How many taxi rides are completed each month?

8,360,703

Business Impact:

- **Operations:** Reveals demand trends, helping leaders make timely decisions on resource allocation and staffing.

- **Marketing:** Highlights seasonal peaks and slowdowns so teams can adjust operations or promotions for maximum impact.

- **Strategy:** Empowers the business to respond quickly to changes in customer behavior and market conditions.

How much total revenue is the NYC Taxi service generating each month?

(in Dollars)

223,870,625.67

Business Impact:

- **Finance:** Tracks overall revenue trends and supports budgeting and forecasting.

- **Strategy:** Informs business planning and helps identify periods of growth or decline.

- **Operations:** Alerts the team to revenue fluctuations so they can take timely action.
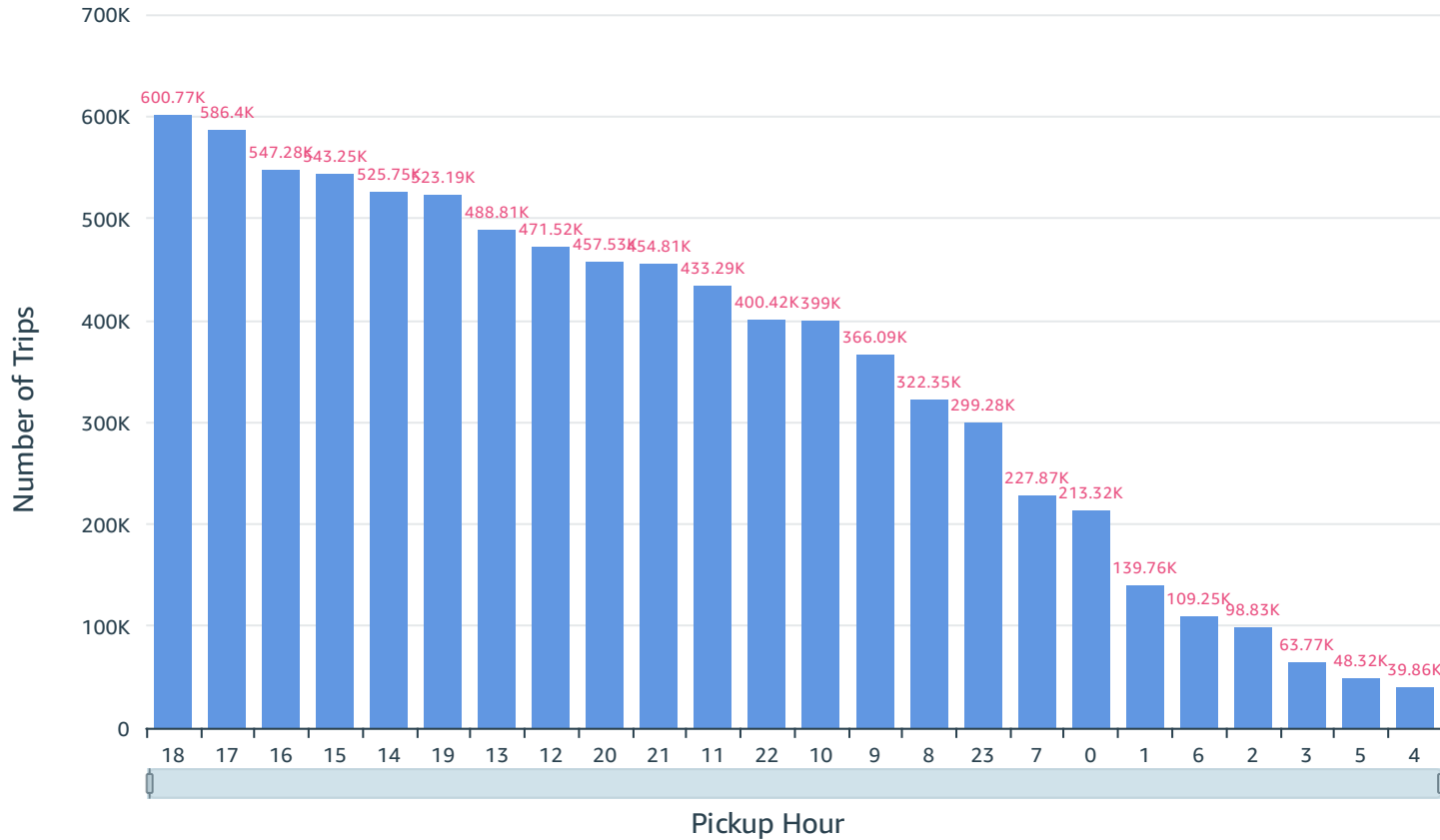
What is the average duration of a taxi trip?

