



Microhubs Pilot – Journey to Launch

NYMTC Brown Bag with Catherine Ponte

June 10, 2025



Overview

1. Context
2. RFEI & Microhubs Pilot Goals
3. Defining Microhubs
4. Legislative & Strategic Coordination
5. Launch
6. Pilot Management & Next Steps





**2021 – Passage of
NYC Local Law 166**

Context

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Consumer & Freight Trends

Increasing freight movement is driven by consumer demand.

- Over 80% of New Yorkers received a package at home in the last 7 days, 18% received packages on 4 or more days
- Pre-COVID-19, 60% of the deliveries were made to commercial customers and 40% to residential customers.
- Approximately 80% of deliveries are now going directly to residential customers
- Trucks conduct 90% of freight deliveries in NYC, leading to impacts on air quality, traffic, quality of life, and safety; disproportionately impacting environmental justice communities



DOT aims to improve infrastructure for the safe, equitable, efficient, and responsible movement of goods.

Local Distribution

Local distribution is consuming street, curb, and sidewalk space.



On-street sorting and transloading of deliveries impact the safety of the operators.



Double parking and haphazard delivery staging in the parking lane impact road users and impede mobility.



Growing demand for deliveries increases truck circulation across neighborhoods, contributing to increased traffic congestion and concerns about poor air quality and safety.

Microhubs are a critical part of the City's comprehensive freight strategy



The City is committed to encouraging greener and more efficient truck deliveries, increasing the share of goods moved by water, rail, and cargo bicycles while supporting innovative practices.

- **Delivering Green:** Lays out five bold steps the City will take to fundamentally restructure freight distribution and create a sustainable system for getting goods where they need to go.
- **Delivering New York:** DOT's blueprint to advance our vision of a safe, sustainable, equitable, and efficient "last-mile" freight delivery system.
- **NYC Streets Plan:** DOT's five-year transportation plan outlines steps to improve the safety, accessibility, and quality of the City's streets for all New Yorkers, prioritizing areas that need the most investment.



Local Law 166 (2021)

Bill to support micro-distribution centers (microhubs) for distributing goods via sustainable modes

- The bill required the Department of Transportation (DOT) **to issue a request for expressions of interest (RFEI)** from entities interested in facilitating, operating, or using micro-distribution centers and to seek feedback on potential challenges and opportunities.
- This legislation became effective on December 24, 2021, and required NYC DOT to **publish a report on findings** and **establish a pilot program** (“Pilot”) to support micro-distribution centers within the boroughs of New York City.



Microhubs Pilot in Context



Microhub pilots are in early phases worldwide

- Many examples have been in operation for less than 5 years
- Participation rates and success often tied to enforcement capacity



Pilots primarily meant to foster a change that promotes sustainability and congestion reduction

- Measured by observed double parking reductions and delivery reliability, and CO2 and air pollution reductions
- Part of government and private sector greening initiatives



Revenue generation was not a key factor in pilot design

- Operations typically were cost neutral or subsidized
- Pricing followed market rates for parking space or area leases



RFEI Findings & Microhubs Pilot Design

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Microhubs RFEI Response Summary

Respondents described desired characteristics for microhub models

23 respondents submitted complete or partial responses, out of which:



11 Freight Operators
Carriers or supply chain management companies



10 Stakeholders
Technology, vehicle, or infrastructure providers



2 Community Partners
Organizations interested in supporting microhub activities

Assessments shared of:

- Transportation system characteristics
- Distribution facilities and their characteristics
- Indoor vs. outdoor benefits and facility ownership

DOT compiled findings and pilot recommendations into a [Microhub Pilot Recommendations](#) report published in April 2023.

Transportation System Characteristics

Below are some of the characteristics respondents mentioned in their RFEI:

Curb Access

- Dedicated truck parking
- Curb cuts for handcart access



Operator Safety

- Low speed roadway
- Sorting and loading space free from vehicle/pedestrian/bicycle conflicts



Network Access

- Transit access for workers
- Truck route access for incoming freight
- Wide bike lanes to facilitate use by 48" wide cargo bikes/trailers



Pilot Goals



The adoption of microhubs will support:



Greater adoption of sustainable delivery strategies by volume of deliveries switched to decarbonized modes.



