



PAYING FOR VIBRANT TRANSPORTATION SYSTEMS

Micromobility:
Potential Impacts and
Revenue Options

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What is "Micromobility"?

Two Perspectives on Micromobility

A Kind of Vehicle →

- Micro-vehicles
- Lightweight
- Low-speed
- Powered or unpowered



A Kind of Service

- Shared micromobility
- Self-serve fleets
- Tech-enabled
- Public or private sector

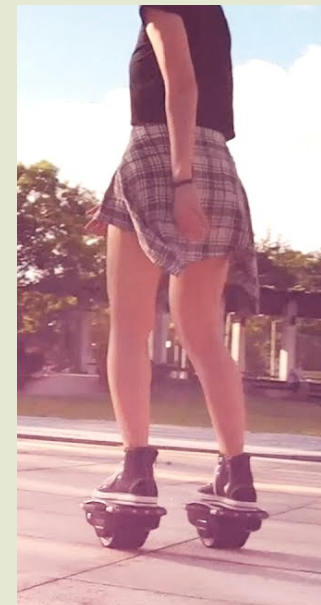
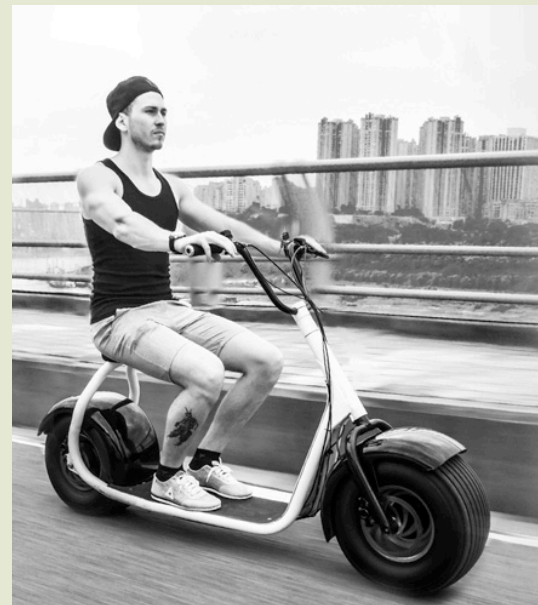
What is "Micromobility"?



What is “Micromobility”?

“Micromobility is an **ambiguous term** associated with a **rapidly evolving** range of light vehicles that are increasingly populating streets across the globe...”

International Transport Forum



What is "Micromobility"?

Two Perspectives on Micromobility

A Kind of Vehicle

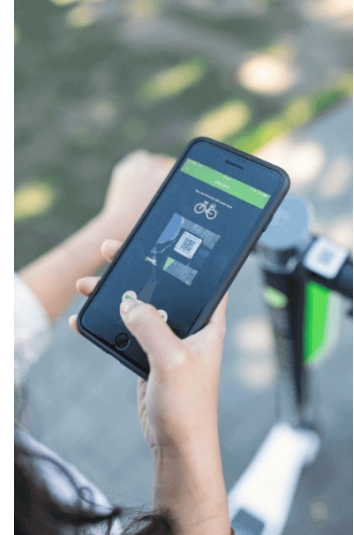
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A Kind of Service

- Shared micromobility
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What is "Micromobility"?



Shared Micromobility

Shared Micromobility encompasses all shared-use fleets of small, fully or partially human-powered vehicles such as bikes, e-bikes, and e-scooters.



Station-based bike share
(including e-bikes)

