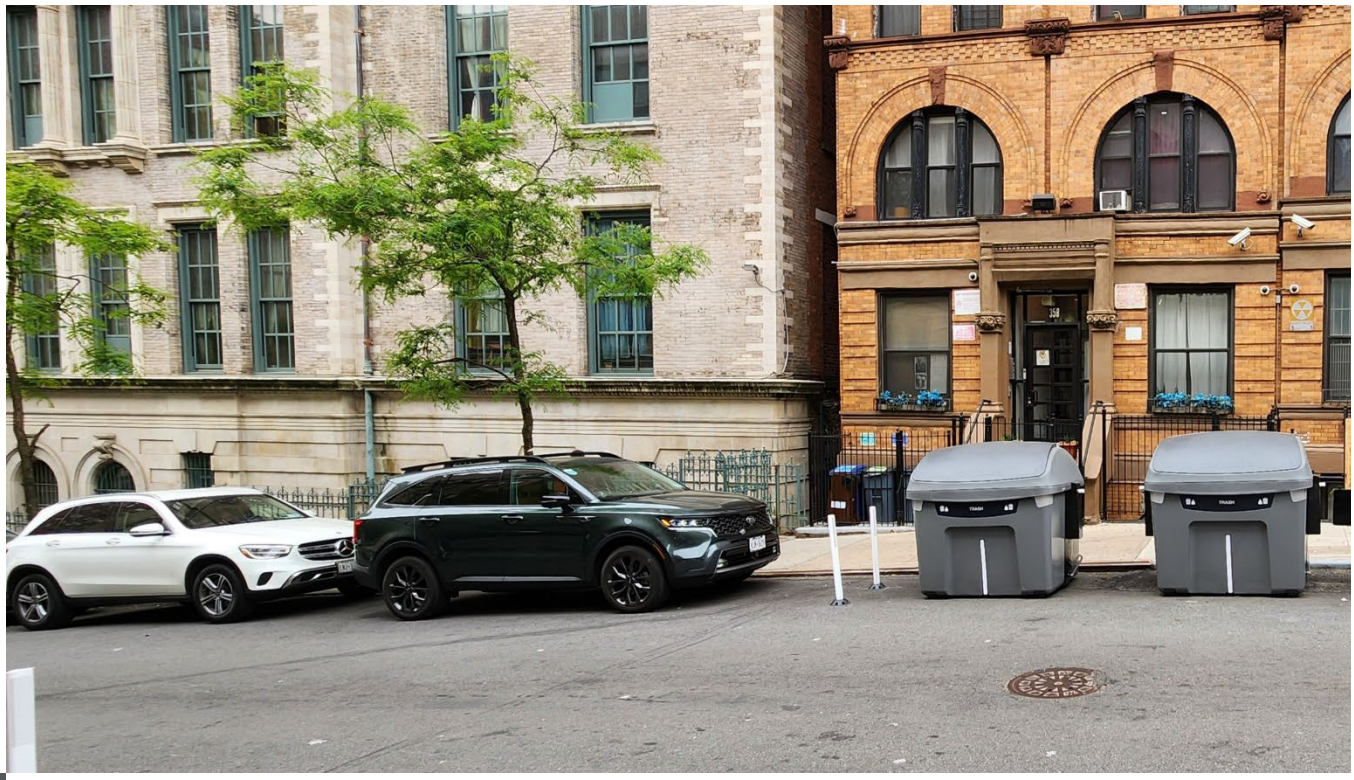

sanitation

Citywide Containerization Program

CEQR No. 25DOS003Y

Draft Environmental Impact Statement

New York City Department of Sanitation

125 Worth Street
New York City, New York 10013

July 1, 2026

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Citywide Containerization Program
Draft Environmental Impact Statement

Project Name:	**Citywide Containerization Program**
CEQR No:	**25DOS003Y**
Lead Agency:	New York City Department of Sanitation 125 Worth Street New York, NY 10013
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Notice of Completion:	July 1, 2026
Public Hearing:	July 28, 2026
Written Comments Accepted Until:	5:00 PM on August 7, 2026

The public hearing will be held from 10:00 AM to 12:00 PM via Microsoft Teams.

Join: https://teams.microsoft.com/meet/219272571493081?p=9Whex9DUHI9nZxy0DJ
Meeting ID: 219 272 571 493 081
Passcode: Ga3j6mG2
Dial in by phone
+1 646-893-7101,,16675825# United States, New York City
Phone conference ID: 166 758 25#

This document is the Draft Environmental Impact Statement for implementation of the proposed Citywide Containerization Program. Copies may be downloaded from DSNY's website at http://www.nyc.gov/site/dsny/collection/containerization.page. Hard copies can be accessed at the designated repository for the environmental review documents: New York City Department of Sanitation, 125 Worth Street, Room 710, New York, NY 10013.

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ACRONYMS AND ABBREVIATIONS

ASL	Automated Side Loader
BID	Business Improvement Districts
CD	Community District
CEQR	City Environmental Quality Review
CH_4	methane
CMP	Coastal Management Program
CO_2	carbon dioxide
CO	carbon monoxide
CRIS	Cultural Resource Information System
CWFS	Citywide Ferry Service
cy	cubic yards
CZMA	Coastal Zone Management Act
DAC	Disadvantaged Community
DACAT	Disadvantaged Community Assessment Tool
dB(A)	A-weighted sound decibel levels
DEIS	Draft Environmental Impact Statement
DOB	New York City Department of Buildings
DOHMH	Department of Health and Mental Hygiene
DSNY	New York City Department of Sanitation
EAS	Environmental Assessment Statement
EIS	Environmental Impact Statement
FHWA	Federal Highway Administration
GHG	Greenhouse Gas
GIS	Geographic Information Systems
GTFS	General Transit Feed Specification
HDDV	Heavy Duty Diesel Vehicle
HDPE	High-Density Polyethylene
HFCs	hydrofluorocarbon
$L_{eq(1)}$	one-hour equivalent-average sound level
LION	Linear Integrated Ordered Network
MD	Midday
MGPC	Metal, glass, plastic, and cartons
MTA	Metropolitan Transportation Authority
$mTCO_2e$/year	annual metric tons of carbon dioxide equivalent
MTS	Marine Transfer Station
MUBS	Multi-Unit Building Survey
N_2O	nitrous oxide
NRHP	National Register of Historic Places

NYCDCP	New York City Department of City Planning
NYCDEP	New York City Department of Environmental Protection
NYCDOT	New York City Department of Transportation
NYCLPC	New York City Landmarks Preservation Commission
NYCPS	New York City Public Schools
NYCT	New York City Transit
ON	Overnight
OPRHP	Office of Parks, Recreation and Historic Preservation
OTI	Office of Technology and Innovation
PATH	Port Authority Trans-Hudson Corporation
PCE	Passenger Car Equivalent
PFCs	perfluorocarbons
PM	Particulate Matter
RCNY	Rules of the City of New York
SEQRA	State Environmental Quality Review Act
SF_6	sulfur hexafluoride
SHPO	New York State Historic Preservation Office
SUV	sport utility vehicle
SWMP	Solid Waste Management Plan
TDF	Transportation Demand Factors
TNM	Traffic Noise Model
VMT	Vehicle Miles Traveled
WRP	Waterfront Revitalization Program

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EXECUTIVE SUMMARY

A. Introduction

The New York City Department of Sanitation (DSNY) is proposing the implementation of a program to containerize waste at certain buildings with residential units throughout the five boroughs of New York City (City) and schools in Manhattan Community District (CD) 09 and Brooklyn CD 02 (Citywide Containerization Program or Proposed Program).

The Proposed Program is intended to address longstanding quality of life and public health issues caused by the enormous volume of plastic-bagged waste placed directly on City sidewalks. These large piles of waste block sidewalks, obstruct pedestrian access, and often spill into the street, creating obstacles for both people and vehicles. Loose plastic bags of waste are easily torn, leading to leaks, generating odors, and attracting vectors (e.g., rats and vermin). When bags rip, their contents become street litter that can enter the City's stormwater collection system and pollute surface waters. In addition, torn plastic bags often pose an increased health and safety risk for sanitation workers, who face line of duty injuries from chemical contaminants, improperly discarded needles, or other hazardous items. Containerizing waste would address these issues and provide more flexibility on timing and space for building waste management. By replacing loose plastic bags with secure, rodent-resistant containers, the City can ensure cleaner sidewalks and streets, safer working conditions, and healthier, more accessible streets in the City.

In order to ensure the successful implementation of the proposed Citywide Containerization Program, the siting and installation of on-street containers would occur in phases, with the next installation taking place in Brooklyn CD 02 and full Citywide implementation anticipated by 2032.

The Proposed Program could result in the placement of up to approximately 66,817 stationary on-street containers in the parking lane, based on various factors including projected participation rates and waste generation. As part of the Proposed Program, buildings with 10 to 30 residential units may choose to set out their refuse at the curb for DSNY collection in rigid receptacles with tight-fitting lids not exceeding 55 gallons in size (individual bins) instead of stationary on-street containers. The Proposed Program has been designed to account for varying building densities and operational needs, and includes conservative assumptions regarding storage capacity and collection frequency.

As lead agency for the required environmental review, DSNY has prepared this Draft Environmental Impact Statement (DEIS) examining the potential for adverse environmental impacts that could result from the Proposed Program, in accordance with the New York State Environmental Quality Review Act (SEQRA) and the City Environmental Quality Review (CEQR) procedures. The entities that were involved in the environmental review and approval process for the Proposed Program are:

- DSNY acting as lead agency for the environmental review for the proposed Citywide Containerization Program implementation
- In consultation with several agencies:
  - New York City Department of Transportation (NYCDOT);
  - New York City Department of Environmental Protection (NYCDEP);
  - New York City Landmarks Preservation Commission (NYCLPC);
  - Metropolitan Transportation Authority (MTA) New York City Transit (NYCT); and
  - New York State Historic Preservation Office (SHPO).

B. Description of the Proposed Action

DSNY has begun to implement its residential waste containerization program to eliminate the accumulation of curbside plastic refuse bags and improve the quality of life in the City. Under DSNY rules, which became effective on November 12, 2024, DSNY initiated implementation of its residential waste containerization program, by requiring buildings Citywide with one to nine residential units and all City agencies to set out their refuse in rigid receptacles with tight fitting lids.[1] Separation of food and yard waste became mandatory for residential properties on April 1, 2025, requiring all residential properties to also containerize food waste in rigid receptacles with tight fitting lids. With these efforts, DSNY has containerized 70% of waste and is working towards containerizing 100% of residential waste through the Proposed Program.

The proposed Citywide Containerization Program would continue the transition of residential waste management from curbside plastic bags to sealed containers across the five boroughs and provide for the remaining 30% of un-containerized residential trash on sidewalks and streets. The Proposed Program would build upon prior studies and a successful pilot in Manhattan CD 09. The Proposed Program would require buildings with 31 or more residential units Citywide to use stationary on-street containers for refuse, while allowing buildings with 10 to 30 residential units Citywide the option to use either stationary on-street containers or individual bins for refuse. Schools in Manhattan CD 09 and Brooklyn CD 02 that receive DSNY collection services would also use stationary on-street containers for all waste streams.

As part of the Proposed Program, certain buildings with residential units utilizing stationary on-street containers would be assigned one or more stationary on-street containers to containerize their waste. These containers would be assigned to a building solely for the use of the assigned building. The stationary on-street containers would be installed in the parking lane in front of or near their respective properties. Access to the stationary on-street containers would be limited to building staff and DSNY via designated access cards. DSNY would work with NYCDOT and/or building superintendent(s) on the specific placement of the stationary on-street containers.

The stationary on-street containers have been designed for minimally invasive installation, high visibility, and ease of use. The body and lids of the proposed stationary on-street containers would consist of high-density polyethylene (HDPE), a durable material with high resistance to impact, chemicals, and weather. Each stationary on-street container would have a capacity of approximately four (4) cubic yards (cy). The stationary on-street container design has a low profile which allows for continued pedestrian visibility of moving vehicles over the container.

For each stationary on-street container, two small alignment blocks would be affixed to the pavement of the parking lane with bolts and anchors to prevent containers from moving. In addition, delineators would be affixed to the pavement on either side of the container(s) to act as a buffer and prevent vehicles from parking too close to the stationary on-street containers. The alignment blocks, bolts, and anchors can be removed by DSNY along with the stationary on-street container to accommodate street milling, paving, maintenance, and/or other types of NYCDOT work or other closures. This modular and mobile infrastructure ensures that stationary on-street containers do not interrupt critical activities taking place on the roadway.

[1] As of June 2026, buildings with one to nine residential units are required to use the Official NYC Bin, equipped with wheels and a secure latching lid. https://www.nyc.gov/site/dsny/collection/containerization/nyc-bin-faq.page

Under the proposed Citywide Containerization Program, DSNY would utilize Automated Side Loader (ASL) collection trucks to collect the waste from the stationary on-street containers, shifting the work from manual to semi-automatic and reducing the risk of harm and injury for sanitation workers. ASL collection trucks have an arm on one side of the collection trucks whereby a sanitation worker operating inside the collection truck can mechanically grab, lift, and empty the stationary on-street containers, while a second sanitation worker stands outside the collection truck to monitor for safety. This will improve safety for sanitation workers handling waste in the City.

The proposed Citywide Containerization Program would potentially result in the placement of up to 66,817 stationary on-street containers, based on various factors, including the number of buildings that would participate in the Proposed Program and the volume of waste that will be stored in the containers assigned to each building. For buildings with 31 or more residential units Citywide and schools in Manhattan CD 09 and Brooklyn CD 02, it is estimated that a total of 49,725 mandatory stationary on-street containers would be needed Citywide to containerize these buildings. For buildings with 10 to 30 residential units, DSNY conservatively estimated that up to two-thirds (66%) of buildings would choose to opt into the Proposed Program and utilize stationary on-street containers instead of individual bins. This estimate is based on the 56% of buildings with 10 to 30 residential units that opted into using on-street containers in the Manhattan CD 09 Pilot Program. Up to 17,092 additional stationary on-street containers may be installed Citywide at buildings with 10 to 30 residential units.

As part of the Proposed Program, buildings with 10 to 30 residential units may choose to set out their refuse at the curb for DSNY collection in individual bins instead of stationary on-street containers. The individual bins would be set out for DSNY collection at the curb in front of or near their respective properties and would be collected manually by sanitation workers using existing standard rear-loader collection trucks.

Buildings with residential units that use individual bins are required to meet DSNY's Rules regarding "Requirements for Receptacles and Bags Containing Solid Waste and Recyclables for Collection" (Section [§] 1-02.1 of Title 16 of the Rules of the City of New York), summarized below:

- Receptacles (Individual bins) must be kept clean and in good repair; and
- If other storage areas on the premises are not available, receptacles may be stored in the area within three feet of the building line on the sidewalk, provided that such receptacles are maintained in an orderly manner and do not impede or obstruct pedestrian flow on the sidewalk.

C. Purpose and Need

In October 2022, DSNY kicked off the "Trash Revolution," the Citywide effort to move millions of pounds of trash per day from black plastic bags on the sidewalk to rat-resistant, closed containers. This undertaking has led to record-breaking reductions in rat sightings in Manhattan CD 09 since the start of the Pilot Program. As part of the "Trash Revolution," the City has committed to moving 100% of plastic refuse bags off City streets.

The use of stationary on-street containers and individual bins for waste disposal would allow DSNY to support the City's commitment to street cleanliness and reducing potential food sources for vectors (e.g., rats and vermin). The Proposed Program seeks to improve waste management practices in the City to ensure safe and efficient waste collection, while improving neighborhood character and street-side aesthetics in the City.

The Proposed Program would provide the following benefits:

- Eliminate the curbside placement of plastic bags containing refuse;
- Reduce potential food sources and/or attractants for rats and other vectors;
- Reduce litter, odor, loss of liquids, and the potential contamination of stormwater runoff associated with plastic bags and the loss of materials from these;
- Reduce pedestrian and curbside obstructions;
- Contribute to improved public health;
- Reduce workplace injuries; and
- Provide an overall improvement in street cleanliness and neighborhood aesthetics.

These changes align with other City initiatives to increase the use of containers for waste storage and collection, and create cleaner, more livable, and more vibrant streets and neighborhoods across the City.

D. Analytical Framework

In accordance with the process described in SEQRA and CEQR, DSNY, as lead agency, is required to examine the potential for environmental impacts that could occur as a result of the proposed Citywide Containerization Program and, to the maximum extent practicable, avoid or mitigate potentially significant adverse environmental impacts, consistent with social, economic, environmental and other essential considerations. The *2025 CEQR Technical Manual* provides suggested methodologies and guidance for conducting environmental assessments performed under CEQR. The impact analysis methodologies presented in the *CEQR Technical Manual* were applied to the proposed Citywide Containerization Program.

Build Year

The build year refers to the year when the full effects of the Proposed Program would occur. The proposed Citywide Containerization Program would be implemented in phases, with full implementation by June 1, 2032. For the assessment of potential impacts of the proposed Citywide Containerization Program, the analysis period is based upon the year 2032.

Baseline Existing Conditions

The analysis framework begins with an assessment of existing conditions. The assessment of existing conditions does not represent the condition against which the Proposed Program is measured but serves as the starting point for the projection of future conditions with and without the Proposed Program and the analysis of potential impacts due to the Proposed Program.

Future without the Proposed Program (No Action Condition)

The Future without the Proposed Program (the No Action condition) assessment describes a future baseline condition to which the changes that are expected to result from the Proposed Program are compared. This DEIS accounts for all known projects impacting the curb through the Build Year (2032) in the Future without the Proposed Program.

Probable Impacts of the Proposed Program (Future with the Proposed Program Condition)

The identification of potential environmental impacts is based upon the comparison of the No Action condition to the Future with the Proposed Program condition. In certain CEQR technical areas, this comparison can be quantified, and the nature of these impacts can be assessed in accordance with the *CEQR Technical Manual*. In other CEQR technical areas, the analysis is qualitative in nature. The methodology for each analysis is presented at the start of each technical area.

Analytical Approach

CEQR allows for a focused environmental review. A review was conducted for each CEQR technical area in order to determine which CEQR technical areas warranted further analysis.

The environmental review focuses on those CEQR technical areas that have the potential to be affected by the Proposed Program, including: Public Policy, Socioeconomic Conditions, Historic and Cultural Resources, Urban Design and Visual Resources, Solid Waste and Sanitation Services, Transportation, Air Quality, Greenhouse Gas (GHG) Emissions and Climate Change, Noise, Public Health, Neighborhood Character, and Effects on Disadvantaged Communities.

The following CEQR technical areas screen out or are not applicable and therefore do not warrant further assessment under the *CEQR Technical Manual*: Land Use and Zoning, Community Facilities and Services, Open Space, Shadows, Natural Resources, Hazardous Materials, Water and Sewer Infrastructure, Energy, and Construction.

E. Probable Impacts of the Proposed Action

Based on the analyses conducted and described within the DEIS (summarized below), the proposed Citywide Containerization Program would not result in significant adverse impacts, but would instead result in a benefit to City residents, sanitation workers, and visitors.

Public Policy

The proposed Citywide Containerization Program was evaluated for potential public policy implications and compliance with and potential effects on existing applicable public policies, including the City's Solid Waste Management Plan (SWMP), PlaNYC: Getting Sustainability Done, the New York City Streets Plan (Streets Plan), the Curb Management Action Plan, and Vision Zero. Since the Proposed Program would be located within Coastal Zone areas designated by New York State (State) and the City, an assessment of the Proposed Program's consistency with the New York City Waterfront Revitalization Program (WRP) is included.

The Proposed Program would support and advance these City policies and plans without resulting in significant adverse impacts. The assessment finds that replacing curbside refuse bags with sealed containers would improve street cleanliness, reduce vector (e.g., rats and vermin) activity, enhance pedestrian mobility, and improve public health—outcomes that align with major initiatives such as the SWMP, PlaNYC, the Streets Plan, the Curb Management Action Plan, and Vision Zero. The Proposed Program also supports broader sustainability and environmental objectives by reducing litter, odors, and stormwater contamination, while making more efficient use of curb space. In addition, the assessment determines that the Proposed Program would be consistent with the WRP, as it would

not adversely affect coastal resources and would improve waste management practices in waterfront areas. Overall, the Proposed Program is compatible with established public policies and would provide meaningful quality-of-life and environmental benefits Citywide.

Socioeconomic Conditions

Pursuant to the *CEQR Technical Manual*, the socioeconomic character of an area includes its population, housing, and economic activity. The socioeconomic conditions assessment considers how a proposed action may affect an area's residents and businesses. The Proposed Program would not directly displace any residents or businesses and would generally produce beneficial effects, such as cleaner streets, improved pedestrian conditions, and reduced vectors (e.g., rats and vermin). Because the Proposed Program primarily focuses on waste containerization, the assessment focused on potential indirect effects to socioeconomic conditions. Specifically, the assessment examined the potential cost impacts for those residents and business customers choosing to pay for off-street parking due to the reduction of on-street parking resulting from the placement of stationary on-street containers in the parking lane. Based on the assessment, these changes would not result in significant adverse socioeconomic impacts due to the Proposed Program.

Historic and Cultural Resources

An assessment was performed to determine if the Proposed Program would lead to significant adverse impacts to historic and cultural resources including archaeological (buried) resources and architectural (historic standing structure) resources. The assessment considered the Proposed Program's potential effects on designated City historic districts or on publicly accessible views, as identified in the State Office of Parks, Recreation and Historic Preservation's (OPRHP) Cultural Resource Information System (CRIS) database and NYCLPC.

Individual bins would be stored within their respective properties (i.e., rear yards, or within three feet of the building line). The stationary on-street containers and individual bins would neatly organize waste awaiting DSNY collection and maintain sidewalk access, compared to mounds of plastic bags of refuse set out at the curb. While the presence of stationary on-street containers and individual bins would be visible in front of individual historic and cultural resources, in the same way that plastic bags currently set out on the curb are, their use would offer a more orderly, uniform presence as compared to the current system. In addition, the stationary on-street containers and individual bins are free-standing and therefore offer no permanent or physical impacts to the resources themselves. Stationary on-street containers and individual bins would not be placed in front of public parks, public art, or monuments, whether located within or outside the boundary of an NRHP-listed or eligible historic district. Therefore, the potential effects of the Proposed Program are limited to minor changes in the visual setting of historic districts, as containers and individual bins would be visible in streets and along sidewalks. However, these elements would be comparable in scale to parked vehicles and would not block views, alter visual prominence, or introduce shadows.

In most cases, the placement of the stationary on-street containers would result in minor modifications to the street surface for the placement of the alignment blocks. However, in cases where streets are historic cobblestone or brick, whether located within or outside the boundary of an NRHP-listed or eligible historic district, the installation of the stationary on-street containers would be performed without attachment to the street.

Overall, the Proposed Program would not result in significant adverse impacts to historic or cultural resources and would enhance the cleanliness and accessibility of historic districts Citywide.

Urban Design and Visual Resources

An urban design and visual resources assessment was performed to determine whether and how the proposed Citywide Containerization Program may change the experience of pedestrians throughout the City and the Proposed Program's potential to alter the arrangement, appearance and functionality of the built and natural environment in the City. The preliminary assessment concluded that the Proposed Program would not result in any significant adverse impacts to urban design or visual resources. Current conditions - characterized by large volumes of plastic waste bags set along the curb - negatively affect the pedestrian experience by blocking sidewalks, creating odors, attracting vectors (e.g., rats and vermin), and degrading the visual quality of streetscapes. The existing system disrupts views, limits accessibility, and diminishes the overall aesthetic and functional quality of public spaces Citywide.

Under the Proposed Program, waste would be stored in stationary on-street containers placed in parking lanes or in individual bins along sidewalks, improving cleanliness, reducing odors and litter, and enhancing pedestrian movement and visual conditions. The stationary on-street containers are designed to be similar in scale to parked vehicles, ensuring they do not obstruct views or alter the visual character of neighborhoods. Any change to the pedestrian experience at the street level due to stationary on-street containers and individual bins would be minimal and would not disturb the vitality, walkability, or visual character of the area. Additionally, as noted above, no containers would be placed in front of any public parks, public art, or monuments and individual bins would not impede or obstruct pedestrian flow on the sidewalk. The Proposed Program would create a more hygienic, harmonious, and aesthetically pleasing experience for pedestrians.

Solid Waste and Sanitation Services

The proposed Citywide Containerization Program would not result in any increase in solid waste generation that would overburden available waste management capacity, nor would it increase the total tonnage of waste handled by the City. DSNY would use the same currently permitted facilities to dispose of the collected waste. Therefore, no effect on any existing regulated solid waste management facilities is anticipated. The Proposed Program would change the type of receptacles in which certain buildings with residential units Citywide and schools in Manhattan CD 09 and Brooklyn CD 02 place their waste. Under the Proposed Program, instead of placing plastic bags of refuse out at the curb for DSNY collection, stationary on-street containers or individual bins would be utilized. The Proposed Program would provide an orderly, more convenient, and cleaner option for waste collection. Instead of large piles of plastic bags of waste on the sidewalk or the building perimeter awaiting collection, the use of stationary on-street containers and individual bins would containerize waste, improving pedestrian access, public health, and neighborhood character.

In addition, the Proposed Program would also result in a safer work environment for sanitation workers. Under the Proposed Program, DSNY would use ASL collection trucks to collect the waste from the stationary on-street containers. This would reduce the need for sanitation workers to repeatedly lift plastic bags of waste throughout their shift and reduce their exposure to potentially hazardous contents of the bags, as well as diseases spread by vectors (e.g., rats and vermin) through their urine, feces, and/or saliva.

The proposed Citywide Containerization Program would be consistent with the current approved SWMP and State policy related to the City's integrated solid waste management system. Therefore, the Proposed Program would not result in any significant adverse impacts to solid waste and sanitation services.

Transportation

The transportation assessment evaluated the extent to which the proposed Citywide Containerization Program would affect traffic, transit, ferry, pedestrian flow and elements, and parking. The transportation assessment was conducted pursuant to the methodologies outlined in the *CEQR Technical Manual* and in coordination with NYCDOT.

Container design and siting are important to transportation and safety. The stationary on-street containers would be placed in parking lanes with buffers and would avoid sensitive curb locations such as bus stops, hydrants, bike lanes, and intersections. Their low-profile design would allow visibility for drivers and pedestrians to be maintained, and placement of the stationary on-street containers would be coordinated with NYCDOT, New York City Public Schools (NYCPS), and/or building superintendents to minimize conflicts with existing essential curb uses.

The proposed stationary on-street containers would require the use of ASL collection trucks to collect waste from these containers and increase the number of collection trucks and employees required to operate them. In addition, the incremental collection trucks would increase the DSNY collection truck trips and employee vehicle trips throughout the City. However, a Citywide traffic screening assessment found that these increases would be dispersed across the City roadways and would not exceed the CEQR traffic screening threshold. Even in the most affected areas near DSNY garage locations (used for collection truck storage) and in-City transfer stations (DSNY and private waste disposal facilities under contract with DSNY), projected peak-hour collection truck and employee vehicle trip increases would remain below the CEQR traffic threshold. Therefore, a detailed traffic analysis was not warranted and no significant traffic impacts are anticipated due to the Proposed Program.

Operational factors, such as temporary parking for the incremental DSNY collection trucks and employee vehicles, were also considered. While some additional collection trucks and employee vehicles may use on-street parking spaces near DSNY garage locations, staggered work shifts and the location of many facilities in lower parking-demand industrial and manufacturing areas limit the effects on residential communities. As a result, these operational needs are not expected to significantly affect surrounding neighborhoods.

The central focus of the transportation assessment consisted of the potential effects to on-street parking loss, as the stationary on-street containers would permanently occupy curb space currently used for on-street parking. A detailed analysis was performed which estimates that the City currently has approximately 39.2 million linear feet of curb space available for on-street parking, equivalent to about 1.96 million parking spaces.[2] The Proposed Program would require approximately 66,817 containers, using roughly 595,677 linear feet of curb space, or approximately 29,842 parking spaces—only about 1.52% of the Citywide on-street parking spaces. As a result, more than 98% of parking would remain available Citywide.

The effects to on-street parking due to the Proposed Program would vary by borough, with Manhattan expected to experience the highest proportional reduction (about 6.4%) and Staten Island the lowest (around 0.1%). At the CD level, most areas would see relatively small on-street parking space losses though some residentially dense Manhattan CDs could lose approximately 10% of on-street parking spaces. CDs consisting primarily of single-family homes, buildings with one to nine residential units, or industrial/manufacturing areas would experience minimal loss of on-street parking

[2] As per the *CEQR Technical Manual*, a parking space is 20 linear feet.

spaces due to the Proposed Program. On average, Manhattan CDs could lose up to approximately 6% of on-street parking spaces, Bronx CDs could lose up to approximately 3% of on-street parking spaces, Brooklyn CDs could lose just under 2%, Queens CDs could lose under 1%, and Staten Island CDs could lose up to approximately 0.1%. The analysis concludes that these reductions would not create significant parking shortages, particularly given widespread access to transit, other transportation alternatives, and off-street parking facilities.

The *CEQR Technical Manual* calls for a parking utilization analysis to determine what effect a proposed project may have on parking resources in a study area. A parking utilization analysis measures the usage of parking spaces over a study period to understand the parking supply (capacity) and demand. However, due to the City's expansive network of public roads, a detailed Citywide parking utilization analysis is not feasible. Therefore, to better understand localized effects, a detailed parking utilization analysis was performed for five representative "prototypical areas" across the City, one per borough. The results of these prototypical area parking utilization analyses were used to further understand the potential effects of the Proposed Program on the Citywide on-street parking supply.

Parking surveys conducted during four 2-hour peak periods show that existing on-street parking demand is high—often with 80 to 97% utilization of the existing on-street legal parking spaces—but still includes some available capacity. In certain dense areas, temporary on-street parking shortfalls may occur in the Future with the Proposed Program within a 0.25-mile radius, especially during peak times. However, when the analysis expands to a broader 0.5-mile radius, incorporating both on-street and off-street parking, there would be sufficient parking available despite the loss of parking spaces due to the Proposed Program, demonstrating that sufficient parking would remain within a reasonable walking distance. In addition, residentially dense areas generally have strong transit access, reducing reliance on private vehicles.

In addition, the loss of parking spaces has the potential to result in some people choosing to use other modes of transportation including subway/rail, buses, or ferries, where available. Therefore, transit (subway/rail and bus), ferry and pedestrian screening assessments were performed, and results show that exceedances of the applicable CEQR screening thresholds would not occur. While some mode shift from driving to transit could occur due to reductions in on-street parking availability, estimated increases in transit riders—such as up to nine incremental peak hour passengers along a single bus route, 28 incremental peak hour subway passengers per line, and 153 incremental peak hour passengers per subway station— would remain well below CEQR screening thresholds. Incremental ferry and pedestrian trips would also stay below CEQR screening thresholds, indicating that detailed analyses are not warranted and no significant adverse impacts on transit systems or pedestrian circulation are anticipated due to the Proposed Program.

Overall, the transportation assessment concluded that the proposed Citywide Containerization Program would not result in significant adverse impacts to traffic, transit, ferry, or pedestrian conditions. While the Proposed Program would reduce some on-street parking, the loss is relatively small and offset by remaining capacity, off-street parking, transit access, and walkable alternatives.

Air Quality

The air quality evaluation for the Proposed Program focused on mobile noise sources from additional DSNY collection trucks and employee vehicles. Pursuant to the *CEQR Technical Manual*, the assessment applied a two-step process: an initial screening-level assessment for carbon monoxide (CO) and fine particulate matter ($PM_{2.5}$) at locations expected to experience the highest

increases in collection truck and employee vehicle activity, followed by detailed modeling at sites that exceed screening thresholds. The screening assessment results show that projected increases would remain well below established CEQR screening thresholds for CO and would not exceed CEQR screening thresholds for $PM_{2.5}$. As a result, no detailed dispersion modeling was required. Therefore, the Proposed Program would not result in significant adverse air quality impacts. In addition, DSNY's fleet already meets stringent federal emissions standards and uses cleaner technologies, including renewable diesel fuel, which significantly reduces GHG emissions compared to conventional diesel.

Greenhouse Gas Emissions and Climate Change

The GHG emissions and climate change implications of the Proposed Program were evaluated. The Proposed Program would not affect transit-oriented development, energy systems, buildings or sustainable transportation. However, the Proposed Program would result in an increase in vehicle miles traveled (VMT) due to additional DSNY collection trucks and employee vehicle trips. These increases are estimated to generate approximately 5,267 metric tons of carbon dioxide equivalent (CO_2e) annually[3] once the Proposed Program is fully implemented. Per the *CEQR Technical Manual,* mobile sources only constitute approximately 22% of the City's total GHG emissions. While the Proposed Program would add mobile sources of GHG emissions, the resulting increase would be relatively small compared to the City's total GHG emissions. Also, DSNY's entire collection fleet is equipped with the best available retrofit technology to maximize emissions reduction.

The Proposed Program would be consistent with the applicable City GHG emissions reduction goals and would not change or be in conflict with any of the existing City, State, and federal protections related to flood resiliency and climate change, and therefore, not resulting in significant adverse impacts related to GHG emissions or climate change.

Noise

The noise evaluation for the Proposed Program focused on mobile noise sources from additional DSNY collection trucks and employee vehicles. Pursuant to the *CEQR Technical Manual*, the noise assessment applied a two-step process: an initial screening to identify locations where vehicle-related noise could increase significantly, followed by detailed modeling at sites that exceed screening thresholds. The screening assessment identified a limited number of roadway segments near DSNY garage locations and DSNY and private waste disposal facilities where incremental DSNY collection trucks and employee vehicle trips could potentially increase noise levels by three (3) A-weighted sound decibel levels [dB(A)] or more, warranting a detailed mobile noise analysis.

The detailed mobile noise analysis found that although the Proposed Program would introduce incremental vehicle traffic, the resulting increases in noise levels would be minimal—approximately one (1) dB(A) or less—and well below CEQR significance thresholds. Therefore, the proposed Citywide Containerization Program would not result in a significant adverse noise impact.

Public Health

The public health implications of the proposed Citywide Containerization Program, which would replace curbside plastic garbage bags with sealed stationary on-street containers and individual bins, were assessed. The current waste practices—characterized by large volumes of exposed trash

[3] The GHG emissions estimated for the Proposed Program conservatively used conventional petroleum diesel factors.

bags—create significant health concerns by attracting vectors (e.g., rats and vermin), spreading disease, generating odors, and contributing to environmental contamination. Rodents thrive on accessible waste and can transmit diseases such as leptospirosis and hantavirus, posing risks to both the public and sanitation workers. By enclosing waste in rodent-resistant containers, the Proposed Program would significantly reduce access to food sources for vectors (e.g., rats and vermin), thereby decreasing rodent populations and associated disease transmission.

In addition, the Proposed Program would improve overall cleanliness, reduce odors and contaminated runoff, and enhance quality of life by eliminating leaking trash and sidewalk obstructions. It would also substantially reduce potential sanitation worker health and safety concerns by reducing the manual lifting of heavy bags and limiting exposure to hazardous materials. Overall, the Proposed Program would not result in any significant adverse public health impacts and would instead provide widespread benefits, including reduced disease risks, cleaner streets, improved environmental conditions, and safer working conditions for sanitation workers.

Neighborhood Character

The assessment of neighborhood character relies on the technical analyses presented in other sections of this DEIS, including public policy, socioeconomic conditions, historic and cultural resources, urban design and visual resources, transportation, and noise.

By moving waste from curbside plastic bags to placement within stationary on-street containers or individual bins, there would be a reduction of potential odors, loss of liquids, and litter from ripped or open plastic bags, and improved pedestrian access along sidewalks. The proposed Citywide Containerization Program would not result in significant adverse impacts to public policy, socioeconomic conditions, historic and cultural resources, urban design and visual resources, traffic, transit, pedestrians, or noise. Individual bins are not anticipated to impede or obstruct pedestrian flow on the sidewalk. In addition, the stationary on-street containers would be of similar or lower height than compact sport utility vehicles (SUVs) that currently park in the parking lane. The placement of stationary on-street containers in the parking lane would be consistent with the current functions of the City curb, including the use of curb space for public services, as described in the 2023 NYCDOT Curb Management Action Plan.[4]

In addition, the Proposed Program would not result in a parking shortfall and parking would remain available within a walking distance, although in some areas drivers may need to search for parking within the 0.5-mile radius. Areas affected by the Proposed Program contain one or more alternative modes of transportation, such as subway and/or bus lines.

Therefore, the Proposed Program would not result in any significant adverse impacts to the neighborhood character of the City.

Alternatives

CEQR requires that alternatives to a proposed project or action be identified and evaluated, including a No Action Alternative to present environmental conditions that would exist if the proposed project were not implemented. Although the DEIS has not identified a significant adverse impact from

[4] https://www.nyc.gov/html/dot/downloads/pdf/curb-management-action-plan.pdf

the Proposed Program with respect to any CEQR environmental category, the alternatives evaluated in this DEIS included:

- No Action
- Alternative container types
- Container sharing
- Alternative waste streams to be containerized
- Alternative types of collection trucks

Based on the alternatives assessment, the Proposed Program represents the alternative that best meets DSNY's goals by limiting vector (e.g., rats and vermin) food sources, improving street cleanliness and aesthetics, and supporting safe and efficient collection operations while avoiding the greater potential operational, spatial, and public health drawbacks associated with the alternatives considered.

Effects on Disadvantaged Communities

An assessment of potential impacts of emissions of air pollutants and noise is included in those sections and concluded that the Proposed Program would not result in a significant adverse impact to air quality from mobile sources of CO emissions or mobile sources of particulate matter emissions or to noise-sensitive receptors. While a majority of garages and in-City transfer stations are located within disadvantaged communities (DACs), an assessment of potential impacts of air and noise emissions is included in those sections and concluded that the Proposed Program would not result in a significant adverse impact to air quality from mobile sources of CO emissions, or mobile sources of particulate matter emissions, or noise.

The Proposed Program would provide significant benefit to residents and their quality of life, including those within DACs. Without the Proposed Program, residents would continue to see large piles of trash bags on the street obstructing sidewalks, attracting vectors (e.g., rats and vermin), and leading to overall dirty conditions. These conditions lead to public health and quality of life issues, such as spread of disease through rodents and the smell and sight of waste on the sidewalks and streets, as well as hazards to pedestrians caused by trash bags cluttering sidewalks who must navigate sidewalks cluttered with trash bags. The Proposed Program would advance DSNY's goals for a healthier, safer, and cleaner City by containerizing waste currently in black bags on sidewalks that attract vectors (e.g., rats and vermin).

The Proposed Program would result in an increase in GHG and co-pollutant emissions, number of trucks collecting waste, and number of employees to support the Proposed Program; however, this would be Citywide and would not disproportionally effect DACs. The DSNY fleet uses renewable diesel, which reduces GHG emissions by 40% to 80% when compared to conventional petroleum diesel. Moreover, given the Proposed Program's potential to increase transit ridership, this effect may partially offset the additional mobile source GHG emissions. While the Proposed Program has the potential to increase some types of emissions, it also provides other benefits and is in alignment with both the State's SWMP and the Climate Act. Therefore, as discussed within this DEIS, the proposed Citywide Containerization Program would not result in any unavoidable significant adverse impacts in any of the CEQR technical areas.

Unavoidable Adverse Impacts

Unavoidable significant adverse impacts are defined as those where there are no reasonably practicable mitigation measures to eliminate the impacts; and there are no reasonable alternatives that would meet the purpose and need of the Proposed Program, eliminate the impact, and not cause other or similar significant adverse impacts.

The proposed Citywide Containerization Program would not result in any unavoidable significant adverse impacts in any of the CEQR technical areas.

Growth-Inducing Aspects of the Proposed Program

The Proposed Program would not add substantial new land use, new residents or significant employment that could induce additional development, nor would the Proposed Program introduce or expand infrastructure capacity.

Irreversible and Irretrievable Commitment of Resources

The benefits of the Proposed Program outweigh the short-term, minor increase in the commitment of resources during the implementation of the Proposed Program for the manufacturing of stationary on-street containers, individual bins, and ASL collection trucks. The Proposed Program would improve street cleanliness, reduce vector activity, enhance pedestrian mobility, and improve public health—outcomes that align with major initiatives such as the SWMP, PlaNYC, the Streets Plan, the Curb Management Action Plan, and Vision Zero.

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1 PROJECT DESCRIPTION

1.1 Introduction

The New York City Department of Sanitation (DSNY) is proposing to implement a program to containerize waste at certain buildings with residential units throughout the five boroughs of New York City and schools in Manhattan Community District (CD) 09 and Brooklyn CD 02 that receive DSNY collection (Citywide Containerization Program or Proposed Program). DSNY's authority to implement the Proposed Program is pursuant to Section (§) 753 and § 1043(a) of the City Charter and § 16-120 of the City Administrative Code. As lead agency for the required environmental review of the Proposed Program, DSNY has prepared this Draft Environmental Impact Statement (DEIS) examining the potential for adverse environmental impacts that could result from it, in accordance with the New York State Environmental Quality Review Act (SEQRA) and the City Environmental Quality Review (CEQR) procedures.

An initial Environmental Assessment Statement (EAS) was prepared and released on September 17, 2025, whereby DSNY concluded that the proposed Citywide Containerization Program has the potential for a significant adverse environmental impact. This determination, a Positive Declaration, noted that a detailed DEIS was warranted and would be prepared under DSNY's direction for consideration by the public and other agencies prior to taking action on the proposal. Accordingly, DSNY prepared a Draft Scope of Work for the DEIS that was released for public comment on September 17, 2025. Public comments on the Draft Scope of Work for the DEIS were invited and accepted through October 30, 2025. Public notices of the Positive Declaration and Public Scoping Meeting were published in the New York City (City) Record, Environmental Notice Bulletin, and a newspaper of general circulation (the *New York Daily News*), and circulated to community boards, elected officials, and interested parties. The public Scoping Meeting was held on October 20, 2025 via Microsoft Teams during which oral comments from members of the public were received. Written comments on the Draft Scope were also received from members of the public and elected officials through October 30, 2025.

The Final Scope of Work for the DEIS was released on July 1, 2026, consisting of revisions to the Draft Scope of Work, based on careful consideration of public comments received on that document. This DEIS, the Final Scope of Work for the DEIS, and other environmental review documents are available on DSNY's website: http://www.nyc.gov/site/dsny/collection/containerization.page. Hard copies can be accessed at the designated public repository for the environmental review documents: New York City Department of Sanitation, 125 Worth Street, Room 710, New York, NY 10013. The DSNY Contact Person for further information regarding the environmental review is Abas O. Braimah, DSNY Bureau of Legal Affairs, 125 Worth Street, Room 710, New York, NY 10013; Email: containerEIS@dsny.nyc.gov; Telephone: 646-885-4993.

This DEIS was prepared based on the Final Scope of Work. DSNY is requesting public comments on this DEIS. A Public Hearing to receive oral and written comments on this DEIS has been scheduled for July 28, 2026 and will take place via Microsoft Teams from 10:00 AM to 12:00 PM using the link below. Any request for accommodation for interpreter services should be made via email to containerEIS@dsny.nyc.gov a minimum of ten (10) days in advance.

Join: https://teams.microsoft.com/meet/219272571493081?p=9Whex9DUHI9nZxy0DJ
Meeting ID: 219 272 571 493 081
Passcode: Ga3j6mG2
Dial in by phone
+1 646-893-7101,,16675825# United States, New York City
Phone conference ID: 166 758 25#

The period for receiving written comments will remain open until August 7, 2026. Emailed comments may be accepted until 5:00 PM, while written comments must be postmarked no later than August 7, 2026 and sent to the project contact person: Abas O. Braimah, Administrative City Planner, DSNY Bureau of Legal Affairs, 125 Worth Street, Room 710, New York, NY 10013. Email: containerEIS@dsny.nyc.gov.

After considering comments received during the public comment period, a Final Environmental Impact Statement (EIS) will be prepared, including a summary of the comments received on the DEIS and responses to such comments from DSNY and any revisions to the DEIS. DSNY, as lead agency, will then prepare a Statement of Findings that describes the potential environmental impacts of the Proposed Program.

This chapter of the DEIS describes the current containerization program, including a background discussion of the purpose and need for the proposed Citywide Containerization Program. The chapter then includes a detailed discussion of the proposed Citywide Containerization Program and identifies the discretionary action and local approvals required to implement it. **Chapter 2,** "**Analytical Framework**" then summarizes the analytical framework used to consider the potential environmental impacts of this Proposed Program.

In accordance with the Final Scope of Work for the DEIS, consideration is given in **Chapter 3** through **Chapter 15** to the potential impacts of the proposed Citywide Containerization Program upon the relevant CEQR technical areas. These include public policy, socioeconomic conditions, historic and cultural resources, urban design and visual resources, solid waste and sanitation services, transportation, air quality, greenhouse gas (GHG) emissions and climate change, noise, public health, neighborhood character, alternatives, and effects on disadvantaged communities.

1.2 Background

DSNY is the City agency responsible for managing the City's solid waste through the collection, disposal, and recycling of residential, institutional, and certain governmental agency-generated waste within the City. DSNY collects waste from most buildings with residential units in the City with the exception of buildings where owners have opted to use private carter services and buildings with residential units that are still under development and without a certificate of occupancy. In addition, DSNY provides containerized collection services for certain larger residential unit buildings, as well as City schools and City-owned buildings.

Since the 1960s, DSNY has collected waste set out at the curb in plastic bags. Today, DSNY collects over 24 million pounds of residential waste each day. The immense number of bags set out at the curb block sidewalks, obstruct pedestrian access, fall into the streets, and impede traffic. Additionally, these plastic bags of waste attract vectors (e.g., rats and vermin); generate odors; leak garbage fluids if torn; may affect surface waters through stormwater runoff; and can increase potential risk to sanitation workers (see **Photo #1**). Placement of waste in containers reduces these impacts.

Photo #1. Plastic Refuse Bags at Curb

Plastic bags of refuse have been historically collected manually by sanitation workers using standard rear-loader collection trucks equipped with a compactor. The frequency of refuse waste collection by DSNY at buildings with residential units varies, ranging between every two or every three days per week. DSNY currently collects waste from schools five days per week (collection occurs each day, Monday through Friday).

1.2.1 Initial Assessment of Waste Containerization in the City

DSNY completed an initial assessment of waste containerization in the City and released a report in April 2023 on its viability in the City (see "*The Future of Trash – Waste Containerization Models and Viability in New York City*"[5]). *The Future of Trash* report, which assessed the applicability of various containerization systems and models in the City, concluded that containerization is viable for most residential streets – with individual bins in low-density residential neighborhoods and shared containers in mid- to high-density residential neighborhoods.

The recommendations of *The Future of Trash* report were further refined for implementation of the Proposed Program. As part of a prior small-scale assessment of on-street waste containerization in Manhattan CD 09,[6] DSNY installed wheeled containers that were shared among buildings. However, the use of shared containers presented challenges for both the container users and DSNY. The shared containers were not sufficiently large enough to accommodate the volume of waste on most mid- to high-density residential streets. In addition, because the containers were shared between multiple buildings, access was not convenient for all buildings. Further, without clear "ownership", refuse tended to build up around the shared containers even when they were not full (See **Chapter 14**, "**Alternatives**"). As such, DSNY determined that containers designated for the sole use of an assigned

[5] https://www.nyc.gov/assets/dsny/downloads/resources/reports/future-of-trash.pdf

[6] In September 2023, DSNY implemented a small-scale assessment of on-street containerization of refuse at residential buildings on 11 residential blocks and of refuse and recyclables (organics; metals, glass, plastic and cartons [MGPC]; and paper/cardboard) at 14 public schools in a small section of Manhattan CD 09 (CEQR No. 24DOS003M).

building would better meet DSNY's containerization goals, along with some other minor refinements that have been incorporated into the Proposed Program.

