

The image features a central white rectangular area containing text, set against a background of an aerial photograph of a densely populated residential neighborhood. The neighborhood is characterized by a variety of colorful houses, including shades of blue, red, and white, and is situated along a waterfront where numerous boats are docked. The overall scene suggests a vibrant, urban community.

Uber Movement

Santosh Rao Danda
Uber



1.2B



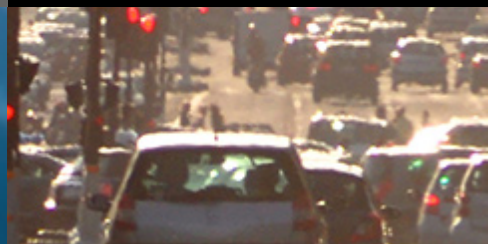
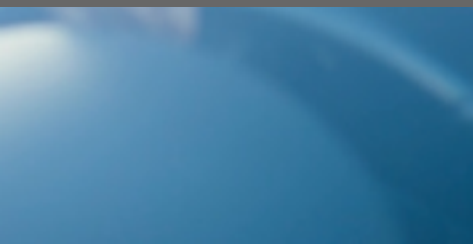
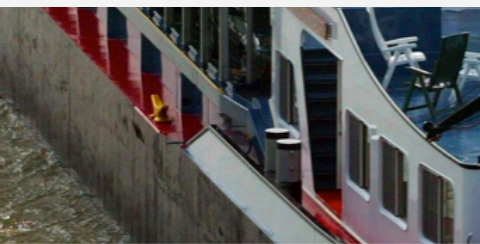
95%