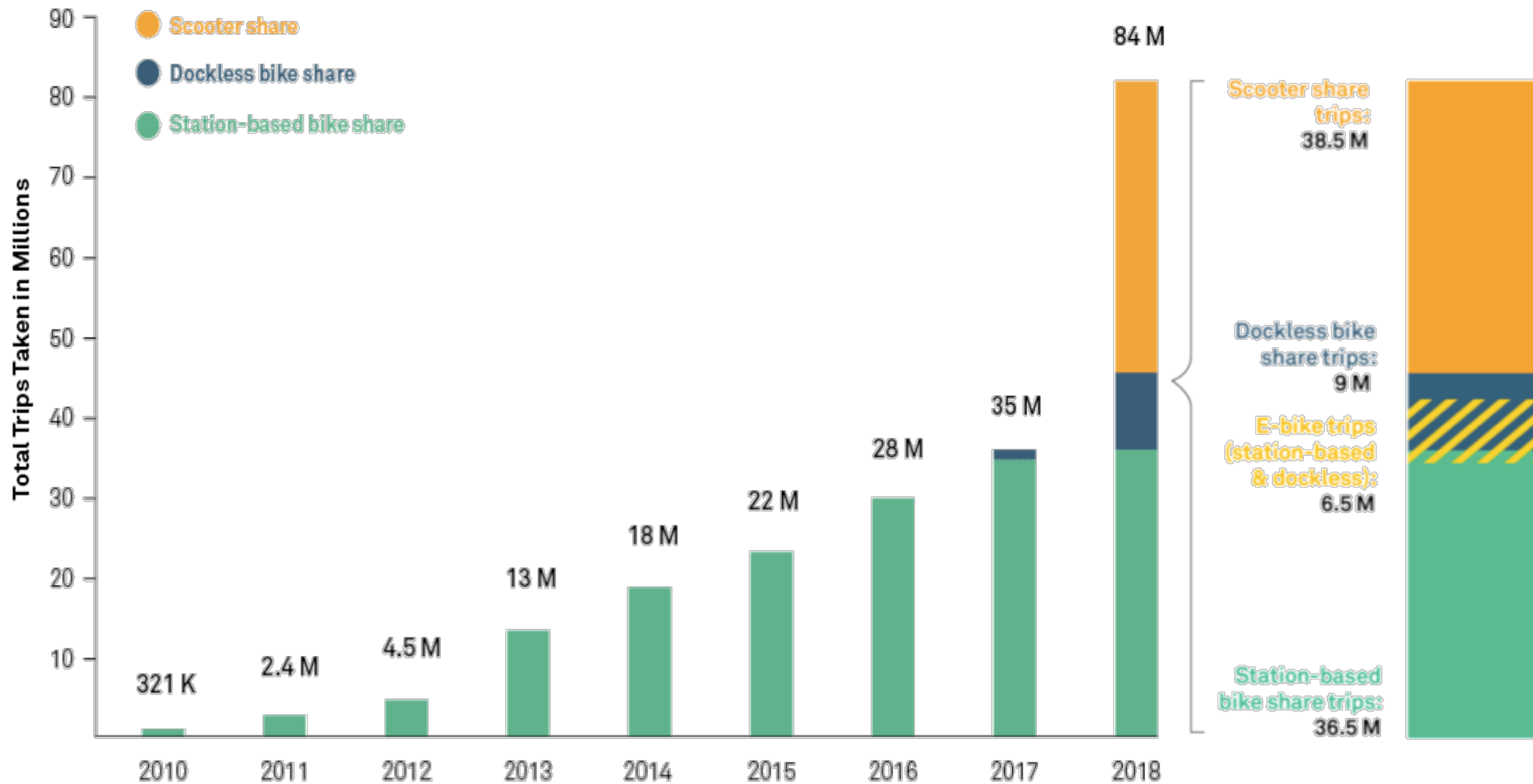


Dockless bike share
(including e-bikes)

