



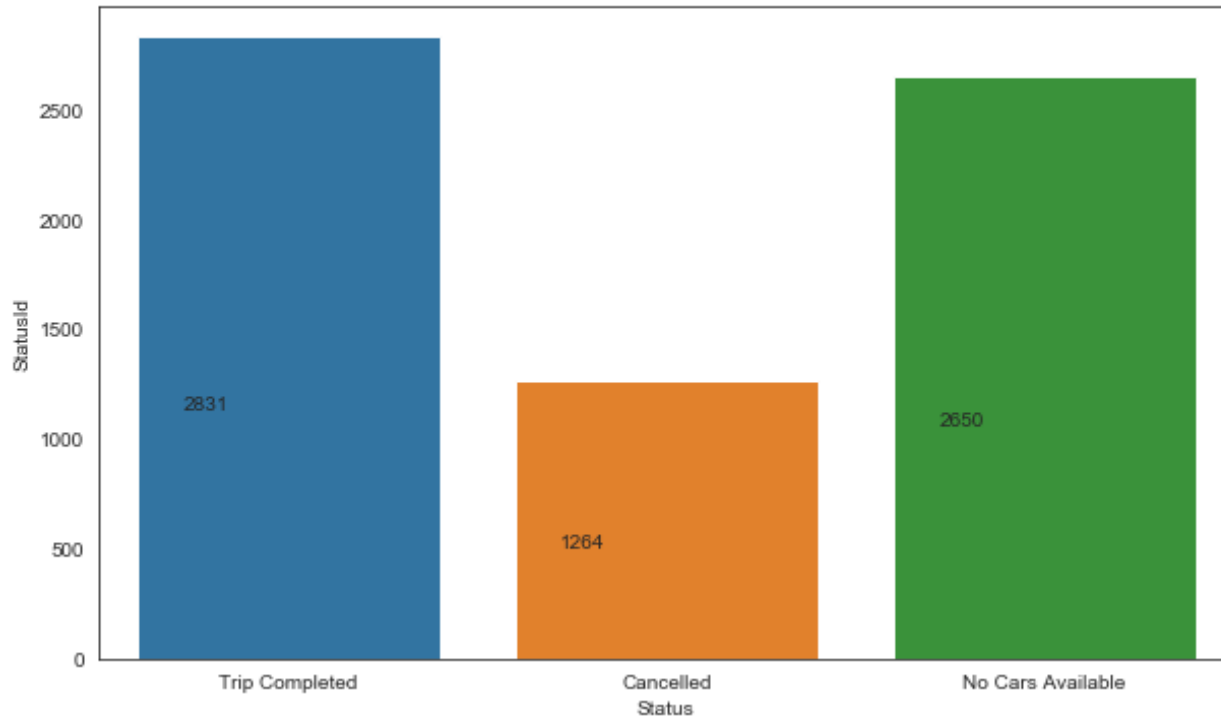
Uber Assignment

IITB Data Science Course I, Module 5

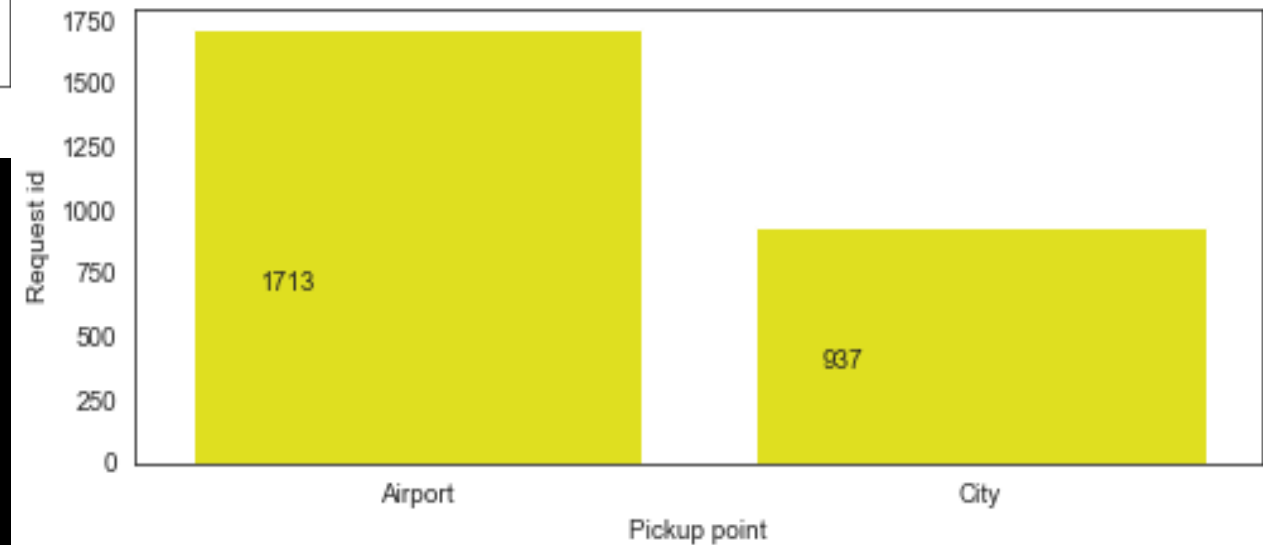
By: Hari Thapliyal

Car Non-Availability is the Biggest Problem

Which is the biggest Problem



Car Non-Availability more from Airport

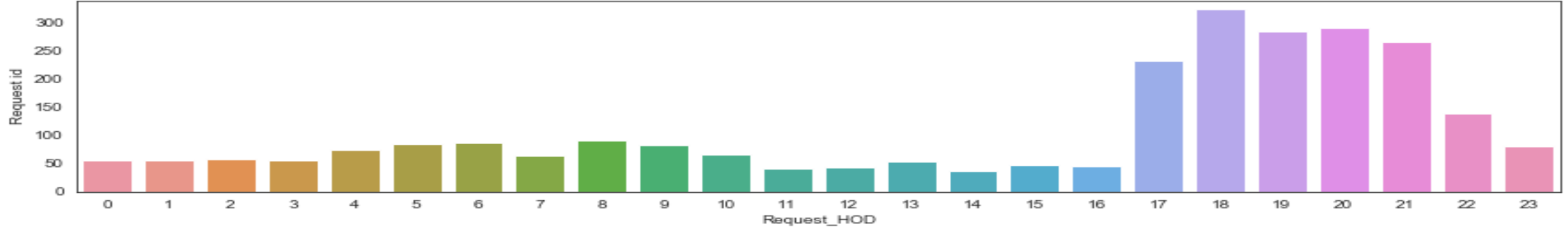


Non-Availability Analysis