(in kms)

15.71

Business Impact:

- **Operations:** Reveals how long a typical taxi trip takes, helping teams understand ride efficiency.

- **Customer Experience:** Helps measure and improve customer satisfaction based on trip times.

- **Service Optimization:** Enables detection of issues (like traffic or routing) and supports targeted improvements.

## During which hours of the day do we see the highest and lowest taxi activity?

Bar chart — Number of Trips vs Pickup Hour:

Pickup Hour	Number of Trips
18	600.77K
17	586.4K
16	547.28K
15	543.25K
14	525.75K
19	523.19K
13	488.81K
12	471.52K
20	457.53K
21	454.81K
11	433.29K
22	400.42K
10	399K
9	366.09K
8	322.35K
23	299.28K
7	227.87K
0	213.32K
1	139.76K
6	109.25K
2	98.83K
3	63.77K
5	48.32K
4	39.86K

Business Impact:

- **Operations:** Identifies peak and off-peak hours to optimize driver schedules and fleet deployment.

- **Strategy:** Supports planning for promotions or pricing adjustments during high- or low-demand periods.

- **Customer Experience:** Ensures better ride availability and shorter wait times during busy hours.

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How is each vendor's revenue distributed across different payment methods (cash, card, digital)?

(in dollards)
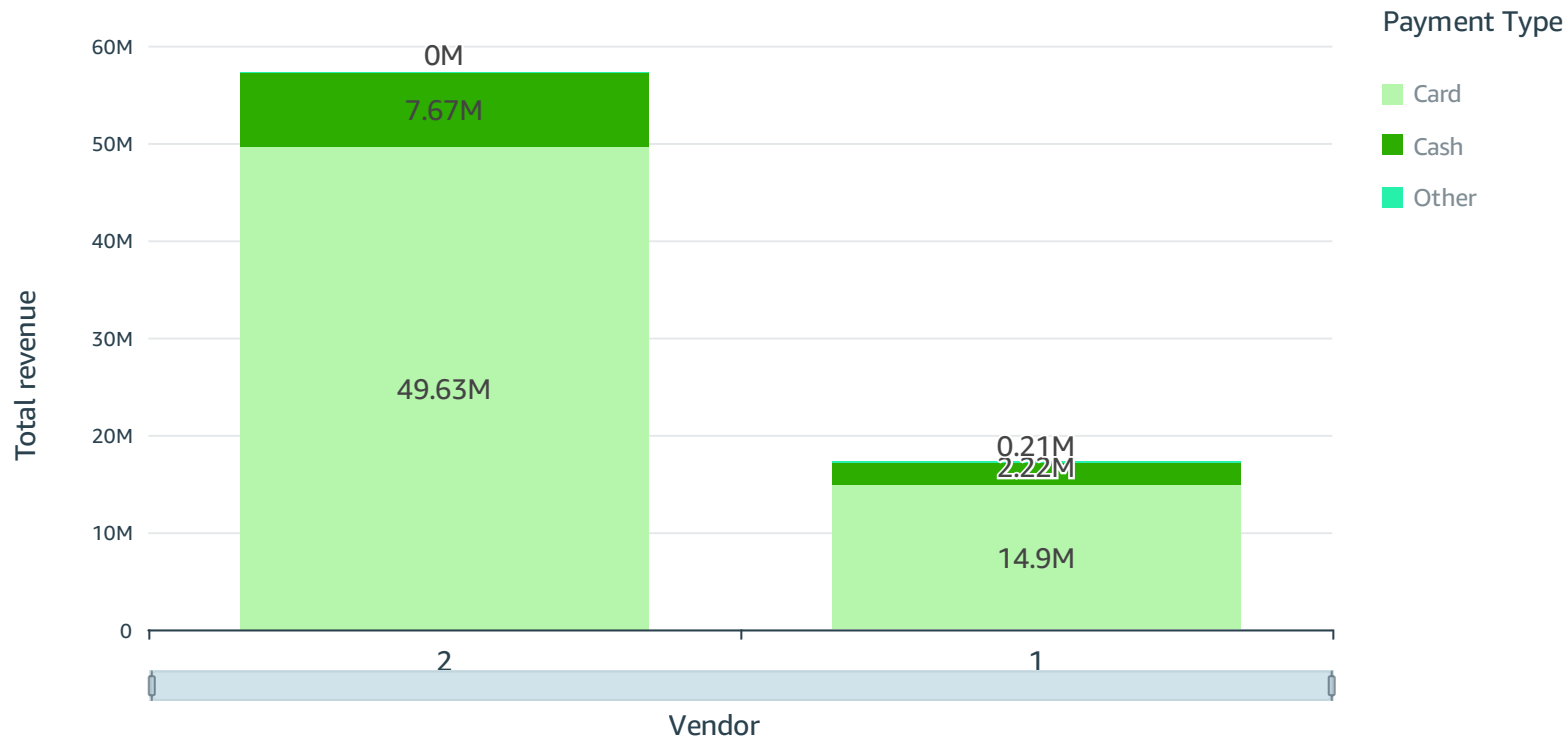
Business Impact:

- **Finance:** Tracks how revenue is collected (cash, card, digital), aiding in payment reconciliation and financial planning.

