

**Draft Scope of Work for a
Generic Environmental Impact Statement
Commercial Waste Zone Program
New York City
CEQR No. 19DOS003Y**

A. INTRODUCTION

The City of New York is proposing to establish and implement a commercial waste zone (CWZ) program across the five boroughs of the City consisting of 20 zones with 3 to 5 private carters operating per zone (the Proposed Action). This Draft Scope of Work for a Generic Environmental Impact Statement (GEIS) describes the studies planned to be conducted to help decision makers and the public understand the expected environmental impact of the Proposed Action.

Currently, New York City's commercial waste system is an open market, regulated system in which private waste carters collect refuse, recyclables, and organics from commercial businesses and compete for contracts with each business. The Business Integrity Commission (BIC) licenses and oversees the private carter industry; this oversight includes setting a citywide rate cap, a maximum price that carters can charge customers for collection and disposal services. The Department of Sanitation (DSNY) regulates the set-out and transfer of commercial waste within the City and enforces against illegal dumping.

Today's commercial waste system achieves its basic goal of collecting and handling the City's commercial waste, but the competitive market has resulted in inefficiencies, with overlapping carting routes and resulting "externalities" that must be borne by the public including extra truck traffic, an increased risk to pedestrian safety, traffic congestion, air and noise pollution, road wear, and increased use of fossil fuels and greenhouse gas (GHG) emissions, contributing to climate change. In some parts of the City, more than 50 carters service a single community district, and an individual commercial block may see dozens of private waste collection trucks on a given night. Compliance with the City's safety equipment and training requirements, and necessary equipment maintenance, are often not enforceable under the current system. Compliance with BIC's rate cap relies on self-reporting and self-policing by carters and customers, and contracts and pricing are not transparent to customers.

In August 2016, DSNY, in partnership with BIC, released a feasibility study by BuroHappold Engineering on the implementation of a CWZ program in New York City that would establish geographic zones for waste collection routes. The study concluded that a CWZ program would be beneficial in reducing inefficiencies in waste collection routes and would reduce carter truck miles traveled by roughly half. The proposed CWZ program described herein builds on this initial work.

The Proposed Action would establish a CWZ program of geographic zones, as further discussed below. A limited number of carters would be authorized to operate in each zone. Each carter would have to adhere to certain parameters intended to improve contractual transparency, worker and public safety and customer service. The CWZ program would advance the City's efforts to

increase commercial recycling, reduce carter truck traffic and associated air, noise and GHG emissions, and improve carting industry operational standards. The CWZ program would thereby help advance several key policy objectives: improving roadway safety, complementing *Vision Zero*; furthering the environmental sustainability efforts of *OneNYC*; and reducing the environmental and community impacts of the commercial waste system, a goal of the City's Solid Waste Management Plan (SWMP).

The proposed CWZ program will be reviewed for its potential environmental impacts, in accordance with the State Environmental Quality Review Act (SEQRA) and the City Environmental Quality Review (CEQR) procedures.

As lead agency for the Proposed Action, DSNY is preparing a Draft GEIS (DGEIS) to examine the potential for significant adverse environmental impacts that could occur as a result of the implementation and contract-award process of the proposed CWZ program. DSNY will release the DGEIS for public review and comment and for consideration by other involved and interested agencies.

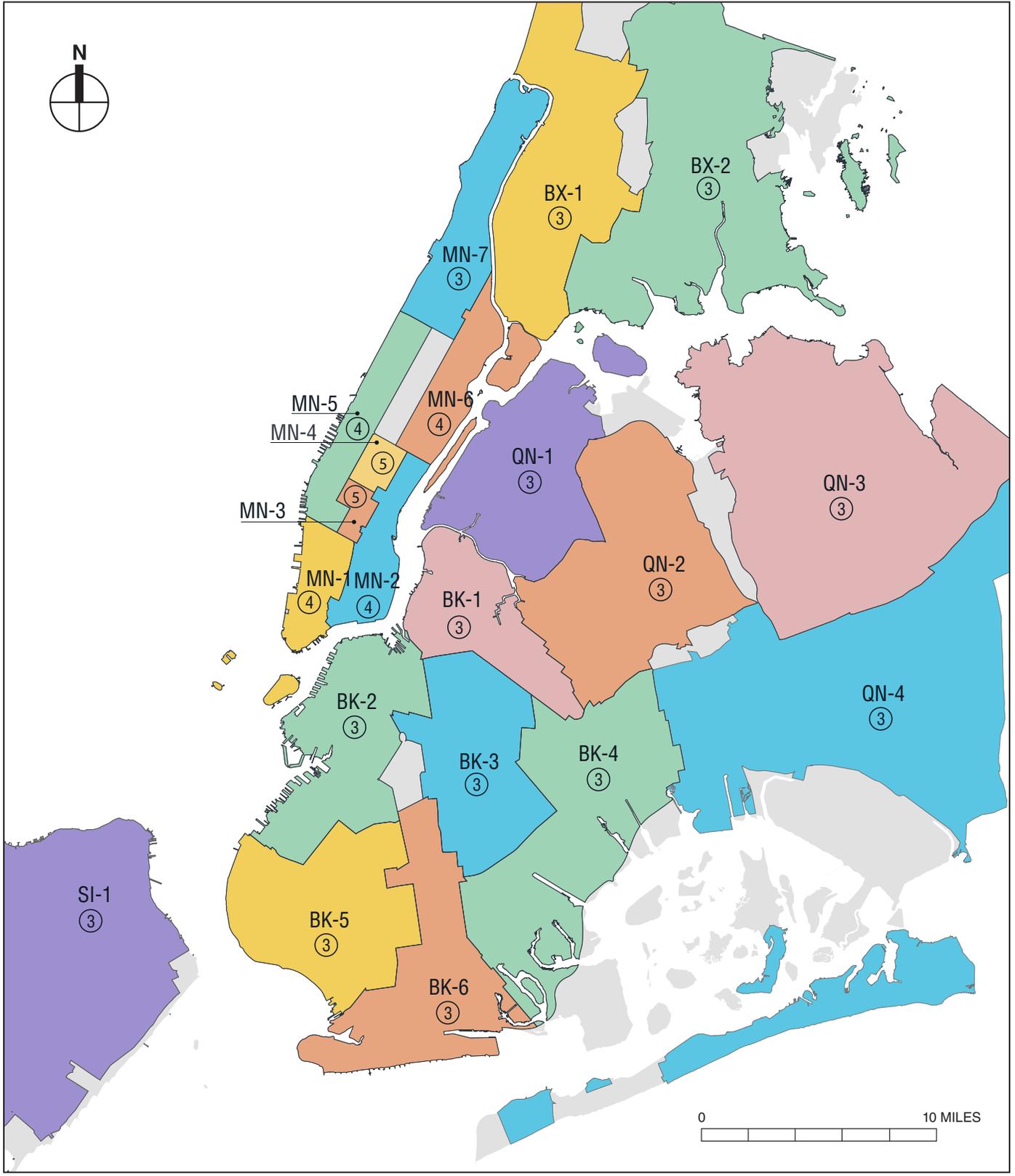
This Draft Scope of Work outlines the assessments that will be conducted during the preparation of the DGEIS. This Draft Scope of Work is being released for public review and comment prior to the issuance of a Final Scope of Work. A public forum to receive comments on the Draft Scope of Work will be held on December 11, 2018 from 5:30 to 8:30 PM at 125 Worth Street, Second Floor Auditorium, New York, NY, 10013. Written comments on the Draft Scope of Work are invited and will also be accepted until December 21, 2018.

B. DESCRIPTION OF PROPOSED ACTION

The City of New York is proposing an implementation plan and contract-award process to develop a zoned commercial waste system (the CWZ program) throughout New York City's five boroughs. Under the proposed CWZ program, private carters would competitively bid for the right to service businesses within geographic collection zones. Carters that win zone contracts would be obligated to meet certain contractual requirements aligned with the City's program goals and objectives, as further discussed below.

To determine the structure of the proposed CWZ program, a robust, year-long stakeholder engagement process was conducted by DSNY, as lead agency, and Public Works Partners, Inc., a consultant. As described in more detail below (see Section E.1, "Stakeholder Engagement"), in the past year over 100 different stakeholders in the commercial waste industry were consulted including commercial businesses that need waste carting services, labor groups, environmental justice advocates, private carters, business improvement district representatives, real estate owners, property managers, trade organizations, other City agencies, traffic safety advocates, and elected officials. From that process, the City's recommended program is a non-exclusive system of 20 geographic zones permitting at least 3 but no more than 5 carters operating within each zone, see **Figure 1**.

In a non-exclusive system, a jurisdiction grants a number of carters the right to compete to provide collection services within a designated zone. No carter could win more than 15 zones in the City. Under this plan, each carter would be able to compete for any and all zones throughout the City based on their preferences. Qualification requirements would be further defined in a Request for Proposals (RFP). While the RFP would define the maximum number of carters able to operate in a particular zone, the number of carters selected for a zone would be determined by the number and quality of the proposals received and the qualifications of the carters. Additionally, the potential to submit proposals as a consortium with other carters or organized through a broker, as



Ⓝ Number of Carters To Operate In Each Zone

Map of Proposed Commercial Waste Zones

well as certain subcontracting allowances, would provide opportunities for an array of different carters. Pricing would be negotiated between individual businesses and carters, subject to rate caps for each carter determined through the contract-award process.

Billing would be fair and transparent, with written service agreements outlining rates and any fees so that NYC businesses would only pay for the waste that they produce. Implementing a non-exclusive zoning system is expected to result in a smooth transition for New York City businesses and preserve customer choice, keeping prices competitive and the quality of service high, while substantially reducing truck traffic associated with waste collection.

The proposed CWZ program would likely be implemented in multiple steps. The competitive solicitation process would be expected to begin in 2020. The RFP would be released for all zones, and all proposals would be reviewed and awarded concurrently. Once all contract agreements are executed, customer transition would be expected to begin at the end of 2021 and could take up to two years following the execution of such agreements. Customer transitions would be expected to be complete by 2023 or early 2024. DSNY would continue to serve as the project manager for the CWZ program and in this capacity, would oversee the competitive solicitation, negotiation of each zone's contract between the City and the carter for the right to collect waste, and the overall transition to commercial waste zones. DSNY would continue to enforce regulations controlling commercial waste set out, recycling, and organics separation. DSNY would also become the primary administrator of carter zone contracts under the program and would serve as a provider of last resort if carters repeatedly fail to perform services for any reason. Additionally, DSNY would create a Division of Commercial Waste to administer this CWZ program and consolidate commercial waste outreach, enforcement, and regulatory functions in the agency under a single chain of command. This Division would oversee the solicitation and transition processes and ensure that the CWZ program achieves its stated goals and requirements.

C. PROJECT APPROVALS AND COORDINATION

Implementation of the Proposed Action would involve several local approvals, and is therefore subject to CEQR and SEQRA and their implementing regulations. The City entities that may potentially be involved in the environmental review and approval process for the Proposed Action are:

- Office of the Mayor, City of New York for authorizing legislation;
- New York City Council for authorizing legislation;
- DSNY acting as lead agency for the environmental review,¹ a potential rulemaking, and the CWZ program implementation;
- BIC for oversight and potential rulemaking.

D. PURPOSE AND NEED

DSNY is proposing the CWZ program to create a safer and more efficient collection system that provides high-quality, low-cost service while advancing the City's sustainability and recycling goals. The CWZ program would improve customer service, safety and labor standards; promote fairness and transparency; and reduce environmental impacts from commercial carting trucks upon traffic, pedestrians, air quality, and noise levels. In addition, the CWZ program would help meet the City's sustainability goals by furthering the goals of the SWMP and *OneNYC* (including

¹ Lead Agency status has been delegated by the City Council and Office of the Mayor to DSNY.

increasing recycling and reducing landfill disposal of waste). Among its hundreds of initiatives, *OneNYC* committed the City to conducting a comprehensive study of commercial waste zones.