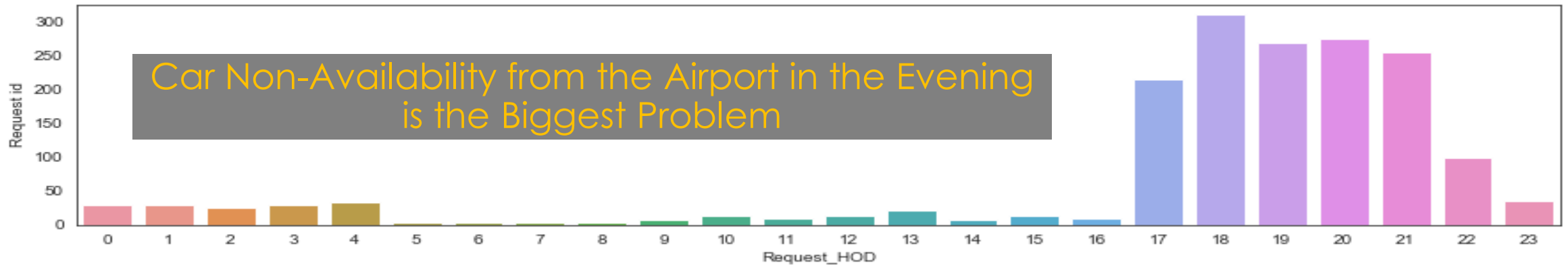


Overall Non-Availability Problem- Hour of the Day

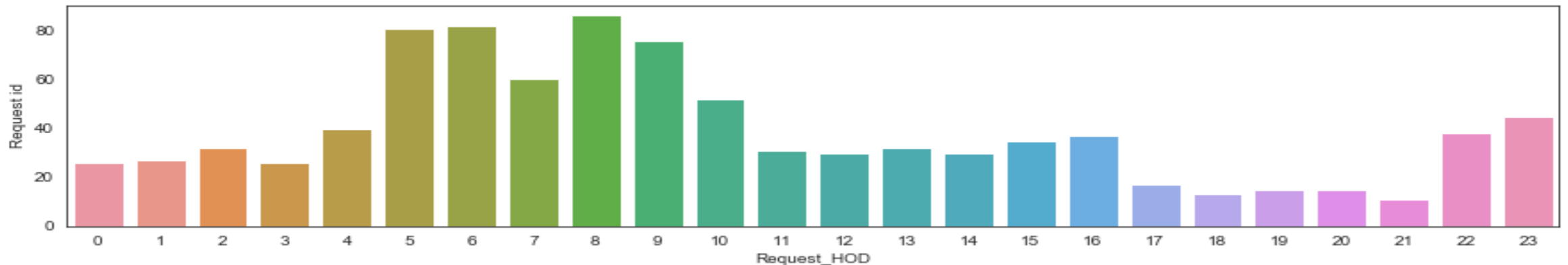
Car Non-Availability - Hours of the Day



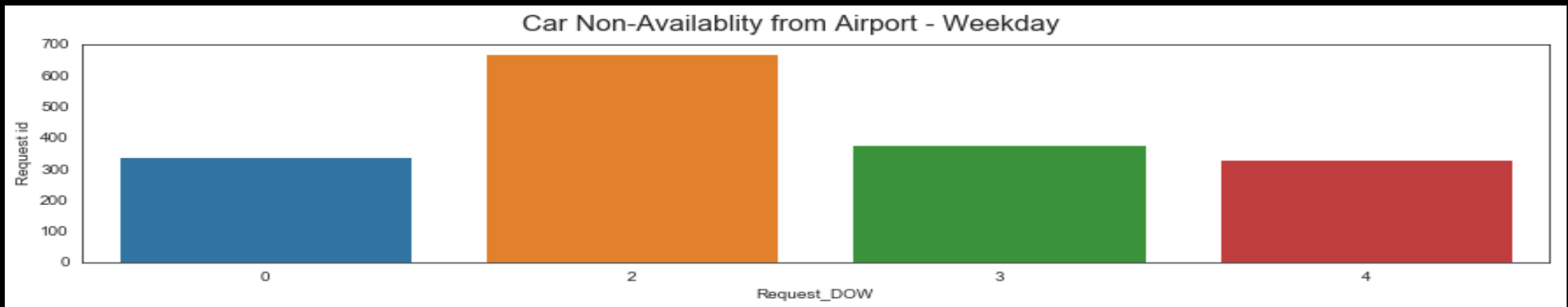
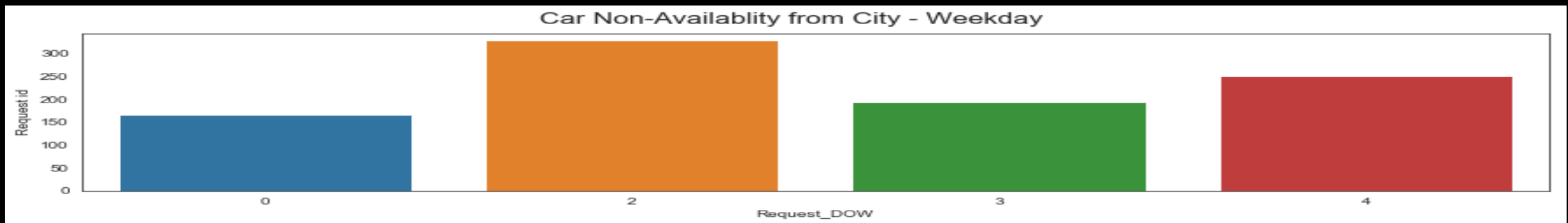
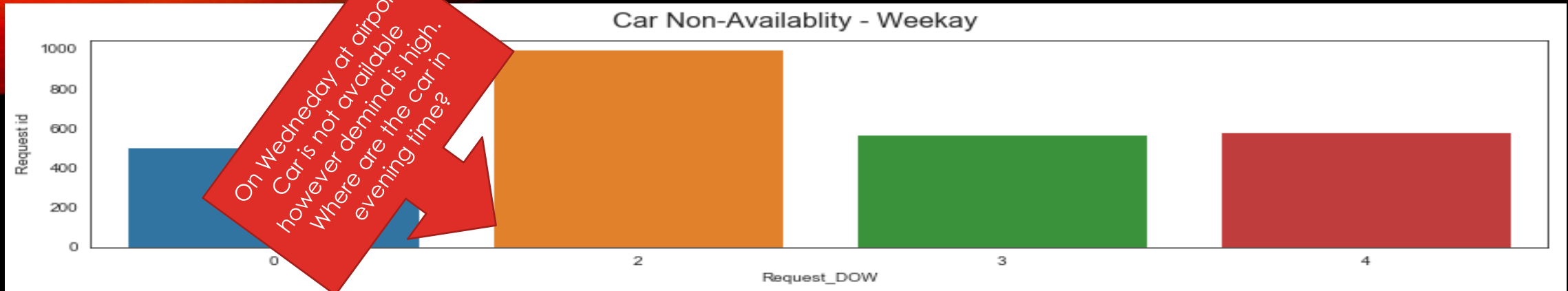
Car Non-Availability at Airport - Hours of the Day



