

A wide-angle photograph of a busy Chicago street, likely Loop, during the day. The street is filled with cars, including a red double-decker bus and a white bus. Tall skyscrapers line the street, with various signs visible, including 'JOFFREY & BALLET CHICAGO', 'CHASE', and 'Walmart'. The scene is captured from a low angle, looking down the street.

# Chicago Car Crash Analysis

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# Goal:

1. Identify high-density areas of car crash in Chicago
2. Analyze control failures to identify opportunities for improvement
3. Check for trends in the time of crash to relocate resources appropriately

M/L classifier:

**Unintentional:** These are events or instances where the driver was unaware of the possibility of an accident.

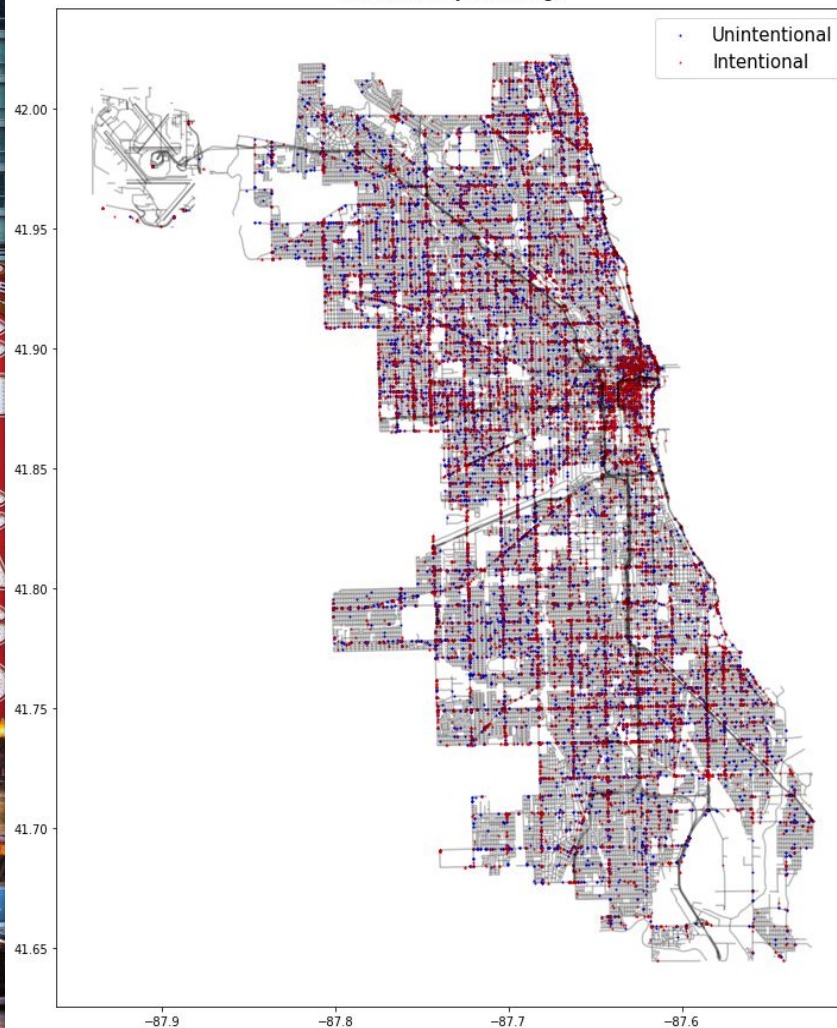
**Intentional:** These are events or instances where the driver was fully aware of the possibility of an accident.



