

# **UBER SUPPLY DEMAND GAP CASE STUDY**

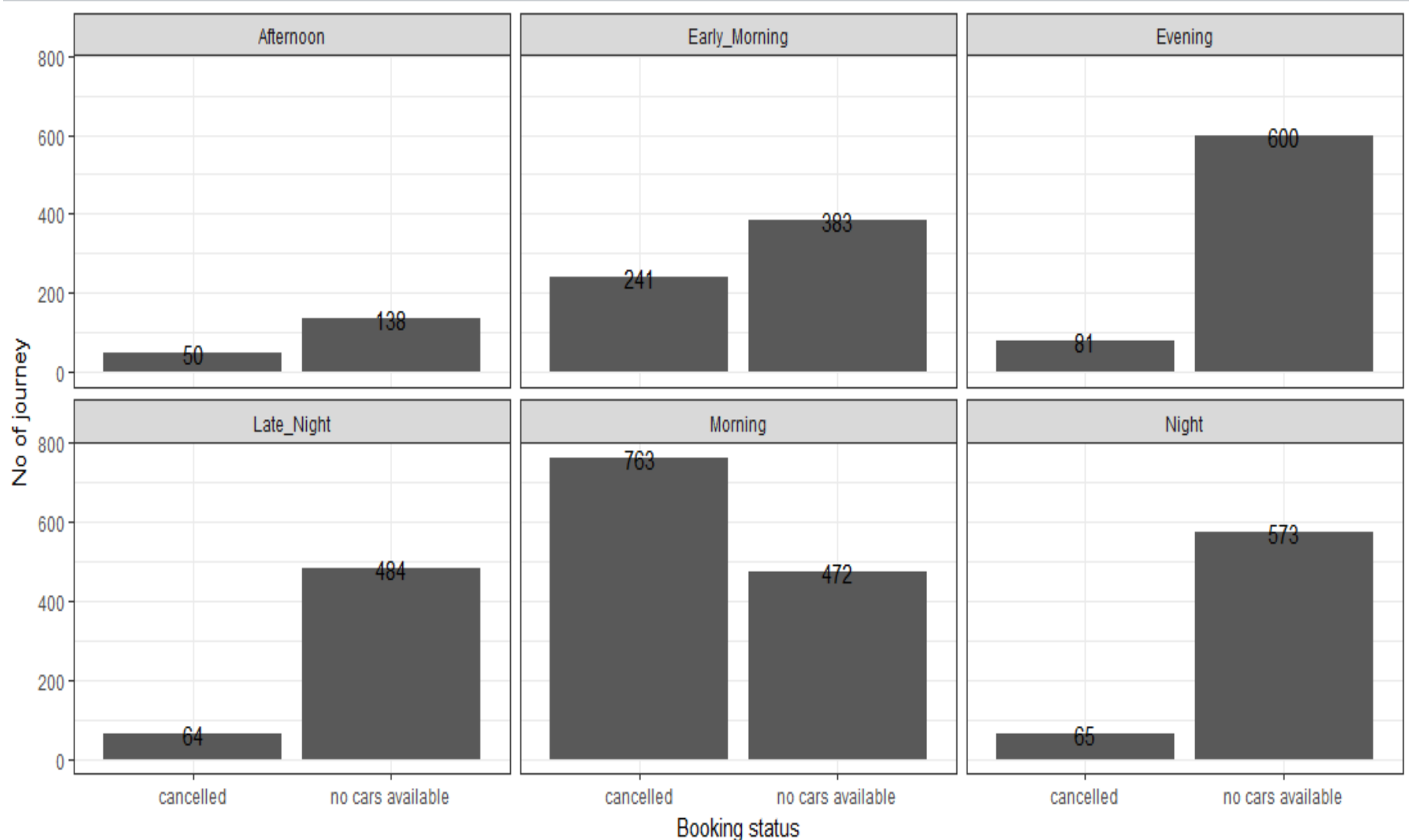
**By:  
CHANDRAPAL  
PANWAR**



# No of requests that get 'cancelled' or show 'no cars available'

Evening and Night time – slot is most prominent time when cars are not available as per demand.

Early morning and Morning time slot is peak time of major no of cars got cancelled.



