Urban Land Institute

SMALL VEHICLES, BIG IMPACT

Micromobility's Value for Cities and Real Estate

American Cities Climate Challenge

Bloomberg Philanthropies

About This Report

Small Vehicles, Big Impact: Micromobility's Value for Cities and Real Estate describes the real estate perspective on micromobility, focusing on scooters and e-bikes. Developers, property owners, managers, and investors are increasingly recognizing the value that micromobility can bring to their properties, and there is a growing case for the industry to support micromobility efforts. The report also serves as a resource for city officials seeking to understand the real estate perspective on micromobility, determine which policies and incentives might advance city goals while garnering support from the real estate industry, and promote equitable implementation. When real estate professionals and cities work toward mutually beneficial goals, micromobility has the potential for an outsized impact on mobility, equity, and sustainability.

About the Urban Land Institute

The Urban Land Institute is a global, member-driven organization comprising more than 45,000 real estate and urban development professionals dedicated to advancing the Institute's mission of shaping the future of the built environment for transformative impact in communities worldwide. ULI's interdisciplinary membership represents all aspects of the industry, including developers, property owners, investors, architects, urban planners, public officials, real estate brokers, appraisers, attorneys, engineers, financiers, and academics. Established in 1936, the Institute has a presence in the Americas, Europe, and Asia Pacific regions, with members in 80 countries.

About the ULI Building Healthy Places Initiative

Around the world, communities face pressing health challenges related to the built environment. Through the Building Healthy Places Initiative, launched in 2013, ULI is leveraging the power of its global networks to shape projects and places in ways that improve the health of people and communities. Building Healthy Places is working to make health, social equity, and wellness mainstream considerations in real estate practice. Learn more and connect with Building Healthy Places: uli.org/health.

Report Team

Primary Author

Diana Schoder
Senior Associate, Building Healthy Places Initiative
Urban Land Institute

Project Staff

Billy Grayson
Executive Director, Center for Sustainability and Economic Performance
Urban Land Institute

Rachel MacCleery
Senior Vice President, Building Healthy Places Initiative
Urban Land Institute

Matt Norris
Director, Building Healthy Places Initiative
Urban Land Institute

James A. Mulligan
Senior Editor
Urban Land Institute

David James Rose
Manuscript Editor
Urban Land Institute

Brandon Weil
Art Director
Urban Land Institute

Kate Wong
Designer
Littleboy Blue Dezign

Craig Chapman
Senior Director, Publishing Operations
Urban Land Institute

2001 L Street, NW, Suite 200
Washington, DC 20036-4948

Recommended bibliographic listing:

Urban Land Institute. *Small Vehicles, Big Impact: Micromobility's Value for Cities and Real Estate*. Washington, D.C.: Urban Land Institute, 2021.

SMALL VEHICLES, BIG IMPACT

Micromobility's Value for Cities and Real Estate

Contents

SeventyFour/Shutterstock

Introduction

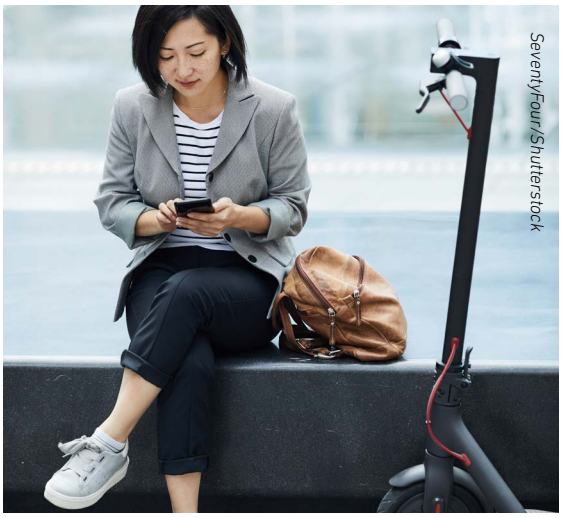
Over the past few years, shared electric micromobility devices—lightweight, single-person vehicles such as dockless scooters and e-bike rentals—have expanded transportation options in cities across the United States. Just like other modes of transit, this emerging form of mobility has the potential to create value for real estate developers and benefit property owners. Also like other modes, it exists within a regulated market. Although policies differ among cities, they typically aim to maximize the benefits of micromobility while elevating equity considerations and addressing any negative consequences, such as safety risks posed by sidewalk clutter.

Micromobility: Lightweight, typically single-person vehicles that can be shared or privately owned, electric or human powered, and docked or dockless. This report focuses on shared, dockless electric vehicles, such as scooters and e-bike rentals.

Both the micromobility technology and policy landscapes are rapidly evolving, leaving real estate professionals with questions about what these new modes will mean for their properties and bottom lines. Although micromobility is a well-explored topic at the city scale, less research has been done to describe the real estate perspective. However, developers, property owners, managers, and investors are increasingly recognizing the value that micromobility can bring to their properties. This research brief will:

- Demonstrate the value of micromobility for the real estate industry;
- Explore how and why real estate professionals are already embracing micromobility, helping individuals and companies to understand the growing case for supporting micromobility efforts; and
- Serve as a resource for city officials seeking to understand the real estate perspective on micromobility, determine which policies and incentives might advance city goals while garnering support from the real estate industry, and promote equitable implementation.


uzhursky/Shutterstock


SeventyFour/Shutterstock

Though only one component of a transportation network, micromobility has the potential for an outsized impact on mobility, equity, and sustainability. As a low-carbon alternative to driving, micromobility expands the radius that people can easily travel without a car. In fact, 36 percent of trips using shared micromobility replace a car trip. Micromobility also helps link people to transit hubs and jobs, reduce traffic congestion, and preserve air quality.

Unlocking these benefits requires working across sectors to not only provide vehicles but also create a supportive environment with reliable charging stations and safe infrastructure. When the real estate industry and public sector are aligned, they can together promote the use of micromobility, work toward a healthier transportation ecosystem, and ultimately shape more livable cities.

Snapshot of Recent Trends

According to the New York City–based National Association of City Transportation Officials (NACTO), people in the United States took 10 million trips on dockless e-bikes and 86 million trips on scooters in 2019. The recent growth in dockless micromobility has taken over traditional bike share, which saw 40 million trips in 2019, and the number of cities with dockless scooter programs increased by 45 percent from the year before to 109 cities.

Shared micromobility trips averaged 11 to 12 minutes and between one and 1.5 miles in 2019, but there is variation across vehicle types. In 2018, NACTO found that scooters are used for recreation more than stationary bike shares, whereas bike share is used more often for connections to transit, social purposes, and commuting. Scooter use was about equally split among these purposes. Because e-bikes are more stable than scooters and often have storage, they are well suited for running errands and making longer trips. As micromobility continues to evolve, having a diversity of vehicle types to meet different needs will help people to right-size the mode for their trip.

During the COVID-19 pandemic, micromobility use dropped 60 to 70 percent in Europe and the United States, but it is already rebounding. Because many former commuters are still working from home, much of the continued use includes running errands or making short trips for restaurant takeout rather than commuting or connections to transit. After the pandemic, "Ridership will likely increase as people return to work at the office having gotten used to micromobility rides for errand runs," predicts Sandy Romero, senior analyst at Cushman & Wakefield. A quick recovery seems especially promising for micromobility, which is naturally socially distanced, as fears of public transportation persist. By 2030, McKinsey forecasts that micromobility use will increase by 5 to 10 percent.

> "Ridership will likely increase as people return to work at the office having gotten used to micromobility rides for errand runs."
>
> *—Sandy Romero, senior analyst, Cushman & Wakefield*

Photo © 2014 by Ariane Kunze

During the COVID-19 pandemic, micromobility use dropped 60 to 70 percent in Europe and the United States, but it is already rebounding.

