Micromobility and Transit: Keys to Successful Collaboration

Findings from TCRP Research Report 230

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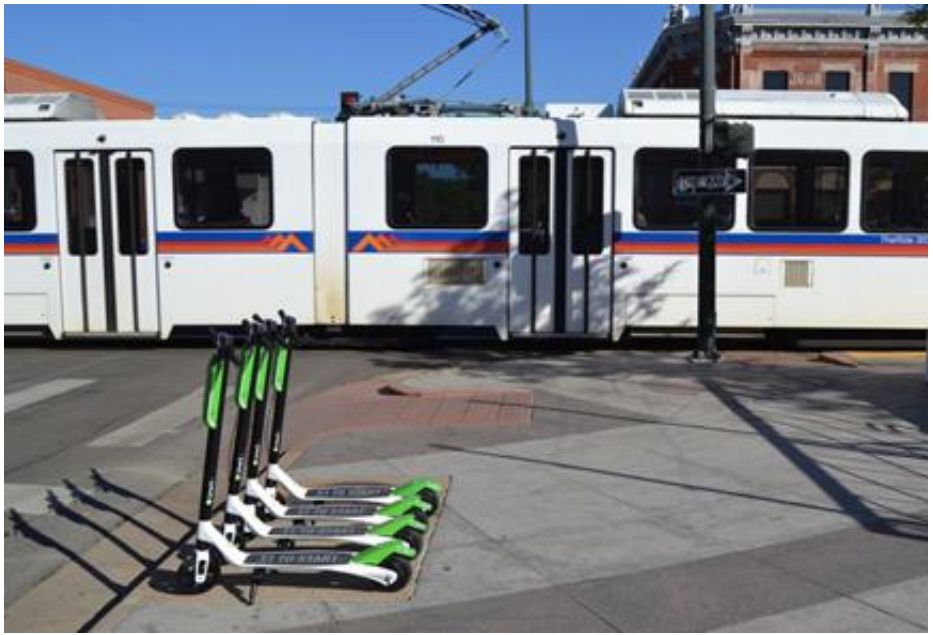


The Big Questions

I. What is micromobility, why should it be regulated, and who should do so?
II. How do local governments regulate?
III. What do transit agencies need to understand about micromobility?
    A. Who's using it, why, and where?
    B. How does it impact transit use & operation?
IV. How does transit agencies' interaction with micromobility differ from that of other public entities?
    A. "Cities regulate. Transit agencies partner."
V. If agencies choose to partner with private providers, what's the best approach?

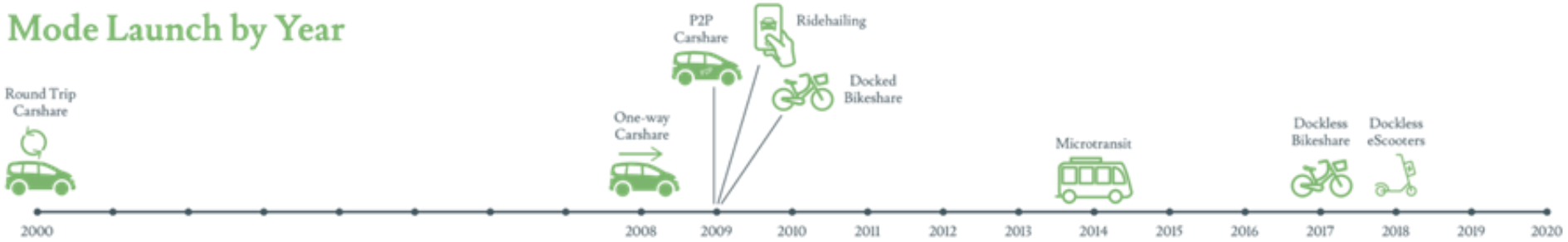
Figure 1 - Docked bikeshare: Divvy bikes in Chicago. Credit: SUMC.

I. Context: Devices and Business Models

Devices & Business Models

- Defining shared micromobility
  - Service types: scooter-share, bikeshare (docked, dockless, hybrid)
  - Vehicle types – SAE 3194 (in fleets) + analog bikes
- Business models & industry trends

I. Evolution of shared mobility and context for micromobility regulation



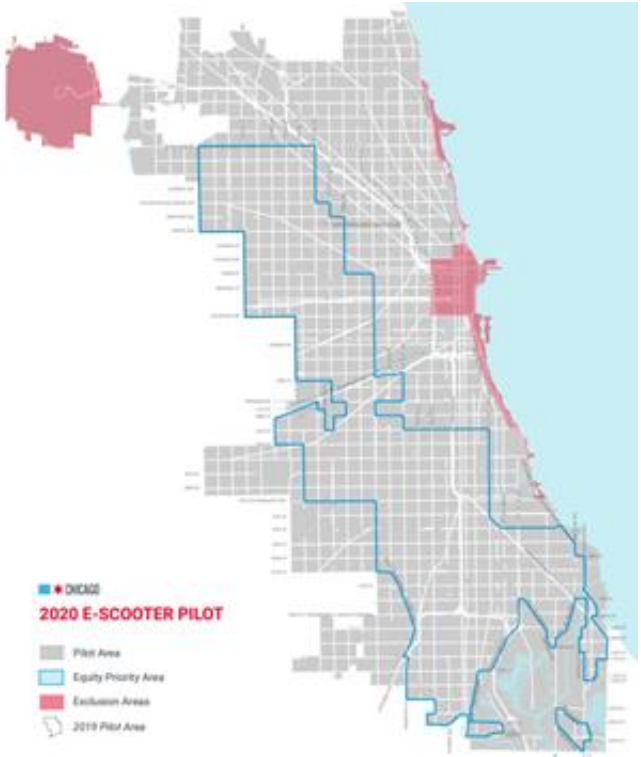
- Earliest models (cars + bikes) were station-based/round trip; free-floating/dockless emerged later
- Large public investments in docked bikeshare
- Dockless MM a unique combination of factors, w/high visibility and greater potential for abuse: brand new mode, physically unsupervised vehicles in public way, unclear chain of custody, some unscrupulous players trading on low barriers to entry
- Also emerged after ridehail caught cities off-guard
- **Stronger initial regulatory response/outright bans on dockless MM in many places**

