



2017
**NYC Reuse
Sector Report**

Acronym Directory

OX30: NYC's Zero Waste Initiative (zero waste to landfills by the year 2030)

CMR: NYC Center for Materials Reuse (at the City College of New York)

DCA: NYC Department of Consumer Affairs

DCAS: NYC Department of Citywide Administrative Services

DSNY: NYC Department of Sanitation

GHG: Greenhouse Gases

MFTA: Materials for the Arts

NAICS: North American Industry Classification System

NYCEM: NYC Emergency Management

NYCVOAD: NYC Voluntary Organizations Active in Disaster

NYPL: New York Public Library

RAB: Recycle-A-Bicycle

RIC: Reuse Impact Calculator

U.S. EPA: U.S. Environmental Protection Agency

WCS: Waste Characterization Study

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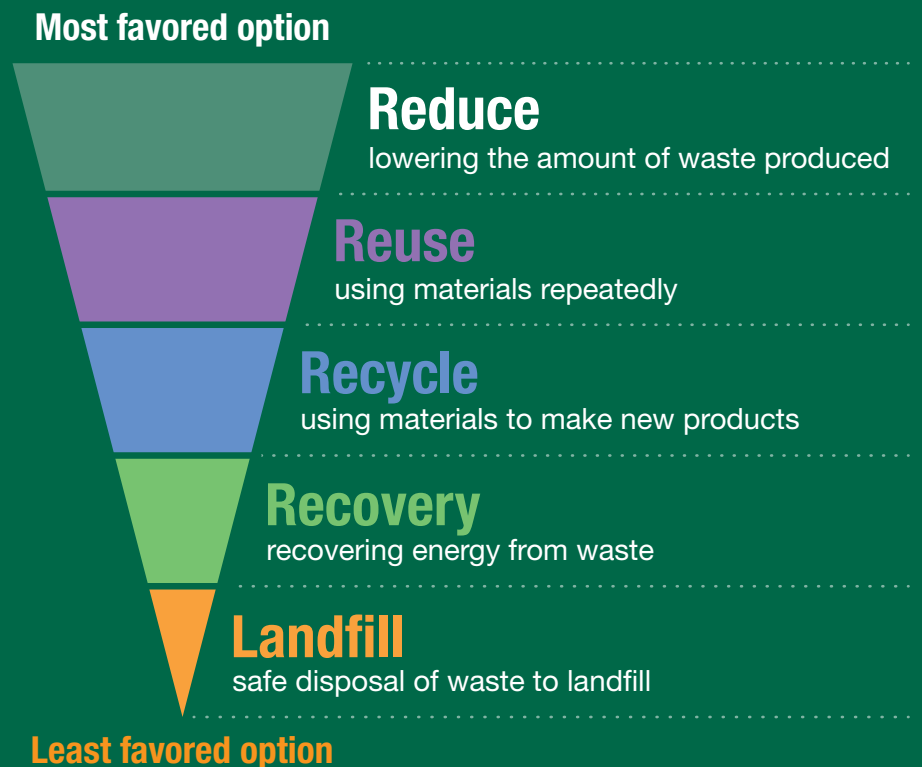
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Grand Bazaar NYC | Manhattan

Introduction

As part of OneNYC, the City’s sustainability blueprint, New York City has established an ambitious goal of sending zero waste to landfills by the year 2030. The zero-waste approach encourages alternative solutions for the management of solid waste that can prevent valuable resources from being disposed of in landfills.¹ By encouraging product-design improvements to facilitate repair and extend a product’s useful life, and by expanding reuse and recycling opportunities, the zero-waste approach contributes to the “circular economy,” in which “products are optimized for a cycle of disassembly and reuse.”²



Source: U.S. EPA

The aim of this assessment is to provide a census overview of reuse activity in New York City and to expand the knowledge about the enterprises that contribute to product reuse and waste prevention in the City.

Reuse, along with source reduction, is the U.S. Environmental Protection Agency's preferred strategy for sustainable materials management.³ Materials reuse alleviates stress on the environment from landfilling or incineration, and from the extraction of virgin source materials.⁴ Reuse can also reduce waste collection and disposal costs for local waste authorities.⁵ In addition, enterprises that redirect products from the waste stream for reuse and recycling help to prevent waste by acting as sorting facilities that extract reusable products from unwanted materials before the materials are recycled or landfilled.⁶

The waste reduction contributions of local reuse enterprises, specifically nonprofit organizations, has been examined in several previous studies, which found that these reuse entities divert thousands of tons of reusable materials from the waste stream and contribute significantly to the sustainability of urban environments.^{7,8,9} Moreover, reuse organizations operating within local communities avoid many of the environmental and social impacts associated with reuse enterprises that ship excess materials abroad. Exporting products overseas is linked to the decline of local manufacturing industries¹⁰ and places additional burdens on the local environment,¹¹ while keeping reuse local generates local jobs and avoids emissions associated with transporting materials across large distances.¹² The New York City Department of Sanitation (DSNY) recognizes these benefits of local reuse and has actively supported product reuse in New York City since 1997, through the creation of a materials exchange¹³ and by supporting local nonprofit organizations and programs that promote material reuse in New York City.

Although the contributions of local nonprofit reuse organizations to waste prevention have been previously documented, little is known about the role of for-profit enterprises in New York City's reuse sector. To address this information gap and as part of its ongoing efforts to encourage materials reuse in New York City, DSNY undertook this more comprehensive reuse sector assessment.

The aim of this assessment is to provide a census overview of reuse activity in New York City and to expand the knowledge about the enterprises that contribute to product reuse and waste prevention in the City. By examining both nonprofit and for-profit enterprises, this report examines reuse through a new framework encompassing all activities that encourage and promote the reuse of materials, including repair and rental services. The scope of the assessment is reuse activity that is accessible to the general public; this report does not examine commercial reuse or surplus resale activities. This report also focuses on durable residential goods only, and does not cover food waste for rescue and donation. (See page 46 for information about DSNY plans for future efforts on food waste and rescue.)

The 2017 NYC Reuse Sector Report focuses particularly on the following questions:

- What is reuse, and how does reuse fit into the City’s waste management strategies?
- What is the size and scope of New York City’s reuse sector, and where are reuse businesses and organizations located in the City?
- What further research is warranted to more fully understand and support the growth of the NYC reuse sector?

DSNY intends to use this information about the City’s reuse sector to help inform the public about the benefits of materials reuse, and to continue to support and promote reuse as a viable and important part of sustainable waste management in New York.



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

What Is Reuse?

Reuse is one of the oldest forms of solid waste management, widely practiced long before widespread recycling was technically possible.

Historically, humans have been ingeniously thrifty, salvaging and reusing items out of necessity.¹⁴ Although 20th-century manufacturing and advertising practices promoted an age of disposable goods and built-in obsolescence, increased concerns about the environment and economic and social sustainability have led to a resurgence of support for reuse, especially under the umbrella of the circular economy theory.¹⁵

The U.S. Environmental Protection Agency characterizes reuse as “the use of a product more than once in its same form for the same purpose or for different purposes.”¹⁶ The European Union established a similar definition of reuse under its Parliamentary 2008 Waste Directive, in which reuse is defined as any operation by which products or components that are not waste are used again for the same purpose for which they were originally produced.¹⁷

Using these definitions as a starting point, this the 2017 reuse sector assessment examines the most commonly reused products in New York City, as well as reuse practices and venues for reuse. The goal is to clearly define reuse in the City and to assess the state of the local reuse sector. DSNY aims to revisit this issue every two years to reexamine the definition of reuse and to measure changes in the City’s reuse sector.

To understand what *reuse* is requires a comparison to *recycling*. In contrast to recycling, reuse does not break items down to their core material parts in order to reprocess them into feedstock for new materials. While **recycling** diverts materials in the waste stream from landfills or incinerators, **reuse** extends the useful life of whole items and creates a closed loop that keeps the items out of the waste stream altogether by redistributing and circulating them locally.

Benefits of Reuse

By keeping materials out of the waste stream, reuse can avoid the costs of garbage collection and transportation and the associated environmental pollution.

By keeping materials out of the waste stream, reuse can avoid the costs of garbage collection and transportation^{18,19} and the associated environmental pollution.²⁰ Reuse also conserves energy and natural resources that would be needed for producing new goods, and avoids the economic and environmental costs of manufacturing new products.²¹

Reuse has social and economic benefits as well: Many reused products are donated to charitable organizations that provide important health, educational, and human services to the community; or they are given or sold for low cost to secondary users who need them,²² helping to “alleviate poverty and fight social exclusion.”²³ Reuse is also a business opportunity in its own right, such as the sale of pre-owned high quality or designer consumer goods. In addition, reuse often keeps products and activities within the immediate community, which contributes to the local economy and to local employment and workforce training.²⁴

In these ways, reuse is an essential aspect of the circular economy, a sustainable business model inspired by nature that aims to “use as few resources as possible in the first place, keep resources in circulation for as long as possible, extract the maximum value from them while in use, and recover and regenerate products at the end of their service life.”²⁵

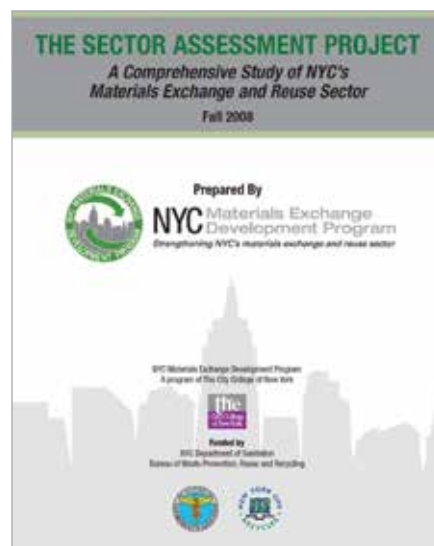
Challenges of Measuring Reuse

Accurately measuring the *quantitative* contribution of reuse activities to overall waste prevention, in terms of tons of materials diverted from the waste stream and corresponding environmental benefits, poses several challenges. Some of the difficulties arise from the fact that reuse can be facilitated through different platforms, both formal and informal. For instance, unwanted products can be donated to brick-and-mortar thrift stores, sold online through websites like Craigslist, or simply given to friends or family.

The sheer number and diversity of enterprises engaging in reuse, along with the inconsistent data-tracking methods that they use, pose additional challenges to accurately measuring reuse.²⁶ For the past 10 years, DSNY's ReuseNYC program (now donateNYC) and the NYC Center for Materials Reuse (CMR) have worked closely with nonprofit organizations in the City to attempt to quantify their contributions to reuse and the resulting environmental benefits. A study of the local New York City nonprofit reuse sector conducted by CMR in 2008 showed that nonprofit enterprises involved in reuse activities employ diverse and inconsistent operational data tracking methods.²⁷ The data tracking methods vary from basic manual procedures to point-of-sale (electronic) systems. Also, some organizations keep records on incoming items donated by the public, while others track outgoing product flow, or the number of items sold at stores.²⁸

Another level of complexity is due to the fact that waste diversion is measured by *weight of materials*, while reuse enterprises deal with *products* rather than materials.²⁹ The organizations track data on items such as clothes, shoes, furniture, and books, but waste diversion is measured in terms of pounds or tons of textiles, wood, and paper. Measuring waste diversion therefore requires a transposition of products into materials, and for each product it is necessary to obtain information about its basic material composition. For instance, a chair's material composition might be 70% wood and 30% metal by weight. However, organizations rarely collect data with this level of detail. To tackle this issue, DSNY and CMR are working to build weight-based metrics and transposition tools that can be used by the nonprofit sector, which are reported each year in the annual donateNYC Partnership Report.³⁰

The 2017 reuse sector assessment focused on a preliminary goal of identifying the *size* of the reuse sector, by estimating the number of existing enterprises in New York City whose activities engage in product reuse and confirming basic information related to the reuse enterprises. The report also identifies the main "reuse platforms" — the main types of operations in the sector (retail, rental, repair, reuse drives, social services and online and virtual reuse outlets), and it describes the types of products associated with each platform. Subsequent research will go deeper to survey the activities and operations of existing reuse platforms in New York City to provide more detailed information on the capacity and infrastructure available for reuse in the City.



