

TOWN OF ITHACA— DEPARTMENT OF PUBLIC WORKS

WASTE ASSESSMENT REPORT



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This report outlines specific steps for creating a successful ReBusiness 4R Program. Use the clickable blue links in the Table of Contents on the left to navigate the report. Included with the report are tools to help you in improving the Town of Ithaca's program, such as signs, decals, and recycling bins.

Thank you for participating in the program, please know that our assistance is available at any time during implementation of these recommendations. Feel free to [contact us](#) should you have any questions or comments regarding your waste assessment.

Look for these symbols throughout this report:

H = Indicates a section addressing your waste management "headache".

\$ = Indicates a section that highlights potential savings or avoidable costs.

E = Indicates a section that highlights quick and easy opportunity that could be done today.

EXISTING PRACTICES

ORGANIZATION PROFILE

The Town of Ithaca's Department of Public Works is located at 106 Seven Mile Drive in Ithaca. The Town of Ithaca owns the building, which is approximately 20,000 square feet. There are approximately 32 full time employees, along with additional seasonal staff, who mainly utilize the building between the hours of 6:30 am and 3:00 pm. The building consists of a main office area with a private office, a break room, a conference room, a woodshop, a boiler room, garages, and bathrooms. The building includes a full kitchen that could be utilized for 24 hour emergency response command center, if necessary.

EXISTING WASTE REDUCTION EFFORTS

RECYCLING & COMPOST COLLECTION FOR:

- Deposit containers
- Fluorescent tubes
- Kitchen and yard waste
- Residential yard waste
- Road hazard composting
- Single stream recyclables
- Toner cartridges
- Used filters and oil

REDUCTION & REUSE THROUGH:

- 2-Sided copying
- Leasing of small equipment
- Mechanical screener for cobble sediment
- Use of cloth shop towels
- Use of refillable products
- Use of reusable dishware
- Scrap paper reuse
- Packaging reuse and return



Various materials, stored for reuse

PURCHASING THE FOLLOWING GREEN PRODUCTS:

- Paper towels
- Pretreated road salt for efficiency

H

WASTE MANAGEMENT "HEADACHE"

The Town of Ithaca Department of Public Works has indicated that a common waste management "headache" is the need to "do more with less" while meeting community expectations without overburdening employees.

WASTE HANDLING:

The images below highlight elements of the waste handling system. For a more detailed description, please see the Materials Handling Flow Chart.



Yard waste for chipping



Scrap metal, tires, and trash dumpster



Kitchen trash and compost



Oil recycling system



Additional kitchen trash



Free compost and mulch for residents

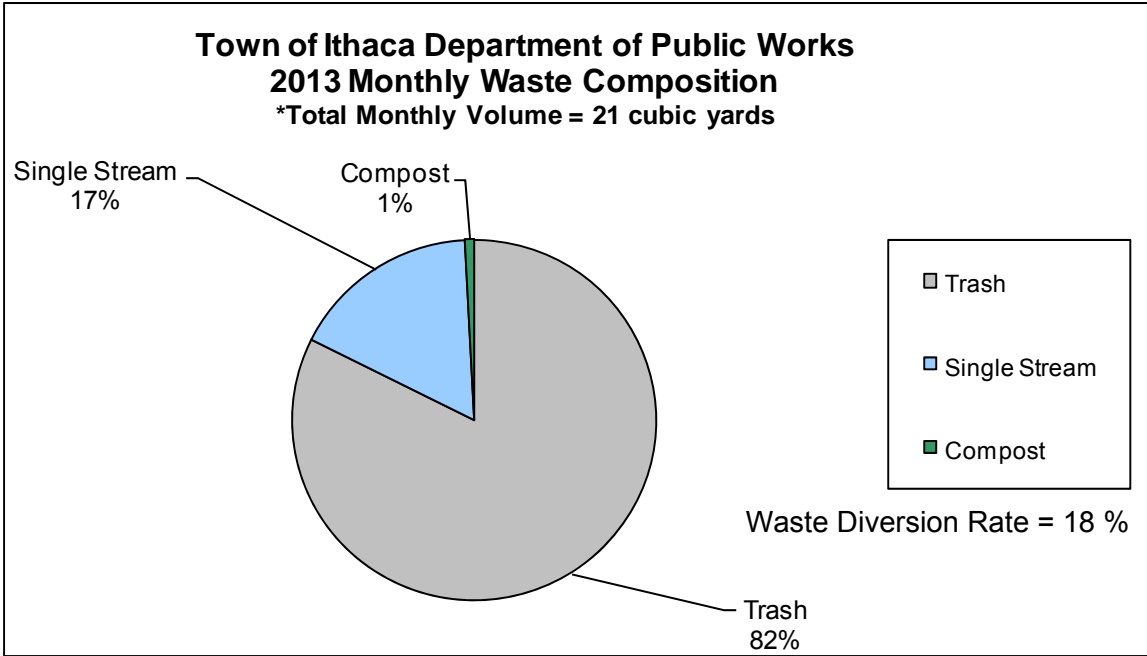
WASTE CHARACTERIZATION:

Waste generation increases during the summer, with the collection of trash from town parks and seasonal maintenance work and construction. It was reported that containers, paper, lunch waste, and maintenance waste are the types of materials most commonly generated at the Department of Public Works. The following materials were observed in trash cans during the assessment and are assumed to be typically found in the waste stream:

- Cardboard
 - Mixed containers
 - Mixed paper
 - Paper milk and juice cartons
 - Plastic Film
 - Coffee Cups
 - Paper Plates
 - Paper Towels
 - Food Wrappers
 - Styrofoam®
- } Single Stream Recyclables
- } Additional Recyclable¹
- } Compostables
- } Trash



¹Plastic bags and film can be recycled at the Recycling and Solid Waste Center (RSWC).



Department of Public Works
Waste Composition Volumes*

Trash= Approximately 8 cubic yards, every other week, varying by season

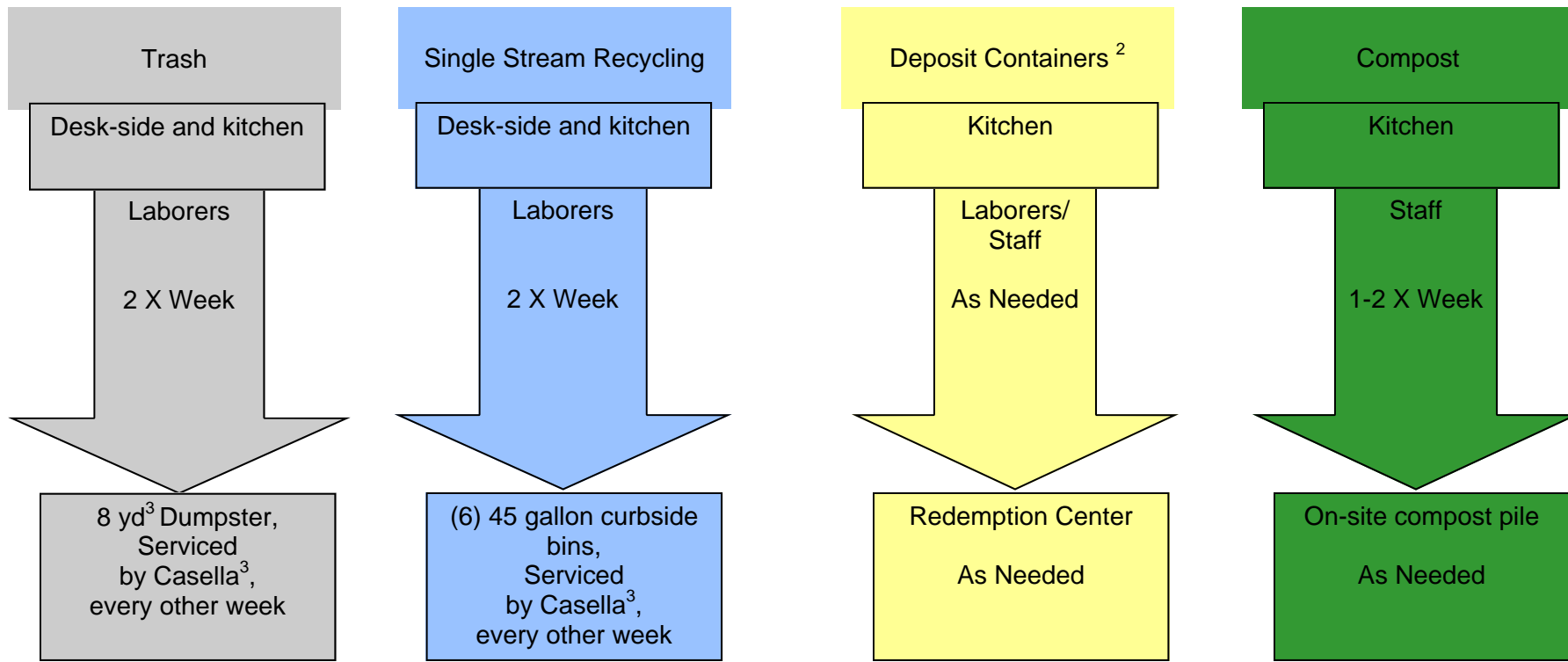
Single Stream Recyclables= Six 45 gallon totes, every other week

Compost= Approximately 10 gallons weekly, varying by season

*Deposit containers are collected separately for redemption, in varying volumes and rates.