1.2.2 Current Waste Containerization Program

DSNY has begun to implement its residential waste containerization program to eliminate the accumulation of curbside plastic refuse bags and improve the quality of life in the City. Under DSNY rules, which became effective on November 12, 2024, DSNY initiated implementation of its residential waste containerization program, by requiring buildings Citywide with one to nine residential units and all City agencies to set out their refuse in rigid receptacles with tight fitting lids.[7] Separation of food and yard waste became mandatory for residential properties on April 1, 2025, requiring all residential properties to also containerize food waste in rigid receptacles with tight fitting lids.

Photo #2. Existing School "Tilt Truck" Containers

Schools throughout the City that receive DSNY waste collection services currently containerize their refuse and compost through the use of "tilt trucks" (see **Photo #2**). These containers with tight-fitting lids each hold approximately one (1) cubic yard (cy) of waste. Waste from these "tilt trucks" is collected manually by sanitation workers using standard rear-loader collection trucks.

1.2.2.1 Manhattan CD 09 Waste Containerization Pilot Program

In October 2024, DSNY completed an EAS to implement a waste containerization pilot program at certain buildings with residential units and schools within Manhattan CD 09 (Manhattan CD 09 Pilot Program, CEQR No. 25DOS001M). As shown in **Figure 1-1,** Manhattan CD 09 is located in the northwest section of the borough of Manhattan encompassing the West Harlem neighborhoods of Morningside Heights, Manhattanville and Hamilton Heights, and is generally bounded by West 155th Street to the north, the Hudson River to the west, Cathedral Parkway/West 110th Street to the south, and Manhattan/ Morningside/ St. Nicholas/ Bradhurst/ Edgecombe Avenues to the east.

[7] As of June 2026, buildings with one to nine residential units are required to use the official NYC Bin, equipped with wheels and a secure latching lid. https://www.nyc.gov/site/dsny/collection/containerization/nyc-bin-faq.page

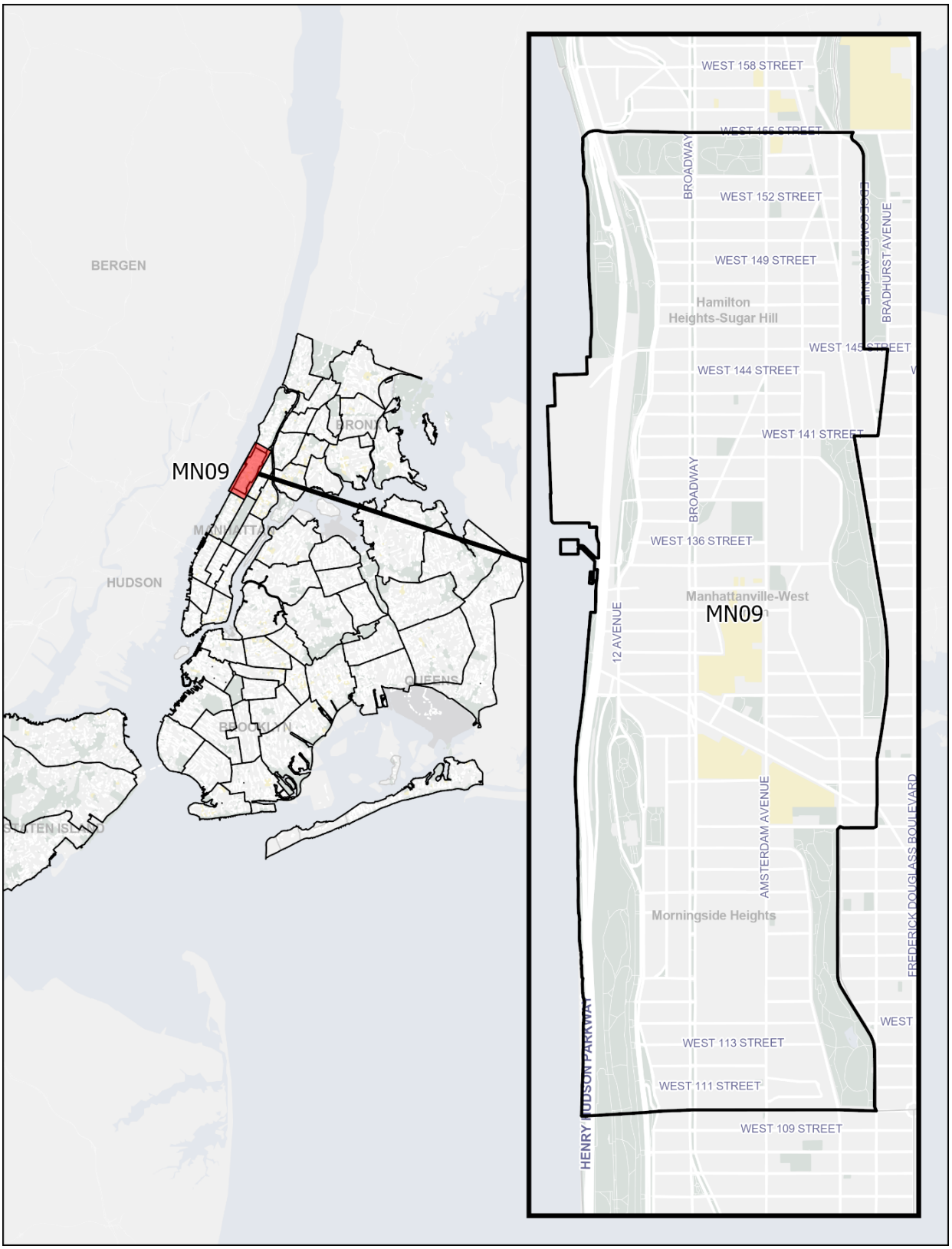

Figure 1-1. Manhattan CD 09

On November 15, 2024, pursuant to § 753 and § 1043(a) of the City Charter and § 16-120 of the City Administrative Code, DSNY amended its rules to establish a pilot program for the use of stationary on-street containers in Manhattan CD 09. Specifically, effective December 15, 2024, Chapter 1 of Title 16 of the Rules of the City (16 RCNY) was amended by adding a new section, § 1-02.6 Stationary On-Street Container Pilot Program.[8] As per 16 RCNY § 1-02.6, the Manhattan CD 09 Pilot Program commenced on June 1, 2025.

Under the Manhattan CD 09 Pilot Program, buildings with residential units within Manhattan CD 09 containerize their refuse as follows for DSNY collection: buildings with 10 to 30 residential units have the option to use individual bins or stationary on-street containers; and buildings with 31 residential units or more must use stationary on-street containers. Under the Manhattan CD 09 Pilot Program, schools within Manhattan CD 09 that receive DSNY collection services must utilize separate stationary on-street containers for each waste stream (refuse; organics; metal, glass, plastic, and cartons [MGPC]; and paper/cardboard). The purpose of the rule (16 RCNY § 1-02.6) was to pilot DSNY's implementation of waste containerization requirements for buildings with 10 or more residential units. Manhattan CD 09 was chosen by DSNY as the pilot area because it is within one of the rat mitigation zones[9,10] designated by the New York City Department of Health and Mental Hygiene (DOHMH), as shown on **Figure 1-2**, and it offered a diverse set of building types and streetscapes.

The EAS completed in October 2024 for the Manhattan CD 09 Pilot Program was also used to support the environmental review of 16 RCNY § 1-02.6. DSNY, as Lead Agency, issued a Negative Declaration on October 15, 2024, as well as a supplemental technical memorandum in July 2025 indicating that the pilot program would not result in significant adverse environmental impacts.

The Manhattan CD 09 Pilot Program was fully operational on June 1, 2025 (see **Photo #3**). As part of the Manhattan CD 09 Pilot Program, DSNY, in collaboration with the New York City Department of Transportation (NYCDOT), New York City Public Schools (NYCPS), and/or building superintendent(s), installed 1,089 stationary on-street containers for buildings with 31 or more residential units, buildings with 10 to 30 residential units that chose to opt-in, one institution, and schools within Manhattan CD 09. Approximately 56% of buildings with 10 to 30 residential units in Manhattan CD 09 chose to opt-in to use stationary on-street containers.[11, 12]

Photo #3. Stationary On-Street Containers Installed in Manhattan CD 09

[8] https://codelibrary.amlegal.com/codes/newyorkcity/latest/NYCrules/0-0-0-147946

[9] Rat Mitigation Zones are areas with high levels of rat activity, where City agencies focus resources to address rats and the conditions that support them. https://www.nyc.gov/site/doh/health/health-topics/rats.page

[10] Source of Rat Mitigation Zone boundaries: NYC's rat mitigation zones | Environment and Health Data Portal

[11] Buildings with 10 to 30 residential units that chose to opt-in to use stationary on-street containers submitted a request to DSNY. Only those buildings with 10 to 30 residential units that make a request to DSNY will be eligible to use stationary on-street containers.

[12] As of the publication of this DEIS, there is an additional pilot district proposed in Brooklyn CD 02. Additional Information on its implementation will be documented, as necessary.

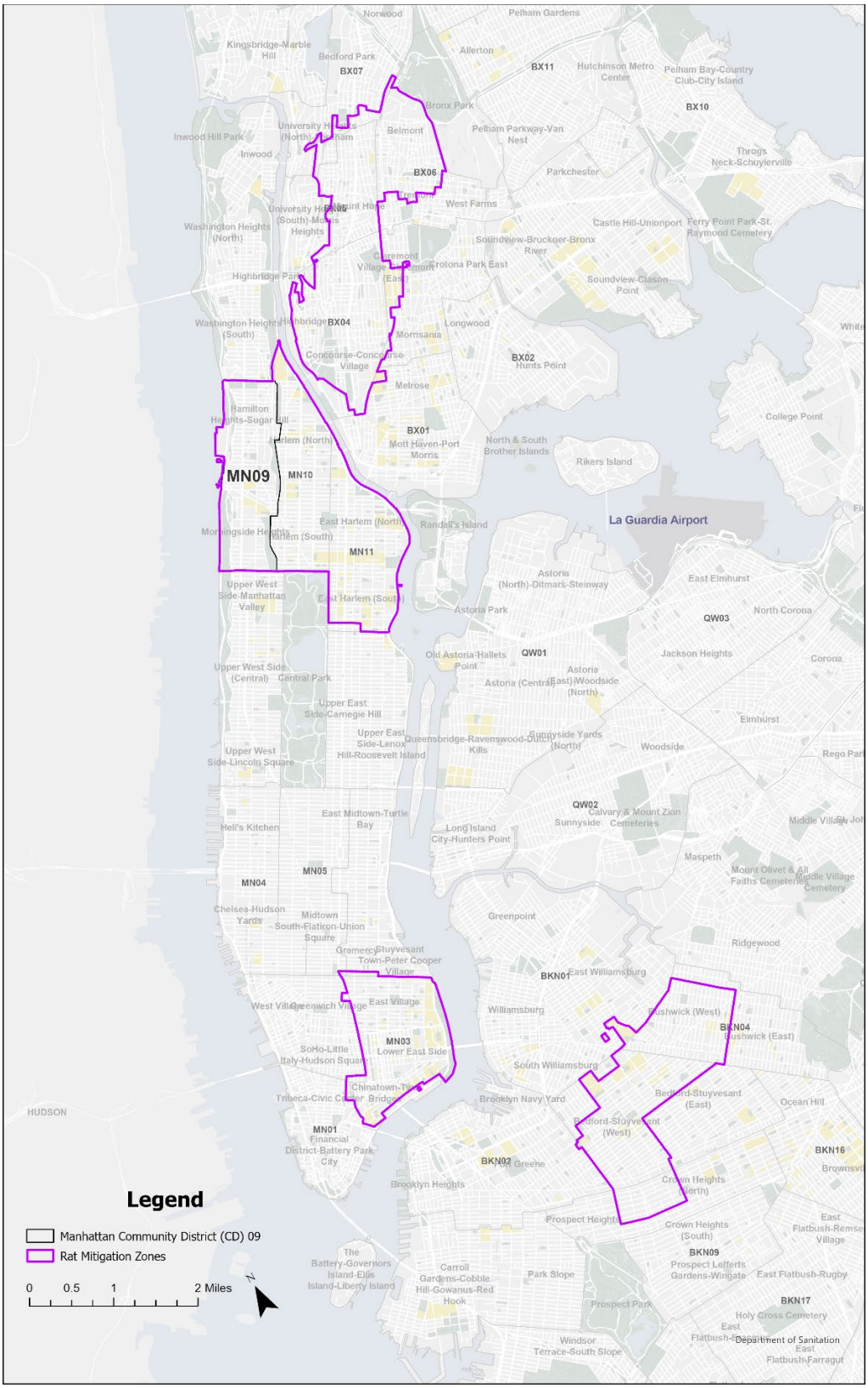

Figure 1-2. City Rat Mitigation Zones

1.3 Purpose and Need

In October 2022, DSNY kicked off the "Trash Revolution," the Citywide effort to move millions of pounds of trash per day from black plastic bags on the sidewalk to rat-resistant, closed containers. This undertaking has led to record-breaking reductions in rat sightings in Manhattan CD 09 since the start of the Pilot Program. As part of the "Trash Revolution," the City has committed to moving 100% of plastic refuse bags off City streets.

The use of stationary on-street containers and individual bins for waste disposal would allow DSNY to support the City's commitment to street cleanliness and reducing potential food sources for vectors (e.g., rats and vermin). The Proposed Program seeks to improve waste management practices in the City to ensure safe and efficient waste collection, while improving neighborhood character and street-side aesthetics in the City.

The Proposed Program would provide the following benefits:

- Eliminate the curbside placement of plastic bags containing refuse;
- Reduce potential food sources and/or attractants for rats and other vectors;
- Reduce litter, odor, loss of liquids and the potential contamination of stormwater runoff associated with plastic bags and the loss of materials from these;
- Reduce pedestrian and curbside obstructions;
- Contribute to improved public health;
- Reduce workplace injuries; and
- Provide an overall improvement in street cleanliness and neighborhood aesthetics.

These changes align with other City initiatives to increase the use of containers for waste storage and collection, and create cleaner, more livable, and more vibrant streets and neighborhoods across the City.

1.4 Description of the Proposed Action

Building upon the success of the Manhattan CD 09 Pilot Program, the Proposed Program would expand the containerization program to certain buildings with residential units throughout the City and schools in Manhattan CD 09 and Brooklyn CD 02. As stated in *The Future of Trash* report, containerization throughout the City is not feasible with a "one size fits all" solution. As such, under the proposed Citywide Containerization Program, buildings would containerize their refuse as follows for DSNY collection:

- Buildings with 10 to 30 residential units would have the option to use individual bins (see **Photo #4**) or stationary on-street containers (see **Photo #5**), and
- Buildings with 31 or more residential units would use stationary on-street containers (see **Photo #5**).

Schools in Manhattan CD 09 and Brooklyn CD 02 that receive DSNY collection services would utilize separate stationary on-street containers for each waste stream (refuse, organics, MGPC, and paper/cardboard) (see **Photo #6**).

Photo #4. Individual Bins
Container size is not to scale.

Photo #5. Stationary On-street Container for Storage of Refuse from Buildings with 10 or more Residential Units
Container size is not to scale.

Photo #6. Stationary On-street Containers for Storage of Refuse, Organics, MGPC, and Paper/Cardboard at Schools
Container size is not to scale. All containers are the same size.

1.4.1 Stationary On-street Containers

The stationary on-street containers for the proposed Citywide Containerization Program are shown in **Photo #5** and **Photo #6** and would be the same as those used for the Manhattan CD 09 Pilot Program.

As part of the Proposed Program, certain buildings with residential units utilizing stationary on-street containers would be assigned one or more stationary on-street containers. These containers would be assigned to a building solely for the use of the assigned building. The stationary on-street containers would be installed in front of or near their respective properties. DSNY would work with NYCDOT and/or building superintendent(s) on the specific placement of the stationary on-street containers.

The stationary on-street containers have been designed for minimally invasive installation, high visibility, and ease of use. The body and lids of the proposed stationary on-street containers would consist of high-density polyethylene (HDPE), a durable material with high resistance to impact, chemicals, and weather. For each stationary on-street container, two small alignment blocks would be affixed to the pavement of the parking lane with bolts and anchors. The alignment blocks would be installed to align the stationary on-street container in front of or near their respective properties and prevent the containers from being easily shifted off center. The alignment blocks, bolts, and anchors can be removed by DSNY along with the stationary on-street container to accommodate street milling, paving, maintenance, and/or other types of NYCDOT work or other closures. This modular and mobile infrastructure ensures that stationary on-street containers do not interrupt critical activities taking place on the roadway.

Each stationary on-street container, inclusive of the alignment blocks, would be 6.16 feet long by five (5) feet wide by 5.25 feet tall, with a capacity of approximately four (4) cy. The stationary on-street container design has a low profile which allows for continued pedestrian visibility of moving vehicles over the container. To prevent vehicles from parking too close to the stationary on-street containers, delineators would be affixed to the pavement on either side of the container(s) to act as a buffer (see **Photo #7**). The stationary on-street containers would be raised above the ground by approximately 1.3 inches and installed approximately 12 inches from the curbline, allowing for unimpeded passage of stormwater runoff in front of and under the stationary on-street containers.

Photo #7. Stationary On-Street Containers with Delineators

Under the proposed Citywide Containerization Program, DSNY would use Automated Side Loader (ASL) collection trucks to collect the waste from the stationary on-street containers. As shown on **Photo #8,** ASL collection trucks have an arm on one side of the collection truck whereby a sanitation worker operating inside the collection truck can mechanically grab, lift, and empty the stationary on-street containers, while a second sanitation worker stands outside the collection truck to monitor for safety. For one-way streets with buildings using stationary on-street containers on both curbsides, an ASL collection truck with an arm on the left side of the collection truck and an ASL collection truck with an arm on the right side of the collection truck would collect waste. The ASL collection trucks are able to empty a stationary on-street container in approximately one minute.[13] The ASL collection trucks are equipped with a compactor.

Photo #8. ASL Collection Trucks

Access to the stationary on-street containers would be limited to building staff and DSNY via designated access cards. Property owners would be responsible for cleaning the curb area surrounding the stationary on-street containers. During DSNY routine waste collection, if waste is observed near or under the stationary on-street containers, the waste would be collected by sanitation workers.

DSNY would be responsible for cleaning and maintaining the stationary on-street containers. Routine scheduled cleaning of the stationary on-street containers and the immediate surrounding area would be performed a minimum of four times per year by the container vendor. The cleaning of the stationary on-street containers would typically be performed using a pressure washer, minimal water, eco-friendly cleaning detergent, and would not require a street closure. Cones would be used during cleaning for pedestrian traffic.

1.4.2 Individual Bins

As part of the Proposed Program, buildings with 10 to 30 residential units may choose to set out their refuse at the curb for DSNY collection in rigid receptacles with tight-fitting lids not exceeding 55 gallons in size (individual bins) instead of stationary on-street containers. An example of individual bins for the proposed Citywide Containerization Program is shown on **Photo #4**.

The individual bins would be set out for DSNY collection at the curb in front of or near their respective properties and would be collected manually by sanitation workers using standard rear-

[13] Each stationary on-street container can hold approximately 45 plastic refuse bags. Manual collection of a comparable number of bags by sanitation workers would take longer to complete.

loader collection trucks equipped with a compactor, similar to current collection efforts. For curbsides along a City street with a combination of buildings using individual bins and buildings using stationary on-street containers, waste collection along the street would occur using both rear-loader collection trucks and ASL collection trucks.

Buildings with residential units that use individual bins are required to meet DSNY's Rules regarding "Requirements for Receptacles and Bags Containing Solid Waste and Recyclables for Collection" (16 RCNY § 1-02.1), summarized below:

- Receptacles (Individual bins) must be kept clean and in good repair; and
- If other storage areas on the premises are not available, receptacles may be stored in the area within three feet of the building line on the sidewalk, provided that such receptacles are maintained in an orderly manner and do not impede or obstruct pedestrian flow on the sidewalk.

1.4.3 Estimate of Stationary On-street Containers

In order to assess the number of stationary on-street containers that the City would require for the proposed Citywide Containerization Program, the number of buildings that would participate in the Proposed Program and the volume of waste to be stored in the containers for each building was estimated. The elements of this analysis are discussed in more detail below.

Buildings with Residential Units

The number of stationary on-street containers required for each building with residential units is dependent on the amount of waste generated by each building and the number of days the waste would need to be stored between DSNY collection. This effort involved the following steps:

- Mapping the locations of buildings with residential units, Citywide;
- Estimating the volume of waste generated by each building; and
- Calculating the number of stationary on-street containers required for buildings with 10 or more residential units based on the estimated number of buildings with 10 to 30 residential units that would opt-in, the estimated volume of waste generated, and the existing DSNY refuse collection frequency for the area (which varies throughout the City). When performing this calculation, one extra day of waste storage was included to account for holidays, snow event days, etc.

Building Mapping

The building type for each City street was determined and mapped in ArcGIS using the following publicly available Geographic Information Systems (GIS) datasets for the City obtained through the City Open Data portal:

- MapPluto (2025) – This a dataset that contains land use, building and geographic data for every property parcel (tax lot) in the City; and
- Linear Integrated Ordered Network (LION) Street Centerline (2025) – A dataset that includes single line representation of City streets.

Using November 2025 data from the New York City Department of Buildings (DOB), each building with residential units was identified and categorized by the number of residential units.

Waste Volume and Stationary On-Street Containers Required

DSNY conducted a Multi-Unit Building Survey (MUBS) to determine the approximate volume of refuse generated by each building with residential units. DSNY developed MUBS as a tool to calculate the average daily volume of waste generated by each residential unit within a building for each of the five boroughs. Based on field measurements of the weight and volume of waste generated by the surveyed buildings with residential units, DSNY then calculated an average daily volume of waste generated per residential unit and then averaged those values per building.[14]

To determine the number of stationary on-street containers each building with residential units would need, DSNY used the MUBS data for the average daily volume of refuse generated by a building, with how many times per week DSNY currently collects refuse from the building. In order to be conservative, one extra day of waste storage was included to account for holidays, snow event days, etc. For example, if DSNY collects refuse three times per week from a building with residential units, then refuse would be stored in the stationary on-street container for up to three days. However, to be conservative and account for holidays or skipped waste collection days, up to four days of waste storage was assumed.

Upon completion of this assessment, DSNY determined that as part of the Proposed Program:

- Buildings with 10 to 30 residential units would have the option to use individual bins or stationary on-street containers since many buildings in this range may not produce sufficient waste to regularly fill a stationary on-street container and may prefer to manage smaller individual bins on their own.[15]
- Buildings with 31 or more residential units would be required to utilize stationary on-street containers as their waste output would regularly require one or more stationary on-street containers.[16]

Schools (Manhattan CD 09 and Brooklyn CD 02)

DSNY proposes containerizing all waste streams (refuse, organics, MGPC, and paper/cardboard) for schools in Manhattan CD 09 and Brooklyn CD 02 that currently receive DSNY collection. DSNY determined the number of stationary on-street containers for each school in these two CDs that receives DSNY collection based on an analysis of the amount and type of waste generated by each school and the number of days the waste would need to be stored between DSNY collection. As part of the Proposed Program, the frequency of waste collection from these schools would increase for operational efficiencies from five days per week to six days per week (collection would occur each day, Monday through Saturday). This increase in DSNY collection frequency was taken into account when calculating the number of stationary on-street containers required for schools in Manhattan CD 09 and Brooklyn CD 02.

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[14] Based upon the volume of waste generated per residential unit, it would not be feasible to containerize all waste streams (refuse, organics, MGPC and paper/cardboard) throughout the City due to the significant number of incremental stationary on-street containers that would be required, which would in turn occupy a significantly higher number of parking spaces. Therefore, for buildings with residential units, DSNY focused on the containerization of refuse.

[15] As part of the Proposed Program, these buildings were assumed to not require more than two stationary on-street containers.

[16] The large majority of the buildings with 31 or more residential units would require less than 12 stationary on-street containers. However, buildings with 31 or more residential units that would require more than 12 stationary on-street containers would utilize an alternative means for DSNY collection.

Containerization Implementation

Figure 1-3 depicts the residential density throughout the City. A summary of the current estimated number of stationary on-street containers for each of the five boroughs due to the proposed Citywide Containerization Program is listed in **Table 1-1.** However, the final number of stationary on-street containers for the Proposed Program would be based on:

- The number of buildings with 10 to 30 residential units that choose to opt-in to use stationary on-street containers;
- A container siting assessment that would be performed by DSNY for each CD prior to implementation of the Proposed Program in order to determine the feasibility and container placement location for each building with residential units; and
- Collaboration with the NYCDOT and/or building superintendent(s).

Using the methodology described above, it is estimated that a total of 49,725 mandatory stationary on-street containers would be installed for buildings with 31 or more residential units Citywide and schools in Manhattan CD 09 and Brooklyn CD 02. This would include 49,453 containers to store and collect refuse from buildings with 31 or more residential units Citywide and 272 containers to store and collect school-generated refuse, organics, MGPC and paper/cardboard in Manhattan CD 09 and Brooklyn CD 02.

In addition, it is conservatively estimated that up to 17,092 stationary on-street containers would be installed Citywide for buildings with 10 to 30 residential units that choose to opt-in to the Proposed Program. Based on the percentage of buildings with 10 to 30 residential units that opted-in to the Manhattan CD 09 Pilot Program (56%), DSNY estimated that up to two-thirds (66%) of these buildings would choose to opt-in to the Proposed Program and utilize stationary on-street containers, to be conservative.

In total, the proposed Citywide Containerization Program would potentially result in the placement of up to 66,817 stationary on-street containers. Implementation of the proposed Citywide Containerization Program would occur in phases with the next installation to occur within Brooklyn CD 02 and full implementation is anticipated by 2032.

1.5 Project Approvals and Coordination

Implementation of the proposed Citywide Containerization Program would involve a discretionary action and local approvals and is therefore subject to CEQR and SEQRA and their implementing regulations. The entities that may potentially be involved in the environmental review and approval process for the Proposed Program are:

- DSNY acting as lead agency for the environmental review for the proposed Citywide Containerization Program implementation; and
- In consultations with several agencies:
    - NYCDOT;
    - New York City Department of Environmental Protection (NYCDEP);
    - New York City Landmarks Preservation Commission (NYCLPC);
    - Metropolitan Transportation Authority (MTA) New York City Transit (NYCT); and
    - New York State Historic Preservation Office (SHPO).

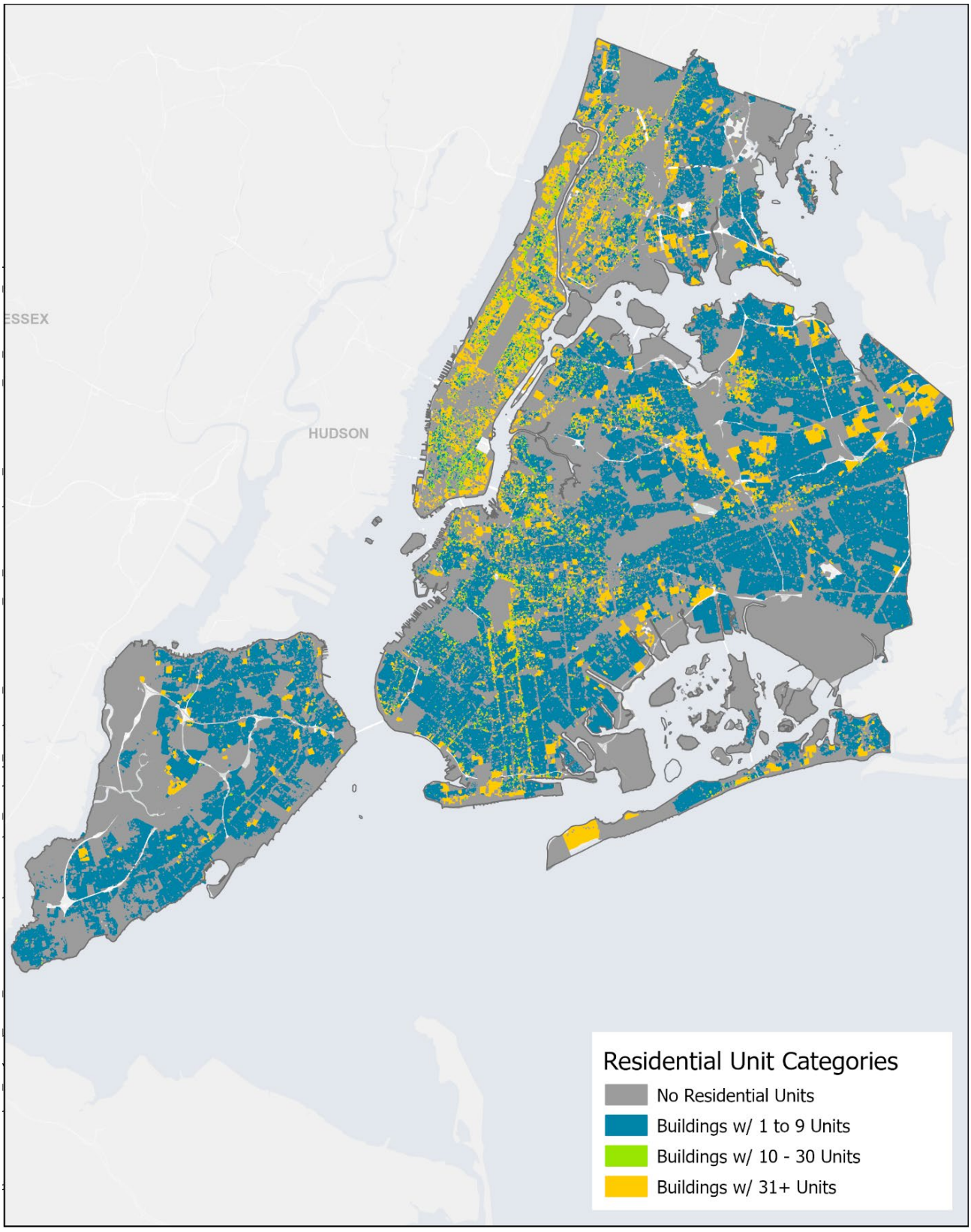

Figure 1-3. Residential Density - Citywide

Table 1-1. Summary of Estimated Stationary On-Street Containers by Borough for Citywide Containerization Program

Borough	Mandatory Buildings		Optional Buildings[1]	Total Number of Stationary On-Street Containers
	Buildings with 31 or more Residential Units	Schools	Buildings with 10 to 30 Residential Units	
Manhattan	14,724	92	7,313	22,129
Bronx	11,817	0	3,621	15,438
Brooklyn	14,548	180	4,219	18,947
Queens	7,891	0	1,780	9,671
Staten Island	473	0	159	632
Citywide	49,453	272	17,092	66,817

Notes:

[1] The Proposed Program would allow buildings with 10 to 30 residential units to use individual bins instead of using stationary on-street containers. This number is conservatively based on 66% of the buildings with 10 to 30 residential units throughout the City choosing to opt-in to utilize stationary on-street containers.

2 ANALYTICAL FRAMEWORK

In accordance with the process described in SEQRA and CEQR, DSNY, as lead agency, is required to examine the potential for environmental impacts that could occur as a result of the proposed Citywide Containerization Program and, to the maximum extent practicable, avoid or mitigate potentially significant adverse environmental impacts, consistent with social, economic, environmental and other essential considerations. The City's *2025 CEQR Technical Manual* provides guidelines for conducting environmental reviews.

This DEIS was prepared in accordance with the guidelines presented in the *CEQR Technical Manual*, as applicable, and additional guidance from the expert City and State technical agencies: NYCDOT, NYCDEP, NYCLPC, MTA NYCT, and SHPO. For each technical area that warrants assessment, the analysis includes a description of existing conditions, an assessment of conditions in the future without the Proposed Program, and an assessment of future conditions with the Proposed Program.

Build Year

The build year refers to the year when the full effects of the Proposed Program would occur. The proposed Citywide Containerization Program would be implemented in phases, with full implementation by June 1, 2032. For the assessment of potential impacts of the proposed Citywide Containerization Program, the analysis period is based upon the year 2032.

Baseline Existing Conditions

The analysis framework begins with an assessment of existing conditions. The assessment of existing conditions does not represent the condition against which the Proposed Program is measured but serves as the starting point for the projection of future conditions with and without the Proposed Program and the analysis of potential impacts due to the Proposed Program.

Future without the Proposed Program (No Action Condition)

The Future without the Proposed Program (the No Action condition) assessment describes a future baseline condition to which the changes that are expected to result from the Proposed Program are compared. This DEIS takes into account all known projects impacting the curb through the Build Year (2032) in the Future No Action condition.

Probable Impacts of the Proposed Program (Future with the Proposed Program Condition)

The identification of potential environmental impacts is based upon the comparison of the No Action condition to the Future with the Proposed Program condition. In certain CEQR technical areas, this comparison can be quantified and the nature of these impacts can be assessed in accordance with the *CEQR Technical Manual*. In other CEQR technical areas, the analysis is qualitative in nature. The methodology for each analysis is presented at the start of each technical area.

2.1 Analytical Approach

The *CEQR Technical Manual* provides suggested methodologies and guidance for conducting environmental assessments performed under CEQR. The impact analysis methodologies presented in the *CEQR Technical Manual* were applied to the proposed Citywide Containerization Program.

CEQR allows for a focused environmental review. This process identifies technical areas (see **Section 2.1.1**) that are not applicable and/or do not require screening analyses to confirm that these technical areas would not be affected and do not warrant additional analysis. The environmental review focuses on those technical areas that have the potential to be affected by the Proposed Program.

An initial review was conducted to determine which CEQR technical areas may require a detailed assessment based on the potential effects of the proposed Citywide Containerization Program. In addition, a waste containerization pilot program was implemented in Manhattan CD 09 (Manhattan CD 09 Pilot Program, CEQR No. 25DOS001M). The EAS for the Manhattan CD 09 Pilot Program identified CEQR technical areas with the potential for impact related to the pilot program and the development of appropriate study areas. As such, the completed EAS for the Manhattan CD 09 Pilot Program informed elements of the proposed analysis approach for the proposed Citywide Containerization Program DEIS, as applicable and appropriate.

Those CEQR technical areas that did not warrant further assessment consistent with *CEQR Technical Manual* guidance are described in **Section 2.1.1**. If further assessment was warranted, the assessment is provided within **Chapter 3** through **Chapter 15**.

2.1.1 CEQR Technical Areas

A review was conducted for each CEQR technical area in order to determine which CEQR technical areas warranted further analysis.

Detailed analyses are provided in this DEIS, as appropriate, for the remaining CEQR technical areas:

- Public Policy;
- Socioeconomic Conditions;
- Historic and Cultural Resources;
- Urban Design and Visual Resources;
- Solid Waste and Sanitation Services;
- Transportation;
- Air Quality;
- Greenhouse Gas Emissions and Climate Change;
- Noise;
- Public Health;
- Neighborhood Character;
- Alternatives; and
- Effects on Disadvantaged Communities.

The following CEQR technical areas that screen out or are not applicable and would not warrant further assessment under the *CEQR Technical Manual*:

- **Land Use and Zoning** - The proposed Citywide Containerization Program would not alter existing land use or zoning districts or require the development of any property or impact any potential development of incremental housing.
- **Community Facilities and Services** - The proposed Citywide Containerization Program would not physically or permanently alter or displace an existing facility and would not involve the addition of new populations that require changes to community facilities and services.
- **Open Space** - The proposed Citywide Containerization Program would not involve the loss or limitation of public open space, or a change in the quality or availability of open space and recreation.
- **Shadows** - The proposed Citywide Containerization Program would not include any permanent structures over 250 feet in height, a structure between 50 and 250 feet in height adjacent to sunlight–sensitive resources, greater than 50 feet of incremental height change or substantial changes in bulk building envelope.
- **Natural Resources** - The proposed Citywide Containerization Program consists of the use of stationary containers on City streets and individual bins on City curbs and would therefore not affect natural resources.
- **Hazardous Materials** - The proposed Citywide Containerization Program would not affect the presence or disturbance of hazardous materials.
- **Water and Sewer Infrastructure** - The proposed Citywide Containerization Program would not adversely affect water and sewer infrastructure. The stationary on-street containers would be raised above the ground by approximately 1.3 inches, allowing the unimpeded passage of water under the containers. In addition, the stationary on-street container containers would be installed approximately 12 inches from the curbline allowing rainfall runoff to flow freely. The proposed Citywide Containerization Program would not involve the use of significant water or sanitary sewer infrastructure.
- **Energy** - The proposed Citywide Containerization Program would not result in significant changes in energy demands.

- **Construction** - Construction related to the proposed Citywide Containerization Program would be minimal and limited to the installation of alignment blocks and delineators. Alignment blocks would be installed in the parking lane to align the stationary containers on the street in front of or near their respective properties and prevent them from being easily shifted off center. Delineators would be affixed to the ground on either side of the stationary on-street container(s).

2.1.2 Definition of Study Areas

Under CEQR, the analysis of a proposed action should be focused on those elements that have the potential to result in an environmental impact. CEQR also requires that any analysis integrate an appropriate study area to accurately assess the potential impacts of a proposed action.

Two study areas for the proposed Citywide Containerization Program were selected:

- Citywide - The Proposed Program would result in the implementation of a new Citywide Containerization Program. The assessment of certain CEQR technical areas in this DEIS is based on the potential overall effects of implementation of the Proposed Program on a Citywide basis, and not dependent on a specific geographic area (i.e., CD).
- Community Districts - The City consists of 59 CDs. Some CDs consists of a higher percentage of buildings with residential units that would be affected by the Proposed Program, while other CDs primarily consist of buildings with one to nine residential units, or other land uses (i.e., industrial, manufacturing) that would not be affected by the Proposed Program. As such, the assessment of certain CEQR technical areas evaluated in this DEIS is based on the potential effects of the Proposed Program on a CD basis.

Table 2-1 provides a summary of CEQR technical areas that were determined to require further assessment and whether a Citywide or CD specific assessment was performed. For those technical areas that warranted further assessment, the assessment is provided within the remaining chapters of this DEIS.

Table 2-1. Summary of Study Areas for CEQR Technical Areas Requiring Further Assessment [1]

CEQR Technical Area	Citywide Study Area	CD Specific Study Area
Public Policy	✓	-
Socioeconomic Conditions	✓	-
Historic and Cultural Resources	✓	-
Urban Design and Visual Resources	✓	-
Solid Waste and Sanitation Services	✓	-
Transportation	-	✓[2]
Air Quality	-	✓
Greenhouse Gas Emissions and Climate Change	-	✓[2]
Noise	-	✓
Public Health	✓	-

CEQR Technical Area	Citywide Study Area	CD Specific Study Area
Neighborhood Character	-	✓
Effects on Disadvantaged Communities	✓	

Notes:
[1] CEQR technical areas not included in this table were determined not to require further assessment based upon an initial review.
[2] The assessment of this CEQR technical area was evaluated based on the potential effects of the Proposed Program on a CD basis and evaluated cumulatively on a Citywide basis.

3 PUBLIC POLICY

3.1 Introduction

In accordance with the *CEQR Technical Manual*, the public policy analysis considers a project's effect on an area's public policies.

As discussed in **Section 1.4**, as part of the proposed Citywide Containerization Program, buildings with residential units would containerize their refuse as follows for DSNY collection: (1) buildings with 10 to 30 residential units would have the option to use individual bins or stationary on-street containers; and (2) buildings with 31 or more residential units would use stationary on-street containers.[17] Schools in Manhattan CD 09 and Brooklyn CD 02 that receive DSNY collection services would utilize separate stationary on-street containers for each waste stream: refuse, organics, MGPC, and paper/cardboard.

This chapter considers the Proposed Program's public policy implications and compliance with and potential effect on existing applicable public policies, including the City's Solid Waste Management Plan (SWMP), PlaNYC: Getting Sustainability Done, the New York City Streets Plan (Streets Plan), the Curb Management Action Plan, and Vision Zero. Since the Proposed Program would affect Coastal Zone areas designated by New York State (State) and City, an assessment of the Proposed Program's consistency with the New York City Waterfront Revitalization Program (WRP) is included.

This assessment finds that the Proposed Program would not have any significant adverse impacts on public policy.

3.2 Public Policy Impact of Proposed Program

The proposed Citywide Containerization Program would provide significant public policy benefits to residents and their quality of life. With about 30,000 residents per square mile, the City generates more than 24 million pounds of residential and school trash and 20 million pounds of commercial trash each day, left on the sidewalks and curbs awaiting collection. Without the Proposed Program, residents and visitors would continue to see large piles of trash bags on the street obstructing sidewalks, attracting vectors, and leading to overall dirty conditions. These conditions lead to public health and quality of life issues, such as spread of disease through rodents and the smell and sight of

[17] Buildings that are already containerized using either a loading dock or off-street container solution would continue to use their current container solution and would not utilize stationary on-street containers. As part of the Proposed Program, buildings with 31 or more residential units that do not already containerize refuse would be limited to no more than 12 stationary on-street containers. Buildings with 31 or more residential units that would require more than 12 stationary on-street containers would utilize an alternative means for DSNY collection.

waste on the sidewalks and streets, as well as hazards to pedestrians who must navigate sidewalks cluttered with trash bags.

In order to address these conditions, DSNY has led an effort to containerize commercial and residential waste, following the lead of many major global cities. First, in April 2023, DSNY changed set-out times for residential and commercial waste from 4:00 PM – one of the earliest set-out times in the country – to 8:00 PM, while also allowing earlier set-out at 6:00 PM if the material is in a container, thus creating the first incentive for the public to containerize. In March 2024, DSNY required approximately 200,000 City businesses to place their trash in rigid receptacles with tight-fitting lids, keeping 20 million pounds of garbage off our streets every day. In November 2024, DSNY also implemented the first trash bin requirement for residential waste since the early 1970s, requiring all properties with one to nine residential units to place their trash in a rigid receptacle with a tight-fitting lid. With these efforts, the City has containerized approximately 70% of the City's trash, removing piles of trash bags from sidewalks and curbs.

The Proposed Program would address the remaining 30% of non-containerized waste from large residential properties. To best accommodate the volume of waste from buildings with 10 or more residential units, DSNY has derived a stationary on-street container solution. In order to test this solution, DSNY piloted these large stationary on-street containers in Manhattan CD 09. Approximately 1,100 stationary on-street containers were placed in Manhattan CD 09, making Manhattan CD 09 the first 100% containerized district for refuse in New York City. These approximately four (4) cy stationary on-street containers serving buildings with 10 or more residential units Citywide and schools in Manhattan CD 09 that receive DSNY collection services replaced the mountains of black plastic trash bags that take up curb space. These containerization efforts have led to the largest year-over-year reduction in rat sighting Service Requests since 2010 by removing their food source. Building upon the success of the Manhattan CD 09 Pilot Program, the proposed Citywide Containerization Program would further advance DSNY's public policy goals for a healthier, safer, and cleaner City.

The implementation of the Proposed Program would ensure the City is able to containerize 100% of refuse from City buildings with residential units. The Proposed Program would containerize the remainder of refuse currently in black bags on sidewalks, which impede pedestrian movement, create odorous and unsightly conditions, and attract rodents. Under the Proposed Program, the use of stationary on-street containers would improve quality of life, cleanliness, and public health. The Proposed Program advances the City's efforts to containerize all of the City's waste and aligns with other existing public policy commitments in the City as detailed below.

3.3 City's Solid Waste Management Plan

The current SWMP, adopted in July 2006 and approved by the State in October 2006, is a five-borough plan that addresses the City's waste management needs. The current plan is in effect through October 2026. The City is required to adopt an updated SWMP for a 10-year period under the State Environmental Conservation Law. The 2026 Draft Solid Waste Management Plan (Draft SWMP26) was released for public review in January 2026. Once approved, the SWMP26 will replace the current SWMP through October 2036.

The 2006 SWMP generally projects waste quantities and identifies the facilities that would manage the transfer of residential and commercial waste, including designated recyclables, refuse, construction and demolition debris, and fill material such as dirt, concrete, brick, and rock. It also emphasizes the following goals: using the waterways and rail system to minimize long-haul trucks for

waste transport; siting transfer stations to ensure that the responsibility for the City's waste management system is allocated equitably; increasing the residential and commercial recycling diversion rates; and handling waste in an efficient and environmentally friendly manner. The Proposed Program would not result in any changes to any facilities that manage the transfer of waste.

The purpose of the Proposed Program is to support the City's commitment to street cleanliness and to reduce potential food sources for rats, vermin, and other vectors. While the Proposed Program is not directly related to the Draft SWMP26 objective to reduce waste and increase diversion, DSNY intends to monitor the impact of containerization on diversion. The Proposed Program would be consistent with the SWMP because waste would be handled in a more environmentally sound manner and the Proposed Program would otherwise not impact any of the other goals of the SWMP.

3.4 PlaNYC: Getting Sustainability Done

PlaNYC: Getting Sustainability Done (2023) is the City's current action plan for a more sustainable, resilient and equitable City. It builds on prior plans, starting with the City's 2007 sustainability plan, *PlaNYC 2030: A Greener, Greater New York*, which focused on population growth, aging infrastructure and global climate change. The current plan sets forth initiatives for protecting the City from climate threats, improving quality of life, and building a green economy including creating a circular economy for waste. The main focus of this plan is the City's GHG emissions footprint as well as on environmental justice and public health. GHG emissions from the Proposed Program are discussed in **Chapter 10,** "**Greenhouse Gases and Climate Change**." Additionally, PlaNYC specifically commits to increasing sidewalk cleanliness by expanding waste containerization.

Primarily, the Proposed Program enables the City to fulfill the PlaNYC commitment to expand waste containerization by implementing a containerization solution for buildings with 10 or more residential units. The Proposed Program would also further the Plan's environmental sustainability objectives. As discussed in detail **Chapter 12,** "**Public Health**," containerizing refuse in sealed rodent-resistant receptacles would positively affect the public health of the City, its residents, sanitation workers, and visitors. In particular, containerizing refuse would eliminate rodents' access to bags of refuse, their main source of food. In areas where refuse is set out in containers, fewer rats, vermin, and other vectors are present.

Additionally, placing refuse bags in sealed containers would significantly reduce odor, the potential for the plastic bags to leak and enter the environment, and potential impacts to surface waters from these bags (e.g., leaks and litter) through the stormwater drainage system.

3.5 New York City Streets Plan

The Streets Plan is a five-year plan developed in 2021 and updated in 2025 by NYCDOT to improve transportation safety, accessibility and quality of the streets within the City. The vision of the Streets Plan is for the City to be a place where everyone has access to welcoming streets and public spaces. Waste containerization is included as a recommendation under the Plan's walking and pedestrian program area. To support this program area, NYCDOT partnered with DSNY on the Clean Curbs pilot program which permits Business Improvement Districts (BIDs) to install sealed, rodent-resistant containers on approved City property to store waste for DSNY collection, in compliance with DSNY and NYCDOT rules. The Clean Curbs for BIDs program improves pedestrian flow on the sidewalks by containerizing waste that would otherwise be bagged and left next to litter baskets, taking up space on the sidewalk, creating conditions that attract rodents and odors, and impeding pedestrian

flow. The Proposed Program supports the goals of the Streets Plan by expanding waste containerization to buildings with residential units throughout the City and would be consistent with the goals of the Streets Plan.

