PHASE III

CHICAGO CAR CRASHES

GROUP SEVENTEEN

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INTRODUCTION

1. **Data Source:** Crash data fetched from E-Crash showing information about each traffic crash on city streets within the City of Chicago limits and under the jurisdiction of Chicago Police Department (CPD).
2. **Problem Statement**: The city of chicago main goal is to be able to come up with solutions to help end or reduce number of accidents. The city of chicago seeks to develop a predictive model that will help indentify the major causes of accidents
3. **Stakeholder:** The primary stakeholder in this scenario is the Vehicle Safety Board of Chicago.
4. **Business problem**: Build a classifier to predict the primary contributory cause of a car accident, given information about the car, the people in the car, the road conditions etc.

DATASETS:

- Traffic Crashes- Vehicle
- Traffic Crashes- People
- Traffic Crashes- Crashes

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Addressing Research Questions

1. Does lack of traffic control device influence accidents and injuries?
2. In which weather conditions do most injuries and accidents occur?
3. Does the number of years since manufacture of a car influence the accidents?
4. In most accidents and injuries occuring do they relate to a certain age group of drivers?

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Business Understanding

This involves gaining a comprehensive understanding of the campaign's goals, objectives, and the broader context of the initiative.

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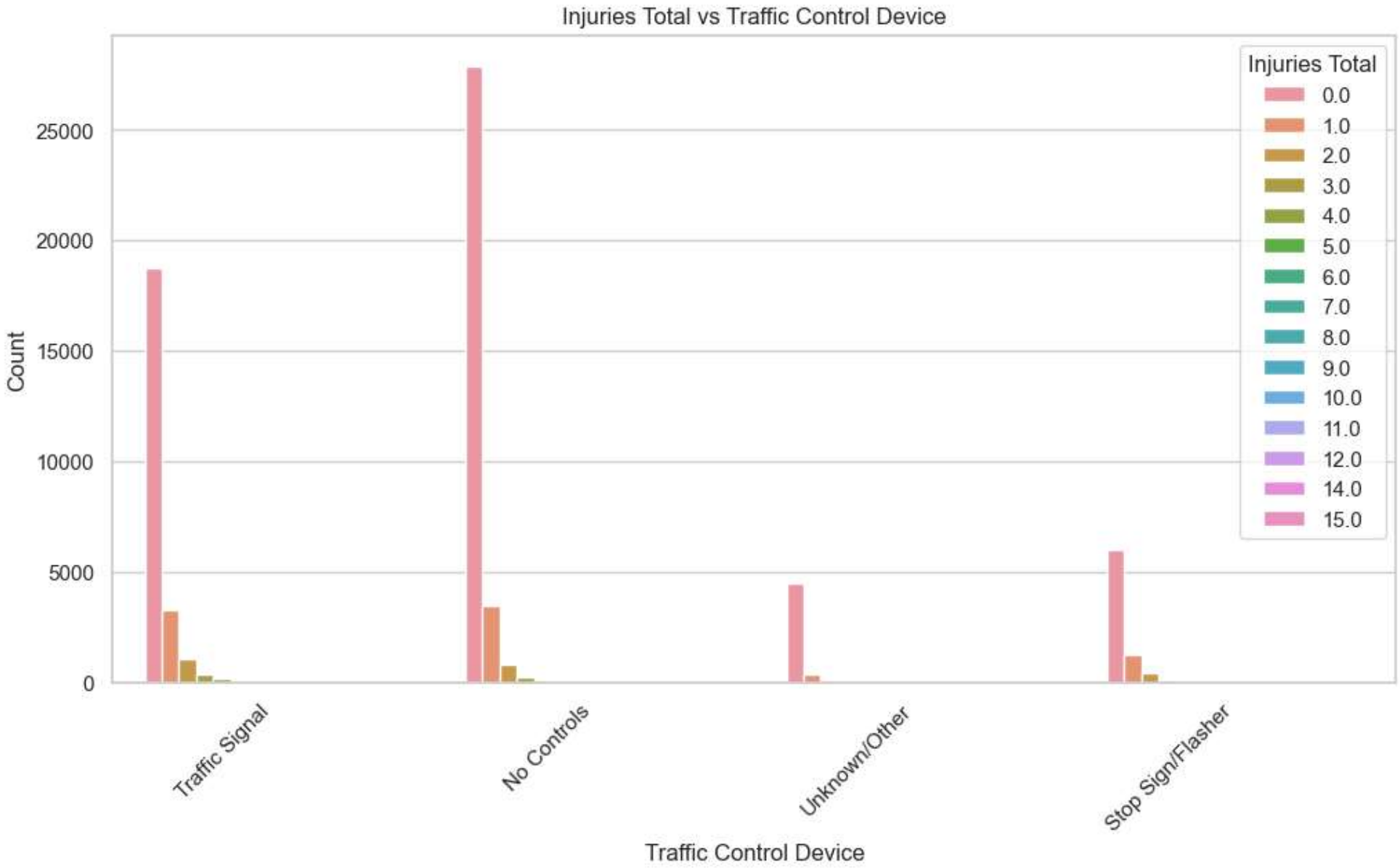
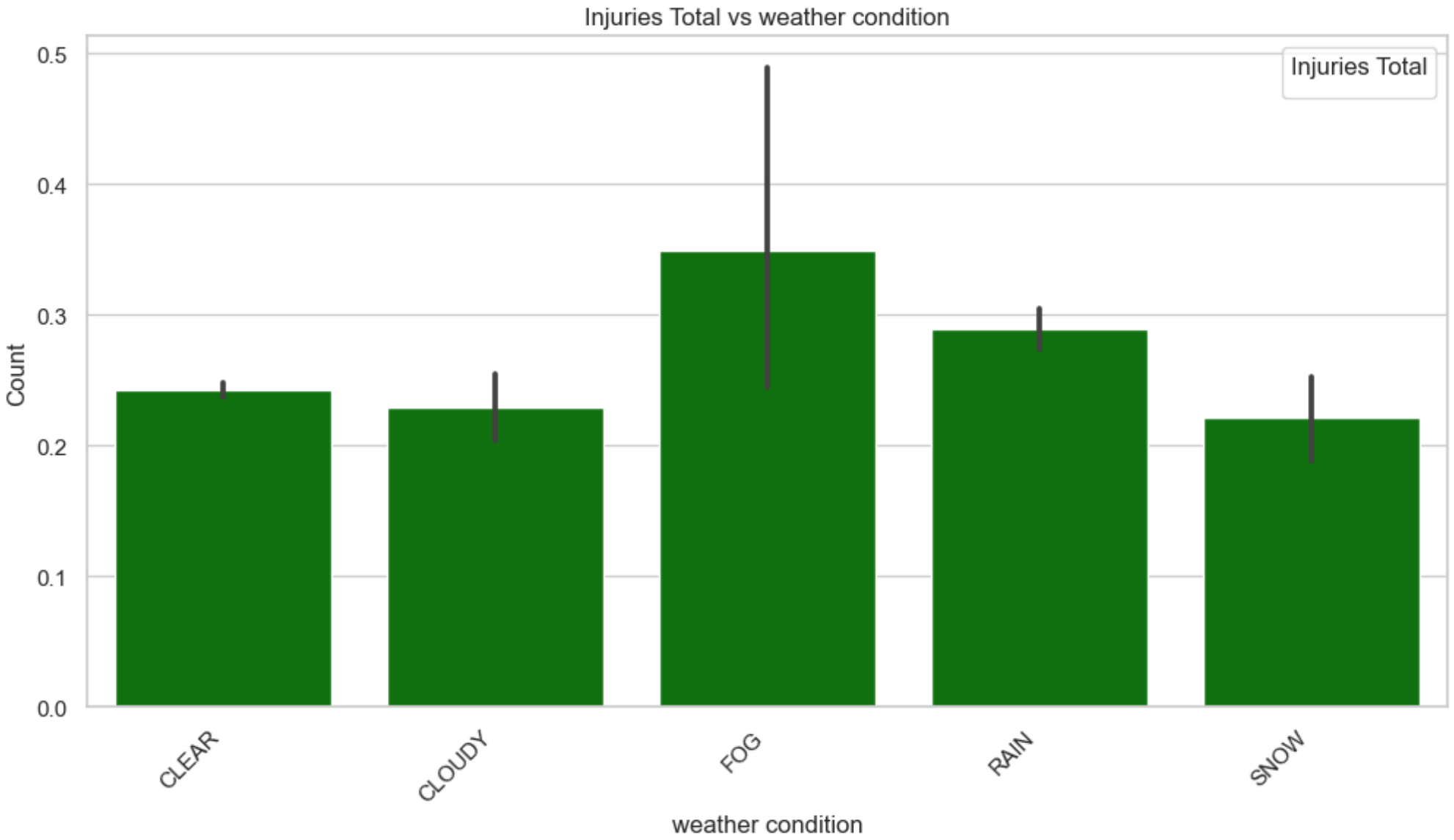
Visualizations

