

Onondaga County Resource Recovery Agency

2014 ANNUAL REPORT ON RECYCLABLES RECOVERED

This report is submitted pursuant to:

NYSDEC Permit Number 7-3142-00028/00002-0 Certificate to Operate Onondaga County Resource Recovery Facility;

NYSDEC Permit Number 7-3156-00047/00001-0 Permit to Construct and Operate the OCRRA Landfill;

NYSDEC Permit Number 7-3148-00048/00001-0 Solid Waste Transfer Station-Ley Creek; and

NYSDEC Permit Number 7-3142-00036/00001-0 Solid Waste Transfer Station-Rock Cut Road.

Period reported: January 1, 2014 through December 31, 2014

Date: March 1, 2014

Planning Unit: **County of Onondaga** including the City of Syracuse, excluding the Town and Village of Skaneateles

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1. 2014 Recycling Data

OCRRA (Onondaga County Resource Recovery Agency) is a non-profit public benefit corporation charged with managing solid waste in Onondaga County (with the exception of the Town and Village of Skaneateles). This includes proper disposal of Municipal Solid Waste (MSW) and recycling. Since beginning operations in 1990, OCRRA has overseen the recycling of 12 million+ tons of material.

In 2014, **35,405 tons** of materials were collected from households through the blue bin curbside recycling program; there are approximately 180,000 households in the OCRRA Service Area, and a population of approximately 468,000.

In 2014, over **525,000 tons** were recycled through mandatory and voluntary recycling efforts (both residential and commercial) in the community, for a **total recycling rate of 60%** (see Table 1). OCRRA also met permitting requirements for the Waste-to-Energy facility set forth by the NYSDEC to maintain a 40% processible recycling rate¹, by reaching 47%, or 233,488 tons (see Table 2).

OCRRA inventories and records recycling tonnages of all material recycled through the curbside program. Data collected from private commercial entities, as well as public and private institutions, are provided on a voluntary basis and are not audited by OCRRA.



Greg Gelewski, OCRRA Recycling Operations Manager, explains the composting process to attendees of the 2014 Home and Garden Show at the NYS Fairgrounds.

¹ The processible recycling rate, as defined by NYSDEC, considers only those materials recycled that could have otherwise been disposed of at the Waste-to-Energy facility. For example, it does not include yard waste, which is an unacceptable waste at the Waste-to-Energy facility.

Table 1 shows the total recycling and trash generation for 2014 in OCRRA’s service area. This total includes “voluntary recycling materials,” meaning items that could not be otherwise processed at the Waste-to-Energy Facility such as yard waste, sludge, construction debris, etc. Table 2 shows totals for “mandatory recycling materials,” meaning items that could be otherwise processed at the WTE Facility such as old corrugated cardboard (OCC), old newspaper pulp (ONP), containers, paper, etc. In Table 3, a breakdown of tonnage by material is displayed. Table 4 shows greenhouse gas emission equivalents avoided by recycling in Onondaga County in 2014.

Table 1 - 2014 Total Mandatory and Voluntary Recycling and Municipal Solid Waste		
Recycling	Tons	Percent of Total Waste
Curbside Recycling (Primarily Residential)	35,405	
Commercial Recycling (Primarily Business)	493,058	
Total Recycling	528,463	60.1%
Solid Waste		
Incoming Municipal Solid Waste (MSW)	271,051	
Less MSW Ferrous & Nonferrous Recycling ¹	-8,127	
Incoming Construction & Demolition Debris (C&D)	52,866	
Incoming Other Waste ²	35,473	
Total Solid Waste	351,263	39.9%
Total Voluntary Recycling and Solid Waste: 879,727		

¹Ferrous and nonferrous metals that are recovered from MSW at the Waste-to-Energy Facility and recycled are subtracted to avoid double counting.

²Includes biosolids currently being sent to a landfill.

Table 2 - 2014 Total Mandatory Recycling and Solid Waste¹		
Processible² Recycling	Tons	Percent
Curbside Recycling (Primarily Residential)	35,405	
Processible Commercial (Primarily Business)	198,083	
Total Processible Recycling	233,488	47%
Municipal Solid Waste (MSW)		
Incoming Municipal Solid Waste	271,051	
Less MSW Ferrous & Nonferrous Recycling ³	-8,127	
Total MSW	262,924	53%
Total Mandatory Recycling and Solid Waste: 496,924		

¹Sources for these data include: recycling companies, retail and commercial firms, and governmental organizations which voluntarily report to OCRRA. Reported data have been adjusted to eliminate known double-counting. For example: If Generator A ships 500 tons of scrap metal to Recycler B and both organizations report 500 tons to OCRRA; OCRRA credits the system-wide total with 500, not 1,000 tons.

²Processible materials are those which could have been disposed of at the Waste-to-Energy Facility.

³When calculating recycling rates, ferrous and nonferrous metals recovered from MSW at the Waste-to-Energy Facility are subtracted to avoid double counting.

Table 3 - 2014 Recycling By Material		
MATERIAL	TONS¹	PERCENT OF TOTAL²
Organic Wastes (excluding Paper)		
Food	91,395	17%
Yard Waste	28,650	5%
Wood	2,655	1%
Textiles	1,679	0%
Total Organic	124,379	23%
Plastics		
	9,322	2%
Metal		
Ferrous Metals, except MSW Ferrous	85,988	16%
MSW Ferrous and MSW Non Ferrous	8,037	2%
Non Ferrous Metals, except Aluminum and MSW Non Ferrous	8,220	2%
Aluminum	1,865	0%
Total Metal	104,110	20%
Paper		
Corrugated Cardboard and Kraft Bags	78,576	15%
Newspapers and Magazines	18,093	3%
Office / Mixed Paper	91,732	17%
Books	464	0%
Total Paper	188,865	35%
Sludge		
	64,294	12%
Other		
Glass	13,047	2%
Special and Hazardous Wastes	812	0%
Electronics and Batteries	5,290	1%
Appliances	203	0%
Miscellaneous	18,141	3%
Total Other	23,179	6%
TOTAL	528,463	100%

¹Data reporting is voluntary and is not audited by OCRRA. Many businesses consider the tonnage and disposal of their special process wastes (the category "Special and Hazardous Wastes"), whether or not they are "hazardous", to be proprietary information. Therefore, the data concerning the recapture and recycling of waste, particularly in this category, may be underreported.

²Data may not equal 100% due to rounding.

Greenhouse Gas Avoidance

Recycling has many environmental benefits, including resource and energy savings due to avoidance of using virgin materials. The USEPA provides its WARM Model to allow users to determine the amount of greenhouse gases (GHGs) saved due to recycling or composting. In the table below, the GHG emissions avoided for materials recycled in Onondaga County in 2014 has been calculated. In 2014, Onondaga County's recycling program **saved 926,602 metric tons of carbon dioxide equivalents (MTCO₂E)** from being emitted. This is equivalent to **taking about 195,000 passenger vehicles off the road**².

Table 4 – 2014 Greenhouse Gas Emissions Avoidance					
MATERIAL¹	RECYCLING / COMPOSTING EMISSION FACTORS (MTCO₂E per short ton)	COMBUSTION EMISSION FACTORS (MTCO₂E per short ton)	DIFFERENCE	TONS RECYCLED/ COMPOSTED	GHG EMISSIONS MITIGATED (MTCO₂E)
Food	(0.15)	(0.12)	-0.03	91,395	-2,742
Yard Waste	(0.12)	(0.15)	0.03	28,650	860
Wood	(2.46)	(0.58)	(1.88)	2,655	-4,991
Mixed Plastics	(1.03)	(1.25)	-2.28	9,322	-21,254
Mixed Metals ³	(4.38)	(0.99)	-3.39	104,110	-352,933
Corrugated Box	(3.12)	(0.48)	-2.64	78,576	-207,441
Magazines	(3.07)	(0.35)	-2.72	2,927	-7,960
Newspaper	(2.75)	(0.55)	-2.2	15,166	-33,366
Mixed Paper - Office	(3.53)	(0.49)	-3.04	91,732	-278,865
Books ⁴	(3.11)	(0.47)	-2.64	464	-1,225
Glass	(0.28)	(0.05)	-0.33	13,047	-4,306
Electronics/Batteries ⁵	(2.51)	(0.17)	-2.34	5,290	-12,379
TOTAL GHGs Mitigated					-926,602

¹Some materials recycled were not included in this analysis due to a lack of equivalent emission factors: Sludge, Special and Hazardous Waste, Textiles, and Miscellaneous.

