



Analysis of Motor Vehicle Accidents in Clark County, NV

Accidents occurred in FY2016

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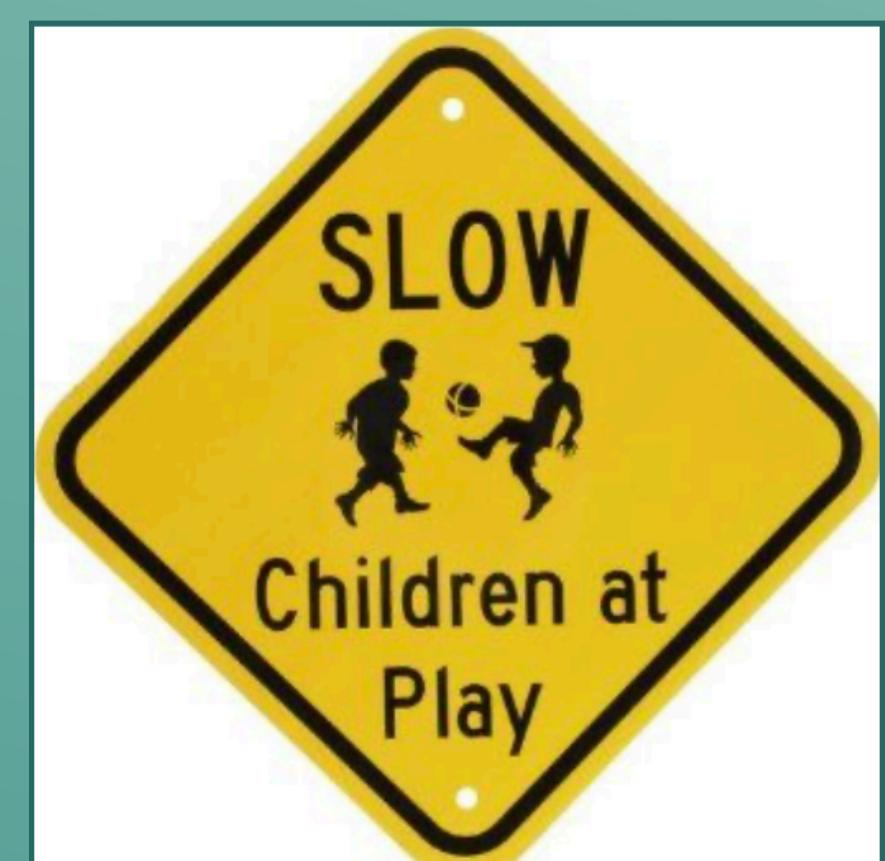
Dee Dixon

Objective

The objective of this study focused on analyzing publicly available data provided by the City of Las Vegas through its Open Data Portal. The team analyzed traffic accident data compiled by the city for the year 2016. This study contains data from Clark County, Nevada and focuses on accidents that occurred in this jurisdiction.

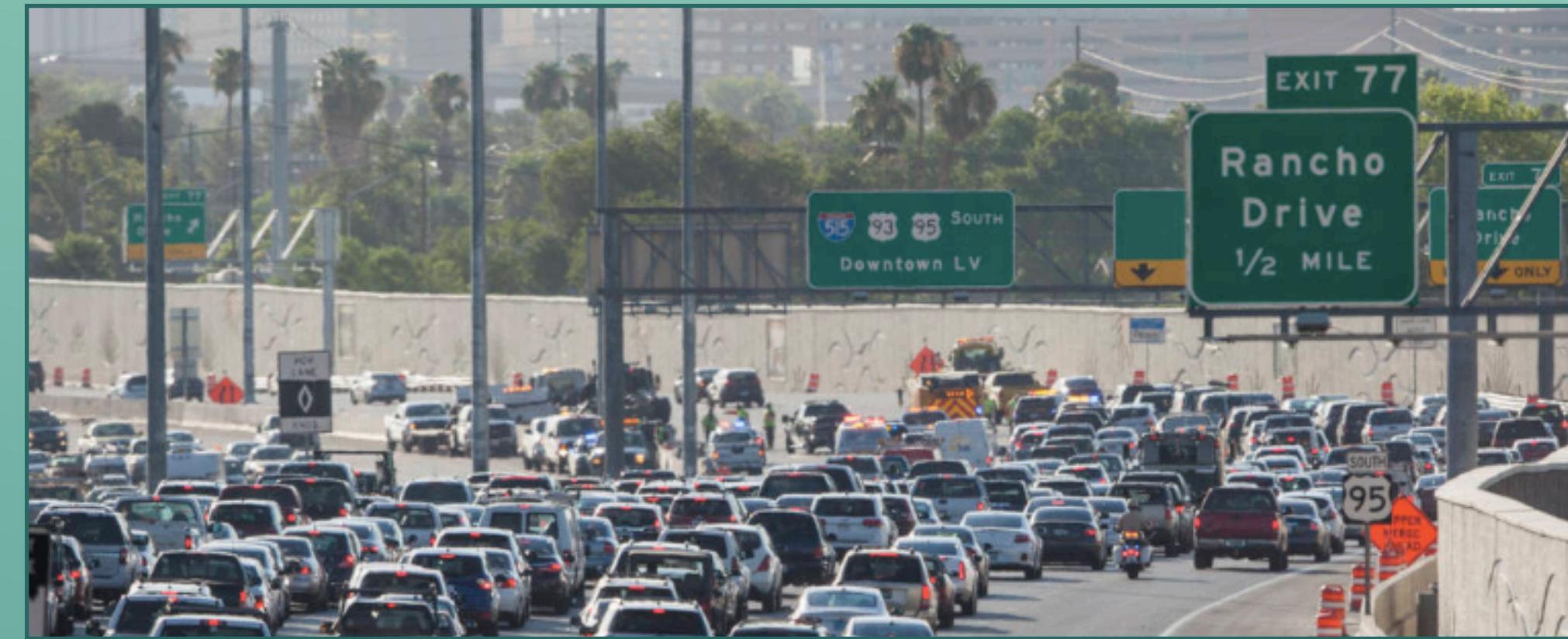
Initial Inquiries Guiding Analysis

- Do most accidents occur at night or during the day
- What are the road conditions
- What are the most dangerous intersections
- Is there a correlation between vehicle type and road condition
- Is there a correlation between time of day and cause of accident
- Is there a correlation between age and accidents



Initial Overall Findings for 2016

- 12,720 total accidents reported
- 9,694 accidents with complete reports were analyzed for this report
- 7,947 sober drivers involved in accidents
- 1,747 impaired driver related accidents
- 44 fatal accidents



