Curb Management Action Plan

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Ydanis Rodriguez Commissioner

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Letter from the Commissioner

Over 70 years ago New York City Mayor William O'Dwyer legalized overnight parking in Manhattan, which established the curb lane's reputation as the place to store our personal vehicles - typically for free. But as the number of vehicles has come to outstrip the available curbside space in many parts of the City, this policy has been widely seen as unsustainable and the debates over and demands for curbside space have grown. As a City, we have come to realize that the curb lane is valuable public space that should benefit all New Yorkers, not just those who own cars. Over the last decade and a half, NYC has rethought how our streets function and NYC DOT accommodated new demands for the curb, including hundreds of miles of lanes for bicyclists as well as space for bus riders using the continent's largest mass transit system.

Under Mayor Eric Adams, making such transformative changes – always with an eye towards equity - remains a top priority. In recent years, DOT has further reformed the curb lane by installing new and innovative uses including Citi Bike stations, bicycle racks, electric vehicle chargers, and expanded pedestrian space. We now operate the country's largest outdoor dining program that has made neighborhoods more vibrant while handing a lifeline to struggling businesses, and we are excited to make that program permanent with improved design guidelines. While I am proud of the agency's past work to leverage the curb lane to improve neighborhoods and provide more transportation options, we must do even more.

In that spirit of looking forward, I am excited to release my agency's *Curb Management Action Plan*, which outlines steps we are taking to modernize our curb lanes to serve the many needs of New Yorkers in a more equitable way. This *Action Plan* commits to beginning a more comprehensive, neighborhood-focused approach to programming and regulating the curb to ensure that the varying needs of different communities are met. It also builds on the work NYC DOT has been doing to make deliveries to homes and businesses easier, as well as to meet Mayor Adams' ambitious climate goals by reducing vehicle emissions.

We are also looking at new ways to incorporate technology into how we plan and manage the curb; with only 80,000 of the estimated 3 million curbside parking spaces in our City right now metered in any way, we will price parking and other curb uses to ensure the most efficient use of this very limited and valuable space. The plan also includes actions that will make it more convenient to get around the city in a variety of ways, like making pickups and drop-offs easier, or further growing bike parking to accommodate the unprecedented boom in cycling.

The *Curb Management Action Plan* builds off past great work by NYC DOT and best practices from cities around the country and world that have established proven ways to improve transportation and quality of life.

And as the changes keep coming, NYC DOT will continue to ensure that our curb lanes support a high quality of life, health, and economic vitality. With safety and equity as our guiding principles, we are eager to continue this transformation.

Ydanis Rodriguez

Letter from the Commissioner



Executive Summary

Curb space is a dynamic and valuable asset that has evolved dramatically in recent years. An efficient, well-functioning curb lane is essential to the quality of life, health, safety, and economic vitality of New York City. The boom in e-commerce and food delivery, increases in for-hire vehicles and bike usage, the introduction of outdoor dining, and new concepts for waste containerization are rapidly reshaping how curbs are used and by whom. The New York City Department of Transportation's Curb Management Action Plan presents a path forward for NYC DOT to implement curb management strategies that address the dynamic community needs of today and better prepare us for the future.

The Action Plan lays out ten action items to maximize the City's curb space to serve the multiple and varied needs of New Yorkers, improving mobility, access, and the flow of people, goods, and services, while moving the city closer to achieving its sustainability goals.







Pilot NYC's first "Smart Curbs" neighborhoods, testing new and innovative curb uses

High demand for curb spaces in dense commercial areas requires a comprehensive approach to curb management.

Work with Business Improvement Districts (BIDs) to test a blank slate approach to curb programming and activation. Test new policies and technologies to make curb access easier and adaptive to community needs.

Prioritize curb uses to meet neighborhood needs

A diverse array of curb needs necessitates policies to guide which uses get prioritized.

Publish a guide detailing how NYC DOT will prioritize curb uses in a way that is consistent with the city's transportation goals and needs while allowing flexibility to tailor curb management tools to local neighborhood conditions.

Make deliveries to businesses and homes safer, sustainable, and more efficient

The rapid growth of e-commerce makes accommodating deliveries at the curb essential.

Expand loading zones, implement microhubs, expand use of cargo bikes, incentivize off-hour deliveries, and pilot new types of loading zones (e.g., reservation, restriction of vehicles, time of day management).

Pilot the East Coast's first low-emission zone

Curb management can play a role in incentivizing or requiring zero or low emission vehicles.

