Traffic Observation in Jacob St. and Liboton St., Naga City

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Background of Study

Traffic congestion in cities negatively impacts residents' quality of life and transportation systems. Naga City faces challenges in managing traffic flow, particularly at intersections like Liboton St. and Jacob St. Understanding factors influencing traffic management is crucial for long-term solutions. Data collection allows researchers to monitor vehicle types, speeds, traffic volumes, and pedestrian activities at these intersections, providing insights into factors contributing to congestion, such as peak traffic hours and pedestrian behavior.

Scope and Limitation

This observational study will be conducted at a single crossroads in Naga City mainly will focus on Liboton St., and Jacob St., road in limited time only between 5:00 o’ clock in the afternoon to 8:00 o’clock in the evening. The findings of this study may not be generalizable in other intersections in Naga City. These observational studies cannot establish a cause-and-effect relationship.

To ensure data accuracy and capture possible missed counts, data will be collected through manual counting by multiple observers with a timestamp video as backup while identifying the number of vehicles who passed with specific types of vehicles such as motorcycles, tricycle and cars, and individuals who crossed in the pedestrian lane from Jacob Market to 7-Eleven Liboton and Jacob Market to Calauag St.

Observational Tool

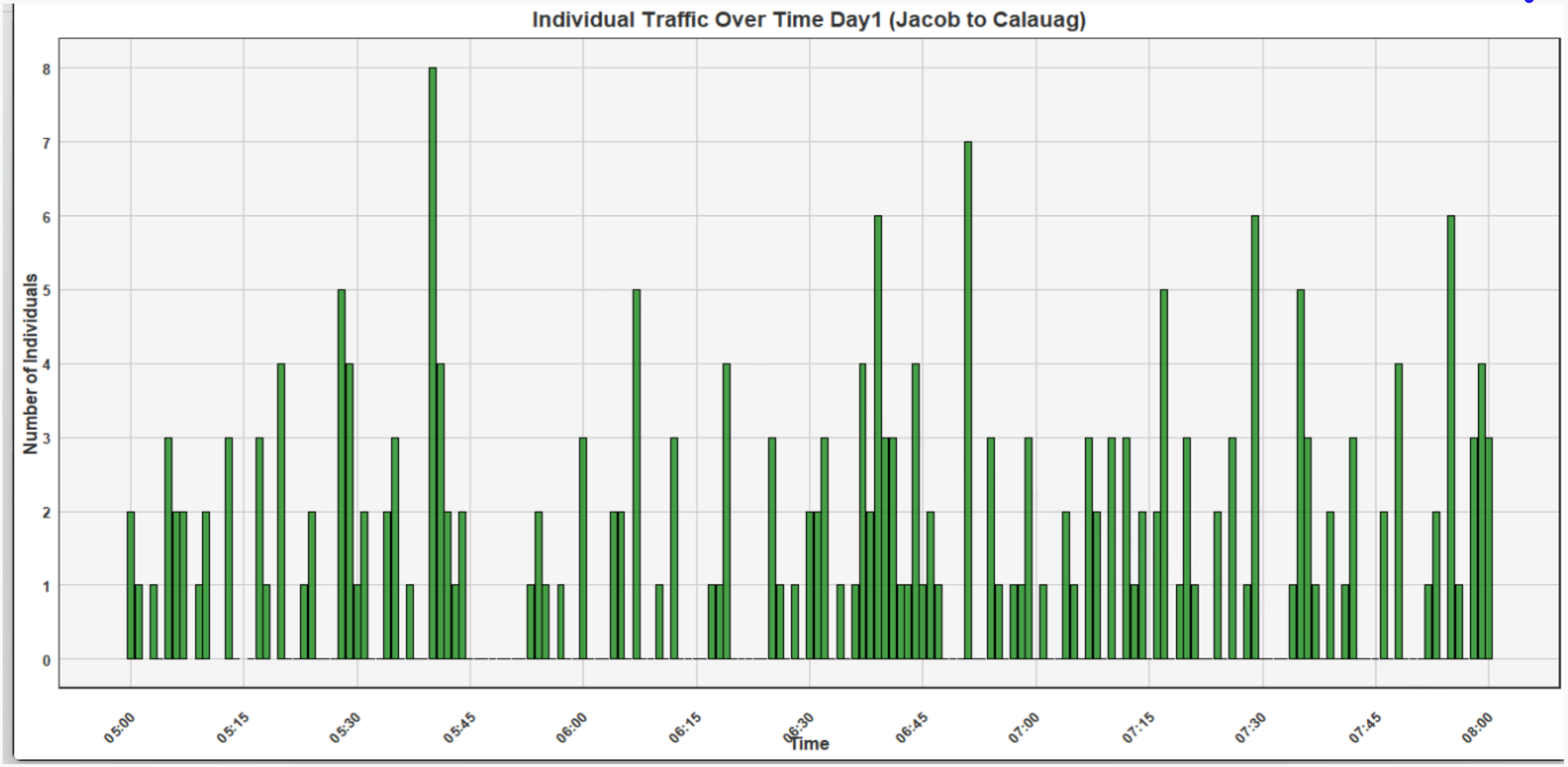
Locations: Liboton St., and Jacob St., Naga City
Timeframe: 5:00 pm to 8:00 pm

Number of days: 2

- Count every vehicle (Motorcycle, Cars and Tricycle) passed between 5:00 pm to 8:00pm
- Count the number of individuals who cross in pedestrians between 5:00 pm to 8:00pm in Liboton Market to Calauag St. and Jacob St Market to 7-Eleven Liboton.
- Identify the reason for traffic congestion along Jacob Street.

