How cities used the curb and street space to respond to COVID-19 and policy ideas to ensure the curb best serves the public good
BACKGROUND & ACKNOWLEDGMENTS

This document was created and shaped by the 2020 Smart Cities Collaborative.

The Smart Cities Collaborative is a year-long program run by Transportation for America (T4America) for public sector transportation leaders to share their experiences with new mobility technologies and develop best practices to ensure that these services improve city life.

In its third year, the 2020 Smart Cities Collaborative (Collaborative) focused its efforts on the curb, specifically identifying best practices and guidelines for better curbside management. Originally, T4America had selected the City of Boston, City of Minneapolis, and City of Bellevue, WA for funding and support to complete curbside management pilot projects. However, COVID-19 forced everyone to adapt: T4America translated its in-person program to a virtual format and the cities were not all able to run their pilots as planned.

Instead, the Collaborative member cities came together to create two resources: this report, and a set of principles to inform the development of future universal curbside language and standards.

Each Collaborative member city was asked to complete a survey to explain how their city adapted its curb management during COVID-19 and identify curbside policy changes they would like to see. The survey responses informed this document and feedback from cities listed below shaped the final version of the report.

T4America would like to sincerely thank everyone who participated in the Collaborative this year. Efforts like the Collaborative are only able to be successful because of the expertise and creativity of the practitioner participants.
ACKNOWLEDGMENTS

Collaborative member cities:

City of Ann Arbor, MI
Cyrus Naheedy
Jada Hahlbrock
Raymond Hess

City of Bellevue, WA
Andisheh Ranjbari (UW Urban Freight Lab)
Chris Iverson
Chris Long
Daniel Lai
Franz Loewenherz

City of Boston, MA
Kris Carter
Matt Warfield
Mieka Lewis
Natalia Urtbey

City of Boulder, CO
Mark Shisler
Ryan Noles

District Department of Transportation, DC
Benito Pérez
Laura MacNeil
Sharada Strasmore

City of Gainesville, FL
Malisa Mccreedy

City of Grand Rapids, MI
Jon Re
Zach Christian-Rotramel

City of Gresham, Urban Design & Planning Department, OR
Carly Rice
Katherine Kelly

Los Angeles Department of Transportation, CA
Jarvis Murray
Rubina Ghazarian

City of Madison, WI
Yang Tao

Metro, OR
Eliot Rose

City of Minneapolis, MN
Danielle Elkins
Dillon Fried
Jasna Hadzic-Stanek
Jennifer Lowry

Portland Bureau of Transportation, OR
Briana Orr
Chris Armes
Eric Hesse
Kathryn Doherty-Chapman
Matt Berkow
Mike Serritella
Peter Hurley
Peter Wojcicki
Shaina Hobbs

San Francisco Municipal Transportation Agency, CA
Darton Ito
Katie Angotti
Mari Hunter

City of West Palm Beach, FL
Chris Roog
Lina Camacho
Uyen Dang

City of West Sacramento, Capital Projects & Transportation, CA
Larry Lee
Sarah Strand

Collaborative steering committee members:
Alex Pazuchanics, Seattle Dept. of Transportation, WA
Benito Perez, District Dept. of Transportation, DC
Kelly Rula, Seattle Dept. of Transportation, WA
Melanie Morgan, City of Centennial, CO
Warren Logan, Oakland Mayor’s Office, CA

Mae Hanzlik, Program Manager at Transportation for America, is the primary author of this document. Beth Osborne, director of the Smart Cities Collaborative; Camron Bridgford, Senior Associate at Cityfi; and Jenna Fortunati, Communications Associate at Transportation for America; provided extensive editorial support. Helen Hope, Communications Associate at Smart Growth America provided additional edits.

Transportation for America

Transportation for America, a program of Smart Growth America, is an advocacy organization made up of local, regional, and state leaders who envision a transportation system that safely, affordably, and conveniently connects people of all means and ability to jobs, services, and opportunity through multiple modes of travel.

New Urban Mobility Alliance

This document was made possible, in part, by support from the New Urban Mobility Alliance (NUMO). NUMO is a global alliance that channels tech-based disruptions in urban transport to create joyful cities where sustainable and just mobility is the new normal. Learn more at numo.global.

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Over the past few years, curbs have increasingly become more than just the space between streets and sidewalks.

Curbs are transportation hubs, where people walk and roll; access app-based shared bicycles, scooters, or cars; board buses and taxis; and park their personal vehicles. Curbs are community spaces, too. They might host an annual block party or event where a portion of a street is closed, or might provide space to a curbside cafe or parklet. Unhoused community members, often without other options, use curbs as temporary living spaces. Business owners field deliveries and send out their products at the curb. Residences receive packages from online retailers, either directly to single-family homes and apartments, or indirectly to storage lockers where people can retrieve them later.
In 2020, the curb was used for all those purposes and more. COVID-19 accelerated some of the changing uses of and growing demand on the curb already underway, and shined a light on the immense value of the curb and its crucial role in preventing the spread of COVID-19. The curb helped support community health and economies, be it through curbside pickup, curbside dining, e-commerce delivery, slow streets, curbside COVID-19 testing, and more.

This report is organized in two parts:

**Part 1 | Cities’ COVID-19 Curb Response:** Case studies to inform cities’ COVID-19 response today and curbside management in the future.

**Part 2 | Ideas to guide curbside management policy:** Local, state, federal policy ideas to guide the future of curbside management.

This document is intended to serve as a resource for:

- Cities interested in implementing curb and street pilots and longer-term programs and policy adjustments in 2021 and beyond.
- Cities looking to innovate at the curb and develop curbs that are flexible and allocated equitably. *This is relevant for future crises but also in less urgent times, as the demands on the curb are always changing but will likely be ever increasing.*
- State and federal agencies responsible for setting policy that has curbside management implications.

**What do we mean by “the curb”?**

Technically speaking, the curb is the physical barrier between the sidewalk and the street. However, often when transportation professionals and the public refer to the curb it includes not just the “curb,” but the “curb lane,” which is the street space adjacent to the curb that is often used for transportation, delivery, parking, and loading, as well as the “interstitial space” between the curb and the sidewalk that often houses parking meters, bioswales, street furniture, bus stops, and treeboxes.
To prevent the spread of COVID-19, city and state governments put in place new guidelines and restrictions that closed or partially closed businesses, restaurants, public gathering spaces, parks, trails, and more in order to protect public health. Local governments needed to get creative, being keenly aware of the debilitating impact of COVID-19 on people’s mental and physical health, access to essential resources, employment status, and small businesses. These issues were all the more significant because of the disproportionate harm faced by certain communities, particularly Black people, Indigenous people, and other people of color. In response, cities across the country piloted new solutions, swapped use cases with peers, stayed as nimble as possible, and reassessed how government assets could better and more equitably serve the public during this crisis.