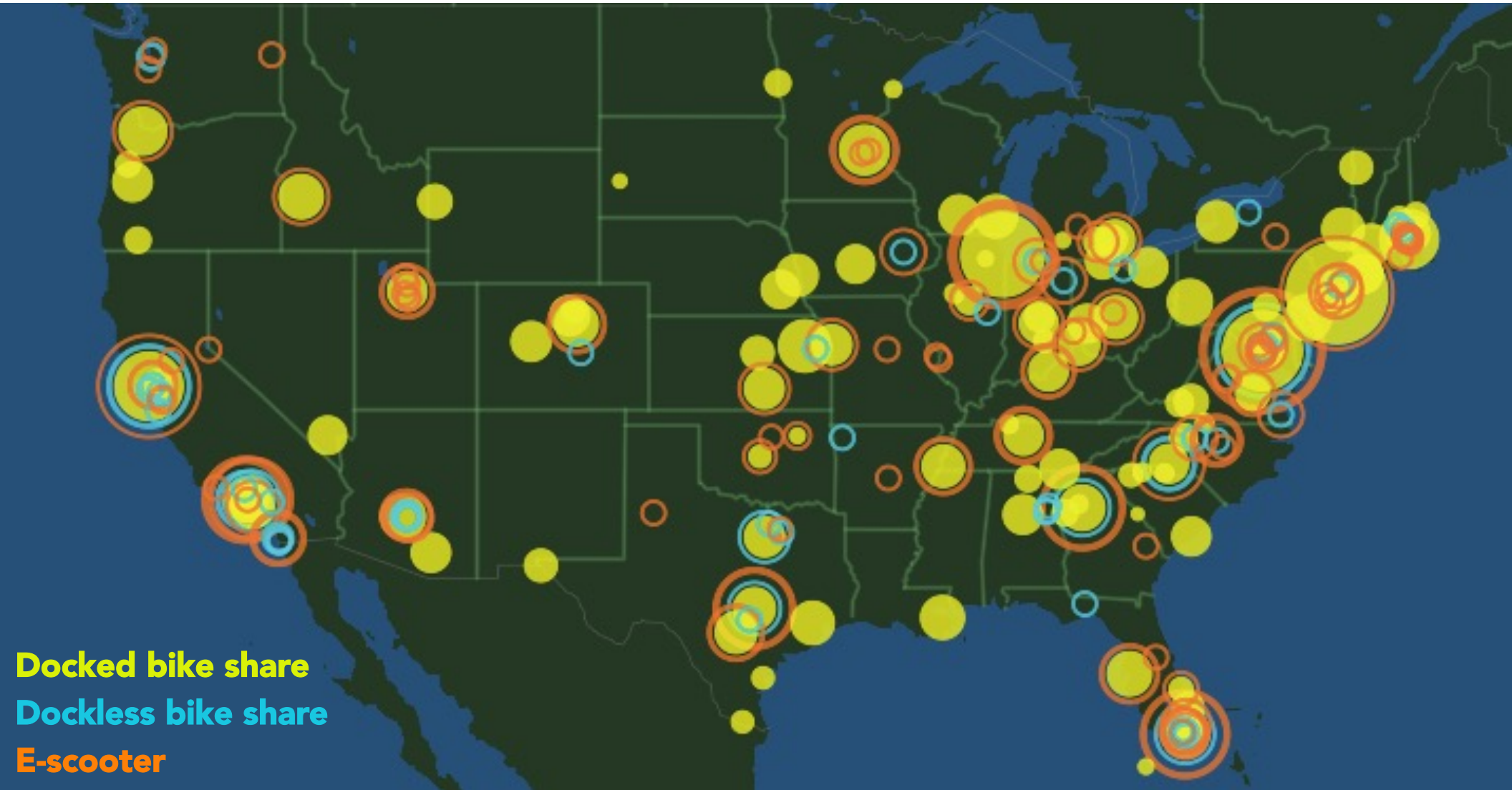


Scooter share

84 Million Trips on Shared Micromobility in 2018



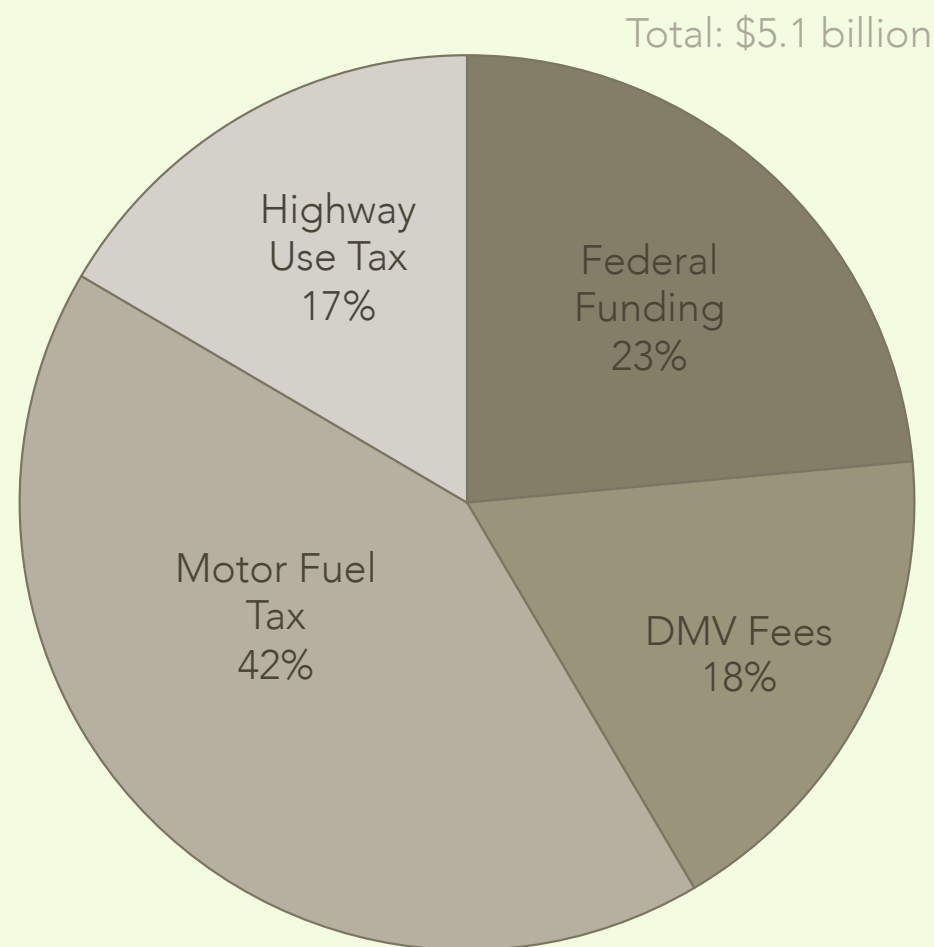
Where are Shared Micromobility Services Currently in Use?



Source: BTS (data.transportation.gov/stories/s/fwcs-jprj)

What are the Possible Impacts of Micromobility for the Public Sector?

- New demands on existing infrastructure and services
- Increased responsibility and costs for local governments
- Many legislative and regulatory considerations
- **Reduced state revenues for transportation investments**
 - Potential to reduce how much people drive → motor fuel tax
 - Potential to reduce car ownership → DMV fees and highway use tax



NCDOT Revenue Sources, FY 2020

What Existing Revenue Options Relate to Micromobility?

Based on Vehicle

Bicycle taxes and fees

Based on Service

Fees from micromobility providers



Micromobility-Related Revenues: Based on Vehicle

Bicycle taxes and fees

- Both state and local examples
- Statewide: Hawaii, Oregon
 - Proposed:
 - North Carolina (2019 HB 157)
 - Georgia (2013 HB 689)
 - Washington (2014 HB 1954)
 - Vermont (2018 SB 196)
 - Repealed: Minnesota (2005)