Study pricing, regulatory, and incentive options to develop a pilot program.

Designate curb space to make passenger pickups and drop-offs easier

The surge in for-hire vehicle trips must be managed with better curb access for passenger loading.

Expand short-term loading, create taxi/FHV pickup/drop-off zones, and work with the Metropolitan Transportation Authority (MTA) to expand Access-A-Ride loading zones.



Expand bike parking to make traveling by bike more convenient

NYC's bicycling boom requires additional bike parking without congesting sidewalks.

Expand on-street and sidewalk short-term bike and micromobility parking, continue expansion of Citi Bike, and create thousands of secure public bike parking spots.

Provide space for Dining Out NYC, waste containerization, street furniture, and other public realm improvements

The curb lane provides an opportunity to create a cleaner, safer, and more vibrant public realm.

Implement the permanent Dining Out NYC program, provide space for waste containerization, and activate the curb lane with public space improvements like sidewalk widenings, Street Seats, and plantings.

Test new technologies for remote and flexible curb management and enforcement

Proven and emerging technologies can enable more efficient, data-driven, and user-friendly curb management.

Implement a more flexible and convenient parking payment system; work with MTA to use new authority to camera enforce bus stops, bike lanes, and double parking; in conjunction with Smart Curbs pilot, test technologies to improve data collection and remote curb management; move toward automated enforcement of more violation types; and expand access to curbside charging.

Price on-street parking to increase commercial activity Parking pricing should reflect demand to encourage the most efficient use of limited space.

Standup a demand-based pricing proof of concept over the next year, update meter rates and geographies to reflect the market and increased demand, expand meters (regular and commercial) to improve access in commercial, industrial, and high demand areas, develop pricing mechanisms to support policy goals, improve fine structures, and adjust reserved curb space policies.

Charge non-transportation users of curb space

The curb lane is a valuable resource that should be priced for businesses that benefit.

To disincentivize excessive use of curb space and to minimize community impact, NYC DOT will develop a framework to charge for street occupancy in metered spaces. It will also seek state authorization to charge in non-metered spaces.

Introduction

Since overnight parking was legalized in the 1950s, most of New York City's curb space has become dedicated to parked cars—the vast majority of it free to the car owner. Allocating curb space to free parking in the busiest parts of the city only benefits the minority of New Yorkers who own cars and park on the street.

New York is by far the most car-free major city in the United States. In 2021, only 46% of households in New York City owned a vehicle, significantly lower than the national average of 92%¹. Citywide, approximately 56% of workers commute to work by public transit and only 27% by private vehicle², with non-white New Yorkers relying more on public transit than white New Yorkers³.

2 US Census Bureau (2019) S0801 Commuting Characteristics by Sex https://data.census.gov/table?q=commute&g=160XX00US3651000&tid=ACSST5Y2019.S0801.



¹ US Census Bureau (2021) DP04 Selected Housing Characteristics ACS 5-year estimates https://data.census.gov/table?g=010XX00US_160XX00US3651000&tid=ACSDP5Y2021.DP04.

³ Transit Center Report: https://dashboard.transitcenter.org/story/nyc.





Figure 1 Median Household Income of NYC Car Owners and Non-Car Owners. Source: ACS 2015-19, IPUMS

Meanwhile, households that have car access have higher incomes than non-carowning households. Citywide, the median household income for non-car owners is \$46,000, compared to a median income of \$90,000 for those with access to one or more vehicles (Figure 1). By borough, the median income of car owners ranges from about two to three times more than non-car owners.

Free or low-cost on-street parking also incentivizes car travel, which generates negative effects on air quality, climate, and quality of life. This disproportionately impacts non-white New Yorkers, who on average live in areas that are exposed to higher levels of air pollution from motor vehicles than white New Yorkers.^{45.6} More driving, particularly speeding and reckless driving, is also associated with traffic fatalities and injuries for pedestrians, drivers, passengers, and other roadway users. Nationwide, roadway deaths constitute more than 94% of transportation related fatalities every year—far exceeding deaths by transit, air, or railroad.⁷ In New York City, there were 260 traffic fatalities and 56,351 traffic injuries in 2022—a 14.7% drop from before Vision Zero strategies were deployed in 2013 and the first decline since 2019, but still too many.⁸

Allocating curb space to a broader range of uses, such as transit corridors, public space, bike lanes, and loading zones benefits a larger share of New Yorkers while advancing the city's climate, air quality, safety, and equity goals.

