

Uber vs. Lyft

Rideshare Platforms in Boston - Which is more economical from the user's perspective?



Background

- Effect of COVID on rideshare economy (during and post quarantine)
 - Massachusetts State of Emergency and what that meant to rideshare drivers

***'Everyone Just Looked Miserable':
Rideshare Costs From Logan Are
Sky-High***

-NBC Boston

***The Worst of Boston's Uber and Lyft
Shortage Has Passed... But Get Ready
For Pricey Rides***

- Boston Magazine

***\$100+ fares and 2-hour wait times: What the
Uber and Lyft driver shortage means for you***

- The Points Guy

Dataset Overview

- Data collected between...
 - Nov. 26 2018 - Dec. 18 2018 (~22 days)
- Uber - Lyft Split
 - 330,568 → Uber rides
 - 307,408 → Lyft rides

- Includes rides from Uber and Lyft from...

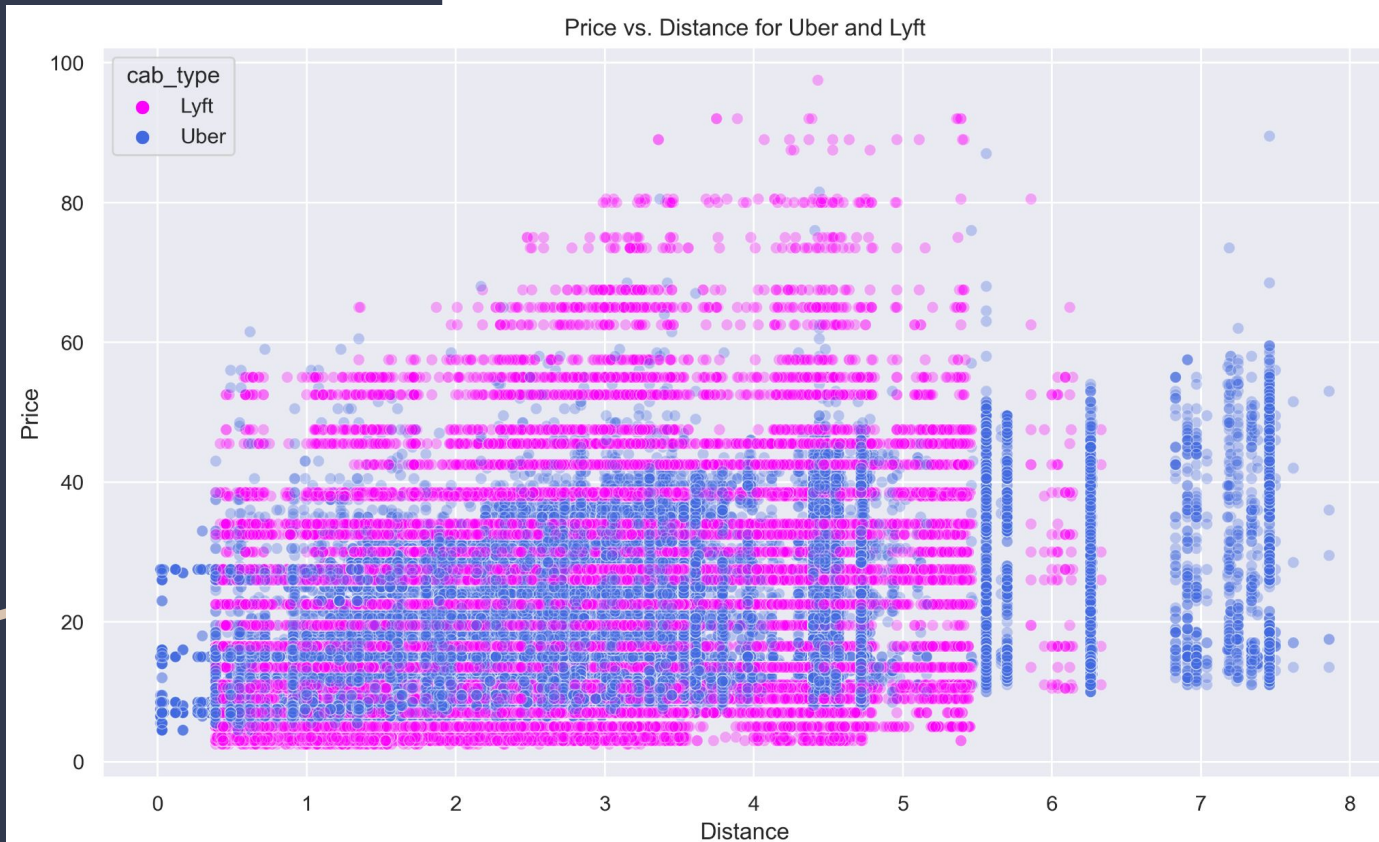
 - 1. Back Bay
 - 2. Beacon Hill
 - 3. Fenway
 - 4. North End
 - Financial district (→ Downtown)
 - Haymarket Square (→ Downtown)
 - Northeastern University (→ Fenway)
 - Boston University (→ Fenway)
 - North Station (→ West End)
 - South Station (→ Downtown)
 - Theatre district (→ Downtown)
 - 5. West End
 - 6. (Downtown)