1 Protected bike lanes provide important infrastructure to create a micromobility network, connecting properties and destinations across the city.

2 Charging stations on private property increase the reliability and availability of micromobility options.

3 Dropoff zones are one of many curb management strategies to reduce potential clutter on sidewalks.

This report provides a high-level overview of the real estate perspective on micromobility, including the following key takeaways:

- **Supportive infrastructure.** Developers and property owners are primarily supporting micromobility by hosting on-site scooter charging stations and converting parking spots to scooter and e-bike dropoff zones.
- **Value creation.** Real estate professionals increasingly recognize the value that micromobility can bring to their properties.
- **Project benefits.** Benefits for developers and building owners of providing micromobility infrastructure include project marketing opportunities, expanded multimodal property access, and the potential financial benefits of reduced parking requirements.
- **Concern mitigation.** Most concerns about scooters and e-bikes can be easily mitigated at both the real estate and city levels.
- **Equity and sustainability benefits.** By providing micromobility infrastructure, real estate professionals can advance city sustainability and equity goals—especially when associated public policies create a supportive development environment.

Martin Katler/Unsplash

Chapter One

Micromobility and the Real Estate Industry

The real estate industry is starting to pay attention to micromobility. Despite concerns that the misuse of micromobility could negatively affect properties—such as sidewalk clutter or property damage—strategies for mitigating these issues are increasingly common, and opportunities to benefit from micromobility often outweigh these risks.

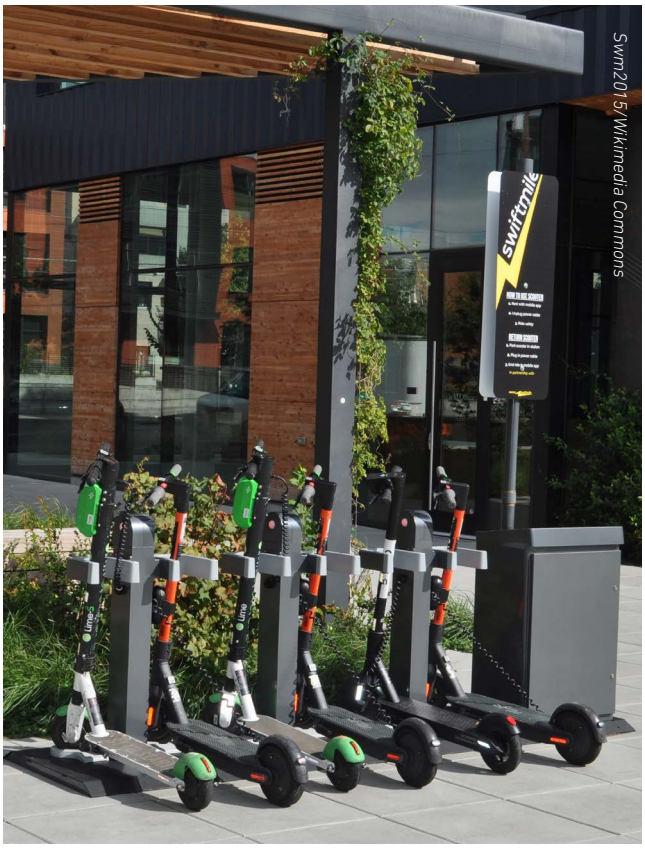
Although this report focuses on scooters and e-bikes, other forms of micromobility like e-cargo bikes will have additional uses, benefits, and challenges that the real estate industry can consider more broadly. The variety of vehicle types is expected to grow, and opportunities like the ones outlined in this brief will continue to emerge.

In the future, micromobility is likely to continue shaping how people move around cities, which directly affects real estate. Predictions for the impact of widespread adoption from Cushman & Wakefield include more micromobility amenities such as bike share and scooter docks in the near term and public transit users typically enhancing their commute with micromobility in the medium term.

This disruption is already happening, and the real estate industry is noticing. Understanding the value that today's micromobility options can bring to properties now can build a strong foundation for continuing to make the most of new mobility options going forward.

Benefits of Micromobility for Real Estate

Micromobility has a wide range of benefits for developers and property owners and managers. As a result, micromobility companies like Lime are seeing commercial and residential real estate owners demand dockless, electric bike shares that can increase the value of their properties, make their buildings more accessible, and provide a new and innovative amenity for tenants. By recognizing common benefits like these, real estate professionals can evaluate how micromobility might best work for their properties. At the same time, micromobility also has the potential to improve transportation access in areas not well served by other modes, and to do so equitably.



Swm2015/Wikimedia Commons

Swiftmile parking and charging station with Lime and Spin scooters.

Amenity Value

Micromobility options are an attractive amenity for commercial and residential real estate, especially among millennials, but only if they are available nearby and reliably charged. To address these issues of availability and reliability, the scooter company Spin is collaborating with property owners across the United States to install charging stations on both residential and commercial properties (see sidebar on page 8). Other ways of providing micromobility amenities include leasing small vehicle fleets—especially as alternatives to shuttles for corporate campuses—and converting parking spaces to scooter dropoff zones.

The residential sector can use these amenities to attract and retain tenants. Just as demand for living near traditional bike shares has grown, people are increasingly eager to have reliable access to e-bikes and scooters. Docking and charging stations also appeal to commercial tenants. For example, DivcoWest implemented the first electric bike share program for a commercial property in the United States. The partnership with Zagster and GenZe offered e-bikes at no cost to tenants at an office tower in Glendale, California, enabling employees to reach destinations too close for a car but too far for a traditional bike.

Safety, convenience, and equitable access are also important considerations. People are more likely to use these amenities when they are in welcoming locations—such as outside a lobby rather than in a parking garage—and use should be unrestricted for those affiliated with the property, including building staff, to ensure that everyone can benefit from this amenity.

Spin Hubs

Uche Chilaka/Unsplash

Spin

Spin has partnered with property owners to create Spin Hubs, or docks where people can park and charge scooters. The Hubs provide an amenity for tenants, reduce the chance of sidewalk clutter, and increase the availability and reliability of charged scooters. There are now more than 70 Spin Hubs across the United States, including installations on properties owned by JBG Smith, Brookfield Properties, Howard Hughes Corp., Gould Property Company, Hubbard Street Group, and Beacon Capital Partners.

Spin has also worked with the Crystal City Business Improvement District (BID), now called the National Landing BID, whose membership is largely composed of private commercial real estate companies, to pilot 10 mobility hubs on private properties throughout the BID in Arlington County, Virginia. At some of these Spin Hubs, Spin has experimented with financial incentives to encourage users to park at the docks.

On a smaller scale, Spin has worked with individual apartment buildings, such as at the Wingate Properties in Southwest Washington, D.C. By looking beyond the downtown area, working with a variety of property types, and providing infrastructure throughout different neighborhoods, Spin is demonstrating its commitment to the city while broadening its user base. Other partners have included university campuses across the United States and the Epicurean Hotel in Tampa, Florida.

Of course, providing vehicles does not guarantee that people will actually use the available scooters. Encouraging the use of micromobility requires overcoming the perception that scooters are only meant for certain people—and scooter users do tend to be younger and more male than the general population. As one part of the solution, "Physical infrastructure can be transformative for equity," says Dan Winston, regional general manager at Spin. When more people see investments in charging stations and are able to reliably access micromobility in their neighborhoods, they can begin to envision themselves as users. And, although most users rent the scooters using a smartphone app linked to their credit cards, alternatives are available for people without smartphones and who would prefer different forms of payment. Providing these options complements the physical infrastructure in addressing various dimensions of equity and ensuring that everyone can access these amenities.

