Unlocking Road Safety Insights

ANALYSIS OF CRASHSTATS DATA

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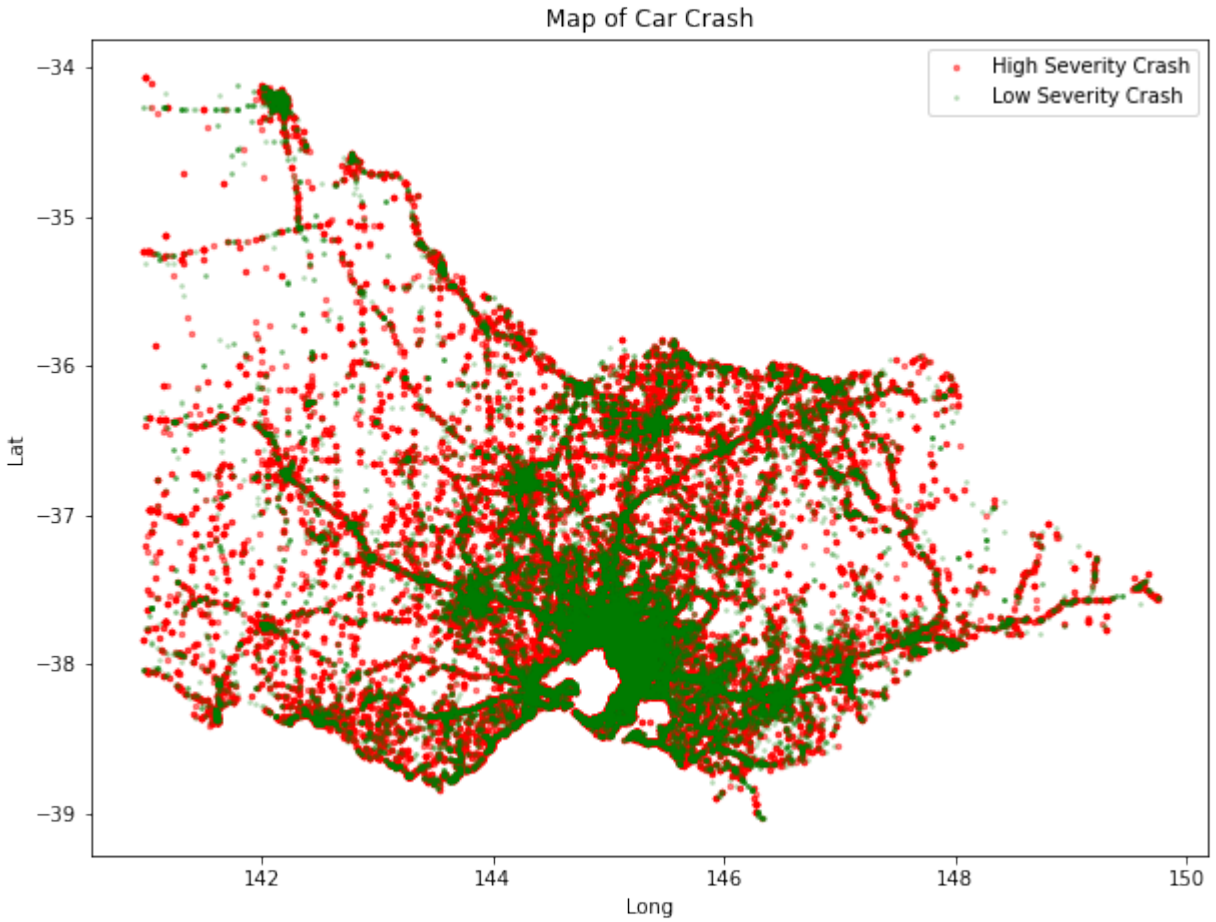
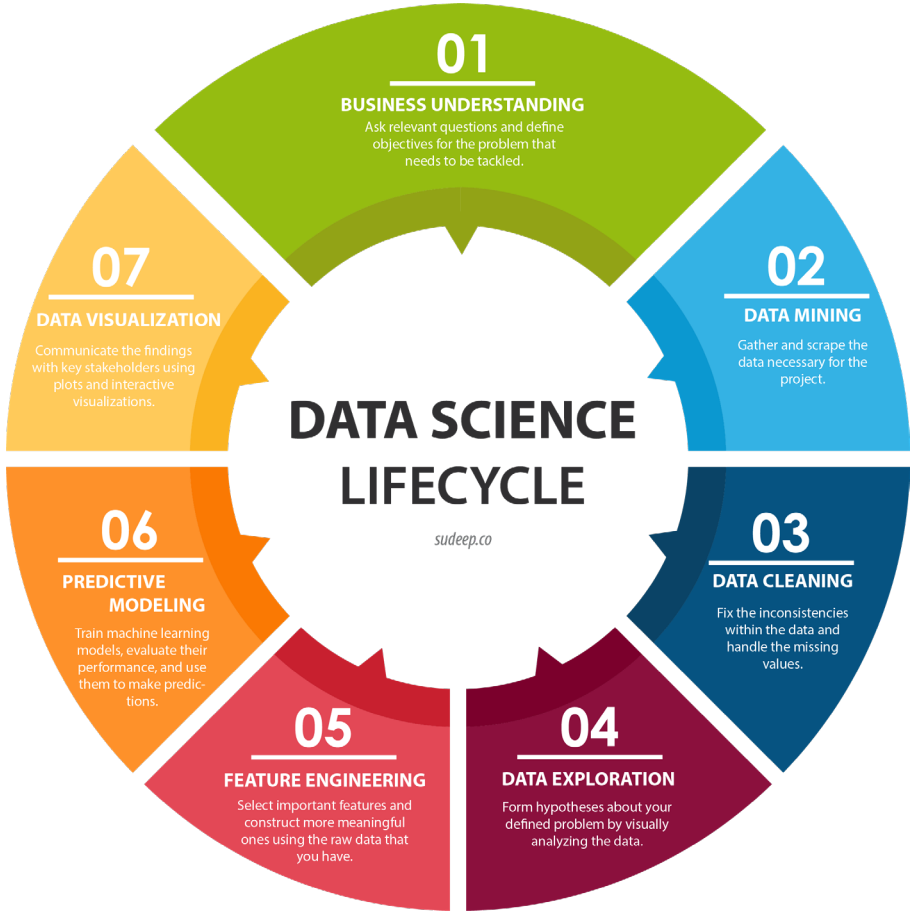
Introduction