In the current, open-market commercial waste system, private carters obtain a license from BIC to allow them to provide commercial waste collection services anywhere within the City. While there are regulations adopted by BIC and DSNY that private carting companies must follow (see Section G, “Future No Action Condition”), the current system does not have adequate enforcement mechanisms to ensure that the private carters comply with these regulations. Moreover, guidance documents, notably BIC’s Safety Manual, are not enforceable. Independent of BIC and DSNY, carters must also comply with all federal, state, and local regulations that apply to their business operations (e.g., minimum wage laws). Under the CWZ program, carters would be required to comply with current regulations so they could compete for business within the CWZ program, and DSNY would have the mechanism to enforce these regulations if carters fail to comply.

Similarly, the current system does not have appropriate reporting and enforcement mechanisms to ensure carters comply with health and safety standards (e.g., safety equipment, health and safety plans). The CWZ program would encourage carters to comply with industry health and safety standards and policies, as well as BIC’s health and safety guidance documents. Compliance with requirements for safety equipment and training and necessary equipment maintenance would be documented and tracked under the CWZ program.

Existing regulations require commercial businesses to recycle metal, glass, plastic (MGP), paper, cardboard and, in some cases, food preparation waste (organics) and thereby divert such waste from landfills; however, enforcement and tracking compliance rates is difficult. The CWZ program would encourage carters to comply with existing recycling and source-separation regulations so they could compete for business within the CWZ. As part of the solicitation process, the CWZ program would require carters to develop “zero waste” plans and identify innovative practices to support waste reduction, reuse and recycling and provide for additional oversight and reporting requirements to ensure that these practices are being followed. With more recycling and organic materials being separated, less waste would be sent to landfills, saving resources and energy, consistent with the City’s sustainability and recycling goals.

During the stakeholder outreach meetings, commercial businesses commented that there is a lack of transparency between carters and customers in the current system. The majority of contracts are oral in nature. There are no set guidelines on what a carter can charge a customer outside of a citywide rate cap and many of the payments are made in cash. Furthermore, for their part, carters pointed out that a customer can change carters with little advance notice. The CWZ program would also standardize the carting contract process by requiring written service agreements between carters and customers and making the pricing structure more transparent.

Additionally, in the current system, customers may select any carter licensed to collect commercial waste in the City. As such, carter routes are largely determined by customer need, resulting in route overlaps and inefficiency. On a single route, carters may collect waste from a few customers in several boroughs and in some parts of the City, more than 50 carters service a single community district, resulting in an individual commercial block seeing dozens of private waste collection trucks on a given night. These route inefficiencies contribute to environmental impacts such as truck traffic, air pollution, increases in GHG emissions, and increased noise levels. The CWZ program would create zones, assigning only a certain number of carters to each zone, thereby minimizing route inefficiencies and overlap, truck traffic, and overall environmental impacts from the industry.

As such, the CWZ program lays out a series of stakeholder-driven goals that the program aims to achieve. These goals include:

1. **Environmental Quality and Public Health:** Reduce truck traffic throughout the City to reduce air pollution and improve quality of life for New Yorkers.
2. **Zero Waste:** Reduce commercial waste disposal and incentivize recycling to conserve resources and reduce GHGs.
3. **Pricing:** Provide fair, transparent pricing with low prices for businesses large and small.
4. **Customer Service:** Strengthen customer service standards and establish accountability.
5. **Health and Safety:** Improve training and safety standards to make the industry safer for workers and the public.
6. **Labor and Worker Rights:** Improve industry labor standards and uphold worker rights.
7. **Infrastructure and Waste Management:** Prioritize investments in clean, modern fleets that make up a reliable, resilient and sustainable waste management system.
8. **Robust, competitive industry:** Create a system that works for carters of all sizes and prevents overreliance on any single company.

The goal of the CWZ program would be to reduce the existing overlap of commercial carting routes and enhance efficiency, worker and pedestrian safety, transparency in contracting, and customer service. It would also further the City's recycling and sustainability goals and reduce truck traffic and associated air, noise, and GHG emissions.

The CWZ program would build on the current regulatory system, with a contract-based system where carters are subject to clear requirements stated in contracts. The contracts awarded to selected carters would be long-term; provide for transparent and fair pricing and customer service mechanisms; require improved environmental performance; and ensure compliance with and enforcement of existing and new requirements. Non-compliance could result in monetary penalties or loss of the contract. Overall, the CWZ program would provide stability to the commercial waste industry by providing carters with predictable business and promoting long-term investments in recycling services and cleaner trucks.

E. BACKGROUND

Waste management is one of the lifelines of New York City. Effective waste management has kept the City functioning and clean since the reforms to the Department of Street Cleaning (now DSNY) in 1895.

The City's waste comes in two broad categories: residential waste and commercial waste. DSNY is responsible for residential and institutional waste collection, while commercial waste is collected by privately owned waste collection companies (or private carters). DSNY regulates commercial recycling requirements, privately owned transfer stations and recycling processors within the City. Each year, more than 100,000 New York City office buildings, retailers, restaurants, manufacturers, and other commercial establishments generate more than three million tons of waste (refuse, recyclables, and organics). A network of more than 90 private carters with approximately 1,100 trucks collect waste from these businesses.

Private carters entered the City's commercial waste collection system in the late 1950s. They are regulated by BIC and serve businesses ranging from small restaurants to large office buildings. Each private carter is required to register with BIC prior to being allowed to operate within the system. Private carters are required to provide BIC with information such as the number of vehicles in their fleet, tax identifiers, insurance policies, state permits, up-to-date customer

information and financial statements. BIC's commissioner also has the ability to request additional information through a Commissioner Directive. The two most recent Directives were made on February 22, 2018 and March 7, 2018. These asked carters to submit routing data for carter operations from March 4–11, 2018 and March 13–15, 2018. In addition, BIC sets operational requirements that private carters must comply with in order to retain their license to operate. These requirements include (1) operate in a safe and sanitary manner, (2) follow DSNY commercial waste source-separation and recycling requirements, (3) properly label containers and waste hauling vehicles, and (4) keep customer and employee data up to date.²

According to BIC's 2017 Q2-Q4³ customer register, the current system contains approximately 100,000 customers covered by 117,000 customer register entries served by carters across the City. Of these, large carters serve approximately 62 percent,⁴ medium carters serve 22 percent, and small carters serve the remaining 16 percent. Customers are considered unique if they are listed in the customer register under a unique name and location. In recent years, the commercial waste industry has begun to see market consolidation through acquisitions on the part of some of the larger operating carters.

DSNY enforces the separation of designated recyclables from refuse by commercial waste generators (customer). The CWZ program would focus on the collection of refuse, designated recyclables, and source-separated organic waste. The CWZ program would exclude specialized or intermittent waste streams, which would continue to be collected in the current manner under existing City and State regulatory requirements. The excluded waste streams include: construction and demolition debris; hazardous or radioactive waste; medical waste; electronic waste; textiles; yard waste (collected by landscapers); junk haulers or one-time bulk waste services; grease; and paper that is collected for the purposes of shredding or destruction.

1. STAKEHOLDER ENGAGEMENT

An extensive stakeholder engagement process was implemented throughout the development of the CWZ program and is expected to continue during implementation. Starting October 19, 2017, over 100 different stakeholders in the commercial waste industry were consulted including commercial businesses, labor groups, environmental justice advocates, private carters, business improvement district representatives, real estate owners, property managers, trade organizations, other City agencies, traffic safety advocates, and elected officials. A variety of formats were utilized including structured one-on-one interviews, small group conversations, phone calls, field interviews, and focus groups. The City used the feedback it gained from this process to determine the program goals, implementation strategies, and the necessary requirements for the eventual carter contracts within the CWZ program. Going forward, the City and project team are expected to continue to work with stakeholders during public review and implementation of the CWZ program.

² The Rules of the City of New York, Title 17: Business Integrity Commission, Chapter 1: Trade Waste, Subchapter A: General Provisions, § 1-09 General Prohibitions and Subchapter E: Conduct of Licensee [http://library.amlegal.com/nxt/gateway.dll/New%20York/rules/title17businessintegritycommission/chapter1tradewaste?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:newyork_ny\\$sanc=JD_T17C001_1-09](http://library.amlegal.com/nxt/gateway.dll/New%20York/rules/title17businessintegritycommission/chapter1tradewaste?f=templates$fn=default.htm$3.0$vid=amlegal:newyork_ny$sanc=JD_T17C001_1-09).

³ This dataset includes customer information reported by individual carters on a regular basis to BIC for the 2017 Q2-Q4 Customer Register.

⁴ As used here, small carters each capture less than 1 percent of the market share (defined by the number of customers). Medium carters each capture between 1 and 3 percent of the market share. Large carters each capture greater than 3 percent of the market share.

2. CWZ PROGRAM DESIGN SCREENING OF OPTIONS

EVALUATION CRITERIA

Potential zone configurations and CWZ program elements were formulated and analyzed through a comprehensive data analysis process, including review of routing and customer data submitted by private carters to BIC. The process to develop the CWZ program design involved consideration of various iterations of potential zone configurations based on a wide consideration of factors, including the types of zone boundaries, level of exclusivity (the number of carters per zone), the number of zones, and the size of each zone, as further described below. Final zone designs were assessed using stakeholder feedback, ease of regulatory oversight, and potential pricing impact.

Zone Boundary Consideration

Two CWZ program boundary types were considered in the shaping of potential zones: governmental boundaries and transportation infrastructure boundaries. Governmental boundaries included the City at large, boroughs, community districts, zip codes, and census tracts. Transportation infrastructure included certain existing major roadways, among other infrastructure.

Governmental boundaries such as zip codes and census tracts were rejected as CWZ program boundaries given that these would create a system with a high number of potential zones relative to the total number of carters operating in the City.

Designating one zone that covered the City as a whole was also rejected for both exclusive and non-exclusive programs as it would not achieve the goals of the CWZ program. The current private carter system is based on 90 carters competing in one zone and it is resulting in the inefficiencies discussed above. Moreover, creating one citywide zone exclusive to one carter would not be feasible as one carter cannot service the entire City.

Community districts were determined to be the most appropriate governmental boundaries, as they produced more reasonably sized zones. DSNY uses community district boundaries as its residential waste collection service areas. For zones delineated using community districts, both exclusive and non-exclusive zone designs were considered.

Borough boundaries were considered for zone boundaries in one non-exclusive “extreme case” design option that would reduce the overall change and thus result in the least impact to the waste carting industry. Borough boundaries were not considered for any exclusive design options as very few NYC carters would be able to reasonably service an entire borough alone.

Transportation boundaries were removed from the zone design selection process as basing boundaries around transportation infrastructure would create new boundaries within the City, which was determined to be undesirable from a management and community accountability perspective that could otherwise be avoided using governmental boundaries. However, access to major roads, tunnels, and bridges were used as a secondary metric to refine zone designs when choosing which community districts to cluster or to split into single zones.