Reliable micromobility infrastructure also shows people that they can count on these vehicles and modify their routines. This sense of security enables potential users to think about shifting away from car use and toward alternatives, knowing that the charging stations—and therefore ready-to-use vehicles—are here to stay.

Whether working with individual apartment buildings, entire business districts, or firms with global portfolios, Spin Hubs help real estate professionals provide an exciting amenity while striving to promote equitable, reliable transportation options.

Alexander Oganezov/Shutterstock

An electric scooter by bike racks and a transit stop in downtown Portland.

Commuting and Connections to Transit

Micromobility can offer first-mile/last-mile solutions for commuters. Whether connecting to transit, traveling within office campuses, or making short trips for work, micromobility is often a time-saving and cost-effective option. It also allows riders to reach transit stops on different lines, expanding their access to the full transportation network.

Notably, the Los Angeles Metro First Last Mile Strategic Plan found that implementing a safer, more efficient transportation network that includes micromobility around existing rail lines would garner more riders than building a new rail line, and it would cost the same amount or less. The was the first planning policy in the United States that fully incorporated the rise of new active and micromobility modes.

Ariane Kunze, Portland Bureau of Transportation

People ride e-bikes in a protected bike lane.

Reduced Parking Requirements

Developers are hopeful that supporting micromobility options will become a more common way of reducing parking requirements. After all, installing a docking station would be easier and less expensive than constructing parking garages, underground parking, or even surface lots. Transportation demand management requirements for rezoning already incentivize developers to provide noncar alternatives, such as on-site bike share stations, in exchange for reduced parking and could be updated to include micromobility. For existing developments, cities can provide tax write-offs for properties that convert parking spaces into scooter and e-bike racks.

Micromobility intersects with related trends, including decreased demand for parking, says a lender and investor who underwrites projects in the U.S. Southeast: "Micromobility and other new mobility trends are paramount as they speak to the declining need for private automobile–focused transportation and the evolution of lifestyle choices simply based on where one may park and drive in a vehicle. Automobile parking should be targeted to the lowest commercially accepted amount possible."

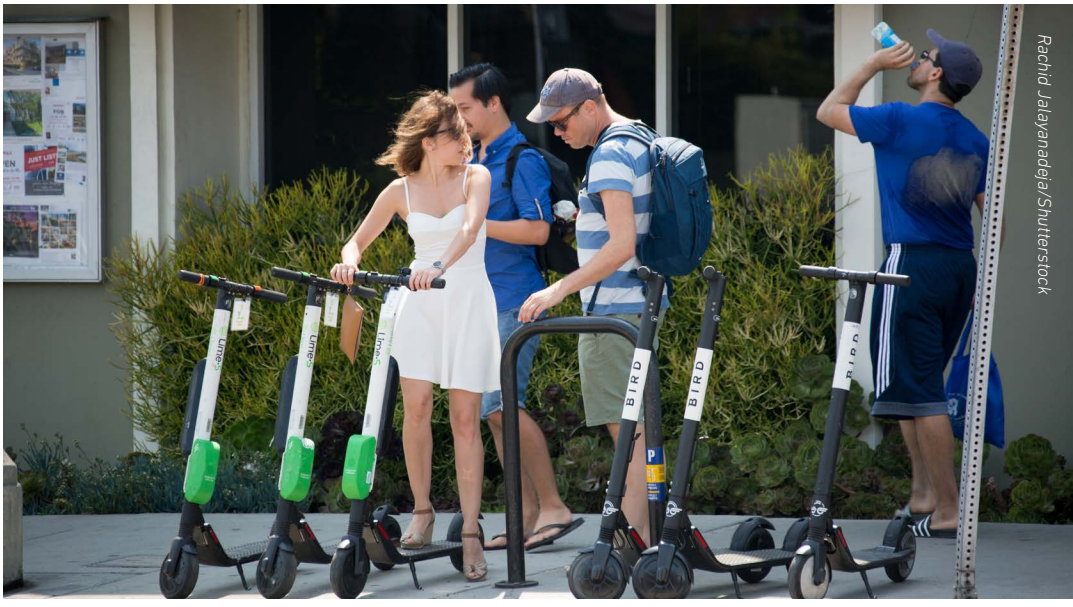
As people consider returning to work after the pandemic, there are new concerns that commuters will choose to drive rather than take public transit, posing logistical issues for buildings that have little to no parking. Encouraging the use of micromobility could help attract people back to the office regardless of parking capacity. "Five years ago, if you asked a developer in Santa Monica how much parking would they build if the requirements were reduced by half, they would still build more than the requirement. Today, developers are very open to building less parking," says Carter Rubin, transportation technical strategist with the Bloomberg Philanthropies American Cities Climate Challenge. "There are a number of no-parking buildings going up, or buildings with a lot less parking. It's a very uncertain time, but the abundance of mobility choices has shown developers that they don't need to provide two spaces per unit."

Development Project Success

Just as access to bike sharing and ridehailing has boosted rents (even more than access to traditional transit or car shares) and increased property values, apartment developers may be able to capture the value of micromobility options as well. "A micromobility system overlaid on an area with no traditional transit can provide a similar real estate bump to a traditional transit-oriented development," says Dylan Jones, architect at the Gensler Mobility Lab, adding, "You can use this as an economic development strategy to attract investment and improve community equity." And, for real estate companies trying to reposition a property that is slightly out of range of public transit, investing in micromobility can be part of a strategy to add value and lease or sell it more quickly.

In addition, micromobility increases transit-oriented development premiums, making it feasible to build farther out from transit stops while remaining transit-accessible. By expanding the radius of travelable distance around public transit and to places not directly located on transit lines, scooters and e-bikes can also distribute those premiums more widely.

> "A micromobility system overlaid on an area with no traditional transit can provide a similar real estate bump to a traditional transit-oriented development. You can use this as an economic development strategy to attract investment and improve community equity."
>
> *—Dylan Jones, architect, Gensler Mobility Lab*



Rachid Jalayanadeja/Shutterstock

People unlock electric scooters in Los Angeles.

Increased Access to More Locations

Having convenient parking and charging spaces for micromobility options could promote visits to retail locations and draw more foot traffic to businesses without increasing the demand for car parking. Increasingly, owners and investors are expected to research what is in a micromobility-accessible distance from their properties as part of their trade area analysis.

Expanding travelable distance by even a small amount can make a difference in access and rents. In Atlanta, Cushman & Wakefield has analyzed how scooters increase the class A apartments and office space available near Metropolitan Atlanta Rapid Transit Authority (MARTA) train stations. There are 7,600 apartments within a five-minute walk, but 36,000 are within an eight-minute scooter ride. Moving from a quarter-mile to one mile away from MARTA stations, average rents drop by 10 percent for office space and 20 percent for apartments.

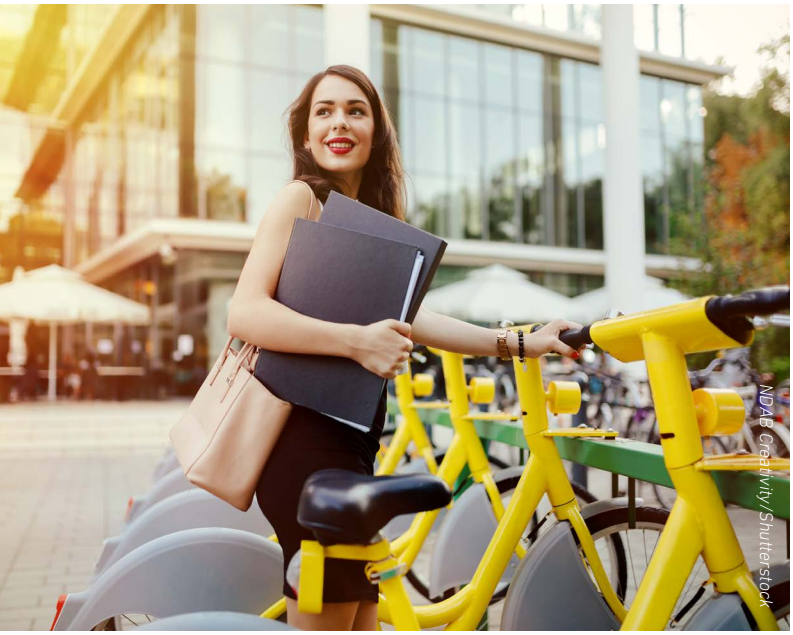
Sundry Photography/Shutterstock

Lime scooters at the Samsung campus in Silicon Valley.