Sector assessment study of the local New York City nonprofit reuse sector conducted by CMR in 2008

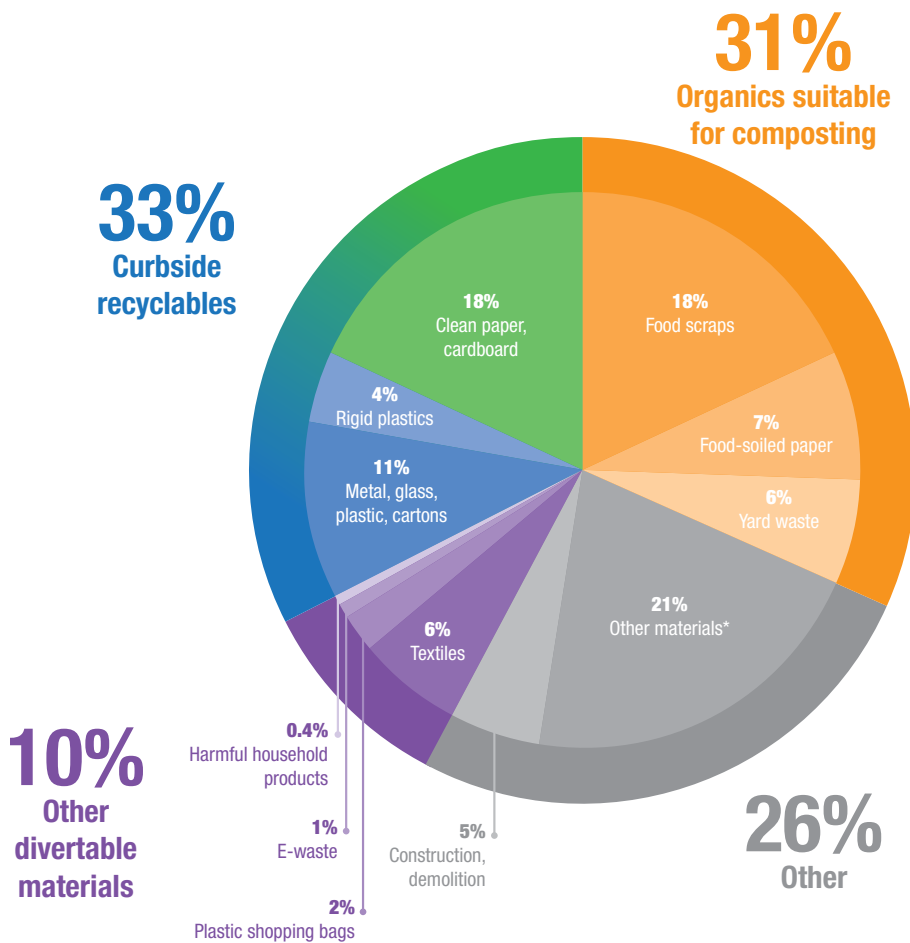
Reusable Items in the New York City Waste Stream

New York residents discard 3.3 million tons of waste every year; for the average New York City household that amounts to about 2,000 pounds a year.³¹

Since the late 1980s DSNY has conducted several waste characterization studies (WCS) to determine the composition of the garbage and recyclables discarded by New Yorkers and collected curbside by DSNY. Studies were conducted in 1989–1990, 2004–2005, and 2012–2013; another WCS is being conducted in 2017. DSNY uses these studies to inform the City’s future waste management planning.

These studies do not measure how much material is diverted from the waste stream due to reuse. However, they do help to identify categories of products, including clothing, textiles, appliances, and electronics, that could still have value if they were made available for reuse instead of going into the waste stream.

For instance, the 2013 NYC Curbside Waste Characterization Study found that textiles (clothing, shoes, household linens, and more) made up a “substantial portion” of materials discarded into garbage by households (6.2%, up from 4.8% in the 2005 study), despite the availability of “ready outlets for reuse and recycling through donation.”³² The same WCS estimates that at least 10% of discards could be potentially donated or reduced—including textiles and electronic waste. (See Appendix for more details.)



* “Other materials” includes: Non-C&D wood, Film plastics, Disposable diapers & sanitary products, Animal by-products, Carpet/upholstery, Non-recyclable paper products, Expanded polystyrene (foam) plastic, Non-recyclable glass items, Fines, and miscellaneous

Reuse Organizations and Businesses

New York City is home to one of the most vibrant reuse sectors in the country. The sector encompasses a wide range of organizations, businesses, and government agencies—from community-based donation drives and small storefront vintage shops to online materials exchanges; from used auto part stores to creative-reuse and salvage stores; from small community groups to large service organizations.

For this 2017 Reuse Sector Report, DSNY, with support from CMR, identified organizations and businesses throughout the five boroughs whose activities engage in the reuse of products. (For more information, see Methodology, page 20, and the Appendix.)

Based on that research, this report defines New York City reuse entities as organizations or businesses that:

- redistribute or actively facilitate the redistribution of used products from New York City residences, businesses, nonprofit organizations, or government agencies, for the purpose of reuse;
- operate a venue or website accessible to the general public, where used goods can be purchased or received free of charge for the purpose of reuse;
- provide repair services to restore products that otherwise are no longer usable to like-new conditions; or
- operate a venue or website accessible to the general public where products can be rented or shared.

Reuse in NYC

The reuse sector in New York City is one of the most active and varied in the country; it is also one of the oldest and most established. For more than 100 years, nonprofit organizations in the City have had programs dedicated to accepting and redistributing second-hand items for the purpose of providing goods, jobs, and social services to communities in need. Some early “reuse” organizations that are still active include The Salvation Army, established in New York in 1880;³³ the Bowery Mission, founded in Manhattan in 1879;³⁴ and Goodwill Industries, established in Brooklyn in 1915.³⁵

Other types of reuse businesses in the private sector, such as repair shops and second-hand dealers, have been active in the City for even longer.³⁶

Reuse Policy and Legislation

To date there has not been significant policy and legislation focused on reuse at either local, state, or federal levels. This raises questions about what kind of legislation could be effective in increasing waste diversion through reuse and in supporting the reuse sector. Two potential areas for future legislation are the donation of food waste and the management of government surplus materials.

To date there has not been significant policy and legislation focused on reuse at either local, state, or federal levels.

A few examples of current reuse-related legislation are:

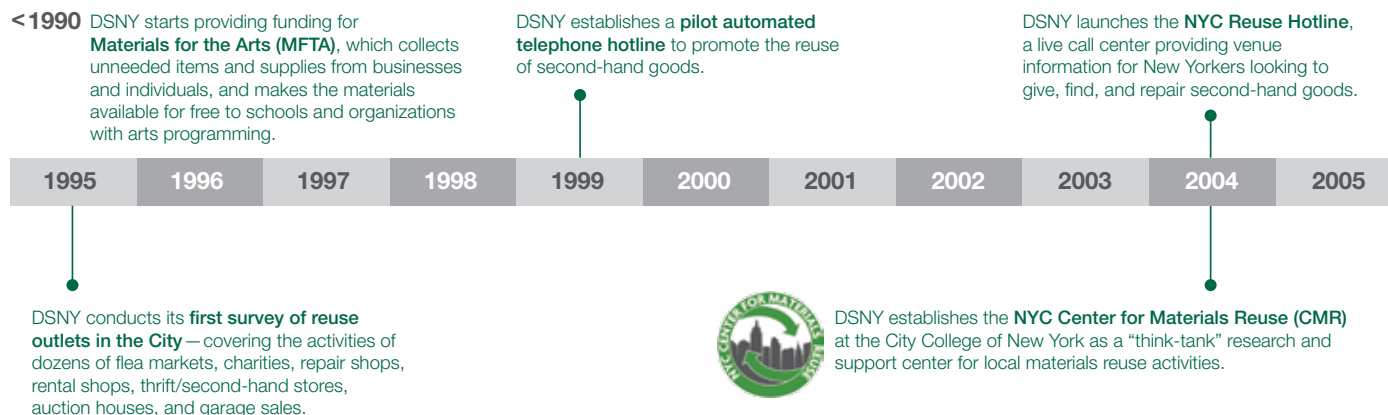
- Resolution No. 999-A, passed by New York City Council in 2011, authorizes the NYC Department of Citywide Administrative Services (DCAS) to donate surplus city-owned computers, computer software, and computer equipment to public and private institutions for secular educational use, and to nonprofit institutions for use by individuals with disabilities, senior citizens, or low-income individuals.
- New York State Senate’s “Right to Repair” bill requires manufacturers to provide parts and information to facilitate repair of electronic devices. This bill was revised and reintroduced in 2017, and has passed the State Senate.

New York State Senate’s “Right to Repair” bill requires manufacturers to provide parts and information to facilitate repair of electronic devices.

Another area that has recently received legislative attention is food rescue. Although food rescue previously has not been characterized as reuse under the definitions established by the U.S. EPA and the European Union, it plays a similar and important role in waste prevention. Nonprofit food rescue programs engage many of the same stakeholders (local donors and social service recipients) as reuse, and they are part of the same in-kind donation infrastructure. In April 2017, New York City Council introduced two bills (Int. 1514 and Int. 1439) focused on supporting and expanding the rescue of commercial food waste for donation (see page 46 for more information).

Timeline of DSNY Local Reuse Support

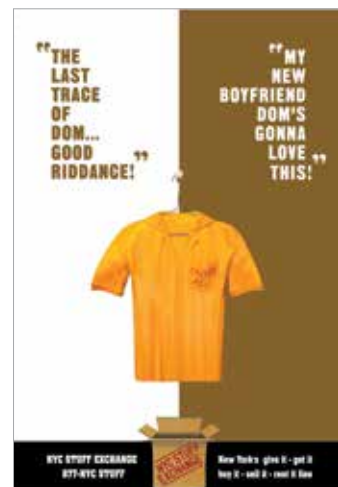
As part of its ongoing efforts to reduce residential waste, DSNY has a decades-long history of fostering reuse activities in New York City through research and programs. The result is one of the most comprehensive support programs for reuse in the country.



Previous DSNY Reuse Surveys and Assessments

In 1995, DSNY conducted a **poll of dozens of reuse outlets** in New York City to gauge interest in the reuse sector for a hotline service that would help residents find venues for donating or acquiring used products. The results highlighted a need for promoting reuse outlets such as flea markets, charity-run thrift shops, and repair shops to consumers, and led to DSNY creating a reuse hotline that later became the Stuff Exchange website portal.

DSNY's **2008 Reuse Sector Assessment** surveyed more than 35 reuse nonprofit organizations operating in New York City to identify their support needs. The assessment found a critical need for data standards that could be adopted by the sector to quantify the impacts of their reuse activities. This led to development of the Reuse Impact Calculator used by CMR to estimate the environmental contributions of nonprofit reuse organizations in the City.



DSNY "Stuff Exchange"
Bus ads, circa 2007



DSNY funds CMR to establish **NYC WasteMatch**, an online materials exchange dedicated to reuse in New York City. A first-of-its-kind service, NYC WasteMatch connected businesses with community-based organizations, and diverted more than 7,500 tons of materials from landfills in its ten-year history.



DSNY launches the **NYC Stuff Exchange**, a mobile app and website, to increase public awareness of reuse and provide better access to reuse venues.

In response to **Superstorm Sandy**, DSNY, CMR and ReuseNYC partners, in collaboration with NYC Emergency Management and NYC Voluntary Organizations Active in Disaster, coordinate the targeted transfer of more than 750,000 unsolicited donations of relief supplies.

Using the RIC system, DSNY and CMR publish the first **ReuseNYC Annual Report**, detailing the social, economic, and environmental contributions of the 30 partner organizations of ReuseNYC.



REUSE!

DSNY and CMR establish **ReuseNYC**, a network of nonprofit reuse organizations and a public-awareness campaign aimed at supporting local reuse and encouraging New Yorkers to "think second-hand first." ReuseNYC provides promotional support, networking opportunities, professional development training, and data management support services to local nonprofit reuse organizations.

DSNY and CMR build the first-of-its-kind **Reuse Impact Calculator (RIC)** which CMR uses to assess the environmental impact of materials reuse.

donateNYC

give goods. find goods. do good.

DSNY launches **donateNYC**, a reconfiguration and consolidation of the NYC Stuff Exchange, NYC WasteMatch, and ReuseNYC into a unified reuse support program for New York City residents, businesses, and nonprofit organizations.

DSNY's Reuse Activity Today

DSNY programs and DSNY-funded projects continue to focus on encouraging reuse through increased public awareness and easier access to reuse activities and venues.



donateNYC | nyc.gov/donate

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. donateNYC offers a wide range of programs and resources to make donating and reusing goods easier for all New Yorkers:

- **Residents** can find places to give or get second-hand goods by searching the donateNYC Directory.
- **Businesses and nonprofits** can use the donateNYC Exchange to donate or receive gently used and surplus commercial goods.