Level of Exclusivity

The first rounds of the CWZ program design considered various levels of exclusivity (i.e., the number of carters that should be included in each zone), including an exclusive system, non-exclusive system, limited exclusive system, limited non-exclusive system, material stream or generator type system, and the current market share system. Each is explained below:

- **Exclusive zone**, one carter obtains the right to operate alone or exclusively in the zone.
- **Non-exclusive zone**, multiple carters are allowed to operate within each zone.
- A **limited exclusive zone** is a system that grants the exclusive right to provide a certain type of collection services, such as residential or commercial organics collection in designated zones, and the non-exclusive right to compete with each other to provide other services, such as commercial collection within the zone.
- A **limited non-exclusive system** establishes service zones and awards the right to provide service non-exclusively to a set number of carters that are then eligible to compete in a specific zone or zones.
- A **material stream or generator type** system specifies a material stream (e.g., organics such as food waste) or generator type (e.g., institutions) for which carters are allowed to provide collection service. This could apply to either an exclusive or non-exclusive system.
- Finally, a **current market share** system is a method of establishing an exclusive system in which zones are designated and awarded to carters currently operating within the jurisdiction based on their existing market share.

As the last four zone system types are variations on exclusive and non-exclusive zones and DSNY already collects waste generated by residences and institutions, zone system types were simplified in a first level of screening analysis to either exclusive or non-exclusive systems for commercial generators.

Exclusive zone options would restrict each zone to one operating carter. Non-exclusive zone options would restrict each zone to a set number of carters. Here, the number of carters per zone were set at two to five based on customer density and existing waste tonnage. Management of more than five contracts per zone would be difficult for the regulating agency. The range of two to five carters per zone would also minimize disruption to the regulated carter market by still allowing for competition within each of the zones. Minimizing market disruption is expected to encourage price stability and allow customers to continue to have a choice of carter to serve them.

Number of Zones

Based on discussions with DSNY and analysis of the City's current carters, the analysis focused on a range of 15 to 30 zones. Data on Vehicle Miles Traveled (VMT)⁵—the amount of miles traveled by carters to complete their routes—was also considered under various zone scenarios. This sensitivity analysis showed that varying the number of zones generally had minimal impact on truck traffic reduction. However, the more zones that are included in the system, the more difficult it would be to manage that number of zones, especially under a non-exclusive system with up to five contracts per zone.

If the City were carved into fewer than 15 zones, smaller carters would lack the ability to serve the resulting large zones. Consequently, having fewer than 15 zones would likely give larger carters, which have the ability to serve a larger customer base, a competitive edge resulting in a less competitive CWZ program contract award process. Therefore, a program with fewer than 15 zones was removed from further consideration. To understand the VMT reduction benefit of either a very limited or a large number of zones, this analysis also considered two additional options:

⁵ VMT is a parameter that represents the number of miles that all trucks drive to pick up and drop off waste each day, and is generally referred to as an average value. The route begins at the garage, continues to each customer for waste collection, then to the transfer station for waste disposal/removal, and ends back at the garage, for the total VMT.

one with only 5 zones—one for each borough—and one with 59 zones, mirroring the established New York City community district boundaries.

The customer entries from the 2016 Q4-2017 Q1 Customer Register dataset⁶ provided by BIC show that the number of commercial waste customers in each community district (excluding parks and airports) ranged from 653 in Bronx Community District 3 to approximately 11,300 in Manhattan Community District 5. Manhattan had the greatest density of customers.

After several revisions to the zone sizing methodologies, the analysis considered zone design options with 15, 20, 25, and 30 zones of relatively equal sizes, as well as a zone design option of 23 mixed-sized zones. Based on customer counts and data from existing routes, individual community districts had customer counts so low that several community districts needed to be combined to form comparable zones. The grouping methodology for equal-sized zones aimed to group community districts so that each zone had a roughly equal number of customers, while minimizing the disruption to the current system. The grouping methodology for equal-sized zones grouped zones primarily based on number of route connections between community districts derived from the 2014-2015 routing data.⁷ For community districts with a similar level of connectivity, customer counts from the 2016 Q4-2017 Q1 Customer Register were used to balance the zones.

Zone Design Options

The zone design selection process used a top-down, tiered approach. At the highest level, generic zone design options as described above (e.g., types of zone boundaries, level of exclusivity [the number of carters per zone] number of zones, size of each zone) were analyzed based on industry knowledge and best practices in the communities around the country. Surveys across 21 cities and counties across the United States were conducted to obtain best practices. Those surveyed included Los Angeles, Fresno, Long Beach, Oakland, Sacramento, San Diego, San Jose, and Santa Barbara County in California; Austin and Fort Worth in Texas; Hillsborough County and Palm Beach County in Florida, plus Boston, Massachusetts; Chicago, Illinois; Las Vegas, Nevada; Minneapolis, Minnesota; Philadelphia, Pennsylvania; Phoenix, Arizona; Portland, Oregon; Seattle, Washington.

Fifty-nine zones (one for each community district) and five zones (one for each borough) were considered the maximum and the minimum numbers, respectively, for the zones to be studied. This range was chosen to show the range of VMT reduction and market impact that could be achieved with the CWZ program. Community districts were then grouped into zones based on the number of customers in each zone, creating equal size (by customer count) or mixed-size zones. Finally, the level of exclusivity, or the range in the number of carters operating in each zone, was chosen. In a fully exclusive zone, only one carter is allowed to operate in the zone. For non-exclusive zone design, the analysis settled on a maximum of five carters within one zone, given the contract management challenges that higher numbers of carters would place on the City.

⁶ This dataset includes customer information reported by individual carters on a regular basis to BIC. The 2016 Q4-2017 Q1 dataset contains information from 119,000 customer entries and 94 carters that collect refuse, recyclables and organics across NYC, including names of customers, addresses, customer business types, contact information, and prices charged for the collection of nine waste streams. Five of those waste streams (refuse, food waste, paper, cardboard, and metal/glass/plastic) are included under the scope of the proposed CWZ program.

⁷ The 2014-2015 routing data covers 96,000 customers and was collected via a Commissioner Directive from BIC. It covers 3 weeks in 2014 and 1 week in 2015.

As a second step in the zone design process, eleven specific zone configurations were formed based on DSNY input, stakeholder feedback, and configurations that proved effective in other jurisdictions in the U.S. Of these 11 zone designs, 5 were exclusive systems based on governmental/community district boundaries for the City. Another 6 were non-exclusive systems based on similar boundaries. Since governmental/community district boundaries already exist, these were grouped together to form the zones. Of the 11 zones, 3 were composed of mixed-size zones to provide opportunities for small carters to bid on zones of similar size to their existing market share. The others varied between 15 to 30 zones of roughly equal size based on the number of customers per zone. Ultimately, exclusive zones were removed from further consideration given concerns about anticipated price increases as a function of reduced competition, carter solvency within a restrictive market, and the ability to meet the needs of the customer. Non-exclusive options were considered to reduce potential adverse impacts on customer service by providing a level of competition.

From the 11 zone design options, 4 finalist preferred options for the proposed CWZ program were chosen for further evaluation. All 4 finalist options were non-exclusive. These design options were (a) 15 zones with a cap of 5 carters per zone; (b) 20 zones with 2 to 5 carters per zone, based on waste tonnage; (c) 23 zones with 2 to 4 carters per zone, based on tonnage with the inclusion of a small zone in every borough; and (d) 30 zones with a cap of 2-carters per zone.

PREFERRED ZONE DESIGN OPTION

Following the zone selection process, the four finalist zone design options were provided to the stakeholders to receive and incorporate their feedback. The stakeholder groups were divided into four large groups with their respective concerns:

- **Customer Businesses:** price, quality of service, and ability to keep existing carter;
- **Carters:** ability to compete in the market, and ability of smaller carters to continue operations;
- **Environment:** truck traffic, safety, air and GHG emissions, and noise;
- **NYC Administration:** ease of management, ease of transition process, and increase in recycling.

Based on consideration of stakeholder feedback, the chosen proposed zone design consists of 20 non-exclusive zones with 3 to 5 carters allowed to operate within each zone.

This final preferred zone design was chosen due in part to a desire to maintain competition, fair pricing, and profitability for carters—and thus minimize market disruption. Customer businesses would be able to choose from a number of carters, allowing prices to be competitive and potentially maintained. Carters would be able to protect profitability through competitive pricing and maintaining their customer base.

With multiple carters allowed to operate within a zone, there would be opportunities for both larger and smaller carters to win the rights to operate within a zone. Smaller carters may benefit in proposal evaluations from a strong local presence in a given zone and knowledge of a particular neighborhood. The proposed CWZ program thus accounts for the current market structure and would give carters of all sizes the opportunity to compete in the new system.

F. THREE COMMERCIAL DENSITY TYPOLOGIES FOR ENVIRONMENTAL ANALYSIS VIA CASE STUDY

As the Proposed Action is generic, the DGEIS will study representative types of commercial clusters and corridors within New York City and will include an analysis of the Proposed Action's

likely effects on its environmental setting (Probable Impacts of the Project) in 2024, the expected year of full program implementation (Analysis Year). Three representative neighborhood case study areas were selected as typologies to provide a more detailed and contextual analysis of the potential benefits and adverse impacts of the Proposed Action in several New York City communities. These areas, and the reasons they were selected for study as typologies for the Proposed Action, are discussed below.

CENTRAL BUSINESS DISTRICT (CBD) STUDY AREA

A central business district (CBD) is the commercial and business center of a city and in larger cities is often synonymous with the City's "financial district." In New York City, these areas are primarily found in lower Manhattan, Midtown Manhattan, and Downtown Brooklyn. Users of waste removal services are typically building operators, including real estate companies often with multiple buildings within the district. Typical waste producers within CBD districts include large offices, commercial retail, and restaurants.

NEIGHBORHOOD RETAIL CORRIDOR STUDY AREA

Neighborhood retail corridors primarily serve as the retail and commercial hubs of medium-density residential neighborhoods outside of the City's Business Districts, such as Long Island City and Roosevelt Avenue in Queens; Fordham Road, the Hub in the Bronx; the Flatbush Nostrand Junction, Atlantic and 5th Avenues in Brooklyn; and Dyckman Street in Manhattan. Businesses within these corridors tend to be smaller in footprint and produce less waste per footprint area than larger buildings found in the City's business districts. Commercial waste customers within these neighborhood retail corridors include medium-sized office buildings, small commercial retailers, neighborhood supermarkets, delis, and restaurants.

LOWER (RETAIL) DENSITY STUDY AREA

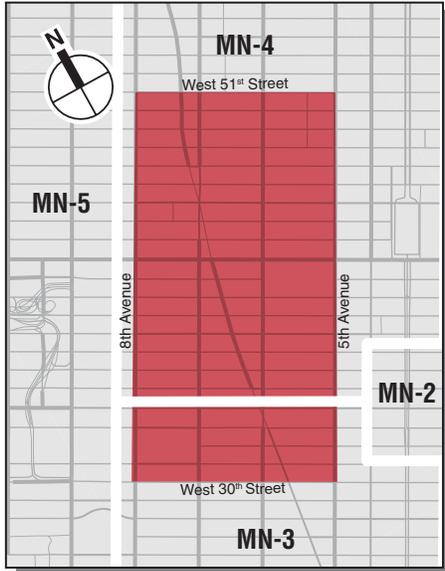
Lower commercial density areas are characterized by commercial uses scattered throughout the district, as opposed to being concentrated in defined clusters or corridors. These low density districts are found in the more automobile-oriented neighborhoods of the outer boroughs including Howard Beach and College Point in Queens, Canarsie in Brooklyn, and neighborhoods throughout Staten Island. Businesses in these areas vary and include a wide variety of different retailers including chain convenience stores, gas stations, bodegas, fast-casual and take-out restaurants, other automotive businesses, big box retail, and pharmacies such as Rite Aid and Duane Reade.