Single vehicle crash SB US 95 in Las Vegas. /Las Vegas Review Journal

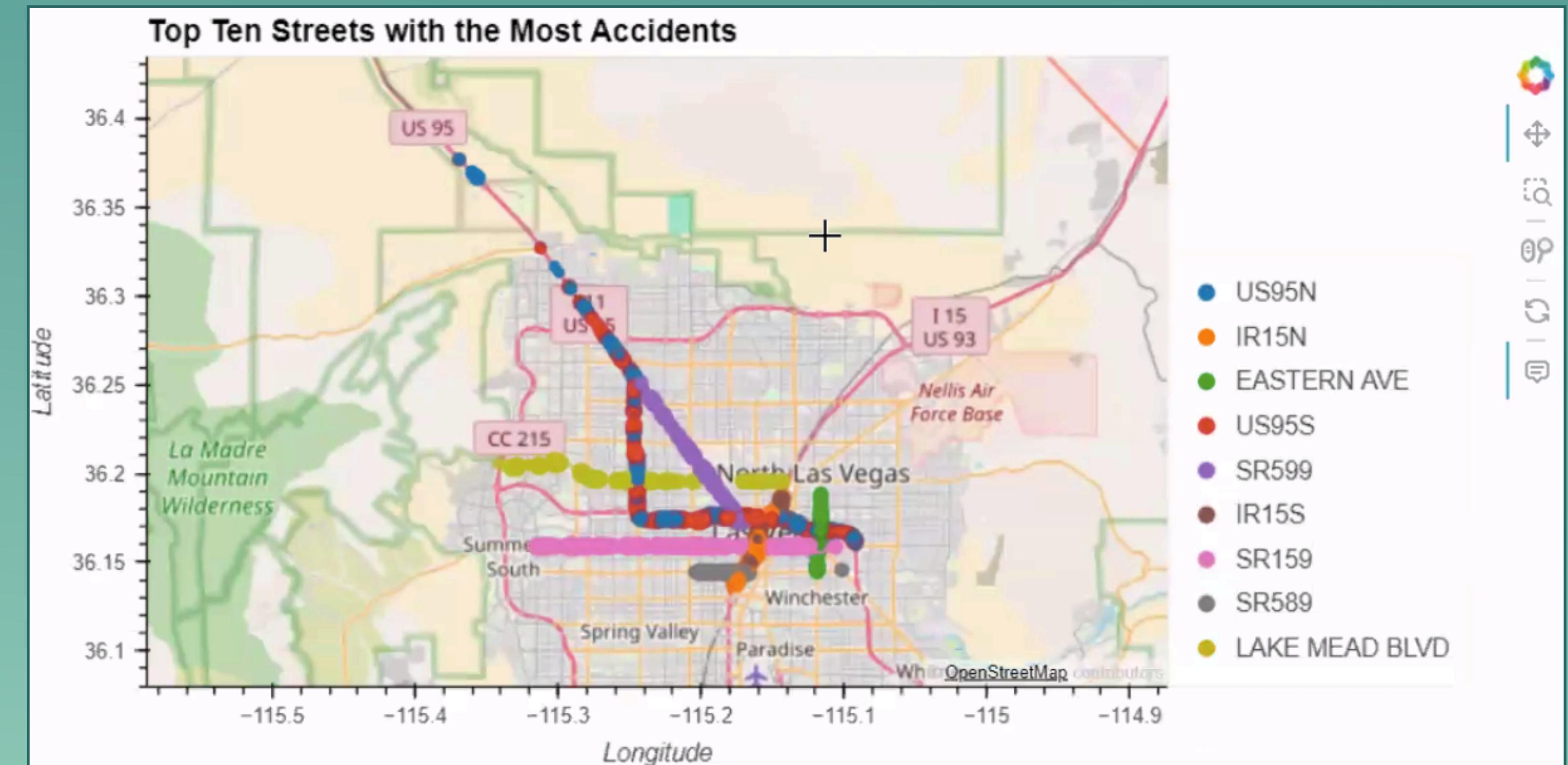


Traffic cam of crash on US 95 in Las Vegas./Las Vegas Review Journal

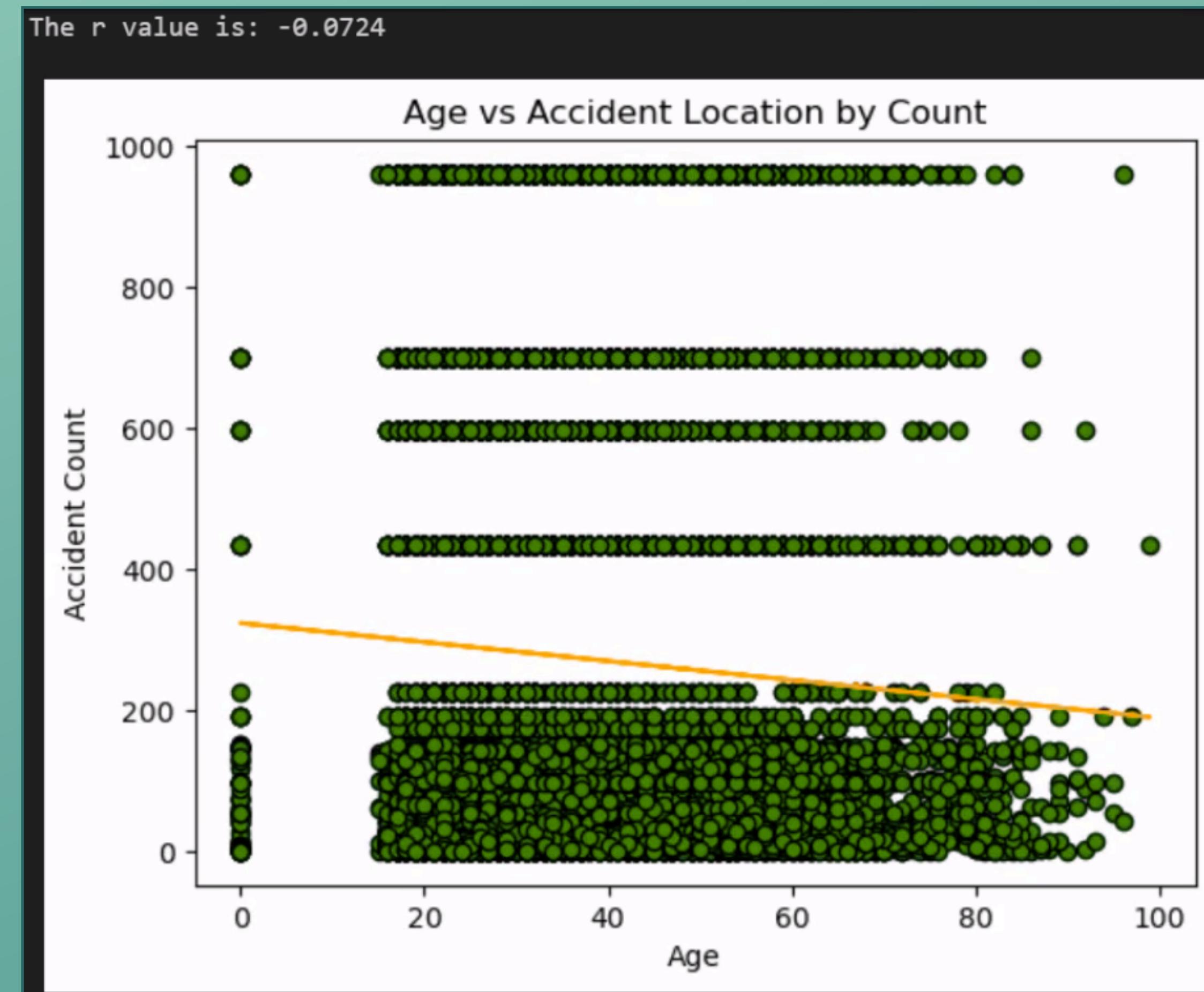
Top 10 Streets With the Most Accidents

Notable Streets

- US95N heading into downtown Las Vegas
- Flamingo and Paradise Roads, which reported more than 150 accidents



