

NEW YORK TAXI TRIP

ANALYSIS AND QUESTIONS

Answering questions from every perspective

2025 / 05 Yui Hanamura

source:

https://www.kaggle.com/microize/newyork-yellow-taxi-trip-data-2020-2019?select=yellow_tripdata_2020-05.csv

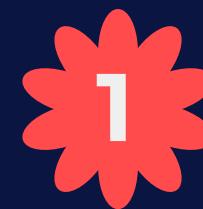


DIFFERENT PERSPECTIVES, DIFFERENT QUESTIONS

This presentation explain about analysis of Power BI file. Vendor Perspective: 2 questions.
Employee Perspective (taxi driver): 2 questions. In addition, my answer for unique question.

- 1 VEHICLE TYPES
- 2 THE MOST STARTING TIMES
- 3 INCOME PER WEEKDAY
- 4 HIGHEST TIP
- 5 TRIP DISTANCE
- 6 DISTANCE BY TIME





VENDOR

WHAT IS THE DISTRIBUTION OF VEHICLE TYPES BY DAY OF THE WEEK?

Most of the time, the cars are **private** and can accommodate up to four people. By day of the week, Tuesdays and Fridays are the most popular.

Number of Passengers	Vehicle Type
1 - 4	Private
5 - 6	Medium Car
7+	Big Car

NumberOfRequest by PickUp_DayName and Vehicle_Types

Vehicle_Types ● Big Car ● Medium Car ● Private

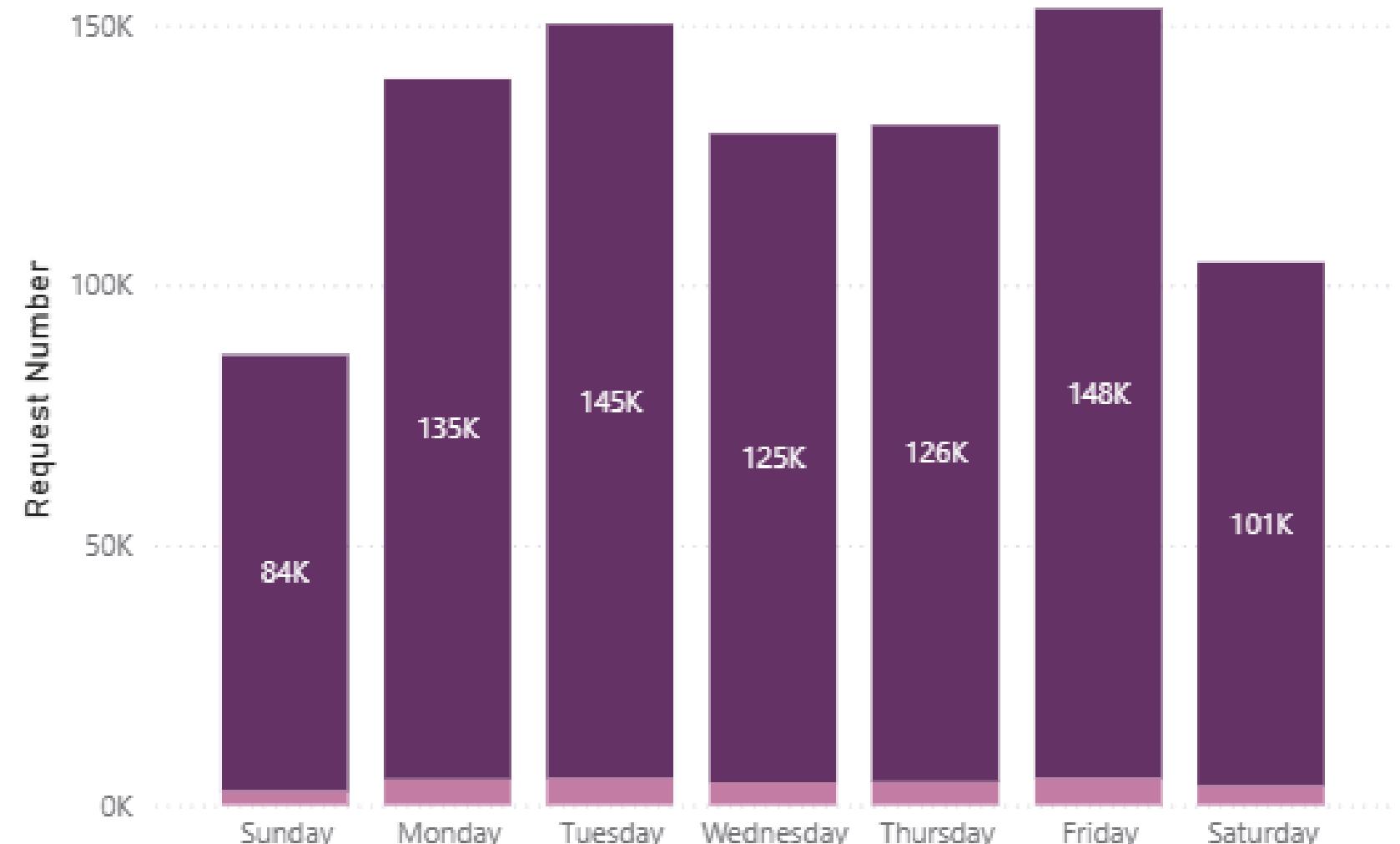


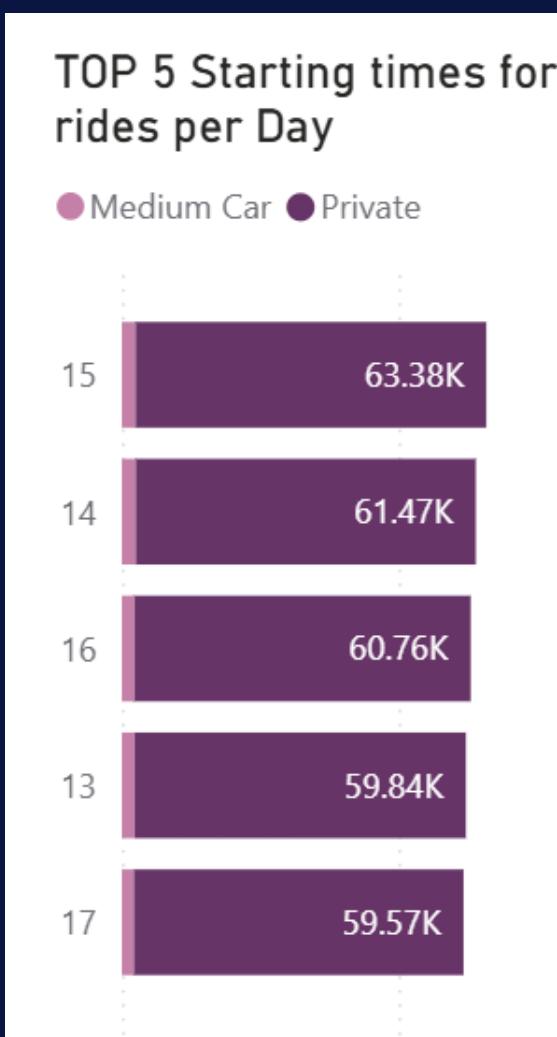
IMAGE From :
PowerBI File > Report view > Vendor tab





VENDOR

WHICH FIVE HOURS A DAY HAVE THE MOST STARTING TIMES FOR RIDES?



Overall, the peak time is during the day. Looking at the size of the vehicle, the peak time for large groups is slightly earlier than for small groups. BigCar is irregular.