²GHG avoidance factors are taken from the USEPA's WARM Model, Version 13.0, updated June 2014:

<http://epa.gov/epawaste/conserva/tools/warm/index.html>. Factors are based on recycling / composting vs. combustion.

³Mixed Metals include: Ferrous Metals, MSW Ferrous, Non Ferrous Metals, MSW Non Ferrous, Aluminum, and Appliances.

⁴Emission factor for textbooks was used for books.

⁵Emission factor for personal computers was used for electronics/batteries.

² Calculated using USEPA's Greenhouse Gas Equivalencies Calculator at <http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

Required Recycling

Onondaga County's local "Source Separation" (i.e. Recycling) Law was updated in 2011, and went into effect January 1, 2012. The original Source Separation Law, which mandated recycling of certain materials by all waste generators, was passed by the County Legislature in 1989.

The 2011 update:

- Clarifies requirements by simplifying language and spelling out specifics for businesses
- Requires haulers to provide recycling service to their customers
- Reinforces multi-tenant housing unit recycling requirements
- Requires that labeled recycling containers must be as easily accessible as trash cans

Below is a list of mandatory recyclables.

Table 5 – OCRRA Mandated Recyclables

- Office Paper and Discarded Mail
- Newspapers and Magazines
- Corrugated Cardboard, Brown Paper Bags, Paperboard, Pizza Boxes
- Milk and Juice Cartons, Gable-Top Cartons, Aseptic Cartons
- Glass Food and Beverage Containers
- Metal Food and Beverage Containers
- Aluminum Foil
- Aerosol Cans
- #1 and #2 Plastic Bottles
- #5 Plastics
- Soft cover books

2. Markets, Trends and Material Recovery Facilities (MRF's)

Fiber Conditions

2014 year end values for OCC (cardboard) and ONP (newspaper) are down slightly compared 2013, as seen in Figure 1. Fluctuations in the commodity markets are difficult to predict from year to year. Figure 2 illustrates that OCC dropped slowly in 2014, and that newspaper pricing was flat until the end of 2014. The expectation is that U.S corrugated and paperbox demand will increase 2.6% per year from 2015 to 2018.³ According to Resource Information Systems Incorporated Senior Recovered Paper Economist, Hannah Zhao, "We are expecting to see growth in global recovered paper demand at an average rate of 2.5% per year, reaching 346 million tonnes by 2029." The expectation is that cardboard will recover slightly in 2015, but there is no anticipated increase in demand for newspaper. One of the last domestic newspaper recycling mills, Kruger, has cut production by 90% and now the majority of those mills are in China.⁴

According to Chaz Miller, State Programs Director for the National Waste & Recycling Association, the paper outlook is grimmer than Hannah Zhao reports, "Recycled paper markets are weak and unlikely to

³ <http://ppimagazine.com/packaging-technology/north-america/industry-statistics/us-corrugated-and-paperboard-box-demand-increase-26-year-394-billion-2018>

⁴ <http://www.recyclingtoday.com/Kruger-shutter-newsprint-machine-deinked-pulp.aspx>

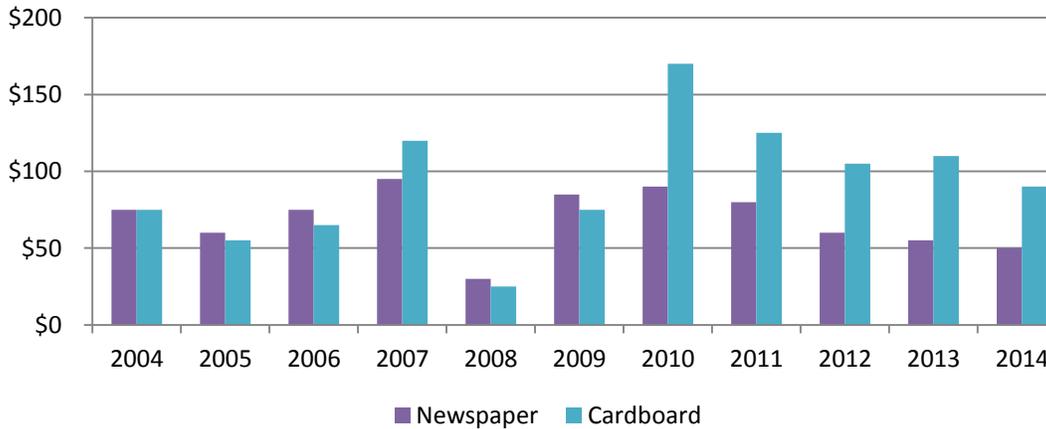
improve. Prices for recycled paper have slowly declined over the last 6 months. This decline is caused by a weakened Chinese economy.”⁵

The West Coast Longshoremen strikes have contributed to terminal congestion at West Coast ports in 2014.⁶ This congestion negatively impacted OCC values; Price relief is expected once the situation is resolved, though recovery will take time.⁷

Figure 1

Year End Market Values

(\$ per ton)

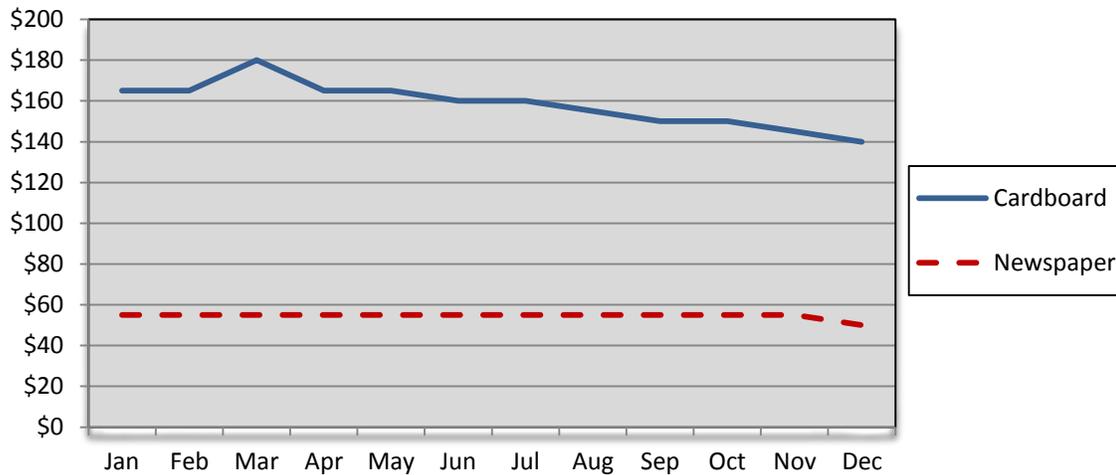


Please see footnote 8

Figure 2

2014 Transacted Stock Paper Prices

(\$ per ton) Prices are based on the Official Board Markets (Buffalo)



Please see footnote 9

⁵ <http://waste360.com/plastics/what-s-store-recycling-organics-2015>

⁶ <http://shipglobal.com/ilwu-and-pma-to-take-break-from-main-contract-negotiations/>

⁷ http://waste360.com/financials/solid-waste-2015-outlook-it-s-all-about-oil?NL=WST-01&Issue=WST-01_20150202_WST-01_51&sfvc4news=42&cl=article_1&YM_RID=CPEQW000001139921&YM_MID=2528

Glass

Based on OCRRA's last Waste Qualification and Characterization Study done in 2005, glass accounts for 1% of the municipal solid waste and 8.1% of the items in the blue bin by weight. Blue bin glass is commonly referred to as MRF glass. This glass is filled with small bits of metal, plastic and paper contamination at the end of the sorting process. Glass has to be fully cleaned and sorted at a glass processor in order to be recycled; there are no longer any glass processors in NYS. Glass is highly destructive on equipment and because virgin sources for glass are readily available, glass does not have a high value.

