

Uber Assignment

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Total Requests

Requests from airport 3238

- Requests completed: 1327(41%)
- Requests cancelled: 198(6%)
- Requests no cars available: 1713(53%)

Requests from city 3507

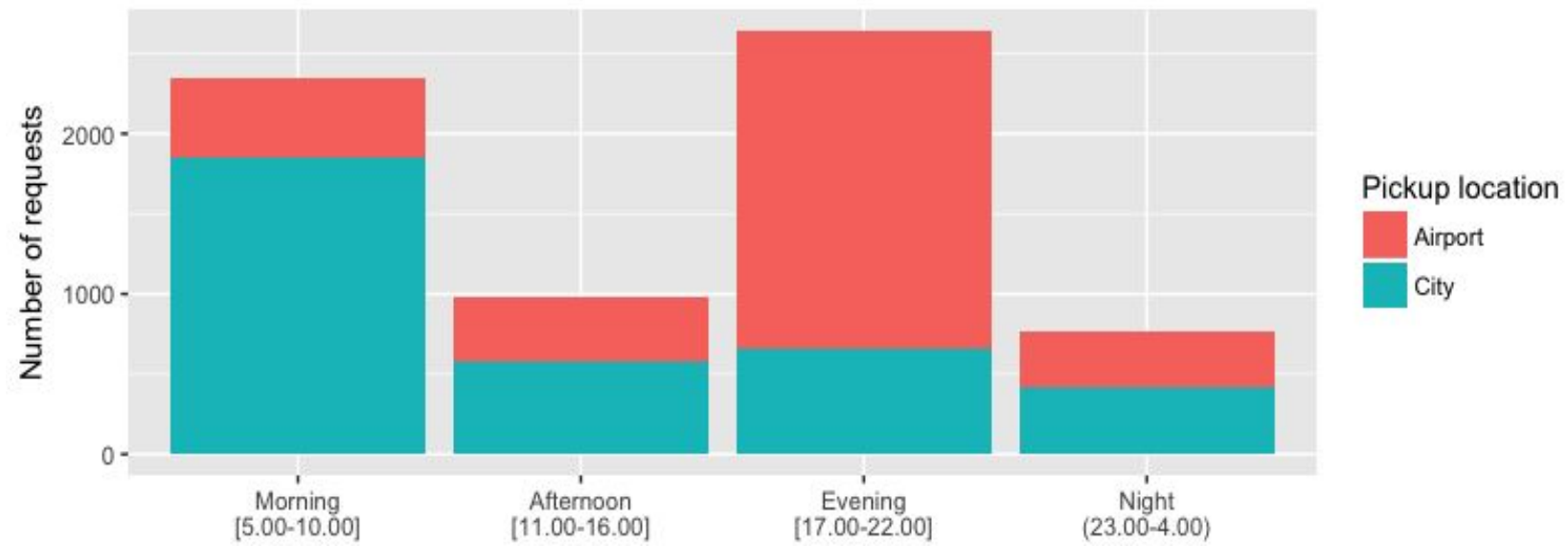
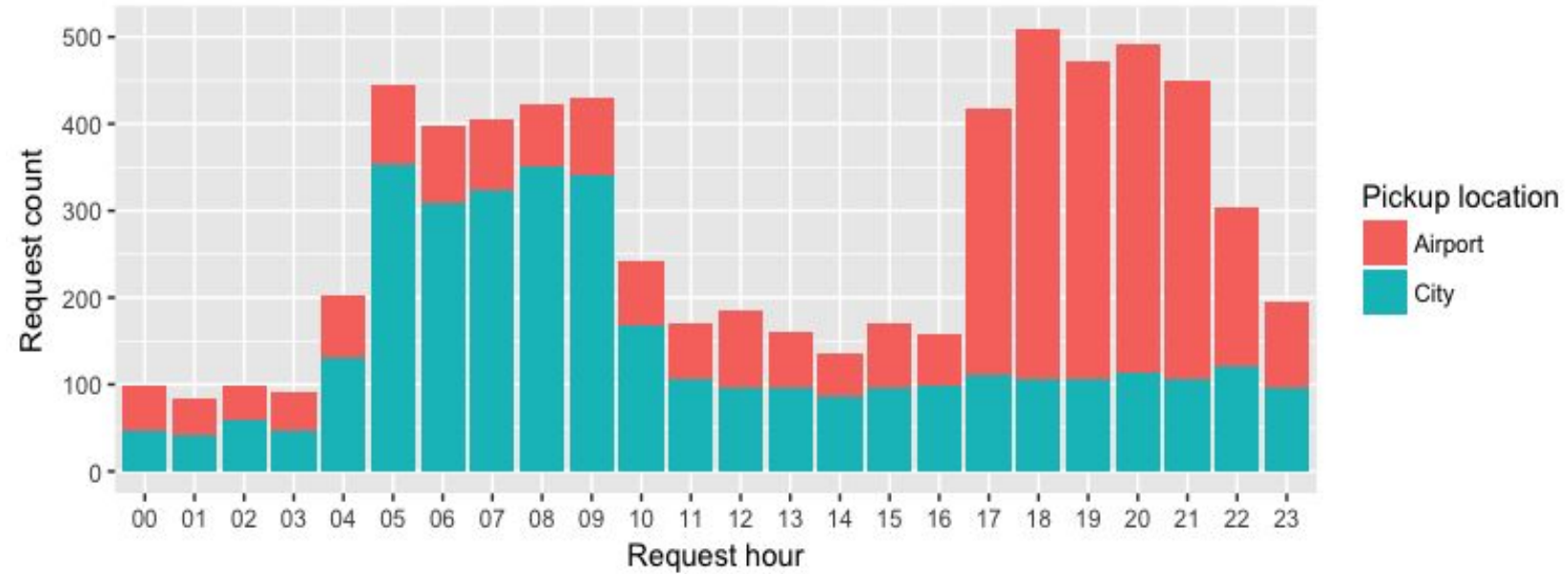
- Requests completed: 1504(42.8%)
- Requests cancelled: 937(26.7%)
- Request for which no cars available: 1066(30.3%)