- Overview of the Project
- Crashstat Dataset (VicRoads)
- Objective and Value

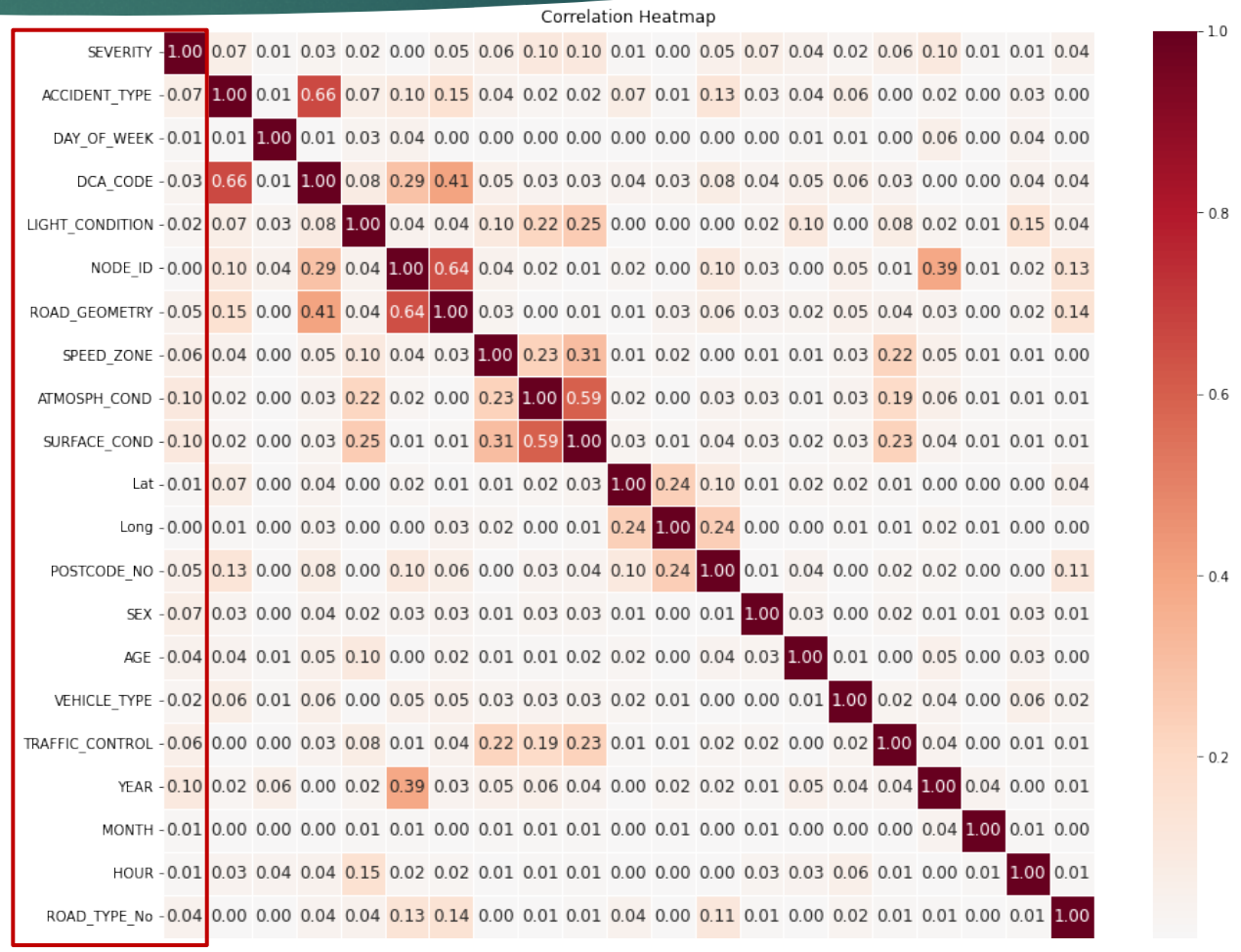
Overview of CrashStats Data Analysis



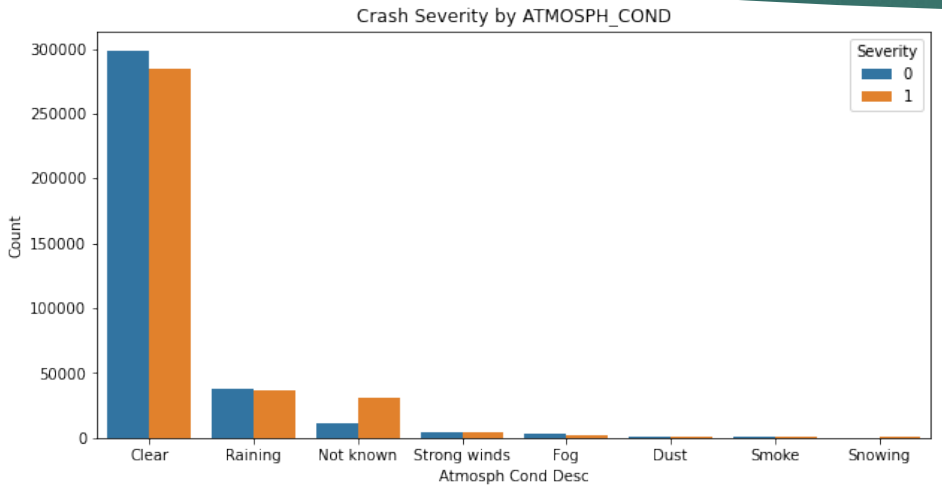


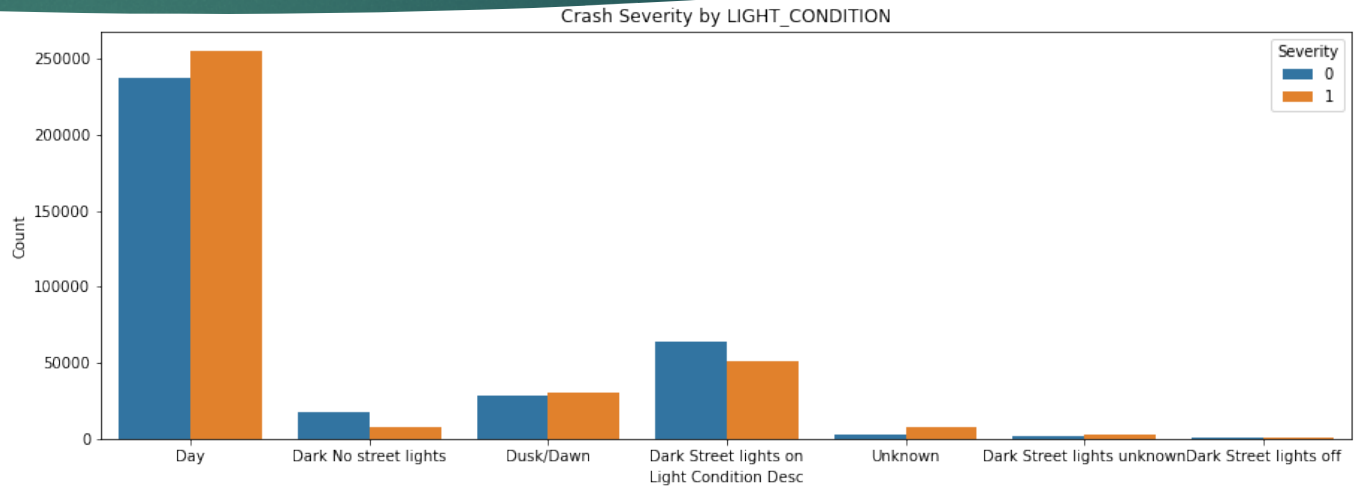
