



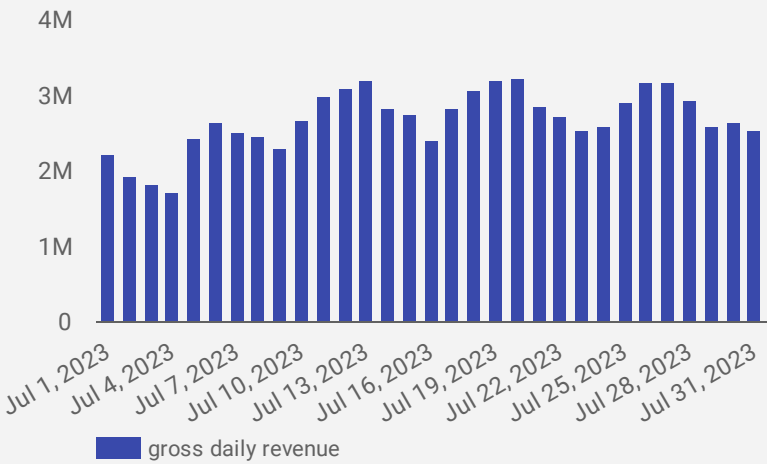
Gross Revenue
\$83.05M

Total Trip
2,907,049

Total Passenger
3,956,285

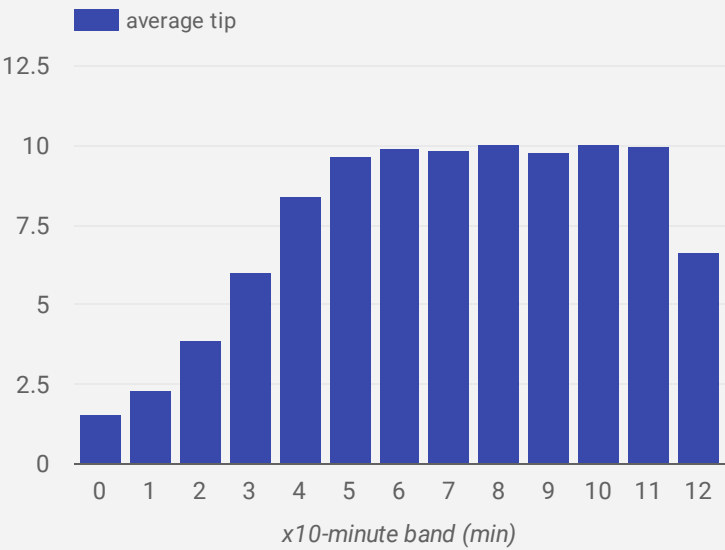
Total Distance (mile)
13.1M

How are daily incomes trending?



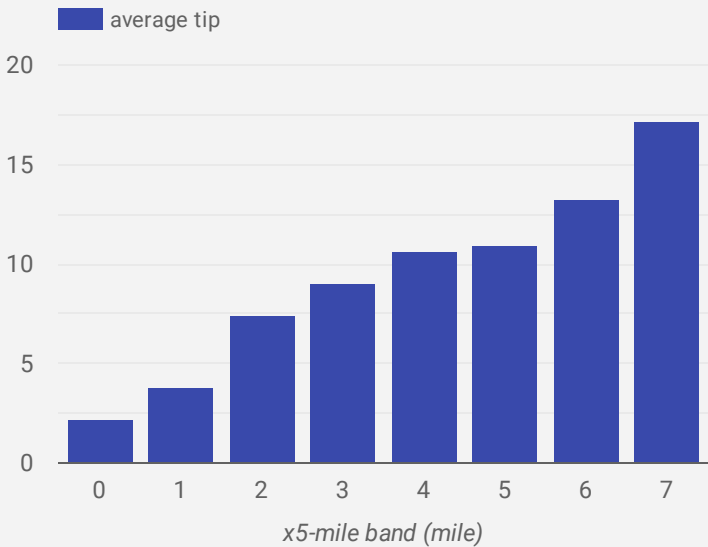
Which trip duration group tips the most?

Goal: Driver opportunities based on duration

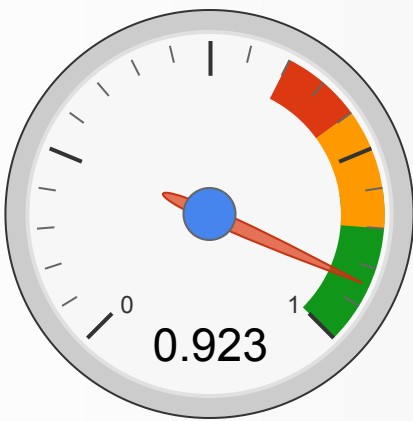


Which trip distance group tips the most?

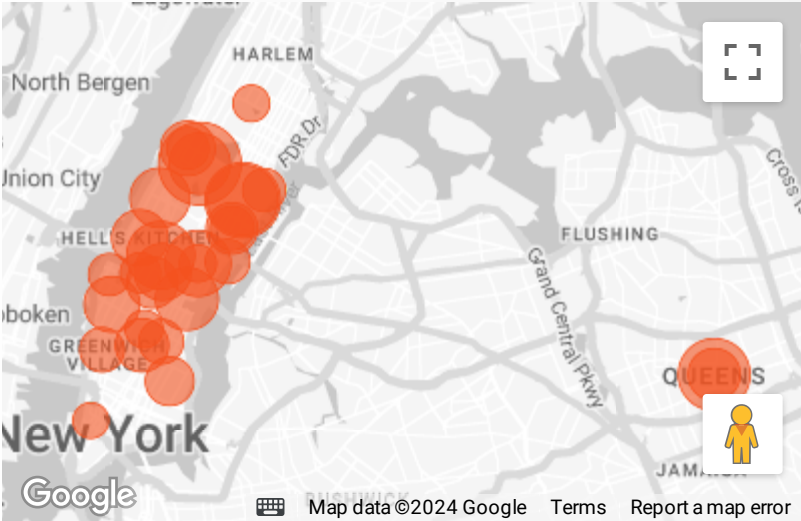
Goal: Driver opportunities based on distance