As part of the response, a number of cities reprogrammed curb and street space for retail, outdoor
dining, and active transportation; worked with communities to design curb pilots; and set up temporary transit lanes and COVID-19 testing sites. Due to the urgent nature of the crisis, cities developed new approaches to a number of challenges (many rooted in issues that existed far before COVID-19) and identified processes that should be revisited post-pandemic.

Some overarching challenges cities faced included:

- Balancing equitable community engagement with pressure to provide quick solutions.
- Wrestling with what is public space, who is it for, and what it should look like.
- Identifying pilot locations.
- Revising permitting processes to be less arduous and more equitable.
- Communicating clearly new regulations and processes.
- Locating staff capacity to implement and maintain pilots and projects.
- Determining when and how to make pilots sustainable in the long-term.

Some approaches to addressing the challenges included:

- Reviewing permitting processes and waiving certain requirements to ensure processes are simple, more expedient and accessible to all businesses, especially smaller businesses with fewer resources.

Outdoor dining in Boston, MA. Photo credit: City of Boston.
EXECUTIVE SUMMARY

- Analyzing community feedback to determine if responses were wholly representative of the community’s demographics and meeting identified community needs. If not, allocating further resources to work closely with community leaders and advocates to ensure feedback is equitable and representative.

- Using the temporary nature of pilots to gain broader support from stakeholders who otherwise would not be supportive.

- Adapting curb pilots based on the local context of a pilot’s location and being flexible when local conditions change.

Today residents, elected officials, and small business owners are paying closer attention to the curb and how it can be strategically leveraged for the public’s benefit. This provides cities with an opportunity to shift management of their curbs in a way that is more:

- **Equitable** - Serving all users, especially the most vulnerable curb users.

- **Flexible** - Responding to changing community needs within a given context.

- **Innovative** - Allowing cities to pilot new approaches and tools to ensure the curb can continue to evolve and serve all users.

Outdoor dining in Boston, MA. Photo credit: City of Boston.
While the role of the curb was in flux before COVID-19, the pandemic accelerated the need for a number of changes and required local governments to get creative. Cities can learn from their peers’ strategies to reprogram curbs during COVID-19 to inform their ongoing pandemic response as well as help develop long-term curbside management strategies. The following series of short case studies spotlight curb actions taken by local governments to respond to COVID-19.

Case studies address the following topics and are organized by what was considered their primary topic, though their content often covers multiple topics.

- Retail and other business operations
- Outdoor dining and food pick-up
- Slow Streets
- Community input in curb-related initiatives
- Transit lanes

CITIES’ COVID-19 CURB RESPONSE

Case studies to inform cities’ COVID-19 response today & curbside management in the future
How can we use the curb to support local businesses and keep people safe during a pandemic?

Reprogram curb space for retail and more.

At the beginning of the pandemic, many local businesses were forced to close—some indefinitely—in order to prevent the spread of COVID-19. When city and state governments started lifting some restrictions, businesses desperately needed greater access to the curb in order to successfully function. Below are some examples of how cities set up these programs and what they learned in the process.

Ann Arbor Downtown Development Authority’s COVID-19 response

ANN ARBOR, MI

Leadership of the Ann Arbor Downtown Development Authority (DDA) knew that downtown businesses were hit hard by COVID-19 and that space at the curb could help alleviate some of the hardship. DDA got creative and used a number of methods to reprogram the curb and support local businesses.

The approach

Ann Arbor Downtown Development Authority worked with the city on an approach that included:

• Converting on-street parking to support 15-minute pick-up and drop-off (PUDO) zones, especially near dining establishments.
• Waiving all City Sidewalk Occupancy Permit fees for every business—more than 100 small businesses—within the downtown district in 2020 so they can use the sidewalk for seating.
• Developing a “parking space repurposing” program to allow 40 restaurants to use the on-street parking spaces in front of their properties for extended patio space at no cost to businesses.
• Working with merchant associations to develop a plan for street closures so that businesses could expand into the street. As part of this effort the city covered the cost—about $50,000—to rent and install barricades.

MAKE IT EASY FOR BUSINESSES TO CONTINUE OPERATIONS OUTSIDE
• Providing emergency landscape maintenance funding to the merchant associations who were unable to maintain their planters due to the loss of revenue from a typically popular annual event, the Art Fair.

• Installing holiday lights six weeks earlier than planned in order to get downtown streets lit before the end of daylight savings time and ensure downtown’s outdoor area is as welcoming as possible.

Select challenges and lessons learned
The initial deployment involved bagging meters as “no parking” and accompanying those with signs permitting temporary PUDO zones. However, parking enforcement was concerned about the mixed messaging, which made writing tickets difficult. One of the challenges was that some people parked in PUDO zones all day once the lack of enforcement became apparent. Ann Arbor has since rectified this issue with new red meter bags that clearly outline the rules.

Learn more on the DDA’s website as well as their partner Ann Arbor SPARK’s website.
STAY ORGANIZED, ESPECIALLY WHEN YOUR PROGRAM EVOLVES TO A MULTI-AGENCY EFFORT

San Francisco Municipal Transportation Agency (SFMTA) Shared Spaces
SAN FRANCISCO, CA

SFMTA’s Shared Spaces program repurposed the city’s curb space to respond to the many grocery stores, restaurants, and businesses across the city who needed to expand their operations outside to allow for safe social distancing.

The approach
SFMTA’s Shared Spaces program has evolved over the course of the pandemic. In the program’s beginning, SFMTA provided social distancing space for the long lines queuing outside of grocery stores and banks, and then expanded to provide pick-up drop-off zones for businesses, and then finally provided outdoor dining for restaurants. This is when it officially took on the “Shared Spaces” name and became a multi-agency effort as encroachment permits (the permits needed for outdoor dining) in San Francisco are issued by a separate department.

As part of this effort, SFMTA worked closely with city agencies and offices including Public Works, Information Technology, the Public Utilities Commission, Planning, Building Inspection, the Mayor’s Office, the Board of Supervisors, Office of Disability, Office of Small Business, Office of Economic & Workforce Development, as well as businesses and residents.
Select challenges and lessons learned

It was challenging for SFMTA to concurrently run and build the program. For example, expectations for how quickly the agency could issue a permit were being set and spread by word-of-mouth, when in reality it was dependent on the location of the permit: Is it in a red zone or tow away zone? At a transit stop? Does it include an ADA-compliant space? Is it in front of a neighboring property? Each of these considerations would change how SFMTA had to approach the permit and who they needed to involve in the process. Since the program was being built as they went, it was difficult to manage expectations.

SFMTA has issued more than 1,300 free Shared Spaces permits across the city and credits the success of the program to the many agencies and staff working behind the scenes who had a clear understanding of what tools were and were not in SFMTA’s control.