Key Insights from the Analysis

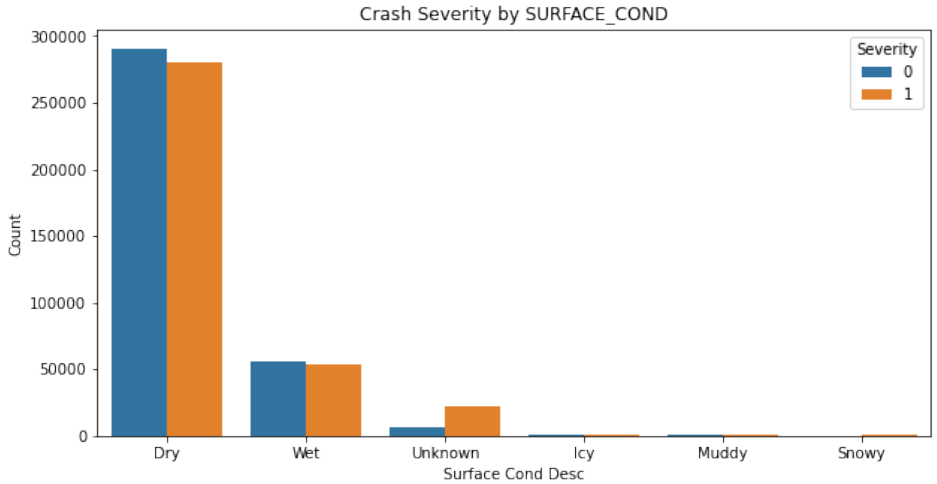
- Crash Severity Patterns
- Contributing factors
  - Location
  - Road
  - Human
  - Vehicle
- Temporal Trends
- Road Type Significance