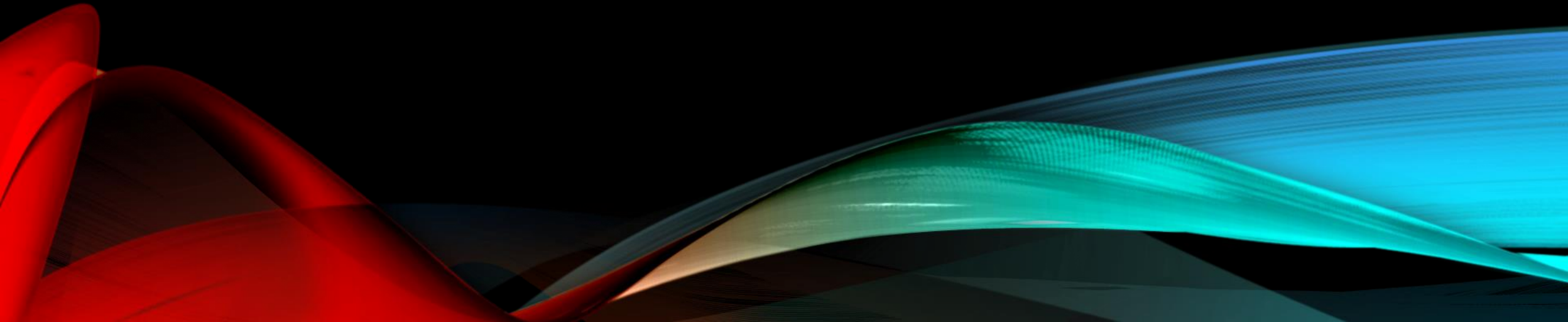
Car Non-Availability in City- Hours of the Day



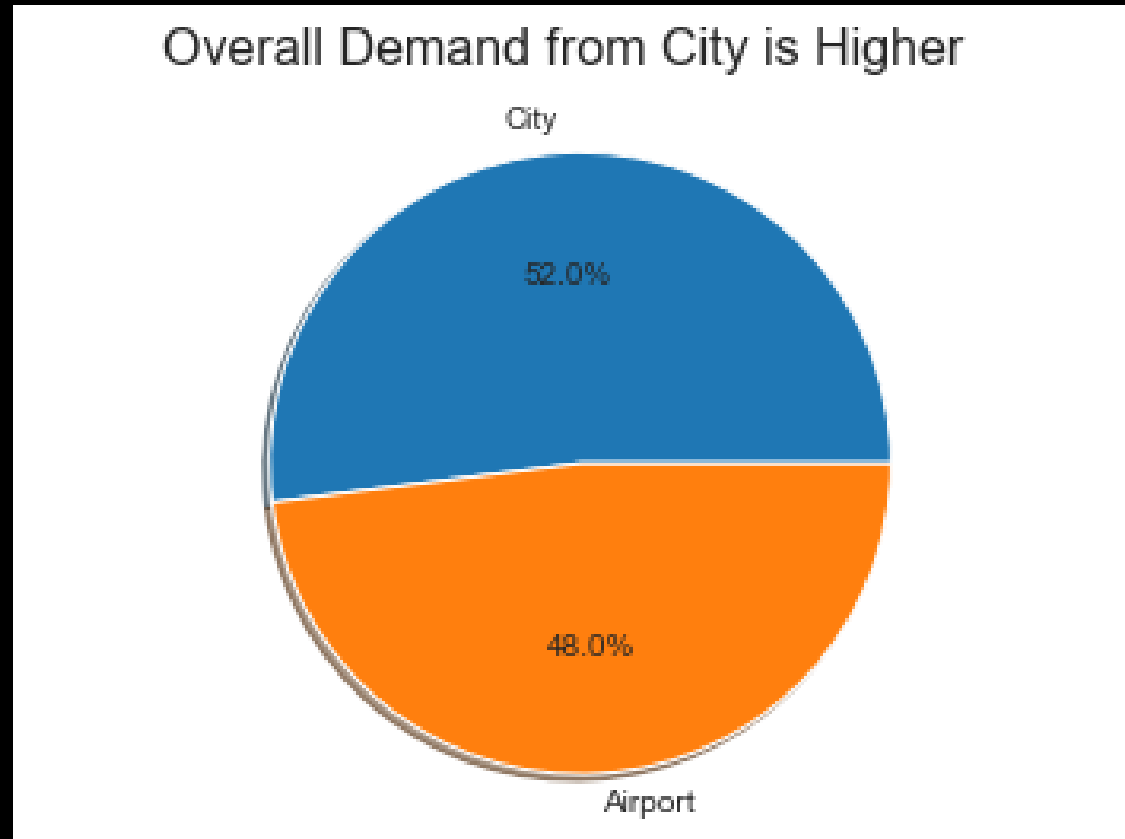
Car Non-Availability Problem Weekday (Wednesday High Problem)



