



A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green color. They are positioned diagonally, with the blue one partially covering the green one.


# Austin Traffic Patterns

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# Agenda

- Our Idea
- Data
- Questions
- Conclusions
- Possible future studies
- Questions from the audience



# Our Idea

- Study Austin traffic patterns using camera data and ML algorithms
- Identify hotspots within the city
- Help plan for the future of infrastructure within the city
- Share with the public this information to help ease everybody's traffic



# Data

- Published by the City of Austin it uses cameras to collect traffic data at different locations in the city
- There are 26 variables but we are only concerned with the location of cameras, density of traffic flowing through, and timestamps at which this data is collected
- The location of cameras is categorical data while the traffic density and timestamps are numerical data

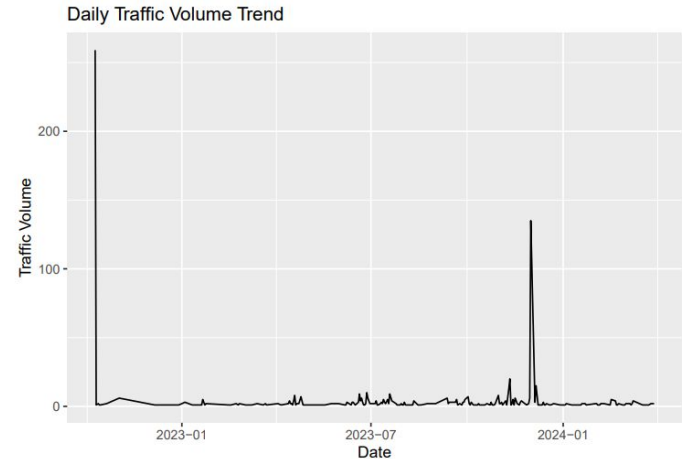


# Questions

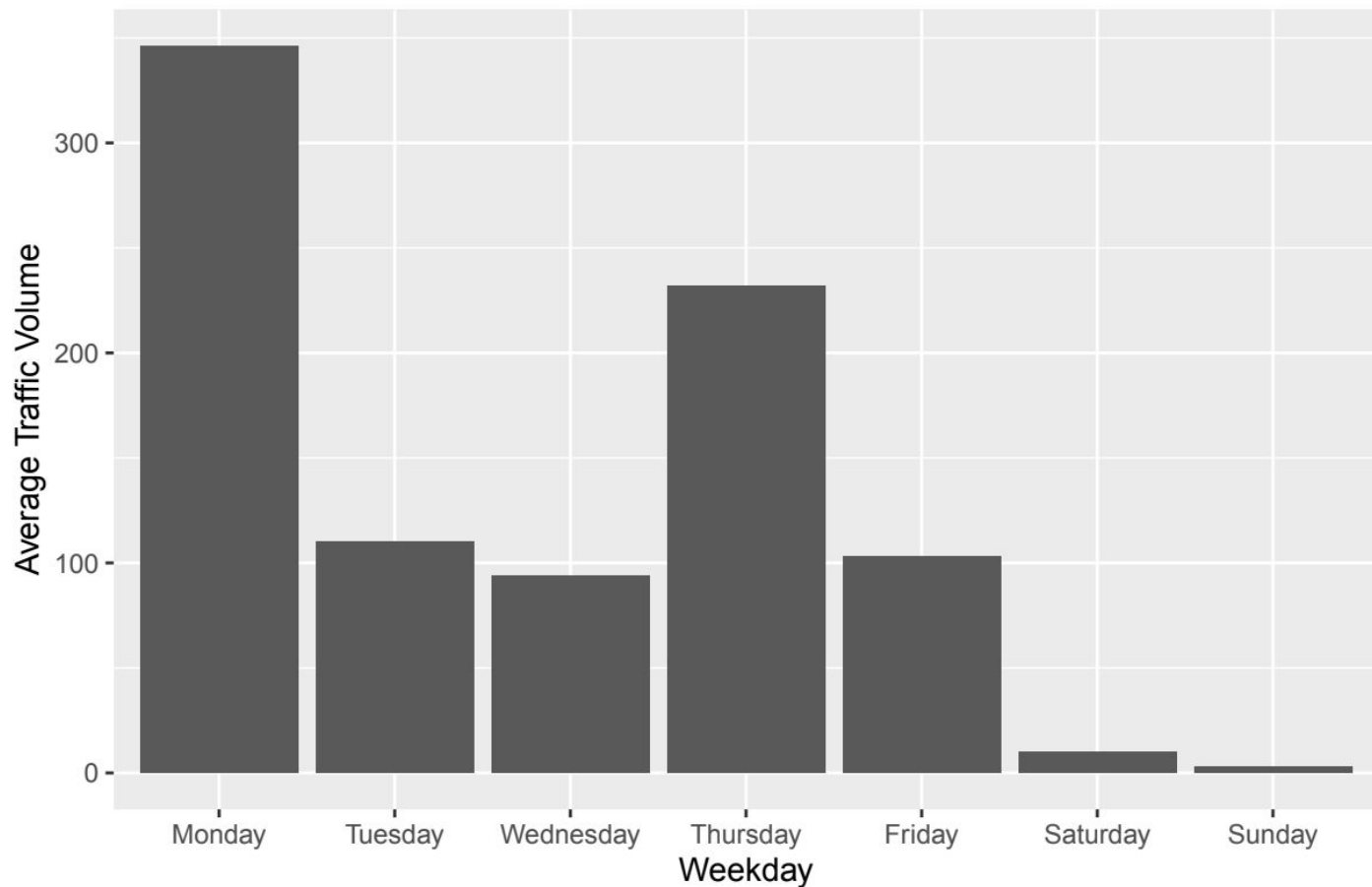
- What are the daily traffic volume trends across the city?
- What locations exhibit consistently high traffic volume indicating congestion hotspots?

