
Uber Analysis
Demand-Supply Gap Report
Comprehensive insights into ride request patterns and strategic recommendations for optimization

Contents

60%

Failed Requests

Of all ride requests result in negative customer experience through cancellations or unavailability

Problem Statement

Core Issue

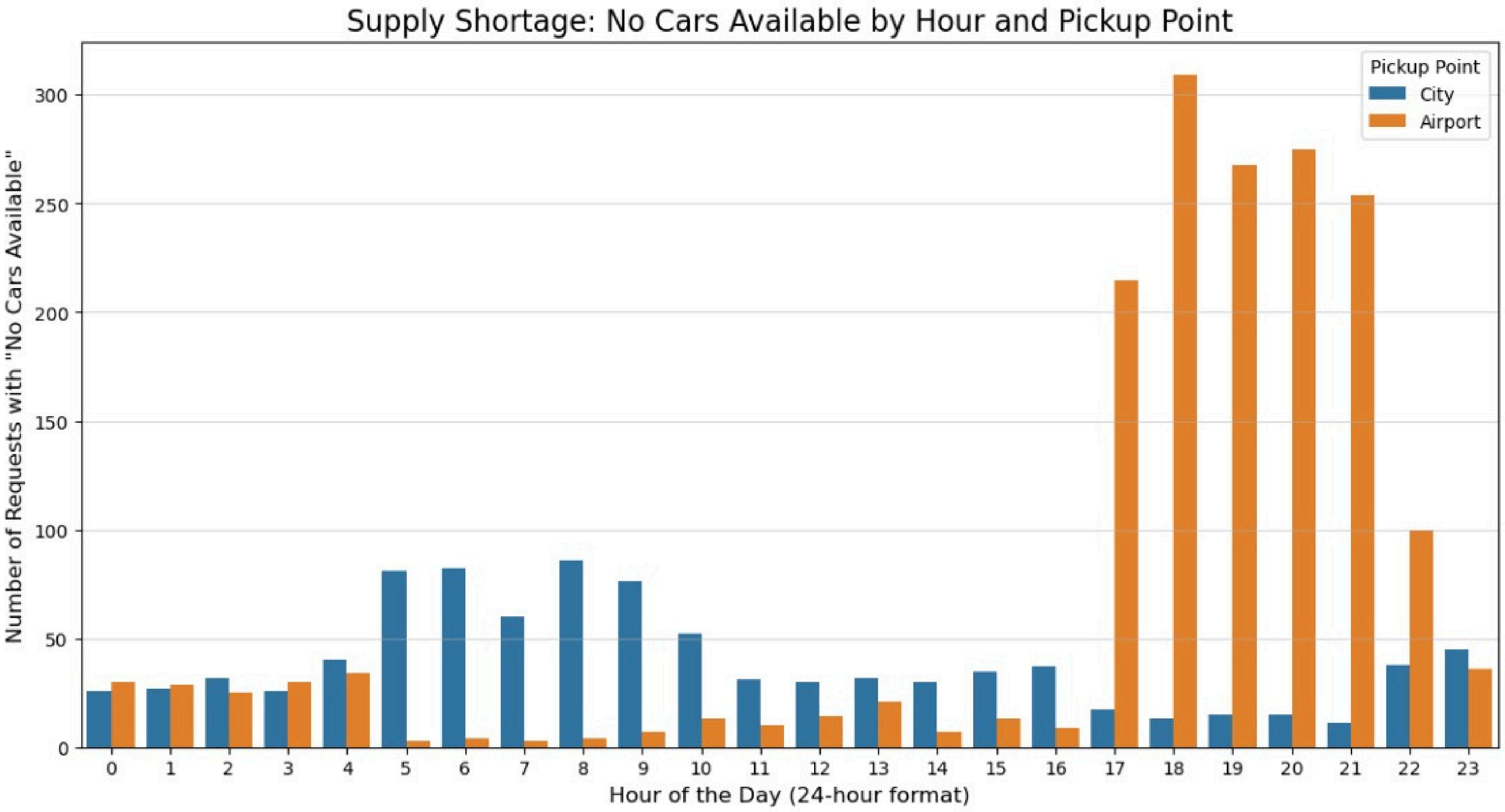
High volume of unfulfilled ride requests between city and airport affecting service reliability and revenue

