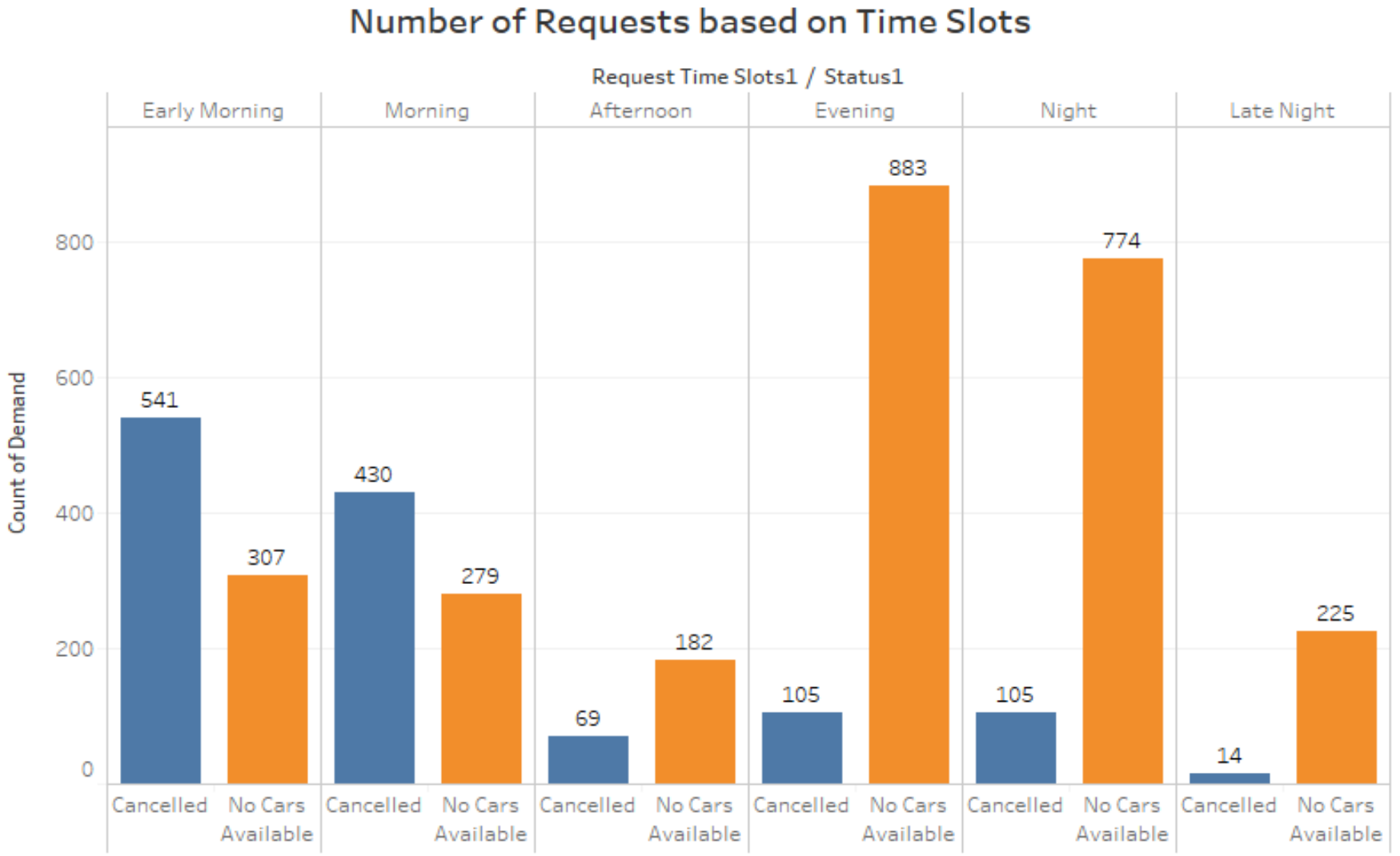
Uber Supply-Demand Gap

Abstract

The aim of analysis is to identify the root cause of the problem (i.e. cancellation and non-availability of cars) and recommend ways to improve the situation.

