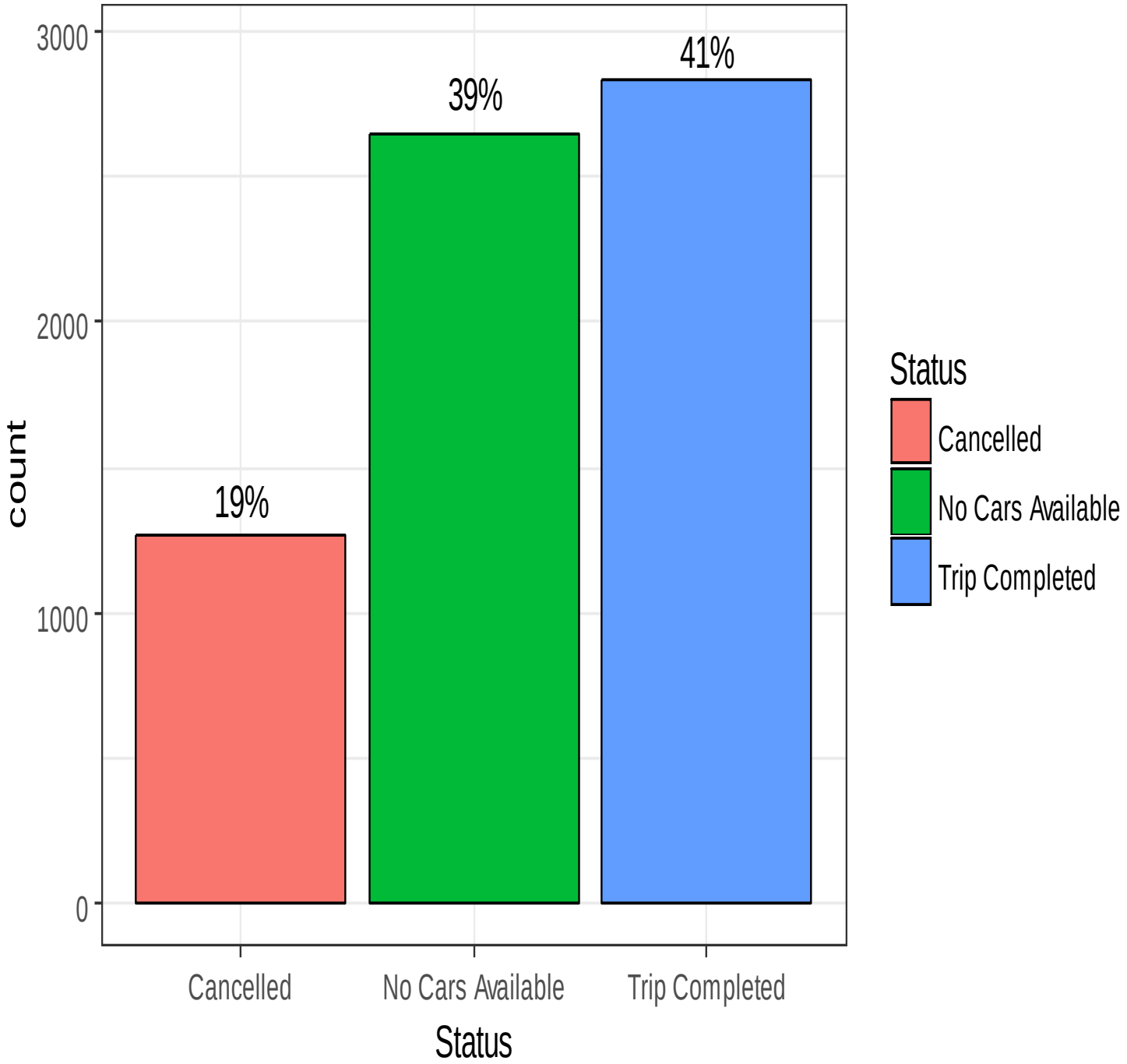
UBER AIRPORT TRIP ANALYSIS REPORT

Exploratory Data Analysis Report

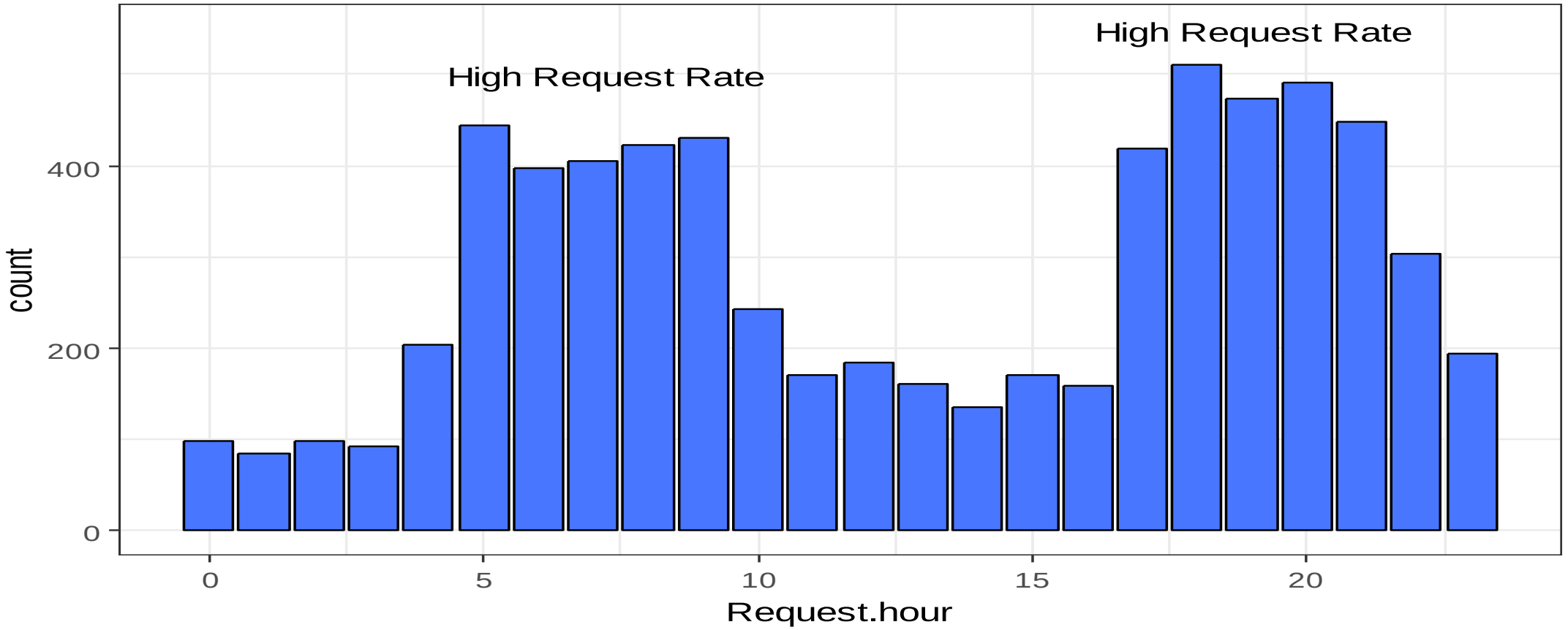
- Exploratory Data Analysis is done in the following ways on the data provided to us
- Firstly univariate analysis is done on variables
- Secondly, the same variables are segmented on other categorical variables to get some more insights

Univariate Analysis: Status

From analyzing the status of trip requests we can recognize that only 41% trips get completed and remaining 59%either get cancelled or vehicles are not available for those trips.



