

# WeGo Bus Analysis



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# WEGO Public Transit

- Founded 1973 - Nashville MTA
- Rebranded to WEGO in 2018
- 28,000 riders a day (2023 weekdays)
- 7,634,000 riders a year (2023)
- Routes - 54
- Fleet - 238 Buses
- Train Route



# Eat your Variables

Adherence: “On time performance”

- Difference between actual departure time and scheduled time
- Negative = Late Departure
- Positive = Early Departure

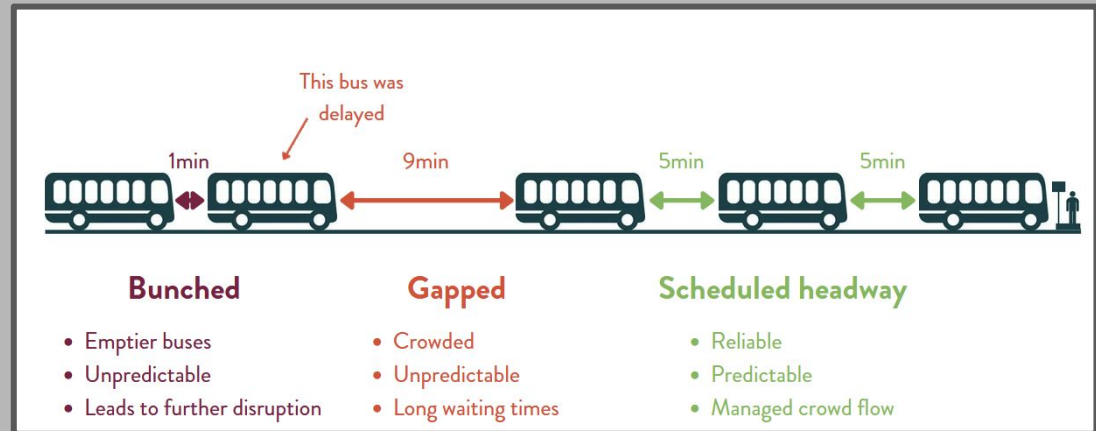
**77.08%** WEGO Buses “On Time”



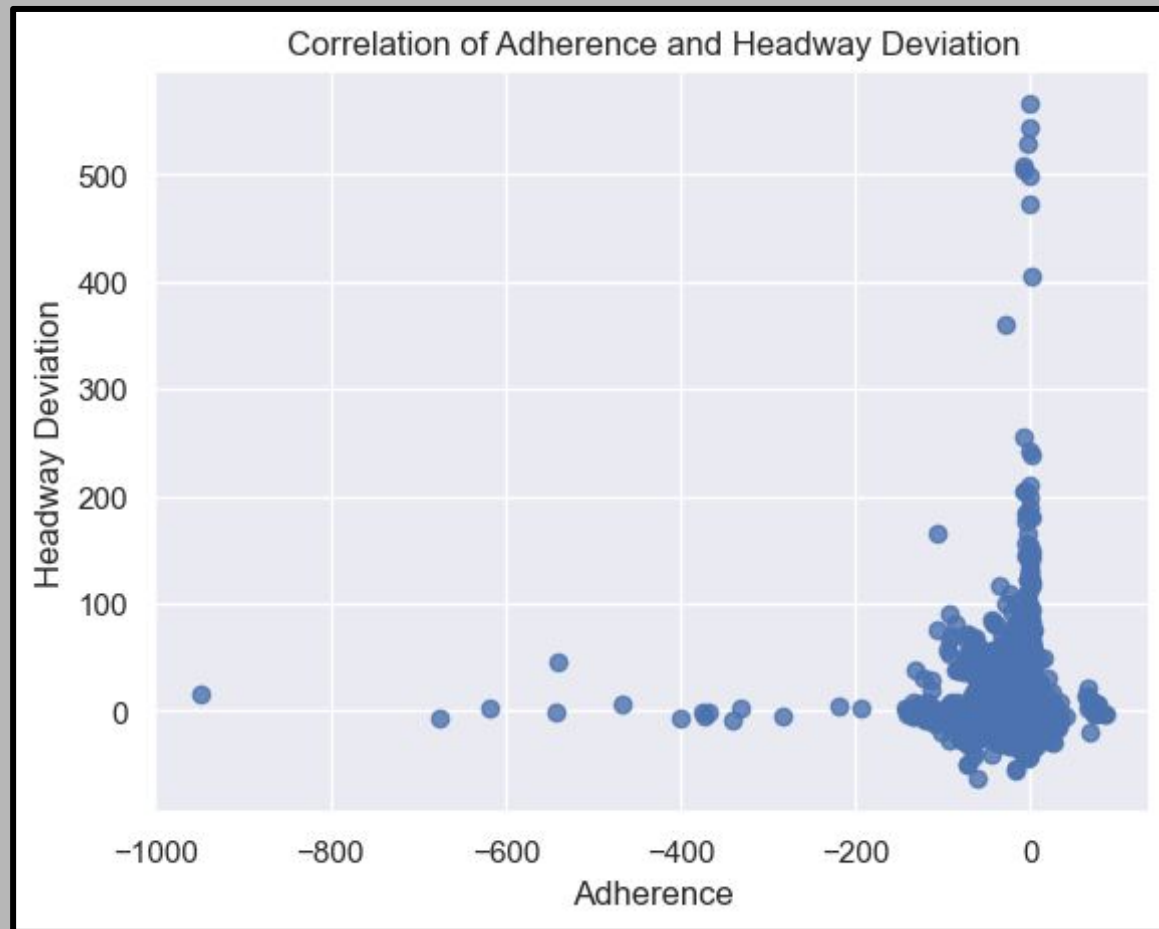
# Eat your Variables

Headway :

