Uber Case Study
Trip Analysis

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Problem Statement

- **Aim of analysis**:
  - To identify the root cause of the problem (no cars available and trip cancellations)
  - Recommend ways to improve the situation.

- **Expected Result:**
  - The root cause and possible hypotheses of the problem(s)
  - Recommend ways to improve them.

Solution Approach

Step 1

Plots for Trip Frequency

Plots for each Status type

- Calculate Total Demand
- Calculate Total Supply
- Evaluate Gap

Step 2

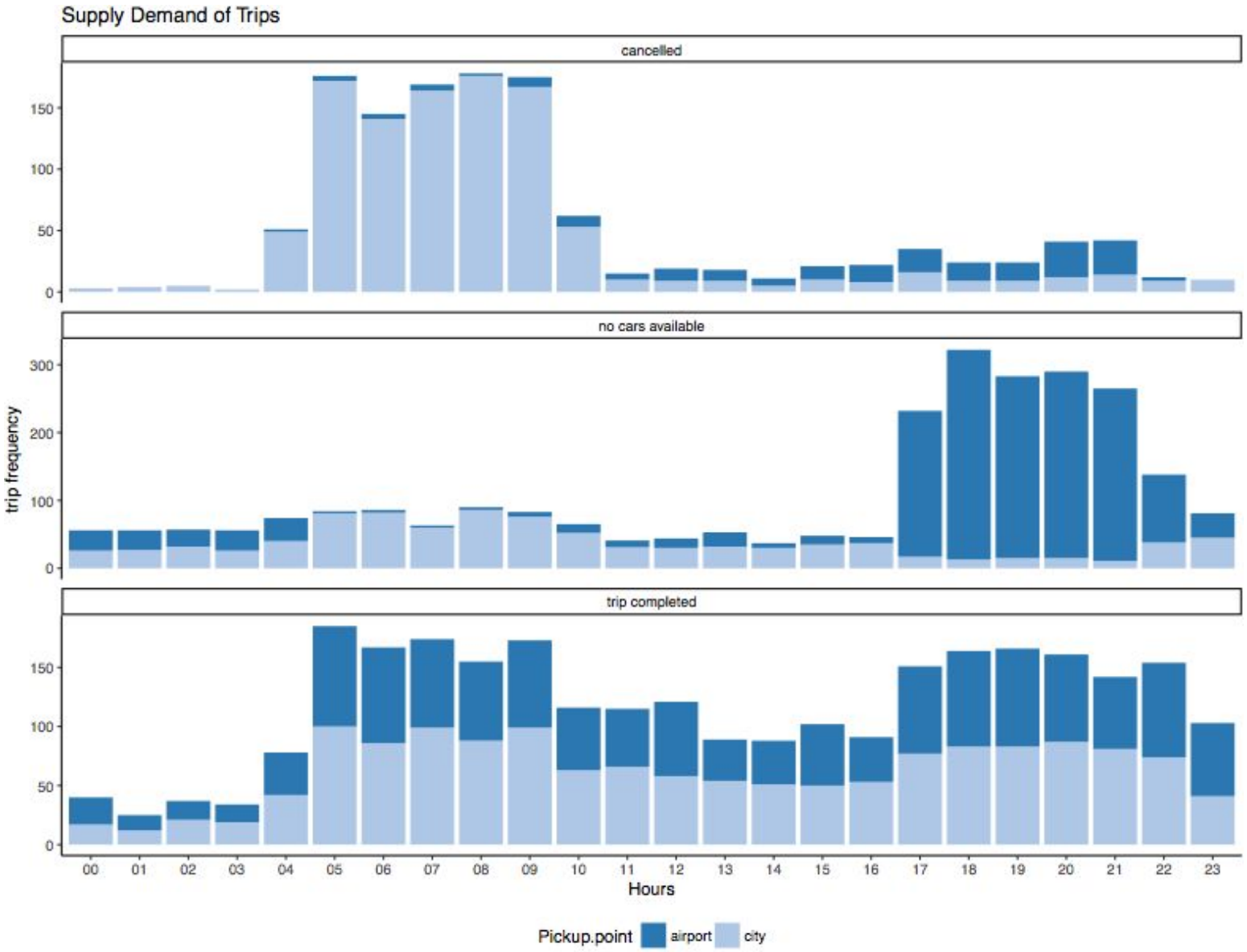
Analyse the Problem by City, status, and time slots

