MARS

Mars is actually a very cold place



MERCURY

Mercury is the closest planet to the Sun



VENUS

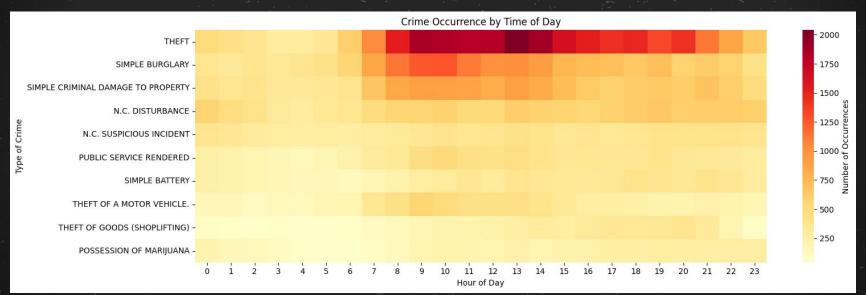
This planet has extremely high temperatures



How many crimes were attempted vs committed?

CRIME OCCURRENCE

By Time of Day



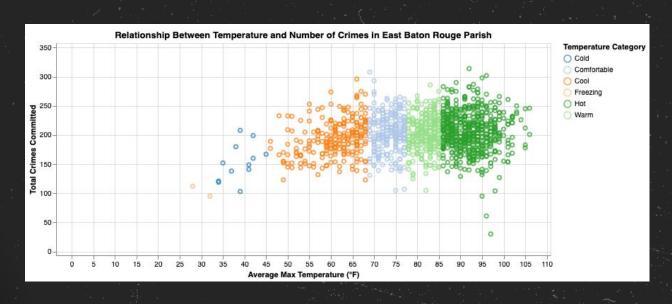
31.4% Afternoon 29.0% Morning

25.9% Evening

13.7% Afternoon

CRIME OCCURRENCE

By Weather



CONCLUSION & SUMMARY

MAJOR FINDINGS:

- Increasing overall crime rates in East Baton Rouge
 Parish
- "OTHER" and theft are most common crimes
- Most crimes occur during daylight hours
- Temperature correlates with crime rates
- Systemic delays in crime reporting and processing

FUTURE RESEARCH:

- Analyze "OTHER" category in depth
- Investigate crime reporting vs. occurrence timing
- Study long-term weather effects on crime
- Examine police response times and prevention strategies