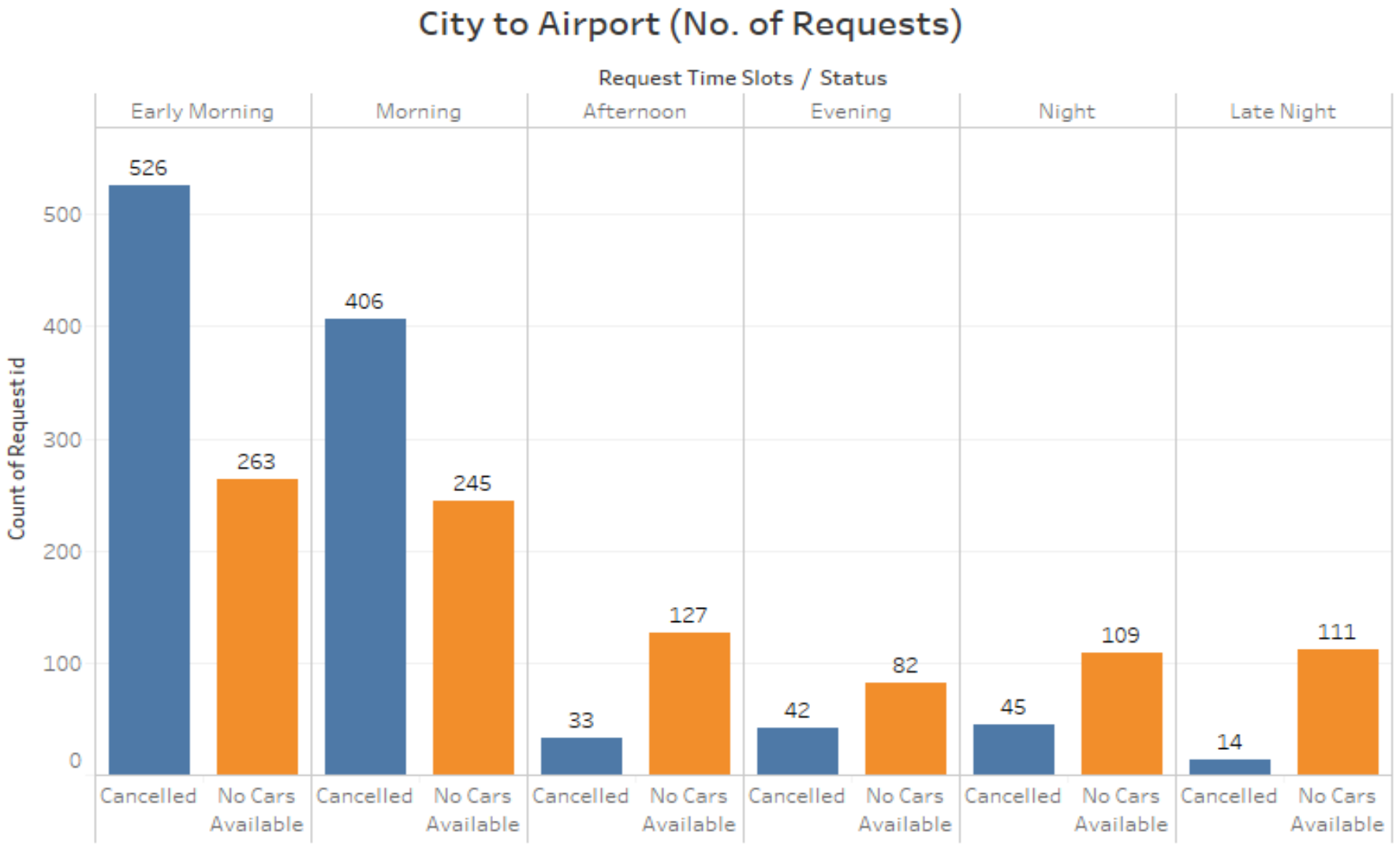
No. of Requests (Total)



Count of Demand for each Status1 broken down by Request Time Slots1. Color shows details about Status1. The view is filtered on Status1, which keeps Cancelled and No Cars Available.

If we take the total requests, we can observe from the graph that many of the drivers cancel the trips in the **early morning** and **morning** times, where as frequency of no cars available is high at **evening** and **night** times.