Univariate Analysis: Request.Hour



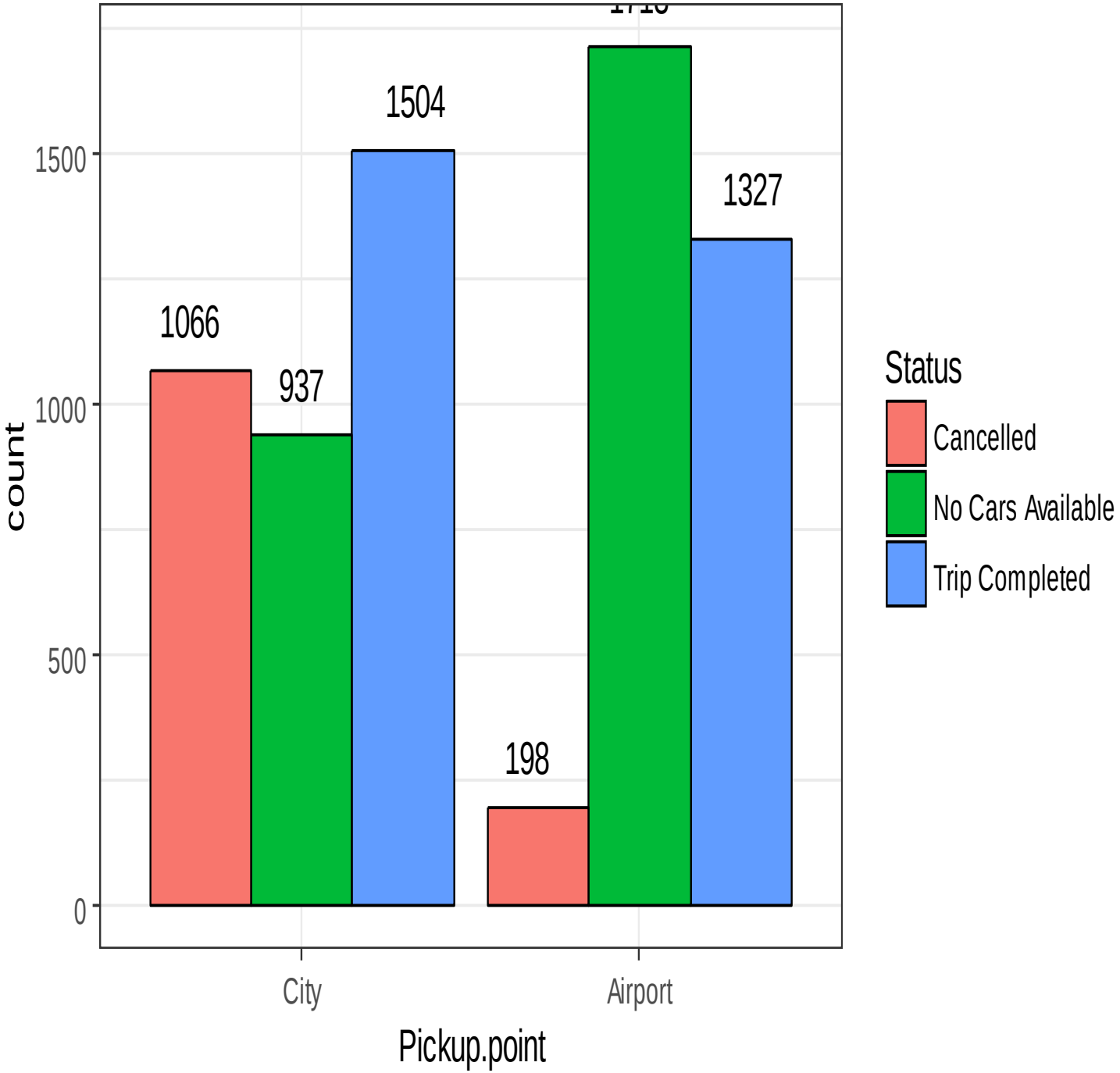
It's clearly visible from the plot that there is a high request rate from 5 to 10 hours and 17 to 22 hours.