II. Key areas of local regulation

- Vehicle location: operation, parking, geographic limitations
- Limiting scale & impact: Fleet caps, provider counts, utilization targets
- Rider & public safety
  - Speed limits
  - Vehicle requirements
  - Helmets
  - Age/license requirements
  - Hours of operation

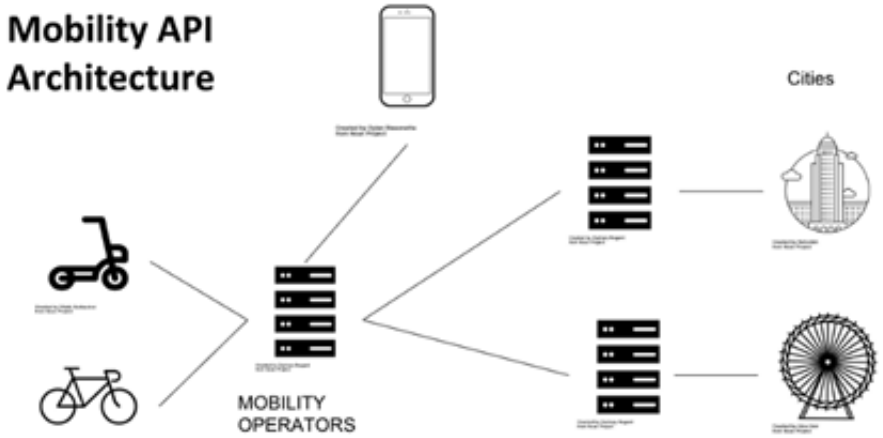
II. Key areas of local regulation

- Social equity considerations
  - Geographic distribution
  - Access for unbanked, people without smart phones
  - Reaching lower-income/historically underserved populations
  - Equity plans & reporting
- Operator responsibilities
  - Distribution/rebalancing
  - Parking enforcement
  - Maintenance
  - Outreach & communications



II. Key areas of local regulation

- Data sharing
  - Reporting requirements
  - Specifications & standards (GBFS, MDS, etc.)
  - Walled gardens/third party apps
- Risk management
  - Insurance coverage
  - Performance bonds



III. Users & Utilization: Survey

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Populus Survey

- User characteristics
  - MM adoption rates
  - Demographics: age, gender, race & ethnicity, income
  - Use of other transportation: commute mode, car ownership
- Scooter use
  - Trip purpose, reasons for choosing, mode replacement
  - Scooting to and from transit

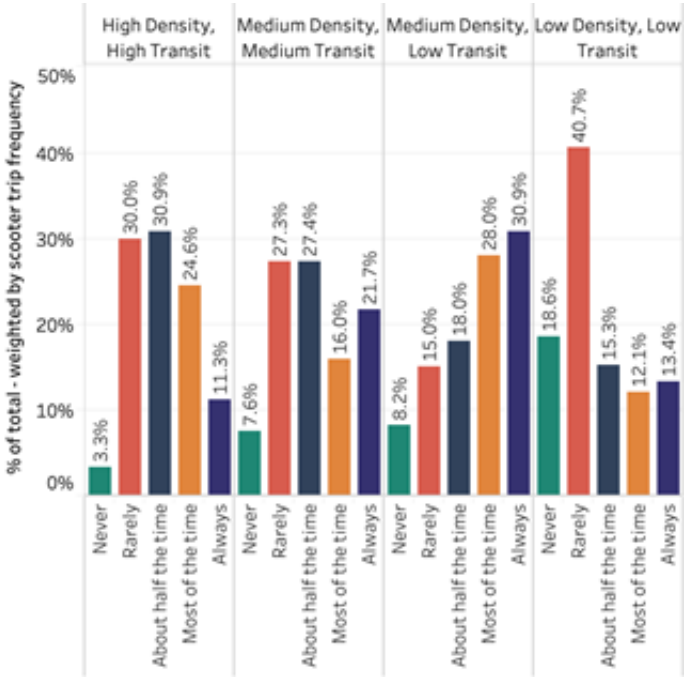

Fig 16: How often scooter is used to get to/from public transit. Populus Groundtruth survey 2019.