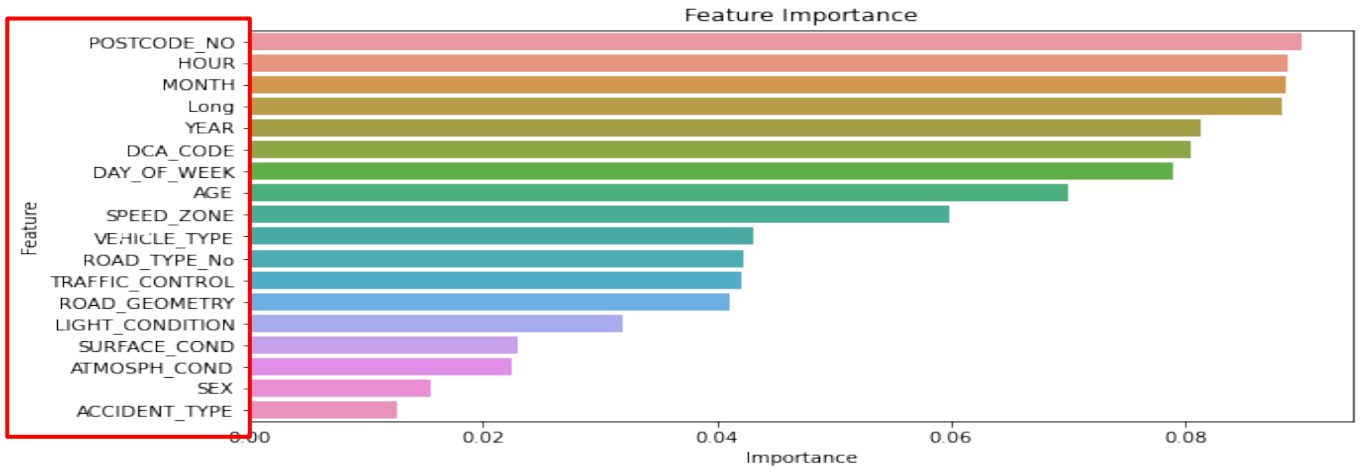


Contributing Factors and Risk Identification





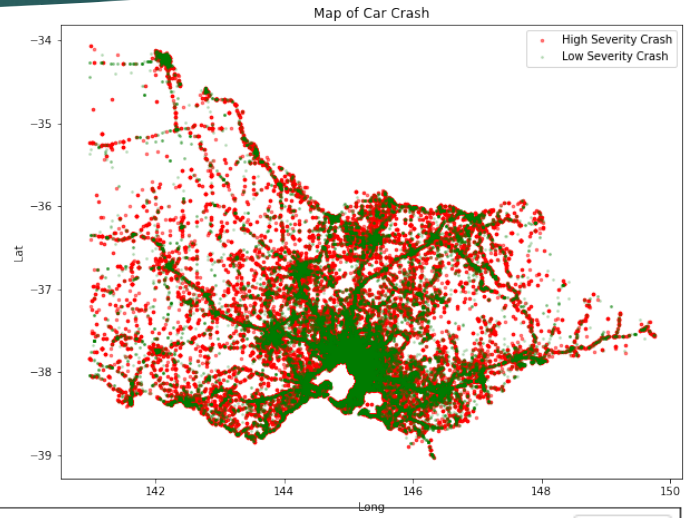


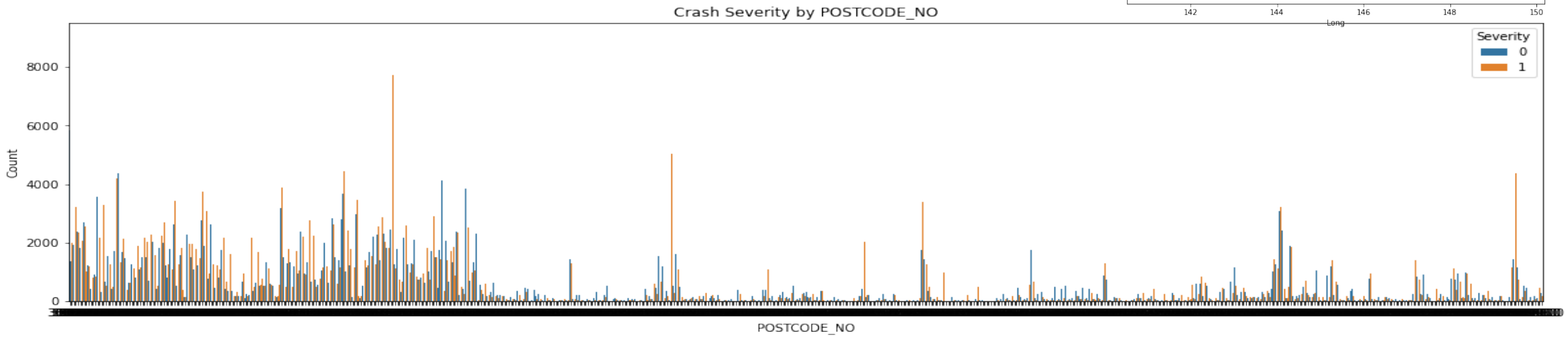


Geographical Crash Hotspots