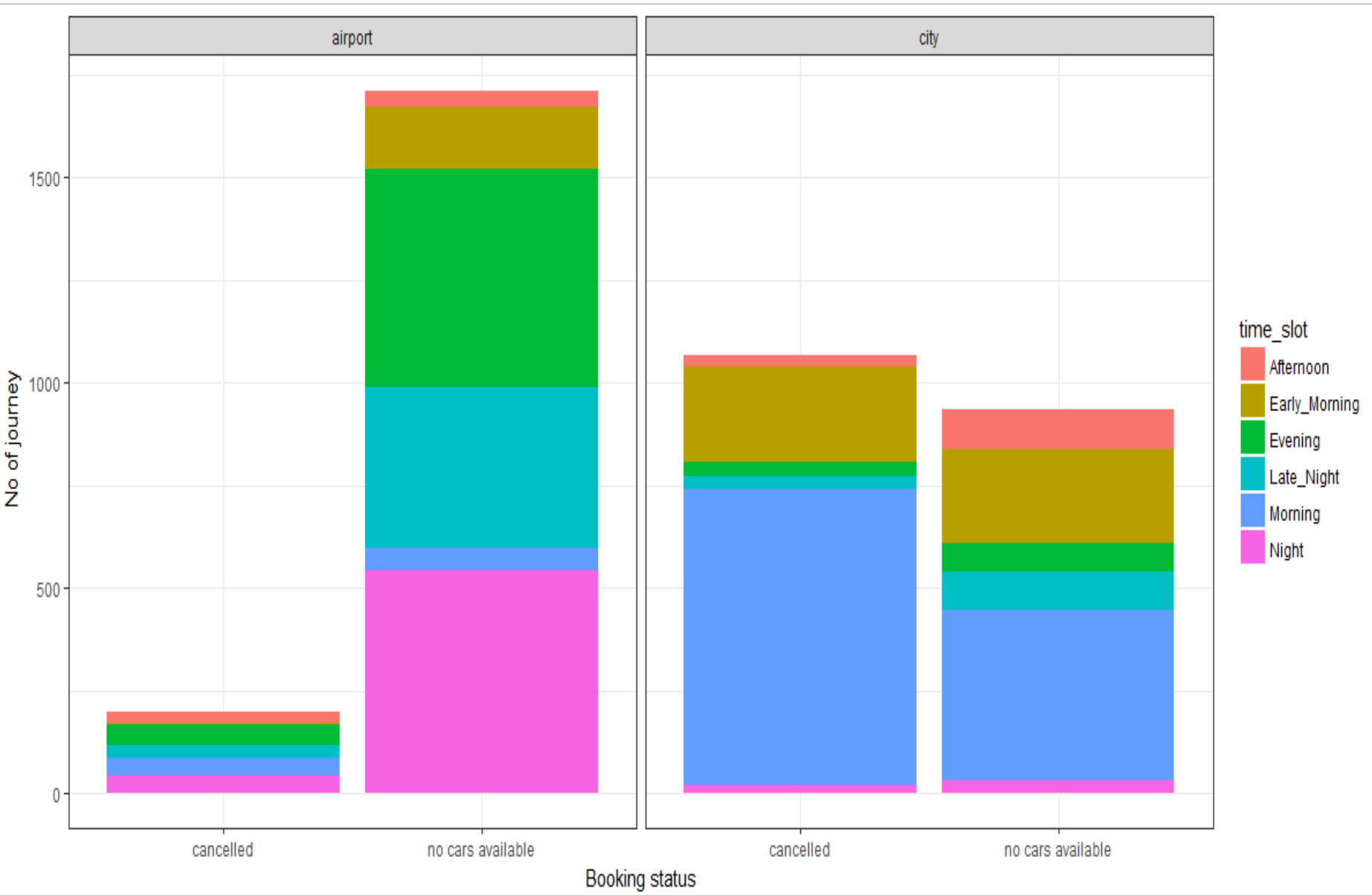
Time slots are defined in hours interval.

Time is derived in hourly basis in whole number so function used for distributing time in time slot taken care of upper and lower limit with including extreme values.