Although micromobility does improve connections to transit, it is also important to consider the people who use micromobility for its door-to-door service. Docks and charging stations should be provided in locations beyond transit stops, where potential users may be discouraged by having to ride, park, and then walk to reach their destination. Strategically placing docks near entertainment venues, clusters of restaurants, and other well-trafficked places not only keeps these properties accessible but also may help encourage micromobility as a convenient option.

Accessibility is a particularly important consideration for real estate investors. For example, Fifth Wall Ventures, which is backed by major commercial real estate companies such as Hines and Prologis, brought together Lime and Macerich, the third-largest mall operator, in a 2018 deal to exclusively offer Lime e-bikes and scooters at Macerich's properties. By installing on-site charging stations, Macerich is hoping to draw more micromobility-using consumers to its malls. This, in turn, enhances the properties of Macerich, part of Fifth Wall's investor base.

There are 7,600 apartments within a five-minute walk of MARTA stations in Atlanta, but 36,000 are within an eight-minute scooter ride.



A woman unlocks a solar-powered e-bike.

Reputation and Certifications

Micromobility may contribute toward corporate responsibility goals or, potentially, to building certifications. For example, the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system offers credits related to transportation and mobility, rewarding smart-building locations and connections to the community. As certifications like LEED evolve, there may be opportunities for real estate professionals to earn credits from supporting the use of micromobility.

Sustainable Transport

As micromobility companies and the real estate industry think about how they are shaping cities, they have an interest in making cities more accessible, less congested, and less polluted. These attributes help create an attractive environment for retail, restaurants, and living and working.

In Washington, D.C., the Southwest Business Improvement District (BID) is home to the Wharf, a waterfront development completed in 2017 with restaurants, a concert hall, and other destinations. Before the pandemic, the BID looked to micromobility—and particularly dockless services—to help alleviate congestion surrounding the Wharf and other entertainment venues in the area. The BID also runs a free shuttle to connect the Wharf to nearby transit and the National Mall, but dockless micromobility has proved to be a popular alternative—and more resilient as the BID had to suspend shuttle service during the pandemic.

In addition, micromobility can spark opportunities for creative placemaking. In 2019, Lime partnered with the Capitol Riverfront Business Improvement District in Washington, D.C., to transform an unused lot near Nationals Ballpark into a scooter parking corral. A local artist created a mural on the lot, which is owned by Brookfield Properties, as part of an effort to reduce congestion during the World Series.

However, micromobility may also have unintended negative consequences, such as the potential for accelerating gentrification. Especially if micromobility investments are concentrated in already gentrifying areas, they can drive up property values and contribute to displacement. Distributing fleets and infrastructure across the city can help, but other policies like rent control remain essential. Cities can also work to ensure that no household is paying more than a certain percentage of its income on housing plus transportation, especially as housing prices increase.

Concerns and Mitigation

Despite potential benefits, concerns about micromobility and their implications for development and property management remain. These are often easily mitigated. This section describes common concerns and how real estate professionals are overcoming them.

Negative Tenant Perceptions

Tenants may have safety concerns about scooters being left at the property or about improper use around the building. Scooter policies, including agreements with residents to not bring scooters into the property, can help mitigate these issues, as can clearly marked, convenient scooter dropoff zones that encourage orderly parking. If there are no dropoff zones, property owners can also consider installing docks on their property.

Clutter

Improperly parked scooters or e-bikes can block entrances, traffic, or trash collection and act as obstacles for pedestrians and people with disabilities, but actively managing scooters through curbside management and private charging stations has been successful in reducing clutter. As people increasingly use micromobility to deliver food and packages, property managers should prepare to accommodate this influx by expanding temporary micromobility parking. Property owners must also prepare for the growth of privately owned e-bikes, which will also require on-site parking.

Reliability

Real estate professionals are often concerned that micromobility options will not be consistently available for tenants. Solutions include allocating unused parking for scooter dropoff zones and installing charging stations on site. Investing in ways to help users find a vehicle, such as signage on developments close to mobility hubs, can also make it easier for tenants to find nearby options and contribute to tenants' perceptions of reliability.

Cost

Although charging stations and parking spot conversions to dropoff zones are relatively inexpensive, strategies are emerging for defraying the cost of this infrastructure for existing properties. For example, when local jurisdictions allow advertising, docks can even become a valuable source of revenue. During new development, any micromobility infrastructure can be underwritten as a part of construction loans, making it easy to contain these fixed costs.

Boyce/Shutterstock

A variety of scooters clutter a sidewalk in San Diego.

Simone Hogan/Shutterstock

Dedicated parking spots for dockless bikes and scooters in San Diego.

Future-Proofing

Like many cities, real estate professionals are concerned about investing in micromobility infrastructure if new technologies will make scooters obsolete, or if micromobility companies will pull out of cities or not survive. These concerns are realistic. The industry has been experiencing a lot of churn, with startups withdrawing from markets and questions remaining about the financial sustainability of scooters. However, charging infrastructure and flexible curb space are expected to be long-term needs.

Property owners can directly provide their own captive micromobility solutions to have more control, or they can work with "vehicle agnostic" infrastructure providers like Swiftmile, which makes charging stations that work with many types of light electric vehicles. This way, property owners can switch micromobility operators without needing to install different stations, and they can more easily adapt to industry changes.

Creating low-cost, flexible spaces and infrastructure can also help mitigate these risks. "Build for what you want to accomplish and the need you're trying to meet now, but in a way where you've identified the adaptable elements that reduce everyone's risk," recommends Jean Crowther, principal/new mobility leader at Alta. Today's curbside scooter parking can be adapted into a delivery zone, allowing property owners to stay responsive to changing needs; charging infrastructure will remain in demand regardless of the future of scooter rentals and can be repurposed for different operators or for residents' personal e-bikes.

> Build for what you want to accomplish and the need you're trying to meet now, but in a way where you've identified the adaptable elements that reduce everyone's risk.

