Data Science question: How did the average stop in response (of a call for service) per gender change over time?

Group 13:

- Isabella Jiang (Canvas Master): Responsible for managing all written content and submissions on the Canvas platform. Ensured that all documents are clear, well-structured, and meet the necessary requirements, facilitating effective communication of the project's findings and analyses.
- Shaun Israni (Screen Master): Worked closely with Tableau, managing visual representations of our data. Ensured that the visual elements are accurate and informative.
- Dhruv Mittal (Speaker): Tasked with presenting the project's key facts and analyses to the class. Communicated the findings in a clear and engaging manner, ensuring that the audience understands the significance of the data and its implications.

Data connected: ripa_stops_datasd, ripa_gender_datasd
Data used: Year (date stop), Perceived Gender, Avg stop in response



Results and Analysis

From the results, we can conclude several findings:

1. Stability in Correlation for Binary Genders:

The correlation between the average response time to calls for service and perceived gender has demonstrated a remarkable consistency for both females and males over the years. This stability may be attributed to a larger sampling size within these populations, which suggests that the data

collected is more representative and less susceptible to variability. Consequently, minor fluctuations in data points are unlikely to skew the overall findings significantly.

This stability suggests that the experiences of binary gender individuals in relation to response times may be more predictable. It also indicates a level of systemic consistency in how services are perceived and experienced by these groups.

2. Fluctuation in Correlation for Transgender Individuals:

In contrast, the correlation between average response times to calls for service and perceived gender exhibited notable fluctuations for transgender women and transgender men over the years. Unlike their binary counterparts, the sample sizes for these groups may be considerably smaller, leading to a heightened sensitivity to changes in the data. As a result, even slight variations in the data points can produce significant shifts in the observed correlation.

This fluctuation raises critical questions about the experiences of transgender individuals when interacting with services. The instability in data suggests that their experiences may differ significantly from those of binary gender individuals.

3. Implications for Future Research and Policy:

These findings highlight the necessity for more comprehensive data collection methodologies that ensure sufficient representation of transgender individuals. Increasing the sample size for these groups will enable more robust analyses and a clearer understanding of their experiences.

Conducting longitudinal studies that track changes over time for transgender individuals can provide deeper insights into the evolving nature of their experiences.