

How Cities Can Use Real-Time Information from Mobility Operators to Optimize City Streets

Meeting of the Minds Webinar

Wed, Jan. 23, 2019 10am - 11am PST



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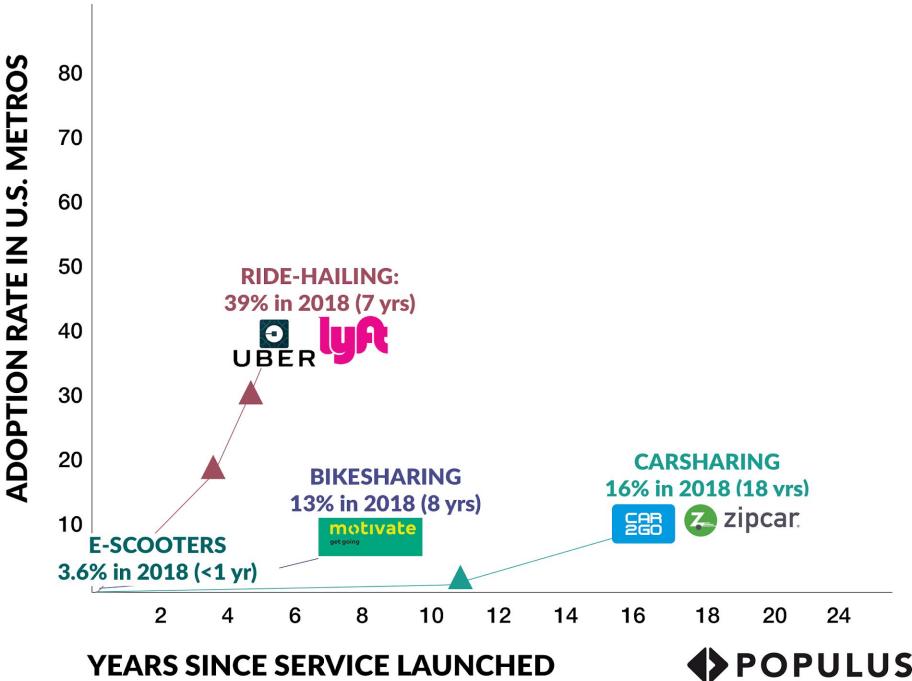
SHARED MOBILITY SERVICES HAVE RAPIDLY EVOLVED IN CITIES



2000 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018



ADOPTION OF NEW MOBILITY SERVICES IS ACCELERATING



Source: The Micro-Mobility Revolution, A Populus Research Report, July 2018

KEY FACTORS HAVE LED TO RAPID GROWTH

1

GPS: smartphone adoption has risen from 35% in 2011 to 77% in 2018

2

Traffic: in many major cities, it is actually faster to bike or scooter trips that are 3 miles or less

3

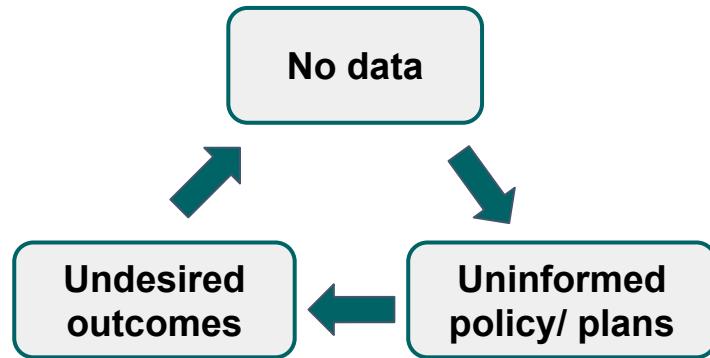
Venture capital: these companies have raised more money faster than prior mobility service providers

THE ROLE OF DATA FOR MANAGING MOBILITY SERVICES

Cities are now requiring data from private mobility operators to manage progress towards public goals, including:

- 1 **Safety:** reducing transportation-related injuries and fatalities.
- 2 **Equitable access:** improving availability and accessibility of transportation services to people of all backgrounds.
- 3 **Efficiency:** prioritizing efficient use of public space, and reducing transportation energy use/ climate impacts.