- **Strategy:** Identifies customer payment preferences, helping inform partnerships and digital payment initiatives.

- **Operations:** Detects trends in payment adoption to optimize point-of-sale processes and reduce transaction issues.
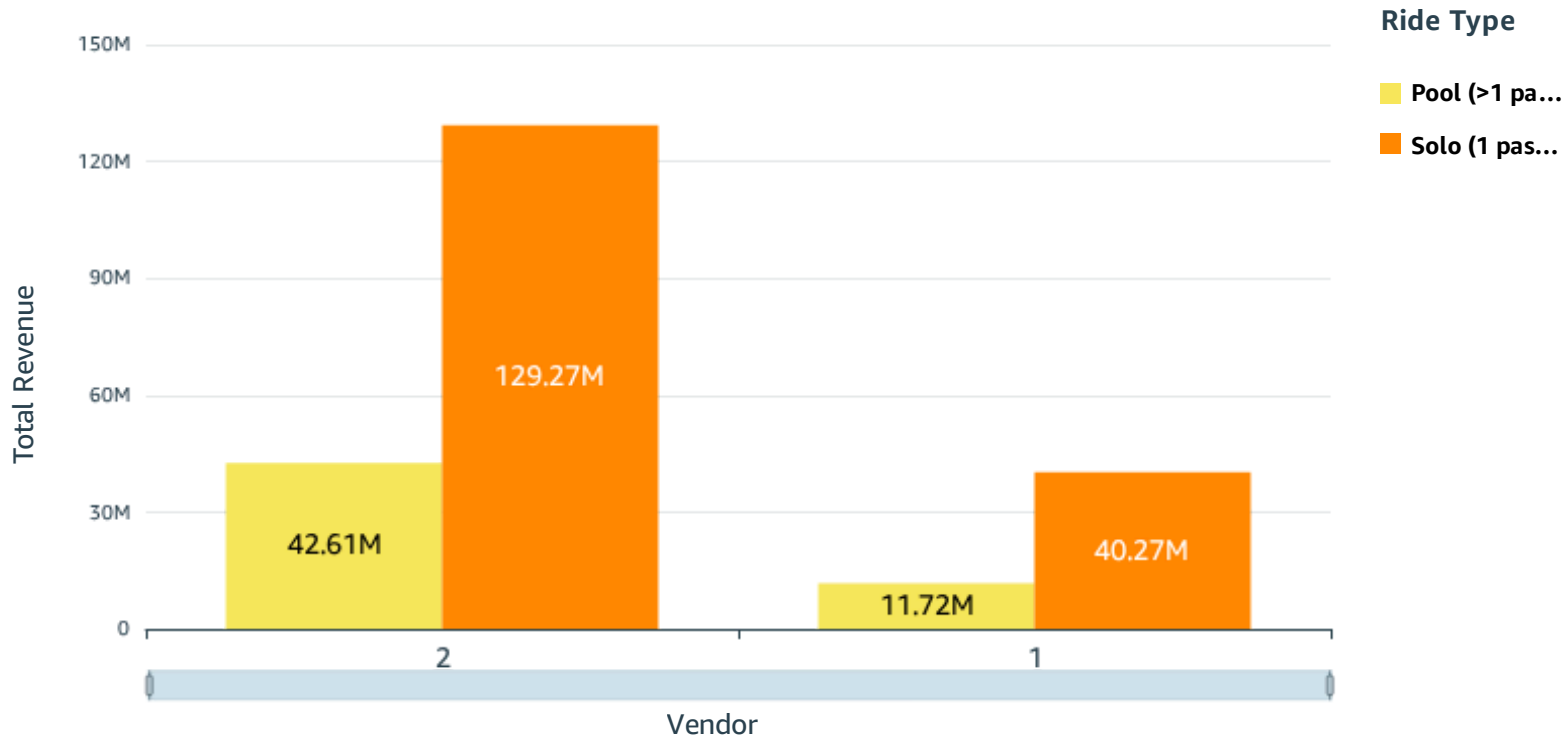
What proportion of trips fall into each trip category?