SELECTED CASE STUDY AREAS

The following three case study areas will be discussed in the DGEIS: the Midtown Manhattan CBD; a neighborhood retail corridor in the Flatbush Nostrand Junction within Brooklyn; and a lower-density study area in College Point, Queens (see **Figure 2**).

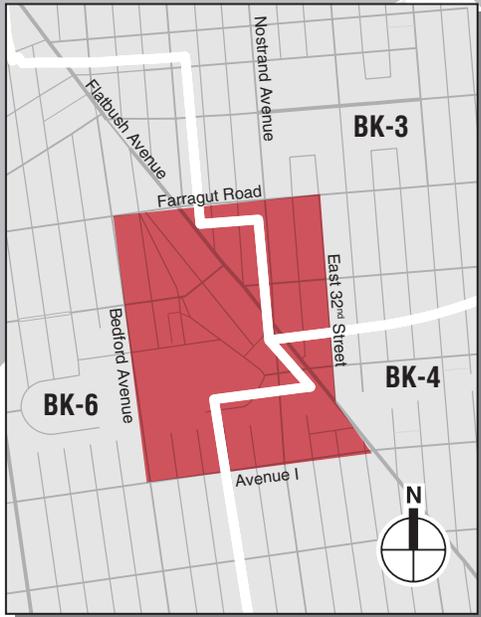
MIDTOWN MANHATTAN CBD

The Midtown Manhattan CBD was selected since it is representative of a high-density CBD. Midtown Manhattan has a high diversity of commercial waste producers, ranging from small-scale retail and restaurants to large offices. The area also includes large destination retail, as well as major entertainment destinations. The study area's density and diversity of waste generators make it suited to understand the effects of the Proposed Action on the City's other large commercial

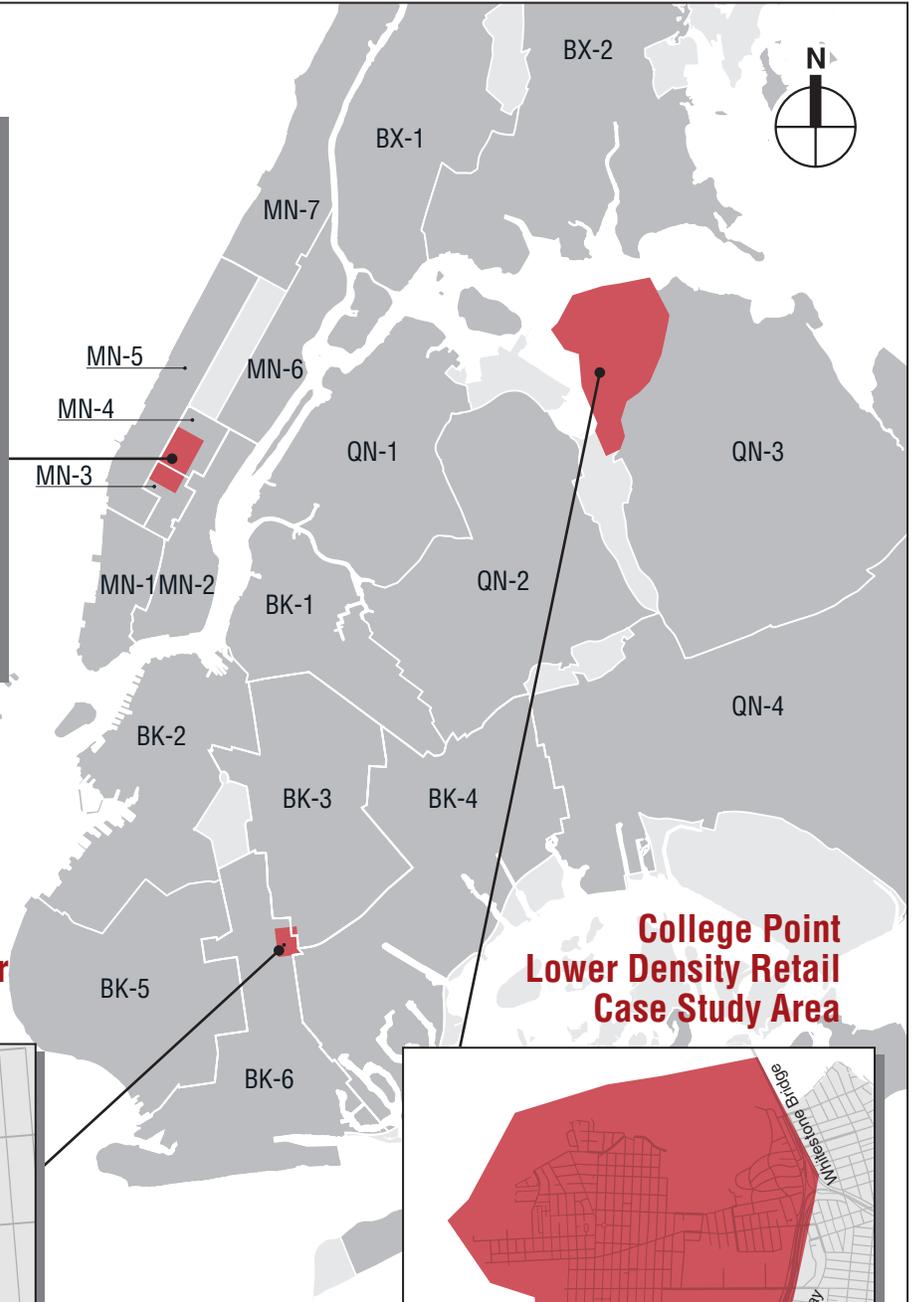
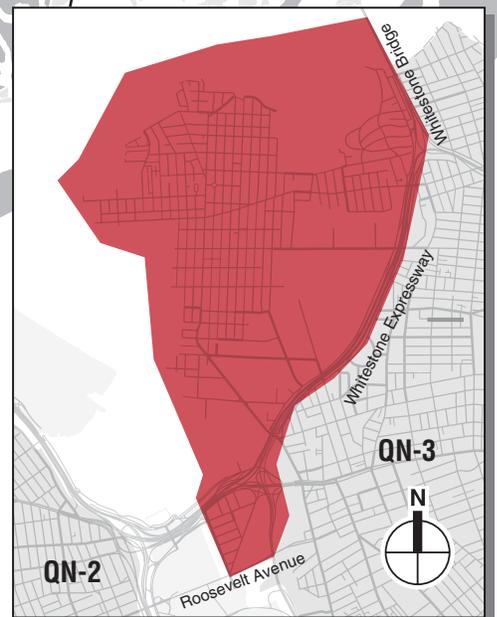


**Midtown Manhattan
CBD Case Study Area**

**Flatbush Nostrand Junction
Neighborhood Retail Corridor
Case Study Area**



**College Point
Lower Density Retail
Case Study Area**



districts. The Midtown Manhattan CBD study area represents an area approximately 0.56 square miles in size (see **Figure 3**).

Based on preliminary data, the midtown Manhattan CBD study area is characterized by approximately 4,800 unique,⁸ commercial waste customers served by 38 different carters. Half of the businesses in this area (approximately 50 percent) are classified as office, followed by non-food retail⁹ (approximately 24 percent), and industrial businesses (approximately 19 percent). Combined, the businesses in this area generate an average of 43,000 tons of waste per month at an average cost of \$14.22 per cubic yard or \$9.03 per 100 pounds of waste. The majority of the waste collected within the Midtown Manhattan CBD consists of food and refuse, with food approximately 27 percent and refuse approximately 25 percent. There are no transfer stations or garages within this study area.

THE FLATBUSH NOSTRAND JUNCTION NEIGHBORHOOD RETAIL CORRIDOR

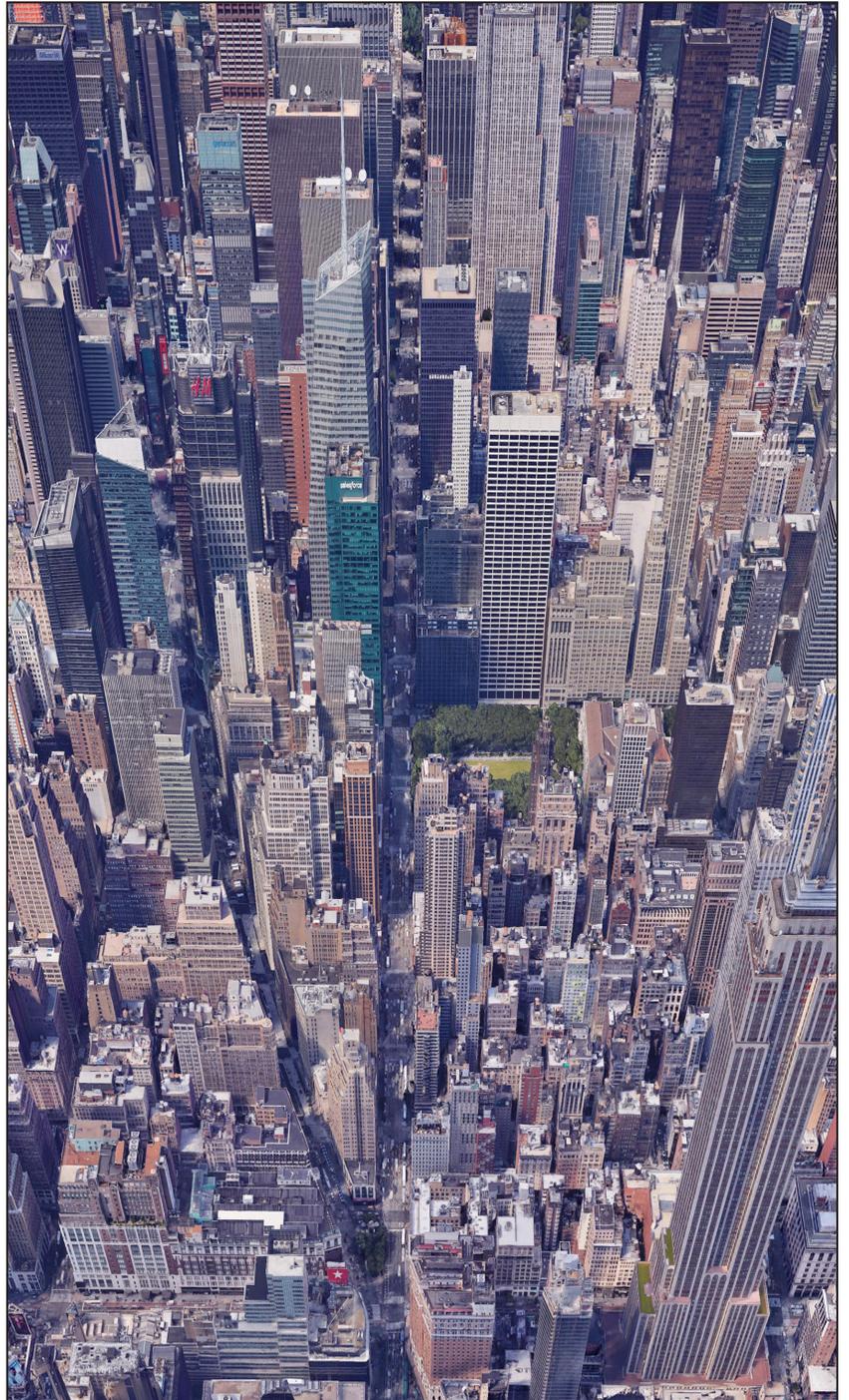
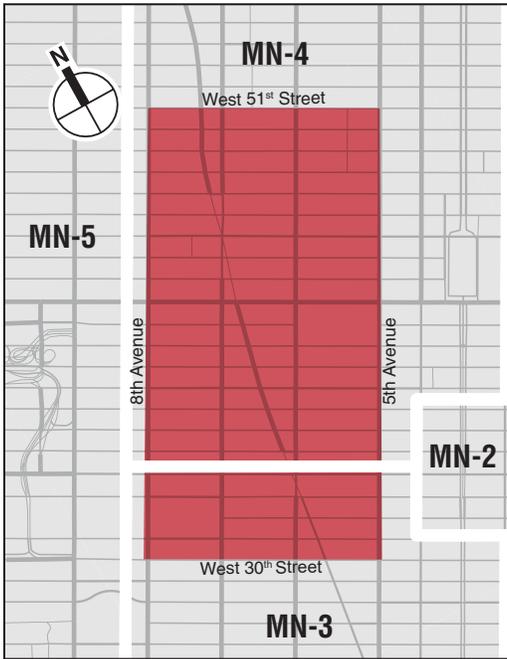
The Flatbush Nostrand Junction was selected as a case study area as it is representative of a mixed-use neighborhood corridor and commercial cluster. The Flatbush Nostrand Junction serves as a major retail and transportation center in central Brooklyn. It primarily serves the Flatbush and Midwood neighborhoods of Brooklyn, as well as the Brooklyn College campus to the west of the area. The IRT Nostrand Avenue Subway Line (No. 2 and 5 trains) terminate at the Flatbush Nostrand Junction and the area is well served by buses, including the B44 Select Bus Service, which runs along Nostrand Avenue. Commercial retail within the district includes small businesses, and in recent years, larger corporate stores, including those within the new Flatbush Nostrand Junction mall development. In addition, the Flatbush Nostrand Junction includes various small offices and other commercial spaces, adding to the mix of businesses found within the area. This high intensity commercial cluster with waste generators of various sizes makes the Flatbush Nostrand Junction well suited as a case study to understand the effects of the Proposed Action more generically on neighborhood retail corridors and clusters throughout the City. The Flatbush Nostrand Junction case study area represents an area approximately 0.18 square miles in size (see **Figure 4**).