- We can see that No cars available is problematic in both city and airport requests, cancelled cars is a problem in city.

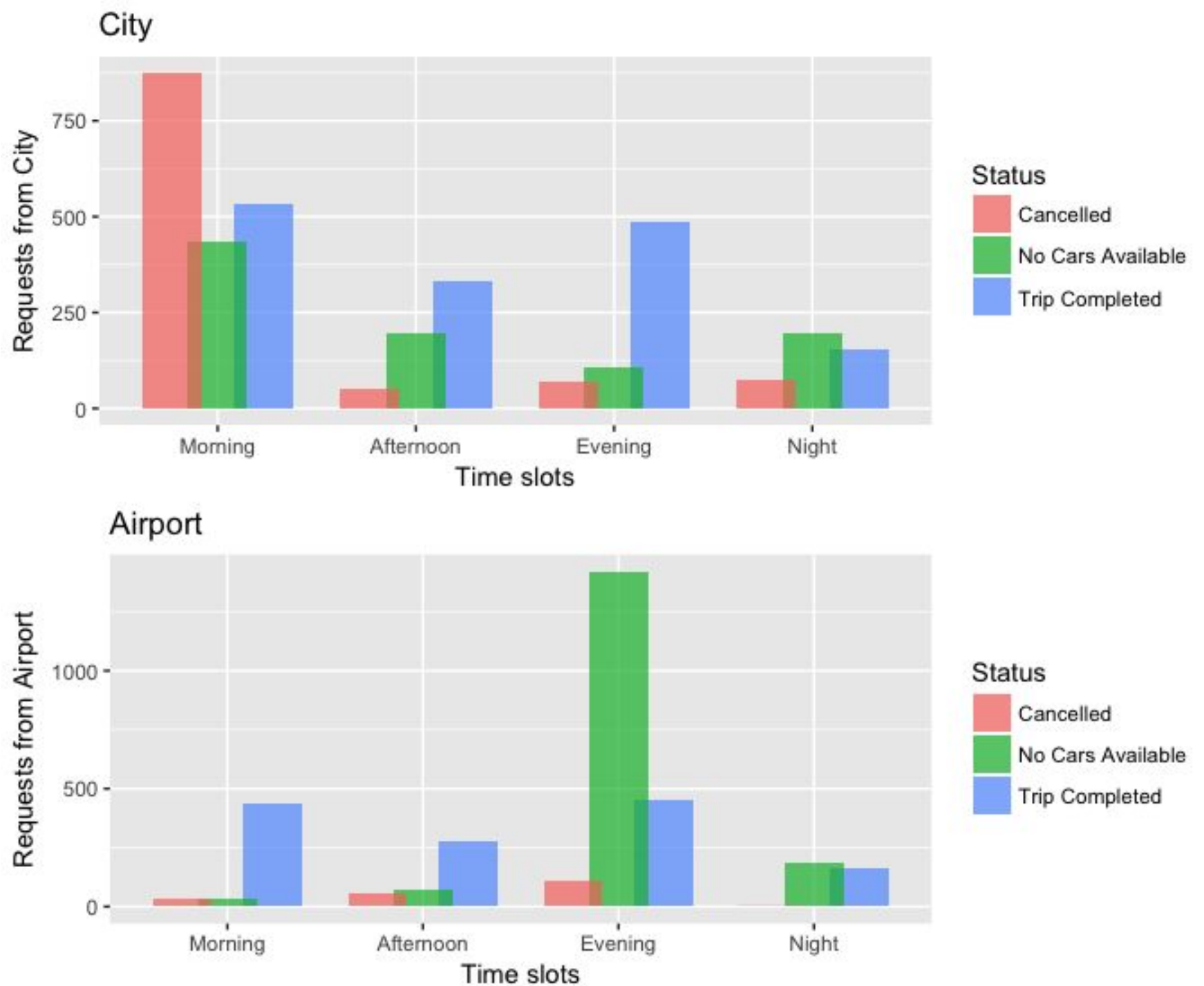
Request Spread & Time slots

Time slots based on the spread

- Morning(5AM-10AM)
- Afternoon(11AM-4PM)
- Evening(5PM-10PM)
- Night(11PM-5AM)