1



>50%

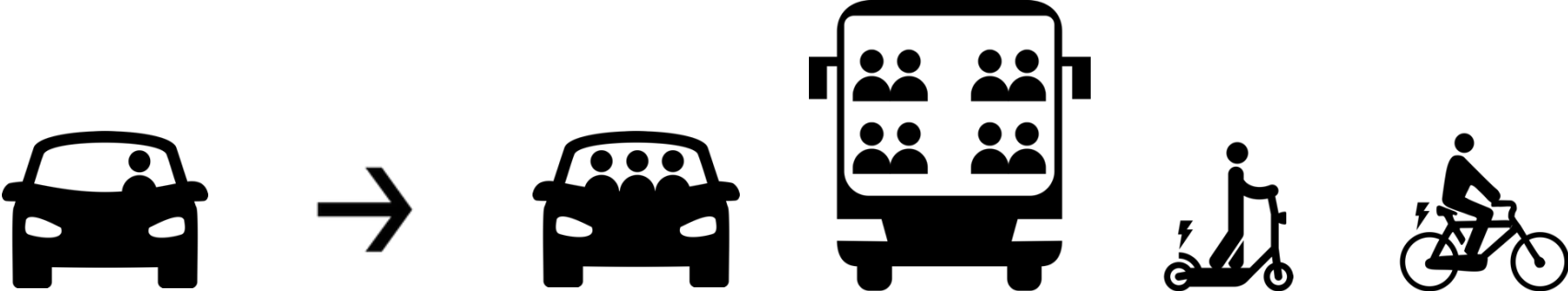


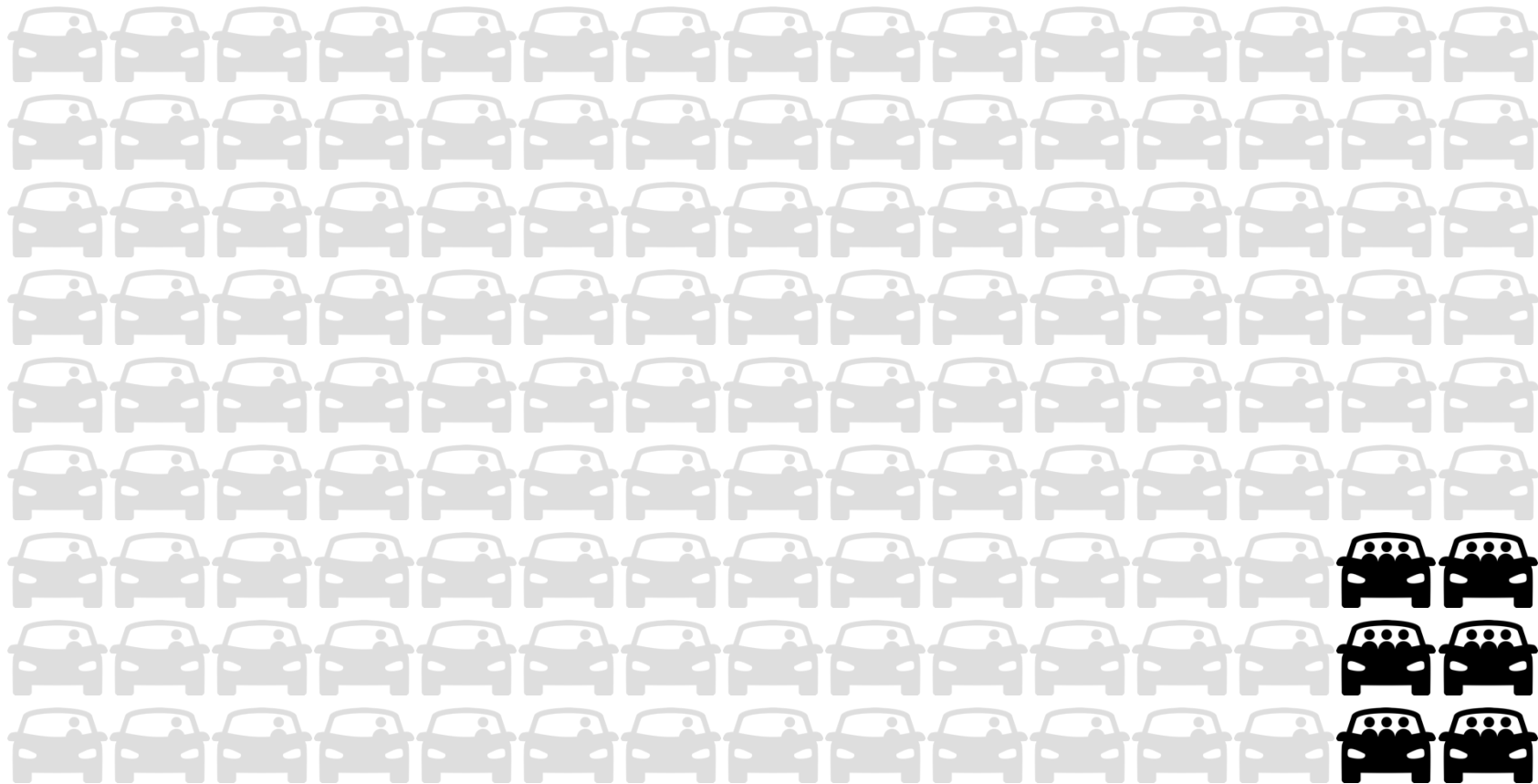
A close-up shot of a man with dark hair and round glasses, looking slightly to the left. He is holding a white plastic fork with a small amount of white rice on it, positioned near his mouth. The background is blurred, showing another person in a blue shirt. The Uber logo is overlaid in the bottom left corner.

Uber

A platform for shared, electric mobility

What if?





Conversations with Cities

Mobility and
Congestion



Infrastructure



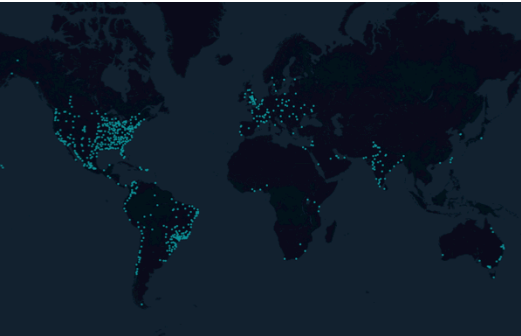
Road Safety



Data & Tools

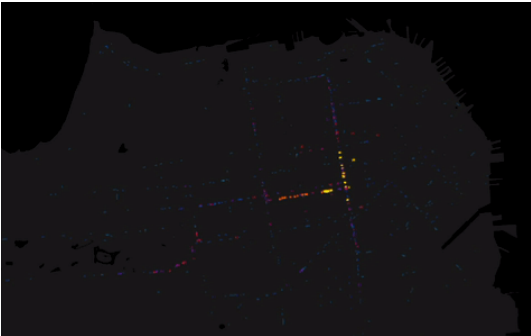


Leveraging Uber's Unique Network



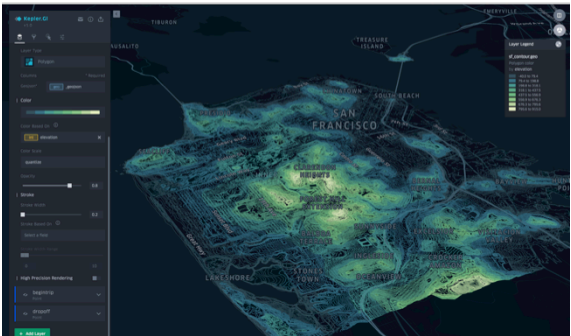
Global Reach

Data available across **700+** cities with coverage across the entire road network