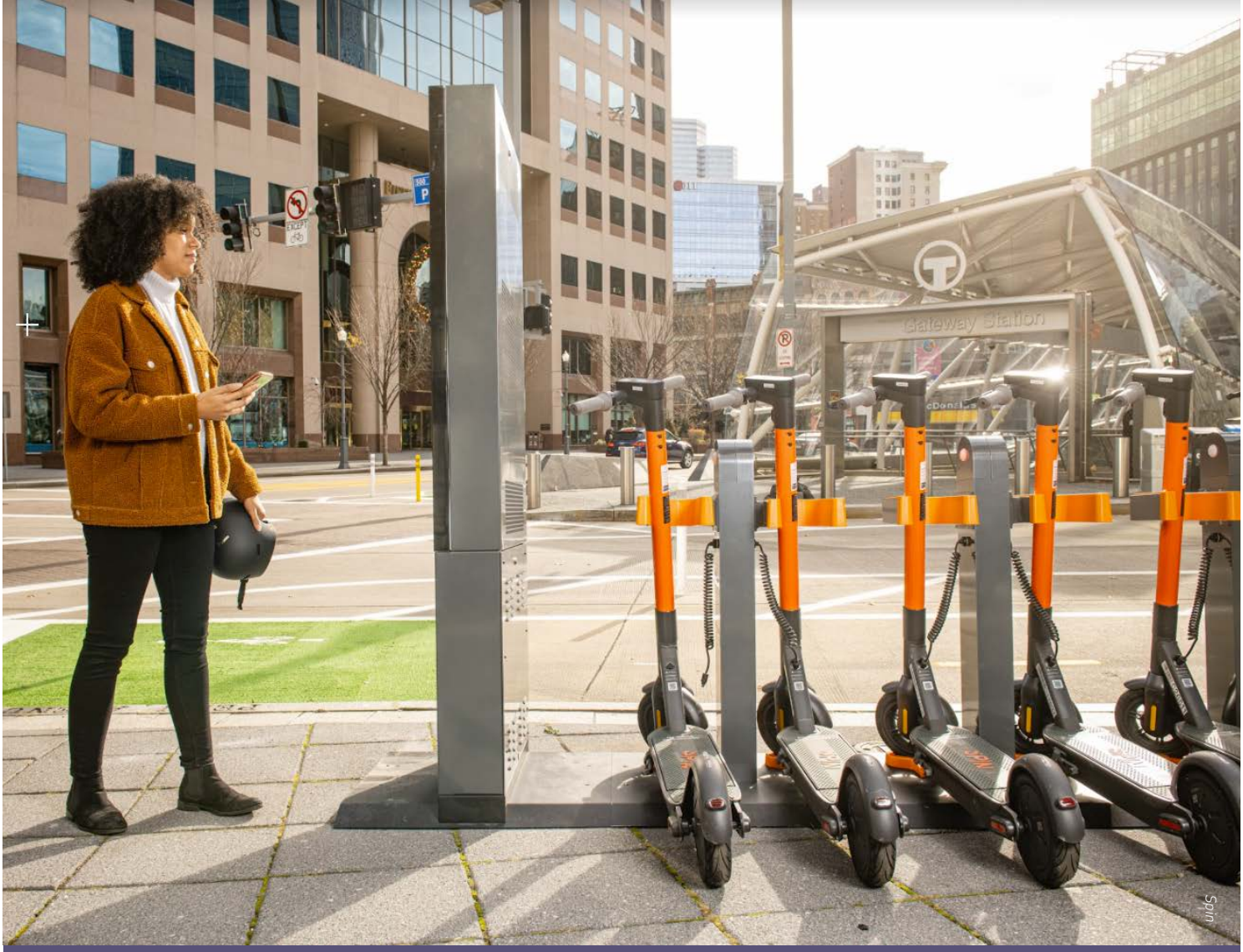
—Jean Crowther, principal/new mobility leader, Alta

During the pandemic, the public sector is also thinking creatively. Although micromobility companies and cities often have tense relationships—many companies originally dropped scooter fleets into cities with no warning—everyone is now planning under uncertain conditions. With this new mind-set comes a willingness to pilot temporary, flexible projects. Property owners can work with cities to implement inexpensive interventions, such as painting over parking spaces to create a scooter dropoff zone outside a store, and help evaluate their impacts on both scooter use and retail.

Future-proofing infrastructure investments also means considering how micromobility may fit into larger trends. For example, JBG Smith's 2020 ESG report holistically looks at micromobility, ridesharing, parking guidance, and electric vehicle infrastructure. "Owners and managers of mixed-use and office buildings and campuses know that workers and residents want short commutes, lots of choices about how they get around. The pandemic has accentuated and is likely to have last impacts with campus owners extending remote work and local policy bodies setting high telecommuting goals," advises Kelley Coyner, mobility innovation lead at George Mason University's Center for Regional Analysis. "Also, more people want to be able to get around without a car once they are at work or home. The public [sector] and private sector alike are looking for cleaner, more sustainable transportation. Developers can set the table for sustainability and meet their corporate responsibility targets by making micromobility work—with solar charging, universal hubs, and equitable access."

Microgen/Shutterstock

An e-bike commuter crosses an overpass.



Chapter Two

Partnering with Micromobility Companies

As real estate professionals increasingly recognize the value of micromobility, they are exploring ways to make the most of this new mode. Currently, providing on-site docking and charging stations remains the primary strategy for adding value to new and existing properties. This involves partnering directly with a micromobility company to install the infrastructure, thinking through siting options (including considerations like access to power), and clarifying responsibilities, such as maintenance and liability.

When forming partnerships, property owners commonly research different micromobility companies, including their financial backing, rather than focusing on the first ones to market. This due diligence will continue to be essential as the micromobility market evolves. Although partnership structures vary, it is common for micromobility companies to provide the stations, continue to serve as the operators, and maintain the stations, while the property owner funds the construction and any maintenance costs. Sometimes, the property manager and representatives from the micromobility company jointly develop on-site programming, such as scooter education and helmet giveaways. Another possibility for the partnership to explore is providing tenants with discounted subscriptions to micromobility services, which can also be available through existing programs for low-income users.

Liability, Safety, and Property Damage

Typically, city regulations make micromobility companies liable for any property damage, outline the extent to which companies and individuals are at fault for accidents, and have other policies that promote safe use. Understanding this regulatory environment is critical when working with micromobility companies, especially if property owners are assuming any risk. However, property owners can still consider other strategies to improve perceptions of safety, such as placing charging stations directly outside the building rather than in parking garages, which can also encourage use.

The two profiles that follow illustrate how real estate firms that recognized the value of micromobility are working with Spin, a micromobility company, to provide charging stations.

> "The combination of time savings and money savings helps reduce the two major pain points of driving, and get them to shift away from driving to other modes of transportation."
>
> *—Justin Schor, principal, Market Research + Planning Wells + Associates*

Profile: Beacon Capital Partners (Office Space, Washington, D.C.)

Beacon Capital Partners has class A office space in Northwest Washington, D.C., that some people view as slightly out of walking distance from Metro stops, but also too close for a shuttle. To help commuters reach the office without driving, Beacon worked with Spin to install a scooter charging station on its properties in the western central business district and the West End. One of the reasons Beacon chose to work with Spin is because the latter is backed by Ford, which provides Spin with sustainable financial backing and makes the company appear to be a more reliable partner than other micromobility startups.

Although most scooter users connect to transit, Beacon found that many commuters were using the Spin scooters for their entire commute. One possible reason for this, says Justin Schor, principal at Wells + Associates, is that "a lot of people make the decision to ride the scooter because it costs equal or less money than connecting to transit," especially in a city where the mass transit charges by distance traveled. He adds, "The combination of time savings and money savings helps reduce the two major pain points of driving, and get them to shift away from driving to other modes of transportation."

In addition to partnering with Spin, Beacon worked with Wells + Associates to design vinyl graphics that incorporate each property's brand, help bring attention to the charging stations, and advertise that Beacon is providing the amenity. Working with micromobility companies is essential for installing docking and charging stations, but property owners can look beyond the stations themselves to maximize their impact through design and branding.

By recognizing the potential of micromobility to make these office spaces more accessible, Beacon was able to provide an amenity that would attract tenants and mitigate employers' concerns about commuting to this location. In the process, Beacon was able to enhance connectivity and ultimately encourage a new way of commuting.

Profile: Hubbard Street Group (Apartment Buildings, Chicago)

During the summers of 2019 and 2020, Spin and Hubbard Street Group partnered to implement a scooter dropoff/pickup zone at the Field's Lofts, a class A apartment complex in Chicago's popular Logan Square neighborhood. Every morning, Spin would drop off fully charged and cleaned scooters to the front lobby of the property so that residents had a convenient, environmentally conscious, cost-effective, and fun way to commute around the city.