Visualising trip status vs timeslots for both pickup points



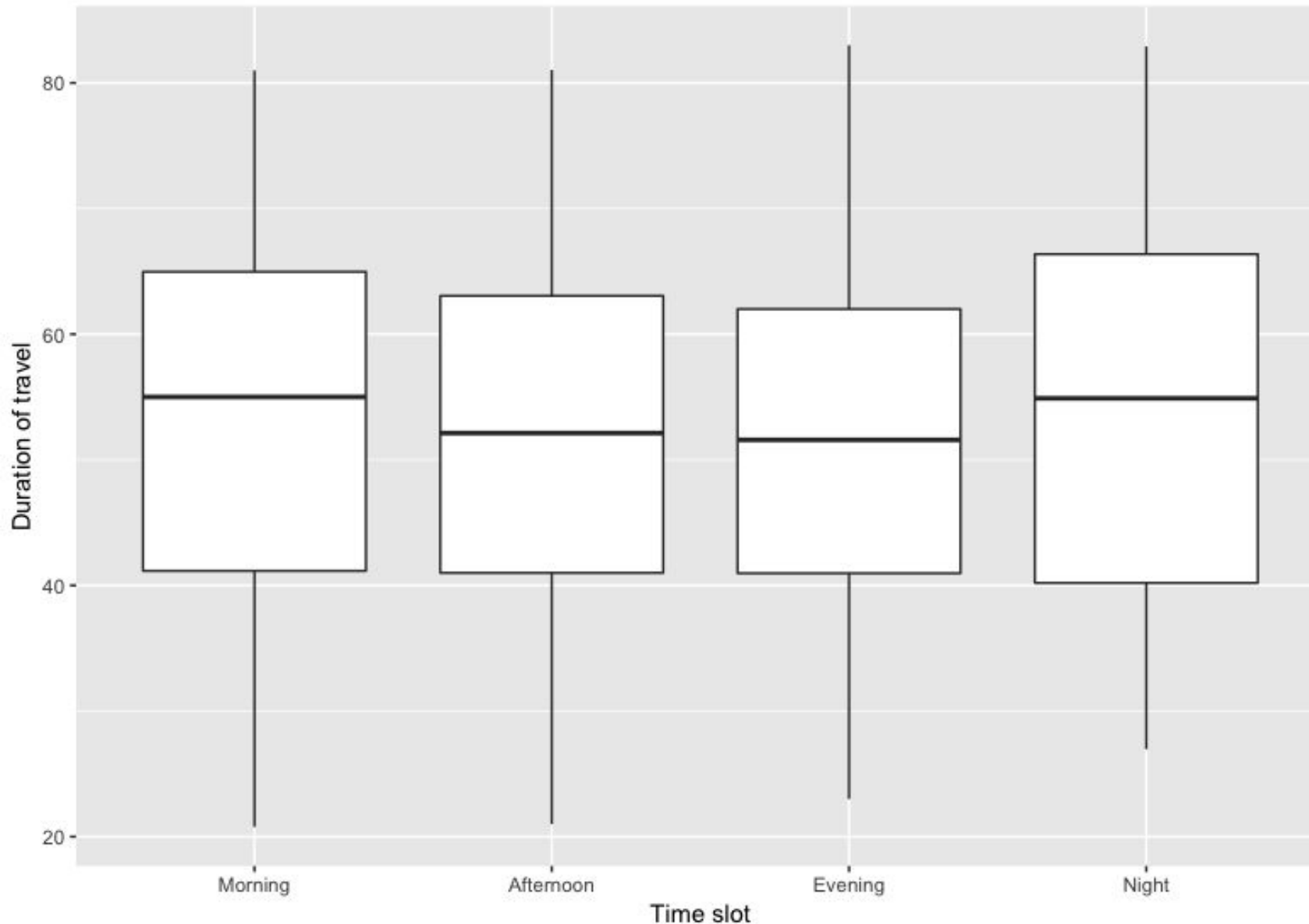
Trip Status for different time-slots

As seen from above plot:

- Cancellation is very high for requests from city in the morning.
 - From city: Out of 1845 requests in the morning, 873(47%) are cancelled and 437(23%) didn't have cars available.
- No cars available is very high for requests from airport in the evening.
 - From airport: Out of 1983 requests in the evening 1421 have no cars available(71.5%) which is a pretty huge demand unsatisfied.

Overall, including cancellations and unavailability 77% of the requests are **not satisfied**.

