MTA Ridership Data Analysis Project

Sigma Six Team

Business Questions:

1. Trend Analysis

- How has daily ridership changed over time for different transportation modes?
- Are there seasonal trends in ridership?

2. Pandemic Impact

- How did ridership recover post-pandemic?
- What's the overall health of every transportation system?
- What's the overall health of every weekday in the Transportation?

3. Correlation & Dependency

- Is there a correlation between subway and bus ridership?
- Do bridge/tunnel traffic levels impact subway/bus ridership?

4. Performance Comparison

- Which mode retained the highest % of pre-pandemic ridership?
- How does weekday vs. weekend ridership differ?

5. Outliers

- Were there significant ridership drops or spikes?

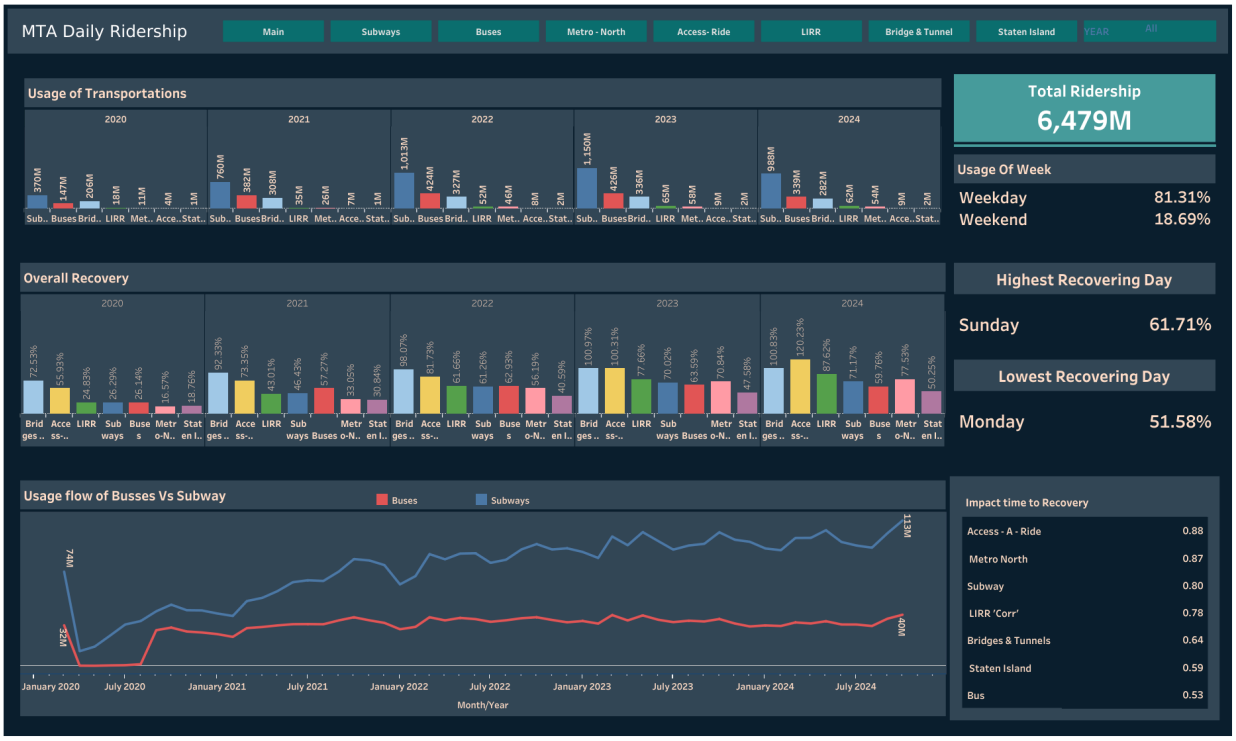
6. Forecasting

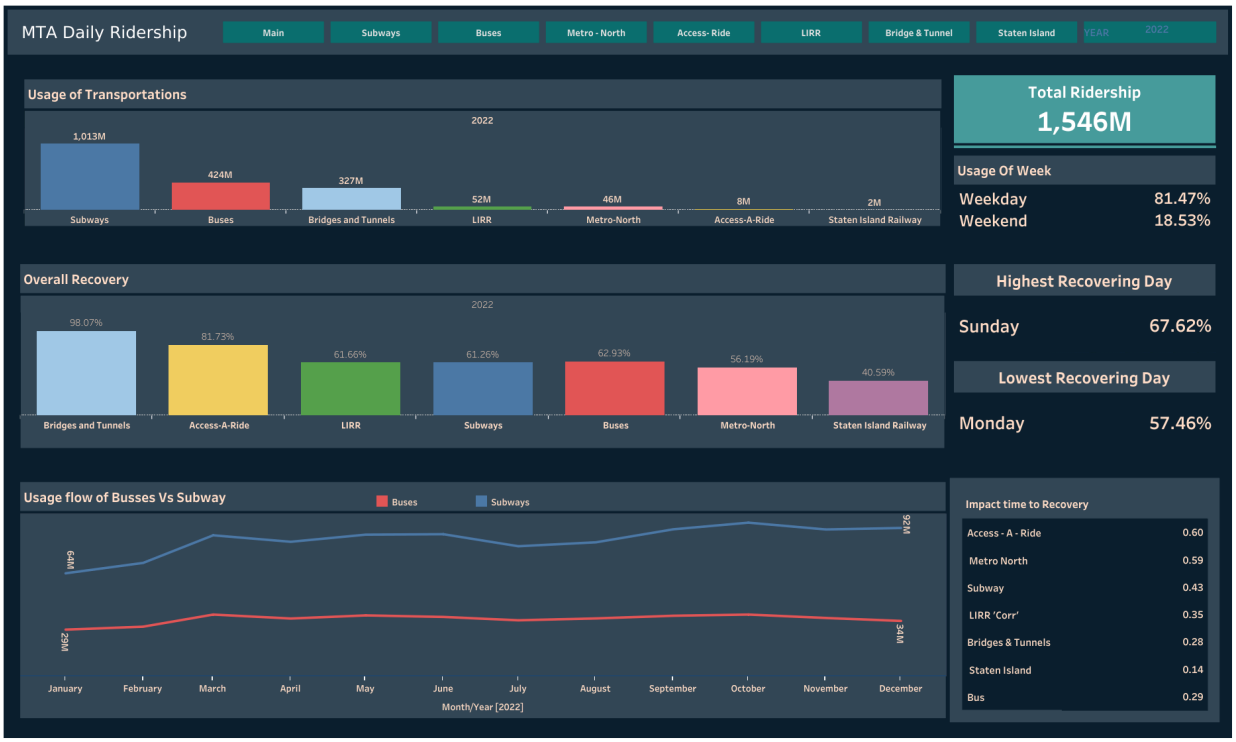
- Can we predict future ridership trends?

Strategic Questions

1. Service Optimization & Efficiency
    - How can MTA optimize train and bus schedules based on ridership patterns?
    - Should service frequencies be adjusted for certain routes or times of the day?
    - What strategies can be used to increase public transit adoption post-pandemic?
2. Financial and Policy Decisions
    - Would fare adjustments encourage higher ridership?
    - Should MTA introduce incentives for off-peak travel to balance capacity?
    - What role can congestion pricing play in shifting car users to public transport?
3. Customer Experience & Accessibility
    - How can MTA improve accessibility for Access-A-Ride users?
    - What measures can be taken to improve passenger comfort and satisfaction?
    - Should MTA invest in expanding certain transportation modes based on demand?

Mockup for Main Dashboard





Mockup for Every Transportation