Research Question

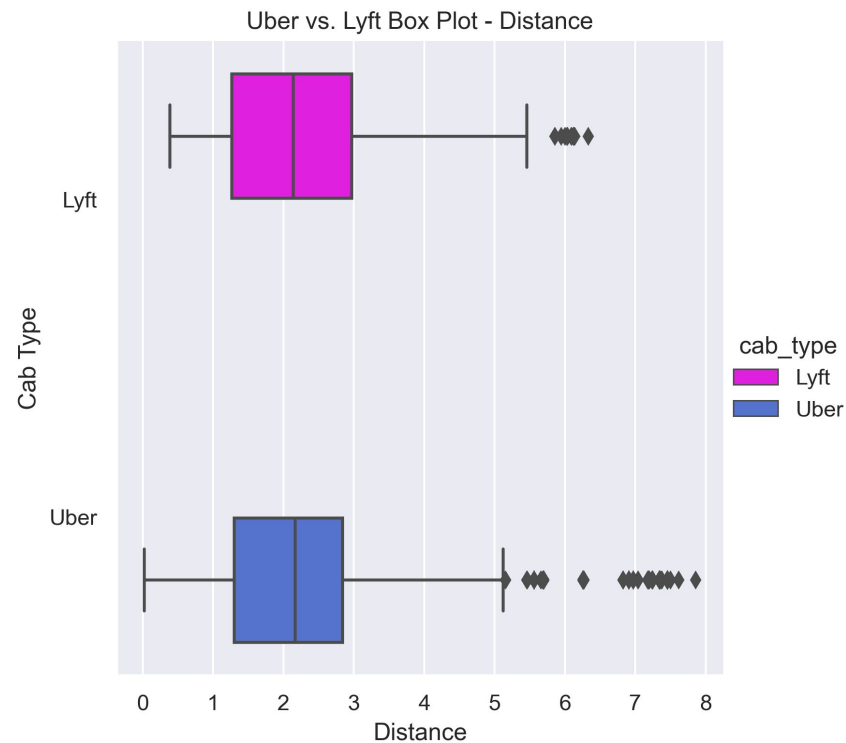
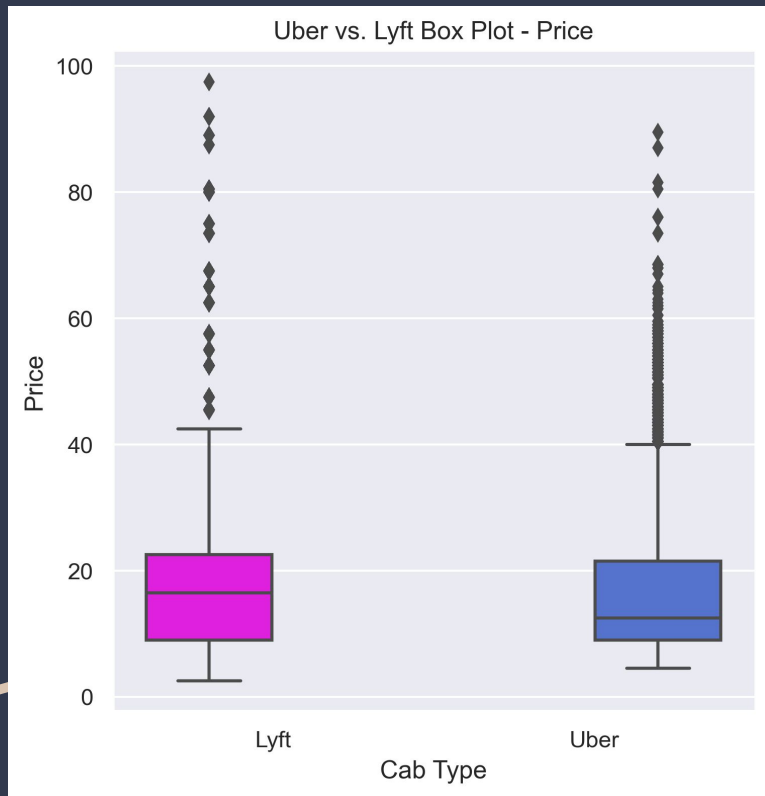
Uber vs. Lyft

Given the (1) date, (2) time, (3) current location, and (4) desired location which rideshare service will be the most economically friendly in Boston?