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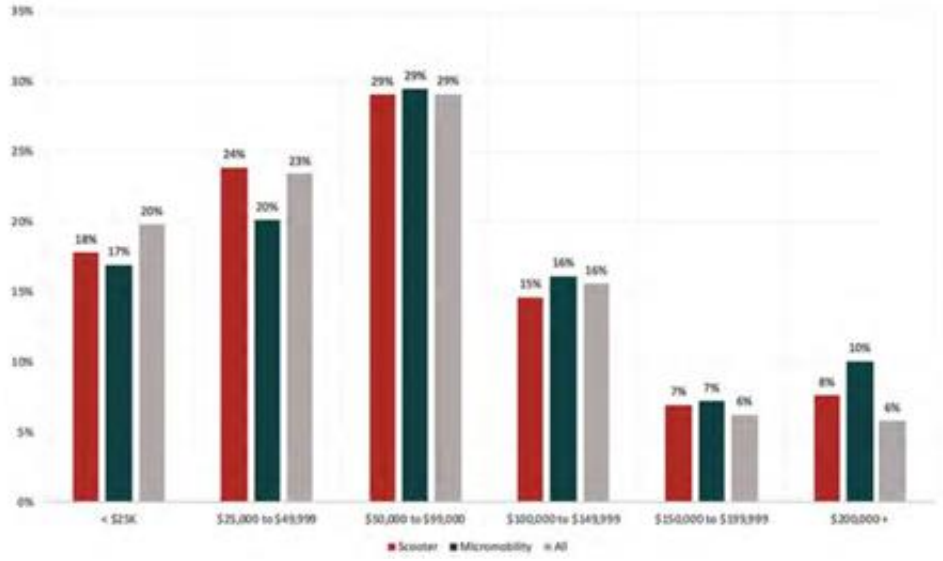

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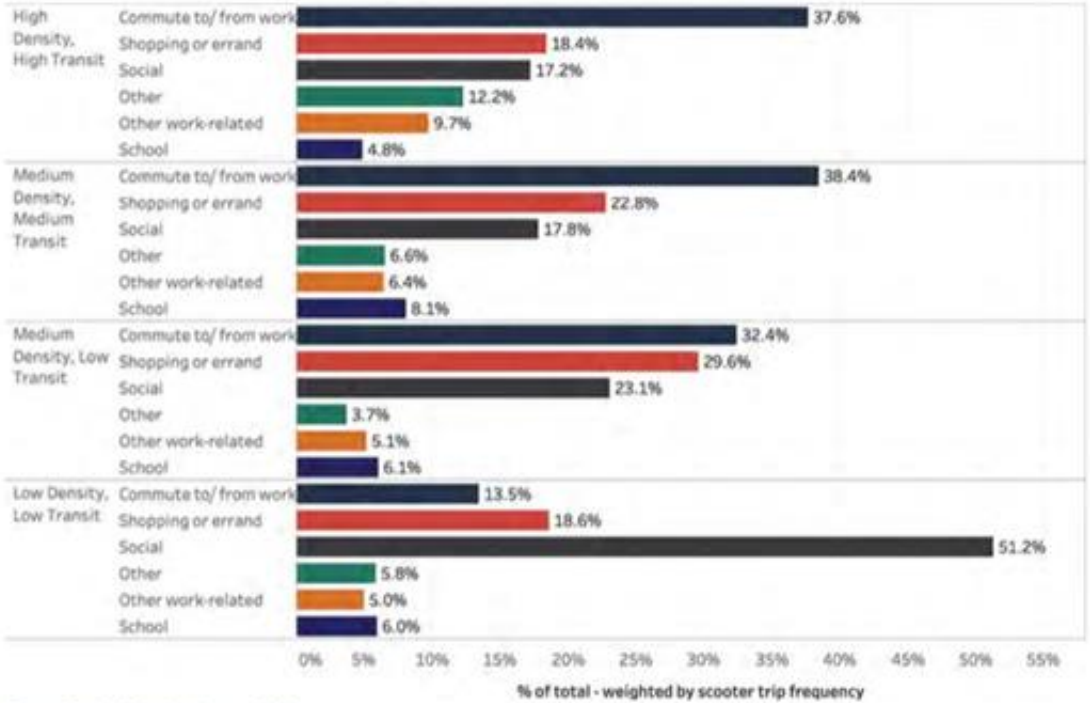
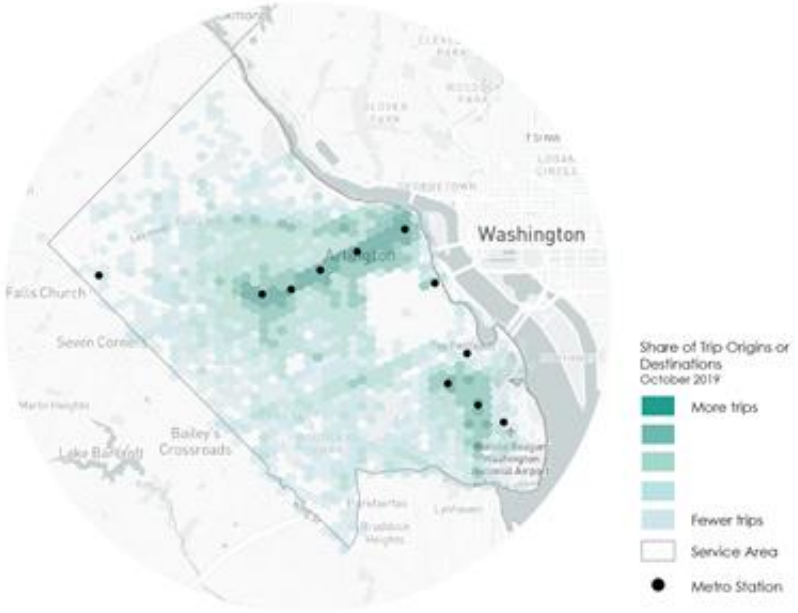
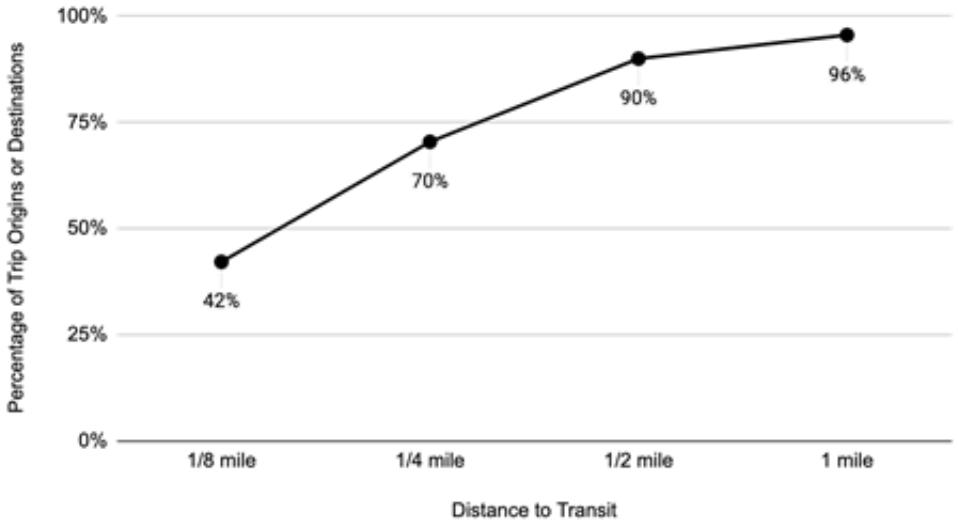


