

## Managing the Curb



Curb management has become a rising priority in cities including Las Vegas, where Cox Communications is piloting curbside kiosks that monitor dwell times in loading zones. Credit: Courtesy of Cox Communications.

**AMONG ITS MANY** consequences, the pandemic ushered in a period of experimental, rapid-fire adjustments to public space. Cities were suddenly tweaking zoning rules to allow more outdoor dining; blocking off streets to give pedestrians and bicyclists more space; and figuring out how to respond to dramatic upticks in food and retail pickup and delivery. It has been a pivotal stretch, in short, for managing the curb.

Even before the lockdowns began, the increasing popularity of transportation network companies—from ridesharing services like Uber and Lyft to scooter firms like Bird and Lime—had made curb management a rising priority for many cities. “In today’s urban fabric, few spaces are more contested than the curb,” the American Planning Association declared back in the before-times of 2019.

But the welter of recent experiments, some involving deployment of new technologies, seems even more significant. Consider the case of Aspen, Colorado. Aspen is an unusual municipality, with a downtown business district that is geographically modest, at just 16 square blocks. Nevertheless, it’s extremely busy: the retail and restaurant businesses there rack up a collective \$1 billion a year. The inevitable upshot is that demand for curb space—for parking, for deliveries—can outpace supply. And that makes Aspen a useful curb-management lab.

In February 2020, Aspen joined a group of municipalities exploring pilot programs with a start-up called Coord, one of a number of “smart city” tech companies with a curb-management bent. “I’m a data freak,” explains Mitch Osur, Aspen’s director of parking and downtown

services. He figured that at the very least, Coord's platform—which integrates “smart zones” with a payment app used by delivery drivers (and a separate app for enforcement officers)—could give him fresh insight into how the downtown streets are really being used.

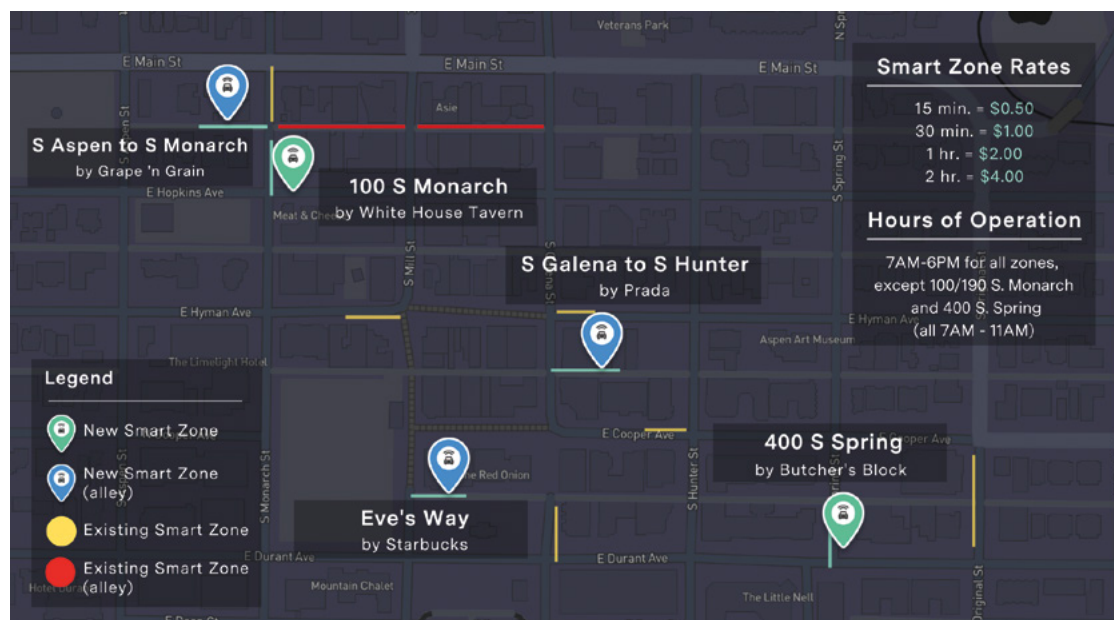
The city identified what it believed were its busiest loading zones. Starting in November 2020, using these zones required booking space through Coord's app, at a cost of \$2 an hour. While regular street parking in downtown Aspen can cost \$6 an hour, the city (like many others) had never previously charged for loading, but figured it was necessary to get delivery fleets' attention. In the end there wasn't much push-back; most drivers appreciated being able to capture a time slot. When one shipping fleet manager questioned the scheme, Osur explained that the shipper could use other loading zones, but the data Aspen was collecting would affect policy decisions about curbs across the downtown area. “If you're not part of the program, your data won't count,” he added. Moreover, he was sharing data with participants and soliciting their input. The shipper signed on.