In NYS right now there is a shortage of good recycling markets for glass. This is a trend nationally as well. "Bottle Bill" glass has a steady market, MRF glass does not. "Bottle Bill" glass is pre-sorted when taken back for deposit and therefore easier to recycle. The glass from the Onondaga County MRF goes to a landfill to be reused as daily cover or for temporary roads. This use does save natural resources by avoiding the use of tens of thousands of cubic yards of top soil. According to David Steiner, Waste Management's President and CEO, "There is no solution in sight to the poor marketing conditions for glass."⁸

Plastics

Globally, the price of oil drastically dropped at the end of 2015; the drop in gas prices might be good for consumer spending but it is not great news for recycled plastics. For processors and manufacturers, once the price of polyethylene resin drops so low that it gets close to the recycled price, manufacturers choose to use virgin resin as a feed stock. There is usually a higher output from using virgin resin than recycled plastic. As long as oil prices are down the demand for recycled plastics will stay down as well.

Since early 2014, the national average price of post-consumer natural high-density polyethylene (HDPE) has risen steadily to a high of 56 cents per pound in August. This price level was maintained through the end of September. However from October through November 14, the price dropped rapidly to the current 43-46 cents per pound range (see graph).⁹



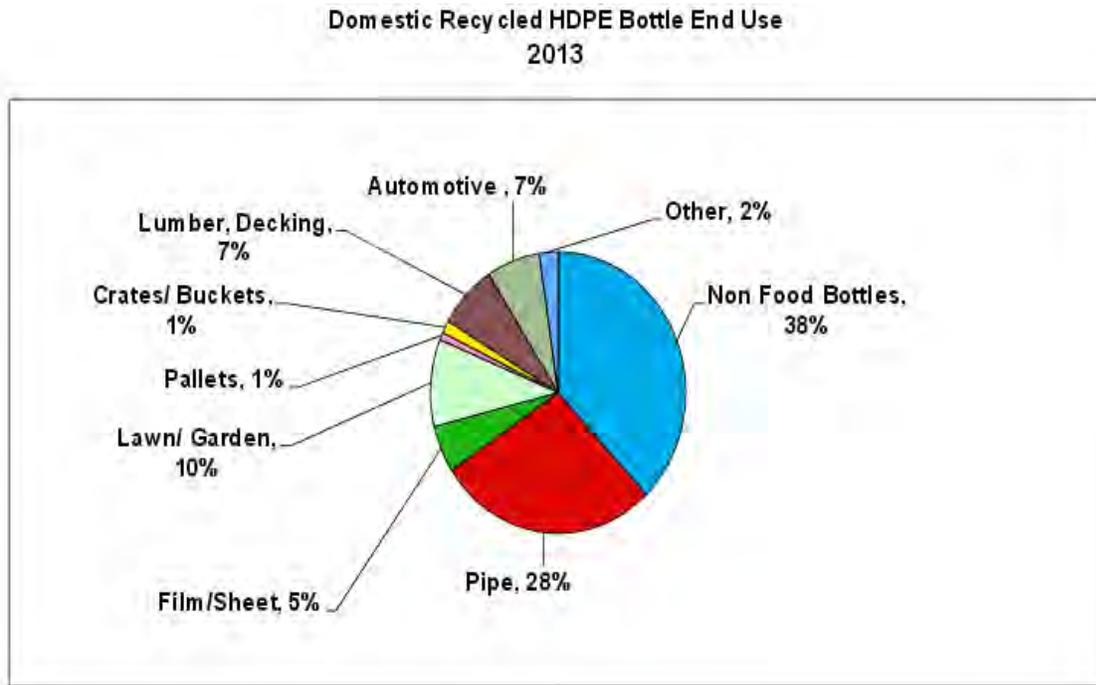
Two areas of concern for recycling plastics are oxo-degradables and labels. The Association of Postconsumer Plastic Recyclers (APR) is working hard to ensure that labels on plastics are not impeding

⁸ <http://waste360.com/waste-management/waste-management-recycling-and-power-networks>

⁹ <http://waste360.com/business/latest-movements-post-consumer-natural-hdpe-corrugated-containers-pricing>

the recycling process. A full wrap label that floats is ideal for recycling; a paper label with adhesive is difficult to remove.¹⁰ Oxo-degradables are plastic containers with added chemicals that will speed up the breakdown of the plastic; these are not suitable for recycling as they contaminate the recycling stream.¹¹ If oxo-degradables are processed with traditional recyclables they can compromise the strength and durability of the new item.

Below is a chart that details what plastic bottles get remanufactured into.¹²



Global Commodity Impacts

Global commodity market developments continue to impact domestic recycling conditions. Most of 2014 was spent trying to recover from 2013’s “Operation Green Fence,” which was how China halted the importation of poor quality materials for recycling. China initiated strict quality control measures upon scrap importers because they were being sent bales of recyclables that were contaminated with dirty recyclables and garbage. Those items required sorting and disposal by China, which resulted in continually increasing costs.

MRF Contract

Blue bin recyclables are collected curbside by private haulers, municipal haulers and municipalities with private hauling contracts. The recyclables are taken for processing and marketing to a material recovery facility (MRF).

¹⁰ <http://plasticsrecycling.org/pet-resins/pet-bottles>

¹¹ <http://www.telegraph.co.uk/news/earth/earthnews/7422006/Biodegradable-plastic-bags-may-not-be-as-eco-friendly-as-thought.html>

¹² http://plasticsrecycling.org/images/pdf/resources/reports/Rate-Reports/National-Postconsumer-Plastics-Bottle-Recycling-Rate-Reports/2013_US_NATIONAL_POSTCONSUMER_PLASTIC_BOTTLE_RECYCLING_REPORT.pdf

In 2010, OCRRA’s five-year contract agreement with private local MRFs was set to expire. A new four-year contract was negotiated and began in 2011; a one year optional extension was signed for 2015. Two private local MRFs signed on to the long-term contract. This contract reduces OCRRA’s annual risk in connection with payments to the MRFs for material processing, potentially generates income for OCRRA under favorable market conditions, and provides certainty and stability for the community’s recycling system during commodity market lows. As a result of this contract, OCRRA provides financial support, depending on market commodity prices, to the MRFs to ensure the MRFs accept residential recyclables at no charge to the waste haulers.

Each year, the contracted MRFs pay OCRRA for residential recyclables processed, with agreed upon upper limits, which are used to cover a small portion of the costs for recycling outreach and education. Apart from the so-called “public education fee” that the MRFs pay OCRRA, other payments may be made from the MRFs to OCRRA, or from OCRRA to the MRFs, depending on the market prices of old corrugated cardboard (OCC) and old newspaper (ONP): consistent average prices below \$60/ton may require a payment from OCRRA; market prices above \$100/ton may require a payment to OCRRA from the MRFs. See Figure 1 indicating that market values for OCC and ONP were relatively stable for most of 2014; at the very end of the year ONP dropped just enough to require a payment from OCRRA to the MRF. That payment of \$2,943 is reflected in Table 6 below.

The MRF contract is a valuable tool, which allows OCRRA to formulate and maintain a uniform definition of “blue bin” recyclables for the community. The contract also encourages stability in the local market for recyclables by reducing the variation in global market demand and pricing. This uniformity helps facilitate the successful education and enthusiastic cooperation of the public.

In July of 2013, one of the locally operated private MRF’s, Syracuse Recycling and Recovery, suffered a fire and is no longer in operation. The other private MRF, Recycle America, has accepted the recyclable materials that were being processed at Syracuse Recycling and Recovery. As a part of the MRF contract they are required to accept residential materials from any OCRRA permitted hauler at no charge, regardless of market conditions.

In 2014, some of the haulers delivered their recyclables to a MRF outside of Onondaga County, which is permitted. There is no flow control on recycling in Onondaga County and the haulers can take the recyclables to wherever they choose, as long as they are not disposed of as trash. This resulted in less tonnage for the Recycle America MRF in 2014.