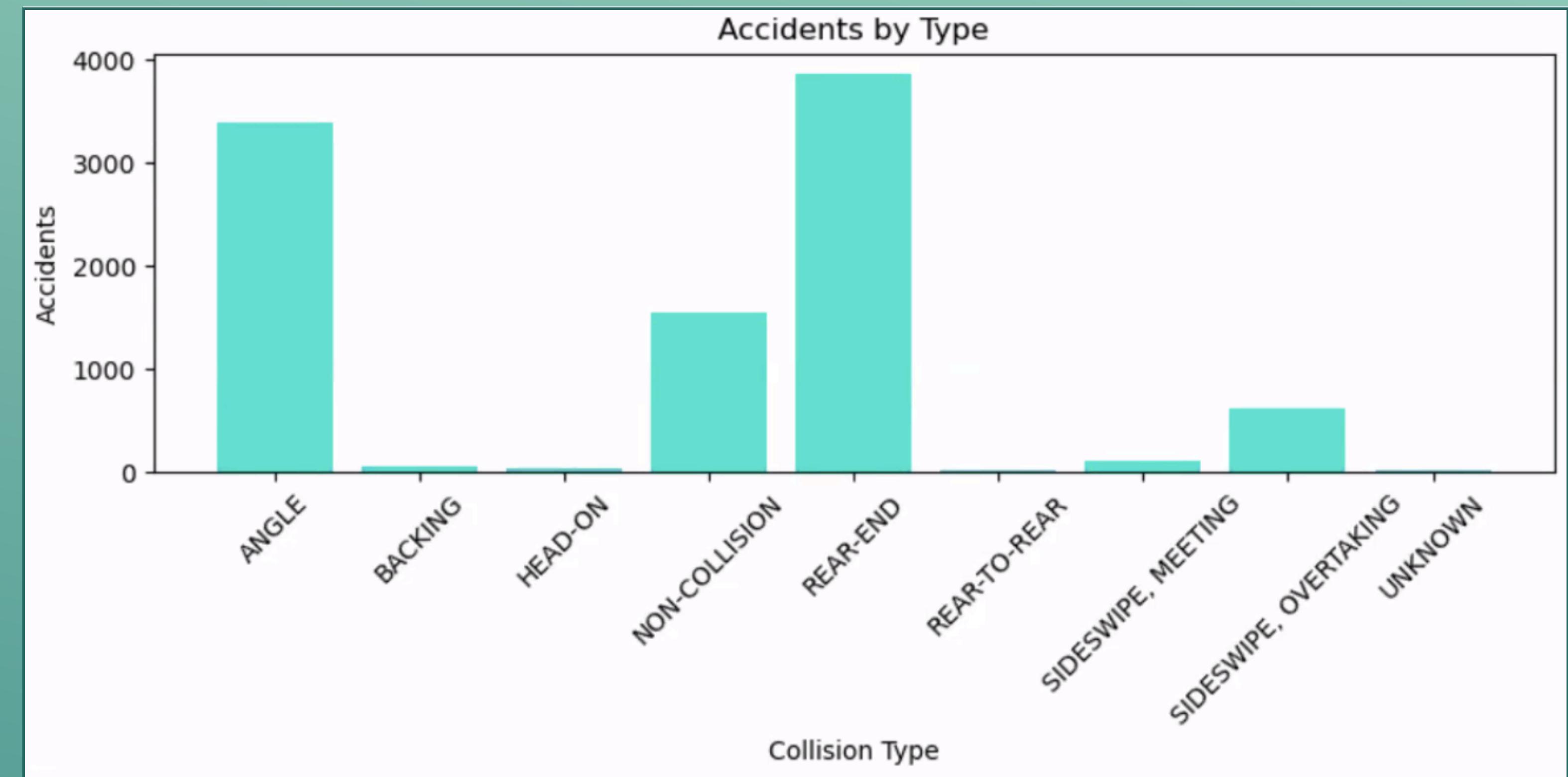
Age vs. Accident Location by Count



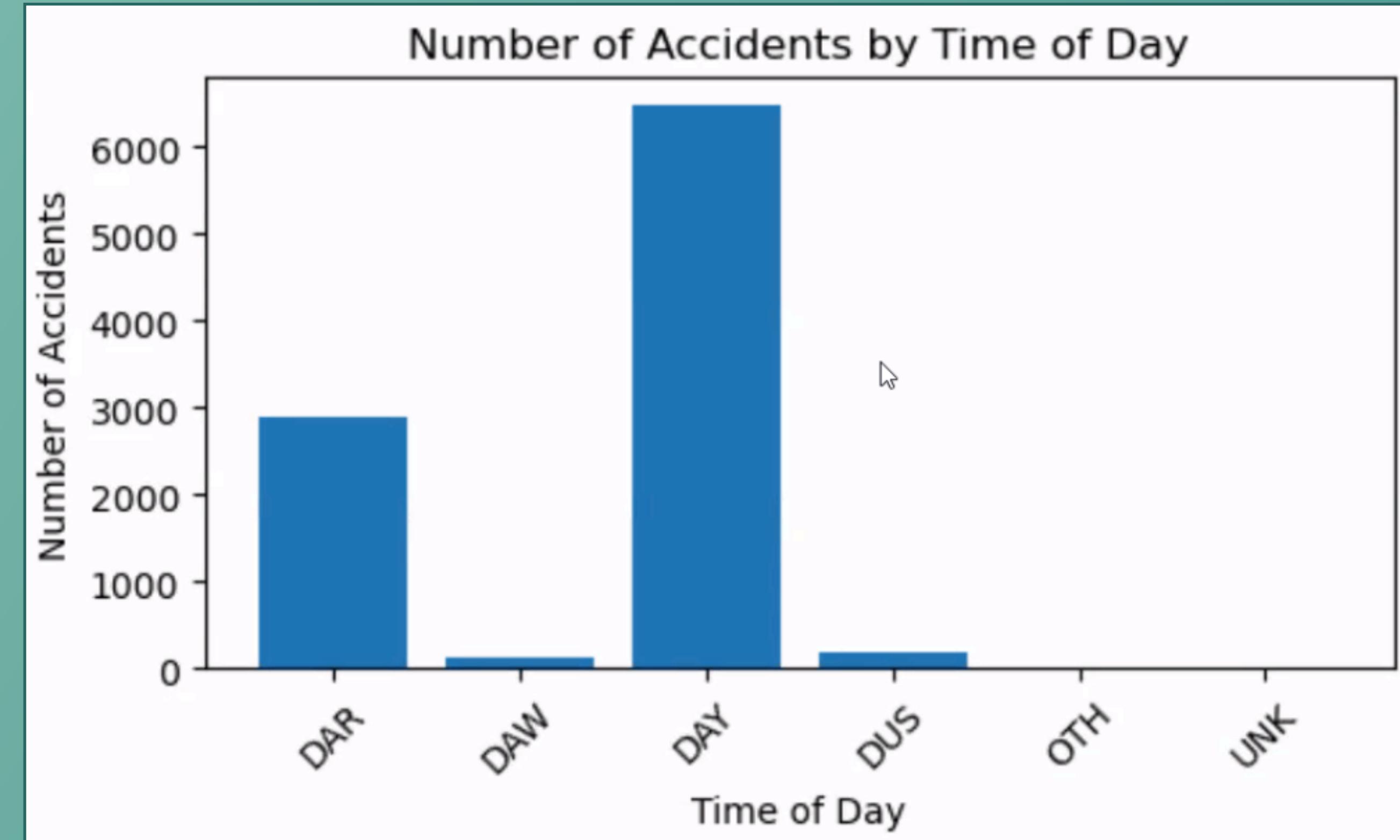
Accidents by Type

The top three accidents:

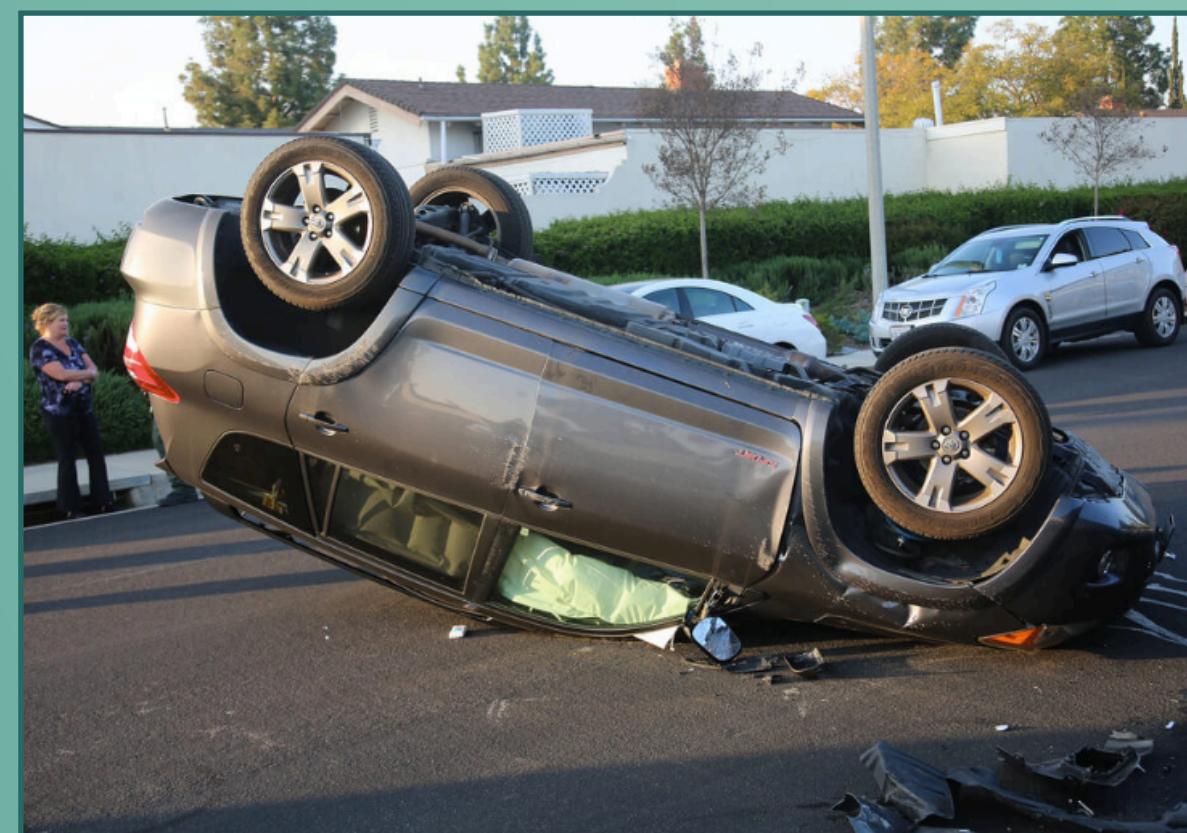
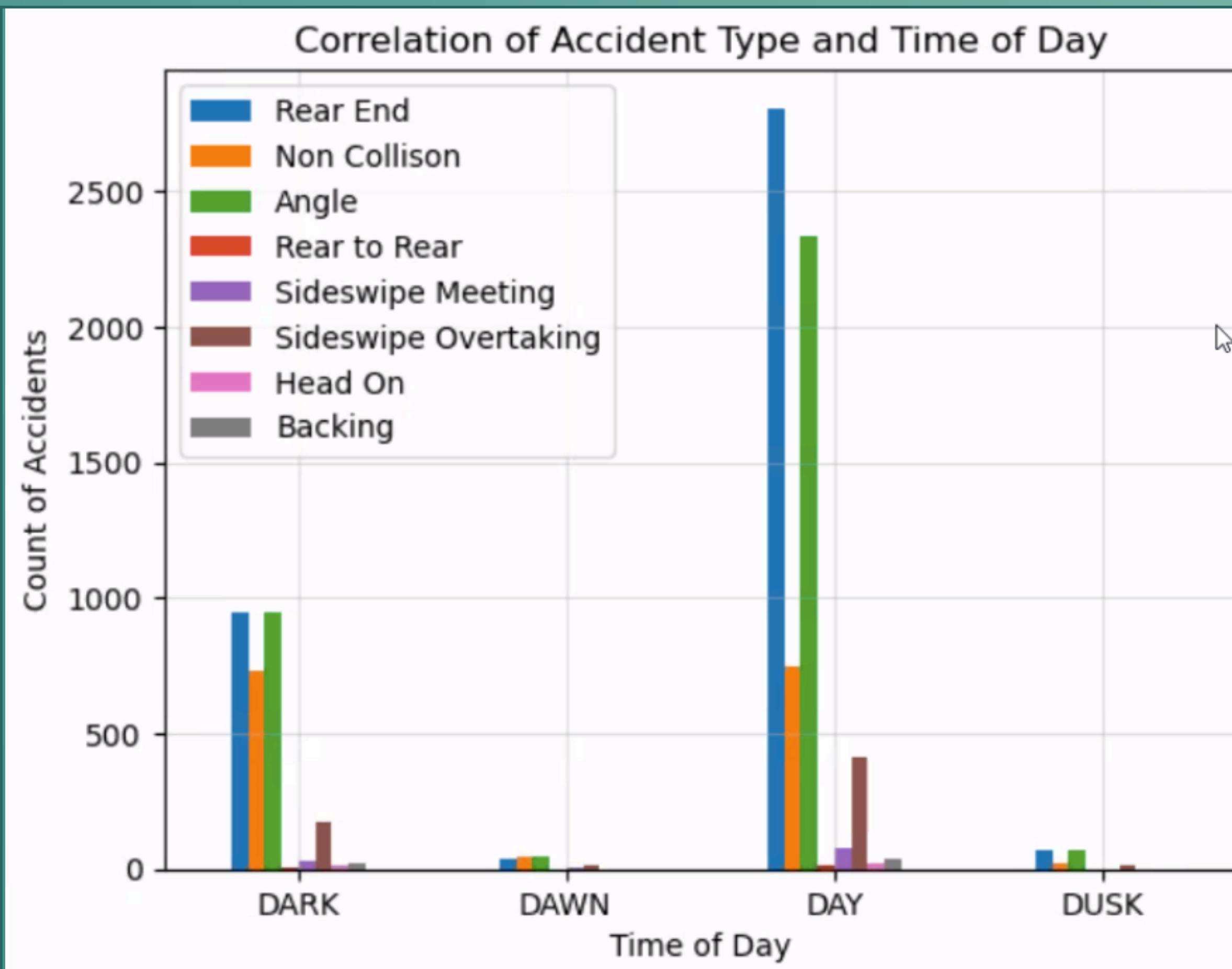
- Rear-end
- Angle
- Non-collision: i.e., driving off the road, rolling over, mechanical failure



Number of Accidents by Time of Day



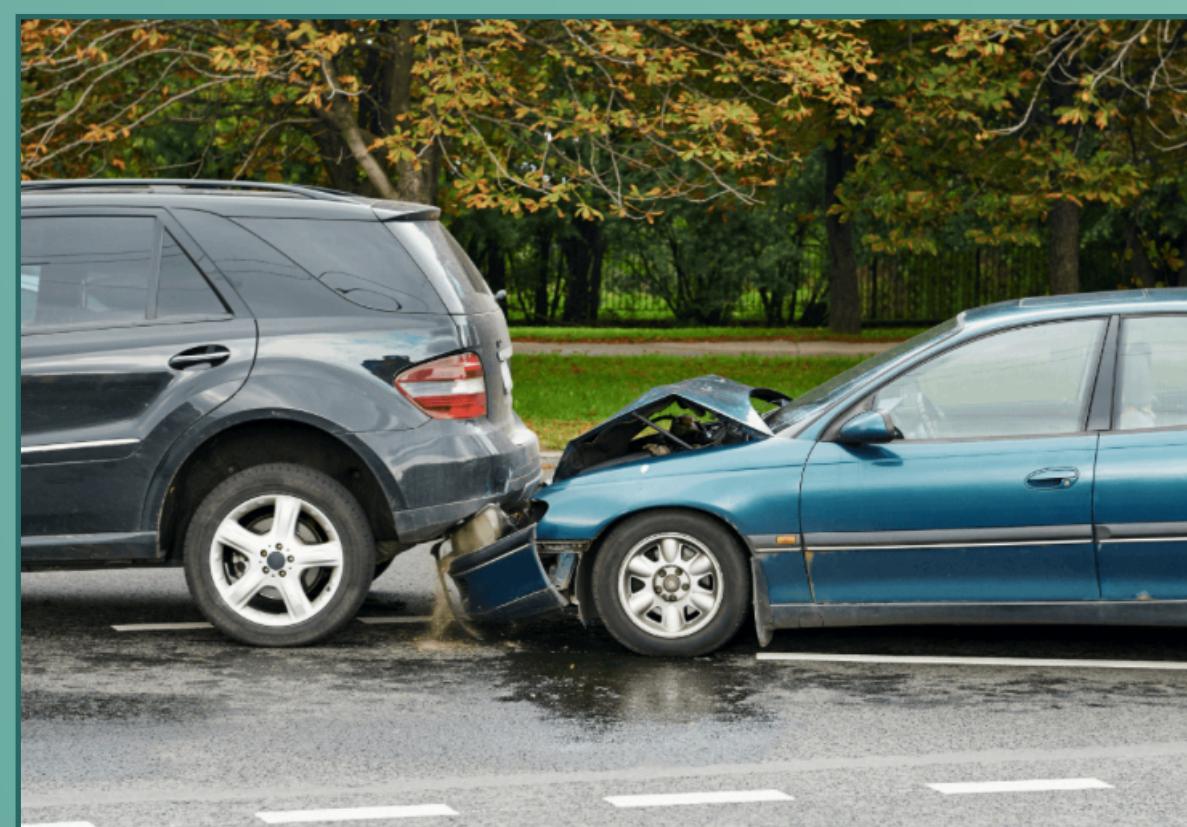
Correlation of Accident Type and Time of Day