The donateNYC Mobile App connects New Yorkers with hundreds of locations to give or find second-hand goods.



The donateNYC Exchange helps connect businesses looking to reduce overhead with nonprofits in need of supplies.

donateNYC Partnership | nyc.gov/donate/partnership

Managed by CMR, the donateNYC Partnership program aims to expand and strengthen the nonprofit reuse sector in New York City by serving as a vital support network for local organizations that accept and distribute donated second-hand and surplus goods.

donateNYC Partners include more than 40 nonprofit thrift stores, social service organizations, creative-reuse programs, salvage centers, and others. The donateNYC Partnership builds strategic partnerships among these organizations, and provides Partners with a platform for collaboration, opportunities for



2016 Annual Partnership Report

networking and training, data management support, and promotional services, as well as ongoing government engagement in materials reuse advocacy.

donateNYC Partners divert more than 45,000 tons of reusable materials from the waste stream annually, while serving more than 1.3 million New Yorkers with health and human services. In addition, donateNYC partners are helping New York City meet its zero waste goals by providing verifiable data needed to assess the City's OX30 progress.

NYC Center for Materials Reuse | nyccmr.org

Established by DSNY in partnership with the City College of New York's Grove School of Engineering, NYC Center for Materials Reuse is a unique research and development program, and home to the donateNYC Partnership and the NYC Reuse Data Management programs. The mission of CMR is to:

- **Leverage local reuse infrastructure** and the circular economy to increase diversion of materials from the waste stream;
- **Research local models** and develop technical resources to support the management of unwanted reusable items;
- **Collect verifiable data** about greenhouse gas (GHG) emissions, energy reduction, and tonnage for zero waste impact assessment; and
- **Support the growth and capacity development** of local non-governmental organizations, community-based organizations, and faith-based groups that redistribute unwanted goods to support social services and workforce development.

In 2015 CMR developed the NYC Reuse Impact Calculator, which is the first-of-its-kind reuse impact calculator and data processing system in the world.

NEW YORK CITY
**CENTER FOR
 MATERIALS
 REUSE**
 Funded by **NYC**sanitation



refashionNYC | nyc.gov/refashion

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; clothing and accessories donated through refashionNYC are sorted at the Housing Works warehouse in Queens, and all proceeds from donations support the charitable mission of Housing Works 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. Both reusable and damaged items are accepted, including clothing, shoes, purses, gloves, scarves, hats, and belts; towels, curtains, bedding, and linens; and clean rags and clothing scraps.



refashionNYC donation bin



Housing Works truck

Supporting Disaster Response with Reuse | nyc.gov/donate/emergency

Often during a disaster, unsolicited relief items are donated from near and far by individuals, businesses, agencies, and organizations. Donations of food and medical supplies, textiles, construction materials, and more accumulate in the areas connected to a disaster: curbside, on streets and in parking lots, and in City facilities. If they are not managed properly, these unsolicited goods end up damaged or destroyed, and become disaster debris and a solid waste problem.

After Hurricane Sandy in 2012, DSNY and CMR, along with NYC Emergency Management (NYCEM), Salvation Army of Greater New York Emergency Disaster Services, NYC Voluntary Organizations Active in Disaster (NYCVOAD), and other response groups, coordinated the targeted transfer of more than 750,000 relief donations to people who needed them—goods that may have otherwise ended up in the waste stream.

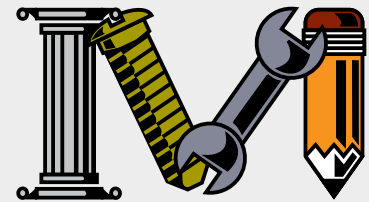


Hurricane Sandy Disaster Donation Center – Long Beach 2012

DSNY continues its collaboration with NYCEM, NYCVOAD, and its partners to help individuals and organizations donate responsibly during and after a disaster.

Materials for the Arts | nyc.gov/mfta

Since 1990, DSNY, in partnership with the NYC Department of Cultural Affairs and with additional support from the NYC Department of Education, has funded Materials for the Arts (MFTA), New York’s premier creative-reuse center. Materials for the Arts collects unneeded items from businesses and individuals, and makes the materials available for free to public schools, government agencies, and nonprofit organizations with arts programming. With its spacious warehouse operation, MFTA offers a wide variety of events, workshops, and classes to help people experience creative reuse up close.



materials for the arts



Materials for the Arts warehouse



Stop 'N' Swap events; Photos courtesy of GrowNYC



Stop 'N' Swaps | grownyc.org/swap

With funding from DSNY, GrowNYC provides a unique local reuse opportunity with its Stop 'N' Swap community reuse events. Stop 'N' Swaps are free events where people can find new homes for their unwanted items—such as clothes, books, shoes, toys, and housewares—and take home items they can use. The events are held around the City in venues like community centers, outdoor plazas, and public schools. The program's goal is to ultimately hold at least one swap each year in each of the City's 59 community districts, so that New Yorkers can have convenient nearby access to local reuse opportunities.



zero waste programs
funded by
NYCsanitation

Greenmarket Clothing Collection | grownyc.org/clothing

DSNY provides funding for GrowNYC's clothing collection at 30 Greenmarkets around the City. Residents can drop off clothing, shoes, linens, and other accessories and reusable textiles, which are collected by Wearable Collections and sorted to recover as much usable clothing as possible for distribution to second-hand markets. Material that is not suitable for reuse goes to recycling markets to be used as wiping rags or shredded for low grade fiber products such as insulation.



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

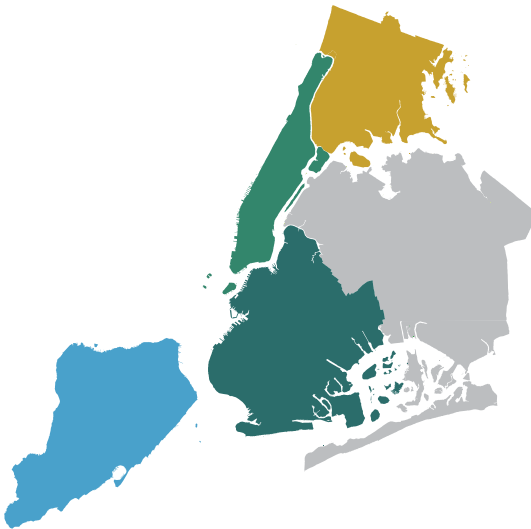
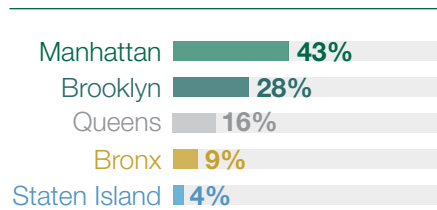
Other Initiatives: The 2015 Textile Collection Pilot

In fall 2015, in partnership with Goodwill Industries of Greater New York and Northern New Jersey, DSNY conducted a first-of-its-kind municipal curbside collection pilot for textile reuse and recycling. The pilot ran for four weeks, and targeted areas of the City that have little or no access to textile reuse or recycling venues. Residents received a special mailer that included a designated pink textile collection bag, with program instructions covering when to put the bag out on the curb. Bags were collected by special detailed Sanitation trucks and delivered to Goodwill's local warehouse, where they were sorted for reuse and recycling. In this short but effective pilot program, more than 150 tons of textile donations were collected in just four weeks.

2017 NYC Reuse Sector Assessment

This section details the findings of the most comprehensive citywide study to date of the size of the for-profit and nonprofit local reuse sector in New York City, conducted in 2016 and 2017 by DSNY, with the support of CMR.

Figure 1 Reuse sector outlets by borough



2,257 businesses and organizations, in **3,654** locations throughout the City, engage in donations, reuse, repair and rental services.

In total, the 2017 reuse sector assessment identified 2,257 businesses and organizations actively involved in donations, reuse, repair, and rental services in New York City; these outlets operate in 3,654 locations throughout the City. They include, but are not limited to, thrift stores, flea markets, public libraries, online classifieds, and bike sharing stations that provide residents with outlets where they can buy, donate, rent, and repair products in New York City.

Methodology and Definitions

For the reuse sector assessment, DSNY and CMR identified more than 8,400 businesses and nonprofit organizations considered likely to be conducting reuse activities and operations in New York City. These included entities licensed by the NYC Department of Consumer Affairs (DCA) as second-hand dealers or repair operations, or identified with North American Industry Classification System (NAICS) codes associated with reuse activities, as well as nonprofit reuse organizations operating in the City.

Individual phone calls and online research were then used to confirm basic information about the identified entities and to ascertain whether they were actively operating and if they engaged in relevant activity defined as reuse for the purpose of the study (see Appendix for more details on the data collected). Phone calls and online research were chosen as the most appropriate data collection methods for this assessment, since they allowed for a prompt, efficient, and accessible data collection process.

As a result of this research, CMR and DSNY estimate that 2,257 entities are currently conducting reuse activities and operations in New York City. The most common entities removed during the data validation process, which reduced the number of outlets from 8,426 to 2,257, included duplicates in both DCA and NAICS databases; permanently closed operations; entities legally registered as second-hand dealers in New York City but with no existing physical operation within the city; operations not accessible to the public; and commercial waste companies. (See Appendix for more details about the Methodology used.)

Definition of Reuse

For the reuse sector assessment, the process of reuse is defined as the use of a product more than once (often multiple times) in its original form, for the same purpose or for a different purpose,³⁷ by:

- selling or giving away items, or donating items to charity or a community group;³⁸
- renting or sharing products, which reduces the need for manufacturing new products; or
- extending the useful life of products through repair instead of discarding and replacing them with new products.

Products

Products included in the reuse sector assessment correspond to the products identified by the U.S. Environmental Protection Agency (EPA) as items that are found in the municipal waste stream that are also commonly reused. These are:

- Appliances
- Bikes
- Books
- Clothing
- Electronics
- Footwear
- Furniture and furnishings
- Jewelry and watches
- Musical instruments
- Records and other media
- Rugs and carpets
- Tools



Reuse Outlets

This assessment is limited to the businesses and organizations that engage in the reuse, repair, and rental of products as described on page 11, within the five boroughs of New York City. In addition, it focuses on outlets facilitating the reuse of residential products, or products that, if not reused, would end up as residential waste. (See page 22 for all exclusions.)

Retail Outlets Included in the Assessment:	Repair Outlets Included in the Assessment:	Rental Outlets Included in the Assessment:
<ul style="list-style-type: none"> • Flea markets and consignment shops • Thrift stores and vintage shops • Furniture shops; antique shops • Used bookstores • Electronic stores carrying mostly second-hand items (cellphones, TVs, computers, etc.), though generally not limited to second-hand • Used appliances stores • Musical instrument stores 	<ul style="list-style-type: none"> • Tailors or sewing and alterations businesses; clothing repair services offered at dry cleaners and laundromats • Shoe repair • Jewelry and watch repair • Upholstery and furniture repair shops • Furnishing repairs (for example, lamp repair shops) • Electronic repair shops (for example, cellphone and computer repair shops) • Appliance repair services (only businesses with stores or websites) • Bike repair shops • Musical instruments repair (only businesses with stores or websites) 	<ul style="list-style-type: none"> • Clothing rental • Furniture rental (for personal use only; entities offering furniture rental for events are excluded) • Appliance rental shops (lease centers are excluded) • Libraries • Media (CDs, DVDs, Records) rental stores • Bike sharing and rental • Musical instruments rental

1,300

businesses and organizations provide repair services within the City



Pop Up Repair

Exclusions

- Businesses handling products that if discarded would not be disposed of as residential waste.
- Outlets not engaged in reuse activities as defined in this survey, such as dry cleaners that don't offer garment alterations.
- Tool repair and rental outlets, because of the inability to ascertain if these products are being repaired for personal/residential or professional/industrial use.
- Donation bins placed in private properties, because they cannot be accessed by the general public, and because it cannot be determined if products are reused or diverted directly to recyclers.
- Pawn shops, because they are associated more with cash loans than with reuse.
- Food donation drives and food pantries, since food rescue is not within the definition of reuse used for this survey. For more information on food rescue, see page 46.
- Salvage enterprises that divert used products directly to recyclers (often outside the United States³⁹). These enterprises are outside the scope of the assessment because their activities do not extract value from products for local reuse. Some reuse enterprises surveyed do engage in selling to salvage markets, particularly textile recyclers and scrap-metal dealers; however, the primary operational focus of these enterprises is the reuse of products.