MATERIAL HANDLING FLOW CHART¹



ABBREVIATION KEY

Casella = Casella Waste Systems

NOTES:

1. A square represents a location and an arrow represents a movement.
2. Deposit containers were noted as part of the waste stream, but volumes were unknown, so this material has been omitted from the Waste Diversion Pie Chart in this report.
3. The trash dumpster service frequency changes seasonally, with more frequent pick ups throughout the summer months.



PLANNING A REBUSINESS PARTNER 4R PROGRAM:

Tips and Suggestions

“Reduce, Reuse, Recycle, Rebuy”

CONDUCT A WASTE ASSESSMENT to understand your current waste management practices and identify opportunities for improvement.

- √ Original assessment completed on March 12th, 2009.
- √ Reassessment completed on July 12th, 2013.

GAIN EMPLOYEE SUPPORT

- ◇ Show support from the Town of Ithaca, by formally announcing the program.
- ◇ Identify a waste reduction coordinator.
- ◇ Organize a Green Team to plan, design, implement, and maintain the program. Include representation from various departments, and input from the cleaning contractors.

ESTABLISH GOALS AND OBJECTIVES

Review the following sections with your team for suggestions to help you design a successful program and improve existing efforts. Maintain momentum for the program by assigning realistic due dates to each task.



- ◇ Strengthen the **RECYCLING** program
- ◇ Strengthen the **COMPOSTING** program
- ◇ Increase waste **REDUCTION & REUSE**
- ◇ Adopt **REBUY** (green purchasing) practices

PROMOTE AND EDUCATE

Encourage employees and residents in these efforts. Education and promotion will be an ongoing effort that can strengthen the program and help gain public recognition. Make sure information is up-to-date.



- ◇ Kick-off with an announcement outlining a new official policy. *See attached sample guidelines: Recycle in Tompkins County*
- ◇ Display signs, posters and public information to promote the program.
- ◇ Include proper waste disposal information as part of new employee orientation.
- ◇ Provide education about the 4R program at employee training sessions.
- ◇ Use a variety of media to present updates and reminders and to promote the program. This may include, but is not limited to:
 - * Emailing recycling tips and reminders
 - * Posting flyers
 - * Dedicating a set amount of time at each staff meeting to discuss and solicit feedback about the program
 - * Providing educational seminars
 - * Posting program information on Town of Ithaca’s website, blog, or other internal communication
 - * Arranging a presentation where Solid Waste representatives or other specialists can provide information and answer questions



- ◇ Offer incentives that motivate employees to participate in the program. For example, use some of the money diverted from trash disposal costs to fund workplace improvements or small gifts.
- ◇ Emphasize that there isn’t additional work with the new recycling and compost program, only a modification of the waste collection protocol.
- ◇ Promote the program at special events that the Department of Public Works participates in.



EVALUATE THE 4R PROGRAM'S EFFECTIVENESS

- ◇ Seek employee feedback and review procedures that were implemented.
- ◇ Conduct additional waste assessments.
- ◇ Identify cost savings and determine the volume of waste reduced.
- ◇ Acknowledge successes and contributions to the program.

KEEP IT CURRENT

Make adjustments to the program based on your evaluations. Be sure to keep communication open and seek input from employees. Share program information and updates periodically.



RECYCLING

Internal Collection Suggestions:

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- ◇ Utilize uniform recycling bins with decals.
- ◇ Post recycling guidelines in key locations, such as the kitchen and in the offices.
- ◇ Provide a recycling bin next to each trash can throughout the building.
- ◇ Clearly label recycling bins in all areas, including those in the kitchen and at desks.
- ◇ Consider designating a convenient, formal collection area for additional recyclables, such as plastic bags and film, batteries, electronics, etc.



