Presentation 1

1. Link to presentation and code on GitHub:
    - Presentation Link: Click Here (Note: if the Power BI embedded in the slides fails, static visuals can be found at the bottom of the slide deck)
    - Coding was done on PowerBI. The data was originally transformed by my partner, Julia Schaffner, and then I built the visualization per the process below.

2. What did you do?

I created a visual for the Time Trends Dashboard using the CAR data. I built off my group partner, Julia's, work in which she compiled all CAR data and All Calls data into singular CSV files using the import code provided by Prof. Krishna. She then loaded them into PowerBI to perform more specific data transformations. Within Power BI, she used the Group By and Advanced Group By functions to ensure each Contact Session ID in the CAR dataset appeared only once, preventing double counting from multiple actions per session. Julia then created four new aggregated columns—Count, Call Start Time, Starting Hour, and All Rows—and expanded the nested tables to access detailed session information in the visuals.

With this data, I created a line chart visualization that aimed to examine if there was a seasonal peak in the number of calls received by Legal Aid. The X-axis is the month in which the call took place over the course of this calendar year. The Y-axis is the number of unique calls during that month. On each visual, you can filter by EP Name, Flow Name, Termination Reason, and the axes for the visual.

3. How does it help the project?

Understanding when call volumes peak is crucial for improving the efficiency of the call system, especially given the constraints legal aid organizations face. With limited budgets and unpredictable funding due to shifting policies and economic conditions, Legal Aid is already struggling to meet demand. Calls often exceed capacity, leaving people unable to get through or

facing long wait times. Since demand likely fluctuates rather than remaining constant—spiking during particular days, weeks, or policy changes—identifying these seasonal or situational trends allows the organization to anticipate and prepare for them. By aligning staffing and resources with periods of highest demand, the organization can serve more clients effectively without increasing costs, improving both accessibility and overall system performance.

4. Issues faced, attempt to resolve issues, and resolved issues:
    - The major issue I, along with the rest of my group, are facing is that the data has a lot of confusing and/or missing terms and information. We were able to get some context about acronyms and terms used by searching the internet or referencing the document Professor Arvind uploaded to GitHub; however, we still have questions about how the different answers in a column compare to each other in context of the overall business problem (i.e. SIP vs WXCC vs. WXC).
5. Next Steps
    - Compare if the seasonal spike from April to September is true in other years suggesting a regular trend or if it is more closely related to the extreme policy changes from this summer; to do so, I would create this same visualization with data from years past
    - Refine the dashboard visuals to clearly display trends in peak call times by current filters; to do so, I would create heatmaps or bar graphs to highlight patterns across hours and days
    - Add more filtering options to allow deeper analysis of when and why specific termination reasons happen

- Work closely with teammates analyzing other metrics to link time-trend findings with their insights for a more complete understanding

6. References

- Input code from Krish
- Julia's data transformations in python and PowerBI
- Information from Cynthia during class with her