Trip Categ...

- Medium
- Short
- Long

Medium 49%

Short 42%

Long 9%
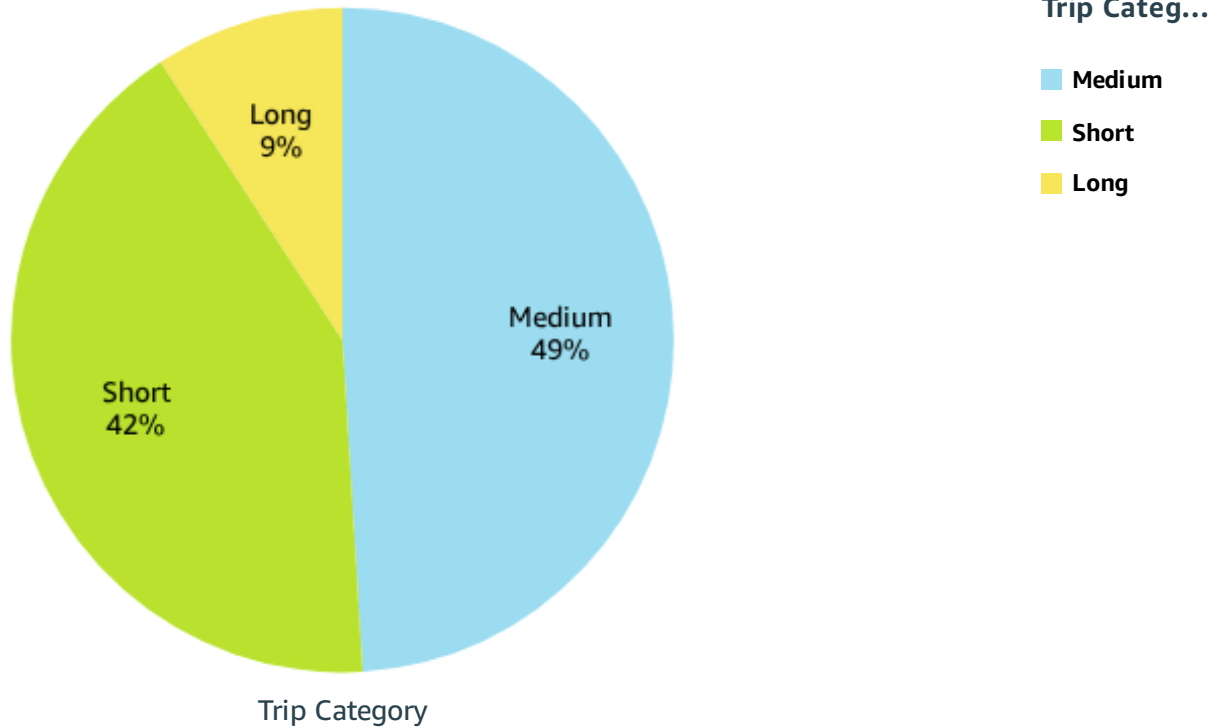
Trip Category
Based on Trip Distance: Short Trips (0–5 min) | Medium Trips (5–15 min) | Long Trips (>15 min)

Business Impact:

- **Operations:** Understands the mix of short, medium, and long trips to better allocate resources and plan routes.

- **Product/Service Planning:** Identifies which trip types are most common, helping design tailored offerings or pricing.