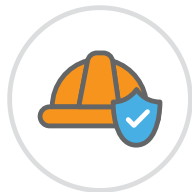
Public safety improvements through the reduction in the roadway (i.e., double parking) and sidewalk obstructions.



Operational efficiencies and cost savings such as reduced congestion delays, toll costs, and fuel costs.



Air quality and noise level improvements from replaced truck trips, reduced truck traffic volumes in congested areas, and reduced truck idle times.



Increased delivery worker **safety**.



Increased programming and amenities promoting desired activity in underused public spaces.

Pilot Framework and Phasing

NYC DOT is launching a phased 3-year pilot to test what makes a successful microhub for NYC. During the two phases, NYC DOT will:

- **Study key elements:** siting criteria, utilization, enforceability, safety/infrastructure, signage/markings
- **Engage stakeholders to** refine pilot locations and design, support more equitable outcomes, expand participation and sites, and help shift toward safer and more sustainable practices

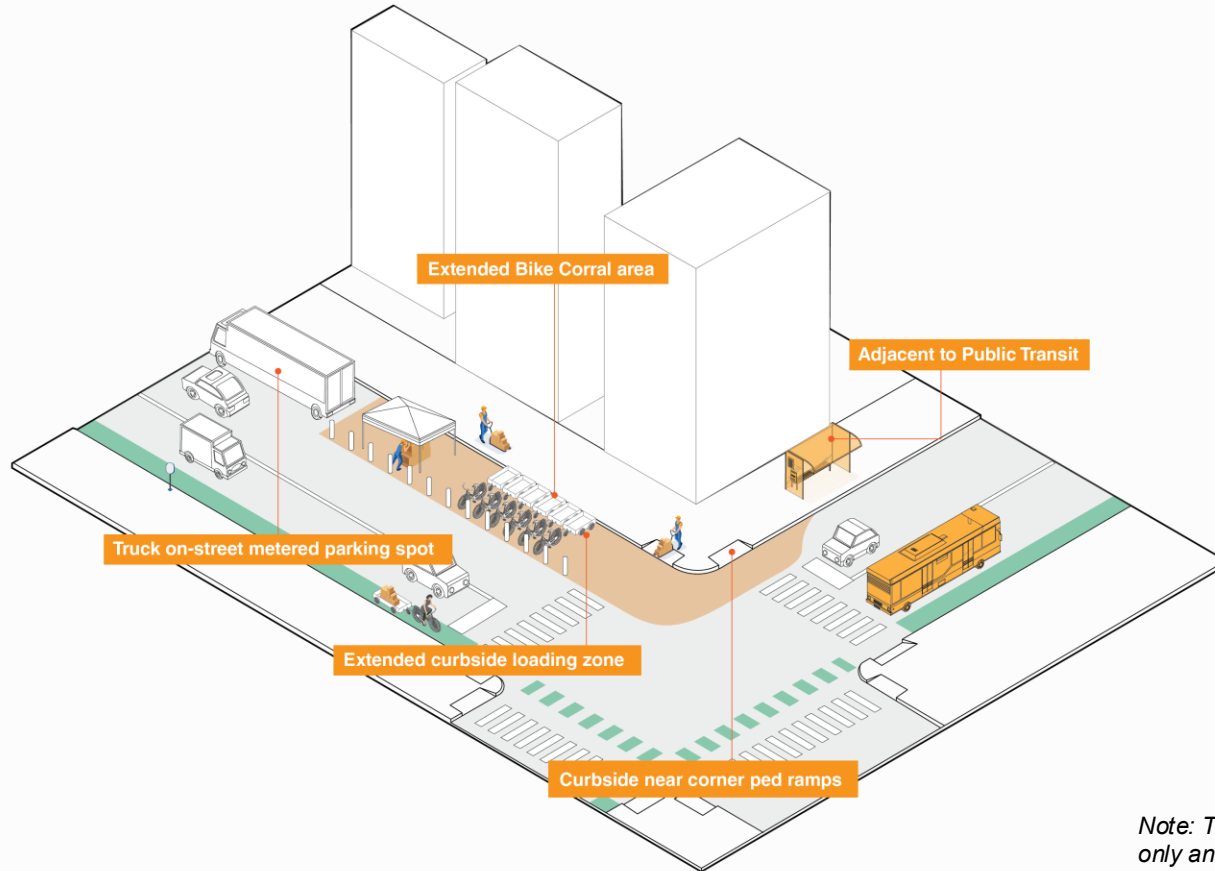
Phase 1 2025

- **Start with a format that is easier to implement and enforce**
 - Aim for 20 pilot microhub sites located throughout NYC
 - Advance rules for curbside microhubs
 - Begin pilot by drawing 8 participants from the RFEI respondents (includes range of small and large delivery companies)
 - Test on-street (curbside) and off-street (under elevated structures) hubs