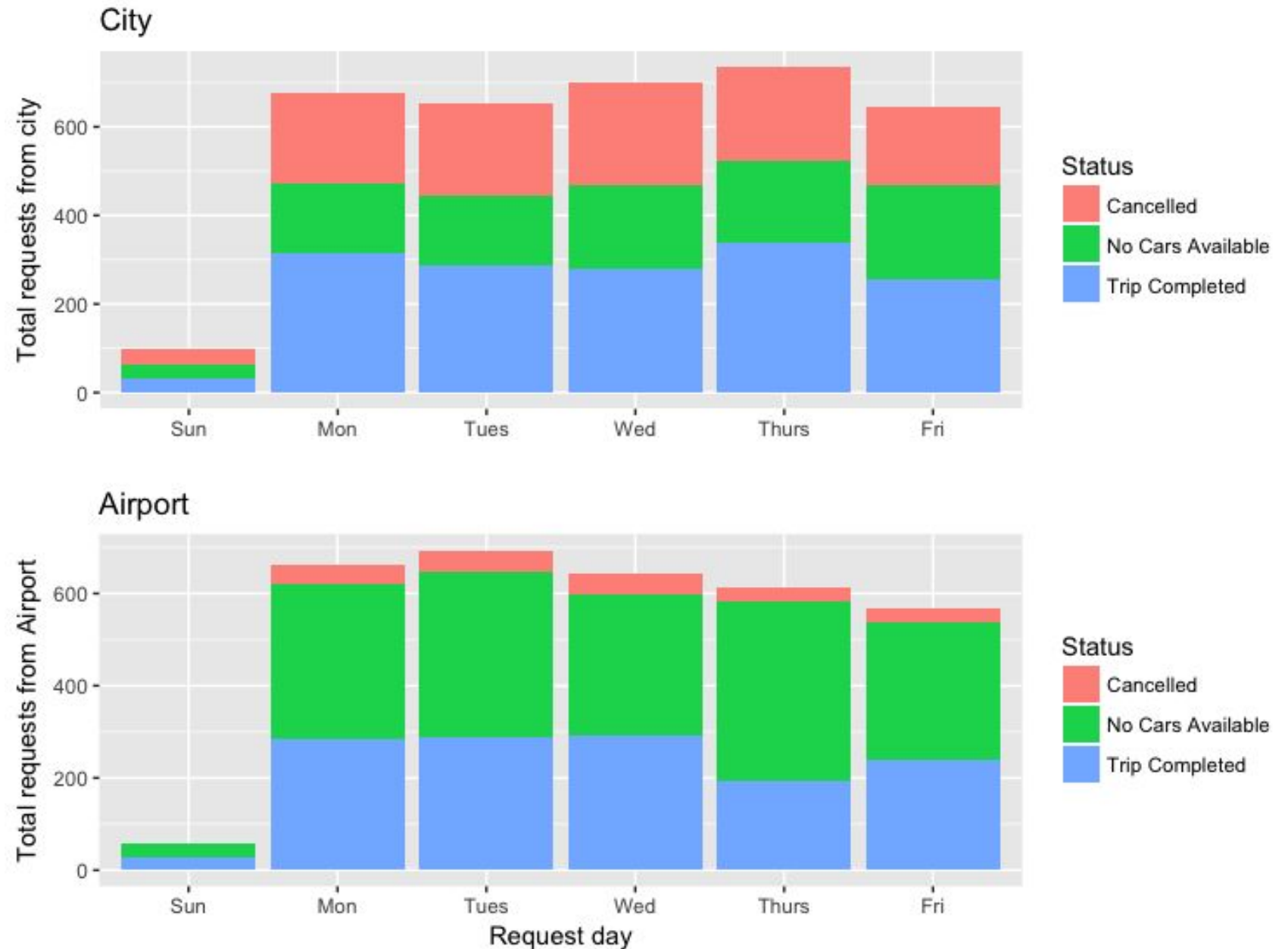
Duration Analysis



- No significant difference in duration of travel during different times of the day. So the traffic is not affecting the duration
- Travel time during peak hours is not the reason for cancellations from drivers.

Analysis Based on Days of the week

- As expected since a sunday is weekend, we can see low number of requests
- More discounts on weekend will encourage the passengers to travel on a weekend which can ease the demand on weekdays.



Supply demand gap

Lets see the demand for each timeslot for 2 pickup points:

Percentage of unsatisfied demand=

(demand in each timeslot - supply in each timeslot)

