

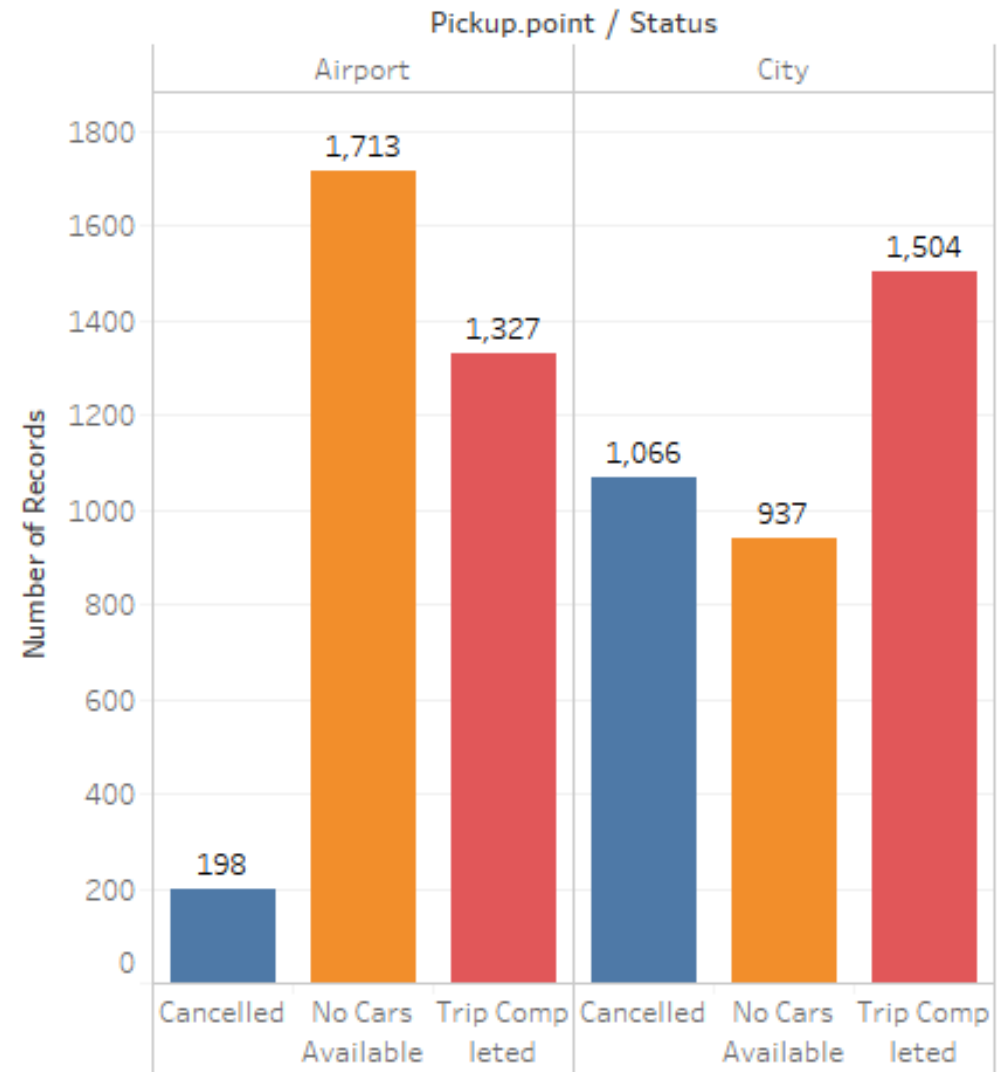
Uber Cases tudy

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Analysis of Plots - Airport v/s City

- Airport pickups are showing a large “No cars available” status
- Secondly major portion City pick ups are getting cancelled
- City to airport are getting cancelled and is almost 4.7 times compared to airport pickups.
- Let us analyze this further to find out during what time this is happening.