Source: Populus Groundtruth survey 2019.

III. Utilization: Ridership By Transit





Arlington County, VA

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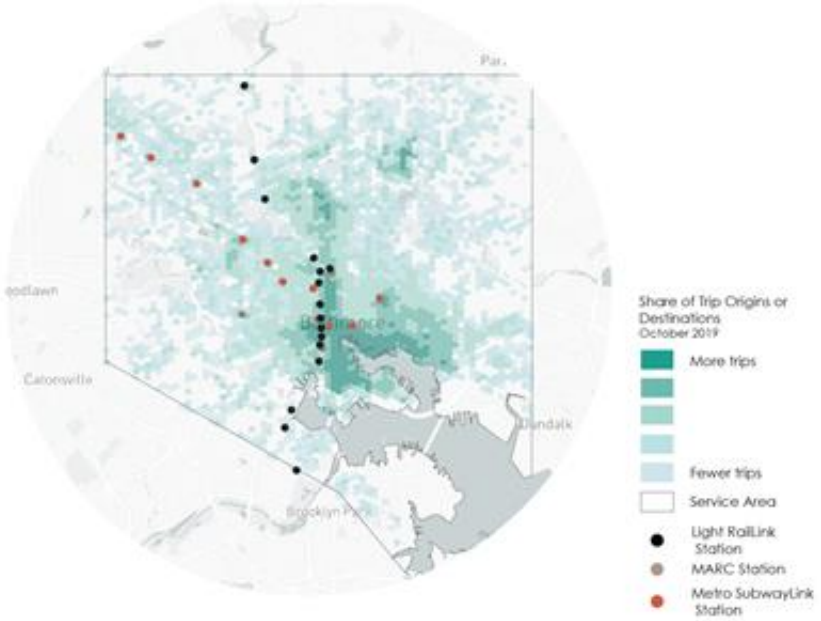

