

# Data Visualization: MBTA Transportations

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# Motivation

- Interactive analysis of MBTA ridership data.
- Insights for resource allocation & service improvements.
- Identifying ridership trends, usage patterns, and flow.
- Supports optimization of Boston's transit system.



# Project Goals

- Analyze trends by mode & usage distribution.
- Identify peak/off-peak patterns.
- Visualize ridership flow via heatmaps.
- Highlight high-activity & low-activity stops.



# Conclusion

- Uncovered key ridership trends & usage patterns.
- Enabled interactive exploration for decision-making.
- Future Enhancements:
  - Real-time data for dynamic insights.
  - Geo-spatial maps for route optimization.
  - Machine learning for demand prediction.