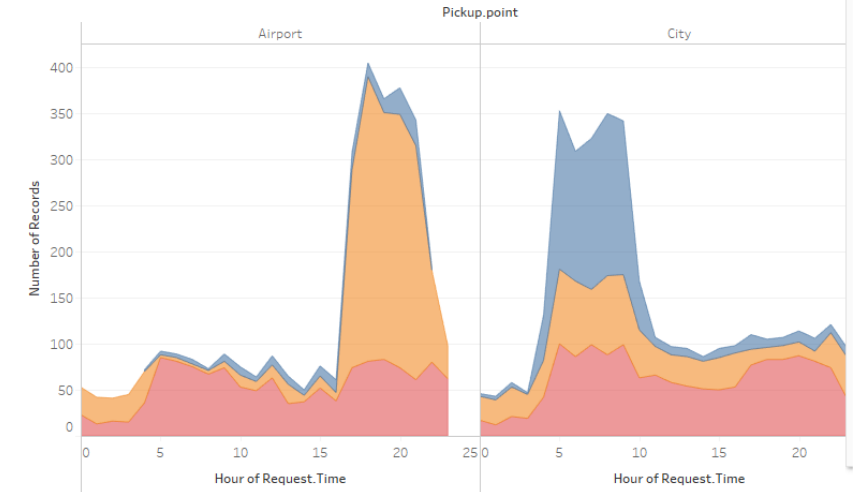
<Status vs Number of Records>



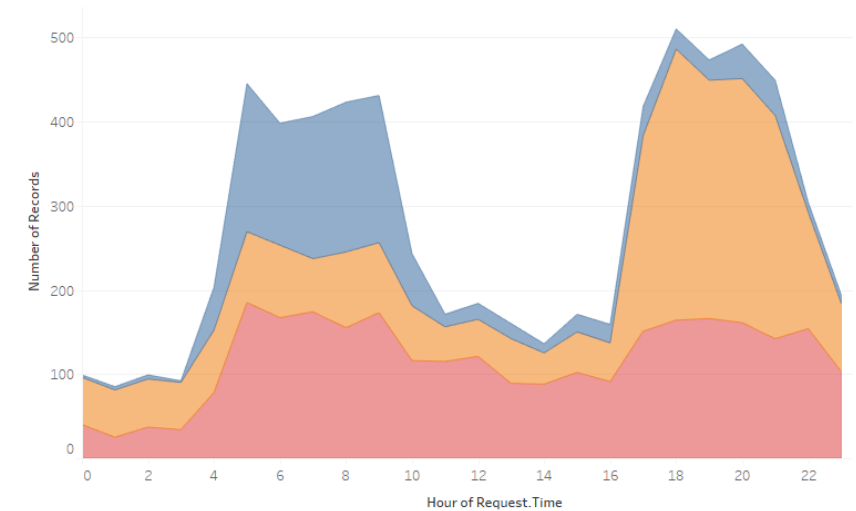
Hourly Analysis

- This figure shows along the time axis , the number of bookings and cancellations done
- It is evident that during **15 to 24 hours** more Airport pickups are showing **"No Cars Available"** and during 4 to 20 city pickups are getting **cancelled**.
- To make this much clear, I have divided time axis into time slots
- 01 to 04 - Late Nights
- 04 to 08 – Early Mornings
- 08 to 12 – Mornings
- 12 to 15 – Afternoon
- 15 to 20 – Evenings
- 20 to 24 - Nights

<Status vs No of cars Per hour>



<Status vs No of cars Per hour>



Overall Time slot analysis

Totals for	Early Mornings	Morning	AfterNoon	Evening	Night	Late Night
Completed Trips	604	559	400	572	560	136
No Cars Available	307	279	182	882	774	225
Cancelled Trips	541	430	69	105	105	14