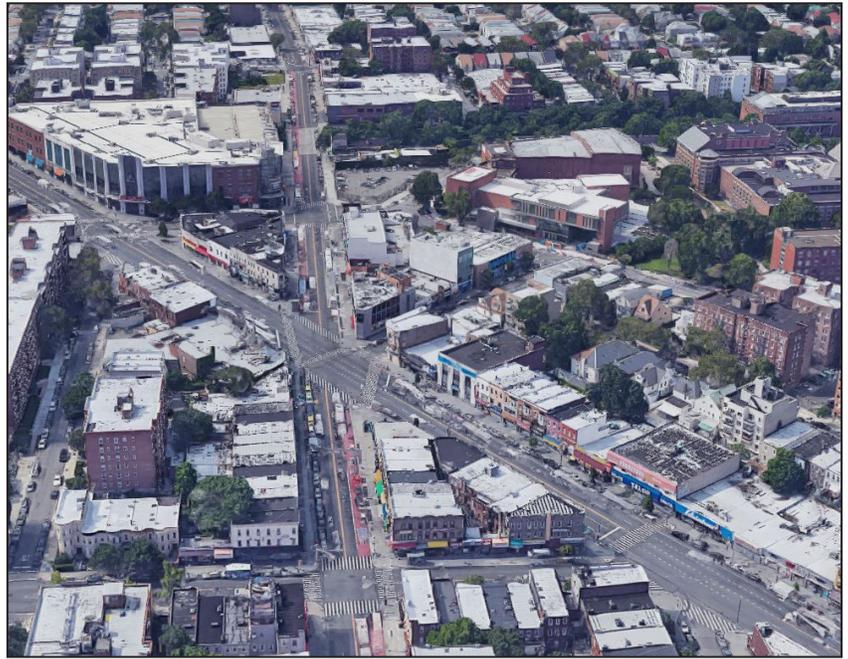
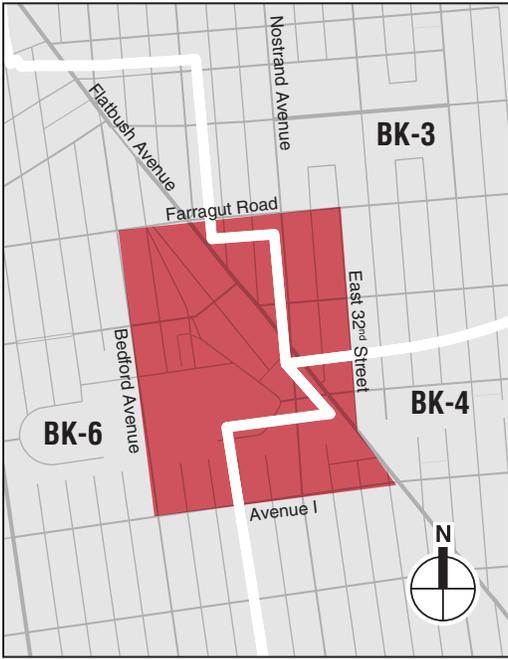
Based on preliminary data, the Flatbush Nostrand Junction study area is characterized by approximately 165 unique customers, served by 17 different carters. Nearly half of businesses in this area (approximately 48 percent) are classified as office, followed by non-food retail (approximately 26 percent), and food services¹⁰ (approximately 14 percent). Combined, the businesses within the Flatbush Nostrand Junction generate an average of 400 tons of commercial waste per month at an average cost of \$14.43 per cubic yard or \$11.10 per 100 pounds of waste. Nearly half of the waste collected within the Flatbush Nostrand Junction consists of refuse (approximately 48 percent). There are no transfer stations or carter garages within this area.

⁸ Unique customers could represent individual business entities or landlords covering multiple commercial business entities.

⁹ Non-food retail includes motor vehicle and parts dealers; furniture and home furnishings stores; electronics and appliance stores; building material and garden equipment and supplies dealers; health and personal care stores; gasoline stations; clothing and clothing accessories stores; sporting goods; hobby, musical instrument, and book stores; general merchandise stores; miscellaneous store retailers; and non-store retailers.

¹⁰ Food services include restaurants and bars.





Flatbush Nostrand Junction
Neighborhood Retail Corridor
Case Study Area
Figure 4

COLLEGE POINT, QUEENS LOWER DENSITY AREA

The College Point neighborhood in Queens was selected as a case study as it is representative of a lower density district. College Point's businesses are not centralized within a defined cluster or corridor but are distributed throughout the neighborhood. College Point is primarily a low-density residential neighborhood with limited access to public transit. This character makes the district more automobile-oriented than neighborhoods located closer to the Manhattan CBD. Commercial waste generators within the College Point neighborhood include small businesses such as restaurants, and local retail; however, the district also includes larger commercial waste producers including the Pepsi-Cola Bottling Plant, New York Times Printing Facility, and a large commercial retail center. The low-density, automobile-oriented character of College Point makes it suited to understanding the effects of the Proposed Action on lower density areas of New York City. The College Point study area represents an area approximately 3.4 miles in size (see **Figure 5**).

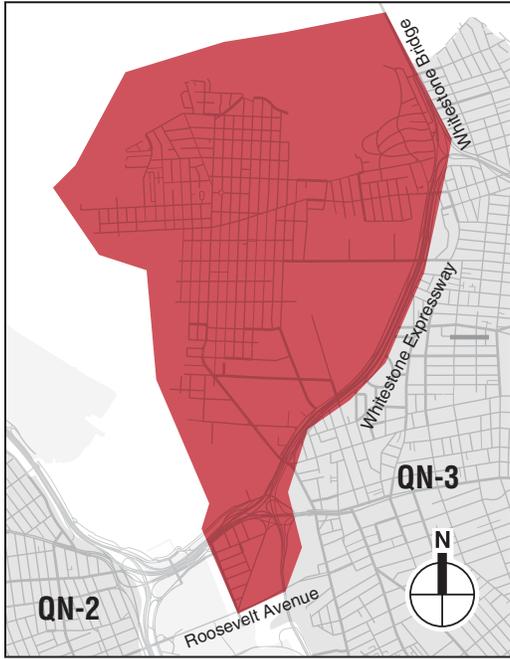
This College Point case study area is characterized by approximately 541 unique customers, served by 23 different carters. A plurality of businesses in this area (approximately 39 percent) are classified as office, followed by industrial (approximately 30 percent) and non-food retail (approximately 18 percent). Combined, this study area generates an average of 2,172 tons of waste per month at an average cost of \$9.40 per cubic yard or \$8.43 per 100 pounds of waste. The majority of the waste collected within the College Point study area consists of refuse and cardboard, with refuse approximately 49 percent and cardboard approximately 21 percent. The case study area includes the Tully Transfer Station located to the south of Flushing Creek on Willets Point and two garages.

G. FUTURE NO ACTION CONDITION

The No Action Condition predicts conditions that would exist in the Analysis Year of 2024 without undertaking the Proposed Action, and thus provides the baseline against which the Proposed Action's impacts may be assessed. The No Action condition in the DGEIS will discuss the current commercial waste industry, including its shortcomings, and any regulatory changes to the industry already expected by the Analysis Year of 2024. This section will also discuss the current commercial waste regulations. A detailed list of these regulations and guidance documents is included in **Appendix A**, and is summarized below.

The current commercial waste industry is regulated largely by Titles 16 and 16A of the New York City Administrative Code, and Titles 16 and 17 of the Rules of the City of New York. The current system and its rules and regulations constitute the No Action condition, on which the CWZ program would seek to build.

Overall, the New York City Administrative Code Titles 16 and 16A establish waste collection and recycling requirements for commercial business owners and grant DSNY certain authority in connection with the commercial waste industry. The Code requires commercial business establishments to have waste removed by a licensed carter, with specified exceptions. In addition, the Administrative Code defines waste set-out requirements for commercial businesses and authorizes DSNY to adopt and enforce recycling rules. Title 16 of the Rules of the City of New York provides requirements specific for the commercial waste carters. The rules broadly (a) allow commercial establishments generating less than a defined amount of waste per week to share a disposal location with another commercial establishment; (b) define designated recyclable materials for commercial waste; (c) set forth source-separation, set-out, and collection requirements and responsibilities; (d) allow the Commissioner of DSNY to conduct inspections;



and (e) define commercial waste hauling vehicle requirements and specifications. Title 17 establishes BIC as the body that provides oversight for the commercial waste industry. It also defines rate caps for waste collection, outlines licensing requirements for carters and brokers, sets license application requirements, provides terms for license application rejection, and specifies certain procedures for investigations, license revocation, license suspension, penalties, liabilities, enforcement, hearings, and other steps related to addressing improper carter and broker conduct.

In addition, commercial carters are required to comply with a number of Local Laws that will take effect over the next six years. Local Law (LL) 145 of 2013 (LL145/2013) requires heavy-duty diesel waste hauling truck engines older than Model Year 2007 to be upgraded to reduce their exhaust emissions either by installing a newer engine from 2007, or later, or to retrofit the engine with pre-approved Best Available Retrofit Technology (BART) emission controls, such as diesel particulate traps, by January 1, 2020. It provides an option for carters to apply for a waiver based on financial burden, which would potentially extend the time allowed to modify the fleet until 2025. In the absence of a waiver, commercial waste carters must be in compliance by the year 2020. The requirements of LL145/2013 take effect before the customer transition for the proposed CWZ program. Therefore, all carters operating under the CWZ program are expected and assumed in the DGEIS to demonstrate full compliance with LL145/2013.

Local Law 56, which was enacted on June 6, 2015 (LL56/2015), requires that all trade waste hauling vehicles be equipped with side guards by January 1, 2024.