CITIES ARE LOOKING OUT FOR THE COMMON GOOD

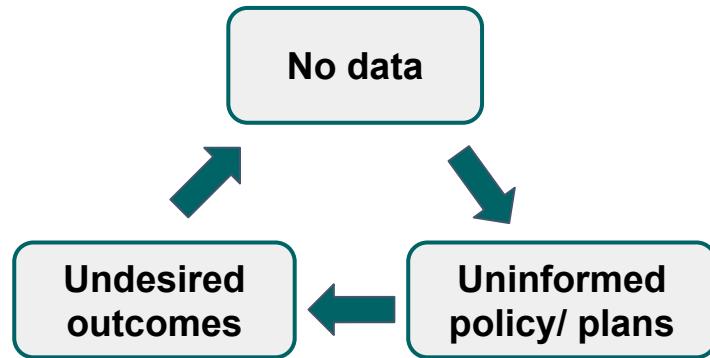


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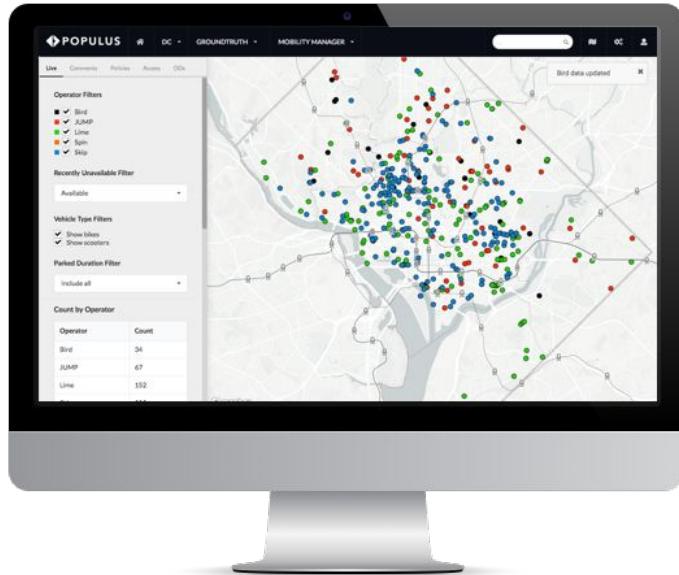
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CITIES ARE TRANSITIONING TOWARDS ACTIVE MOBILITY MANAGEMENT



Populus Mobility Manager ingests data from major mobility operators on behalf of cities

With access to real-time data for new mobility services (primarily dockless shared bikes and scooters today), cities are entering a new era of active mobility management.

KEY EXAMPLES

- Vehicle and fleet monitoring
- Incident management
- Data-driven policy (e.g. flexible vehicle caps)
- Data-driven planning
- Pricing to efficiently allocate public space

CITIES ARE ADOPTING NEW MOBILITY DATA REQUIREMENTS



COMMONLY REQUESTED DATA POINTS FROM OPERATORS

- Trips
- Vehicles
- Maintenance logs
- Complaints
- Injuries

REQUEST DATA THROUGH INDUSTRY STANDARD APIs

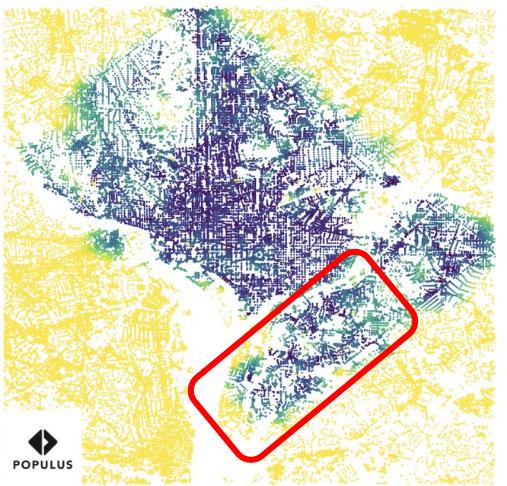
- GBFS (General Bike Feed Specification) is commonly required for public-facing APIs of vehicle locations (for example to third-party apps).
- MDS (Mobility Data Specification), initially introduced by LADOT, is now being used widely to require trip, vehicle status, and route data.