Phase 2 2026

- **Expand geographic and partner reach**
 - Consider additional microhub amenities and programming opportunities
- **Strategize options** for regulatory changes, incentives and enhanced enforcement
 - Assess technologies to support space sharing, monitoring, and compliance
- **Gather lessons** from pilot to develop a permanent program

Basic Characteristics of On-Street Hub

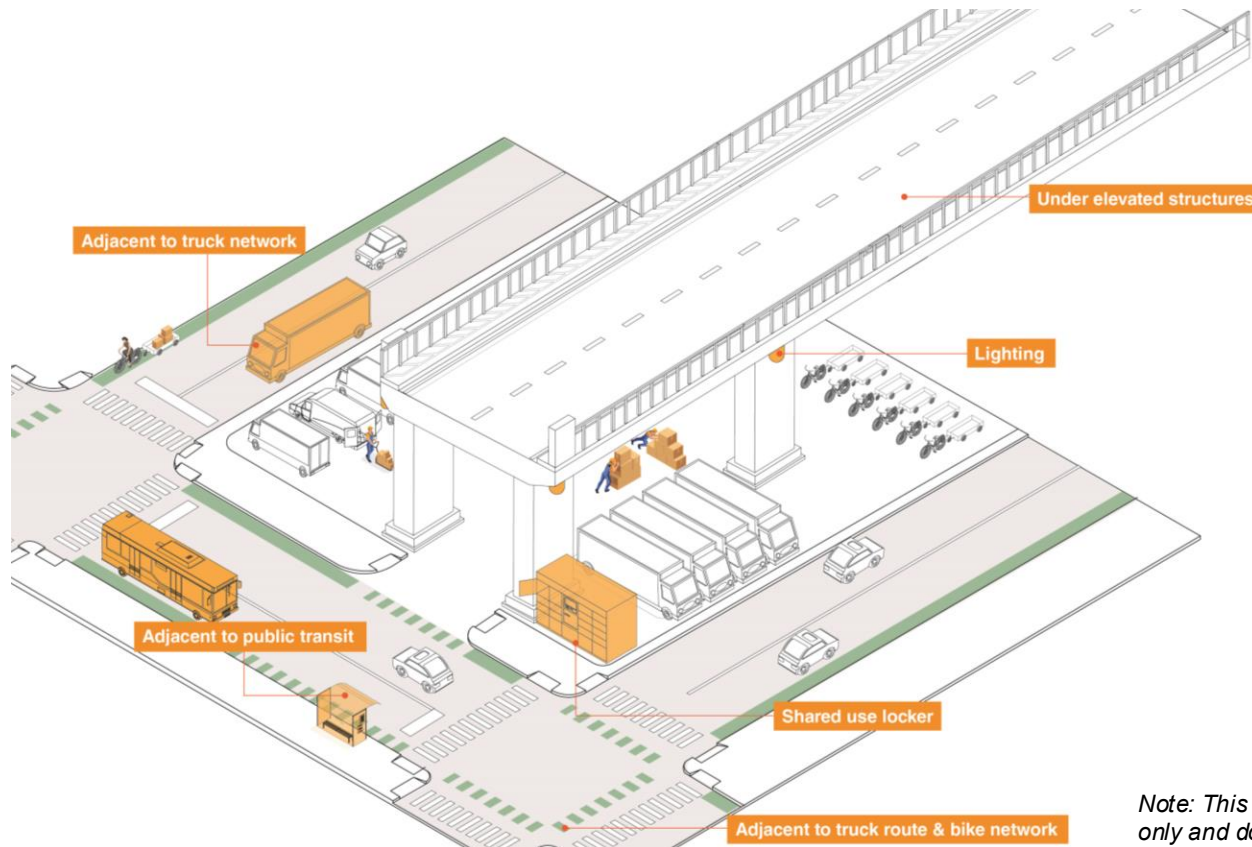


On-Street Hub Features:

- 80-100 feet in length
- Regulatory signage and other markings designating it as a microhub
- Transloading space for package sorting and transfer to electric vehicles, bikes, and walkers
- (Cargo) bike corral
- Upgraded safety barriers (flexible delineators, bollards, armadillos, planters, etc.)