⁴ https://www.ucsusa.org/sites/default/files/attach/2019/06/Inequitable-Exposure-to-Vehicle-Pollution-NY.pdf.

⁵ https://www.lung.org/clean-air/outdoors/who-is-at-risk/disparities.

⁶ https://www.nyc.gov/office-of-the-mayor/news/919-22/mayor-adams-kicks-off-landmark-study-reimagine-cross-bronx-expressway/#/0.

⁷ https://www.bts.gov/content/transportation-fatalities-mode.

⁸ https://vzv.nyc/.

For example, protected bike lanes typically provide major safety improvements for pedestrians, bicyclists, and motor vehicle users; New York City has seen a 34% reduction in total injuries along corridors where protected bike lanes were installed.⁹ On-street Citi Bike bike share docks, which provide space for roughly seven bikes where one motor vehicle might have parked, have enabled a healthy and sustainable transportation option, with nearly 30 million trips taken in 2022. Similarly, providing curb space for loading goods and passengers has the benefit of relieving congestion and improving safety. It also improves access to goods and services for residents and business owners.

In recent years, evolving neighborhoods and land uses, shifts in travel mode choice, population growth, and technological advancements have rapidly changed the way the curb lane is used. The COVID-19 pandemic further accelerated many of these trends.

Some of the current factors that are driving this demand include:

- + **Online shopping.** The growth of e-commerce and the increasing popularity of home delivery mean more delivery vehicles competing for curbside space, including in areas that had not previously experienced such delivery demand. Prior to COVID-19, roughly 40% of deliveries in the city were to residential customers, but since COVID-19 that has increased to 80%.¹⁰
- Food delivery. The increase in at-home delivery is not limited to freight, as mobile app-based food deliveries have exploded in popularity. At the onset of the pandemic, orders increased by more than 50% in the New York City metro area, and growth has continued since. App deliveries now account for 15% of all NYC restaurant sales, and there are an estimated 61,000 delivery workers working for restaurant apps in the city in a given week. Roughly 22% of app deliveries are made by car.¹¹

⁹ https://www.nyc.gov/html/dot/html/pr2021/biketober-bike-lanes-curcial-network-safety.shtml.

¹⁰ Loading Zone Expansion: https://www.nyc.gov/html/dot/downloads/pdf/loading-zone-expansion-progress-report.pdf.

¹¹ A minimum Pay Rate for App-Based Restaurant Delivery Workers in NYC: https://www.nyc.gov/assets/dca/downloads/pdf/workers/Delivery-Worker-Study-November-2022.pdf.

- Ride-hailing. The significant growth of for-hire vehicles (FHVs) from fewer than 40,000 vehicles in 2010 to roughly 90,000 in 2022, down from a peak of 120,000 in 2019¹² means a proliferation of drivers looking for space to pickup and drop-off. High-volume FHVs like Uber and Lyft have grown from an average of nearly 114,000 trips per day in 2015 to over 582,000 in 2022—rebounding towards their pre-pandemic peak of 700,000 trips per day in 2019.¹³ Neighborhoods have seen a rise in double parking and short-term standing in bus lanes, bike lanes, and near fire hydrants—particularly in Manhattan below 60th Street, where taxis and FHVs make up 53% of the total traffic share.¹⁴
- + **Evolving modes of transportation.** The increasing use and diversity of modes, such as electric bikes and scooters, require curb space for infrastructure and circulation capacity.
- + Outdoor dining/seating, public plazas, and waste containerization. The city supports many programs that repurpose the curb lane to improve the overall quality of life, with uses that do not involve vehicle storage or circulation and may not be transportation-related at all.

Given this evolution of how the curb is used, it is critical that regulations, programming, and policy keep pace to organize and maintain the curb lane in an equitable way.

12 Improving Efficiency and Managing Growth in New York's For-Hire Vehicle Sector. June 2019. https://www.nyc.gov/assets/tlc/downloads/pdf/fhv_ congestion_study_report.pdf.





¹³ Analysis of TLC monthly aggregated data: https://www.nyc.gov/site/tlc/about/ aggregated-reports.page.

¹⁴ Improving Efficiency and Managing Growth in New York's For-Hire Vehicle Sector. June 2019. https://www.nyc.gov/assets/tlc/downloads/pdf/fhv_ congestion_study_report.pdf.