3.6 Curb Management Action Plan

The 2023 Curb Management Action Plan, prepared by NYCDOT, identifies 10 action items intended to support the City's sustainability goals by maximizing curb space to improve mobility, flow and access for users, such as pedestrians, cyclists and drivers. One of the action items in the plan is providing space in the curb lane for waste containers. The use of the curb lane for waste containerization would improve quality of life conditions by removing the plastic bags that contribute to messy and dirty street conditions, removing a food source that attracts rats, vermin, and other vectors, and removing obstructions that affect pedestrian access and the experience of users along the sidewalk. Individual bins would be stored on the individual premises, or if no areas are available, individual bins may be stored in the area within three feet of the building line on the sidewalk, provided that such receptacles are maintained in an orderly manner and do not impede or obstruct pedestrian flow on the sidewalk.

The Proposed Program would directly promote the 2023 Curb Management Action Plan by increasing available sidewalk space that would otherwise be occupied by large mounds of refuse bags and by promoting the use of the curb lane for non-transportation uses.

3.7 Vision Zero

Vision Zero is a City initiative to improve street safety through multiple engineering, enforcement, education and legislative initiatives. The goal of Vision Zero is zero deaths and serious injuries on City streets. The engineering initiatives include safety projects, such as redesigned streets, sidewalks and crosswalks, protected and dedicated bike lanes, truck side guards, and City vehicles with telematics. The enforcement initiatives include the issuance of failure to yield and speeding summonses. The education initiatives include visits to schools and older adult centers to increase pedestrian and driving safety awareness in these populations, and training for MTA bus operators, Taxi and Limousine Commission licensed drivers and City employee drivers to promote heightened safety awareness for these drivers. The legislative initiatives aim to pass laws and regulations that improve the safety of the City's streets.

The Proposed Program would promote the initiatives and goals of Vision Zero by providing a safer environment for pedestrians, cyclists and drivers. Waste containerization would provide cleaner, less obstructed sidewalks thereby improving pedestrian flow and minimizing pedestrians who walk on the roadway due to blocked sidewalks (**Photo #7**). This would be accomplished by removing the mounds of refuse bags on the sidewalk, which often overflow into the street. Doing so would prevent obstructions to traffic and maintain a clear line of sight for users, reducing the risk of dangerous conditions for drivers, cyclists, and pedestrians.

As noted in **Chapter 6,** "**Urban Design and Visual Resources**," the stationary on-street container design has a low profile which allows for pedestrian visibility over the container. As part of the Proposed Program, buildings with 10 to 30 residential units have the option to use individual bins instead of stationary on-street containers. While individual bins may vary in dimension, they would not exceed 55 gallons each and would be stored on the individual premises, or if no areas are available, individual bins may be stored in the area within three feet of the building line on the sidewalk, provided

that such receptacles are maintained in an orderly manner and do not impede or obstruct pedestrian flow on the sidewalk.

3.8 Waterfront Revitalization Program

The Federal Coastal Zone Management Act (CZMA) of 1972 was enacted to support and protect the distinctive character of the waterfront and to set forth standard policies for reviewing proposed development projects along coastlines. The CZMA emphasizes the primacy of State decision-making regarding the coastal zone. In accordance with the CZMA, the State adopted its own Coastal Management Program (CMP), designed to balance economic development and preservation by promoting waterfront revitalization and water dependent uses. The CMP was also designed to protect fish, wildlife, open space, scenic areas, farmland, and public access to the shoreline in order to minimize adverse changes to ecological systems, erosion, and flood hazards. The State CMP provides for local implementation when a municipality adopts a local WRP, as is the case in the City.

The City's WRP is its principal coastal zone management tool, originally adopted in 1982 and approved by the New York State Department of State (NYSDOS) for inclusion in the State CMP. The WRP establishes the City's policies for the development and use of the waterfront and provides a framework for evaluating activities proposed within the Coastal Zone. The WRP includes policies designed to maximize the benefits derived from economic development, environmental preservation and public use of the waterfront, while minimizing the conflicts among those objectives. The WRP Consistency Assessment Form lists the WRP policies and indicates whether the Proposed Program would be consistent or potentially inconsistent with a particular policy or sub-policy, or if that policy would not be applicable.

The Proposed Program would be implemented Citywide, which includes areas within the City's Coastal Zone Boundary, and therefore, would be subject to review for consistency with the policies of the WRP. **Figure 3-1** shows the locations of buildings with residential units Citywide and schools within Manhattan CD 09 and Brooklyn CD 02 in relation to the limits of the Coastal Zone and its special areas. As detailed in the WRP Consistency Assessment Form and supporting assessment in **Appendix A**, the Proposed Program would be consistent with the City's approved WRP, pursuant to the State's CMP, and would be conducted in a manner consistent with the CMP.

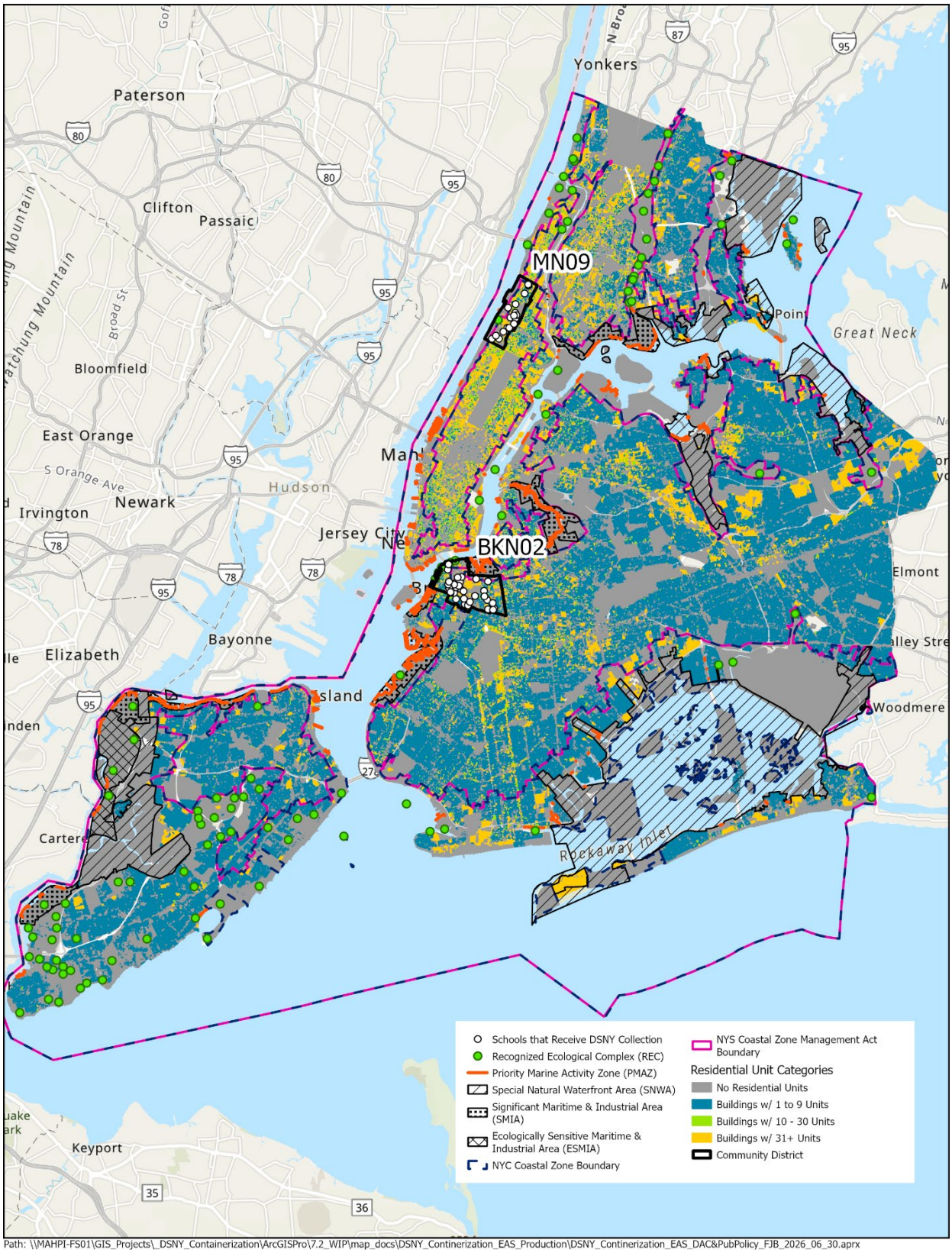

Figure 3-1. Coastal Zone Boundary

4 SOCIOECONOMIC CONDITIONS

4.1 Introduction

Pursuant to the *CEQR Technical Manual,* the socioeconomic character of an area includes its population, housing, and economic activity. The socioeconomic conditions assessment considers how a proposed action may affect an area's residents and businesses. Socioeconomic changes may occur when a project directly or indirectly changes any of those elements.

Containerizing waste in sealed, rodent-resistant receptacles would have a positive effect on neighborhoods as well as the health of its residents, DSNY sanitation workers, and the general public. Waste set out in containers would create more passable, sanitary, safe and enjoyable experiences for pedestrians while facilitating waste pickup by collection trucks. Additionally, containerizing waste would improve pedestrian access and use of sidewalks through the removal of plastic bags of waste set out on the curb and reduce the presence of vectors (e.g., rats and vermin), thus making the City more desirable to inhabit and visit.

The proposed Citywide Containerization Program would not directly affect population, housing, or economic activity, but could have indirect effects that are evaluated in this assessment. Specifically, this assessment considers whether the loss of on-street parking could adversely affect residents and businesses. This assessment finds that the Proposed Program would not lead to the displacement of residents or businesses, and therefore, would not have any significant adverse impacts on socioeconomic conditions.

4.2 Methodology

Even when socioeconomic changes would not result in impacts under CEQR, they are disclosed if they would affect land use patterns, low-income populations, the availability of goods and services or economic investment in a way that changes the socioeconomic character of the area. In some cases, these changes may be substantial but not adverse. In other cases, these changes may be beneficial for some groups but detrimental for others. The objective of the CEQR analysis was to disclose whether any changes created by the Proposed Program would have a significant impact compared to what would happen in the Future without the Proposed Program.

The Proposed Program would not directly displace residents or businesses but would displace parking that supports neighborhood residential and business uses. The stationary on-street containers would be located in the parking lane and their placement would result in the reduction of available on-street parking near buildings with residential units Citywide and schools in Manhattan CD 09 and Brooklyn CD 02 that would be part of the Proposed Program. Therefore, this assessment analyzes whether this reduction would lead to a potential disinvestment in a neighborhood due to a minimal decrease of a residential amenity (on-street parking availability) or lead to the indirect displacement of businesses that provide important products or services to residents or businesses.

As per the *CEQR Technical Manual*, a socioeconomic analysis considers five specific elements that may result in significant adverse socioeconomic impacts:

1. Direct displacement of 500 or more residences. The Proposed Program does not include new residential uses or redevelopment of any site, and no residences are being directly displaced by the Proposed Program. Therefore, no direct residential displacement would

occur as a result of the Proposed Program and no further analysis of this element is required.

2. Direct displacement of more than 100 employees or displacement of a business whose products or services are uniquely dependent on its location. The Proposed Program would not directly displace any existing businesses. Therefore, no further assessment of this element is required.

3. Indirect displacement of a residential population in a study area: Examples include rising rents in an area that result from a new concentration of higher-income housing introduced by a project, which ultimately could make existing housing unaffordable to lower income residents. The Proposed Program would not include new residential uses, but would reduce the amount of on-street parking. Therefore, an assessment of the limited reduction of on-street parking due to the Proposed Program was conducted to determine whether the reduction would result in the indirect displacement of a residential population due to a minimal decrease of a residential amenity (on-street parking availability).

4. Indirect displacement of businesses or institutions in a study area provided that more than 100 employees are directly displaced, or a proposed project would result in new commercial development of more than 200,000 square feet. As the Proposed Program would reduce the amount of on-street parking, an assessment was conducted to determine if the reduced parking availability would affect businesses that provide products or services to residents and other businesses.

5. Adverse effect on conditions within a specific industry. The Proposed Program is not expected to adversely affect the economic and operational conditions of any specific industries in the City. Therefore, an assessment of adverse effects on conditions within specific industries was not warranted.

4.3 Preliminary Assessment

4.3.1 Indirect Displacement

The *CEQR Technical Manual* defines indirect displacement as the “involuntary displacement of residents, businesses, or employees that results from a change in socioeconomic conditions created by the proposed project.” For instance, indirect displacement occurs if costs imposed on households, especially lower-income ones, could cause them to shift to a lower cost accommodation. The *CEQR Technical Manual* recommends an analysis of the “size and type of groups of residents, businesses, or employees” that may be affected.

4.3.1.1 Residents

The objective of the indirect residential displacement assessment is to determine whether the Proposed Program may either introduce or accelerate a change in socioeconomic conditions that may potentially displace a vulnerable population that, in turn, affects the socioeconomic character of neighborhoods across the City.

As assessed in **Chapter 8**, “**Transportation**,” the Proposed Program would result in a loss of on-street parking spaces due to the placement of stationary on-street containers in the parking lane.

The assessment of potential indirect displacement of residents includes understanding the context in which the loss of on-street parking spaces due to stationary on-street containers could increase parking costs due to the decision to use off-street parking facilities, and, in turn, that these higher parking costs would cause households to relocate. In general, parking costs could increase for a household in neighborhoods with: (a) many buildings with 10 or more residential units (which would thus be affected by the Proposed Program and use one or more stationary on-street containers that take parking spaces); and (b) a high demand for on-street parking (high density residential areas with many vehicle owners). Households who are potentially at risk of higher parking costs include those that own vehicles, currently park on the street, and live in high density areas. Thus, not every household in a neighborhood would be affected. In fact, U.S. Census data indicate that around 30% of City households own vehicles. In many Manhattan CDs, less than 50% of those vehicles park on the street (because of the lack of available parking spaces). On days when these households cannot find on-street parking, it is anticipated that they pay for off-street parking. Ultimately, indirect displacement for a household would result only if total transportation costs with the Proposed Program (including both vehicle user costs and program-induced parking costs) trigger the relocation to an alternative home with lower total transportation costs (including all changes in user and parking costs), and assuming no change in housing costs.

The numbers of households who could potentially need to use off-street parking is available from the parking utilization analysis performed for five representative prototypical areas (one for each borough) (see **Chapter 8**, "**Transportation**," for more details). The parking utilization analysis included an evaluation of parking availability and utilization in the Future with and without the Proposed Program within a 0.25-mile radius area, and, where required by CEQR, a 0.5-mile radius area during four 2-hour peak periods of day (morning [AM], MD, evening [PM] and ON) to represent high and low demand and availability. For this socioeconomic assessment, it was determined that on-street parking for residents would be primarily affected by the Proposed Program during the morning and ON peak periods.

Based on the parking utilization analysis, there would be sufficient on-street parking within the Bronx, Brooklyn, Queens, and Staten Island prototypical areas during the morning and ON peak periods and therefore, residents there would not need to use off-street parking facilities. However, in the 0.5-mile Manhattan CD 08 prototypical area, during the ON peak period, 352 out of a total of 5,765 on-street parking and vehicle-owning households would not be able to find on-street parking within a 0.5-mile radius and would likely opt to pay for off-street parking. As such, the proportion of vehicle-owning and street-parking household residents who would need to find off-street parking in the ON peak period would amount to approximately 6%,[18] assuming each of these households owns one vehicle.[19] In the 0.5-mile Manhattan CD 08 prototypical area, during the morning peak period, 687 out of a total of 4,763 on-street parking and vehicle-owning households would not be able to find on-street parking within a 0.5-mile radius and would likely opt to pay for off-street parking. As such, the proportion of vehicle-owning and street-parking households who would need to find off-street parking in the morning peak period would amount to approximately 14%, assuming each of these households owns one vehicle.

[18] Note that this percentage of households is computed by dividing 352 (the number of vehicles that would need to find off-street parking) by 5,765 (the total number of vehicles that would need to park in the ON peak period). This percentage is different than the parking utilization rate. This percentage is computed for the economic analysis to determine the average frequency that a household could potentially pay more for parking due to the proposed stationary on-street containers occupying on-street parking spaces.

[19] U.S. Census data indicate that a large majority of households in Manhattan who own vehicles only own one.

Based on the morning peak period, the 14% of households with vehicles who typically park on the street means also that a household may on average opt to pay for off-street parking 14.4% of the time, or on average about 4.4 days per month.[20] Off-street parking costs vary. For the purposes of this assessment, an upper end average cost of about $61 per day (based on a survey of parking garages and assuming conservatively that all vehicles that have to use a garage pay the higher sport utility vehicle (SUV) parking rate in Manhattan CD 08), a household could face higher costs of about $270 per month. This increase in costs would be relatively modest compared to total housing and transportation costs for many households in Manhattan CD 08 because many already pay relatively high rents[21] and vehicle-owning households tend to have above-average incomes[22]. Incidentally, paid off-street parking is already a fairly common expense for a majority of vehicle-owning residents in this area.[23]

The loss of parking spaces in Manhattan is generally not considered a significant impact in the *CEQR Technical Manua*l due to the magnitude of available alternative modes of transportation options. Notwithstanding, the analysis indicates that the Proposed Program would use parking spaces in Manhattan CD 08 that would otherwise be used for on-street parking and these spaces would most likely be used by residents, given the time period. Accordingly, since the parking utilization analysis for the prototypical areas indicates that the reduction of on-street parking would lead to minor to no increase in parking costs on average, there would be a very low likelihood of indirect displacement of residents.

4.3.1.2 Businesses

The objective of the indirect business displacement assessment is to determine whether the Proposed Program may either introduce or accelerate a change in socioeconomic conditions that may potentially displace business that, in turn, affects the socioeconomic character of neighborhoods across the City.

Similar to the potential effects of a reduction in on-street parking to residents, discussed above, this assessment evaluates the potential for indirect displacement relative to the potential effects of on-street parking reduction on businesses. Potential effects to businesses would occur if customers spend less on their goods and services as a result of limitations to on-street parking due to the Proposed Program.

Similar to the assessment performed for residents (**Section 4.3.1.1**), the numbers of customers who would potentially use off-street parking is available from the parking utilization analysis. However, in this case, the potential effects on businesses would depend on whether customers would divert money from business spending if they opt to pay more than usual for parking. In contrast to residential vehicle owners, businesses are assumed to be primarily affected by the Proposed Program during the MD and evening peak periods.

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[20] For a month consisting of 30.5 days on average, 14.4% of these days amounts to 4.4 days.

[21] Standardized rent data by Manhattan neighborhood is available from RentCafe.com.

[22] Vehicle ownership by income is shown on Page 51 of NYC.GOV 2022 Citywide Mobility Survey Results.

[23] Using average household density and vehicle ownership rates for the Manhattan CD 08, the 0.5-mile radius would be home to about 44,000 households who own on average 14,000 vehicles. In the 0.5-mile radius, there are around 5,765 households who park on the street during the ON peak period (based on the parking survey data) and this means that nearly 60% of households are currently parking in an off-street parking facility.

Based on the parking utilization analysis, there would be, on average, sufficient on-street parking within the Bronx, Brooklyn, Queens, and Staten Island prototypical areas during the MD and evening peak periods and therefore, customers would not need to use off-street parking facilities. Only in the Manhattan CD 08 prototypical area would customers potentially need to use off-street parking facilities during the midday and evening peak periods.

The potential cost of parking for customers can be evaluated using results from the parking utilization analysis. This analysis assumes that the effects of a reduction of parking spaces on vehicle-driving customers can be evaluated as an average of the parking conditions during the two two-hour peak periods (MD and evening). The parking utilization analysis indicates that during these two peak periods, 5,118 vehicles on average would seek to park in the average number of 4,302 legal spaces in the 0.5-mile Manhattan CD 08 prototypical area. This means that approximately 816 vehicles may require off-street parking, or 16% of all vehicles. Equivalently, an individual customer may need to find off-street parking 16% of the time, or every 6.25 trips on average.

The actual financial impact on businesses is likely to be low because according to the *CEQR Technical Manual*, sufficient alternative modes of transportation exist in Manhattan. Customers may use lower cost transportation options. For instance, to avoid paying off-street parking costs, some consumers that currently use vehicles may shift to travel via train or bus. Others may adapt by modifying their parking strategies, such as finding a single on-street parking space and remaining there for the duration of their visit, completing the entirety of their business along a corridor on foot rather than moving their vehicle for each errand. These alternative modes provide a buffering effect of the reduced on-street parking options caused by the Proposed Program. That is, consumers may further shift to alternative modes if on-street parking becomes more difficult and costly – they would be less likely to shift where they purchase goods and services. Moreover, containerizing waste and removing the mounds of curbside plastic bags filled with waste would create a more aesthetically pleasing environment, thus enhancing the experience for business customers. Therefore, the Proposed Program would not be anticipated to result in indirect displacement of businesses due to a reduction of on-street parking spaces.

4.4 Conclusion

Based on the above socioeconomic assessment, the Proposed Program would not result in a significant adverse impact on socioeconomic conditions.

5 HISTORIC AND CULTURAL RESOURCES

5.1 Introduction

Pursuant to Chapter 9 of the *CEQR Technical Manual*, the lead agency identifies and evaluates the historic and cultural resources within the proposed project area to determine whether the proposed project would lead to any significant impacts.

For purposes of CEQR, the following resources were specifically considered in this Citywide analysis:

- Historic districts listed in, or formally determined eligible for inclusion in, the State and/or National Register of Historic Places (NRHP);

- Historic districts recommended by the State Office of Parks, Recreation and Historic Preservation (OPRHP), which operates the SHPO, for listing in the State and/or National Registers of Historic Places;
- Individual resources listed in, or formally determined eligible for inclusion in, the State and/or NRHP, or contained within a district listed in, or formally determined eligible for listing in, the State and/or NRHP;
- Individual resources recommended by the State OPRHP for listing in the State and/or NRHP;
- Designated City landmarks, scenic landmarks and properties within designated City historic districts; and
- Resources calendared for consideration as one of a designated City landmark, scenic landmark or property within a designated City historic district by NYCLPC.

Historic and cultural resources include both architectural resources and archaeological (buried) resources. Historic architectural resources generally include historically important buildings, structures, objects, sites, and districts, while archaeological resources generally include subsurface physical remains and artifacts from time periods before the 20th century. Historic districts are concentrations of buildings, structures, objects, and/or sites that are linked by shared historical events, architectural style, or development.

The Proposed Program would not result in any ground disturbance below the existing paved streets and therefore, would not result in any potential significant adverse impacts to archaeological resources. The Proposed Program would include placement of stationary on-street containers and individual bins within historic districts and areas designated with architectural resources, as discussed below. However, none of the architectural resources within the historic districts would experience any physical change.

While small alignment blocks would be installed at the street surface for the placement of stationary on-street containers, resulting in a minor modification to the parking lane, the Proposed Program would not result in ground disturbance below the existing paved streets. In cases where streets are historic cobblestone or brick, whether located within or outside the boundary of an NRHP-listed or eligible historic district, the installation of stationary on-street containers would be performed without attachment to the street. Therefore, the Proposed Program would not impact historically significant street surfaces.

As described more fully below, the placement of stationary on-street containers and individual bins would not result in any potential significant adverse direct or indirect impacts to architectural resources.

5.2 Methodology

Per the *CEQR Technical Manual*, generally, architectural resources should be surveyed and assessed if the proposed project would result in any of the following:

- New construction, demolition, or significant physical alteration to any building, structure, or object.
- A change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature. Visual prominence is generally the way in which a building, structure, object, or landscape feature is viewed.
- Construction, including but not limited to, excavating vibration, subsidence, dewatering, and the possibility of falling objects.

- Additions to or significant removal, grading, or replanting of significant historic landscape features.
- Screening or elimination of publicly accessible views.
- Introduction of significant new shadows or significant lengthening of the duration of existing shadows on an historic landscape or on an historic structure if the features that make the structure significant depend on sunlight.

In order to determine whether the Proposed Program could potentially affect architectural resources, this chapter considers whether the Proposed Program would result in any physical or visual changes, to historic resources and if so, whether the changes would be likely to alter or eliminate the significant characteristics of the resource which make it historically important. Based on the nature of the Proposed Program, the potential for significant impacts on individual historic and cultural resources would be negligible. The environmental review performed for the Manhattan CD 09 Pilot Program (CEQR No. 25DOS001M) found that potential impacts to historic and cultural resources associated with waste containerization would be limited to potential impacts on the setting[24] for historic districts. While the Proposed Program would cause no physical impacts to individual resources that comprise historic districts, the setting (or physical environment) of a historic district was assessed in terms of whether the presence of stationary on-street containers in parking lanes and individual bins along sidewalks would have the potential to significantly diminish the public's visual experience of any historic districts as a whole.

5.3 Existing Conditions

The State OPRHP's Cultural Resource Information System (CRIS) database identified 166 NRHP-listed historic districts and 211 NRHP-eligible historic districts within the City's 59 CDs. In addition, 135 identified historic districts that have not been evaluated for State or NRHP listing are noted as "undetermined." CRIS records indicate 52 historic districts have been determined not eligible for NRHP listing and one district has been demolished. As such, a total of 565 historic districts were identified. **Table 5-1** presents the State- and federal-level NRHP-listed and NRHP-eligible historic districts included in CRIS records, listed by CD. **Appendix B** details the name and eligibility status of each historic district, listed alphabetically by CD. **Appendix C** includes CD maps depicting buildings that would potentially use stationary on-street containers in relation to the locations of eligible and NRHP-listed historic districts.

Table 5-1. Total Eligible and NRHP-listed Historic Districts by CD

Community District (CD)	Eligible	Listed	Community District (CD)	Eligible	Listed
Manhattan CD 01 (MN01)	6	5	Brooklyn CD 07 (BKS07)	1	3
Manhattan CD 02 (MN02)	5	9	Brooklyn CD 08 (BKN08)	3	6
Manhattan CD 03 (MN03)	5	7	Brooklyn CD 09 (BKN09)	8	3
Manhattan CD 04 (MN04)	5	5	Brooklyn CD 10 (BKS10)	1	3
Manhattan CD 05 (MN05)	4	1	Brooklyn CD 11 (BKS11)	0	0

[24] The National Park Service defines setting as the physical environment of a historic property, including how it relates to its surroundings. The Proposed Program only has the potential to impact setting; it has no potential to impact location, design, materials, workmanship, feeling, or association of historic districts or individual historic and cultural resources. The Proposed Program is not physically impacting historic or cultural resources in any way.

Community District (CD)	Eligible	Listed	Community District (CD)	Eligible	Listed
Manhattan CD 06 (MN06)	2	8	Brooklyn CD 12 (BKS12)	2	0
Manhattan CD 07 (MN07)	10	7	Brooklyn CD 13 (BKS13)	5	0
Manhattan CD 08 (MN08)	3	5	Brooklyn CD 14 (BKS14)	1	3
Manhattan CD 09 (MN09)	6	5	Brooklyn CD 15 (BKS15)	2	0
Manhattan CD 10 (MN10)	8	8	Brooklyn CD 16 (BKN16)	4	0
Manhattan CD 11 (MN11)	8	5	Brooklyn CD 17 (BKN17)	1	0
Manhattan CD 12 (MN12)	1	5	Brooklyn CD 18 (BKS18)	1	0
Bronx CD 01 (BX01)	3	2	Queens CD 01 (QW01)	5	0
Bronx CD 02 (BX02)	2	1	Queens CD 02 (QW02)	3	2
Bronx CD 03 (BX03)	0	1	Queens CD 03 (QW03)	0	1
Bronx CD 04 (BX04)	1	2	Queens CD 04 (QW04)	1	0
Bronx CD 05 (BX05)	5	2	Queens CD 05 (QW05)	4	19
Bronx CD 06 (BX06)	2	0	Queens CD 06 (QW06)	2	0
Bronx CD 07 (BX07)	3	1	Queens CD 07 (QE07)	2	1
Bronx CD 08 (BX08)	6	2	Queens CD 08 (QE08)	4	1
Bronx CD 09 (BX09)	3	0	Queens CD 09 (QW09)	0	2
Bronx CD 10 (BX10)	4	0	Queens CD 10 (QE10)	1	0
Bronx CD 11 (BX11)	0	1	Queens CD 11 (QE11)	0	4
Bronx CD 12 (BX12)	3	2	Queens CD 12 (QE12)	5	0
Brooklyn CD 01 (BKN01)	6	2	Queens CD 13 (QE13)	4	1
Brooklyn CD 02 (BKN02)	5	10	Queens CD 14 (QE14)	7	3
Brooklyn CD 03 (BKN03)	9	4	Staten Island CD 01 (SI01)	11	3
Brooklyn CD 04 (BKN04)	2	3	Staten Island CD 02 (SI02)	4	2
Brooklyn CD 05 (BKN05)	3	2	Staten Island CD 03 (SI03)	4	1
Brooklyn CD 06 (BKS06)	5	3			
Total Eligible = 211 Total Listed = 166					

Source: State CRIS, November 2025

NYCLPC defines a historic district as a concentration of resources that represents at least one period or style of architecture typical of one or more eras in the City's history, has a distinct "sense of place," and has a coherent streetscape. The 164 City-designated historic districts that would be part of the NYCLPC permitting process, according to data provided by NYCLPC in the City's

NYCOpenData (November 2024), are summarized in **Table 5-2** and identified by CD in **Appendix D**. **Appendix E** includes CD maps depicting buildings that would potentially use stationary on-street containers in relation to the locations of City-designated historic districts.

Table 5-2. NYCLPC Historic Districts by CD

Community District (CD)	Total	Community District (CD)	Total
Manhattan CD 01 (MN01)	11	Brooklyn CD 07 (BKS07)	5
Manhattan CD 02 (MN02)	14	Brooklyn CD 08 (BKN08)	5
Manhattan CD 03 (MN03)	4	Brooklyn CD 09 (BKN09)	4
Manhattan CD 04 (MN04)	6	Brooklyn CD 10 (BKS10)	1
Manhattan CD 05 (MN05)	3	Brooklyn CD 11 (BKS11)	-
Manhattan CD 06 (MN06)	8	Brooklyn CD 12 (BKS12)	-
Manhattan CD 07 (MN07)	13	Brooklyn CD 13 (BKS13)	-
Manhattan CD 08 (MN08)	9	Brooklyn CD 14 (BKS14)	4
Manhattan CD 09 (MN09)	7	Brooklyn CD 15 (BKS15)	-
Manhattan CD 10 (MN10)	5	Brooklyn CD 16 (BKN16)	-
Manhattan CD 11 (MN11)	2	Brooklyn CD 17 (BKN17)	1
Manhattan CD 12 (MN12)	4	Brooklyn CD 18 (BKS18)	-
Bronx CD 01 (BX01)	3	Queens CD 01 (QW01)	-
Bronx CD 02 (BX02)	3	Queens CD 02 (QW02)	2
Bronx CD 03 (BX03)	1	Queens CD 03 (QW03)	1
Bronx CD 04 (BX04)	2	Queens CD 04 (QW04)	-
Bronx CD 05 (BX05)	1	Queens CD 05 (QW05)	4
Bronx CD 06 (BX06)	-	Queens CD 06 (QW06)	-
Bronx CD 07 (BX07)	1	Queens CD 07 (QE07)	1
Bronx CD 08 (BX08)	2	Queens CD 08 (QE08)	-
Bronx CD 09 (BX09)	-	Queens CD 09 (QW09)	-
Bronx CD 10 (BX10)	-	Queens CD 10 (QE10)	-
Bronx CD 11 (BX11)	-	Queens CD 11 (QE11)	3
Bronx CD 12 (BX12)	-	Queens CD 12 (QE12)	1
Brooklyn CD 01 (BKN01)	3	Queens CD 13 (QE13)	2
Brooklyn CD 02 (BKN02)	11	Queens CD 14 (QE14)	-
Brooklyn CD 03 (BKN03)	5	Staten Island CD 01 (SI01)	2
Brooklyn CD 04 (BKN04)	1	Staten Island CD 02 (SI02)	1
Brooklyn CD 05 (BKN05)	-	Staten Island CD 03 (SI03)	-

Community District (CD)	Total	Community District (CD)	Total
Brooklyn CD 06 (BKS06)	8		
Total = 164			

Source: New York City Open Data, November 2024

5.4 Future without the Proposed Program

Under the Future without the Proposed Program, buildings with one to nine residential units would continue to use individual bins for their refuse. Buildings with 10 or more residential units would also continue to set out plastic bags of waste at the curb. Without the Proposed Program, these waste-filled plastic bags would continue to block or impede pedestrian access along sidewalks, thus potentially impacting access in historic districts throughout the City. These plastic bags would continue to be visible within the viewsheds of historic buildings, impacting general walkability and passage for those that use wheelchairs, walkers, strollers and other apparatus. The plastic bags of waste would continue to attract vectors (e.g., rats and vermin), generate odors, and leak garbage fluids if torn, thereby continuing to negatively affect the setting of historic districts Citywide.

5.5 Future with the Proposed Program

As discussed in **Chapter 1**, "**Project Description**," the Proposed Program would result in the placement of stationary on-street containers Citywide for refuse from buildings with 31 or more residential units and buildings with 10 to 30 residential units that opt-in to the Proposed Program, and for all waste streams from schools in Manhattan CD 09 and Brooklyn CD 02 that receive collection by DSNY. Buildings with 10 to 30 residential units have the option of setting out their refuse along the sidewalk in individual bins instead of stationary on-street containers for DSNY collection.[25]

The stationary on-street containers would be installed in front of or near their respective properties. The stationary on-street containers would be of similar or lower height than compact SUVs that currently park in the parking lane. Each stationary on-street container, inclusive of the alignment blocks, would be approximately 6.16 feet long by five (5) feet wide by 5.25 feet tall, with a capacity of approximately four (4) cy. The stationary on-street container design has a low profile which allows for continued pedestrian visibility over the container.

As part of the Proposed Program, buildings with 10 to 30 residential units may choose to set out their refuse for DSNY collection along the sidewalk in individual bins instead of stationary on-street containers. The individual bins would be set out for DSNY collection at the curb in front of or near their respective properties. **Appendix C** includes CD maps depicting buildings that may use the proposed stationary on-street containers in relation to the locations of eligible and NRHP-listed historic districts.

[25] Buildings with residential units that use individual bins are required to meet DSNY's Rules regarding "Requirements for Receptacles and Bags Containing Solid Waste and Recyclables for Collection" (16 RCNY §1-02.1), summarized below:
- Receptacles (Individual bins) must be kept clean and in good repair; and
- If other storage areas on the premises are not available, receptacles may be stored in the area within three feet of the building line on the sidewalk, provided that such receptacles are maintained in an orderly manner and do not impede or obstruct pedestrian flow on the sidewalk.

Under the Proposed Program, both stationary on-street containers and individual bins would be placed within identified historic districts Citywide. Based on the following evaluation, surveying of architectural resources was not warranted:

- *New construction, demolition, or significant physical alteration to any building, structure, or object.* The Proposed Program would not result in a physical change to any architectural resources within the historic districts.
- A change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature. Visual prominence is generally the way in which a building, structure, object, or landscape feature is viewed. The visual prominence[26] of historic district resources would not be impacted by the Proposed Program. The visual context of district resources in terms of their historic setting would be similar in similar or lower height than compact SUVs.
- Construction, including but not limited to, excavating vibration, subsidence, dewatering, and the possibility of falling objects. Activities conducted as part of the Proposed Program do not include the potential for excavating vibration, subsidence, dewatering, or falling objects.
- *Additions to or significant removal, grading, or replanting of significant historic landscape features.* Activities conducted as part of the Proposed Program do not include any physical changes to historic landscape features.
- *Screening or elimination of publicly accessible views.* Stationary on-street containers would be located in on-street parking lanes and individual bins would be located along the sidewalk, and their profile would not screen or eliminate publicly accessible views of the architectural resources that comprise historic districts.
- Introduction of significant new shadows or significant lengthening of the duration of existing shadows on an historic landscape or on an historic structure if the features that make the structure significant depend on sunlight. The scale of the stationary on-street containers and individual bins precludes the introduction of significant new shadows. Additionally, historic districts and their contributing resources do not typically rely on sunlight for significance.

Individual bins would be stored within their respective properties (i.e., rear yards, or within three feet of the building line). The stationary on-street containers and individual bins would neatly organize waste awaiting DSNY collection and maintain sidewalk access through districts and past historic and cultural resources, compared to mounds of plastic bags of refuse set out at the curb. While the presence of stationary on-street containers and individual bins would be visible in front of individual resources, in the same way that plastic bags currently set out on the curb are, their use would offer a more orderly, uniform presence as compared to the current system. In addition, the stationary on-street containers and individual bins are free-standing and therefore offer no permanent or physical impacts to the resources themselves.

In most cases, the placement of the stationary on-street containers would result in minor modifications to the street surface for the placement of the alignment blocks. However, in cases where streets are historic cobblestone or brick, whether located within or outside the boundary of an NRHP-listed or eligible historic district, the installation of the stationary on-street containers would be performed without attachment to the street, as is common practice in European cities with containerization programs and historic street surfaces. As a result, the Proposed Program would not

[26] In CEQR guidance, visual prominence refers to the way in which an architectural resource is viewed, i.e., its visual context. The Proposed Program calls for stationary on-street containers that are similar or lower height than compact SUVs, indicating that the resources would not be visually overwhelmed by the containers, and the relationship between the resources and the streetscape would not be altered.

impact historically significant street surfaces. See **Appendix F** for a list of cobblestone and brick streets identified by CD. Cobblestone streets are also depicted on the figures included in **Appendix C** and **Appendix E**.

Additionally, stationary on-street containers and individual bins would not be placed in front of public parks, public art, or monuments, whether located within or outside the boundary of an NRHP-listed or eligible historic district.

Designated City landmarks, scenic landmarks and properties within designated City historic districts, as well as resources calendared for consideration as a designated City landmark, scenic landmark or property within a designated City historic district would be subject to the NYCLPC permitting process. Therefore, potential impacts to City-designated properties would be addressed in consultation with the NYCLPC.

Based on this analysis, the placement of stationary on-street containers and individual bins under the Proposed Program would not negatively impact architectural resources, using the *CEQR Technical Manual*'s list of potential impacts as detailed in **Section 5.2**. Therefore, the Proposed Program would not result in any significant adverse impacts to NRHP-listed or eligible historic or cultural resources.

The assessment was reviewed by the State OPRHP. As per the letter received from the State OPRHP in March 2026, the State OPRHP concluded that they have no concerns regarding the proposed stationary on-street containers. See **Appendix G.**

6 URBAN DESIGN AND VISUAL RESOURCES

6.1 Introduction

Pursuant to the *CEQR Technical Manual*, this urban design and visual resources assessment considers whether and how the proposed Citywide Containerization Program may change the experience of pedestrians throughout the City and the Proposed Program's potential to alter the arrangement, appearance and functionality of the built and natural environment in the City. Urban design is the totality of elements that shape and affect a pedestrian's experience of public space. A visual resource is the connection from the public realm to significant natural or built features, including views of the waterfront, public parks, landmark or historic structures, and natural resources.

As described below, this preliminary assessment concludes that the Proposed Program would not result in any significant adverse impacts to urban design or visual resources. Although the Proposed Program would have the potential to affect how a pedestrian views the urban landscape, such effects would be positive. Instead of the multitude of plastic waste bags obstructing pedestrian access along sidewalks, waste would be containerized in stationary on-street containers placed in the parking lane or individual bins placed in front of or near the building on the sidewalk. Additionally, containerized waste would improve the visual and pedestrian experience by removing the sight and smell of plastic waste bags piled up along the sidewalk.

6.2 Methodology

In accordance with the *CEQR Technical Manual*, this analysis considers the effects of the Proposed Program on the experience of a pedestrian in the City. The assessment focuses on those project elements that have the potential to alter the built environment, or urban design, which is collectively formed by the following components:

- *Streets*. The arrangement and orientation of streets define location, flow of activity, street views, and create blocks on which buildings and open spaces are arranged. Other elements including sidewalks, plantings, streetlights, curb cuts, and street furniture also contribute to an area's streetscape.
- *Buildings*. A building's size, shape, setbacks, pedestrian and vehicular entrances, lot coverage and orientation to the street are important urban design components that define the appearance of the built environment.
- *Open Space*. Open space includes public and private areas, including parks and other landscaped areas, cemeteries, and parking lots.
- *Natural Features*. Natural features include vegetation and geologic, topographic, and aquatic features that are natural to the area.
- *View Corridors and Visual Resources*. Visual resources include significant natural or built features, including important view corridors, public parks, landmark structures or districts, or otherwise distinct buildings or groups of buildings.
- *Wind*. Channelized wind pressure from between tall buildings and downwashed wind pressure from parallel tall buildings may cause winds that affect pedestrian comfort and safety.

In accordance with the *CEQR Technical Manual*, a preliminary assessment of urban design and visual resources is appropriate when there is the potential for a pedestrian to observe, from the street level, a physical alteration beyond that allowed by existing zoning. Because the Proposed Program has the potential to change views or access to visual resources beyond a *de minimis* amount, it meets the threshold for a preliminary assessment of urban design and visual resources.

6.3 Existing Conditions

Since the 1960s, DSNY has collected plastic bags of waste set out at the curb. Today, DSNY collects over 24 million pounds of residential waste each day. The immense number of bags set out at the curb block sidewalks, obstruct pedestrian access, fall into the streets, and impede traffic. Additionally, these plastic bags of waste attract vectors (e.g., rats and vermin), generate odors, and leak waste fluids if torn. Under existing conditions, pedestrians are subject to a negative multi-sensory experience through these visual and physical effects. See **Photo #1** for an example of plastic bags of refuse piled on the sidewalks and spilling into the streets.

Under DSNY Rules, which became effective on November 12, 2024, DSNY initiated implementation of its residential waste containerization program, by requiring buildings throughout the City with one to nine residential units and all City agencies to set out their refuse in rigid receptacles with tight fitting lids. Separation of food and yard waste became mandatory for residential properties on April 1, 2025, requiring all residential properties to also containerize food waste in rigid receptacles with tight fitting lids.

In June 2025, DSNY implemented a waste containerization pilot program in Manhattan CD 09. Under the Manhattan CD 09 Pilot Program, buildings with residential units within Manhattan CD 09

containerize their refuse as follows for DSNY collection: buildings with 10 to 30 residential units have the option to use individual bins or stationary on-street containers; and buildings with 31 residential units or more must use stationary on-street containers. Under the Manhattan CD 09 Pilot Program, schools within Manhattan CD 09 that receive DSNY collection services must utilize separate stationary on-street containers for each waste stream (refuse, organics, MGPC, paper/cardboard).

For buildings that are not subject to the DSNY Rules on waste containerization or the Manhattan CD 09 Pilot Program, plastic bags of waste are set out at the curb under existing conditions. The large number of plastic bags set out at the curb disrupt pedestrian views and experiences of visual and urban design resources Citywide, including at historic and landmark structures, historic and landmark districts, waterfront areas, national memorials, and public parks. See **Chapter 5**, "**Historic and Cultural Resources**," for a discussion of the existing conditions and potential impacts on historic and cultural resources due to the Proposed Program.

6.4 Future without the Proposed Program

Under the Future without the Proposed Program, buildings with one to nine residential units would continue to use individual bins for their refuse. Buildings with 10 or more residential units would continue to set out plastic bags of waste at the curb. In the Future without the Proposed Program, these waste-filled plastic bags would continue to block or impede pedestrian access along sidewalks, in turn affecting access and views of various visual and urban design resources, including businesses, transit stops and historic or landmark structures throughout the City. These plastic bags would continue to affect the viewsheds of historic buildings and affect general walkability, including impeding passage for those that use wheelchairs, walkers, strollers and other mobility apparatus. The plastic bags of waste would continue to attract vectors (e.g., rats and vermin), generate odors, and leak waste fluids if torn, thereby continuing to negatively affect visual resources and pedestrian experiences Citywide.

6.5 Future with the Proposed Program

The Proposed Program would result in the placement of stationary on-street containers for refuse from buildings with 31 or more residential units and some buildings with 10 to 30 residential units Citywide, and for refuse and recyclables from schools in Manhattan CD 09 and Brooklyn CD 02 that receive collection by DSNY. As part of the Proposed Program, buildings with 10 to 30 residential units may choose to set out their refuse at the curb for DSNY collection in individual bins instead of stationary on-street containers.[27] The individual bins would be set out for DSNY collection at the curb in front of or near their respective properties. The use of stationary on-street containers and individual bins for waste disposal would allow DSNY to support the City's commitment to street cleanliness and to reducing potential food sources for vectors (e.g., rats and vermin). By moving waste from curbside plastic bags to placement within on-street containers or individual bins, there would be a reduction of potential odors, loss of liquids, and litter from ripped or open plastic bags, and improved pedestrian access along sidewalks.

[27] Buildings with 10 to 30 residential units that choose to utilize individual bins are required to comply with DSNY's Rules regarding "Requirements for Receptacles and Bags Containing Solid Waste and Recyclables for Collection" (16 RCNY §1-02.1), summarized below:

- Receptacles (individual bins) must be kept clean and in good repair; and
- If other storage areas on the premises are not available, receptacles may be stored in the area within three feet of the building line on the sidewalk, provided that such receptacles are maintained in an orderly manner and do not impede or obstruct pedestrian flow on the sidewalk.

As the Proposed Program would be Citywide, to produce a reasonable assessment of the likely effects of the Proposed Program, the assessment referenced existing conditions and utilized photographs of individual bins currently used by buildings that are required to comply with 16 RCNY § 1-02.1, and stationary on-street containers currently used by buildings and schools as part of the Manhattan CD 09 Pilot Program.

The stationary on-street containers would be installed in front of or near their respective properties and would be of a similar or lower height than compact SUVs that currently park in the parking lane, as shown in **Photo #9**. Each stationary on-street container, inclusive of the alignment blocks, would be approximately 6.16 feet long by five (5) feet wide by 5.25 feet tall, with a capacity of approximately four (4) cy. Therefore, the visual scale of the existing elements in the parking lane would not change. As shown in **Photo #9,** the Proposed Program would not result in obstructed views or access to visual resources beyond a *de minimis* amount, as the stationary on-street container design has a low profile which allows for pedestrian visibility over the container(s). Although some stationary on-street containers may be placed in the parking lane in front of historic or landmark structures or within historic or landmark districts, they would not negatively impact the pedestrian experience due to their size and organized manner of storage. Additionally, no stationary on-street containers would be placed in front of any public parks, art installations, monuments, or transit stops.

Photo #9. Installed Stationary On-Street Containers as part of the Manhattan CD 09 Pilot Program

As part of the Proposed Program, buildings with 10 to 30 residential units may choose to set out their refuse at the curb for DSNY collection in individual bins, as shown in **Photo #4**, instead of stationary on-street containers. Individual bins may vary in dimension but would not exceed 55 gallons each. The individual bins would be set out for DSNY collection at the curb in front of or near their respective properties on the night before collection. In accordance with 16 RCNY § 1-02.1, the individual bins would be stored within the property, in rear yard, or within three feet of the building line to allow for a clear path for pedestrian travel. Therefore, the individual bins are not anticipated to impede or obstruct pedestrian flow on the sidewalk, result in obstructed views or access to visual resources beyond a *de minimis* amount, or otherwise result in a negative change to the experience of pedestrians on the sidewalk.