Segmented Univariate Analysis : Pickup point

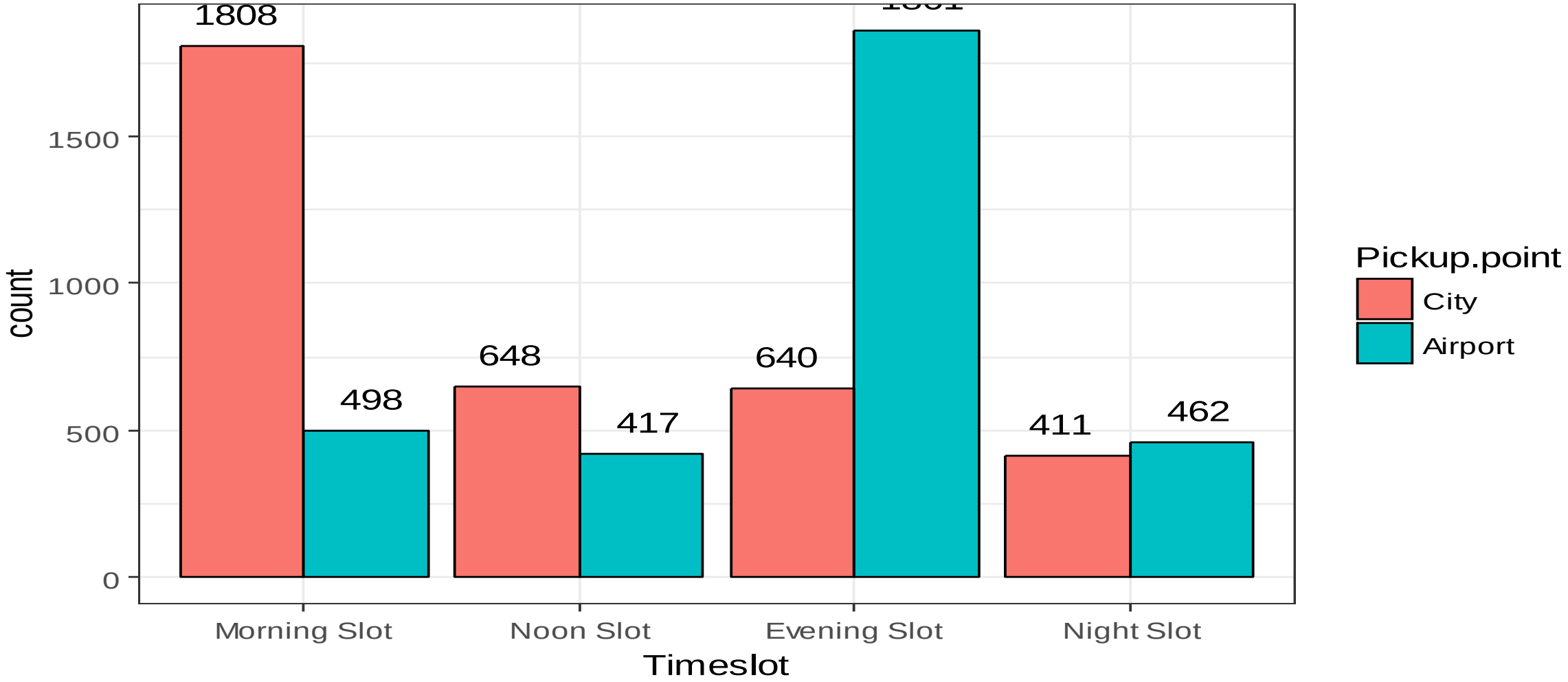
There isn't much to analyse pickup point individually. Because, both pickup points have almost same requests with a little difference.

But segmenting pickup point on status gives more insights.

From the plot it can be clearly observed that most city pickup requests get cancelled and for most of the airport pickups cars are not available.

