



Unveiling traffic patterns and citations by time and weekday

Bobby Emerick, Eddie Haith, Hector DeLeon



Story Time

- Picture this: Tuesday mornings on campus, a bit chaotic. Why? Well, lots of students have classes on Tuesday mornings, and in the hustle, some might forget about the parking rules. It's like a reminder to double-check those meters before diving into the busy day. Otherwise, you may be unlucky like David Helmstetler who was found yelling at his car. When asked what happened, he said “this parking lot was full so I parked in a teacher spot since I needed to get to class. I come back to my car and I see a ticket that was issued 5 minutes ago.” The frustrations of never being able to find a parking spot and being ticketed in a moment’s notice is something a lot of us have experienced before. Today, we will be showing you how you can figure out where to park and when to park there so you never have to experience this again.



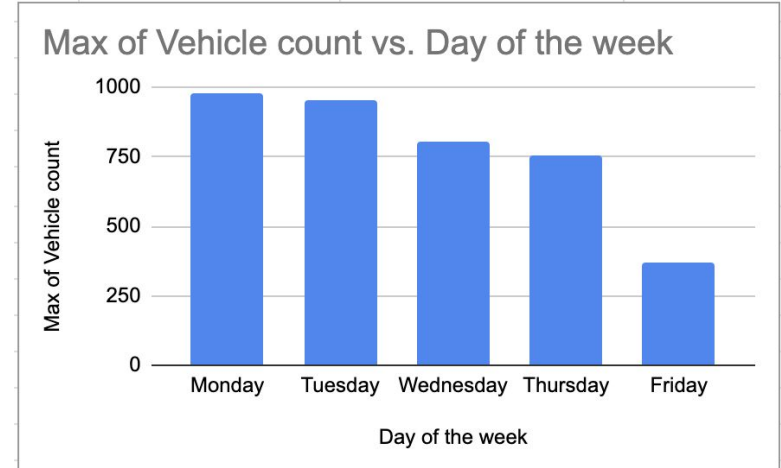
BIG INSIGHT: How parking behaviors are influenced by the interplay of time, weekdays, and ticketing patterns.

- Data Period: All data was collected from February 3, 2022, through June 5, 2023.
- Tuesday is the most busy day for parking throughout the week
- The busiest times are from 10 a.m. to 12 p.m. and 2 p.m. to 4 p.m.
- Ticketing occurs most in the mornings from 8 a.m. to 10 a.m.

Insight 1: The vehicle count throughout a semester is influenced by the day of the week.

Sub-headline: Exploring how day of the week influences semesterly traffic patterns.

- As a group, we explored and analyzed data collected from February 9, 2022, to February 5, 2023. Our findings led to a visualization illustrating the average number of vehicles in the parking lot on different days of the week. We observed a trend where Mondays and Tuesdays consistently recorded higher vehicle count compared to the rest of the week. This pattern aligns logically with Mondays marking the beginning of the week, resulting in increased activity as people return to work and school. Additionally, Tuesdays experience a surge in activities due to scheduled events, extracurriculars, or school-related commitments. Our collective emphasize the influence of weekday schedules on lot utilization.



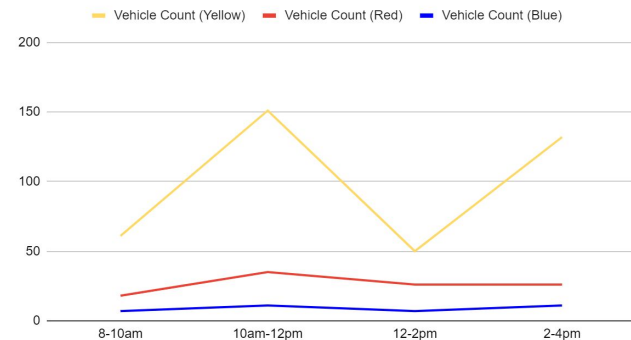
Insight 2: The correlation between the time of day and the specific lot fill rates (red, yellow, blue) throughout a semester is under investigation.

