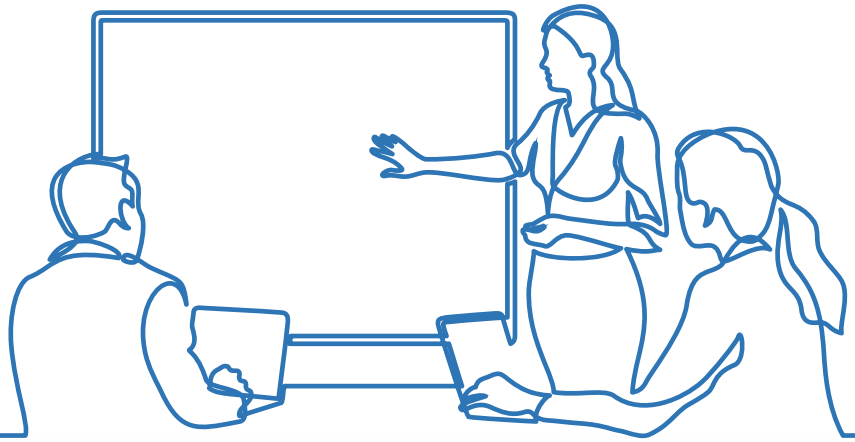

Curb Man A Team

Managing curb space used to be relatively easy—but not anymore! Why it's important for everyone to understand curb management and what it means for communities.

By Christopher Perry, CAPP, and Charley DeBow, CAPP

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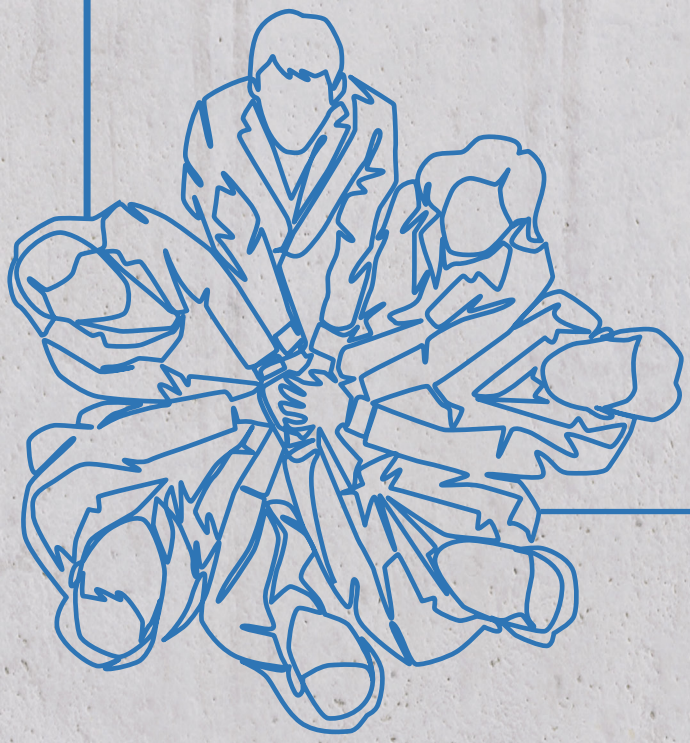
Effort

PARKING MANAGEMENT the past 85 years has been straightforward. The vehicle parks, possibly makes a payment, and perhaps enforcement checks if the car is authorized to park at that time and then takes an enforcement action if a violation is identified. Technology has supported this by streamlining this process in various ways, but the policies at the curb have not changed very much.

The future of the curb is much more complex. There are more stakeholders involved and more technology is needed. New mobility modes seem to arrive daily and it takes a team to tackle these challenges. We need to get the right people in the right seats on the bus.



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Parking is no longer an afterthought to city planning. Parking professionals are being asked to join greater mobility discussions to help solve the growing problems facing our urban centers.