Reuse by Product

Figure 2 (following page) shows the number of reuse businesses and organizations in New York identified by the 2017 survey, by product category.

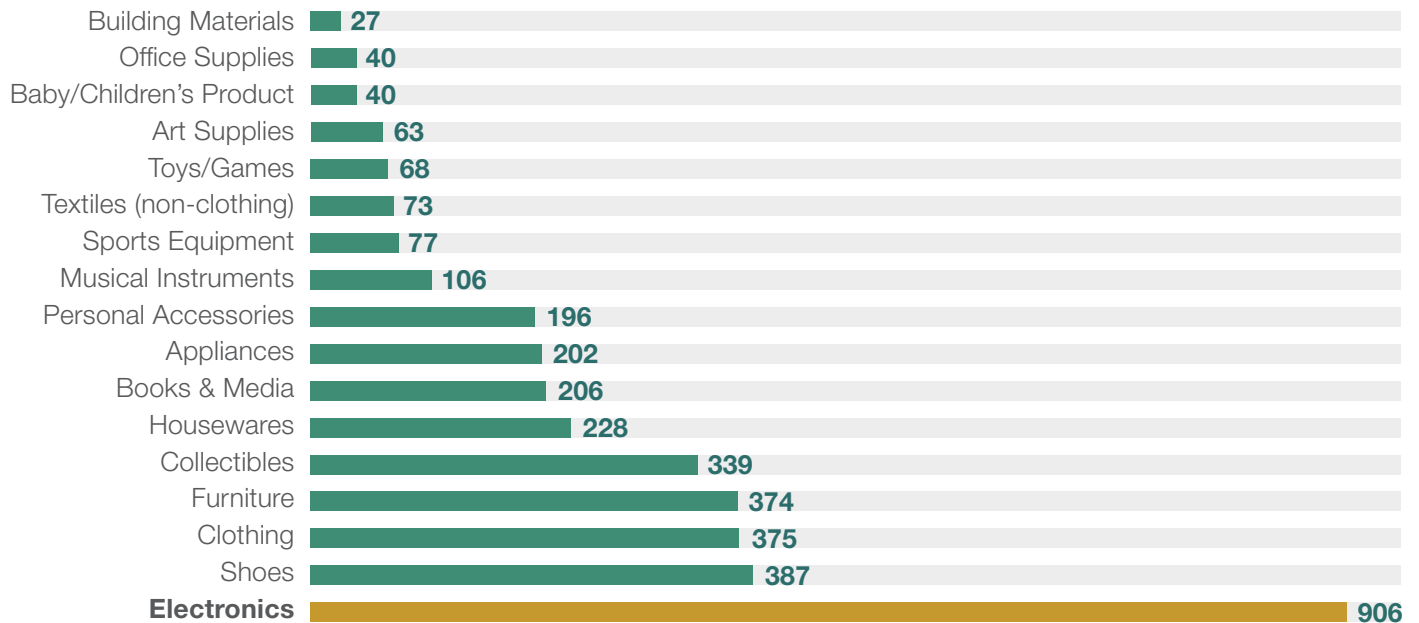
Outlets handling electronics are by far the most common businesses and organizations in the New York City reuse sector. The reuse sector assessment identified 906 businesses and organizations (40% of the total identified reuse outlets) that repair, rent, or sell pre-owned electronics. These items, which are often sold refurbished, include cellphones, computers, tablets, video games, televisions, and stereo equipment.

Outlets handling shoes, clothing, and furniture follow next, after electronics. Together, businesses and organizations handling these four product categories represent more than 55% of the reuse outlets identified in the City.

Electronics products such as cellphones and computers are particularly common in repair businesses. In fact, it's easier to find a place to repair electronics in New York City than a place to buy electronics second-hand.

The 2017 Reuse Sector Report findings about the top products for each reuse activity platform (Retail, Rental, Repair, and others) are covered in the following sections.

Figure 2 Number of reuse outlets handling each product



Reuse by Platform

The main types of platforms for reuse activities in New York City can be described as:

- Retail
- Rental and Product Sharing
- Repair
- Cooperative Retail
- Reuse Drives
- Social Services
- Online and Virtual Reuse Outlets

The majority of outlets identified in the reuse sector assessment are for-profit businesses. About 14% of the identified outlets provide more than one type of services; almost half of these offer both retail and repair services.

Figure 3 For-profit and nonprofit reuse entities in NYC

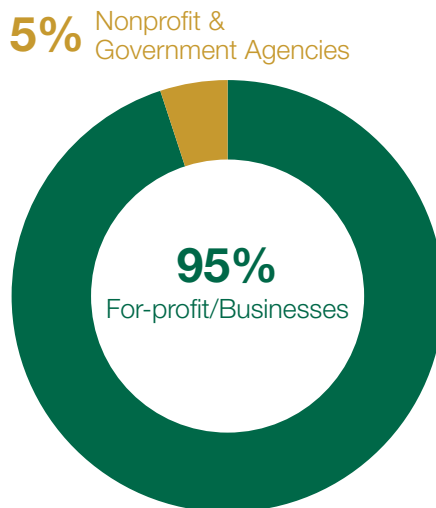
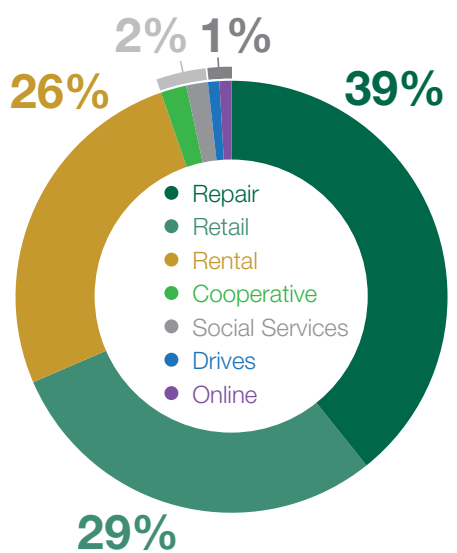


Figure 4 Reuse activity platforms





Monkey Girlz cooperative retail outlet

Retail

Businesses and organizations that sell second-hand products include thrift shops, vintage, and antique stores. This category also includes stores that sell new products along with second-hand items, such as stores that sell new cellphones as well as refurbished phones, or stores that sell both new and gently used appliances.

Figure 5 Number of retail outlets handling each type of product

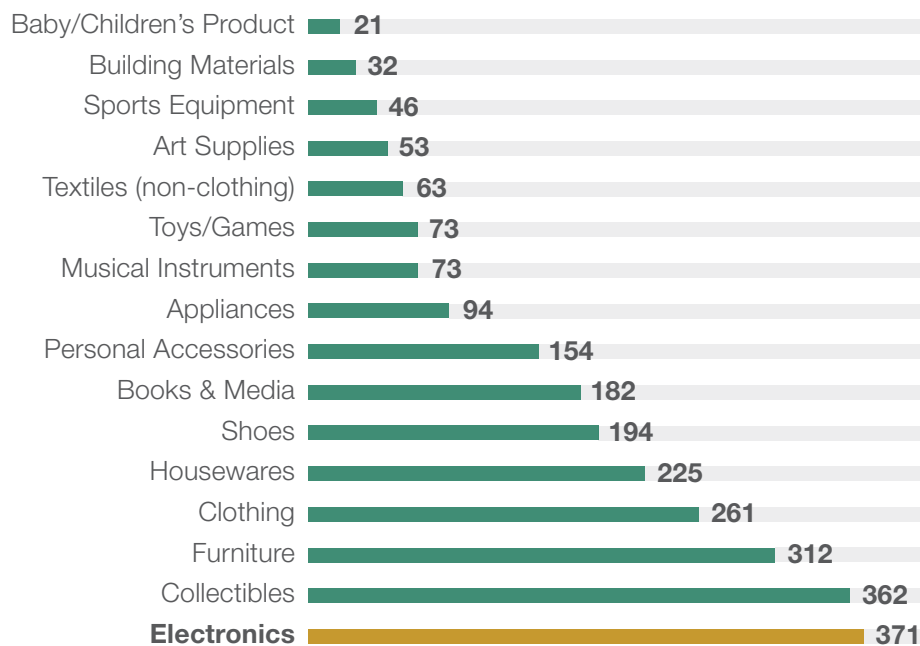


Figure 6 Number of rental outlets handling each product



The reuse sector assessment identified 904 entities (for-profits and nonprofits) engaged in retail activities, spread over the City's five boroughs in more than 1,100 locations. Almost half of the locations are in Manhattan. The products most commonly handled by these entities are electronics, collectibles, clothing, housewares, books and media, and shoes.

Rental and Product Sharing

The reuse sector assessment identified 132 New York City businesses and organizations, in approximately 1,048 locations, that provide services for rental and product sharing of consumer products for use by New York City residents. Products popularly rented include bikes, books, clothing, electronics, and furniture. The predominance of sports equipment in the Rental and Product Sharing platform is due to the bike sharing program Citi Bike™. Books are second, because of the large number of libraries in the City.

Clothing rental services are most often provided by stores offering rental of party garments, such as tuxedos. Rental services offered exclusively online were also identified, but there were fewer compared to brick-and-mortar stores.

Repair

The most common outlets that provide repair services for consumer products are shoe repair shops, tailoring services, and appliance and electronics repair outlets. The reuse sector assessment identified approximately 1,300 businesses and organizations, in 1,500 locations in the City, that provide repair services. More than one-third of the repair outlet locations are in Manhattan, and more than half of all of the repair outlets are in Manhattan or Brooklyn.

Businesses providing repair of electronics dominate the repair sector; more than half of the repair businesses offer repair of cellphones, tablets, and computers.

Cooperative Retail

Cooperative retail includes outlets such as consignment stores and flea markets that provide the opportunity for individuals or businesses to sell second-hand products. The reuse sector assessment identified 66 outlets engaged in cooperative retail, in 77 locations in all five boroughs of the City. The top three second-hand products handled by cooperative retail businesses and organizations are clothing, shoes, and personal accessories. The majority of the cooperative retail outlets are located in Manhattan and Brooklyn.

Reuse Drives

Reuse drives are defined as points of collection of second-hand products, primarily through the placement of collection bins across the City (except collection bins placed on private property, as described in Exclusions on page 22). Used products most commonly collected through these drives are clothing, shoes, and other textiles. Seasonal drives collect products through bins in temporary locations across the City for limited periods of time. Not all collection points for these seasonal reuse drives were included in this assessment. Despite

Figure 7 Number of repair outlets handling each type of product

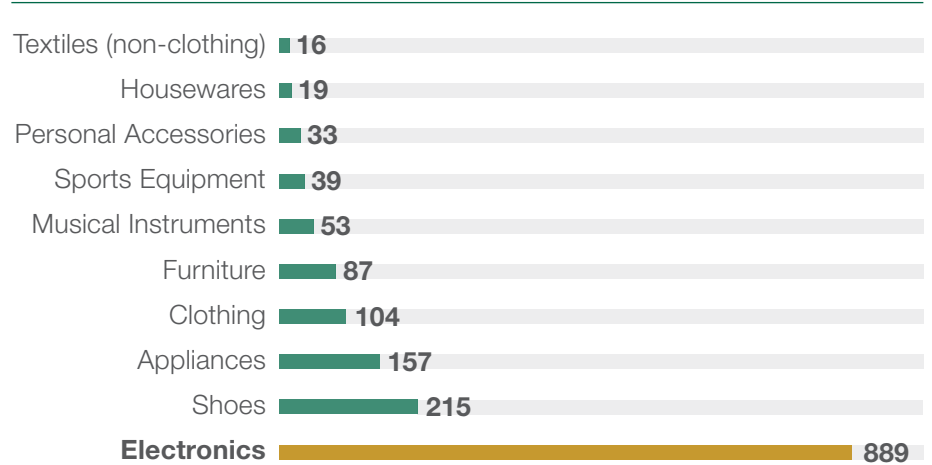


Figure 8 Number of cooperative outlets handling each type of product

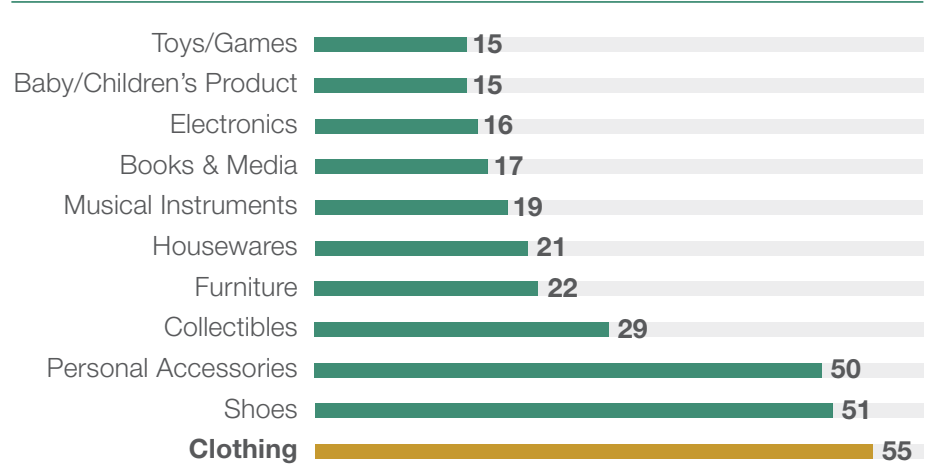


Figure 9 Number of drives handling each product



being temporary, seasonal drives have the potential to collect large amounts of items. In 2016, the New York Cares Coat Drive collected more than 109,000 coats, through 309 public collection points and 1,400 collecting groups.