Note: This conceptual image is included for illustrative purposes only and does not reflect the final design of the microhub.

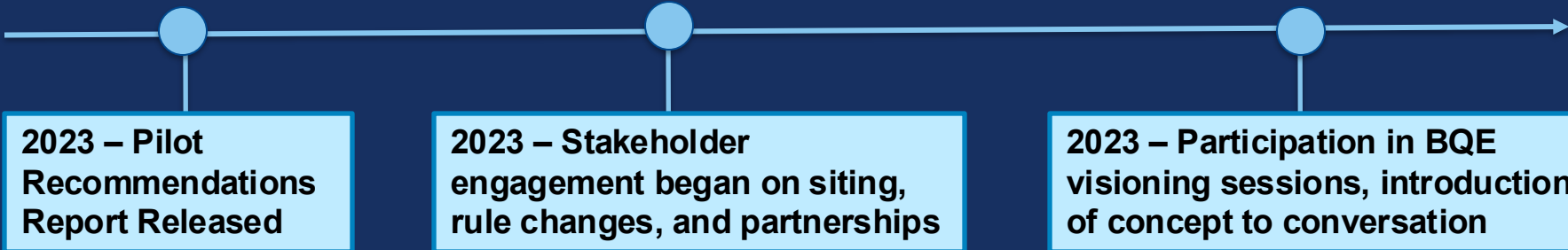
Basic Characteristics of Off-Street Hub



Off-Street Hub Features:

- Variation in size based on site location
- Vehicle and goods storage
- Vehicle repair, maintenance, charging
- Transloading space for package sorting and transfer to electric vehicles, bikes, and walkers
- Weather protection and lighting
- Opportunities for additional amenities and programming

Note: This conceptual image is included for illustrative purposes only and does not reflect the final design of the microhub.



A horizontal timeline with a light blue arrow pointing to the right. Three light blue circles are placed along the timeline, each connected by a vertical line to a light blue rectangular box containing text. The boxes are positioned below the timeline.

**2023 – Pilot
Recommendations
Report Released**

**2023 – Stakeholder
engagement began on siting,
rule changes, and partnerships**

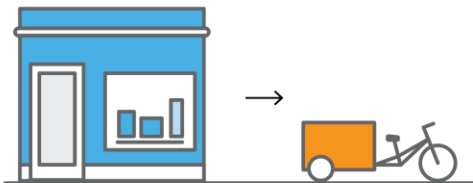
**2023 – Participation in BQE
visioning sessions, introduction
of concept to conversation**

Defining Microhubs

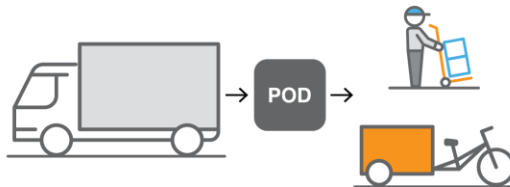
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Microhub Defined

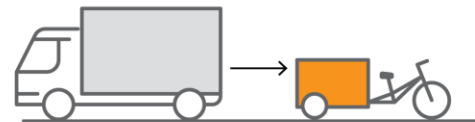
For this pilot NYC DOT is defining a **microhub** as a space located within the public or private right-of-way where goods are transloaded from larger freight vehicles to smaller, low-emission and electric vehicles, or human-powered modes (e.g., cargo cycles, hand carts) for final delivery.