Unprecedented Scale

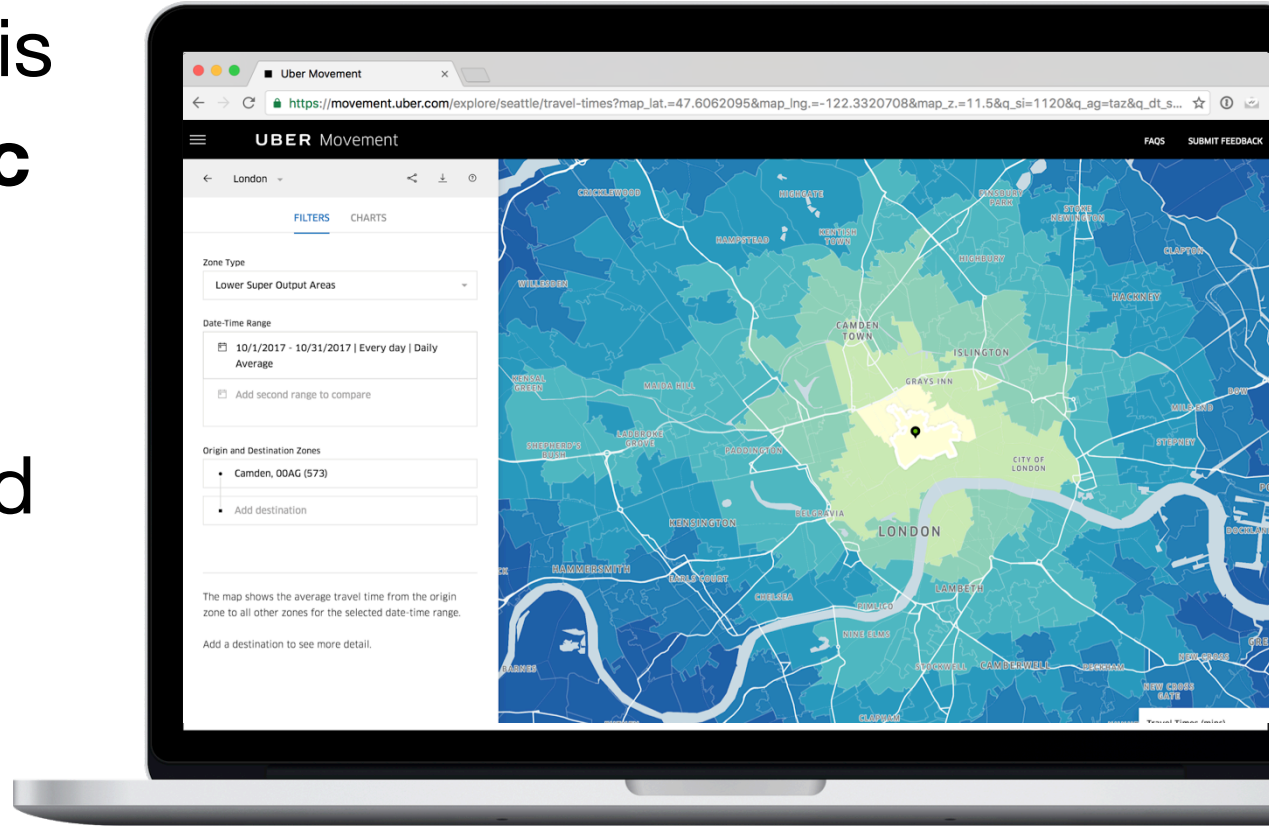
Leveraging a constantly updating sensor network derived from **14M+** trips per day



Cutting Edge Technology

Industry-leading open source tools and transportation data expertise

Uber Movement is
a **free and public**
platform using
Uber's data to
better understand
cities



Designed and developed for cities



City officials and policymakers who want to visually see and understand impact of infrastructure and policy changes



Urban planners and researchers working with data day to day who need to produce investment and policy recommendations

What did we start with?