The Proposed Program would improve the overall appearance of public spaces along sidewalks, as shown in **Photo #10** through **Photo #12**. Based on the learnings of the Manhattan CD 09 Pilot Program and as depicted in **Photo #11**, the placement of stationary on-street containers and individual bins on a curb along the same City street would not disrupt pedestrian movement on

sidewalks. Rather, as described above, the Proposed Program would improve available sidewalk space and walkability compared to the Future without the Proposed Program. The Proposed Program would also enhance the current viewsheds throughout the City and preserve urban design features by removing large piles of plastic bags of waste which obstruct sidewalks, attract vectors (e.g., rats and vermin), and cause odors and unsanitary street conditions (see **Photo #1**).

Photo #10. Individual Containers Stored within Three Feet of the Building Line as part of the Manhattan CD 09 Pilot Program

Photo #11. Individual Containers Placed for Collection at the Curbline with Stationary On-Street Containers as part of the Manhattan CD 09 Pilot Program

Photo #12. Individual Containers Placed at the Curbline for Collection

The proposed Citywide Containerization Program would change the type of receptacles in which certain buildings with residential units Citywide and schools in Manhattan CD 09 and Brooklyn CD 02 place their waste. The Proposed Program would not generate an increase in solid waste over

levels anticipated in the Future without the Proposed Program. The Proposed Program would not influence development patterns or the built environment. As noted above, the placement of stationary on-street containers in the parking lane would have less of a visual effect on the pedestrian experience as parked cars. While the individual bins would be temporarily placed at the curb on the evening before collection, they would not be permanently placed on sidewalks and would provide a benefit to the pedestrian experience. When not set at the curb for collection, individual bins would be stored on the premises of the residential building or within three feet of the building.

In summary, the Proposed Program would create a more hygienic, harmonious, and aesthetically pleasing experience for pedestrians, and would not result in any significant adverse impacts to urban design or visual resources. The Proposed Program would not negatively alter significant view corridors or views of visual resources and is unlikely to disturb the vitality, walkability, or visual character of the area. Therefore, no further analysis of urban design and visual resources is warranted.

7 SOLID WASTE AND SANITATION SERVICES

7.1 Introduction

As detailed in the *CEQR Technical Manual*, a solid waste and sanitation services assessment determines whether a proposed project has the potential to cause a substantial increase in solid waste production that may overburden available waste management capacity or otherwise be inconsistent with the approved SWMP or with State policy related to the City's integrated solid waste management system. Consistent with the *CEQR Technical Manual*, if a proposed project is not expected to generate 50 tons per week or more of new solid waste, then the project would not have a significant adverse impact to the City's available waste management capacity and a detailed analysis is not warranted. If a proposed project involves the construction, operation, or closing of any type of regulated solid waste management facility or if it would involve a regulatory change to public or private waste collection, processing, recycling, or disposal activity, a more detailed discussion may be warranted.

As set forth below, the Proposed Program would not generate an increase in solid waste over levels anticipated in the Future without the Proposed Program. Therefore, the proposed Citywide Containerization Program would not result in any increase in solid waste generation that would overburden available waste management capacity, nor would it increase the total tonnage of waste handled by the City. DSNY would use the same currently permitted facilities to dispose of the collected waste, and no effect on any existing regulated solid waste management facilities is anticipated. The Proposed Program would not result in any significant adverse impacts to solid waste and sanitation services.

7.2 Citywide Assessment

Generally, DSNY collection routes and frequency of waste collection would not change, except for schools in Manhattan CD 09 and Brooklyn CD 02. The frequency of waste collection from schools in Manhattan CD 09 and Brooklyn CD 02 would increase from five days per week to six days per week.

The proposed Citywide Containerization Program would change the type of receptacles in which certain buildings with residential units Citywide and schools in Manhattan CD 09 and Brooklyn

CD 02 place their waste. Under the Proposed Program, instead of placing plastic bags of refuse out at the curb for DSNY collection, buildings with 31 residential units or more, as well as buildings with 10 to 30 residential units that opt-in to the Proposed Program, would utilize stationary on-street containers for refuse.[28] Under the Proposed Program, buildings with 10 to 30 residential units may choose to set out their refuse along the sidewalk for DSNY collection in individual bins instead of stationary on-street containers.[29] The individual bins would be set out for DSNY collection at the curb in front of or near their respective properties. Additionally, under the Proposed Program, schools in Manhattan CD 09 and Brooklyn CD 02 that receive DSNY collection services would utilize separate stationary on-street containers for each waste stream (refuse, organics, MGPC, and paper/cardboard). The Proposed Program would provide an orderly, more convenient, and cleaner option for buildings with residential units Citywide and schools in Manhattan CD 09 and Brooklyn CD 02. Instead of large piles of plastic bags of waste on the sidewalk or the building perimeter awaiting collection, the use of stationary on-street containers and individual bins would containerize waste, improving pedestrian access, public health, and neighborhood character.

The proposed stationary on-street containers would consist of HDPE, a durable material with high resistance to impact, chemicals and weather. Maintenance activities would be required to promote sanitary conditions and reduce the potential for odors within and around the stationary on-street containers. Property owners would be responsible for cleaning the curb area surrounding the stationary on-street containers. During DSNY routine waste collection, if waste is observed near or under the stationary on-street containers, the waste would be collected by sanitation workers. DSNY would be responsible for cleaning and maintaining the stationary on-street containers. Routine scheduled cleaning of the stationary on-street containers and the immediate surrounding area would be performed a minimum of four times per year by the container vendor. The cleaning of the stationary on-street containers would typically be performed using a pressure washer, minimal water, eco-friendly cleaning detergent, and would not require street closure. Cones would be used during cleaning for pedestrian traffic. This routine cleaning would include removal of any debris or graffiti from the stationary on-street containers. Routine cleaning of the stationary on-street containers would also reduce potential odors generated by any residual solid waste or liquids that escape from bagged waste and accumulate in the bottom of the stationary on-street containers. Individual bins must be kept clean and in good repair by the property owners, per DSNY's Rules regarding "Requirements for Receptacles and Bags Containing Solid Waste and Recyclables for Collection" (16 RCNY §1-02.1).

In addition, and as discussed in **Chapter 12**, "**Public Health**," the proposed Citywide Containerization Program would also result in a safer work environment for sanitation workers. Under the Proposed Program, DSNY would use ASL collection trucks to collect the waste from the stationary on-street containers. This would reduce the need for sanitation workers to repeatedly lift plastic bags of waste throughout their shift and reduce their exposure to potentially hazardous contents of the bags, as well as diseases spread by vectors (e.g., rats and vermin) through their urine, feces, and/or saliva.

The proposed Citywide Containerization Program would be consistent with the current approved SWMP and State policy related to the City's integrated solid waste management system.

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[28] Buildings with 31 or more residential units that would require more than 12 stationary on-street containers would utilize an alternative means for DSNY collection.

[29] Buildings with residential units that use individual bins are required to meet DSNY's Rules regarding "Requirements for Receptacles and Bags Containing Solid Waste and Recyclables for Collection" (16 RCNY §1-02.1), summarized below:

- Receptacles (Individual bins) must be kept clean and in good repair; and
- If other storage areas on the premises are not available, receptacles may be stored in the area within three feet of the building line on the sidewalk, provided that such receptacles are maintained in an orderly manner and do not impede or obstruct pedestrian flow on the sidewalk.

Therefore, no further analysis is required, and the Proposed Program would not result in any significant adverse impacts to solid waste and sanitation services.

8 TRANSPORTATION

8.1 Introduction

In accordance with the *CEQR Technical Manual*, this chapter examines the potential effects of the proposed Citywide Containerization Program on the City's transportation system. The transportation system generally includes traffic operations and mobility, public transportation facilities and services, pedestrian elements and flow, safety of all roadway users (pedestrians, cyclists, transit users and motorists), on- and off-street parking, and/or goods movement. The transportation assessment was conducted pursuant to the methodologies outlined in the *CEQR Technical Manual* and in coordination with NYCDOT and MTA NYCT.

As described in **Chapter 1**, "**Project Description**," under the proposed Citywide Containerization Program, buildings with 10 to 30 residential units would have the option to use stationary on-street containers or individual bins for their refuse; buildings with 31 or more residential units would use stationary on-street containers for their refuse; and schools in Manhattan CD 09 and Brooklyn CD 02 that receive DSNY collection would use stationary on-street containers for all waste streams (refuse, organics, MGPC, and paper/cardboard).

For buildings with 10 to 30 residential units that choose to use individual bins, their refuse would be collected manually by sanitation workers using standard rear-loader collection trucks.

ASL collection trucks would be used to collect the waste from the stationary on-street containers. ASL collection trucks have an arm on one side of the collection truck whereby a sanitation worker can, from within the collection truck, mechanically grab, lift and empty the stationary on-street containers, while a second sanitation worker stands outside the collection truck to monitor for safety. The ASL collection trucks are able to empty a stationary on-street container in approximately one minute.[30]

The Proposed Program has the potential to result in an increase in collection truck and employee vehicle trips. Additional employees would be required to drive the incremental collection trucks. For one-way streets with buildings using stationary on-street containers on both curbs, an ASL collection truck with an arm on the left side of the vehicle and an ASL collection truck with an arm on the right side of the vehicle would collect waste. For City streets with a combination of buildings using individual bins and buildings using stationary on-street containers, curbside[31] waste collection would occur using both rear-loader collection trucks and ASL collection trucks. In addition, although the frequency of DSNY waste collection of refuse at buildings with residential units would not change due to the Proposed Program, DSNY waste collection at schools in Manhattan CD 09 and Brooklyn CD 02 would increase from five to six days per week (Monday through Saturday). Therefore, since the Proposed Program has the potential to result in an increase in collection truck and employee vehicle trips, a traffic screening assessment of potential effects of the Proposed Program was performed

[30] Each stationary on-street container can hold approximately 45 plastic refuse bags. Manual collection of a comparable number of bags by sanitation workers would take longer to complete.

[31] In this DEIS, curbside refers to the side of a road that is nearer to the curb.

Citywide focused on the increase in DSNY collection truck and employee vehicle trips necessary to collect and dispose of the waste from stationary on-street containers.

The proposed stationary on-street containers would be assigned to a building solely for the use of the assigned building and based on their waste generation needs. The stationary on-street containers would be installed in the parking lane in front of or near their respective properties, thereby permanently occupying potential parking spaces available to the general public. Therefore, a parking assessment was performed focused on the potential effects of the Proposed Program on parking due to the permanent placement of proposed stationary on-street containers. The parking analysis was performed Citywide to assess the potential loss of on-street parking spaces for each of the 59 CDs due to the Proposed Program.

In addition, the incremental collection trucks and employee vehicles required to implement the Proposed Program may use on-street parking spaces if the DSNY garage they are assigned to does not contain sufficient off-street parking. The number of parking spaces that may be required for the incremental collection trucks and employee vehicles is also disclosed.

The *CEQR Technical Manual* calls for a parking utilization analysis to determine what effect a proposed project may have on parking resources in the study area. A parking utilization analysis measures the usage of parking spaces over a study period to understand the parking supply (capacity) and demand. However, due to the City's expansive network of public roads, a detailed Citywide parking utilization analysis is not feasible. Therefore, in addition to an analysis of the potential reduction in Citywide on-street parking, a parking utilization analysis, consistent with the *CEQR Technical Manual* and in coordination with NYCDOT, was performed for five prototypical areas representing each of the five City boroughs. The results of these prototypical area parking utilization analyses were used to further understand the potential effects of the Proposed Program on the Citywide on-street parking supply.

In addition, the loss of parking spaces has the potential to result in some people choosing to use other modes of transportation including subway/rail, bus or ferries, where available. Therefore, transit (subway/rail and bus), ferry and pedestrian screening assessments were performed.

As detailed below, the proposed Citywide Containerization Program would not result in significant adverse impacts to traffic, transit, or pedestrians. In addition, the Proposed Program would not result in a parking shortfall and parking would remain available within a walking distance, although in some areas drivers may need to search for parking within a 0.5-mile radius. Areas affected by the Proposed Program contain one or more alternative modes of transportation, such as subway and/or bus lines.

8.2 Citywide Assessment

In accordance with *CEQR Technical Manual* guidelines, the individual key CEQR technical areas of the transportation system – traffic, parking, transit, and pedestrians – were separately assessed to determine whether the Proposed Program has the potential to adversely and significantly affect a specific area of the transportation system. Furthermore, interrelationships between the individual technical areas were considered in this assessment. As detailed in this section, a Citywide screening assessment was performed for incremental traffic, transit, ferry and pedestrian trips generated by the Proposed Program, as well as an analysis to determine the anticipated reduction of parking spaces due to the Proposed Program.

8.2.1 Citywide Transportation Screening Assessment

The *CEQR Technical Manual* provides guidance on conducting a two-tier screening assessment in order to determine the need for detailed analyses and/or the potential for significant project-related adverse transportation impacts. This assessment encompasses CEQR transportation analysis categories including traffic, transit, ferry, and pedestrian. A Level 1 screening assessment includes a trip generation assessment in order to estimate the number of project-generated trips. If further assessment is warranted, a Level 2 screening assessment - consisting of a project-generated trip assignment evaluation - is then conducted to identify intersections within the study area requiring a detailed transportation analysis.

A Level 2 screening assessment would only be required for a technical area if a proposed project would exceed the following thresholds:

- 50 peak hour vehicle trip-ends, estimated in traffic passenger car equivalents (PCEs);[32]
- 200 peak hour subway/rail or bus transit riders;
- 50 peak hour Citywide Ferry Service (CWFS) ferry trips; or
- 200 peak hour pedestrian trips.

As described in the following sections, the proposed Citywide Containerization Program would not exceed the screening thresholds for traffic, transit, ferry, or pedestrians. Therefore, detailed transportation analyses were not warranted and the proposed Citywide Containerization Program would not result in significant adverse traffic, transit, ferry, or pedestrian impacts.

8.2.1.1 Traffic

A Transportation Demand Factors Memorandum (TDF Memorandum) was prepared in coordination with the NYCDOT and is provided as **Appendix H**. The TDF Memorandum summarizes the projected DSNY collection truck and associated employee vehicle trips for the proposed Citywide Containerization Program, and the screening assessment performed for the Proposed Program.

The focus of the traffic screening assessment was to determine if the Proposed Program would result in 50 or more vehicle trips during any peak hour. Due to the City's expansive network of public roads, the Level 1 traffic screening assessment was performed in two stages. First, the anticipated incremental collection truck trips for waste collection within each CD were reviewed to determine if the Proposed Program would result in an increase of 50 or more vehicle trips within a CD. Second, the anticipated incremental collection truck trips for waste transport from each CD to the DSNY garage locations (used for collection truck storage) and to the in-City transfer stations (DSNY and private waste disposal facilities under contract with DSNY) and the additional DSNY employee vehicle trips traveling to/from the DSNY garage locations at the start/end of the three work shifts were reviewed to determine if the Proposed Program would result in an increase of 50 or more peak hour vehicle trips near a DSNY garage and/or transfer station.

8.2.1.1.1 Incremental Trips for Waste Collection within the CDs

For the Level 1 screening assessment of the 59 CDs that comprise the City, the incremental daily collection trucks per CD were calculated for each weekday and Saturday and converted to traffic

[32] As per the *CEQR Technical Manual*, collection trucks generated by a proposed project are considered to be "equivalent" to more than one car. Collection truck trips were converted to PCEs in the analysis to determine if the 50 peak hour vehicle trip-end threshold would be exceeded. The PCE factor for waste collection trucks is 1.5. See Chapter 16, *CEQR Technical Manual.*

PCEs. Fifty-eight of the 59 CDs would not generate 50 or more total daily incremental PCEs due to the Proposed Program. In these 58 CDs, the Proposed Program would result in a change in daily collection trucks ranging from a reduction of four daily collection truck trips (-6 PCEs) to an increase of 28 daily collection truck trips (42 PCEs) by CD[33]. Only one CD would generate 50 or more total daily incremental collection truck trips for waste collection – Manhattan CD 08 - with an anticipated increase of up to 37 daily collection truck trips (55.5 PCEs). However, waste collection within a CD is divided into subsections for collection truck routes. As such, collection truck trips would be distributed across multiple collection areas within each CD such that no street or intersection would see all of the total incremental collection trucks. For each street, the Proposed Program would result in up to two incremental collection truck trips due to the addition of ASL collection trucks with the different arm orientation for waste collection. If the street includes a school in Manhattan CD 09 or Brooklyn CD 02 that receives DSNY collection, there would be one additional incremental collection truck trip on a day when recyclables collection occurs. Therefore, the Proposed Program would result in a maximum of three incremental tuck trips per day (4.5 PCEs) on any given street.

Since the Proposed Program is not anticipated to generate 50 or more total daily incremental PCEs at a street or intersection for waste collection, screening of the anticipated incremental collection truck trips on an hourly basis under a Level 1 screening assessment, as well as a Level 2 screening assessment, for the Proposed Program was not warranted.

8.2.1.1.2 Incremental Trips at DSNY Garage Locations and In-City Transfer Stations

In addition to screening the incremental collection truck trips for waste collection within each CD, a Level 1 screening assessment was conducted for the transport of waste from each CD to DSNY garage locations and to in-City transfer stations.

The locations of DSNY garages and transfer stations were evaluated based on their geographic locations relative to each other. Facilities, including multi-district garages, located near each other were grouped together, as collection trucks from facilities located near each other generally share common main roadways, potentially resulting in 50 or more peak hour vehicle trip-ends (in PCEs) at adjacent intersections. Following this methodology, the incremental collection truck and employee vehicle trips due to the Proposed Program were evaluated for 18 unique groups of facilities that are anticipated to potentially share common roadways. In addition, the incremental collection truck trips associated with 20 individual facilities not located near other facilities were evaluated.[34]

The evaluation was performed based on the incremental collection truck trips per eight-hour collection truck shift and incremental employee vehicle trips expected to arrive at and depart from DSNY garages before and after each shift. Of the 18 facility groups and 20 individual facilities evaluated, eight facility groups and two individual facilities, the East 91st Street Marine Transfer Station (MTS) and Waste Management-Harlem River Yard, resulted in 50 or more incremental PCEs on a weekday and/or Saturday during a single eight-hour collection truck shift. For these facility groups and individual facilities, the total incremental vehicle trip-ends (in PCEs) per hour were calculated to

[33] In certain CDs, the Proposed Program would be more efficient than current waste collection due to more tons of storage per truck with ASL collection trucks as compared to rear loader collection trucks. This efficiency would result in using fewer collection trucks in those CDs compared to the current condition, which would result in a reduction in collection truck trips.

[34] Incremental employee vehicles are expected to arrive at and depart only from DSNY garages. DSNY and private waste disposal facilities are not anticipated to require additional employees.

determine if the *CEQR Technical Manual* traffic screening threshold would be exceeded in any single hour.

Based on this assessment, the projected incremental hourly collection trucks summed with employee vehicle trips per facility group, where applicable,[35] would range from zero vehicle trips (0 PCEs) to an increase of up to 37 vehicle trips (48 PCEs) in an hour. For the East 91st Street MTS, the projected incremental hourly collection trucks would range from zero vehicle trips (0 PCEs) to an increase of 30 vehicle trips (45 PCEs) in an hour and for the Waste Management – Harlem River Yard facility, the projected incremental hourly collection trucks would range from zero vehicle trips (0 PCEs) to an increase of 30 vehicle trips (45 PCEs) in an hour. As such, the transport of waste from the CDs to DSNY garage locations and to in-City transfer stations, combined with the incremental employee vehicle trips due to the Proposed Program, would not exceed the *CEQR Technical Manual* traffic screening threshold of 50 or more PCEs during any hour on weekdays or on Saturdays for any individual facility or facility group. Therefore, neither a Level 2 screening assessment nor a detailed hourly traffic analysis is warranted for transport of waste to DSNY garage locations and to in-City transfer stations.

8.2.1.2 Transit

A transit screening assessment was performed to assess the potential for a transit mode shift from vehicle trips to transit trips (subway/rail and bus) due to on-street parking changes as a result of the proposed Citywide Containerization Program. The transit screening assessment was performed by applying a transit mode shift rate based on the proposed change to on-street parking supply using the New York Metropolitan Transportation Council (NYMTC) regional travel demand model framework. In coordination with the MTA NYCT, a conservative transit mode shift rate of 0.15 new transit trips for each on-street parking space lost was used for the transit screening. In this approach, removing 10 parking spaces would lead to 1.5 new peak period transit trips. This is conservative since there may be no increase in transit ridership resulting from reduced on-street parking spaces, as indicated by the transit trip data before and during the Manhattan CD 09 Pilot Program.

The Proposed Program would result in an exceedance of the CEQR Level 1 screening threshold of 200 or more peak hour subway/rail and bus transit riders. Therefore, a Level 2 Screening assessment was performed to determine if the anticipated incremental subway/rail and bus transit riders due to the Proposed Program would exceed the CEQR screening thresholds of:

- 50 or more bus trips in a single direction on a single route
- 200 or more passengers at a subway/rail station or on a subway/rail line during any analysis peak hour

In the Future with the Proposed Program, the Proposed Program would result in up to nine incremental peak hour passengers along a single bus route. Therefore, the Proposed Program would not exceed the CEQR Level 2 screening threshold of 50 or more bus trips on a single route and a detailed analysis for incremental bus trips was not warranted.

In the Future with the Proposed Program, the Proposed Program would result in up to 28 incremental peak hour passengers along a single subway route. Therefore, the Proposed Program would not exceed the CEQR Level 2 screening threshold of 200 or more passengers on a subway/rail

[35] Incremental employee vehicles are expected to arrive at and depart only from DSNY garages. DSNY and private waste disposal facilities are not anticipated to require additional employees.

line during any analysis peak hour and a detailed analysis for incremental trips per subway/rail line was not warranted.

In the Future with the Proposed Program, the Proposed Program would result in up to 153 incremental peak hour passengers at a transit station. Therefore, the Proposed Program would not exceed the CEQR Level 2 screening threshold of 200 or more passengers at a subway/rail station during any peak hour and a detailed transit station analysis was not warranted.

8.2.1.3 Ferry

A screening assessment was performed to assess the potential for a transit mode shift from vehicle trips to transit trips, including ferry trips, due to on-street parking changes as a result of the proposed Citywide Containerization Program, following the methodology described in **Section 8.2.1.2.** In the Future with the Proposed Program, the Proposed Program would result in up to 22 incremental ferry trips in an hour. Therefore, the Proposed Program would not exceed the CEQR Level 1 screening threshold of 50 peak hour CWFS ferry trips and neither a Level 2 screening assessment nor a detailed analysis for ferry trips was warranted.

8.2.1.4 Pedestrians

The incremental transit trips, including ferry trips, would not result in an additional 200 pedestrians in any peak hour on any pedestrian element. Therefore, no further pedestrian assessment was warranted.

8.2.1.5 Parking for Incremental DSNY Collection Trucks and Employee Vehicles

Current garage sites may not accommodate off-street parking for all incremental collection trucks and employee vehicles anticipated to support the proposed Citywide Containerization Program and may result in temporary occupancy of on-street parking spaces in the vicinity of a garage site.

Table 8-1 lists the potential number of incremental collection trucks and employee vehicles that may need to use on-street parking near the DSNY garage for each CD. The use of on-street parking by DSNY collection trucks and employee vehicles near the garage sites is not expected to significantly affect parking in the surrounding area. DSNY operations occur on staggered work shifts, which distribute collection trucks and employee vehicle arrival and departure times and reduce peak demand for on-street parking at any one time. DSNY collection trucks may use on-street parking during a shift change; otherwise, the collection truck would be collecting and transporting waste. In addition, a number of DSNY garages are located in areas primarily characterized by industrial and manufacturing land uses with relatively low concentrations of residential and commercial activity, resulting in limited competing demand for on-street parking. As a result, DSNY collection trucks and employee vehicles would not substantially interfere with parking availability for nearby residents or businesses. Furthermore, area number of DSNY garages fall within CEQR parking Zones 1 and 2, where the removal or displacement of on-street parking is generally not considered to result in significant adverse impacts under CEQR guidance. Therefore, DSNY collection trucks and employee vehicles parking along these streets would not be expected to result in a significant parking shortfall, as defined in **Section 8**.

Table 8-1. Potential Number of DSNY Collection Trucks and Employee Vehicles Requiring Temporary On-Street Parking by CD During the Weekday

Community District (CD)	Shift 1 (12:00 AM to 8:00 AM)		Shift 2 (Manhattan: 5:00 AM to 1:00 PM; Other Boroughs: 6:00 AM to 2:00 PM)		Shift 3 (4:00 PM to 12:00 AM)	
	Collection Trucks	Employee Vehicles	Collection Trucks[1]	Employee Vehicles	Collection Trucks[2]	Employee Vehicles
Manhattan CD 01	1	4	0	6	0	1
Manhattan CD 02	3	5	0	12	0	3
Manhattan CD 03	9	0	0	18	0	4
Manhattan CD 04	4	6	0	13	0	3
Manhattan CD 05	2	4	0	8	4	0
Manhattan CD 06	8	2	0	18	6	1
Manhattan CD 07	12	2	0	26	1	5
Manhattan CD 08	11	8	0	29	5	4
Manhattan CD 09	5	1	0	10	3	1
Manhattan CD 10	3	2	0	9	4	0
Manhattan CD 11	3	3	0	8	3	0
Manhattan CD 12	6	3	0	15	0	4
Bronx CD 01	2	6	0	10	3	1
Bronx CD 02	0	4	0	4	2	0
Bronx CD 03	0	8	0	8	4	0
Bronx CD 04	3	4	0	11	5	0
Bronx CD 05	4	4	0	11	4	1
Bronx CD 06	2	4	0	8	4	0
Bronx CD 07	5	4	0	13	5	1
Bronx CD 08	1	6	0	7	4	0
Bronx CD 09	4	1	0	8	4	0
Bronx CD 10	2	1	0	5	0	1
Bronx CD 11	4	2	0	10	2	1
Bronx CD 12	3	2	0	8	2	1
Brooklyn CD 01	1	2	0	4	1	0
Brooklyn CD 02	5	4	0	14	7	0

Community District (CD)	Shift 1 (12:00 AM to 8:00 AM)		Shift 2 (Manhattan: 5:00 AM to 1:00 PM; Other Boroughs: 6:00 AM to 2:00 PM)		Shift 3 (4:00 PM to 12:00 AM)	
	Collection Trucks	Employee Vehicles	Collection Trucks[1]	Employee Vehicles	Collection Trucks[2]	Employee Vehicles
Brooklyn CD 03	2	1	0	5	3	0
Brooklyn CD 04	6	0	0	12	6	0
Brooklyn CD 05[3]	0	0	0	0	0	0
Brooklyn CD 06	4	0	0	7	3	0
Brooklyn CD 07	3	1	0	7	2	1
Brooklyn CD 08	4	2	0	11	5	0
Brooklyn CD 09	6	4	0	16	0	4
Brooklyn CD 10	5	0	0	10	3	1
Brooklyn CD 11	4	0	0	9	4	0
Brooklyn CD 12[3]	0	0	0	0	0	0
Brooklyn CD 13	2	0	0	4	0	1
Brooklyn CD 14	8	2	0	17	0	4
Brooklyn CD 15	4	0	0	8	0	2
Brooklyn CD 16	4	0	0	7	0	1
Brooklyn CD 17	6	1	0	12	0	2
Brooklyn CD 18	3	0	0	5	0	1
Queens CD 01	2	3	0	8	0	1
Queens CD 02	2	0	0	4	0	1
Queens CD 03[3]	0	0	0	0	0	0
Queens CD 04[3]	0	0	0	0	0	0
Queens CD 05	3	1	0	7	1	1
Queens CD 06	2	1	0	4	0	1
Queens CD 07	5	1	0	10	5	0
Queens CD 08	3	1	0	6	0	1
Queens CD 09	0	0	0	1	0	0
Queens CD 10	1	0	0	3	1	0
Queens CD 11	5	1	0	11	0	2

Community District (CD)	Shift 1 (12:00 AM to 8:00 AM)		Shift 2 (Manhattan: 5:00 AM to 1:00 PM; Other Boroughs: 6:00 AM to 2:00 PM)		Shift 3 (4:00 PM to 12:00 AM)	
	Collection Trucks	Employee Vehicles	Collection Trucks[1]	Employee Vehicles	Collection Trucks[2]	Employee Vehicles
Queens CD 12	2	1	0	4	0	1
Queens CD 13	2	0	0	5	0	1
Queens CD 14[3]	0	0	0	0	0	0
Staten Island CD 01 and CD 03	7	0	0	14	6	0
Staten Island CD 02	6	0	0	11	4	1

Notes:

[1] The incremental collection trucks during this shift would typically only be parked on the street for a brief period after the shift starts and a brief period before the shift ends.

[2] Unless otherwise stated, if no incremental collection trucks are identified for a CD during this shift, there would typically only be incremental collection trucks parked on the street for a brief period after the shift starts and a brief period before the shift ends.

[3] Incremental collection trucks and employee vehicles would not be required for this CD.

8.2.2 Citywide Parking Analysis due to Placement of Stationary On-Street Containers

This section describes the potential effects of the proposed Citywide Containerization Program on parking (on-street and off-street) due to the placement of stationary on-street containers. As per the *CEQR Technical Manual*, this Citywide parking analysis included a review of on- and off-street parking in each of the 59 CDs, as well as a review of the existing alternative modes of transportation with each CD.

8.2.2.1 Methodology and Existing Conditions

As detailed in this section, the Citywide parking analysis consisted of estimating the length of curbside parking[36] available throughout the City under existing conditions and calculating the estimated total length of curb required for the proposed stationary on-street containers on a per CD basis. These calculations were performed to determine the length of curb that would remain available for on-street parking under the Future with the Proposed Program.

8.2.2.1.1 Existing On-Street Parking

Publicly available City data obtained from Geographic Information Systems (GIS) datasets was used in conjunction with data obtained during field and desktop surveys[37] to perform the analysis described in this section. The GIS datasets consist of electronic files containing the location of physical

[36] Curbside parking refers to parking along the side of a street adjacent to the curb.

[37] Desktop surveys refer to a review of existing conditions on a computer using publicly available data. Desktop surveys were completed using Cyclomedia Street View, via the New York City Department of City Planning's Zoning & Land Use Map. The Cyclomedia Street View displays high-resolution, frequently updated views within the prototypical areas.

features, including City blocks and streets, fire hydrants, bus stops, curb cuts, bike share stations, and parking signs. The GIS datasets, source, year, and description of the data are provided in **Table 8-2**.

Table 8-2. GIS Datasets used for Analysis

GIS Dataset	Source[1]	Year	Description
Street Data	New York City Department of City Planning (NYCDCP) Linear Integrated Ordered Network (LION) Data (LION 26a)	2026	A line dataset that shows the City's streets and other linear geographic features. The dataset provides information regarding each street, including the number of travel lanes and location and number of parking lanes.
Edge of Pavement (Curb) Data	New York City Office of Technology and Innovation (OTI) Planimetric Data: PAVEMENT_EDGE	2025	A line dataset that shows the curbs in the City by providing the edge of pavement (curb) of the City blocks.
Bus Lane Data	New York City Department of Transportation (NYCDOT) Bus Lanes - Local Streets	2026	A line dataset that shows the location of bus lanes throughout the City. The dataset provides information regarding the type of bus lane, such as curbside bus lanes or off-set bus lanes (an off-set bus lane is between a parking lane and a travel lane). The dataset was combined with the Street dataset, described above, to identify the bus lanes along the curb.
Fire Hydrant Data	New York City Department of Environmental Protection (NYCDEP) City Wide Hydrants	2025	A dataset that shows the location of fire hydrants in the City.
Bus Stop Data	Metropolitan Transportation Authority (MTA) General Transit Feed Specification (GTFS) Files	2026	A point dataset that shows the location of current City bus stops.
Bus Route Data	MTA GTFS Files	2026	A line dataset that shows the location of current City bus routes. This dataset was used along with the bus stop dataset described above to determine the location of bus stops that service one bus route, and bus stops that service multiple routes.
Midblock Curb Cut Data	New York City OTI Planimetric Data: CURB_CUTS	2025	The edge of pavement (curb) dataset, described above, contains an additional feature shown along the pavement (curb) edge which identifies the location of curb cuts, and distinguishes between curb cuts near the corners of a City block, and midblock curb cuts. This dataset was used to obtain the location and length of midblock curb cuts.
Bike Share Data (Citi Bikes)	NYCDOT Data	2025	A dataset that shows the location of Citi Bike stations and identifies those that are both on the street, within sidewalk space or both.

GIS Dataset	Source[1]	Year	Description
Parking Regulation Locations Sign Data	NYCDOT Parking Regulation Locations and Signs	2025	A dataset that shows the location and a description of parking signs throughout the City.

Notes:

[1] The GIS datasets described in this table, with the exception of the Bus Route data and the Bike Share data, were obtained through the City Open Data portal (https://opendata.cityofnewyork.us/), which is a website that provides access to thousands of sets of public data from City agencies.

Field surveys and desktop surveys of the existing parking restrictions were performed in various areas throughout the City to verify the GIS data and analysis assumptions. Desktop surveys were completed using Cyclomedia Street View, via the New York City Department of City Planning's (NYCDCP) Zoning & Land Use Map. The Cyclomedia Street View displays high-resolution, frequently updated views. The calculations of the length of existing curbside parking restrictions were modified as needed based on information obtained through the survey process.

8.2.2.1.1.a Existing Length of Curb Available

To determine the existing length of curb available for on-street parking, the existing length of public curb space available for use throughout the City was calculated. Using the City datasets listed in **Table 8-2,** the existing length of curb not adjacent to a vehicle travel lane was determined for each City block. Private streets[38] were not included since these curbs would not be available to the general public. Any curb that cannot be used for on-street parking (i.e., curb adjacent to highways, general travel lanes or rush hour travel lanes, and dedicated bus lanes) was not included in the analysis.

8.2.2.1.1.b Existing Length of Curb Available for On-street Parking

Once the existing length of available curb throughout the City was calculated, an evaluation was performed to determine how much of this curb length was not available for parking due to regulations that restrict curbside parking over a 24-hour period (hereinafter referred to as "parking restrictions").

Using the City datasets listed in **Table 8-2**, a comprehensive review was conducted that evaluated the existing parking restrictions along each side of the City blocks compared to the total existing length of curb available.

Parking Restrictions

Using the publicly available electronic City data listed in **Table 8-2,** the total length of existing parking restrictions along the curb throughout the City was calculated. The parking restrictions included in the analysis were:

Intersections:

NYCDOT Parking Regulations allow parking at some intersections, such as those without traffic signals, all-way stop signs or crosswalk markings.[39] However, to be conservative and to account

[38] A private street refers to a road on privately owned land.

[39] https://www.nyc.gov/html/dot/html/motorist/parking-regulations.shtml

for those intersections where parking is not allowed, including areas with crosswalks, curb within 20 feet of the intersections was counted as an existing curbside parking restriction.

Fire Hydrants:

As per NYCDOT Parking Regulations, it is illegal to park within 15 feet of either side of a fire hydrant.[40] Therefore, for each existing hydrant, 30 feet was used as an existing curbside parking restriction.

MTA Bus Stops:

As per NYCDOT, the typical length of a bus stop varies depending on the following factors:

- The location along the City block where the bus stop is located;
- The type of bus that would be stopping at the bus stop, including a standard bus or an articulated bus, which is longer than a standard bus to allow for a larger capacity of riders; and
- The number of bus routes and the frequency with which a bus is expected to service the bus stop (i.e., one bus at a time, or multiple buses at a time).

The design guidelines for a typical bus stop were reviewed and an average length of 90 feet was used as an existing curbside parking restriction for each MTA bus stop that services one bus route (a low frequency route). An average length of 150 feet was used as an existing curbside parking restriction for each MTA bus stop that services multiple bus routes (a high frequency route) to accommodate more than one bus at a time. Additionally, the average length of the bus stop takes into account the lengths of standard buses and articulated buses.

Midblock Curb Cuts:

A curb cut is a dip in a sidewalk and curb that enables access (vehicular and pedestrian) to the street. Curb cuts can be found near intersections as well as along the middle of a City block, and must remain accessible for use. Curb cuts at intersections of City blocks were included in the intersection curbside parking restriction discussed above. Midblock curb cuts include driveways and pedestrian ramps. Midblock curb cuts were accounted for as an existing curbside parking restriction based on the length of the curb cut.

Bike Share (Citi Bikes):

Throughout the City, there are self-service stations where the public can rent bicycles. These stations can be located on a sidewalk, on the street, or can be a combined bike station that is located both on the street and within sidewalk space. The analysis included the length of each on-street bike station as an existing curbside parking restriction.

Daylighting:

The NYCDOT has been working to improve visibility for pedestrians at intersections through "daylighting."[41] Daylighting enhances safety by removing visibility-blocking obstructions, such as parked vehicles near intersections, so drivers more easily see pedestrians and other road users at these critical junctures. A GIS dataset with this information is not available; however, where daylighting

[40] https://www.nyc.gov/html/dot/html/motorist/parking-regulations.shtml

[41] https://www.nyc.gov/html/dot/html/pr2024/dot-enhances-pedestrian-safety.shtml

was observed through field and desktop surveys, the length of the daylighting was accounted for as an existing curbside parking restriction.

Dining Out NYC:

Under Dining Out NYC,[42] roadway cafes[43] may be permitted along a curb or in the parking lane of roadways fronting restaurants. These roadway cafes were considered an existing condition since they were permitted during this analysis. Roadway cafe locations were determined through the NYCDOT Outdoor Dining Application Portal[44] and the length of roadway cafes was removed from the total available curbside parking length.

Parking Regulation Signs:

There are numerous types of curbside parking regulations (as displayed on parking signs) that are in effect on City streets. Parking signs that were included as restrictions in this analysis and therefore not considered available curbside parking, were signs that restrict the public from parking, standing or stopping anytime, and signs that only allow parking by specific vehicles or for specific purposes, including commercial vehicles, loading zones, emergency vehicles, and for-hire vehicles. Signs that allow parking during certain times were considered available for parking for this Citywide analysis since the curb would be available for public parking during a portion of a 24-hour period.

An evaluation of the available City data for these types of parking signs was performed to estimate the length of existing curbside parking restrictions. The calculation utilized the information posted on the sign, including the stated parking restriction and any directional arrow posted on the sign pointing towards the curb for which the parking restriction was applicable.

Summary of Existing Available Curbside Parking

To determine the total existing length of curb available to the general public for on-street parking Citywide, the existing length of curbside parking restrictions was subtracted from the total existing length of publicly available curb. The existing length of curb available for on-street parking by borough is listed in **Table 8-3**. The existing length of curb available for on-street parking in each of the 59 CDs in the City is listed in **Table 8-4**. According to the *CEQR Technical Manual*, a parking space is 20 linear feet. Based on this, the existing available legal on-street parking spaces by borough and per CD is also listed in **Table 8-3** and **Table 8-4,** respectively. Citywide, the existing length of curb available for on-street parking was determined to be approximately 39.2 million linear feet, which is equivalent to approximately 1.96 million parking spaces.

Table 8-3. Existing Available On-Street Parking by Borough

Community District (CD)	Total Length (Linear Feet) of Curb Available for On-Street Parking	Total Existing Available Legal On-Street Parking Spaces[1]
Manhattan	3,145,629	157,281
Bronx	5,400,365	270,018

[42] https://www.diningoutnyc.info/rules

[43] As per NYCDOT's adopted rule for the Dining Out NYC program, the term "roadway cafe" means an open-air portion of a ground floor restaurant containing readily removable tables, chairs, and other removable decorative items, located curbside or in the parking lane of a roadway fronting the restaurant.

[44] https://diningout.nyc.gov/application/

Community District (CD)	Total Length (Linear Feet) of Curb Available for On-Street Parking	Total Existing Available Legal On-Street Parking Spaces[1]
Brooklyn	10,115,426	505,773
Queens	14,868,537	743,425
Staten Island	5,665,275	283,264
Citywide	39,195,232	1,959,761

Notes:

[1] As per the *CEQR Technical Manual*, a parking space is 20 linear feet. Values may differ due to rounding.

Table 8-4. Existing Available On-Street Parking by CD

Community District (CD)	Total Length (Linear Feet) of Curb Available for On-Street Parking	Total Existing Available Legal On-Street Parking Spaces[1]
Manhattan CD 01	206,205	10,310
Manhattan CD 02	219,941	10,997
Manhattan CD 03	274,848	13,742
Manhattan CD 04	230,167	11,508
Manhattan CD 05	212,981	10,649
Manhattan CD 06	220,768	11,038
Manhattan CD 07	281,030	14,052
Manhattan CD 08	331,501	16,575
Manhattan CD 09	225,054	11,253
Manhattan CD 10	251,981	12,599
Manhattan CD 11	318,079	15,904
Manhattan CD 12	373,074	18,654
Bronx CD 01	373,966	18,698
Bronx CD 02	341,379	17,069
Bronx CD 03	241,774	12,089
Bronx CD 04	361,814	18,091
Bronx CD 05	258,940	12,947
Bronx CD 06	268,403	13,420
Bronx CD 07	308,347	15,417
Bronx CD 08	434,644	21,732
Bronx CD 09	633,142	31,657
Bronx CD 10	828,132	41,407
Bronx CD 11	576,239	28,812

Community District (CD)	Total Length (Linear Feet) of Curb Available for On-Street Parking	Total Existing Available Legal On-Street Parking Spaces[1]
Bronx CD 12	773,585	38,679
Brooklyn CD 01	781,702	39,085
Brooklyn CD 02	475,895	23,795
Brooklyn CD 03	508,417	25,421
Brooklyn CD 04	344,098	17,205
Brooklyn CD 05	881,416	44,071
Brooklyn CD 06	495,377	24,769
Brooklyn CD 07	494,147	24,707
Brooklyn CD 08	286,476	14,324
Brooklyn CD 09	277,435	13,872
Brooklyn CD 10	663,027	33,151
Brooklyn CD 11	631,390	31,570
Brooklyn CD 12	614,058	30,703
Brooklyn CD 13	378,980	18,949
Brooklyn CD 14	487,171	24,359
Brooklyn CD 15	817,590	40,880
Brooklyn CD 16	336,448	16,822
Brooklyn CD 17	554,585	27,729
Brooklyn CD 18	1,087,214	54,361
Queens CD 01	897,361	44,868
Queens CD 02	789,624	39,481
Queens CD 03	559,309	27,965
Queens CD 04	430,945	21,547
Queens CD 05	1,050,761	52,538
Queens CD 06	595,581	29,779
Queens CD 07	1,693,928	84,696
Queens CD 08	1,192,508	59,625
Queens CD 09	710,929	35,546
Queens CD 10	951,652	47,583
Queens CD 11	1,431,512	71,576
Queens CD 12	1,645,487	82,274
Queens CD 13	2,053,837	102,692

Community District (CD)	Total Length (Linear Feet) of Curb Available for On-Street Parking	Total Existing Available Legal On-Street Parking Spaces[1]
Queens CD 14	865,103	43,255
Staten Island CD 01	1,722,132	86,107
Staten Island CD 02	1,716,244	85,812
Staten Island CD 03	2,226,899	111,345
Citywide	39,195,232	1,959,761

Notes:

[1] As per the *CEQR Technical Manual*, a parking space is 20 linear feet. Values may differ due to rounding.

8.2.2.1.2 Existing Off-Street Parking Facilities

A review was performed of the legally operating existing commercial parking lots and garages and their vehicle parking capacity throughout the City. This assessment was based on publicly available data from the New York City Department of Consumer and Worker Protection (DCWP). The number of existing off-street parking facilities within in each CD are listed in **Table 8-5**.

8.2.2.1.3 Existing Alternative Modes of Transportation

Based on a review of GIS data from the MTA General Transit Feed Specification (GTFS) files, the existing number of transit stops (subway/rail and bus) and ferry terminals within each CD are summarized in **Table 8-5.**

Table 8-5. Existing Off-Street Parking Facilities and Alternative Modes of Transportation

Community District (CD)	Off-Street Parking Facilities	Subway Stops	MTA/ New Jersey Bus Stops	Metro-North Railroad/ Long Island Rail Road Stops	New Jersey Transit Rail and PATH Stops	Ferry Terminals
Manhattan CD 01	78	46	169	0	1	5
Manhattan CD 02	66	38	117	0	2	0
Manhattan CD 03	28	14	162	0	0	1
Manhattan CD 04	111	20	141	0	0	2
Manhattan CD 05	130	60	269	3	4	0
Manhattan CD 06	161	6	173	0	0	2
Manhattan CD 07	98	14	212	0	0	0
Manhattan CD 08	236	20	198	0	0	2
Manhattan CD 09	18	18	156	0	0	0
Manhattan CD 10	27	18	176	0	0	0
Manhattan CD 11	36	10	157	1	0	0

Community District (CD)	Off-Street Parking Facilities	Subway Stops	MTA/ New Jersey Bus Stops	Metro-North Railroad/ Long Island Rail Road Stops	New Jersey Transit Rail and PATH Stops	Ferry Terminals
Manhattan CD 12	36	28	212	0	0	0
Bronx CD 01	31	20	113	0	0	0
Bronx CD 02	11	12	92	0	0	0
Bronx CD 03	16	4	114	1	0	0
Bronx CD 04	33	14	140	2	0	0
Bronx CD 05	23	14	102	1	0	0
Bronx CD 06	15	4	107	2	0	0
Bronx CD 07	20	18	163	3	0	0
Bronx CD 08	16	6	131	3	0	0
Bronx CD 09	9	8	192	0	0	1
Bronx CD 10	14	12	278	0	0	1
Bronx CD 11	16	12	162	0	0	0
Bronx CD 12	6	18	193	2	0	0
Brooklyn CD 01	52	28	311	0	0	3
Brooklyn CD 02	67	40	233	1	0	2
Brooklyn CD 03	10	20	299	0	0	0
Brooklyn CD 04	8	24	156	0	0	0
Brooklyn CD 05	2	32	339	1	0	0
Brooklyn CD 06	17	16	154	0	0	1
Brooklyn CD 07	5	18	167	0	0	1
Brooklyn CD 08	13	4	159	1	0	0
Brooklyn CD 09	3	20	126	0	0	0
Brooklyn CD 10	4	10	287	0	0	1
Brooklyn CD 11	3	28	190	0	0	0
Brooklyn CD 12	5	18	204	0	0	0
Brooklyn CD 13	14	14	171	0	0	0
Brooklyn CD 14	4	18	196	0	0	0
Brooklyn CD 15	5	14	291	0	0	0
Brooklyn CD 16	4	18	152	0	0	0
Brooklyn CD 17	3	6	224	0	0	0

Community District (CD)	Off-Street Parking Facilities	Subway Stops	MTA/ New Jersey Bus Stops	Metro-North Railroad/ Long Island Rail Road Stops	New Jersey Transit Rail and PATH Stops	Ferry Terminals
Brooklyn CD 18	2	6	454	0	0	0
Queens CD 01	30	22	211	0	0	1
Queens CD 02	29	32	200	3	0	2
Queens CD 03	10	6	148	0	0	0
Queens CD 04	12	14	126	0	0	0
Queens CD 05	6	10	317	0	0	0
Queens CD 06	26	10	132	1	0	0
Queens CD 07	47	2	392	3	0	0
Queens CD 08	4	2	229	0	0	0
Queens CD 09	7	16	177	1	0	0
Queens CD 10	2	15	194	0	0	0
Queens CD 11	1	0	204	4	0	0
Queens CD 12	27	10	471	5	0	0
Queens CD 13	5	0	363	3	0	0
Queens CD 14	5	22	145	1	0	1
Staten Island CD 01	6	8	749	0	0	1
Staten Island CD 02	1	12	505	0	0	0
Staten Island CD 03	1	22	460	0	0	0

Notes: PATH = Port Authority Trans-Hudson Corporation

8.2.2.2 Future with the Proposed Program

In the Future with the Proposed Program, buildings with 31 residential units or more would use stationary on-street containers for refuse; schools in Manhattan CD 09 and Brooklyn CD 02 would use stationary on-street containers for refuse, organics, MGPC, and paper/cardboard; and buildings with 10 to 30 residential units would have the option to use stationary on-street containers or individual bins for refuse.[45] Therefore, the analysis of the Future with the Proposed Program accounts for a potential reduction in parking spaces due to the placement of stationary on-street containers for buildings with 10 or more residential units Citywide and schools in Manhattan CD 09 and Brooklyn CD 02.

