

NYC RFEI Pilot for Public Realm Refuse and Recycling Solutions Request for Expressions of Interest (RFEI)

1. Purpose of RFEI

Since the early 19th century, New York City’s urban planners have sought to maximize the amount of real estate available for public use and development. As a result, much of the City was designed with no back alleys, leaving deliveries and waste collection to happen in already-overcrowded streets. Continued growth in population density and economic activity means increased consumption of goods and services—with less space to store, set out and collect the resulting refuse and recycling. Pedestrians in the City are forced to navigate around piles of refuse and recycling that take up significant sidewalk space and attract pests. Meanwhile, collecting refuse and recycling by truck means more heavy-duty vehicles on congested roadways and has significant environmental impacts. It is time to make smarter, more efficient choices when it comes to the way New Yorkers set out refuse and recycling for collection in the public right of way.

Through this Request for Expressions of Interest (“RFEI”), the NYC Department of Sanitation (“DSNY”) seeks Responses from interested parties (“Respondent(s)”) for privately or publicly operated methods of consolidating, and/or containing residential and/or commercial refuse and recycling in the public right-of-way or on City-owned property that will: 1) increase waste diversion, including by reduction, reuse, and recycling; 2) reduce the volume of consolidated material set out on City sidewalks, 3) reduce vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions associated with waste collection; and/or 4) improve the cleanliness of City streets and sidewalks.

DSNY, in coordination with the NYC Department of Transportation (“DOT”) and other City agencies as relevant, including but not limited to the NYC Business Integrity Commission, the Mayor’s Office of Sustainability, the NYC Department of Health and Mental Hygiene, the NYC Department of Education, the NYC Public Housing Authority, the NYC Department of City Planning, the Public Design Commission, and the Landmarks Preservation Commission, may select multiple Responses for pilot testing in the public right of way or on City-owned property, in the form of a demonstration project, permit and/or concession.

2. Background

2.1. New York City Goals

Mayor Bill de Blasio’s *One New York: The Plan for a Strong and Just City* (“OneNYC”) lays out a commitment to creating a dynamic, inclusive economy, a healthier environment, more affordable housing, and more reliable and resilient infrastructure. In OneNYC the City committed to the ambitious goal of reducing the amount of waste disposed of by 90 percent by 2030. Achieving this goal requires major changes in what materials we consume and dispose of, but also in how those materials are collected, processed, stored and ultimately diverted to beneficial use.

New York City's transportation sector accounts for 30 percent of the City's total greenhouse gas emissions. In September 2014, New York City committed to reduce GHG emissions 80% by 2050 (80 x 50), with an interim target to reduce GHG emissions 40% by 2030 (40 x 30). In June 2017, the Mayor signed Executive Order 26, bringing the City in line with the Paris Agreement at the United Nations Climate Change Conference, which seeks to limit global temperature rise to 1.5 degrees Celsius, thus significantly accelerating the City's 80 x 50 efforts. This RFEI seeks Responses that will help achieve the City's goals of reducing waste sent to landfills and greenhouse gas emissions.

2.2. City Agency Strategic Goals

In 2016, DSNY and DOT both released Strategic Plans outlining agency goals and roadmaps of future policy and program commitments. The DSNY Strategic Plan commits the agency to launch new services to reach zero waste to landfills, including the expansion of organics, electronics, and textile collections and supporting partnerships that increase recycling participation from all New Yorkers. DSNY also seeks to make New York the cleanest large City in the United States. The DOT Strategic Plan commits the agency to make NYC streets safer and more sustainable, accessible, and efficient. Among other initiatives, the plan details ways to make sidewalks more inviting for pedestrians, seeks to address the challenge of traffic congestion, and looks at how to improve the safety, environmental performance, and economic efficiency of truck deliveries. The Department of City Planning's strategic objectives include enhancing resiliency and sustainability of neighborhoods.