demand in each timeslot

X 100

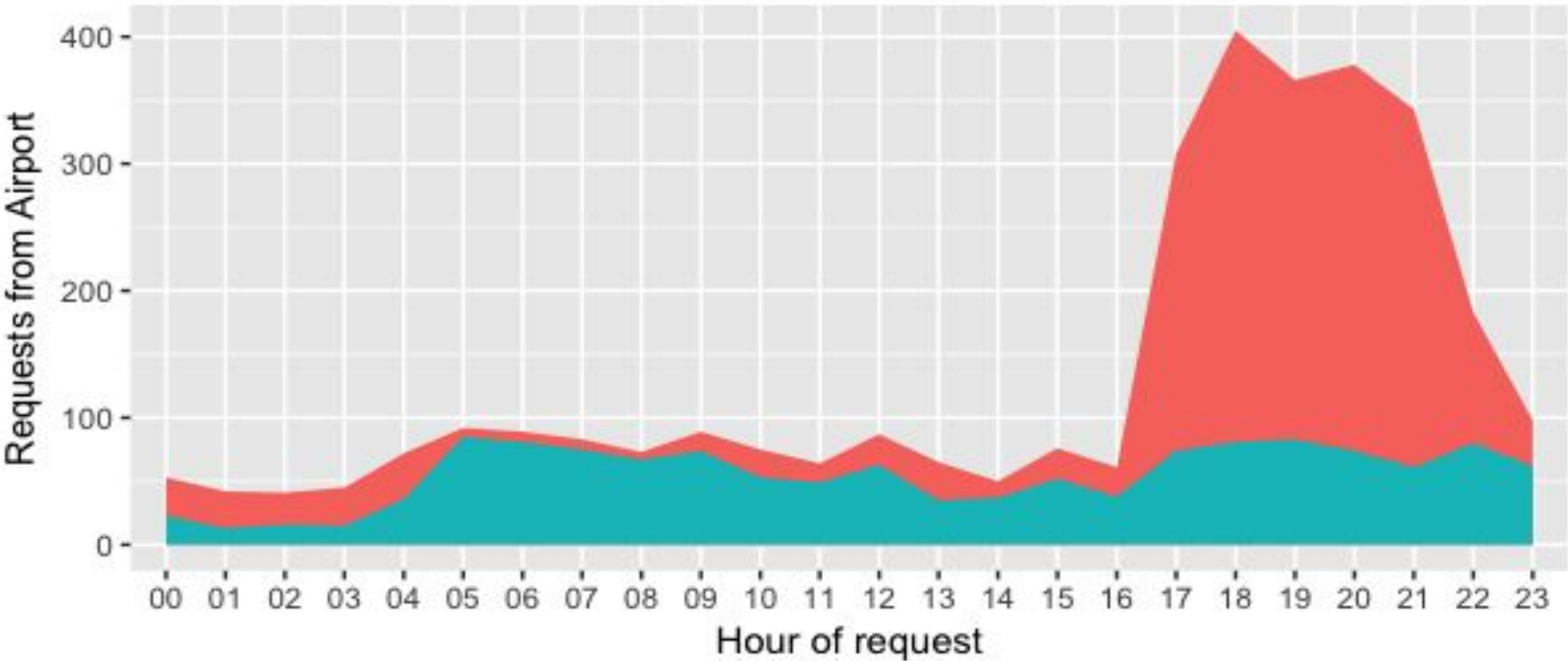