Time - Slot	Time - interval	
Early_Morning	0:00	5:00
Morning	6:00	12:00
Afternoon	13:00	15:00
Evening	16:00	18:00
Night	19:00	20:00
Late_Night	21:00	23:00

# Problematic types of requests

Car availability is biggest problem from airport to city.  
It became severe issue during evening and night time from airport.



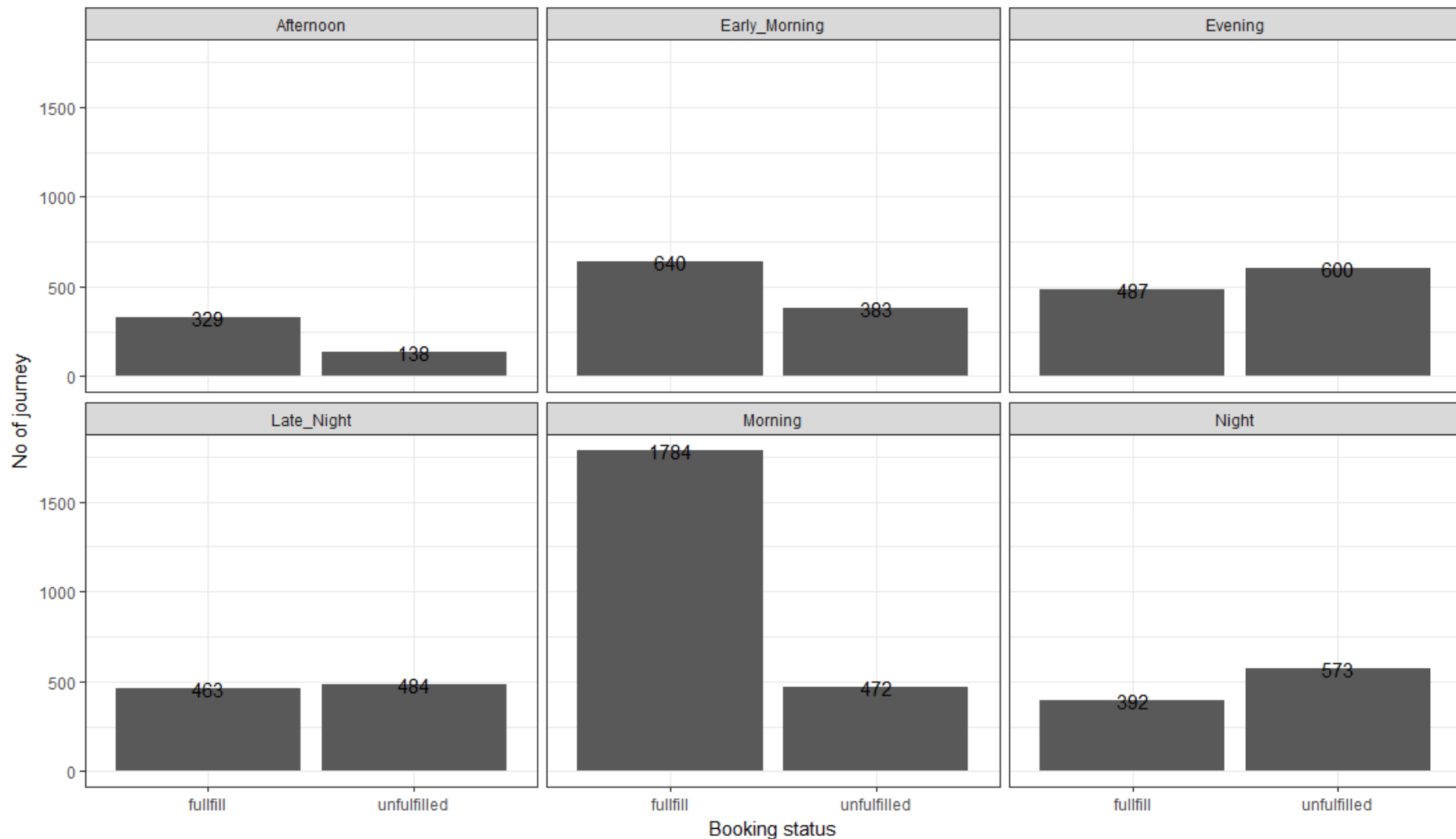
# Time slots when the highest gap exists

To understand demand – supply gap.