Demand Analysis

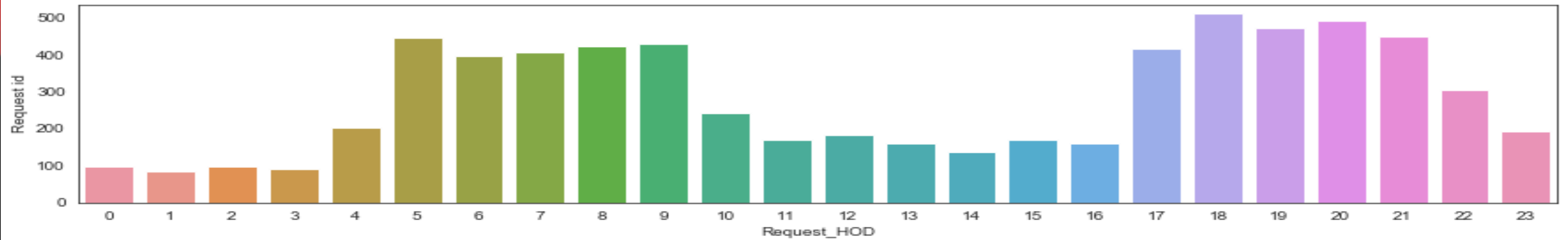


Overall Car Demands from City is 4% Higher



Overall Car Demands high between morning 5 to 9 in City and evening 5-9 at Airport