External Collection Options for Trash and Recycling:

- √ Biweekly County curbside collection. Businesses are limited to 300 gallons of material—including stacked cardboard—on an every-other-week basis.
- ◇ Self-haul to Recycling and Solid Waste Center (RSWC): Businesses may bring their recyclables to the RSWC at 160 Commercial Avenue, Monday-Saturday, 7am-3:30pm. *Refer to the Recycling Guidelines pamphlet for more information.*
- ◇ Contract with private hauler: If generating volumes greater than the County weekly curbside limit, contract with a private hauler to provide and service recycling totes or a dumpster. [Refer to the list of licensed haulers online.](#)

RECYCLING

ACCEPTABLE ITEMS

COMMON RECYCLABLE MATERIALS

Cardboard & Mixed Paper

e.g. Pizza boxes, cereal boxes, newspaper, mail, magazines, paperback and hardcover books, & office paper

**MORE
ITEMS**

Glass Containers

e.g. Clear, green, & brown food and beverage containers

Metal Cans & Foil

e.g. Aluminum foil, food cans, & empty aerosol cans



Through Plastics

e.g. Plastics marked #1 - #7 including bottles, tubs, & carry-out containers

Paper Milk & Juice Cartons

e.g. Drink boxes, soy milk, & soup boxes

Small Rigid Plastics

e.g. Flower pots, small plastic toys, & other hard plastics up to the size of a 5-gallon bucket

ADDITIONAL ITEMS - Can be recycled at the Recycling and Solid Waste Center

- Batteries – lead acid & rechargeable
- Electronics
- Fluorescent light bulbs & tubes
- Freon® units*
- Hazardous Waste ^h– including oil based paints and stains
- Large rigid plastics
- Plastic grocery bags & film – labeled #2 or #4, e.g. bread and produce bags
- Propane tanks
- Scrap metal– including empty paint cans
- Textiles
- Tires*
- Yard Waste

* - There is a fee for these items.

^h - Visit our website to find the drop-off event dates and to register in advance

COMPOST

Internal collection suggestions:

- ◇ Strengthen the compost collection system. In addition to kitchen food waste, paper towels could be collected with compost in a large scale system.
- ◇ Utilize uniform compost bins with decals, if more than one collection location is identified.
- ◇ Post composting guidelines in key locations, such as in the kitchen.
- ◇ Reevaluate trash service frequency and cost with possible smaller volumes.



Explore employee education options:

- ◇ Tompkins County Solid Waste representatives are available for educational presentations.
- ◇ Contact Adam Michaelides at acm1@cornell.edu about arranging a presentation through Cornell Cooperative Extension's Compost Education program.









Commercial collection options for composting:

- ◇ Residents and small businesses may bring food scraps to the [Recycling and Solid Waste Center \(RSWC\)](#) for composting, in limits of 10 gallons per person per day.
- ◇ For more information contact Mary Proctor at Cayuga Compost (607) 387-6826 to discuss service levels and pricing. www.cayugacompost.com

COMPOST

COMPOSTABLE MATERIALS ACCEPTED AT CAYUGA COMPOST

 <p>BREAD, GRAINS, & BEANS</p>	 <p>FRUITS & VEGETABLES</p>	 <p>PAPER NAPKINS & CUPS</p>
 <p>MEAT, FISH, & BONES</p>	 <p>EGGS & DAIRY</p>	 <p>COMPOSTABLE DISPOSABLES</p>

REDUCE & REUSE

REDUCE WASTE

- ◇ Support Town of Ithaca policy that includes waste reduction through default double-sided printer settings, and similar methods.
- ◇ Research the feasibility of a LEED certified electric hand dryer for the bathrooms.
- ◇ Refer to the “Reducing Unwanted Mail” brochure to learn how to decrease the volume of junk mail that is received. Sign-up for Catalog Choice to remove the Department of Public Works and staff from mailing lists by visiting <https://www.catalogchoice.org/> to sign up.
- ◇ Consider providing reusable or compostable cups for the kitchen, as well as for meeting guests.
- ◇ Consider using hanging waste baskets, produced by companies like Busch Systems, to conveniently collect small amounts of trash.
 - * Smaller trash promotes less waste.



REUSE

Formalize reuse policies and consider options to reuse surplus equipment:

- ◇ Utilize the Tompkins County reuse policy as a template for a formal policy for the Town of Ithaca.
- ◇ Local options include: The ReUse Center, located in the Triphammer Mall (www.fingerlakesreuse.org), Craig's List (www.craigslist.com), The Freecycle Network (www.freecycle.org), Salvation Army (www.salvationarmyusa.org), Rescue Mission (<http://www.rmsyr.org/stores/thrifty-shopper-store-locations/ithaca-thrifty-shopper/>), Catholic Charities (<http://www.catholiccharitiesst.org/>)
- ◇ Utilize the Northeast Recycling Council's Reuse Marketplace (<http://www.reusemarketplace.org>).