We have to understand how much total request generated and full filled.

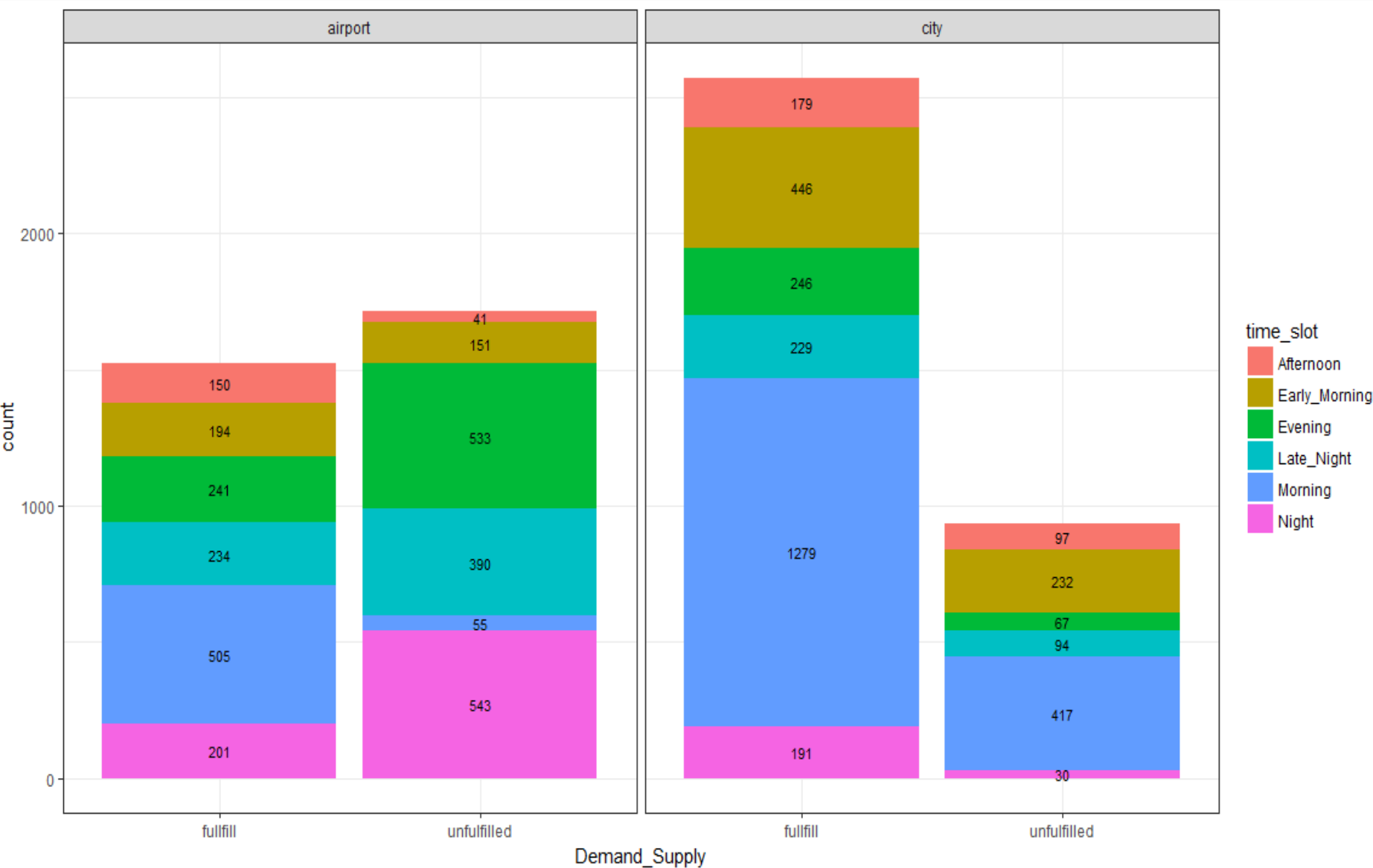
Full filled are those request in which trip got completed along with cancelled request.