Step 3

Identify Root Cause

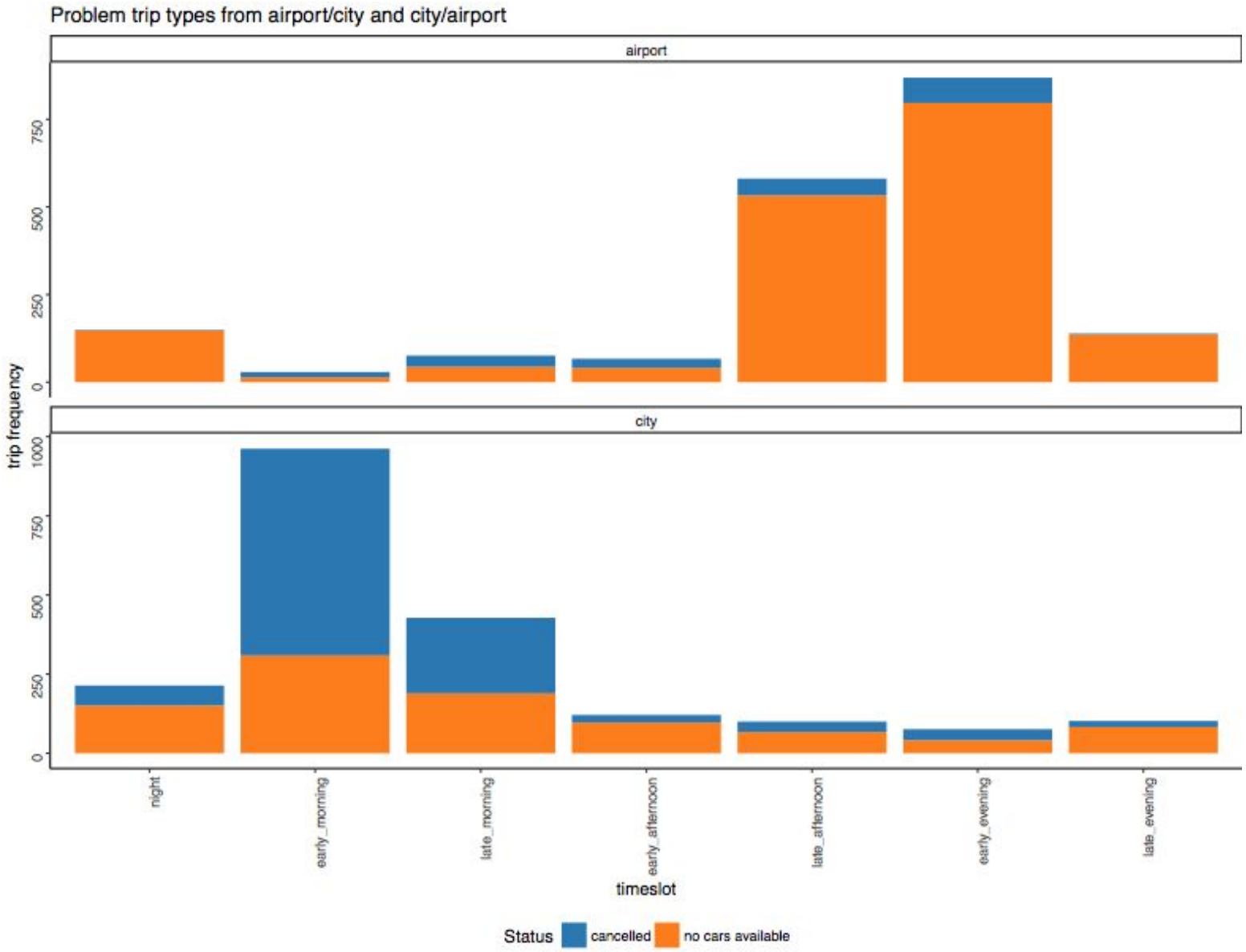
Recommend Measures

Overview of Trips



- “cancelled” trips Status Peaking between 4am to 10 am in City
- “no cars available” Status peaks at the airport between 5 pm to 10 pm
- “trips completed” status remain balanced between 5 am to 11 pm

