CS506 Project Meeting Notes

Deliverable 0 Meeting:

What is the project focus/overall goal?

To better understand the impact of bus performance on Boston residents. The project aims to answer questions presented by the client in regards to end-to-end performance and the impacted population.

Why is this project important?

A lot of people use the bus to get around Boston. Helping them have even a slightly better experience would incrementally increase the quality of life of many people through a snowball effect.

What type of data will you collect or be analyzing?

Analysis of MBTA bus data that examines service performance trends by geography. Bus Data: Arrival time, departure time, bus stop location, time on bus, ridership. Location data: Neighborhood and demographics such as income level, race, ethnicity, age, etc.

What are potential limitations of the project?

A lot of people also use the train so our data might not be completely accurate for certain neighborhoods. Some people use the bus without registering which also might show some gaps in the data. These could limit the usefulness of our findings, as opposed to having all public transportation data and it being completely accurate. There can also be external factors that influence the bus service performance, like weather and social events, but these factors may not be considered in our analysis.And these facts may make our model trigger incomplete understanding and misattribution of causes to the bus services in Boston.

What are your next steps? Divide tasks amongst the team

First deadline will be the base analysis in the sixth week. Our first steps will be to complete the following: collect and preprocess data, complete preliminary analysis (descriptive stats etc), answer base questions, and submit everything to github.

Answer two of the base questions (subjected to change) by researching and reading the context materials attached to the project description. We assign each member a base questions to process, and then we decide to meet next week with some preliminary research results:

- (Isaac) What are the end-to-end travel times for different bus routes (Isaac)
- (Jasmine) Are there disparities in the service levels of different routes? (which lines are late more often than others)
- (Tiansui) What are the population sizes and characteristics of the communities serviced by different bus routes (e.g. race, ethnicity, age, people with disabilities/ vulnerabilities)?
- (Salma) If there are service level disparities, are there differences in the characteristics of the people most impacted?(Salma)
- (AlHasan)This can include questions about traffic information, which neighborhoods are served better/worse by the MTBA bus system, which routes are better/worse, differences in quality of service by class/race, contributing variables, ect.