

Ride Sharing and Tipping Behavior in Chicago 2018–2023

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Story 1:

- The percentage of tip and daily trips has been hit due to pandemic, but has been recovering since 2021.
- As the end of 2022, daily trips have rebounded to approximately two-thirds of pre-pandemic levels.
- On the other hand, tipping percentages have recovered beyond the pre-pandemic average of 4.0% to around 5.5%.

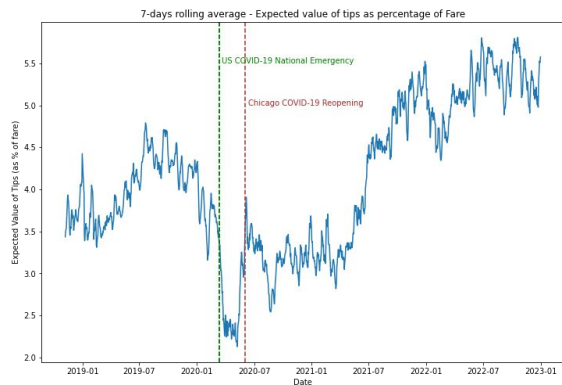
Story 2:

- Lower income groups utilize ride sharing at an increased rate coming out of the pandemic as opposed to other income groups.
- While higher income groups tip on more rides, lower income groups tip more per ride.

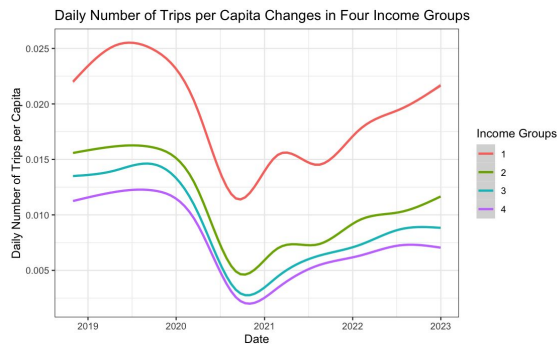
Story 3:

- Poor weather leads to an increased demand in rides but not an increase in tips.
- In general, drivers can expect to make more money on rainy and snowy days, but it may not be worth the risks of driving in these conditions.

Selected Visualization



Story 1: Trend of expected tips as percentage of ride fare



Story 2: Tipping percentage trend between different income group

Table 2: The Coefficients of Weather Attributes on Tipping Percentage Per Ride/Daily Number of Trips Per Capita/Fare

| | Dependent variable: | | |
|-------------------------------|------------------------------------|---|----------------------|
| | Tipping Percentage Per Ride (1) | Daily Number of Trips Per Capita (2) | Fare (3) |
| Temperature | 0.013 (0.006) | -0.0001*** (0.00001) | 0.090*** (0.015) |
| Relative Humidity | -0.004* (0.002) | 0.00001 (0.00000) | -0.031*** (0.003) |
| Rain | 0.032 (0.016) | 0.0002*** (0.00001) | 0.207*** (0.014) |
| Snowfall | 0.041 (0.104) | 0.001*** (0.0001) | 0.864** (0.254) |
| Additional variables included | Y | Y | Y |
| Income Fixed effects | Y | Y | Y |
| Traffic Fixed effects | Y | Y | Y |
| Observations | 2,991,753 | 2,991,753 | 2,991,753 |
| R ² | 0.083 | 0.347 | 0.641 |
| Adjusted R ² | -0.007 | 0.283 | 0.606 |
| Residual Std. Error | 10.425 (df = 2724830) | 0.009 (df = 2724830) | 7.560 (df = 2724831) |

Note:

*p<0.1; **p<0.05; ***p<0.01

Story 3: Weather effect on tipping, fare, and number of trips.