Looking Ahead, *Moving Faster*

The changing mobility ecosystem and its effects on the parking industry.

By Nathan Berry

THE TRANSPORTATION INDUSTRY has been transformed in the past few years, and innovation shows no signs of slowing down. There are many new forms of transportation, and citizens have dozens of options at their fingertips—public transit, electric scooters, dockless bikes, ride-hailing services, personal and shared vehicles—and autonomous vehicles are on the horizon. All of these modes are competing for valuable curb space, creating new challenges for cities to manage.

With all of these unprecedented changes and the fast pace of innovation, private companies, cities, and universities are striving to stay on top of the trends and lead the industry by implementing more technology to improve and better manage their complex mobility ecosystems.

As new modes of mobility are introduced, a new set of challenges is forthcoming that expands beyond the traditional parking environment. Through conversations with city and mobility leaders, I have identified a few common themes organizations are trying to address as they strive to decrease congestion and create

more livable communities:

- Managing the curb.
- Collaborating among modes (parking, transit, micro-mobility, etc.).
- Dealing with the introduction of scooters and dockless bikes.
- Leveraging technology for mobility management.

Curbside Management

In the past, parking departments have had a primary focus on managing the rates and rules for parking and making sure drivers had a way to pay. But changes in the industry now require parking leaders to think about the bigger picture and how their operations can better manage the curb. It is no longer just about on-street parking and the choice of paying with a meter or a mobile phone; today's leaders are facing challenges with electric scooters crowding the sidewalk and ride-hailing vehicles stopping at the curb to pick up and drop off riders. To make cities more livable for their citizens and continue driving economic growth, city and parking leaders need a way to understand and manage their unique mobility ecosystems.

As cities make way for the future of mobility, it will be critical to consider autonomous vehicles and other innovations that will require digital systems for operations. Currently in many areas, the curb is managed offline as rules, rates, and regulations live

on physical signage or on non-connected systems, which can lead to confusion for drivers and enforcement officers. As new modes of transportation use the curb, centralized digital management is becoming a necessity. Cities can better understand what's happening on their streets and make decisions to improve congestion and centralize the issuance and validation of access to the curb (parking rights, essentially) in order to make the city more livable, efficient, and equitable.

Coordinating this exchange of information, which often requires collaboration with private companies, requires the city to play a new role. To ensure access without stalling innovation, municipalities have to start leveraging technology to centralize data across modes of transportation so they can make data-driven decisions about how to provide equitable transportation options.

One successful example of effective curbside management is a pilot program with Lyft in San Francisco, Calif. Riders who requested a Lyft on Valencia Street—one of the busiest areas in the city—were directed to a side street to meet their rides instead of blocking the curb on the main street. As a result, average vehicle speed on Valencia increased, improving the flow of traffic. This small behavior shift for each individual, amplified across the thousands of people using Lyft in this area, has created a larger positive outcome for the city.[1]

Mix-modal Collaboration

With so many possibilities for getting around a city, citizens can use multiple modes of transportation to get from point A to point B, but they are forced to manage each mode separately. Agencies are recognizing this trend and shifting from mode-oriented to user-oriented services.

The shift to mix-modal is well-demonstrated by Miami-Dade's Department of Transportation and Public Works in Florida. In 2016, Miami-Dade reorganized its entire transportation system under one umbrella agency to embrace the idea of mobility management and improve the transportation experience for citizens. More cities are considering a similar consolidation and approach as they understand that when parking, transit, and micro-mobility are managed collectively, it leads to more collaboration and provides a holistic view of mobility challenges and opportunities. With more data available, leaders can make better decisions for positive city outcomes.

We're also seeing a convergence of transportation options that focus on the user journey, especially when it comes to first mile/last mile solutions. In April 2018, the Charlotte Area

Transit System (CATS) in North Carolina, announced a partnership with Lyft to offer subsidized rides for users of its CATSPass app. Passengers who originate or terminate a trip at specific station locations receive a contribution toward their Lyft fare. With this partnership, CATS was able to increase public transit usage in the city by providing options to use multiple forms of transportation in a single journey, streamlining the user experience.

Scooters and Micro-mobility

In 2018, scooter companies dropped thousands of scooters in cities across North America, creating great excitement and debate among citizens, city leaders, and mobility companies. With both Lime and Bird boasting more than 10 million scooter rides taken to date and the continued expansion into more cities in the U.S. and abroad, micro-mobility management has risen to the top of challenges that city and parking leaders face.