Since the CWZ analysis year is 2024, compliance with LL145/2013 and LL56/2015 are considered part of the No Action Condition.

The SWMP, adopted in July 2006 and approved by New York State in October 2006, is a five-borough plan that addresses New York City's waste management needs. The City is required to adopt a SWMP for at least a 10-year period under New York State Environmental Conservation Law. The current plan is in effect through 2025, at which point a new plan will be evaluated and developed. The SWMP provides for the shift from a long-haul trucking-oriented system for DSNY-managed waste, by which such waste is transported to landfills and waste-to-energy plants outside the City by trucks, to a system of transporting such waste from marine and rail transfer stations located throughout the five boroughs. Full implementation of the SWMP is anticipated to reduce the City's annual GHG emissions by 34,000 tons and annual local and long-haul waste truck travel by 60 million miles. Overall, the SWMP has two major goals: (1) the gradual elimination of long-haul truck transport of DSNY-managed municipal solid waste and (2) the improvement of neighborhood equity with respect to waste management by reducing the intensity of waste transfer activity in certain affected neighborhoods and reducing related truck traffic. These goals are being achieved through the reconstruction of four marine transfer stations, contracts for rail export from four other facilities, the construction of a central, barge-based recycling handling and recovery facility, and the reduction of solid waste processed in certain overburdened districts of Brooklyn, Bronx and Queens. In particular, the SWMP seeks to improve environmental and public health effects of waste collection through the reduction in truck transport. Full implementation of the SWMP will reduce annual City-collection truck travel by nearly 3 million miles and private long-haul truck travel on City streets by 2.8 million miles and reduce noise, traffic congestion, and air pollution.

Implementation of the SWMP is considered part of the No Action condition. Implementation of the proposed CWZ program would align with the SWMP goals of reduction in waste-related truck traffic in the City.

H. ENVIRONMENTAL REVIEW PROCESS

The purpose of the DGEIS is to provide a discussion of the potential significant adverse environmental impacts associated with implementation of the Proposed Action and to the maximum extent practicable, avoid or mitigate such impacts, consistent with social, economic, and other essential considerations. The 2014 *CEQR Technical Manual* will be used to evaluate the potential impacts of the Proposed Action.

Each impact analysis will include an inventory of existing conditions establishing a baseline against which future conditions can be projected (Future No Action Condition).

Finally, each impact analysis will include an examination of the Proposed Action's likely effects on its environmental setting (Probable Impacts of the Project) in the expected year of full program implementation (Analysis year). The Proposed Action's Analysis year is 2024.

The DGEIS will contain the following:

- A description of the Proposed Action and the environmental setting;
- A description of the methodologies utilized for each technical area;
- A statement of the potential significant adverse environmental impacts of the Proposed Action;
- An identification of any potential significant adverse impact that cannot be avoided if the Proposed Action is implemented;
- An identification of irreversible and irretrievable commitments of resources that would be involved if the Proposed Action is implemented; and
- A description of measures proposed to minimize or fully mitigate any potential significant adverse environmental impacts.

The first step in preparing the DGEIS document will be the public scoping process. Scoping, or creating the scope of work for the DGEIS, is the process of focusing the environmental impact analysis on the key issues relevant to the Proposed Action. The scoping process includes the development a Draft Scope of Work (this document), which will be available for public review and comment, as well as conducting public meetings to obtain feedback from interested parties prior to finalizing the DGEIS Scope of Work. The DGEIS will be based on the Final Scope of Work and will also be subject to public review, including a public hearing and a period for public comment. After the public comment period on the DGEIS closes, a Final GEIS (FGEIS) will be prepared, including a summary of the comments and responses on the DGEIS and any revisions to the DGEIS. DSNY, as lead agency, will then prepare a Statement of Findings that describes the environmental impacts of the Proposed Action and any required mitigation.

The proposed Scope of Work for each of the technical areas to be analyzed in the DGEIS is described below. Where applicable, a comparative analysis of feasible alternatives will be performed and presented in an Alternatives chapter of the DGEIS. The methodologies utilized for each analysis will be presented in each respective chapter in the DGEIS.

I. ANALYTICAL APPROACH

Detailed analyses will be provided as appropriate for land use, zoning, and public policy; socioeconomic conditions; solid waste and sanitation services; transportation; air quality; greenhouse gases; noise; neighborhood character; and public health. Based on the anticipated limited impact of the Proposed Action, the following CEQR technical areas are expected to be

screened out of any need for detailed discussion: community facilities; open space; shadows; historic and cultural resources; urban design and visual resources; natural resources; hazardous materials; water and sewer infrastructure; energy; and construction.

LAND USE, ZONING AND PUBLIC POLICY

Following the guidelines of the *CEQR Technical Manual*, a land use analysis characterizes the uses and development trends in the area that may be affected by a proposed project and determines whether a proposed project is either compatible with those conditions or whether it may affect them. Similarly, the analysis considers the project's compliance with, and effect on, the area's zoning and other applicable public policies.

Since the Proposed Action is generic, limited to regulatory changes regarding the collection of commercial solid waste throughout the City, and is not expected to change land use or result in any new or different development, a detailed analysis of land use is not warranted. Similarly, the Proposed Action would not modify or otherwise affect any zoning regulations, therefore, a detailed analysis of zoning is not warranted.

The assessment will address whether this proposal is consistent with any officially adopted public policies and initiatives, including the SWMP and applicable items in *OneNYC*. Drawbacks of the current commercial waste system and future benefits with implementation of the Proposed Action will also be discussed in this section.

SOCIOECONOMIC CONDITIONS

The socioeconomic character of an area includes its population, housing, and economic activity. Socioeconomic changes may occur when a project directly or indirectly changes any of these elements. Following the guidelines of the *CEQR Technical Manual*, the five principal issues of concern with respect to socioeconomic conditions are whether a project would result in significant adverse impacts due to (1) direct residential displacement; (2) direct business displacement; (3) indirect residential displacement; (4) indirect business displacement due to increased rents or retail market saturation; and (5) adverse effects on a specific industry. The following describes whether and how each of these issues will be addressed in the DGEIS.

DIRECT DISPLACEMENT

The Proposed Action will not result in the direct displacement of any residents or businesses. Therefore, this is not an issue of concern for the Proposed Action.

INDIRECT DISPLACEMENT

The Proposed Action will not result in changes to residential or commercial market conditions that could lead to increased residential rents and the potential displacement of any vulnerable populations or increased commercial rents or retail competition. Therefore, this is not an issue of concern for the Proposed Action.

ADVERSE EFFECTS ON SPECIFIC INDUSTRIES

As described in the *CEQR Technical Manual*, a project may not displace, but may affect, the operation of a major industry or commercial operation in the City. In these cases, the lead agency assesses the economic impacts of the project on the industry in question. Usually, economic changes alone need not be assessed under CEQR; however, in cases such as those facilitated by

the Proposed Action, their inclusion in a CEQR review is appropriate because a major industry—commercial waste carters—would be affected. These economic changes can, in turn, have socioeconomic consequences.

As noted in the *CEQR Technical Manual*, “A citywide regulatory change that would adversely affect the economic and operational conditions of certain types of businesses or processes may affect socioeconomic conditions in a neighborhood if (1) a substantial number of residents or workers depend on the goods or services provided by the affected businesses; or (2) it would result in the loss or substantial diminishment of a particularly important product or service within the City.”

Based on the above, the socioeconomic conditions chapter will focus on potential adverse effects to the City’s commercial waste hauling industry. The socioeconomic analysis will also apply the case study approach to model potential economic impacts from the proposed CWZ program and resulting carting fees to a range of typical New York City businesses representing three different commercial densities as customers of the commercial waste hauling industry.

A preliminary assessment of potential effects on these businesses, both the carting industry and its customers, will examine the following:

- Whether the Proposed Action would significantly affect business conditions in any industry or category of businesses; and
- Whether the Proposed Action would indirectly substantially reduce employment or impair the economic viability in a specific industry or category of businesses.

The industries or categories of businesses that will be considered in this assessment are those specified in the North American Industry Classification System (NAICS) as promulgated by the U.S. Census Bureau.

Existing Conditions

The analysis will describe existing conditions within the commercial waste hauling industry and discuss industry-specific attributes, such as operational and financial characteristics of carting businesses; market trends, including consolidation and growth patterns within the industry; and existing regulations governing business activities.

In addition, using the three different commercial density case typologies the analysis will discuss the major business sectors served by the commercial waste hauling industry and potentially affected by the Proposed Action. In particular, it will assess waste volumes currently produced by major business sectors and prices charged by waste haulers. Data reported to BIC by private waste management companies, along with DSNY data and other sources, will be utilized to describe the current state of the commercial waste hauling industry and its customers. This will include understanding existing rent and other operational expenses for commercial waste customers and calculating the proportional revenues expended on commercial waste carting services. The modeling of industry sector waste generation and pricing will focus on the three identified case study areas to provide a perspective of how the Proposed Action would affect businesses in New York City neighborhoods with different business density characteristics. Based on the assumptions that that business density and composition will affect the operational economics of carters and customer pricing, the analysis will develop a baseline for each study area against which potential effects of the Proposed Action will be measured.

Future Conditions without the Proposed Action

This section will discuss any changes to future operations of carters and customers expected to occur in the absence of the Proposed Action by the Analysis Year of 2024. For example, it will take account of mandatory separate commercial organics waste collection under local law, and the commercial carter truck emission reduction measures under LL145/2013. The section will also assess how market trends are expected to affect the industry and its customers.

Potential Impacts of the Proposed Action

This section will assess whether the Proposed Action could create conditions, for example, through zone design and/or pricing changes that would substantially impair the ability of the commercial waste hauling industry, a sub-sector of that industry, or a category of commercial waste generators served by carters to continue operating within the City. Using the case study approach, the DGEIS will analyze the potential incremental effect that the Proposed Action would have on the case study areas. To identify potential impacts, the assessment will focus on potential changes in costs and revenues to carters and customers and compare these changes to the baseline developed in the existing conditions analysis.

SOLID WASTE AND SANITATION SERVICES

A solid waste assessment determines whether a 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 City's SWMP or with state policy related to the City's integrated solid waste management system. According to the *CEQR Technical Manual*, a solid waste assessment is appropriate if a project involves a regulatory change to public or private waste collection, processing, recycling, or disposal. While the Proposed Action will not result in an increase in solid waste production, a solid waste assessment of the Proposed Action's potential effects on the solid waste management system is warranted and will be provided in the DGEIS.

To provide an existing baseline of the commercial waste generated quantity as well as the commercial waste collection capacity for each of the neighborhood case study areas defined above, the current conditions of the commercial waste system will be characterized, including the number of customers, the total tonnage of waste generated, the number of carters, and the waste streams.

To determine potential changes to the commercial waste system under the Proposed Action, each neighborhood case study area will be evaluated for any anticipated changes to the respective quantities of refuse and recyclables set out for collection and waste collection capacity. The DGEIS will identify proposed changes in total number of carters and in waste collection capacity serving the area.

This assessment will also address the Proposed Action's consistency with the SWMP and will evaluate the potential for the Proposed Action to affect the SWMP's goals and policies.

TRANSPORTATION

The *CEQR Technical Manual* states that quantified transportation analyses may be warranted if a proposed action results in 50 or more vehicle trips (passenger car equivalents or PCEs), 200 or more transit trips, or 200 or more pedestrian trips during a given peak hour.

The framework assumptions and transportation scope of work is outlined below.

SCREENING ASSESSMENT

The Proposed Action is not anticipated to generate an increase in pedestrian or transit trips, therefore, the focus of the screening assessment will be to determine if an intersection will experience an increase in 50 or more PCEs in a peak hour.