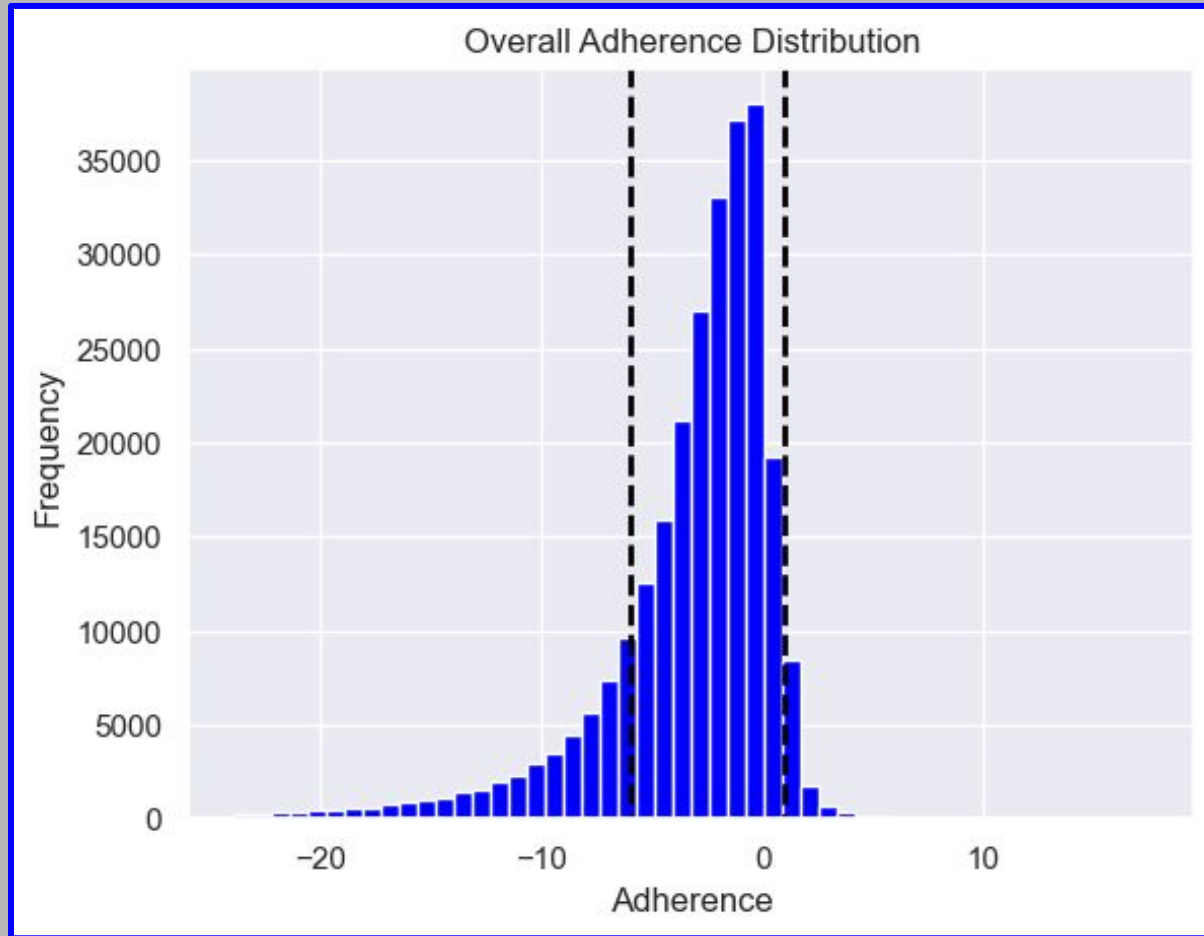
- Negative = Bunching (too close together)
- Positive = Gapping (too far apart)