General – Price vs. Distance

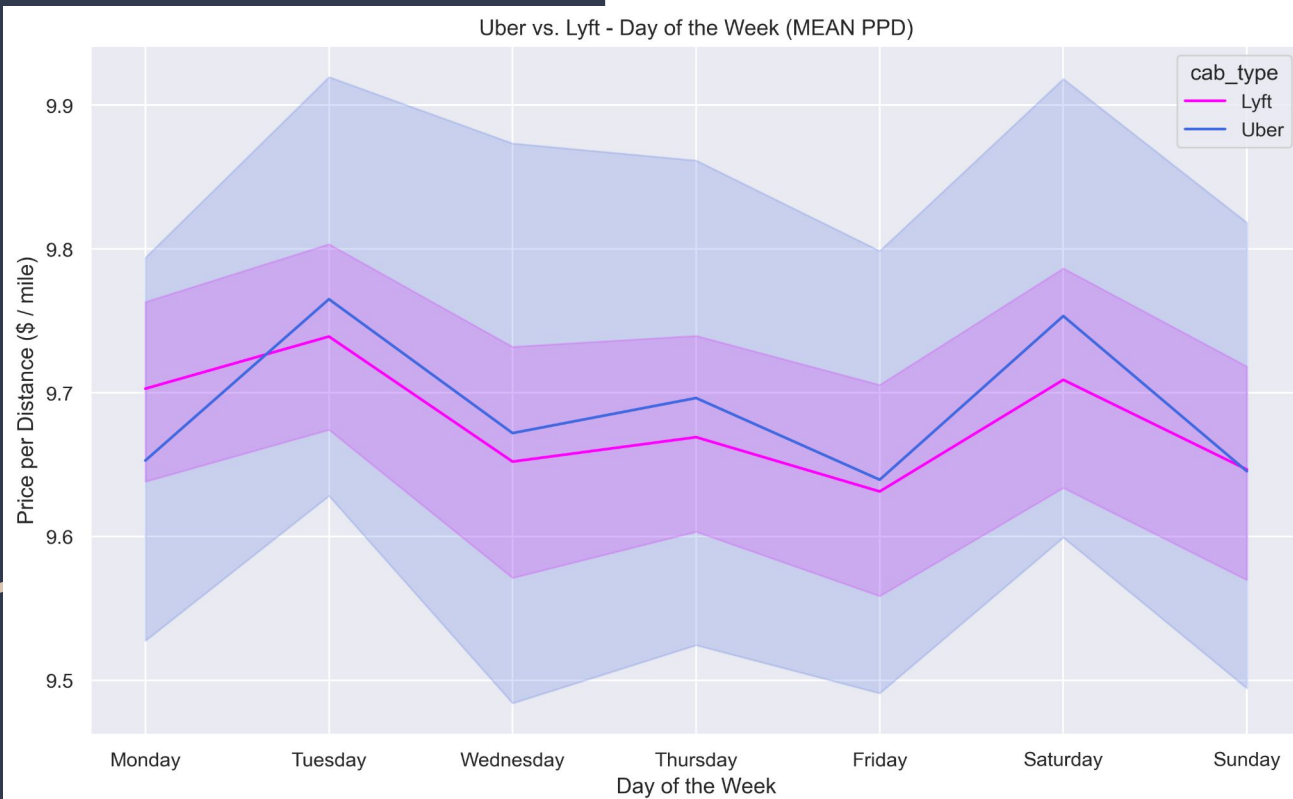


General - Price vs. Distance



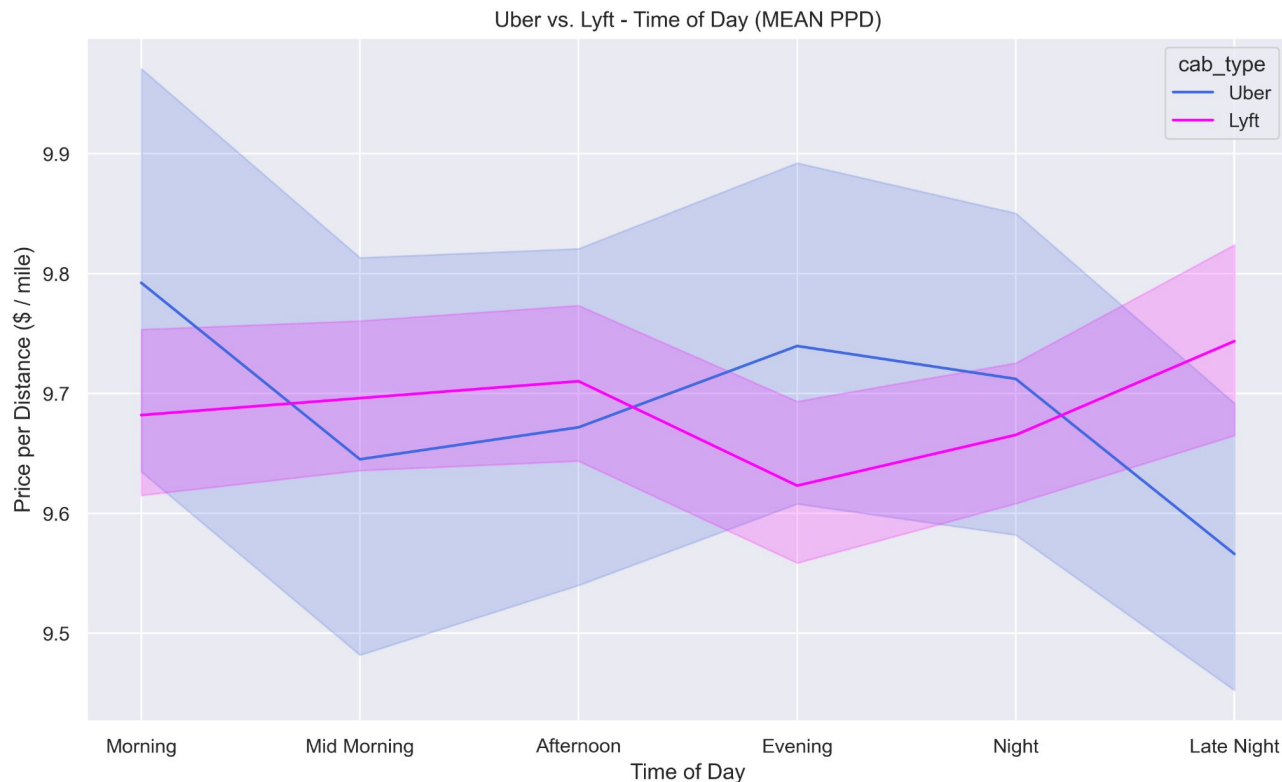
By Date/Time

1. What day of the week are you looking for a ride?