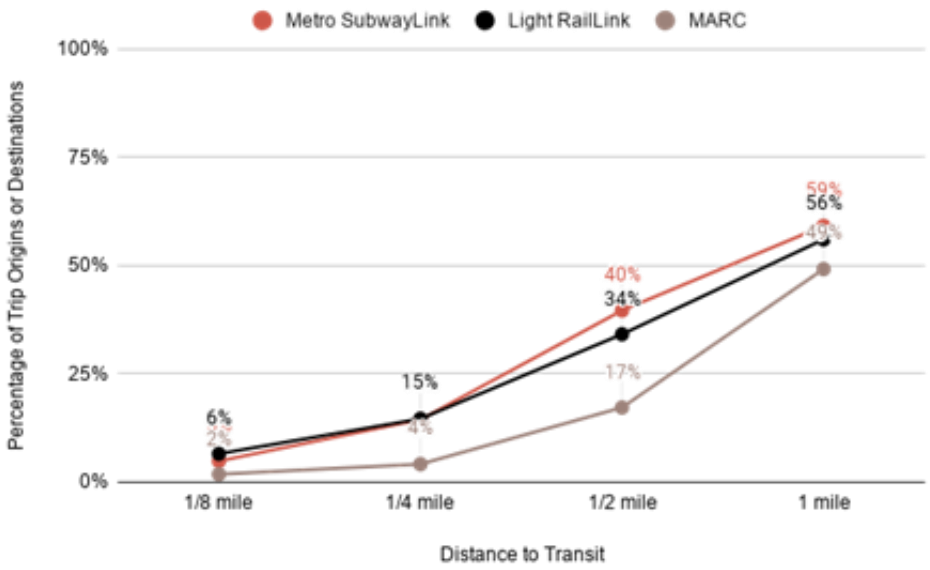

Baltimore, MD

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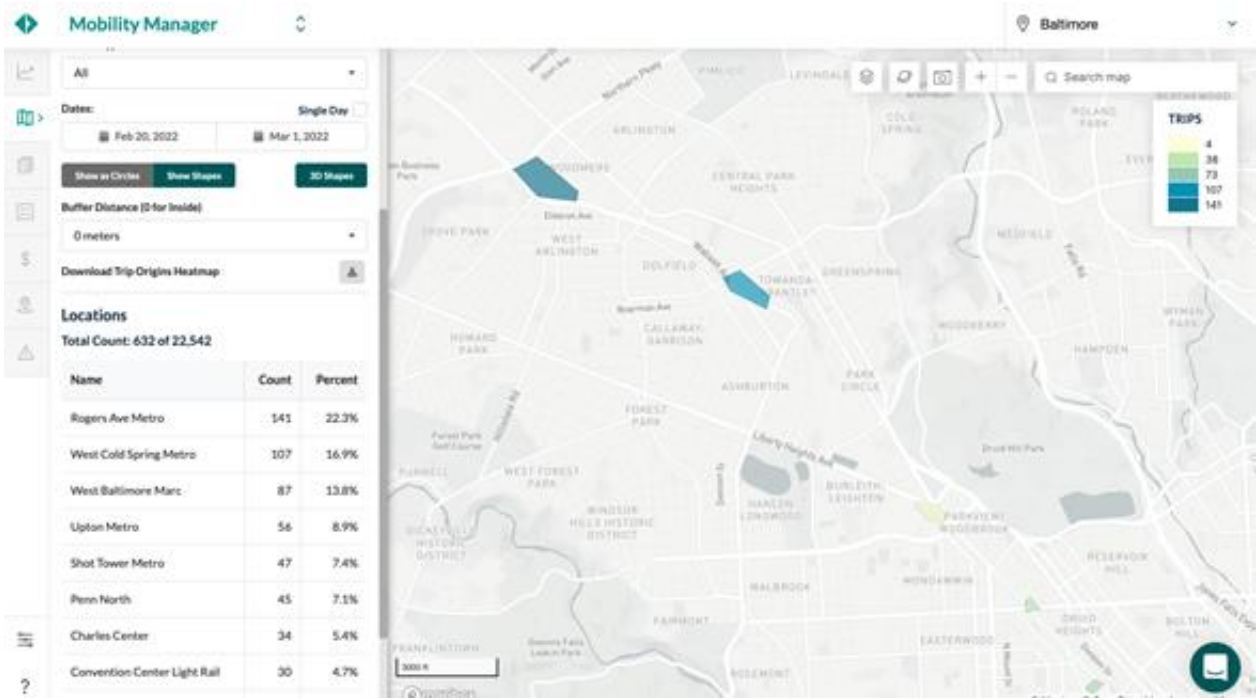

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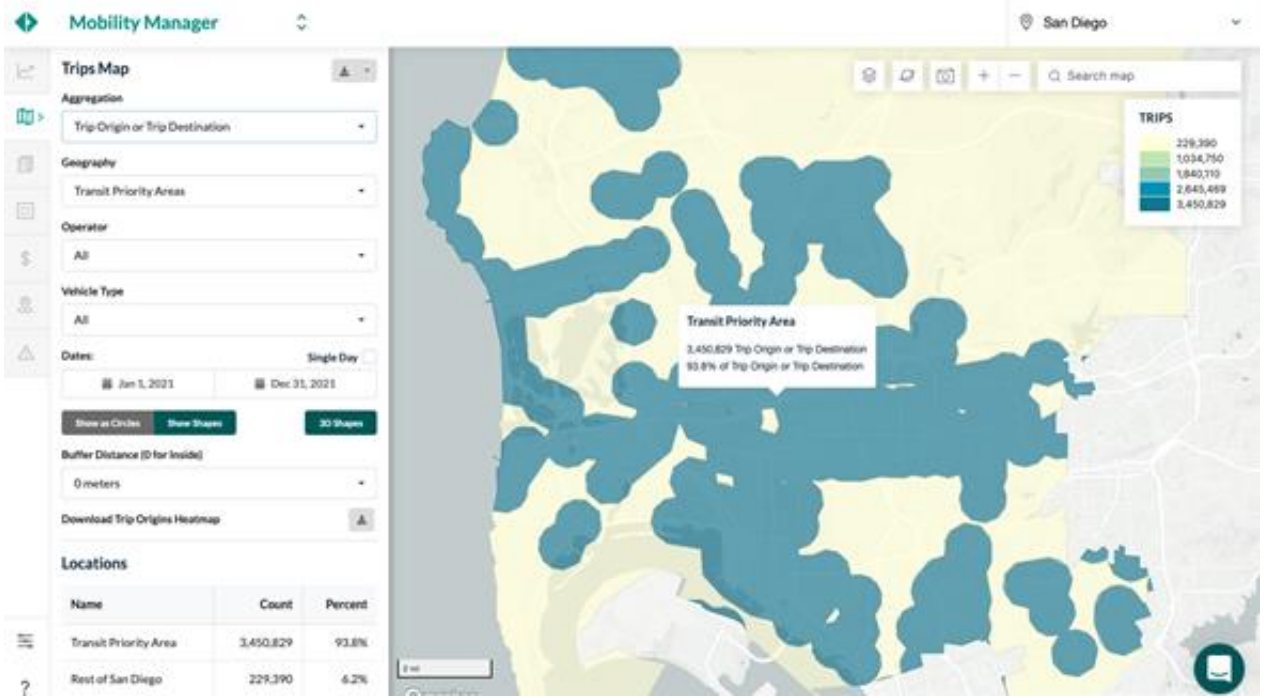

