

How does weather affect where Citi Bike users travel in New York City?



A data visualization created by Job Lee and Ray Low for IAT 355

→ joblee.ca/citibike

Citi Bike is the operator for New York City's bike sharing service. This project seeks to equip city planners with a better idea of how Citi Bike users travel around New York City. Specifically, we want to inform city planners which days Citi Bike users ride, under what weather conditions, and at which stations.

AUDIENCE

New York City Planners

IDIOMS

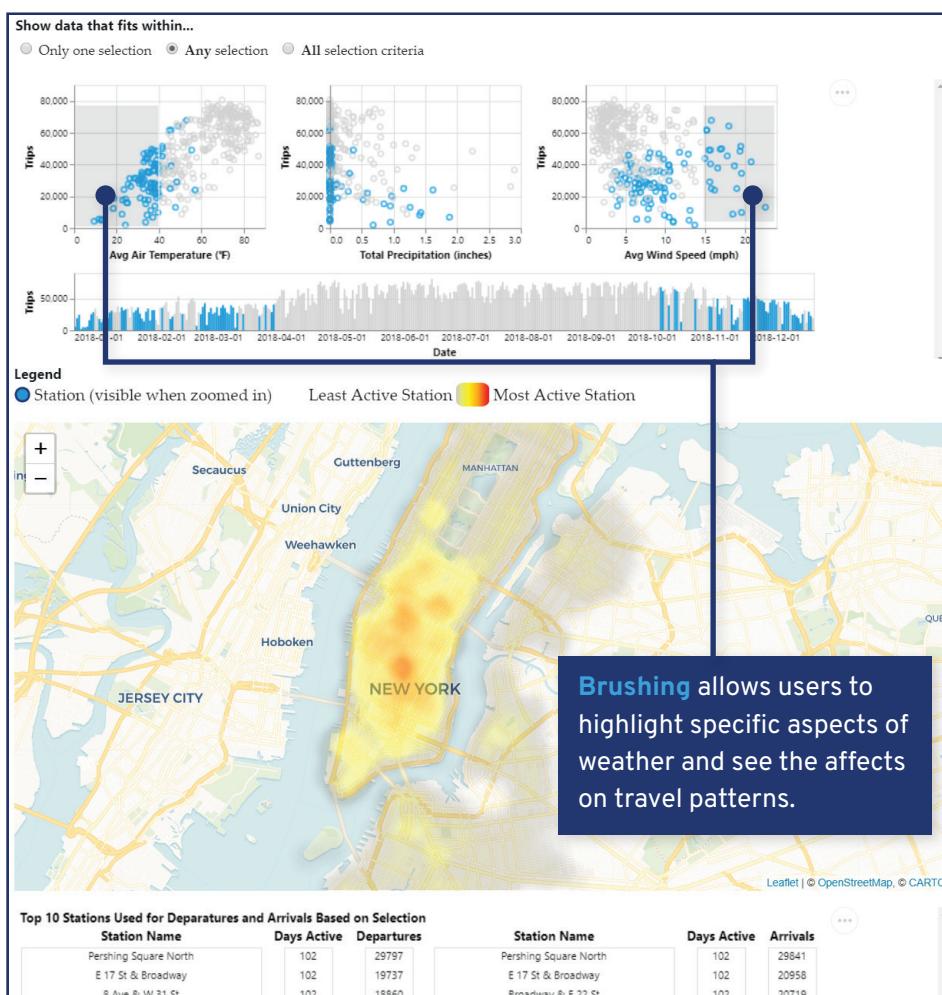
Scatter Plot + Bar Graph + Heat Map

RESEARCH QUESTIONS

Under what weather conditions do Citi Bike users ride in?

Which stations are more active than others? Which days have more ridership?

Visualization & Interaction



Quick Facts

12,000 bikes

750 stations

48,203 average trips per day

297,748 members in 2018

17,593,918 trips in 2018

Dimensions & Encoding

WEATHER

Collected from NEWA's NYC-Central Park Weather Station (2018).

- 🌡️ Average Temperature (°F)
- 💧 Total Precipitation (inches)
- 🚩 Average Wind Speed (mph)

BIKE TRIPS

Collected from Citi Bike NYC System Data.

- 🚲 Daily Ridership and Membership Data (2018): Trip counts.
- 🛤️ Trip Histories (2018): Station name, Station location (lat., long.), Trips start and end counts.

ENCODING

Scatter Plots compare weather with daily ridership.

Heat Map shows which stations are more active by using a colour gradient from light grey to red.