Hubbard Street Group saw the micromobility option as a creative way to connect residents to the city's primary transit system and provide an innovative amenity that residents could enjoy. Some nearby attractions became accessible via a five-minute scooter ride.

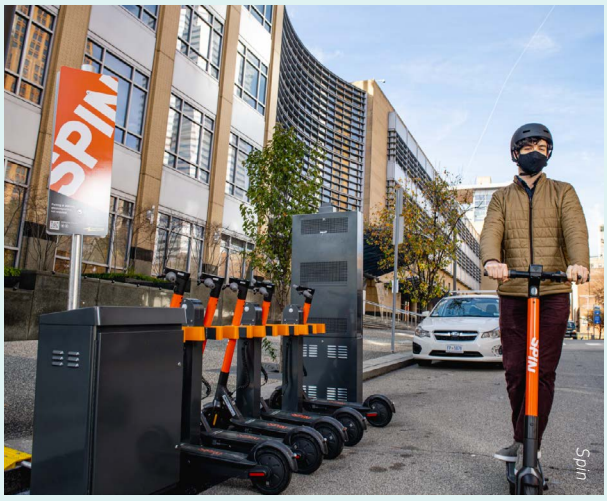
Residents of the Field's Lofts received a voucher that could be used for rides, and the designated dropoff zone added to the overall availability of scooters. The program contributed to the scooters' popularity: on the first weekday of availability, all of the scooters were all taken by 8 a.m. Given this demand, Hubbard Street Group and Spin doubled the number of scooters left on site.

"As a developer of class A apartment complexes across the city, we are always looking for innovative ways to benefit the residents at all of the communities in our portfolio," says Kevin Brown, director of asset management at Hubbard Street Group. "Listening to residents and staying up-to-date on consumer trends allows us to keep an edge on the competition and encourage a positive living experience for residents and, in this case, extending that quality beyond the complex."

Based on the success of the program, Spin approached Hubbard Street Group to install a Spin Hub, a multi-scooter docking station that ensured that all scooters were organized and fully charged for the next user. Having had a great experience working with Spin and with residents having had overwhelmingly positive reactions, Hubbard Street Group agreed. The station was standalone and self-sufficient, including a replaceable battery that eliminated the need for permanent drilling or sourcing power from the building. Spin's operations team would monitor the Hub's battery levels and replace the battery as needed.

"Our partnership with the Hubbard Street Group has given the residents of the Field's Lofts a way to efficiently and safely connect to Chicago's mass transit system and the city at large," said Zander Bonorris, director of regional partnerships at Spin. "Hubbard Street Group has adopted an orderly and reliable system to ensure residents have an affordable way to get around the city."

Hubbard Street Group had a great experience working with Spin over the last two years. According to Brown, "A successful partnership is built upon coming up with a sound strategy, communicating it to all parties, and executing in real time." Since the beginning of this partnership, Hubbard Street Group has continued to work with Spin to roll out Spin Hubs at other properties throughout Chicago and intends to continue the strategy in the years to come.



Spin

Simone Hogan/Shutterstock

Chapter Three

City Policies for a Micromobility-Supportive Real Estate Environment

Creating a more equitable transportation system is complex and involves public and private stakeholders with different roles and responsibilities. City policies, incentives, and partnerships can advance public-sector goals while creating a supportive real estate environment for micromobility.

Mitigate Real Estate Industry Concerns

A variety of city policies can reduce the instances of improper parking. In Austin, dedicated micromobility parking spaces are required with land development projects where the devices are prevalent. Dallas prohibits parking devices on private property without permission of the owner and on narrow sidewalks. And, Santa Monica, California, mandates micromobility companies to remove equipment parked on private property without permission.

Local zoning rules may apply to places where micromobility companies plan to use private property, and parking on public property may fall under health and safety regulations. Updating these regulations can make mobility hubs more feasible on both private property and on public rights-of-way.

Supportive Policies for Micromobility

Policy	Benefits for the city	Benefits for real estate
Implement transportation demand management measures or impact fee reductions, or incentive zoning for the inclusion of micromobility infrastructure (e.g., reduce parking requirements or allow increased density for installing infrastructure like charging stations).	• Reduces and manages traffic congestion, even alongside new development.	• Obtains desired incentives that reduce costs or add value. • Absence of parking creates more space for other priorities, like community rooms.
Allow advertising and sponsor recognition on docking and charging stations.	• Is a zero-cost way to keep micromobility options financially sustainable and accessible to all users.	• Offers potential to receive some of the revenue and defray costs.
Offer tax credits, rebates, and grants for the installation of micromobility charging stations, which is already being done with electric vehicle–charging systems.	• Drives the adoption of micromobility, which contributes to sustainability goals.	• Lowers installation costs.
Develop incentives or requirements for building owners to provide micromobility services at low or no cost.	• Makes use more affordable and contributes to equity goals.	• Makes micromobility-related amenities even more appealing and accessible to tenants.
Allow micromobility signage, regulate the signage, and negotiate maintenance requirements through real estate leases. Sign codes are especially important given the rise of digital displays on charging stations.	• Improves wayfinding around mobility hubs and advertises micromobility rules relevant to users.	• Positions micromobility as a reliable option for tenants.
Require scooter parking on private property, similar to zoning requirements requiring property owners to provide automobile and bicycle parking.	• Increases available parking.	• Reduces clutter on and around properties.

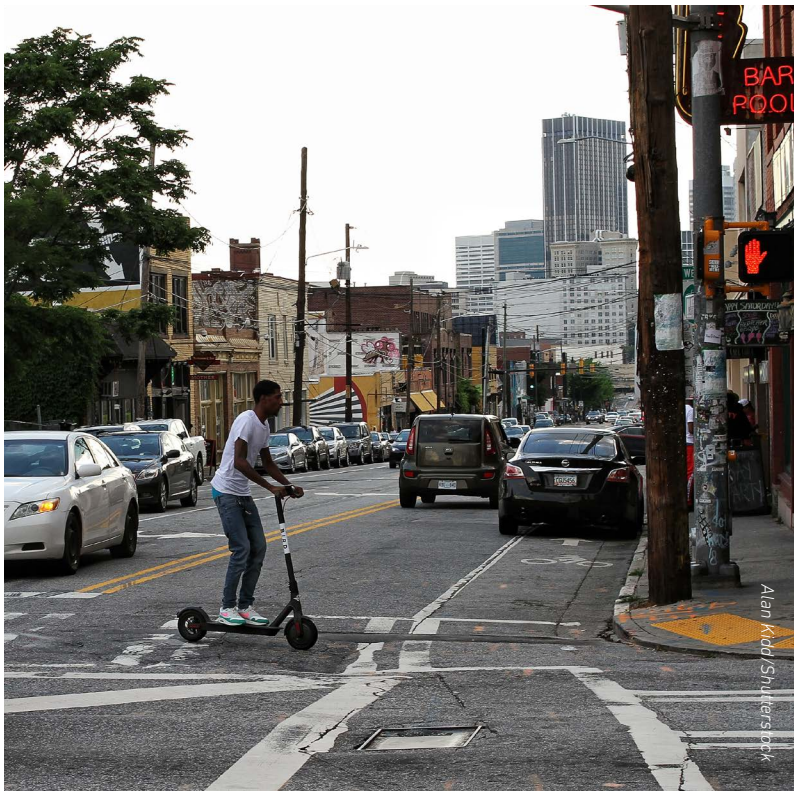
Address Equity Considerations

Many cities promote equitable access to micromobility across several dimensions, including cost (discounting trips or subsidizing the cost through on-vehicle advertising revenues; offering non–credit card forms of payment), physical barriers (requiring deployment in each part of a city), and safety (infrastructure improvements; targeted enforcement). As micromobility vehicles evolve, they may also begin to provide more options for people of differing abilities.