COLLECT SURVEY DATA TO ANSWER KEY QUESTIONS

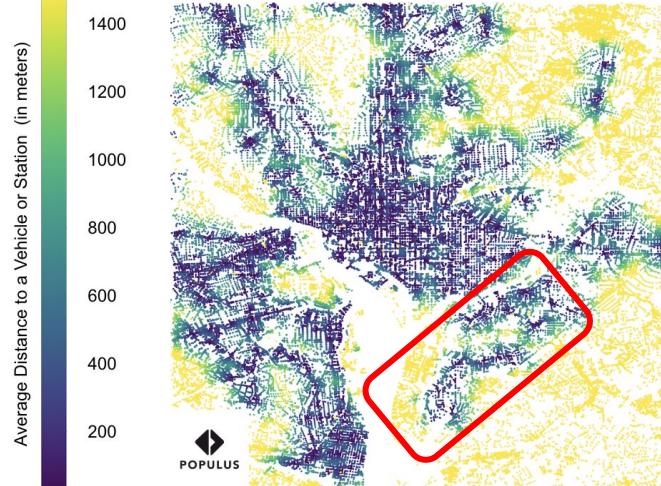
- Many key policy questions cannot be answered with GPS based locational data alone. They require asking people to respond to a survey.
- Cities should require that operators collect data in a consistent format approved by the city.

EVALUATING EQUITABLE ACCESS TO MOBILITY SERVICES

Average Distance to Dockless Vehicles



Average Distance to Capital Bikeshare



MEASURING EQUITABLE
ACCESS TO NEW MOBILITY:
A CASE STUDY OF SHARED
BIKES AND ELECTRIC
SCOOTERS



A POPULUS REPORT
NOVEMBER 2018

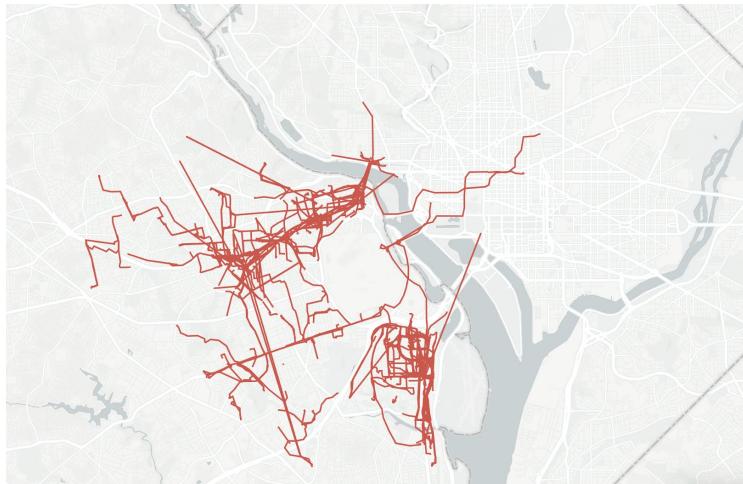
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- We evaluated the average distance to a bike (or scooter) for each street intersection.
- In Ward 8 (traditionally underserved), one can access a dockless vehicle within a shorter distance than the pre-existing docked system.
- Analysis of utilization rates suggests that dockless is not cannibalizing the existing docked system.

BETTER DATA HELPS CITIES EXPAND BIKE/SCOOTER INFRASTRUCTURE

Cities that receive detailed trip data can now harness GPS trace data to plan safer routes for bicycling and scooter infrastructure such as protected lanes and parking areas.

In addition to requiring that operators provide stationary vehicle location data (i.e. parked vehicles), cities need to require trip and route data through a standard such as the Mobility Data Specification (MDS).