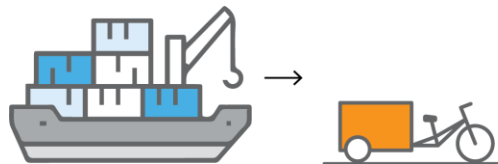
On-demand delivery/retail distribution



Truck-to-pod-to-cargo bike/handcart



Truck-to-bike/trailer



Barge-to-cargo bike



Box truck-to-EV van/sprinter van



Curbside box truck-to-handcart

Collaborative Programming



Microhubs present an opportunity to further test strategies that promote multi-purpose improvements to freight and the public realm in partnership

Commercial Cargo Bikes

Bike Parking Initiatives



Design & Regulations



Blue Highways/ Waterborne Freight



Marine Freight (Blue Highways)



Curb Management/Freight Decarbonization

Curb Access Initiatives



Freight Electrification



Safety & Public Realm Improvements

Better Barriers



Programming Under Elevated Structures



Smart Curbs Coordination

- Smart Curbs implements and evaluates new treatments and regulations to reimagine the curb for improved safety, reduced congestion, more orderly local deliveries, and more.
- Smart Curbs Program and Microhubs Pilot part of broader [Curb Management Action Plan](#), released in September 2023.
- In addition to Smart Curbs Pilot engagement efforts, DOT conducted intercept surveys and merchant surveys in neighborhood to inform public and solidify site locations.
- First three on-street sites included as part of [Smart Curbs on Upper West Side](#).

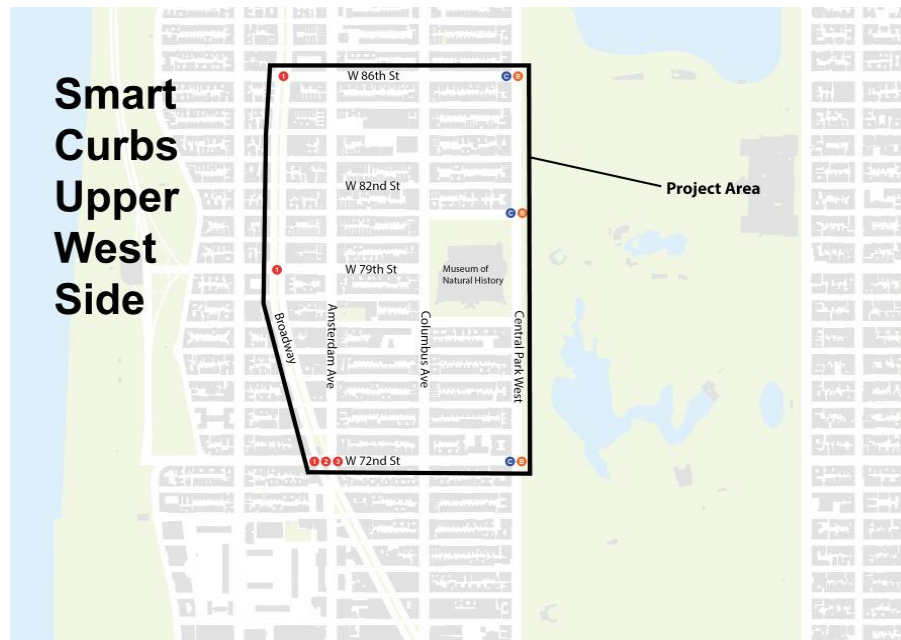
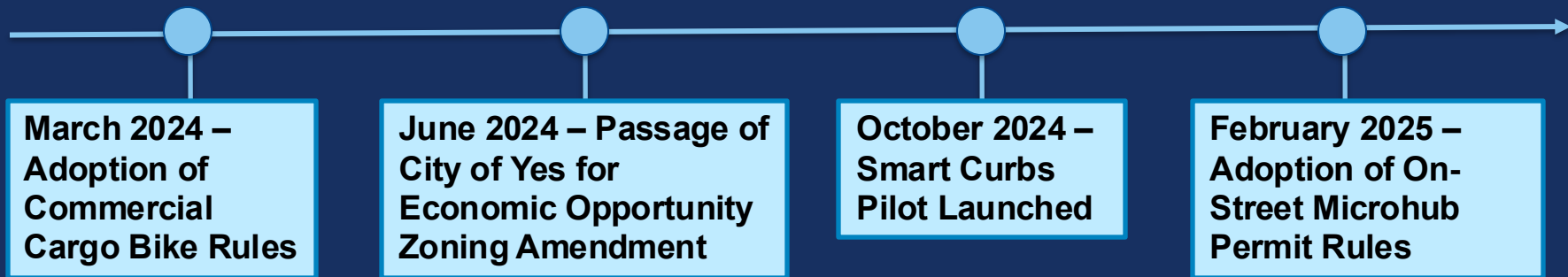


Image: boundaries of Upper West Side Smart Curbs program: W 72 St to the south, Broadway to the west, W 86 St to the north, and Central Park West to the east.