TABLE 6 – TOTAL MRF PAYMENTS	
2004	\$19,804
2005	\$74,727
2006	\$68,668
2007	(\$66,820)
2008	(\$58,250)
2009	\$158,106
2010	(\$37,256)
2011	(\$78,251)
2012	\$36,006
2013	0
2014	(\$2,943)

Emerging Trends

There are multiple factors that can contribute to a reduction or an increase in recycling rates, including the following:

- The single most important factor has been the recent struggling economy and tightening of budgets nationwide, which caused consumers to buy less and many companies to scale back business – resulting in less material that required recycling.
- The decrease in newspaper and magazine use due to continued growth of online news options, resulting in fewer subscriptions and therefore fewer papers printed.¹³ Not only is the amount of papers printed decreasing, but so is the actual size of newspapers. There are less pages printed due to less advertising (because of a loss in readership), as well as a drop in classified pages as more people use online sites to sell items, services or search for jobs. This trend came to fruition locally when The Syracuse Post-Standard reduced the printing of the daily newspaper to three days a week effective February 2, 2013. Also in spring 2013, the Scotsman weekly PennySaver ceased production.
- The use of plastic products increased by 25 percent in the last 11 years. Plastics are replacing heavier products,¹⁴ (e.g., manufacturers swapping glass jars for plastic to save on shipping costs.) New flexible packages (such as baby food pouches) are replacing recyclable packages.¹⁵
- “Thinwalling”, also a global trend, is where the materials used to create certain packaging, such as plastic water bottles, aluminum cans, and fiber packaging, are thinner and therefore weigh less. On an aggregated basis, the “loss” in material is significant.
- In the future, the trend of smaller electronic products could result in less recycling tonnage; a smart phone combines the functions of a telephone, video camera, still camera, watch, music player and more. This reduces the number of products in our homes and subsequently in the waste stream.¹⁶
- Bans on plastics are taking place all over the country; most notable is the ban on single-use expanded polystyrene (EPS) foam in NYC.¹⁷ Plastic bags are being banned far and wide, 6 towns and villages have banned bags in New York State so far.¹⁸
- Zero Waste: Many towns/villages/cities are ascribing to zero waste goals. This means that there is a conscious effort to reduce waste, reuse more and recycle just about everything leftover.
- Organics Bans: Some states have implemented mandatory food waste composting and banned all organics from landfills.¹⁹
- The use of carts for trash and recycling is a trend nationally and a few haulers in Onondaga County have chosen to embrace it as well. The use of carts could increase recycling and reduce litter.

¹³ deThomas, D. The Shape of MRFs to Come. Resource Recycling, Dec 2011.

¹⁴ <http://waste360.com/blog/circular-file-less-less>

¹⁵ <http://waste360.com/plastics/what-s-store-recycling-organics-2015>

¹⁶ <http://waste360.com/blog/circular-file-less-less>

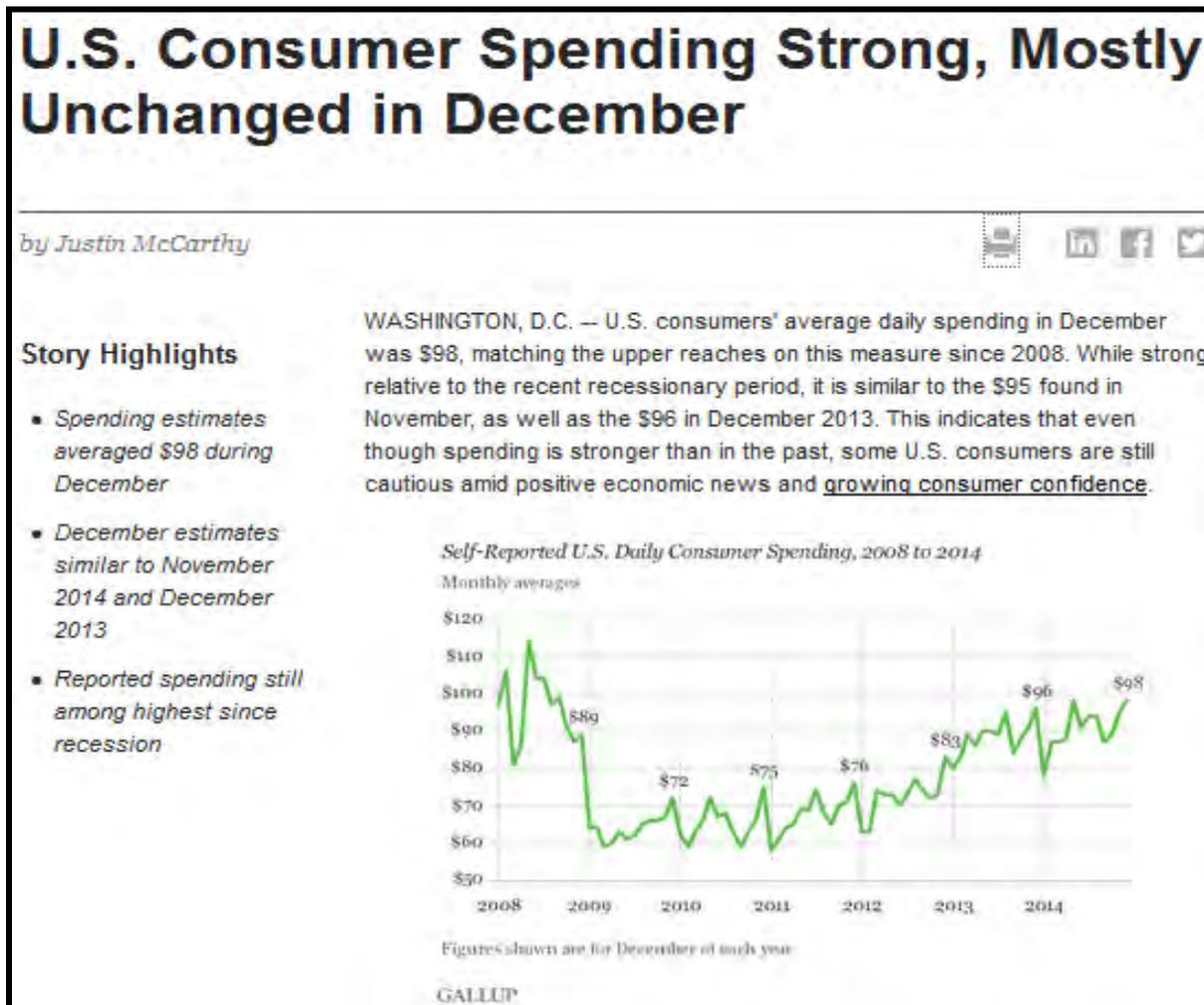
¹⁷ <http://waste360.com/plastics/new-york-city-bans-single-use-polystyrene>

¹⁸ <http://www.citizenscampaign.org/campaigns/plastic-bags.asp>

¹⁹ <http://compostingcouncil.org/landfill-bans-on-organics/>

Some of these trends result in less material generation. So, while there may be a significant net decrease in the available material for recycling, these trends do represent an overall environmental benefit due to waste reduction.

As seen in the GALLUP graph below, consumer spending is on the rise and approaching 2008 levels.²⁰ Usually more spending and purchasing would equate to more trash and recyclables created but all the above mentioned factors in waste reduction are still occurring. In addition, many communities are pushing to increase composting and ban yard waste or food waste from the trash completely. Some waste minimization techniques such as backyard composting or leaving your leaves on your yard are hard to measure, but should be taken into account.



3. 2014 Recycling Program Costs

OCRRA manages the solid waste and recycling program for 33 municipalities in Onondaga County. Each municipality is unique in its solid waste collection. Some provide waste and recyclables collection through their own public employees, some contract with private waste hauling firms to provide services for their residents, and still others require residents to arrange for disposal and recycling by contracting with a private hauler or bringing their MSW and recyclables to one of the two OCRRA transfer stations.

²⁰ <http://www.gallup.com/poll/180401/consumer-spending-strong-mostly-unchanged-december.aspx>

OCRRA is not funded by taxes. The trash tipping fee revenue and energy revenue provide the bulk of the financing for recycling program components essential to achieving the mandated recycling rate. OCRRA applies for grants through competitive applications as well. Program costs include OCRRA’s comprehensive public education program which consists of radio, TV, web and print media campaigns; on-site visits to businesses by a staff of recycling professionals offering technical assistance; classroom presentations on recycling and environmental stewardship; and numerous brochures and educational materials. In 2014, over \$2 million in state grants were received; \$1.245 million for reimbursement of Amboy compost site development costs, and \$1.09 million for a wide variety of recycling related expenses and outreach efforts for the three-year period 2010 through 2012.

OCRRA’s recycling program covers costs necessary to assure waste haulers a zero tip fee at the Material Recovery Facilities (MRFs) for residential recyclables during poor commodity market conditions. OCRRA also manages two transfer stations that allow for the drop-off of blue bin recyclables at no cost. The transfer stations are also drop-off points for additional materials such as scrap metal, small appliances, mercury thermostats, mercury thermometers, and household batteries.