REBUY



ADOPT GREEN PURCHASING PRACTICES

- ◇ Purchase products with recycled content such as office paper.
- ◇ Purchase green tip fluorescent bulbs that contain less mercury.
- ◇ Avoid purchasing single-use products, such as disposable wipes. Replace with reusable microfiber cleaning cloths and a multipurpose spray, if possible.
- ◇ Consider purchasing compostable disposable serviceware, when reusable is not practical. Companies like EcoProducts may be a place to start looking.
- ◇ Contact the cleaning contractor to determine the feasibility of using green cleaning products, as well as recycled content paper towels.
- ◇ Reduce Styrofoam packaging by inquiring with suppliers about packaging take-back programs.



Material Handling in Tompkins County: What you need to know

The following recommendations are designed to help a business manage and reduce its hazardous waste. For more information, please call 273-6632.

Why do these regulations matter?

Hazardous waste materials have properties that make them dangerous or potentially harmful to human health or the environment, if they are not handled and disposed of properly. These hazardous products have the potential to poison, corrode, explode or ignite due to their chemical make-up.

Hazardous waste recycling is *mandatory* in Tompkins County. Additionally, improper disposal of mandatory recyclables is a violation of the *Mandatory Recycling Law*, [Chapter 140](#) of the Tompkins County Code, and carries a fine when convicted.

Conditionally Exempt Small Quantity Generators (CESQGs)

Non-household generators that qualify as a [CESQG](#) can apply to utilize Tompkins County's permanent hazardous waste facility to dispose of its hazardous waste in a cost-effective and environmentally-sound manner.

A generator is a CESQG if in a calendar month:

- They generate no more than 220 lbs of hazardous waste and no more than 2.2 pounds of acute hazardous waste, AND
- They store no more than 2,200 pounds of hazardous waste and 2.2 pounds of acute hazardous waste. For more information or to obtain an application form, call 273-6632.

Fluorescent Bulbs

- Manage bulbs in a manner so that breakage is minimized
 - ◊ Save empty fluorescent bulb boxes to store spent bulbs in
 - ◊ Label storage boxes "Used Lamps" and with an accumulation start date
- Purchase green end cap lamps, which contain less mercury.
- Recycle bulbs by contacting a certified recycler or through Tompkins County Solid Waste's [program](#). CESQG's must register for the program and pay a small fee for these items.

Computers and Electronics

- Computers can be recycled at Tompkins County's RSWC, after registering and weighing-in at the scale house, or through the manufacturer, thanks to the [NYS Electronic Equipment Recycling and Reuse Act](#).
- Consider following [EPEAT](#) certification standards to purchase greener computers and electronics.
- Consider renting or leasing equipment instead of buying outright.
- Upgrade portions of a system instead of the entire computer and look to buy products that can be partially upgraded.
- Donate unwanted computers to local agencies such as the Finger Lakes ReUse eCenter or Computer All-Stars.
- Computers must be recycled under NYS c7 scrap metal exemption, meaning that the scrap metal must be recycled, or disposed of as hazardous waste.



Batteries

- Invest in [rechargeable batteries](#) and a charger for dry cell batteries (some battery chargers are solar-powered). Rechargeable batteries can be recycled through manufacturers, retailers, and Tompkins County's RSWC. These items should not be sent to the landfill.
- Increase the life of dry cell batteries by storing them safely in a cool, dry place.
- Purchase equipment that does not require batteries.
- Set-up your own recycling program through [www.rbrc.org](#) or <http://earth911.com/recycling/mail-back-programs-recycling-from-home/#batteries>



RECYCLE SINGLE STREAM

RECYCLE

- ✓ Office & Shredded Paper
- ✓ Newspaper & Magazines
- ✓ Cardboard & Pizza Boxes
- ✓  Through  Plastics
- ✓ Small Rigid Plastics
- ✓ Metal Cans & Foil
- ✓ Paper Milk & Juice Cartons
- ✓ Glass Containers



www.RecycleTompkins.org

- No**
- ✗ Plastic Bags
 - ✗ Styrofoam[®]
 - ✗ Drinking Glasses
 - ✗ Pyrex[®]
 - ✗ Compostable Plastics
 - ✗ Hangers
 - ✗ Coffee Cups



Tompkins County's ReBusiness Partners Program thanks you for doing your part.