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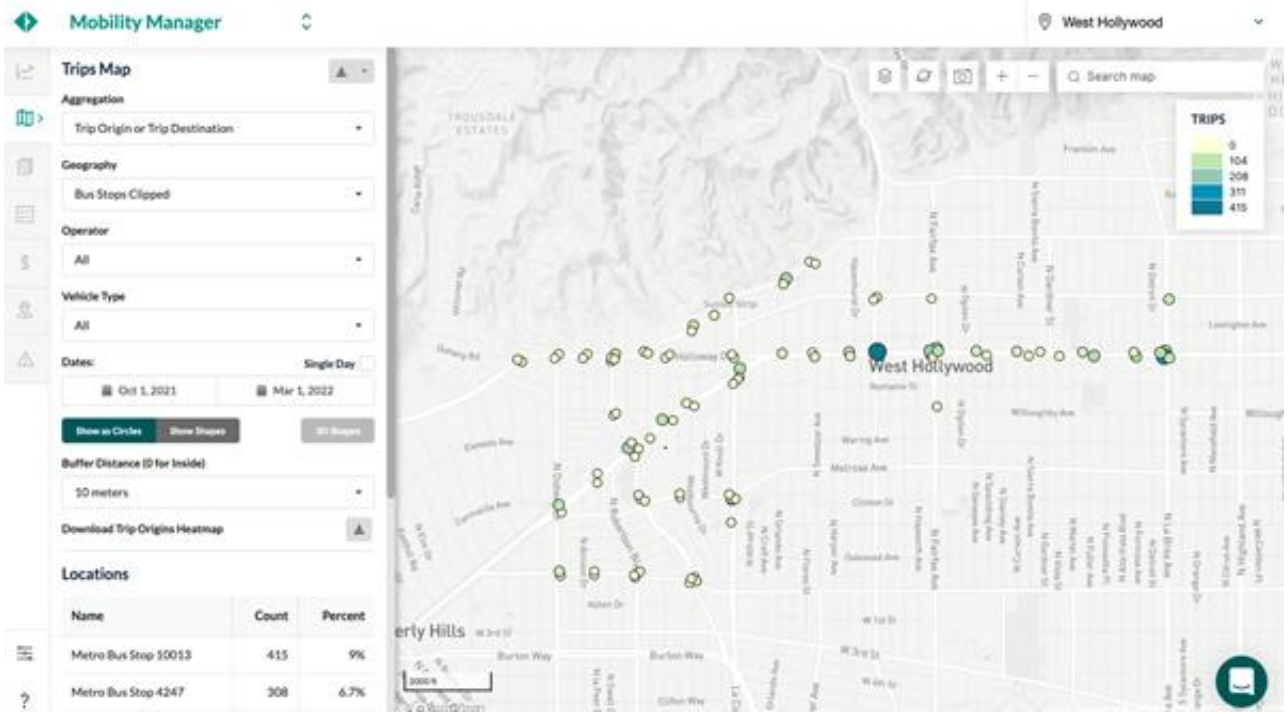