During 2014, OCRRA’s Recycling Program managed:

- ❁ Two yard waste compost sites, open to the public from April to November;
- ❁ A commercial and institutional food waste composting program at the Amboy Compost Site (open year-round);
- ❁ A year-round Monday-Friday Household Hazardous Waste (HHW) collection program;
- ❁ Two “Shred-O-Rama” events, in which mobile shredding trucks shredded household confidential papers on-site;
- ❁ Year-long household battery collection at local drop-off points and a curbside collection in July;
- ❁ A mercury thermometer and thermostat exchange program; and
- ❁ Special services and programs for businesses, schools and apartment building managers and owners.

Direct program costs in 2014 (unaudited) associated with the recycling services are as follows:

Table 7 –RECYCLING COSTS		
PROGRAM	2013 EXPENSE	2014 EXPENSE
Recycling Personnel *	\$556,960	\$616,863
Material Recovery Facility (MRF) Fees	\$0	\$2943
Public Education - Outside Service	\$315,415	\$461,005
Composting**	\$234,800	\$379,731
Household Hazardous Waste (HHW) Collection	\$55,804	\$75,221
Blue Bin Expense	\$143,523	\$189,014
Other Recycling Programs	\$101,066	\$122,300
Total Cost	\$1,407,568	\$1,844,134

*Includes all permanent compost personnel.

**Includes all temporary personnel.

4. Public Education, Program Outreach and Enforcement

OCRRA continues to invest in a high-profile effort to ensure that residents, businesses and institutions understand and follow the local law mandating source separation of recycling.

Recycling Team

OCRRA employs a professional recycling team engaged in spreading the recycling message and bringing technical assistance to residents, schools and businesses in Onondaga County. In 2014, the Recycling Specialists visited hundreds of local businesses, apartment complexes and schools to offer assistance in designing effective recycling programs as well as to offer free recycling containers and decals.

When needed, OCRRA Enforcement Officers supplement the efforts of the Recycling Specialists. An enforcement officer calls on businesses and apartment buildings when it is determined that other approaches have not resulted in compliance. Each enforcement officer spends a significant portion of the week inspecting loads of solid waste at OCRRA's Waste-to-Energy facility to ensure that those containing recyclables are issued warnings and/or notice of violations. Recycling Specialists visit waste generators that may be in violation to determine the source of the problem and assist in designing a recycling program which will capture the mandated recyclables, before any fines are sought.



OCRRA Communications

The Onondaga County community maintains an excellent recycling rate; however, frequent and consistent communication from OCRRA is necessary to remind current residents of what is recyclable, to alert those who recently moved to the area of the recycling rules and to inform the public of special collection events.



To keep the public abreast of the recycling program, OCRRA continued its extensive public communication program throughout 2014, investing resources into direct public education through TV, web and print media. OCRRA's public message promotes the "why" of recycling

and the difference one person can make in preserving natural resources for future generations. This campaign, launched in 2009, was based on community surveys which asked what messages would resonate. It uses the slogan "Save the World a Little Each Day," demonstrating that the simple act of recycling can help the environment in a meaningful way. This campaign also emphasizes the OCRRA website as a community resource. For examples of the ad campaign, please visit: <https://ocrra.org/news-and-events/media/ad-campaign>.

In the fall of 2012, the Agency launched a revamped website, (www.OCRRA.org), providing enhanced search features to allow users to quickly find recycling options for their unwanted items, along with waste reduction and reuse tips for those items, when appropriate. It also allows users to make online reservations for household hazardous waste drop off, and purchase both compost passes and trash disposal stickers online. Additionally, it houses a recycling supply order form, which allows businesses, schools and apartment buildings to order free recycling containers and decals with a few simple clicks (see: <https://ocrra.org/shop/supply-order-form>).

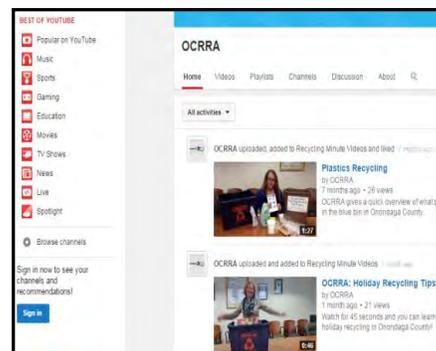


In addition to paid media advertising, OCRRA continues to publish its quarterly newsletter (see: <https://ocrra.org/news-and-events/newsletters>) which contains articles written by OCRRA staff that highlight special recycling events, stand-out businesses and schools as models of excellence, and inform the public about specific recyclable materials. OCRRA distributed the newsletter as an insert in the Onondaga County Eagle Newspaper in the Sunday Post-Standard, which reached over 105,000 households on a quarterly basis. About 5,000 newsletters each quarter reach the public via

public libraries, government offices (village and town clerks) and special events as well.

One of OCRRA's most effective means of communication is email. Through a web-based system, emails covering various recycling topics and upcoming events are regularly sent to nearly 8,000 people. In addition to this primary contact list, OCRRA has the ability to create smaller sub-lists and send emails to select groups of people (such as compost site users or school teachers). Email blasts are an inexpensive and effective way of reaching thousands of people and are growing in popularity as the email address list grows each year.

OCRRA also continued its social media presence with its [Facebook page](#), allowing people to actively engage in discussion about recycling and OCRRA services. New information about upcoming events and highlights of local recycling and waste reduction achievements are posted on a regular basis. OCRRA also established a [YouTube channel](#) in 2014 with a series of four short videos highlighting operations at the Compost Site, Transfer Station, Waste-to-Energy Facility, and the privately-owned Materials Recovery Facility (MRF).



Lastly, OCRRA provides numerous posters, brochures and decals at no charge to businesses, residents and institutions. These items act as prompts to remind people to recycle, as well as to inform them of the correct rules.

Apartment Recycling

Onondaga County has hundreds of multi-unit apartment buildings, which present a unique set of challenges to recycling, such as space constraints and inconvenient recycling bin locations. To assist residents in 2014, OCRRA Recycling Specialists visited dozens of apartment complexes and spoke with numerous landlords and property managers to ensure that proper recycling occurred. To help facilitate a great recycling system, OCRRA provided brochures, magnets, decals and special containers, as well as presentations at group meetings.

Business Recycling

OCRRA's Recycling Specialists regularly call on businesses in Onondaga County to help them design effective collection systems for recyclables. During 2014, OCRRA continued to provide free consultations, as well as free containers and decals to all types of businesses.



Business can access a wide variety of information on OCRRA's website (<https://ocrra.org/how-do-i/recycle/recycle-at-work#how-to-recycle-more>) to enhance onsite recycling and waste reduction efforts, including ordering containers, recycling guides, and posters to promote recycling within the office environment. Each year, business recycling accounts for some 80% of the community's total waste reduction effort. In 2014, businesses recycled over 198,000 tons of mandatory recyclable materials.

In the fall of 2009, OCRRA began the [Blue Ribbon Recycler](#) Program to recognize businesses that demonstrate recycling excellence in the workplace. Each applicant to the program must meet specific criteria in regards to recycling, such as providing recycling containers for all employees and purchasing recycled paper. Once a Recycling Specialist determines that a business qualifies, it receives a certificate from OCRRA and recognition on the OCRRA website. If a business does not meet all criteria, it provides an opportunity to identify areas for improvement. The Blue Ribbon Recycler Program is an incentive for businesses to achieve recycling excellence by offering them recognition that they can then share with their clients and customers. To date, there are 66 certified Blue Ribbon Recyclers.



Recycling at Schools



Schools generate a significant portion of the recyclables in a community, in the form of paper, cardboard and containers. Because of this and the importance of educating children early about recycling, schools are always a major focus of OCRRA's public education. Recycling Specialists regularly visit school custodians, teachers and administrators to help with design and improvement of their recycling programs. OCRRA's Recycling Specialists provided over 150 classroom presentations and assemblies for the 130 schools throughout the county in 2014. In addition, OCRRA gave out its annual Vonnell Mastri award in June, honoring a school with an excellent recycling program in the city of Syracuse. In 2014, the award went to McKinley-Brighton Elementary in the City of Syracuse School District (*see photo below*). An additional triumph of OCRRA's school outreach in 2014 was food scraps composting in the Jordan-Elbridge School District, becoming the second school district in Onondaga County (joining Marcellus) to separate food scraps for OCRRA's large-scale compost efforts (*see photo below*).



