

SHARED MOBILITY AND MICROMOBILITY TODAY



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DISRUPTING MOBILITY



Easter Morning 1900:
5th Avenue, New York City
SPOT THE AUTOMOBILE



Easter Morning 1913:
5th Avenue, New York City
SPOT THE HORSE





WHAT IS SHARED MOBILITY?

Shared mobility—the shared use of a vehicle, bicycle, or other mode—is an innovative transportation strategy that enables users to gain short-term access to transportation modes on an as-needed basis



DISRUPTING MOBILITY



MICROMOBILITY AND LOW-SPEED MODES



MICROMOBILITY AND LOW-SPEED MODES



- Sharing and electrification reshaping personal mobility
- Electric motors are reinventing personal mobility and being added to equipment such as: bicycles, scooters (push and moped styles), skateboards, and unicycles
- Emerging modes and a changing marketplace make it challenging for cities and public agencies to understand: 1) nature of services and 2) where they should be permitted to operate (in motion and parked)



MICROMOBILITY OPERATIONAL MODELS



Bikesharing and scooter sharing includes various service models including:

- **Station-based:** bicycle or scooter is checked out at one station location and can be returned to a different designated station location
- **Dockless/Stationless:** Bicycles and scooters can be picked up and parked within a defined area at a rack or along the sidewalk; can be locked/unlocked with a smartphone and/or locking mechanism attached to the equipment
- **Flexible/Hybrid:** Users have the option of checking out and returning equipment to/from a station or anywhere within a defined area (allowing station-based and dockless operations)



MICROMOBILITY BY THE NUMBERS



Bikesharing (as of May 2018)

- The U.S. had 261 operators with more than 48,000 bicycles (Russell Meddin, unpublished data)
- Dockless bikesharing accounted for ~44% of all bikesharing bikes in the U.S. and approximately 4% of bikesharing trips as of 2017 (NACTO, 2018)
- Between 2010 to 2017, 123 million bikesharing trips have been completed in the U.S.; 35 million trips completed in 2017 (NACTO 2018)

Scooter Sharing (as of September 2018)

- Lime had 11.5 million rides on its bikes and scooters
- Bird had over 10 million rides
- Both Lime and Bird operate in 100 cities worldwide
- Spin operates in 18 cities in the U.S.
- Skip operates in the SF Bay Area, Portland, and Washington D.C.
- Scoot Networks available in San Francisco and Barcelona
- An estimated 65,000 scooters are available nationally

COMMON LOCAL CONCERNS

- Fear of bicycle/scooter graveyards
- Damage, theft, and vandalism
- Safety considerations
- Helmet use
- Sidewalk/curb space management
- Many dockless bicycles and e-scooters feature locking mechanisms that may not require racks, which can cause riders to park them without considering their surroundings
- System imbalance
- Legal operational areas
- Equity



LOCAL RESPONSES

- A number of cities have implemented permit processes for dockless micromobility services
- Common policy aspects include:
 - Bicycle equipment standards
 - Liability insurance and/or indemnifications of liability
 - Plans for initial deployment, re-balancing, and system expansion
 - Parking guidelines
 - Process for enforcement, fines, and equipment impounding
 - Municipal fees

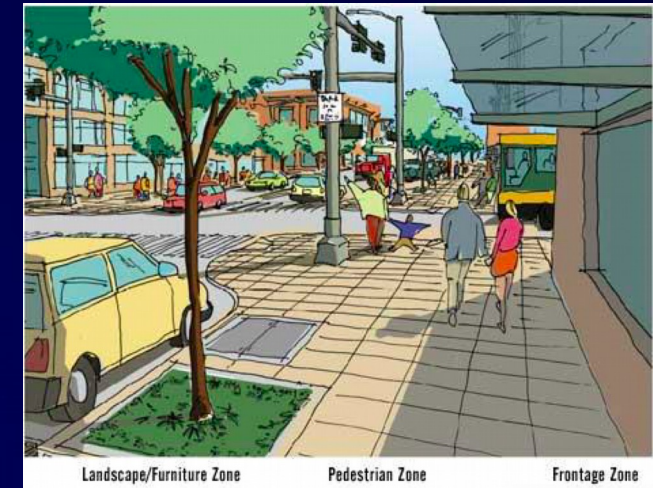


Diagram showing different sidewalk zones from Seattle's dockless bikeshare permit.



Example of Seattle's painted dockless bikeshare parking zone.

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