2. What time are you traveling?



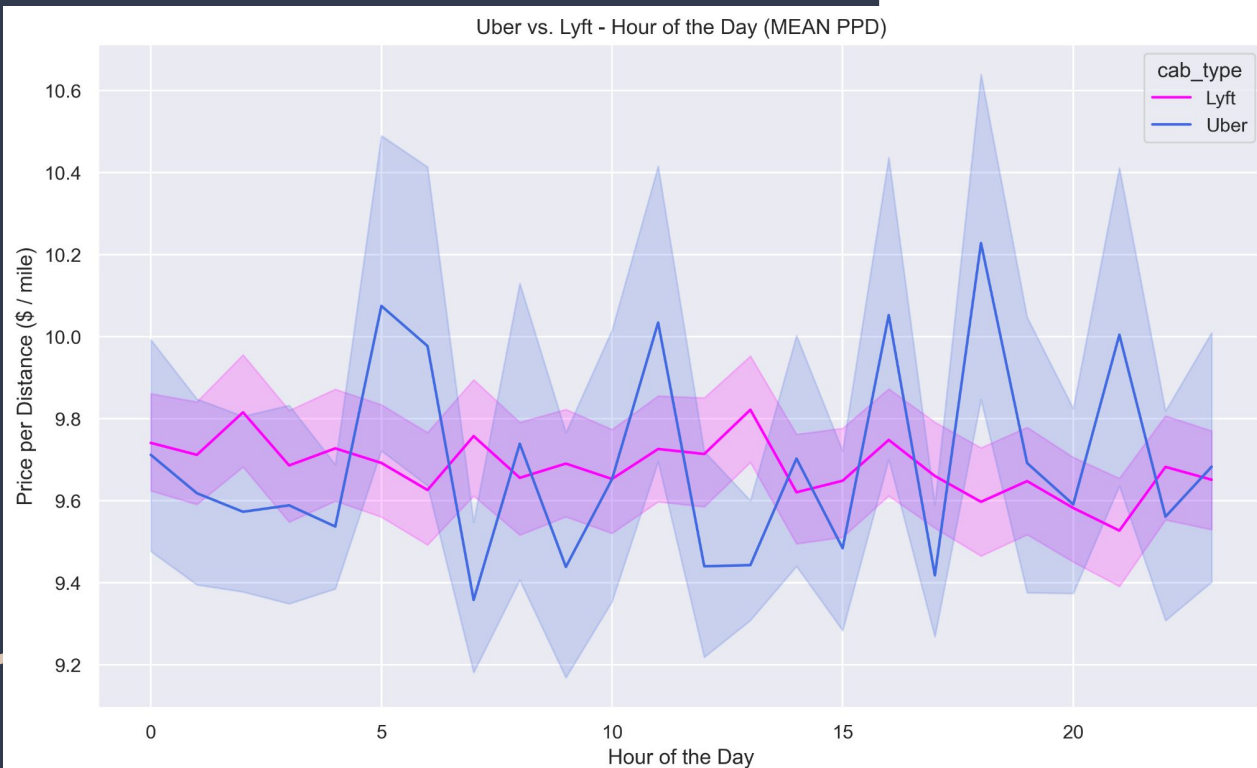
By Date/Time

1. What day are you looking for a ride?
2. What time of day/hour are you traveling?