Top 5 car types for starting ride times

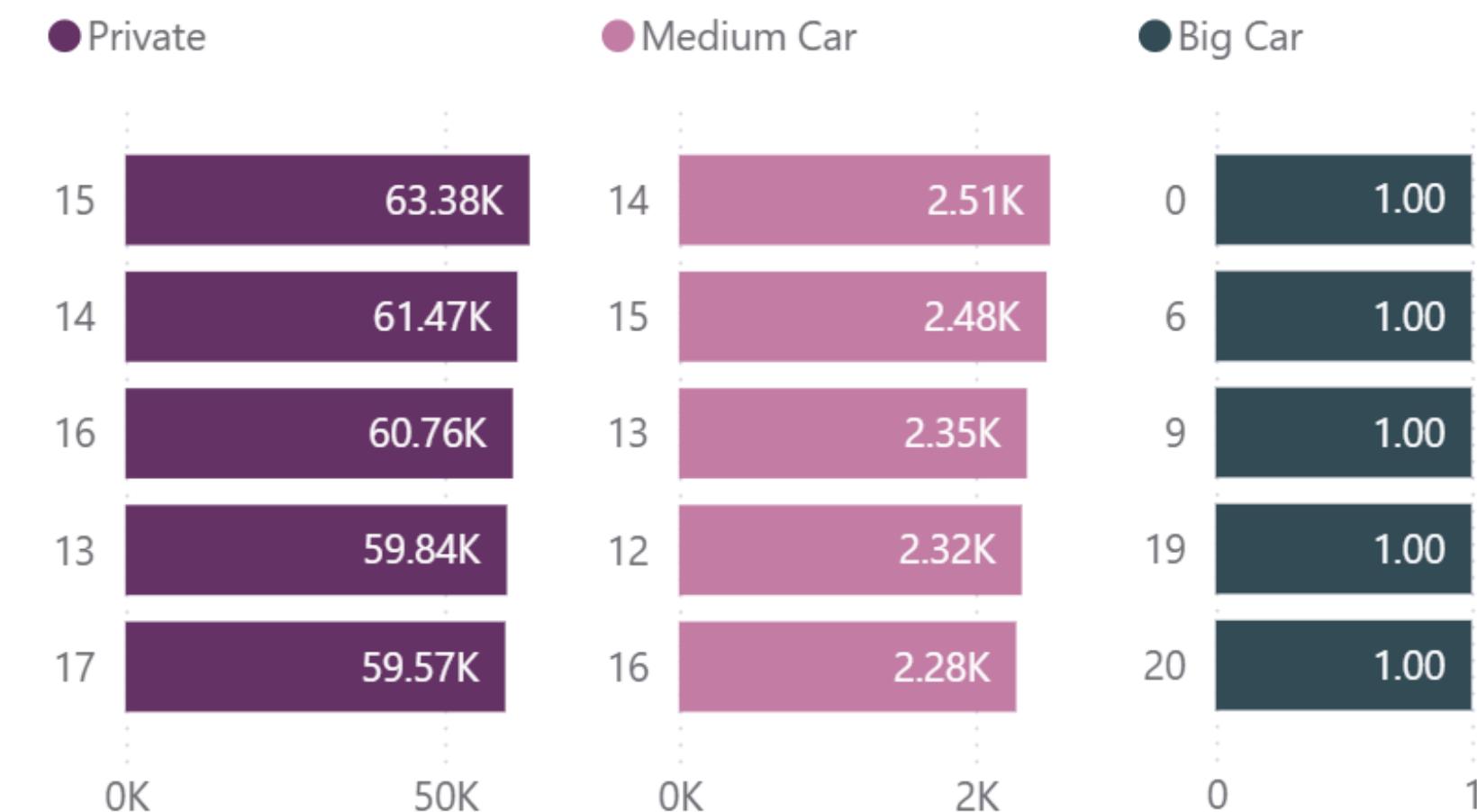


IMAGE From :
PowerBI File > Report view > Vendor tab





3 EMPLOYEE (TAXI DRIVER)

WHAT ARE THE TWO DAYS A WEEK WHEN THE AVERAGE INCOME PER TRIP IS THE HIGHEST?

The two days with the highest average sales per business ride are Sunday and Monday.

Looking at vehicle types, private type with small numbers of passengers tend to have higher sales.