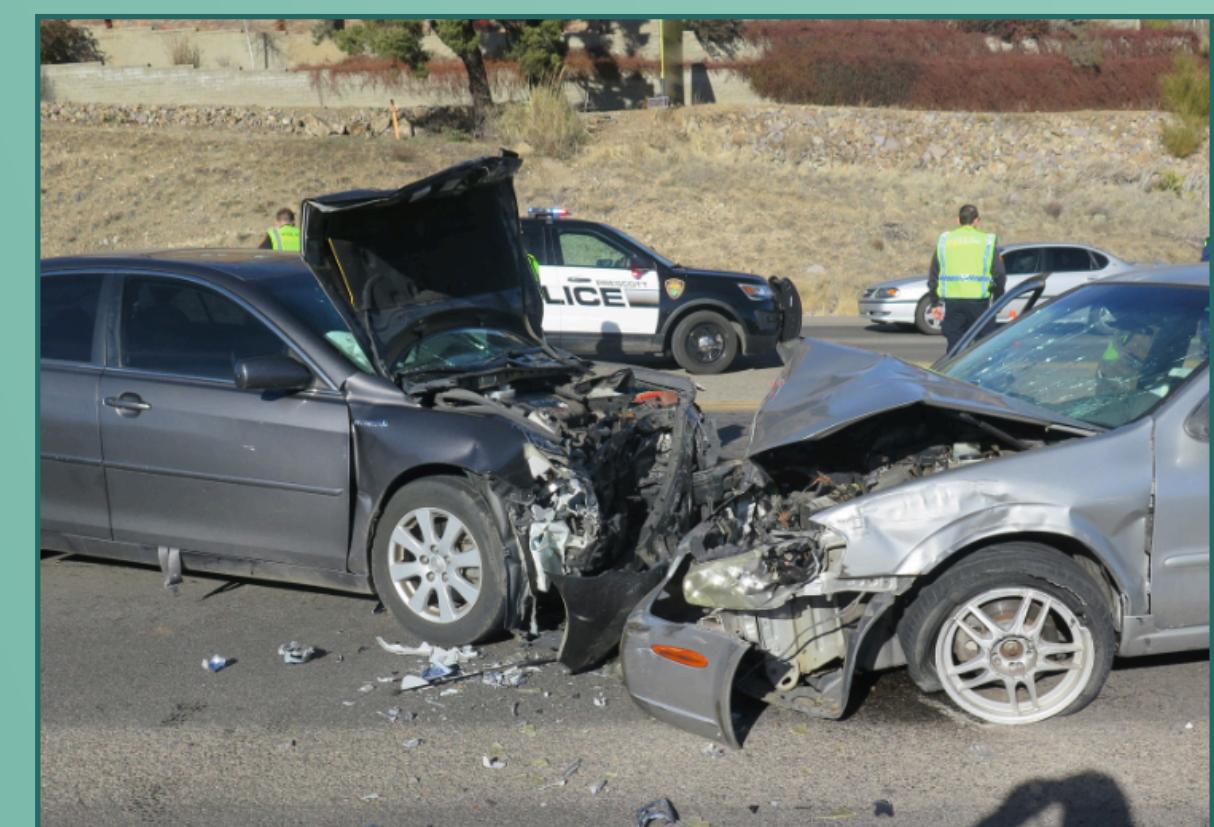
Non-Collision, Roll Over



Angle Collision

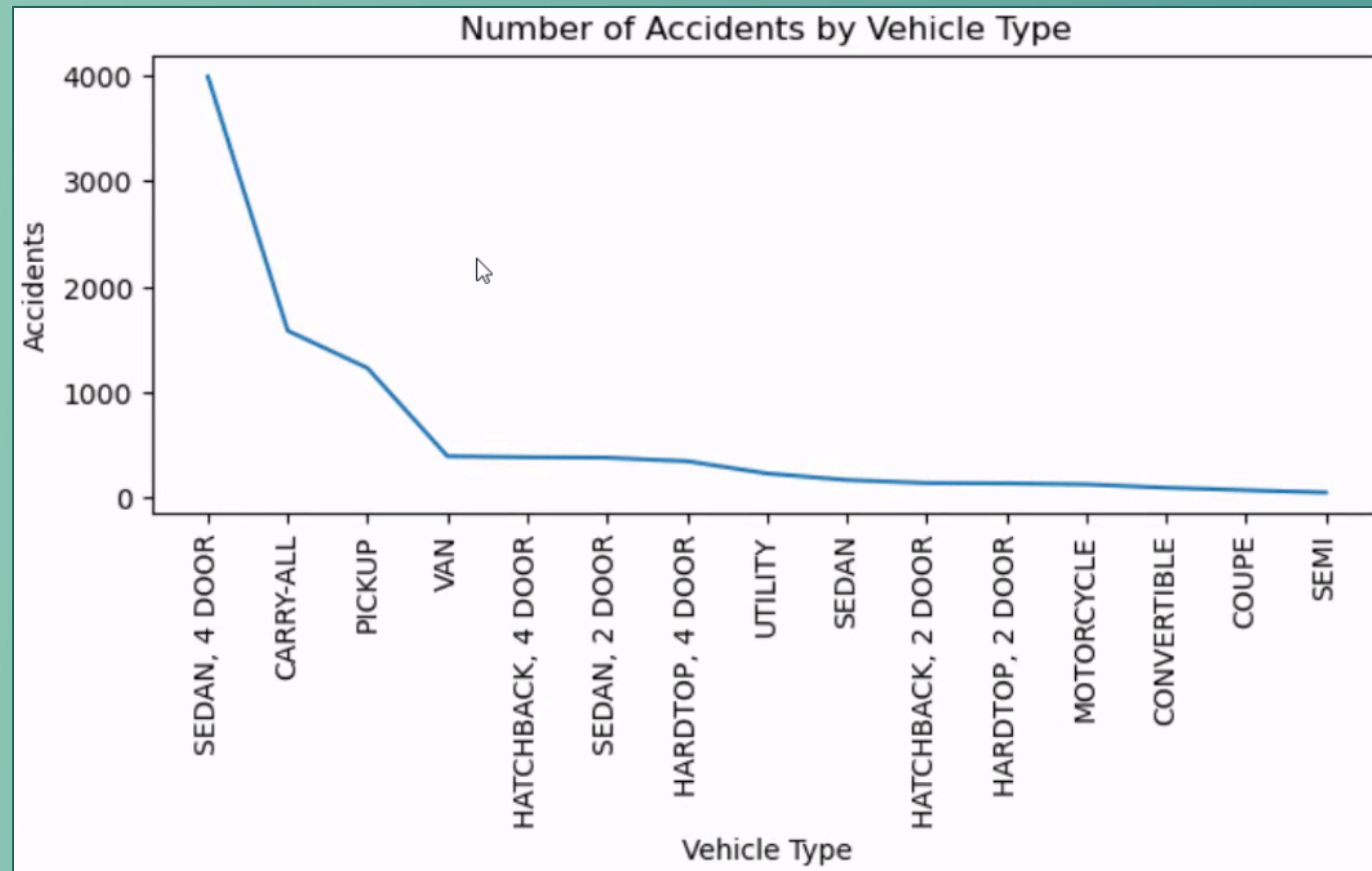


Rear End Collision

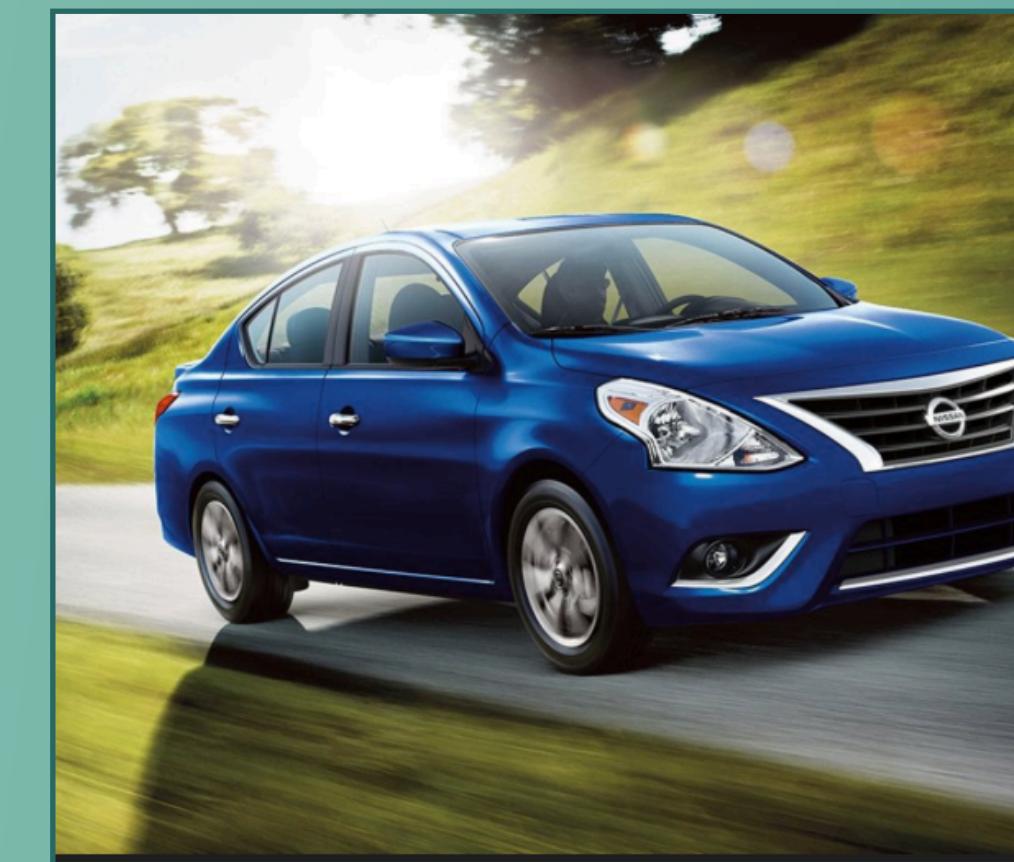
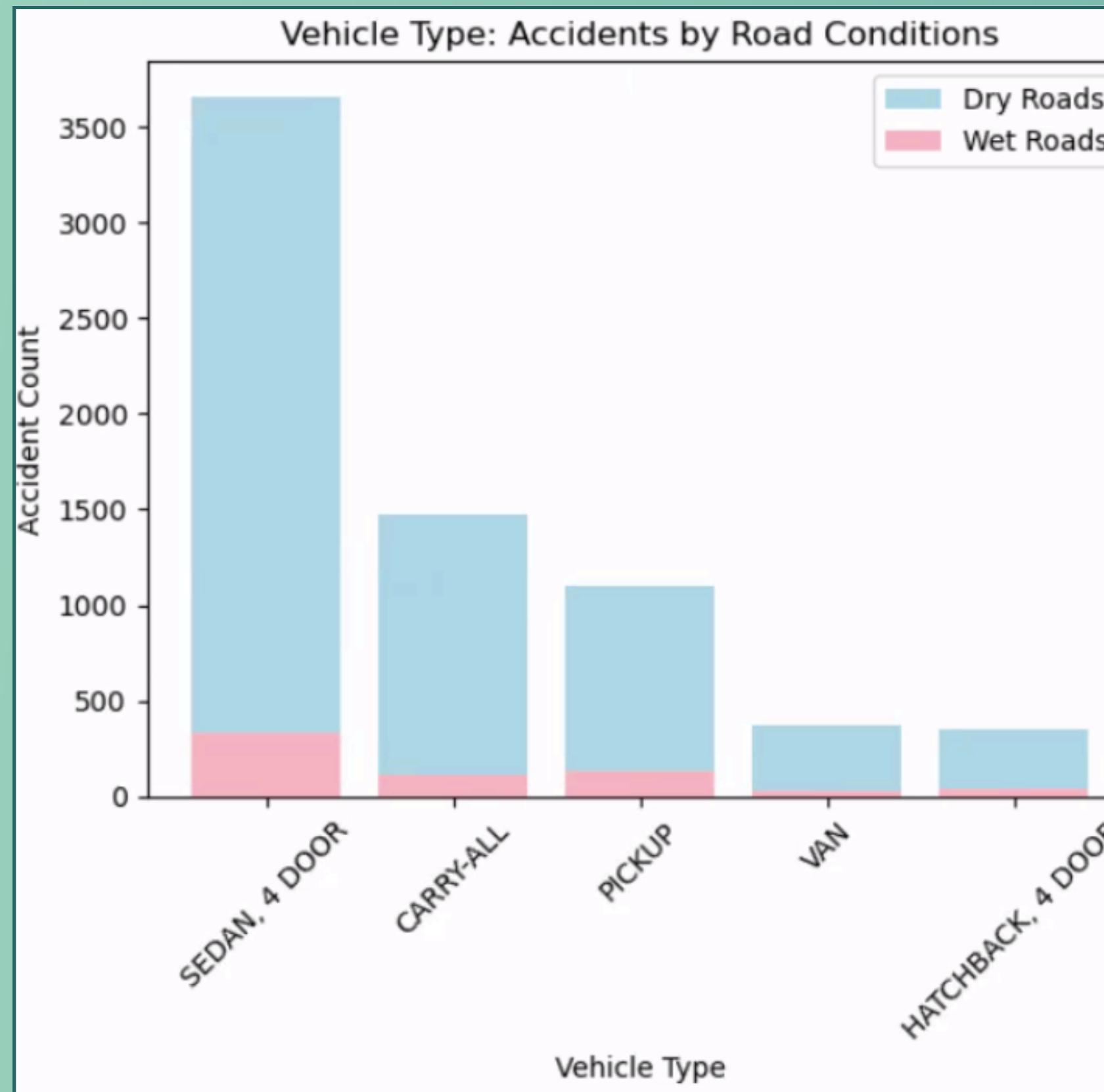