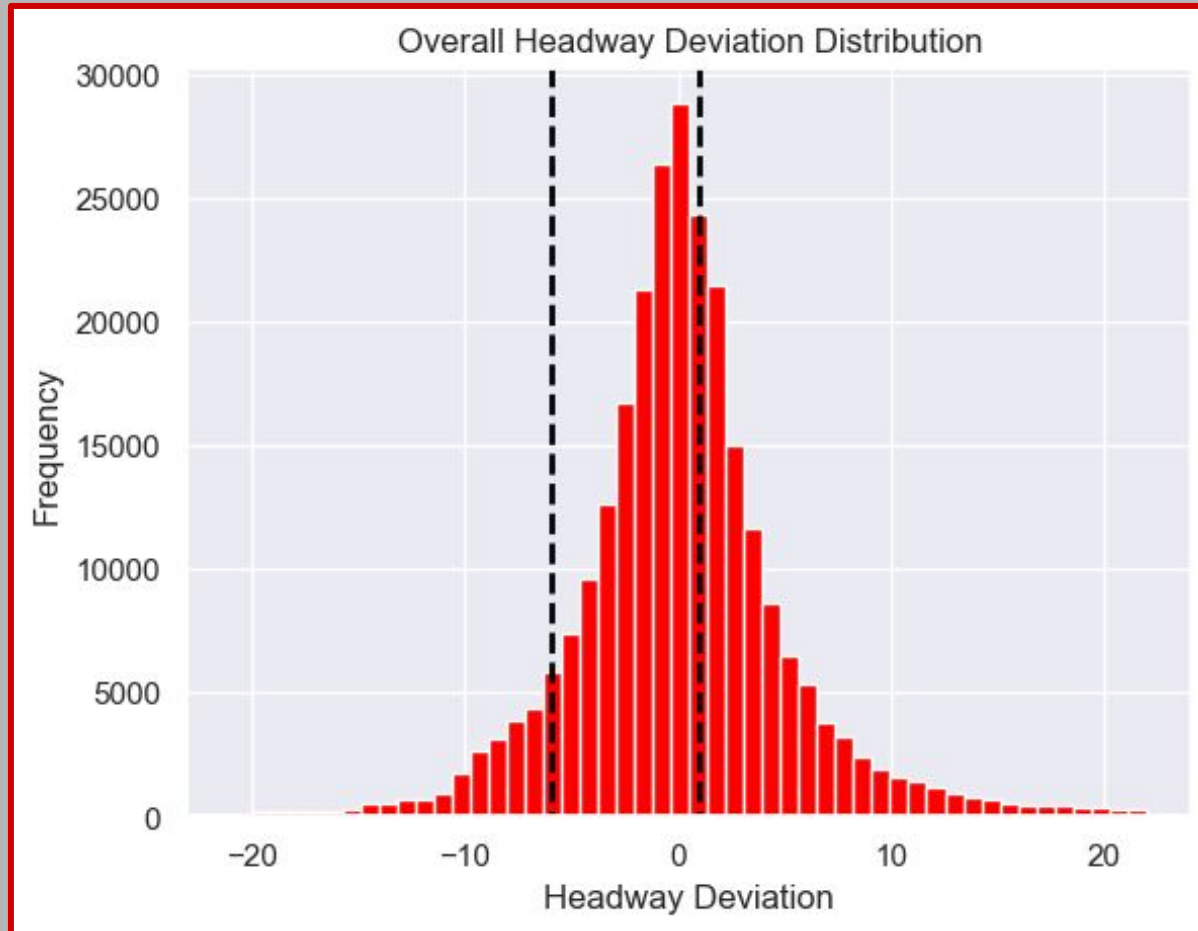
# Correlation of Adherence & Headway Deviation



# Overall Adherence



# Overall Headway Deviation



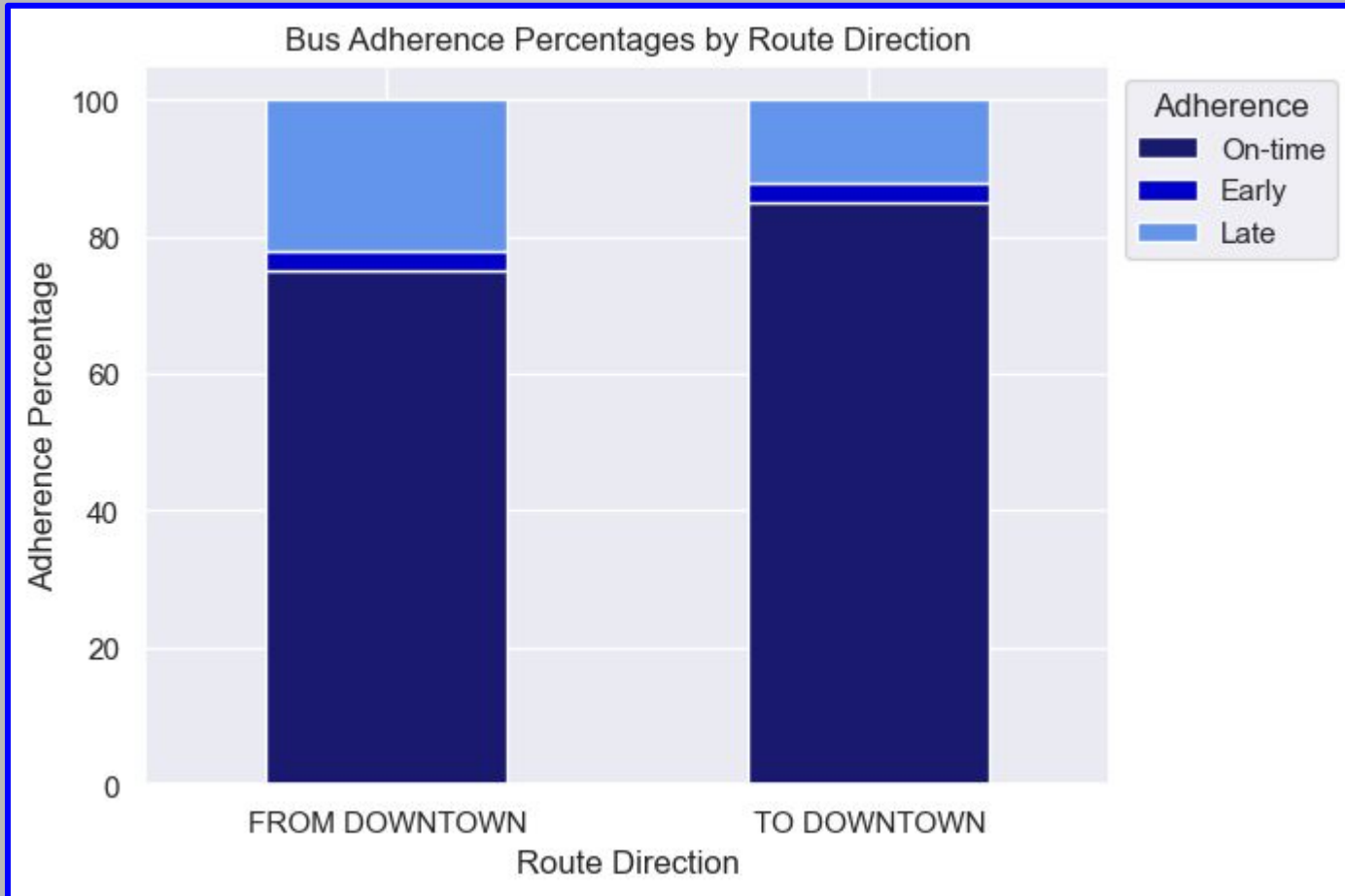
## More Variables!

