Uber Movement

Santosh Rao Danda
Uber

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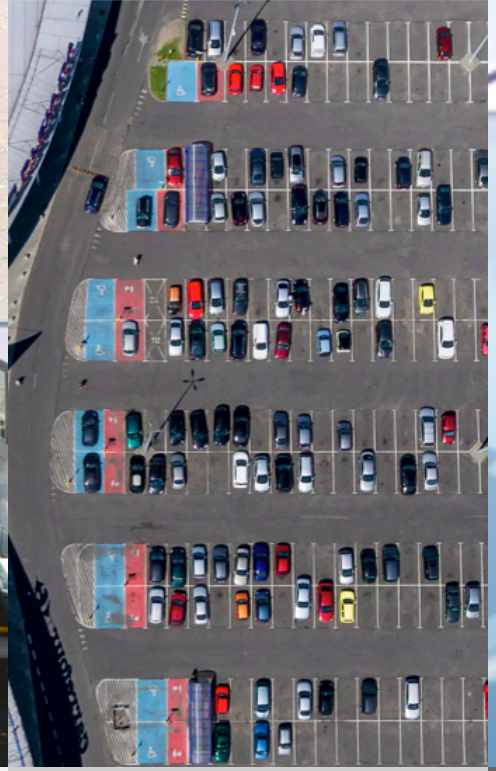

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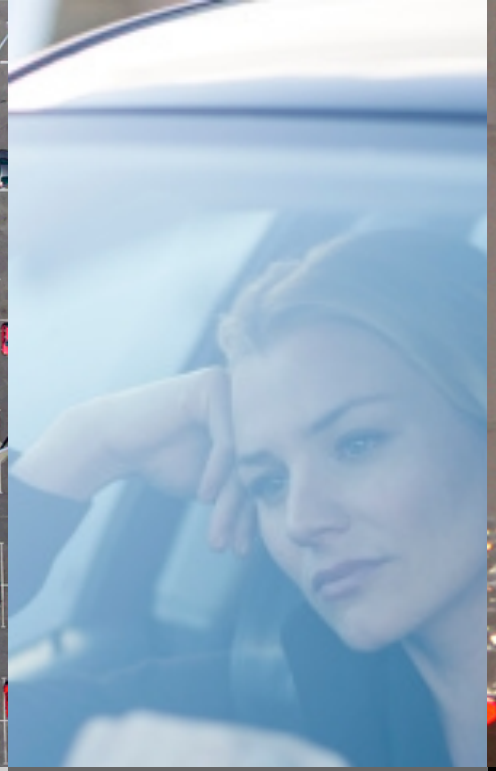

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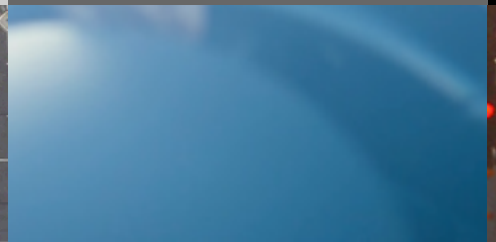
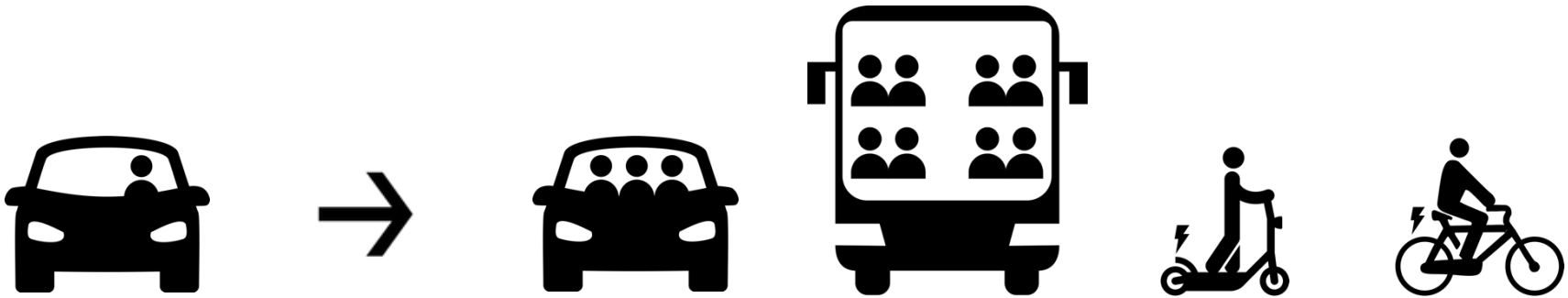
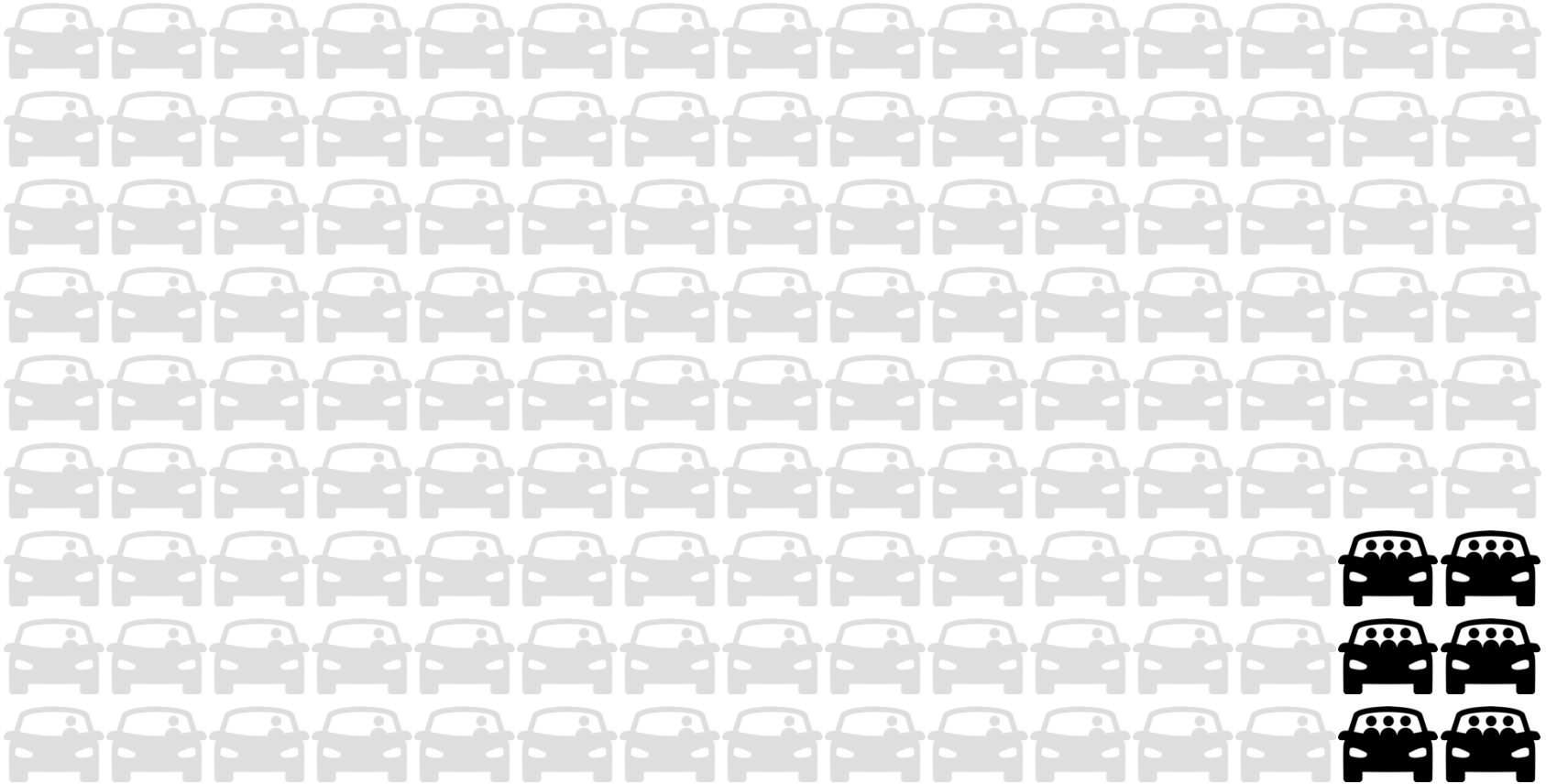


