



 **State Farm<sup>®</sup>**

# 2020 Highway Safety Champions

GHSA is grateful for the following Highway Safety Champions who graciously maintained their financial support of the association this year.









RESPONSIBILITY.ORG



VERRA  
MOBILITY™  
Safe. Smart. Connected.

# Micromobility

## TYPES OF POWERED MICROMOBILITY VEHICLES<sup>1</sup>

	Powered Bicycle	Powered Standing Scooter	Powered Seated Scooter	Powered Self-Balancing Board	Powered Non-Self-Balancing Board	Powered Skates
						
Center column	Y	Y	Y	Possible	N	N
Seat	Y	N	Y	N	N	N
Operable pedals	Y	N	N	N	N	N
Floorboard / foot pegs	Possible	Y	Y	Y	Y	Y
Self-balancing <sup>2</sup>	N	N	N	Y	N	Possible

<sup>1</sup>All vehicles typically designed for one person, except for those specifically designed to accommodate additional passenger(s)

<sup>2</sup>Self-balancing refers to dynamic stabilization achieved via a combination of sensors and gyroscopes contained in/on the vehicle

Source: Society of Automotive Engineers

# Micromobility

## Micromobility Ridership



**2010**

Since 2010, there have been **207 million** trips on shared bikes (pedal and electric-powered) and e-scooters in the United States.

2011

2012

2013

2014

2015

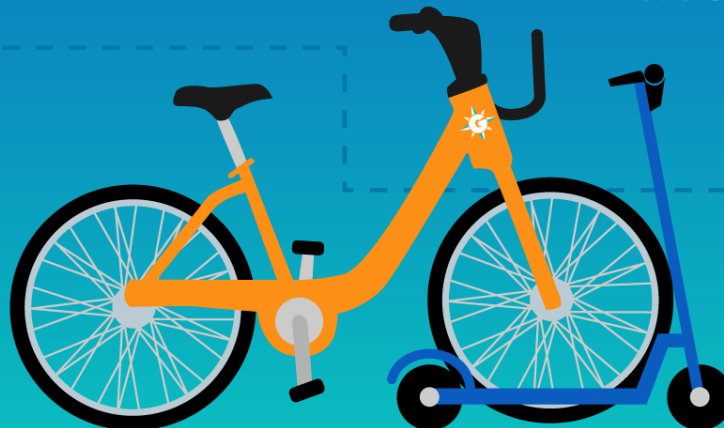
2016

2017



**2018**

There were **84 million** trips in 2018 alone, including 36.5 million on station-based bike share, 9 million on dockless bikes, and 38.5 million on e-scooters.



# Micromobility

## A Quicker Way to Get Around

Car speeds in cities have slowed, making micromobility a faster mode of travel.

**4.7 mph**

average car speed  
in midtown  
Manhattan  
in 2017

**15 mph**

average maximum  
e-scooter speed



Source: Agrawal as cited in Lee, Loucks, Stewart, Jarvis & Arkenberg



# Micromobility



# Micromobility

## Micromobility Fatalities

### E-bikes

**2 fatalities**

associated with bike share programs since 2007



### E-scooters

**22 fatalities**

with all but three involving motor vehicles since 2018



**90%** >> of micromobility fatalities are the result of a collision between a personal transportation device and motor vehicle.

# Challenges

Consistent  
statutes/regulations

Dedicated funding

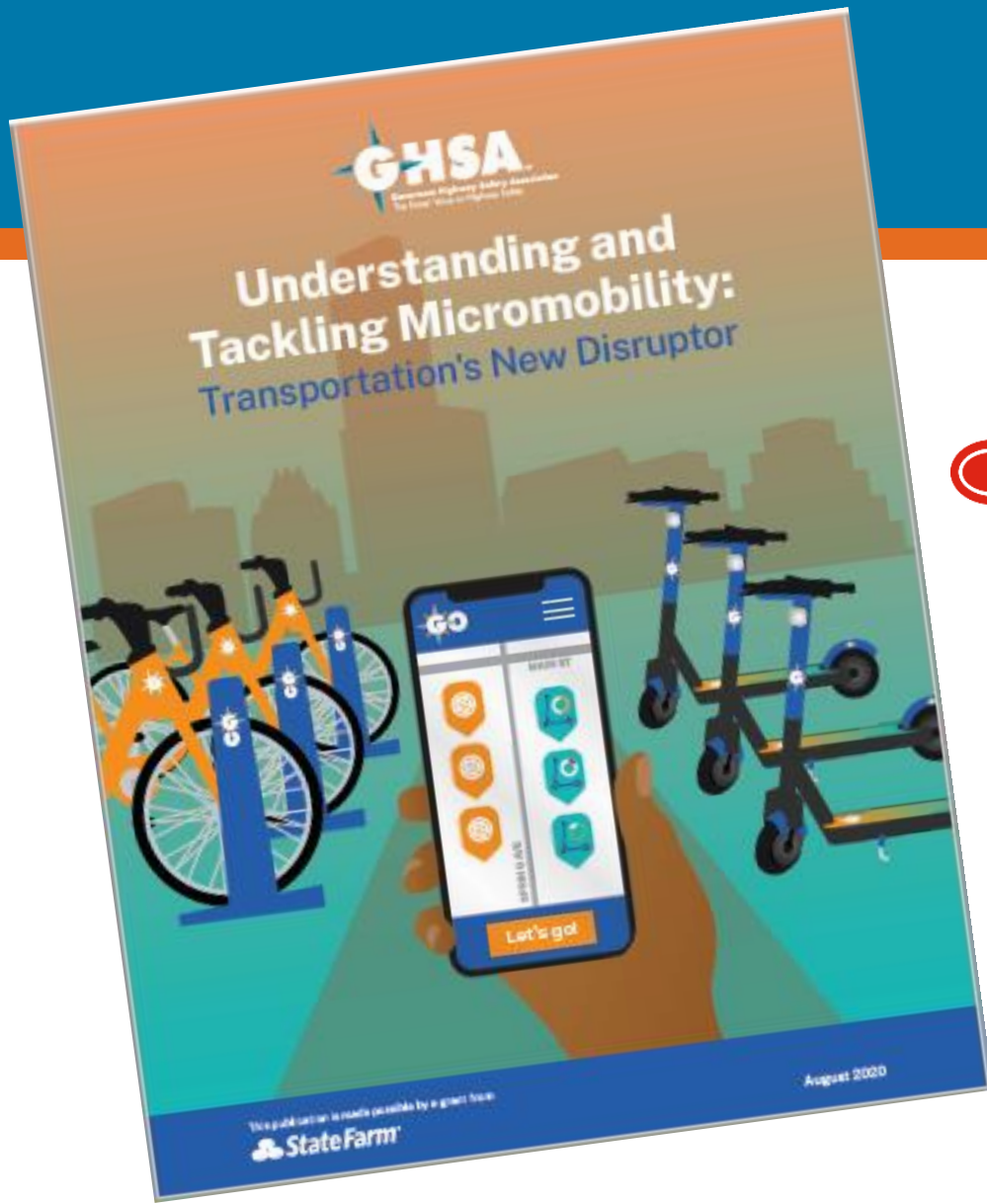
Universal reporting  
standard

Separate  
infrastructure

Law enforcement  
training

Education for all  
road users





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