For other agencies considering similar efforts, SFMTA recommends:

- Ensuring that all communications, permits, forms, and documents are in agreement. Either they all say the same thing, or they all point to one location that has the relevant, most up-to-date information.

- Being prepared to be flexible, responsive to community needs, make changes in response to fix issues that arise, and move on. This is especially important for agencies who are creating programs while they are concurrently operating them.

Learn more about SFMTA’s Shared Spaces program.
WORK WITH LOCAL BUSINESSES TO REPURPOSE YOUR STREETS AND CURB SPACE

**PBOT’s Summer Street Plaza**
PORTLAND, OR

To support local businesses and allow space for social distancing, Portland Bureau of Transportation (PBOT) re-programmed the curb and street space in Portland’s Albina district to provide space for outdoor dining, public art, and retail.

**The approach**
As part of the National Association of City Transportation Official’s (NACTO) Streets for Pandemic Response and Recovery grant program, the Portland Bureau of Transportation (PBOT) collaborated with Portland’s Soul District Business Association (SDBA), to create an outdoor plaza to provide safer places for businesses to serve food and conduct retail sales in the Albina district.

The Albina district is the historic center of Black cultural, economic, and spiritual life in the City of Portland and has witnessed high levels of displacement and gentrification in recent decades. PBOT selected this district in part because earlier in the pandemic they rolled out a Healthy Businesses Permit Program to allow businesses to operate in the right-of-way, free of charge. Through this program, the bureau noticed very few applications from the Albina district. PBOT saw the plaza as an opportunity to work with the Albina community and build partnerships with local organizations and businesses.
In designing the space, PBOT worked with businesses adjacent to the space including a local Black artist, the owner of greenHAUS Gallery, to design the plaza’s mural and help program the space. To create a friendly, welcoming environment, the plaza was also outfitted with locally-made picnic tables and potted trees from the Portland Bureau of Environmental Services.

Amid a summer of wildfires and protests, the partners worked together to transform a street into a Black-centered public plaza in the heart of Albina. Over a series of weekend events, more than twenty vendors participated selling clothes, food, art, and other handmade goods in a safe, physically distant outdoor market. The plaza incorporated public art by local Black artists and catalyzed a district-wide public art initiative to be designed by a group of nonprofits with their roots in Albina.

Select challenges and lessons learned
PBOT encountered a handful of challenges throughout the process, including concerns from business owners about parking access. They addressed the parking access concerns by providing A-frame signs to nearby businesses to notify customers of the street changes.

As winter approached and COVID-19 cases began to rise in the final months of 2020, increased uncertainty about how to safely continue operating the plaza compounded capacity issues in maintaining consistent programming. Without consistent plaza promotion and foot traffic, some of the adjacent businesses grew hesitant to extend the street plaza permit through the winter as completely car-free space. Ongoing discussions are underway about how to re-open the plaza with new vendors and partners in the spring when weather improves and the COVID-19 vaccine is more widely available.

For others considering setting up similar plazas, PBOT recommends:

• Working in partnership with local businesses adjacent to the space.
• Building community support by working with the local business association to conduct the majority of neighborhood outreach.
• Ensuring internal city staff have enough flexibility to provide steady, involved technical assistance to stakeholders throughout program deployment.

Learn more about PBOT’s Summer Street Plaza.
Gresham’s future street closures
GRESHAM, OR

City of Gresham sought to close a three-block corridor in downtown to support small businesses, however due to a number of challenges the city paused plans and is reevaluating setting up a similar space in spring 2021.

The approach
Throughout May 2020, City of Gresham staff developed design options to close a three-block corridor in the heart of the city’s downtown to support small businesses. The designs included pick-up drop-off areas for vehicles outside of the closure area, as well as walk-up areas for pedestrians within the closure and outdoor dining areas that supported social distancing as per federal guidelines. In June, city staff presented the concept to elected leaders who proposed additional engagement with business owners along the corridor. Subsequently, staff coordinated virtual meetings and surveyed business owners, investigated how to acquire permits to allow serving alcohol in the public right-of-way, and discussed rerouting buses with the regional transit agency.

Select challenges and lessons learned
As plans were coming together and there was hope for a pilot implementation, wildfires hit and businesses closed due to excessive and unhealthy levels of smoke. At that point, it was decided that fall weather would warrant additional designs for wetter, colder conditions.

Due to limited staff resources, including layoffs due to COVID-19 as well as limited availability of business owners to engage in the development of design options, plans were put on hold for street closures and parking space reprogramming in 2020. Discussions with business owners will restart in early 2021 with the potential to repurpose street space in the spring.

For other jurisdictions looking to close or partially close their streets, Gresham recommends community engagement as a first step as well as identifying the best way to support community partners with elements like permits, licenses, and insurance.
How can we use the curb to support restaurants in the midst of a pandemic?

Provide space for outdoor dining & food pick-up.

Restaurants, in particular, needed additional support as city and state restrictions closed or partially closed indoor dining to prevent the spread of COVID-19. Part of the response included cities setting up outside dining and food priority zones at the curb. Below are some examples of how the cities set up these programs and what they learned in the process.

STREAMLINE THE OUTDOOR DINING PERMITTING PROCESS, SUPPORT SMALL BUSINESSES, AND ENSURE ADA ACCESSIBILITY

Boston’s outdoor dining program
BOSTON, MA

To help mitigate the impact of closing down a main engine of its service economy, the City of Boston quickly responded by streamlining their outdoor dining permitting process, providing financial support to small businesses, and creating a new ramp program to ensure outdoor dining would be accessible.

The approach
To allow more space for restaurants to operate, the City of Boston altered their outdoor dining program so restaurants could establish parklet-style cafes in curb space that was traditionally reserved for parking. In instances where there was significant restaurant density, entire curb lanes and portions of streets were completely closed to motor vehicles.

Boston needed to quickly simplify their outdoor dining permitting process so it was easy to navigate for interested restaurants, especially smaller restaurants. The city launched a cross-department effort to identify roadblocks and minimize requirements to focus on safety and access. This process resulted in the city:

Waiving or reducing outdoor dining permit requirements. Before COVID-19, outdoor dining permits required review through their Public Improvement Commission, which included surveyed and engineered design
drawings, a public hearing, multi-departmental permitting, and fees. The majority of these requirements were either waived or reduced, and the review and approval process was expedited to take a matter of weeks, rather than months.

**Expediting design and implementation.** Typically changes to the curb go through several divisions within the Boston Transportation Department (BTD), including planning, engineering, and operations. While all important and often necessary steps, this process can take several weeks to months. With more than 400 outdoor dining requests BTD needed to be flexible. The planning division was given authority to make decisions about curb changes, and when needed, changes were submitted directly to the operations division. Additionally, restaurants were tasked with taking on some of the work themselves. Signage materials and directions for how to establish their cafe zone were provided, leaving it up to them to implement the change rather than taxing city services.