- **Strategy:** Reveals shifts in trip patterns that could signal changing customer needs or new market opportunities.
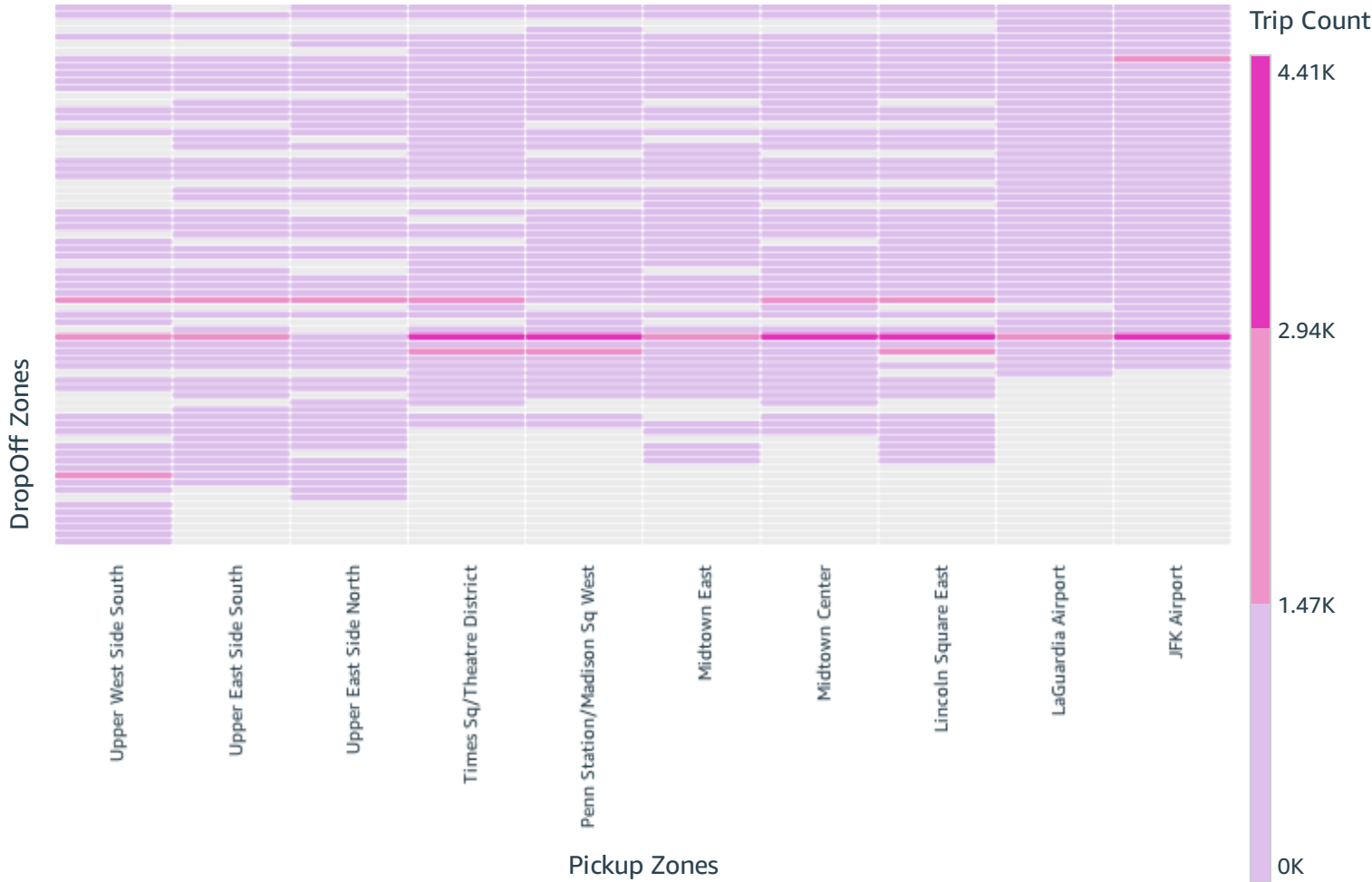
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How is total revenue distributed among vendors for different passenger counts?

(in dollars)

Ride Type

- Pool (>1 pa...
- Solo (1 pas...

Chart data:

Vendor	Pool (>1 passenger)	Solo (1 passenger)
2	42.61M	129.27M
1	11.72M	40.27M

Business Impact:

- **Finance:** Reveals which vendors generate the most revenue across different group sizes, supporting revenue analysis and forecasting.

- **Operations:** Guides resource allocation by showing which vendors serve more solo vs. group rides.

- **Strategy:** Helps identify partnership or growth opportunities based on passenger group revenue patterns.

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Which pickup and dropoff zone combinations account for the most taxi trips, and what are the busiest routes in NYC?

DropOff Zones (y-axis)