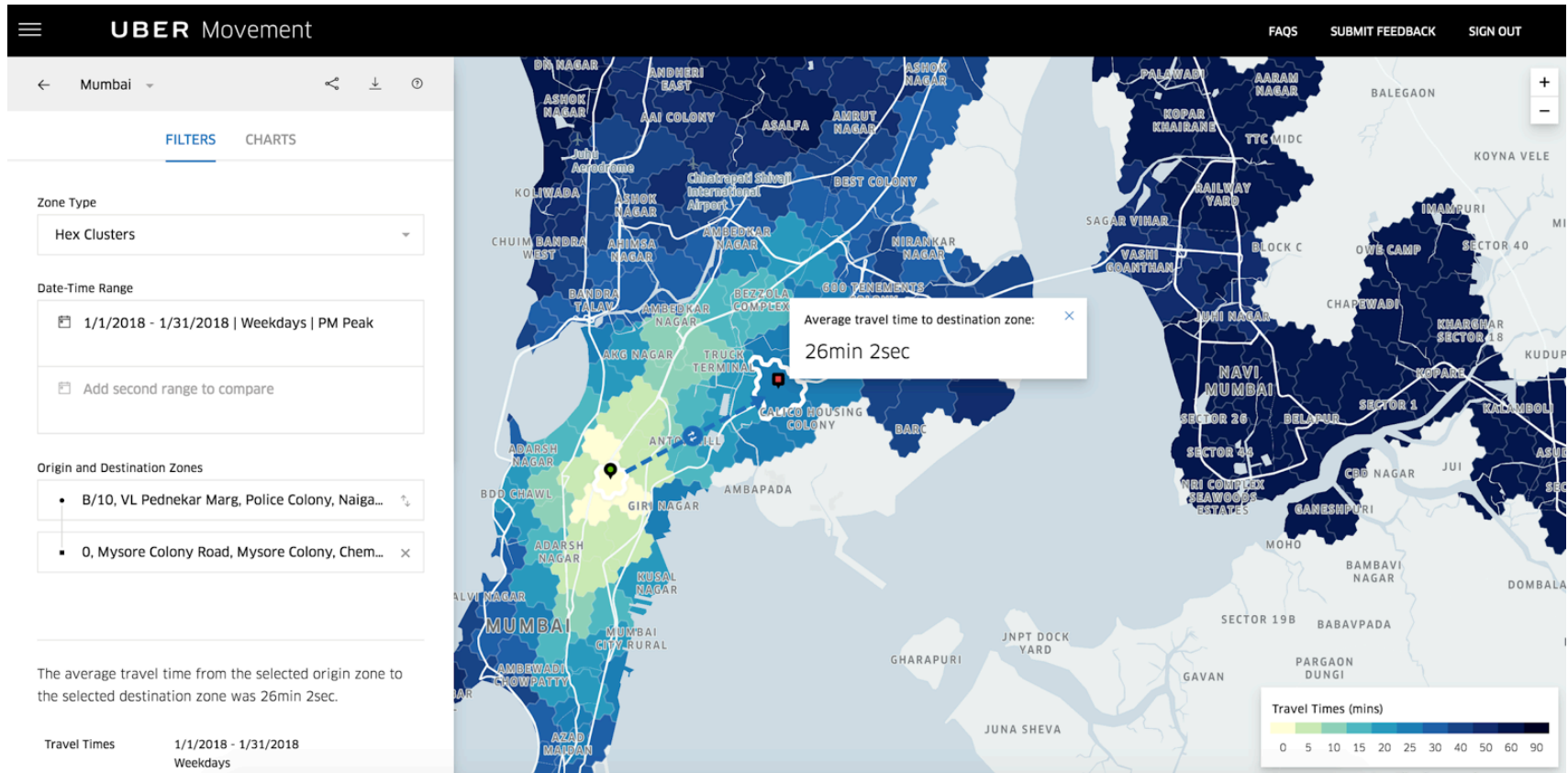
Measuring **Zone-to-Zone Travel Times**.

Historically, there have been many challenges with travel times:

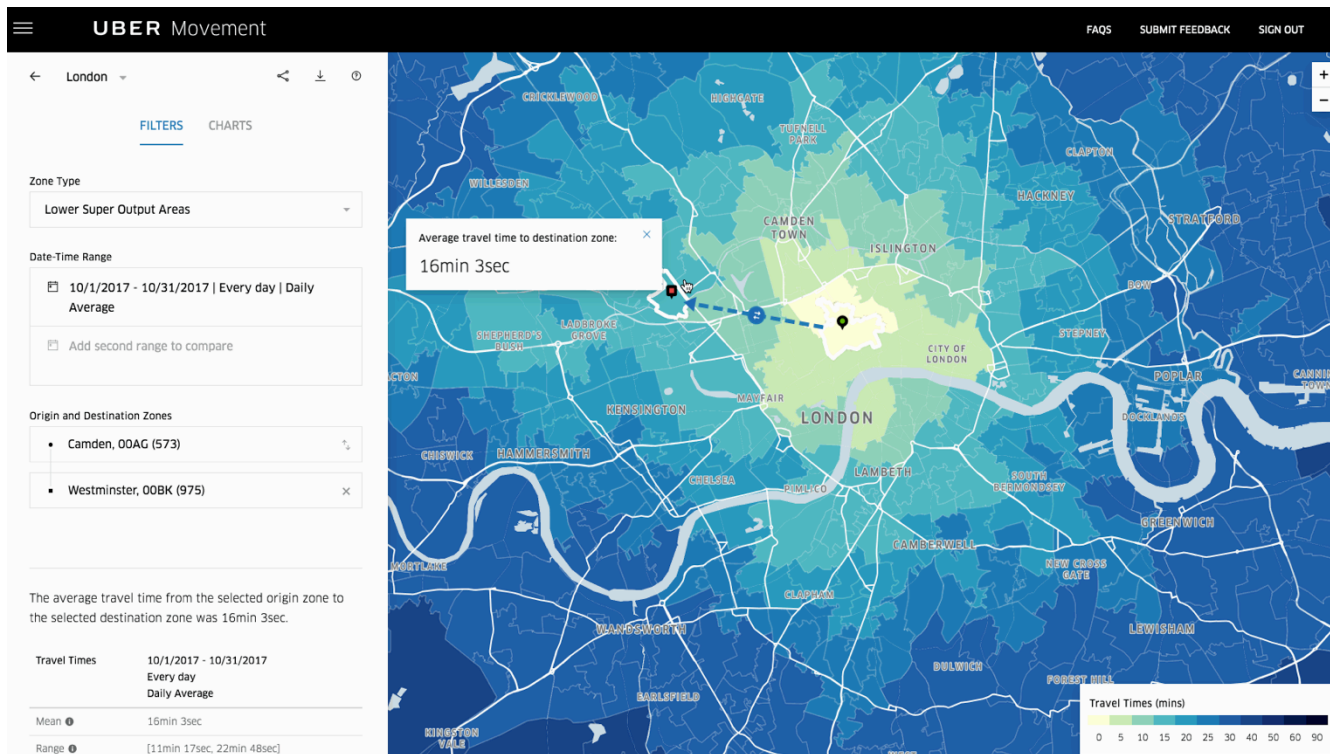
- Sparse geographic coverage
- Outdated or inaccurate data
- Considerable data gathering costs
- Over reliance on “gut checks” when validating travel demand models