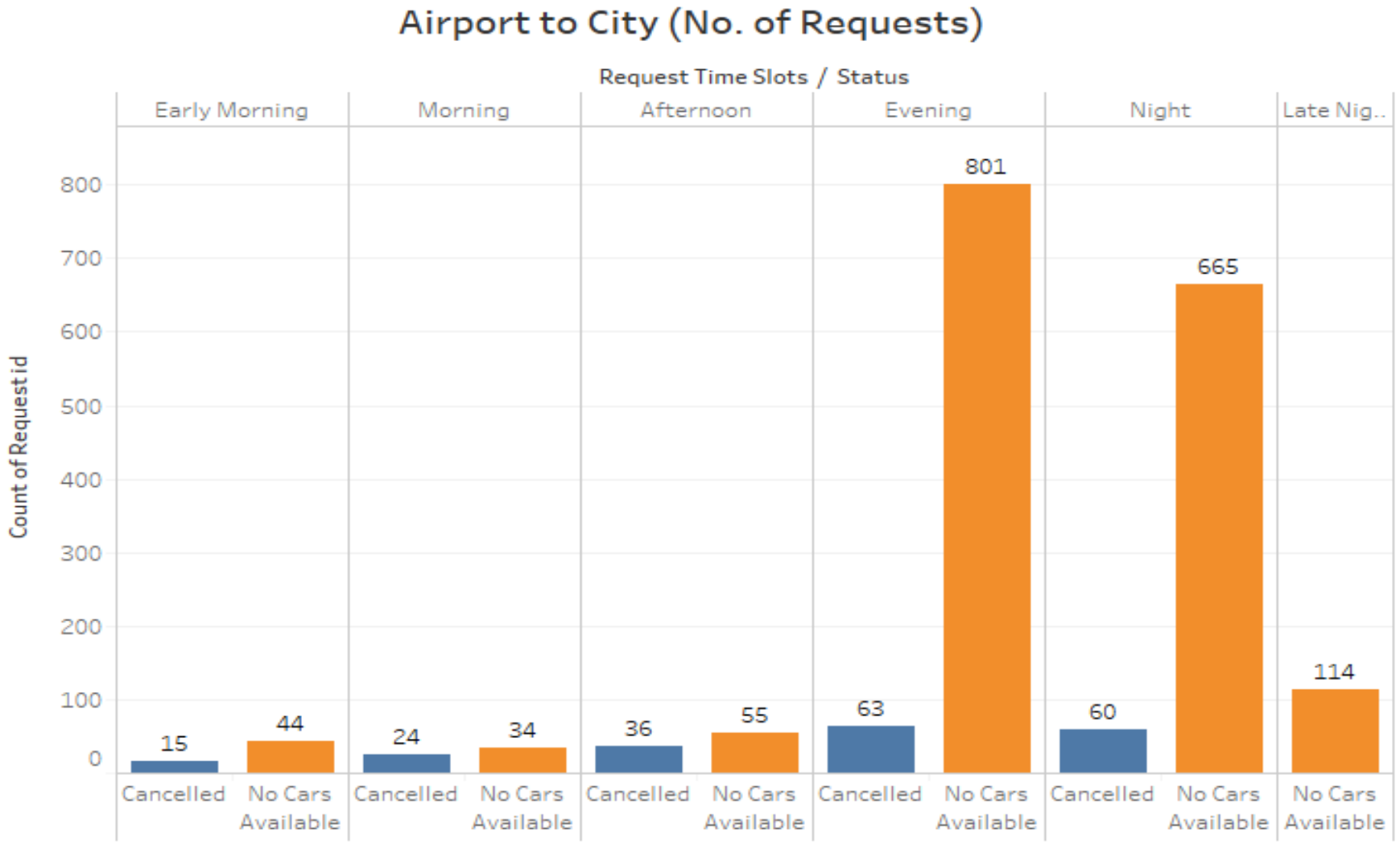
No. of Requests (City to Airport)



Count of Request id for each Status broken down by Request Time Slots. Color shows details about Status. The data is filtered on Pickup point, which keeps City. The view is filtered on Status, which keeps Cancelled and No Cars Available.

From the following graph, we can observe that most of the drivers are not interested to take trips to airport in the **early morning** and **morning** times. Availability of cars is also less in above time slot. From city to airport early morning is very problematic time faced by customers.