8.2.2.2.1 Curb Length Required for Stationary On-Street Containers

Each stationary on-street container would be 6.16 feet long by five (5) feet wide by 5.25 feet tall, with a capacity of approximately four (4) cy. The stationary on-street container design has a low

[45] Although not part of the Proposed Program, buildings with one to nine residential units would be required to use rigid receptacles with tight fitting lids. These receptacles would be placed on the sidewalk and would therefore not affect on-street parking.

profile which allows for continued pedestrian visibility of moving vehicles over the container. To prevent vehicles from parking too close to the stationary on-street containers, delineators would be affixed to the pavement on either side of the stationary on-street container(s) to provide a buffer. The stationary on-street containers would be raised above the ground by approximately 1.3 inches and installed approximately 12 inches from the curbline, allowing for unimpeded passage of stormwater runoff in front of and under the stationary on-street containers.

As detailed in **Chapter 1,** "**Project Description**," the proposed Citywide Containerization Program would potentially result in the placement of up to 66,817 stationary on-street containers. The following sections describe how the associated curb length was determined for these stationary on-street containers.

8.2.2.2.1.a Curb Length Required for One Stationary On-Street Container

Each stationary on-street container would be 6.16 feet (74 inches) long. To prevent vehicles from parking too close to the containers, delineators, with a 3-inch diameter, would be affixed to the ground on either side of the stationary on-street container. The delineators would be affixed to the pavement at 19.7 inches from either side of one stationary on-street container. As shown in **Figure 8-1**, for buildings that would need only one container, the total curb length required would be 119.4 inches or approximately 9.95 feet. This represents the sum of:

- A 3-inch diameter delineator installed 19.7 inches from the left side of the container,
- The length of one container (74 inches), and
- A 3-inch diameter delineator installed 19.7 inches from the right side of the container.

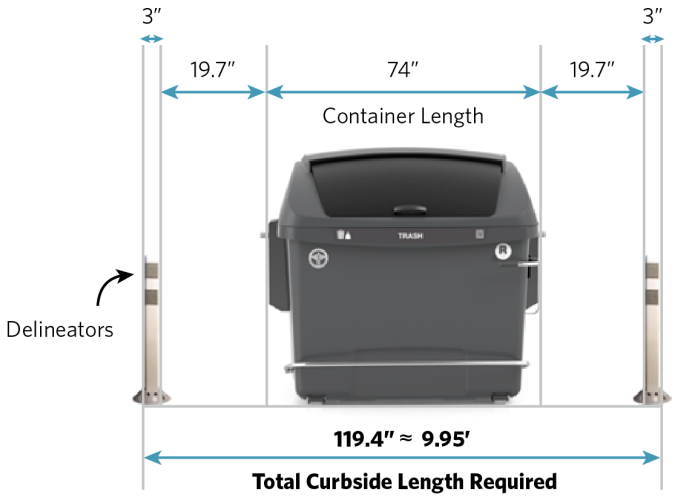

Figure 8-1. Total Curb Length Required for One Stationary On-Street Container

8.2.2.2.1.b *Curb Length Required for Multiple Stationary On-Street Containers*

The majority of buildings with residential units would only require one stationary on-street container. However, for buildings with residential units Citywide and schools in Manhattan CD 09 and Brooklyn CD 02 that would require multiple stationary on-street containers, the containers would be installed with approximately 19.7 inches of spacing between each container to allow for container handling during collection. In addition, one set of 3-inch diameter delineators would be bolted to the pavement at 19.7 inches from either side of the set of containers.

As shown on **Figure 8-2**, for buildings that would require two containers, the total curb length that would be required would be 213.1 inches or approximately 17.75 feet, which would be the sum of:

- A 3-inch diameter delineator installed 19.7 inches from the left side of the set of containers,
- The length of one container (74 inches),
- A spacing between containers of 19.7 inches,
- The length of the second container (74 inches), and
- A 3-inch diameter delineator installed 19.7 inches from the right side of the set of containers.

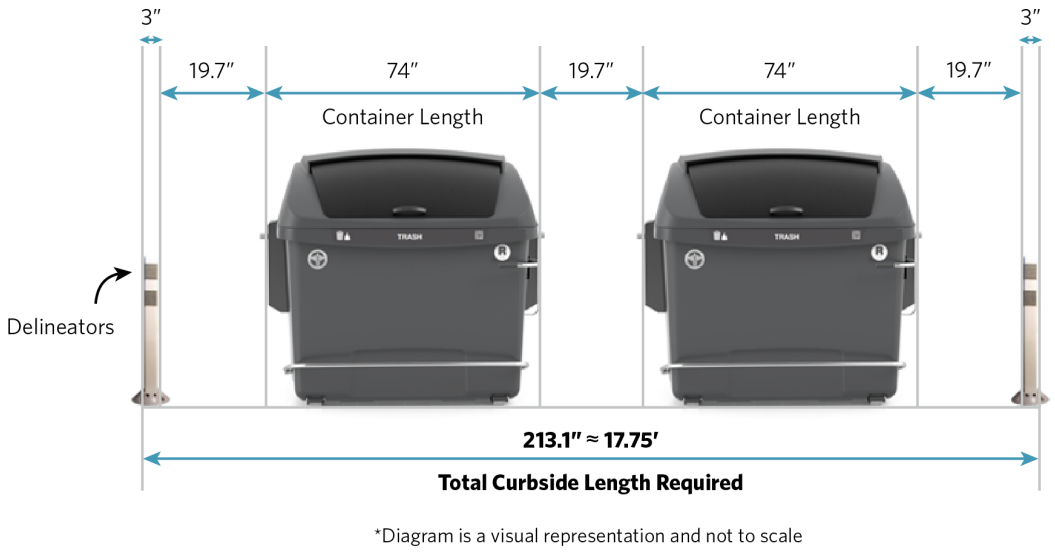

Figure 8-2. Total Curb Length Required for Two Stationary On-Street Containers

Similarly, as shown on **Figure 8-3**, for buildings that would require three containers, the total curb length required would be 306.7 inches or approximately 25.56 feet, which is the sum of:

- A 3-inch diameter delineator installed 19.7 inches from the left side of the set of containers,
- The length of one container (74 inches),

- A spacing between containers of 19.7 inches,
- The length of the second container (74 inches),
- A spacing between containers of 19.7 inches,
- The length of the third container (74 inches), and
- A 3-inch diameter delineator installed 19.7 inches from the right side of the set of containers.

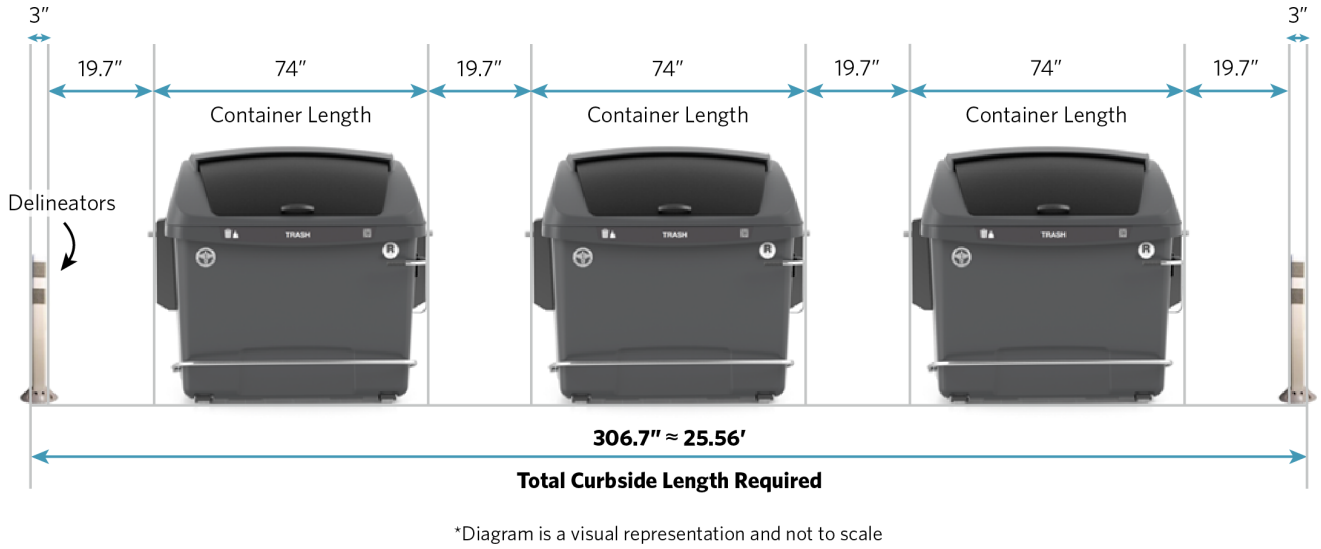

Figure 8-3. Total Curb Length Required for Three Stationary On-Street Containers

8.2.2.2.2 Stationary On-Street Container Placement

The stationary on-street containers would be placed along the curb of the parking lane in front of or near the respective property they are assigned to. The proposed stationary on-street containers would not be placed along a curb with the following restrictions:

- Crosswalks
- Bus stops
- Curb Cuts/Driveways
- Citi Bike Station
- Fire hydrants
- Travel Lane
- Bike Lanes
- Bus Lane
- Open Restaurants
- Taxi Stands
- Hotels
- Funeral Homes
- Religious Institutions
- Theaters
- Medical Facilities
- Loading Zones
- No Standing
- No Parking

- Street Seats[46]
- Authorized vehicles – Emergency vehicle operations of any kind
- Authorized vehicles – FDNY operations of any kind
- Bus Layover
- Authorized vehicles – NYPD operations of any kind

Prior to the placement of the stationary on-street containers in a CD, DSNY would perform a detailed container siting evaluation for each building with residential units that would participate in the Proposed Program and schools within Manhattan CD 09 and Brooklyn CD 02 that receive DSNY collection within the CD. Siting of the stationary on-street containers would be dependent on where the waste is typically removed from the building, existing curbside uses and parking restrictions, as well as other factors. Container siting would be performed in collaboration with the NYCDOT, NYCPS, and/or building superintendents.

8.2.2.2.3 Citywide Parking Analysis Results

As previously stated, the Citywide parking analysis consisted of determining the length of curbside parking available throughout the City under existing conditions and calculating the total length of curb that would be used by the proposed stationary on-street containers. **Table 8-6** summarizes the results of the parking analysis by borough, and **Table 8-7** provides the result of the parking analysis by CD.

8.2.2.2.3.a Mandatory Stationary On-Street Containers

Based on the number of buildings with 31 residential units or more, the amount of refuse each building produces, and the DSNY collection frequency, approximately 49,453 stationary on-street containers would be needed for these buildings Citywide. Additionally, approximately 272 stationary on-street containers would be needed for schools within Manhattan CD 09 and Brooklyn CD 02 based on the amount of refuse, organics, MGPC, and paper/cardboard the schools produce and the DSNY collection frequency. In total, approximately 49,725 mandatory stationary on-street containers would be installed for buildings with 31 residential units or more Citywide and schools within Manhattan CD 09 and Brooklyn CD 02.

Based on the methodology described above for determining the curb length that would be required for the stationary on-street containers, the approximately 49,725 mandatory stationary on-street containers would require approximately 429,176 linear feet of curb Citywide. As per the *CEQR Technical Manual*, a parking space is 20 linear feet.[47] Therefore, approximately 21,485 on-street parking spaces would be needed for buildings with 31 residential units or more Citywide and schools within Manhattan CD 09 and Brooklyn CD 02 (see **Table 8-6**).

8.2.2.2.3.b Optional Stationary On-Street Containers

As previously discussed, buildings with 10 to 30 residential units would have the option to use stationary on-street containers or individual bins for refuse. It was conservatively estimated that up to 17,092 stationary on-street containers would be installed Citywide for buildings with 10 to 30 residential

[46] Street Seats is a Citywide program that transforms underused streets into public spaces between the months of March through December. Street Seats are installed in the roadbed along the curb line or on wide sidewalks and include the placement of chairs and seats. https://www.nyc.gov/html/dot/html/pedestrians/streetseats.shtml

[47] For the purposes of this analysis, the number of parking spaces to potentially be occupied by all stationary on-street containers was rounded up to the nearest whole number.

units that opt-in to the Proposed Program. Based on the percentage of buildings with 10 to 30 residential units that opted-in to the Manhattan CD 09 Pilot Program (56%), DSNY estimated that up to two-thirds (66%) of these buildings Citywide would opt-in to the Proposed Program and use stationary on-street containers, to be conservative.

Based on the methodology described above for determining the curb length required for the stationary on-street containers, the placement of up to 17,092 optional stationary on-street containers would require approximately 166,501 linear feet of curb Citywide. As per the *CEQR Technical Manual*, a parking space is 20 linear feet. Therefore, approximately 8,357 on-street parking spaces are anticipated to be needed for buildings with 10 to 30 residential units Citywide (see **Table 8-6**).

Table 8-6. Summary of Estimated Stationary On-Street Containers by Borough

Borough	Mandatory Buildings (Buildings with 31 or More Residential Units[1] and Schools[2])			Optional Buildings[3] (Buildings with 10 to 30 Residential Units)			Total		
	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)[4]	Estimated Total Parking Spaces Required[4]	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)	Estimated Total Parking Spaces Required[4]	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)[4]	Estimated Total Parking Spaces Required[4]
Manhattan	14,816[5]	129,103	6,460	7,313	72,693	3,642	22,129	201,796	10,102
Bronx	11,817	101,734	5,092	3,621	32,951	1,654	15,438	134,685	6,746
Brooklyn	14,728[6]	125,713	6,295	4,219	41,639	2,092	18,947	167,352	8,387
Queens	7,891	68,553	3,433	1,780	17,654	889	9,671	86,207	4,322
Staten Island	473	4,074	205	159	1,564	80	632	5,638	285
Citywide	49,725	429,176	21,485	17,092	166,501	8,357	66,817	595,677	29,842

Notes:

[1] Based on buildings with 31 or more residential units that would not require more than 12 stationary on-street containers. Buildings with 31 or more residential units that would require more than 12 stationary on-street containers would use an alternative means for DSNY collection.

[2] Schools in Manhattan CD 09 and Brooklyn CD 02 that receive DSNY collection would use stationary on-street containers.

[3] The Proposed Program would allow buildings with 10 to 30 residential units the option of using stationary on-street containers. This number is conservatively based on 66% of the buildings with 10 to 30 residential units throughout the City choosing to opt-in to use stationary on-street containers.

[4] As per the *CEQR Technical Manual*, a parking space is 20 linear feet. Values may differ due to rounding.

[5] This includes 92 stationary on-street containers for schools within Manhattan CD 09.

[6] This includes 180 stationary on-street containers for schools within Brooklyn CD 02.

Table 8-7. Summary of Estimated Stationary On-Street Containers by CD

Community District (CD)	Mandatory Buildings (Buildings with 31 or More Residential Units[1] and Schools[2])			Optional Buildings[3] (Buildings with 10 to 30 Residential Units)			Total		
	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)[4]	Estimated Total Parking Spaces Required[4]	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)	Estimated Total Parking Spaces Required[4]	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)[4]	Estimated Total Parking Spaces Required[4]
Manhattan CD 01	727	6,055	303	101	1,005	51	828	7,060	354
Manhattan CD 02	786	6,952	348	723	7,183	360	1,509	14,135	708
Manhattan CD 03	991	8,653	433	1,124	11,174	559	2,115	19,827	992
Manhattan CD 04	1,234	10,576	529	680	6,756	338	1,914	17,332	867
Manhattan CD 05	870	7,366	369	123	1,222	62	993	8,588	431
Manhattan CD 06	1,634	13,932	697	361	3,585	180	1,995	17,517	877
Manhattan CD 07	2,193	19,056	953	1,018	10,124	507	3,211	29,180	1,460
Manhattan CD 08	2,491	21,624	1,082	1,157	11,509	576	3,648	33,133	1,658
Manhattan CD 09[5]	710	6,429	322	251	2,486	125	961	8,915	447
Manhattan CD 10	731	6,454	323	827	8,227	412	1,558	14,681	735
Manhattan CD 11	939	8,155	408	435	4,320	216	1,374	12,475	624
Manhattan CD 12	1,510	13,852	693	513	5,102	256	2,023	18,954	949
Bronx CD 01	1,020	8,588	430	374	3,458	173	1,394	12,046	603
Bronx CD 02	483	4,229	212	253	2,287	115	736	6,516	327
Bronx CD 03	891	7,590	380	426	3,898	195	1,317	11,488	575
Bronx CD 04	1,640	14,199	710	428	3,905	196	2,068	18,104	906
Bronx CD 05	1,310	11,492	575	416	3,782	190	1,726	15,274	765
Bronx CD 06	669	5,777	289	538	4,873	244	1,207	10,650	533
Bronx CD 07	1,576	13,849	693	461	4,182	210	2,037	18,031	903
Bronx CD 08	1,272	10,851	543	118	1,073	54	1,390	11,924	597

Community District (CD)	Mandatory Buildings (Buildings with 31 or More Residential Units[1] and Schools[2])			Optional Buildings[3] (Buildings with 10 to 30 Residential Units)			Total		
	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)[4]	Estimated Total Parking Spaces Required[4]	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)	Estimated Total Parking Spaces Required[4]	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)[4]	Estimated Total Parking Spaces Required[4]
Bronx CD 09	1,047	8,930	447	179	1,621	82	1,226	10,551	529
Bronx CD 10	332	2,845	143	112	1,013	51	444	3,858	194
Bronx CD 11	867	7,345	368	88	787	40	955	8,132	408
Bronx CD 12	710	6,040	302	228	2,072	104	938	8,112	406
Brooklyn CD 01	1,179	10,138	507	534	5,312	266	1,713	15,450	773
Brooklyn CD 02[6]	1,454	12,193	610	319	3,156	158	1,773	15,349	768
Brooklyn CD 03	697	5,966	299	379	3,762	189	1,076	9,728	488
Brooklyn CD 04	244	2,125	107	182	1,806	91	426	3,931	198
Brooklyn CD 05	1,001	8,309	416	154	1,504	76	1,155	9,813	492
Brooklyn CD 06	574	4,843	243	289	2,844	143	863	7,687	386
Brooklyn CD 07	265	2,272	114	237	2,335	117	502	4,607	231
Brooklyn CD 08	680	5,878	294	416	4,130	207	1,096	10,008	501
Brooklyn CD 09	942	8,103	406	211	2,095	105	1,153	10,198	511
Brooklyn CD 10	737	6,280	315	184	1,799	90	921	8,079	405
Brooklyn CD 11	677	5,863	294	227	2,213	111	904	8,076	405
Brooklyn CD 12	806	6,922	347	203	1,977	99	1,009	8,899	446
Brooklyn CD 13	869	7,334	367	59	585	30	928	7,919	397
Brooklyn CD 14	1,654	14,266	714	274	2,692	135	1,928	16,958	849
Brooklyn CD 15	1,200	10,173	509	122	1,182	60	1,322	11,355	569
Brooklyn CD 16	548	4,659	233	167	1,662	84	715	6,321	317
Brooklyn CD 17	823	7,168	359	221	2,182	110	1,044	9,350	469

Community District (CD)	Mandatory Buildings (Buildings with 31 or More Residential Units[1] and Schools[2])			Optional Buildings[3] (Buildings with 10 to 30 Residential Units)			Total		
	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)[4]	Estimated Total Parking Spaces Required[4]	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)	Estimated Total Parking Spaces Required[4]	Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)[4]	Estimated Total Parking Spaces Required[4]
Brooklyn CD 18	378	3,219	161	41	403	21	419	3,622	182
Queens CD 01	1,044	9,253	463	530	5,272	264	1,574	14,525	727
Queens CD 02	953	8,258	413	198	1,970	99	1,151	10,228	512
Queens CD 03	702	6,163	309	150	1,484	75	852	7,647	384
Queens CD 04	558	4,817	241	124	1,228	62	682	6,045	303
Queens CD 05	107	934	47	102	1,012	51	209	1,946	98
Queens CD 06	1,170	10,074	504	55	539	27	1,225	10,613	531
Queens CD 07	1,187	10,286	515	177	1,760	88	1,364	12,046	603
Queens CD 08	583	5,016	251	166	1,648	83	749	6,664	334
Queens CD 09	334	2,944	148	62	611	31	396	3,555	179
Queens CD 10	84	737	37	17	165	9	101	902	46
Queens CD 11	150	1,323	67	66	650	33	216	1,973	100
Queens CD 12	491	4,255	213	68	677	34	559	4,932	247
Queens CD 13	36	320	16	18	171	9	54	491	25
Queens CD 14	492	4,175	209	47	467	24	539	4,642	233
Staten Island CD 01	320	2,744	138	109	1,077	54	429	3,821	192
Staten Island CD 02	120	1,052	53	35	342	18	155	1,394	71
Staten Island CD 03	33	277	14	15	145	8	48	422	22
Citywide	49,725	429,176	21,485	17,092	166,501	8,357	66,817	595,677	29,842

Notes:

Notes on **Table 8-6** are also applicable to this table.

8.2.2.3 Summary

A comprehensive review of the existing length of curb within the City was performed to determine the length of the curb available for on-street parking by the general public (approximately 39.2 million linear feet; equivalent to approximately 1.96 million parking spaces). The results of this assessment are summarized in **Table 8-8** by borough and detailed in **Table 8-9** by CD**.** Based on this evaluation, the curb length needed for the stationary on-street containers would be approximately 595,677 linear feet Citywide, which is equivalent to approximately 29,842 parking spaces Citywide. As listed in **Table 8-8,** the Proposed Program is anticipated to require approximately 1.52% of the Citywide existing curbside parking for placement of the stationary on-street containers. Therefore, more than 98% of on-street parking would still be available Citywide.

Table 8-8. Future with the Proposed Program On-Street Parking by Borough

Borough	Total Length (Linear Feet) Available for Curbside Parking	Total Existing Parking Spaces	Future with the Proposed Program			
			Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)	Estimated Total Parking Spaces Required[1]	Total Curbside Parking Required (%)[2]
Manhattan	3,145,629	157,281	22,129	201,796	10,102	6.42%
Bronx	5,400,365	270,018	15,438	134,685	6,746	2.49%
Brooklyn	10,115,426	505,773	18,947	167,352	8,387	1.65%
Queens	14,868,537	743,425	9,671	86,207	4,322	0.58%
Staten Island	5,665,275	283,264	632	5,638	285	0.10%
Citywide	39,195,232	1,959,761	66,817	595,677	29,842	1.52%

Notes:

[1] As per the *CEQR Technical Manual*, a parking space is 20 linear feet. Values may differ due to rounding.

[2] Based on a total estimated existing available curb length available for parking and the total curb length required for stationary on-street containers.

Table 8-9. Future with the Proposed Program On-Street Parking by CD

Community District (CD)	Total Length (Linear Feet) Available for Curbside Parking	Total Existing Parking Spaces	Future with the Proposed Program			
			Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)	Estimated Total Parking Spaces Required[1]	Total Curbside Parking Required (%)[2]
Manhattan CD 01	206,205	10,310	828	7,060	354	3.42%
Manhattan CD 02	219,941	10,997	1,509	14,135	708	6.43%
Manhattan CD 03	274,848	13,742	2,115	19,827	992	7.21%
Manhattan CD 04	230,167	11,508	1,914	17,332	867	7.53%
Manhattan CD 05	212,981	10,649	993	8,588	431	4.03%
Manhattan CD 06	220,768	11,038	1,995	17,517	877	7.93%
Manhattan CD 07	281,030	14,052	3,211	29,180	1,460	10.38%
Manhattan CD 08	331,501	16,575	3,648	33,133	1,658	9.99%
Manhattan CD 095	225,054	11,253	961	8,915	447	3.96%
Manhattan CD 10	251,981	12,599	1,558	14,681	735	5.83%
Manhattan CD 11	318,079	15,904	1,374	12,475	624	3.92%
Manhattan CD 12	373,074	18,654	2,023	18,954	949	5.08%
Bronx CD 01	373,966	18,698	1,394	12,046	603	3.22%
Bronx CD 02	341,379	17,069	736	6,516	327	1.91%
Bronx CD 03	241,774	12,089	1,317	11,488	575	4.75%
Bronx CD 04	361,814	18,091	2,068	18,104	906	5.00%
Bronx CD 05	258,940	12,947	1,726	15,274	765	5.90%
Bronx CD 06	268,403	13,420	1,207	10,650	533	3.97%
Bronx CD 07	308,347	15,417	2,037	18,031	903	5.85%
Bronx CD 08	434,644	21,732	1,390	11,924	597	2.74%
Bronx CD 09	633,142	31,657	1,226	10,551	529	1.67%
Bronx CD 10	828,132	41,407	444	3,858	194	0.47%
Bronx CD 11	576,239	28,812	955	8,132	408	1.41%
Bronx CD 12	773,585	38,679	938	8,112	406	1.05%
Brooklyn CD 01	781,702	39,085	1,713	15,450	773	1.98%
Brooklyn CD 026	475,895	23,795	1,773	15,349	768	3.23%
Brooklyn CD 03	508,417	25,421	1,076	9,728	488	1.91%
Brooklyn CD 04	344,098	17,205	426	3,931	198	1.14%
Brooklyn CD 05	881,416	44,071	1,155	9,813	492	1.11%
Brooklyn CD 06	495,377	24,769	863	7,687	386	1.55%
Brooklyn CD 07	494,147	24,707	502	4,607	231	0.93%

Community District (CD)	Total Length (Linear Feet) Available for Curbside Parking	Total Existing Parking Spaces	Future with the Proposed Program			
			Anticipated Number of Stationary On-Street Containers	Total Curb Length Required (Linear Feet)	Estimated Total Parking Spaces Required[1]	Total Curbside Parking Required (%)[2]
Brooklyn CD 08	286,476	14,324	1,096	10,008	501	3.49%
Brooklyn CD 09	277,435	13,872	1,153	10,198	511	3.68%
Brooklyn CD 10	663,027	33,151	921	8,079	405	1.22%
Brooklyn CD 11	631,390	31,570	904	8,076	405	1.28%
Brooklyn CD 12	614,058	30,703	1,009	8,899	446	1.45%
Brooklyn CD 13	378,980	18,949	928	7,919	397	2.09%
Brooklyn CD 14	487,171	24,359	1,928	16,958	849	3.48%
Brooklyn CD 15	817,590	40,880	1,322	11,355	569	1.39%
Brooklyn CD 16	336,448	16,822	715	6,321	317	1.88%
Brooklyn CD 17	554,585	27,729	1,044	9,350	469	1.69%
Brooklyn CD 18	1,087,214	54,361	419	3,622	182	0.33%
Queens CD 01	897,361	44,868	1,574	14,525	727	1.62%
Queens CD 02	789,624	39,481	1,151	10,228	512	1.30%
Queens CD 03	559,309	27,965	852	7,647	384	1.37%
Queens CD 04	430,945	21,547	682	6,045	303	1.40%
Queens CD 05	1,050,761	52,538	209	1,946	98	0.19%
Queens CD 06	595,581	29,779	1,225	10,613	531	1.78%
Queens CD 07	1,693,928	84,696	1,364	12,046	603	0.71%
Queens CD 08	1,192,508	59,625	749	6,664	334	0.56%
Queens CD 09	710,929	35,546	396	3,555	179	0.50%
Queens CD 10	951,652	47,583	101	902	46	0.09%
Queens CD 11	1,431,512	71,576	216	1,973	100	0.14%
Queens CD 12	1,645,487	82,274	559	4,932	247	0.30%
Queens CD 13	2,053,837	102,692	54	491	25	0.02%
Queens CD 14	865,103	43,255	539	4,642	233	0.54%
Staten Island CD 01	1,722,132	86,107	429	3,821	192	0.22%
Staten Island CD 02	1,716,244	85,812	155	1,394	71	0.08%
Staten Island CD 03	2,226,899	111,345	48	422	22	0.02%
Citywide	39,195,232	1,959,76	66,817	595,677	29,842	1.52%

Notes:

[1] As per the *CEQR Technical Manual*, a parking space is 20 linear feet. Values may differ due to rounding.

[2] Based on a total estimated existing available curb length available for parking and the total curb length required for stationary on-street containers.

8.3 Prototypical Area Analysis

In addition to an analysis of the potential reduction in Citywide on-street parking, a parking utilization analysis in representative prototypical areas was also performed. As set forth in the *CEQR Technical Manual*, the parking utilization analysis considers whether the Proposed Program would support future parking demand. The parking utilization analysis was performed for four 2-hour peak periods throughout the day (7:00 AM to 9:00 AM, 12:00 PM to 2:00 PM, 5:00 PM to 7:00 PM, and 10:00 PM to 12:00 AM).[48] This analysis identifies the future on- and off-street parking conditions without and with the Proposed Program to determine if there would be a parking shortfall, as defined in **Section 8.3.2.3.1**.

As previously mentioned, due to the City's expansive network of public roads, a detailed Citywide parking utilization analysis is not feasible. Therefore, in order to complete a reasonable analysis of potential effects of the Proposed Program, a parking utilization analysis, consistent with the *CEQR Technical Manual,* was performed for five prototypical areas representing each of the five City boroughs. The parking utilization analysis in these prototypical areas was used as the basis for further understanding the potential effects of the Proposed Program on the Citywide on-street parking supply.

A Prototypical Analysis Memorandum was prepared in coordination with NYCDOT and is provided as **Appendix I**. The Prototypical Analysis Memorandum examines the potential effects of the Proposed Program on representative prototypical areas (see below), which, in part, reflect a range of conditions and activities where the Proposed Program would be implemented. A summary of the Prototypical Analysis Memorandum is summarized in this section.

8.3.1 Prototypical Area Selection

The process to identify representative prototypical areas consisted of reviewing information from publicly-available GIS datasets to identify 0.25-mile radius areas that are: (1) considered representative of the typical existing conditions throughout the City; (2) contain a distribution throughout the 0.25-mile radius of buildings with residential units that would potentially be affected by the Proposed Program; and (3) contain areas with the potential to result in parking shortfalls and areas with the potential to result in significant parking shortfalls, as defined in **Section 8.3.2.3.1**.[49]

As per the *CEQR Technical Manual*, a convenient walking distance from available on- and off-street parking is about 0.25 miles. Therefore, each prototypical area encompasses a 0.25-mile radius study area.

An evaluation of existing and proposed conditions using GIS datasets was completed to select one representative prototypical area for each of the five boroughs. In selecting the prototypical areas, the following elements were considered as primary factors to be included within a 0.25-mile radius prototypical area:

[48] A parking utilization analysis includes an inventory of all public off-street parking lots and garages within a parking study area and tabulation of the existing number and occupancy of legally regulated on-street parking spaces within the parking study area at certain times of the day.

[49] The placement of stationary on-street containers would result in a reduction of on-street parking spaces due to the Proposed Program. In accordance with the *CEQR Technical Manual,* the reduction of parking spaces would not necessarily constitute a parking shortage if there are parking spaces within a convenient walking distance (0.25 mile) that are available for use.

- Areas with a combination of buildings with 10 to 30 residential units and buildings with 31 or more residential units; and
- Areas with mixed-use residential buildings with ground floor commercial uses.

The *CEQR Technical Manual* identifies certain neighborhoods of the City as "Parking Zones 1 and 2" due to the "magnitude" of other alternative modes of transportation available (i.e., where there are subway stations or bus stops within a convenient walking distance [0.25 mile]). These neighborhoods are shown on **Figure 8-4.**

Prototypical areas were identified based on the above criteria in addition to their locations relative to CEQR Parking Zones. Specifically, prototypical areas were selected to represent one of the following three categories:

- CDs fully located in a CEQR Parking Zone;
- CDs partially located in a CEQR Parking Zone; and
- CDs not located in a CEQR Parking Zone.

Based on an evaluation of existing and proposed conditions along with this criteria, one prototypical area was selected to assess the potential effects of the Proposed Program on parking in each of the five boroughs as follows:

- Prototypical Area # 1 (**Figure 8-5**): Manhattan CD 08
  - Center of 0.25-mile radius: East 76th Street between 2nd and 3rd Avenues.
  - Fully located in a CEQR Parking Zone.
- Prototypical Area # 2 (**Figure 8-6**): Bronx CD 02
  - Center of 0.25-mile radius: Tiffany Street and Westchester Avenue.
  - Partially located in a CEQR Parking Zone.
- Prototypical Area # 3 (**Figure 8-7**): Brooklyn CD 09
  - Center of 0.25-mile radius: Montgomery Street between Albany and Troy Avenues.
  - Not located in a CEQR Parking Zone.
- Prototypical Area # 4 (**Figure 8-8**): Queens CD 06
  - Center of 0.25-mile radius: 65th Road between 99th and 102nd Streets.
  - Not located in a CEQR Parking Zone.
- Prototypical Area # 5 (**Figure 8-9**): Staten Island CD 01
  - Center of 0.25-mile radius: Belmont Place and Daniel Low Terrace.
  - Not located in a CEQR Parking Zone.