Uber

A platform for shared, electric mobility

What if?





Uber Movement

Conversations with Cities

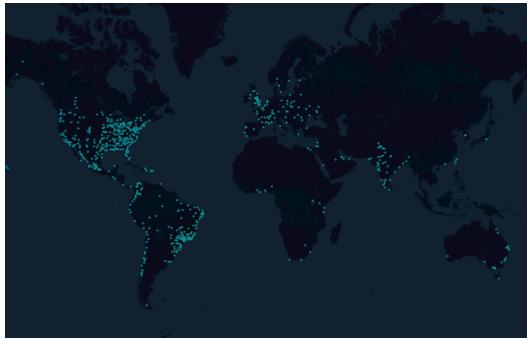
Mobility and Congestion

Infrastructure

Road Safety

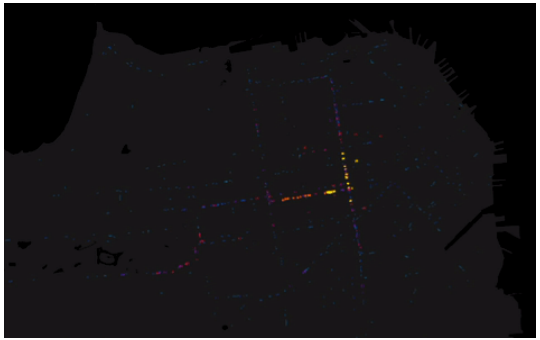
Data & Tools

Leveraging Uber's Unique Network



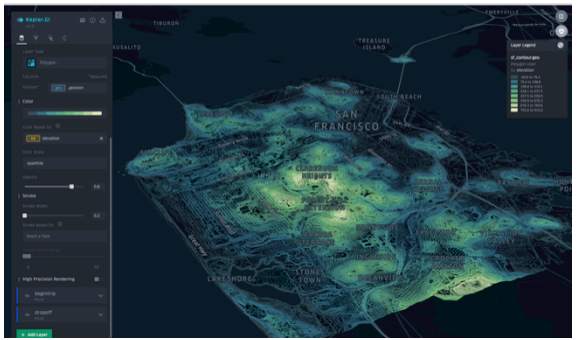
Global Reach

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



Unprecedented Scale

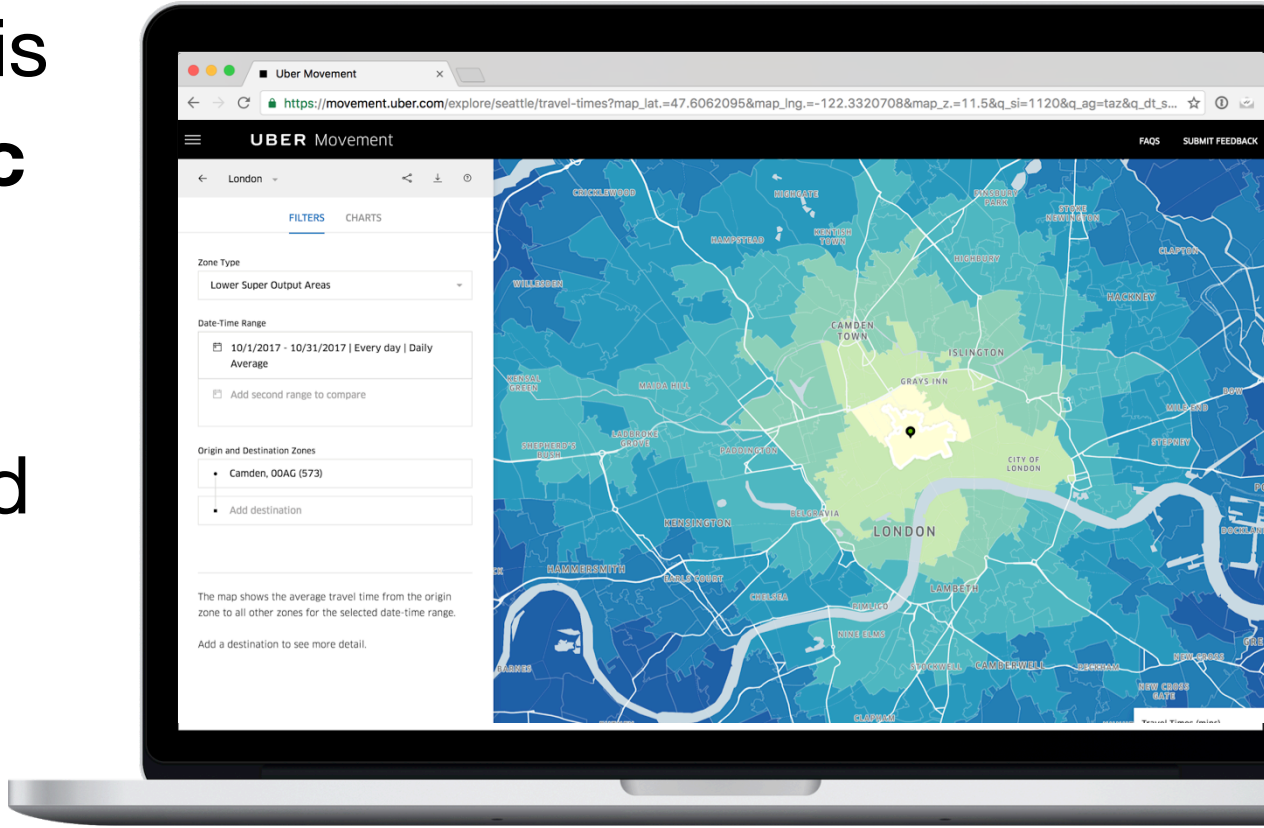
Leveraging a constantly updating sensor network derived from **14M+** trips per day