Micromobility companies have demonstrated an interest in equity as well. For example, the Spin Access program works with cities to establish appropriate distribution levels of scooters in underserved areas and introduce new service models to increase reliability, and it has so far been successful in Detroit and San Francisco.

Affordable and mixed-income housing developers also are beginning to think about micromobility. In early 2020, a request for proposals in Tampa looked for mixed-income housing with a focus on connections to transit, including micromobility. Similarly, a partnership between TransForm and the Metropolitan Transportation Commission (MTC) is implementing three mobility hubs at affordable housing developments in the California cities of Oakland, Richmond, and San Jose, and they considered scooters in their assessment of community transportation needs. Programming at affordable housing sites can also bring awareness to micromobility cost subsidies available to low-income residents.

Finally, enforcement poses equity issues. In places without protected bike lanes, micromobility users may feel safer riding on the sidewalk. Or, users may not know about requirements to wear a helmet. Calling the police about minor infractions like these can have inequitable consequences, and real estate professionals should prioritize more constructive ways of supporting safe use, such as adding informative signage to their charging stations.



Alan Kidd Shutterstock

A person rides an electric scooter through a busy intersection in Atlanta.

Update Measures of Environmental Impact

California's Senate Bill (SB) 743, which went into effect in 2020, updated how local jurisdictions analyze environmental impacts for both publicly and privately initiated projects. The new measurement moved away from level of service (LOS), which implicitly prioritized cars and auto-oriented infrastructure, to vehicle miles traveled. When figuring out how to mitigate the environmental consequences of new developments, developers are now encouraged to promote bike access, contribute to traffic-calming measures, and support other investments that also benefit micromobility users—rather than building the wider, faster roads that LOS incentivized.

A person rides a Jump electric bike among car traffic.

> "The real estate industry can also lead on encouraging micromobility by signaling to government that as an industry they are open—and willing to be flexible and responsive—to the inevitable bumps in the road when it comes to welcoming a range of new vehicles to our streets. It makes a big difference to local government if they know the leadership among the real estate community wants to help make micromobility work for all."
>
> *—Sarah Jo Peterson, principal, 23 Urban Strategies LLC*

Provide Supportive Conditions and Infrastructure

Many factors influence micromobility use. When cities unlock demand for micromobility through smart policies and planning decisions, real estate companies have a better case for investing in supportive infrastructure and small vehicle fleets. Strategies include developing protected bike lanes, addressing threats to personal safety—such as street harassment, racial profiling, violence, and crime—and supporting mixed-use environments where destinations exist within a micromobility-accessible distance.

Cities can also address physical barriers to implementing charging stations. Often, potential station sites that would be convenient for users do not have access to electrical power. Cities can think about how to provision power in the public right-of-way and at new commercial or residential developments, as they are with electric vehicle charging infrastructure.

Moreover, cities must recognize that micromobility use does not just occur between residential areas and downtowns. People also use micromobility within their neighborhoods and, ideally, people would be able to work closer to where they live, making short commutes via scooter or e-bike viable. This speaks to the need for other policies that would make living closer to work more affordable and for investments in workforce opportunities closer to where people live. When promoting micromobility, "We need to address these other needs to have a meaningful starting point," says Laura Miller Brooks, senior transportation and infrastructure associate at the Federal City Council.

Facilitate Negotiations

Both public agencies and developers have points of leverage throughout the development process. Cities can push for more micromobility infrastructure on private property, especially in underserved neighborhoods. At the same time, developers want a safe micromobility network so that people can reach their properties, and they can be more vocal about needing the city to take action on protected bike lanes, curbside management, and additional micromobility parking in the public right-of-way. More formally, clear mechanisms for public benefit negotiation enable developers to easily see the tradeoffs among different decisions and provide an efficient path for working with cities.

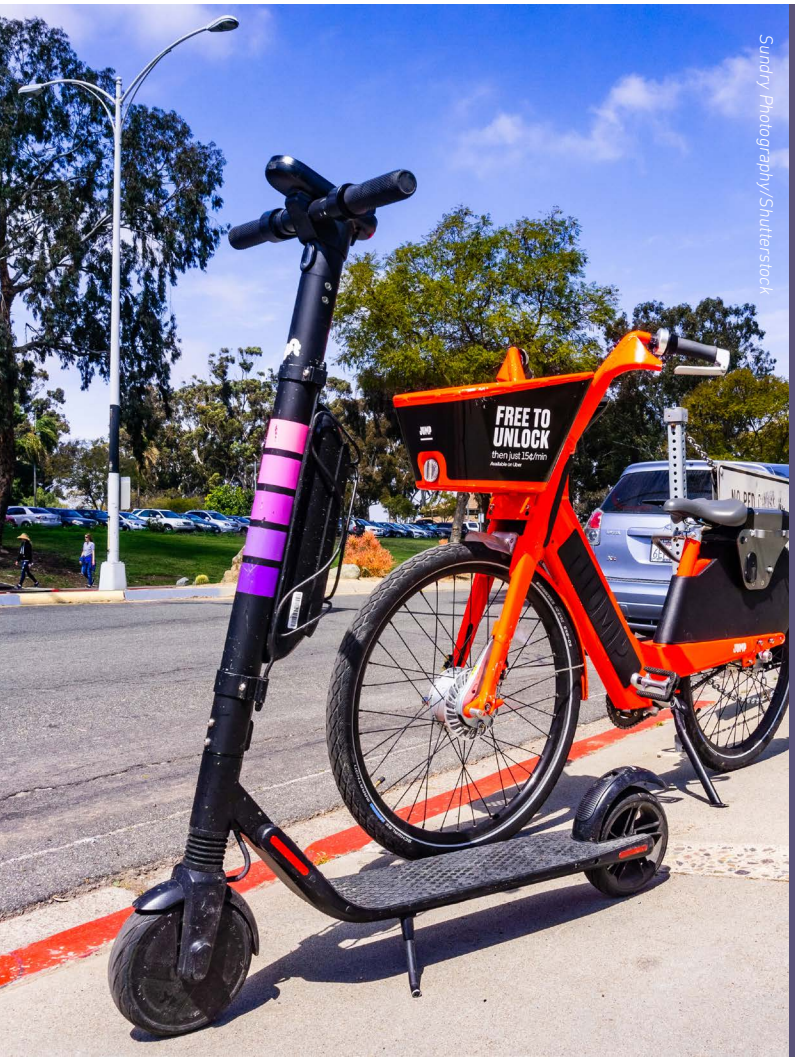
Promote Complementary Actions for Private Real Estate

The real estate industry must recognize the reciprocal relationship between private and public sectors to maximize investments in micromobility. A reliable and widespread network of safe, convenient micromobility options and infrastructure makes micromobility easier and more desirable to use, but this requires public- and private-sector efforts. In addition to the policies and incentives above, public/private multimodal partnerships can include micromobility options. For example, cities are working with businesses and developers to share the costs and benefits of bike sharing, and this can be done for micromobility as well.

The real estate industry can also work with cities to help create more robust mobility hubs. For example, as the Pittsburgh Mobility Collective develops mobility hubs near transit stops—featuring car share, scooters, bike share, screens with transit information, and carpool pickup spots—they are thinking about how to bridge public and private spaces. As car share moves toward an electric system, nearby buildings may be well positioned to accommodate the needed charging infrastructure. Developers and property owners can partner with cities to help provide this infrastructure, which ultimately improves accessibility for the properties. To create a cohesive sense of place around the hubs, cities can create clear connections between these buildings and the higher-visibility services in the public right-of-way.