2.3. Zero Waste Design Guidelines

Published in October 2017, the Zero Waste Design Guidelines ("the Guidelines") seek to address the design challenges of refuse and recycling collection and storage. The Guidelines include specific recommendations for waste collection and urban design, and highlight best practices from around the globe, such as shared recycling in the public realm in Paris, France and below-ground containers for temporary storage in The Hague, Netherlands.

Through this RFEI, the City seeks Responses inspired by the best practices as outlined in the Guidelines. Respondents should review [Zero Waste Design Guidelines Chapter 3: Collection & Urban Design](#), which includes examples of best practices, including: sub-surface waste containers; "roll-on, roll-off" containers for private or public use; waste collection containers for public and/or private use; and freight distribution and waste collection micro-centers.

2.4. Freight Movement Coordination with Discard Material Management

The City's economy depends on the efficient movement of freight, but at the same time truck traffic contributes to air pollution, noise, and congestion, and creates safety challenges for pedestrians and cyclists. This RFEI seeks Responses that may include pairing consolidated freight delivery with consolidated waste materials handling for a more efficient, environmentally friendly management system. For example, in Yokohama, Japan, 3 eco-cargo station locations serve 85% of the waste pick-up and delivery needs of 500 shops and 850 individual homes in the Motomachi neighborhood. This system began as a pilot project funded by the municipality but later became financially supported by the local merchants

association (approximately \$24,000/year). Before the consolidation, during a 10 day period, 100 trucks from 11 companies would enter Motomachi. Through the use of the eco-cargo station, 29 trucks of 1 company now enter the area in the same period.¹

3. Project Overview and Points of Interest

This RFEI seeks Responses for privately or publicly operated methods of consolidating, and/or containing residential and/or commercial refuse and recycling (metal/glass/plastic, and paper/cardboard, and organics) and other potentially divertible discards (e.g. textiles) in the public right-of-way or on City-owned property that will: 1) increase waste diversion, including by reduction, reuse, and recycling; 2) reduce the volume of consolidated material set out on City sidewalks, 3) reduce vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions associated with waste collection; and/or 4) improve the cleanliness of City streets and sidewalks.

Today, residential and commercial waste set out in plastic bags take up significant space on the curb and lends itself to messy conditions. Responses should address this challenge and reduce litter, drips, odors and rats, and other nuisances associated with piles of bags.

Respondents are also encouraged to consider:

- Compatible, year-round systems:
 - Compatibility with current collection operations including DSNY’s municipal services and the private hauling system for commercial waste.
 - Access and functionality during all seasons and weather events, including high wind, heavy rain (flooding), and snow operations (ie: plowing snow).
 - Contingency during special events or other activities that may block street access during selected periods of time, for example parades, street fairs, or other activities.
 - Responses regarding waste containerization systems should conform to the specifications for such systems found in the Department of Sanitation rules at Title 16 Section 9 of the Rules of the City of New York.
 - Responses regarding use of either sidewalk or street space should consider ability to be responsive to rules relating to revocable consent of certain structures on, over or under the inalienable property (streets and sidewalks) of the City found in the Department of Transportation rules at Title 34, Chapter 7 of the Rules of the City of New York.
 - Responses regarding changes to the construction or alteration of driveways, roadways, curbs, and sidewalks should consider the requirements in Builders Paver’s Plans in the NYC Building Code. https://www1.nyc.gov/assets/buildings/pdf/code_notes_builders-pavement-plans.pdf
- Functional considerations:

¹ Urban Consolidation Centers: The Good, The Bad, and The Ugly. Professor Eichi Taniguchi, Dr Ali Queshii. VREF Center of Excellence for Sustainable Urban Freight Systems Peer-to-Peer Exchange Programs. March 5th, 2014