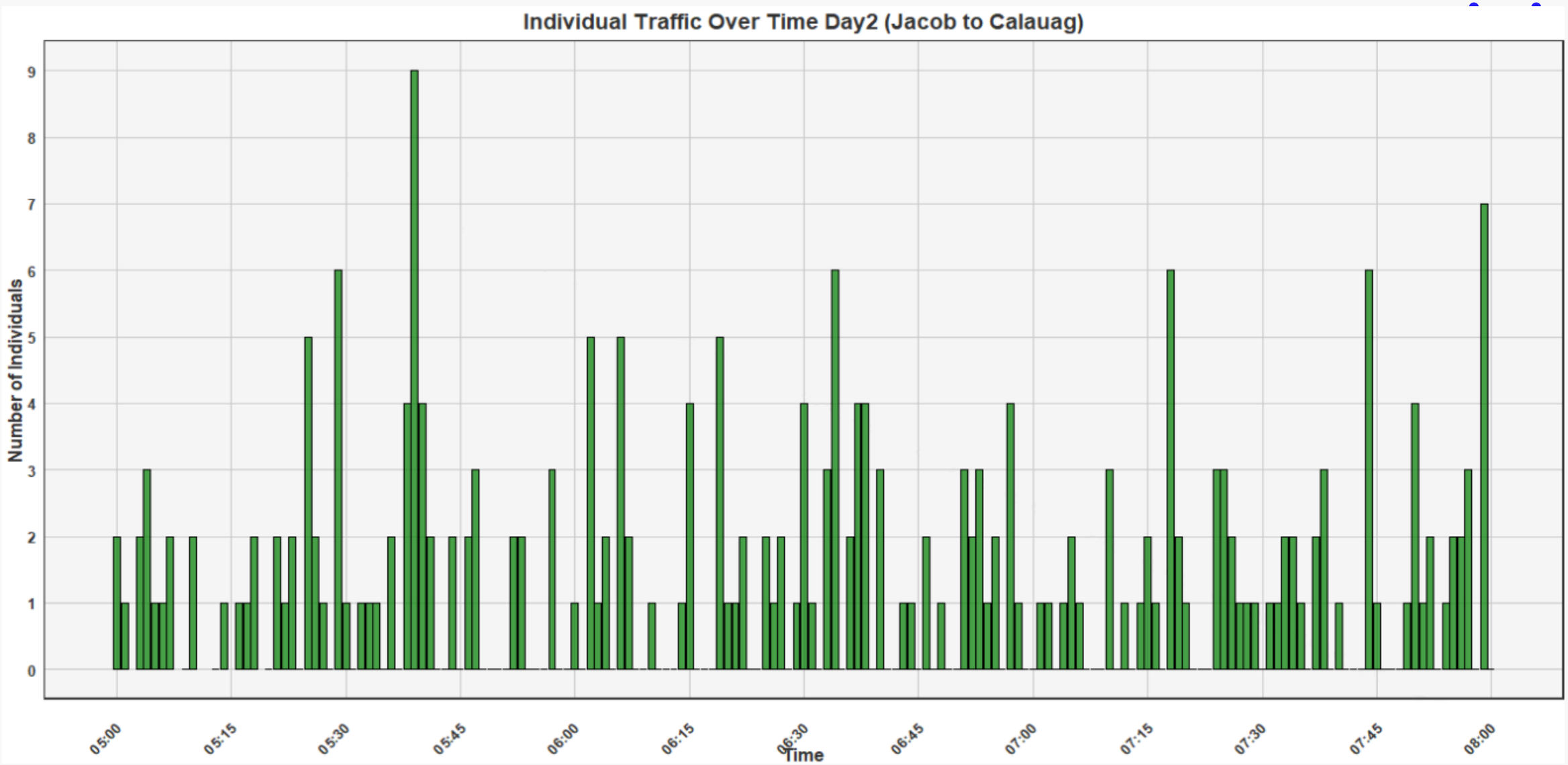
Graphs and Charts

Individual Traffic from Jacob to Calauag



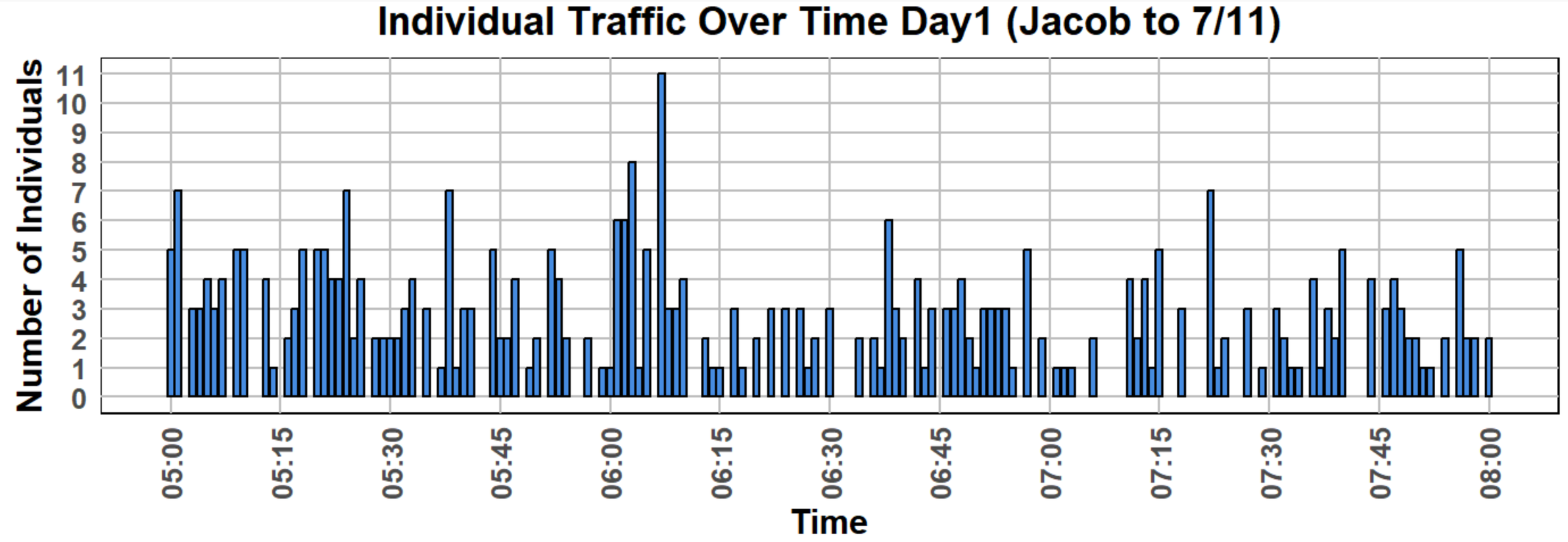
Graphs and Charts

Individual Traffic from Jacob to Calauag