Social Services

Social service programs include outlets, mostly nonprofit organizations, that collect and distribute second-hand and surplus products free of charge as part of their social mission. They do not have retail outlets.

Figure 10 Number of social service programs handling each type of product

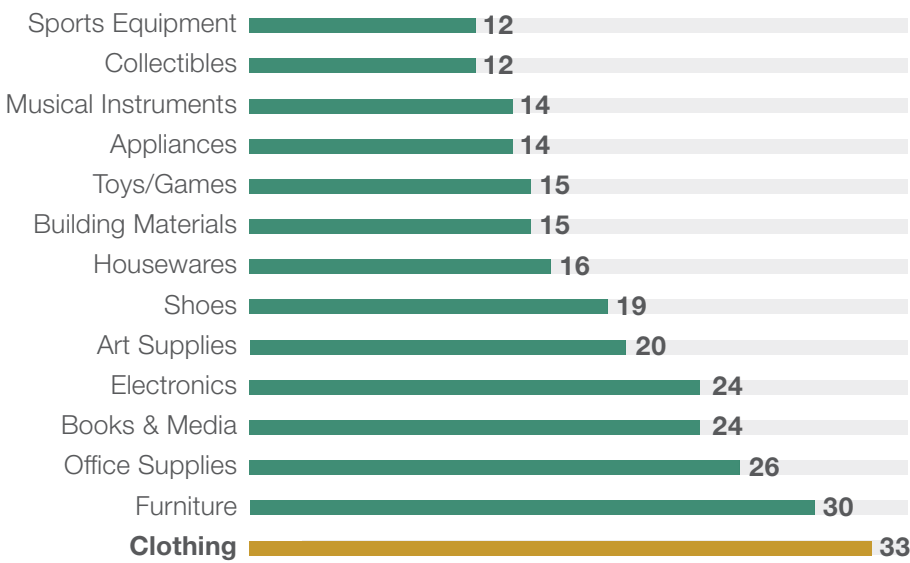
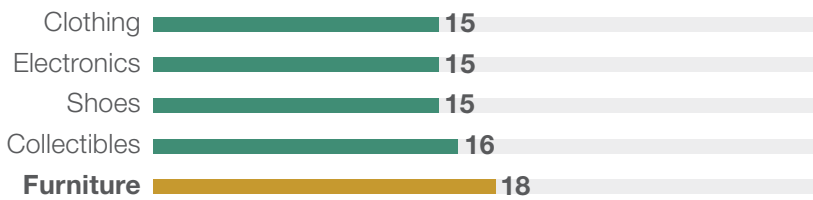


Figure 11 Number of online and virtual outlets handling each type of product



The majority of these organizations collect donations from the general public and private companies and redistribute them to other nonprofit organizations or to individuals receiving their social services. The reuse sector assessment identified 64 organizations operating in New York City that accept and distribute second-hand products. The diversity of services offered by these organizations is reflected in the variety of products that the organizations accept as donations. (As described in Exclusions on page 22, food rescue is not included.)

Online and Virtual Reuse Outlets

This category of reuse includes online stores, classified listings (where users can sell used products), exchange forums (where products are exchanged between users free of charge), and online

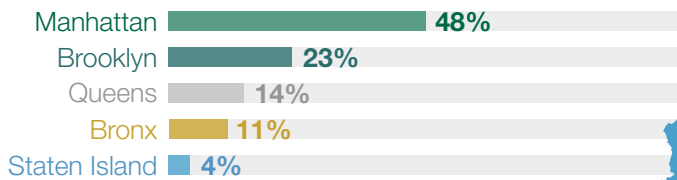
rental stores. The reuse sector assessment identified 40 entities selling second-hand products that operate online and do not have a brick-and-mortar store. Among these outlets, online stores and classified listings are the majority. The outlets handle a wide variety of products. Although the number of online outlets identified in this assessment is relatively small, these outlets can be accessed and used by a large number of people. And because of their ongoing nature, online classified listings such as Craigslist and Freecycle have unlimited potential to match used goods with new owners.

Reuse by Location

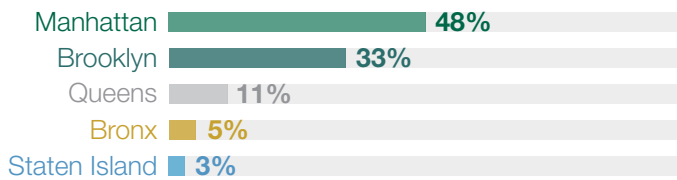
The graphs below show the geographic disposition of reuse businesses and organizations across the five boroughs of New York City, by reuse activity.



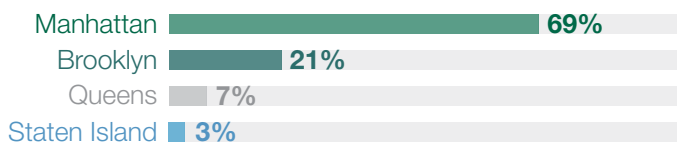
Retail organizations in each borough



Rental and Product Sharing organizations in each borough

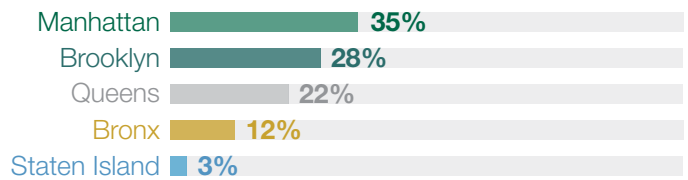


Cooperative Retail organizations in each borough

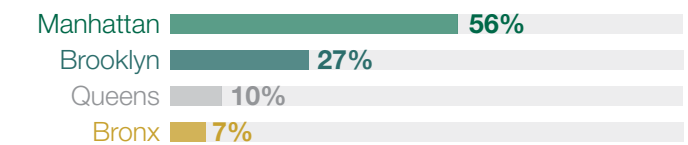


The reuse sector assessment highlights a need for more research to determine why Manhattan and Brooklyn have more reuse outlets than the Bronx, Queens, and Staten Island.

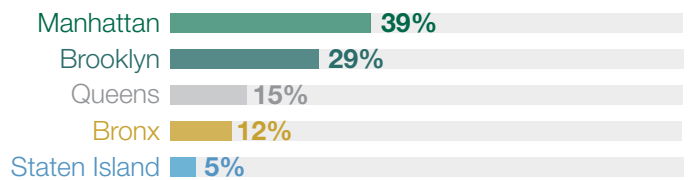
Repair organizations in each borough



Reuse Drives in each borough



Social Services organizations in each borough





Monkey Girlz | Staten Island

Profiles of NYC Reuse Outlets

The following pages present profiles of seven reuse organizations and businesses operating in New York City's five boroughs or online, in a range of reuse activity platforms. They provide a snapshot of the vibrancy, innovation, and passion of New York City's reuse sector.

New York Public Library, Mott Haven Branch

Bronx—Rental and Product Sharing

Book sharing through public libraries represents one of the oldest and most common forms of reuse.

The New York Public Library (NYPL) is the second largest library system in the country, providing free and open access to materials and information, while promoting literacy, citizenship, and community engagement. The NYPL Mott Haven Branch has been a resource to the local community since it opened to the public in 1905.

Reuse Activity / Products. The NYPL Mott Haven Branch has a collection of more than 102,000 items in circulation—books, DVDs, CDs, and computer tablets that are lent out and therefore regularly reused. More than 33,000 New Yorkers use the computers and other electronic devices at the branch every year. Mott Haven was one of the first NYPL branch libraries to participate in a pilot project launched in 2015 to lend out free WiFi devices for a year to community residents; the program was repeated in the 2016–17 school year for students in the community.

Clients and Community. The NYPL Mott Haven Branch serves a large and diverse community of all ages, including families, schools, daycare centers, shelters, and other community organizations. In addition to book and computer sharing, the library offers a wide variety of activities and support services, from storytelling and crafts to English as second language programs, computer support, and assisting community residents in signing up for IDNYC. With more than 175,000 visitors each year, the Mott Haven branch has become a model of both traditional and modern reuse, and a center of education, skills-building, and community development.

Environmental and Zero Waste Impact. NYPL is a major product-sharing organization in the City, with a total of more than 8 million books and other circulating items that are used and reused for free by the City’s residents. When NYPL removes books from its collection, it donates the books to community organizations for further use. The Mott Haven Branch

keeps these donations local, giving used library books to nearby WIC (Women, Infants, and Children) clinics and local hospitals. A local social service organization, East Side House Settlement, sets aside areas in its centers where the donated library books are available for people to borrow and return, keeping the books in the community and in effect creating hyper-local satellite reuse libraries.

Information provided by Jeanine Cross Thomas, Mott Haven branch library manager.



“ The Mott Haven Library is located in a community with access to few resources, and the Library has stepped into the gap. Where else can you find access to free resources in a safe and enjoyable place? Children are able to do their homework here and can borrow the books, tablets and laptops they need to succeed in school. ”

— Branch Manager,
Jeanine Cross Thomas



Time Galleries, Inc.

Brooklyn—Retail and Repair

Vintage and antique shops like Time Galleries, Inc. salvage furniture and other items that might otherwise end up in the waste stream.

Time Galleries, Inc. has been buying and reselling used, vintage, and antique goods in South Slope, Brooklyn, for 14 years. The packed shop occupies two floors totaling 5,700 square feet; furniture repair and restoration work is done by a couple of long-time shop employees in the store's workshop area downstairs. Time Galleries' owners, two brothers, have been in the vintage and antiques business for almost 19 years.



Reuse Activity and Products. Time Galleries, Inc. buys, repairs, restores, and resells a variety of used items, including furniture, lamps and chandeliers, art, and other collectibles and stage props. The items are purchased primarily at estate sales, with customers also selling goods directly to the store through email or walk-ins. By skillfully repairing and repurposing pieces, the shop salvages furniture and other items that might not otherwise be useful—for instance, by converting a vintage full-size bedframe into a more usable queen-size frame.

Clients and Community. Customers come from both the immediate neighborhood and around the City, and include residents, antique and vintage dealers, home decorators, and many film, television, and theatre stage designers and decorators. The shop is known by repeat clients who are looking for particular items, such as mid-century modern furniture or Art Deco pieces.

Environmental and Zero Waste Impact. With a turnover of sometimes twenty pieces per week, the shop finds and restores furniture and other items that might otherwise be thrown away, and markets them to customers who value them and give them a second life.

Information provided by Angel Panora and Luis Panora, Time Galleries, Inc. co-owners.

“ I go to an apartment or house and see something that's so beat up, it might look like it's ready to be thrown out. But I know what's underneath. I know that we can clean it, repair it, and restore it back to life. ”

— Angel Panora,
Time Galleries, Inc. co-owner



Grand Bazaar NYC

Manhattan—Flea Market

Flea markets like Grand Bazaar NYC support lively materials reuse by giving vendors and customers a popular, regular venue for buying and selling used and artistically repurposed goods.

Grand Bazaar NYC is the largest, and one of the oldest, curated weekly flea markets in the City, operating every Sunday, year-round. The market occupies 43,000 square feet of indoor and outdoor space on Manhattan’s Upper West Side, and hosts more than 100 local dealers—including local artists and craftspeople, reuse designers, and independent antique and vintage sellers.