TOP 2 Amount Average by PickUp

● Big Car ● Medium Car ● Private

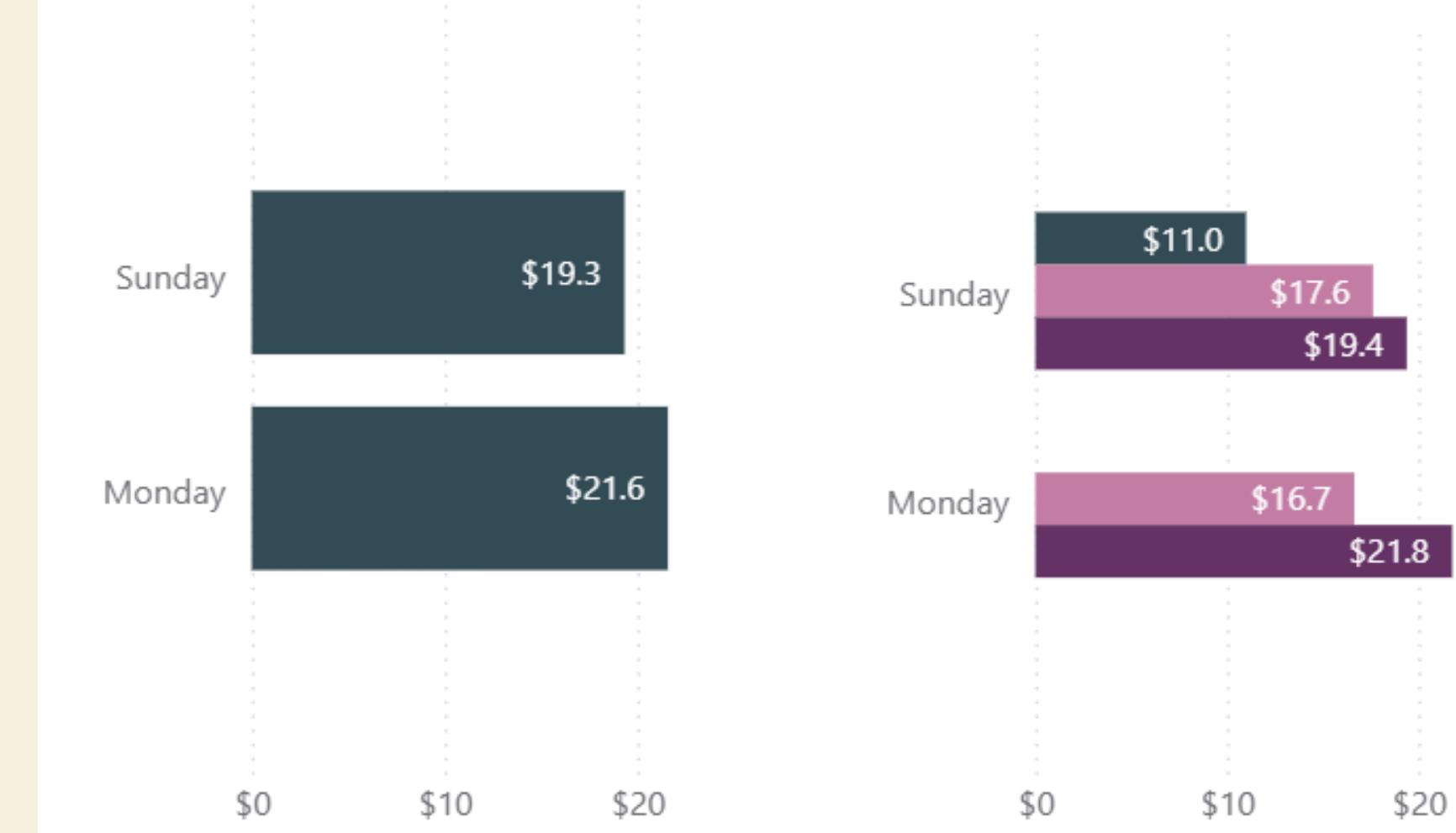


IMAGE From :

PowerBI File > Report view > Employee tab



4 EMPLOYEE (TAXI DRIVER)

WHAT IS THE TYPE OF VEHICLE WITH THE HIGHEST TIP PER MILE?

The average tip amount is highest for private small group vehicles.

For this question, I added a column that divides the tip amount by the mileage. If the mileage is 0, the value becomes an error, so I replaced it with 1 in an if statement (because a tip was received).