Ensuring accessibility for all users is a priority for the City of Boston and a primary reason why the city required all on-street cafes to be fully ADA-compliant. While decking can be built to be flush with the curb, placing seating on the street poses an access challenge. Restaurants were required to provide portable ADA ramps that would be deployed by request. To support restaurants in this and other costs, the city launched a ramp program that put $200,000 into purchasing and distributing access ramps, and set aside a portion of the Reopen Boston Fund for the purchase of other materials.

Stakeholders involved in Boston’s outdoor dining effort included restaurants, neighborhood residents, business
associations, patrons, and internal city partners from Licensing, Transportation, Public Works, Fire Department, Disabilities Commission, Office of Economic Development, Office of Neighborhood Services, Inspectional Division, Boston Police, Neighborhood Main Streets, and the Mayor’s Office.

Select challenges and lessons learned

Through this process, Boston learned that providing restaurants with flexibility to establish a cafe in the street sped up the process and relieved pressure on some city services, however the cafes weren’t always up to safety standards. For the 2021 outdoor dining pilot program, the City established stricter safety requirements and used examples from 2020 to provide clarity.

For other cities considering similar action, Boston offers the following reflections and suggestions:

- The outdoor dining streamlining process revealed that some of the permitting requirements the City had in place should be revisited for post-pandemic implementation modifications.
- Alongside outdoor dining, there is a need to continue and accommodate other curb activity, such as commercial loading, food takeout and delivery, and passenger loading. Locations with a concentration of restaurants should be approached with a plan for the entire area to address that activity.

Learn more about Boston’s outdoor dining program.

Outdoor dining in Boston, MA. Photo credit: City of Boston.
SET CLEAR GUIDELINES AND WORK CLOSELY WITH YOUR PERMIT APPLICANTS

DC Streatery program
WASHINGTON, DC

The District Department of Transportation (DDOT) set up a program, which allows restaurants, business improvement districts (BIDs), main street organizations (MSOs), and advisory neighborhood commissions (ANCs) to temporarily transform public space during the public health emergency.

The approach
To help mitigate restaurants’ significant loss of potential revenue from reduced capacity, Washington, DC’s city council drafted legislation to allow restaurants to expand dining into public space.

DDOT was very intentional about developing guidelines that would accommodate and address the wide variety of public space types eligible as part of the program, which included sidewalks, on-street parking spaces, travel lanes, alleys, and plazas. Washington, DC has many neighborhoods with varying sidewalk widths and parking needs, so the guidelines needed to be specific but broad enough to meet the needs of each neighborhood and commercial corridor. You can view those guidelines here and here.

During implementation, DDOT’s partners included the Department of Public Works, advisory neighborhood commissions, BIDs, MSOs, and stakeholders including local restaurant owners and employees. DDOT also worked...
with the Office of Planning, DC Health, the Alcohol Beverage Regulation Administration, and the Department of Small & Local Business Development.

**Select challenges and lessons learned**

For other cities considering similar initiatives, DDOT recommends working closely with applicants to ensure they understand the guidelines and are able to submit a complete and accurate application. By prioritizing this, DDOT ensured that the review process was smooth and timely for many applicants. For example, completed permits could be approved within 72 hours, allowing a quick transformation of public space to outdoor dining.

Learn more about the [DC Streatery program](#).

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*Outdoor dining in Washington, DC. Photo Credit: DDOT.*
At the beginning of the pandemic, many local governments quickly realized that there wasn’t enough public space for city residents to safely get outside, exercise, and move around their community. To support social distancing and physical activity, improve quality of life, and reduce overcrowding on trails, parks, and sidewalks during the pandemic, some cities partially or fully closed certain segments of streets to motor vehicles. These street closures have been called “Slow Streets,” “Healthy Streets,” and “Open Streets.”

After some slow streets were launched in cities across the country, community-based organizations and advocates questioned if these pilots were being equitably placed, ensuring that people of all races, especially Black and Brown residents, felt safe in those spaces; and if they were actually helping people access essential resources.¹

Below are some examples of how cities set up these programs, responded to feedback, and what they learned in the process.
USE FEEDBACK TO CREATE AN EQUITABLE SLOW STREETS PROGRAM

Oakland Slow Streets & Essential Places
OAKLAND, CA

After closing 20 miles of street space in the first phase of the Oakland Slow Streets (OSS) initiative, the City of Oakland checked in with their community to gather feedback. They specifically worked closely with advocates and residents to ensure the feedback was representative of all Oakland residents, not just wealthier, White residents. The city used that feedback to inform future iterations of the program.

The approach
The City of Oakland was one of the first cities to implement slow streets in response to COVID-19. In the first phase of the program, they closed 20 miles of roads to provide more space for residents. The city then paused and set out to evaluate the program thus far and gather feedback from residents across Oakland.

Select challenges and lessons learned
The city quickly realized that the feedback was not representative of Oakland: over 60 percent of respondents were White, although White residents make up only 24 percent of the population. Further, 40 percent of respondents had annual household incomes of $150,000, whereas the annual household income in Oakland is $76,000. To

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Signage created as part of Oakland’s Arts & Transportation Rapid Response project. Photo credit: Kahlim Davis.
remedy this imbalance, the city worked closely with advocates and residents in East Oakland—a historically Black community that has undergone decades of disinvestment—who shared that the Slow Streets program wasn’t meeting their needs, nor was it helping them access essential services. The city used this feedback to inform the next iteration of the program which included:

- Launching an offshoot of OSS, Slow Streets: Essential Places, where they installed a number of “permanent and temporary traffic safety improvements to enable safer access for residents to the essential services in their neighborhood—including grocery stores, food distribution sites in public facilities, and COVID-19 test sites.”³

- Working with an artist and Smart Growth America as part of the Arts & Transportation Rapid Response initiative to pilot a solution for more aesthetically pleasing, sturdy Oakland Slow Streets barricades that better reflect East Oakland culture.

Learn more about Slow Streets: Essential Places program and Oakland’s Arts & Transportation Rapid Response project.


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Recognizing unrepresentative feedback and using it to inform future Slow Streets iterations

SFMTA’s Slow Streets
SAN FRANCISCO, CA

Similar to the City of Oakland’s experience with unrepresentative feedback, San Francisco Municipal Transportation Agency (SFMTA) realized its online feedback process for its own Slow Streets program fell short of equally reaching all San Franciscans. As they entered phase four of the program, SFMTA focused its efforts on coordinating with neighborhoods that didn’t provide feedback and working with neighborhood groups in those areas to identify areas where slow streets could work.

Learn more about the SFMTA’s Slow Streets program.
FOLLOW THROUGH ON THE TEMPORARY NATURE OF A SLOW STREETS PILOT

Bellevue Healthy Streets
BELLEVUE, WA

The City of Bellevue created a slow streets pilot, called Healthy Streets, to allow for safe physical distancing on neighborhood streets. Unlike other pilots, the city followed through on the temporary nature of the pilot by ending it in October 2020 and completing a post-pilot evaluation.