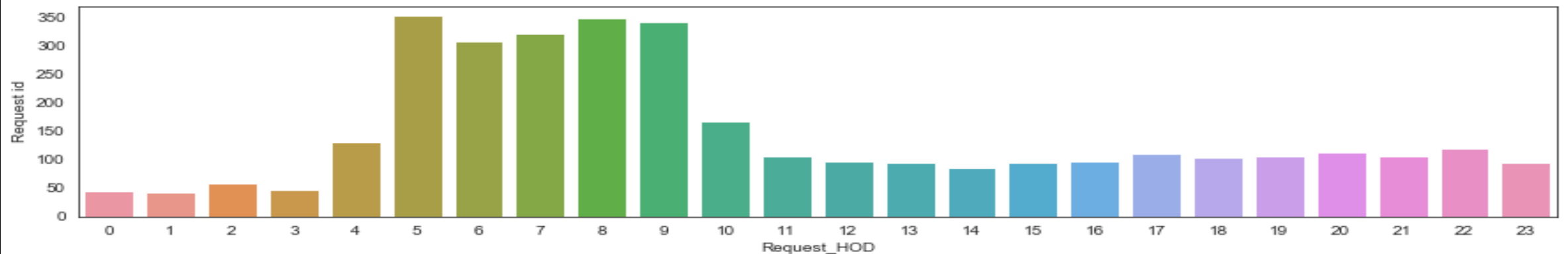
Car Demand Hours



Car Demand at Airport - Hours of the Day

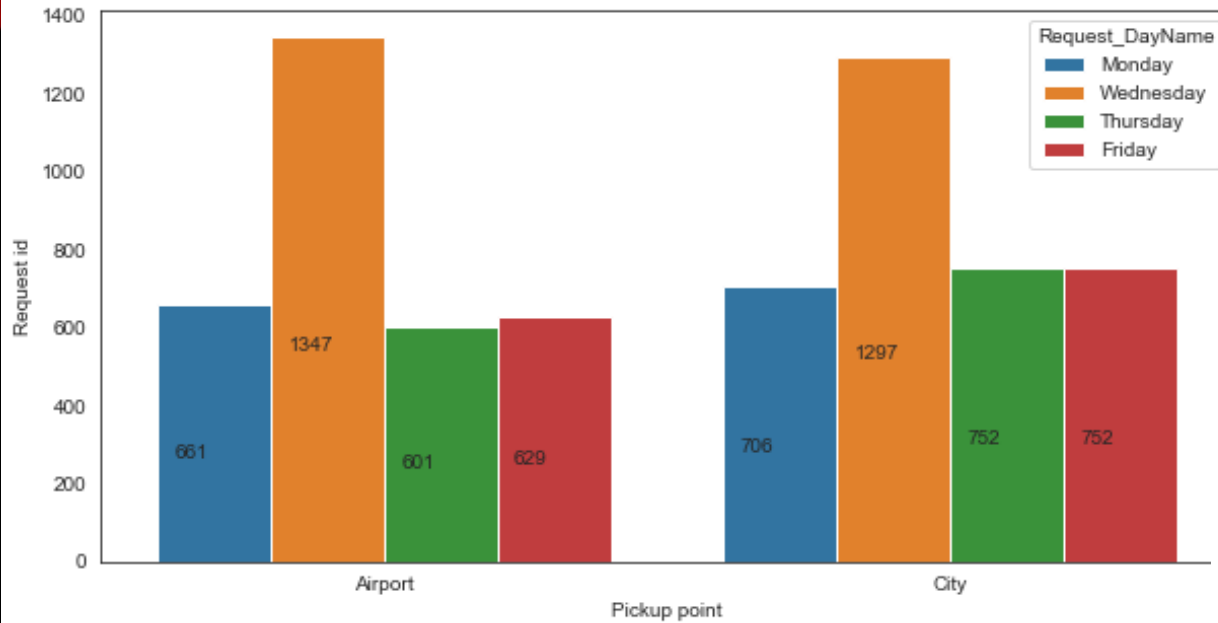


Car Demand in City - Hours of the Day



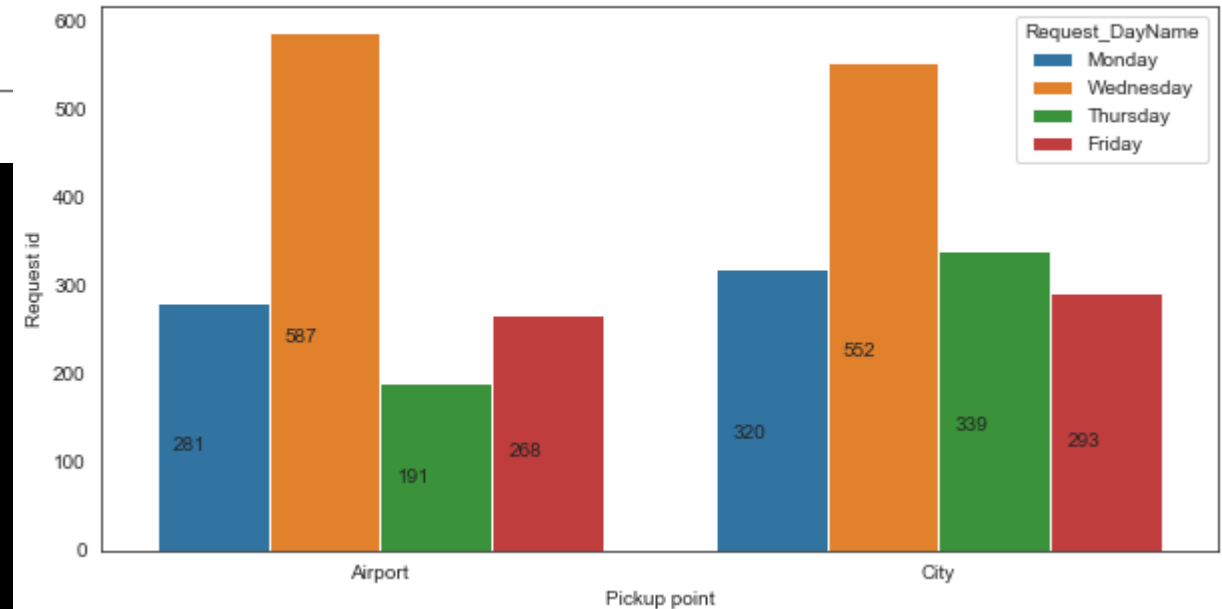
Demand on Wednesday is almost 100% more from Airport & City