Unfulfilled request are those for which cabs were not available during that time slot.



# Requests (city-airport or airport-city) in different time slot.

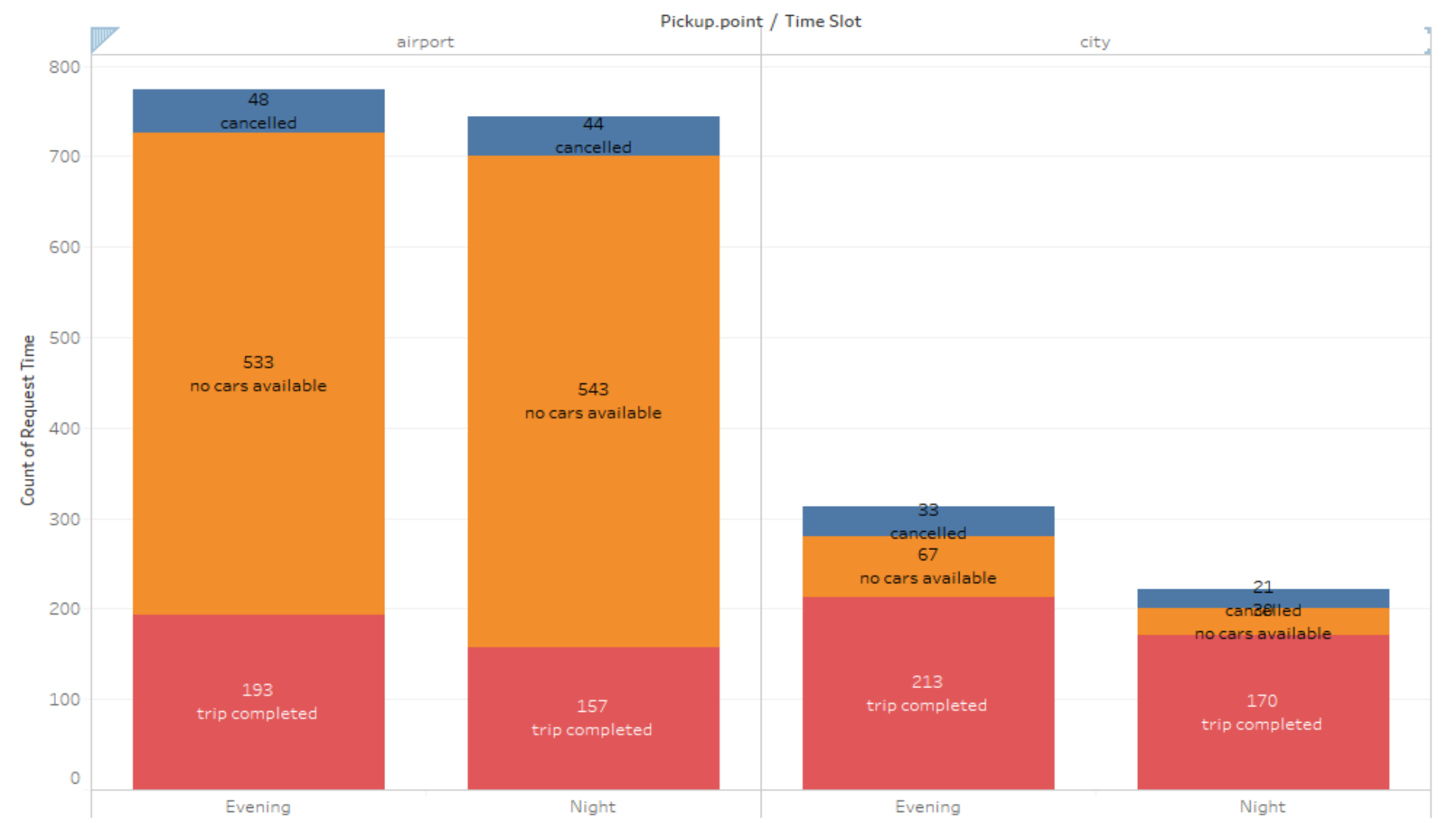
Most no of unfulfilled request were from airport. If we go through different time slot in graph. Easily can understand Night (543) and Evening (533) were those time slot when most of request gone unfulfilled due to cars unavailability.