Bellevue is exploring the following options for a future deployment:

- Launch a similar Healthy Streets Initiative in spring or summer of 2021.
- Create a seasonal program that transforms certain street segments into recreational space. These are often referred to as “Play Streets.”
- Pilot neighborhood greenways using low-cost materials.
Select challenges and lessons learned

Like other cities, in order to quickly launch the pilot and rapidly respond to the pandemic, Bellevue’s staff went forward without first collecting public input and internally determined locations for the pilot. Naturally, some community members expressed frustration that there was not an opportunity to participate in the development of the pilot. However, feedback received after implementation was mixed depending on the corridor. While one Healthy Street location ended early due to negative feedback, another corridor—which received positive feedback—is now moving into a design phase to establish the city’s first neighborhood greenway. One key lesson for Bellevue staff from the pilot was that residents would like to be engaged in the development of the program’s vision, selection of corridors, and design of their home streets.

Learn more about Bellevue’s Healthy Streets pilot.

USE A MULTI-PRONG APPROACH TO SLOW STREETS THAT RespondS TO LOCAL CONTEXT

Ann Arbor Healthy Streets
ANN ARBOR, MI

The City of Ann Arbor, in partnership with the Downtown Development Authority, launched the Healthy Streets program which reconfigured traffic lanes to provide additional dedicated space for walking, rolling, and biking. The goal of the Healthy Streets program was to immediately improve safety, access, and comfort, and provide more physical distancing space for people in the city. From the beginning, Ann Arbor also considered the program as an opportunity to collect findings that could inform future projects and city goals outlined in its Vision Zero policy, carbon-neutrality plan, and non-motorized plan.

Instead of fully closing streets to motor vehicles, the city took a softer, multi-faceted approach. That approach included:
• Soft closures on local neighborhood streets suggested by residents. To do this, the city launched an online portal for residents to provide feedback at the beginning of the pandemic. They received nearly a thousand comments which slowed deployment but ultimately helped justify the project.

• Arterial road reconfigurations to provide additional dedicated space for walking, rolling, and biking. This was the most challenging part of the program as the city received considerable resistance from motorists—so much so that the city council rolled back portions of the deployment after only three weeks of a 90 day pilot.

• Weekend road closures in downtown Ann Arbor to support businesses and provide additional space for people walking and biking. The city worked closely with businesses to do this and also provided funding to the Arts Alliance to hire four artists, who were paid a living wage, to set up temporary art installations in these spaces.

Select challenges and lessons learned

For other cities looking to do something similar, Ann Arbor offers the following recommendations and reflections:

• Move as quickly as possible during implementation. Ann Arbor staff believe they took too long with their deployments, leading to a number of complaints from residents that the effort “was no longer needed” or that these projects “were causing traffic back-ups.”

• Cones, barrels, and barricades were not as effective as expected as they were frequently moved and required constant maintenance.
How can we adapt curb-related initiatives to better respond to current community needs during a pandemic?

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Work with the community to redesign curb-related initiatives.

When COVID-19 hit, cities had to both respond to immediate needs and either postpone, adapt, or cancel planned initiatives. Below are some examples of how cities adapted curb-related initiatives, worked with communities to do so, and what they learned in the process.

1. **REVAMPING A PILOT TO RESPOND TO COVID-19 AND THE MURDER OF GEORGE FLOYD**

   **Minneapolis Mobility Hub pilot**
   **MINNEAPOLIS, MN**

   In response to COVID-19 and uprisings following the murder of George Floyd, Minneapolis worked with community partners to revamp their 2019 Mobility Hub pilot by increasing the number of pilot locations, adding new elements, and installing intersection safety improvements.

   **The approach**
   Minneapolis’ Mobility Hubs utilize the city’s curb and public right-of-way space to connect people to multiple modes of transportation and make their trips as safe, convenient, and reliable as possible. The locations are selected based on an equity-driven data analysis, as originally the pilot sought to improve access and support first-and-last mile connections to transit primarily in Areas of Concentrated Poverty (ACP50)⁴. In early 2020, the city redefined the pilot goal to respond to COVID-19 and the protests following the killing of George Floyd—which had further exacerbated inequities in the ACP50 areas. Specifically, the Minneapolis’ public works department expanded its 2019 Mobility Hub pilot by increasing the number of pilot locations, adding new elements, and installing intersection safety improvements.

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⁴ ACP 50: The Metropolitan Council defines Areas of Concentrated Poverty (ACPs) as census tracts where 40 percent or more of the residents have family or individual incomes that are less than 185 percent of the federal poverty threshold. (In 2018, 185 percent of the federal poverty threshold was $47,547 for a family of four or $23,650 for an individual living alone.) To identify areas where people of color experience the most exposure to concentrated poverty, the Council further differentiates Areas of Concentrated Poverty where 50 percent or more of the residents are people of color (ACP50s).
The city worked closely with neighborhood and community organizations on the pilot’s engagement plan. Minneapolis wanted to ensure residents that it was not only seeking feedback from the community, but actively providing a platform to partner with people in the neighborhoods where these pilots would occur. Through this engagement, city staff learned that people felt unsafe—both in terms of personal safety and infrastructure-related safety—and that they wanted to see alternatives to policing. From this feedback, the city created a new ambassador program which employed part-time ambassadors to test community-based approaches to safety at the hubs.

Select challenges and lessons learned
In the beginning, Minneapolis had to spend considerable time obtaining the necessary approvals and permits within its own public works department and other jurisdictions, as many of the Mobility Hubs are located on or adjacent to state and county right-of-way and lots, which slowed down the timeline for deployment.

The city has also heard from a select number of businesses and property owners who view some of the Mobility Hub elements, like seating, as a nuisance and an invitation for “undesired activity” which has led to the city wrestling with what is public space, who it is for, and what it should look like.

Stakeholders included public agencies and service providers, such as the State of Minnesota, Hennepin County, public transit providers, library services, community based organizations, shared mobility providers, property owners, businesses, and community members.

Learn more about Minneapolis’ Mobility Hubs.
2 TRANSFORM THE CURB INTO A TEMPORARY COVID-19 TESTING SITE WITH A REPURPOSED MICROTRANSIT VEHICLE

Gainesville’s mobile COVID-19 testing
GAINESVILLE, FL

The City of Gainesville, FL repurposed a microtransit vehicle and used it to conduct mobile COVID-19 testing across its city. The vehicle was parked at the curb, in parking lots and fields, and sometimes in the middle of the street. When selecting neighborhoods to visit and receive testing, Gainesville specifically prioritized neighborhoods that had more limited access to personal vehicles.