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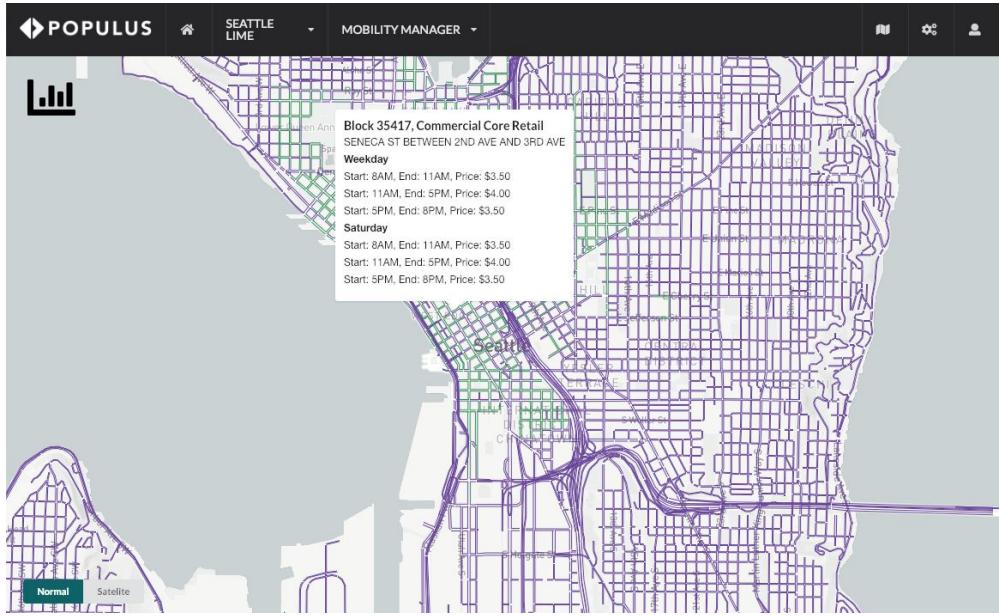
1 PARKING SPOT FOR A CAR >> 15 BIKES AND SCOOTERS

Photo credit: Gregory Matletsky

VALIDATING USE OF SHARED MOBILITY CURBSIDE UTILIZATION

As we look to the future, many cities are exploring strategies for more efficient curbside utilization:

- Allocating parking for car-sharing vehicles with higher trip utilization rates than personally-owned vehicles.
- Creating pick-up/ drop-off zones for fleet vehicles.
- Pricing and incentivizing public space for shared fleets, including curbs and sidewalks, for micromobility parking.

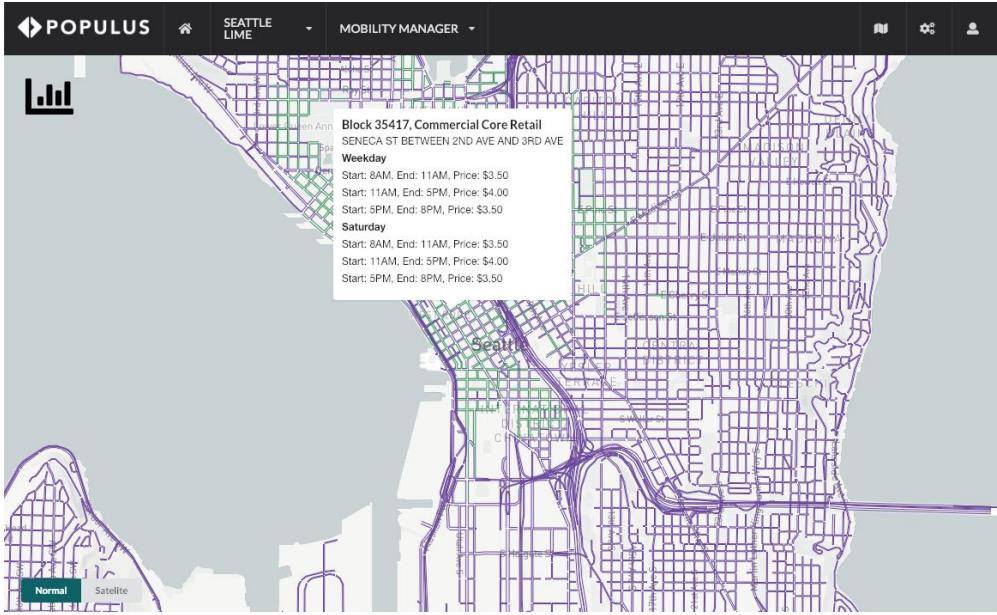


Lime and Populus announced a new partnership to validate use of on-street parking for their free-floating car-sharing vehicles, the LimePod, for a city.

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THANK YOU



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