Overall Demand on Wednesday is Higher

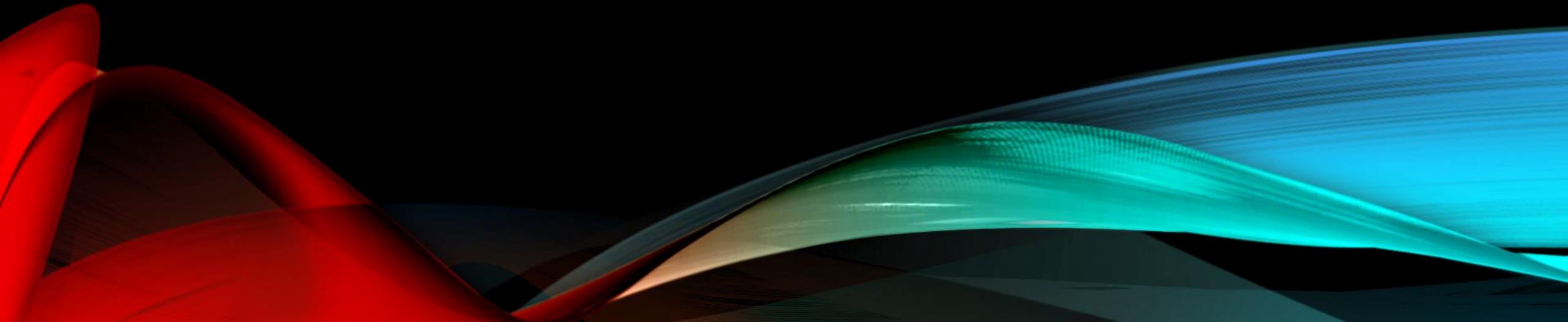


Supply on Wednesday is almost 100% more from Airport & City

Completed Trips on Wednesday City is Higher

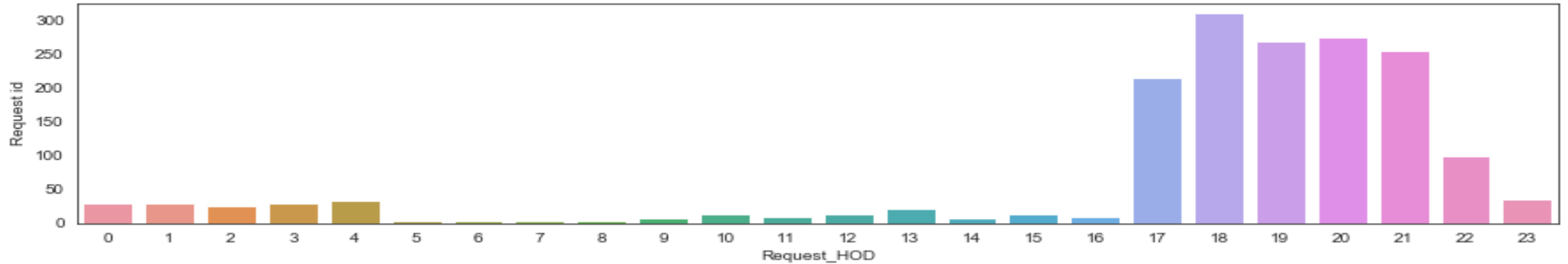


Demand & Non-Availability Together

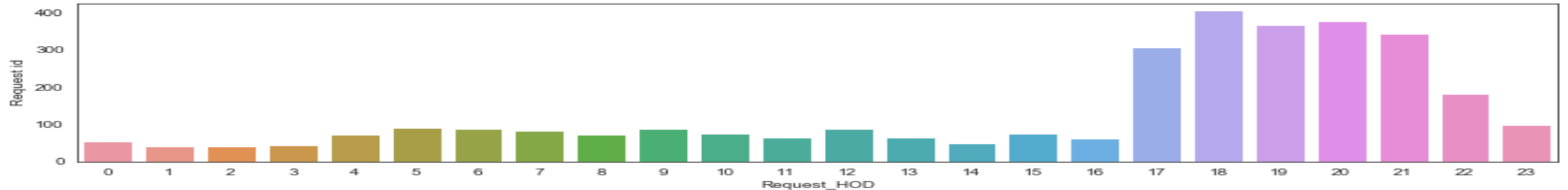


Airport Demand & Non-Availability

Car Non-Availability at Airport - Hours of the Day

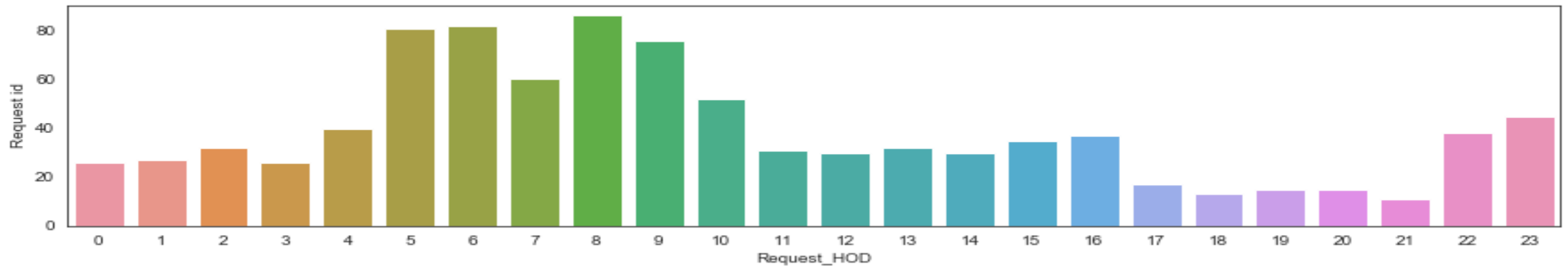


Car Demand at Airport - Hours of the Day

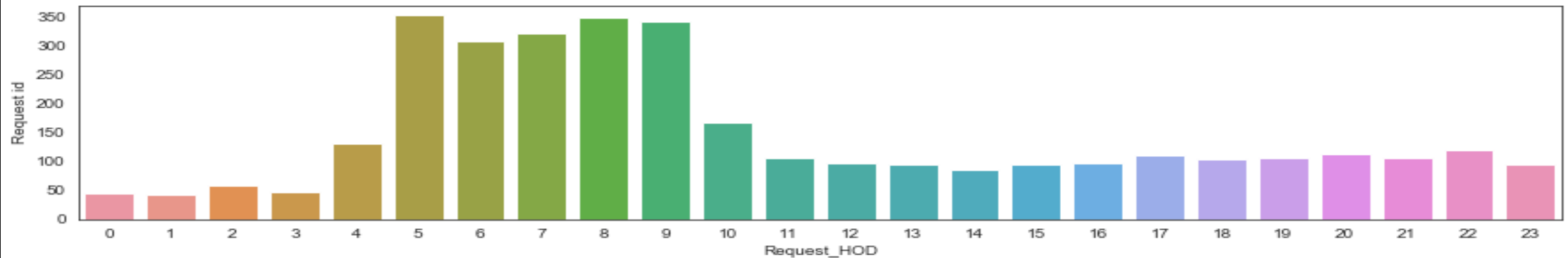


City Demand & Non-availability

Car Non-Availability in City- Hours of the Day



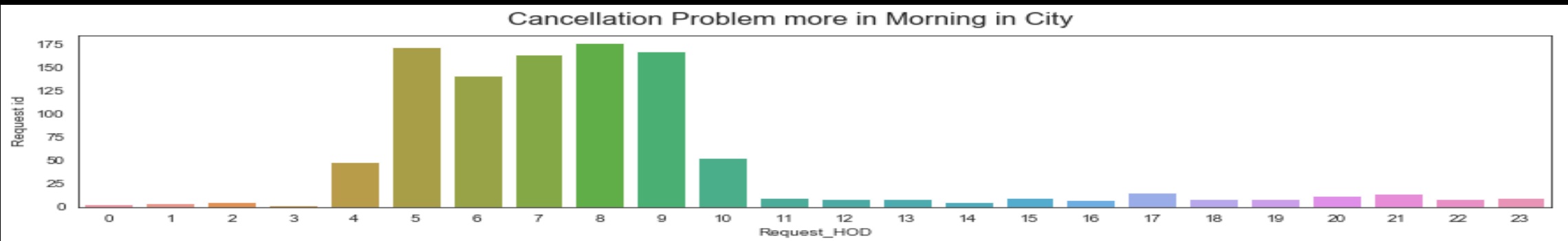
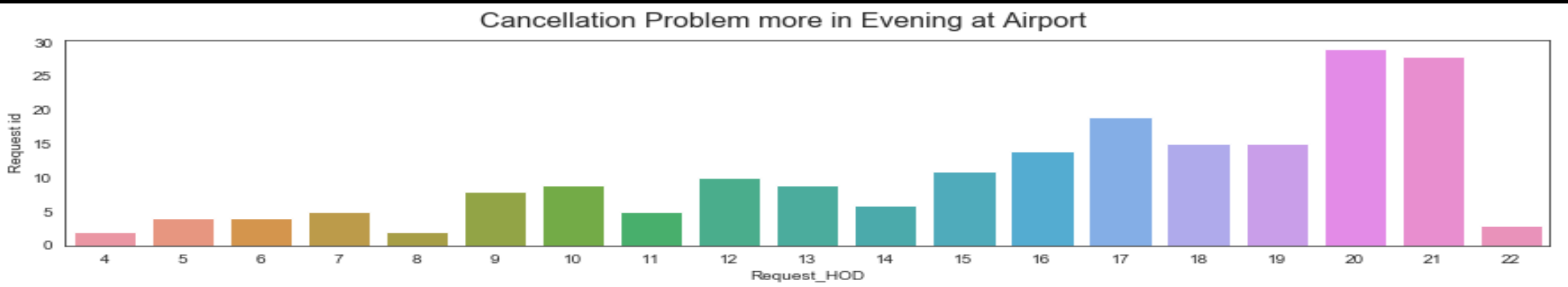
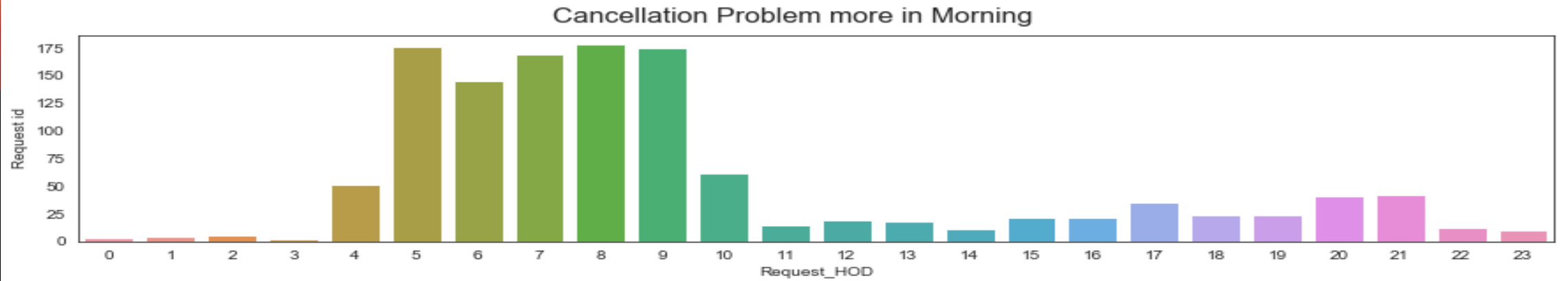
Car Demand in City - Hours of the Day