Airport Analysis

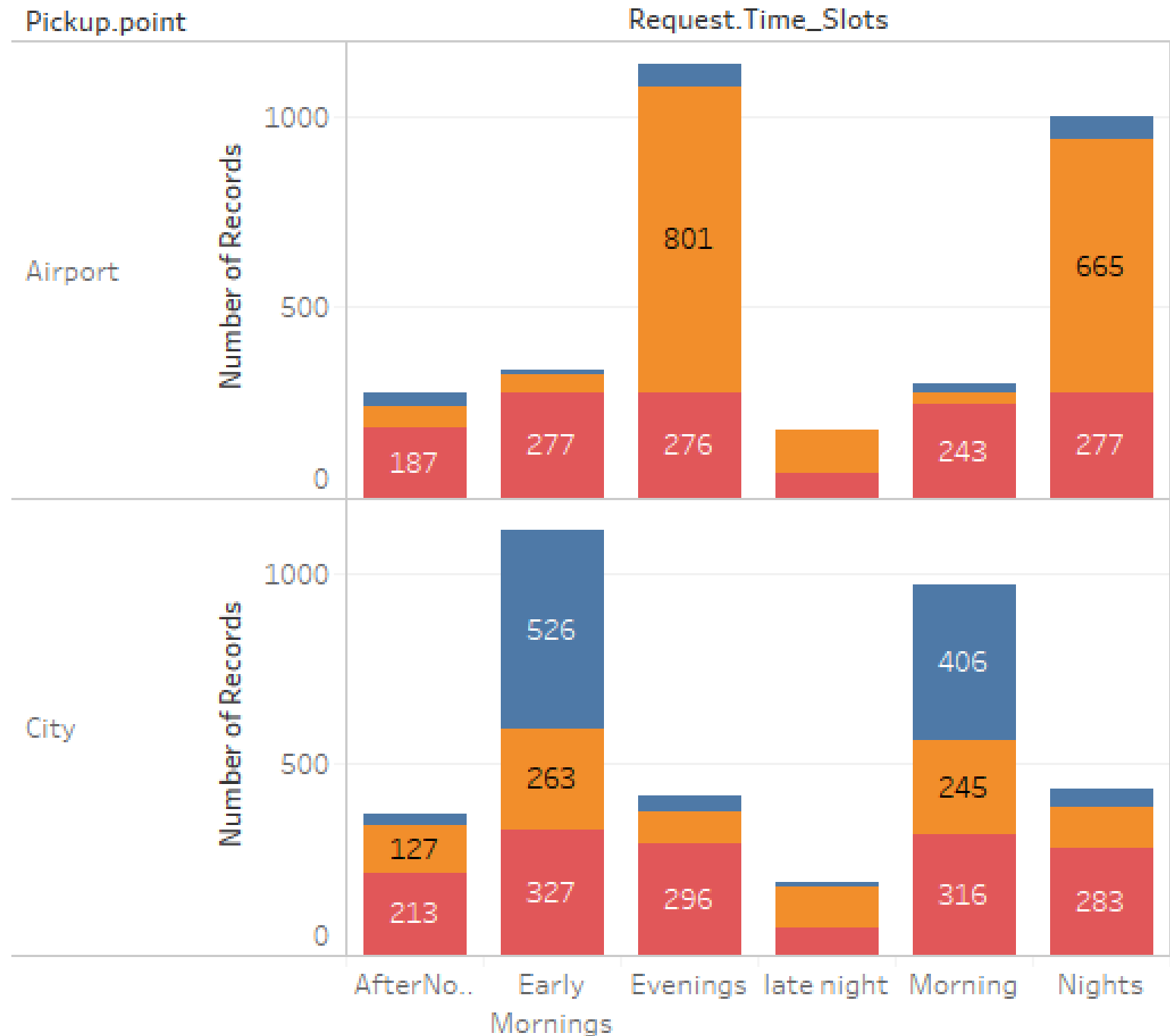
Totals	Early Morning	Morning	Afternoon	Evening	Night	Late Night
Completed trips	277	243	187	276	277	67
No Cars Available	44	34	55	801	665	114
Cancelled Trips	15	24	36	63	60	0