The testing was administered by the city’s Community Resource Paramedicine (CRP) team, who shared the following reflections:

- It was challenging to ensure people remained distanced and that the bus remained adequately cleaned. To assist with this, CRP team set up two testing stations, one in the front seat of the bus and another at the back of the bus using a foldable chair on the ground; which also helped preserve unidirectional airflow.

- Communicating the opportunity to residents was the biggest obstacle the CRP team faced. They hope to partner with medical and community based organizations to do something similar in the future for COVID-19 vaccines.
USE TRANSIT-ONLY LANES TO PROTECT PUBLIC HEALTH

SFMTA’s Temporary Emergency Transit Lanes
SAN FRANCISCO, CA

San Francisco Municipal Transportation Agency (SFMTA) installed temporary emergency transit lanes to keep buses out of traffic and keep essential workers and transit-dependent San Franciscans as safe as possible.

The approach
As traffic started to slowly return after the initial lockdown in San Francisco, SFMTA made the decision to set up temporary transit lanes to ensure “that essential workers and transit-dependent San Franciscans do not bear the costs of traffic congestion.”5 By devoting lanes solely for buses, SFMTA reduced the amount of time buses spend in traffic, protecting public health by reducing riders’ travel time and hence their potential exposure to COVID-19. The transit lanes also allow buses to complete their routes more quickly, enabling SFMTA to provide more service with the same number of buses and reduce crowding.

Moreover, based on ridership and travel time data, SFMTA says this program “benefit[s] customers on [bus] routes critical to neighborhoods with high percentages of people of color and low-income households.”6

5, 6 https://www.sfmta.com/projects/temporary-emergency-transit-lanes

Set up transit lanes to improve transit efficiency.

A few months into the COVID-19 pandemic, cities started to see traffic return to their streets. To ensure essential workers and people using transit would not shoulder the burden of congestion, cities started setting up—or adapting—transit lanes to improve efficiency and safety. Below are some examples of how cities implemented transit lanes and what they learned in the process.
Select challenges and lessons learned

One of the greatest challenges SFMTA faced with implementing the transit lanes was the availability of its city crews to implement a program of this size in such a short time frame. Originally it had planned to build up to 70 miles of temporary emergency transit lanes, however due to capacity, SFMTA predicts that it is likely the pandemic will be under control before they are able to reach 70 miles. Consequently, SFMTA pivoted to focus their efforts on key corridors that it hopes to permanently keep after the pandemic. If time allows and there is political support, SFMTA may continue to expand to additional corridors.

Through this process, SFMTA found that the highly data-driven nature of the program (which considers frequency, crowding, and safety) has helped SFMTA to gain broader support. Staff have been able to share transit lane proposals with different elected officials to gauge interest, and refocus energy and resources appropriately.

The temporary nature of the program has also made it more palatable to quickly implement. With the assurance that a future approval would be needed to make the lanes permanent, community members have been more open to trying out the lanes with a shortened outreach process. SFMTA hopes to use more of this quick build, reversible approach in the future.

Learn more about SFMTA’s Temporary Emergency Transit Lanes.
CONVERT TRAVEL LANES TO BUS-BIKE LANES TO IMPROVE TRANSIT EFFICIENCY AND SAFETY FOR PEOPLE BIKING

Brighton Avenue bus-bike lane
BOSTON, MA

In 2019, the City of Boston, in partnership with Massachusetts Bay Transportation Authority, transformed one travel lane on Brighton Avenue in the Allston neighborhood into a bus-bike lane to improve transit efficiency and the safety of people biking.

Located in a bustling neighborhood with a number of restaurants, retail, and entertainment venues, Brighton Avenue had two travel lanes and parking lanes in each direction, and also served as a major bus corridor, which caused buses to be consistently delayed due to traffic and frequent incidences of double parking.

To address this issue, the city transformed one travel lane into a bus-bike lane, consolidated bus stops, and converted the stops that were removed into commercial loading during the day time and passenger pick-up drop-off in the evening and night.

In 2020, as part of Boston’s COVID-19 response, additional curb space was converted from two hour parking into a five-minute food takeout zone. As a result of the transformation, bus timing through the corridor has improved dramatically and the instances of double parking have been reduced. The next phase of the project is to install bus bump outs, analyze how well the short term curb access has worked, and propose the area for metering to increase vehicle turnover.
The curb is public space and a public asset; and as such, it should be utilized to the greatest benefit of the public. The COVID-19 pandemic has only made this more apparent as curb space has been needed for safe recreation, retail, restaurants, and more. To ensure that curb space can be used efficiently and equitably now and in the future, it is the responsibility of local governments to set priorities with regard to who can use the limited amount of curb space, for what, when, and at what cost.

The ideas presented in this section are not examples of pilots or initiatives but, rather, ideas and lessons offered by city curbside practitioners who participated in the 2020 Smart Cities Collaborative. This section is intended to provide informal guidance to local, state, and federal government agencies seeking to create an equitable, flexible, and innovative curb beyond COVID-19.
Local Curbside Policy Ideas

Allocate the curb equitably
To ensure that curb space serves all users fairly, especially the most vulnerable road users, cities should build equity into their curbside policy and curbside management programs. Without that lens, certain users (such as people who do not own, cannot afford, choose not to, or are unable to drive cars) will continue to be left behind and convenient private vehicle parking will usurp all other needs.

Whether intentional or not, the way cities allocate their curb space directly reflects who and what is prioritized in their city. This can and should change depending on the geographic context within a city, as different neighborhoods have different needs.

For decades, the curb has been overwhelmingly dedicated to storage for personal vehicles. This excludes people that have no access to a car and that need or want to travel by other means. By reallocating the curb space for other modes and additional purposes, cities can ensure the curb serves everyone—especially those who need better and more affordable access to curbs. This includes people with disabilities; people using transit; those walking, biking, or rolling; low-income people; people of color; and those not connected to the digital network. Below are some ideas on how to equitably allocate the curb.

Prioritize curb and street space for transit. Part of equitably allocating curb space means prioritizing space for tran-
sit. Transit uses space more efficiently than cars, is better for our climate, and provides access to those who may not have a personal vehicle. By prioritizing space for transit, cities can improve the riders’ travel time, ride quality, transportation affordability, and safety while waiting for transit; address broader transportation inequities; and achieve emissions reduction goals.

**Prioritize curb and street space for vulnerable road users.** Similar to transit, part of equitably allocating curb space means prioritizing space and curb resources for vulnerable road users including those walking, rolling, or biking; people with disabilities; low-income people; and people of color.

**Address inequitable enforcement at the curb.** There is no shortage of research showing that law enforcement disproportionately harms and targets people of color, especially Black and Brown people. While curbside management is typically not enforced by police departments, enforcing rules like parking requirements is part of a city’s larger enforcement effort. It is crucial for cities to examine the impact of their curb enforcement and explore alternatives that ensure all curb users, especially Black and Brown users, are treated with dignity and respect at the curb.