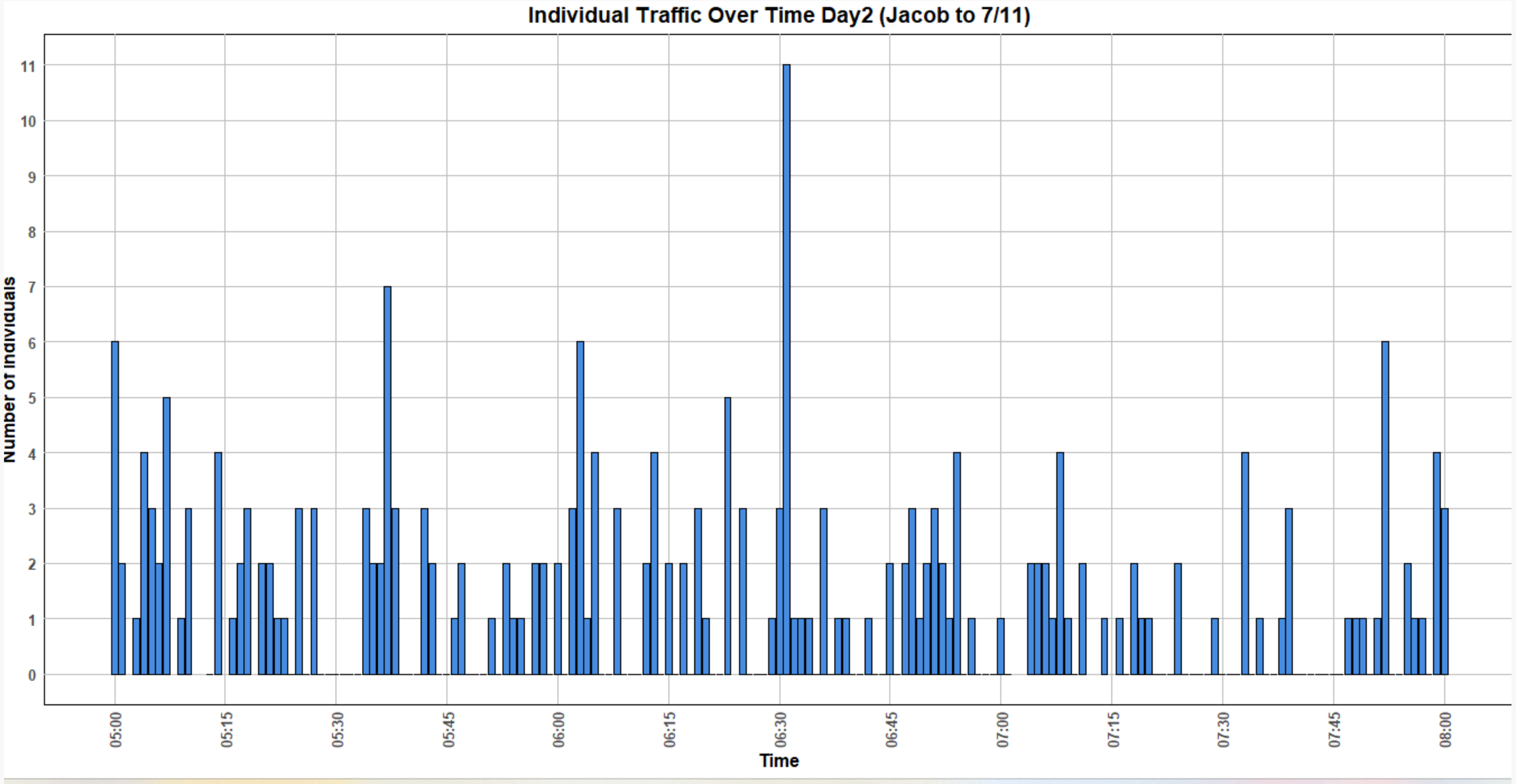
Graphs and Charts

Individual Traffic from Jacob to 7/Eleven



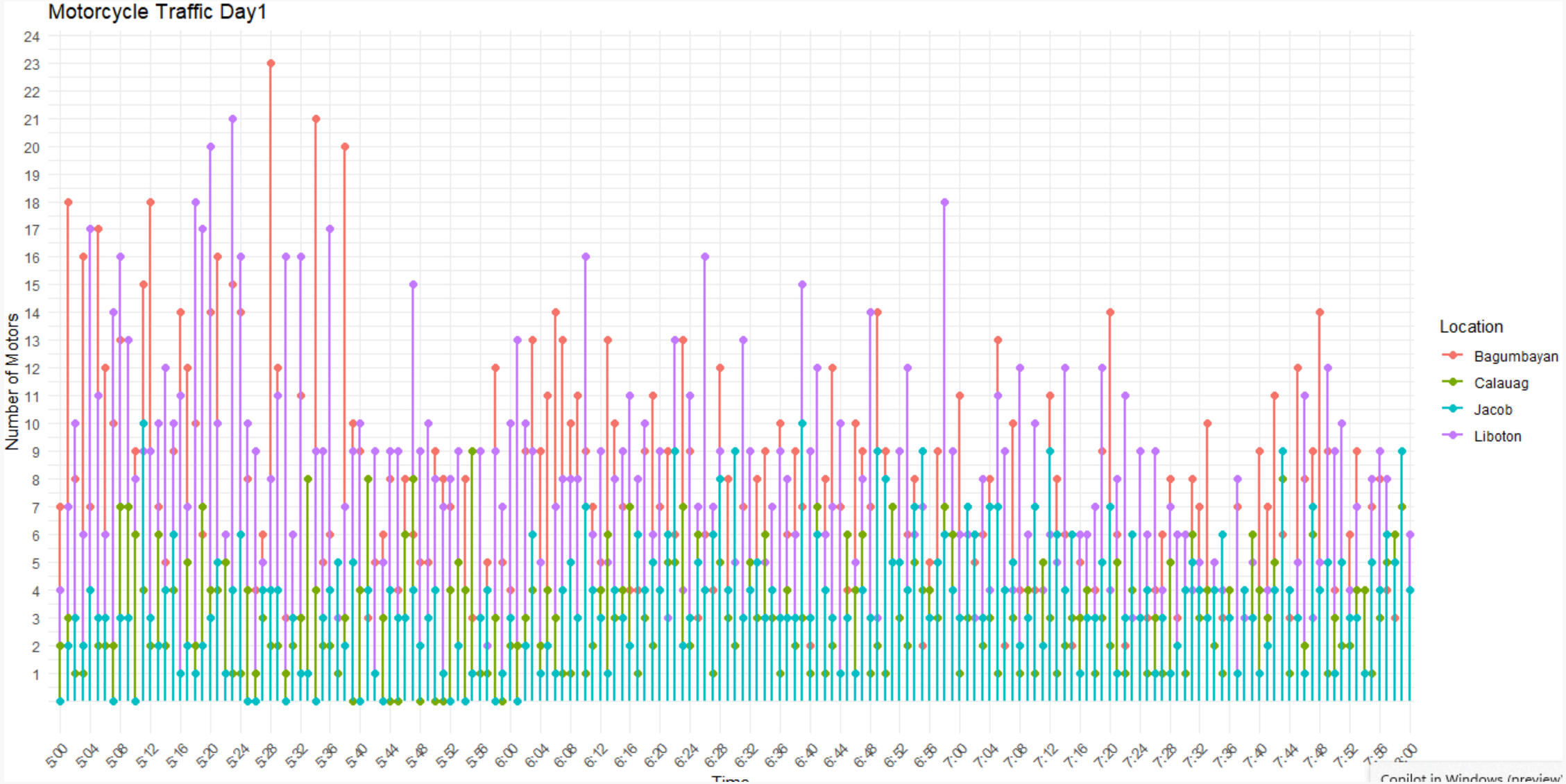
Graphs and Charts

Individual Traffic from Jacob to 7/Eleven