By Date/Time

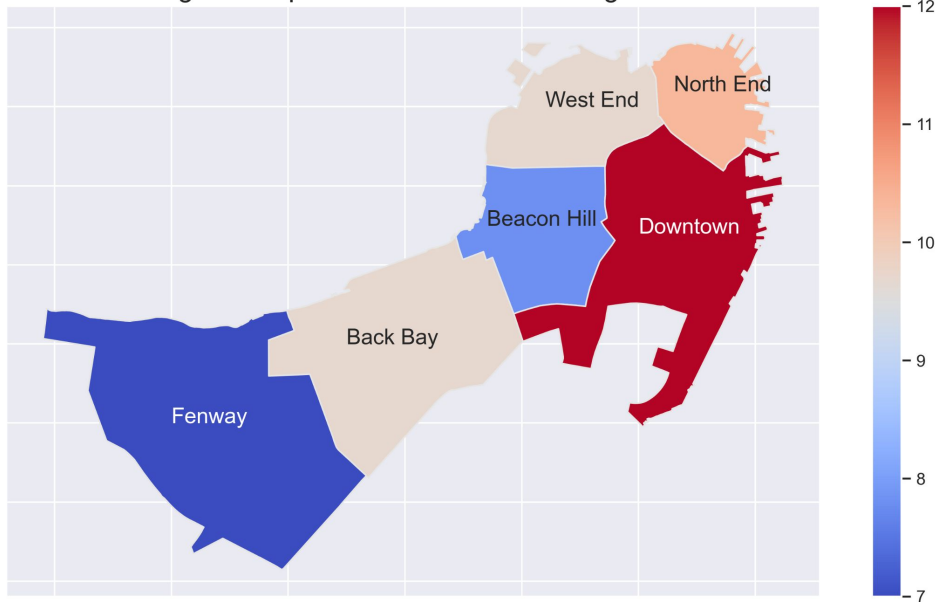
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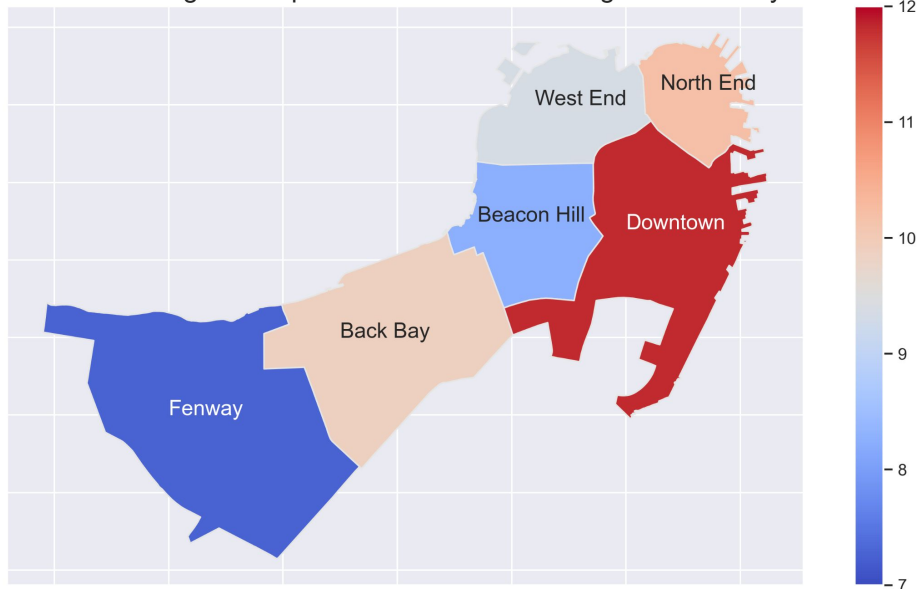
PPD – By Source (Pick-up locations)