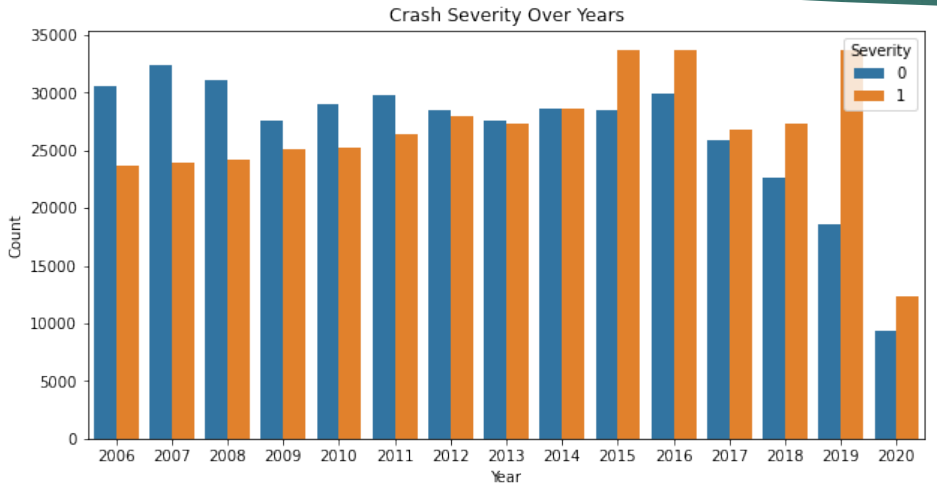
Trends and Patterns

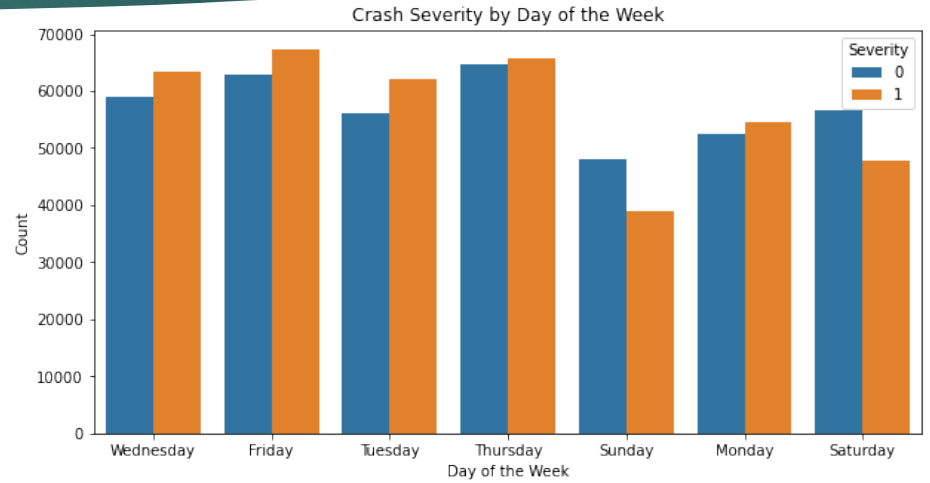
- Certain area(postcode) have more crash
- Metro – crash hotspots but less serious
- Regional – more server crashes on HW