- Waste compaction and consolidation to increase efficiency of the “last mile” of collection vehicle operations
- Data collection on waste generation and diversion
- Waste metering to track activity by user
- Integrated chargeback/invoicing for commercial waste
- Pairing freight delivery with improved waste materials handling
- Educational opportunities and streetscape enhancements such as art, public social space, public interaction, and sustainable plantings
- Opportunities for secure drop-off / collection of organics, textiles, and electronic waste
- Responses should consider blocks with predominantly non-residential uses, predominantly residential uses, and/or mixed uses (with the understanding that the collection of residential and commercial waste are separate.)
- Design considerations:
 - Automated and/or low- and zero-emission design
 - Use of renewable energy (wind, solar, and anaerobic digestion) and sustainable design
 - Efficient use of space, minimizing street and sidewalk obstruction.
 - Infrastructure requirements for system (electrical, water, other hookups, sub-terrain and above ground space requirements, permanent or temporary fixture, etc.
 - Impact on local community, pedestrian and vehicle flow, and interaction with other streetscape elements
 - Accessibility by various users – buildings, businesses, waste collectors
 - Overall creativity and innovation
 - Ease of access for maintenance
- Economic considerations:
 - Sustainability of the system’s operation from a cost perspective, and ongoing funding requirements
 - Opportunities for job creation

DSNY, in coordination with DOT and other City agencies, as relevant, may select multiple Responses for pilot testing in the public right of way or on City-owned property, at locations determined by DSNY and DOT, to demonstrate the effectiveness of the product or system in meeting the goals outlined in this RFEI, and to evaluate the performance of the product or system in high pedestrian and vehicular traffic areas and under various weather conditions.

Any alterations to the City Right of Way necessary for the installation or operation of the Respondent product or system will be reviewed by the City and, if approved, must be restored to City standards at the end of the pilot period. Any portion of the City Right of Way damaged by the installation or operation of the proposed product or system must be restored to City standard immediately.

4. Questions for Respondents

4.1 Project Overview & Goals

1. Provide a detailed description of the product or system, and at least one drawing, rendering or photo.
2. What is the capacity of the product or system? What kind of waste is it intended for?
3. How is the product or system used and serviced? Provide technical specifications of the vehicle needed to service the system, if relevant, and specify whether your product or system is compatible with existing collection trucks (e.g. rear loaders and roll-on and roll-off trucks)?
4. How does the product or system increase waste diversion, reduce vehicle miles traveled and/or GHG emissions associated with waste collection, and/or improve the cleanliness of New York City streets and sidewalks? Highlight unique or innovative elements of the product/system that address the core goals of this RFEI.
5. Is the product or system currently available for sale in the United States or elsewhere? If so: What municipalities or other customers have purchased and installed the product or system? How many products or systems were installed in each location and in what month and year? Provide contact information for up to three client references if deployed elsewhere. Provide data on system function if already deployed elsewhere.

4.2 Siting

1. How and where is the product or system installed (sidewalk, roadway, or on another type of City property)?
2. Please provide a site plan showing the product or system in context of the surrounding right of way. Include product or system dimensions; distances between the product or system and the corner quadrant; and if the product or system is on the sidewalk, distances between the product or system and other sidewalk structures (benches, poles, fire hydrants, stoops, sidewalk cafes, etc.), as well as the sidewalk width and the distance between the product or system and the adjacent buildings.
 - a. Does the product or system contain any subsurface components? If so, what subsurface clearance will be required for installation?
3. Are there specific locations or neighborhoods you suggest for the installation and use of product or system?

4.3 Service and Management

1. How will the product or system be kept clean and regularly maintained? If the product or system will be located in the roadway or sidewalk, what is the plan to keep the space around it clean?
2. How will you prevent discards, liquids, and odors that may escape the product or system into the public right of way, and what is the plan to address them if they do?
3. What measures have been taken to rodent-proof the product or system?
4. What are the anticipated repair requirements resulting from the regular use of the product or system? How will the product or system be repaired?

5. Can the product or system be installed, removed and relocated? If so, please provide a narrative and/or graphical description of the modular capabilities of the product or system.
6. What measures or protections will be in place to prevent vandalism and misuse, such as illegal dumping next to, or illegal relocation of the product or system?
7. What security measures does the product or system have?
8. Is the product or system flexible? How could it be adapted over time to respond to evolving needs for collection or diversion?
9. How will the product or system's impact and effectiveness be measured? What performance metrics would it aim to satisfy?