- Route Direction
- Route Name
- Day of the Week
- Time of Day
- Operator

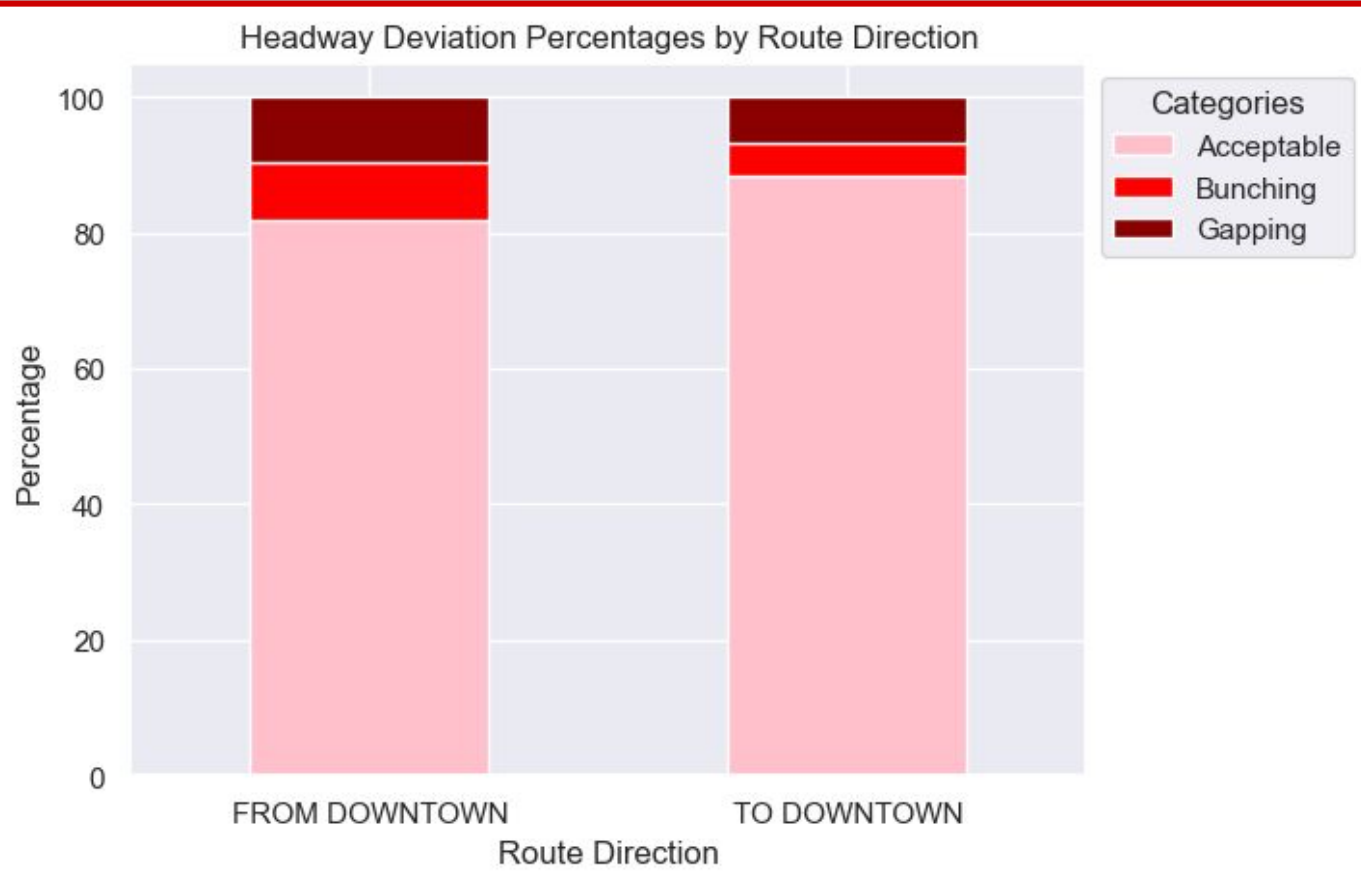