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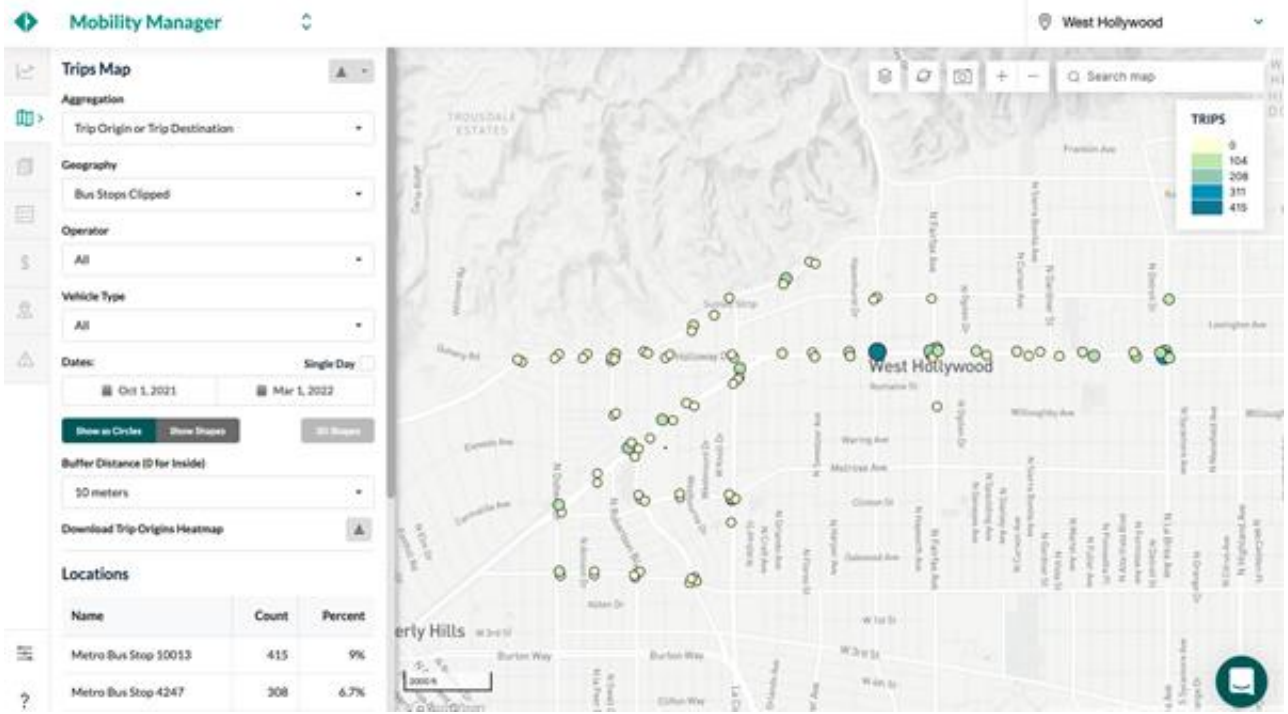


IV: The Role of Transit Agencies

Cities

Regulator and ROW Manager

Transit Agencies

Partner and Integrator

IV: The Role of Transit Agencies

Key Transit Agency Interests

- Enhance Access & Increase Ridership
- Support Cities in Managing Network Demand
- Inform Service and Infrastructure Decisions & Evaluate Partnerships

IV: The Role of Transit Agencies

Policy Areas & Spheres of Influence

- Seamless mobility
- Safe station access
- Managing network demand
- Risk management
- Digital policy and data sharing
- Fare integration
- Equitable access

IV: The Role of Transit Agencies

Transit Agency Proving Grounds

- Physical, digital, and policy realms
- Testing new governance and operating models
- Moving toward true public mobility
- Physical integration

IV: Built Environment Coordination

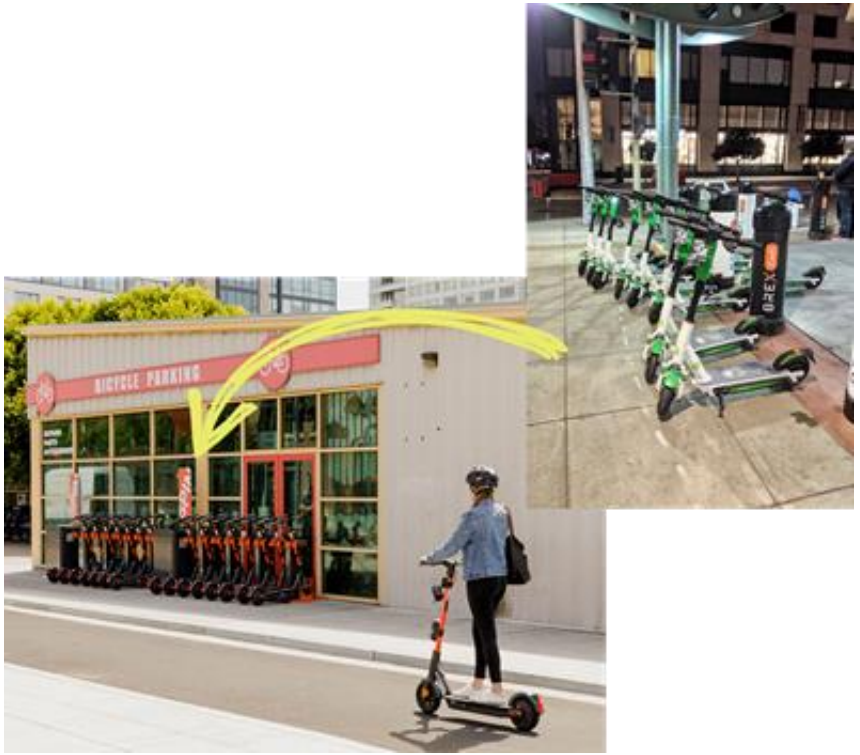
Built Environment Challenges

- Transit access and parking
- Street management and first/last mile
- Demand management
- Data (and its relationship to the built environment)
- Infrastructure funding

IV: Built Environment Coordination

Emerging Responses

- Parking areas/infrastructure at transit stops
- Applying siting guidance
- Coordinating access and parking policies unique to dockless models
- Strategic planning for integration, FMLM, transit reach, etc. (Capital Metro and Caltrain)