4.4 Costs and Business Model

1. What is the estimated cost for implementation of the product or system for a single large waste generator or a group of waste generators in New York City? Provide specific breakdown of costs (equipment, maintenance, etc.) and specify the waste generator(s) (ex: NYC DOE schools, residential or commercial buildings)
2. If relevant, describe the payment process, including details on waste metering or integrated chargeback/invoicing.
3. How would the system interface and/or work collaboratively with incentivized reduction and recycling programs, such as SAYT (save-as-you-throw)?
4. Describe the business model. Do you expect sponsorship to be part of the business model for the operation and maintenance of the product or system?²
5. What is the projected useful life of the product or system?
6. Is the product or system licensed or patented?

5. Submission Requirements

5.1 Content

The RFEI response must be in writing (less than 15 pages) and in PDF electronic format (via email to the recipient designated in section 5.3 below). The RFEI response must contain:

- Contact information, including the legal name of the respondent, business address, name of contact, telephone and email.
- A summary of respondent's background and experience related to urban design, public space, waste diversion, GHG emission reduction, and/or waste containerization, consolidation, and collection.

² Advertisements are not allowed on City-owned infrastructure but are permissible on privately-owned infrastructure.

- Responses to the questions listed in Section 4 and any other information that would be informative and responsive to this RFEI.
- At least one drawing, rendering or photo of the product or system, and a site plan showing the product or system in context of the surrounding right of way.

5.2 Inquiries

Any inquiries concerning this RFEI should be directed by e-mail, under the subject line "NYC Pilot for Public Realm Refuse and Recycling Solutions Q&A", to RFEI@dsny.nyc.gov. The deadline for submission of RFEI inquiries and requests for clarification is March 15 at 4:00 p.m. EST.

5.3 Submission Details

Final submission must be delivered in electronic format to RFEI@dsny.nyc.gov with the subject line "NYC RFEI Pilot for Public Realm Refuse and Recycling Solutions Final Submission." **Final Submissions are due May 31, 2019 at 4:00 p.m. EST.**

6. Additional Information

- 6.1 This RFEI is not intended as a formal request for proposals for the award of a contract or for participation in any future solicitation.
- 6.3 DSNY, the City and their officials, officers, agents and employees make no representation or warranty and assume no responsibility for the accuracy of the information set forth in this RFEI.
- 6.4 Neither DSNY nor the City shall be liable for any costs incurred by any respondent in the preparation, submittal, presentation or revision of its submission. Neither DSNY nor the City shall be obligated to pay and shall not pay any costs in connection with the preparation of such submissions.
- 6.5 All submittals become the property of the City of New York and DSNY. Submittals will generally be made available for inspection and copying by interested parties upon written request, except when exempted from disclosure under the New York State Freedom of Information Law.
- 6.6 DSNY is subject to the New York State Freedom of Information Law, which governs the process for the public disclosure of certain records maintained by DSNY. (See: Public Officers Law, Sections 87 and 89). Individuals or firms that submit materials to DSNY may request that DSNY exempt all or part of such materials from public disclosure, on the grounds that the materials contains trade secrets, proprietary information, or that the information, if disclosed, would cause substantial injury to the competitive position of the individual or firm submitting the information. Such exception may extend to information contained in the request itself, if public disclosure would defeat the purpose for which the exception is sought. The request for such an exception must be in writing and state, in detail, the specific reasons for the requested exception. It must

also specify the materials or portions thereof for which the exception is requested. If DSNY grants the request for exception from disclosure, DSNY shall keep such materials or portions thereof in secure facilities.

6.7 DSNY at its sole discretion reserves, without limitation, the right to:

6.7.1 Withdraw the RFEI at any time;

6.7.2 Use the ideas and/or submissions in response to this RFEI in any manner deemed to be in the best interests of DSNY and the City, including but not limited to soliciting competitive submissions relating to such ideas or proposals; and

6.7.3 Change any terms of the RFEI.