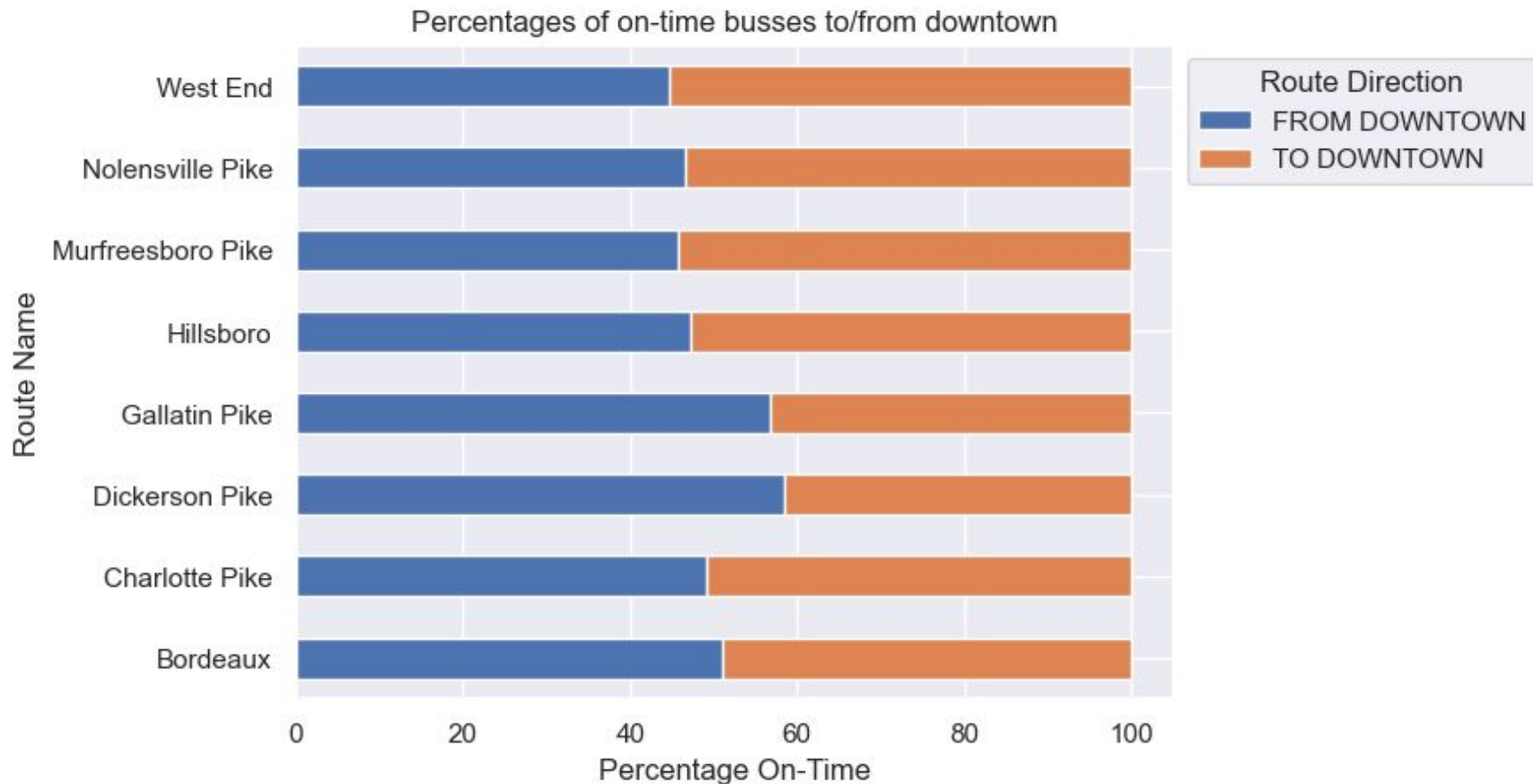
# Route Direction - Adherence



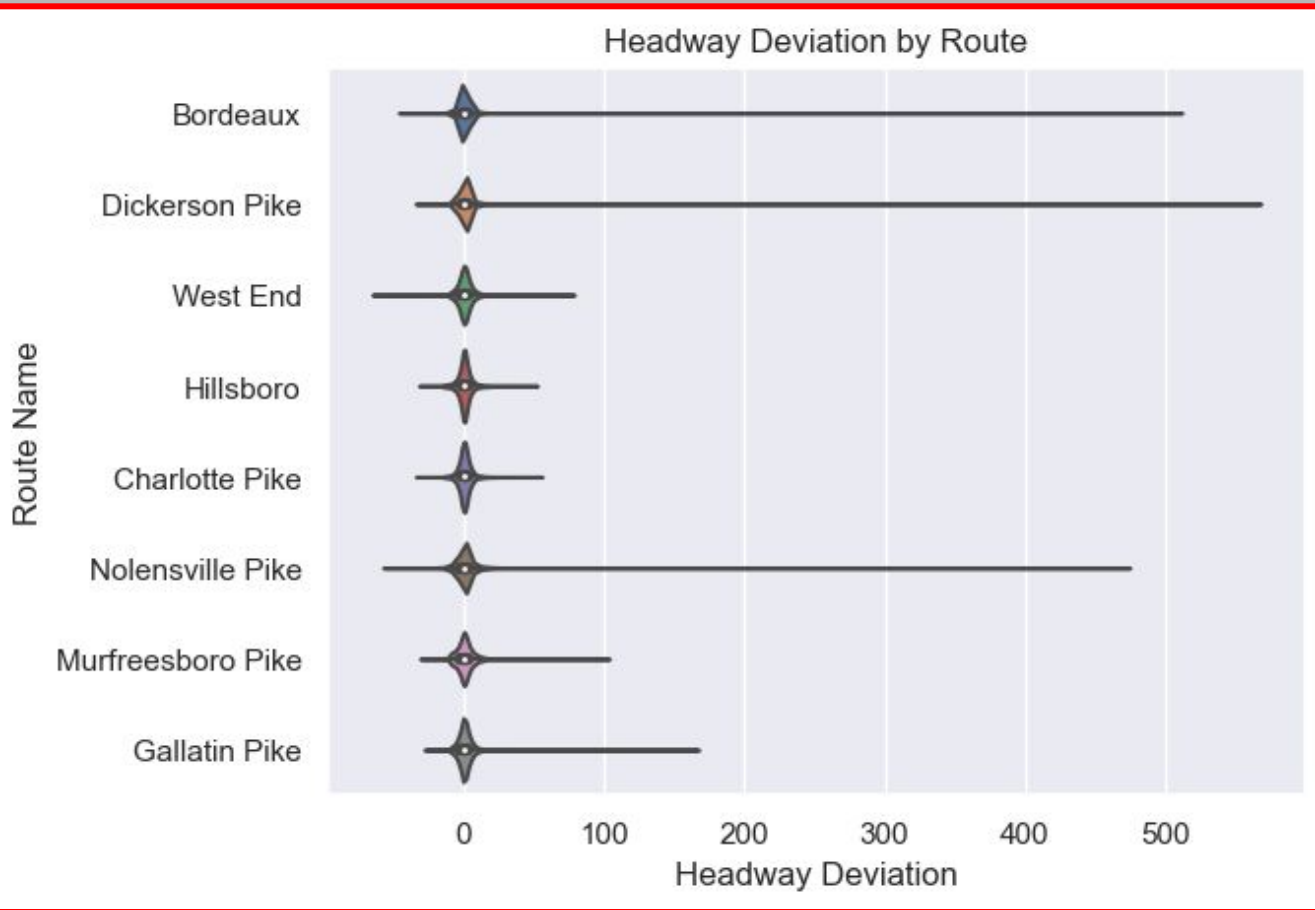