- Where are you leaving from?

Source: Average Price per Distance for each Neighborhood - Uber



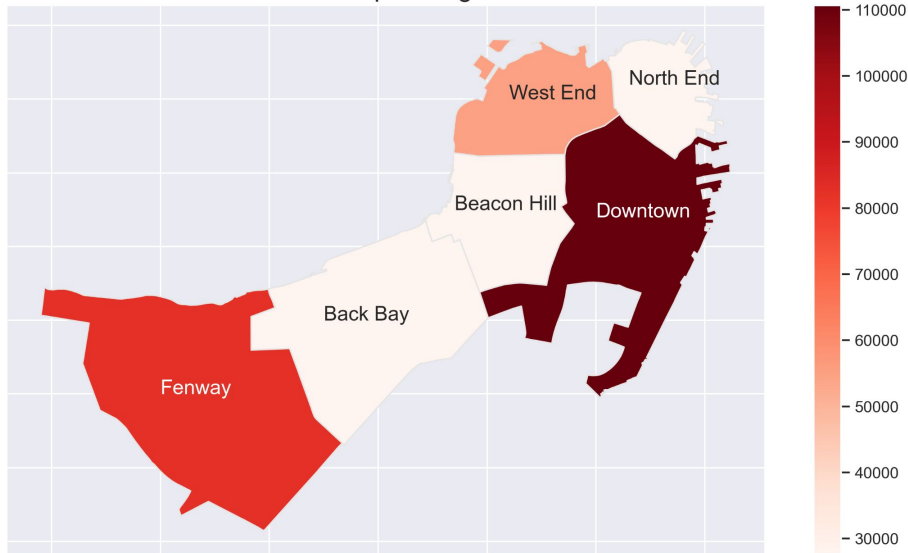
Source: Average Price per Distance for each Neighborhood - Lyft



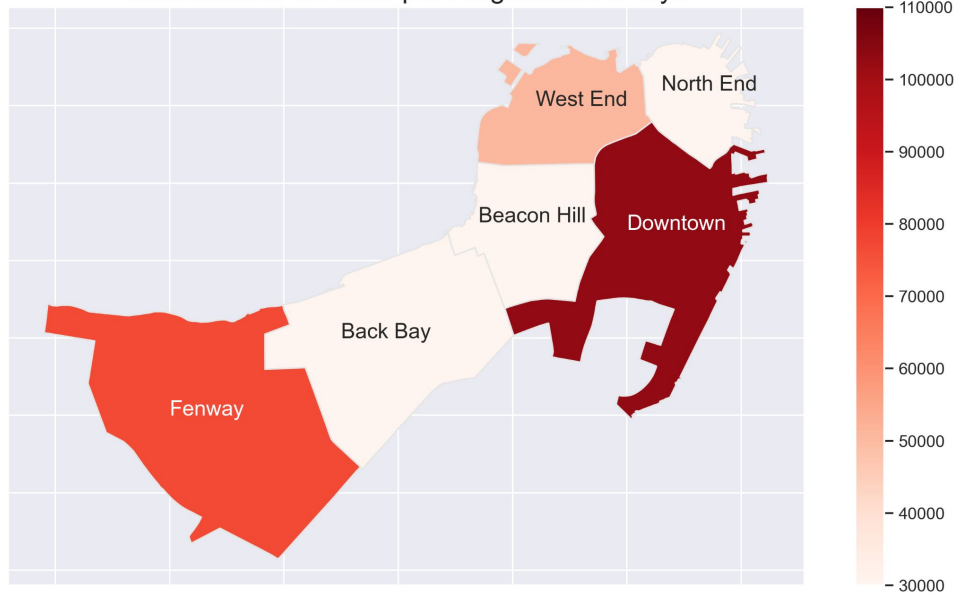
Number of Rides – By Source

- How many rides are leaving from each neighborhood?