**Ensure curb signage is understandable and accessible.** Curb signs and curb use information should be simple and understandable, utilizing symbols or color-coding when possible and providing translations when appropriate. Cities should avoid confusing and complex restrictions for loading zones and curb use. Cities should also provide multiple ways to pay for metered parking, as individuals may not have a smartphone, data plans that allow liberal use of apps, or a credit card for payment. Moreover, clear curb signage and wayfinding reduces the need for enforcement and ticketing.

**Utilize the curb to incentivize more and more just economic development.** As e-commerce grows and app-based ride hailing recovers from the pandemic, good curbside management practices can incentivize economic recovery and growth. This helps ensure that curb operations, including signage, timing, usage, access and cost, assist to incentivize the behavior at the curb that cities want to see. For example, cities could raise the cost of unloading and loading freight during peak commute hours to disincentivize use of the curb for that purpose during those hours, therefore providing greater access and economic development opportunities for nearby businesses.
- **Streamline permitting processes to increase curb access to small business owners.** Oftentimes city permitting processes can be arduous and overwhelming, especially for small businesses who often have less capacity, time, and expertise in completing permits. To ensure all businesses can access curb space, cities should consider reevaluating their processes to eliminate any unnecessary steps.

- **Provide grants for parklet equipment.** As part of a short term response to COVID-19, cities can provide small grants to neighborhood businesses to help purchase equipment to establish outdoor cafe areas. By covering the cost of parklet equipment for neighborhood businesses, cities can help ensure that outdoor dining is accessible to all parts of the city, not just the bigger downtown restaurants.

- **Create multi-purpose, short term loading zones.** Setting up multi-purpose, short term loading zones can be an efficient use of space and serve a variety of businesses, including small, local restaurants and retail stores, and users, like freight delivery drivers and customers.

**EXAMPLE**

**Parklet grants work.**

In the City of Boston, providing grants for parklet equipment translated into more than 150 outdoor dining cafes being located in its neighborhoods, especially those located away from downtown and more affluent areas of the city.

Photo credit: City of Boston
Improve curb flexibility

To ensure the curb can respond to changing community needs within a given context, the curb needs to be flexible. Below are some ideas to improve curb flexibility.

Allow demand-based curb management. Cities should update their ordinances to ensure they can be as flexible as possible with their curb pricing and allocation. By building flexibility into a curb management approach, cities can more easily adapt to changes in future demand and support more dynamic use of existing on-street parking spaces. This will also improve a city’s ability to accommodate a number of uses at different times of the day.

Consider pricing your curb. Cities need to incentivize the behavior that they want to see at the curb and while there are different approaches to achieve this, pricing the curb is one of the most powerful tools to do so. Pricing the curb based on demand leads to higher turnover, less need for enforcement, and consequently creates a more flexible curb that serves more people. It is also an opportunity for cities to generate revenue.

Set up city-specific curb guidelines. Often cities’ default position is to designate the curb lane for parking. The idea that parking is essential to a city’s economy is ingrained within engineering, business, and some policy circles. To combat this notion, cities should create a comprehensive set of curb-use guidelines. Such a framework would provide guidance for a city on the prioritized use(s) of the curb—which may change depending on the time of day or location within the city—through a “curb use hierarchy” that can inform future curb management decisions. To build buy-in and ensure that the guidelines align with a city’s values and vision for use of

EXAMPLE

Who pays for commercial loading zones in your city?

In Minneapolis, commercial loading zones are requested and paid for by the adjacent property owners, which has furthered the misunderstanding of who owns the public right of way and led to inappropriate policing of that space by adjacent property owners. Shifting payment for those spaces to the user—and away from the adjacent property owners—will reinforce that the space is a public good, increase curb flexibility, and improve curb access for users beyond just property owners. For example, the city can utilize some of that space to continue building out their bicycle and pedestrian infrastructure.
the curb, cities should work within and across departments, like transportation and public works, in addition to elected leadership. Curb use guidelines will lead to a better understanding of how best to manage the curb and allow cities to address curb-related issues concerning land use and equity through policy decisions.

**Coordinate curb management.** While curb management is often housed within a city department of transportation or public works department, it can involve a number of divisions within and entities outside of that department. Without intentional coordination, curbside management can quickly become disjointed and therefore more difficult to respond to changing curb demands. It is important for cities to coordinate across internal department divisions, such as planning, operations and engineering, and with outside entities such as elected officials, local transit agencies, parking agencies, and development authorities.

**Monitor curbs and develop curb inventory.** Cities that have ongoing and automated collection of data on how different users are interacting with the curb, at what times and locations, and for what purposes can use this information to create a time and demand-based methodology based on current and desired use(s). This information can help justify the allocation of curb space as well as whether, how much, where, and how to charge for curb use beyond traditional parking uses. All cities, and by extension the public, can benefit from viewing the curb as an innovative finance tool that can provide revenue to fund program needs, mitigate negative impacts, and fund other transportation and infrastructure improvements.

Cities can collect curb data using internal resources, but may also set up agreements with private sector companies to collect and share that information. In these cases, it is equally important for cities to exercise data sharing and privacy standards to protect the anonymity of curb users. More information on data sharing can be found on page 43.

**EXAMPLE**

**Using video analytics to learn more about the curb.**

In early 2020, before COVID-19, the City of Bellevue was setting up a curbside monitoring pilot project in order to collect more extensive data on curbside usage and explore technologies. After COVID-19 pandemic began, Bellevue was able to adapt and move forward by narrowing the scope from a full evaluation to a technology performance assessment which involved setting up video analytics systems to collect curbside behavior and trends. The goal of the pilot is to eventually optimize operations at the curb and provide data that can lead to policy recommendations for the city.
Make the curb a place of innovation and piloting

To ensure the curb can continue to evolve and serve all users, cities must be able to pilot new approaches and tools at the curb. Below are some ideas to help make the curb a place of innovation and piloting.

Identify new ways to allow for piloting outside the traditional procurement or permitting processes.

One of the biggest barriers to ensuring the curb can be a space of innovation is a city’s procurement and permitting requirements. While these processes are crucial to a city’s operations, they are often not compatible with testing and innovation, and can slow down pilots to the point where the original goals are no longer relevant. Because pilots are important for testing what interventions are successful and will benefit the community, cities should create internal mechanisms that allow piloting and innovation to occur. Some questions to consider when developing those processes and protocols:

- How to iterate from a pilot idea to planning to implementation?
- Who to engage and when?
- What quantitative and qualitative data can be collected?
- How to evaluate the success of a pilot, and whether or when to pivot from the original concept?
- How to translate a successful temporary pilot into a permanent fixture or service?

Update land use policy.