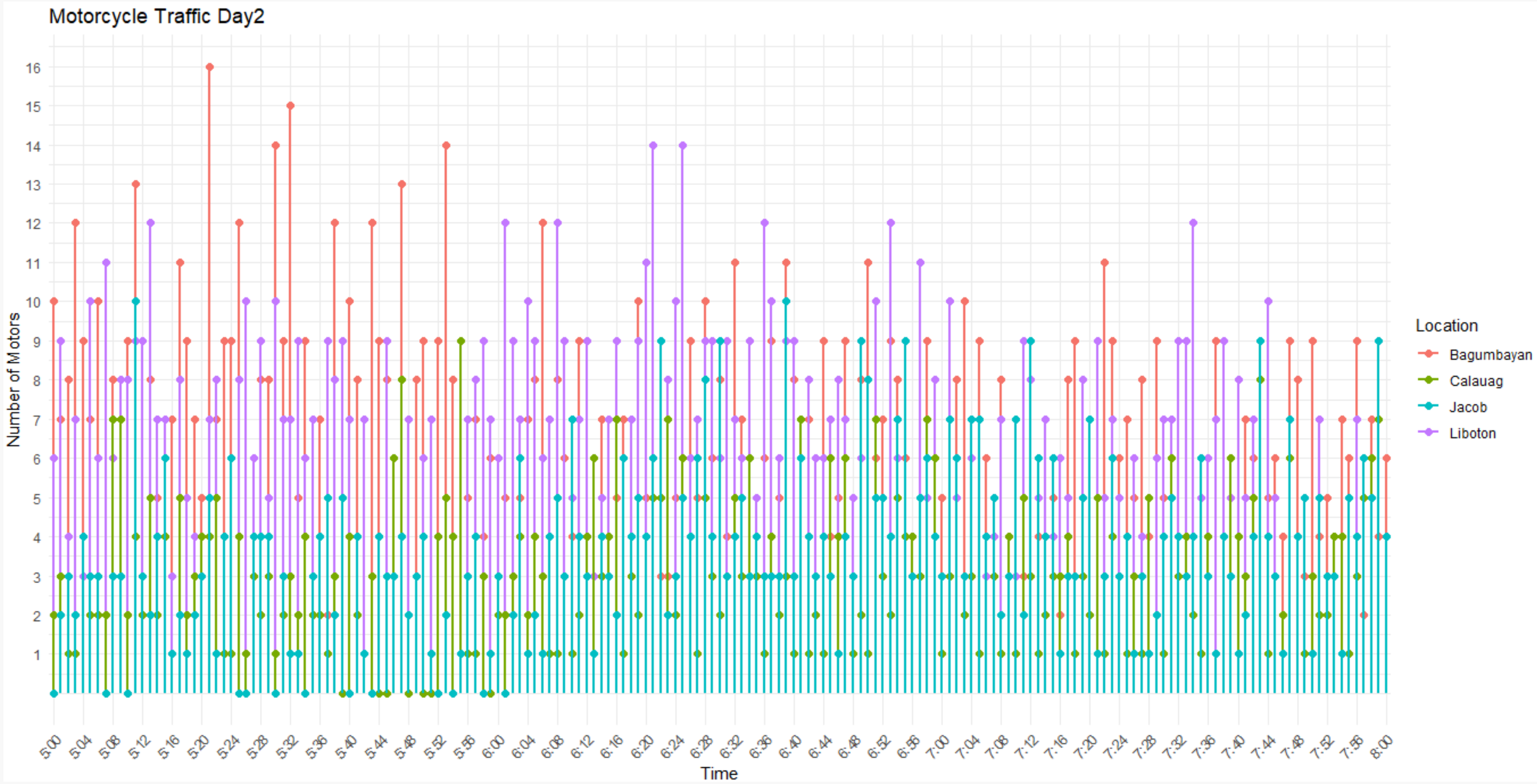
Graphs and Charts

Motorcycle Traffic



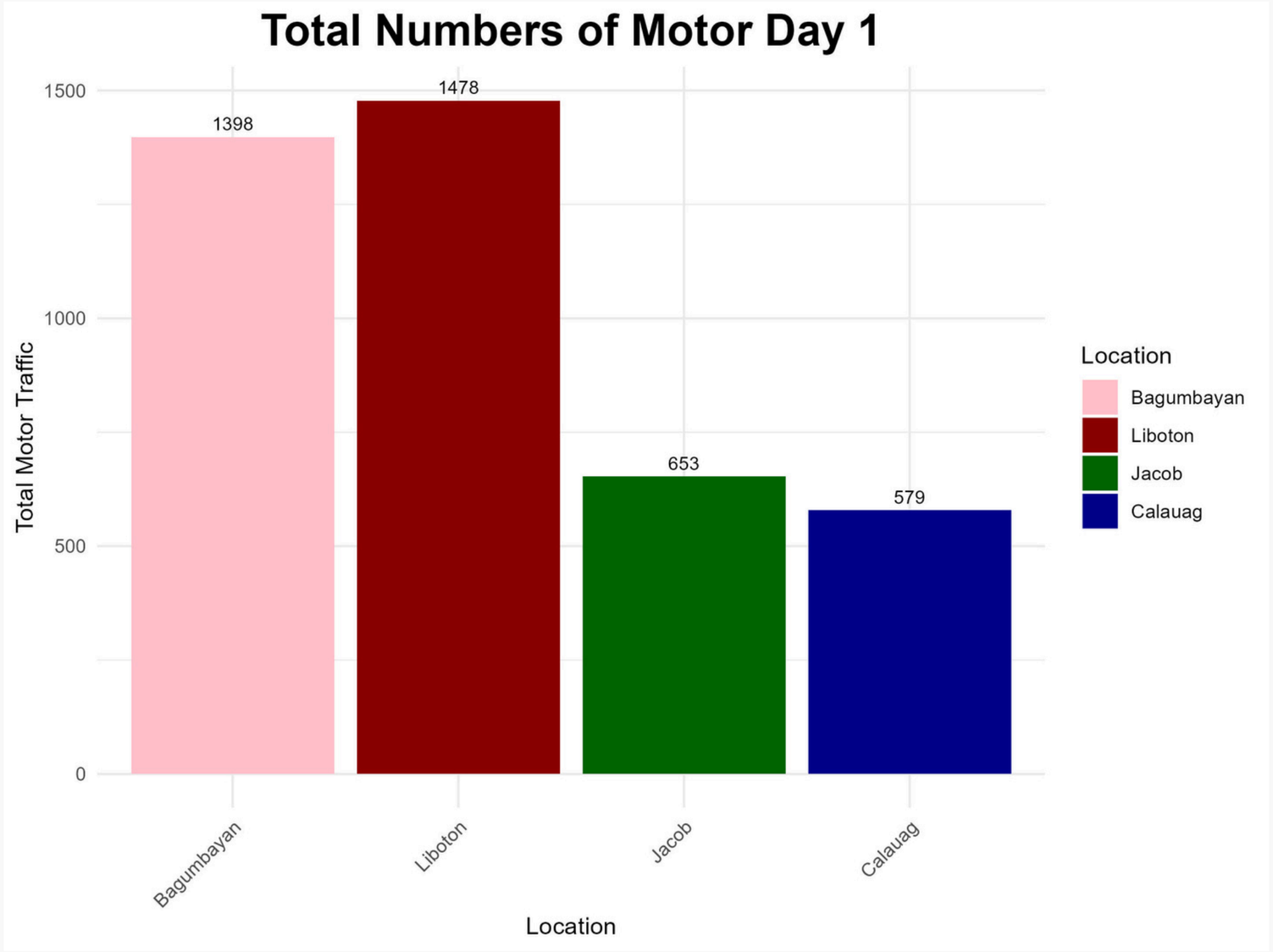
Graphs and Charts

Motorcycle Traffic



Graphs and Charts

Total Numbers of Motorcycle