Sub-headline: Discovering the correlation between time of day and specific lot fill rates (red, yellow, blue) across different semesters.

- In our collaborative analysis of data from August 1, 2022, to June 5, 2023, we focused on understanding peak times for the vehicle count in parking lots. Findings highlighted significant periods from 10 a.m. to 12 p.m. and 2 p.m. to 4 p.m., where the vehicle count was the highest. Additionally, our exploration revealed that yellow lots consistently had the highest number of cars, attributed to their designation for students and being among the largest on campus. This trend suggests a correlation with class schedules, as more students and staff likely have classes during those hours.
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- Extending data collection to 12 p.m. to 2 p.m., we found a similarity in vehicle count to the earlier 8 a.m. to 10 a.m. slot. This resemblance logically connects to lunchtime, where some individuals may vacate parking lots for breaks. The collaborative analysis sheds light on the temporal dynamics of parking lot usage, emphasizing the impact of class schedules and breaks on observed patterns throughout the day.
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Visualization:

Average Vehicle Count per Colored Lot



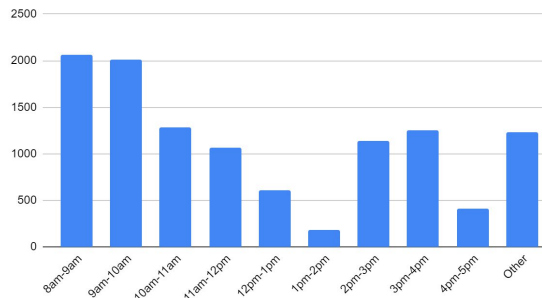
Insight 3: The research focuses on determining the specific times and days during a semester when cars are most frequently ticketed.

Sub-headline: When are cars most likely to get ticketed on campus during the semester? Unveiling the peak times and days.

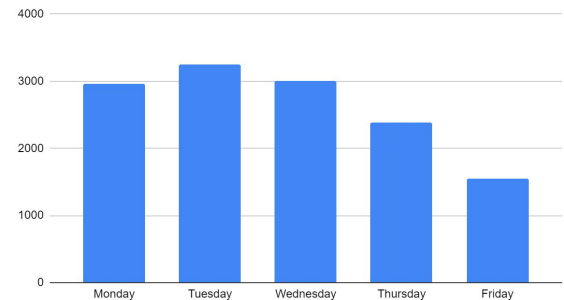
- As a group, we examined data spanning from August 1, 2022, to June 5, 2023, uncovering an intriguing pattern related to parking tickets. Surprisingly, Tuesday emerged as the day when cars receive the highest number of tickets. Further analysis revealed that the peak time for ticketing occurs in the morning, specifically from 8 a.m. to 10 a.m.
- This observation finds a logical explanation in the fact that many students have early classes on Tuesdays. In the rush of the early morning – heading to class, hitting the gym, and more – some may inadvertently overlook parking rules. It serves as a reminder that both the timing and the specific day of the week can significantly influence adherence to parking regulations. Our collaborative efforts in examining this data contribute to a clearer understanding of when and why parking tickets tend to occur.

Visualization:

Time Tickets are Given (from 8/1/22 - 6/5/23)



Total Tickets Given (13,152 from 8/1/22 - 6/5/23)





Summary

Tuesday mornings are the busiest time of the week due to more students having classes Tuesdays in the morning, yet Monday experiences more vehicles on average.

Yellow lots have more people in them due to students and staff allowed to have yellow permits, while blue lots are the smallest amount due to only staff members having permits to those.



Data Reflection

[Learn more about the data used in this project here](#)

Script

[Click here for the script for this slideshow](#)

Sources who can discuss our insights:

- Margretta de Vries, Parking Commision Secretary (mdevries@ku.edu)
- Diana Stanley, KU Court and Appeals (stanley_de@ku.edu)