What the map means



Interacting with the map



Downloading raw data

The screenshot shows the Uber Movement website interface. A modal window titled "Download Data" is open, providing three download options:

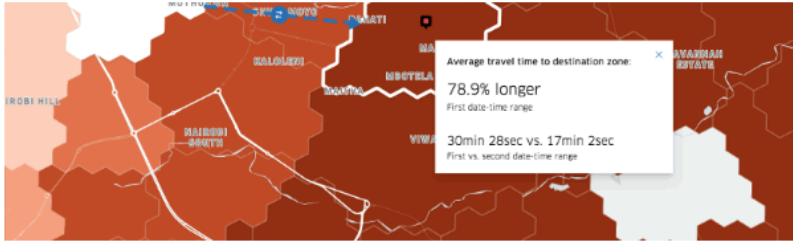
- Origin to All Destination Download**: This data set includes aggregated mean, range and confidence from the starting zone to all other zones. A link for [TRAVEL_TIMES.CSV](#) is provided.
- Daily Time Series Download**: For selected starting zone to destination zone, this data set includes aggregated daily, AM Commute and PM Commute, and Midday Averages. A link for [TRAVEL_TIMES_DAILY.CSV](#) is provided.
- Chart Data Download (Day of Week and Hour of Day averages)**: For selected starting zone to destination zone, these data sets include aggregated mean, range and confidence for day of week and hour of day. Links for [TRAVEL_TIMES_DAYS_OF_WEEK.CSV](#) and [TRAVEL_TIMES_HOURLY.CSV](#) are provided.

At the bottom of the modal, there is a copyright notice: "Copyright (c) 2017 Uber Technologies, Inc. Data Provider Attribution" and "Data is made available under the Creative Commons, Attribution Non Commercial license". A blue "DONE" button is located at the bottom right of the modal.

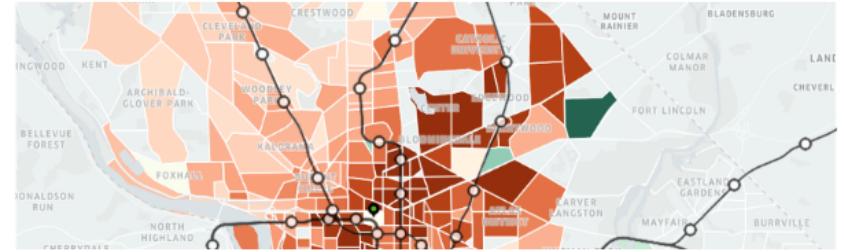
The background of the screenshot shows the Uber Movement website with a sidebar on the left containing navigation options like "Washington D.C.", "QUERY", "CHARTS", "Aggregation", "Census Tracts", "Date range", and "Locations". The main content area features a map of Seattle with various zones labeled, and a "Query summary" section at the bottom left.

Understanding Impact:

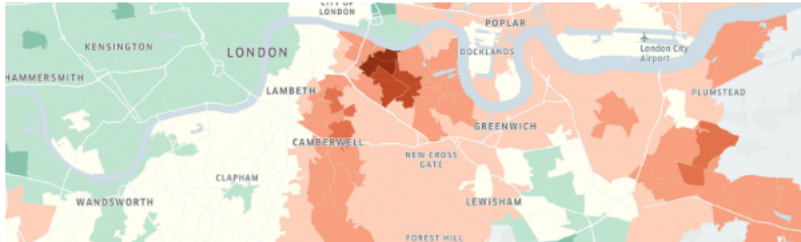
Examples from cities across the globe



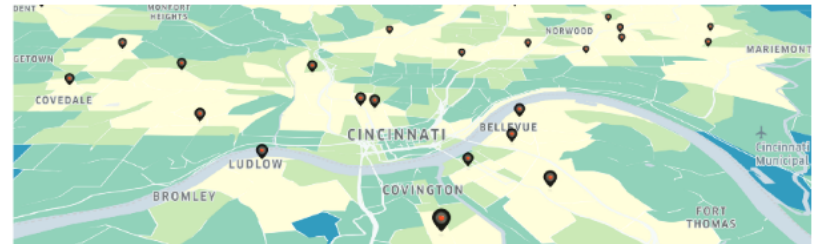
How March Floods Affected Nairobi Travel Times