Many land use codes are not inherently “curb-friendly,” as they can set in place certain requirements or exceptions that may not be in line with a city’s broader curbside management effort. For example:

- Some new developments are conditioned to require continuous planter strips between roadways and sidewalks. While this can create a more livable environment—and landscaping and greening have both environmental and place-making benefits—by including it as a requirement, these new developments unilaterally restrict curb usages in ways that may or may not be in line with a city’s broader curb hierarchy or guidelines.
- Often city codes outline parking minimums for new developments by specifying the number of parking spaces that must be created for the square footage being built. Parking minimums incentivize driving over other modes of transportation, which inherently spills over...
into curb space and creates more demand for the limited curb space. Cities should have a unified parking approach that determines the supply and demand in an area—at the curb and in parking lots.

Land use codes should be updated to better address the comprehensive menu of street behaviors, changes in technology, and increased demand for curb space to ensure there is equitable access to the curb.

Make space for non-traditional entrepreneurs.
Cities should leverage the curb as a way to bring goods and services to the public right of way and provide space for entrepreneurs and new types of business. Food trucks and street vendors around the world have experimented with more flexible uses of the curb and public right of way; this is possible in the United States too. The curb should be available to connect businesses, especially smaller businesses, to consumers and allow for a formal sanctioning of more activities and better access to local goods and services.

Volunteers draw social distancing cues on the street in New York City. Photo credit: Street Lab.
State & Federal Curbside Policy Ideas

Suggestions from local governments to improve state and federal policy

While curb management and policy largely occurs at the local level, there are a handful of policy actions states and the federal government can take to support local governments’ ability to efficiently and equitably manage their curb.

Require data sharing between private operators and cities.

Most of our understanding of curbs comes from knowledge acquired from experience over time, from community input to traditional data collection methods like traffic counts. Often-times curb management is reactionary because the city does not have an official way they manage the curb—or clear rules posted for a user—so the city has to react to how people decide to use the curb. Though the reactionary approach is evolving and some cities (on their own or in partnership with a private company) are collecting data so they can take a more forward-thinking approach to the curb.

Cities should require private sector companies to share data in order to operate at the curb or in the right-of-way. Requiring data-sharing will help cities’ efforts to better manage the curb. Data allows cities to make strategic decisions about curb use to better manage its changing demands and city priorities. Data helps cities make decisions that align their values and priorities with their curbside operations, from planning, to engineering, to implementation.

Delivery and mobility companies often collect data that is of value to cities to make these better decisions about how to manage the curb. Since their business model profits from public streets and curbs, they should be required to share data and maintain proper privacy standards so cities can responsibly manage the public space and better determine the value of allocating curb space to the private services.
**Policy Ideas**

**Permit automated enforcement.**  
**Level**  

Many states restrict the use of automated enforcement. Without the ability to use technology to enforce curb policies, cities are still relying upon traditional, analog enforcement models that are limited to monitoring parking meters and issuing tickets. Allowing automated enforcement at the state level would provide local entities with the ability to use digital and camera technology to automatically enforce curb spaces. When permitting, states should also ensure that city implementation of automated enforcement technology is applied and deployed equitably and does not disproportionately penalize Black and Brown people.

**Allowing automated enforcement could:**
- Reduce physical enforcement by parking officers which could:
  - Increase ticketing consistency and reduce negative interactions between law enforcement and the public, especially Black and Brown people.
  - Free up funding and staff capacity for other purposes.
  - Increase the speed of the ticketing process. Lower cost, more frequent ticketing is a more effective and fair approach as it reduces the element of timing or allocation enforcement personnel.
- Allow a city to change the price of curb use based on demand. This would also require a city to have a compatible payment system.

**Reclassify or transfer ownership of state highways.**  
**Level**  

Many states do not allow or make it difficult to transfer ownership or reclassify segments of state-owned roadways. Oftentimes states have the right to preempt cities from using their curbs or right of way exactly how they want, making it difficult for cities to manage what takes place on their roadways.

States should allow or make it easier to reclassify or transfer ownership of state-owned roads in cities to local governments. This will support more multimodal design and context appropriate speed limits, better coordination with land use regulations, and additional pick-up-drop-off and loading zones.
Allow road taxes and fees to be spent on curb management. **LEVEL** **STATE**

Many states require that road taxes and fees be spent on roads and highways. This creates a financial disincentive for cities to consider more multimodal forms of curb management, develop curb management based on local need instead of a one-size-fits-all approach, and makes it hard to fund large-scale curb management or public realm improvement projects.

**Additional state-specific issues**

Here are some state-specific issues that some cities are navigating that may also be applicable to your city and state. This is not an exhaustive list, but provides some insights to how state level policies are impacting local curbside management.

- **Prohibition on commercial activity in parking garages and transit centers.** The State of Minnesota prohibits commercial activity in parking garages and transit centers. This is an issue because the City of Minneapolis owns the majority of parking garages in the city, but are restricted in how they can utilize them. Allowing commercial activity in parking garages would allow the city to better manage its real estate and create needed revenue for the city.
  
  - **This also occurs at the federal level through the National Park Service. While this prohibition may make sense in larger, more remote areas, it’s limiting for smaller parks located in urban areas.**
  
  - **Cost-recovery limitations for most parking-related fees.** The State of California limits cost-recovery for several parking-related fees. This is an issue because it limits parking-related fees to the costs of administration and enforcement of individual programs. It prevents cities from charging either the market price of valuable urban land, or the true costs that car parking inflicts on the city, including congestion, safety issues, and more.

- **Restrictions that limit dynamic curbside management due to hydrants and select signage.** Some states, including Washington, have restrictions in place that unnecessarily limit the curbside function in relation to hydrants and other signage. Modifying these policies will allow cities to better manage their curb.
Provide additional regulatory oversight on delivery vehicles and TNCs.

**LEVEL** STATE, FEDERAL

There is inadequate regulatory oversight of delivery vehicles and transportation network companies (TNCs), such as app-based ride hailing providers, at the state and federal level. Cities that have tried to take a thoughtful approach to managing delivery have been stymied by their inability to enforce local rules and priorities, and many states have preempted cities from managing TNCs. Curbside management is not very useful if cities can’t enforce rules for the two emerging uses that are responsible for some of the greatest growing demand at the curb.

Cities need both policies and technical tools to enforce regulations for delivery and TNCs more efficiently, especially as ticketing is not a sufficient management mechanism to ensure the proper and flexible use of the curb. This is something best managed at the city level and states should support that, not preempt local work. But state or federal support, such as guidance on successful regulatory models, is important for smaller cities and towns that might not have the capacity to manage these issues.

Set a universal curbside language and standards.

**LEVEL** FEDERAL

There is no uniform way that local governments define the curb and its users. The lack of universal curbside language and standards (UCLS) creates a number of issues for everyone, most notably local governments, regional and state governments, and private companies. There is a role for the federal government to develop a set of universal curbside language and standards and it should be developed with these five principles in mind.