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Curb Lane Uses in NYC

In NYC, curb uses and their characteristics are highly informed by neighborhood and location, thus reflecting their surrounding land use context and multiple unique stakeholders. These stakeholders include a wide range of users, such as drivers, pedestrians, cyclists, transit riders, business owners, and building owners, as well as a variety of agencies, such as the city government, transportation departments, and public utilities. Each of these stakeholders has their own priorities, needs, and desires when it comes to using the curb lane, which can sometimes lead to conflicting perspectives and challenges in managing the space effectively. To better understand and prioritize curb lane uses, NYC DOT has divided curb functions into five major categories:





Function 1. Transportation Access

Active space that prioritizes transit boardings, pickups/ drop-offs, and freight activities such as loading and unloading goods.

Passenger loading zones

- Bus stops
- Bus bulbs/boarding islands
- Taxi stands
- FHV zones
- Paratransit loading zones

Goods loading zones

- Commercial loading zones
- Freight microhubs
- Neighborhood loading zones
- Cargo bike loading zones
- _ Green loading zones



Function 4. Vehicle Storage

Space occupied by vehicles (personal cars, bicycles and other micromobility, buses, etc.) for extended periods such that other users cannot access the space.

Bicycles

- Citi Bike docks
- Bicycle corrals
- Secured/covered bicycle parking

Other micromobility

- Micromobility parking
- Micromobility chargers

Cars, trucks, and motorcycles

Function 2.

Active curb space designated

for the use of people and

services.

Public spaces

Street Seats

Beautification

Special events

Outdoor dining

└ Food vending

Plazas

Dining

local businesses to provide

Public Realm

- Metered parking
- Unmetered parking
- Authorized parking
- Commercial parking
- _ Carshare parking
- Electric vehicle chargers
- _ Taxi/FHV relief stands
- Overnight truck parking

Transit

Bus terminal layovers



Function 3. Services & Safety

Curb space designated for public services and the safety of people.

Public services

- Green infrastructure
- _ Temporary construction
- _ Waste containers

Public safety

- Intersection daylighting and
- other safety design treatments
- Fire hydrant access
- Security infrastructure

Development and production

- Construction logistics
- Film/TV



Function 5. Circulation & Movement

Space for the movement of motorized and non-motorized modes.

All users

- General traffic lanes
- Turning lanes
- Peak hour-only travel lanes
- Driveway access

Dedicated users

- Curb extensions
- Walking lanes
- Bus lanes
- _ Bike lanes



Function 1. Transportation Access:

active space that prioritizes transit boardings, pickups/drop-offs, and freight activities such as loading and unloading goods.

Passenger loading zones



Bus stops: areas for boarding and alighting of passengers



Bus bulbs/boarding islands:

an extension of the sidewalk or a raised area, with dedicated waiting and boarding areas for bus passengers



FHV zones: areas for for-hire vehicle (FHV) passenger pickup/drop-off



Paratransit loading zones:

areas for Access-A-Ride Paratransit Service pickup/drop-off



Taxi stands: areas for taxi passenger pickup/ drop-off



Function 1. Transportation Access:

active space that prioritizes transit boardings, pickups/drop-offs, and freight activities such as loading and unloading goods.

Goods loading zones



Commercial loading zones: loading/unloading area for commercial vehicles in assigned hours



Freight microhubs:

space allocated for delivery staging, sorting, and redistribution onto smaller vehicles or cargo bikes



Neighborhood loading zones:

active loading and unloading for personal vehicles, package delivery by commercial vehicles, and taxi and car service pickup/drop-off



Cargo bike loading zones:

space for cargo bikes to stage and load as an alternative to the sidewalk



Green loading zones:

sections of the curb for exclusive use by green vehicles such as cargo bikes or electric trucks



Function 2. Public Realm:

active curb space designated for the use of people and local businesses to provide services.

Public spaces



Plazas:

extension of the sidewalk or curb line for pedestrian use



Special events:

periodic use for street fairs, block parties, food fests, sports events, etc.



Beautification: planters and other landscaping to green streets



Street Seats:

smaller-scale public spaces in neighborhoods that serve as an amenity for workers, tenants, residents, and visitors

Dining



Outdoor dining:

outdoor dining space for a restaurant adjacent to the sidewalk in front of the establishment



Food vending: use of the curb by food trucks and carts



Function 3. Services and safety:

curb space designated for public services and the safety of people

Public services



Green infrastructure:

space for stormwater management tools like bioswales, rain gardens, planters, etc.