“ Whether it’s repairing vintage radios and updating them to make them Bluetooth enabled, or transforming old New York traffic street light glass or subway tokens into jewelry, our vendors are engaged in all forms of reuse and creative reuse, taking old items and making them useful in new forms. In some cases, people are actually buying a piece of NYC history. ”

— Marc Seago,
Grand Bazaar NYC Executive Director

Reuse Activity / Products. Grand Bazaar NYC vendors offer everything from “upcycled” items made from reused materials to antiques—including one-of-a-kind, rare, and limited edition art; antique watches; vintage fashion and household collectibles; handmade jewelry; and furniture.

Clients and Community. The market was started in 1982 as a weekend “yard sale” by a group of public school parents to supplement fundraising for the local schools. The yard sale was wildly successful, and the market was established as the ongoing

GreenFlea Market in 1985 to ensure its continuity as parent volunteers moved on when their children graduated out of the schools. The name was changed to Grand Bazaar NYC in 2016 to better represent the market’s growth as one of the City’s most successful flea markets. Part of Grand Bazaar NYC’s mission is to keep New York City “creative and authentic” by providing affordable retail space to unique vendors. The market donates 100% of its profits to PS 87, The Computer School, PS 334, and PS 452—benefiting more than 4,000 children with funding for enrichment programs, books, supplies, teaching assistants, and sports and chess programs. More than 400,000 people visit the market annually, which also helps support weekend business in neighborhood shops and restaurants.



Environmental and Zero Waste Impact. Many of the market vendors are engaged in materials reuse by selling antiques and used and vintage goods, or are crafters, jewelers, or artisans who create new products from used materials. Other vendors are local businesses who use locally sourced goods to make their products. The market is exploring practical ways to separate recyclables on site, and to encourage food vendors to use environmentally friendly utensils, and all vendors to use environmentally friendly bags when selling.

*Information provided by Marc Seago,
Grand Bazaar NYC Executive Director.*



Recycle-A-Bicycle Program of Bike New York

Queens and Brooklyn—Repair, Retail, and Social Service

Repair shops are a mainstay of materials reuse by extending the useful lives of products that might otherwise be discarded.

Recycle-A-Bicycle (RAB) is a community-based bike shop that refurbishes donated used bicycles for resale and offers full-service bike repairs. RAB's recycling and education center is based in Long Island City, Queens; retail storefronts are in DUMBO, Brooklyn, and during the summer at the Long Island City Flea & Food market. Its youth programs promoting bicycling are located in schools throughout the City. RAB began in 1994 as a project of Transportation Alternatives with a grant from DSNY to “marry the issue of latch key kids with bicycle recycling and repair in after-school programs.” Incorporated separately in 1998, RAB merged with Bike New York in 2017 to facilitate more comprehensive educational programs.

Reuse Activity / Products. Bicycles are donated by individuals, bike shops, housing management companies, and other groups that sponsor collections. In 2016 RAB collected 1,893 bicycles; 40% of the bikes were distributed to youth, 39% were sold, and 19% were disassembled, with parts re-purposed or sent to a scrap dealer. Small parts and tubes were crafted and sold as jewelry.

“Recycle-A-Bicycle has many success stories! Citi Bike™ often hires graduates of RAB's earn-a-bike programs; at one point, more than 50% of Citi Bike's™ mechanics were trained by RAB. One RAB alum was hired when Citi Bike™ began, and is now second in command of all Citi Bike™ mechanics.”

— Karen Overton,
Recycle-A-Bicycle Director

Clients and Community. In addition to providing affordable bicycles for sale in the community, and free bikes to youth through “earn-a-bike” programs and donations, RAB runs a variety of programs benefiting New York City middle school and high school students. Proceeds from the sales and repair services support these programs, which include job training, environmental education, “cycle craft” recycled arts, and ride clubs. RAB partners with community groups to offer summer youth employment program sites and provide job training for low-income teens. Earn-a-bike students become skilled mechanics, and some go on to work in RAB shops, private sector shops, and Citi Bike™.



Environmental and Zero Waste Impact. The used bicycles collected by RAB in 2016 amounted to 27.5 tons diverted from the waste stream. In addition, RAB's environmental education programs reach more than 5,000 people a year and actively encourage reuse and recycling. By promoting cycling, RAB also contributes to air quality improvement in New York City, since bicycles do not emit pollutants. On average, RAB sells 550 bikes every year, primarily to commuters who either no longer pollute by driving, or who create more room for other riders to travel by public transport.

Information provided by Karen Overton,
Recycle-A-Bicycle director.



Monkey Girlz Treasures Consignment Boutique

Staten Island—Consignment

Consignment shops like Monkey Girlz sell used items on behalf of consignors and take a cut of the profits. This way, both the shop and the individual sellers profit from reuse, and customers have access to often unusual and high-quality used items.

Monkey Girlz is a 1,000-square-foot consignment boutique in the Castleton Corners neighborhood of Staten Island. The well-stocked shop offers a carefully curated selection of contemporary and vintage clothing and accessories, all cleaned and displayed with creativity and flair.

Reuse Activity / Products. The shop's merchandise includes gently used or never-worn women's clothing and footwear; handbags, hats, and other accessories; items like vintage mirrors and jewelry; and a limited selection of housewares. Consignor appointments are primarily in the shop, and occasionally in homes. The shop has a base of about 750 consignors, mostly women in Staten Island, Brooklyn, Manhattan, the Bronx, and New Jersey; some of them have been selling at the shop since it opened six years ago. The shop seeks out repair artisans like cobblers and seamstresses; sending them work helps support those reuse skills locally.

Clients and Community. The shop has a broad customer base, from teen girls to older women; as many as 80% of customers are repeat customers from all over the City and from New Jersey. The shop also attracts tourists who like to explore and shop "off the beaten path." Five bus lines run through the neighborhood, including express buses to and from Manhattan, and an express bus from Brooklyn that stops on the corner right next to the shop. Monkey Girlz hosts events at the boutique that feature local artists and artisans, often donating event proceeds to local charities. Monkey Girlz has also worked with nonprofit organizations by donating prom dresses for girls who couldn't afford them.

Environmental and Zero Waste Impact. Monkey Girlz keeps consignment inventory for 90 days; if an item isn't sold or picked up by the consignor, the

shop donates it to an organization like Red Cross or Suit Up. In the borough of Staten Island where people often have homes with basements and attics that may be filled with hidden treasures or family heirlooms, the shop lets people give a second life to family items that they don't want to wind up in the trash.

*Information provided by AngeLee,
Monkey Girlz founder and owner.*

“ We love to give back to the community, and to show people that second-hand is an amazing way to shop, save money, and help the environment. I love reusing things, rescuing beautiful things and finding new homes and new lives for them. Along with the clothes, I learn their histories, the stories that enhance their value. My motto is ‘Re-Sale, Re-Love, Re-cycle, Re-Use, Re-Purpose.’ ”

*— AngeLee,
Monkey Girlz founder and owner*





AptDeco

Online—Materials Exchange

AptDeco and other online platforms for buying and selling used goods represent the changing reuse marketplace in and around New York City.

Established in 2014, AptDeco provides customers with a way to buy and sell used furniture that removes the typical transportation and logistical limitations of a materials exchange. AptDeco facilitates transactions through its online platform and 7-day customer service, and provides logistics support through direct delivery from the seller to the buyer. With 10,000 active listings on its platform from sellers in New York City, AptDeco is a leader in the growing online reuse marketplace.



Reuse Activity / Products. AptDeco is a platform for buying and selling furniture—including sofas, dressers and other storage units, chairs, tables, and more. The company doesn't buy products directly, but instead facilitates the sale logistics between buyers and sellers. Suppliers or stores with AptDeco listings include residents, individual artisans, independent retailers, and larger franchises. The listings range from used and vintage furniture to high-end one-of-a-kind designer pieces.

Clients and Community. Sellers include individuals who are moving or redecorating (about 70%), interior designers, and large and small furniture stores looking to liquidate surplus inventory (about 30%). Buyers are people looking to source their furniture quickly and

easily from one place, without having to worry about the hassle of pickup and delivery. A “tech company with a local focus,” AptDeco’s goal is to “connect neighborhoods in a way they couldn’t be before.”

Environmental and Zero Waste Impact. In 2014, the year the company was started, New Yorkers threw away about 200,000 tons of furniture waste, not including the packaging included with new products. Because New Yorkers move so frequently, they often face transportation challenges and have limited options for donating furniture, AptDeco has met sellers who were about to dispose of items only a year old or less. By providing an easy way to buy and sell furniture, AptDeco actively promotes reuse and reducing waste. AptDeco made 10,000 furniture pickups in 2016—80% of the sales in 2016 were used furniture sold by individuals.

Information provided by Sateesh Daniel, Head of Business Development, AptDeco.

“Technology has changed this business and made it easier. Someone in the Bronx might see an amazing deal on Craigslist for a dining table in Queens, but it’s not realistic for them to travel there, inspect the table, and lug it all the way back home after work. By connecting online the buyer and seller suddenly feel much closer. It’s as if the whole City has access to what was once just an amazing yard sale.”

— Sateesh Daniel, AptDeco



Pop Up Repair

Temporary Locations—Repair

Pop Up Repair represents a new kind of innovative business that aims to promote reuse and a sustainable model of household consumption, while creating local jobs.

Pop Up Repair is an itinerant repair service for household items, working to extend the lives of items and divert material from landfills through repair. Pop Up Repair opens short-term shops in different neighborhoods in various locations—in storefronts, within larger businesses, or at existing community venues and events like weekly Greenmarkets—in order to make drop-off and pick-up convenient for the customers. Customers drop off their broken items within a certain time frame (usually two to four weeks), and pick them up repaired at the same location, before the Pop Up closes and goes on to the next spot.

“ Every dollar that someone spends getting something repaired goes to a local New York artisan, and our customers love that. It provides a valuable and increasingly rare service for the community: a convenient way to do the right thing for the environment, and a way to make it easier for people to take care of what they have. ”

— Sandra Goldmark,
Pop Up Repair co-founder

Reuse Activity / Products. Founded as a start-up social enterprise three years ago, Pop Up Repair facilitates the repair and reuse of household items of all kinds, including lamps, small appliances, furniture, jewelry, ceramics, toys, clothing, and more. To date, Pop Up Repair has taken in more than 2,000 broken items, and successfully repaired more than 85% of them.

Clients and Community. At a time when brick-and-mortar repair shops are closing, Pop Up Repair provides a valuable and increasingly rare service to the community: a convenient way for people to take care of their stuff and to reduce waste. Customers tend to be 35 to 65 years old, either apartment owners or long-term renters—people looking for an easy way to get broken items fixed. To promote an upcoming repair event, Pop Up Repair sends a notification email to its subscriber base and to local news organizations. Pop Up partners advertise the service to their customers in the weeks preceding a Pop Up event, and the service gets grassroots marketing as well, with people spreading the word about an event through PTAs, church groups, neighborhood list-serves, local newsletters and blogs, and community Facebook pages. Pop Up Repair creates local jobs for artists and artisans; many of the fixers are theatre artists or other freelance workers.



Environmental and Zero Waste Impact. Pop Up Repair operates on the premise that the culture needs to build a healthier model of consumption, and that repair, reuse, and more thoughtful design all need to be a part of the equation. Repair not only reduces the amount of materials going to landfills; every item that is repaired also represents a new item that is not manufactured and shipped, which has huge environmental savings.

*Information provided by Sandra Goldmark,
Pop Up Repair co-founder.*



Looking Forward

As the City works toward its goal of diverting zero waste to landfills by 2030, DSNY plans to broaden its support of local materials reuse, to adapt to the changing needs of New Yorkers. To meet these goals, DSNY will look to engage stakeholders from all relevant sectors, review and assess challenges, and explore additional opportunities to leverage new technology and partnerships. The Department will also continue to assess the state of the City's reuse sector in future periodic assessments, with attention to the following challenges and opportunities.

Challenges. Similar to the residents they serve, local material reuse and donation programs face increasing logistical challenges related to high rent, limited storage capacity, and transportation. Another concern for reuse is the decrease in high-quality repairable products, and the increase in costs of repair or refurbishment. DSNY will examine these challenges and look to develop collaborative strategies to deal with them.