Graphs and Charts

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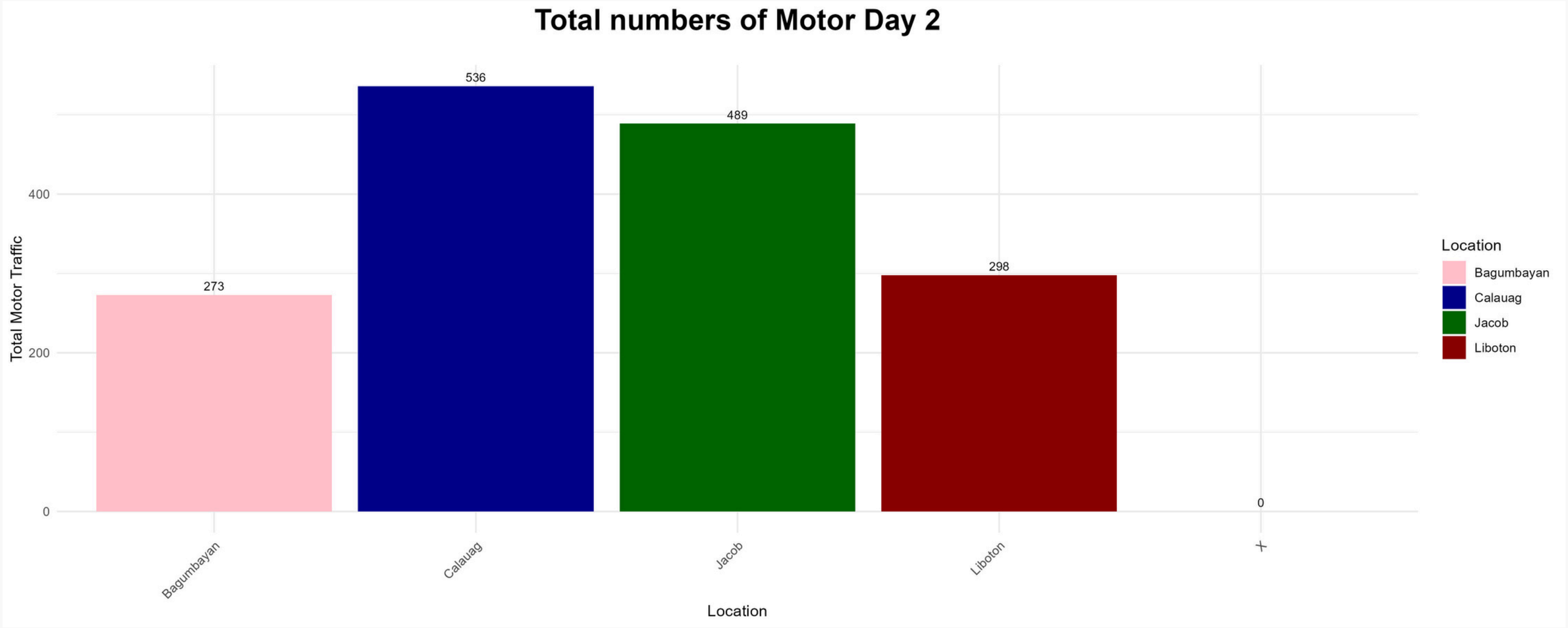
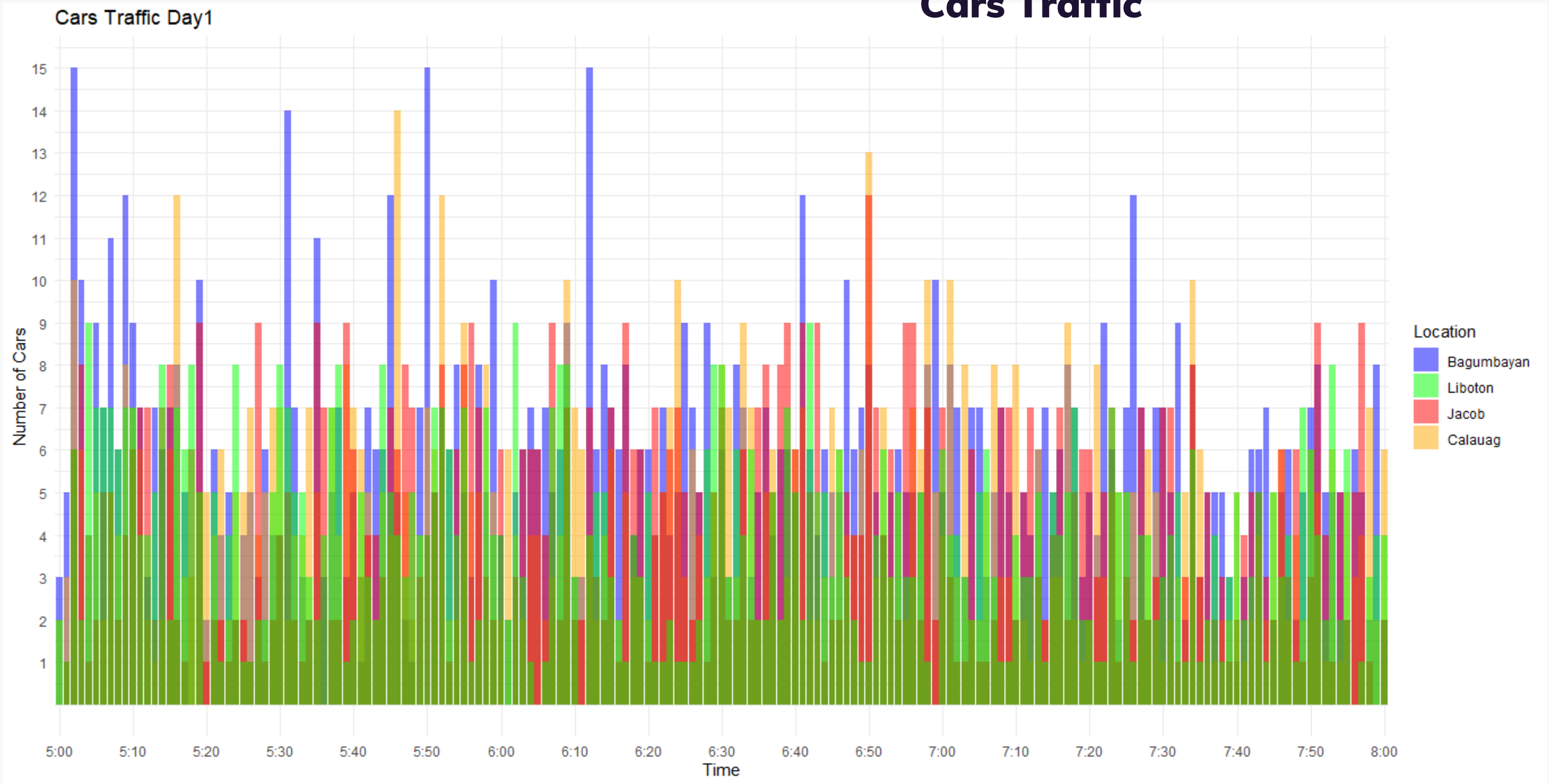
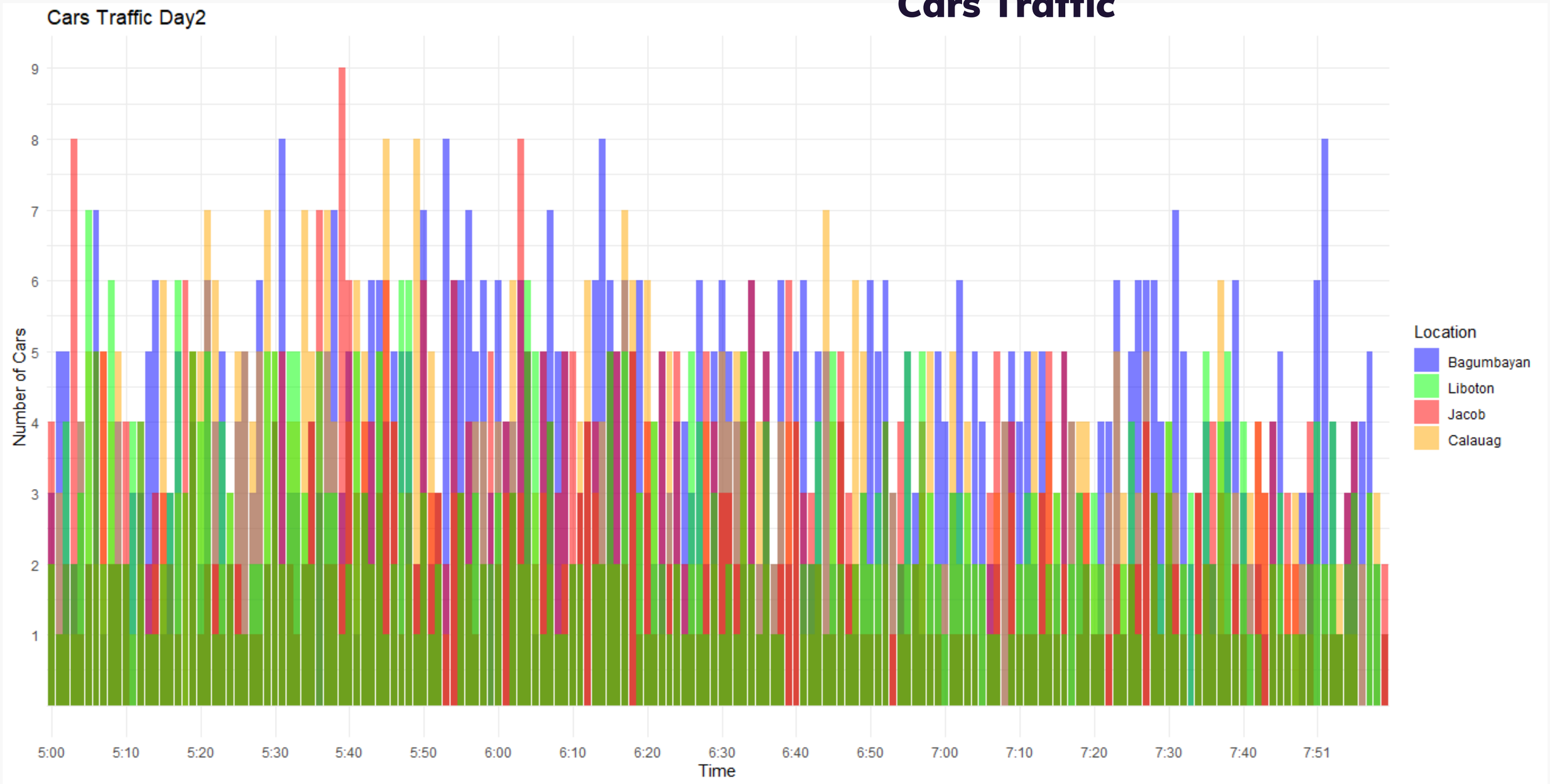