Plus, the private sector can help not only with funding but also with streamlining implementation. When developers have conversations with communities early on and elevate equity considerations, they can increase public interest and accountability and result in a smoother development process.

Additional strategies for the real estate industry include supporting state and local regulations and getting actively involved in policymaking, providing corporate sponsorships as an employee benefit, and having a general attitude of welcoming toward micromobility. "[T]he real estate industry can also lead on encouraging micromobility by signaling to government that as an industry they are open—and willing to be flexible and responsive—to the inevitable bumps in the road when it comes to welcoming a range of new vehicles to our streets," says Sarah Jo Peterson, principal at 23 Urban Strategies LLC. "It makes a big difference to local government if they know the leadership among the real estate community wants to help make micromobility work for all."



Sundry Photography/Shutterstock

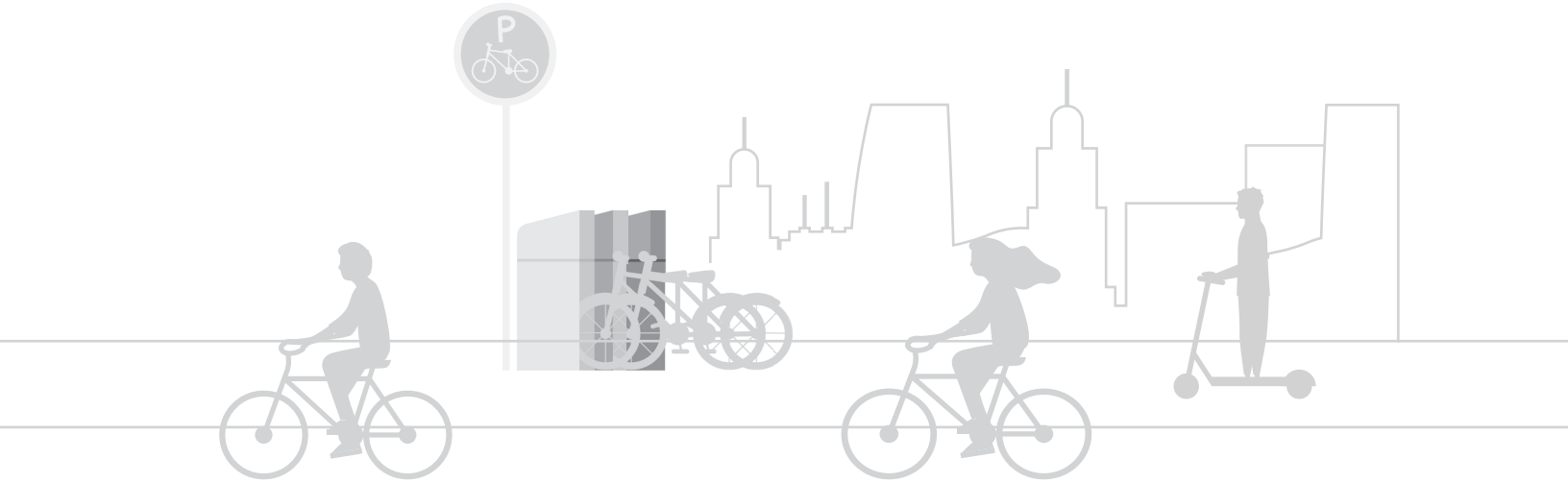
Jump electric bike and Lyft scooter parked on a sidewalk in San Diego.

Conclusion

Dockless micromobility is here and will continue to disrupt cities. Regardless of potential concerns, the real estate industry is already recognizing the value in micromobility. As public policy continues to develop, cities can ensure that the real estate industry has opportunities to have a say, and the real estate industry can actively support policies that are mutually beneficial.

Reducing the reliance on single-occupancy vehicle trips is good for cities, developers, and the climate. The pandemic is expected to reverse the trend away from cars, but the real estate industry must be willing to look farther ahead with cities and not lose sight of their aligned pre-pandemic priorities. And, investing in basic infrastructure like bike lanes is a low-cost, high-impact strategy for an equitable recovery from the lasting effects of COVID-19.

After all, "We can't get people out of cars in a place built for cars," says Dan Winston. Recognizing the value of micromobility for both real estate and cities is one step toward building healthier, more sustainable, and more equitable places for people.



Acknowledgments

This report was developed with support from the Bloomberg Philanthropies American Cities Climate Challenge. The Climate Challenge is an initiative that empowers 25 of the largest U.S. cities to implement near-term climate goals and become primary drivers of progress toward meeting America's pledge on climate. Recognizing that cities account for more than 70 percent of global carbon emissions—and that mayors have significant authority over cities' highest emitting sectors: transportation and buildings—the Climate Challenge aims to enhance the work already being done by mayors across the United States and to support cities in the fight against climate change.

ULI thanks the following individuals for providing their insights and expertise as interviewees for this report. All titles and affiliations reflect the individuals' positions at the time of their interviews.

Lexie Albe
Deputy Executive Director
Southwest Business Improvement District

Demi Allen
Director of Business Development
Swiftmile Inc.

Lance Artis
Director of Real Estate Partnerships
Spin

Kathleen Baireuther
Business Strategy and Operations
Ford Autonomous Vehicles LLC

Zander Bonorris
Director of Regional Partnerships
Spin

Kevin Brown
Director of Asset Management
Hubbard Street Group

Jay Corbalis
Vice President, Public Affairs
JBG SMITH

Kelley Coyner
Mobility Innovation Lead
Center for Regional Analysis
George Mason University

Jean Crowther, AICP
Principal/New Mobility Leader
Alta

Kate Elliot
Senior Program Manager
National Association of City Transportation Officials

Brad Greiwe
Cofounder and Managing Partner
Fifth Wall

Amanda Howell
Project Manager
Urbanism Next Center at the University of Oregon

Jenny Jacobs
Director of Development
East West Partners

Dylan Jones
Architect and Senior Associate
Gensler Mobility Lab

Acknowledgments (*continued*)

Charles Lancaster
Chief Innovation Officer
Gould Property Company

Julie Lydon
Head of Communications
Fifth Wall

Robert H. Mandle
Deputy Executive Director
National Landing Business Improvement District

Laura Miller Brooks
Senior Transportation and Infrastructure Associate
Federal City Council

Nicole Payne
Program Manager
National Association of City Transportation Officials

Sarah Jo Peterson
Principal
23 Urban Strategies LLC

Karina Ricks
Director, Department of Mobility and Infrastructure
City of Pittsburgh

Sandy Romero
Senior Analyst, Research
Cushman & Wakefield

Carter Rubin
Transportation Technical Strategist,
Bloomberg Philanthropies American Cities Climate Challenge
Natural Resources Defense Council

Justin Schor
Principal, Market Research + Planning
Wells + Associates

Greg Smithies
Partner
Fifth Wall

Dan Winston
Regional General Manager
Spin

Nicola Whiteman
Senior Vice President of Government Affairs
Apartment and Office Building Association
of Metropolitan Washington

David Tran Photo/Shutterstock

Small Vehicles, Big Impact: Micromobility's Value for Cities and Real Estate describes the real estate perspective on micromobility, focusing on scooters and e-bikes. Developers, property owners, managers, and investors are increasingly recognizing the value that micromobility can bring to their properties, and there is a growing case for the industry to support micromobility efforts. The report also serves as a resource for city officials seeking to understand the real estate perspective on micromobility, determine which policies and incentives might advance city goals while garnering support from the real estate industry, and promote equitable implementation. When real estate professionals and cities work toward mutually beneficial goals, micromobility has the potential for an outsized impact on mobility, equity, and sustainability.

Urban Land Institute