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DS-D

ASSIGNMENT 2

KEY INSIGHTS / RECOMMENDATIONS

Insights

- **Trends in Injuries and Fatalities:** Over the years, the number of injured and killed persons in traffic incidents shows varying trends, indicating fluctuations in road safety and traffic regulations effectiveness.
- **Time of Day Impact:** Certain hours of the day exhibit significantly higher rates of injuries and fatalities, suggesting specific times when traffic accidents are more likely to occur, particularly for cyclists and pedestrians.
- **Vulnerable Road Users:** Cyclists and pedestrians represent a notable percentage of the injured and killed individuals, highlighting their vulnerability in traffic scenarios.
- **Contributing Factors:** The analysis of contributing factors reveals specific patterns associated with injuries and fatalities, with some vehicle types more frequently involved in severe incidents.
- **Geographical Patterns:** Injury and fatality counts differ by zip code, indicating specific areas with higher risks, which may be correlated with traffic density or unsafe road conditions.
- **Vehicle Types and Safety:** Variations in injuries and fatalities by vehicle type suggest that certain vehicle categories may pose a higher risk to pedestrians and cyclists, emphasizing the need for targeted safety measures.

Actionable Recommendations

- **Targeted Awareness Campaigns:** Implement public awareness campaigns focused on the hours and locations with the highest accident rates to educate drivers, cyclists, and pedestrians on safety practices during those times.
- **Infrastructure Improvements:** Enhance road safety infrastructure in high-risk areas identified by zip code analysis, including better signage, dedicated bike lanes, and pedestrian crossings, to protect vulnerable road users.
- **Policy Revisions for Vehicle Safety:** Review and revise regulations concerning vehicle types that contribute significantly to injuries and fatalities, potentially including stricter safety standards or restrictions on certain vehicle models in urban areas.
- **Data-Driven Enforcement:** Utilize data on contributing factors to enforce traffic regulations more effectively, targeting specific behaviors that lead to accidents (e.g., speeding, distracted driving) during peak times.
- **Collaboration with Local Agencies:** Partner with local transportation and safety agencies to create community-specific initiatives that address the unique challenges and safety needs of each borough or zip code area.