Within each of the neighborhood case study areas, based on the total number of customers, the total tonnage of waste generated, and the number of anticipated carters, the anticipated number of vehicle trips generated by the Proposed Action will be calculated and compared with the specified *CEQR Technical Manual* thresholds (Level 1 screening analysis) to determine whether additional screening and/or quantified analyses are warranted. If the Proposed Action would result in 50 or more peak hour PCEs, a Level 2 screening analysis, where project-generated trips are assigned to specific intersections and compared with the *CEQR Technical Manual* thresholds, and/or a quantified traffic analysis may be warranted. As per the *CEQR Technical Manual* a commercial waste carting truck is equivalent to 1.5 PCEs.

The Proposed Action is anticipated to reduce the amount of truck trips within the City on a regional scale. Accordingly, a qualitative regional traffic assessment will discuss the magnitude of reduction in the VMTs by carters from the Proposed Action, the total number of trucks operating, and the total number of truck trips.

AIR QUALITY

Under the *CEQR Technical Manual*, an air quality analysis is performed to determine whether a proposed action may result in stationary or mobile sources of pollutant emissions that could have a significant adverse impact on regional or local ambient air quality.

Since the Proposed Action will not result in the development of new transfer facilities or expansions of existing facilities, the air quality analysis will focus on emissions from mobile sources. The Proposed Action, once implemented, is expected to result in a reduction to local and regional emissions from mobile sources, namely waste collection vehicles.

Under the *CEQR Technical Manual*, an action that results in reductions in traffic alone would not warrant analysis of air quality impacts from the action. Nevertheless, as reductions in carter truck air emissions are a goal of the Proposed Action, this chapter of the DGEIS will present an analysis of the reductions to be expected. The primary pollutants of concern from mobile sources for regional air quality that would decrease are carbon monoxide (CO), oxides of nitrogen (NO_x), volatile organic compounds (VOC), and particulate matter (PM₁₀ and PM_{2.5}); for local air quality: CO, PM₁₀, and PM_{2.5}.

The analysis will include the following tasks:

EXISTING AIR QUALITY

Existing ambient air quality data from representative New York State Department of Environmental Conservation (NYSDEC) monitoring stations will be summarized for the New York City region.

MESOSCALE (REGIONAL) AIR QUALITY ANALYSIS

A qualitative analysis of mesoscale emissions will be performed to examine the regional impacts of the Proposed Action on air quality. The mesoscale analysis will be performed to estimate cumulative emissions reductions attributable to reduction in VMTs from commercial carting trucks.

The Proposed Action is anticipated to reduce the amount of truck trips traveling within the City on a regional scale. With a reduction in overall truck trips, it is anticipated that a reduction in regional emissions will be achieved. The potential reduction in emissions will be estimated based on changes in the waste generated tonnage amounts, the total number of trucks operating, and the total number of truck trips between the baseline No Action condition and the Proposed Action condition.

MICROSCALE (LOCAL)—VEHICULAR TRAFFIC AIR QUALITY ANALYSIS

The vehicle trips generated by the Proposed Action will likely be below the *CEQR Technical Manual* CO screening threshold of an increase of 170 vehicles in a peak hour at any intersection and the PM emission screening threshold discussed in Chapter 17, Sections 210 and 311 of the *CEQR Technical Manual*. If screening thresholds are exceeded, a detailed mobile source analysis will be prepared. The mobile source air quality screening analysis will be performed using US Environmental Protection Agency (EPA) models and considering all requirements of Section 210 of the *CEQR Technical Manual*.

MICROSCALE (LOCAL)—STATIONARY SOURCE AIR QUALITY ANALYSIS

The Proposed Action will not result in the development of new transfer facilities or expansions of existing facilities; therefore, there are no stationary sources included and an analysis is not warranted.

GREENHOUSE GAS (GHG) EMISSIONS AND CLIMATE CHANGE

In accordance with the *CEQR Technical Manual*, a GHG emissions analysis discloses the GHG emissions that could result from a large-scale project, and assesses the consistency of the project with the City's goals to reduce GHG emissions. The Proposed Action is generic and no construction is proposed. Therefore, this chapter of the DGEIS will assess the consistency of the Proposed Action with the City's GHG reduction goals under *OneNYC*.

NOISE

The *CEQR Technical Manual* requires that the noise study address the effects of increased noise due to the introduction or re-routing of transportation sources such as vehicular traffic, aircraft, or trains (particularly at sensitive land uses such as residences or open space).

The Proposed Action is expected to reduce commercial carter truck traffic and therefore reduce mobile-source noise. Under the *CEQR Technical Manual* an expected reduction in mobile-source noise emissions from a Proposed Action would generally not warrant an impact analysis. Nevertheless, as reductions in carter trucks travel and related noise emissions are a goal of the Proposed Action, the noise chapter will present a discussion of noise reduction to be expected from the Proposed Action.

The noise analysis for the Proposed Action will include quantified analyses of noise generated by any increment in vehicular traffic associated with the Proposed Action, as well as a qualitative analysis of noise generated by refuse collection operations. Each would have a separate methodology and is described below.

VEHICULAR TRAFFIC NOISE ANALYSIS

For each of the neighborhood case study areas, a screening analysis will be performed to determine whether the Proposed Action would have the potential to result in a doubling of Noise Passenger

Car Equivalents (Noise PCEs), which would be sufficiently large to result in a 3 A-weighted decibels (dBA) increase in noise levels at existing roadways.

If the screening analysis identifies locations that would have the potential to experience a doubling of Noise PCEs, a detailed mobile source noise analysis will be performed.

REFUSE COLLECTION OPERATIONS NOISE

Noise associated with changes in the frequency, duration, or timing of refuse collection resulting from the Proposed Action will be considered qualitatively. The neighborhood case study areas will be evaluated to determine if there are changes in refuse collection frequency or duration or where collection pickup times may shift from nighttime peak to daytime hours. The potential for noise impacts from such operations will be considered and qualitatively discussed.

NEIGHBORHOOD CHARACTER

Neighborhood character is determined by a number of factors, including land use, socioeconomic conditions, open space, historic and cultural resources, urban design, visual resources, shadows, transportation, and noise. According to the guidelines of the *CEQR Technical Manual*, an assessment of neighborhood character is generally needed when a proposed project has the potential to result in significant adverse impacts in one of the technical areas presented above, or when a project may have moderate effects on several of the elements that define a neighborhood's character.

The Proposed Action is generic and does not involve construction or changes in land use. Limiting the number of commercial carters that may service a zone would reduce traffic and related air and noise and not implicate other components of neighborhood character. However, if warranted based on an evaluation of the Proposed Action's potential effects in these areas, an assessment of neighborhood character would be prepared following the methodologies outlined in the *CEQR Technical Manual*. If warranted, the assessment will focus on those neighborhoods or portions of neighborhoods which would experience changes that would have the potential to affect that area's character, such as increases in traffic on local streets.

PUBLIC HEALTH

As per the *CEQR Technical Manual*, where no significant unmitigated adverse impact is found in other CEQR analysis areas, such as air quality, hazardous materials, or noise, no public health analysis is warranted. If unmitigated significant adverse impacts are identified in any one of these technical areas and DSNY determines that a public health assessment is warranted, an analysis will be provided for that specific technical area.

MITIGATION

If any significant impacts associated with the Proposed Action are identified in the analyses discussed above, measures will be identified and assessed to mitigate those impacts. If any impacts cannot be mitigated, they will be described as unavoidable.

ALTERNATIVES

The purpose of an alternatives analysis is to examine reasonable and feasible options that avoid or reduce Proposed Action-related significant adverse impacts while still achieving the stated goals and objectives of the Proposed Action.

A No Action Alternative (i.e., examining the impacts of not undertaking the action being reviewed) will be included in the DGEIS.

DGEIS SUMMARY CHAPTERS

In accordance with *CEQR Technical Manual* guidelines, the DGEIS will include the following summary chapters, where appropriate, to the Proposed Action:

- Executive Summary—will describe the Proposed Action and summarize its significant and adverse environmental impacts, measures to mitigate those impacts, and feasible alternatives to the Proposed Action;
- Unavoidable Adverse Impacts—will summarize any significant adverse impacts that are unavoidable if the Proposed Action is implemented regardless of the mitigation employed (or if mitigation is impossible);
- Growth-Inducing Aspects—will discuss the “secondary” impacts of the Proposed Action that trigger further development; and
- Irreversible and Irretrievable Commitments of Resources—will summarize the Proposed Action’s impacts in terms of the loss of environmental resources (i.e., removal of vegetation without replacement, use of fossil fuels and materials for construction, etc.), both in the immediate future and in the long term, as applicable. *

Appendix A

Table 1
Existing Laws & Regulations

Source of Law	Effective Date	Summary
Local Law 42 of 1996	Effective 6/03/1996	The City Council passed Local Law 42 of 1996, creating the Trade Waste Commission (TWC) to oversee and regulate the commercial waste industry. In 2001, via charter revision, the TWC was combined with the Markets Division at Small Business Service and the Gambling Commission and renamed Business Integrity Commission (BIC).
New York City Administrative Code: Title 16A: Commercial Waste Removal		
Chapter 1: Trade Waste Removal § 16-501 through §16-526	In Effect	<p>These laws define BIC's responsibilities such as licensing, registration and regulation of businesses that remove, collect or dispose of trade waste and trade waste brokers. BIC's responsibilities include:</p> <ul style="list-style-type: none"> (a) Issuing and establishing standards for the issuance, suspension and revocation of licenses and registrations that authorize the operation of businesses engaged in the collection, removal or disposal of waste within the city and trade waste broker businesses; (b) Establishing maximum and minimum rates for the collection, removal, or disposal of such waste; (c) Investigating carters should it be warranted; (d) Establishing standards for service and for the regulation and conduct of businesses , including but not limited to requirements governing the level of service to be provided, contracts for trade waste removal, billing form and procedures, the maintenance and inspection of records, the maintenance of appropriate insurance, and compliance with safety and health measures; (e) Appointing employees to staff; (f) Providing education programs to educate customers on waste classification and rights in contractual agreements; and, (g) Establishing fees for executing provisions.
The New York City Administrative Code: Title 16: Sanitation		
Chapter 1: Department of Sanitation and Chapter 3: Solid Waste Recycling	In Effect	<p>This law requires commercial establishments to provide for the removal of waste by a business licensed by BIC or allows them to obtain permission to remove their own waste. This regulation also:</p> <ul style="list-style-type: none"> • Requires signage indicating the carter that services the business and the time their waste gets picked up. • Prevents the discard of commercial refuse or liquid waste in public litter baskets. • Allows the Commissioner of DSNY to adopt and implement rules related to recycling requirements. • Describes carter responsibilities under recycling rules. • Requires businesses to source-separate their waste to minimize contamination of designated recyclables and maximize marketability. • Allows BIC to adopt and implement rules requiring carters to properly collect and recycle source-separated materials. • Required DSNY to undertake the New York City Commercial Solid Waste Study and Analysis of commercial recycling in the city no later than January 1, 2012. This commercial recycling study focused on the putrescible portion of the commercial waste stream.