Legislative & Strategic Coordination

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Addressing Challenges

Challenges from RFEI Responses

- High cost of private real estate/space
- Limited availability of dedicated parking
- Conflicts with other street and sidewalk users
- State restrictions on cargo-bike widths (36" limit)
- Limited access to electric vehicle (EV) battery charging
- Limited access to bathrooms for workers
- Concerns and lack of information regarding zoning restrictions

Legislative and Strategic Opportunities

- Use permit and city public space leasing to keep costs accessible
- Create dedicated curbside space using [Carshare Program](#) model to reduce conflicts and support curb access
- Advocate for update to the cargo-bike rules to address current design standards
- Work with FDNY and Con Edison to create opportunities for safe EV charging
- Explore opportunities to co-locate with supportive amenities
- Support zoning amendment to define and expand permissible areas for micro-distribution activities

Commercial Cargo Bike Rules

- In March 2024, DOT advanced [rules to allow larger pedal assist commercial cargo bicycles](#) in NYC
- The new standards provide additional guidance and support for companies wishing to use cutting edge cargo bikes for micro-distribution.

NYC DOT Authorizes the Use of E-Cargo Bikes on City Streets and Establishes Key Safety Standards

New rules allow pedal-assist e-cargo bicycles to operate on-street to make deliveries safer and more sustainable



Image of NYC DOT pedal-assist e-cargo bicycle, "Cargi B"

City of Yes for Economic Opportunity Zoning Amendment



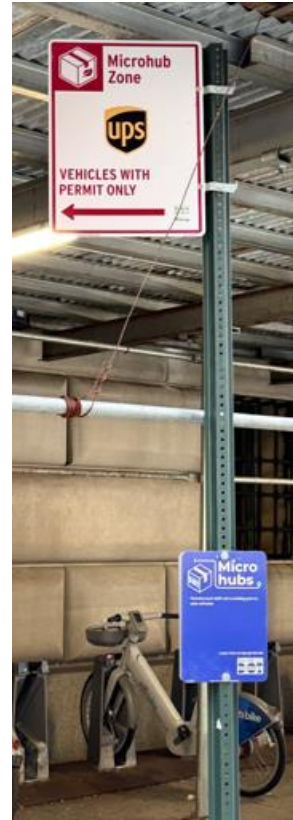
- Adopted June 2024, DCP's [zoning code amendment](#) allows for microhubs in NYC commercial areas to support a shift to sustainable last mile modes.
- Sets allowable square footage of commercial buildings and garages for micro-distribution use based on density of the commercial district.
- Provides a complementary option to our pilot for micro-distribution in private spaces



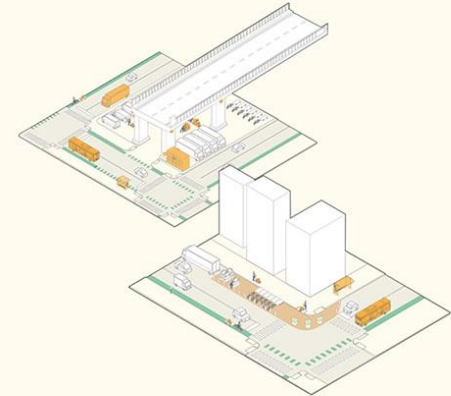
City Traffic Rule Change for On-Street Permit



- January 14, 2025 NYC Traffic Rules change creates permit mechanism for creating and regulating curbside microhub spaces.
- Rules allow DOT to establish [on-street 'microhub zones.'](#) as part of the local delivery hub pilot.
- Each microhub zone is set to be designated to one delivery company for exclusive use via an annual permit.
- Details on permit requirements and roles are discussed in Section 5 of this presentation.



Truck drivers need a dedicated space to transfer packages onto *smaller modes of transportation** for the last leg of deliveries.



*e-cargo bikes, handcarts, & electric sprinter vans.