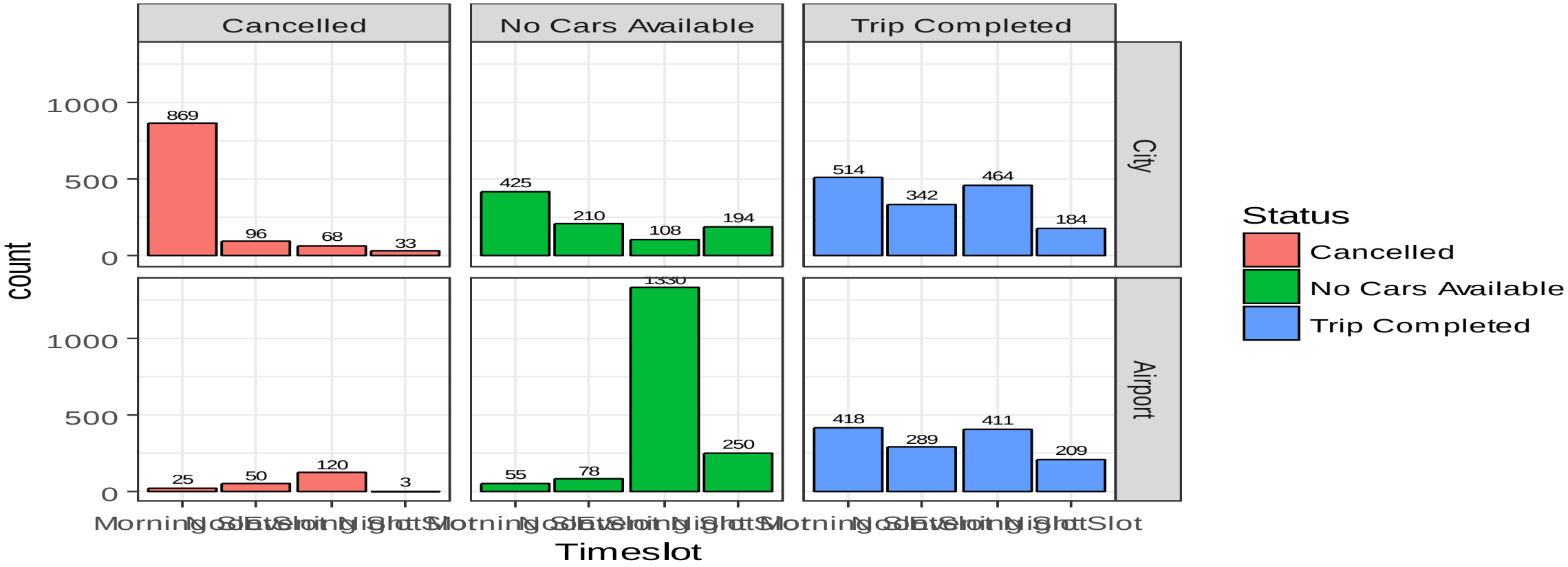


Segmented Univariate Analysis :Time slot on Pickup point



Morning and Evening slots have high pickup requests where morning slot has high CIty pickup requests. And evening has high Airport pickup requests.

Segmented Univariate Analysis :Time slot on Pickup point and Status



From the above plot it is clear that most city requests get cancelled in the Morning slot(during which there is high city request rate) and for most of the airport requests during the Evening slot(during which there is high airport request rate) there are no cars available.