Graphs and Charts



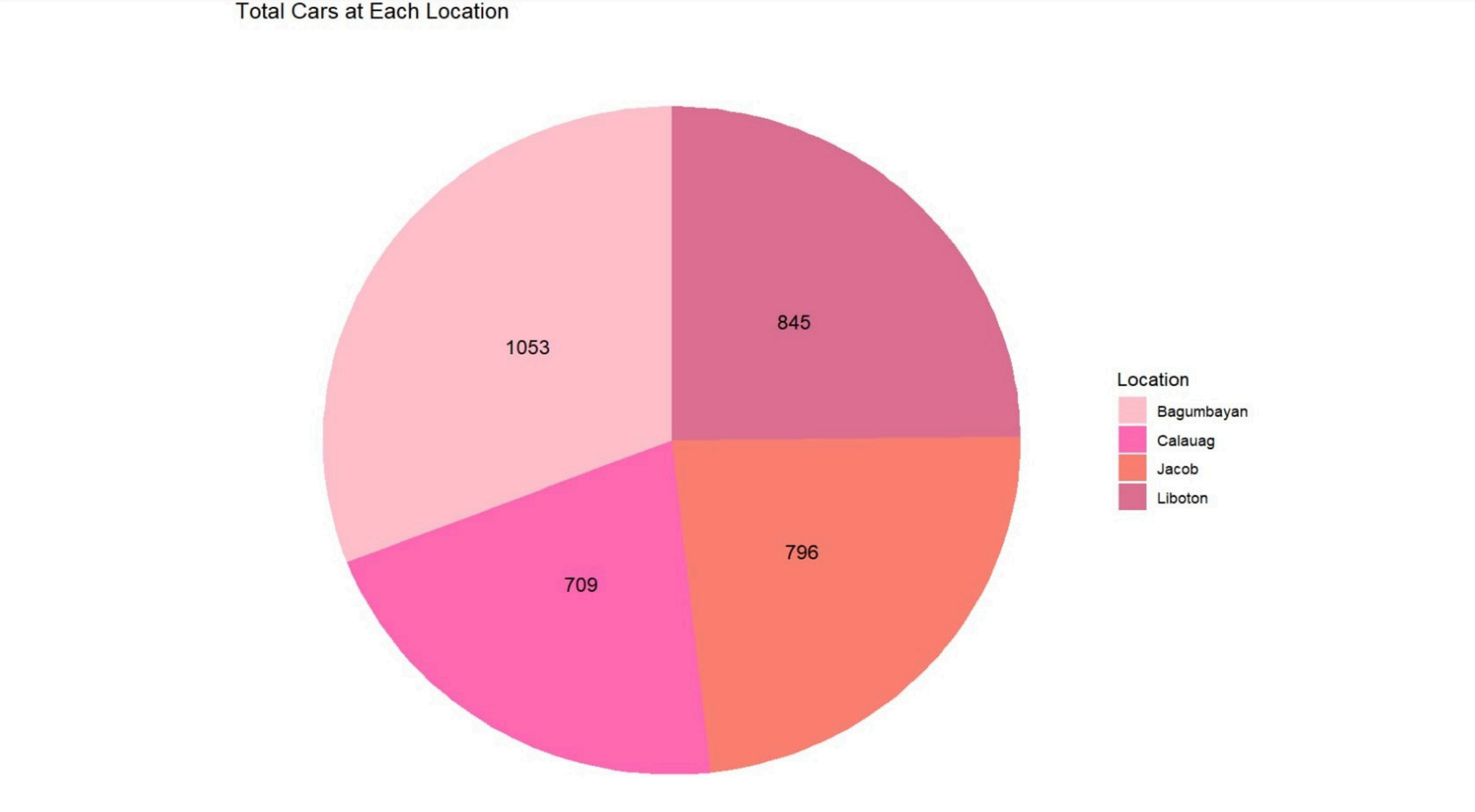
Graphs and Charts

Cars Traffic



Graphs and Charts

Total Cars at Each Location



Graphs and Charts

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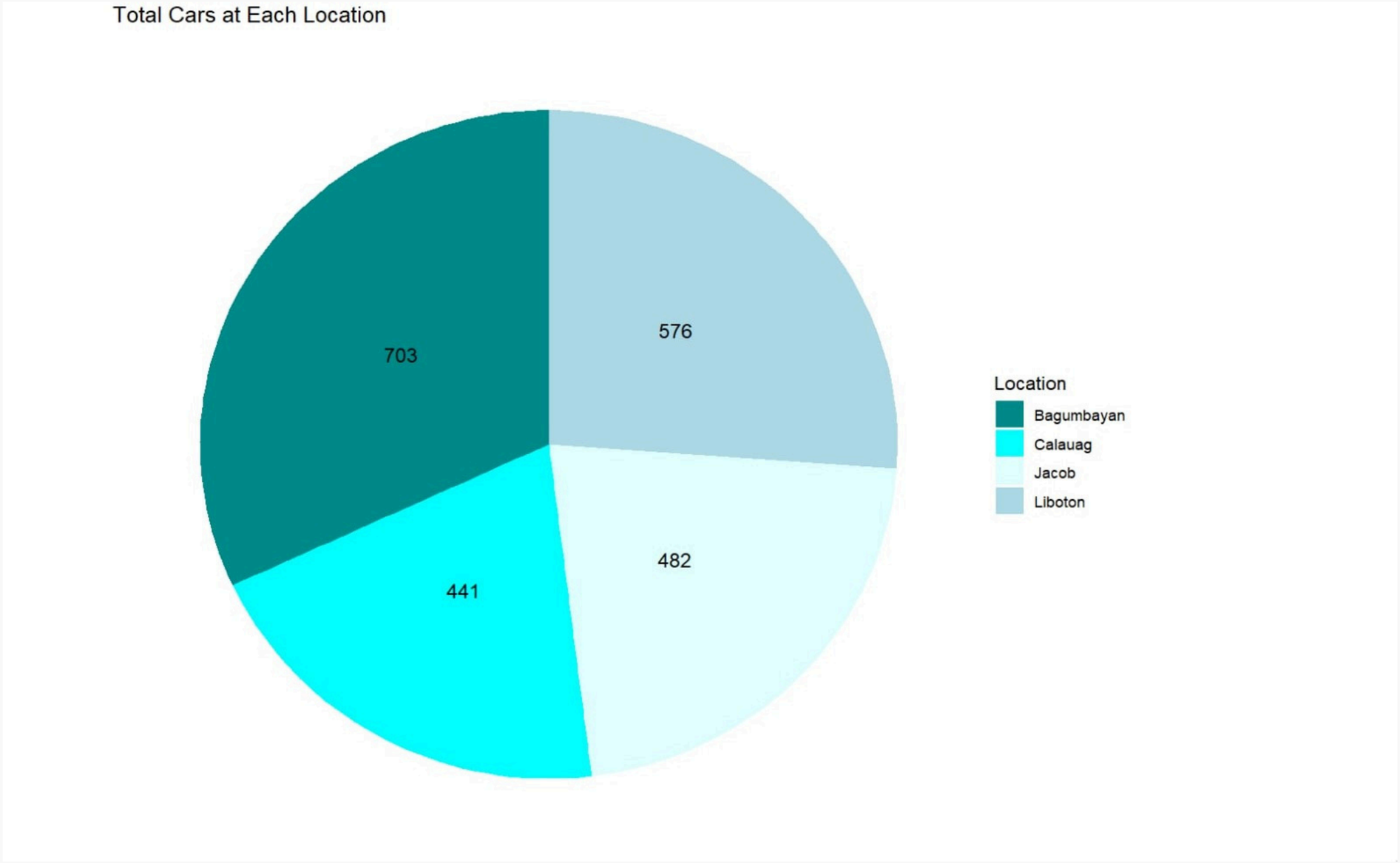
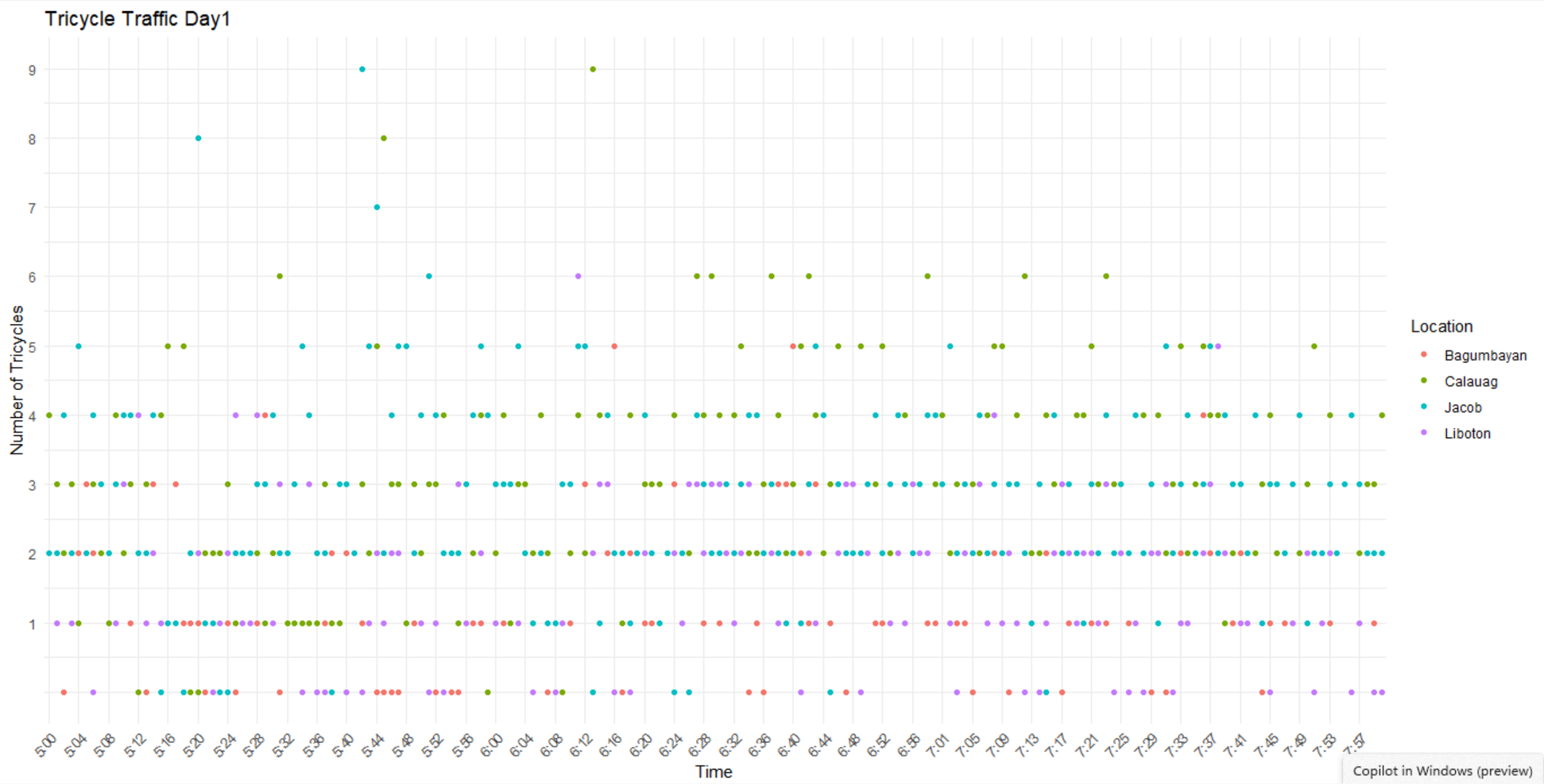