Pickup Zones (x-axis): Upper West Side South, Upper East Side South, Upper East Side North, Times Sq/Theatre District, Penn Station/Madison Sq West, Midtown East, Midtown Center, Lincoln Square East, LaGuardia Airport, JFK Airport
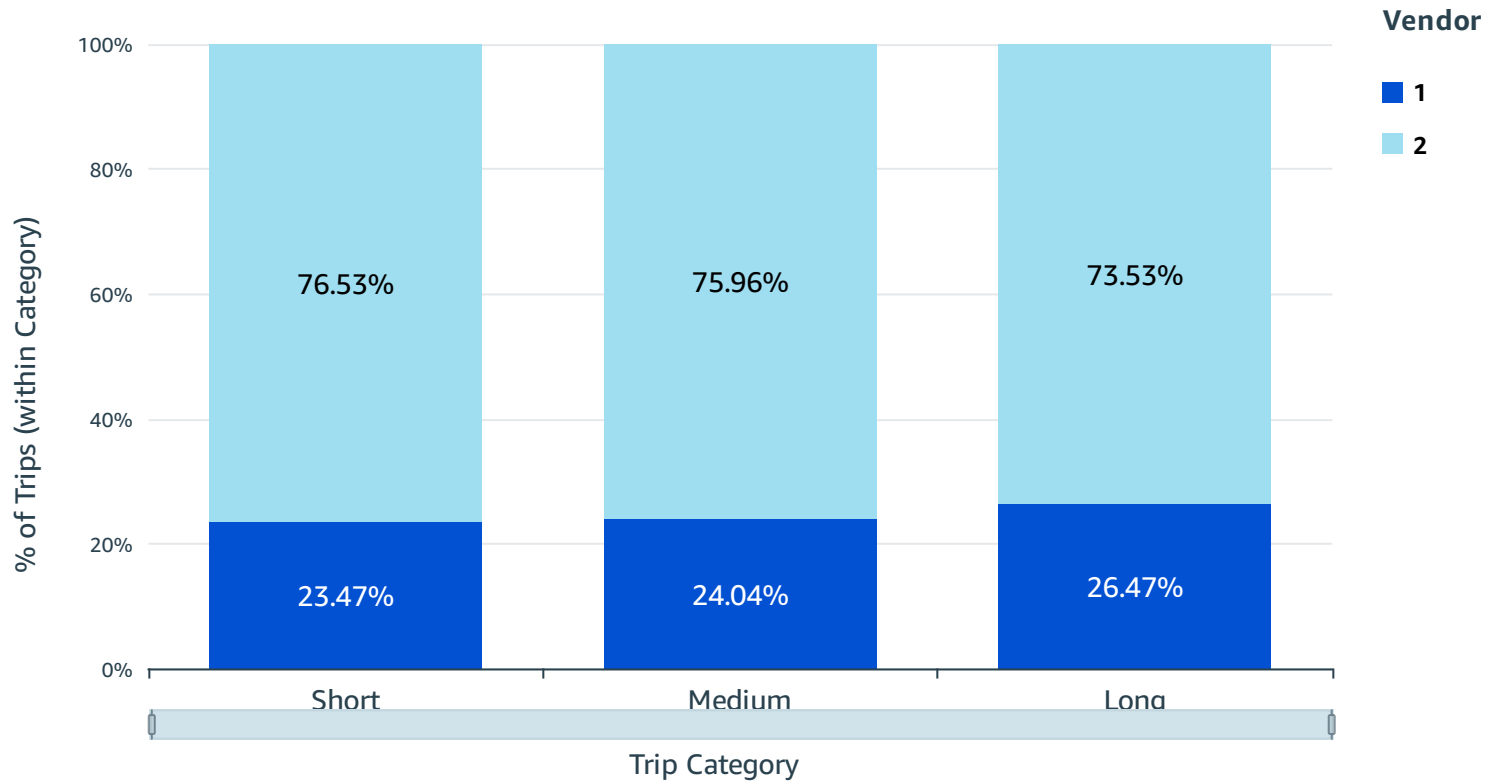
Trip Count
- 4.41K
- 2.94K
- 1.47K
- 0K

Business Impact:

- **Operations:** Pinpoints high-demand routes to optimize fleet deployment and reduce wait times in busy areas.

- **Strategy:** Guides marketing efforts and potential partnerships based on popular travel corridors.

- **Urban Planning:** Provides valuable data for city planners to improve infrastructure and transportation services.

How do vendors contribute to each trip duration category?

Vendor
- 1
- 2

% of Trips (within Category)

Trip Category	Vendor 2	Vendor 1
Short	76.53%	23.47%
Medium	75.96%	24.04%
Long	73.53%	26.47%

Business Impact:

- **Operations:** Reveals which vendors specialize in short, medium, or long trips to inform resource planning and vendor management.

- **Strategy:** Identifies market positioning opportunities for vendors based on their strengths in different trip types.

- **Partnerships:** Supports collaboration and incentive programs tailored to vendors' trip duration profiles.