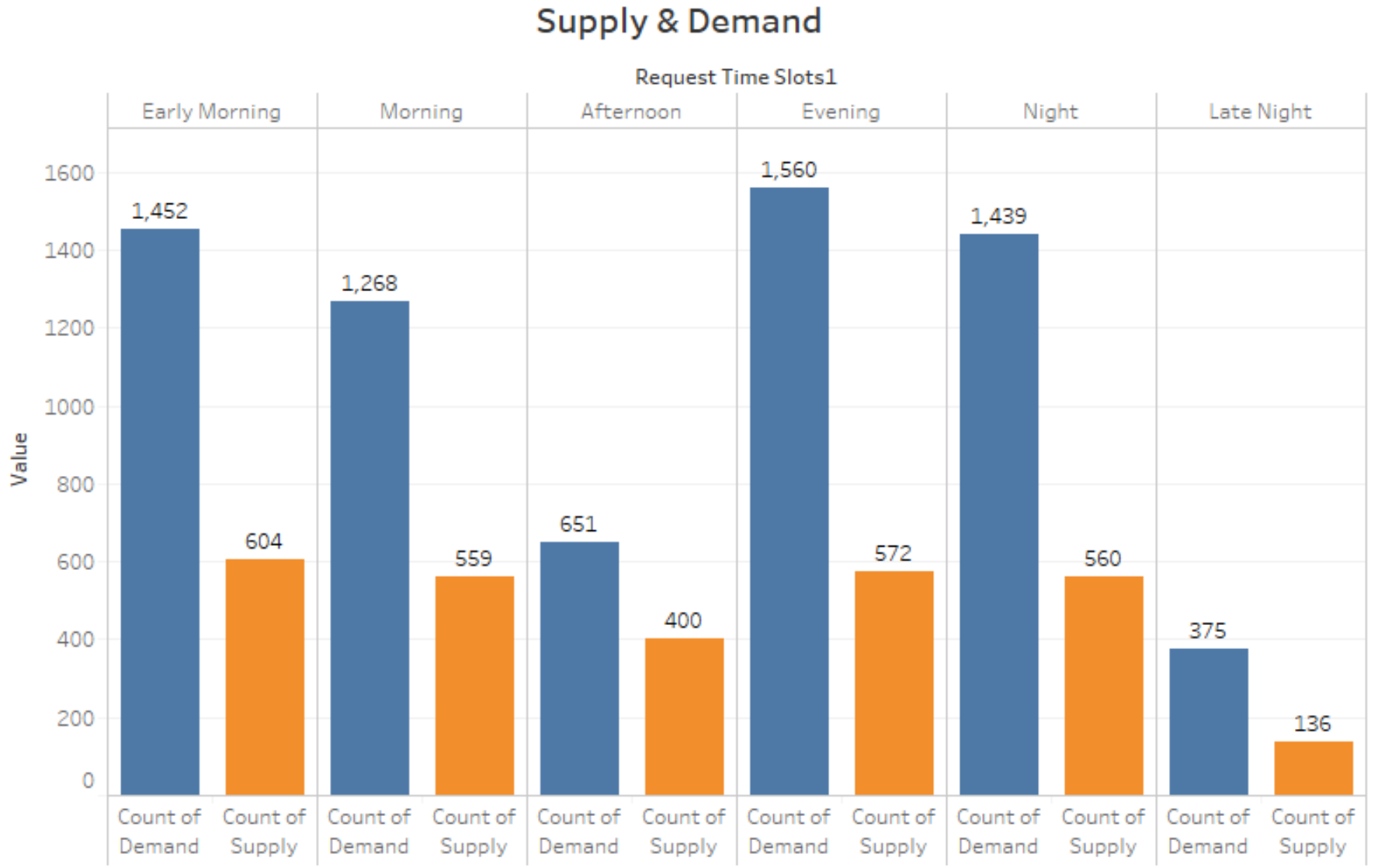
No. of Requests (Airport to City)



Count of Request id for each Status broken down by Request Time Slots. Color shows details about Status. The data is filtered on Pickup point, which keeps Airport. The view is filtered on Status, which keeps Cancelled and No Cars Available.

We can observe from the graph that customers are not able to get the cabs from Airport to city in the **evening** and **night** times. We can see a very huge frequency of people not getting the cars at evening and night times. So evening & night is the very problematic slot for customers who wants to come from airport to city.