The effects of DC Metrorail service disruptions on traffic congestion



Examining the Impact of the London Tower Bridge Closure



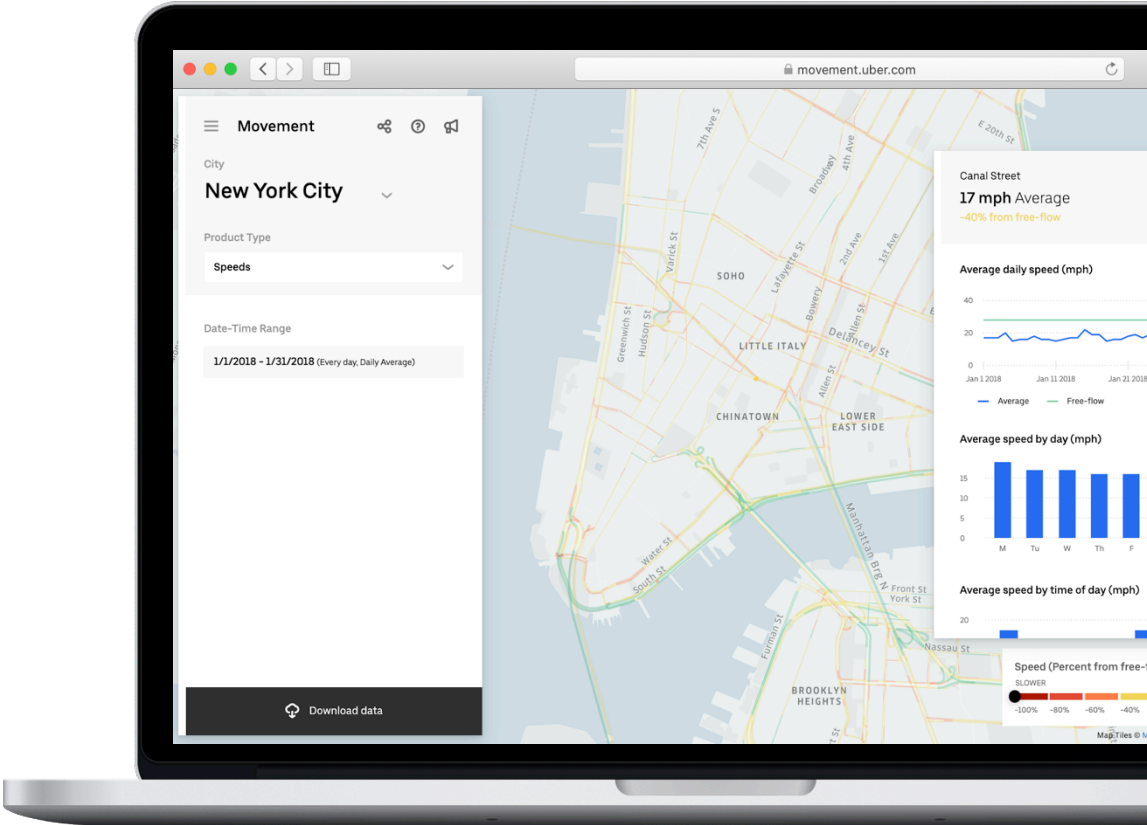
Visualizing Access to Healthy Food Options in Cincinnati

Next, speeds

Measuring Street Segment-level Average Speeds

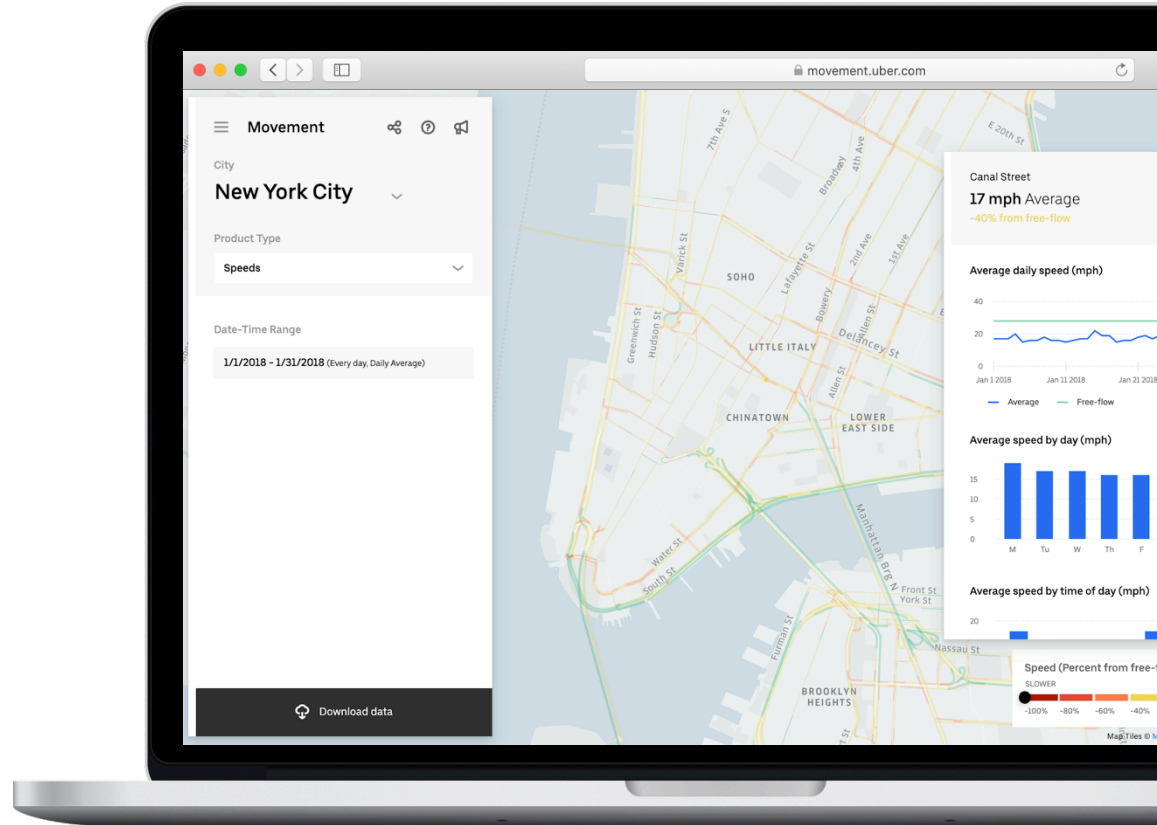
Today, urban planners report many challenges working with speeds data:

- Existing industry standards are often outdated and expensive
- Sparse coverage of side and feeder roads
- Not interoperable across base maps and systems, and often proprietary
- Difficult to work with without expert systems and a high degree of technical expertise



Launched in five cities

- New York City
- Seattle
- London
- Nairobi
- Cincinnati



Filter and Visualize

☰ Movement 🔗 ⓘ 🗣️

City
New York City ▾

Product Type

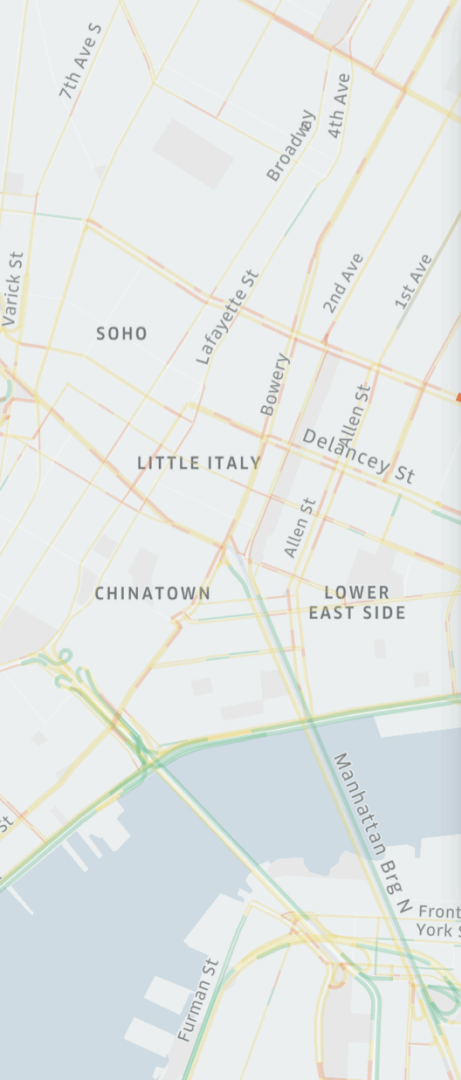
Speeds ▾

Date-Time Range

1/1/2018 - 1/31/2018 (Every day, Daily Average)

📄 Download data

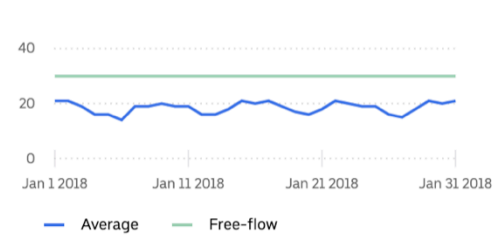




East Houston Street
18 mph Average
-41% from free-flow

SPEED LIMIT 25

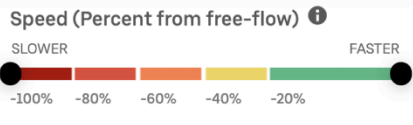
Average daily speed (mph)



Average speed by day (mph)



Average speed by time of day (mph)



View Trends Over Time, and Against Baselines

Download Hourly Time Series Data

Speeds by Road Segment

Product

Speeds



Time Period

2018 Quarter 3



Historical Speeds, Hourly Time Series (July 2018)

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This dataset provides the average speed on a given road segment for each hour of each day in the specified month. Only includes road segments with at least 5 unique trips in that hour.

Dataset Columns ▶

File size: 1.3 GB

[Download](#)



Historical Speeds, Hourly Time Series (August 2018)

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This dataset provides the average speed on a given road segment for each hour of each day in the specified month. Only includes road segments with at least 5 unique trips in that hour.