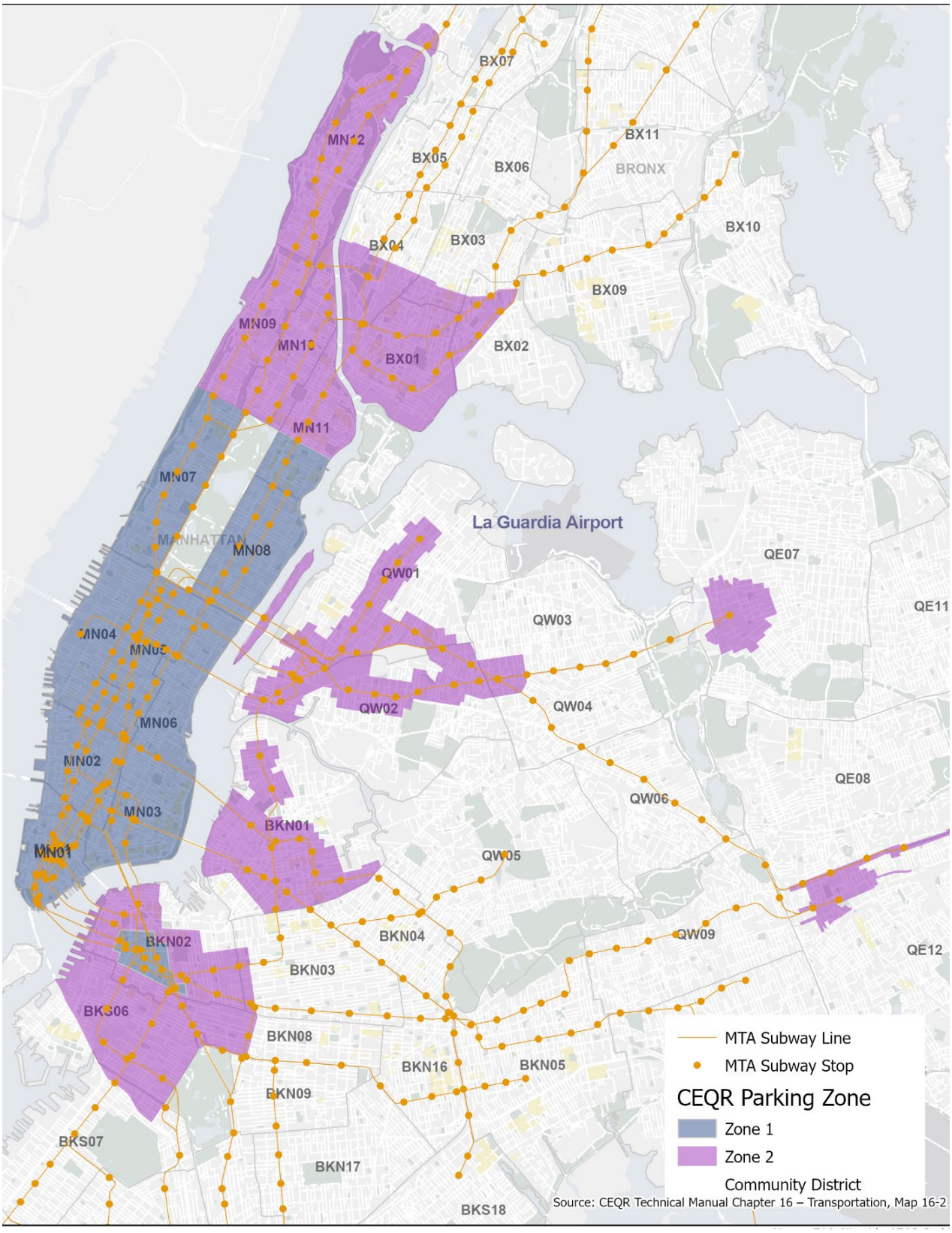

Figure 8-4. CEQR Parking Zones

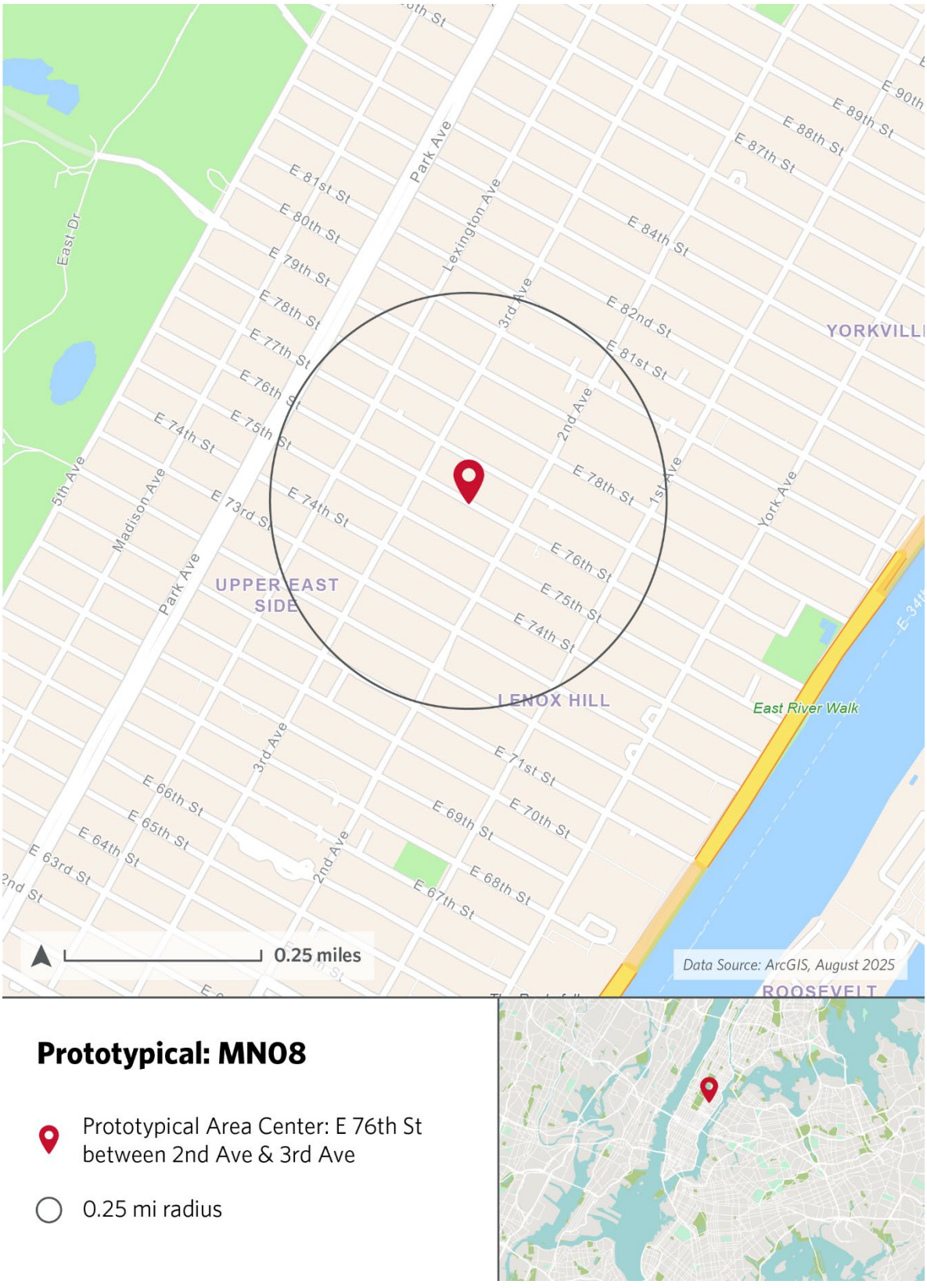

Figure 8-5. Prototypical Area # 1 - Manhattan CD 08

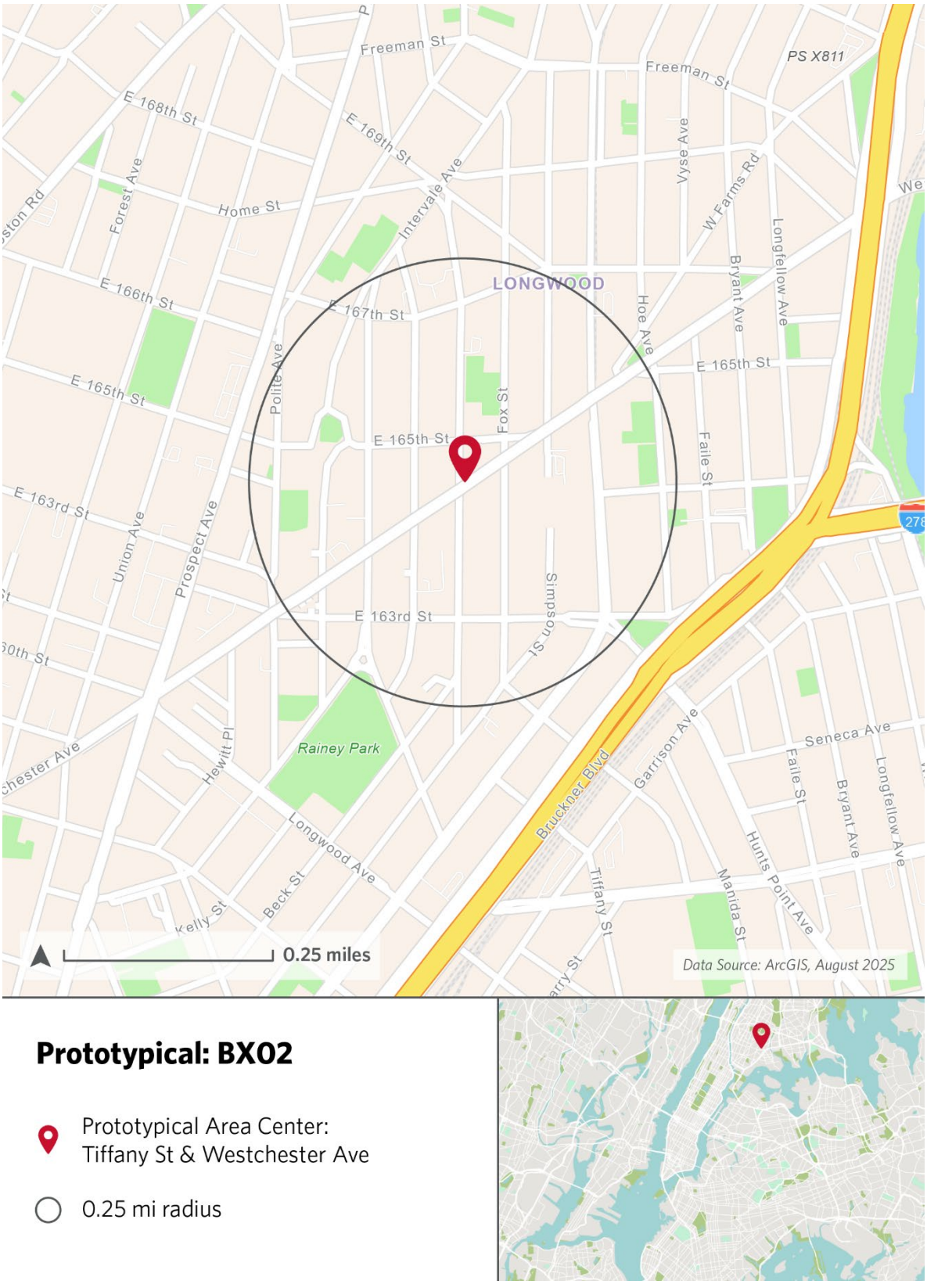

Figure 8-6. Prototypical Area # 2 - Bronx CD 02

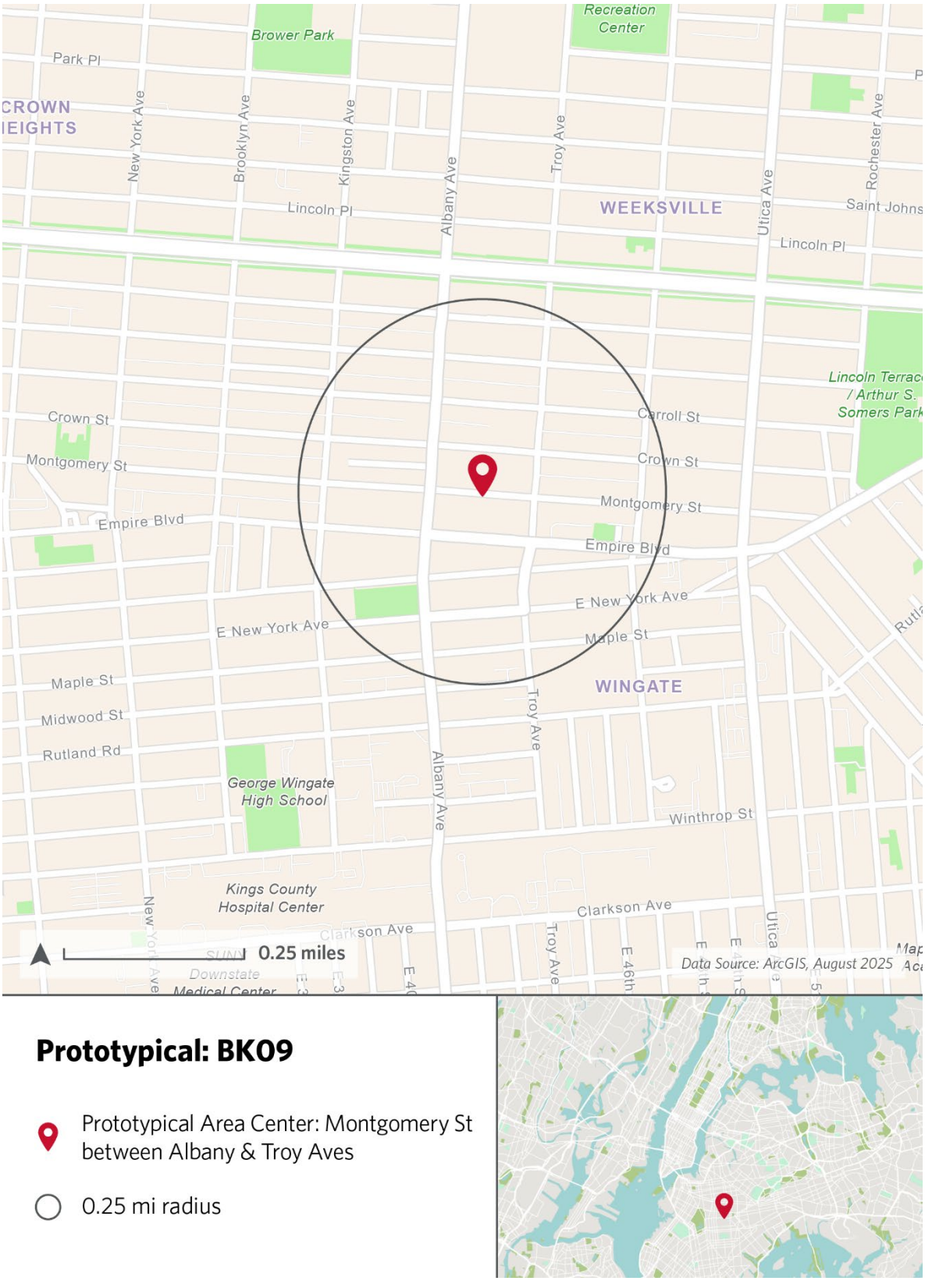

Figure 8-7. Prototypical Area # 3 - Brooklyn CD 09

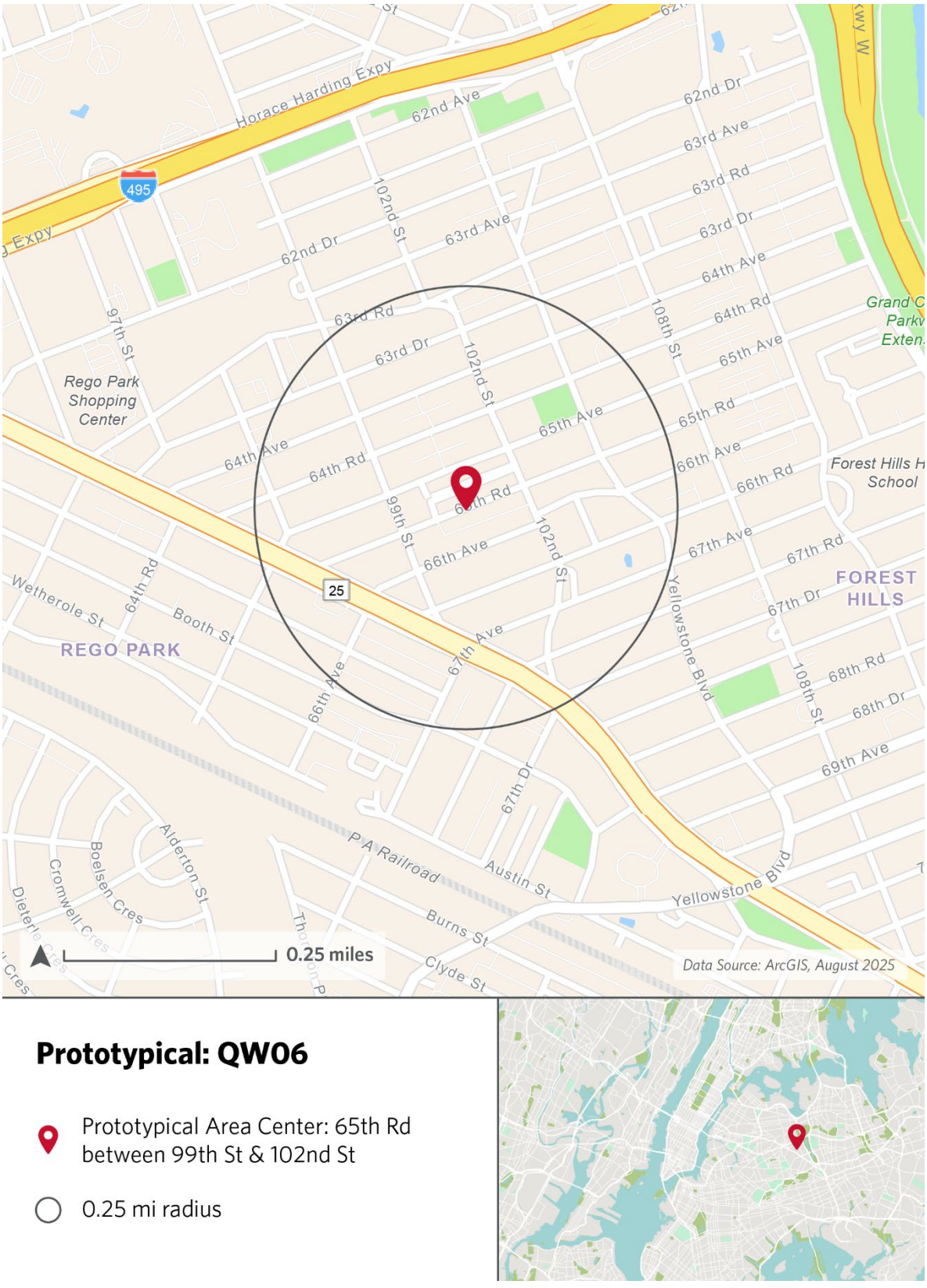

Figure 8-8. Prototypical Area # 4 - Queens CD 06

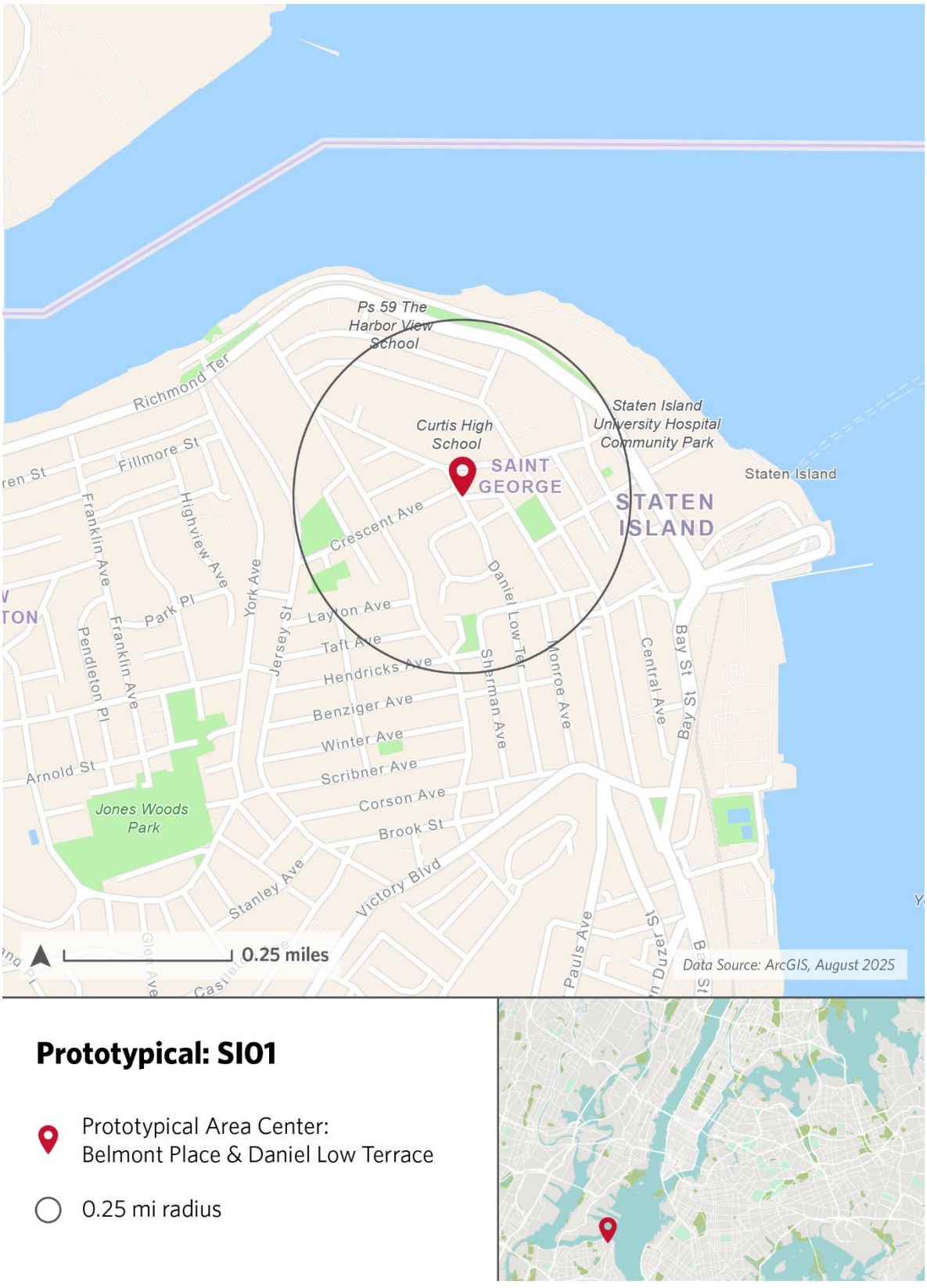

Figure 8-9. Prototypical Area # 5 - Staten Island CD 01

8.3.2 Parking Utilization Analysis

The parking utilization analysis for the proposed Citywide Containerization Program was completed in accordance with the *CEQR Technical Manual* for each of the five prototypical areas. This section describes the methodology and parking utilization results for the existing conditions, Future without the Proposed Program, and Future with the Proposed Program.

8.3.2.1 Methodology and Existing Conditions

The methodology used for the parking utilization analysis consisted of completing the following steps for each prototypical area:

- Existing Conditions
  - Performing field and desktop surveys to determine the existing on-street and off-street parking capacity;
  - Surveying the existing on-street and off-street parking occupancy during peak periods to establish the existing parking demand; and
  - Determining if the existing parking demand during peak periods can be accommodated by the existing available on-street and off-street parking capacity.
- Future without the Proposed Program
  - Identifying the projected reduction of the existing available parking capacity due to other proposed projects and annual background growth rates; and
  - Determining if the future parking demand during peak periods can be accommodated by the anticipated available on-street and off-street parking capacity in the Future without the Proposed Program.
- Future with the Proposed Program
  - Determining the potential future loss of parking spaces due to the placement of the stationary on-street containers in the parking lane;
  - Determining if the future parking demand during peak periods can be accommodated by the anticipated available on-street and off-street parking capacity despite the potential future loss of parking spaces due to the Proposed Program; and
  - Using the results of the parking utilization analysis in the five prototypical areas to further understand the potential effects of the Proposed Program on the Citywide on-street parking supply.

The results of the parking utilization study for existing conditions are detailed below in this section. The parking utilization results for the Future without the Proposed Program are discussed in **Section 8.3.2.2** and the parking utilization results for the Future with the Proposed Program are discussed in **Section 8.3.2.3**.

8.3.2.1.1 Existing Length of Curb Available for On-street Parking

The existing length of curb available for on-street parking within each prototypical 0.25-mile radius area was initially calculated as per the methodology described in **Section 8.2.2.1.1** for the Citywide Parking Analysis, accounting for the existing 24-hour parking restrictions, including:

- Intersections – Corners
- Fire Hydrants
- MTA Bus Stops
- Bike Share (Citi Bike)
- Daylighting
- Dining Out NYC Program

- Midblock Curb Cuts
- Parking Regulation Signs for 24-hour restrictions

In addition, for each period analyzed, the curb length that was not available for parking due to active part-time parking restrictions that were in effect during the study periods was determined. These included the following parking regulations that restrict curbside parking for a portion of the day:

- Authorized Vehicles Only - Emergency Vehicles Only
- Loading Zones
- No Standing School Days
- No Stopping Zones
- No Standing Zones
- Alternate Side Parking (Street Cleaning)

8.3.2.1.2 Existing Number of Legal On-Street Parking Spaces During Study Periods

For each prototypical area, the total number of legal parking spaces per study period was determined by dividing the total available curbside parking length (calculated as described above and in **Section 8.2.2.1.1**) by 20 linear feet.[50] This provided the total number of existing legal parking spaces available within a prototypical area for each study period.

8.3.2.1.3 Existing On-Street Parking Availability and Utilization

A parking survey was conducted within the five prototypical areas during May and June 2025. Data was collected by video recording the parked vehicles along each side of a City block (blockface) within a 0.25-mile radius of the center of each prototypical area. Each blockface was surveyed at least once during each of the following four 2-hour peak periods (study periods):

- **AM:** 7:00 AM to 9:00 AM
- **Midday (MD):** 12:00 PM to 2:00 PM
- **PM:** 5:00 PM to 7:00 PM
- **Overnight (ON):** 10:00 PM to 12:00 AM

Parking regulations along each surveyed blockface were documented, along with observations about double-parked vehicles, construction activity, and deliveries. Field staff documented all restrictive parking regulations and any physical parking obstacles—such as on-street bike-share facilities, fire hydrants, temporary construction and outdoor dining areas—along each blockface within each 0.25-mile radius prototypical area. The survey videos were reviewed to quantify the parked cars along each blockface for each peak period.

In addition, off-street parking facilities (i.e., legally operating existing commercial parking lots and garages) located within the 0.25-mile radius were documented. This included recording the legal parking capacity posted at each facility entrance and, when possible, interviewing facility staff to obtain information about utilization of each off-street parking facility during the identified peak periods.

Table 8-10 summarizes the existing on-street parking supply (capacity) within each prototypical area and the percent that capacity is utilized. Based on the existing parking utilization analysis described above, it was determined that there is available on-street parking capacity, as listed

[50] As per the *CEQR Technical Manual*, a parking space is 20 linear feet.

in **Table 8-10**, and off-street parking capacity, as listed in **Table 8-11,** within all five of the 0.25-mile radius prototypical areas during the four study periods.

Table 8-10. Existing On-Street Parking Utilization in the 0.25-mile Radius Prototypical Areas

Prototypical Area	AM Peak Period (7:00 AM to 9:00 AM)		MD Peak Period (12:00 PM to 2:00 PM)		PM Peak Period (5:00 PM to 7:00 PM)		ON Peak Period (10:00 PM to 12:00 AM)	
	Total Parking Capacity [1, 2]	% Utilized	Total Parking Capacity [1, 2]	% Utilized	Total Parking Capacity [1, 2]	% Utilized	Total Parking Capacity [1, 2]	% Utilized
#1 - Manhattan CD 08	1,640	93%	1,692	96%	1,714	93%	1,928	90%
#2 - Bronx CD 02	1,284	89%	1,949	93%	2,043	85%	2,050	88%
#3 - Brooklyn CD 09	2,001	95%	1,076	97%	2,139	87%	2,170	95%
#4 - Queens CD 06	2,234	94%	2,242	96%	2,394	95%	2,346	95%
#5 -Staten Island CD 01	1,920	80%	1,920	83%	1,997	69%	2,009	71%

Notes:
[1] The total parking capacity represents the number of legal parking spaces within the prototypical area during the peak period.
[2] Values may differ due to rounding.

Table 8-11. Existing (2025) Available Off-Street Parking Spaces in the 0.25-mile Radius Prototypical Areas[1]

Prototypical Area[2]	AM Peak Period (7:00 AM to 9:00 AM)	MD Peak Period (12:00 PM to 2:00 PM)	PM Peak Period (5:00 PM to 7:00 PM)	ON Peak Period (10:00 PM to 12:00 AM)[3]
#1 - Manhattan CD 08	340	130	643	253
#2 - Bronx CD 02	104	83	92	11
#4 - Queens CD 06	37	15	67	15
#5 -Staten Island CD 01	74	31	78	5

Notes:
[1] Available off-street parking spaces were determined based on the parking capacity and the existing utilization of those spaces. Parking capacity was assumed to be 98% of the permitted capacity, as per the *CEQR Technical Manual*. Utilization estimates were provided by the off-street parking facility attendants and were not verified by a detailed inventory.
[2] There are no off-street parking facilities available with the 0.25-mile radius prototypical area for Prototypical Area #3 - Brooklyn CD 09.
[3] Three off-street parking facilities provided information on the available capacity for the ON period, which ranged from 60 to 70%. Due to the limited information for the ON period, these values were conservatively based on a 5% available capacity for those off-street parking facilities that did not provide utilization information for the ON period.

8.3.2.2 Future without the Proposed Program

The analysis of the Future without the Proposed Program serves as the baseline for comparing the potential effects of the Proposed Program. In the Future without the Proposed Program, it is anticipated that waste would continue to be placed in plastic bags on public sidewalks prior to waste collection.

For the parking utilization analysis, the Proposed Program Build Year of 2032 was used. Using the annual background growth rate recommended in the *CEQR Technical Manual*, a reduction in available parking spaces was calculated for each prototypical area. The growth rates were used to determine the projected reduction in the existing available on-street parking supply due to proposed projects, independent of the Proposed Program.

For known development projects within each 0.25-mile radius prototypical area, NYCDOT and NYCDCP offices in the relevant CDs were contacted to obtain available information. In addition, data from several City department websites (e.g., NYCDCP, DOB) were reviewed. However, the information obtained was minimal; therefore, it was assumed that any loss of parking due to known developments in each prototypical area would be accounted for within the reduction resulting from the background growth rate.

In addition, information regarding NYCDOT bikeshare (Citi bike) locations, street improvement projects, electric-vehicle charging stations, and microhub zones[51] received from the NYCDOT Division of Transportation Planning and Management on August 15, 2025, was evaluated. Of a total of 12 projects identified, detailed information was available for six projects. The associated loss of parking spaces from these six projects was incorporated into the available parking supply used in the Future without the Proposed Program analysis. Additionally, after further coordination with NYCDOT, three more projects identified in the borough of Staten Island were considered in the Future without the Proposed Program analysis.

Table 8-12 summarizes the Future without the Proposed Program on-street parking supply (capacity) within each prototypical area and the percent that capacity would be utilized. The analysis shows that in the Future without the Proposed Program there would be available on-street parking capacity within all five of the 0.25-mile radius prototypical areas during the four study periods.

Table 8-12. Future without the Proposed Program (2032) On-Street Parking Utilization in the 0.25-mile Radius Prototypical Areas

Prototypical Area	AM Peak Period (7:00 AM to 9:00 AM)		MD Peak Period (12:00 PM to 2:00 PM)		PM Peak Period (5:00 PM to 7:00 PM)		ON Peak Period (10:00 PM to 12:00 AM)	
	Total Parking Capacity [1, 2]	% Utilized	Total Parking Capacity [1, 2]	% Utilized	Total Parking Capacity [1, 2]	% Utilized	Total Parking Capacity [1, 2]	% Utilized
#1 - Manhattan CD 08	1,595	96%	1,646	99%	1,668	96%	1,880	93%

[51] These are zones provided by NYCDOT as safe, dedicated spaces for truck operators to transfer deliveries onto other modes of transportation for the last leg of delivery, including e-cargo bikes, handcarts, and smaller electric sprinter vans. https://www.nyc.gov/html/dot/html/pr2025/authorize-microhub-zones.shtml

Prototypical Area	AM Peak Period (7:00 AM to 9:00 AM)		MD Peak Period (12:00 PM to 2:00 PM)		PM Peak Period (5:00 PM to 7:00 PM)		ON Peak Period (10:00 PM to 12:00 AM)	
	Total Parking Capacity [1, 2]	% Utilized	Total Parking Capacity [1, 2]	% Utilized	Total Parking Capacity [1, 2]	% Utilized	Total Parking Capacity [1, 2]	% Utilized
#2 - Bronx CD 02	1,270	90%	1,929	94%	2,022	86%	2,029	89%
#3 - Brooklyn CD 09	1,971	96%	1,055	99%	2,107	88%	2,138	96%
#4 - Queens CD 06	2,210	95%	2,218	97%	2,369	96%	2,321	96%
#5 -Staten Island CD 01	1,652	94%	1,652	96%	1,781	77%	1,747	82%

Notes:
[1] The total parking capacity represents the number of legal parking spaces within the prototypical area during the peak period.
[2] Values may differ due to rounding.

8.3.2.3 Future with the Proposed Program

The analysis of the Future with the Proposed Program accounts for a potential reduction in parking spaces due to the placement of stationary on-street containers for buildings with 10 or more residential units Citywide and schools within Manhattan CD 09 and Brooklyn CD 02. The parking utilization analysis was completed in each of the prototypical areas to determine if there would be a parking shortfall in the Future with the Proposed Program, as per the *CEQR Technical Manual*. The CEQR guidance for determination of potential parking shortfalls is summarized in **Section 8**.

8.3.2.3.1 Determination of Potential Parking Shortfalls

As per the *CEQR Technical Manual*, if a proposed project generates the need for more parking than it provides and/or is available, it is considered a parking shortfall.

As discussed in **Section 8.3.1** and shown on **Figure 8-4**, the *CEQR Technical Manual* identifies certain neighborhoods of the City as "Parking Zones 1 and 2" due to the "magnitude" of other alternative modes of transportation available (i.e., where there are subway stations or bus stops within a convenient walking distance [0.25 mile]).

As per the *CEQR Technical Manual*:

- For proposed projects located in CEQR Parking Zones 1 and/or 2:
  - A parking shortfall is generally not considered significant due to the magnitude of available alternative modes of transportation.
- For proposed projects in areas not designated as CEQR Parking Zones 1 and/or 2:
  - A project's parking shortfall may be considered significant.

While the *CEQR Technical Manual* states that if a proposed project generates the need for more parking than it provides and/or is available, this shortfall of spaces may be considered significant;

however, a significant parking shortfall would not be considered an impact.[52] The availability of on- and off-street parking spaces within a convenient walking distance (about 0.25 mile) as well as the availability of alternative modes of transportation are considered in making this determination.

8.3.2.3.2 Results of the Future with the Proposed Program Parking Utilization Analysis

Table 8-13 summarizes the results of the Future with the Proposed Program parking utilization analysis for each 0.25-mile radius prototypical area.

Based on the parking utilization analysis described above, it was determined that there would be available on-street and off-street parking capacity within two of the five 0.25-mile radius prototypical areas during the four study periods.

Under the Proposed Program, both the Bronx CD 02 and Staten Island CD 01 0.25-mile radius prototypical areas would have available on-street and off-street street parking capacity. Without the inclusion of the off-street parking availability, the 0.25-mile radius prototypical area in Bronx CD 02 would experience a parking shortfall during the MD period. However, with the inclusion of off-street parking availability, the MD peak period would not result in a parking shortfall (**Table 8-13**). The Staten Island CD 01 0.25-mile radius prototypical areas would have a surplus of available parking and the Proposed Program would not result in a parking shortfall during any of the four study periods (**Table 8-13**), even without the inclusion of off-street parking availability. Additionally, there would also be off-street parking spaces available for use in the Staten Island CD 01 0.25-mile radius, further contributing to the parking surplus. As such, further review of available parking within a 0.5-mile radius area for these two prototypical areas was not warranted.

However, the Brooklyn CD 09, Manhattan CD 08, and Queens CD 06 0.25-mile radius prototypical areas would experience some parking shortfalls that required additional analysis. The 0.25-mile radius prototypical area in Brooklyn CD 09 would experience a parking shortfall during the AM, MD, and ON peak periods. This prototypical area does not have existing off-street parking facilities within the 0.25-mile radius. The 0.25-mile radius prototypical area in Manhattan CD 08 would experience a parking shortfall during all four study periods. With the inclusion of off-street parking availability, the AM, PM, and ON peak periods would not result in a parking shortfall; however, the MD peak period would result in a parking shortfall. The 0.25-mile radius prototypical area in Queens CD 06 would experience a parking shortfall during all four study periods. With the inclusion of off-street parking availability, the AM and PM peak periods would not result in a parking shortfall; however, the MD and ON peak periods would result in a parking shortfall. Based on the results of the parking utilization analysis for the 0.25-mile radius prototypical areas, a review of the available parking within a 0.5-mile radius area for the Manhattan CD 08, Brooklyn CD 09, and Queens CD 06 prototypical areas was warranted, as presented below.[53]

[52] *CEQR Technical Manual*, Chapter 16 – Transportation, Section 460.

[53] Per the *CEQR Technical Manual*, should the parking spaces available within a 0.25-mile radius prove insufficient to accommodate the parking demand, consideration should be given to extending the study area to a maximum of 0.5 mile of the site.

Table 8-13. Future with the Proposed Program (2032) Parking Utilization in the 0.25-mile Radius Prototypical Areas

Prototypical Area	Total Parking Spaces Required for the Proposed Program[1] (AM/MD/ PM/ON)	Parking	AM Peak Period (7:00 AM to 9:00 AM)		MD Peak Period (12:00 PM to 2:00 PM)		PM Peak Period (5:00 PM to 7:00 PM)		ON Peak Period (10:00 PM to 12:00 AM)	
			Total Parking Capacity[2, 3]	% Utilized[4]	Total Parking Capacity[2, 3]	% Utilized[4]	Total Parking Capacity[2, 3]	% Utilized[4]	Total Parking Capacity[2, 3]	% Utilized[4]
#1 - Manhattan CD 08	357/371/ 371/371	On-Street	1,238	123%	1,275	128%	1,297	123%	1,509	116%
		Total (On- and Off-Street[5])	1,578	97%	1,405	116%	1,940	82%	1,762	99%
#2 - Bronx CD 02	73/134/ 134/134	On-Street	1,197	95%	1,795	101%	1,888	92%	1,895	95%
		Total (On- and Off-Street[5])	1,301	87%	1,878	96%	1,980	88%	1,906	95%
#3 - Brooklyn CD 09	89/17/89/89	On-Street	1,882	101%	1,038	100%	2,018	92%	2,049	100%
		Total (On- and Off-Street[5,6])	1,882	101%	1,038	100%	2,018	92%	2,049	100%
#4 - Queens CD 06	144/133/ 144/144	On-Street	2,066	101%	2,085	103%	2,225	102%	2,177	102%
		Total (On- and Off-Street[5])	2,103	100%	2,100	102%	2,292	99%	2,192	101%
#5 -Staten Island CD 01	26/26/28/28	On-Street	1,626	95%	1,626	98%	1,753	78%	1,719	83%
		Total (On- and Off-Street[5])	1,700	91%	1,657	96%	1,831	75%	1,724	83%

Notes:

[1] The total estimated parking spaces required for the Proposed Program account for credits associated with stationary on-street container placement on curb segments with active construction, active regulation, or physical restrictions.

[2] The total parking capacity represents the number of legal parking spaces within the prototypical area during the peak period.

[3] Values may differ due to rounding.

[4] Parking utilization percentages less than 100% signify that there would be available parking capacity since the existing parking demand would not use all of the legal parking spaces. Parking utilization percentages over 100% signify that there would be a parking shortfall since the existing parking demand would not be met by the parking capacity.

[5] The off-street parking facility data is based on **Table 8-5**.

[6] There are no off-street parking facilities available within the 0.25-mile radius Prototypical Area #3 - Brooklyn CD 09.

8.3.2.3.2.a Manhattan CD 08, Brooklyn CD 09, and Queens CD 06 0.5-mile Radius Prototypical Areas

Per the *CEQR Technical Manual*, should the parking spaces available within a 0.25-mile radius prove insufficient to accommodate the parking demand, consideration should be given to extending the study area to a maximum of 0.5 mile of the site. As such a review of the available parking within a 0.5-mile radius area for the Manhattan CD 08, Brooklyn CD 09, and Queens CD 06 prototypical areas, as shown in **Figure 8-10** to **Figure 8-12** was performed.

Table 8-14 summarizes the results of the Future with the Proposed Program parking utilization analysis for the 0.5-mile radius area, including the 0.25-mile radius area, for the Manhattan CD 08, Brooklyn CD 09, and Queens CD 06 prototypical areas, to account for on- and off-street parking availability. With the inclusion of the off-street parking availability for the 0.5-mile radius, all three prototypical areas would not result in a parking shortfall during any of the four study periods.

Table 8-14. Future with the Proposed Program (2032) Total Parking Utilization in the 0.25 and 0.5-mile Radius Combined Prototypical Areas

Prototypical Area	Total Parking Spaces Required for the Proposed Program[1] (AM/MD/ PM/ON)	Parking	AM Peak Period (7:00 AM to 9:00 AM)		MD Peak Period (12:00 PM to 2:00 PM)		PM Peak Period (5:00 PM to 7:00 PM)		ON Peak Period (10:00 PM to 12:00 AM)	
			Total Parking Capacity[2, 3]	% Utilized[4]	Total Parking Capacity[2, 3]	% Utilized[4]	Total Parking Capacity[2, 3]	% Utilized[4]	Total Parking Capacity[2, 3]	% Utilized[4]
#1 - Manhattan CD 08	1,066/1,066/ 1,142/1,146	On-Street	4,076	117%	4,040	122%	4,563	117%	5,413	107%
		Total (On- and Off-Street[5])	6,488	73%	5,755	85%	8,211	65%	7,123	81%
#3 - Brooklyn CD 09	231/106/ 255/255	On-Street	6,261	95%	3,768	97%	6,670	87%	6,864	93%
		Total (On- and Off-Street[5])	6,319	94%	3,826	96%	6,728	87%	6,922	92%
#4 - Queens CD 06	324/312/ 348/348	On-Street	6,332	95%	6,223	97%	7,218	93%	7,228	96%
		Total (On- and Off-Street[5])	6,469	93%	6,304	96%	7,428	91%	7,333	95%

Notes:

[1] The total estimated parking spaces required for the Proposed Program account for credits associated with stationary on-street container placement on curb segments with active construction, active regulation, or physical restrictions.

[2] The total parking capacity represents the number of legal parking spaces within the prototypical area during the peak period.

[3] Values may differ due to rounding.

[4] Parking utilization percentages less than 100% signify that there would be available parking capacity since the existing parking demand would not use all of the legal parking spaces. Parking utilization percentages over 100% signify that there would be a parking shortfall since the existing parking demand would not be met by the parking capacity.

[5] The off-street parking facility data is based on **Table 8-5.**

Figure 8-10. Prototypical Area # 1 - Manhattan CD 08 0.5-mile Area

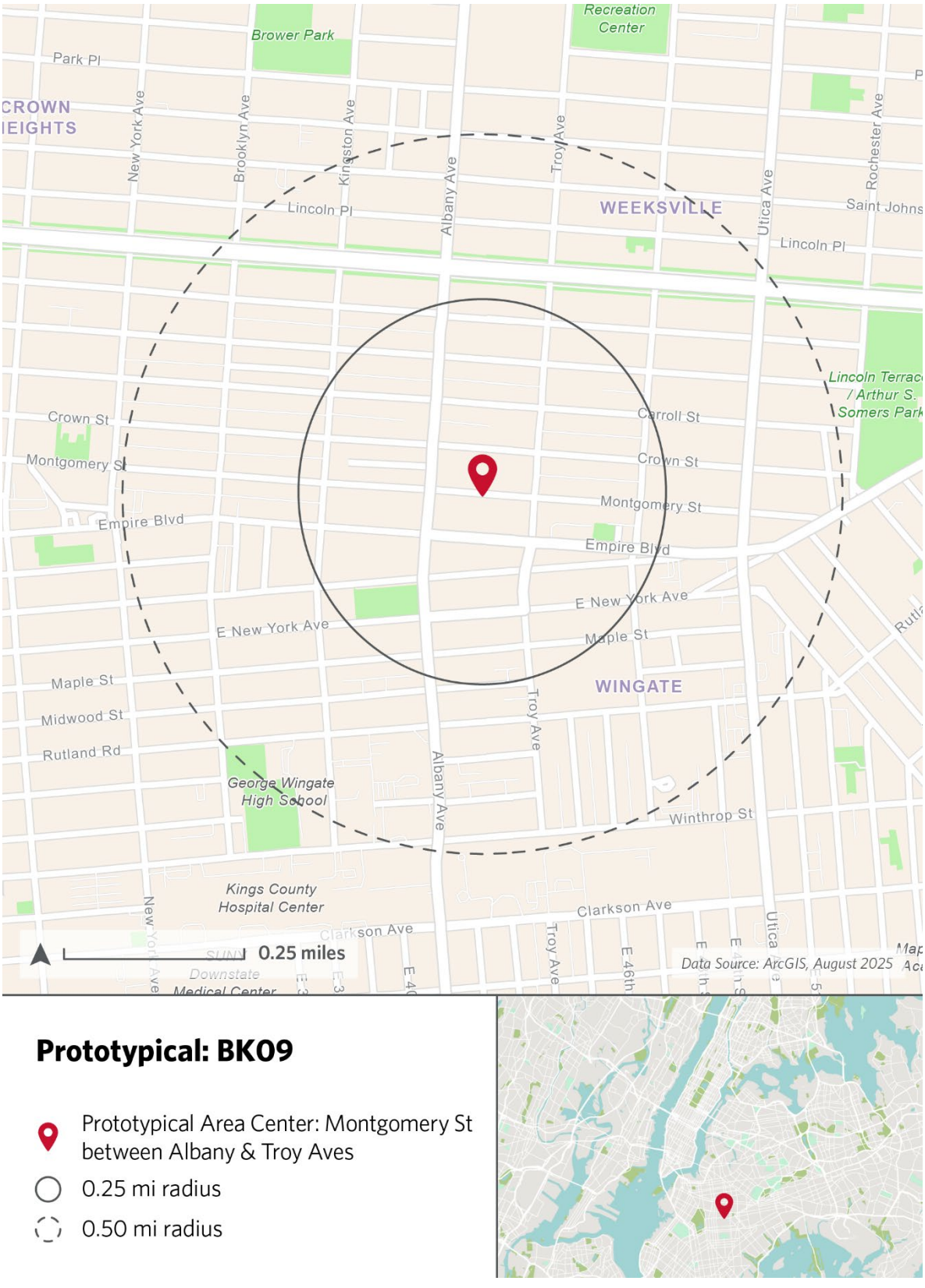

Figure 8-11. Prototypical Area # 3 - Brooklyn CD 09 0.5-mile Area

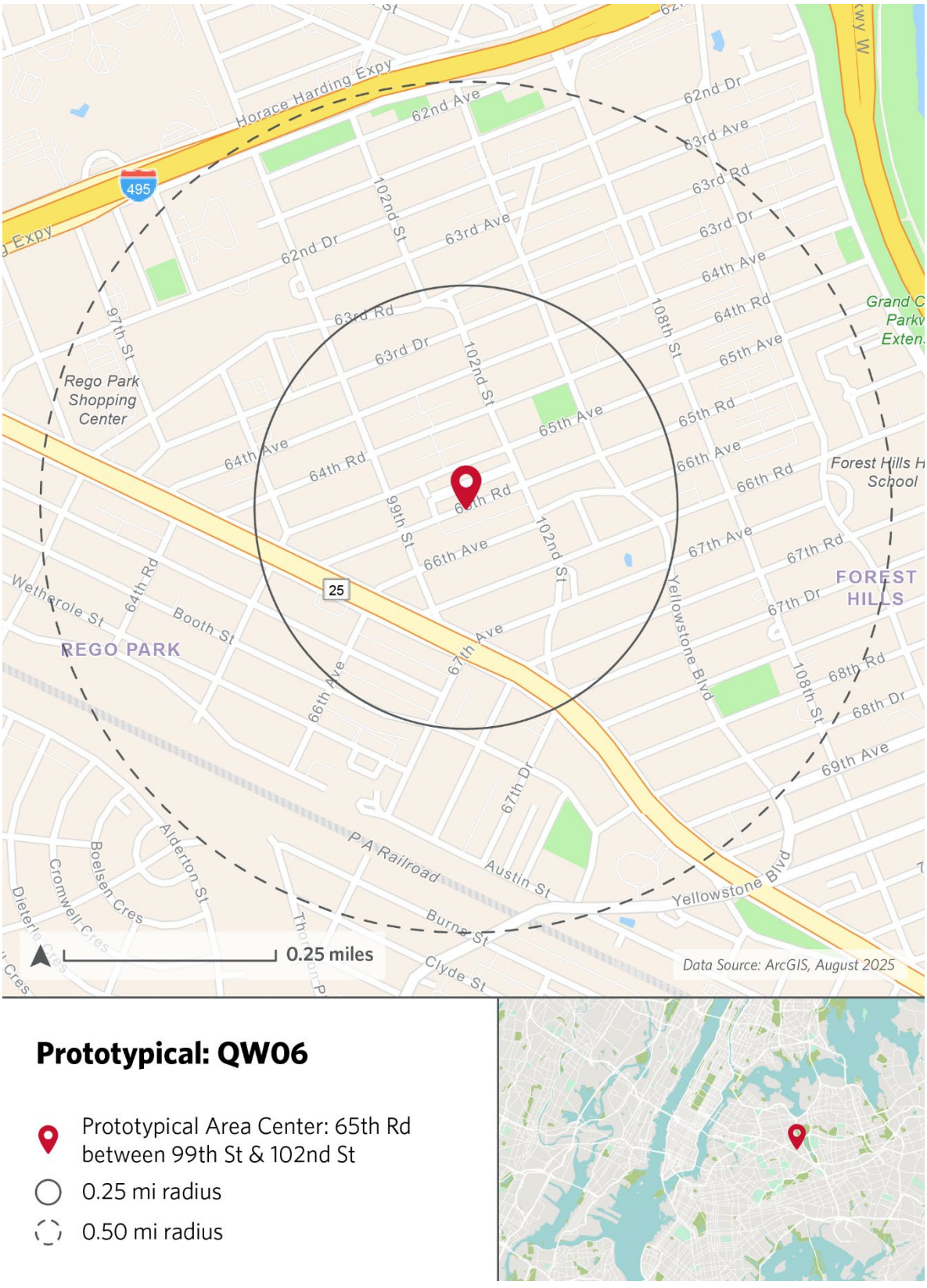

Figure 8-12. Prototypical Area # 4 - Queens CD 06 0.5-mile Area

8.3.3 Citywide Parking Conclusions Derived from the Prototypical Area Analysis

The objective of the parking utilization analysis was to identify the future on- and off-street parking conditions with the Proposed Program and to understand whether there would be:

- A parking shortfall in areas within a CEQR Parking Zone 1 or 2; and
- A parking shortfall or significant parking shortfall in areas outside of a CEQR Parking Zone 1 or 2.

As previously stated in **Section 8.3.1**, the *CEQR Technical Manual* identifies certain neighborhoods of the City as "Parking Zones 1 and 2" due to the "magnitude" of other alternative modes of transportation available (i.e., where there are subway stations or bus stops within a convenient walking distance [0.25 mile]). These neighborhoods are shown on **Figure 8-4.**

Table 8-15 identifies each of the City's 59 CDs and whether they are fully or partially located in a CEQR Parking Zone or not located in a CEQR Parking Zone.

Table 8-15. Categorization of CDs based on CEQR Parking Zones

CDs fully located in a CEQR Parking Zone	CDs partially located in a CEQR Parking Zone	CDs not located in a CEQR Parking Zone	
MN01	BX02	BX05	BKN04
MN02	BX03	BX06	BKN05
MN03	BX04	BX07	BKN09
MN04	BX08	BX09	BKS10
MN05	QW01	BX10	BKS11
MN06	QW02	BX11	BKS12
MN07	QW03	BX12	BKS13
MN08	QW04	QW05	BKS14
MN09	QE07	QW06	BKS15
MN10	QE12	QE08	BKN16
MN11	BKN01	QW09	BKN17
MN12	BKN02	QE10	BKS18
BX01	BKN03	QE11	SI01
	BKS06	QE13	SI02
	BKS07	QE14	SI03
	BKN08		

As previously discussed, the parking utilization analysis in the five prototypical areas was used as the basis for further understanding the potential effects of the Proposed Program on the Citywide on-street parking supply. As discussed below, since the five prototypical areas would not result in a parking shortfall, the Proposed Program is not anticipated to result in a parking shortfall due to the placement of stationary on-street containers throughout the City.[54]

8.3.3.1 CDs Fully Located in a CEQR Parking Zone

The 0.25-mile radius prototypical area in Manhattan CD 08 was selected as representative of the 13 CDs throughout the City fully located in a CEQR Parking Zone. The parking utilization analysis determined that there would be a parking shortfall within the 0.25-mile radius prototypical area in Manhattan CD 08 with installation of the proposed stationary on-street containers and drivers may need to search for parking within the 0.5-mile radius. However, the parking utilization analysis determined that with the placement of stationary on-street containers in the parking lane, there would remain excess parking capacity within the Manhattan CD 08 0.5-mile radius prototypical area.

Based on the parking utilization analysis for the Manhattan CD 08 prototypical area, the Proposed Program is not anticipated to result in a parking shortfall in 13 CDs throughout the City fully located in a CEQR Parking Zone (12 CDs in Manhattan and Bronx CD 01). In addition, these 13 CDs have numerous subway and bus lines within the 0.25-mile and 0.5-mile radius that are widely accessible and provide service on a regular and frequent basis.

8.3.3.2 CDs Partially Located in a CEQR Parking Zone

The 0.25-mile radius prototypical area in Bronx CD 02 was selected to be representative of the 16 CDs throughout the City partially located in a CEQR Parking Zone. Since the parking utilization analysis determined that there would be excess parking capacity (on-street and off-street parking) within the 0.25-mile radius prototypical area in Bronx CD 02 with installation of the stationary on-street containers, the Proposed Program is not anticipated to result in a shortfall at any of the 16 CDs throughout the City partially located in a CEQR Parking Zone that would be affected by the Proposed Program.

8.3.3.3 CDs Not Located in a CEQR Parking Zone

The 0.25-mile radius prototypical areas in Brooklyn CD 09, Queens CD 06 and Staten Island CD 01 were selected to be representative of the 30 CDs throughout the City that are not located in a CEQR Parking Zone. The parking utilization analysis determined that with the placement of stationary on-street containers in the parking lane, there would remain excess parking capacity (on-street and off-street parking) within the Staten Island CD 01 0.25-mile radius prototypical area. The parking utilization analysis determined that there would be a parking shortfall within the 0.25-mile radius prototypical area in Queens CD 06 with installation of the stationary on-street containers and drivers may need to search for parking within the 0.5-mile radius. However, the parking utilization analysis determined that with the placement of stationary on-street containers in the parking lane, there would remain excess parking capacity within the Queens CD 06 0.5-mile radius prototypical area. In addition, in a 0.25-mile radius prototypical area without off-street parking facilities, such as the Brooklyn CD 09, there may be a parking shortfall due to the Proposed Program and drivers may need to search for

[54] The placement of stationary on-street containers would result in a reduction of on-street parking spaces due to the Proposed Program. The reduction of parking spaces would not necessarily constitute a parking shortage if there are parking spaces within a convenient walking distance (0.25 mile) that are available for use.

parking within the 0.5-mile radius. However, the parking utilization analysis determined that with the placement of stationary on-street containers in the parking lane, there would remain excess parking capacity within the Brooklyn CD 09 0.5-mile radius prototypical area.

Therefore, the overall Proposed Program is not anticipated to result in a parking shortfall at any of the 30 CDs throughout the City not located in a CEQR Parking Zone that would be affected by the Proposed Program. Furthermore, areas not located in a CEQR Parking Zone that would be affected by the Proposed Program contain one or more alternative modes of transportation, such as subway and/or bus lines. Most areas that do not have transit within a 0.25-mile radius consist of large parks or areas with single family homes, buildings with one to nine residential units, or industrial/manufacturing areas and would, therefore, not be affected by the Proposed Program.

9 AIR QUALITY

9.1 Introduction

This section considers the potential effects of the proposed Citywide Containerization Program on air quality. The air quality assessment was conducted pursuant to the methodologies outlined in the *CEQR Technical Manual*. The air quality assessment focuses on mobile sources of air emissions from additional DSNY collection trucks and employee vehicles at representative major convergence points near eight facility groups and two individual facilities, as outlined below. Based on the results of the assessment described below, a detailed mobile air quality analysis was not warranted, and the Proposed Program would not result in a significant adverse impact to air quality.

9.2 Mobile-Source Screening Assessment Methodology

If a proposed project may result in significant mobile source air quality impacts, then the *CEQR Technical Manual* recommends a two-step approach to mobile-source evaluation: an air quality mobile-source screening assessment followed by a detailed air quality mobile-source dispersion analysis, if necessary.

The *CEQR Technical Manual* provides screening thresholds for Carbon Monoxide (CO) and fine particles of a diameter of 2.5 microns or smaller ($PM_{2.5}$). Therefore, an air quality mobile-source screening assessment was conducted for CO and $PM_{2.5}$ at representative major convergence points that would experience the highest volume of Program-generated vehicles to determine if the Proposed Program would exceed the *CEQR Technical Manual* screening thresholds and warrant a detailed assessment.

As described in **Chapter 8**, "**Transportation**," the major convergence points would occur near the DSNY garage locations (used for collection truck storage) and the DSNY and private waste disposal facilities within the City under contract with DSNY. A traffic screening assessment was performed based on the anticipated incremental daily collection truck and employee vehicle trips for 18 facility groups and 20 individual facilities throughout the City (**Section 8.2.1.1**). Of the 18 facility groups and 20 individual facilities evaluated, the traffic screening assessment determined that eight facility groups and two individual facilities would experience the most incremental daily collection truck and employee vehicle trips due to the Proposed Program and therefore required a review of the anticipated incremental collection truck and employee vehicles on an hourly basis. As such, an air quality screening assessment was performed for representative major convergence points near these eight facility groups and two individual facilities, listed below, and shown on **Figure 9-1**.

- Group 1 - Staten Island CD 01 and CD 03 garages, Staten Island Transfer Station, Fresh Kills Compost, and Visy Metal Staten Island
- Group 2 - Manhattan CD 01, CD 02, and CD 05 garages
- Group 3 - Manhattan CD 04 and CD 07 garages, and the 59th Street MTS
- Group 5 - Bronx CD 07, Bronx CD 08, Manhattan CD 08, and Manhattan 12G garages
- Group 6 - Bronx CD 01, CD 03, and CD 04 garages.
- Group 14 - Brooklyn CD 01 and CD04 garages, Queens CD 05 garage, and Waste Management Varick
- Group 15 - Brooklyn CD 02 and CD 06 garages, Hamilton Avenue MTS, and SIMS Metal Brooklyn
- Group 18 - Brooklyn CD 05, CD 14, CD 16, CD 17, and CD 18 garages
- East 91st Street MTS
- Waste Management - Harlem River Yard

9.2.1 CO Screening Threshold

The following CO screening thresholds are based on the incremental peak hour auto traffic that a proposed action would generate:

- 160 or more auto trips in downtown Brooklyn or Long Island City, Queens;
- 140 or more auto trips in Manhattan between 30th and 61st Streets; or
- 170 or more auto trips in the rest of the City.