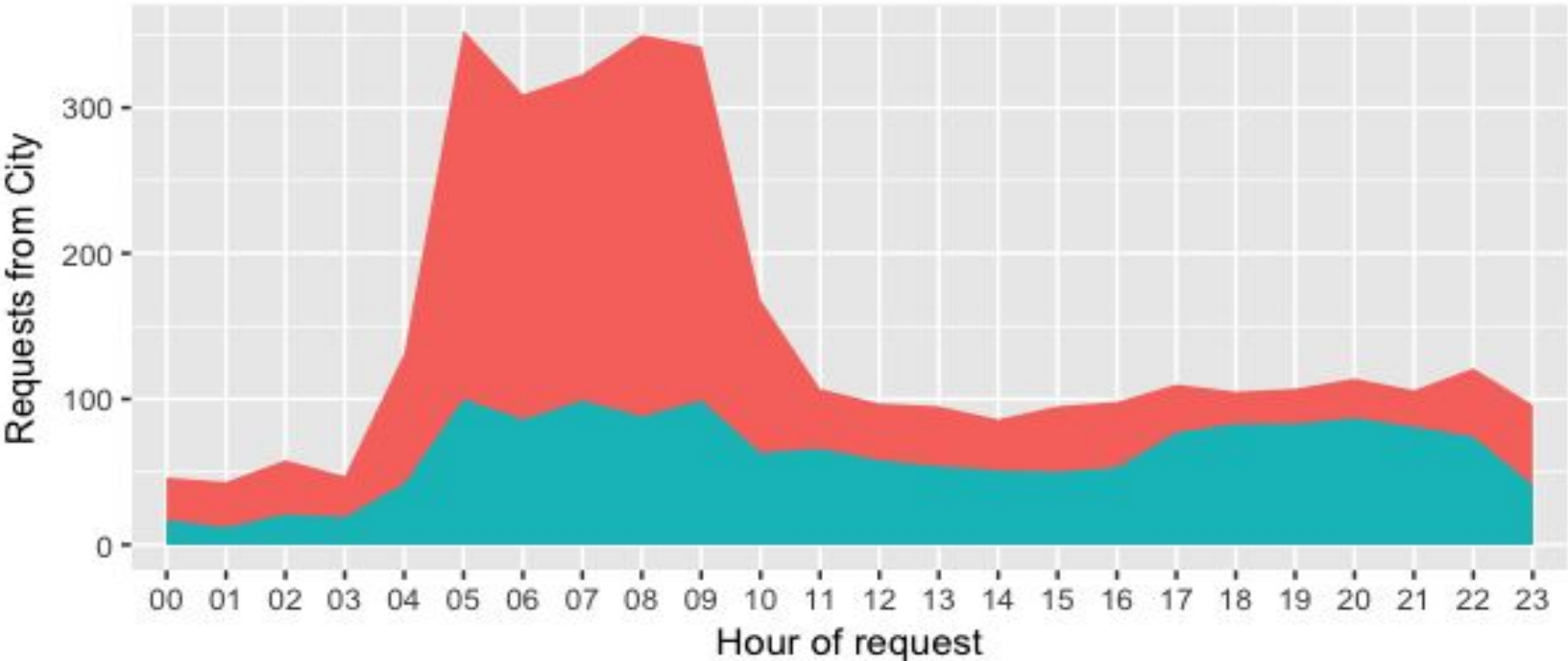
City