Head-on Collision

Number of Accidents by Vehicle Type



Vehicle Type: Accidents by Road Conditions



Sedan, 4-Door



Carry-All



Pickup

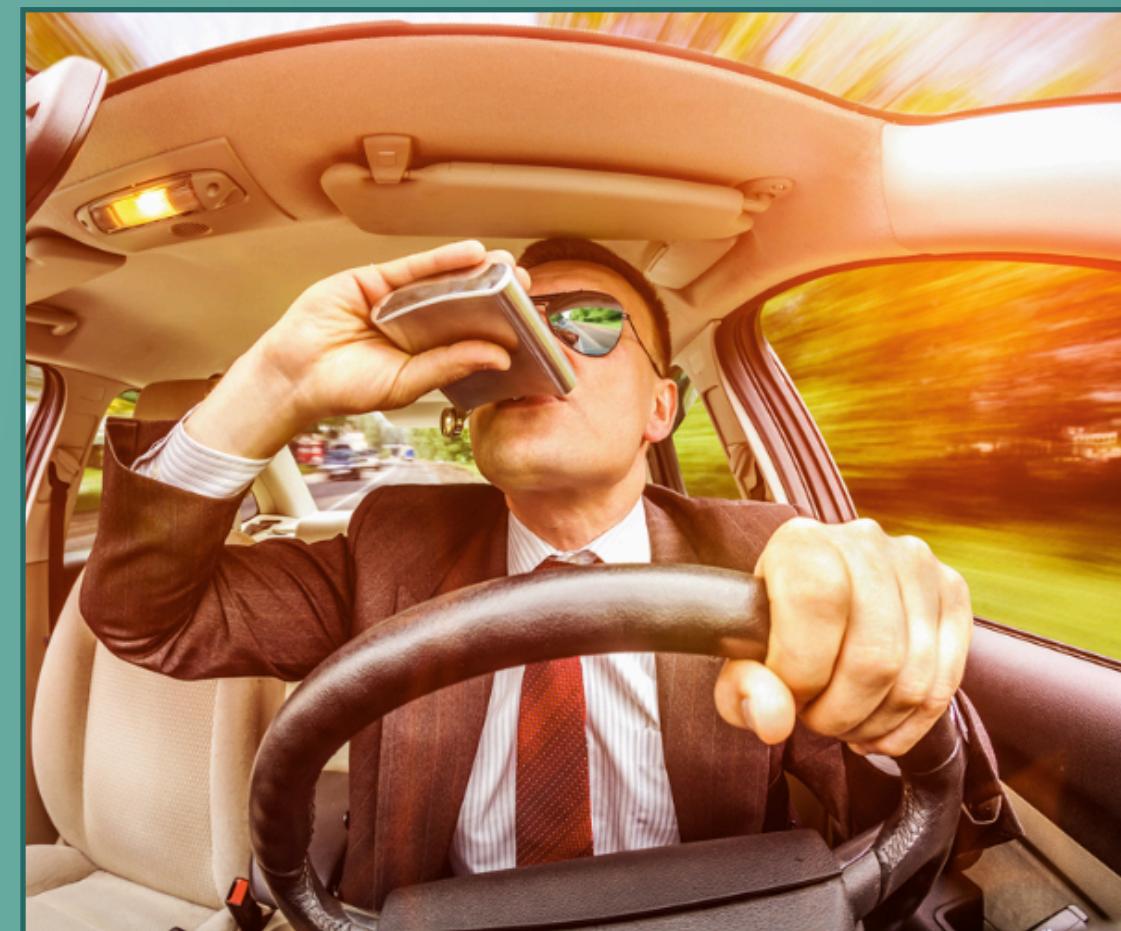
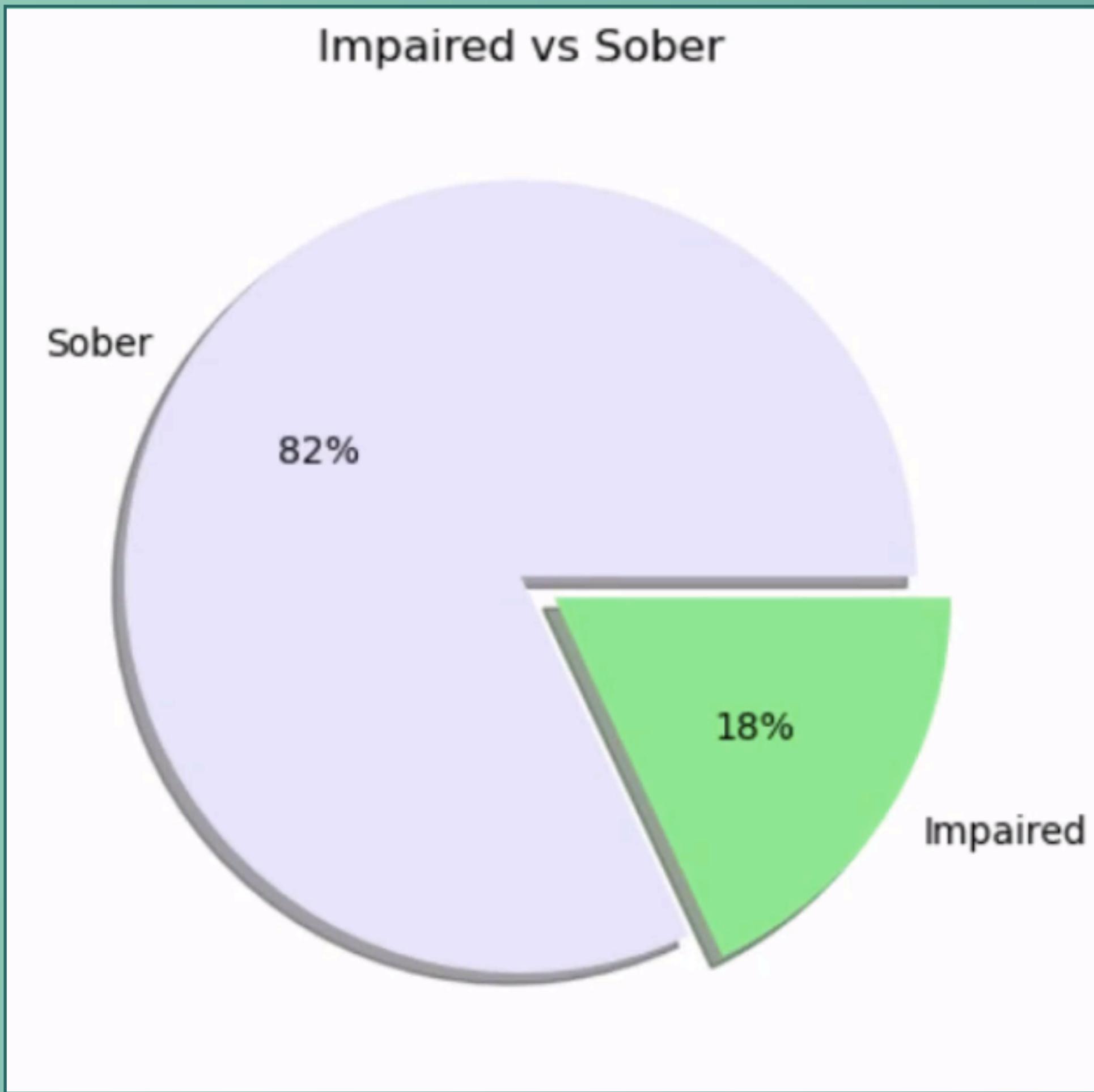


