

Fall 2015 Curbside Textile Collection Pilot

EXECUTIVE SUMMARY



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sanitation
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Background

Every year, New Yorkers throw out over 200,000 tons of clothing, shoes, linens, towels, and accessories. Throughout the City there are numerous opportunities to reuse or recycle clothing and textiles. Options for textile reuse and recycling include donation to reuse organizations or charitable clothing drives and sale to for-profit local thrift shops. For example, the New York City Department of Sanitation [DSNY] offers refashionNYC through a partnership with the non-profit organization, Housing Works that provides a convenient clothing donation bin service for apartment buildings with 10 or more units.

Despite these opportunities, most unwanted textiles in New York City are discarded in the trash each year. Due to the size of the residential population and the fact that a majority of New Yorkers do not own cars and cannot easily move goods via public transportation, residents in several areas have limited access to venues participating in textile reuse. To address this issue and as part of the City's goal to send Zero Waste to landfills by 2030, DSNY developed and implemented a curbside textile collection pilot in the fall of 2015.

Objective

The objective of this pilot was threefold:

- Increase waste diversion by collecting residential textile waste for reuse and recycling
- Provide textile collection to neighborhoods not currently served by refashionNYC or other reuse venues
- Test the viability of curbside collection of textile waste

DSNY met these objectives using its collection trucks for a one-time pilot, collecting textile donations in specially designated bags alongside conventional recycling.

Timeline

The 2015 curbside collection pilot ran for four weeks in October. Collection occurred on regularly scheduled recycling days over the course of one week each in four Community Districts.

refashionNYC and donateNYC

The NYC Department of Sanitation encourages New Yorkers to donate and reuse textiles instead of discarding them, whenever possible. By donating and reusing textiles, New Yorkers can greatly reduce waste, conserve energy and resources, save money, and help provide residents in need with jobs and human services.

To make donating and reusing textiles easier for New Yorkers, DSNY offers refashionNYC and donateNYC.



refashionNYC
in partnership with HOUSING WORKS

refashionNYC is a partnership between DSNY and Housing Works to make clothing donation as easy as possible, through a convenient in-building drop-off and pickup service. In contrast to for-profit reuse clothing companies that supply similar collection bins, refashionNYC is a not-for-profit program, with all proceeds from donations going to support Housing Works' mission to end the dual crises of homelessness and AIDS.

The program serves 142,000 households in 880 buildings, and has diverted more than 5,000 tons of textiles from the waste stream. To enroll, or find out if your building is eligible, visit nyc.gov/refashion.



donateNYC

As DSNY's cornerstone reuse program, donateNYC helps New Yorkers "give goods, find goods, and do good," with tools that make it easy to donate or find second-hand and surplus items—including clothing.

With the donateNYC directory and mobile app, **residents** can search hundreds of locations, throughout all five boroughs, for the most convenient place to give or get second-hand goods—including textiles. **Businesses and nonprofits** can also register and use the donateNYC Exchange to donate or receive gently used and surplus commercial goods. For more information, visit nyc.gov/donate.

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District Selection

DSNY selected four New York City Districts as participant areas for the pilot, based on two criteria:

- A. Few or no donation drop-off venues in the area
- B. Few or no apartment buildings [buildings with fewer than 10 units are not eligible for refashionNYC. The four selected districts have a total of more than 213,000 households.

District	Neighborhoods	Households
Staten Island 3	Arden Heights, Tottenville, Huguenot, New Dorp	58,324
Bronx 8	Riverdale, Fieldston	36,411
Queens 11	Bayside, Auburndale, Oakland Gardens, Douglaston, Little Neck	46,915
Brooklyn 11	Bath Beach, Bensonhurst, Gravesend, Mapleton	71,911
TOTAL		213,561

Reuse Partner Selection

DSNY selected a nonprofit social enterprise organization. As it relates to reuse, a nonprofit social enterprise is a local or regional organization that meets a social mission primarily by redistributing donated items directly to a secondary end user (i.e. individual customer or client) and through an in-house redistribution program, or retail operation.*

The principal goal of this social enterprise model is distribution for reuse, with only the portion not able to be used locally being sold to commercial recycling or salvage companies.

Through this type of partner, DSNY was able to:

- Capture and divert the highest possible percentage of materials for reuse
- Collect detailed and verifiable data for tracking and analysis
- Ensure that collected materials were used to support local socio-economic development and sustainability

DSNY sent an initial request to refashionNYC partner Housing Works, who declined participation in the pilot. DSNY then selected Goodwill Industries of Greater New York and New Jersey, a nonprofit social enterprise with local operational capacity, as the recipient of the collected textiles.



Reuse in New York City includes a wide variety of outlets, ranging from local owner-operated businesses to national nonprofit retail chains

* Directive 2008/98/EC of the European Parliament and of the Council. November 19, 2008 on waste: page 312/10, article 3, item 13

Operational Process

Communications & Marketing

DSNY sent program packets to area households two to three weeks before commencement, giving participants sufficient lead time to participate in the collection should they choose to. These packets included two specially marked pink bags for textiles and an introductory letter with program instructions. DSNY also created a webpage for the pilot that explained the program, and from which participants could download a tax receipt online from Goodwill, and print labels for additional bags, if needed.

To deter scavenging, DSNY did not publicize specific dates or locations with the general public, i.e. via social media or a press release.

Collection

DSNY collected the designated bags from the curb using only new or thoroughly cleaned rear loader collection trucks. The trucks were instructed not to run the compactor, which ensured that the bags were delivered to Goodwill's Astoria, Queens warehouse intact.