How do revenue and trip counts fluctuate each day?
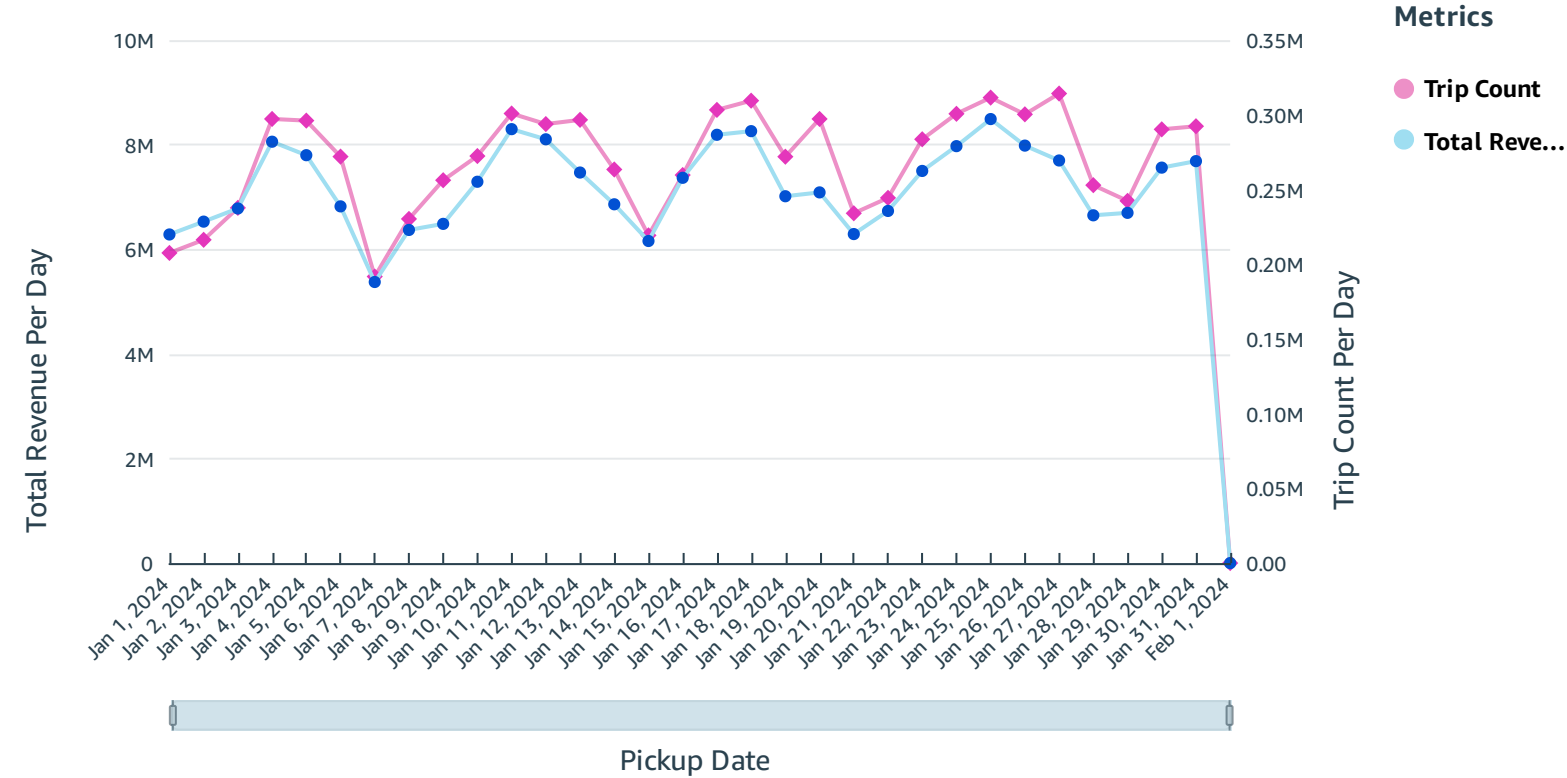
Business Impact:

- **Operations:** Monitors daily demand and revenue to guide staffing and fleet adjustments.

- **Finance:** Tracks day-to-day financial performance for better forecasting and budget management.