Taking the Lead and Why it Matters

The advancement of technology has clearly had an effect on our operations. Connected platforms, license plate recognition (LPR), mobile apps, and data make our operations more efficient and provide a higher level of service for our customers. However, on-street parking policies have remained relatively consistent for the past 85 years. Yes, we have moved some time limits, tiered rates, and reorganized some curb space, but we have not transformed a majority of the curb policy. It becomes imperative to investigate what comes first: policy shift or supportive technology.

Parking is no longer an afterthought to city planning. Parking professionals are being asked to join greater mobility discussions to help solve the growing problems facing our urban centers. Five years ago, the curb consisted of car parking, loading zones, bus zones, and maybe a few taxi stands spread out across the city. The decision to change the policy on a specific curb was primarily based on the need directly attached to that curb; a hotel needed a taxi stand or a commercial district needed a loading zone. Enforcement was sporadic because technology was lacking, but also because these zones were a small piece of the overall operation. Cities focused the technological investment to higher priority areas such as paid parking. The parking technology sector followed accordingly, and earmarked research and development dollars on products and software that matched this focus. They did not see a large enough opportunity to develop new technology that specifically addressed these specialty zones.

Technology is starting to offer more options. Professionals are leaving their operational roles and starting to develop technology to solve real problems. However, there may be a major shift in solutions based on the size of the municipality or university.

Historically, parking technology for large urban cities was the same as it was for the smaller cities. The needs for a New York, N.Y., are more complex than a State College, Pa., but overall, the technology did the same job: collect payments, issue permits, and enforcement. The needs for larger cities are starting to be drastically different. Will the technology sector focus on only the big cities? How will the technology sector react?

We Have Been Here Before

Curb management is a predominant topic in the climate of the parking and mobility industries, and rightfully so. Competition for curb space seems to grow on a daily basis. Home delivery services, transportation network companies (TNCs), food delivery services, scooters, and the more traditional players such as cars, buses, and taxis are all vying for the same real estate. While these relatively new entrants are adding stress to the system and increasing the need to properly manage spaces, the idea of curb management is one that precedes these new players. Parking meters, disabled parking zones, and taxi stands are all examples of prior curb management techniques.

The early 1900s saw the increase of automobile use, and with it came congestion. Parking regulations of the time were not adequate to manage the increase in automobile parking. The issue was so prevalent that cities began banning parking cars within shopping and business districts during daytime hours. Parking continued to be an issue and in 1935, Oklahoma City installed the first parking meters.

A more recent instance of curb management surrounds the identification and protection of parking spaces for disabled drivers. The designation of certain parking spaces for disabled drivers is an essential part of a parking system. These spaces are often located in areas that afford the greatest convenience for the drivers who use them. In a shopping center, the stalls are closest to the store entrance; on a block face, the locations are often at the end of the block or in front of medical facilities. This value created the need for regulations and policies to manage curb space.

States and municipalities vary in how disabled parking zones are regulated, but in the simplest terms, the zones are designated for drivers with the proper identification. All other drivers are restricted from using them

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and penalties for improper parking can be significant. For example, in New Jersey, these fines could exceed $250. The value of these zones is so high that it has led to abuse of the underlying regulations in place to protect them. Disabled placards or hang tags are frequently transferred from vehicle to vehicle and used by drivers they are not designated for, while other drivers obtain placards without following the proper processes. These abuses impact availability of disabled zones and lead to further regulations to protect them. New Jersey now requires that the issuance and renewal of disabled placards be endorsed by a medical professional. Additionally, the new placards include added terminology and expiration information to make enforcing these zones easier.