# Route Direction - Headway Deviation



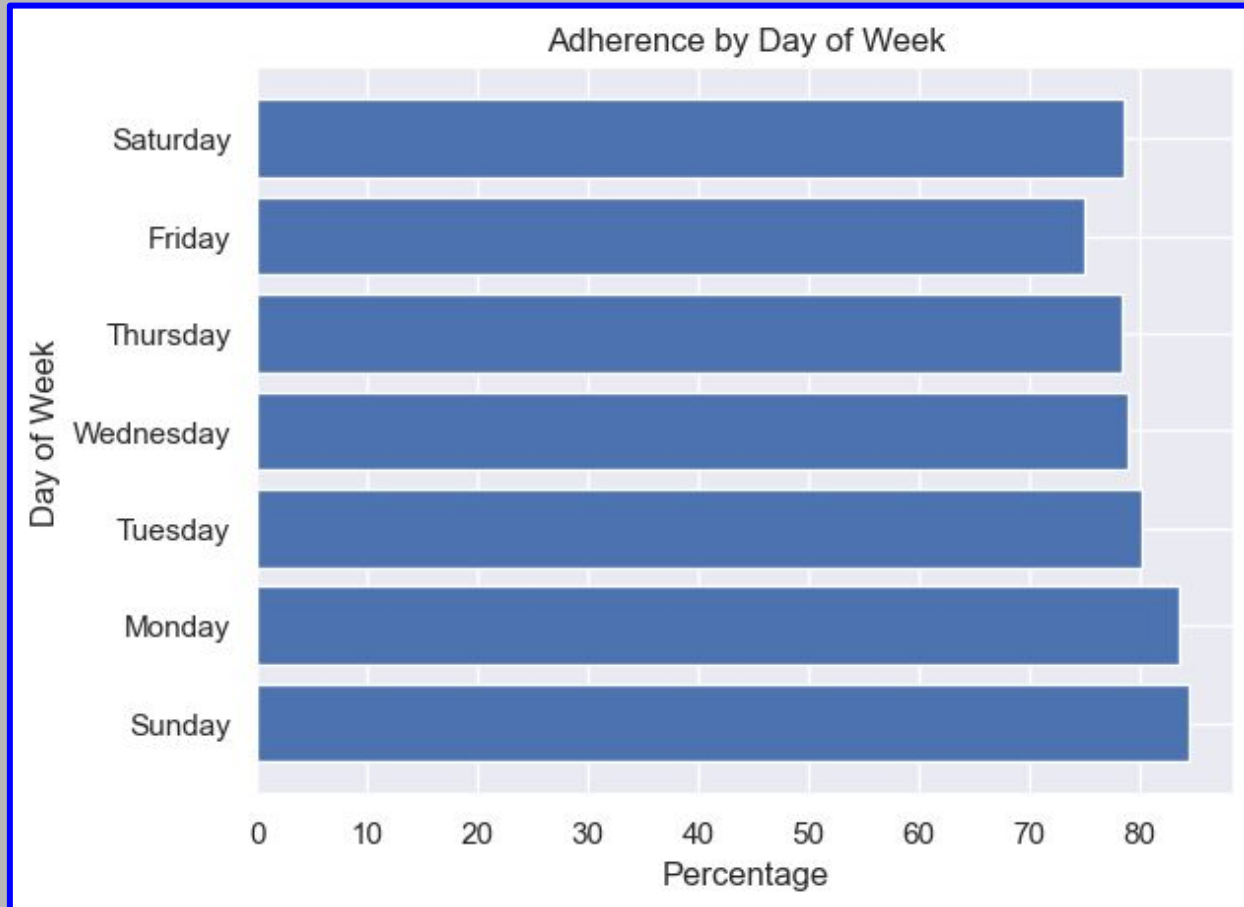
# Route Name - Adherence (by Direction)