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

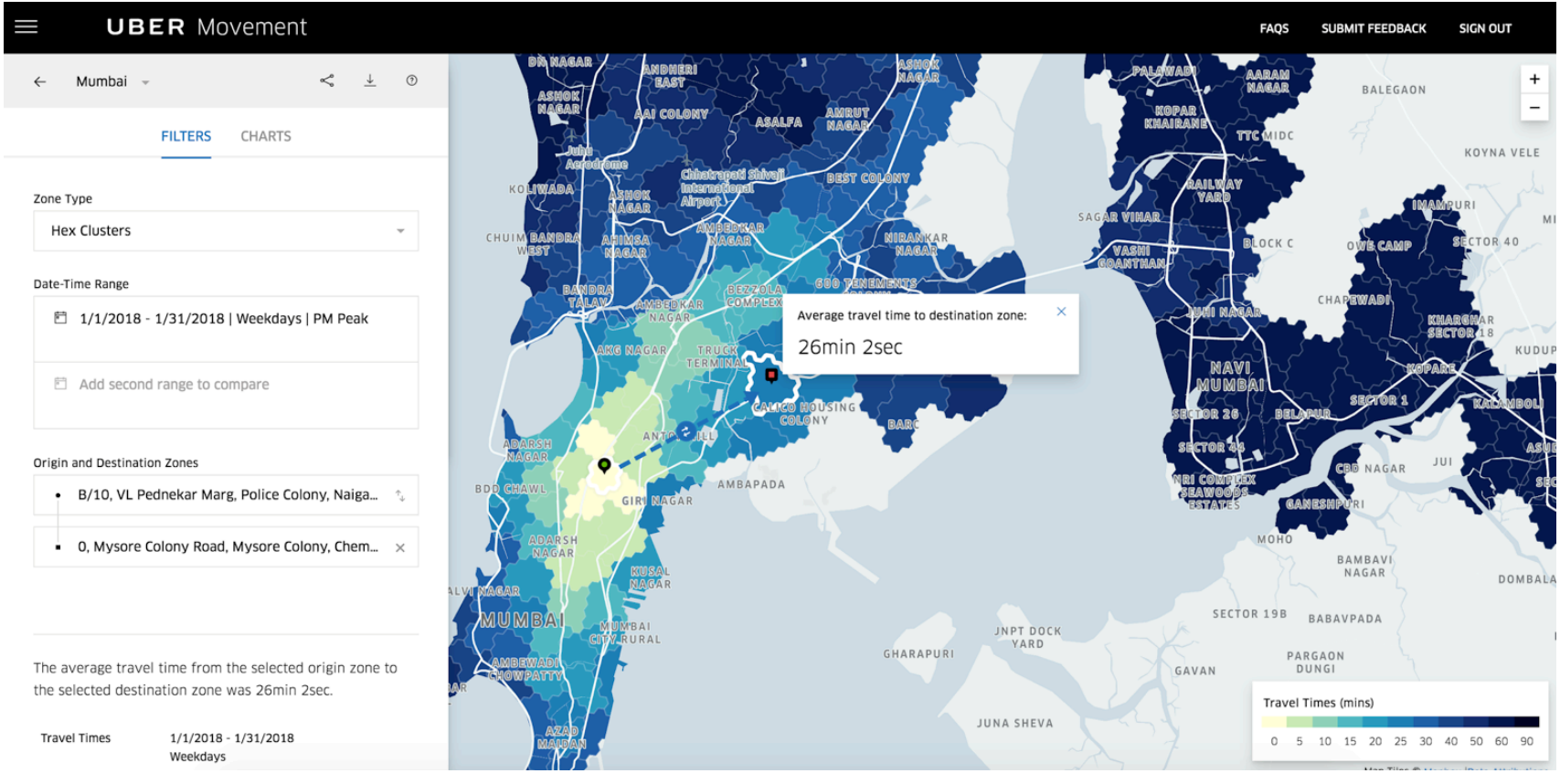
What did we start with?