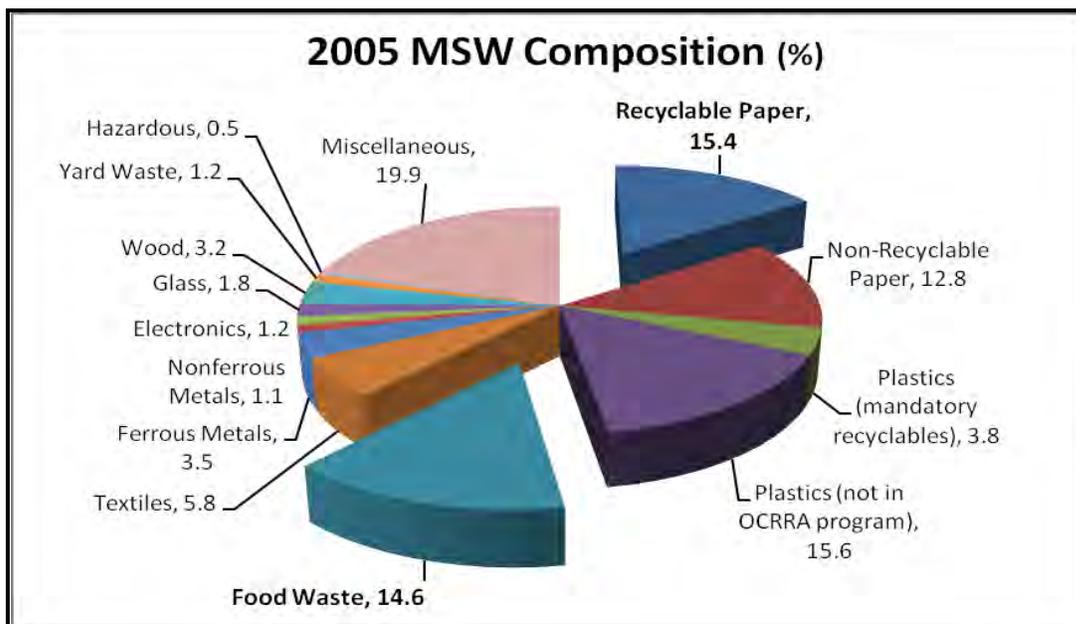
2005 Waste Quantification & Classification

In September 2005, OCRRA conducted a Waste Quantification & Classification study to measure the composition of curbside recyclables and Municipal Solid Waste (MSW), brought to the Waste-to-Energy plant operated by Covanta Energy. Samples from these streams were sorted, as delivered, into more than 50 categories. Similar studies in 1993 and 1998 have been used to inform decisions concerning the expansion of the list of mandatory recyclables and public communications. The 2005 study allowed more current examination of recycling trends.

According to the findings of the study, the majority of mandatory recyclable materials (78%) are indeed being recycled. However, approximately 15% of MSW is recyclable fiber (cardboard, office paper, newspaper and magazines) and 14% is food waste (*see Figure 3*). These constitute the largest volume by far of potentially recyclable material that ends up in the trash. This information has allowed OCRRA to focus its efforts on capturing more recyclable paper through its business and school recycling campaigns and more food waste through the expansion of its composting program.

As of 2014, the data acquired from this most recent study is 9 years old. More up-to-date information would be invaluable for further program evaluation; OCRRA continues to consider its ability to devote resources to planning and executing another large-scale Waste Quantification & Classification.

Figure 3



5. Highlights of the 2014 OCRRA Recycling Program

Again in 2014, OCRRA's award-winning recycling programs demonstrated sound environmental solutions, excellent public participation and quality disposal and recycling services for the residents of Onondaga County, including:

- OCRRA received the 2014 Community Recycling Excellence award from the National Recycling Coalition, besting over 70 other municipal programs from across the country.
- OCRRA took a lead role in proposing state legislation requiring a recycling notice on all political campaign materials, with "same-as" bills proposed by Senator Valesky and Assemblyman Roberts, and passage anticipated in the 2015 session.
- Established partnerships with 20 local garden and hardware stores to sell OCRRA's premium STA-certified bagged compost.
- OCRRA staged a successful inaugural reception for the opening of the redeveloped Amboy compost site, with Lori Scozzafava, Executive Director of the United States Composting Council, and Ken Lynch Region 7 Director of the NY DEC featured as keynote speakers.
- OCRRA's Earth Day Litter Clean Up was held on Friday, April 12, and Saturday, April 13. Over 5,500 volunteers from some 260 groups participated; 85,000+ pounds of litter collected; one of the largest Earth Day litter collection events in the country.
- Major alkaline battery manufacturers, including Energizer and Duracell, again selected OCRRA as one of only five "Foundation Programs" in the country, paying OCRRA's cost to transport and recycle over 80,000 pounds of alkaline batteries (a cost savings of over \$40,000).
- OCRRA took a leadership role in organizing a statewide textile recovery campaign (over 1.4 billion pounds of textiles trashed in NYS annually with a market value exceeding \$200 million); OCRRA's local textile collection event at Destiny USA on America Recycles Day (November 15) netted over 30,000 pounds of clothes and textiles for the Rescue Mission, filling six trailer loads.
- OCRRA partnered with Covanta to host a mercury collection event. Thanks to resident participation, over 330 thermometers and 115 thermostats were collected! This amounts to approximately 790 grams of mercury being removed from the environment, which is comparable to recycling 197,750 compact fluorescent light bulbs. Residents can recycle mercury thermometers and thermostats year-round at OCRRA's Rock Cut Road Drop-Off Site (and get a \$5 Home Depot Gift Card from Covanta and / or a replacement thermometer).
- OCRRA's Greg Gelewski received the 2014 Recycling Leadership Award from the New York State Association for Reduction, Reuse and Recycling (NYSAR3) for his efforts to advance organics recovery in New York State.

Yard and Food Waste Composting

OCRRA's composting facilities help New York State meet its environmental policy objectives to keep organics out of the trash by developing organics management infrastructure.

In 2014, OCRRA unveiled the newly renovated "state of the art" food and yard waste Amboy Compost Facility, which was designed to ultimately process over 9,000 tons of institutional and commercial food waste annually. Total food scraps processed in 2014 at the Amboy site included over 3.8 million pounds.

2014 brought growth to the Food Waste Composting Program with the addition of Empire Brewing Company, a local restaurant, and the Jordan-Elbridge School District among others. OCRRA is currently processing over 70,000 lbs of institutional and commercial food scraps weekly, which is a 58% increase from 2013.

Included in this total is food waste from:

- Crouse Hospital (Sodexo)
- Destiny USA, including 25+ food service locations
- Empire Brewing Company
- Jordan-Elbridge Central School District (Chartwell Services)
- LeMoyne College (Sodexo)
- Marcellus Central School District
- Onondaga Community College
- Pastabilities Restaurant
- Paul deLima Coffee
- Ramada Inn
- Rescue Mission
- Sheraton Syracuse University Hotel & Conference Center
- SUNY Upstate at Community General Hospital (Morrison)
- SUNY Upstate University Hospital (Morrison)
- Syracuse Banana
- Syracuse University
- The Centers at St. Camillus (Sodexo)
- The Oncenter
- Wegmans, includes 8 CNY stores



In 2014, OCRRA continued its association with the US Composting Council and their Seal of Testing Assurance (STA) Program. OCRRA's finished compost is [USCC STA](#) certified, meaning that it is a high-quality material that is consistent from batch to batch and guarantees that it has been laboratory tested by a third party and meets all USCC, NYS DEC and US EPA criteria. The demand for OCRRA's compost products continued to grow and has been used in many "Green Infrastructure" projects across the State, with a prominent use on the Rosamond Gifford Zoo, Save the Rain, green roof and wetlands project.