Tip_by_mile by Vehicle_Types and PaymentType

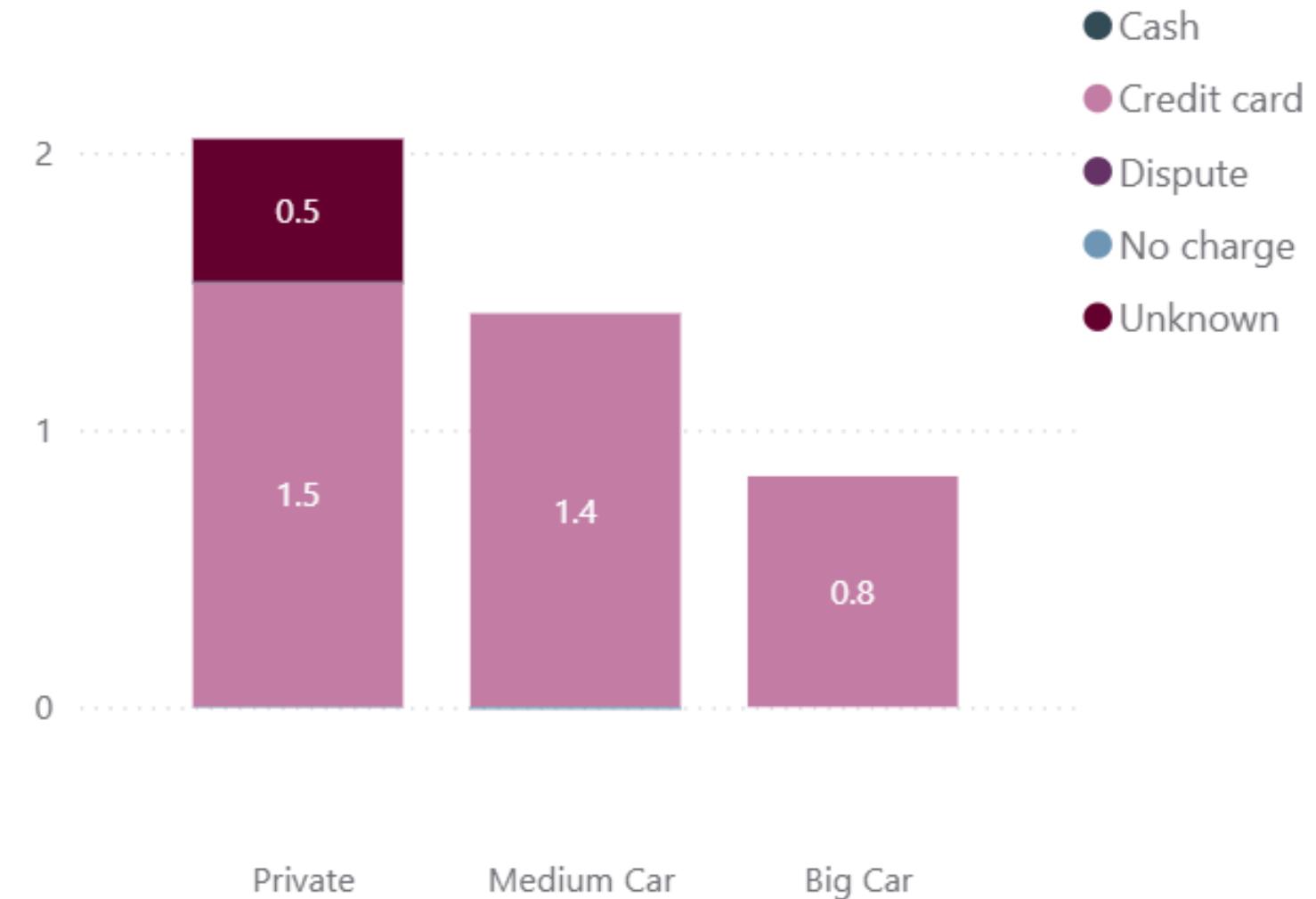


IMAGE From :

PowerBI File > Report view > Employee tab

5

ORIGINAL Q1

MILEAGE RATIO AND MOST FREQUENTLY USED DISTANCES

The most common distance is less than two miles, accounting for more than half of all users. 80% of users use the service for distances up to five miles.

This index is intended for management to quickly see the big picture.