Temporary construction: repairs of the curb lane itself, e.g., repaving, striping, utilities



Waste containers: space for curbside bins as part of the Clean Curbs pilot program

Public Safety



Fire hydrant access: clear space to allow access for fire trucks



Security infrastructure: vehicle barriers, bollards, etc.



Intersection daylighting and other safety design treatments:

clear space near intersections to improve driver visibility and other utilization of the curb lane for street safety design improvements

Development and Production



Construction logistics:

barriers, access points, and/or temporary storage of equipment or material stockpiles for construction



Film/TV:

temporary storage of operational and logistical equipment for film/TV production



Function 4. Vehicle storage:

space occupied by vehicles (personal cars, bicycles and other micromobility, buses, etc.) for extended periods such that other users cannot access the space.

Bicycles



Citi Bike docks: space allocated to Citi Bike stations



Bicycle corrals: clusters of bike racks where demand exceeds available sidewalk space



Secured/covered bicycle parking: secure bike parking structures

Other micromobility (such as electric scooters)



Micromobility parking and storage: parking corrals or docks for micromobility devices



Micromobility chargers: charging stations for micromobility devices

Transit



Bus terminal layovers:

temporary staging of buses to support driver breaks and adherence to schedules



Function 4. Vehicle storage:

space occupied by vehicles (personal cars, bicycles and other micromobility, buses, etc.) for extended periods such that other users cannot access the space.

Cars, trucks, and motorcycles



Metered parking: personal and commercial vehicle parking



Motorcycle parking: designated parking for motorcycles



Unmetered parking: free parking zones



Authorized parking:

authorized parking zones for government, funeral homes, schools, press, etc.



Commercial parking:

parking exclusively for registered commercial vehicles, typically metered



Carshare parking:

designated space for carshare with signs designating specific companies



Electric vehicle chargers: PlugNYC publicly accessible electric charging network



Taxi/FHV relief stand:

space for taxi or FHV drivers to park their vehicles for up to one hour to rest, eat, or take care of other needs



Function 5. Circulation and Movement:

space for the movement of motorized and non-motorized modes.

All users



Driveway access: clear space to allow part-time or fulltime driveway access



General traffic lanes: mixed traffic lanes



Peak hour-only travel lanes: allocated to vehicle movement by time of day and day of week



Turning lanes:

pockets to separate through vehicles from turning vehicles at intersection approaches



Function 5. Circulation and Movement:

space for the movement of motorized and non-motorized modes.

Dedicated users



Bike lanes:

dedicated travel lanes for bicycles and other micromobility devices



Bus lanes: dedicated travel lanes for buses



Curb extensions:

sidewalk bulb-outs, mid-block crossings, street-level extensions of the curb line, pedestrian islands, etc.: Installed to provide additional space for pedestrian comfort, convenience, or safety



Walking lanes: pedestrian zones painted on the roadbed



Variety of Curb Uses

The curb provides access for a wide range of users and travel modes: drivers, pedestrians, cyclists, transit riders, businesses owners, and building owners, among others. Curb functions are also manifold, including the loading and drop-off of passengers and goods, public space, dining, public services, safety, construction, vehicle storage, and circulation. The diversity of user groups and functions car sometimes lead to conflicting perspectives and challenges, but also opportunities in managing the space effectively.

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Protected Bike Lane

Cargo Bike Loading Zone/Microhub

Commercial Loading Zone

Secured/Covered Bike Parking



Goals

The Curb Management Action Plan presents a path forward for NYC DOT to implement strategies that address the dynamic community needs of today and better prepare us for the future. Collectively, the actions in this plan will improve mobility, access, and the flow of people, goods, and services, while moving the city closer to achieving its sustainability goals.

The Action Plan reflects the vision set forth by Mayor Eric Adams and Governor Kathy Hochul in **Making New York Work for Everyone**, a set of proposals from the "New" New York Panel to support the recovery and resiliency of the city's commercial districts. Initiative 26 from that set of proposals provides a roadmap to reimagine curb space by improving the way its uses are regulated, priced, programmed, and enforced. Meanwhile, **PlaNYC: Getting Sustainability Done**, the city's strategic climate plan, also calls for new, sustainable, and forward-looking approaches to the curb, including low emissions zones, expanded electric vehicle charging, commercial cargo bike incentives, a secure bike parking pilot, and other public realm initiatives.