Finished compost sales from the Amboy and Jamesville Compost Sites included over 5,200 yards in 2014 (a 15% increase over 2013). Additionally, over 9,600 yards of bulk mulch were sold (a 78% increase over 2013). Both of OCRRA's compost sites were able to offer convenient service for residents, municipal and commercial entities to drop-off yard waste from April to November, with the addition of year-round service for food waste generators and commercial customers. 2014 also brought to life a new product, OCRRA Bagged Compost (*seen in photo below*) through a partnership with ARC of Onondaga. Beginning in the spring, 20+ local retail establishments offered OCRRA's premium compost for sale, conveniently packaged in 1 cubic foot bags. In 2014, OCRRA sold 10,000 compost bags to retailers.



As in previous years, OCRRA’s finished compost was available for residents to take home as part of the Residential Pass Program. The “Residential Pass Program” enables residents to purchase compost passes for \$15, which allows them to drop off an unlimited amount of yard waste and take away up to 6 cubic yards of compost. In 2014, residents purchased over 4,005 compost passes and made over 28,900 visits to both compost sites, this was an increase of over 900 visits from 2013. Additionally, there were over 3,000 commercial and municipal drop-offs throughout the 2014 season (a 57% increase from 2013). OCRRA again in 2014 offered its free Christmas tree recycling program to residents. The facilities were open for a two-week period in January for residents to drop off their Christmas trees for composting at no charge.

Batteries

Residents in the OCRRA service area are able to drop off their old batteries at nine local grocery stores, which are then collected weekly by OCRRA. In addition, OCRRA offers a curbside collection of alkaline batteries each year during the month of July. In 2014, over 89 tons were kept out of the trash, including over 5,000 pounds of rechargeable batteries which are recycled at no cost through the Call2Recycle program. Residents in the OCRRA service area are now recycling more rechargeable batteries per capita than any other large community in New York State.



In 2010, New York State adopted legislation to require the recycling of rechargeable batteries, to be provided by the manufacturers, physically or financially. This new law means that manufacturers are providing outlets for recycling at all retail locations that sell rechargeable batteries at no charge to the consumer. The law intends to ensure that rechargeable batteries stay out of the waste stream and that residents and businesses have easy access to recycling options. In addition to the nine local stores that partner with OCRRA to recycle rechargeable

batteries, there are now several retail locations that accept them as well. *(At left: Community resident demonstrates OCRRA’s annual alkaline battery collection in July 2014.)*

As a result of its innovative residential battery collection program, OCRRA was again invited to serve as a “Foundation Program” by the Battery Recycling Corporation (BRC) in 2014, one of only a handful of communities across the country invited by the BRC to do so. As a result of this public / private partnership, BRC covered the expenses to transport and recycle the thousands of pounds of household alkaline batteries that the Agency collected. The partnership is continuing in 2014, and is aimed at ultimately developing “best practices” for a nationwide collection system managed by alkaline battery manufacturers. More information about OCRRA’s battery collection program is available online at: <https://ocrra.org/resource-pages/resource-page-category/household-batteries>

Fluorescent Light Bulbs

Fluorescent light bulbs are a popular household item because of their energy saving potential. However, these energy efficient bulbs contain a small amount of mercury, a potentially harmful chemical, and

should not be mixed with regular household trash at the end of their life. To encourage residents to dispose of these properly and keep mercury out of the trash, OCRRA partners with local hardware stores to provide residents with convenient locations to drop off old bulbs. From the stores they are shipped off for proper disposal. There are 15 participating stores throughout the county. Over 10,000 lamps were collected in 2014 at these stores. Further information about this environmental program is available online at: <https://ocrra.org/resource-pages/resource-page-category/fluorescent-bulbs>

Household Hazardous Waste



In 2014, OCRRA continued the convenient, year-round Household Hazardous Waste (HHW) collection model that was started in 2013 in response to residents' suggestions. This new HHW program consists of a Monday-Friday drop-off at Environmental Products and Services of VT, Inc. This popular environmental service allows residents to safely dispose of their hazardous waste, keeping these materials out of the waste stream. Among the hazardous wastes collected are adhesives and resins; oil-based paint; paint thinner; solvents; thermometers, thermostats, and other mercury containing products, pesticides and fluorescent light bulbs. Direct costs to OCRRA are included the fee charged by the vendor based on the amount of Hazardous Waste brought in by the resident.

Mercury Thermometer/stat Exchange Program

OCRRA continued its mercury thermometer exchange and thermostat collection program at the Rock Cut Road Transfer Station in 2014.

OCRRA partners with Covanta Energy to provide residents with non-mercury thermometers in exchange for their old mercury thermometers. Over 200 residents brought in 500 thermometers and thermostats for recycling in 2014. This is a significant increase from last year's numbers due to a special collection event that was held in coordination with Covanta in October 2014. The resident participation from this one collection event alone contributed to the removal of approximately 790 grams of mercury from the environment, which is comparable to recycling 197,750 compact fluorescent light bulbs. Since 2003, nearly 1,000 residents have brought in over 2,000 mercury containing devices to Rock Cut Road. This exchange program helps prevent mercury contained in household items from escaping into the environment when broken or improperly disposed. Thermostats are handled through the [Thermostat Recycling Corporation](#) (TRC), a national industry-funded program that provides proper disposal of mercury-containing thermostats at no cost.

Shred-O-Rama

In response to increasing public concern over identity theft, OCRRA held two annual Shred-O-Rama events in 2014 at NBT Stadium in Syracuse. Over 3,400 residents attended the two events, and dropped off 74 tons of confidential documents to be shredded. Paper was shredded on site and then recycled by Confidata and Shred Solvers.

Textile Collection

On America Recycles Day, November 15, 2014, over 500 local residents joined OCRRA and dropped off over **31,000 pounds of clothing and textiles** (six truckloads worth) at a collection event conducted at the Destiny USA mall in Syracuse. All materials collected were donated to the Rescue Mission to help change lives in the Central New York community.



This local drop off was in connection with a statewide textile recovery campaign organized by the New York State Association for Reduction, Reuse and Recycling (NYSAR3) to raise public awareness of the issue of textile recovery. Each year, over 1.4 billion pounds of textiles are trashed across New York State, with an economic value (loss) of over \$200 million; in Onondaga County, 20 million pounds are trashed annually with a market value of \$3 million. More information about the statewide textile recovery campaign is available online at: <http://www.nysar3.org/page/clothes-the-loop-ny---home-78.html>.

Non-Profit Recycling Incentive Program for Local Charities

In 2014, OCRRA again provided a "recycling credit" to the local Rescue Mission, Salvation Army and Habitat for Humanity for each documented ton of material (clothing, furniture, etc.) recycled through their organizations. The organizations were credited toward their monthly waste disposal fees through the OCRRA system. In 2014, OCRRA credited these organizations with approximately \$17,860.

Extended Producer Responsibility

OCRRA has been involved in many Extended Producer Responsibility (EPR) initiatives in the last few years. EPR requires manufacturers to take responsibility for the safe and environmentally sound disposal of items they make and sell. This includes reducing toxic materials used for manufacturing and a requirement to implement some form of a take-back and reuse and/or recycling program.

New for 2014, a New York State law went into effect, requiring manufacturers to collect mercury thermostats. The bill, known as the Mercury Thermostat Collection Act, requires that manufacturers develop and implement a thermostat collection program that meets a pre-established goal of collecting 15,500 thermostats by 2015. The law requires the New York Department of Environmental Conservation (NYDEC) to establish annual collection goals thereafter, and to make changes to the program if manufacturers fail to meet these goals. This could include requiring manufacturers to pay financial incentives to recyclers (residents and contractors) to encourage greater participation.

In 2010, New York State passed the [Electronic Equipment Recycling and Reuse Act](#), which ensures that manufacturers are responsible for the recycling costs of electronics, whether physically or financially. Since this law went into effect in April 2011, over 300 million pounds of e-waste have been collected from across New York State.

Also in 2010, New York State adopted legislation to require the recycling of rechargeable batteries to be provided by the manufacturers, physically or financially. Beginning in late 2011, the [NYS Rechargeable Battery Recycling Act](#) banned the disposal of any rechargeable batteries in NYS. This new law means that manufacturers are providing outlets for recycling at all retail locations that sell rechargeable batteries at no charge to the consumer. Manufacturers of alkaline batteries have also recently proposed a model EPR bill in some states that would provide for recovery of these "primary" batteries by such manufacturers as Energizer and Duracell. Such legislation has not yet been introduced in the New York State Legislature.