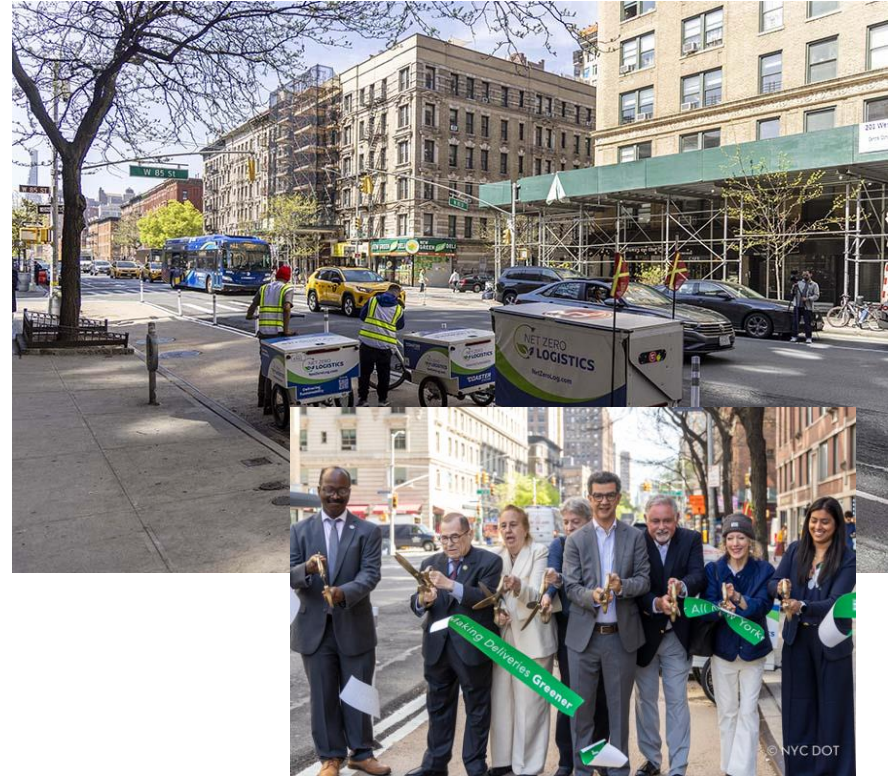


Launch

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Launch on Earth Day

- DOT launched first three on-street microhubs sites on Earth Day, 4/22/25.
- First microhubs located on:
 - Amsterdam Avenue and West 73rd Street;
 - Amsterdam Avenue and West 85th Street, and
 - Broadway and West 77th Street
- Zones offer dedicated space for select delivery companies participating in the pilot program, including Amazon, Net Zero Logistics, and UPS.



DOT's Role



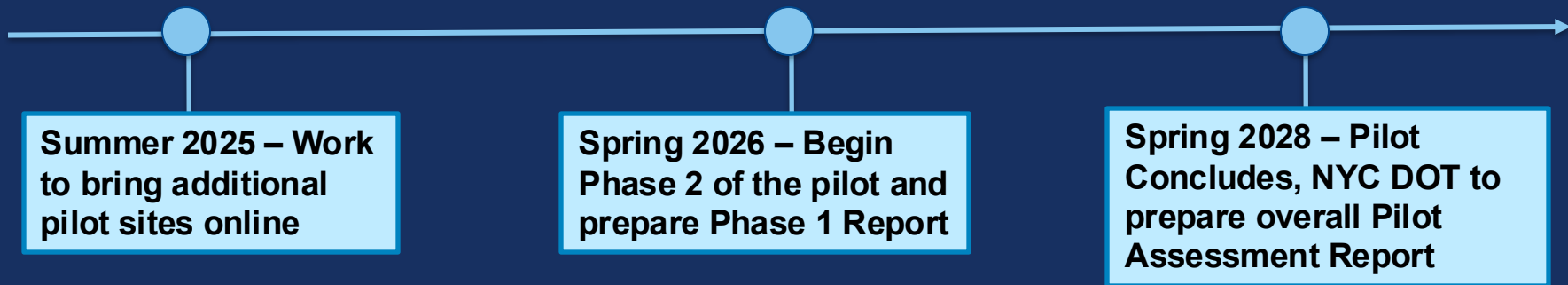
- Vetting and managing pilot participants
- Coordinating the identification and screening of pilot locations
- Developing terms and conditions for participation (details on next slide)
- Providing guidelines for design and circulation
- Coordinating with DCAS and NYPD for licensing and enforcement
- Collecting and analyzing data to track participant activity
- Monitoring benefits/impacts of pilot based on data collected