To visualize this we will use 4 diagrams we extracted from the several in the notebook

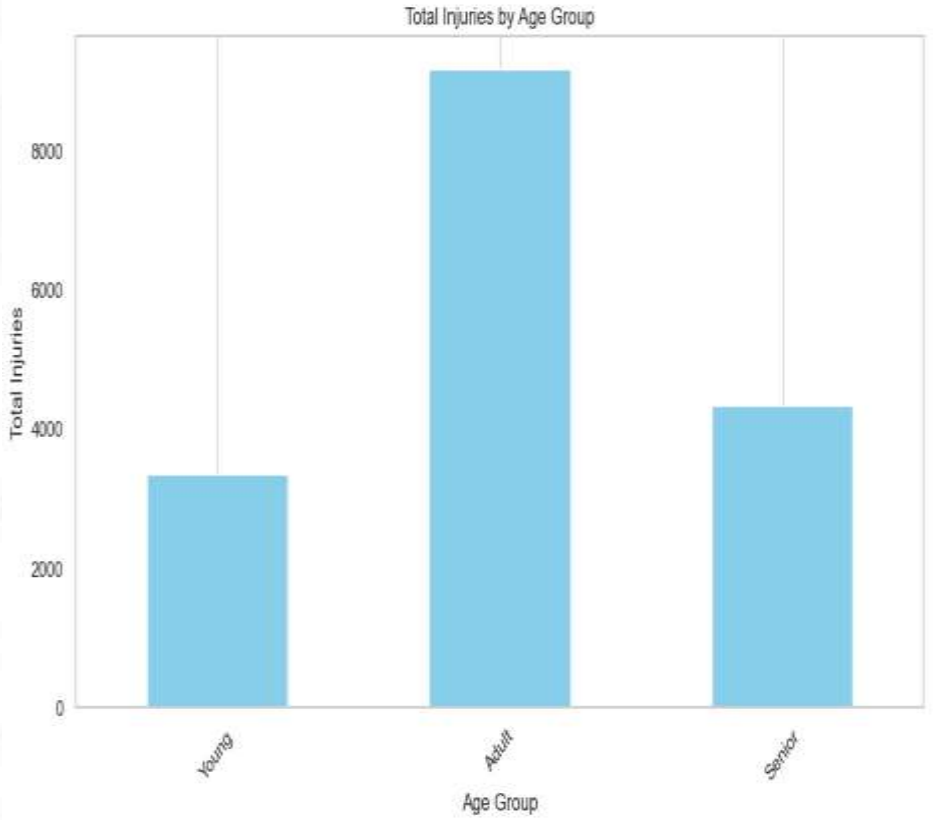
INJURIES TOTAL vs TRAFFIC CONTROL DEVICE



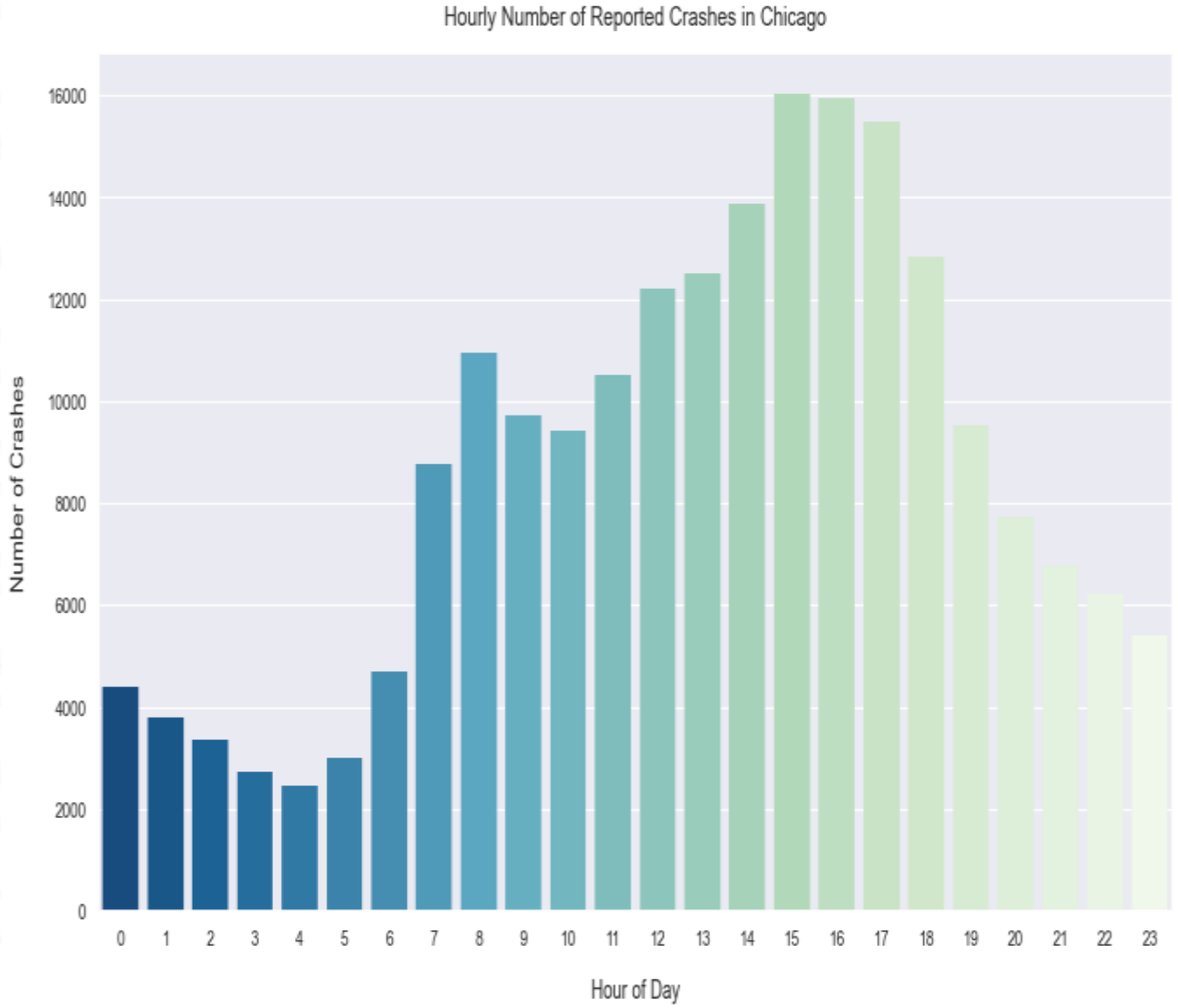
INJURIES TOTAL vs WEATHER CONDITION



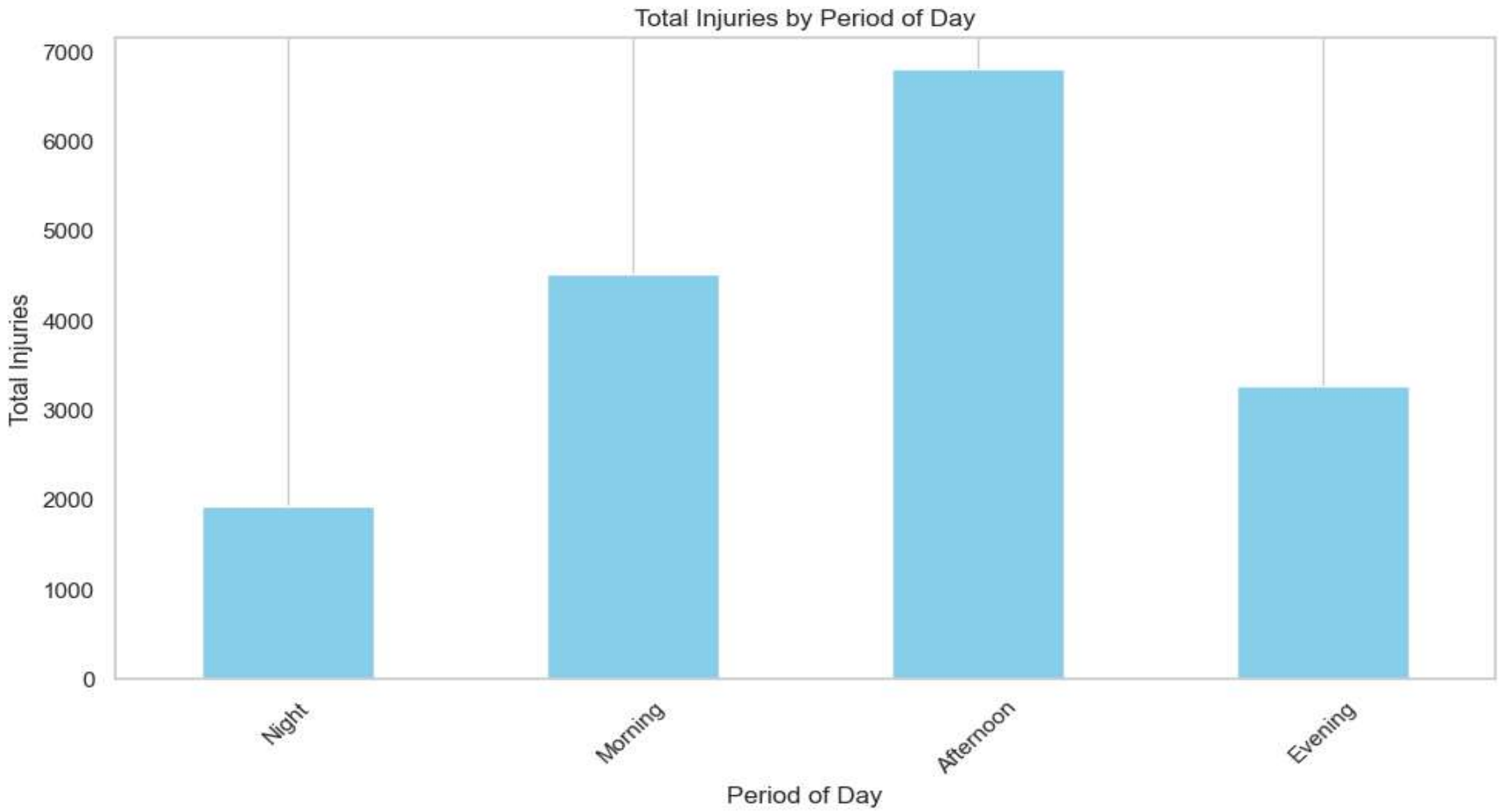
TOTAL INJURIES BY AGE GROUP



Hourly Number of Reported Crashes in Chicago



TOTAL INJURIES BY PERIOD OF DAY



03

Findings and Conclusions

1. Most of the injuries recorded were caused by drivers between the age of 25 to 50 years falling into the adult category
2. Based on the data, it shows that most accidents occur in the afternoon/rush hour.
3. It also shows that most accidents occur in speed limit zones labeled between 30-40 mph.
4. Most of the vehicles involved in the accidents fell into the old category that is they were in the road for a period of more than ten years
5. Most of the accidents occured where there were no traffic signals but less injuries were observed

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RECOMMENDATIONS

The following are our recommendations ;

1. The city should put restrictions on vehicles allowed in roads to be below ten years
2. The city lowers the speed limit during afternoon/rush hour or more patrol in the 30-40 mph zones.
3. The city should increase the traffic control devices to reduce in accidents occurences

THANK YOU

Project: Chicago Car Crashes

Group: 17