IV: Built Environment Coordination

Awaiting Leadership

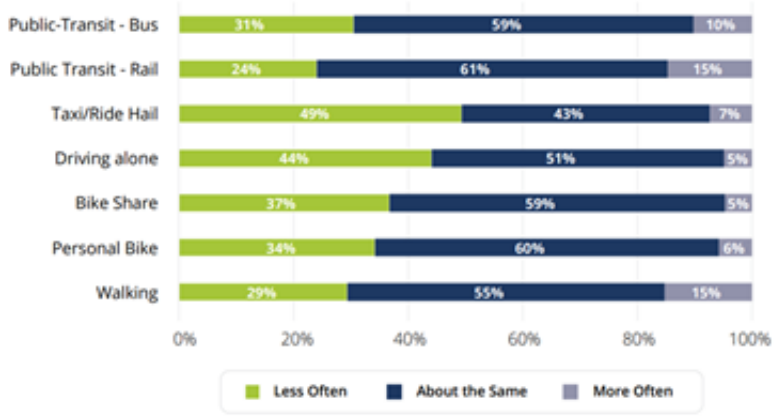
- Collaboration on equity requirements
- Alleviating crowding through micromobility partnerships
- Data collaboration with cities
- Aligning micromobility infrastructure funding with transit

AC Transit live crowding information

IV: Transit Agency Implications

Funding and Financial Implications

- + / - effects: may support ridership but replace some trips
- Public subsidies
- Limited potential for infrastructure funding



Mode Shift Since Using Electric Scooters or Bikes (LADOT, 2020)

IV: Transit Agency Implications

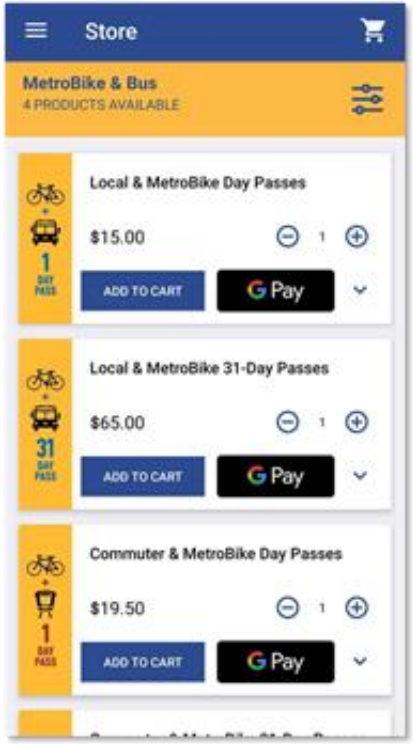
Civil Rights and Social Equity Implications

- Limited specific guidance on civil rights & micromobility partnerships
- ADA & Title VI still apply
- Application of ADA also needs more guidance

IV: Transit Agency Implications

Rider Experience Implications

- Lack of data/research
- Alleviate demand for personal micromobility devices on buses and trains
- Focus on digital experience



V. Transit - City Partnerships

Transit Agency–Led Operation/Integrated Services

- Agency operated-and-maintained model (Dayton RTA and Spin)
- “Powered by” Branding (KCATA – Kansas City)
- Integrated Services (LA Metro and Capital Metro)

Dayton RTA-led scooter operations

V. Transit - City Partnerships

Rider Incentives and FMLM Investments

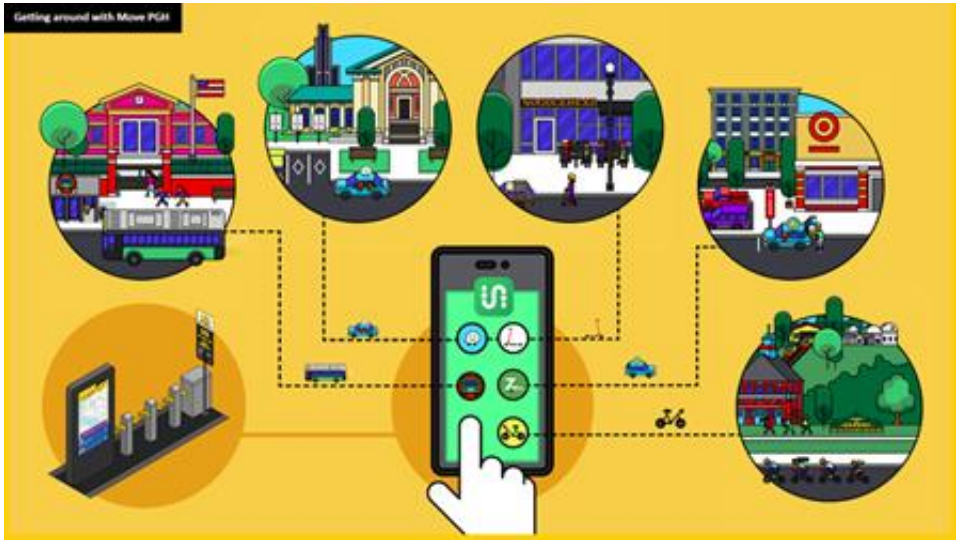
- Fare-free transit with micromobility trip (SacRT + Jump)
- FMLM bike share fare partnership (COMET – Columbia SC)

COMET integrates Blue Bike service via first/last mile fare partnership

V. Transit - City Partnerships

Policy Collaboration with Cities

- Permit coordination (RTD – Denver)
- Mobility Hubs (multiple cities)
- Full Physical and Digital Integration (Pittsburgh)



MovePGH/Pittsburgh Mobility Collective

V. Partnership Toolkit

For transit agencies considering micromobility partnerships, a concise set of action steps distilling and applying the study's findings.

Questions?

Thank you!

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