OCRRA is an active member of the [New York Product Stewardship Council](#), a statewide, non-profit group which partners with local government agencies to advocate for EPR policies. In the future, OCRRA hopes to see further discussion of New York State EPR laws, particularly for paint, pharmaceuticals and fluorescent bulbs.

The growing product stewardship movement in the U.S. seeks to ensure that those who design, manufacture, sell, and use consumer products take responsibility for reducing negative impacts to the economy, environment, public health, and worker safety. These impacts can occur throughout the lifecycle of a product and its packaging, and are associated with energy and materials consumption; waste

generation; toxic substances; greenhouse gases; and other air and water emissions. In a product stewardship approach, manufacturers that design products and specify packaging have the greatest ability, and therefore greatest responsibility, to reduce these impacts by attempting to incorporate the full lifecycle costs into the cost of doing business.

Product stewardship is the act of minimizing the health, safety, environmental, and social impacts of a product and its packaging throughout all lifecycle stages, while also maximizing economic benefits. The manufacturer, or producer, of the product has the greatest ability to minimize adverse impacts, but other stakeholders, such as suppliers, retailers, and consumers, also play a role. Stewardship can be either voluntary or required by law.

Extended producer responsibility (EPR) is a mandatory type of product stewardship that includes, at a minimum, the requirement that the manufacturer's responsibility for its product extends to post-consumer management of that product and its packaging. There are two related features of EPR policy: (1) shifting financial and management responsibility, with government oversight, upstream to the manufacturer and away from the public sector; and (2) providing incentives to manufacturers to incorporate environmental considerations into the design of their products and packaging.

The following principles include key elements that should be included in all EPR legislation.

1. Producer Responsibility

- Producers are required to design, manage, and finance programs for end-of-life management of their products and packaging as a condition of sale. These programs may or may not use existing collection and processing infrastructure. Programs should cover all products in a given category, including those from companies no longer in business and from companies that cannot be identified.

2. Level Playing Field

- All producers within a particular product category have the same requirements, whether they choose to meet them individually or jointly with other producers.

3. Results-based

- Producers have flexibility to design the product management system to meet the performance goals established by government, with minimum government involvement.
- Producer-managed systems must follow the resource conservation hierarchy of reduce, reuse, recycle, and beneficially use, as appropriate.
- Products must be managed in a manner that is protective of human health and the environment.
- Producers design and implement public education programs to ensure achievement of performance goals and standards established by government.
- All consumers have convenient access to collection opportunities without charge.

4. Transparency and Accountability

- Government is responsible for ensuring that producer programs are transparent and accountable to the public.
- Producer programs, including their development and the fate of products managed, provide opportunity for input by all stakeholders.

5. Roles for Government, Retailers and Consumers

- Government is responsible for ensuring a level playing field for all parties in the product value chain

to maintain a competitive marketplace with open access to all, for setting and enforcing performance goals and standards, for supporting industry programs through procurement, and for helping educate the public.

- Retailers only sell brands within a covered product category that are made by producers participating in an industry program, and are responsible for providing information to consumers on how to access the programs.
- Consumers have a responsibility to reduce waste, reuse products, use take-back and other collection programs, and make appropriate purchasing decisions based on available information about product impacts and benefits.

6. Examples of materials that are either currently managed through a product stewardship structure in New York State (indicated by “*”), or could be in the future:

- Electronics, including old TVs and computers*
- Mercury-containing thermostats*
- Rechargeable batteries*
- Tires
- Pharmaceuticals

Community Events and Public Outreach

OCRRA is committed to maintaining high levels of community participation through its recycling program. In 2014, OCRRA’s recycling team participated in numerous area events and fairs, including the Taste of Westcott Street (for Syracuse University students), Huntington Family Center Picnic (for Syracuse’s Near Westside residents), Save the Rain’s Clean Water Fair and the CNY Home & Garden Show. A variety of recycling information was distributed including blue bins, recycling instructions and numerous recycling-related promotional items. OCRRA interacted with thousands of people at these events.



In addition to events, OCRRA Recycling Specialists conducted multiple presentations to a wide variety of audiences, including school-age children, business office staff, teachers, Rotary Clubs and neighborhood groups. These presentations all provided information about the recycling program, as well as the importance of environmental stewardship. *(At right: OCRRA performs a recycling presentation at the Green Lakes Annual Environmental Field Days.)*

OCRRA Recycling Specialists also shared their expertise with the community by presenting at various conferences in 2014, including the annual Federation of NY Solid Waste Associations Conference.

Earth Day

OCRRA also sponsors an Annual Earth Day Litter Clean-Up, which is a community-wide, two-day event occurring in April each year. In 2014, **over 5,500 volunteers from 260 community groups participated; collecting 85,000+ pounds of litter** as part of this annual cleanup program. Volunteer groups consisted of schools, Girl and Boy Scout troops, community and neighborhood groups, and businesses. This program has been a continued success since 1994, with over 2 million pounds of litter cleaned up to date. *(At right, Earth Day cleanup volunteers from the Dairy Farmers of America in Syracuse.)*



Beyond these noteworthy activities, a host of other services and accomplishments continued to be provided through the recycling program, including:

- ♻️ A year-round recycling drop off six days per week for mandatory recyclables at OCRRA Transfer Stations. This service includes a no-charge drop-off for household scrap metal and office paper from small businesses;
- ♻️ Grant application submittals to support a variety of OCRRA programs, including advertising and public education, food-waste composting, household hazardous waste collection, recycling containers and recycling personnel costs; and
- ♻️ Participation in solid waste associations. All members of OCRRA’s recycling team are members of the New York State Association of Recycling, Reduction and Reuse (NYSAR³).

6. Benchmark of Local Recycling Rate

It is important to evaluate where the OCRRA service area stands when comparing recycling rates to counties of a similar size, as well as “green” cities such as Portland and Seattle, and to state and national rates. 2012 data was the most recent data that could be acquired. It should be noted that the rates for Portland and Seattle are only for the cities and not their respective counties, as that data was not available.

TABLE 8 - 2012 Processible Recycling Rates* Comparison		
Planning Unit	Recycling Rate	Population
OCRRA	46% ²¹	467,500
NYS Average Recycling Rate (2010)	36.6% ²²	19,500,000
US Average Recycling Rate	34.5% ²³	313,000,000

* Table 8 shows totals for the processible recycling rate, as defined by NYSDEC, considering only those materials recycled that could have otherwise been disposed of at the Waste-to-Energy facility. For example, it does not include yard waste, which is unacceptable at the Waste-to-Energy facility.

TABLE 9 - 2012 Total Recycling Rates** Comparison		
Planning Unit	Recycling Rate	Population
OCRRA	61% ²⁴	467,500
Portland, Oregon	64% ²⁵	603,650
Seattle, Washington	56% ²⁶	650,000
Westchester County, NY	60% ²⁷	960,000

²¹ http://ocrra.org/app/webroot/img/gallery/File/downloads/aboutocrra/reports/Annual_Reports/AnnualReport_2012_051713.pdf

²² As Provided by NYSDEC. 2010 is the most recent year for the recycling data that the NYS DEC could provide.

²³ http://www.epa.gov/waste/nonhaz/municipal/pubs/2012_msw_fs.pdf

²⁴ http://ocrra.org/app/webroot/img/gallery/File/downloads/aboutocrra/reports/Annual_Reports/AnnualReport_2012_051713.pdf

²⁵ <http://www.portlandoregon.gov/bps/article/496027>

²⁶ http://www.seattle.gov/util/groups/public/@spu/@garbage/documents/webcontent/01_026636.pdf

²⁷ <http://environment.westchestergov.com/images/stories/pdfs/2012AnnualReportDEF.pdf>

** Table 9 illustrates trash and recycling generation in the OCRRA service area. In addition to municipal solid waste, this includes yard waste, sludges, C&D, etc. (i.e. materials that cannot be processed at the Waste-to-Energy facility)

The way that recycling rates are calculated varies by state and region. Some areas call it a diversion rate and include Waste to Energy. Some are only measuring MSW, while others include all garbage including C&D. The rates may include or exclude various items such as ash or sludge. Those listed above are included to provide a reasonable measure of how our community's recycling program compares to other recycling programs. Best efforts were made to include rates that were comparable.