# Supply - Demand Gap Airport.

On looking below figure it appears less trip are completing from airport to city compare to city to airport. It may be possible traffic congestion could be issue that cabs were not able to reach in airport in due time. Although Demand is high compare to city in airport during evening and night time may be most of flight are landing during this time period.

Supply - Demand Gap

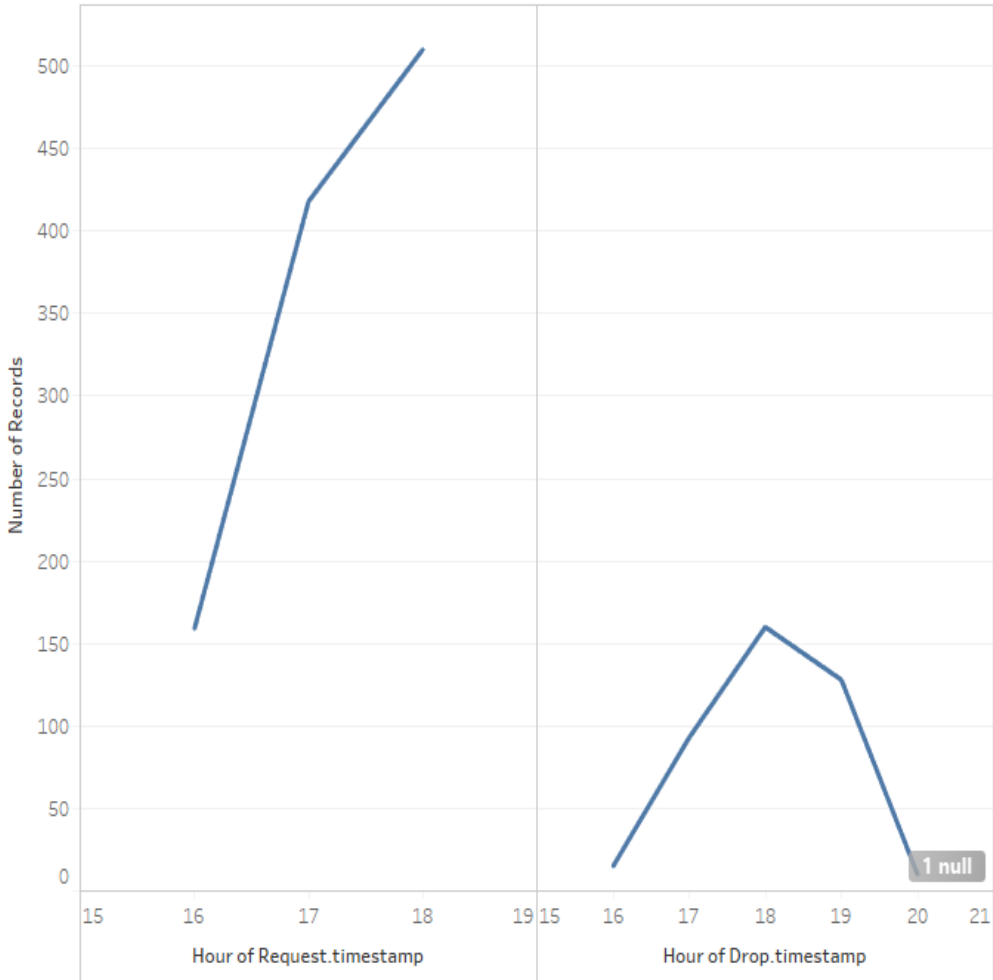


# Probable solution to fulfill Demand – Supply Gap

- ❑ Need to hire more cabs to full fill demand of these time slot in airport.
- ❑ To balance it out during evening and night time. We could ask cab driver to remain in airport location.
- ❑ Cancelled cabs do not wait for more time and quickly take other request during this time period.
- ❑ Drop time is high for cabs in evening and night by conveying same things to them. We can further analyses highly congested traffic area during evening and night and provide these information to cab driver to avoid these route in evening and night.

Last Modified 10/8

Evening - Request vs Drop time stamp



Night - Request vs Drop time stamp