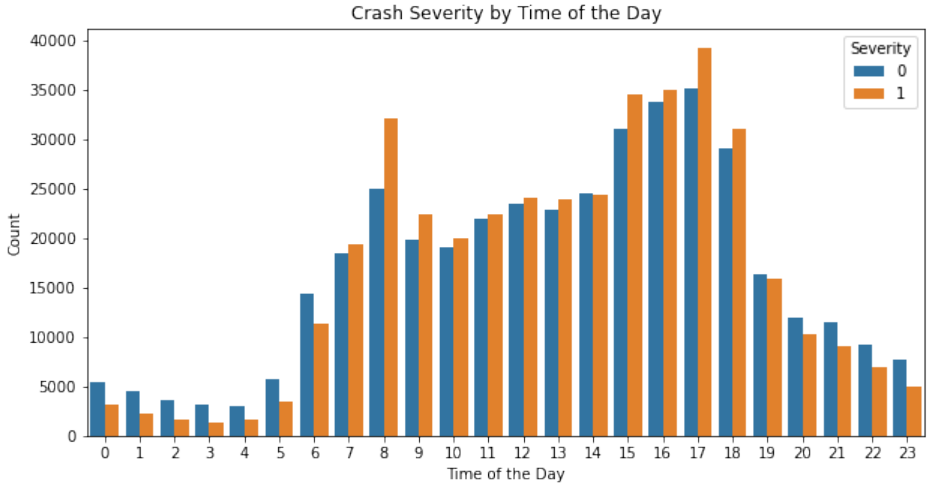




Time Trends and Seasonal Patterns





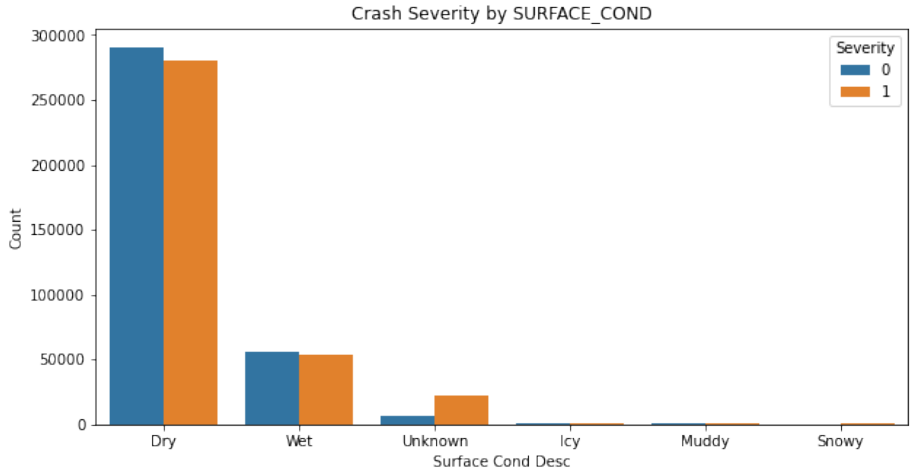


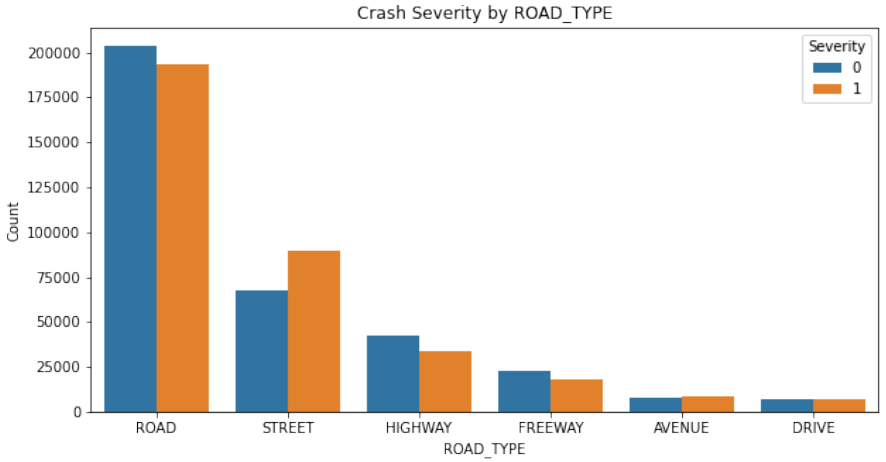
Trends and Patterns

- Peak accident times (**8am, 3-6pm**)
- Peak days (**Tue-Fri**)
- Total Incidents ▼
- High to Low Severity Ratio ▼