Taxi stands and taxi relief stands are designated curb locations designed to provide areas for taxis to queue. Metropolitan cities contain thousands of taxis engaged in the delivery of passengers—New York and Chicago have more than 12,000 and 6,000 taxi cabs respectively. These vehicles could cause tremendous traffic congestion if not properly stored when not in use. The idea of storing taxis when not actively transporting passengers is a basic one, but it cannot be accomplished without adequate locations and policies to store them. New York City has more than 60 taxi stands or taxi relief stands available to cab drivers and actively enforces these zones for compliance. Fines for illegally parking in the areas exceed $100

The City Perspective

The act of managing the curb is not unique to the cities we interviewed. Competition for the curb is intense and often crosses multiple right-of-way functions. Parking and mobility functions are only a part of the curbside ecosystem, which must also include access for pedestrians, commerce, and activation initiatives such as sidewalk cafes, food trucks, and parklets. All these parties interact with the curb in different ways and not all are present in all cities. These variables challenge parking administrators to develop curbside policies that are relevant in the current and future environment.

Good core policy is key to an effective curb management program. Technology within the mobility industry is developing at a rapid pace. TNCs, car-sharing services, and scooters are popular mobility platforms that didn't exist 10 years ago. Services such as Uber and Lyft experience large market adoption at the same time companies offering car-sharing or e-scooter services are experiencing expansion and contraction in their respective businesses. The fluidity in these emerging platforms coupled with the ability for new technology to rapidly affect the curbside make it nearly impossible for parking administrators to maintain policies that address all the current issues they face.

A proper foundation grounded in solid core parking policy is the key to managing this ever-changing ecosystem. Through the prioritization of the curbside use and proper communication of such policies, cities can reconcile the competition for curb space with core principles that were adopted by all the necessary city stakeholders and policymakers. Seattle and Las Vegas cited core policy as the driving force behind how they manage TNCs and scooters. Seattle currently does not have an e-scooter policy and this service is not currently offered within the city. This may change in the future, but a well-communicated curbside policy fostered an environment where the potential vendors are working with the city before offering their service to the public. This collaborative effort will ultimately result in a solution that is respectful for all parties.

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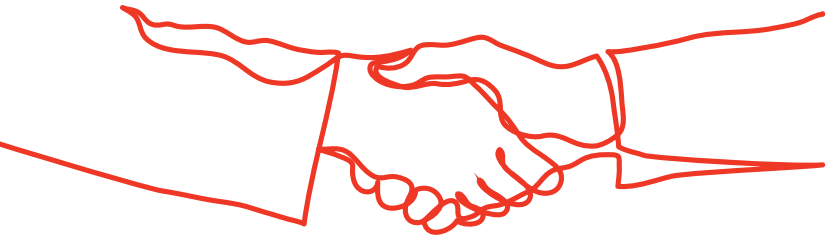
Similarly, Las Vegas relies on existing taxi or drop-off regulations when addressing the services offered by TNCs. This landscape is changing, and pick-up/drop-off volumes may be increasing, but the city can utilize existing regulations and policies to address this evolution. The process of creating and adopting city policy cannot keep up with the rapid pace of technological change. A solid core policy is essential for administrators and policymakers to manage access to the curb.

Collaboration is as important as integration. Cities make data-driven decisions, and having the ability to view and analyze the various data sets generated from their parking technologies is essential to developing parking policies. The amount of data being generated is growing every day, and the only way for parking administrators to fully understand their operation is by integrating these data sets. However, without proper collaboration, the success of a new technological deployment is at risk. Collaboration is not limited to the relationship between the technology partner and the parking department and is broader than one specific project:

- Parking administrators must work with internal stakeholders to deploy technology that is mutually supportive of parking policy.
- Cities must collaborate with one another to develop policies that include the experiences and lessons learned from technology pilots.
- Technology providers must collaborate with parking administrators to deliver a solution that meets the needs of the city.

Too often, technology is developed that addresses what the perceived problem is, so the solution only addresses a portion of the problem it attempts to solve. Many cities are progressive in their exploration of new technology and pilot programs are often utilized to test new solution sets. A collaborative effort between cities with good core policy and technological partners that are willing to listen and develop will result in solutions that are problem-solving and scalable.



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Technology is Not the Only Answer—For Now

Las Vegas, Nev.