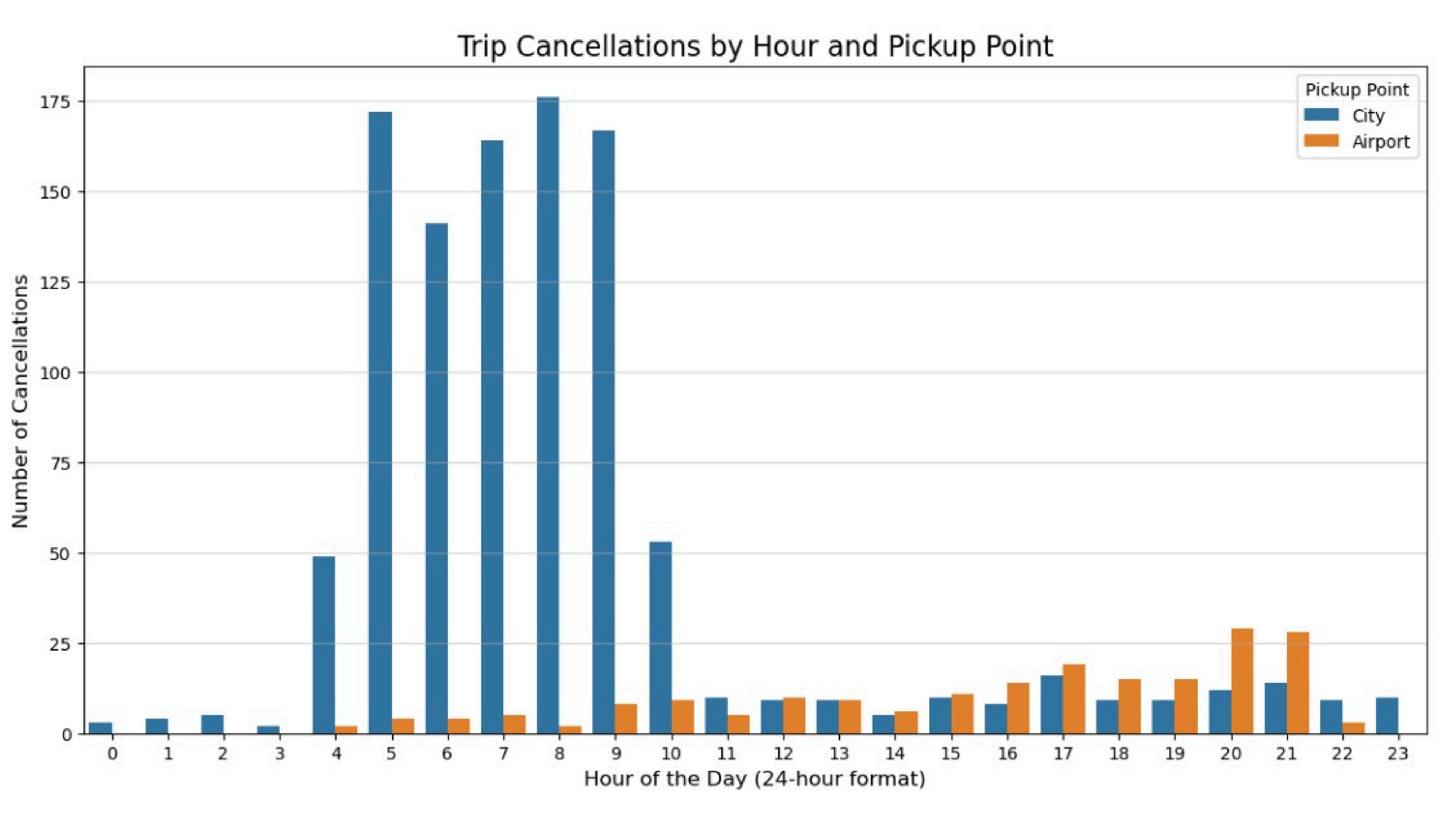
Key Questions

Identify peak demand-supply gap periods, location impact patterns, and underlying causes for optimization

Business Impact

Poor customer experience leading to potential revenue loss and competitive disadvantage in market