Monthly Performance Indicator



Where are the busiest traffic by zones?



trip_count 80,227 • 252,476

Zone Name		Trips...
1.	Midtown Center, Manhattan, New York, US	252,4...
2.	Upper East Side South, Manhattan, New York, US	225,4...
3.	JFK Airport, Queens, New York, US	212,9...
4.	Upper East Side North, Manhattan, New York, US	207,4...
5.	Times Sq/Theatre District, Manhattan, New York, ...	198,3...
6.	Midtown East, Manhattan, New York, US	190,9...
7.	Murray Hill, Manhattan, New York, US	180,3...
8.	Penn Station/Madison Sq West, Manhattan, New ...	174,1...
9.	Lincoln Square East, Manhattan, New York, US	168,6...
10.	Midtown North, Manhattan, New York, US	157,9...



Case Studies: Carpool, Edge Cases, Payment Method

Can we utilise carpooling to common journeys?

Benefit: Better congestion relief, Cons: Price adjustment, fleet cost

- In city planning perspective, carpooling presents several benefits such as reduced traffic congestion and lower environmental impact. The opportunity is to focus on most frequent destinations: airports.
- Trip efficiency in terms of trip per passenger measure which shows our fleet efficiency (more efficient with smaller ratio). The ratio is grouped hourly to show proposed shuttle frequency.
- Biggest challenge is to adjust our pricing and possibility of new fleet investment.
- The most interesting fact is among airports, JFK more passenger efficient compared to LaGuardia. This is likely because people who go to JFK are more likely families, which naturally makes the trip efficient. Thus, our carpooling trial should be directed to LaGuardia.

What do the edge cases explain?

Benefit: Error prevention, service integrity, Cons: Heightened monitoring

- Edge cases are focused on the extra fare incurred on the trip.
- Interestingly, all 9 cases come from cabs using Creative Mobile Technologies as its fare systems. Granted, this is likely not our causal dimension.
- The trend observed is that all of these journeys except one, involves a journey to/from an airport (East Elmhurst is categorised as LaGuardia). In addition, rate codes are not filed properly.
- It is important to validate with subject matter expert on why the extra fare can be as high as \$12.75 when the data dictionary states these charges only includes the \$0.50 and \$1 rush hour and overnight charges. Further insights are needed before hypothesis can be drawn.
- One case stood out where a 1.6 mile trip incurred a \$67.33 extra fare. Again, this needs to be further explored.

What is the farthest trips of the month?

Benefit: Fleet outreach analytics

- The motivation to analyse the farthest trips of the month is to understand our fleet outreach, and perhaps give us ideas on our repricing strategies on long trips.
- What we uncovered is problems in our fare box. Trip distance is measured in miles. To pick one example, a 16 minute journey from Lenox Hill to LaGuardia is measured at almost 150000 miles. VeriFone boxes seems to have more frequent issue of this kind.
- As erroneous data is detected, fare box inspection to the individual cab is recommended, especially the large error values which will skew our data.
- These values directly affect our total mileage figure. This is an important metric which can estimate our fleet's fuel cost and carbon emission by leveraging average mpg information.

	pickup_hour	dropoff_zone	n_trip	trip_per_pass...
1.	Jul 26, 2023, 3PM	LaGuardia Airport	102	0.81
2.	Jul 27, 2023, 1PM	LaGuardia Airport	100	0.85
3.	Jul 26, 2023, 5PM	LaGuardia Airport	83	0.81
4.	Jul 27, 2023, 6AM	LaGuardia Airport	82	0.81
5.	Jul 26, 2023, 6AM	LaGuardia Airport	70	0.9
6.	Jul 25, 2023, 6PM	LaGuardia Airport	45	0.83
7.	Jul 31, 2023, 3PM	Newark Airport	27	0.82
8.	Jul 26, 2023, 11PM	JFK Airport	25	0.83
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	dropof...	pickup_z...	dropoff_zone	trip_...	extra_fa...
1.	11AM	Midtown C...	West Chelsea/...	1.6	\$67.33
2.	7PM	JFK Airport	Times Sq/Thea...	18.1	\$14.25
3.	8PM	LaGuardia ...	West Village	10.7	\$12.75
4.	8PM	LaGuardia ...	Greenwich Villa...	10.3	\$12.75
5.	8PM	LaGuardia ...	Lincoln Square ...	10.5	\$12.75
6.	8PM	East Elmh...	Clinton East	8.9	\$12.75
7.	8PM	East Elmh...	Greenwich Villa...	9.4	\$12.75
8.	4PM	Clinton East	LaGuardia Airp...	10.1	\$12.50
9.	8PM	Lincoln Squ...	JFK Airport	17.2	\$12.50
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	ve...	pickup_zone	dropoff_zone	dura...	trip_dist...
1.	2	Meatpacking/...	Kips Bay	11	191945
2.	2	Yorkville West	Columbia Street	33	186514.1
3.	2	Lenox Hill East	LaGuardia Airport	16	148406.8
4.	2	World Trade Ce...	Lincoln Square ...	31	130745.9
5.	2	Crown Heights ...	East Harlem So...	30	120288.5
6.	2	Alphabet City	Times Sq/Theatr...	17	119905.3
7.	2	Yorkville West	Midtown Center	22	78100
8.	1	Brownsville	Rego Park	30	74674.3
9.	2	Meatpacking/...	Flatiron	5	73704
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