Cancellation Analysis

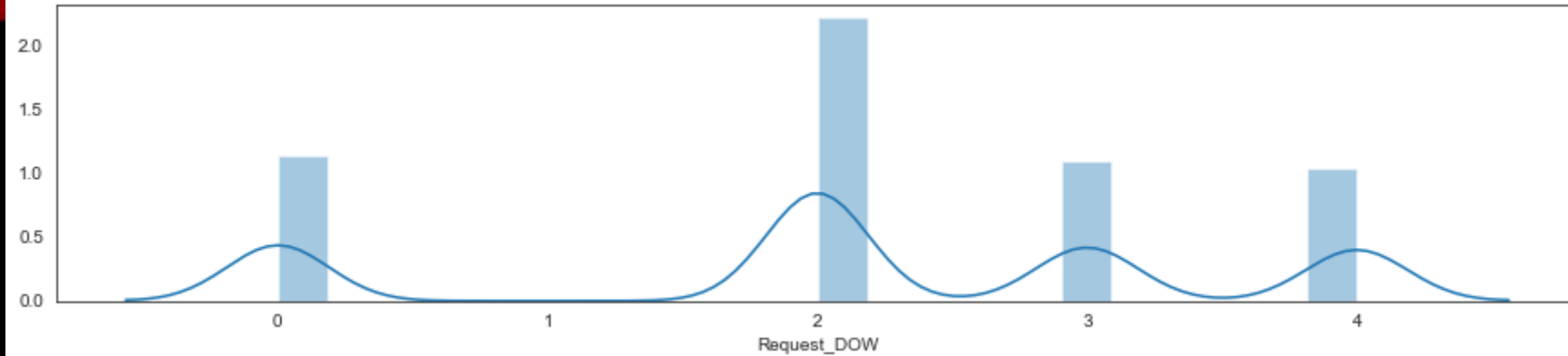


Cancellation Problem is More in Morning in City and Evening at Airport



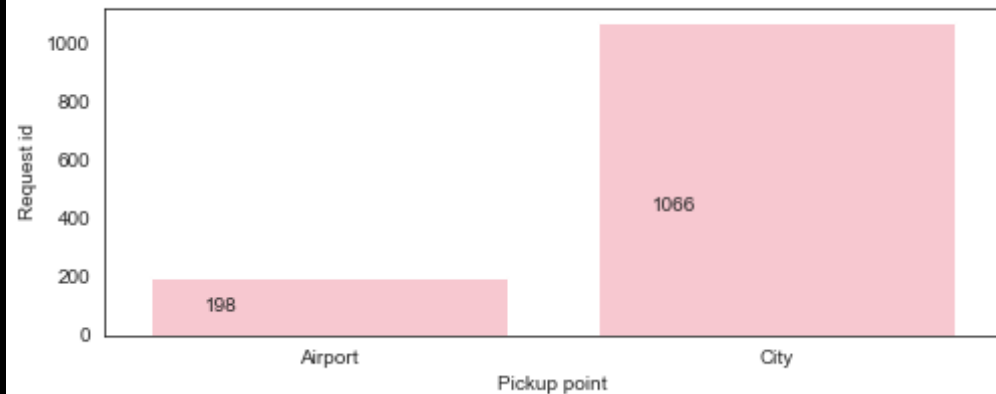
Cancellation Problem

Cancellation Problem more on Wednesday

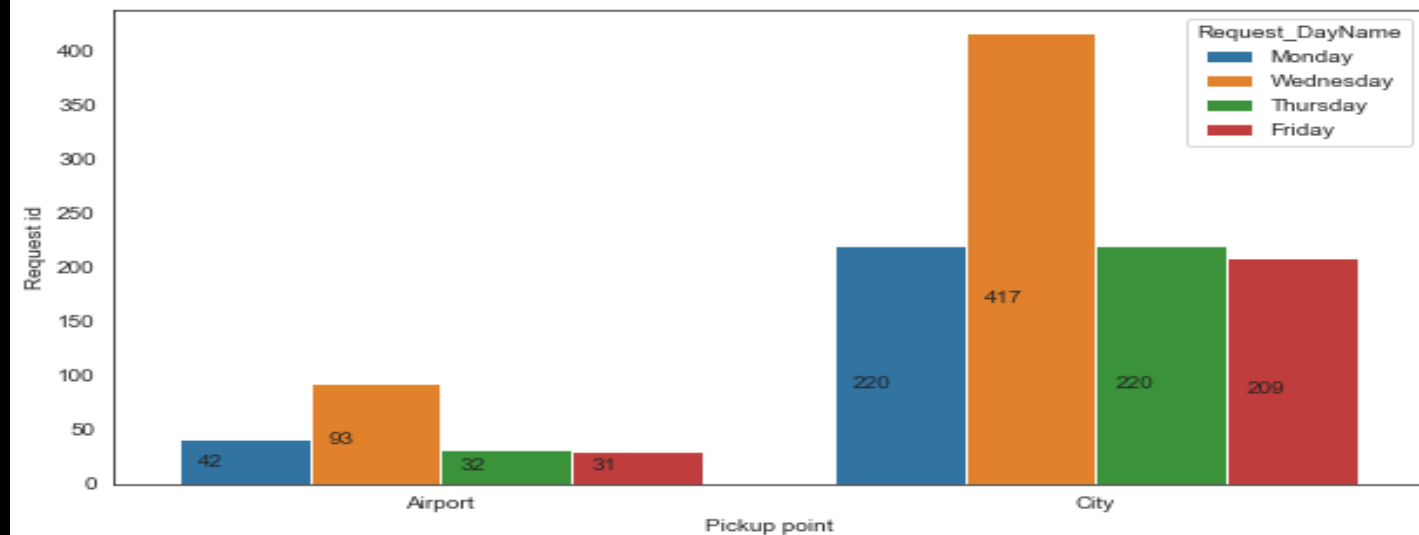


On Wednesday within city Car are available but drivers are cancelling the cars in morning Hours.