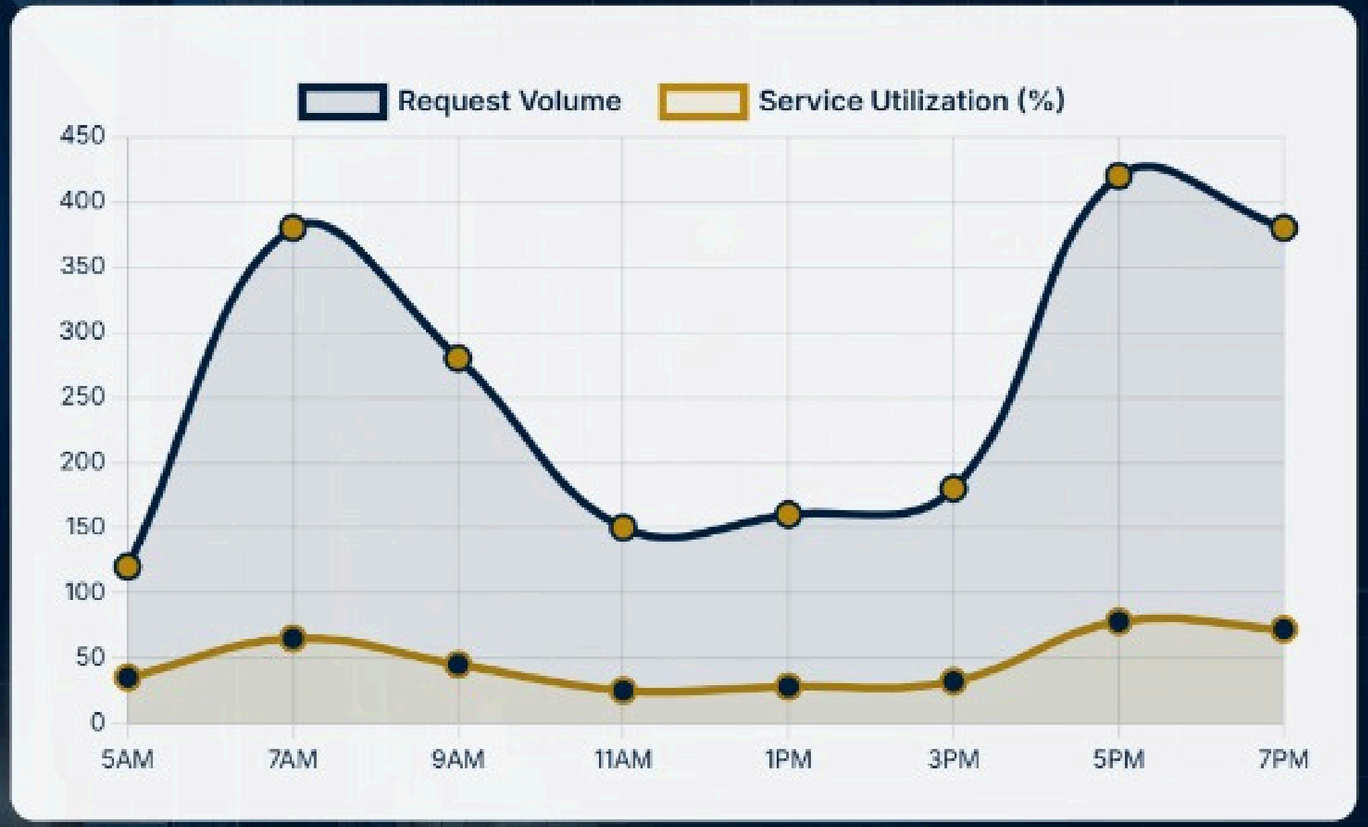

Supply Shortage: No Cars Available by Hour and Pickup Point
Pickup Point
City
Airport
Number of Requests with "No Cars Available"
0
50
100
150
200
250
300
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Hour of the Day (24-hour format)