The Curb Management Action Plan is also complementary to the Metropolitan Transportation Authority's (MTA) Central Business District Tolling Program (CBDTP), New York's congestion pricing program. Improving management of the curb will harmonize with reducing traffic volumes in the Manhattan core, helping to further reduce congestion and vehicle emissions.





Action Plan

Summarized in the following pages are ten actions that provide a path forward for NYC DOT to improve the functionality and performance of the city's curb lanes.



Pilot NYC's first "Smart Curbs" neighborhoods, testing new and innovative curb uses

NYC DOT will work with Business Improvement Districts (BIDs) to take a blank slate approach to curb management policies across a district by re-evaluating current uses and comprehensively implementing new programming. Many of the densest and busiest commercial areas of the city that are most in need of improved curb management have a BID that can provide local expertise and public space management. The agency will use public engagement and a datadriven approach to install new curb uses like loading zones, bike parking, carshare, public space, and other innovations, and will use a demand responsive approach to adjust parking meter rates, with the goal of improving the overall transportation experience in each area.

NYC DOT will begin with one BID in 2023, which will provide a model for how the experience at the curb could be improved in other neighborhoods through comprehensive curb planning. In conjunction with this initiative, NYC DOT will engage the curb management industry to identify ways to improve public access to digital records of curb regulations and try new technologies to make curb access easier and adaptive to community needs, with Smart Curbs neighborhoods as testing locations.



Prioritize curb uses to meet neighborhood needs

The way the curb lane is used on a particular block or neighborhood is context-specific, driven by land use, transportation, and development patterns. Good curb management requires prioritizing curb functions that reflect local context. NYC DOT will develop and publish a curb management hierarchy to inform the public and aid planning decisions. The guide will detail how to prioritize New York City curb uses based on street or neighborhood typologies in a way that is consistent with the city's transportation goals and needs, while still allowing flexibility to tailor curb management tools to specific local conditions and public feedback.



Make deliveries to businesses and homes safer, sustainable, and more efficient

In response to the tremendous growth of e-commerce, NYC DOT is identifying ways to address freight-related safety, congestion, pollution, and quality of life concerns through better curb management. Strategies include policy tools, such as incentivizing off-hour deliveries to reduce demand at the curb during busy times, and physical treatments like loading zones. NYC DOT is installing truck loading zones and commercial metered parking in commercial areas and neighborhood loading zones in residential areas to reduce double parking and improve safety. In 2022 the agency installed roughly 1,800 loading zones.

The agency will also identify and pilot new types of loading zones to develop innovative ways to manage freight, such as zones restricted by time of day, vehicle type, and reservations. NYC DOT will pilot microhubs, which provide accessible space located within the public right of way where goods are transferred from larger freight vehicles to smaller, low-emission, and electric vehicles or human-powered modes (e.g., cargo bikes, hand carts) for final delivery. NYC DOT will encourage the use of cargo bikes and install cargo bike loading zones as part of a goal to shift 25% of lastmile freight deliveries from trucks to small, sustainable delivery methods by 2040.



Pilot the East Coast's first low-emission zone

Other global cities, such as London, have used low emissions zones to catalyze shifts to sustainable modes and EVs. NYC DOT is examining ways to require and/or incentivize the use of low- and low/zero emission trucks through the creation of low emission zones in areas with the highest concentration of truck traffic and the worst public health outcomes. NYC DOT will study ways to implement low-emission zones in New York City and will propose a pilot program for one or more environmental justice communities. As part of this effort, NYC DOT will review the role curb management plays in incentivizing or requiring zero or low emission vehicles in order to access curb space. The surge in for-hire vehicle trips must be managed with better curb access for passenger loading.

Designate curb space to make passenger pickups and drop-offs easier

The surge in for-hire vehicle (FHV) trips has had a significant impact on curb management, often resulting in parking regulation violations like improperly occupying taxi stands, double parking, and unsafe pickup/drop-off behavior, such as obstructing traffic and encouraging passengers to walk through traffic. NYC DOT is implementing a new "loading only" curb regulation for short-term loading that, in addition to facilitating deliveries, will allow for passenger pickup and drop-off. The agency will establish dedicated pickup/ drop-off zones for FHVs in high-volume locations, working with operators (Lyft, Uber, etc.) to formalize the zones so that drivers and passengers are directed to use them.