Opportunities. In future studies, DSNY will review and consider new opportunities in the following areas:

- **The role of repair within the reuse sector.** With repair outlets representing more than 39% of local, second-hand dealer licensees, DSNY will further assess this subgroup of the reuse industry, to learn more about the challenges of repair, the needs of repair outlets, and ways to encourage repair instead of product replacement.
- **Food rescue.** While DSNY's previous reuse initiatives have focused on reuse of durable non-food related goods, in future studies DSNY plans to look more closely at food rescue, to learn what can be done to encourage safe and appropriate donations and to propose new initiatives that might help close the gap between food waste and hunger in NYC. (See Food Donation and Rescue, page 46.)
- **Sharing economy.** With the growing interest in product rental and sharing, and with many reuse outlets (such as libraries and bike share services) engaged in rental and sharing, further study will be done to determine the role that sharing plays in local reuse, including considering ways to encourage and strengthen the sharing economy.
- **The "donation model."** In the nonprofit reuse sector, the in-kind donation of goods plays a huge role in supporting the missions of organizations that serve millions of New Yorkers each year. DSNY will continue to explore additional ways to encourage New Yorkers to donate used items instead of discarding them, and to view that activity as a vital part of reuse and waste reduction.
- **Disaster Response Planning.** DSNY will continue to evaluate the role of the reuse and the reuse sector in the management of unsolicited donated goods in disaster. The Department will continue its ongoing collaboration with NYCEM and NYCVOAD to help encourage residents and organizations to donate responsibly during disasters and work to ensure that donated goods do not go to waste. In 2017 DSNY will also be working to update its donateNYC (nyc.gov/donate) website for use in disaster response.
- **Distribution of reuse outlets throughout the City.** The 2017 reuse sector assessment found that outlets across most of the reuse platforms are currently concentrated in the boroughs of Manhattan and Brooklyn. DSNY will explore ways to address this skewed distribution of outlets in the City and provide better, easy access to reuse venues in the other underserved boroughs.
- **New technology.** In addition to continuing its ongoing development of the donateNYC website and mobile app, DSNY will assess new and innovative technology solutions, with the goal of one day making materials reuse almost as easy as putting it out on the curb.
- **Reuse and exchange of surplus goods.** While not "second-hand" material by definition, surplus inventory can end up becoming garbage if not managed properly. DSNY will explore the waste reduction impact of exchanging, donating, and selling unwanted businesses and government surplus goods.

Food Donation and Rescue

Although food waste that is redistributed for consumption falls outside both the EPA and European Union definitions of reuse, food donation and food rescue play a critical role in DSNY's waste diversion strategy, and in efforts by the Office of the Director of Food Policy to increase food security in New York City.⁴⁰

Food scraps constitute a large portion—18%—of the waste discarded by New York City residents.⁴¹ To address this, DSNY has several initiatives for diverting organic waste, including food scraps, from the waste stream. In the fall of 2013, DSNY commenced a citywide rollout to collect residential organic waste—the program currently serves one million residents and will grow to serve 3.3 million households in the City by the end of 2017.⁴² In addition, through its partnerships with GrowNYC and the NYC Compost Project, DSNY provides collection points around New York City where residents can drop off food scraps for composting.

While these initiatives reduce the landfilling of food scraps, given the large amounts of food generated (and wasted) in the City,⁴³ it is clear that more can be done to eliminate food waste and to help make food accessible for people who need it. It has been estimated that some 1.4 million New Yorkers experience food insecurity⁴⁴—limited access to affordable, nutritious food. According to a report by Food Bank,⁴⁵ food pantries and soup kitchens in New York City have been experiencing food shortages in recent years.⁴⁶

Food rescue can help bridge this gap. In contrast to the collection and composting of food scraps, food rescue is the collection and transportation of prepared foods from donor businesses and residents, by food rescue organizations that deliver the products to venues like food pantries, soup kitchens, and senior centers.

The major players in New York City's food rescue sector include well-established groups such as the Bowery Mission, City Harvest, and Food Bank for New York

City, as well as innovative newcomers like Rescuing Leftover Cuisine. These organizations maintain networks of redistribution venues to which they deliver donated food products. The NYC Department of Health and Mental Hygiene estimates that within the food rescue networks there are more than 1,000 of these redistribution venues throughout the City.⁴⁷

While the process of food rescue is somewhat similar to the model of donating and reusing durable goods, the needs for refrigeration and immediate redistribution of food to avoid spoiling requires expedited pick-up and specialized transportation.⁴⁸ Currently, food rescue or food bank organizations each maintain their own distribution systems, with call centers for donors to schedule pick-ups of food suitable for donation. Some of these organizations provide both rescue and distribution services, and capacity and technological assets vary from operation to operation.^{49,50} While food rescue organizations are some of the most agile and effective donation enterprises in the City, there are considerable challenges in food rescue, and considerable opportunities to improve the coordination between these organizations so that food not usable by one group can be redirected to another. Opportunities for improvement include technology development to support communication and referrals between reuse organizations, improving data management strategies to assess waste reduction impact, and developing collaborative approaches for storage and transportation.⁵¹

In early 2017, the New York City Council proposed Intro. 1514, which seeks to address food waste and support food rescue by establishing a web portal aimed at expanding and improving food rescue coordination. The possibility of future legislation to support food rescue, together with DSNY's citywide organics collection initiatives and the launch of donateNYC, all provide new opportunities for the City to leverage its existing resources and existing relationships with food rescue organizations to considerably expand food rescue and donation in the City.

Appendix

How Reuse Businesses and Organizations Were Identified for This Report

For the reuse sector assessment, businesses and organizations meeting the reuse entity definition on page 11 were obtained from the following sources:

- **North American Industry Classification System (NAICS).** This is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.⁵² For this assessment, businesses with NAICS codes associated with reuse activities operating in New York City were identified.
- **NYC Department of Consumer Affairs (DCA).** DCA licenses more than 81,000 businesses in more than 50 industries, and enforces key consumer protection, licensing, and workplace laws that apply to countless more.⁵³ Businesses licensed as “Electronic and Home Appliances Service Dealers,” and “Second-hand Dealer—General” were identified and included in this assessment.
- **donateNYC directory and Partnership program databases.** This includes businesses and nonprofit organizations registered with donateNYC, as well as current organizations in the donateNYC Partnership.
- **Online search.** A search was undertaken for key words such as “thrift stores,” “antique shops,” and “vintage shops” to identify relevant businesses and organizations for this report.

In total, out of an initial list of 8,426 entities, CMR and DSNY identified 2,257 businesses and organizations actively operating in the City that meet the reuse definition and handle the reuse products set out in this report. The data validation process that reduced the number of outlets from 8,426 to 2,257 started with removal of duplicates from the list of businesses obtained from DCA and NAICS. The number was further reduced when phone calls and online research identified operations that had permanently closed. The remainder of businesses

that were in the initial list of 8,426 entities but were not included the final 2,257 were: entities legally registered as second-hand dealers in New York City but with no existing physical operation within the City (such as a storefront or warehouse); repair services without a storefront facility or website; businesses selling auto parts; libraries in educational institutions (removed because they are not open to the public); commercial repair services (such as plumbing, garage doors, and windows); laundromats; and party equipment rental outlets.

Relevant NAICS categories included in the assessment.

NAICS Code	Category
453310	Used Merchandise Stores
454390	Other Direct Selling Establishments
519120	Libraries and Archives
532210	Consumer Electronics and Appliances Rental
532220	Formal Wear and Costume Rental
532230	Video Tape and Disc Rental
532291	Home Health Equipment Rental
532292	Recreational Goods Rental
532299	All Other Consumer Goods Rental
532310	General Rental Centers
811211	Consumer Electronics Repair and Maintenance
811212	Computer and Office Machine Repair and Maintenance
811213	Communication Equipment Repair and Maintenance
811411	Home and Garden Equipment Repair and Maintenance
811412	Appliance Repair and Maintenance
811420	Reupholstery and Furniture Repair
811430	Footwear and Leather Goods Repair
811490	Other Personal and Household Goods Repair and Maintenance

Out of an initial list of **8,426** entities, CMR and DSNY identified **2,257** businesses and organizations actively engaged in materials reuse.

Data Collected

The following are questions that were used to collect data about reuse businesses and organizations through phone calls and online research.

1. Name of the business

2. Address, Borough, Zip Code

3. Contact information: Email, Website

4. Work with used/second-hand products? Yes/No

- a. Accept donations of used products at these locations? Yes/No
- b. Work with new products as well? Yes/No
- c. Offer pick up? Yes/No

5. Any other location? Yes/No

- a. How many?

6. Type of Venue?

- a. Antique Store
- b. Bike Shop
- c. Car Dealer
- d. Charities/Social Program
- e. Collection Bin
- f. Consignment Store
- g. Corporate Office
- h. Exchange Event
- i. Exchange Forum
- j. Flea Market
- k. Food Bank
- l. Library
- m. Musical Instrument Store
- n. Online Classifieds
- o. Pawn Shop
- p. Repair Shop
- q. Thrift Store
- r. Used Book Store
- s. Used Furniture Store
- t. Warehouse
- u. Other (Please specify)

7. Types of Products? Select all that apply.

- a. Appliances
- b. Art Supplies
- c. Books & Media
- d. Building Materials
- e. Clothing
- f. Collectibles
- g. Commercial Furniture
- h. Commercial Restaurant and Hospitality Equipment
- i. Containers & Packaging
- j. Electronics
- k. Food & Beverages
- l. Glass
- m. Household Furniture
- n. Housewares
- o. Medical Supplies & Personal Care
- p. Musical Instruments
- q. Office Supplies
- r. Shoes
- s. Sporting Equipment
- t. Textiles (non-clothing)
- u. Toys/Games
- v. Vehicles
- w. Other (Please specify)

8. Type of Operation? Select all that apply.

- a. Retail
- b. Repair
- c. Rental
- d. Social services
- e. Cooperative retail (flea markets, consignment stores, exchange events)
- f. Drives
- g. Online
- h. Other (Please specify)

Categories in the 2013 Municipal Solid Waste Characterization Study Potentially Containing Reusable Products

Material Category Definitions

Material categories containing potential reusable items highlighted; ■

Group	Category	Description
Paper	Newspaper	Printed ground wood newsprint (Advertising “slicks” (glossy paper), if found mixed with newspaper; otherwise, ad slicks are included with mixed low grade.)
Paper	Plain OCC/Kraft Paper	Old unwaxed/uncoated corrugated container boxes, and Kraft paper including paper bags
Paper	High Grade Paper	White and lightly colored bond, rag, or stationery grade paper. This includes white or lightly colored sulfite/sulfate bond, copy papers, notebook paper, envelopes, Continuous-feed sulfite/sulfate computer printouts and forms of all types, excluding carbonless copy paper
Paper	Mixed Low Grade Paper	Includes junk mail, magazines, advertising “slicks” (glossy paper) not mixed with newspaper, colored papers, bleached Kraft including bags, boxboard, mailing tubes, carbonless copy paper, ground wood computer printouts, telephone directories, paperback books, hardcover books
Paper	Compostable/Soiled Paper/Waxed OCC/Kraft	Waxed papers and cardboards, other papers that were soiled with food during use (e.g., pizza box inserts); paper towels, wipes and napkins; paper plates, platters, cups, and bowls
Paper	Other Nonrecyclable Paper	Coated paper frozen food and ice cream containers/packaging and other polycoated papers (excluding polycoated beverage cartons and aseptic packaging); paper with other materials attached (e.g. juice concentrate cans, and spiral notebooks), and other non-recyclable papers such as carbon copy paper, label backing, and photographs, gypsum board tape rolls.
Beverage Cartons	Beverage Cartons and Aseptic Boxes	Beverage and food containers made of bleached and unbleached paperboard coated with HDPE film. This includes polycoated milk, juice and soup containers, and aseptic juice and soup boxes, including those with plastic spouts attached. Excludes juice concentrate cans.
Plastic	#1 PET Bottles and Jars	#1 Polyethylene terephthalate translucent or colored (green, blue, red, amber, yellow, orange and opaque) narrow neck bottles and jars.
Plastic	#2 HDPE Natural Bottles	High-density translucent polyethylene (#2) bottles. Milk, juice, beverage, vinegar, distilled water bottles and jars with necks.
Plastic	#2 HDPE Pigmented Bottles	High-density colored (including opaque white) polyethylene (#2) bottles. Liquid detergent bottles, some hair care bottles and jars with necks. Includes empty motor oil bottles. (Chemical bottles that still contain product are sorted according to that material-for instance, pesticides.)
Plastic	Other Plastic Bottles	All other bottles and jars with necks labeled with resin codes other than #1 and #2, bioplastic, dual-labeled (marked with two resin codes), other labeled, or unlabeled. Includes empty bottles that once held motor oil or other HHP. (Chemical bottles that still contain product are sorted according to the product).
Plastic	Rigid Plastic Containers/Packaging	All non-bottle rigid plastic containers and packaging made of any resin. Thermoform molded trays, clamshells, and other packaging, typically used for food items and made out of #1 PET. White plumbing pipe, identifiable PVC packaging other than PVC bottles/tubs. Injection molded (predominantly #2 & #5 plastic resin) wide mouth containers without a neck, such as cottage cheese and margarine tubs, of any resin type. Includes lids to the tubs and plastic bottle caps, pill bottles, #6 rigid polystyrene containers and packaging. Also clear trays, clamshells, and cases, salad green containers, cookie tray inserts, yogurt, butter and sour cream containers, CD cases. Includes containers and packaging not classified elsewhere, including containers of all types, clamshells, trays, protective packaging, stand-up toothpaste tubes, and plastic pools. Includes empty tubes of toothpaste, lotion, conditioner, body wash and caulk.
Plastic	#6 Expanded Polystyrene	#6 expanded polystyrene (EPS) packaging and finished products. Includes EPS trays used for packaging and shelf display of meats and groceries. Includes Styrofoam plates, cups, bowls and platters, which are Single Use Plates, Cups, and Cutlery.