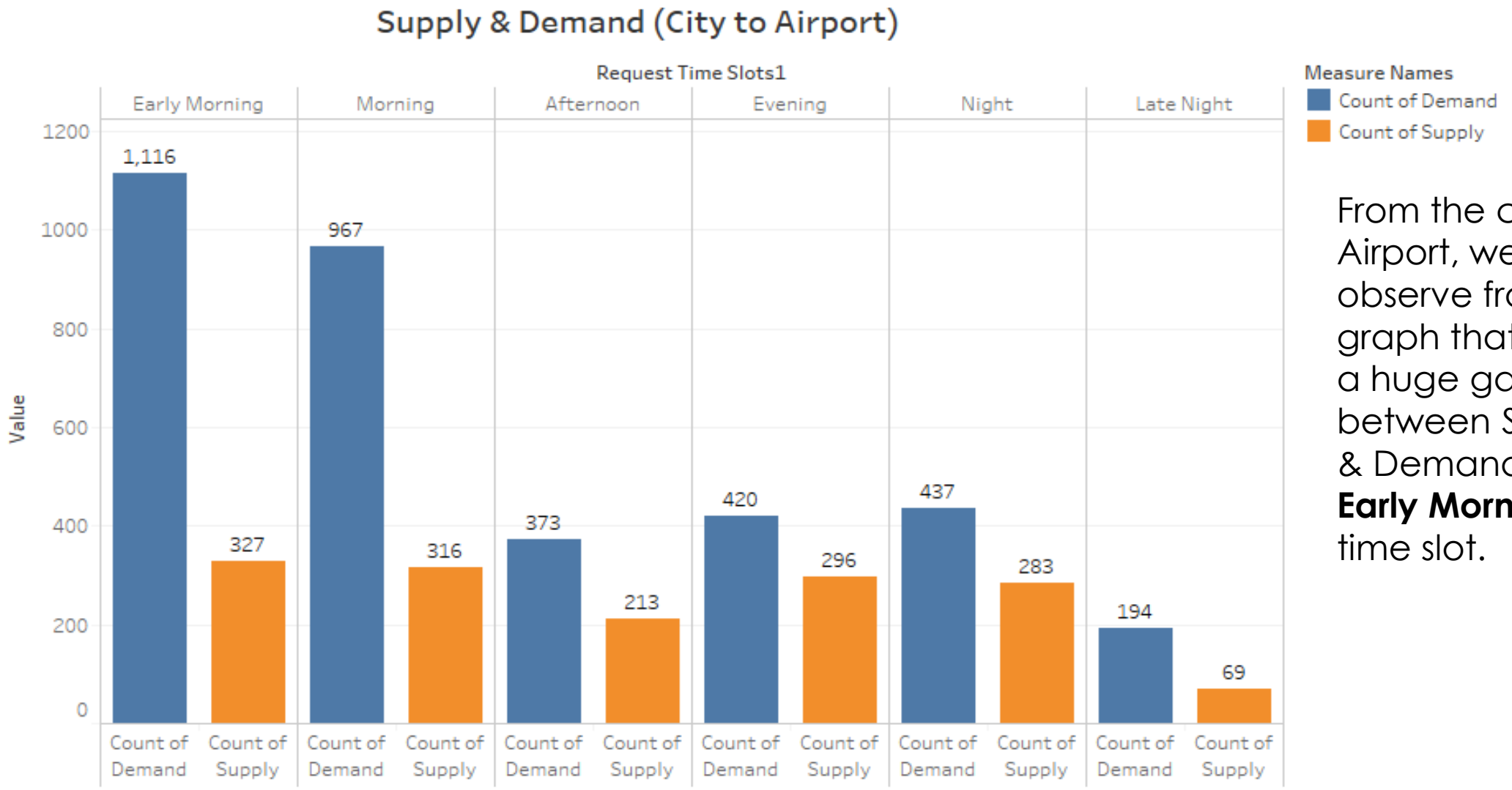
Supply & Demand



Count of Demand and count of Supply for each Request Time Slots1. Color shows details about count of Demand and count of Supply.

As we can observe from the graph, we can see that there is a huge difference between Demand & Supply in the **Evening** time slot.