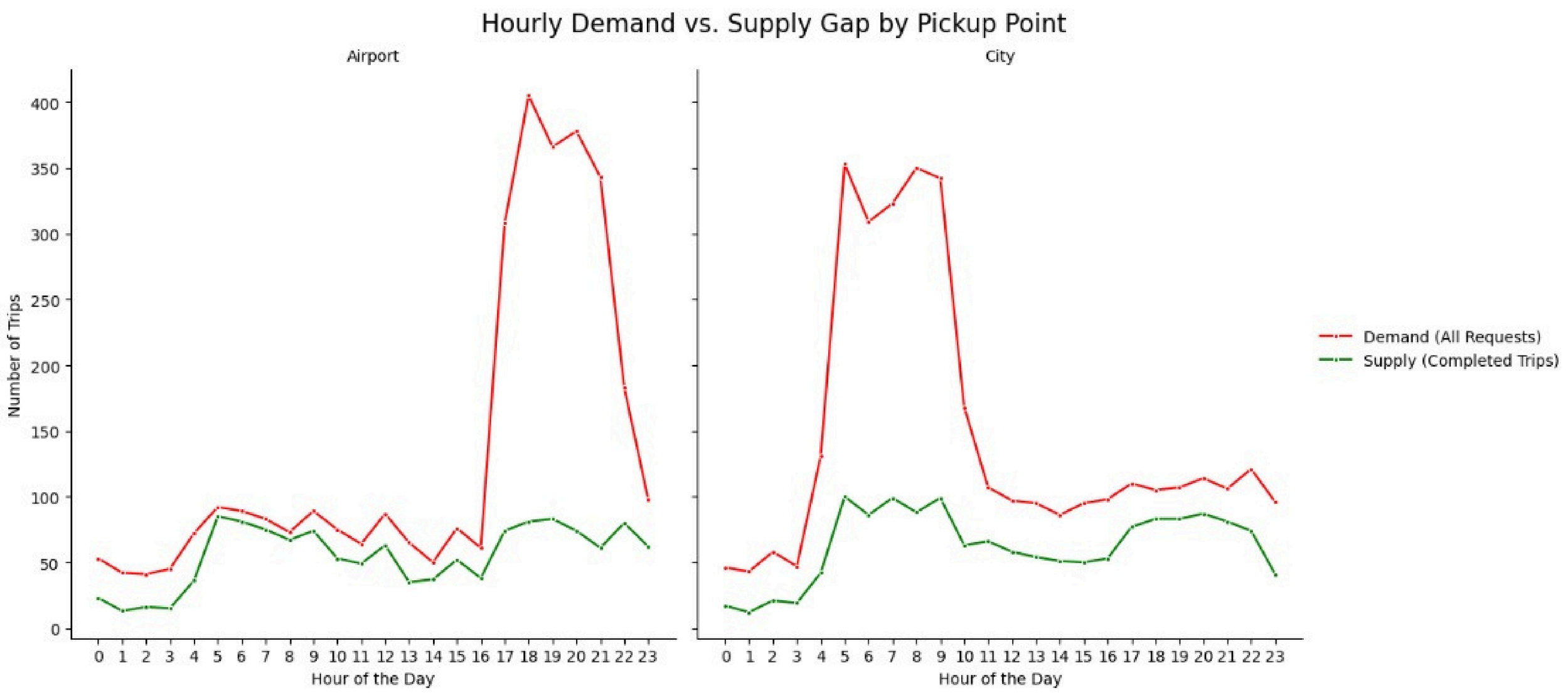

Trip Cancellations by Hour and Pickup Point
Pickup Point
City
Airport
Number of Cancellations
0
25
50
75
100
125
150
175
Hour of the Day (24-hour format)
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23

Demand Patterns

Hourly Request Distribution Analysis

The analysis reveals a clear bimodal distribution with two distinct peak periods. Morning rush shows sharp spike between 5-9 AM, while evening rush demonstrates prolonged demand from 5-10 PM. These patterns directly correlate with typical commuting and travel behaviors.




Hourly Demand vs. Supply Gap by Pickup Point
Airport
City
Number of Trips
0
50
100
150
200
250
300
350
400
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
Hour of the Day
Demand (All Requests)
Supply (Completed Trips)

Gap 1: Morning Cancellations

Problem	Solution
High cancellation rates from city to airport	Implement morning airport bonus incentives
Drivers unwilling to take unprofitable trips	Show potential follow-up fares to drivers
Empty return journeys reduce driver earnings	Impose stricter cancellation penalties during peak

VS

Gap 2: Evening Car Shortage

Problem	Solution
No cars available at airport during evening	Implement surge pricing specifically at airport
High flight arrivals create demand surge	Schedule fleet positioning before evening rush
Insufficient drivers positioned at airport terminals	Offer paid wait times for airport queue

VS

Gap Summary

Time Period	Pickup Point	Problem Type	Status	Root Cause
Morning 5-9AM	City	High Supply Low Intent	Cancelled	**Driver Profitability**
Evening 5-10PM	Airport	High Demand Low Supply	No Cars Available	**Supply Shortage**

Critical Period Analysis Overview

Two distinct problems require targeted solutions: Morning period shows high supply with low driver intent due to profitability concerns, while evening period demonstrates genuine supply shortage during peak passenger demand at airport locations requiring strategic fleet positioning.

Strategic Recommendations for Implementation

Morning Solutions

- Morning Airport Bonus incentives
- Show potential follow-up fares
- Reduce driver uncertainty
- Implement stricter cancellation penalties

Evening Solutions

- Surge pricing at airport
- Schedule fleet positioning
- Paid wait times
- Notify drivers before rush

Implementation Plan

- Pilot program testing
- Performance monitoring
- Driver feedback integration
- Revenue impact assessment