City Analysis

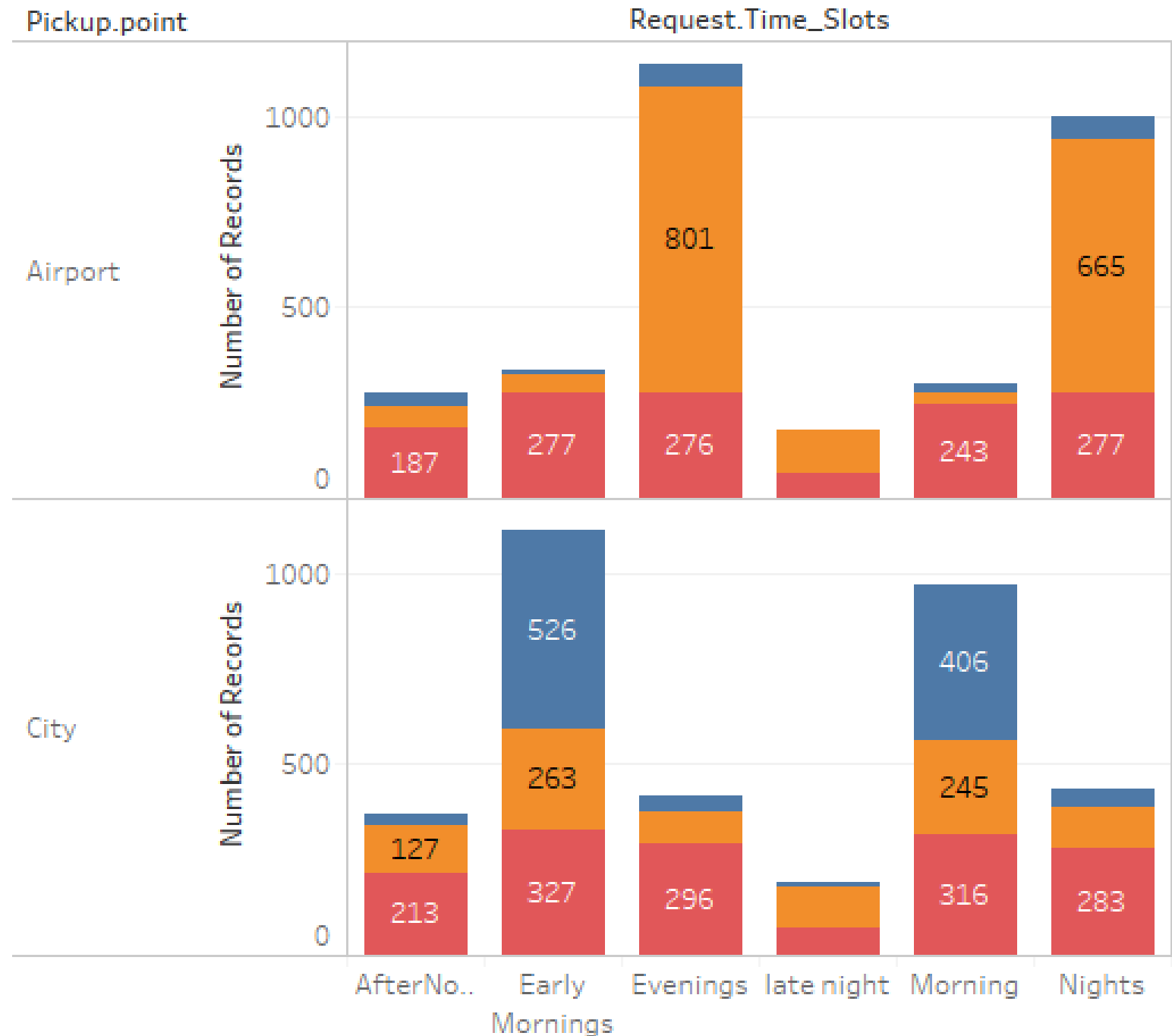
Totals	Early Morning	Morning	AfterNoon	Evening	Night	LateNight
Completed trips	327	316	213	296	283	69
No Cars Available	263	245	127	82	109	111
Cancelled Trips	526	406	33	42	14	45

Time Slot Analysis

- This picture drawn by keeping time slot on X-Axis and Number of requests on Y-Axis
- Red: Trip Complete
- Orange: No Cars
- Blue: Cancelled Bookings
- Now this depicts that most number of cancellations happening during early mornings and mornings. Means 4 AM to 10 AM roughly.
- Let us analyze further to find some more insights

