





# Analyzing Chicago Taxi Data for Road Pricing


- Congestion - tragedy of the commons problem
- Road pricing?
  - when/where?
  - how much?
  - how?

# Chicago taxi trips data

**CHICAGO  
DATA PORTAL**

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Taxi Trips Transportation

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Taxi trips reported to the City of Chicago in its role as a regulatory agency. To protect privacy but allow for aggregate analyses, the Taxi ID is consistent for any given taxi medallion number but does not show the number, Census Tracts are suppressed in some cases, and times are rounded to the nearest 15 minutes.

[More](#)


Updated  
August 12, 2017

Data Provided by  
City of Chicago


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### Featured Content Using this Data

#### How This Dataset Was Created




External Content



An article explaining the background of this dataset, including privacy and data quality considerations.

#### Public Passenger Vehicles




External Content

| License Number | Status | Vehicle Type | Vehicle Model | Vehicle Year | Vehicle Color |
|----------------|--------|--------------|---------------|--------------|---------------|
| 1000000001     | ACTIVE | TAXI         | TOYOTA        | 2012         | BLACK         |
| 1000000002     | ACTIVE | TAXI         | TOYOTA        | 2012         | BLACK         |
| 1000000003     | ACTIVE | TAXI         | TOYOTA        | 2012         | BLACK         |
| 1000000004     | ACTIVE | TAXI         | TOYOTA        | 2012         | BLACK         |
| 1000000005     | ACTIVE | TAXI         | TOYOTA        | 2012         | BLACK         |
| 1000000006     | ACTIVE | TAXI         | TOYOTA        | 2012         | BLACK         |
| 1000000007     | ACTIVE | TAXI         | TOYOTA        | 2012         | BLACK         |
| 1000000008     | ACTIVE | TAXI         | TOYOTA        | 2012         | BLACK         |
| 1000000009     | ACTIVE | TAXI         | TOYOTA        | 2012         | BLACK         |
| 1000000010     | ACTIVE | TAXI         | TOYOTA        | 2012         | BLACK         |

Dataset of licensed public passenger vehicles, including taxis.

#### Public Chauffeurs



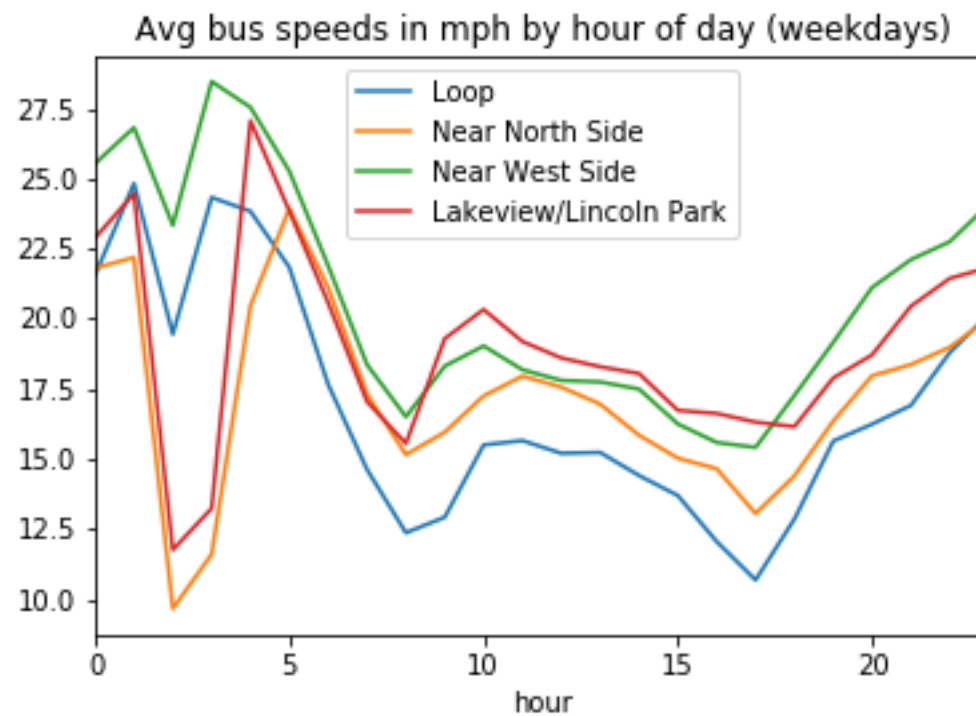
External Content

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Licensed public chauffeurs, including taxi drivers.