Many cities responded initially by implementing systems and rules intended to minimize disruption by limiting access to their curbs and

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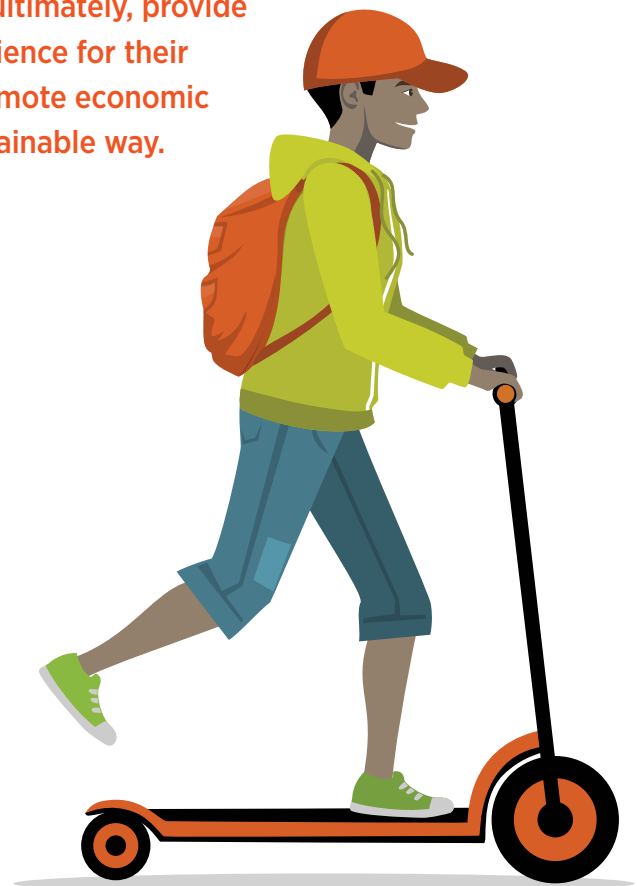
streets. But by focusing on the challenges, cities risked missing the opportunity to incorporate new modes of transportation to make their cities more equitable and livable. In the subsequent months, cities have begun the process of building systems to coordinate fleets of micro-mobility vehicles, including the creation of data standards and data-sharing agreements with scooter providers. As those initiatives mature, cities will need to use shared data to ensure the alignment of incentives between public and private sector participants.

Cities and micro-mobility companies have an interest in creating a system in which all parties—end-users, the city, and the micro-mobility companies—can benefit. With a shared data system that can help scooter companies balance supply and demand, citizens will have greater access to transportation options, cities can better control and manage the scooters on their streets, and micro-mobility companies can optimize the number of vehicles available.

Leveraging Technology

The new innovations in our industry have the potential to positively affect cities and their citizens, but the missing piece is often having the right technology to implement desired solutions. Organizations are looking to implement technology that creates simpler and more efficient systems for drivers, enforcement officials, and city leaders, while providing unprecedented access to data about parking trends, behaviors, payments, enforcement officer routes, and more, all in real time. This information is the key to tackling broader city initiatives, such as ensuring equity, reducing congestion, and fostering innovation, and allows transportation leaders to make data-driven decisions for better mobility management.

Parking and transportation leaders understand the importance of technology, but there are many options to consider. The first step is to help leaders better understand mobility trends by leveraging technology to manage all forms of transportation in one place. A mobility platform is the solution, allowing cities to connect multiple mobility services (mobile pay for parking, digital permits, parking enforcement, meters, micro-mobility, ride-hailing services, and more) in a centralized hub. Cities then have real-time access to data to help identify trends, make informed policy decisions, and effectively code the curb. The platform can also house information about rates, rules, and regulations, which can then be pushed out to all of the connected services.

With a more connected system, it becomes easier for cities to make adjustments, big and small, that will influence the daily decisions citizens make about how to travel throughout the city. When cities and parking leaders have more control, they can manage a complex mobility ecosystem and ultimately, provide a positive experience for their citizens and promote economic growth in a sustainable way.

The bottom line is that cities, universities, and agencies are facing many of the same challenges, regardless of their organization's size or location. Innovation is not slowing down, and the changes that will affect our industry this year and in the years to come are unknown, which is why there needs to be an established system of collaboration between private and public sectors. Private and public organizations will lead the way with new technology and developments, making it critical that the public sector has the tools necessary to keep up and stay on pace. With greater collaboration, organizations can share best practices that can help everyone be successful. ◆

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1. Medium (2018, August 22) Creating a Safer Valencia Street https://medium.com/sharing-the-ride-with-lyft/creating-a-safer-valencia-street-54c25a75b753