NYC DOT will also continue to work with the MTA to expand loading zones for Access-A-Ride paratransit vehicles at key locations. The agency will also update its parking design standards to reflect the U.S. Access Board's Public Rights-of-Way Accessibility Guidelines.

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NYC's bicycling boom requires using the curb lane to provide bike parking without congesting sidewalks.

Winder This

Expand bike parking to make traveling by bike more convenient

On a given day, roughly 550,000 bicycle trips are taken in New York City – more than triple the level 15 years ago. The city has also seen a significant rise in the use of other micromobility devices like scooters. This tremendous growth has brought a dramatic increase in demand for bicycle and other micromobility parking.

In addition to installing thousands of new bike racks on sidewalks, NYC DOT is installing bike corrals in the curb lane to provide higher-capacity parking. NYC DOT will also solicit proposals for vendors to pilot secure bike parking facilities, including in the curb lane. Providing curbside access to secure bike storage for residents who lack access to bike storage, including for oversized models and e-bikes, will promote more frequent use of bicycles for all trips. Secure bike parking will also facilitate the use of cargo bikes for last-mile deliveries, improve first-mile connections to transit, and provide safe overnight storage for delivery workers.

Additionally, NYC DOT is continuing to work with Citi Bike to expand bike share, utilizing the curb lane to provide space for roughly seven or eight bikes where one car might have been stored.

The curb lane provides an opportunity to create a cleaner, safer, and more vibrant public realm.

Provide space for Dining Out NYC, waste containerization, street furniture, and other public realm improvements

An attractive public realm is a critical element of a vibrant and welcoming city, and the importance of quality public spaces was further emphasized when COVID-19 made outdoor spaces the safest places to gather and socialize. NYC DOT will continue to build on its success improving the public realm, including using the curb lane for sidewalk widenings, curb extensions, bus boarding platforms, plantings, public art, and the Street Seats program, which creates small-scale public spaces adjacent to the sidewalk. NYC DOT recently installed a large Street Seat in Jamaica with more locations to come. Curb lane asphalt murals were recently completed with partners on Westchester Avenue in the Bronx and 31st Avenue in Queens.

NYC DOT will also continue working with the City to implement the permanent Dining Out NYC program, allowing restaurants to use the sidewalk and roadway space in front of their business for outdoor dining.

NYC DOT will support the NYC Department of Sanitation's (DSNY) ongoing efforts to containerize waste to improve pedestrian travel and mitigate rodents. The agency will work with DSNY to use the curb lane for waste containerization as part of its upcoming pilot in Manhattan's Community Board 9, which will test wheeled containers and retrofitted collection trucks at up to 10 residential blocks and 14 public schools in Morningside Heights, Manhattanville, and Hamilton Heights.

NYC DOT will also provide curb space for the NYC Housing Authority (NYCHA) "Clean Curbs for All" pilot to use large, on-site waste containers at public housing developments, including in the curb lane.



Test new technologies for remote and flexible curb management and enforcement

NYC DOT is implementing and piloting proven and emerging technologies to move toward a more efficient, data-driven, and user-friendly model of curb management. Given the success of ParkNYC mobile parking payments, the city's parking meters will be converted to a unified pay-by-plate parking system, replacing the existing paper-based "pay-and-display" operations. In a pay-byplate system, users simply enter their license plate at the meter without the need to return to the vehicle to place a receipt, improving convenience and making enforcement more efficient.

NYC DOT is also expanding access to curbside level 2 (L2) electric vehicle charging, with a focus on high-density neighborhoods with limited off-street parking, communities where significant numbers of taxi and for-hire vehicle drivers live, and historically disadvantaged communities.

Furthermore, technology is enabling better enforcement, which is critical to effective

management of the curb and addressing conflicts and safety issues between road and sidewalk users. NYC DOT will work with the MTA to implement new state authorization to use enforcement cameras to discourage double parking and blocking of bus stops and bike lanes.

NYC DOT will also test emerging technologies that could make curb access easier and more adaptive to community needs. This could include sensors or cameras that provide data on what is happening at the curb, enabling better decision-making on programming and regulating the curb based on how it is being used. Technology could also allow curb regulations to be adjusted more quickly in response to data collected, allowing more flexibility with less fixed hardware. NYC DOT will make sure that any new program can work reliably and cost effectively while continuing to be at the forefront of new technology.