Trip Analysis



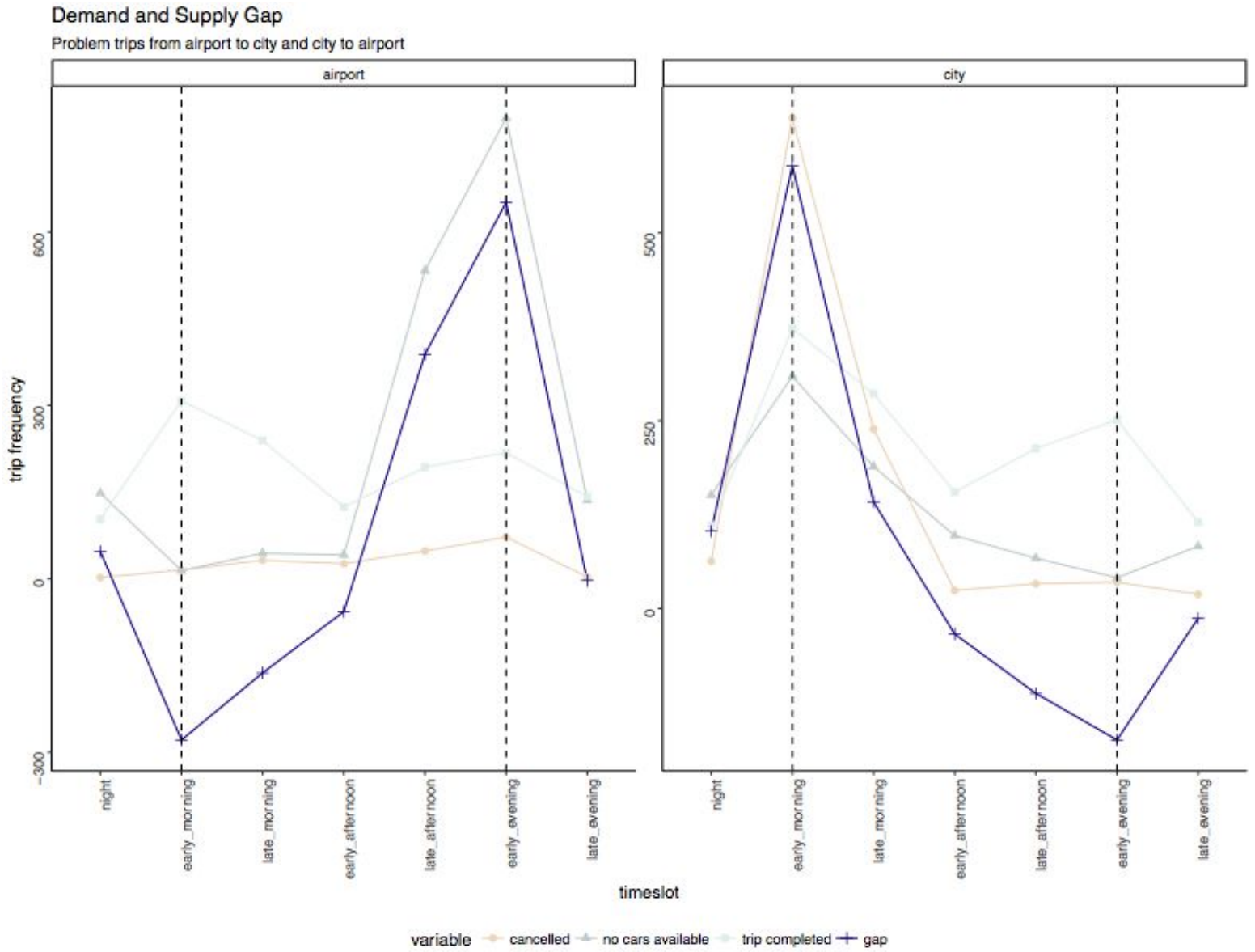
Airport:

Problem trips	Problem Slots
No Cars available	early_evening

City:

Problem trips	Problem Slots
Cancelled	Early_morning

Demand Supply Gap Analysis



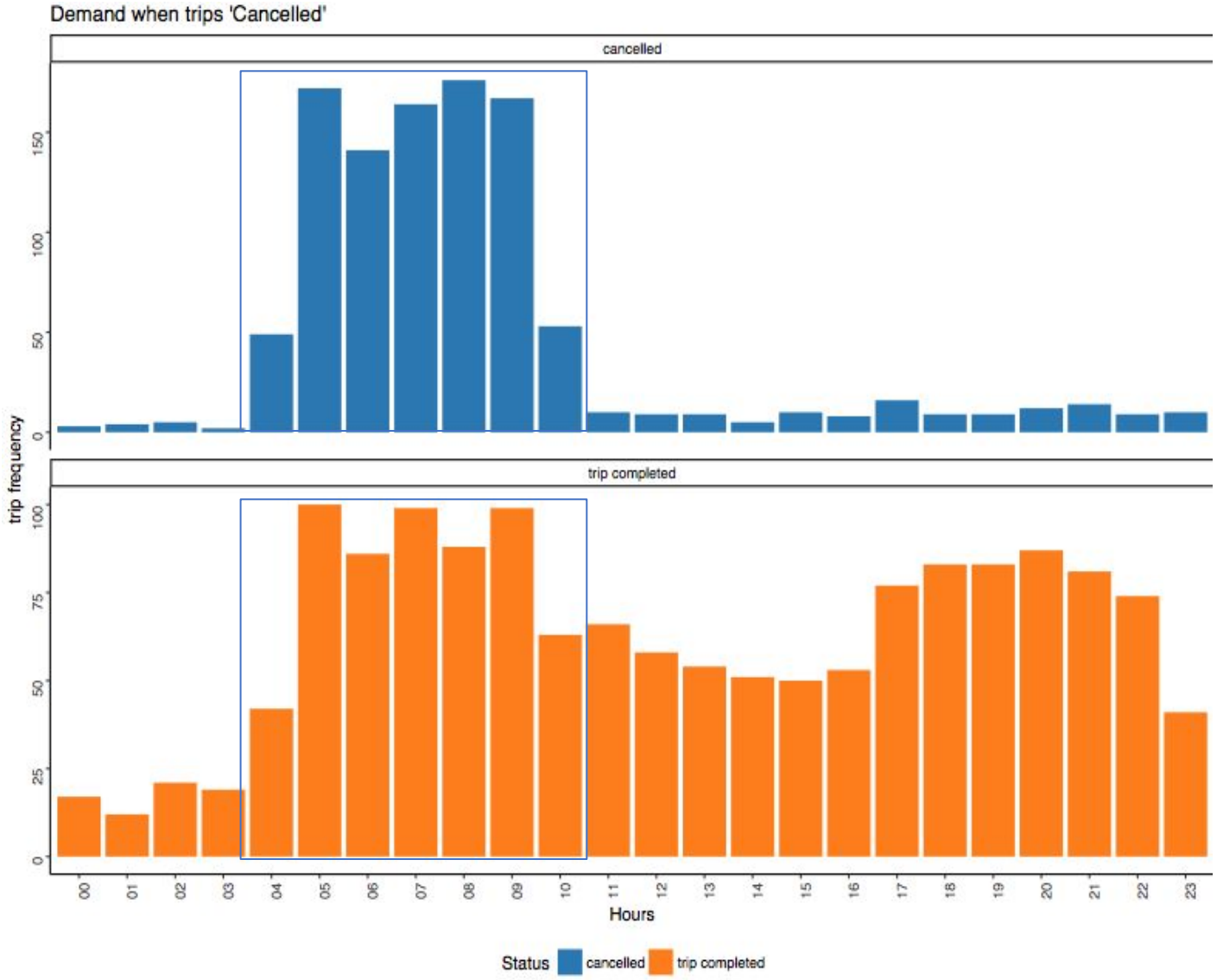
Airport:

- There is peak demand of 651 unfulfilled requests at the airport during early evening hours

City:

- Early mornings have a peak demand of 589 unfulfilled requests

Root Cause for Cancellations

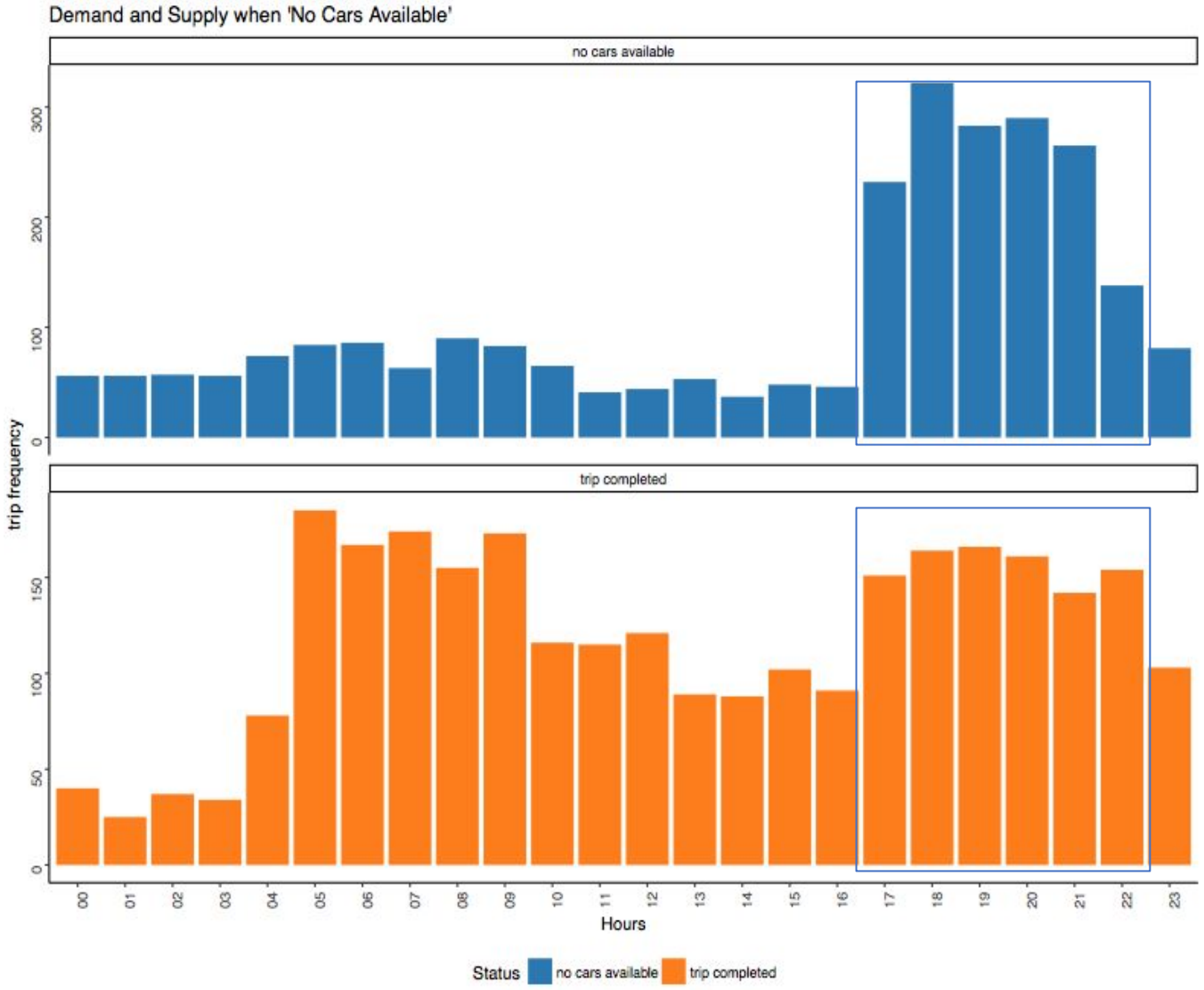


- From the City
  - Problematic hours tend be (4 am to 10 am)
  - Cancellations are higher during this time

Probable Reason:

- Flights at the airport might begin to arrive in the late_mornings.
- Due to which driver partners tend to cancel the trip to airport to avoid longer “idle wait time” at the airport

Root Cause for No cars available



Indications:

- From airport "no cars available" status is acute between 5pm to 10pm.

- There are more flights arriving at the airport around this time. There are “no cars available” to serve the passengers at the airport

Probable Reason:

- This can also be the time when partner drivers end their daily schedule. and logout from the app

Conclusions

- *Incentivize the trips* when the demand for taxis is higher, this can push the drivers meet the demand to some extent
- *Charge airport convenience fees*: For airport trips in order to compensate the driver idle times, uber may charge slight convenience fees to trade-off cancelleations.
- *Invite new partner drivers:* More the number of drivers greater the service.
- *Encourage Overlapping Work shifts at peak demand*
- *Allow passengers* to pre-book uber airport taxis through multiple channels.
- *Inform drivers* about new arrivals and new departures of flights in-advance.