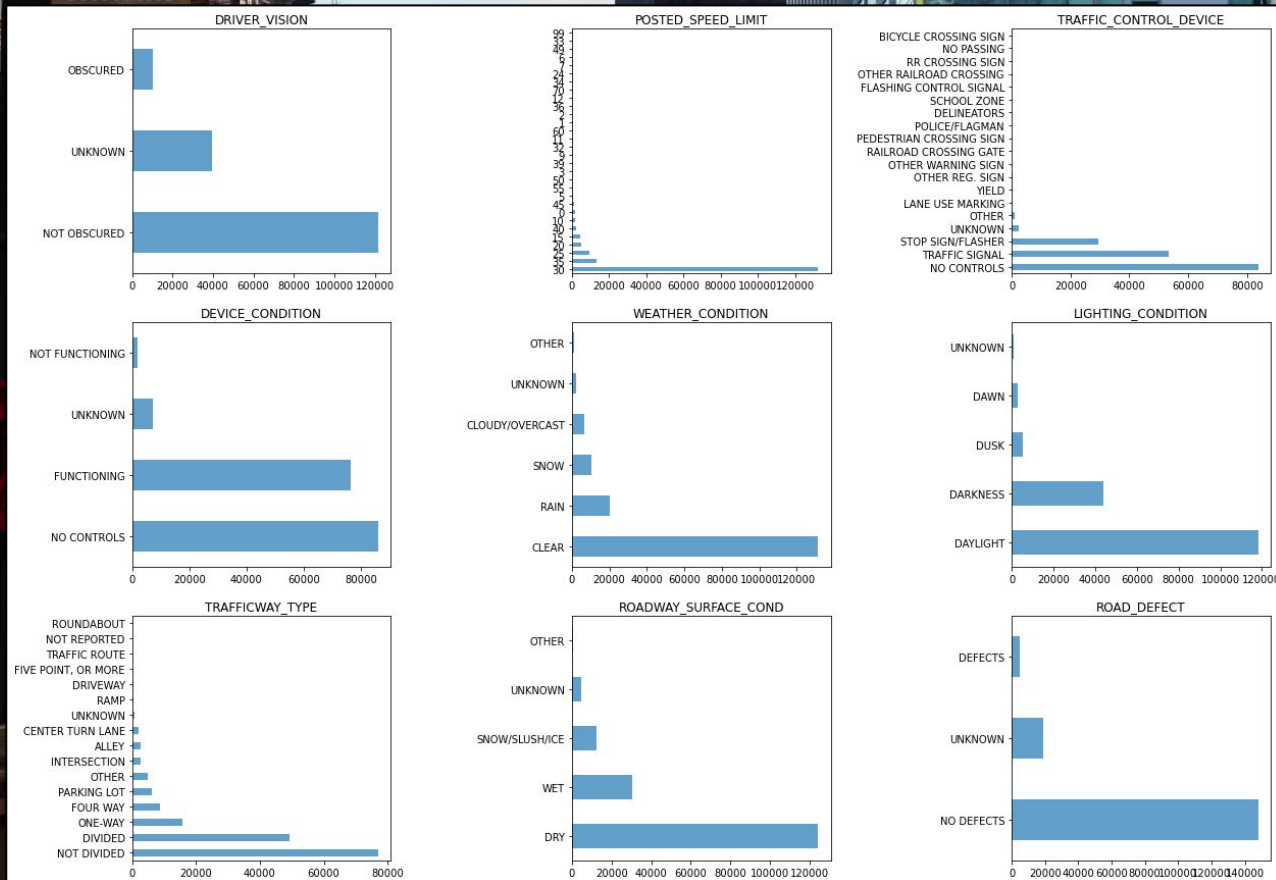
# 1. Identify high-density areas of car crash in Chicago

- Intentional accidents concentrated in the Downtown area.
- Even distribution of Intentional and Unintentional accidents across the city.

Crash Density in Chicago



## 2. Analyze control failures to identify opportunities for improvement



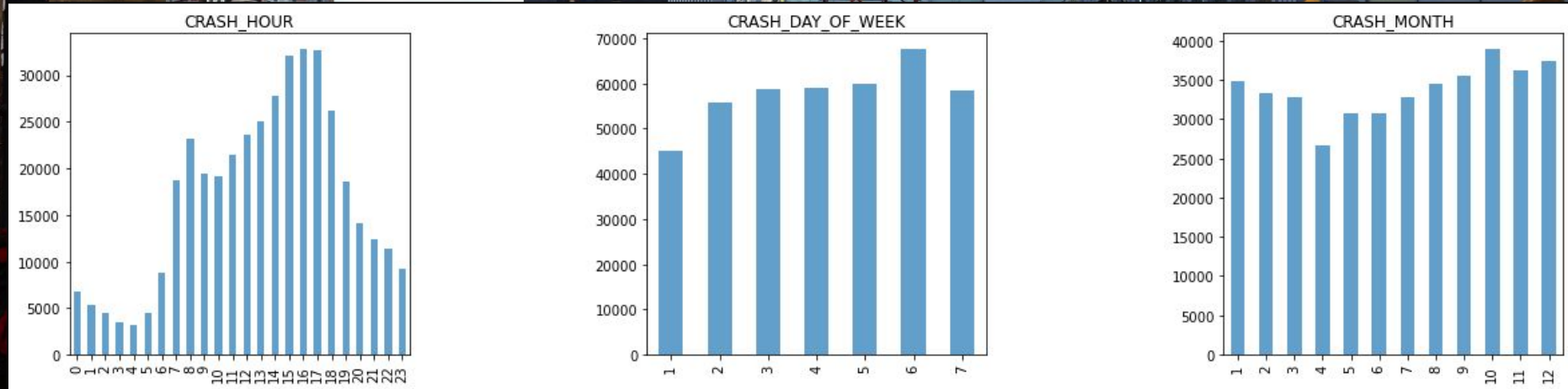
Two key takeaways:

-Most of the accidents are occurring when there are 'No Controls' present.