NumberOfRequest by Distance

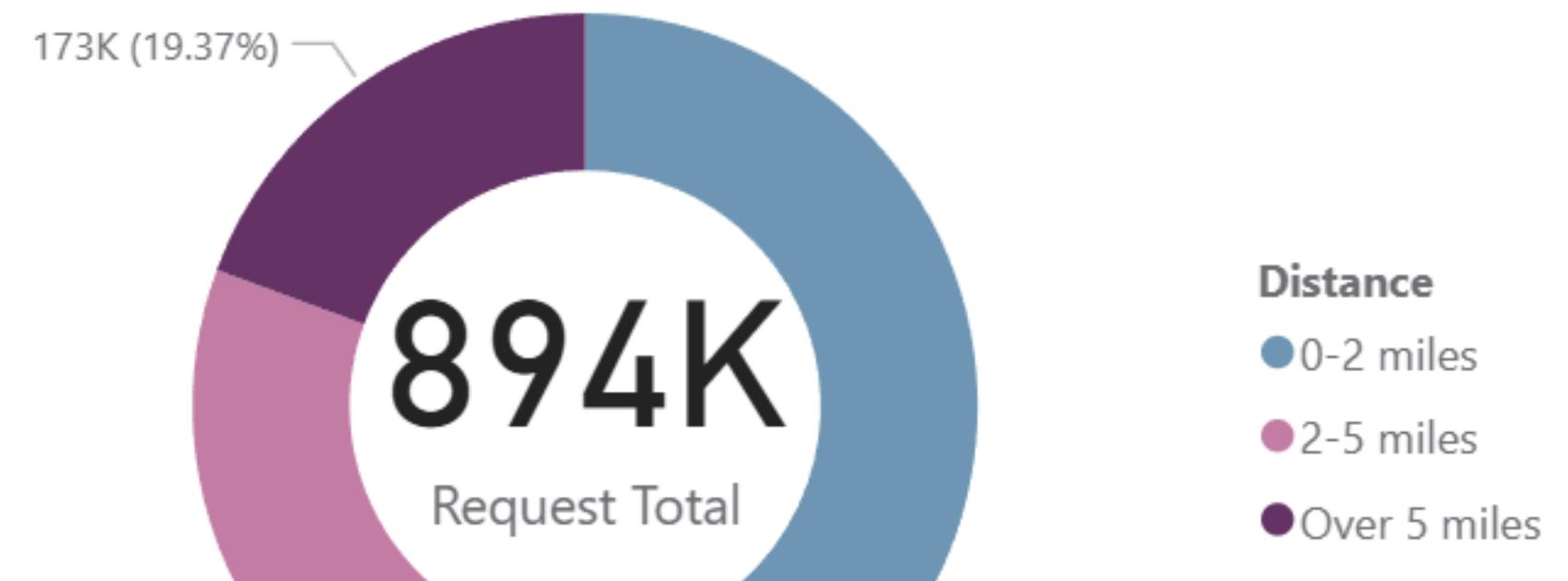


IMAGE From :
PowerBI File > Report view >
Overview tab





ORIGINAL Q2

**DO YOU LIKE
LONG-TRIP
DISTANCE?**

The distance traveled per trip is longer from late at night to early in the morning, probably because public transportation is not available.

This table is intended to give drivers an idea of what demands are in place during their shifts.
I use the median value to avoid the influence of extremely long-distance outliers.



IMAGE From :
PowerBI File >
Report view >
Employee tab

Trip distance (mile) per hour / weekday

PickUp Hour	Sunday	Monda y	Tuesd ay	Wednes day	Thurs day	Friday	Satur day
0	3.03	3.73	3.49	3.41	3.45	3.37	3.10
1	3.32	5.39	6.87	6.52	6.24	6.03	4.00
2	4.08	7.72	8.10	7.57	7.70	6.98	4.81
3	5.12	8.49	9.20	9.33	9.48	8.86	7.13
4	9.90	10.50	10.36	10.94	10.96	10.17	10.09
5	4.12	2.89	2.80	3.20	2.99	2.85	3.71
6	2.44	1.80	1.82	1.80	1.76	1.90	2.22
7	2.10	1.89	1.89	1.91	1.90	1.90	2.08
8	2.04	1.83	1.80	1.80	1.83	1.83	1.92
9	1.80	1.67	1.68	1.70	1.70	1.68	1.68
10	1.80	1.60	1.61	1.64	1.64	1.60	1.66
11	1.79	1.63	1.60	1.60	1.62	1.60	1.70
12	1.80	1.60	1.60	1.62	1.60	1.60	1.70
13	1.85	1.57	1.60	1.57	1.55	1.60	1.70
14	1.80	1.60	1.60	1.63	1.63	1.70	1.74
15	1.90	1.78	1.74	1.70	1.76	1.80	1.82
16	1.90	1.87	1.88	1.90	1.90	1.90	1.80
17	1.90	1.94	1.93	1.90	1.95	2.00	1.87
18	1.96	1.90	1.91	1.90	2.00	2.00	1.89
19	2.02	1.97	1.95	2.03	2.06	2.10	2.06
20	2.20	2.09	2.09	2.06	2.11	2.13	2.12
21	2.44	2.14	2.22	2.08	2.30	2.20	2.26
22	2.64	2.65	2.60	2.72	2.62	2.51	2.40
23	3.65	3.60	3.51	3.87	3.82	3.30	2.90



NEWYORK
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DATA

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THANK
YOU