Van

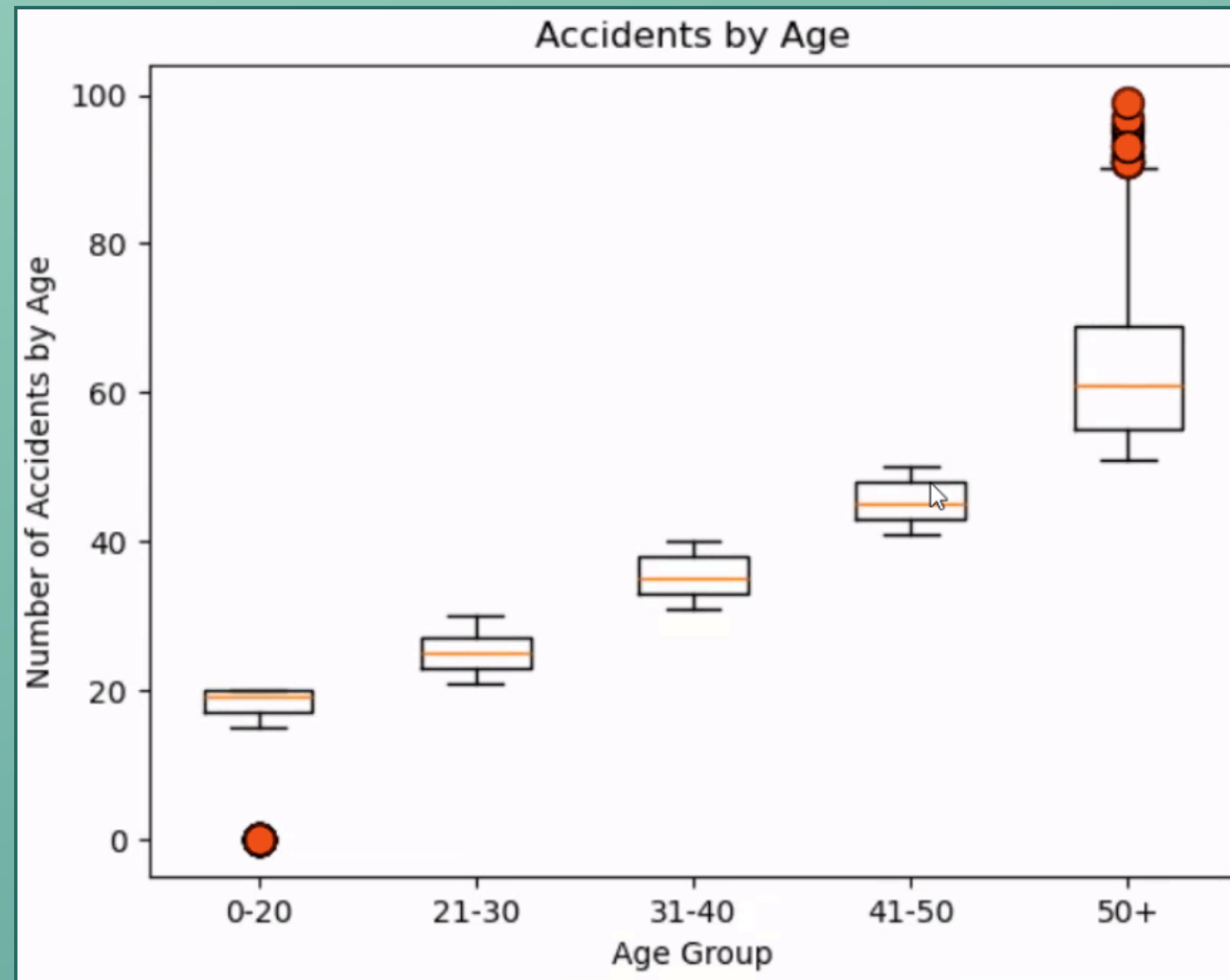


Hatchback

Impaired vs. Sober



Accidents by Age



Conclusions

- Sedans make up most vehicles involved in accidents
- Most accidents occur during the day in non-wet, normal driving conditions
- There were a significant number of rear-end collisions, which suggest speed, brake failure and distracted drivers