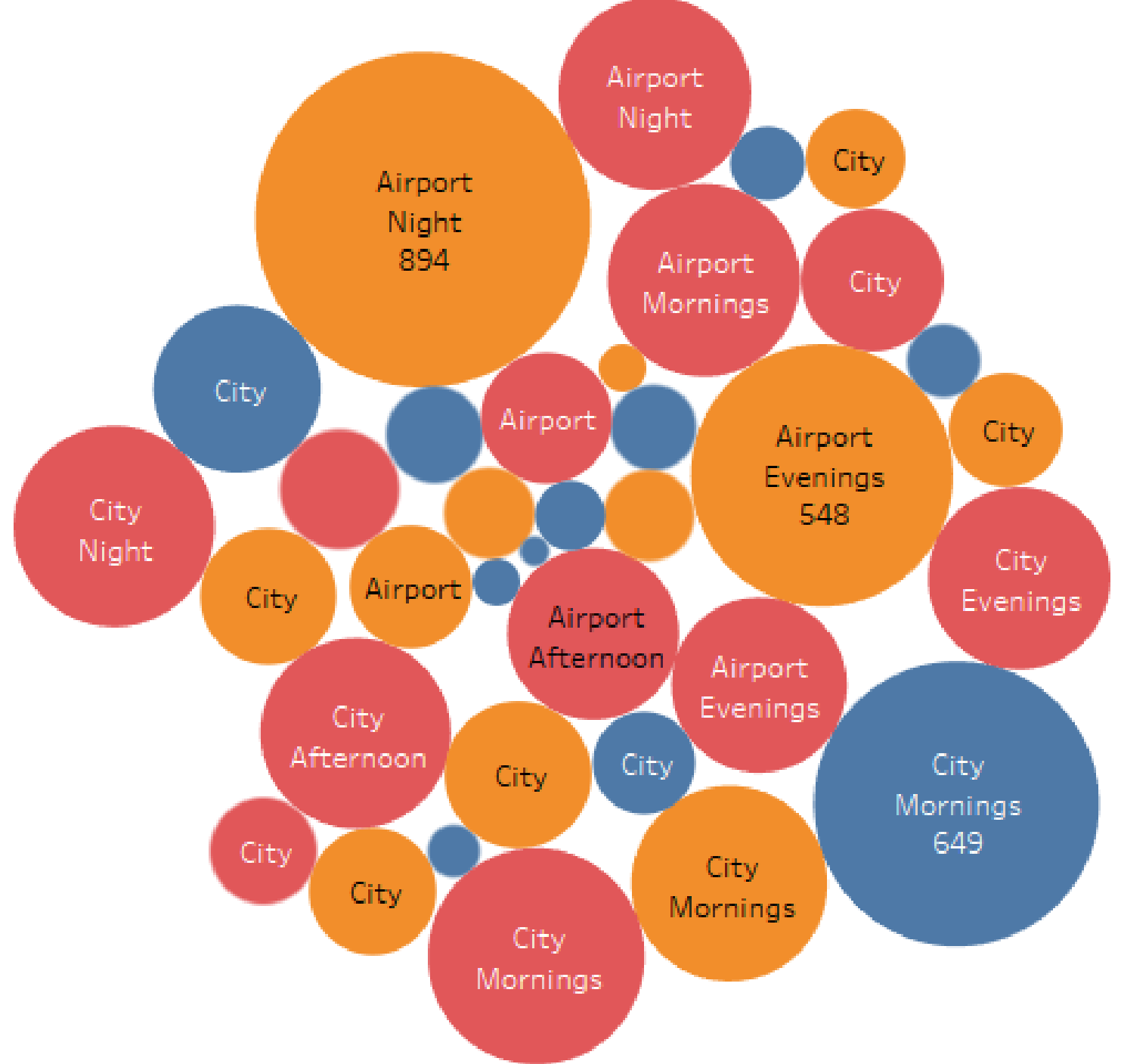


- This is revised time slots and checked with the request locations.
- Graph clearly shows that major portion showing cars not available during evenings and nights effectively time between 16 to 23.
- This is Demand –Supply Gap
- Let us view the whole scenario in a single diagram
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Hawk View

- **AIRPORTS:** no cars available during evenings and nights
- **CITY:** More cancellations happening during mornings
- Average travel time 52.41 minutes



Cause analysis and Improvement suggestions

- **Reasons for Demand supply gap :**
- This is happening during evenings and nights, during which all schools , colleges and office closing time.
- So drivers may get many short trips which gives them more profit. Hence no one going towards airport, which is creating a demand supply gap.
- The uber drivers may be late in the city and the long waits by prospective passengers and second time or more passengers may result in cancellations
- There could be traffic and rush hours during the day time and lack of drivers for night shifts at night resulting in short supply at night
- Long wait times could result in more cancellations in the morning
- If driver pickups the ride in the mornings and goes to airport, there may not be any pick ups, which consisted long wait times for drivers.

- **Proposed Solutions:**

- Divert the cars to airports during late nights by giving more offers to driver during evenings for air port pickups may reduce demand supply gap.
- Planning and Scheduling should be resorted to with the help or operations research and critical path for the rides from the city to the Airport
- Monthly Weekly and hourly stats for cancellations should be tracked and these callers should be given less priority
- Ensure more drivers are available at night and realistic wait times are given to city and airport customers to avoid cancellations in cities and longer wait times and demand at the airport