**Table 1 (cont'd)
Existing Laws & Regulations**

Source of Law	Effective Date	Summary
Private Carter, Collected Waste § 16-306	Effective 3/01/2018	This regulation defines designated recyclable materials for commercial waste, provides source separation, set-out, and collection requirements, and allows the Commissioner of DSNY to conduct inspections to ensure compliance. Recyclable materials are required to be placed in transparent bags and or labelled bins, certain designated paper must be tied and bundled securely, and waste streams cannot be commingled. In addition, this regulation sets out requirements for businesses who choose to transport their own designated recyclable materials to a central holding location.
Citywide Recycling Program, Organic Waste, as amended § 16-306.1	Effective 7/01/2015, last amended 3/27/2018	<p>Under Local Law 146 of 2013, this law requires certain New York City businesses to separate their organic waste. The current list of covered establishments, last amended March 2018, includes the following:</p> <ol style="list-style-type: none"> (1) Food manufacturers with a floor area of at least 25,000 square feet; (2) Food wholesalers with a floor area of at least 20,000 square feet; (3) Retail food stores with a floor area of at least 25,000 square feet, or any retail food store that is part of a chain of three or more retail food stores that have a combined floor area space of at least 10,000 square feet and that operate under common ownership or control and receive waste collection from the same private carter; (4) Arenas or stadiums with a seating capacity of at least 15,000 people; (5) Food service establishments that are part of a chain of two or more food service establishments that have a combined floor area of at least 8,000 square feet and under same ownership/control; are individual outlets of a parent business, and do business under the same corporate name; (6) Food service establishments with a floor area of at least 7,000 square feet, provided that the requirements of subparagraph (i) of paragraph 1 of subdivision c of this section shall not apply to any such location when the building or premises containing such location is in compliance with such requirement pursuant to paragraph seven of this definition; (7) Food service establishments with a total combined floor area of at least 8,000 square feet and where the owner of the building or premises, or its agent, arranges or contracts with a private carter for the removal of waste from food service establishments having no less than eight thousand square feet of such building or premises, provided that any such food service establishments shall comply with the requirements of subparagraphs (ii), (iii) and (iv) of paragraph 1 of subdivision c of this section, but such requirements shall not apply to the owner or agent of any such building or premises; (8) Food preparation establishments with a floor area of at least 6,000 square feet; (9) Catering establishments at events with the anticipated attendance is greater than 100 people; (10) Food service establishments located within and providing food to one or more hotels totaling at least 100 sleeping rooms; and (11) Sponsors of a temporary public event. <p>In addition, the regulation requires the Commissioner of DSNY to annually evaluate the regional capacity and cost to process organics. Any transfer station that receives source separated organic waste pursuant to this section shall deliver or have delivered such organic waste directly to a facility that accepts organic waste for purposes of composting, aerobic or anaerobic digestion, or any other method of processing organic waste that the department approves by rule. This does not apply to waste that cannot be processed at an organic waste processing facility. Lastly, this regulation allows DSNY, BIC, the Department of Health and Mental Hygiene, and the Department of Consumer affairs to promulgate any rules necessary to implement the separation requirements.</p>

**Table 1 (cont'd)
Existing Laws & Regulations**

Source of Law	Effective Date	Summary
The Rules and Regulations of the City of New York: Title 16: Department of Sanitation		
Chapter 5: Specifications for Trucks and Vehicles Conveying Rubbish through the Streets	In Effect	<p>This regulation provides specifications for waste collection vehicles as well as requires vehicles to be maintained, operated and used in full compliance with applicable laws. Vehicles that transport garbage or rubbish, or garbage and rubbish, are classified as Class 1 vehicle bodies.</p> <p>Class 1 vehicle bodies shall be:</p> <ul style="list-style-type: none"> (i) totally permanently enclosed; (ii) of welded steel construction; (iii) rear dumping; (iv) loaded only from and through the rear end or the top of the totally permanently enclosed body (except as permitted by subparagraph (viii) below); (v) so constructed that once garbage or rubbish or garbage and rubbish has been loaded none of such may be re-worked, sorted, handled, or removed from the body other than by dumping the load or partial load; (vi) without any bulkhead or similar construction between the body and the vehicle cab; (vii) without any provision whatsoever upon body or cab or other portions of the vehicle to provide for or permit the loading and carrying of any material otherwise than within the totally permanently enclosed vehicle body; (viii) except that vehicle bodies may have side doors at the forward end of the body not larger than 36 inches by 36 inches for loading bulky materials which cannot be loaded through the rear or top loading openings; (ix) constructed without doors or openings other than as permitted under subparagraphs (iv) and (viii) above; and, (x) having all loading openings of the vehicle body supplied with adequate doors or covers tightly fitted against rubber or other suitable gaskets and provided with latches or clamps to keep all doors and covers tightly closed when not in use for loading, leakproof, spillproof and dustproof. <p>The body, cab and motor or engine hood of vehicles of Class 1 licensees may be painted any color other than white, beige or any shade thereof which resembles the color of collection vehicles owned or operated by the department.</p>
The Rules and Regulations of the City of New York: Title 17: Business Integrity Commission: Chapter 1: Trade Waste		
<p>This title of regulations provides definitions for BIC. Defines rate caps for waste collection. Describes licensing requirements for carters and brokers. Lists license application requirements. Provides terms for license application rejection. Details investigation, license revocation or suspension, penalties, liabilities, enforcement, hearing procedures, and other processes related to incidences of improper carter and broker conduct.</p>		
Rates § 5-02	Modification Effective 8/09/2018	<p>This regulation provides rules in connection with carter billing, including:</p> <ul style="list-style-type: none"> • Carters cannot demand, charge, exact, or accept rates for the collection, removal, disposal, or recycling of trade waste greater than the following maximum rates: (1) \$20.76 per cubic yard and (2) \$13.62 per 100 pounds. These rates do not apply to construction debris and carters can charge less than these maximum rates. • In the event that a written contract or other agreement between a carter and a customer uses a "flat" billing method, whether based on weight or on volume, a customer has the right to have this rate determined by a survey provided at no charge by the carter. • Carters who charge on the basis of the weight of a customer's waste will need to use scales that are accurate and calibrated. • Carters who use third party services to weigh a customer's waste must insure that the scales used by them are accurate and properly calibrated. • The weight of a customer's waste is be determined by subtracting the weight of the container the waste is in from the weight of the trash itself.

**Table 1 (cont'd)
Existing Laws & Regulations**

Source of Law	Effective Date	Summary
Record Keeping § 5-03	Effective 4/5/2018	This regulation outlines carter requirements for record keeping. Carters are required to maintain records concerning their business which include bills and purchase invoices, deposit slips, copies of checks received from payers, bank statements, cancelled checks, tax returns (copies of Federal, State, and local returns with all supporting schedules), waste surveys, rate schedules, documents concerning mergers, acquisitions, subcontracts and asset sales, lists of collection routes and schedules, and submissions to and notices from the Commission. This regulation also states that carters need to maintain records of cash payments and prohibits carters from making checks payable to cash. In addition, a carter must maintain a complete and accurate set of books of account reflecting the operation of its business.
Compliance with Applicable Local Law and Regulation § 5-04	In Effect	This regulation requires that carters comply with all the laws, rules, and regulations of federal, state and local governmental authorities having jurisdiction over any of their activities, including, but not limited to, rules and regulations of the Department of Environmental Protection, the Department of Health, DSNY and the Department of Transportation concerning the vehicle specifications, sanitary requirements, handling, transport, receipt, transfer or disposal of trade waste, regulated medical waste or waste containing asbestos or other hazardous, toxic or dangerous material.
Agreements and Contracts with Customers, Service to Customer § 5-05	Effective 4/5/2018	This regulation allows for agreements between a carter and its customer to be made in oral form. In addition, this regulation states that carters can discontinue service to any customer, or raise the rates charged to a customer, after having provided at least 14 days written notice.
Operations § 5-08	Effective 8/06/2016	This regulation provides requirements for carter operations, including how material should be disposed of, where material can be disposed of, and how to clean vehicle containers.
Labeling of Containers § 5-11	Effective 8/06/2016	This regulation provides requirements for container labeling, labeling volume capacity of each container, container owner name, and whether organics are being disposed within a specific container.
Recycling Requirements for Licensees § 5-12	Effective 8/06/2016	This regulation provides recycling requirements for carters, including requirements that source-separated materials cannot be commingled and rules for handling organic material.
Other Regulations		
Local Law 152 of 2018, also called the Waste Equity Law	Effective 8/16/2018	Local Law 152 of 2018 amends the administrative code of the City of New York to reduce the permitted capacity at putrescible and non-putrescible solid waste transfer stations in certain overburdened community districts in New York City.
New York City Minimum Wage	In Effect until 12/30/2018	The New York State minimum wage increased on December 31, 2017. In New York City, the minimum wage is \$12.00 per hour for businesses with 10 or fewer employees, and \$13.00 per hour for businesses with 11 or more employees. There are different hourly rates for workers in the fast food industry and those who receive tips. These rates remain in effect until December 30, 2018.
Local Law 145 of 2013	Effective 1/01/2020	This law requires that beginning January 1, 2020, any heavy duty trade waste hauling vehicle must utilize best available retrofit technology or be equipped with an engine certified to the applicable 2007 EPA standards for particulate matter. A "Heavy duty trade waste hauling vehicle" means any diesel-fuel powered vehicle with a gross weight of over sixteen thousand pounds that is owned or operated by an entity that requires a BIC license and that is operated in New York city for collection and/or removal of trade waste.
Local Law 56 of 2017	Effective 1/01/2024	This law requires that all trade waste hauling vehicle be equipped with side guards by January 1, 2024.

**Table 1 (cont'd)
Existing Laws & Regulations**

Source of Law	Effective Date	Summary
Solid Waste Management Plan (SWMP)	Approved 10/27/2006	<p>The City is required to adopt a SWMP for at least a 10-year period under New York State Environmental Conservation Law. The current plan is in effect through 2025, at which point a new plan will be evaluated and developed. The SWMP seeks to improve environmental and public health effects of waste collection through the reduction in truck transport. To reach this goal, the SWMP provides for the shift from a long-haul trucking-oriented system for DSNY-managed waste, by which such waste is transported to landfills and waste-to-energy plants outside the City by trucks, to a system of transporting such waste from marine and rail transfer stations located throughout the five boroughs. Full implementation of the SWMP is anticipated to reduce the City's annual GHG emissions by 34,000 tons and annual local and long-haul waste truck travel by 60 million miles.</p> <p>Overall, the SWMP has two major goals: (1) the gradual elimination of long-haul truck transport of DSNY-managed municipal solid waste and (2) the improvement of neighborhood equity with respect to waste management by reducing the intensity of waste transfer activity in certain affected neighborhoods and reducing related truck traffic.</p>
BIC Rulemaking New § 1-12	Adopted 10/9/2018	<p>These rule amendments are designed to improve the safety of the general public:</p> <ul style="list-style-type: none"> • Requiring licensees to increase the limits on commercial general liability, business automobile liability and employers' liability insurance, as well as require registrants to increase the limit on business automobile liability insurance. • Requiring licensees and registrants to notify BIC of their drivers' Vehicle and Traffic Law violations and drivers' license suspensions and revocations, crashes that involve a vehicle used in the licensee's or registrant's business, and to notify BIC of certain adverse actions by government authorities. • Requiring licensees and registrants to maintain written policies and procedures regarding compliance with federal, state and local laws, rules and regulations. • Requiring licensees and registrants to maintain Report of Motor Vehicle Accident (MV-104) forms and other forms related to crashes and adverse determinations by government authorities.

**Table 2
Existing Guidance Documents**

Guidance	Effective Date	Summary
BIC Safety Manual	Issued 2/01/2018	The BIC Safety manual is a guidance document for use by private carters to craft their health and safety programs. The BIC Safety Manual contains guidelines addressing areas of worker readiness, hazards in the workplace, pre-trip planning and inspection, review of traffic laws, driving hazards, driving tips to avoid collisions, tips on safe stops and proper lifting, what to do in an emergency, and how to keep workers and carters accountable to guidelines that they choose to adopt.