Because the Coord platform tracks actual usage of the smart loading zones, Osur did indeed get plenty of fresh data. Some was expected, some surprising. He figured average “dwell times” were about 30 minutes, and found they were averaging 39 minutes and 13 seconds.

The dwell times were longer in the morning and shrank to about 15 minutes after 2 p.m. He was surprised to learn that the busiest days weren't Monday and Friday, as expected, but Tuesday and Thursday; Wednesday's loading zone use was half that of peak days. Based on these insights, Aspen is planning to change the rules for some zones, converting them to regular parking at 11 a.m. on some days rather than 6 p.m. (Osur has seen other changes as a result of adopting Coord; drivers have stopped snagging space early and eating lunch in loading zones, a previously routine practice.)

Coord has run similar pilots in Omaha, Nashville, and other cities. But it is just one entity involved in curb-management experiments. Cox Communications, through its Cox2M “internet of things” division, is testing curbside kiosks that can essentially monitor dwell times in loading zones and present a countdown clock warning drivers not to overstay their time on the curb; the technology can alert city enforcement when drivers linger. Las Vegas is running a pilot program with the technology, which can also be used to manage commercial deliveries, a Cox official told *Government Technology*. Columbus, Ohio, and Washington, DC, have run pilots with another app, curbFlow, designed to coordinate deliveries from multiple services along particularly busy curb stretches.

Aspen, Colorado, is one of several communities testing Coord, a platform that makes it easier to identify, use, and enforce loading zones. Credit: Courtesy of Coord.



Technology such as video kiosks and app-based location trackers adds both new options and new complexity to the business of managing curbs. Traditionally, defining curb use has involved signage and paint, which are hard to tweak quickly, notes Anne Goodchild, professor of civil and environmental engineering at the University of Washington, whose Urban Freight Lab has focused on public-private efforts to address evolving delivery logistics and planning. Perhaps because of the pandemic, cities have been more willing to try new options. Before the pandemic, a curb change would have entailed lengthy public processes. The crisis showed that a more nimble alternative was possible. “We did some things differently,” Goodchild says. “For example, we changed curb allocations literally overnight.”

The pandemic pushed a fast-forward button on both new patterns of street usage and policy responses to those patterns, says Heather Hannon, associate director of planning practice and scenario planning at the Lincoln Institute. During the pandemic, the organization’s Big City Planning Directors Institute shifted from a twice-yearly gathering to a monthly one (held virtually, of course). The pandemic, she points out, “was a reason to try new things.”

Hannon has observed a spike in interest in scenario planning for potential futures among U.S. communities since the pandemic began. She also points out that curb management isn’t merely an issue for downtowns or commercial districts, noting that it tilts into residential neighborhoods as well. The demand for home delivery has soared: food-delivery apps doubled their revenues in a six-month period during 2020 compared to the same period in 2019, and e-commerce in the United States grew 44 percent in 2020 compared to the previous year. These trends will only be complicated by the experiments with robots and drones that policy makers increasingly have to accommodate.

Aspen, meanwhile, has expanded its pilot program, adding new loading zones to the experiment as the number of participating



Designations like this one in Raleigh, North Carolina, popped up across the country during the early months of the pandemic as food and retail companies had to shift their operations. Credit: City of Raleigh via Flickr CC BY-NC 2.0.

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“This is totally scalable,” Osur says, referring not to any specific app or technology but to the general idea of cities using new tools to more actively manage the curb. “This is the future.” □

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