Total Number of Rides per Neighborhood - Uber



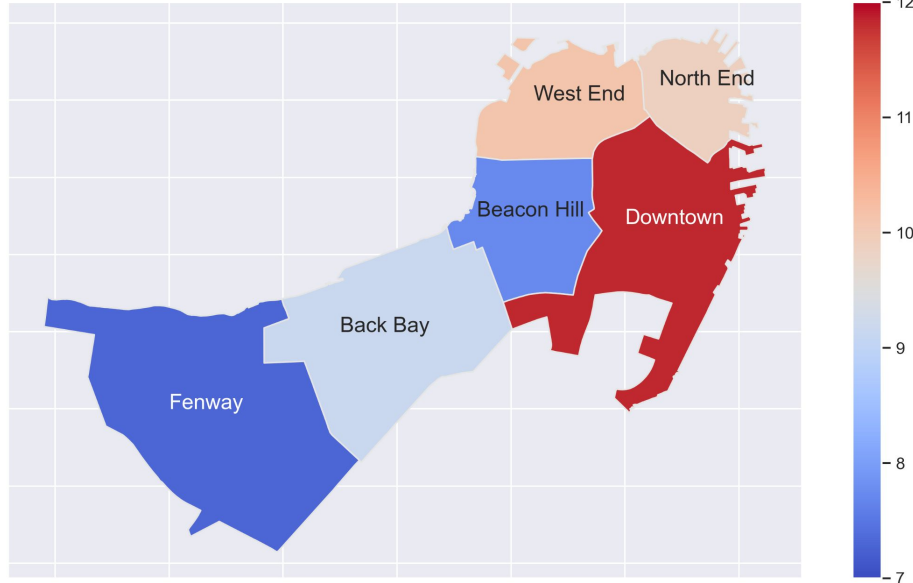
Total Number of Rides per Neighborhood - Lyft



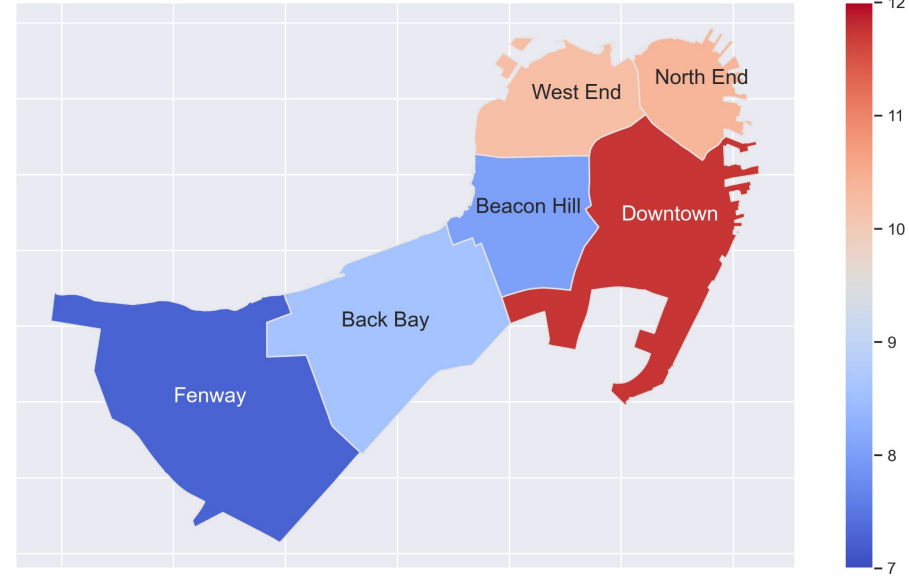
By Destination (Drop-off locations)

- Where are you going to?