- **Strategy:** Identifies patterns or anomalies in daily activity, enabling timely business decisions.
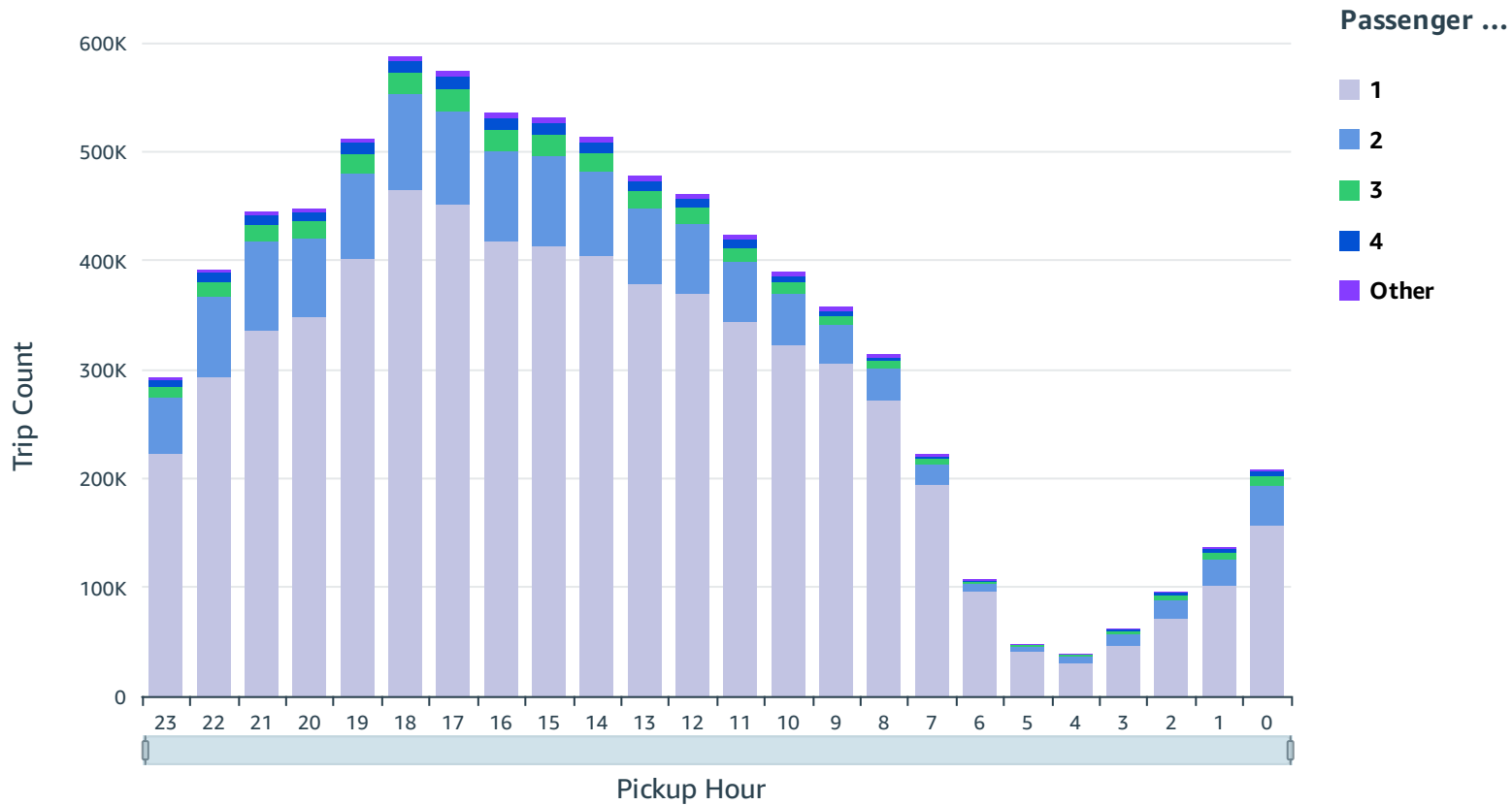
How does the average fare per kilometer charged by each vendor vary across trip categories and passenger counts?

(in dollars)

Trip Category

Vendor	Ride Type	Short	Medium	Long
		Avg Cost Per km	Avg Cost Per km	Avg Cost Per km
1	Pool (>1 passenger)	17.99	11	6.85
	Solo (1 passenger)	18.05	11.13	7.03
2	Pool (>1 passenger)	32.79	10.66	6.65
	Solo (1 passenger)	25.5	10.74	7.19

Business Impact:

- **Finance:** Analyzes pricing effectiveness across different ride types and group sizes, supporting revenue optimization.

- **Strategy:** Identifies opportunities for targeted fare adjustments or special offers based on fare patterns.

- **Customer Insights:** Reveals how pricing impacts various customer segments, aiding in competitive positioning.

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What are the hourly patterns of taxi trip volumes for different passenger counts?

Passenger ...
- 1
- 2
- 3
- 4
- Other

Trip Count (y-axis): 0, 100K, 200K, 300K, 400K, 500K, 600K

Pickup Hour (x-axis): 23, 22, 21, 20, 19, 18, 17, 16, 15, 14, 13, 12, 11, 10, 9, 8, 7, 6, 5, 4, 3, 2, 1, 0

Business Impact:

- **Operations:** Helps optimize driver scheduling and fleet distribution based on passenger group demand throughout the day.

- **Customer Experience:** Ensures availability for both solo and group riders during peak times, reducing wait times.

- **Strategy:** Informs marketing and service initiatives by revealing when different passenger groups use the service