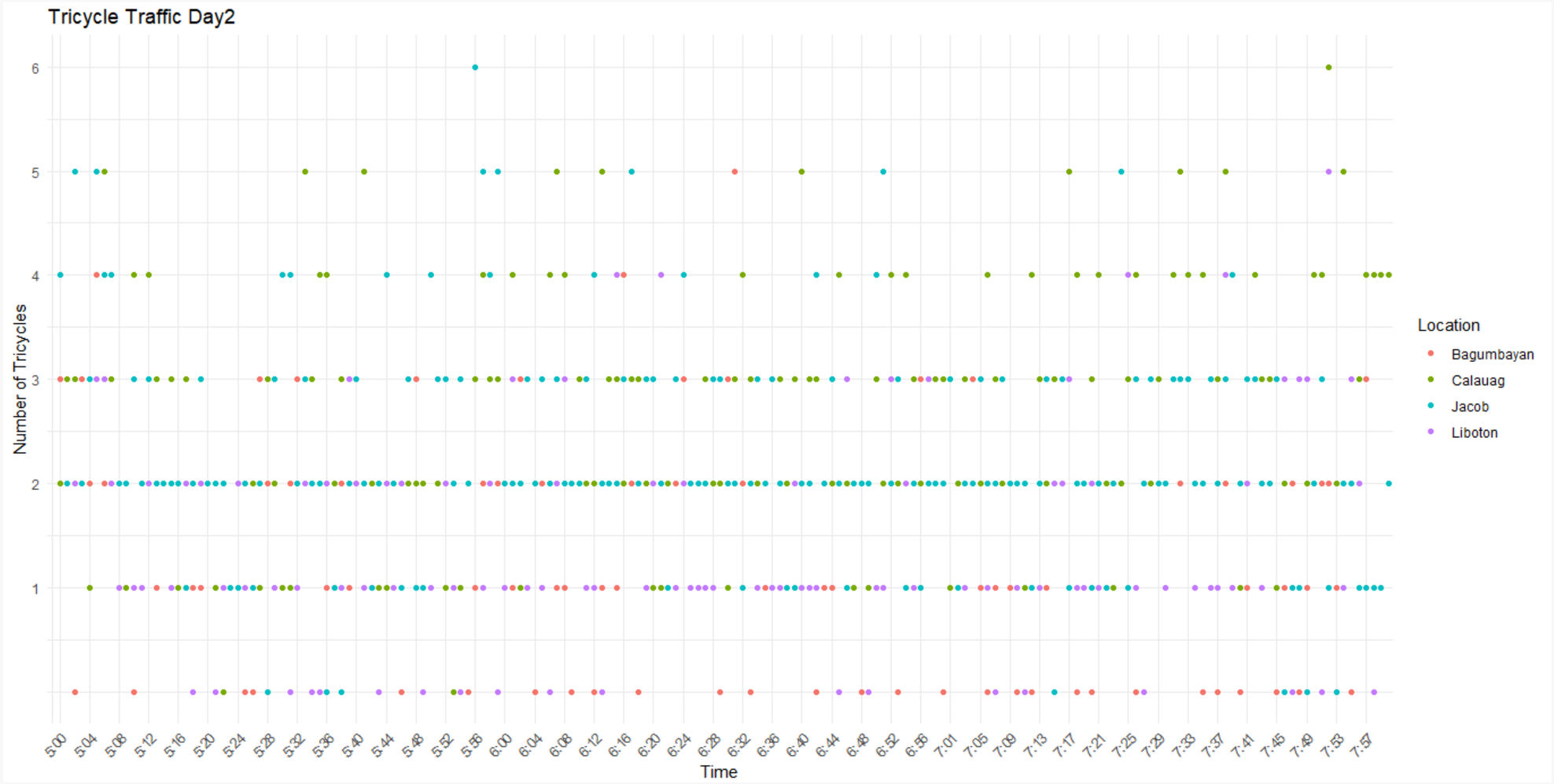
Graphs and Charts

Tricycle Traffic Day 1



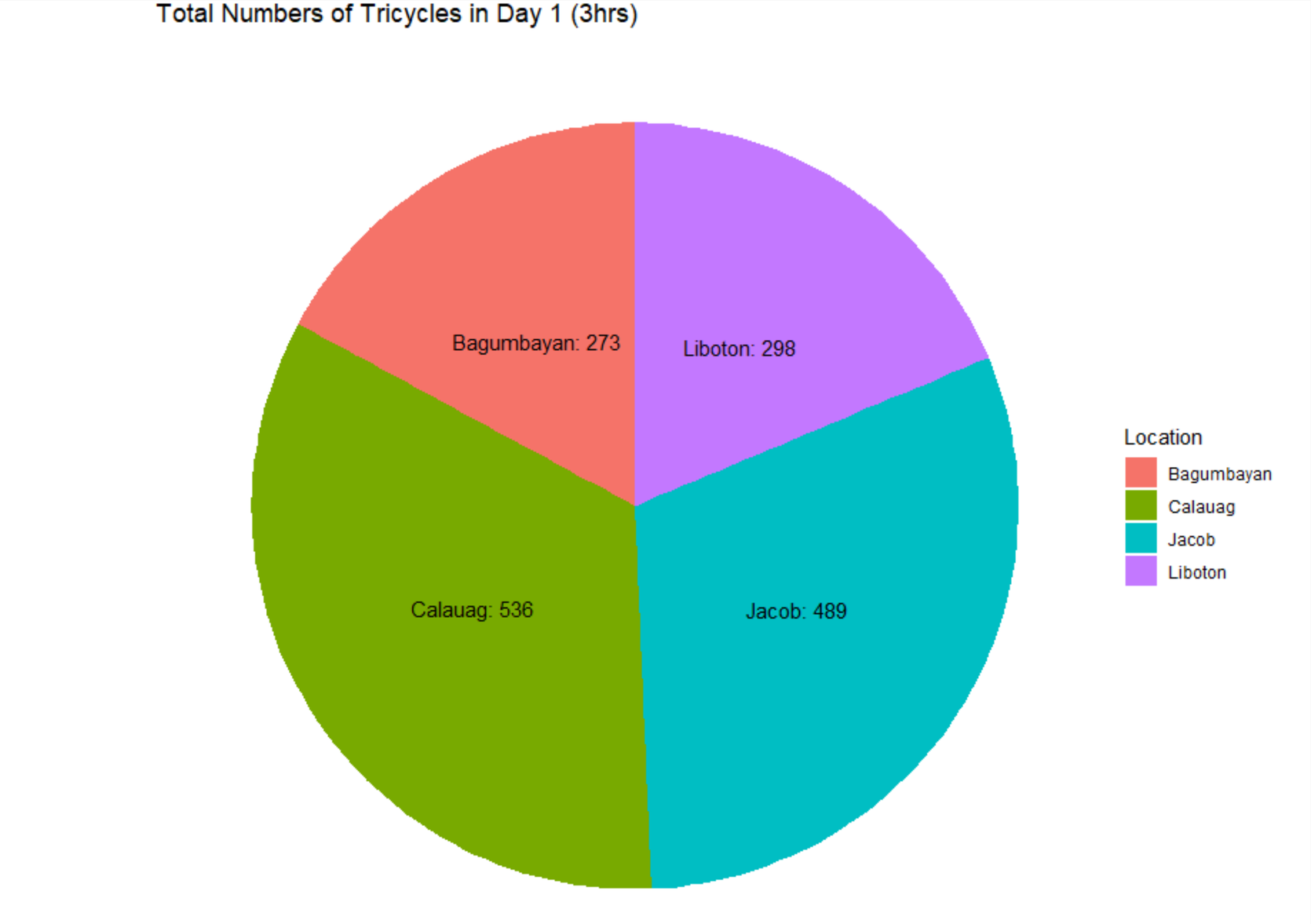
Graphs and Charts

Tricycle Traffic Day 2



Graphs and Charts

Total Number of Tricycle



Graphs and Charts

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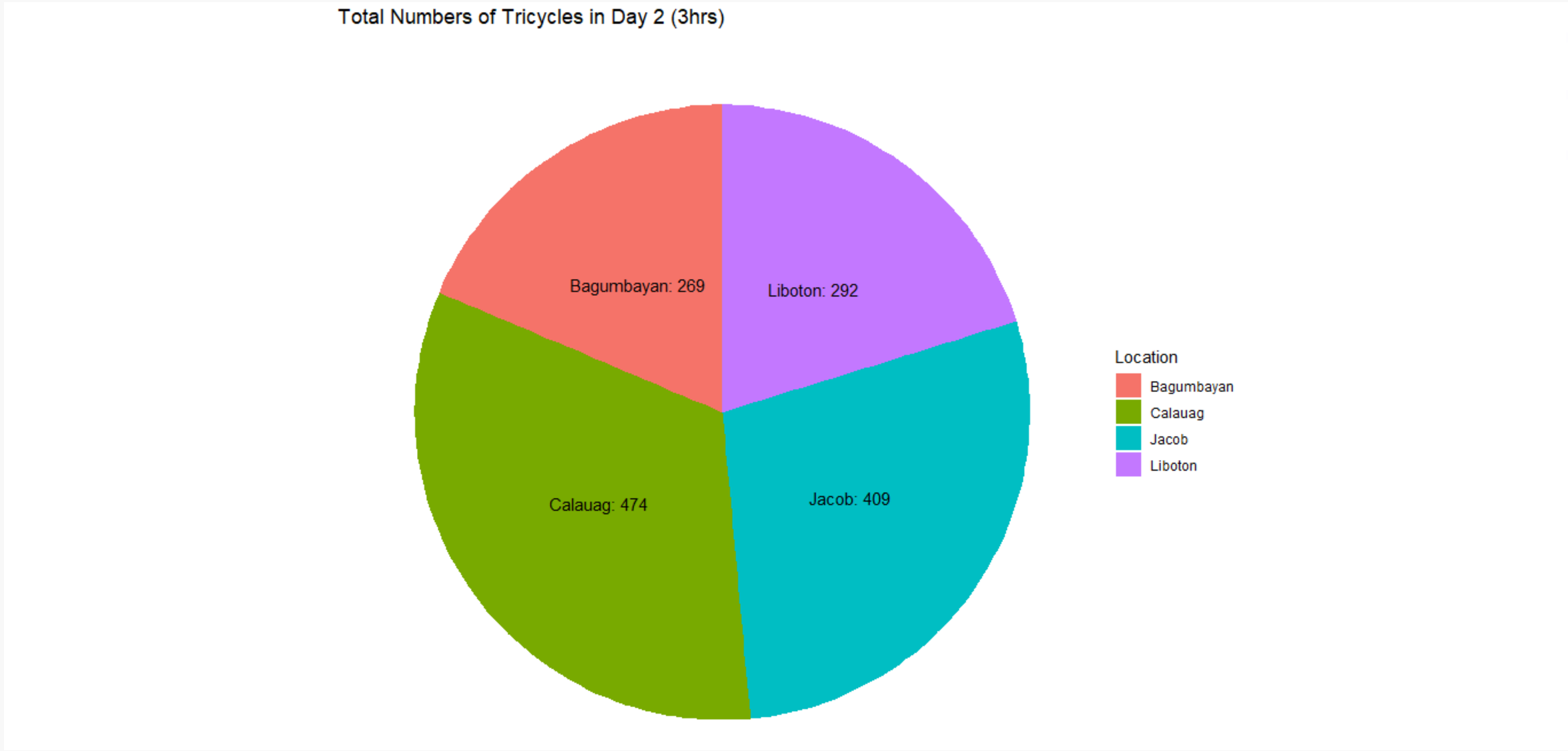

Conclusions

Based on our observations, our data suggests that pedestrian crossings and vehicle volumes at specific times of the day are the key contributors to the traffic issues observed. To address these challenges, enhanced pedestrian management strategies, such as improved signage and dedicated crossing times, along with more robust traffic control measures like traffic lights or manual traffic enforcers during peak hours, are recommended. Implementing these measures could significantly improve traffic flow, reduce congestion, and enhance the overall quality of life for residents in Naga City.

Thank you.