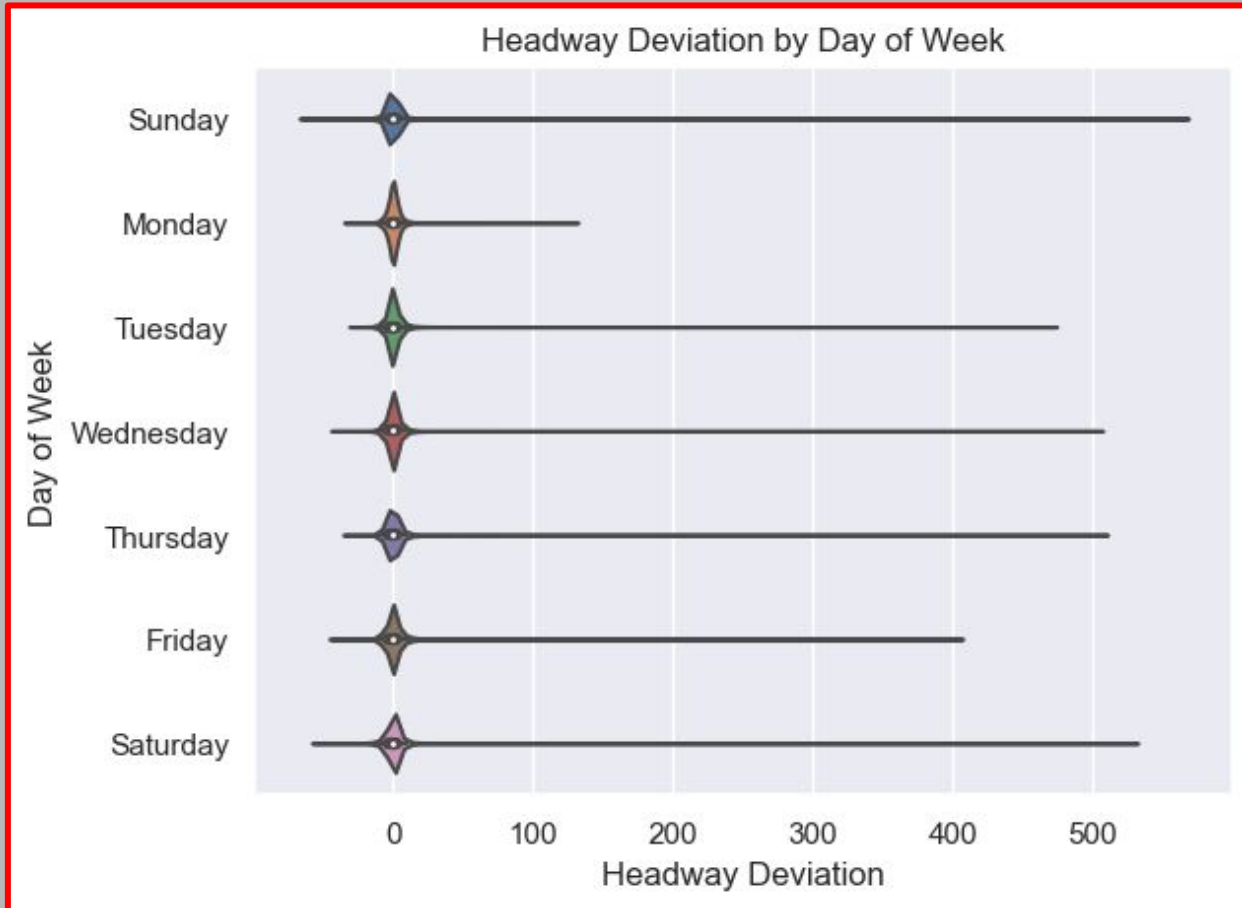
# Route Name - Headway Deviation



# Day of Week - Adherence



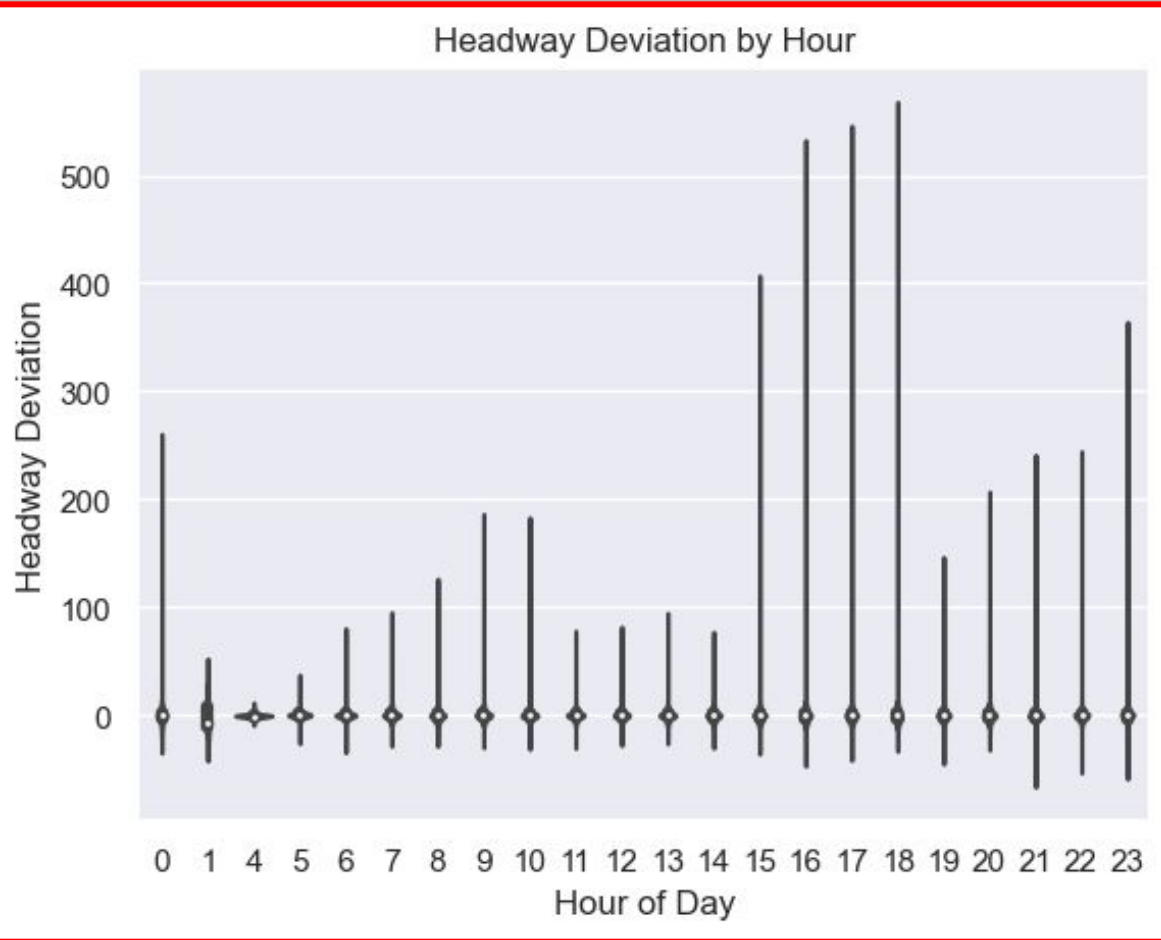
# Day of Week - Headway Deviation



# Time of Day - Adherence

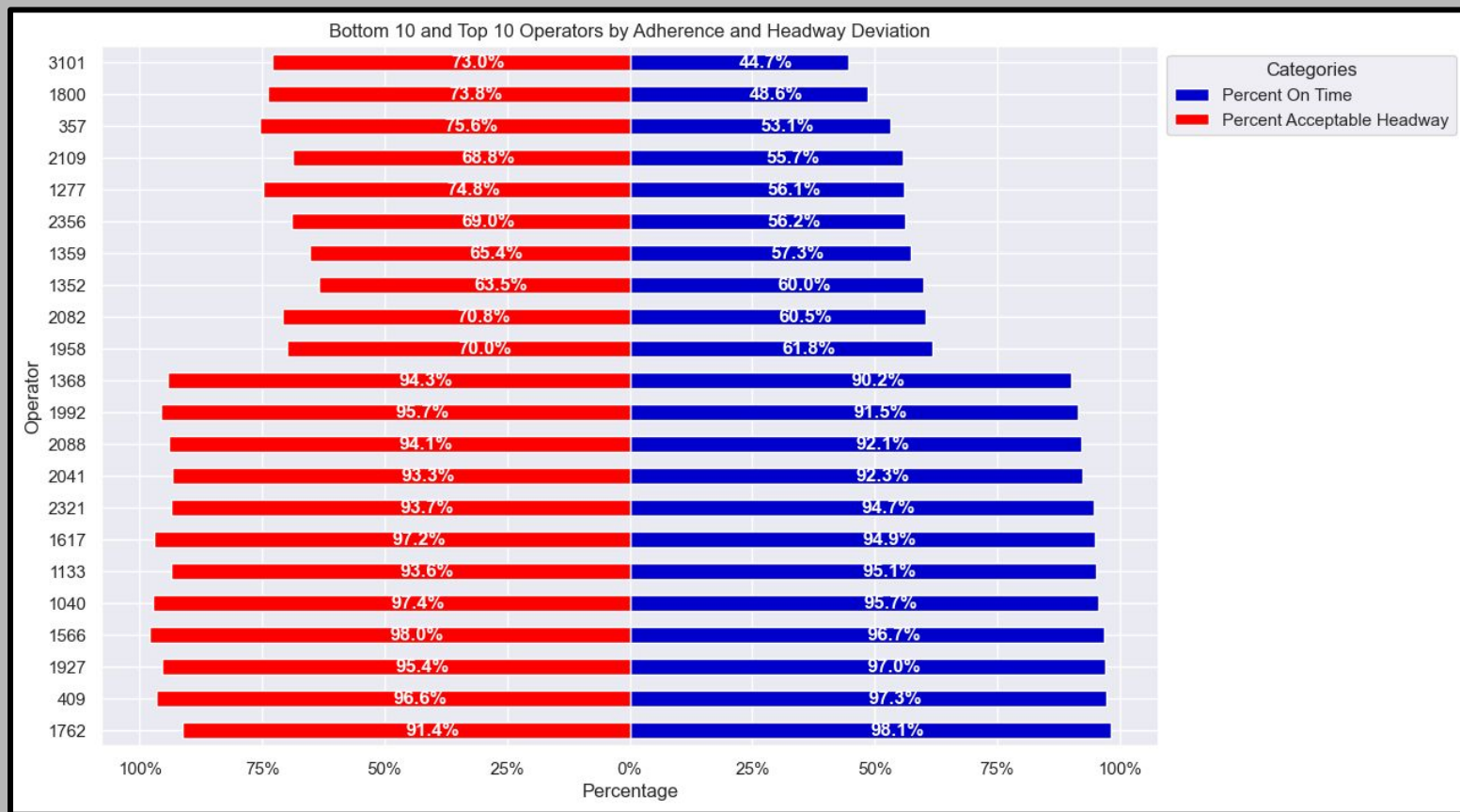


# Time of Day - Headway Deviation





# Driver Stats - Adherence vs. Headway Deviation



# Conclusion



- Buses are 77.08% on-time
- Route is bigger factor than Direction of Travel
- Rush Hour, Late Night, and Weekends have worse delays
- Far more gapping than bunching
- The worst drivers have a minor impact on overall performance
- Headway deviation is a more useful metric than adherence

# Questions?