9.2.2 $PM_{2.5}$ Screening Threshold

The *CEQR Technical Manual* provides screening thresholds for $PM_{2.5}$ based on the incremental peak hour auto traffic that a proposed action would generate. Typically, if a $PM_{2.5}$ analysis is not required based on the screening assessment, an analysis for particles of a diameter of 10 microns or smaller (PM_{10}) is also not required. The *CEQR Technical Manual* screening thresholds for $PM_{2.5}$ are based on equivalent Heavy Duty Diesel Vehicle (HDDV) emissions varying per roadway types, as listed in **Table 9-1**.

Table 9-1. *CEQR Technical Manual* $PM_{2.5}$ Screening Threshold

Road Classification	$PM_{2.5}$ Screening Threshold Value (equivalent HDDVs)
Local	12
Collector	19
Principal and Minor arterial	23
Expressways & Limited Access	23

Figure 9-1. Facility Groups and Individual Facilities Screened

The $PM_{2.5}$ National Ambient Air Quality Standard (NAAQS) standard is based on a 24-hour averaging period; therefore, the daily hourly trips were averaged over 24 hours for each of the representative major convergence points near the eight facility groups and two individual facilities screened to more accurately reflect the potential impact over a 24-hour period.

9.3 Mobile-Source Screening Assessment Results

9.3.1 CO

As presented in **Table 9-2**, the Proposed Program would result in up to 46 incremental collection truck and employee vehicle trips in a peak hour and therefore would not exceed the CO screening threshold. As a result, a detailed mobile air quality analysis for CO was not warranted, and it can be concluded that the Proposed Program would not result in a significant adverse impact to air quality from mobile sources of CO emissions.

Table 9-2. CO Screening Assessment

Group	Facility	Borough	Incremental Peak Hour Program-Generated Weekday Trips	Incremental Peak Hour Program-Generated Weekend Trips
1	SI01 and SI03 garages, Staten Island Transfer Station, Fresh Kills Compost, and Visy Metal Staten Island	Staten Island	14	13
2	MN01, MN02, and MN05 garages	Manhattan	31	25
3	MN04 and MN07 garages and 59th Street MTS	Manhattan	40	35
5	BX07, BX08, MN08, and MN12 garages	Manhattan	46	44
6	BX01, BX03, and BX04 garages	Bronx	36	27
14	BKN01, BKN04, and QW05 garages and Waste Management Varick	Brooklyn	23	18
15	BKN02 and BKS06 garages, Hamilton Avenue MTS, and SIMS Metal Brooklyn	Brooklyn	26	26
18	BKN05, BKN16, BKN17, BKS14, and BKS18 garages	Brooklyn	32	30
N/A	Harlem River Yard	Bronx	28	30
N/A	East 91st Street MTS	Manhattan	30	29

9.3.2 $PM_{2.5}$

Table 9-3 provides the results of the $PM_{2.5}$ screening assessment based on the projected 24-hour average Program-generated vehicles and the actual classification of the roadways. As shown on **Table 9-3**, based on the number of anticipated incremental collection truck and employee vehicle trips during the 24-hour period, the Proposed Program would not result in an exceedance of the $PM_{2.5}$ screening thresholds. Therefore, a detailed microscale analysis of $PM_{2.5}$ and PM_{10} was not warranted, and it can be concluded that the Proposed Program would not result in a significant adverse impact to air quality from mobile sources of particulate matter emissions.

It should be noted that all DSNY collection trucks, including ASL collection trucks, meet stringent United States Environmental Protection Agency emissions standards for particulate matter. DSNY's entire collection fleet is equipped with the best available retrofit technology to minimize emissions. Emissions from such collection trucks have been shown to be about as clean as emissions from heavy duty trucks fueled by natural gas. Additionally, the DSNY fleet uses renewable diesel, which reduced GHG emissions by 40 to 80% when compared to conventional petroleum diesel.[55]

Table 9-3. $PM_{2.5}$ Screening Assessment Based on 24-Hour Average Program-Generated Vehicles

Group	Facility	Intersection	Roadway	Roadway Classification	$PM_{2.5}$ Screening Threshold (HDDVs)	24-Hour Average Weekday Program-generated Equivalent HDDVs	24-Hour Average Weekend Program-generated Equivalent HDDVs
1	SI01 and SI03 Garages, Staten Island Transfer Station, Fresh Kills Compost, and Visy Metal Staten Island	Muldoon Avenue and West Service Road	Muldoon Avenue	Local	12	2	2
			West Service Road	Collector	19	2	2
2	MN01, MN02, and MN05 Garages	Spring Street and Washington Street	Spring Street	Minor Arterial	23	3	3
			Washington Street	Minor Arterial	23	3	3
		Spring Street and West Street	Spring Street	Minor Arterial	23	3	3
			West Steet	Principal Arterial	23	3	3
		Spring Street and	Spring Street	Minor Arterial	23	3	3

[55] National Laboratory of the Rockies (nlr.gov)

Group	Facility	Intersection	Roadway	Roadway Classification	$PM_{2.5}$ Screening Threshold (HDDVs)	24-Hour Average Weekday Program-generated Equivalent HDDVs	24-Hour Average Weekend Program-generated Equivalent HDDVs
		Greenwich Street	Greenwich Street	Minor Arterial	23	3	3
		Washington Street and West Houston Street	Washington Street	Minor Arterial	23	3	3
			West Houston Street	Principal Arterial	23	3	3
3	MN04 and MN07 Garages, and 59th Street MTS	West 57th Street and 11th Avenue	West 57th Street	Principal arterial	23	4	4
			11th Avenue	Minor Arterial	23	4	4
		West 57th Street and 12th Avenue	West 57th Street	Principal arterial	23	4	4
			12th Avenue	Local Road	12	6	5
5	BX07, BX08, MN08, and MN12G Garages	West 214th Street and 10th Avenue	West 214th Street	Local	12	8	8
			10th Avenue	Principal Arterial	23	6	5
		West 215th Street and 10th Avenue	West 215th Street	Local	12	8	8
			10th Avenue	Principal Arterial	23	6	5
		West 216th Street and 10th Avenue	West 216th Street	Local	12	8	8
			10th Avenue	Principal Arterial	23	6	5
6	BX01, BX03, and BX04 Garages	East 132nd Street and Cypress Avenue	East 132nd Street	Local	12	4	3
			Cypress Avenue	Local	12	4	3
		East 133rd Street and Cypress Avenue	East 133rd Street	Local	12	4	3
			Cypress Avenue	Local	12	4	3
		East 132nd Street and	East 132nd Street	Local	12	4	3

Group	Facility	Intersection	Roadway	Roadway Classification	$PM_{2.5}$ Screening Threshold (HDDVs)	24-Hour Average Weekday Program-generated Equivalent HDDVs	24-Hour Average Weekend Program-generated Equivalent HDDVs
		Willow Avenue	Willow Avenue	Local	12	4	3
		East 133rd Street and Willow Avenue	East 133rd Street	Local	12	4	3
			Willow Avenue	Local	12	4	3
14	BKN01, BKN04, and QW05 Garages and Waste Management Varick	Grand Avenue and 47th Street	Grand Avenue	Principal Arterial	23	3	2
			49th Street	Local	12	3	3
15	BKN02 and BKS06 Garages, Hamilton Avenue MTS, and SIMS Metal Brooklyn	Hamilton Avenue and 2nd Avenue	Hamilton Avenue	Principal Arterial	23	6	6
			2nd Avenue	Local	12	6	6
		Hamilton Avenue and Hamilton Place	Hamilton Avenue	Principal Arterial	23	6	6
			Hamilton Place	Local	12	6	6
18	BKN05, BKN16, BKN17, BKS14, and BKS18 Garages	Foster Avenue and East 95th Street	Foster Avenue	Major Collector	19	4	4
			East 95th Street	Local	12	4	4
		Linden Boulevard and East 95th Street	Linden Boulevard	Local	12	4	4
			East 95th Street	Local	12	4	4
N/A	Harlem River Yard	Lincoln Avenue and East 132nd Street	Lincoln Avenue	Local	12	6	6
			East 132nd Street	Local	12	6	6
		Lincoln Avenue and Bruckner Boulevard	Lincoln Avenue	Local	12	6	6
			Bruckner Boulevard	Principal Arterial	23	6	6

Group	Facility	Intersection	Roadway	Roadway Classification	$PM_{2.5}$ Screening Threshold (HDDVs)	24-Hour Average Weekday Program-generated Equivalent HDDVs	24-Hour Average Weekend Program-generated Equivalent HDDVs
N/A	East 91st Street MTS	East 90th Street and York Avenue	East 90th Street	Local	12	3	4
			York Avenue	Minor Arterial	23	4	4
		East 91st Street and York Avenue	East 91st Street	Local	12	3	4
			York Avenue	Minor Arterial	23	4	4

Notes:

HDDVs = Heavy-Duty Diesel Vehicles

10 GREENHOUSE GASES AND CLIMATE CHANGE

10.1 Introduction

As discussed in the *CEQR Technical Manual*, increased GHG emissions are resulting in climate change, which is projected to have wide-ranging effects on the environment, including rising sea levels, increases in temperature, and changes in precipitation levels. Although this is occurring on a global scale, the environmental effects of climate change are also likely to be experienced at the local level. The long-term sustainable development policy of the City started in April 2007 with *PlaNYC 2030: A Greener, Greater New York*, and has continued and was enhanced in *PlaNYC: Getting Sustainability Done*. Through this initiative, the City has advanced sustainability initiatives and goals to both greatly reduce GHG emissions and increase the City's resilience to climate change.

Per the *CEQR Technical Manual*, a GHG consistency assessment is typically conducted only for larger projects undergoing an EIS, since these projects have greater potential to be inconsistent with the City's GHG reduction goal to a degree considered significant. In addition to larger City capital projects that require an EIS, the *CEQR Technical Manual* states that a GHG consistency assessment may be warranted for power generation projects, projects resulting in 350,000 square feet or more of development, and projects which fundamentally alter the City's solid waste management system by changing solid waste transport mode, vehicle distances traveled, or disposal technologies. The Proposed Program would not change the mode of transport of waste. Nor would the Proposed Action require a change in the disposal technology for such waste or fundamentally change the City's solid waste management system. Since an EIS was required for the Proposed Program, a GHG assessment was performed.

The Proposed Program would be consistent with the applicable City GHG emissions reduction goals and would not change or be in conflict with any of the existing City, State, and federal protections

related to flood resiliency and climate change, and therefore, no significant adverse impacts related to GHG emissions or climate change are anticipated as a result of the Proposed Program.

10.2 GHG Emissions

GHG emissions are gases that trap heat in the atmosphere and cause a general warming of the Earth's atmosphere, known as the "greenhouse effect." In accordance with the *CEQR Technical Manual*, a review was performed of the six internationally recognized GHG pollutants of concern[56]: carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6). There would be no significant sources of HFCs, PFCs or SF_6 associated with the Proposed Program since these pollutants are typically associated with non-combustion sources such as refrigeration and industrial resources. As such, CO_2, N_2O, and CH_4 are the primary pollutants of concern for this mobile source GHG assessment.

This section provides an assessment of the anticipated increase in vehicle miles traveled (VMT) from: (1) incremental collection truck trips to collect waste from the proposed stationary on-street containers, and transport of that waste to DSNY garages and transfer stations (DSNY facilities and private waste disposal facilities under contract with DSNY); and (2) incremental employee vehicle trips to and from the DSNY garages before and after each shift.

10.2.1 Policy, Regulations, Standards, and Benchmarks for Reducing GHG Emissions

GHGs are associated with global climate changes including increased intensity of storms and flooding, sea level rise, and temperature increases. New York State's Climate Leadership and Community Protection Act of 2019 established a path to reduce GHG emissions, as well as goals to address climate change, including a goal to limit Statewide GHG emissions to 40% below 1990 levels by 2030 and 85% below by 2050.

The New York City Climate Protection Act, Local Law 22 of 2008, established the goal to reduce Citywide GHG emissions to 30% below 2005 levels by 2030 (the "GHG reduction goal"). This goal was developed for the purpose of planning for an increase in population of almost one million residents while achieving significant GHG reductions. Subsequently, the City committed to an 80% reduction in GHGs by the year 2050 ("80 by 50"). Specifically, on November 13, 2014, the City Council passed a bill to require an 80% reduction in Citywide GHG emissions by 2050 (Intro. 378). This was adopted on December 14, 2014 as Local Law 66/2014, and was codified at Section 24 803 of the New York City Administrative Code.

10.2.2 Methodology

As noted above, the Proposed Program would not affect transit-oriented development, energy systems, buildings or sustainable transportation. However, as noted in **Chapter 8**, "**Transportation**," the Proposed Program would have the potential to change GHG emissions due to the anticipated increase in mobile sources of GHG emissions from incremental DSNY collection trucks and employee vehicles.

[56] Per the Kyoto Protocol, an international agreement adopted in 1997 that is linked to the United Nations Framework Convention on Climate Change.

Mobile sources of GHG emissions due to the Proposed Program were estimated using the *CEQR Technical Manual*'s GHG Emissions Calculator. The GHG Emissions Calculator uses VMT to determine the annual carbon dioxide equivalent (CO_2e) emissions, which allows gases with different global warming potentials, including CO_2, N_2O, and CH_4, to be added together and compared.

Annual VMT for the Proposed Program were calculated for:

- Incremental DSNY collection trucks traveling to and from the DSNY garages,
- Incremental DSNY collection trucks traveling to and from the transfer stations,
- Incremental DSNY collection trucks for waste collection, and
- Incremental DSNY employee vehicles traveling to and from the DSNY garages.

The incremental annual VMT were then entered into the GHG Emissions Calculator to estimate the incremental mobile-source GHG emissions attributable to the Proposed Program for the first year of full implementation in 2032. GHG emissions are presented in units of annual metric tons of carbon dioxide equivalent ($mTCO_2e$/year).

10.2.3 Future with the Proposed Program

The incremental DSNY collection trucks would result in a total of approximately 1.2 million annual VMT, as summarized in **Table 10-1**. The incremental DSNY employee vehicles would result in a total of approximately 3.7 million annual VMT, as summarized in **Table 10-2**. The results of the mobile source GHG assessment for the Future with the Proposed Program are provided in **Table 10-2**. As listed in **Table 10-2**, once fully implemented, the Proposed Program would emit an additional 5,267 mTCO2e/year.

Table 10-1. Summary of Annual Incremental VMT for DSNY Collection Trucks by Borough

Borough	Annual Incremental VMT[1]		
	Incremental DSNY Collection Trucks Traveling to/from DSNY Garages/Transfer Stations	Incremental DSNY Collection Trucks for Waste Collection	Total Incremental DSNY Collection Trucks
Manhattan	593,370	69,645	663,015
Bronx	185,090	71,366	256,456
Brooklyn	124,523	53,234	177,757
Queens	32,710	17,012	49,722
Staten Island	34,119	16,880	50,999
Citywide	969,812	228,137	1,197,949

Notes:
[1] Values may differ due to rounding.

Table 10-2. Summary of Annual Carbon Dioxide Equivalent Emissions by Borough

Borough	Annual Incremental VMT[1]		Annual Mobile Source GHG Emissions ($mTCO_2e$/year)[2]
	Total Incremental DSNY Collection Trucks	Incremental DSNY Employee Vehicles Traveling to/from DSNY Garages	
Manhattan	663,015	1,883,332	3,597
Bronx	256,456	1,003,932	858
Brooklyn	177,757	544,670	538
Queens	49,722	160,094	153
Staten Island	50,999	68,763	121
Citywide[1]	1,197,949	3,660,790	5,267

Notes: mTCO2e = metric tons of carbon dioxide equivalent
[1] Values may differ due to rounding.
[2] Values were conservatively calculated based on the use of local roads.

Consistency with the City's GHG Reduction Goal

According to the *CEQR Technical Manual,* the assessment of consistency with the City's GHG reduction goal should answer the following question: Is the project consistent with the goal of reducing GHG emissions, specifically the attainment of the City's established GHG goal of reducing Citywide GHG emissions by 30% below 2005 levels by 2030 and by 80% below such levels by 2050? To determine consistency with the City's overall GHG reduction goal involves assessing the consistency of a proposed project with four sustainability goals cited in the *CEQR Technical Manual*, as relevant to the Proposed Action:

- Pursue transit-oriented development;
- Generate clean renewable power through replacement of inefficient power plants with state of the-art technology and expanding the use of clean distributed generation;
- Construct new resource- and energy-efficient buildings (including the use of sustainable construction materials and practices) and improve the efficiency of existing buildings; and
- Encourage sustainable transportation through improving public transit, improving the efficiency of private vehicles, and decreasing the carbon intensity of fuels.

The Proposed Program would not affect transit-oriented development, energy systems, buildings or sustainable transportation. In addition, the Proposed Program would not include any increases in energy usage, stationary sources of GHG emissions or GHG emissions associated with construction. While there would be a small increase in VMT Citywide by DSNY collection trucks under the Proposed Program, DSNY's entire collection fleet is equipped with the best available retrofit technology to maximize emissions reduction. Emissions from such trucks have been shown to be about as clean as emissions from heavy duty trucks fueled by natural gas. Additionally, the DSNY fleet uses renewable diesel, which reduces GHG emissions by 40% to 80% when compared to conventional

petroleum diesel.[57,58] Moreover, given the Proposed Program's potential to increase transit ridership, as discussed in **Chapter 8**, "**Transportation**," this effect may partially offset the additional mobile source GHG emissions. Accordingly, the Proposed Program is consistent with the City's GHG policies and reduction goals.

10.3 Climate Change

The Proposed Program does not involve the construction and operation of any new or modified permanent structures. The Proposed Program would also not result in any increase in solid waste generation that would overburden available waste management capacity, nor would it increase the total tonnage of waste handled by the City. It is noted, however, that portions of the City, and therefore the Proposed Program is located within coastal and fluvial flood hazard areas per Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs). The Proposed Program would change the way waste is placed at the curb for collection – going from being placed in trash bags piled on the sidewalk to being placed in stationary on-street containers and individual bins. These stationary on-street containers would be elevated and would allow water to flow underneath to avoid flooding from sudden intense storms or overflowing storm sewers. Therefore, climate change would not have an impact on the Proposed Program.

10.4 Conclusion

The Proposed Program was evaluated for its consistency with GHG reduction goals. The Proposed Program would not include any increases in energy usage, stationary sources of GHG emissions or GHG emissions associated with construction. The Proposed Program would have the potential to change GHG emissions due to the anticipated increase in mobile sources of GHG emissions from incremental DSNY collection trucks and employee vehicles. Per the *CEQR Technical Manual,* mobile sources only constitute approximately 22% of the City's total GHG emissions. While the Proposed Program would add mobile sources of GHG emissions, the resulting increase would be relatively small compared to the City's total GHG emissions. Also, DSNY's entire collection fleet is equipped with the best available retrofit technology to maximize minimize emissions reduction. Additionally, the DSNY fleet uses renewable diesel, which reduces GHG emissions by 40% to 80% when compared to conventional petroleum diesel. Moreover, given the Proposed Program's potential to increase transit ridership, as discussed in **Chapter 8**, "**Transportation**," this effect may partially offset the additional mobile source GHG emissions.

The Proposed Program would be consistent with the applicable City GHG emissions reduction goals and would not change or be in conflict with any of the existing City, State, and federal protections related to flood resiliency and climate change, and therefore, no significant adverse impacts related to GHG emissions or climate change are anticipated as a result of the Proposed Program.

[57] National Laboratory of the Rockies (nlr.gov)

[58] The GHG emissions estimated for the Proposed Program conservatively used conventional petroleum diesel factors.

11 NOISE

11.1 Introduction

This section considers the potential noise effects that could result from the proposed Citywide Containerization Program. The *CEQR Technical Manual* requires that a noise study address the effects of increased noise due to the introduction or re-routing of transportation sources such as vehicular traffic (particularly at sensitive land uses such as residences or open space). In accordance with the *CEQR Technical Manual*, the noise assessment must study: (1) a proposed project's potential effects on existing noise sensitive uses and/or locations (i.e., receptors); and (2) the effects of ambient noise levels on new receptors introduced by the proposed project.

Mobile sources of noise consist of vehicular traffic or other moving sources. Noise emission sources that are in a fixed location are considered stationary sources: an example of this are rooftop heating, venting and air conditioning units. Since the Proposed Program does not include any stationary noise sources, the noise assessment focuses on mobile noise sources from incremental DSNY collection trucks and employee vehicles. Based on the results of the assessment described below, the Proposed Program would not result in a significant adverse noise impact.

11.2 Noise Impact Standards and Criteria

The noise impact thresholds provided in the *CEQR Technical Manual* for existing noise-sensitive receptors are as follows:

- Daytime (7:00 AM to 10:00 PM)[59]
  - If the Future No Action noise level is 60 A-weighted sound decibel levels [dB(A)] based on the one-hour equivalent-average sound level ($L_{eq(1)}$) or less, the threshold for significant impacts from a proposed action would be an increase of five (5) dB(A) or more outdoors at an indoor noise-sensitive receptor, such as a residence, school, or health care facility, or at an outdoor receptor used for quiet recreation such as certain park areas or a hospital grounds ambulatory area.
  - If the Future No Action noise level is equal to 61 dB(A) $L_{eq(1)}$, the threshold for significant impacts from a proposed action would be an increase of four (4) dB(A) at the nearest noise-sensitive receptor in order to not exceed an absolute daytime noise level of 65 dB(A) $L_{eq(1)}$.
  - If the Future No Action noise level is 62 dB(A) $L_{eq(1)}$ or more, the threshold for significant impacts from a proposed action would be an increase of three (3) dB(A) or more at the nearest noise-sensitive receptor.
- Nighttime (10:00 PM to 7:00 AM)
  - The threshold for significant impacts from a proposed action at night would be an increase of three (3) dB(a) or more over the Future No Action noise level at the nearest noise-sensitive receptor.

[59] During daytime hours it is reasonable to consider 65 dB(A) as an absolute noise level that should not be significantly exceeded.

11.3 Mobile-Source Screening Assessment Methodology and Results

Noise emissions from incremental vehicle trips from a proposed project may have the potential to result in noise impacts on nearby noise-sensitive receptors. The *CEQR Technical Manual* recommends a two-step approach: a mobile-source noise screening assessment followed by a detailed mobile noise analysis, if necessary.

The purpose of a mobile-source noise screening assessment is to determine whether the potential exists for a project to generate a significant noise impact at a noise-sensitive receptor. A mobile-source noise screening assessment consists of determining the existing and future traffic volumes along the roadway adjacent to a noise-sensitive receptor, and converting the traffic volumes to noise PCEs using the following noise PCE factors as identified in the *CEQR Technical Manual*:

- Each Automobile or Light Truck: one noise PCE
- Each Medium Truck: 13 noise PCEs
- Each Bus: 18 noise PCEs
- Each Heavy Truck: 47 noise PCEs

As per the *CEQR Technical Manual*, if a significant increase in noise PCEs is expected (i.e., more than a doubling of noise PCEs) along any given roadway that proposed project-related vehicles would use going to and coming from the site within a given hour, then a detailed noise analysis should be performed. An increase in noise PCEs of 100% or more due to a proposed project is equivalent to an increase of three (3) dB(A) or more.[60]

A mobile-source noise screening assessment was performed for the proposed Citywide Containerization Program at noise-sensitive receptor locations along major incremental vehicle convergence points that would experience the highest volume of Program-generated vehicles (vehicle trips generated by the Proposed Program). The mobile-source noise screening assessment was performed to determine whether a doubling of noise PCEs would occur and therefore to determine if the Proposed Program would have the potential to increase existing (ambient) noise levels by three (3) dB(A) or more.

As described in **Chapter 8**, "**Transportation**," the major convergence points for Program-generated vehicles would occur near the DSNY garage locations (used for collection truck storage) and the DSNY and private waste disposal facilities within the City under contract with DSNY. A traffic screening assessment was performed based on the anticipated incremental daily collection truck and employee vehicle trips for 18 facility groups and 20 individual facilities throughout the City (**Section 8.2.1.1**). The assessment identified two facility groups and two individual facilities that would experience the most incremental daily collection truck and employee vehicle trips under the Proposed Program. Accordingly, a noise screening assessment was performed for eight representative major convergence points near these facility groups and individual facilities, which have the greatest potential for incremental noise levels at nearby noise-sensitive receptors compared to the remaining facility groups and individual facilities.

[60] Generally, changes in noise levels of three (3) dB(A) would barely be perceived by most people, whereas a five (5) dB(A) change is readily noticeable, and a 10 dB(A) change is perceived as a doubling (or halving) of loudness.

The representative roadways adjacent to noise-sensitive receptors that were screened are listed below:

- Group 3 - Manhattan CD 04 and Manhattan CD 07 garages and the 59th Street MTS
  - West 57th Street between 11th and 12th Avenues
  - 11th Avenue between West 56th and 57th Streets
- Group 5 - Bronx CD 07, Bronx CD 08, Manhattan CD 08 and Manhattan CD 12 garages
  - West 215th Street between 10th Avenue and Broadway
  - 10th Avenue between West 214th and West 215th Streets
- East 91st Street MTS
  - East 90th Street between 1st and York Avenues
  - East 91st Street between 1st and York Avenues
  - York Avenue between 90th and 91st Streets
- Waste Management - Harlem River Yard
  - Lincoln Avenue between East 132nd Street and Bruckner Boulevard

To perform the noise screening assessment, existing conditions traffic volumes were obtained at these roadways from camera-based traffic count systems for a 24-hour period for both an average weekday and one Saturday. The Future without the Proposed Program traffic volumes were then calculated by applying borough-specific annual background growth rates from the *CEQR Technical Manual* to the existing conditions traffic volumes. The Future with the Proposed Program traffic volumes were based on the Future without the Proposed Program traffic volumes plus the incremental DSNY collection trucks and employee vehicles as a result of the Proposed Program. These calculations assumed the Proposed Program would be fully implemented by 2032. The results of the mobile-source noise screening assessment are provided in **Table 11-1.**

Table 11-1. Mobile-Source Noise Screening Assessment

Group or Individual Facility	Location	Period	Maximum Hourly Ratio of Future with the Proposed Program Noise PCEs to Future without the Proposed Program Noise PCEs[1,2]	
			Daytime[3]	Nighttime[3]
Group 3: Manhattan CD 04 and Manhattan CD 07 Garages and the 59th Street MTS	West 57th Street between 11th and 12th Avenues	Weekday	1.37	1.44
		Saturday	1.34	1.96
	11th Avenue between West 56th and 57th Streets	Weekday	1.02	1.35
		Saturday	1.03	1.54
Group 5: Bronx CD 07, Bronx CD 08, Manhattan CD 08 and Manhattan CD 12 Garages	West 215th Street between 10th Avenue and	Weekday	**2.00**	**13.48**
		Saturday	**3.11**	**8.42**
	10th Avenue between West 214th and West 215th Streets	Weekday	1.49	**2.09**
		Saturday	1.55	1.95

Group or Individual Facility	Location	Period	Maximum Hourly Ratio of Future with the Proposed Program Noise PCEs to Future without the Proposed Program Noise PCEs[1,2]	
			Daytime[3]	Nighttime[3]
East 91st Street MTS	East 90th Street between 1st and York Avenues	Weekday	1.31	1.13
		Saturday	1.33	1.40
	East 91st Street between 1st and York Avenues	Weekday	1.55	1.60
		Saturday	1.91	1.68
	York Avenue between 90th and 91st Streets	Weekday	1.51	1.81
		Saturday	1.69	1.83
Waste Management - Harlem River Yard	Lincoln Avenue between East 132nd Street and	Weekday	1.69	1.91
		Saturday	1.80	1.66

Notes:
[1] A maximum noise PCE ratio of 2.0 or greater (doubling or more of noise PCEs) would exceed the CEQR mobile-source noise screening assessment threshold and would therefore warrant a detailed mobile-noise analysis at those locations. These noise PCE ratios are formatted in **bold**.
[2] The hour with the highest PCE ratio varies per location.
[3] As per CEQR Technical Manual, daytime hours are defined as 7:00 AM to 10:00 PM and Nighttime hours are defined as 10:00 PM to 7:00 AM.

Based on the results of the mobile noise screening assessment, the Proposed Program would potentially result in a doubling of noise PCEs and thus the potential for an increase in existing (ambient) noise levels by three (3) dB(A) or more during one or more hours at the two locations listed below. For each location, the daytime hour and/or nighttime hour, as applicable, that exceeds the CEQR noise screening threshold with the highest PCE ratio anticipated is listed. (Note: The hour with the highest PCE ratio varies per location.) As per the *CEQR Technical Manual*, a detailed mobile noise analysis was performed for these locations and time periods.

- Group 5 - Bronx CD 07, Bronx CD 08, Manhattan CD 08 and Manhattan 12 garages
  - West 215th Street between 10th Avenue and Broadway
    - Weekday Daytime: 11:00 PM to 12:00 PM
    - Weekday Nighttime: 3:00 AM to 4:00 AM
    - Saturday Daytime: 9:00 AM to 10:00 AM
    - Saturday Nighttime: 6:00 AM to 7:00 AM
  - 10th Avenue between West 214th and West 215th Streets
    - Weekday Nighttime: 5:00 AM to 6:00 AM

Therefore, a detailed mobile noise analysis was performed for the above-referenced locations and time periods that exceeded the CEQR noise screening threshold. As listed in **Table 11-1**, the Proposed Program would not have the potential to double the noise PCEs at West 57th Street between 11th and 12th Avenues, 11th Avenue between West 56th and 57th Streets, East 90th Street between 1st

and York Avenues, East 91st Street between 1st and York Avenues, York Avenue between 90th and 91st Streets, and Lincoln Avenue between East 132nd Street and Bruckner Boulevard. Therefore, the potential change in existing (ambient) noise levels would be less than three (3) dB(A) and no further assessment was warranted for these locations.

11.4 Mobile-Source Detailed Analysis Methodology and Results

A detailed mobile noise analysis was warranted based upon the results of the mobile noise screening assessment for the two representative locations noted above. For these locations, the Federal Highway Administration (FHWA) Traffic Noise Model (TNM) was used to predict the noise levels at the noise-sensitive receptor to determine if there would be an exceedance of the CEQR noise impact thresholds in the Future with the Proposed Program. TNM takes into account various factors that influence vehicular noise, including traffic volumes, vehicle classifications, and source/receptor geometry**. Figure 11-1** shows the roadways analyzed for Facility Group 5.

11.4.1 Existing Noise Levels and Noise Model Validation

Noise monitoring was performed at the two locations that screened in. Monitoring occurred on one or more days in March and May 2026 under typical traffic conditions. Noise measurements obtained were between a minimum of 20 minutes up to one hour, per the *CEQR Technical Manual*.

The noise measurements were conducted under the following conditions:

- Wind speeds less than 12 miles per hour;
- Dry weather conditions; and
- Dry road conditions.

The microphone height was approximately five feet above the ground. A digital sound level meter and a handheld calibrator that met Class 1/Type 1 precision requirements of the American National Standards Institute and International Electrotechnical Commission standards were used to perform the measurement. The sound level meter stored the $L_{eq(1)}$ and additional metrics.[61] **Table 11-2** presents the measured existing noise levels.

[61] As very few noises are constant, metrics have been developed to describe varying noise levels over extended periods of time. A commonly used metric is the equivalent-average sound level (L_{eq}). The L_{eq} represents a constant sound level that conveys the same sound energy as the actual fluctuating sound in a given time period. The recommended descriptor for determining noise compliance of a proposed project with regards to existing noise-sensitive receptors, based on the *CEQR Technical Manual*, is the $L_{eq(1)}$ descriptor, which refers to a one-hour period.

Figure 11-1. Facility Group 5 - Bronx CD 07, Bronx CD 08, Manhattan CD 08, and Manhattan CD 12 Garages

Table 11-2. Existing Noise Levels at Representative Noise-Sensitive Receptors

Group or Individual Facility	Location	Measured Date	Measured Time	Measured Existing Noise Level (L_{eq}), dB(A)
Group 5: Bronx CD 07, Bronx CD 08, Manhattan CD 08 and Manhattan CD 12 Garages	West 215th Street between 10th Avenue and Broadway	Tuesday March 10, 2026	3:00 AM to 4:00 AM	65.7
		Thursday May 7, 2026	11:00 AM to 12:00 PM	69.3
		Saturday March 14, 2026	5:25 AM to 5:45 AM[1]	66.5
		Saturday March 21, 2026	9:23 AM to 9:43 AM	70.6
	10th Avenue between West 214th and West 215th Streets	Tuesday March 10, 2026	5:00 AM to 6:00 AM	76.7

Notes:
[1] Used to represent the existing noise level during the 6:00 AM to 7:00 AM hour.

A summary of the noise levels recorded, as well as observations made during the monitoring session is provided below:

- **West 215th Street between 10th Avenue and Broadway Avenues** - Residential noise-sensitive receptors are located along this roadway.
  - A noise level of 65.7 dB(A) L_{eq} was measured at this location on a weekday from 3:00 AM to 4:00 AM. Primary sources of noise at this location were observed to be traffic and train activity for the 1 train with a secondary noise source produced by a loud car exhaust.
  - A noise level of 69.3 dB(A) L_{eq} was measured at this location on a weekday from 11:00 AM to 12:00 PM. Primary sources of noise at this location were observed to be traffic and train activity for the 1 train.
  - A noise level of 66.5 dB(A) L_{eq} was measured at this location on a Saturday from 5:25 AM to 5:45 AM. Primary sources of noise at this location were observed to be traffic and train activity for the 1 train.
  - A noise level of 70.6 dB(A) L_{eq} was measured at this location on a Saturday from 9:23 AM to 9:43 AM. Primary sources of noise at this location were observed to be traffic and train activity for the 1 train with secondary noise sources produced by people working on a car and people talking loudly near the meter.
- **10th Avenue between West 214th and West 215th Streets** - Residential noise-sensitive receptors are located along this roadway.
  - A noise level of 76.7 dB(A) L_{eq} was measured at this location on a weekday from 5:00 AM to 6:00 AM. Primary sources of noise at this location were observed to be traffic and train activity for the 1 train with a secondary noise source produced by car honking and loud car music.

According to the FHWA, TNM requires validation to verify the accuracy of the modeled data for the analyzed location. A TNM validation assessment was performed by comparing the model-predicted existing traffic noise levels with field-collected data, including measured existing noise levels, traffic volumes, and vehicle classifications conducted simultaneously. Existing speed surveys were performed along the roadways and used in TNM to predict noise levels for the associated traffic. To validate the TNM model for the location being analyzed, the TNM-predicted existing noise levels were compared to the existing monitored noise levels as part of the mobile sources analysis. During a TNM validation assessment, the model is validated when differences between the measured and the modeled noise levels are within three (3) dB(A).

Table 11-3 presents the differences in measured and modeled noise levels for the mobile noise analysis locations.

Table 11-3. TNM Validation Results

Group or Individual Facility	Location	Analysis Time Period		Measured Existing Noise Level (L_{eq}), dB(A)	TNM Predicted Existing Noise Level (L_{eq}), dB(A)	Difference dB(A)	Validated?
Group 5: Bronx CD 07, Bronx CD 08, Manhattan CD 08 and Manhattan CD 12 Garages	West 215th Street between 10th Avenue and Broadway	Weekday Nighttime	3:00 AM to 4:00 AM	65.7	61.6	4.1	No[1] (Train Activity)
		Weekday Daytime	11:00 AM to 12:00 PM	69.3	56.2	13.1	No[1] (Train Activity)
		Saturday Nighttime	6:00 AM to 7:00 AM	66.5[2]	54.1	12.4	No[1] (Train Activity)
		Saturday Daytime	9:00 AM to 10:00 AM	70.6	57.9	12.7	No[1] (Train Activity)
	10th Avenue between West 214th and West 215th Streets	Weekday Nighttime	5:00 AM to 6:00 AM	76.7	65.3	11.4	No[1] (Train Activity)

Notes:
[1] These locations could not be validated with TNM since TNM only models noise associated with vehicle traffic and, here, the existing noise level at these locations is greatly affected by other background noise associated with the elevated train tracks and station for the 1 train along 10th Avenue near these roadways.
[2] Existing Noise level is based on monitoring during the 5:00 AM to 6:00 AM hour.

As shown in **Table 11-3**, TNM was not validated for the roadways analyzed associated with Facility Group 5. These locations could not be validated with TNM since TNM only models noise associated with vehicle traffic and, here, the existing noise level at these locations is greatly affected by other background noise associated with the elevated train tracks and station for the 1 train along 10th Avenue near these roadways.

Since TNM did not validate for the noise analysis locations, TNM was used to predict the noise level solely for the Proposed Program-generated vehicles. This noise level was then added to the measured existing noise level to determine the predicted Future with the Proposed Program noise level and the resulting increase in noise, which was then compared to the CEQR noise impact thresholds.

11.4.2 Analysis Results

Table 11-4 shows the results of the detailed mobile noise analysis for the roadways analyzed for Facility Group 5. Based on the detailed mobile noise analysis results, there would be no predicted significant adverse mobile noise impacts that would be caused at noise-sensitive receptors by the Proposed Program based on the CEQR noise impact thresholds provided in **Section 11.2**.

Table 11-4. Detailed Mobile Noise Analysis Results

Group or Individual Facility	Location	Analysis Time Period		Measured Noise Level dB(A)	TNM-Predicted Program-Generated Traffic Noise Level (L_{eq}), dB(A) [1]	Calculated Future with Proposed Action Noise Level (L_{eq}), dB(A) [2]	Difference dB(A) [3]
Group 5: Bronx CD 07, Bronx CD 08, Manhattan CD 08 and Manhattan CD 12 Garages	West 215th Street between 10th Avenue and Broadway	Weekday Nighttime	3:00 AM to 4:00 AM	65.7	58.4	66.4	0.7
		Weekday Daytime	11:00 AM to 12:00 PM	69.3	58.7	69.7	0.4
		Saturday Nighttime	6:00 AM to 7:00 AM[4]	66.5	61.6	67.7	1.2
		Saturday Daytime	9:00 AM to 10:00 AM	70.6	63.9	71.4	0.8
	10th Avenue between West 214th and West	Weekday Nighttime	5:00 AM to 6:00 AM	76.7	63.0	76.9	0.2

Notes:

[1] The TNM-predicated Program-Generated Traffic Noise Level is based on the noise emitted by the incremental DSNY collection trucks and employee vehicles associated with the Proposed Program.

[2] The combined noise level is the logarithmic addition of the TNM-predicated Program-Generated Traffic Noise Level and the measured noise level.

[3] If the existing noise level is 62 dB(A) $L_{eq(1)}$ or more during daytime hours, the threshold for significant adverse impacts from a proposed action would be an increase of three (3) dB(A) or more at the nearest noise-sensitive receptor. During nighttime hours, the threshold for significant adverse impacts from a proposed action would be an increase of three (3) dB(A) or more at the nearest noise-sensitive receptor.

[4] Existing Noise level is based on monitoring during the 5:00 AM to 6:00 AM hour.

11.5 Conclusion

In view of the foregoing, it can be concluded that the proposed Citywide Containerization Program would not result in a significant adverse noise impact.

12 PUBLIC HEALTH

12.1 Introduction

Since the 1960s, DSNY has collected waste set out at the curb in plastic bags. Today, DSNY collects over 24 million pounds of residential waste each day. The immense number of bags set out on the curb block the sidewalk, obstruct pedestrian access and fall into the streets, impeding traffic and creating potential street litter that may enter the City's stormwater collection system and impact surface waters. Additionally, these plastic bags of waste attract vectors (e.g., rats and vermin); generate odors; leak garbage fluids if torn; and may increase potential risk to sanitation workers (e.g., line of duty injuries). The Proposed Program would require certain buildings with residential units use stationary on-street containers for their refuse Citywide and schools in Manhattan CD 09 and Brooklyn CD 02 that receive DSNY collection services use stationary on-street containers for all waste streams (refuse, organics, MGPC, and paper/cardboard).[62] As discussed in this section, waste containerization would positively impact public health in the City, for residents, sanitation workers, and visitors alike.

According to the *CEQR Technical Manual*, public health is the organized effort of society to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion, prevention of disease, injury, disorder, disability and premature death; and reducing inequalities in health status. The goal of CEQR with regard to public health is to determine if the environmental changes resulting from a proposed project would result in significant adverse public health impacts and, if so, to identify measures to mitigate such impacts. In addition to an assessment of potential impacts associated with the proposed project, positive outcomes to public health resulting from a proposed project should also be presented, where applicable.

For purposes of this analysis, public health is defined as the activities that society carries out to create and maintain an environment in which people can be healthy. As described within this DEIS, the Proposed Program would not result in significant adverse impacts to air quality, noise, hazardous materials, or water quality. The public health analysis demonstrates that the Proposed Program would not cause any significant adverse public health impacts, but rather would improve and benefit several aspects of public health, addressing issues of vectors (e.g., rats and vermin), leaking refuse bags and odors, and worker health and safety.

As detailed below, no significant adverse impacts to public health are expected from the Proposed Program, but would instead result in a benefit to residents, sanitation workers, and visitors.

12.2 Reduce Spreading of Disease

Vectors (e.g., rats and vermin) are considered pests and can increase vector-borne diseases and negatively affect public health. Rats thrive and reproduce based on their access to food. When plastic bags of waste are placed at the curb, rats and other vectors have easy and consistent access to the contents of those bags, thereby resulting in increased vector sightings and localized infestations.

Rats can carry numerous diseases, including leptospirosis, the hantavirus, rat bite fever, and salmonellosis, all of which can be transmitted to humans. They also serve as hosts for ticks and fleas,

[62] Buildings with 10 to 30 residential units would containerize their refuse in either individual bins or stationary on-street containers, and buildings with 31 residential units or more would containerize their refuse in stationary on-street containers. Buildings with one to nine units will containerize their refuse in individual bins pursuant to a separate rulemaking effective November 12, 2024.

which also carry diseases transmittable to humans. Leptospirosis is a disease caused by bacteria in the urine of infected animals, such as rodents, and affects people and animals that come into contact with the infected urine, including contaminated soil or water. Without treatment, a person with leptospirosis may experience kidney damage, meningitis, liver failure, trouble breathing, and possibly death. Although leptospirosis is rarely found in the City, the City's DOHMH issued a public health advisory in April 2024 on the continued increase in leptospirosis cases in the City.[63] Rats are the most common vectors of leptospirosis, and the best way to prevent contracting disease is to avoid contact with them and with objects, soil, and water contaminated by rat urine. In addition to leptospirosis, rats also carry the hantavirus, a family of viruses that can cause rare, but potentially fatal diseases leading to severe lung distress, kidney disease, and even death. These diseases can be contracted by people who are exposed to rodent-infested environments, primarily through infected rodents' urine, feces, or saliva. The DOHMH identifies removing and securing trash as a way to prevent hantavirus.[64]

People can become infected with these diseases when they are exposed to materials – like trash bags – that are contaminated with rodent urine, feces, or saliva. Sanitation workers are highly susceptible to such exposure because they regularly handle trash bags, which may be contaminated with these bacteria or viruses. In 2023, 24 leptospirosis cases were reported in the City – at that time, the highest number ever in a single year. Of those cases, four of the 24 people, or approximately 17%, were sanitation workers. In 2024, 32 leptospirosis cases were reported in the City – a 25% increase over 2023. Of those 32 cases, five were sanitation workers. This trend continued in 2025, with sanitation workers comprising four of the 27 leptospirosis cases reported in the City. Over the three-year period from 2023 through 2025, nearly 16% of all leptospirosis cases reported in the City were from sanitation workers.[65]

A DOHMH study[66] found that a high volume of waste from plastic bags set out at the curb, coupled with a high number of residential units in a dense urban environment, are top determinants of urban rat presence. The study showed that rat sightings increased in areas with a higher number of dwelling units concentrated in a smaller area, indicative of multi-family dwellings in an urban environment, thereby resulting in a greater population density producing more waste. Additionally, in areas with high volumes of waste where plastic bags were set out at the curb, there were high rates of rat sightings. According to the study, the consistent availability of curbside food waste trains rats to return to these locations.[67] Removing a rat's access to refuse, by reducing plastic refuse bags set out at the curb, is an effective way to reduce rodent populations. Placing refuse in sealed, rodent-resistant containers would reduce rodents' access to their food source and would result in a significant decrease in the City's rodent population, and therefore, would decrease potential exposure to disease-causing bacteria and viruses in the City's dense urban population.

In December 2025, DSNY announced that rat sightings reported to 311 (the City's comprehensive government information and services call center) have declined in the past 12 months

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[63] City of New York Department of Health and Mental Hygiene, 2024 Health Advisory #10: Continued Increase in Leptospirosis Cases in New York City (April 12, 2024), https://www.nyc.gov/assets/doh/downloads/pdf/han/advisory/2024/han-advisory-10.pdf.

[64] https://www.nyc.gov/site/doh/health/health-topics/hantavirus-infection.page

[65] City of New York Department of Sanitation. (2026) Medical Division, Leptospirosis Infection Rates; City of New York Department of Health and Mental Hygiene, Zoonotic and Vector-Borne Disease Unit (2026).

[66] Johnson, S. et a. (2016). Characteristics of the Built Environment and the Presence of the Norway Rat in New York City: Results From a Neighborhood Rat Surveillance Program, 2008-2010. Journal of Environmental Health. *See also* DSNY, The Future of Trash (April 2023). https://dsny.cityofnewyork.us/wp-content/uploads/reports/future-of-trash-april-2023.pdf.

[67] Johnson, S. et a. (2016).

when compared to December 2024.[68] From December 2023 to November 2024, 25,230 rat sightings were reported by City residents. One year later, the number of sightings dropped to 20,025, a 20.6% decline. The decline coincides with the adoption of DSNY's rule on November 12, 2024, that requires buildings with one to nine residential units to place their refuse into sealed containers. In addition, DSNY implemented a small-scale assessment of waste containerization at certain buildings with residential units over 11 blocks within the Hamilton Heights neighborhood of Manhattan CD 09.[69] In June 2025, DSNY implemented a waste containerization pilot program at certain buildings with residential units and schools within Manhattan CD 09. The stationary on-street containers have been highly successful in deterring vectors (e.g., rats and vermin). Containerization has lead to record-breaking reductions in rat sightings in Manhattan CD 09 since the start of the Pilot Program.[70]

By containerizing the remaining refuse in the City, rodents would have less access to their main source of food, which would lead to a decrease in the rat population and reduced risk for the spreading of disease.

12.3 Minimize Odor, Prevent Water Contamination, and Improve Cleanliness and Quality of Life

When plastic refuse bags tear, their contents leak onto the sidewalk and into the streets and can cause cleanliness, public health, and quality of life issues associated with street litter and environmental impacts (see **Photo #1**). In addition to attracting vectors (e.g., rats and vermin) as discussed above, leaking refuse bags create visual eyesores on sidewalks and streets and produce strong odors as refuse decomposes, especially during the hotter summer months when it decomposes more quickly, affecting quality of life. The use of stationary on-street containers and individual bins for waste disposal would allow DSNY to support the City's commitment to street cleanliness and quality of life.

When the contents from leaked bags come into contact with water, from precipitation or flooding events, the contaminated runoff enters the stormwater system and local waterbodies, potentially impacting surface water quality. The contaminated water can also pool on sidewalks, further attracting vectors (e.g., rats and vermin), exacerbating odors, and increasing potential for pedestrians to be directly exposed to contamination. The proposed stationary on-street containers would consist of HDPE, which is recyclable, durable and highly resistant to impact, chemicals, and weather. As such, placing refuse bags in sealed containers would significantly reduce the odors and potential for leaks, improving quality of life and preventing potential water contamination.