Drop off

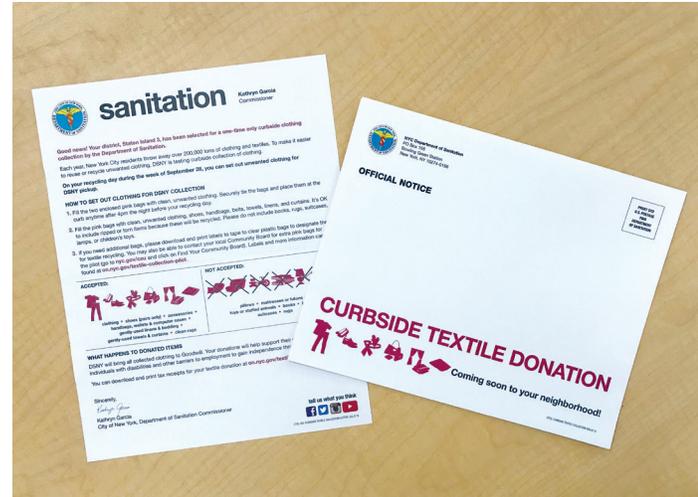
All trucks tipped at the Goodwill warehouse during regular business hours. Goodwill provided staffing and operational resources to sort and store delivered items, augmented by DSNY Staff.

Data Collection + Assessment

DSNY staff recorded truck numbers and bag counts after each drop off at the Goodwill warehouse. In addition, staff conducted an onsite assessment to separate contaminated goods from those with reuse/recycling value. Material was considered contaminated when it was wet or soiled, thus representing the potential for mold or bacteria while in storage.

Bags determined to have reuse/recycling value were put into palletized Gaylord boxes and stored in Goodwill's warehouse until shipped to local and regional retail outlets for additional sorting and sale.

A noted challenge was the significant rainfall due to Hurricane Joaquin during the first week of the Pilot. This caused an 8% loss in material recovery due to wet product.



Textile Collection Mailers



Textile Collection Donation Bag



Textile Pilot Sorting Center – Goodwill Industries Warehouse, Long Island City

Results

Participation

7,475 households, or 3.5 percent of the pilot area’s households, set out bags during the pilot.

Intake Volume

15,069 bags were collected during the course of the pilot with an approximate total weight of 150 tons.

63%, or **94.3 tons**, of material accepted was completely diverted from landfills for reuse by the local market.

Reuse, Recycling and Waste Averages

Goodwill and DSNY conducted a series of inspections and sorted the bags into reuse [retail], recycling [salvage], and refuse [waste] categories. During inspection 19 tons or 13% of collected material was found to be contaminated, leaving 131 tons for reuse and recycling.

PROCESS	Reuse	Salvage/Recycling	Waste
TOTAL	94.3 tons	36.2 tons	19 tons
Percent	63%	24%	13%

63%, or 94.3 tons, of material accepted was completely diverted from landfills for reuse by the local market. 24%, or 36.2 tons, of the remaining bags were sold by Goodwill as salvage to commercial recyclers. Industry standard for commercial textile recycling is to convert these products into either rags or fiber or export them to markets abroad. Revenue from the sale of these products was used by Goodwill to further their social service and employment programs. The most common categories of material diverted included: clothing, shoes, accessories, bedding, and linens.

Cost + Revenue

Communications and marketing materials, including specialized bags, were the greatest cost incurred during the pilot at \$365,000. The operational costs, which included staff time and vehicle operational costs, were \$252,000. Total pilot cost was \$617,000.

According to Goodwill, net revenue generated by the pilot, after accounting for the organization’s operational costs, totaled \$625,500. Goodwill used this revenue to support its mission of providing social and employment services to 94,655 New Yorkers with disabilities. Additional returns on investment included modest disposal cost savings to the City from not having to pay for tip fees for waste disposal or recycling. Participant returns included convenience and tax deductions. Tax receipts, provided by Goodwill, were the most common participant request.

Conclusions

DSNY conducted an after-action meeting with Goodwill evaluating the pilot. The following conclusions were made:

Observations + Feedback

Tracked participant correspondence showed an overwhelming popularity of the pilot. Low participant numbers were likely a result of minimal marketing due to concerns over scavenging.

Goodwill found the pilot to be one of their most successful collaborations. Their feedback also included a request to consider seasonal and weather variations in future planning, both of which can have an impact on their capacity to handle the incoming material from such a program. This will ensure minimal conflicts with other large scale collection events, and reduce the percentage of goods contaminated by inclement weather.

DSNY's observations included concerns over Goodwill's capacity for both storage and staffing.

Additional DSNY staff was needed to help collect sample data and coordinate sorting. It was also not evident that existing Goodwill storage capacity could withstand an expansion of this pilot.

Capacity Assessment Needs

DSNY concluded that a more in-depth analysis of local NRO capacity is critical to future curbside collection projects. Future capacity assessments should include storage scalability, seasonal variation, and staffing capabilities. These are needed to ensure alleviation of operational strain for both the NRO partner and DSNY, and to avoid storage capacity saturation of the partner.

DSNY will work to develop an internal logistics capacity assessment of partners for future operational collaborations. This assessment will confirm Goodwill's capacity for a continuation and/or expansion of this collection pilot. It will also establish a formal process for integrating additional NRO partners in future pilot planning.

Operational Improvements

To improve communications, DSNY and future partners will increase the number of planning sessions, check-in meetings and after-action meetings for future pilot programs.

DSNY and future partners may also develop a rain date or other severe weather contingency plan to account for possible widespread contamination of materials collected.

Costs

Since the greatest cost of the pilot was for communication and marketing, DSNY concludes that distributing collection bags and information packets through Community Boards or elected officials' offices rather than sending them to every household would reduce costs. Additional social media efforts and increased lead time for the public could also increase participation.

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REP-TCP15: FALL 2015 CURBSIDE TEXTILE COLLECTION PILOT



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