Key Conditions for Participation



- **Sustainable Mode:** Transfer goods from a commercial vehicle to low-emission or electric commercial vehicles, bicycles, handcarts in the designated microhub zone
- **Sustainable Delivery Radius:** Only deliver goods by a sustainable mode of transportation to final points of delivery located within the delivery radius around the microhub zone
- **Transloading Restriction:** The permit holder must not conduct transloading activity within ½ mile of the microhub zone except at the designated microhub zone
- **Company Name:** Display permit holder's name prominently on each commercial vehicle, low-emission or electric commercial vehicle, bicycle, handcart utilizing a microhub zone
- **Maintenance:** Actively use and maintain the designated microhub zone
- **Data Sharing:** Share and regularly report on data requested by the DOT
- **Notice of Leave:** Provide the DOT with a thirty-day notice if a permit holder decides to discontinue operations at a designated microhub zone

* If the microhub partner breaks the terms of agreement, the City has the ability to revoke their license within 24 hours



Pilot Management and Next Steps

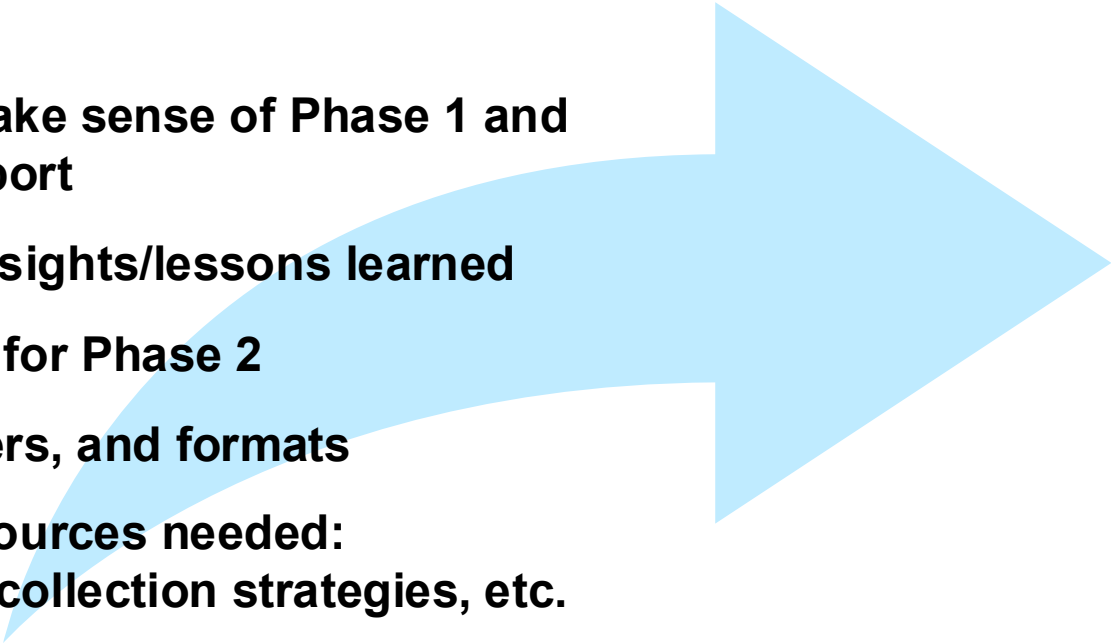
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Where we are now

- **Working through challenges to ensure sites are up and running**
- **Finalizing data sharing agreements, permits, and leases**
- **Waiting on first batch of quarterly data to review (July)**
- **Working with partners on evaluation support**
- **NYMTC's UPWP funded project – gathering lessons learned for others in region**



What's Next

- **Gather analysis to make sense of Phase 1 and complete Phase 1 report**
 - **Report on regional insights/lessons learned**
 - **Planning & Outreach for Phase 2**
 - **New sites, partners, and formats**
 - **Assessing future resources needed: guidebooks, metrics collection strategies, etc.**
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Thank You!



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