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

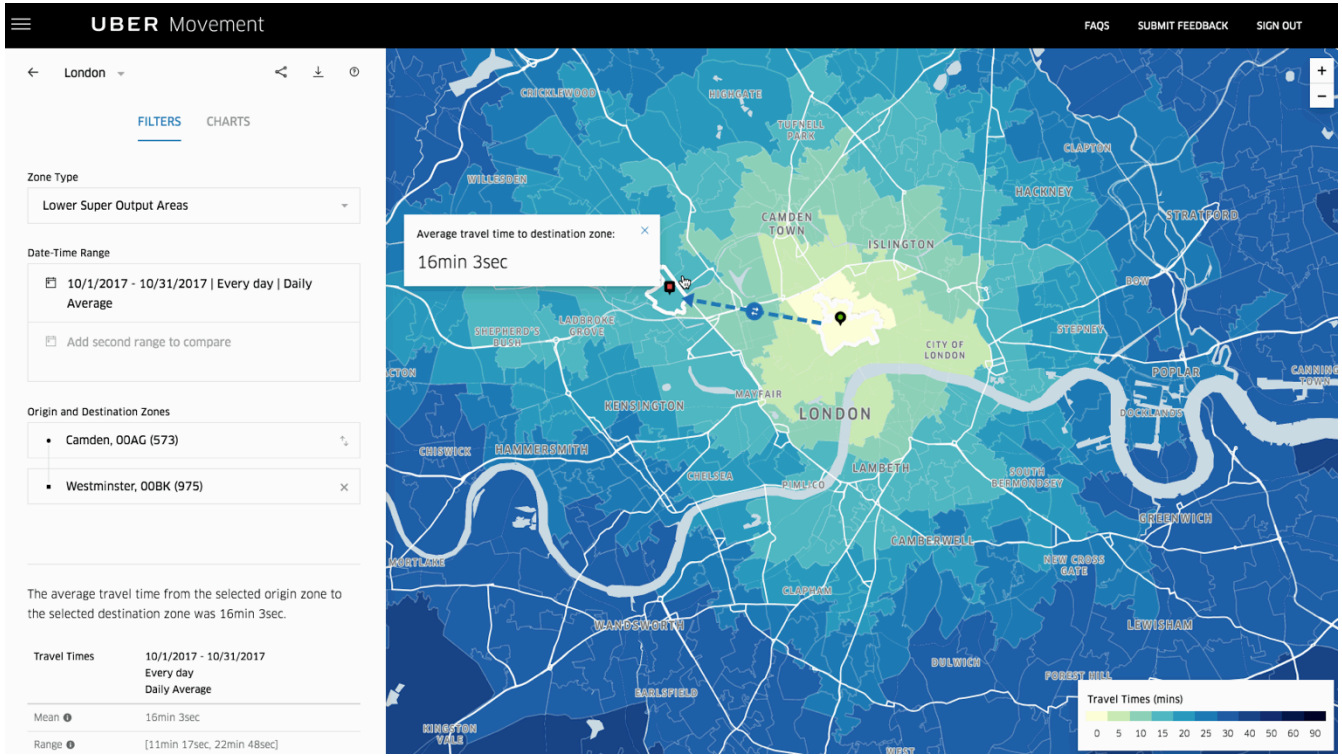
Historically, there have been many challenges with travel times:

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

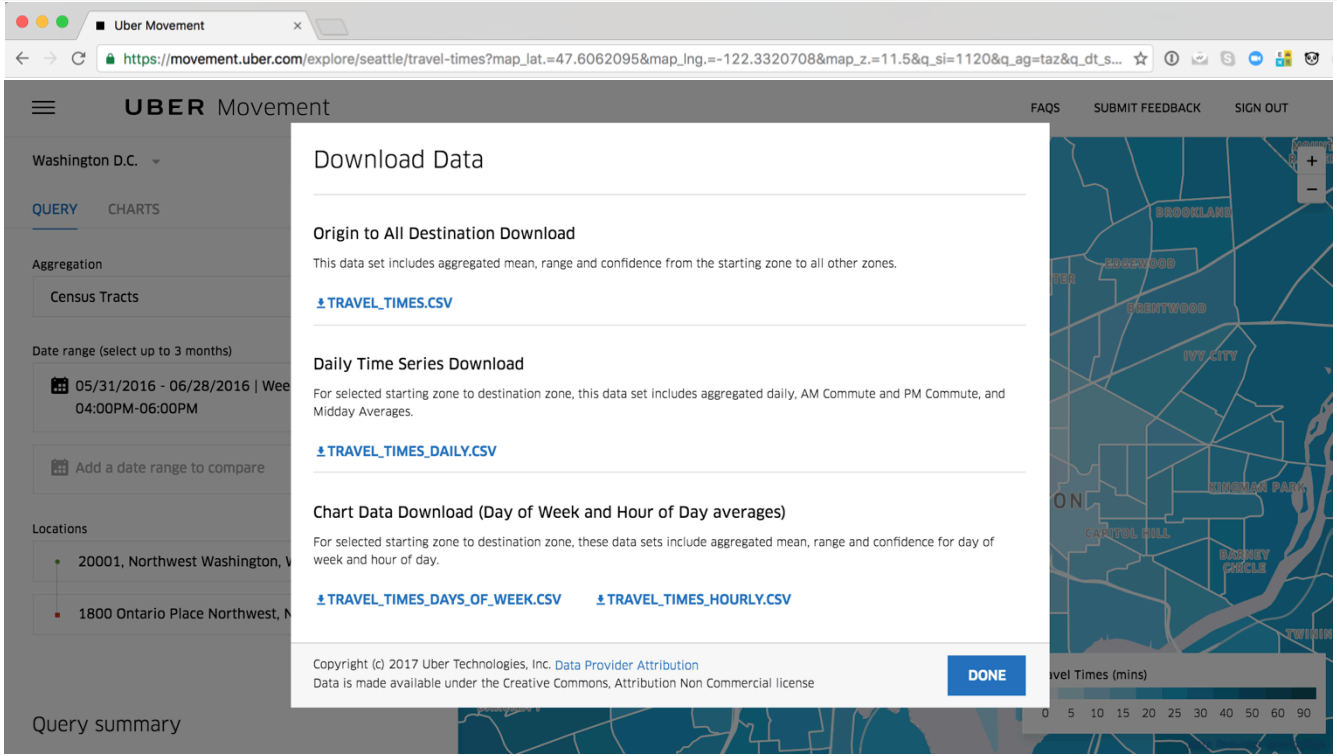
What the map means



Interacting with the map

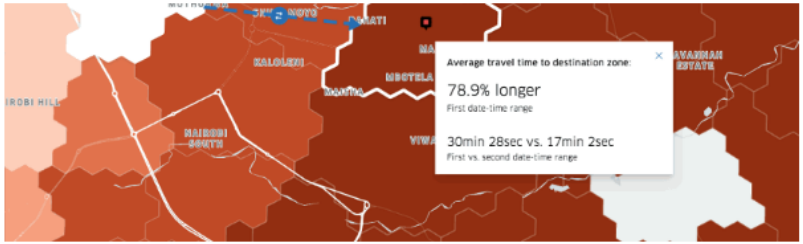


Downloading raw data

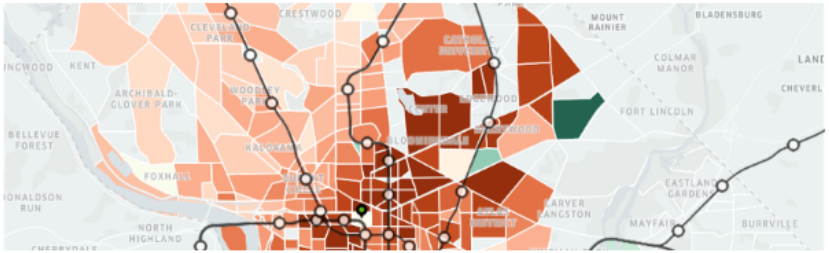


Understanding Impact:

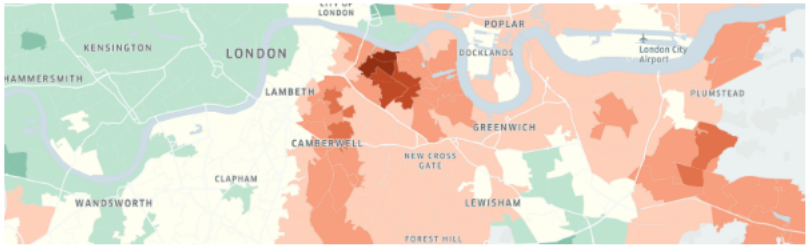
[Examples from cities across the globe]