12.4 Reduce Injuries and Improve Sanitation Worker Health and Safety

Sanitation workers are susceptible to line of duty injuries from manually collecting plastic bags of waste. Regularly lifting heavy bags of refuse exposes sanitation workers to potential physical harm, including strains and sprains and contact with sharp objects, chemicals, or debris. According to the

[68] NYC Rats Are Fleeing – for an Incredible 12 Straight Months! | City of New York, khttps://www.nyc.gov/site/dsny/news/25-039/nyc-rats-fleeing-an-incredible-12-straight-months-#/0

[69] In September 2023, DSNY implemented a small-scale assessment of on-street containerization of refuse at buildings with residential units on 11 residential blocks and of refuse and recyclables (organics; MGPC; and paper/cardboard) at 14 public schools in a small section of Manhattan CD 09 (CEQR No. 24 DOS003M).

[70] City of New York Open Data. (2020-Present). 311 Service Requests.

Bureau of Labor Statistics, the work performed by refuse and recyclable material collectors is one of the most dangerous jobs in the country. Sanitation workers experience a higher rate of line of duty injuries compared to other City employees.

More than 40% of sanitation worker line of duty injuries are sprains and strains related to the manual collection of trash bags. Plastic bags of refuse are heavy and cumbersome, with each bag weighing up to 100 pounds. During one shift, a team of two sanitation workers collect approximately 10 tons (20,000 pounds) of waste (see Photo #13). Under the Proposed Program, DSNY would instead use ASL collection trucks to collect the waste from the stationary on-street containers. ASL collection trucks have an arm on one side of the collection truck whereby a sanitation worker operating inside the collection truck can mechanically grab, lift and empty the stationary on-street containers, while a second sanitation worker stands outside the collection truck to monitor for safety. This would significantly reduce line of duty sprain and strain injuries typically caused by lifting heavy plastic refuse bags. The use of ASL collection trucks would also reduce the liquid and debris released as a result of refuse bags being cycled in traditional rear-loader collection trucks, protecting sanitation workers and the public from risk of contact and injury.

Photo #13. Example of Sanitation Workers Collecting Bags of Waste

Additionally, plastic bags are susceptible to being torn or ripped, exposing both sanitation workers and the public to the biological and potential chemical hazardous contents of the bags with waste. Needles and other sharp objects that can penetrate plastic bags are responsible for more than 100 line of duty injuries each year. Under the Proposed Program, the increased use of containers would reduce sanitation worker exposure to vector-borne diseases as discussed above and hazardous materials that may inadvertently be placed in plastic bags, especially ripped and leaking bags, currently placed on the curb.

Stationary on-street containers would significantly reduce sanitation workers' harmful exposure risks on the job, protecting their safety and the safety of others.

12.5 Conclusion

As discussed above, the Proposed Program would not cause a significant adverse impact in any of the areas that affect public health, including air quality, water quality, pests, hazardous materials, and noise. Additionally, a cleaner environment would improve the overall appearance of public spaces and would positively impact mental health and the well-being of residents, visitors, and sanitation workers. Containerizing waste in sealed rodent-resistant receptacles would have a positive effect on public health, including the health of DSNY sanitation workers by:

- Reducing the Spread of Disease: By containerizing trash in sealed individual bins and stationary on-street containers, exposure to pests (such as rats and flies) that can carry diseases would be limited. In contrast, placing plastic bags of refuse on the sidewalk attracts vectors (e.g., rats and vermin) and potentially spreads infections and diseases.

- Minimizing Odor: Properly sealed refuse containers would reduce foul odors. This would improve air quality and reduce respiratory health risks for nearby residents and passersby.
- Preventing Water Contamination: Containerization would prevent surface and rainwater from coming into contact with bags of waste and reduce the risk of contaminated runoff and street litter from torn bags entering the stormwater system and water bodies. The use of containers would protect water quality, contributing to the City's overall goals of achieving and/or maintaining water quality standards and their designated uses (e.g., fishing, swimming and boating).
- Improving Cleanliness and Quality of Life: Neatly organized waste containers would improve the overall appearance of public spaces and can serve to reduce street litter from torn bags. This is in contrast to current conditions in which large amounts of plastic bags of refuse are placed on sidewalks for hours before DSNY collection. A cleaner environment positively impacts mental health and well-being. The Proposed Program would create a more hygienic, harmonious, and aesthetically pleasing experience for pedestrians and residents.
- Reducing Injuries and Improving Worker Health and Safety: Containerizing waste would minimize sanitation workers' and the public's exposure to sharp objects, and other potential unseen hazards. It would also reduce the potential of sanitation worker injuries by replacing the need to lift plastic refuse bags, resulting in a significant reduction in line of duty injuries.

Therefore, per the *CEQR Technical Manual,* no significant adverse impacts to public health are expected from the Proposed Program, but would instead result in a benefit to residents, sanitation workers and visitors.

13 NEIGHBORHOOD CHARACTER

13.1 Introduction

The *CEQR Technical Manual* defines neighborhood character as a mixture of various elements that give neighborhoods their distinct "personality", including public policy; socioeconomic conditions; historic and cultural resources; urban design and visual resources; transportation; and noise. Per CEQR, to determine a project's effects on neighborhood character, the elements that contribute to a neighborhood's context are considered together.

According to the *CEQR Technical Manual*, an assessment of neighborhood character is generally recommended when a proposed project has the potential to result in significant adverse impacts in the CEQR technical areas that relate to neighborhood character, or when the project may have moderate effects on several of the elements that define a neighborhood's character. A moderate effect is generally defined as an effect that is reasonably close to a significant adverse impact threshold for a particular technical area. Therefore, even if a project does not have the potential to result in a significant adverse impact on neighborhood character in a certain technical area, the project may result in a combination of moderate effects in more than one area that, when considered together, may cumulatively affect an area's neighborhood character, warranting further analysis.

The *CEQR Technical Manual* states that neighborhood character impacts are rare, and only under unusual circumstances would a combination of moderate effects to the neighborhood result in an impact to neighborhood character. Moreover, a significant impact identified in one of the CEQR technical areas that contribute to a neighborhood's character is not automatically equivalent to a significant impact on neighborhood character but rather serves as an indication that it should be

examined. According to the *CEQR Technical Manual*, if it is determined that neighborhood character should be examined, then a preliminary assessment should be conducted.

This assessment of neighborhood character for the proposed Citywide Containerization Program describes the defining features of neighborhood character and considers the potential effects of the Proposed Program on these defining features. The assessment of neighborhood character relies on the technical analyses presented in other sections of this DEIS, including public policy, socioeconomic conditions, historic and cultural resources, urban design and visual resources, transportation, and noise.

The assessment concludes that no significant adverse neighborhood character impacts would occur as a result of the Proposed Program. Rather, by moving waste from curbside plastic bags to placement within stationary on-street containers or individual bins, there would be a reduction of potential odors, loss of liquids, and litter from ripped or open plastic bags, and improved pedestrian access along sidewalks, thus enhancing the character of the various neighborhoods Citywide.

13.2 Methodology

As described in the relevant chapters of this DEIS, the Proposed Program would not result in significant adverse impacts in any of the technical analysis areas that are relevant to neighborhood character; however, a combination of moderate effects to several areas may cumulatively affect neighborhood character. Therefore, based on the methodology provided in the *CEQR Technical Manual*, a preliminary assessment was conducted to determine the Proposed Project's effects on neighborhood character.

13.3 Preliminary Assessment

13.3.1 Public Policy

As summarized in **Chapter 3**, "**Public Policy**," the public policy analysis considered the Proposed Program's public policy implications and compliance with and potential effect on existing applicable public policies, including the City's SWMP, PlaNYC: Getting Sustainability Done, the Streets Plan, the Curb Management Action Plan, and Vision Zero. Since the Proposed Program would affect Coastal Zone areas designated by the State and City, an assessment of the Proposed Program's consistency with the New York City WRP was also performed. The assessment determined that the Proposed Program would be consistent with these policies and support the City's commitment to improving street cleanliness and reducing potential food sources for vectors (e.g., rats and vermin). The proposed Citywide Containerization Program would provide significant public policy benefits to residents by improving quality of life, cleanliness, and public health. The Proposed Program would align with other City initiatives to increase the use of containers for waste storage and collection, and to create cleaner, more livable, and more vibrant streets and neighborhoods across the City.

13.3.2 Socioeconomic Conditions

As summarized in **Chapter 4**, "**Socioeconomic Conditions**," the proposed Citywide Containerization Program would not directly affect population, housing, or economic activity. However, the Proposed Program could have indirect effects due to the reduction of on-street parking potentially resulting in adverse economic effects to residents or businesses. As such, an economic assessment

was performed to determine the indirect effects of potential increased costs associated with the potential use of off-street parking lots and garages for residents and businesses that choose to use them. The assessment concluded that the Proposed Program would not lead to the indirect displacement of residents or businesses. The reduction of on-street parking throughout the City due to the Proposed Program would not significantly affect the desirability of an area as a residential neighborhood and would not lead to a loss in consumer traffic to businesses that provide important products or services to residents and businesses because the additional costs for off-street parking is likely to be low and many alternative transportation options exist in the City. Additionally, containerizing waste and removing the mounds of curbside trash bags would create a more aesthetically pleasing environment, thus enhancing the pedestrian experience Citywide for residents and visitors, alike. Therefore, the Proposed Program would not result in socioeconomic conditions that would affect neighborhood character.

13.3.3 Historic and Cultural Resources

As summarized in **Chapter 5**, "**Historic and Cultural Resources**," the Proposed Program would not result in any ground disturbance below the existing paved streets and therefore, would not result in any potential adverse impacts to archaeological resources. The placement of stationary on-street containers and individual bins would not result in any potential adverse direct or indirect impacts to architectural resources. The Proposed Program would not result in physical changes to historic or cultural resources, views of resources would not be screened or eliminated and would remain publicly accessible, and experience of the resources from the sidewalk would not be screened or eliminated. Additionally, stationary on-street containers and individual bins would not be placed in front of public parks, public art, or monuments. Therefore, there is no potential for the Proposed Program to affect defining features of neighborhood character related to historic and cultural resources.

13.3.4 Urban Design and Visual Resources

As summarized in **Chapter 6**, "**Urban Design and Visual Resources**," the urban design and visual resources assessment considered the effects of the Proposed Program on the experience of a pedestrian in the City and focused on the project elements that have the potential to alter the built environment, or urban design. The Proposed Program would not result in obstructed views or access to visual resources beyond a *de minimis* amount, as the stationary on-street container design has a low profile which allows for pedestrian visibility over the container(s). The stationary on-street containers and individual bins would not disturb the vitality, walkability, or visual character of the area. Neatly organized stationary on-street containers and individual bins would improve the overall appearance of public spaces and have a positive effect on visual resources and the pedestrian experience. By moving waste from curbside plastic bags to placement within stationary on-street containers or individual bins, there would be a reduction of potential vectors (e.g., rats and vermin), odors, waste fluids, and litter from ripped or open plastic bags, and improved pedestrian access along sidewalks. In accordance with 16 RCNY § 1-02.1, the individual bins would be stored within the property, in rear yard, or within three feet of the building line to allow for a clear path for pedestrian travel. Therefore, the individual bins are not anticipated to impede or obstruct pedestrian flow on the sidewalk. Additionally, no stationary on-street containers would be placed in front of any public parks, public art, or monuments. The Proposed Program would create a more hygienic, harmonious, and aesthetically pleasing experience for pedestrians. Therefore, the Proposed Program would not adversely affect the defining features of neighborhood character related to urban design and visual resources.

13.3.5 Transportation

As summarized in **Chapter 8**, "**Transportation**," the potential effects of the proposed Citywide Containerization Program on the City's transportation system, including traffic operations, public transportation facilities and services, pedestrian elements and flow, and on- and off-street parking was evaluated.

A traffic screening assessment of potential effects of the Proposed Program was performed Citywide focused on the incremental DSNY collection truck and employee vehicle trips necessary to collect the waste from stationary on-street containers, and to transport the waste from each CD to the DSNY garage locations and to the in-City transfer stations. The incremental collection truck trips associated with the Proposed Program for waste collection would be distributed across multiple collection areas within each CD such that no street or intersection would see more than three incremental collection truck trips per day on any given street and therefore would not exceed the *CEQR Technical Manual* traffic screening threshold of 50 or more PCEs. In addition, the incremental collection truck trips due to the Proposed Program were evaluated for 18 unique groups of facilities that are anticipated to share common roadways and the incremental collection truck trips associated with 20 individual facilities not located near other facilities were evaluated. Based on this traffic screening assessment, the incremental DSNY collection trucks transporting waste from the CDs to DSNY garage locations and to in-City transfer stations, combined with the incremental employee vehicle trips due to the Proposed Program, would not exceed the *CEQR Technical Manual* traffic screening threshold of 50 or more PCEs during any hour on weekdays or on Saturdays for any individual facility or facility group. Therefore, a detailed hourly traffic analysis was not warranted.

A transit screening assessment was performed to assess the potential for a transit mode shift from vehicle trips to transit trips (subway/rail and bus) due to on-street parking changes as a result of the proposed Citywide Containerization Program. The Proposed Program would result in up to nine incremental peak hour passengers along a single bus route, 28 incremental peak hour passengers along a single subway route, and up to 153 incremental peak hour passengers at a transit station. Therefore, the Proposed Program would not exceed the CEQR screening threshold for transit trips and a detailed transit station analysis was not warranted.

A screening assessment was performed to assess the potential for a transit mode shift from vehicle trips to ferry trips, due to on-street parking changes as a result of the Proposed Program. The Proposed Program would result in up to 22 incremental ferry trips in an hour and thus would not exceed the CEQR screening threshold for incremental ferry trips and a detailed analysis for ferry trips was not warranted.

The incremental transit trips, including ferry trips, would not exceed the CEQR screening threshold for pedestrians in any peak hour on any pedestrian element. Therefore, no further pedestrian assessment was warranted.

Current garage sites may not accommodate off-street parking for all incremental collection trucks and employee vehicles anticipated to support the proposed Citywide Containerization Program and may result in temporary occupancy of on-street parking spaces in the vicinity of a garage site. However, DSNY collection trucks and employee vehicles would not substantially interfere with parking availability for nearby residents or businesses. Therefore, DSNY collection trucks and employee vehicles parking along these streets would not be expected to result in a significant parking shortfall.

A comprehensive analysis was performed to determine the length of the curb available for on-street parking by the general public and the number of parking spaces that would be needed for the stationary on-street containers. The Proposed Program is anticipated to require approximately 1.52% of on-street parking spaces Citywide. While the Proposed Program would reduce the number of parking spaces in the City by approximately 29,842, more than 98% of on-street parking would still be available Citywide. Additionally, there are many transit alternatives (subway/rail, bus, and ferry) throughout the City, as well as public off-street parking lots and garages.

In addition to an analysis of the potential reduction in Citywide on-street parking, a parking utilization analysis in representative prototypical areas was also performed to determine if there would be a parking shortfall. Due to the City's expansive network of public roads, a detailed Citywide parking utilization analysis is not feasible. Therefore, in order to complete a reasonable analysis of potential effects of the Proposed Program, a parking utilization analysis, consistent with the *CEQR Technical Manual,* was performed for five prototypical areas representing each of the five City boroughs. The parking utilization analysis in these prototypical areas was used as the basis for further understanding the potential effects of the Proposed Program on the Citywide on-street parking supply. Based on the parking utilization analysis in the five prototypical areas, the Proposed Program is not anticipated to result in a parking shortfall due to the placement of stationary on-street containers throughout the City. Therefore, the Proposed Program would not affect neighborhood character with respect to transportation.

13.3.6 Noise

As stated above, under the Proposed Program, collection of waste in a CD would not result in more than three incremental collection truck trips per day on any given street and therefore would not result in a doubling of noise PCEs. However, as summarized in **Chapter 11**, "**Noise**," a mobile-source noise screening assessment was performed at noise-sensitive receptor locations along major incremental vehicle convergence points near the DSNY garage locations (used for collection truck storage) and the DSNY and private waste disposal facilities within the City under contract with DSNY. Two facility groups and two individual facilities would experience the most incremental daily collection truck and employee vehicle trips under the Proposed Program. Accordingly, a noise screening assessment was performed for eight representative major convergence points near these facility groups and individual facilities, which have the greatest potential for incremental noise levels at nearby noise-sensitive receptors compared to the remaining facility groups and individual facilities.

Based on the results of the mobile noise screening assessment, the Proposed Program would potentially result in a doubling of noise PCEs at two locations and thus a detailed assessment of mobile source noise emissions was performed. Based on the detailed mobile noise analysis results, noise levels are predicted to increase up to 1.2 dB(A), which would not exceed the CEQR noise impact thresholds and would not result in significant adverse noise impacts. Therefore, noise conditions under the Proposed Action would not affect neighborhood character.

13.4 Conclusion

As detailed above, public policy, socioeconomic conditions, historic and cultural resources, urban design and visual resources, transportation, and noise conditions in the Future with the Proposed Program would not negatively affect neighborhood character. Rather, by moving waste from curbside plastic bags to placement within stationary on-street containers or individual bins, there would be a reduction of potential odors, loss of liquids, and litter from ripped or open plastic bags, and

improved pedestrian access along sidewalks, thus enhancing the character of the various neighborhoods Citywide.

Therefore, no significant adverse neighborhood character impacts would occur as a result of the Proposed Program.

14 ALTERNATIVES

14.1 Introduction

Pursuant to the *CEQR Technical Manual*, the purpose of an alternatives assessment is to examine reasonable and practicable options that have the potential to avoid or reduce significant adverse impacts while still achieving the stated goals and objectives of a proposed action. In accordance with the *CEQR Technical Manual*, this chapter presents and analyzes alternatives to the proposed Citywide Containerization Program.

As described in **Chapter 1**, "**Project Description**," the City is proposing to implement a Citywide Containerization Program across the five boroughs of the City to improve waste management practices and to ensure safe and efficient waste collection in a manner that reduces vector (e.g., rats and vermin) food sources and sightings, while improving neighborhood character and street-side aesthetics in the City.

Although the environmental review has not identified a significant adverse impact from the Proposed Program with respect to any CEQR technical area, nevertheless, this chapter considers various alternatives to the Proposed Program.

The DSNY completed an initial assessment of waste containerization in the City and released a report in April 2023 on its viability in the City (see "*The Future of Trash – Waste Containerization Models and Viability in New York City*"[71]). *The Future of Trash* report, which assessed the applicability of various containerization systems and models in the City, concluded that containerization is viable for most residential streets – with individual bins in low-density residential neighborhoods and larger containers in mid- to high-density residential neighborhoods.

DSNY evaluated specific alternatives for waste containerization for the proposed Citywide Containerization Program. These alternatives include:

- No Action Alternative (Future without the Proposed Program), which is mandated to be considered by CEQR and SEQRA, and is intended to provide the lead and involved agencies with an assessment of the environmental conditions that would exist if the proposed Citywide Containerization Program were not implemented, and thus serves as a baseline against which the impacts of the Proposed Program may be assessed.
- Alternative container type, including:
    - Wheeled containers, and
    - Individual bins.
- Container sharing.
- Alternative waste streams to be containerized.
- Alternative vehicle types used for waste collection from containers.

[71] https://www.nyc.gov/assets/dsny/downloads/resources/reports/future-of-trash.pdf

Primary considerations of this alternatives assessment include: residential population density, physical space limitations and above-ground footprint, collection truck model and curb access (e.g., during winter weather conditions), and security concerns (e.g., potential for unauthorized access to containers). The below assessment evaluates the alternatives to determine: (1) whether they meet DSNY's purpose and need for the Proposed Program and (2) whether there are short-term and long-term implementation considerations of each alternative (i.e., relative costs, physical, permitting, or coordination complexities, effectiveness and ease of use, etc.).

Based on this alternatives assessment, the Proposed Program was determined to best meet DSNY's goals by reducing potential food sources for vectors (e.g., rats and vermin), improving street cleanliness and neighborhood aesthetics, and supporting safe and efficient collection operations while avoiding the greater potential operational, spatial, and public health drawbacks associated with the assessed alternatives.

14.2 No Action Alternative (Future without the Proposed Program)

The No Action Alternative predicts the environmental conditions that would exist if the proposed Citywide Containerization Program was not implemented. Under the No Action Alternative, buildings with 10 or more residential units would continue to set plastic bags of refuse at the curb for DSNY collection. Without the Proposed Program, these refuse-filled plastic bags would continue to block or impede pedestrian access along sidewalks, and would continue to attract vectors (e.g., rats and vermin), generate odors, and leak garbage fluids if torn. As such, the No Action Alternative would result in similar environmental effects as existing conditions, such as effects on public health, urban design and visual resources, neighborhood character, and historic and cultural resources. The No Action Alternative would not be consistent with DSNY's goals for the containerization of waste, which are: eliminate the curbside placement of plastic bags containing refuse; reduce potential food sources for vectors (e.g., rats and vermin), contributing to improved public health; reduce litter, odor, loss of liquids and the potential contamination of stormwater runoff associated with plastic bags and the loss of materials from these bags; reduce pedestrian and curbside obstructions; reduce workplace injuries; and provide an overall improvement in street cleanliness and neighborhood aesthetics.

14.3 Alternative Container Type

DSNY evaluated specific container type alternatives including individual bins and/or larger capacity containers or collection systems (including wheeled containers and stationary on-street containers). Larger capacity containers are necessary for containerization of waste in the high-density urban landscape of the City, as they occupy less space than the large number of individual bins that would be needed for larger buildings. However, containerization is not a one-size-fits-all solution and must accommodate a range of residential densities, and associated waste generated (i.e., the quantities and types of waste streams to be containerized). Therefore, the evaluation of alternatives leading to the selection of the Proposed Program considered an array of container type options, including smaller, individual bins. These alternatives are summarized below. Other container type alternatives considered in *The Future of Trash* report include underground storage containers and pneumatic waste collection systems. While these may be effective containerization options for greenfield construction projects, such as New York City Housing Authority's Polo Grounds Towers, these alternatives were considered infeasible for widescale Citywide use due to insurmountable

complexities around existing underground infrastructure, costs, safety risks, and proper operation and maintenance of these systems, and therefore, they were not further assessed.

14.3.1 Individual Bins

Alternatives evaluated included an array of container type options, including smaller, rigid receptacles with tight-fitting lids not exceeding 55 gallons in size (individual bins). Under DSNY rules, which became effective on November 12, 2024, DSNY initiated implementation of its residential waste containerization program, by requiring buildings throughout the City with one to nine residential units and all City agencies to set out their refuse in individual bins.[72, 73]

DSNY evaluated the potential for buildings with 10 or more residential units to use individual bins rather than larger storage alternatives. An example of individual bins for the proposed Citywide Containerization Program is shown in **Photo #4.** These individual bins are the same as those that are currently used by buildings with one to nine residential units.

The individual bins would be temporarily placed at the curb on the evening before DSNY collection in front of or near their respective properties and would be collected manually by sanitation workers using standard rear-loader collection trucks similar to current collection efforts. When not set at the curb for collection, individual bins would be stored on the premises of the residential building or within three feet of the building line on the sidewalk. Therefore, individual bins do not require permanent curb placement or loss of parking. However, individual bins have a fraction of the capacity of larger containers and, therefore, cannot be used for larger buildings (i.e., buildings with 31 residential units or more) that generate a large amount of waste. Furthermore, the number of individual bins required for larger buildings may be difficult for the building owners to store on the building premises or within three (3) feet of the building line on the sidewalk. In addition, the number of individual bins required for larger buildings would likely create impassable sidewalk conditions when placed on the sidewalk for collection. The reduction in passable sidewalk space could adversely impact the streetscape and potentially result in significant adverse impacts to pedestrian access along sidewalks, neighborhood character, urban design and visual resources, and historic and cultural resources.

14.3.2 Wheeled Containers

As discussed in **Chapter 1**, "**Project Description**," as part of the Proposed Program, certain buildings with residential units would utilize a larger storage alternative (as opposed to individual bins) as their waste output would regularly require one or more large containers. Wheeled containers were assessed as a potential larger storage alternative. See **Photo #14** for an example of wheeled containers.

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[72] As of June 2026, buildings with one to nine residential units were required to use the Official NYC Bin, equipped with wheels and a secure latching lid. https://www.nyc.gov/site/dsny/collection/containerization/nyc-bin-faq.page

[73] Buildings with residential units that use individual bins are required to meet DSNY's Rules regarding "Requirements for Receptacles and Bags Containing Solid Waste and Recyclables for Collection" (16 RCNY §1-02.1), summarized below:

- Receptacles (Individual bins) must be kept clean and in good repair; and
- If other storage areas on the premises are not available, receptacles may be stored in the area within three feet of the building line on the sidewalk, provided that such receptacles are maintained in an orderly manner and do not impede or obstruct pedestrian flow on the sidewalk.

Containerization requires a fleet that is compatible with the selected containers. One of the benefits of wheeled containers is that they are compatible with the existing rear-loading collection trucks currently used by DSNY (with retrofits), meaning they can be implemented on a faster timeline than alternatives that require a new fleet. Furthermore, increases in truck trips would be limited as the fleet would continue to have the ability to service both sides of the street with the same truck.

Photo #14. Example of Wheeled Containers
Source: DSNY "The Future of Trash: Waste Containerization Models and Viability in New York City", April 2023.

However, there are many drawbacks to wheeled containers, which were utilized in the small-scale assessment in Manhattan CD 09. Wheeled containers are hampered by obstructions in the sidewalk and street, including but not limited to, potholes, uneven pavement/surfaces, loose refuse, snow and ice. The container's wheels are particularly unreliable in snow and ice. If wheeled containers are stored in the building between collection service, those wheeled containers require an available storage location within the property grounds or facilities to store the containers between service, a service entry wide enough to accommodate the wheeled container, ramps or elevators to bring the wheeled containers to street level, and an unobstructed curb cut to allow the wheeled containers to be moved from the sidewalk to the street where the collection truck can service collection. If the wheeled container is stored in the parking lane as was done with the small-scale Manhattan CD 09 assessment, containers need to be stored in corrals that allows the wheeled containers to be secured in place to prevent them from rolling out of place, which requires additional time to perform collection operations.

In addition, wheeled containers typically have between 10 to 50% less capacity than the proposed stationary on-street containers. Smaller containers are more easily stored within a property, are more mobile since they need to be wheeled outside for collection and will not require as wide of a door opening. Due to wheeled containers having less capacity than the proposed stationary on-street containers, more wheeled containers would be required compared to stationary on-street containers in order to accommodate the waste generated by larger buildings. Wheeled containers are also highly prone to breakage due to concentrated impact on the four corners where wheels connect to the container, particularly when bearing significant weight loads and when being used for daily collection. A wheeled container with a broken wheel may not be able to be moved into position for collection service until it is repaired, which would require manually removing the waste from the container before repairing the broken wheel. Annual maintenance costs are higher per container due to significant preventative maintenance needs associated with wheels. In addition, wheeled containers have an expected useful life of three years, less than half that of stationary on-street containers, which would contribute significant costs to the proposed Citywide Containerization Program over time.

Finally, if wheeled containers were placed on sidewalks, the wheeled containers would likely result in adverse impacts to pedestrian access along sidewalks, urban design and visual resources, neighborhood character, and historic and cultural resources. Because of this placement, containers would be elevated above street level and would not blend with the surroundings. Further, wheeled containers would require an additional enclosure to avoid the public tampering with them, prevent

moving without authorization, and ensure safety. The use of enclosures would significantly slow down collection efficiency, require installation costs, and require additional space within the public realm. Without an enclosure, wheeled containers would need to be stored securely off-street between collections, presenting additional challenges due to space constraints across the City. Because of access and storage challenges, loose bags of refuse are likely to build up around containers when they are in their enclosures or being stored. This could result in adverse impacts to public health.

14.4 Container Sharing

As part of a prior small-scale assessment of on-street waste containerization in Manhattan CD 09, DSNY installed containers that were shared among buildings. While some of DSNY's goals were met through this alternative, there were significant challenges. Due to the lower capacity of the wheeled containers, more containers were needed. However, since the exact number of properties using containers was not predetermined, each set of containers needed to be sized to accommodate the highest possible volume, which resulted in higher container needs compared to the assigned container model. In addition, because the containers were shared between multiple buildings, containers were sited so that no property on a block segment would have to walk more than 150 feet to the nearest container. As a result, some property owners needed to walk further than others to get to the closest containers, so access was not as convenient for the residents of all buildings sharing the container. In addition, in the shared model, some properties had multiple containers sited in front of or near their property, regardless of their waste output, while other properties, potentially large waste generators, may not have any shared containers placed in front of or near their property.

Further, if the shared containers are not locked, anyone can add material to the containers and without clear "ownership," a significant amount of refuse tended to build up in and around the containers even when they were not full, without any clear means of accountability. The buildup of refuse undermines DSNY's goals for the Proposed Program, while also diminishing any improved public health, urban design and visual resources, historic and cultural resources benefits imparted by the portion of waste that is appropriately containerized.

Without these containers being assigned to specific buildings with clear commitment of "ownership" and responsibility, significant behavioral changes would be required to successfully operationalize this approach and to meet DSNY's Program goals. There were also clear challenges regarding responsibility for maintenance and routine cleaning of the containers and their surroundings. The burden of cleaning the containers and their surroundings would likely fall solely on DSNY, which would be unsustainable and incur a significantly higher maintenance cost for the Proposed Program overall.

The proposed stationary on-street containers shared among buildings were also assessed as an alternative. As learned through the Manhattan CD 09 Pilot Program, properties with 30 or more residential units generate enough waste to require one or more stationary on-street containers, making sharing of the containers unnecessary.

14.5 Alternative Waste Streams to be Containerized

DSNY collects waste in four separate streams Citywide: refuse, MGPC, paper/cardboard, and food and yard waste (organics). Accordingly, DSNY evaluated potential alternatives to containerization of all four waste streams under the Proposed Program.

Although generally measured by weight, waste must be assessed by volume for purposes of containerization. Paper and cardboard, while light in weight, take up a disproportionate amount of space and does not typically attract vectors (e.g., rats and vermin). MGPC also requires a large storage volume and, like paper and carboard, are also not a significant vector attractor. Therefore, the outsized volume of these waste streams make it infeasible to containerize all recyclables throughout the City without significantly increasing the number of additional stationary on-street containers that would be required, which would in turn occupy a significantly higher number of parking spaces. This large additional reduction in available parking could potentially adversely impact parking and socioeconomic conditions. The increased number of stationary on-street containers would also increase implementation and maintenance costs. Unlike recyclables, organics are already required to be placed out on the curb in individual bins to prevent vectors. Introducing additional stationary on-street containers for the organics waste stream is not necessary since organics are already required to be placed out at the curb in individual bins and would not justify the need for additional space and maintenance required for additional stationary on-street containers.

14.6 Alternative Types of Collection Trucks

A primary consideration for the Proposed Program is a collection truck fleet that is compatible with the selected containers.

The main benefit of wheeled containers and individual bins is that they are compatible with existing rear-loading collection trucks. The implication of fleet compatibility is that wheeled containers and individual bins can be implemented on a significantly faster timeline than stationary on-street containers. However, wheeled containers do not meet the purpose and need for the Proposed Program due to the drawbacks discussed in **Section 14.3.2**. Similarly, individual bins do not meet the purpose and need for the Proposed Program due to the drawbacks discussed in **Section 14.3.1**.

Photo #15. Example of Hoisted Waste Collection from an Underground Storage System

Source: DSNY "The Future of Trash: Waste Containerization Models and Viability in New York City", April 2023.

Hoist trucks were identified as an alternative collection truck for waste collection of stationary on-street containers (see **Photo #15**).[74] Hoist-lifting mechanisms have a more maneuverable lifting arm compared to ASL collection trucks, which could present flexibility relative to where trucks are positioned to lift the containers. Additionally, hoist trucks can service both sides of a street, though emptying each container would take several minutes. When positioned over the collection truck, the waste is then released from the bottom of the stationary on-street container. However, this method of waste collection

[74] **Photo #15** depicts a hoist truck lifting an underground storage container; this truck model and lifting mechanism (i.e., hopper extension and crane) would be similar for a stationary on-street container.

presented the potential for impacts to public health due to untenable safety risks associated with suspending containers above cars, pedestrians, and sanitation workers for minutes at a time on high-density streets.[75] Additionally, many City streets do not have the 20 feet of overhead clearance space required to collect waste with a hoist, due to street trees, overhead utilities, light poles and canopies/overhangs.

14.7 Conclusion

This chapter evaluated reasonable and practicable alternatives to the Proposed Program in accordance with CEQR. Although this DEIS has not identified any significant adverse impacts from the Proposed Program with respect to any CEQR technical area, the alternatives assessment evaluated whether the alternatives would meet DSNY's purpose and goals for the Proposed Program while avoiding or reducing operational, public realm, and maintenance challenges.

The No Action Alternative would not meet the purpose and goals for the Proposed Program because buildings with 10 or more residential units would continue to place refuse-filled plastic bags at the curb for DSNY collection, thereby resulting in similar environmental effects as existing conditions, such as continuing to attract vectors (e.g., rats and vermin), generate odors, leak garbage fluids if torn, block or impede pedestrian access along sidewalks, and diminish neighborhood aesthetics.

In addition to the No Action Alternative, DSNY evaluated specific alternatives for waste containerization including alternatives to the container type, container sharing, alternative waste streams to be containerized, and alternative types of collection trucks. Based on this alternatives assessment, the Proposed Program best meets DSNY's goals by reducing potential food sources for vectors (e.g., rats and vermin), improving street cleanliness and neighborhood aesthetics, and supporting safe and efficient collection operations while avoiding the greater potential operational, spatial, and public health drawbacks associated with the assessed alternatives.

15 EFFECTS ON DISADVANTAGED COMMUNITIES

15.1 Introduction

Environmental justice is the fair and meaningful treatment of all people regardless of race, income, national origin or color with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and activities with respect to the distribution of environmental benefits and burdens. Fair treatment means that no racial, ethnic, or socioeconomic group should bear a disproportionate share of the potential negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, State, and local programs and policies.

The Environmental Justice Siting Law requires the Lead Agency to consider whether an action may cause or increase a disproportionate pollution burden on disadvantaged communities (DAC). Pursuant to the *CEQR Technical Manual*, an assessment of the potential for the Proposed Program

[75] Cities that deploy hoist trucks in higher percentages are typically lower density. DSNY "The Future of Trash: Waste Containerization Models and Viability in New York City", April 2023.

to cause or increase a disproportionate pollution burden on a DAC is required. Under State law, disadvantaged communities are defined as "communities that bear burdens of negative public health effects, environmental pollution, impacts of climate change, and possess certain socioeconomic criteria, or comprise high-concentrations of low- and moderate- income households."[76] Pollution is defined as "the presence in the environment of conditions and or contaminants in quantities of characteristics which are or may be injurious to human, plant or animal life or to property or which unreasonably interfere with the comfortable enjoyment of life and property throughout such areas of the state as shall be affected thereby."[77]

15.2 Citywide Assessment

The New York State Department of Environmental Conservation developed the Disadvantaged Community Assessment Tool (DACAT) to provide a screening tool to identify DAC census tracts that may warrant further assessment. All DACs were established for this tool based on percentile ranks for 45 indicators of economic and health vulnerability, historical discrimination or disinvestment, and environmental burdens. Each census tract was scored based on relative burden, risk, vulnerability, or sensitivity to measure the level of "Environmental Burdens and Climate Change Risks" as well as "Population Characteristics and Health Vulnerabilities" relative to other census tracts. Census tracts with higher scores relative to other census tracts statewide or to their region (i.e., New York City) were identified as DACs.

The DACAT compares three scores (Combined Score, Burden Component Score, and Vulnerability Component Score) for each census tract to non-DAC comparison scenarios (statewide urban, statewide rural, and urban/rural for each of the 10 regions). The DACAT then selects the lowest score in each of the comparison scenarios, called the "aggregate denominator." It also displays the percent difference between the three scores and the statewide mean or median for each. The DACAT compares the three scores with the identified aggregate denominators. If the Combined Score is 25% higher than its aggregate denominator, and one or both the Burden and Vulnerability Component Scores are 35% higher than their aggregate denominators, then DACAT highlights the census tract as having comparatively higher existing burdens or vulnerabilities. This indicates an increased likelihood that a proposed action may have a moderate or large impact on the DAC. If the conditions above are not met, then the DACAT highlights the census tract as having comparatively lower existing burdens or vulnerabilities, and therefore a decreased likelihood that a proposed action may have a moderate or large impact on the DAC.

Figure 15-1 illustrates the DACs within the City. According to DACAT, approximately 36% of the City's census tracts are identified as DACs. **Table 15-1** notes the acreage and percentage of coverage of both higher and lower burden and vulnerability DACs.

[76] https://www.nysenate.gov/legislation/laws/ENV/75-0101

[77] https://www.nysenate.gov/legislation/laws/ENV/1-0303

Table 15-1. Summary of Disadvantaged Communities by Borough

Borough	Higher Comparative Burdens and Vulnerabilities		Lower Comparative Burdens and Vulnerabilities	
	Acres	Percent Coverage	Acres	Percent Coverage
Manhattan	2,406	1.2	3,748	1.9
Bronx	12,339	6.4	6,893	3.6
Brooklyn	5,697	2.9	12,625	6.5
Queens	3,009	1.6	14,309	7.4
Staten Island	4,483	2.3	4,046	2.1
Citywide	27,935	14.4	41,622	21.5

The proposed Citywide Containerization Program seeks to improve waste management practices in the City to ensure safe and efficient waste collection in a manner that reduces vector (e.g., rats and vermin) food sources and sightings, while improving neighborhood character and street-side aesthetics in the City.

This assessment considers the Proposed Program's potential to add a disproportionately greater pollution burden within affected DACs than that same burden in comparable non-DACs. The SEQRA Environmental Assessment Full Form identifies direct or indirect impacts that may affect a DAC, including new noise sources or expansions/modifications of existing noise sources (i.e., noise from operational sources or construction activities); emissions of air pollutants including mobile emissions; wastewater discharges; generation of odors; light pollution; new or modified radiation sources; or new or modified sources of solid waste generation, management, or disposal.

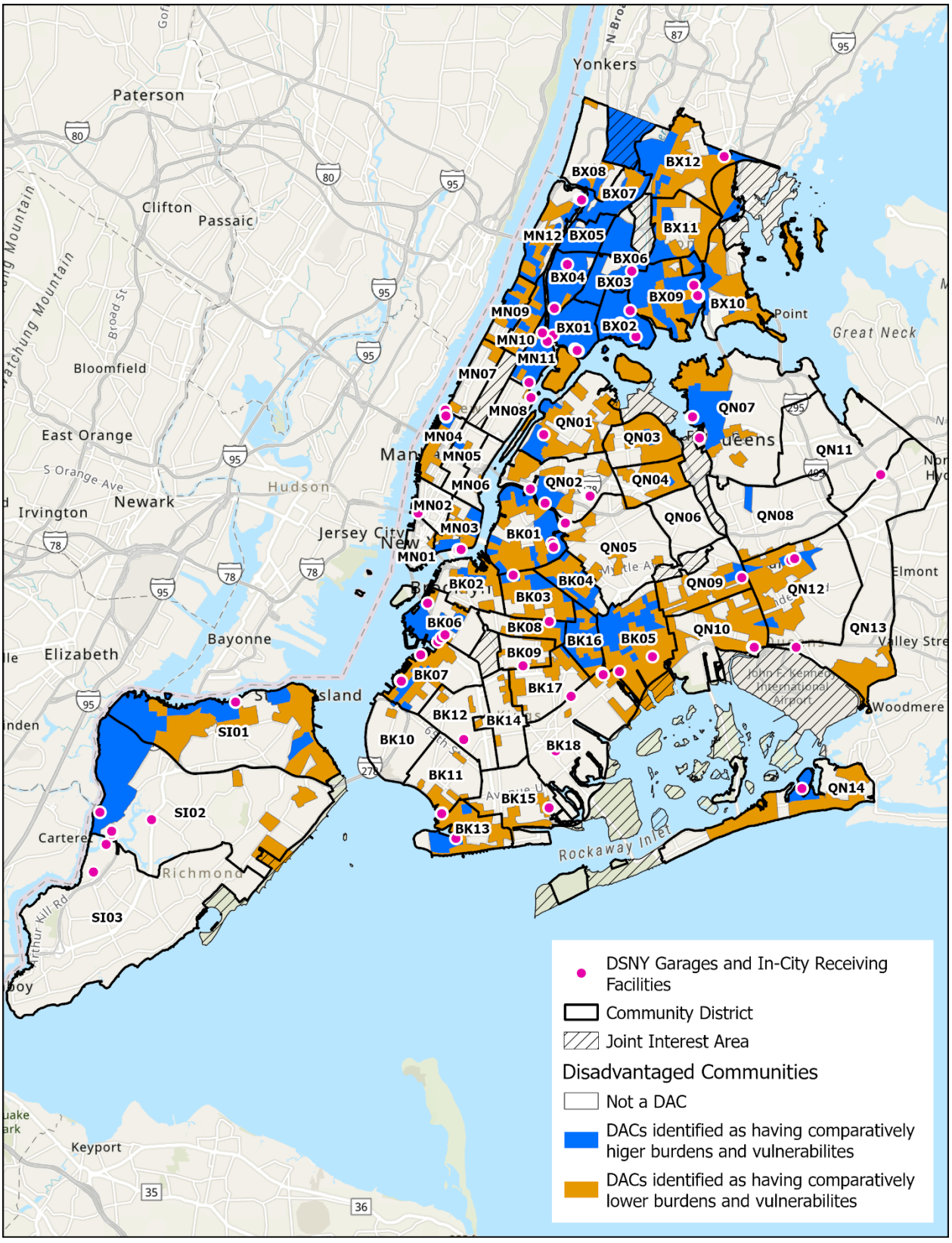

Figure 15-1. Disadvantaged Communities

As described within this DEIS, the Proposed Program would not include any new radiation sources or new or modified sources of solid waste (generation, management, or disposal), nor would it introduce any light pollution or generate any new odors. While a majority of garages and in-City transfer stations are located within DACs, an assessment of potential impacts of air and noise emissions is included in those sections and concluded that the Proposed Program would not result in a significant adverse impact to air quality from mobile sources of CO emissions, or mobile sources of particulate matter emissions, or noise. Similarly, the proposed Citywide Containerization Program would not exceed the screening thresholds for traffic, transit, ferry, or pedestrians.

The Proposed Program would provide significant benefit to residents and their quality of life, including those within a DAC. Without the Proposed Program, residents and visitors would continue to see large piles of trash bags on the street obstructing sidewalks, attracting vectors (e.g., rats and vermin), and leading to overall dirty conditions. These conditions lead to public health and quality of life issues, such as spread of disease through rodents and the smell and sight of waste on the sidewalks and streets, as well as hazards to pedestrians caused by trash bags cluttering sidewalks who must navigate sidewalks cluttered with trash bags. The Proposed Program would advance DSNY's goals for a healthier, safer, and cleaner city by containerizing waste currently in black bags on sidewalks.

This assessment demonstrates that the proposed Citywide Containerization Program would not disproportionally effect DACs. In addition, the Proposed Program is in alignment with both the State's SWMP and the Climate Act.

15.3 Conclusion

Since the Proposed Program is Citywide and therefore located in both mapped DACs as well as non-DACs, the Proposed Program is not anticipated to add a disproportionate pollution burden within an affected DAC that would be significantly greater than that same burden in comparable non-DACs. The Proposed Program would not result in significant adverse impacts in any of the CEQR technical areas analyzed in this DEIS. Furthermore, the DEIS does not identify the potential for the Proposed Program to cause any combination of moderate effects which together result in an impact. As such, the Proposed Program would not cause a disproportionate impact on DACs with respect to any of the CEQR technical areas, including cumulative effects from multiple technical areas.

16 UNAVOIDABLE ADVERSE IMPACTS

According to the *CEQR Technical Manual*, unavoidable adverse impacts are to be disclosed when an action is expected to result in significant adverse impacts for which there are no reasonable or practical mitigation measures. As discussed in this DEIS, the Proposed Program would not result in any unavoidable adverse impacts. The Proposed Program would support DSNY's commitment to street cleanliness and reducing potential food sources for vectors (e.g., rats and vermin), improve waste management practices in the City to ensure safe and efficient waste collection, and create cleaner, more livable, and more vibrant streets and neighborhoods across the City.

17 GROWTH-INDUCING ASPECTS OF THE PROPOSED ACTION

As described in the *CEQR Technical Manual,* growth-inducing aspects of an action generally refer to "secondary" effects that have the potential to trigger further development. Proposals that add substantial new land use, new residents, or new employment that could induce additional development of a similar kind or of support uses, such as retail establishments to serve new residential uses.

The Proposed Program would result in an increase in 581 full-time equivalent employees. These employees would be dispersed Citywide and between late 2026 and the Build Year of 2032. This increase in employees would not be anticipated to create the need for any additional residential development. In addition, as described in **Chapter 4**, "**Socioeconomic Conditions**," the Proposed Program would not result in the direct or indirect displacement, or increase in residential population or businesses in the City.

The Proposed Program would be consistent with designated zoning. It would not cause a shift or change in land use and thus would not incur any land use changes Citywide. In addition, the Proposed Program would not change or expand any infrastructure network, nor would it create secondary effects with the potential to induce growth in the City.

18 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

The Proposed Program would not include any construction of new facilities or infrastructure but would include limited effort to install the stationary on-street containers. This would result in minimal, near-term commitment of man-made and human resources. No environmental resources would be irretrievably lost from implementation of the Proposed Program.

No additional public services would be required in connection with the Proposed Program (e.g., police and fire protection and public-school seats) that would constitute resource commitments that might otherwise be used for other programs or projects.

The Proposed Program's commitment of resources consists principally of the use of resources consumed as part of the manufacturing of stationary on-street containers, individual bins and ASL collection trucks. This commitment is expected to be higher during the implementation period (through 2032). This short-term increase is considered irretrievably committed, however the stationary on-street containers and individual bins would be made of up to approximately 75% HDPE, with the rest of the components being limited to metal elements, such as reinforcements and fasteners. The production of the stationary on-street containers and individual bins could utilize up to 65% recovered, or recycled, material. In addition, the containers and bins themselves would be 100% recyclable.

The operation of the Proposed Program would add new collection trucks to the DSNY fleet for the collection from stationary on-street containers. DSNY replaces the entire fleet of collection trucks on a rotating basis every eight to nine years. The incremental 270 collection trucks required for the Proposed Program represent an approximately 19% increase in the overall fleet by 2032 and would not significantly change the commitment of resources required in the manufacturing of the fleet. As an alternative to the use of fossil fuels, DSNY's collection fleet uses renewable diesel, which is a

renewable alternative to conventional petroleum diesel. Therefore, the addition of new collection trucks to the DSNY fleet would not commit any long-term irreversible and irretrievable resources. No changes to any DSNY or DSNY-contracted facilities are included with the Proposed Program.

The short-term, minor increase in the commitment of resources during the implementation of the Proposed Program are weighed against the City's commitment to street cleanliness and reducing potential food sources for vectors (e.g., rats and vermin). The Proposed Program would improve street cleanliness, reduce rodent activity, enhance pedestrian mobility, and improve public health - outcomes that align with major initiatives such as the SWMP, PlaNYC, the Streets Plan, the Curb Management Action Plan, and Vision Zero.