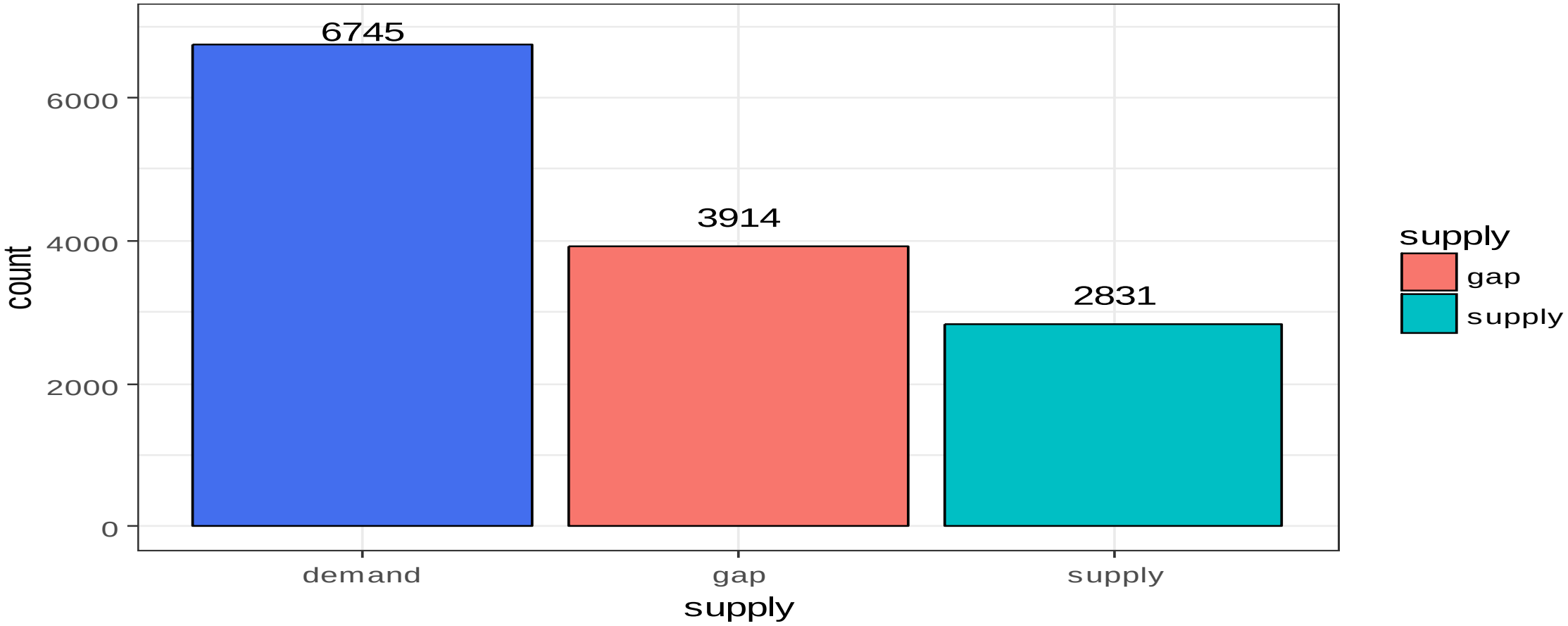
Insights drawn from the Uber Data

- From the above plots it can be assumed that although there is not much difference between city requests and airport requests ,City requests are problematic requests because most of city requests gets cancelled by drivers.
- Most Uber drivers are not ready to drive to airport as they may have to wait long before they get a trip back to city
- This is the same reason for most airport requests cars are not available

DEMAND AND SUPPLY GAP

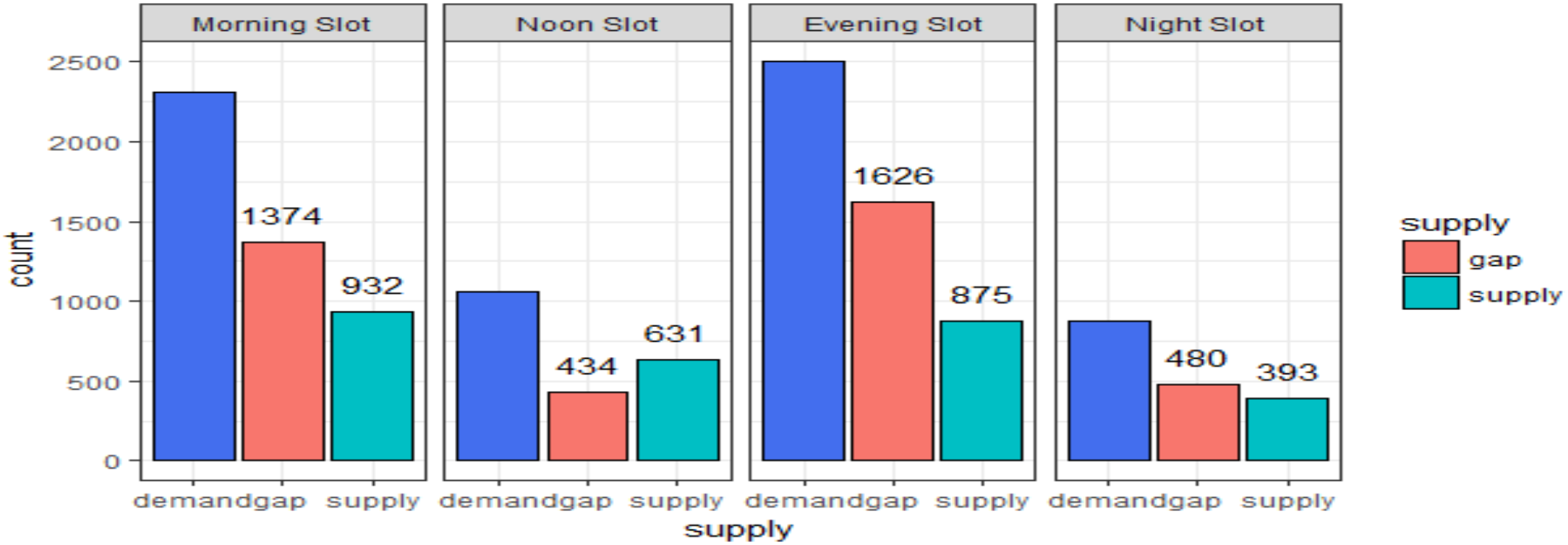
- The next few slides will show
- The demand and supply gap for Airport Trips
- The demand and supply gap for Airport Trips segmented on timeslots
- segmented on timeslots as well as pickup points