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

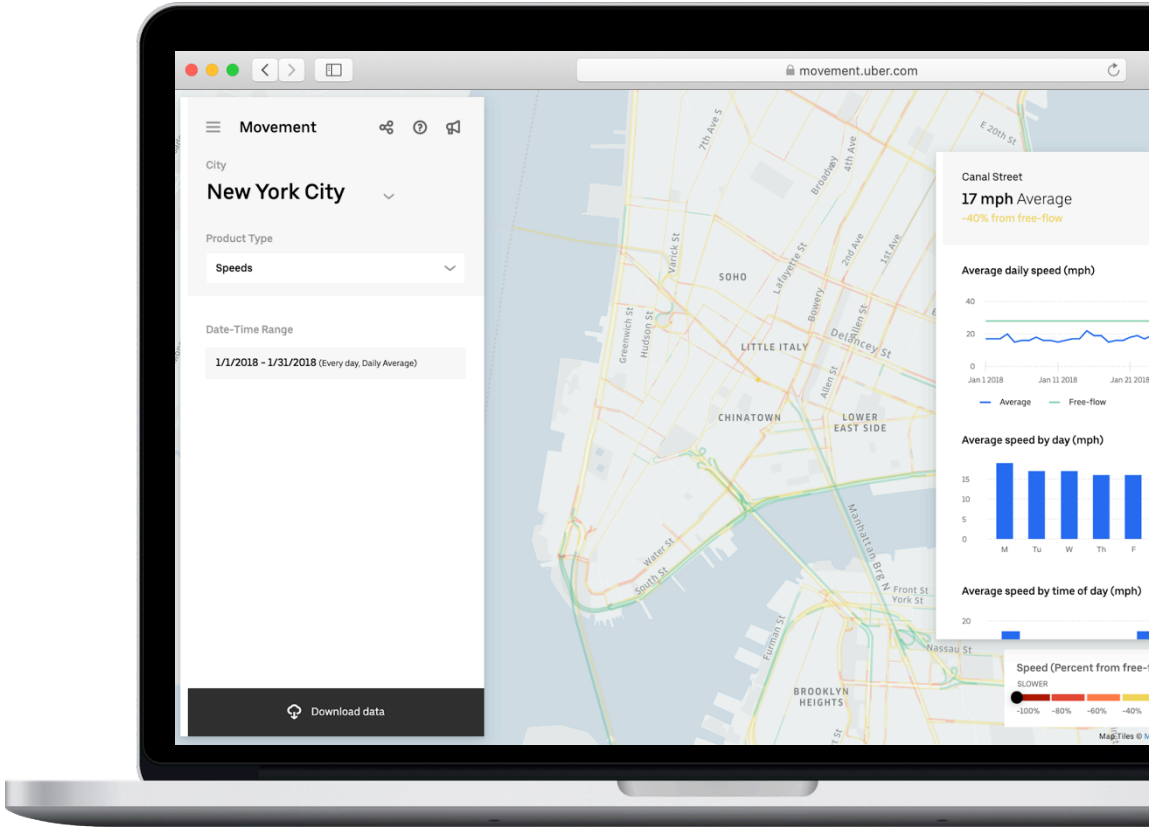
ential

Next, speeds

Measuring **Street Segment-level Average Speeds**

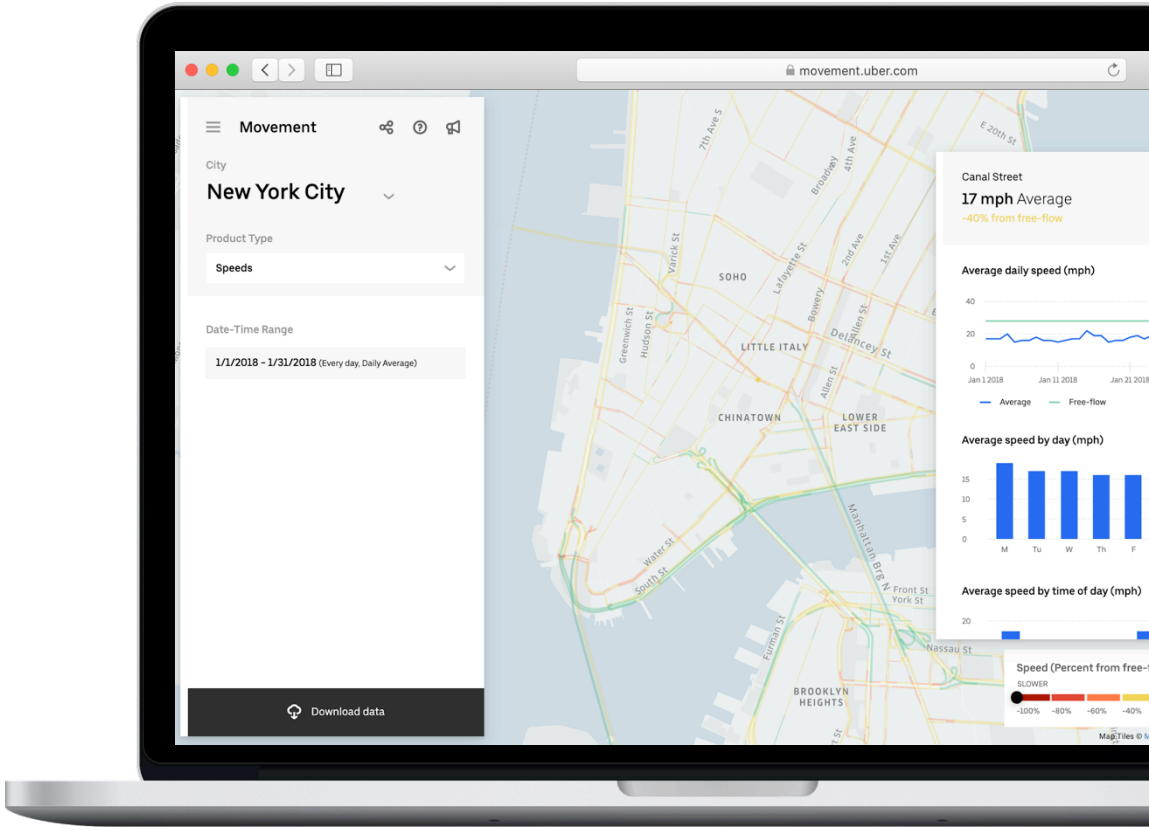
Today, urban planners report many challenges working with speeds data:

- 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

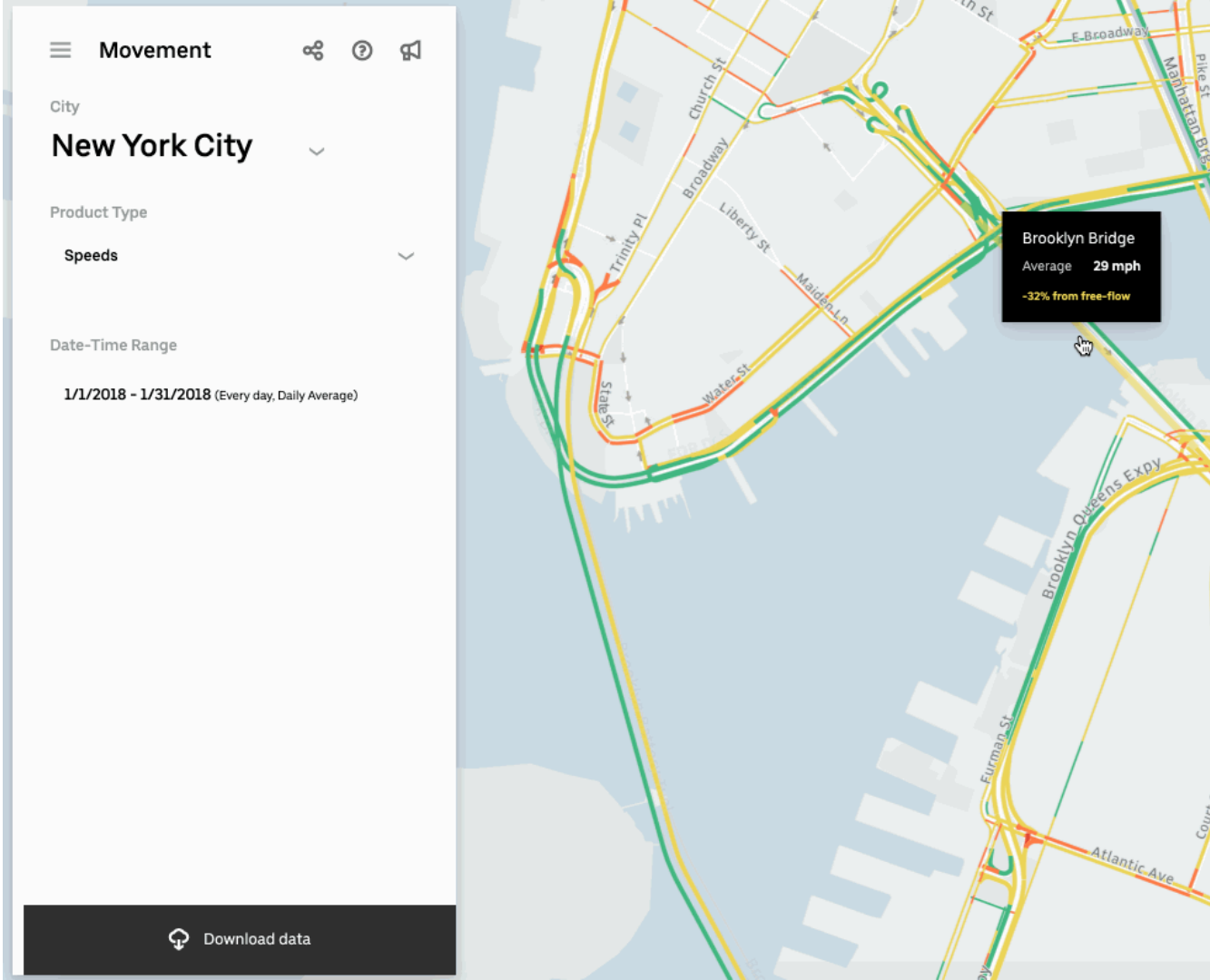


Launched in five cities

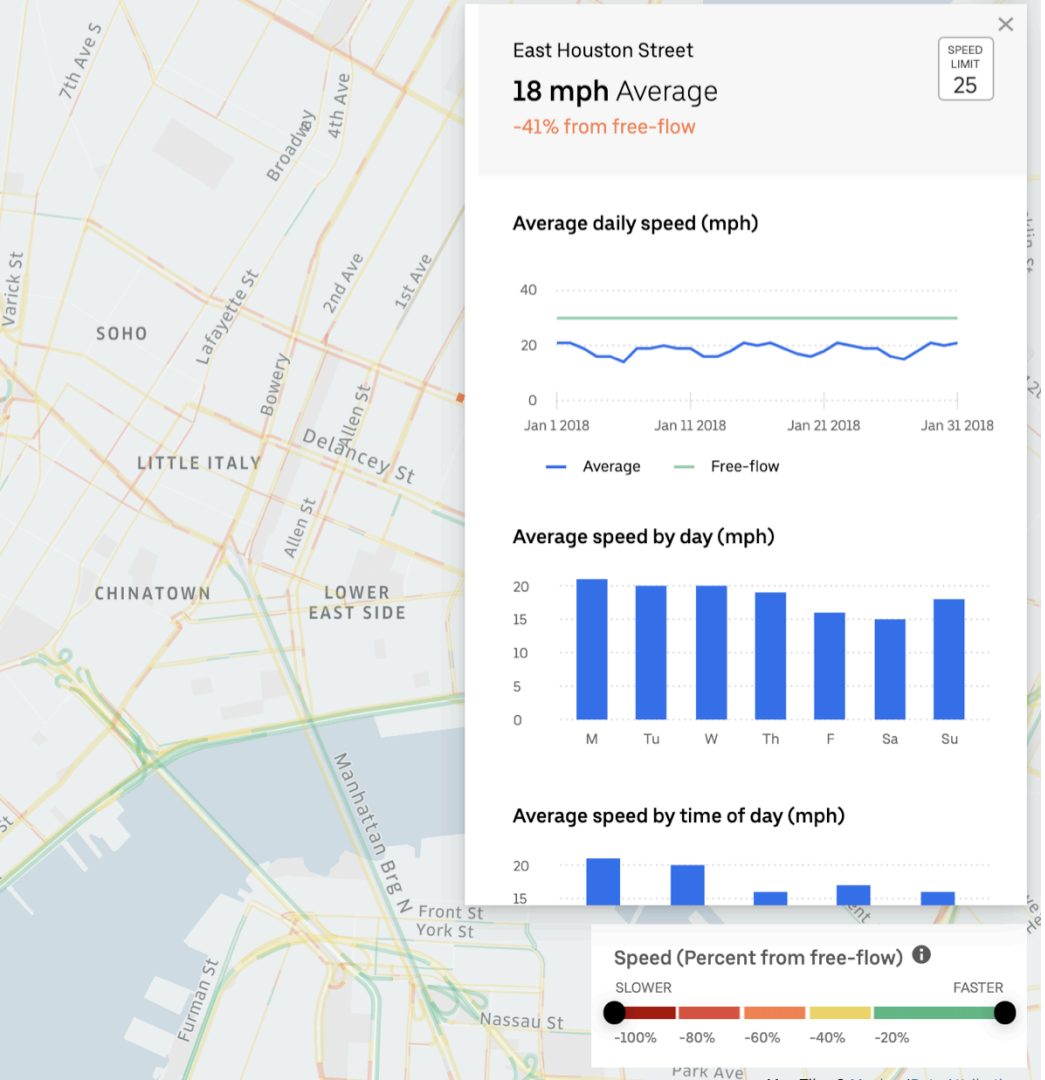
- New York City
- Seattle
- London
- Nairobi
- Cincinnati



Filter and Visualize



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)

CSV

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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)

CSV

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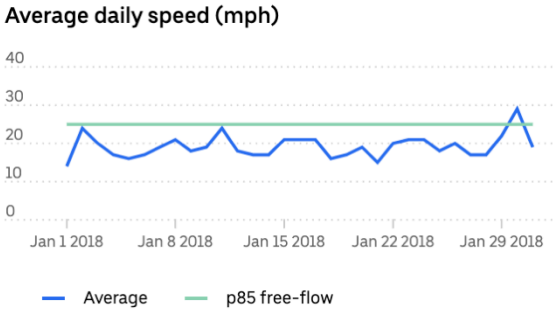
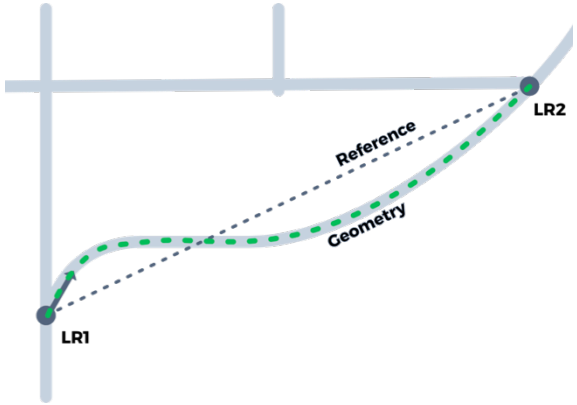
This dataset provides the average speed on a given road segment for each hour of each day in the specified month.