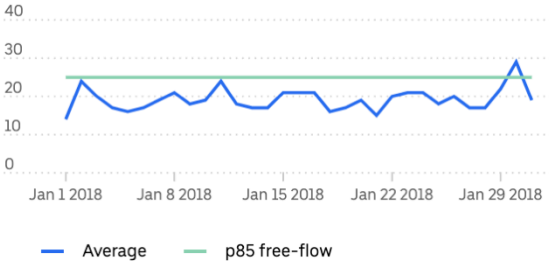
Using the Data



Granular

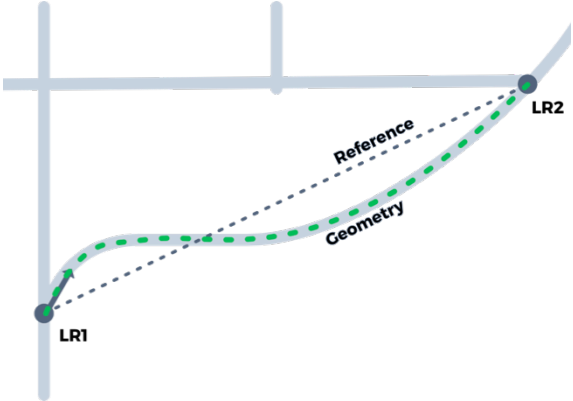
- Aggregated data should be at the block or street-segment level where possible
- Data should be available as a continuous time series, not larger periods like daily averages

Average daily speed (mph)



Baseline References

- Understanding what locations and times deviate from the norm
- Understanding what baseline activity and readings look like

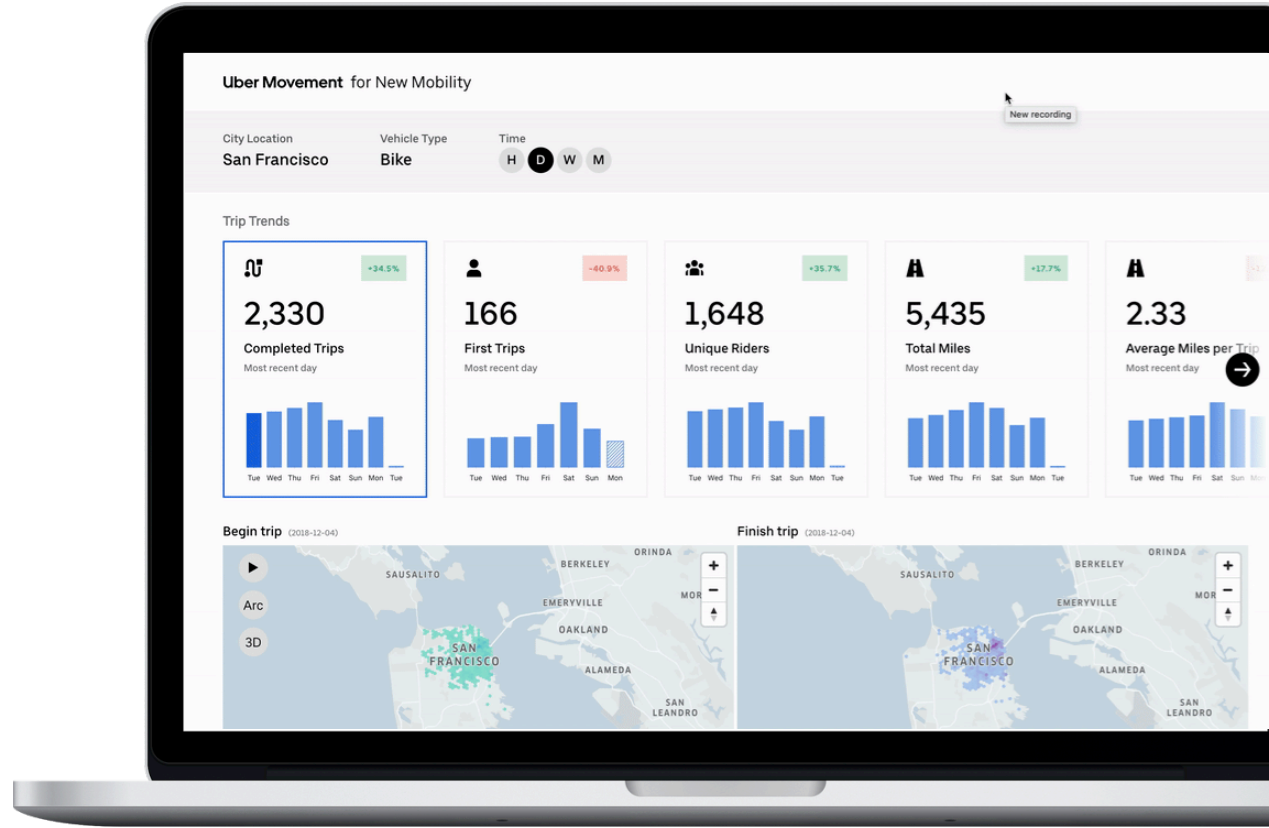


Interoperable

- Data and tools that are as interoperable and open as possible
- Aligned with open industry standards, such as OpenStreetMap and SharedStreets

New Mobility Dashboard

A dashboard providing the **data and insights** city mobility teams need to manage bike and scooter program.





Thank you!

Contact:

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Uber