Micromobility-Related Revenues: Based on Service

Fees from micromobility providers

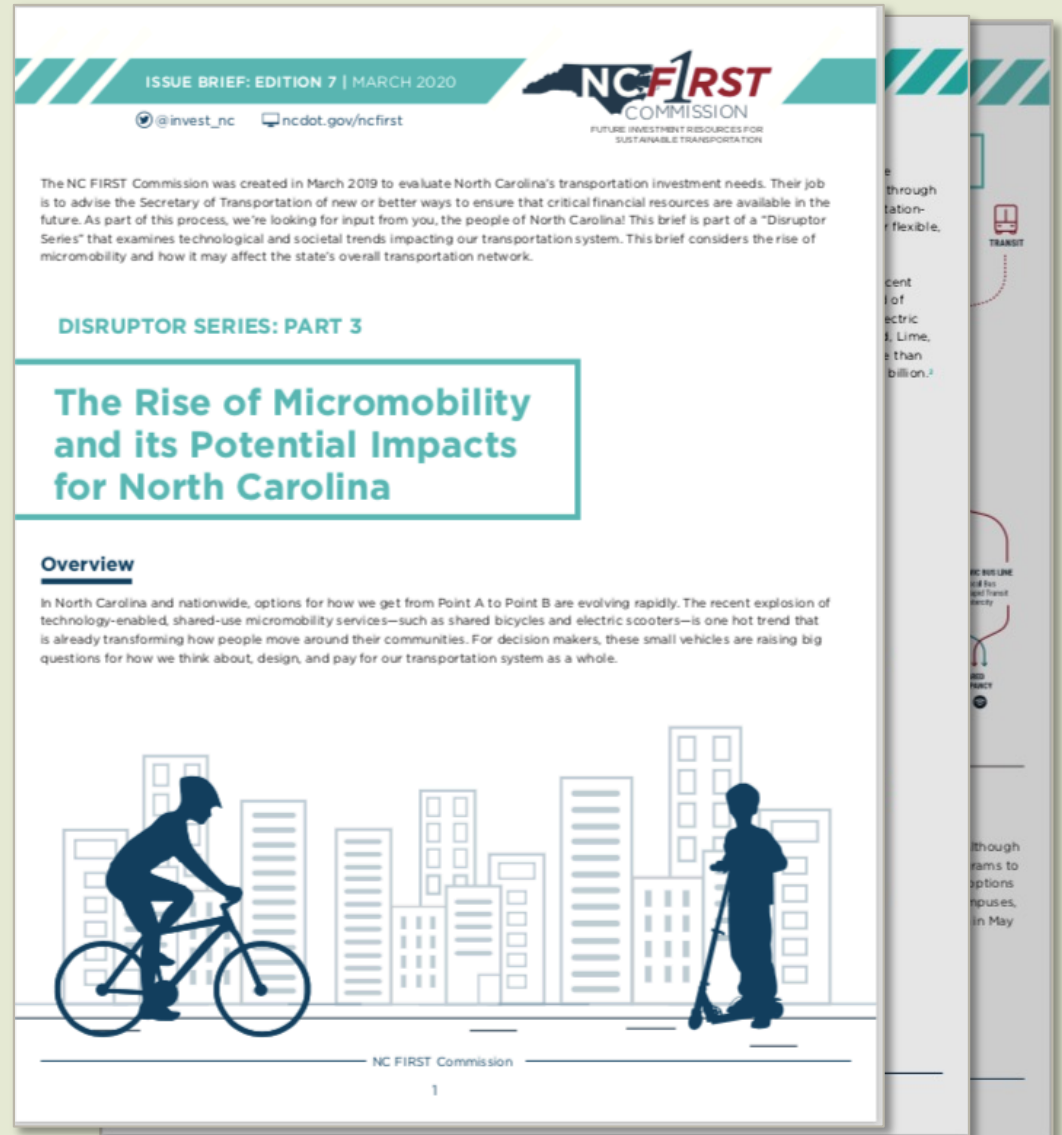
- Local examples only
- Common approach
- Permitting, per-trip, and other fees



For More Information About Micromobility Trends and Impacts

NC FIRST Commission Issue Brief: Edition 7

www.ncdot.gov/about-us/how-we-operate/finance-budget/nc-first/Pages/nc-first-briefs.aspx



Further Resources

- DuPuis, N., Griess, J., & Klein, C. (2019). *Micromobility in cities: A history and policy overview*. Washington, DC: National League of Cities. www.nlc.org/resource/micromobility-in-cities-a-history-and-policy-overview
- International Transport Forum (ITF), Organisation for Economic Co-operation and Development. (2020). *Safe micromobility*. Paris: ITF. www.itf-oecd.org/safe-micromobility
- National Association of City Transportation Officials. (2019). *Shared micromobility in the U.S.: 2018*. New York, NY: NACTO. nacto.org/shared-micromobility-2018/
- National Association of City Transportation Officials. (2018). *Guidelines for the regulation and management of shared active transportation*. New York, NY: NACTO. nacto.org/home/shared-active-transportation-guidelines/
- Shaheen, S., & Cohen, A. (2019). *Shared micromobility policy toolkit: Docked and dockless bike and scooter sharing*. Berkeley, CA: University of California. doi:10.7922/G2TH8JW7
- Shinkle, D., & Teigen, A. (2008). *Encouraging bicycling and walking: The state legislative role*. Denver, CO: National Conference of State Legislatures. www.ncsl.org/research/transportation/encouraging-bicycling-and-walking-the-state-legis.aspx
- Shinkle, D. (2019). *Micromobility: State legislative trends*. Denver, CO: National Conference of State Legislatures. www.ncsl.org/Portals/1/Documents/transportation/STLS_Shinkle_Present_33837.pdf

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