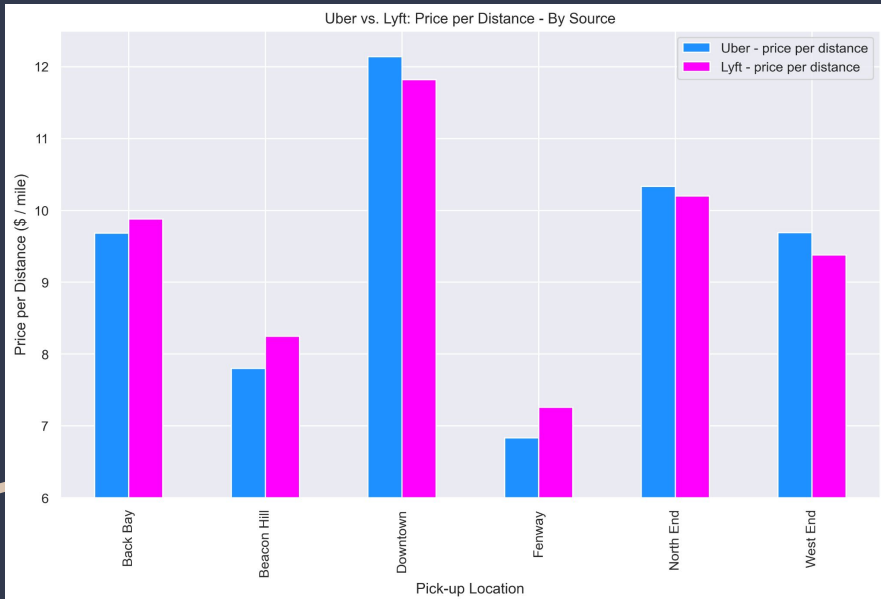
Destination: Average Price per Distance for each Neighborhood - Uber



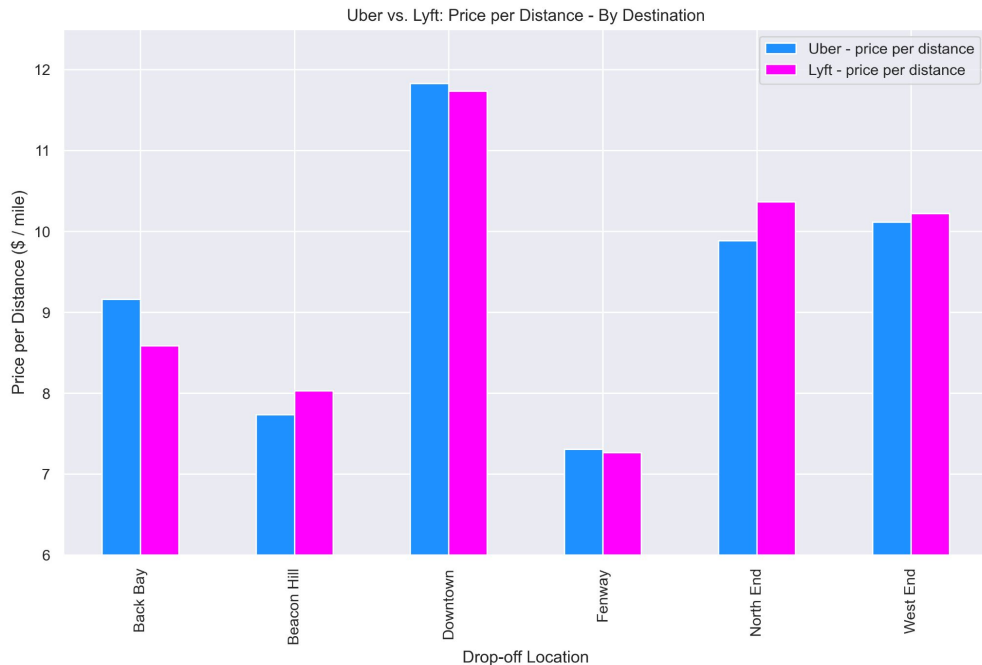
Destination: Average Price per Distance for each Neighborhood - Lyft



Source



Destination



Findings

- Ride price analysis allows for overall better understanding of overall rideshare pricing structure
- From the perspective of an up-and-coming competitor, overpriced areas are essential opportunities to take market share
 - (i.e. Uber → ~4-7am, 9am-12pm, 5-7pm,
Both Lyft and Uber → rides to and from Downtown Boston, etc.)
- Paired with average ride quantity per neighborhood, we can discover areas that have high rider activity with relatively low rates → indicator of price increase opportunity for market leaders

Next Steps

- Cross reference pricing insights with additional datasets...
 - City public transportation
 - Neighborhood demographics
 - More detailed geographic data (specific starting coordinates and ending coordinates)
- Consider additional key variables not included on original dataset (especially duration of trip, surge pricing, wait times, etc.)
- Further investigate variables' relation to one another
 - Time of day vs. ride source/destination
 - Day of week vs. ride source/destination
- Validate dataset used for initial analysis (questionable values)