Timeslot	Demand	Supply	Gap
Morning	1845	535	71%
Afternoon	578	332	42.5%
Evening	663	485	26.8%
Night	421	152	64%

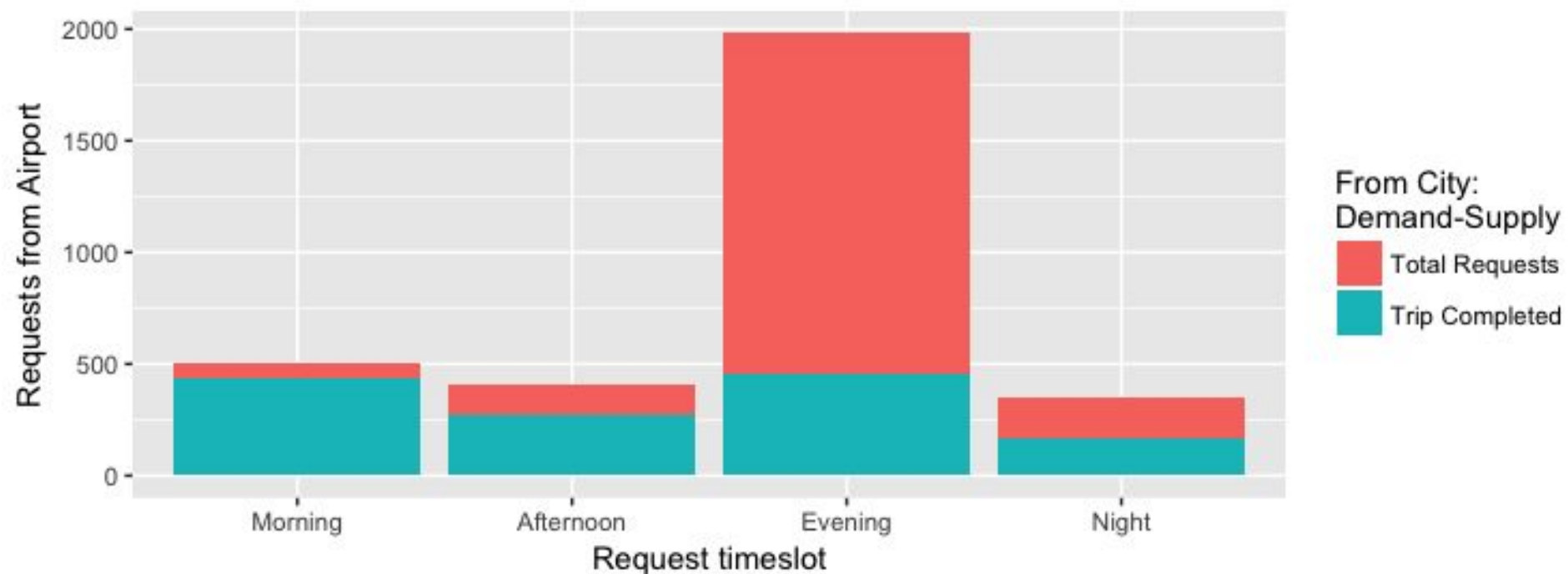
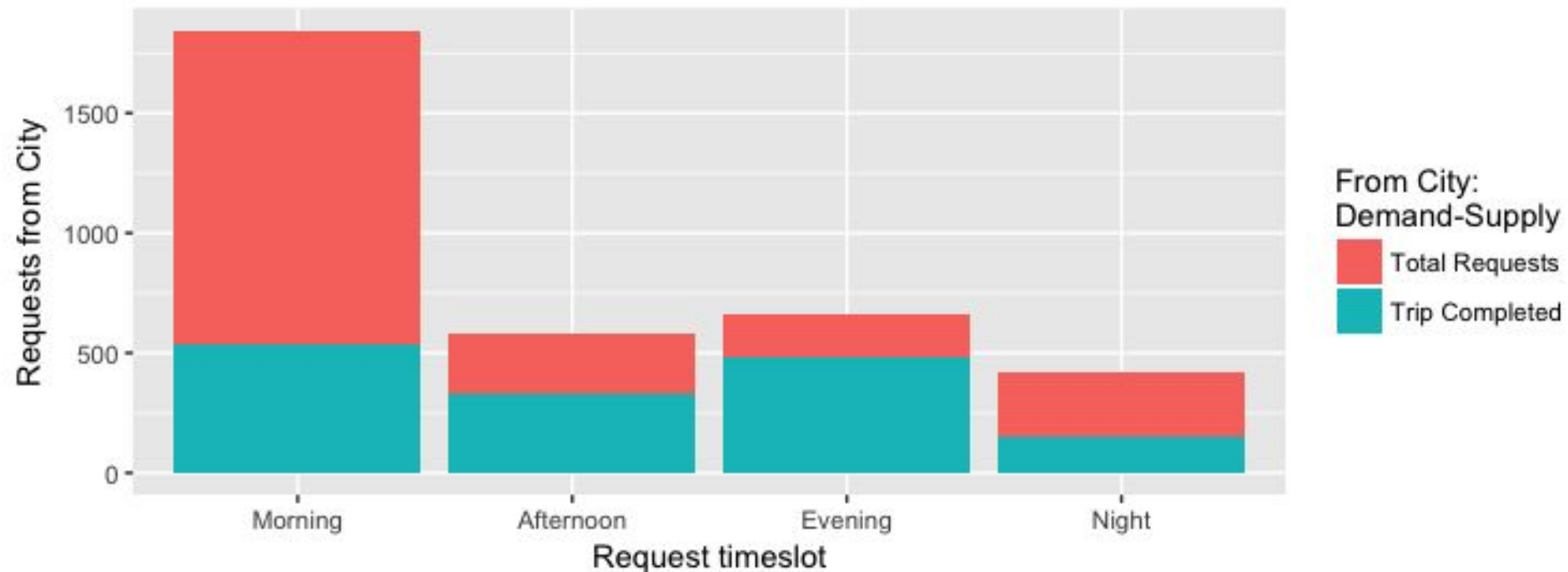
Airport

Timeslot	Demand	Supply	Gap
Morning	501	435	13%
Afternoon	403	274	32%
Evening	1983	453	77%
Night	351	165	53%

Hourly supply
demand gap



Supply
demand gap
based on
time slots



Supply demand gap: Problems and Reasons

- **Cancellations are maximum in morning peak time from City**

(77% gap)

Reasons:

- Once the drivers drop at the airport in the morning, for the next trip they need to wait for next peak time to come from airport to city(Which is in the evening). During the same time they could have probably done 3-4 trips within city limits.

- **No cabs available is maximum during evening peak time from Airport**

(73% gap)

Reasons:

- This peak time comes after the low demand time from city to airport, hence there are not enough drivers at the airport.
- Also the drivers are going back home since it is evening and are not waiting at the airport.

Supply demand gap: Mitigation

- Encourage more drivers to be available during evening hours at airport by providing more incentives for airport pickup in the evening.
- Provide incentives to drivers to not cancel morning trips from city to airport by increasing the incentive to the drivers for requests from city to airport during morning hours.
- Reduce the prices during the afternoon and night so that more people come during that time and the demand is more evenly spread.
- We can also consider discounting on weekends for both type of requests so that people consider travelling during that time to spread out the requests throughout the week.