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

Baseline References

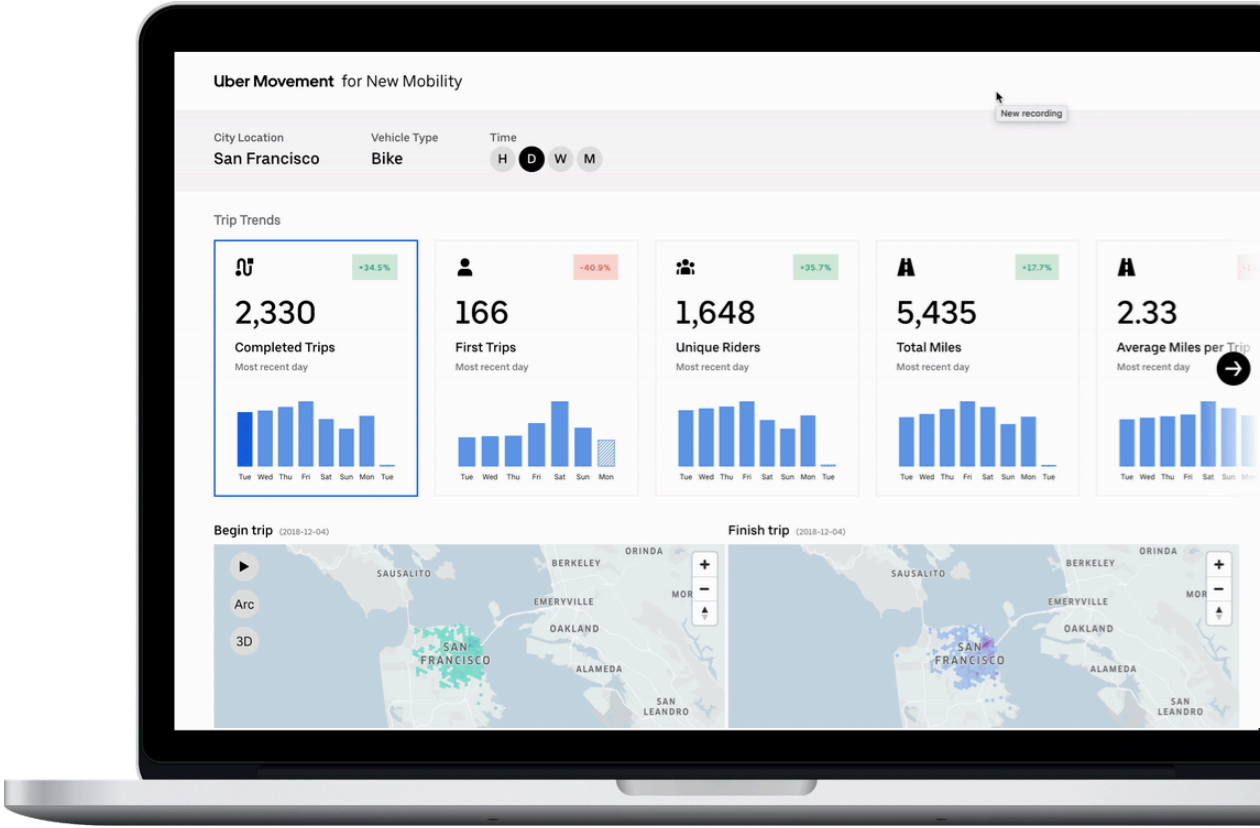
- Understanding what locations and times deviate from the norm
- Understanding what baseline activity and readings look like

Interoperable

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

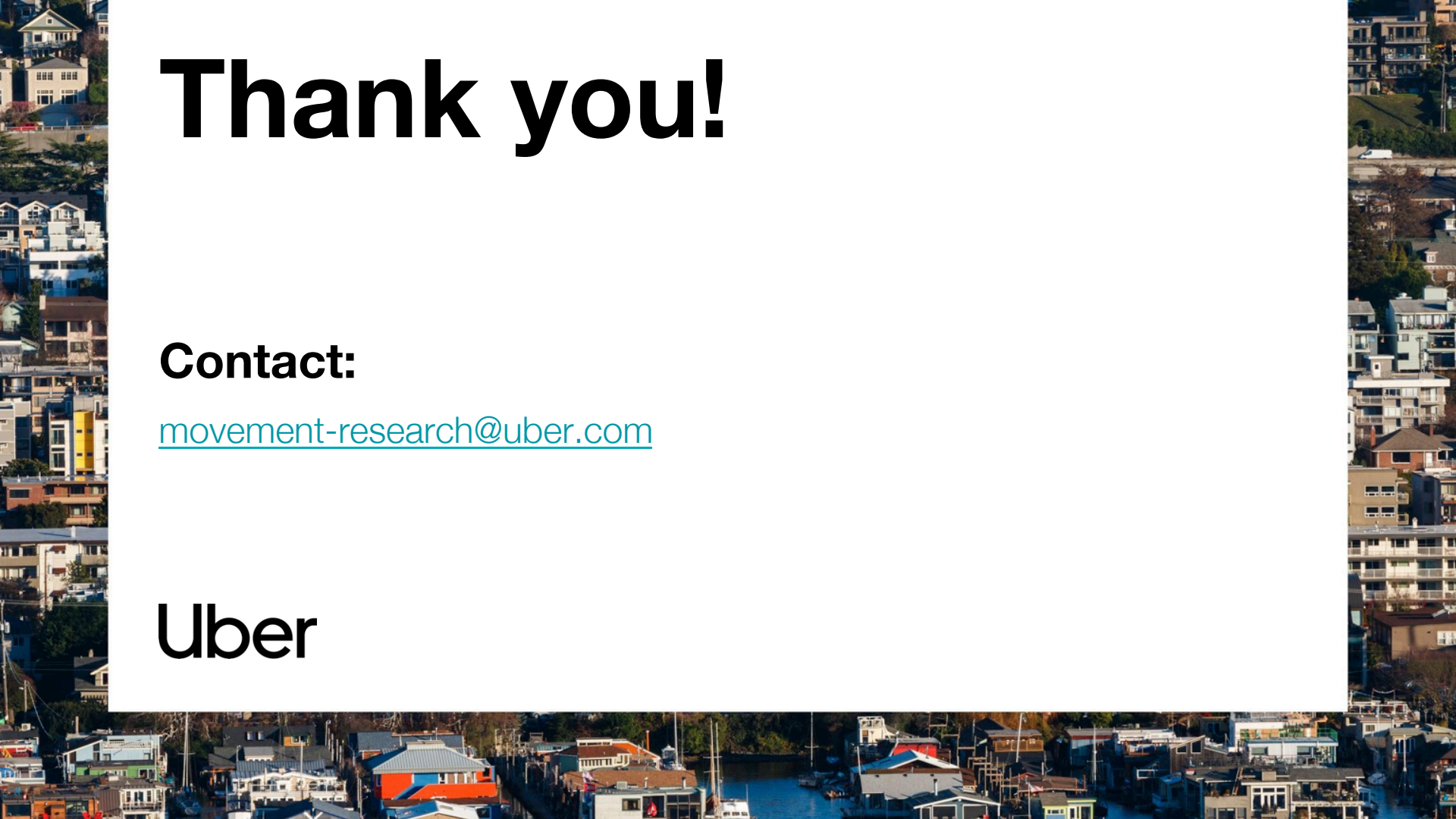
New Mobility Dashboard

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



Thank you!

Contact:

movement-research@uber.com

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