Material Category Definitions (continued)

Group	Category	Description
Plastic	Film: Retail Bags and Sleeves	Plastic bags given to customers by any retail establishment for transporting purchased goods. Includes labeled grocery and merchandise bags, dry cleaner bags, and newspaper sheath bags. Excludes garbage bags, baggies or Ziploc bags; or bags heavily soiled with food.
Plastic	Film: Garbage Bags	Plastic bags designed and marketed to contain garbage, recycling, or other materials for disposal.
Plastic	Film Plastic: Food/ Drink Pouches	Drink pouches made of multi-layer film plastic and including foil.
Plastic	Film Plastic: All Other Film	Other film bags not elsewhere classified and other plastic film products. Film that is heavily contaminated with food, liquid or grit during use (including baggies, Ziploc bags and plastic wraps); is woven together (e.g., grain bags); contains multiple layers of film or other materials that have been fused together (e.g., potato chip bags).
Plastic	Single-Use Plates, Cups, Cutlery (Excluding EPS)	Plastic single use spoons, forks, knives, plates, cups, cup lids, bowls, straws, and platters of various resins. Excludes expanded polystyrene (EPS).
Plastic	Appliances: Plastic	Small and large electric appliances made predominantly (> 50%) of plastic.
Plastic	Bulks/Rigid Plastic	Bulky rigid plastic items larger in size than a breadbox. Includes plastic furniture, tools, toys, plastic crates and soda bottle carriers. Includes 5-gal buckets and large planters. Excludes plastic appliances.
Plastic	Other Plastic Materials Not Elsewhere Classified	Plastic items made entirely of plastic or predominantly of plastic not elsewhere classified. As a rule of thumb, smaller in size than a breadbox. Includes pens and markers, lighters, 3-ring binders, small toys and housewares, toothbrushes, razors, dental floss containers, CD/DVDs, VHS tapes.
Glass	Clear Container Glass	Manually sortable, recyclable clear glass bottles and jars that are greater than 2" x 2"
Glass	Green Container Glass	Manually sortable, recyclable green glass bottles and jars that are greater than 2" x 2"
Glass	Brown Container Glass	Manually sortable, recyclable brown glass bottles and jars that are greater than 2" x 2"
Glass	Other Color Container Glass	Manually sortable, recyclable blue, yellow, red and other color glass bottles and jars that are greater than 2" x 2"
Glass	Mixed Cullet	Broken glass of any color not manually sortable (under 2" x 2"); glass shards
Glass	Other Glass	Window glass, mirrors, light bulbs (except fluorescent tubes), decorative glassware (e.g. vases), decorative glass bottles (e.g. perfume bottles), drinking glasses, other noncontainer glass.
Metal	Aluminum Cans	Aluminum beverage and food cans and bi-metal cans made mostly of aluminum.
Metal	Aluminum Foil/ Containers	Aluminum food containers, trays, and foil.
Metal	Other Aluminum	Aluminum products and scrap that are 50% or more aluminum by weight, such as window frames, cookware.
Metal	Other Nonferrous	Non-aluminum metals not derived from iron, to which a magnet will not adhere, and which are not significantly contaminated with other metals or materials. Includes copper, brass, lead, stainless steel, zinc.
Metal	Steel/Tin Food Cans	Steel food containers, including bi-metal cans mostly of steel. Includes removed steel lids.
Metal	Empty Aerosol Cans	Empty, mixed material/metal aerosol cans. (Aerosols that still contain product are sorted according to that material — for instance, solvent-based paint.)
Metal	Other Ferrous	Ferrous and alloyed ferrous scrap metals to which a magnet adheres and which are not significantly contaminated with other metals or materials. Includes ferrous metal caps/lids to containers of other material types.
Metal	Mixed Metals	Items that are predominately metal with other materials attached such as motors, insulated wire, and finished products containing a mixture of metals, or metals and other materials, that are not classified in the "small appliances" section below. Includes pieces of white goods. Included certain non-computer insulated wiring such as holiday light strands if the wiring is half or more of the weight.

Material Category Definitions (continued)

Group	Category	Description
Metal	Appliances: Ferrous	Large and small electric appliances made predominantly of ferrous metal (steel). Includes large appliances such as washers, dryers, stoves, refrigerators, dishwashers, etc. Includes small appliances such as toasters, microwave ovens, power tools, curling irons, and light fixtures.
Metal	Appliances: Nonferrous	Large and small electric appliances made predominantly of non-ferrous metal (stainless steel).
Organic	Yard Waste	Any plant materials from a yard or garden area. Includes grass clippings, leaves, weeds, garden wastes, prunings, trimmings, limbs, stumps, etc. Also includes cut flowers and house plants.
Organic	Food	Vegetative and non-vegetative food wastes and scraps. Includes vegetative food wastes such as vegetables and fruit as well as dairy, meat, bones, shells, husks, rinds, and prepared foods etc. Also includes vitamins and supplements. Excludes food containers, except when container weight is not appreciable compared to the food inside and separation is not practical.
Organic	Non-C&D Wood	Wood products not associated with C&D activities. Includes furniture, popsicle sticks, chopsticks, wooden spoons, and other miscellaneous household wood products. Also includes clean, stained, painted and composite woods, wicker, and box springs.
Organic	Textiles: Non-Clothing	Non-clothing fabrics made of rag stock fabric materials of natural or synthetic textiles, such as cotton, wool, silk, woven nylon, rayon, and polyester. Includes handbags, linens, draperies, tablecloths, nylon rope.
Organic	Textiles: Clothing	All clothing textiles. Includes cloth diapers and fabrics made of natural or synthetic textiles, such as cotton, wool, silk, woven nylon, rayon, and polyester.
Organic	Carpet/Upholstery	General category of flooring applications and non-rag stock textiles consisting of various natural or synthetic fibers bonded to some type of backing material. Includes mattresses and cushions made only of urethane foam with upholstered exterior.
Organic	Disposable Diapers & Sanitary Products	Diapers and sanitary products made from a combination of natural and/or synthetic fibers, and made for the purpose of single use. This includes disposable baby diapers, adult protective undergarments, and feminine hygiene products.
Organic	Animal By-Products	Animal carcasses not resulting from food storage or preparation. Also includes animal wastes, and kitty litter.
Organic	Shoes/Rubber/Leather	Finished products and scrap materials made of leather, and natural and synthetic rubber. Includes leather jackets, belts, bags, purses, shoes, sneakers, sandals, and boots, bath mats, inner tubes, garden and rubber hoses, foam rubber, tire pieces, latex gloves.
Organic	Fines	Small organic items that are smaller than 1/2 inch and fell through the screen on the sort table.
Organic	Miscellaneous Organics	Items of organic origin not elsewhere classified. Include wax, bar soap, carpet padding, cigarette butts, briquettes, and fireplace, burn barrel and fire pit ash, vacuum cleaner bags and contents, sponges. Also includes pet food and hair. Includes traditional mattresses made of a combination of foam and metal coil construction with upholstered exterior.
Electronics	Audio/Visual Equipment (TV Peripherals-Covered)	Electronic A/V equipment covered by the NYS Electronics Recycling Law. Includes VCRs, digital video recorders, DVD players, digital converter boxes, cable or satellite receivers, electronic or video game consoles. Includes any batteries that are still inside the devices.
Electronics	Audio/Visual Equipment (Non-Covered)	Electronic A/V equipment not covered by the NYS Electronics Recycling Law. Includes Radios, Stereos, Tape Decks, Cameras, GPS devices, Cell phones, Calculators. Includes any batteries that are still inside the devices.
Electronics	Computer Monitors	Items other than televisions containing a cathode ray tube (CRT) such as computer monitors and laptops. Also includes flat screen monitors
Electronics	Televisions	Television sets containing a cathode ray tube (CRT) and flat screen TVs.
Electronics	Other Computer Equipment	Computer items not containing CRTs such as processors, mice and mouse pads, keyboards, and disk drives, cords and cables, portable devices (portable digital music player, tablet, e-readers etc.), printers, scanners, servers. Includes both computer cords and regular extension cords.
Constr. Debris	Untreated Dimension Lumber, Pallets, Crates	Untreated, milled lumber commonly used in construction for framing and related uses. Includes 2 x 4's, 2 x 6's, etc.

Material Category Definitions (continued)

Group	Category	Description
Constr. Debris	Treated/ Contaminated/ Composite Wood	Lumber and wood products that have been painted or treated so as to render them difficult to compost (with generally 50% or more of the surface area treated). Includes painted and chemically treated lumber, plywood, strandboard, and particleboard. Also includes wood and lumber products that are mixed with other materials in such a way that they cannot easily be separated.
Constr. Debris	Other C&D Debris Not Elsewhere Classified	Construction debris (other than wood, plastic and metal) that cannot be classified elsewhere, and mixed fine building material scraps. Includes clean and painted gypsum drywall, fiberglass insulation, rock/concrete/bricks, asphaltic and other roofing, fixtures, etc.
Harmful Household Products	Oil Filters	Metal oil filters used in cars and other automobiles.
Harmful Household Products	Antifreeze	Full or partially full containers of anti-freeze.
Harmful Household Products	Wet-Cell Batteries	Wet-cell batteries of various sizes and types as commonly used in automobiles. Includes lead-acid batteries.
Harmful Household Products	Water-Based Adhesives/Glues	Water or resin/volatile solvent-based glues and adhesives, including epoxy, rubber cement, two-part glues and sealers, and auto body fillers.
Harmful Household Products	Latex Paint	Latex paint
Harmful Household Products	Oil-Based Paint/ Solvent	Oil-based paints, varnishes, and similar products. Various solvents, including chlorinated and flammable solvents, paint strippers, solvents contaminated with other products such as paints, degreasers and some other cleaners if the primary ingredient
Harmful Household Products	Pesticides/ Herbicides/ Rodenticides	Variety of poisons with the purpose of discouraging or killing insects, weeds, vermin, or microorganisms. Fungicides and wood preservatives, such as pentachlorophenol, are also included.
Harmful Household Products	Dry-Cell Batteries	Dry-cell batteries of various sizes and types as commonly used in households. Includes cell phone and button cell batteries.
Harmful Household Products	Fluorescent Tubes/ CFLs	Fluorescent light tubes and compact fluorescent light bulbs (CFL).
Harmful Household Products	Mercury-Laden Wastes	Thermostats, thermometers, and other items containing mercury. Excludes fluorescent bulbs.
Harmful Household Products	Compressed Gas Cylinders, Fire Extinguishers	An apparatus, typically a metal container, containing chemicals or gas, held under pressure.
Harmful Household Products	Home Medical Products	Syringes, IV Bags, medical tubing
Harmful Household Products	Other Potentially Harmful Wastes	Caustic acids and bases whose primary purpose is to clean surfaces, unclog drains, or perform other actions; photography chemicals, chemistry sets; household disinfectants and pool chemicals; gasoline/diesel fuels; motor oils and automotive fluids not elsewhere classified; smoke detectors, explosives.
Misc.	Miscellaneous Inorganics	Other inorganic materials not classified elsewhere. Includes ceramics, full or partially full containers of non-hazardous cleaning & hygiene products, fabric softener sheets and Brita filters.

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