Let's look at an example of changing a curb to allow short term pick-up and drop-offs. While the initiative has merit, until it is tried, the impact of getting cars out of travel lanes and to the curb is unknown. Las Vegas; Washington, D.C.; and Columbus, Ohio, have tried to manage these zones in the past year. Technology alone was not the solution as all three cities also needed personnel to manage these flex zones. Pilots are not a long-term solution, but to see the effectiveness of these zones, pilot programs that collect data are needed. We need to know these types of policies will actually have an impact and be of value to the cities before technology can catch up with a process to streamline it.

So how is the technology gap closed? In discussions of evaluating current technology with Brandy Stanley, CAPP, parking service manager for the City of Las Vegas, we learned that Las Vegas will soon allow TNC drivers to stage in a city owned parking garage at night. The garage serves daytime demand and is empty at night. To make this operate efficiently, Las Vegas needed a solution that was not available, so the city paid to have it developed. Technology vendors can be good partners in developing needing solutions or repurposing existing solutions for new problems.

Orlando, Fla.

There are not just voids within and between technology and policy; voids also exist within departmental structures inside a municipality. As nighttime entertainment centers grow, more people are attracted to these areas. The impact of this success creates new mobility challenges: TNC and taxi volume increases, parking challenges extend beyond normal business hours, and pedestrian traffic needs to coexist within this environment. Cities are beginning to recognize the need to create roles that specifically deal with this new environment.

The City of Orlando created the position of a nighttime economy manager who bridges the gap between parking and planning, daytime and nighttime, with a focus on the mobility challenges that are the result of a vibrant entertainment district. Downtown Orlando witnesses a huge population increase on weekend evenings. This population arrives at various times, with a disproportionate population exiting the district after midnight when the nightclubs begin to close. The nighttime economy manager manages all aspects of this ecosystem by bringing together the various parties involved—TNCs, city planners, politicians, police, and other stakeholders—to develop a platform that includes the goals of all parties. Additionally, the city utilized community redevelopment agency (CRA) status for the district, allowing for easier funding for the initiative. This focus has led to the development of new policies and technology to manage the TNC volume.

As evening comes to an end, the volume of TNC pickups increases and reaches a point of congestion that jeopardizes pedestrian traffic. By deploying geofencing technology that is supported by new traffic policy, Orlando created TNC zones for picking up passengers on the perimeter of the entertainment center. These pick-up zones were determined in conjunction with the TNCs using passenger data to identify popular areas. Orlando took things a step further by creating a pick-up

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hub in one of the zones and inviting trucks to sell food to waiting TNC riders. Restrooms, security, and lighting we also added to increase the attractiveness of the area. The program is still in the pilot phase but is expected to expand to include more TNC zones in the near future. The marriage of policy, technology, and staff lead to a situation that benefited all parties.

Pittsburgh, Pa.

In January, Pittsburgh Mayor Bill Peduto released a plan to change the Pittsburgh Parking Authority to the Pittsburgh Mobility Authority. The plan would task the authority with finding, and managing, unconventional ways to move people around Pittsburgh. David Onorato, CAPP, executive director of the Pittsburgh Parking Authority (and IPMI Board Chair), said the motive for the planned expansion of duties was to be able to put the right decision-makers in the room to allow Pittsburgh to move quickly to address new and innovative mobility modes and technologies. Is this the new model for parking departments/authorities?

Chicken or the Egg?

What comes first, technology or policy? As the industry continues to tackle curb management, it seems like each question answered leads to more questions to be addressed. The pace of change is rapid and technology can outpace the changes made to parking policies. This is compounded when we begin to include mobility within the parking domain. Collaboration between parking policy and technological investment is critical but this collaboration must extend beyond the traditional parking departments and authorities. Mobility topics continue to impact parking operations and these items need be included when we make changes to policies. Technology also play a key role in the long-term success for curb management. Technology that is developed without full consideration for the problem at hand and the policies in place will not approach a viable or scalable solution. Collaboration between parking administrators, mobility policy makers, municipal budgets, and technology providers is essential in developing a solution set that meets the needs of the industry. ◆

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