# Question 1

- What are the daily traffic volume trends across the city?
- What days of the week are Austin roads most crowded?
- Used the data to create a bar chart to illustrate
- Monday was significantly the highest congestion day
- Saturday and Sunday initially seemed to have the lowest traffic volume

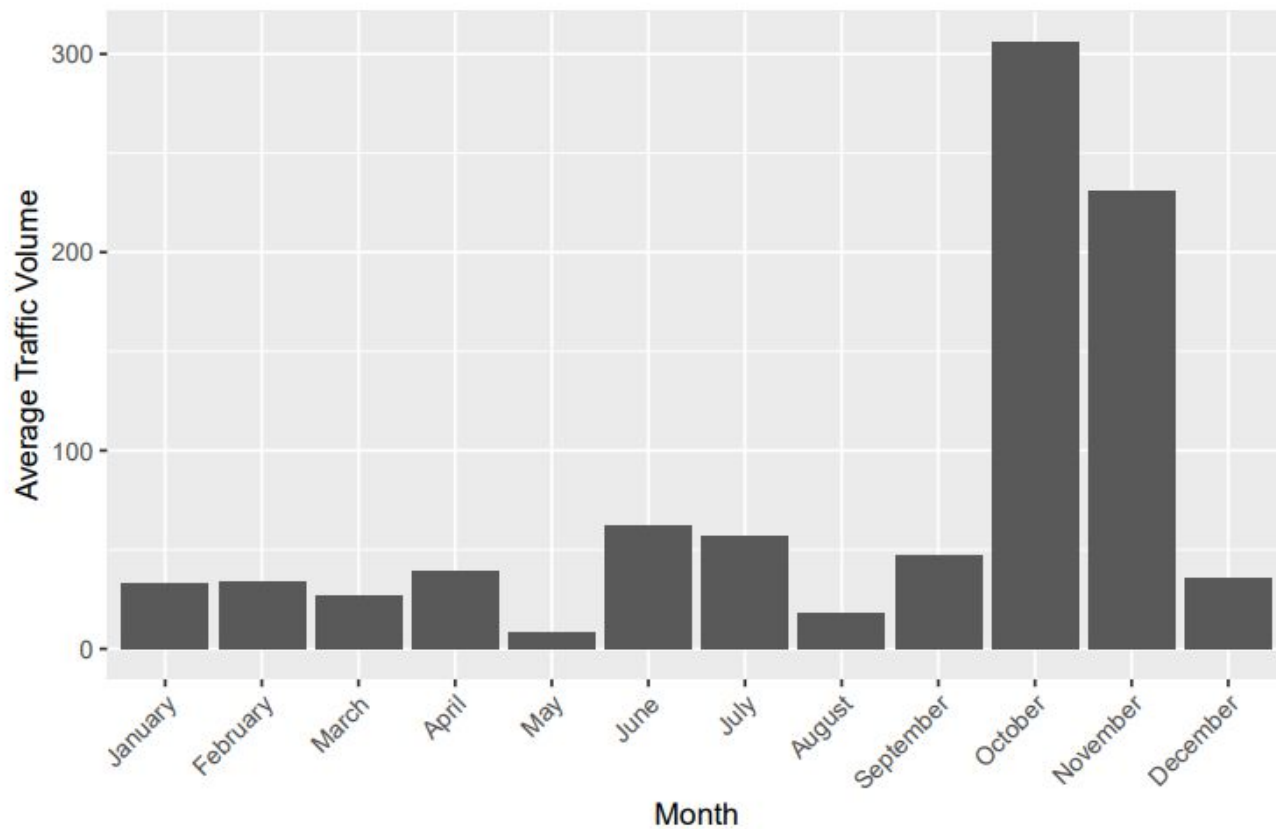


# Weekly Traffic Volume Trend



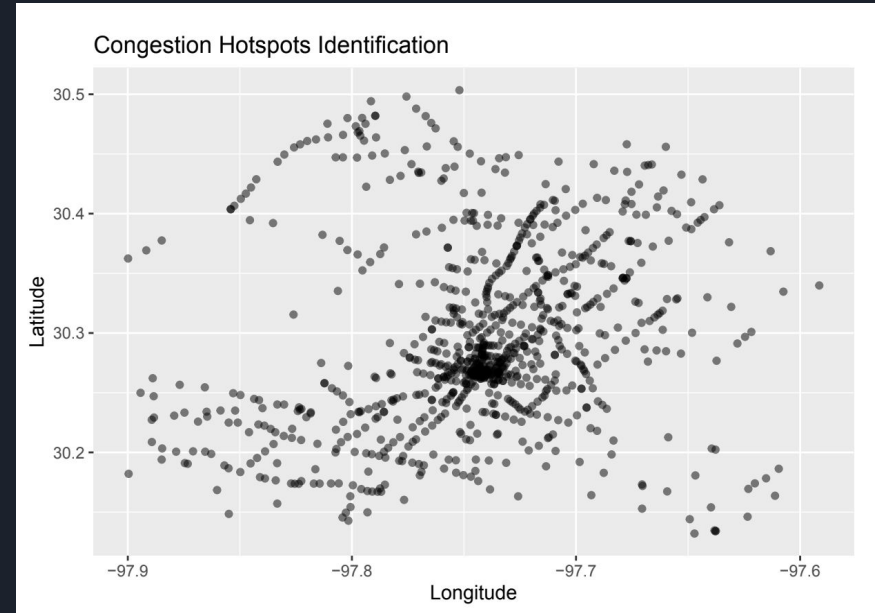


Seasonal Traffic Volume Trend



## Question 2

- What locations exhibit consistently high traffic volume indicating congestion hotspots?
- We want to identify the most traffic dense places in the city
- Used the latitude and longitude coordinates of the camera locations to build a map of hotspots
- Darkness of the dot indicates the density of traffic in that location





# Conclusion

- The downtown region of Austin has consistently the highest density of traffic within the city
- Mondays are the most traffic dense day of the week within the city
- The further you get from the city center the less dense the traffic is
- The weekend is the least congested time to be on the road



# Other things we would like to study

- Go more in depth in the downtown area and study specific intersections and streets with the worst congestion
- The specific times of each day where traffic is at its worst in the city

Thank you!  
Questions from the  
Audience