46GB, 113M taxi rides ('13-17), analyzed w/ Pandas

# When/where? from bus tracking data

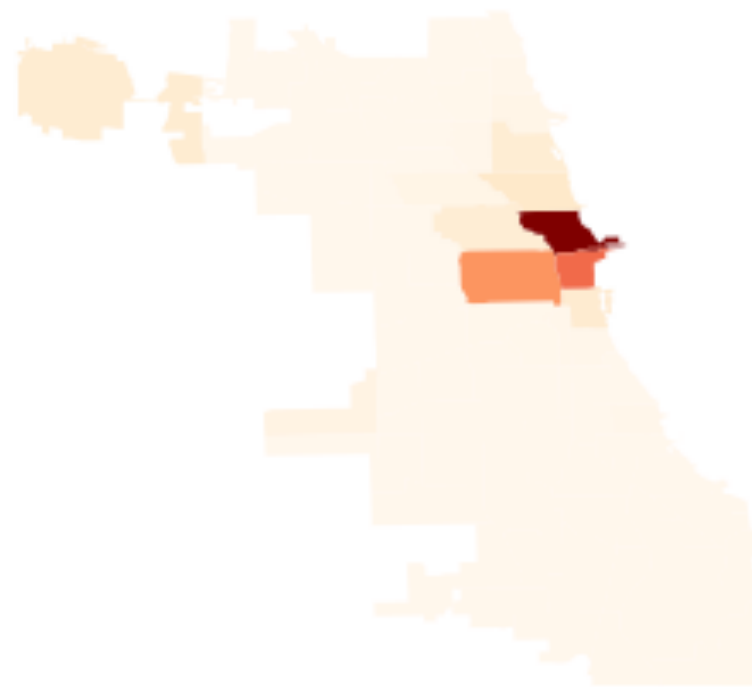


Focus: Loop at 8-10am and 4-7pm

Next: Near North Side

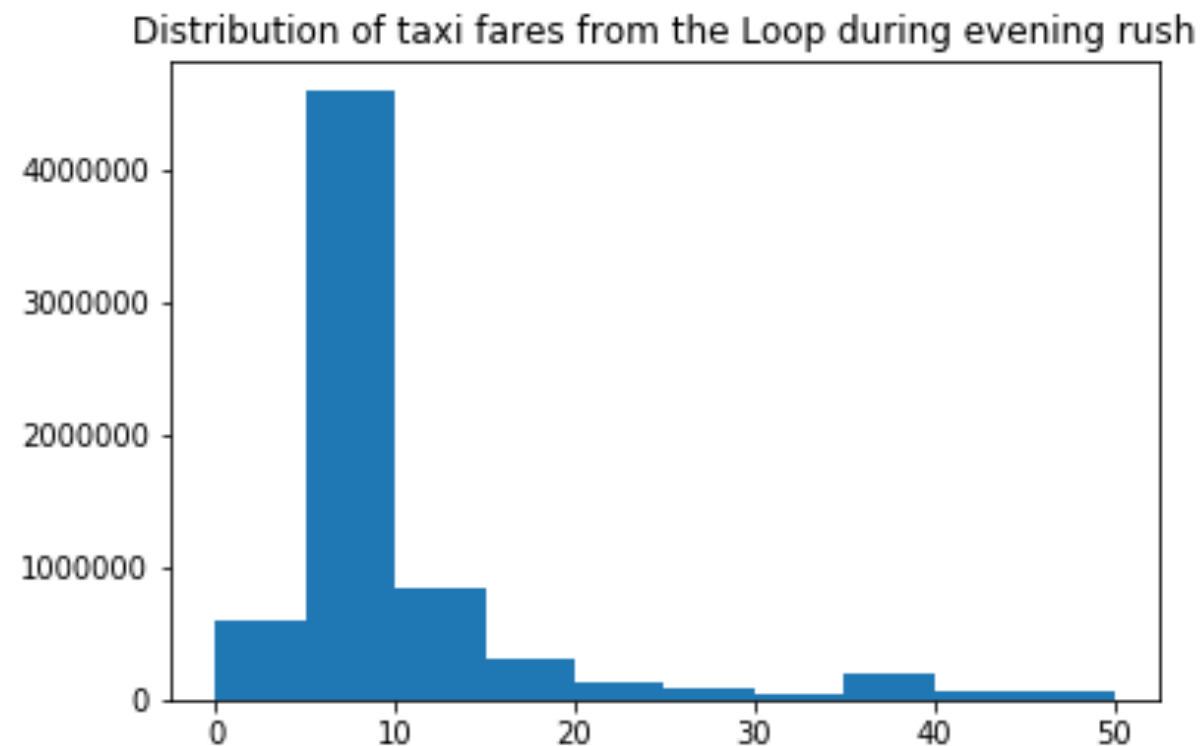
# When/where? from taxi data

Evening rush taxi rides from the Loop



Most taxis go to Near North Side, the Loop,  
Near West Side

# How much? from taxi data



Most rides between \$5-10

Small toll can be effective

# Recommendation and next steps

- Small toll for the Loop at rush hours
- Use finer pickup / dropoff location data
- Prediction model
- Track individual taxis
- Near North Side?