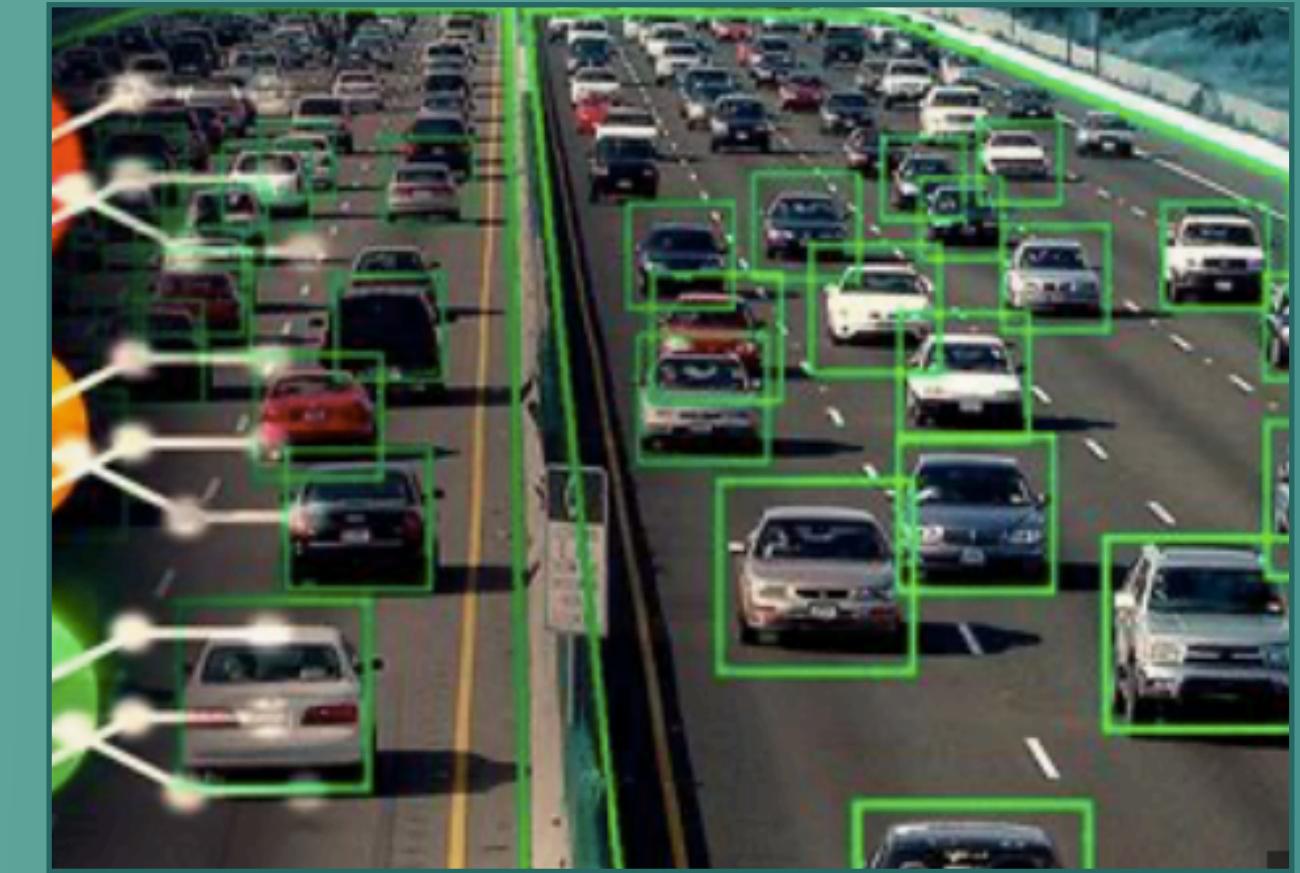


Recommendations

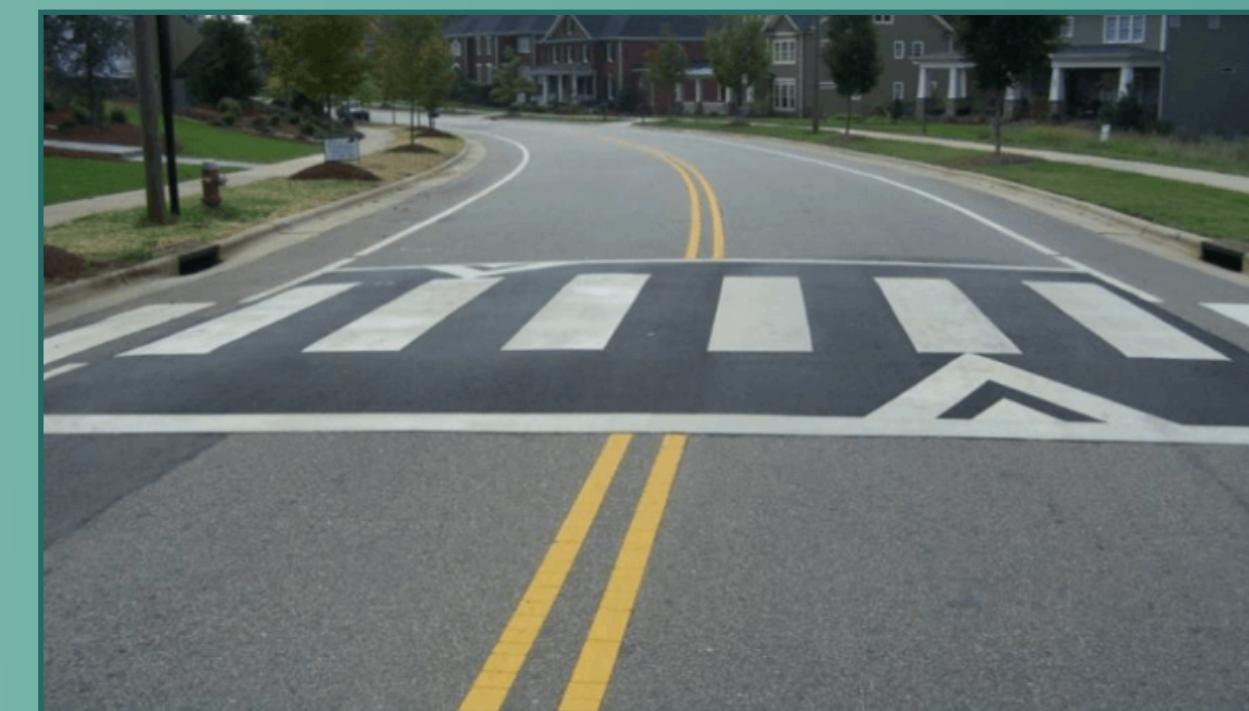
- Traffic control devices: Speed bumps, bump outs, traffic circles, etc.
- Law enforcement patrols and presence
- Use AI technology to control traffic flows
- For government accident data collection, include drivers' speed and posted speed limits, use bucketed libraries of pull downs to allow for greater data integration and alignment



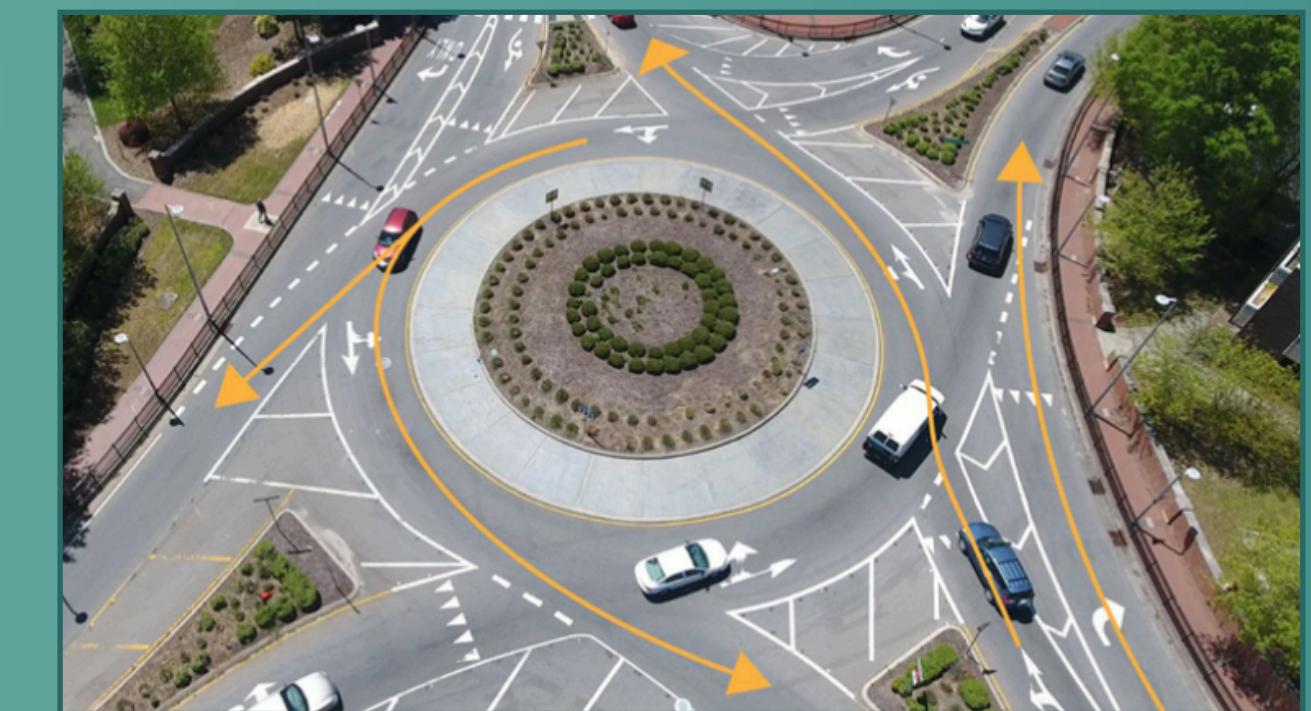
Law Enforcement Speed Control



AI Technology and Traffic Control



Speed Hump Traffic Control



Traffic Circle

Recommendations

- Public relations campaigns aimed at deterring distracted driving: Hands-free devices, focus on the roadway, limit distractions in the vehicle while in motion, etc.
- Collaborate with AARP and other organizations that cater to a mature audience to reinforce safe driving and a suspension of driving privileges, if and when needed