Demand And Supply plot



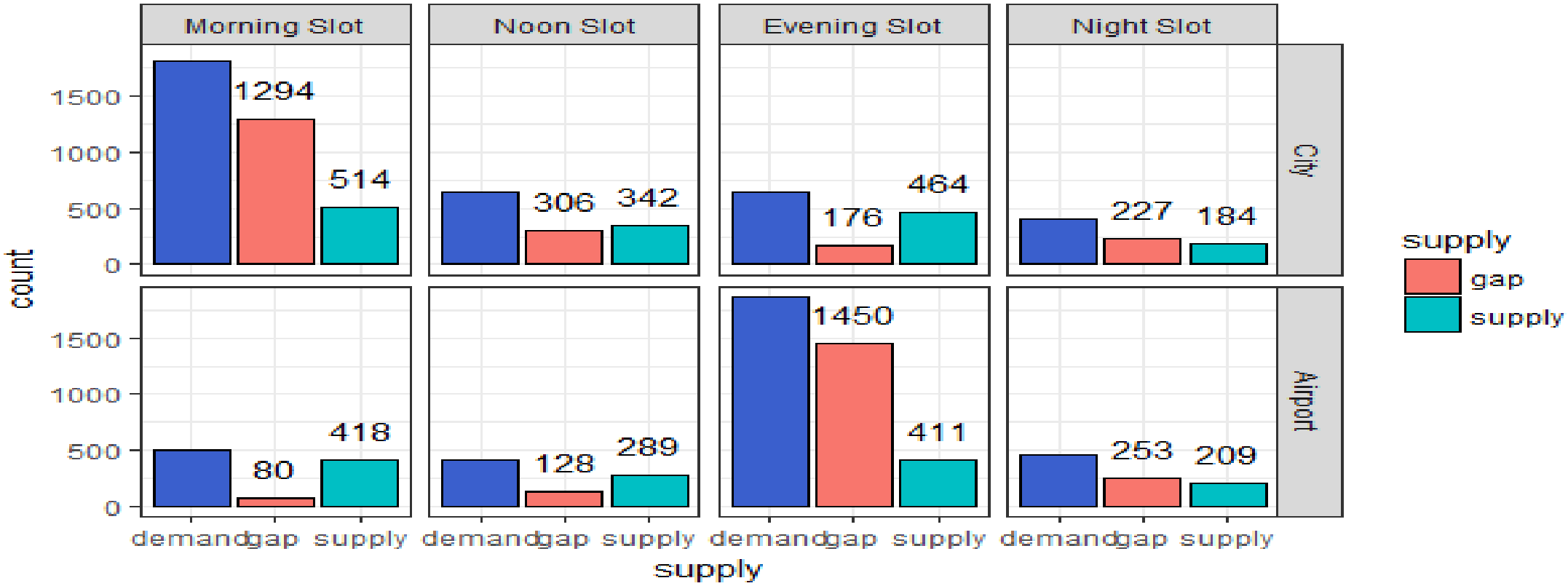
From the above plot it is clear that ,the overall gap is more than supply and is 58% of demand.

supply and demand gap for different time slots



From the above graph the gap for evening slot(4pm to 10pm) is high i.e 65%

supply and demand gap for different time slots and pickup points



From the above plots it can be seen that the gap for Airport pickup requests is high on evening slots I.e 77%
If we consider all time slots the gap for airport pickup request is high which is 59% than city pickup requests 54%

Possible suggestions to fill the supply and demand gap

- 1) Increasing trip rates for airport pickups and drops. Which may make drivers interested to take up the trips with out cancelling .
- 2)Making drivers work on shift basis, where one shift starts in the morning at city and the other start at the airport during evening and so on
- 3)A fixed number of cars should be specially assigned for airport trips and they should accept only airport pickups and drops
- 4)Keeping drivers updated with the flight schedule details on a regular basis , will also help them plan their work productively

END OF REPORT