Road Type and Speed Zone Analysis

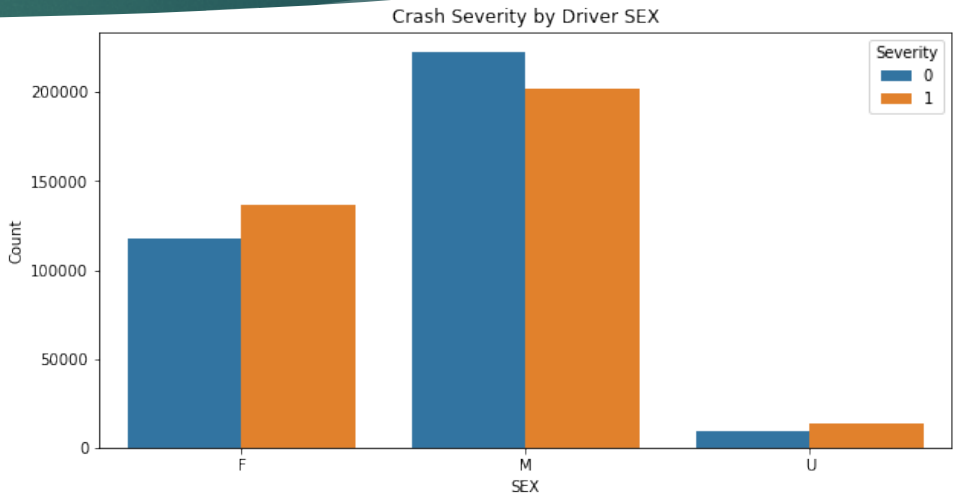
- Road Type
  - More car crashes on **RD**, **ST**, **HW and FW** happening in **Dry** surface condition
- Speed Zone
  - High speed crashes tend to more serious (e.g. 80 and 100)
  - Most of crashes are in **60 speed zone**

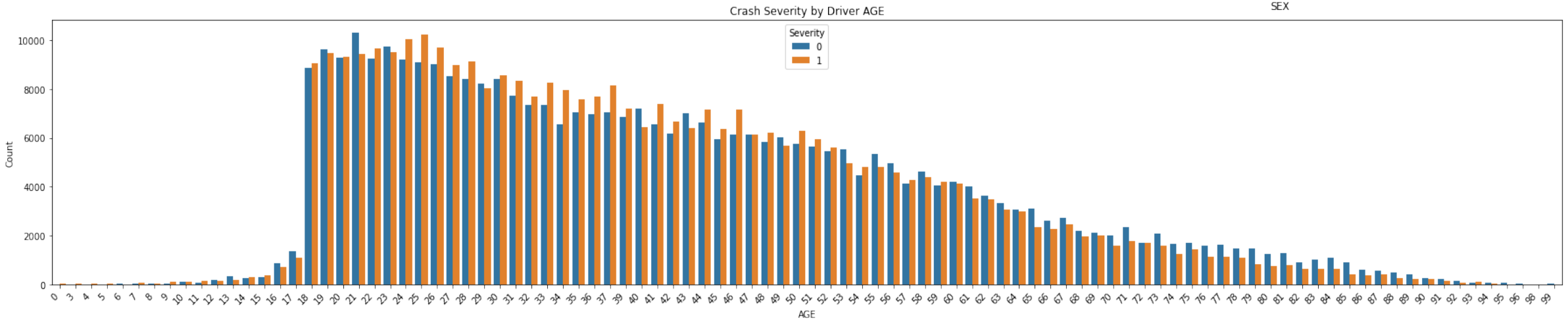




Crashing fact about drivers

- Age
  - **Younger** drivers cause more car crashes.
- Sex
  - Male drivers are responsible for more crashes, while crashes caused by females tend to be more serious.





Data-Driven Risk Management Strategies

- Utilising insights act as a guide for developing targeted risk management strategies
- Leveraging insights for resource allocation, safety interventions, and infrastructure improvements
- Collaboration for safer roads by leveraging data-driven risk management

Q&A Session

Thank You!