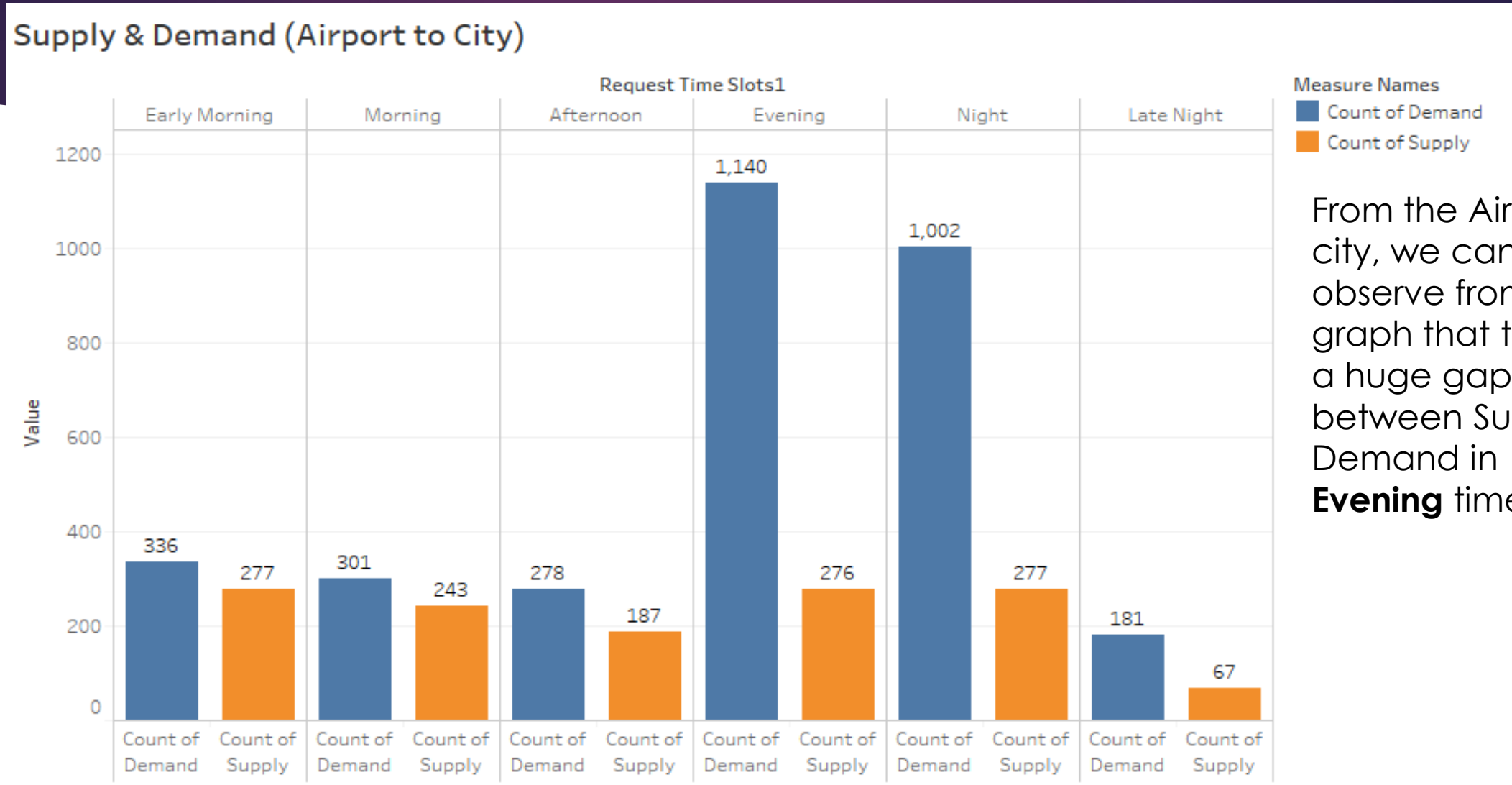
Supply & Demand (City to Airport)



Count of Demand and count of Supply for each Request Time Slots1. Color shows details about count of Demand and count of Supply. The data is filtered on Pickup point1, which keeps City.

From the city to Airport, we can observe from the graph that there is a huge gap between Supply & Demand in **Early Morning** time slot.

Supply & Demand (Airport to City)



Count of Demand and count of Supply for each Request Time Slots1. Color shows details about count of Demand and count of Supply. The data is filtered on Pickup point1, which keeps Airport.

From the Airport to city, we can observe from the graph that there is a huge gap between Supply & Demand in **Evening** time slot.

Reason for issue in Supply & Demand Gap

- From city to Airport we can find from the previous graphs that there is more gap b/w supply & demand in the early morning & morning. The drivers are refusing to take trip to airport because once they reach airport they need to wait for a minimum of 2 to 3 hours on an average to get another trip. So if they are in the city for those 3 hours they can make more money.
- From Airport to city we can see that there is more gap b/w supply & demand in the evening and night slots. It is because the drivers plan to come back to city before evening as some times they don't have flights landing till mid night and they had to be idle till then.

Conclusion & Ways to resolve the Supply & Demand Gap

- Firstly the fare can be increased at the times where there is more Supply & Demand gap so that the drivers don't lose and they will accept the rides.
- Secondly there can be dynamic pricing within the each time slots which can help in the reduction of supply and demand gap.
- Thirdly they can fix the minimum salary for the drivers those who are driving to airport so that they are assured they will get minimum salary even if there are not enough of trips. This will surely decrease the Supply and Demand gap.