-There is an increased number of accidents in roads which are 'Not Divided'.



### 3. Check for trends in the time of crash to relocate resources appropriately



Highest Crash hour: 4pm - 6pm

Highest Crash day: Friday

Highest Crash month: October

Lowest Crash hour: 12am - 6am

Lowest Crash day: Sunday

Lowest Crash month: April

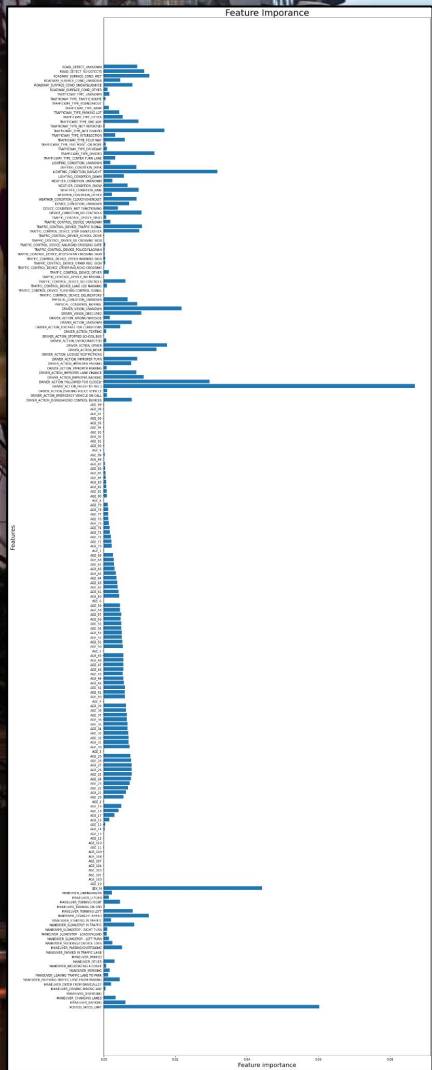


## Recommendations:

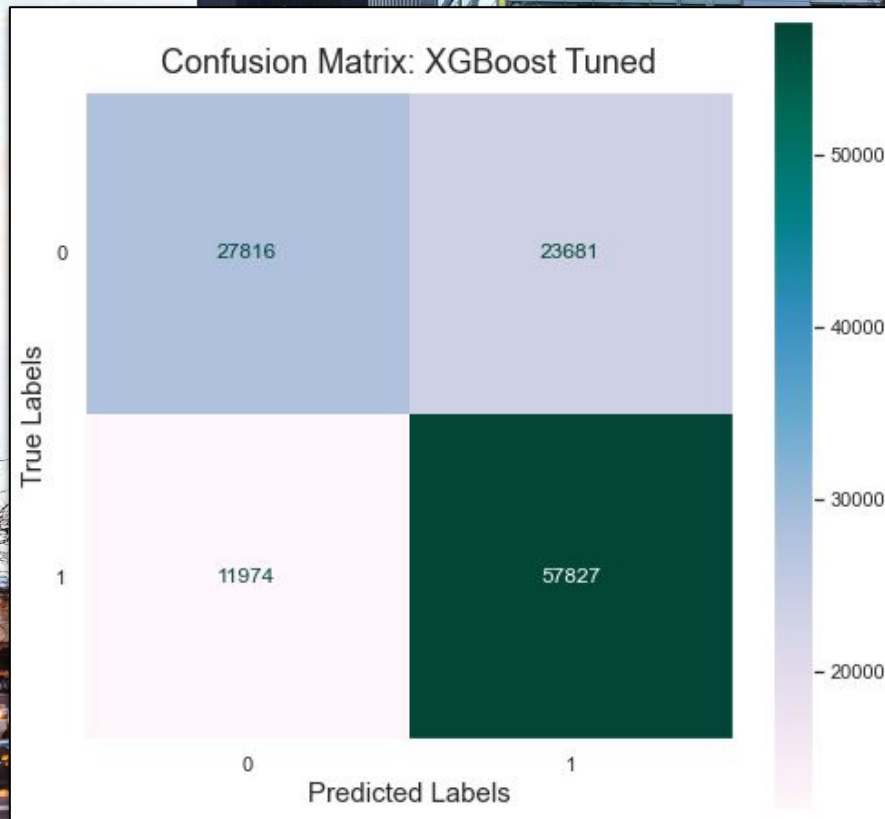
1. Increase the number of traffic control devices all across the city.
2. Create divided trafficway types all across the city.
3. Increase traffic policing during the hours for 4 pm - 6pm and on the weekends.







## M/L Classifier:



Precision = 70.9%

Recall = 82.8%

F1-Score = 76.4%

Thank you