Price on-street parking to increase commercial activity

Pricing parking closer to market rates, including through dynamic pricing based on demand can improve turnover, especially in commercial districts. Since the last major change to metered parking rates in 2018, increased demand has heightened the need to turnover parking spaces quicker and ensure that rate zones reflect current transportation and land use patterns. NYC DOT will expand the use of parking meters in high demands areas and commercial neighborhoods. NYC DOT will also develop pricing mechanisms to support policy goals such as safety and sustainability and will create a demand-based pricing pilot, including

testing technology that adjusts rates in real-time based on demand and time of day, as well as other national best practices. Finally, in collaboration with the NYC Department of Finance, NYC DOT will improve fine structures for curb violations to make enforcement of the curb more effective. Use of reserved curb space for specific agencies and organizations will be re-evaluated to ensure that space is being allocated fairly and efficiently.



Charge non-transportation users of curb space

The curb lane is often occupied by private uses unrelated to mobility, safety, or public space. Pricing is an important tool to discourage unnecessary or excessive use of public space. NYC DOT currently oversees construction permits for use of curb space and to date has only charged a small administrative fee. To disincentivize excessive use of curb space and to minimize community impact, NYC DOT will develop a framework to charge for street occupancy in metered spaces. It will also seek state authorization to charge in non-metered spaces. NYC DOT will also roll out a citywide permanent outdoor dining program that allows restaurants to use the roadway for set per square foot fees based on geography and will charge the equivalent metered parking rate for construction occupancy of metered spaces, which currently requires only a small permit fee that does not account for the loss of revenue and does not incentivize the occupant to minimize the duration of the occupation.

Case Studies

Seattle

To gain a better understanding of national and international curb management practices, NYC DOT took an in-depth look at some of the programs and pilot projects of many cities, including interviews and conversations with agency leaders and staff.

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Seattle Department of Transportation tting Around Permits and Services



nporary No Parking Permits

Seattle

Seattle Department of Transportation (SDOT) manages a comprehensive set of policies and programs to price the occupation of curb space. An online calculator allows the public to get estimates of daily fees for permits to block sections of the right-ofway, and interactive maps provide information on street classifications and active temporary no-parking zones.

CURB MANAGEMENT **STRATEGY**



San Francisco

The San Francisco Municipal Transportation Agency (SFMTA) published a Curb Management Strategy in February 2020. The Strategy is intended to provide a toolbox for planners working on street design and to better communicate curb management practices to the public.

Pick-up/Drop-off (PUDO) Zone Pilot



- 1. 14th and U Streets NW (1900-2000 biks of 14th Street)
- The Wharf (700-900 bils of Maine Ave. SW)
 Georgetown (1200 bils of Wisconsin Ave. NW)
- NoMa/Union Market (1200 blk of 6th Street NE) 5. National Zoo (2900 blk of Connecticut Av
- Mt. Vernon Triangle (400 blk of K Street NW)
- Golden Triangle BID/I (1100 blk of 19th Street NW)
- 8. The White House (1400 blk of New York Av
- 1776 F Street NW* 10. The Yards (1200 bik 1" Street SE)



Washington, DC

District Department of Transportation (DDOT) piloted the use of pickup/ drop-off (PUDO) zones to manage increased demand for for-hire vehicles and ran another curb management pilot in 2019, establishing reservable commercial loading zones.



Philadelphia

The city of Philadelphia has embraced new technologies to manage the use of its most in-demand curb space. The ongoing Smart Loading Zones pilot has established reservable loading zones in busy areas of Center City. The city has also considered further steps to digitize their curbs.

London



Southwark

The borough of Southwark developed *curb management policies*—including better management of freight and deliveries and trials of new technologies.



Lambeth

Lambeth

The borough of Lambeth recently released a **Kerbside Strategy**, which establishes a set of priorities around which the borough will reallocate at least 25% of curb space currently used for parking.

Toronto

Toronto published a **Curb Management Strategy** in November 2017. Like San Francisco, Toronto's plan establishes priorities for curb usage by corridor typology.



Paris

Paris offers an **interactive online map** of all loading zones in the city, with information about and street-view photography of each loading zone.

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Looking Ahead

An efficient, well-functioning curb lane is essential to the quality of life, health, safety, and economic vitality of New York City. This plan supports the goals set out in *Making New York Work for Everyone* and *PlaNYC: Getting Sustainability Done*, and brings the city closer to its vision to improve the functionality and performance of the curb for a diversity of users and uses. NYC DOT is actively working to implement the actions outlined in this plan and will continue to explore innovative ways to better manage the curb.







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