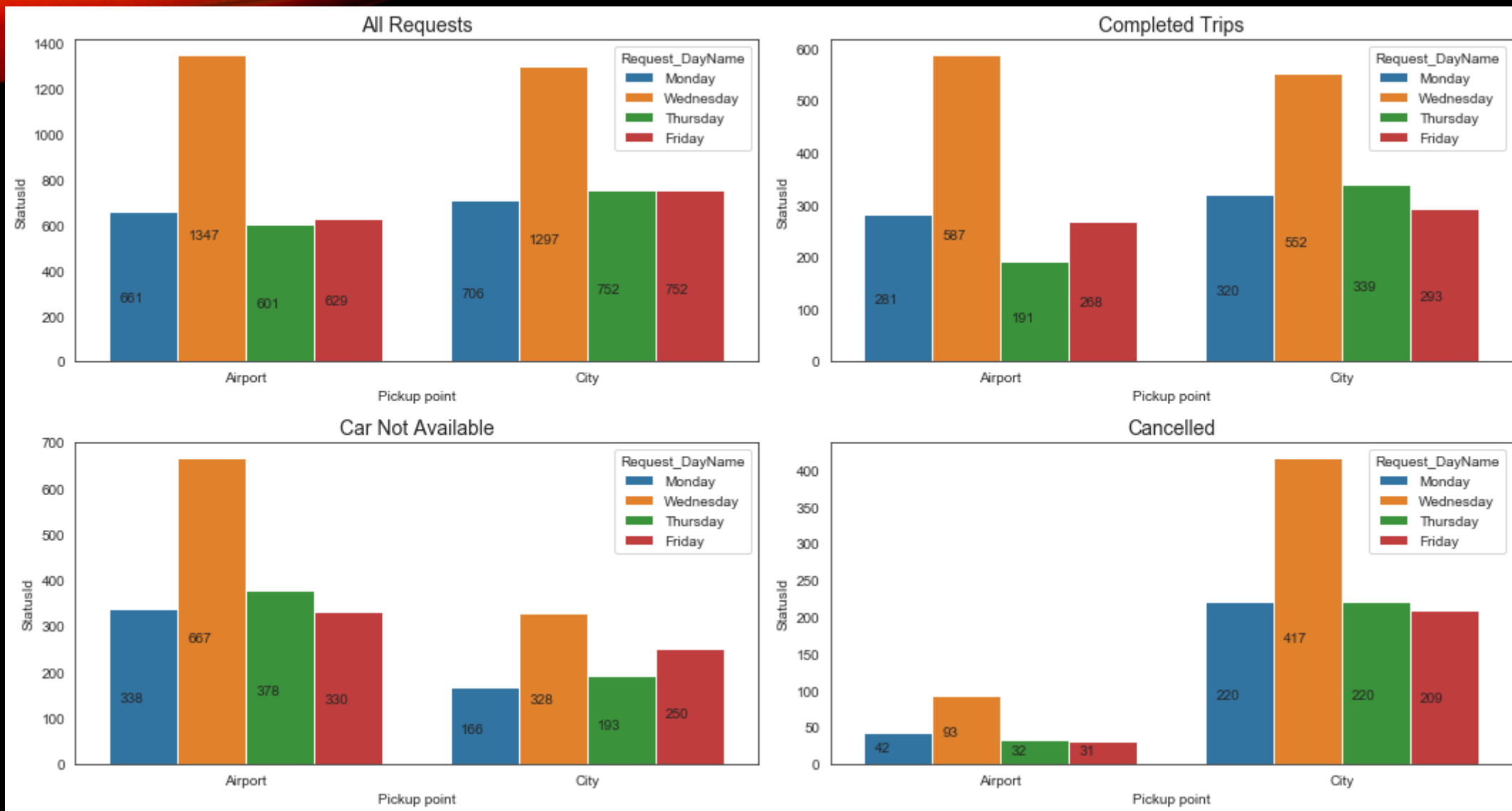
Cancellation Problem more from City



Cancellation Problem on Days



Daywise Total Request, Completed, Non-Availability, Cancellation Analysis



High Booking Cancellor's Analysis

- Total number of drivers 301
- Number of Driver who cancels $\geq 30\%$ of the business : 143
- Total Booking taken by High Cancel-Driver : 1988
- Total Booking Cancelled by High Cancel-Driver : 810

Answer need to found for these 2 Questions

- Why drivers are cancelling more cars on Wednesday morning from city?
- Why cars are not available from airport on Wednesday night?

What do you think is the reason for this issue for the supply-demand gap?

- Why drivers are cancelling more cars on Wednesday morning from city?
 - Possibly because of too much traffic jam on Wednesday in the morning hours
 - Tuesday night because of low flight traffic at airport drivers need to return empty from airport and now in morning hours city to airport booking may be high and they do not want to go
 - Because after going to airport from city, they know there are not many flight on Wednesday to airport so they need to come empty from airport
- Why cars are not available from airport on Wednesday night?
 - As usual because of high demand in evening Wednesday evening car have gone to city because of
- Drivers in evening do not want to go and pickup customer from Airport. May be because they want to take rest after day service in city.
- Drivers in Morning do not want to enter into the city. May be because of high traffic.

Recommend some ways to resolve the supply-demand gap.

- Warning to top cancellers identified here.
- Identify this Wednesday factor and put special reward for Wednesday
- Marginal increase on Wednesday fair
- Reduce uber percentage commission on Wednesday