

City of Roseville

2013 Year-End Recycling Report



Roseville, MN has one of the best recycling programs in the country.

There is currently a dialogue happening on a national level about the future of recycling programs. Cities, counties, states, recyclers and the organizations that create packaging are all talking about ways to reduce packaging, reduce waste and maximize recycling and reuse in the future. In this conversation, Ramsey County has been held up as a model nationally for counties that are doing well and Roseville is one of the strongest programs in Ramsey County.

In the many conversations we have had with Roseville residents we hear over and over how people in Roseville strive to leave their city a better place for their children. The recycling program in Roseville reduces waste and improves the economy, and that is a great legacy for the next generations of Roseville residents.

The high quality of Roseville's recycling program will only become more apparent as the City works with Eureka Recycling to make the transition to single-sort recycling in 2014. Roseville and Eureka Recycling have previously maintained a two-sort system because of concerns about the negative impact that single-sort recycling can have on the quality of materials and higher costs to the community in single-sort systems. But, the desire from residents for easier sorting—which they hope will translate into more recycling in Roseville—has made the shift to single-sort important to both Roseville and Eureka Recycling. Now Eureka Recycling and Roseville are moving forward together to “get to the bottom” of how single-sort recycling really works.

This change to single-sort also means there is room for more types of plastics, but any plastic with a number #3 or #6 will not be accepted. Eureka Recycling has been able to verify several North American end-use markets that will make new products from most plastic food and beverage containers, but there is no viable end-use market for #3 or #6 packaging. Eureka Recycling is committed to educating Roseville residents about what plastics can really be recycled, because putting non-recyclable plastics or any other trash in the recycling only increases the cost of Roseville's recycling program and reduces the revenue that Roseville receives from the sale of this material to markets, which the city uses to support the community's recycling and waste reduction programs. But most importantly, any time trash is placed in the recycling cart, it reduces the environmental benefits of the whole program.

Eureka Recycling is committed to improving single-stream recycling so that each bottle, can, and piece of paper can be put to its highest environmental use. We will track and report the impacts of single-stream recycling in our Zero-Waste Lab. While it certainly won't be the first single-sort program in the country, our commitment is to make it one of the best! Through our zero-waste approach to recycling, and with the help of Roseville residents and city staff, we will continue to recycle everything we can, and communicate with the City and with Roseville residents about the benefits and challenges that we experience with this new system.

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www.eurekarecycling.org

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waste today through
innovative resource
management and to reach
a waste-free tomorrow
by demonstrating that waste
is preventable, not inevitable.

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For nine years the City of Roseville and Eureka Recycling have partnered to design and manage a zero-waste recycling program. Zero-waste recycling is an approach to recycling that always carefully considers people, cost, *and* the environment. The goal is to ensure the most sustainable use of the natural resources we rely on for the products and packaging we need.

- It looks at the impacts these products and packaging have on the people who use, transport, sort, and manufacture these goods into new products.
- It examines the environmental impact of all of this work and searches for ways to maximize the environmental benefit of recycling by using local or regional markets over exports. It assures that as much material as possible is recycled to its highest and best use, and if possible, that material can be recycled again and again.
- It accounts for the value of the material. Specifically in Roseville, revenues are shared back with the community to help keep the costs of the program low and to support other zero-waste initiatives.

Most recycling programs are not built on zero-waste values. They are designed and managed to maximize the profit margins on hauling, sorting, and selling material for the hauler.

Through their zero-waste recycling program, Roseville has had the unique opportunity to go far beyond traditional recycling to include other approaches to waste reduction as well.

In 2013, over 840 Roseville residents used the Twin Cities Free Market to prevent items from becoming waste through person-to-person exchanges. **That effort prevented over 6,700 pounds of waste** and made sure that durable goods like furniture and appliances were used for their entire lifecycle before they ended up in the waste stream. This form of prevention is also an effective way to reduce the amount of bulky items that need to be handled by cities.

Roseville also demonstrates leadership in recycling and waste reduction at the many city-sponsored events such as The Run for the Roses, The Wild Rice Festival and Earth Day. Large events in other cities generally mean a giant pile of waste from the disposable cups and plates and other material generally used at events. In Roseville these gatherings are done as zero-waste events. It takes time and thoughtful planning to ensure that all of the packaging and material generated at these events is either avoided, reduced, or made from compostable or recyclable materials. The results are that events drawing hundreds of Roseville residents end up with a diversion rate of over 90%! Roseville has been a leader in zero-waste events in the entire state and has been recognized by other communities for their leadership.

Roseville residents also reduce their waste by composting kitchen scraps and yard waste right in their backyard. Eureka Recycling teaches backyard composting workshops that are hosted by the city where residents can learn another way to reduce waste and make healthy soil. At the workshops residents obtain compost bins, learn about how to be a successful composter and join up with other neighbors who are composting at home.

According to a recent report from the Minnesota Pollution Control Agency, over 35% of what we toss in Minnesota is still food waste and non-recyclable paper that could be composted. One

of the biggest benefits of Roseville's switch to single-sort recycling is that it creates the opportunity to co-collect—or collect in different compartments on the same truck—recyclables with compostable material, making it much less expensive to add composting to the program in the future.

This year, Eureka Recycling spoke with over 930 Roseville residents on our zero-waste hotline. Residents call our hotline with questions about waste reduction, how to properly dispose of or reuse items, or to find out what happened to the material they set out for recycling.

The efforts of this zero-waste recycling program result in the highest benefit for the environment and the community year after year, and 2013 was no exception. Eureka Recycling and the residents and city of Roseville accomplish this together, by providing a constant and full analysis of recycling that takes into account not only the costs, but the environmental benefits and impacts, and the impact on and convenience for our community. It is up to all of us as residents and community members to continue to create systems that respect, preserve, and protect the rapidly depleting resources that our lives depend on.

Specific Data About Roseville's Successful Zero-Waste Recycling Program in 2013

The City of Roseville's recycling program is exceptional because it uses this zero-waste approach. Here are some examples of the benefits that the City of Roseville has ensured on behalf of its residents.

Tons of Material Recycled in Roseville

The number of tons of material set out for recycling by residents has increased slightly this year. This can be attributed to a combination of an increase in the economy with more people able to spend more and to increased awareness of the recycling program as a result of the communications about the changes happening to the program in 2014. It has been shown in the past that whenever recycling is a topic of conversation in a community the result is an increase in the number of recyclers and in the amount each person recycles.

Route	2006 Total Tons	2007 Total Tons	2008 Total Tons	2009 Total Tons	2010 Total Tons	2011 Total Tons	2012 Total Tons	2013 Total Tons
Curbside Total	2,958	3,094	2,994	2,675	2,742	2,678	2,603	2,647
Multifamily Total	483	587	612	606	580	566	570	578
Roseville Total	3,441	3,681	3,556	3,281	3,322	3,244	3,173	3,225

Annual Composition of Roseville's Material

Some notable things that can be seen in the composition of Roseville's material in 2013 are the decrease on the proportion of the paper as compared to the containers (bottles and cans). This has been a trend over several years in communities around the country. A decrease in newspaper is one large reason. Fewer and fewer households have a daily newspaper subscription.

Roseville Has a Very Low Residual Rate.

Residual refers to the amount of material collected from residents that is not actually recyclable. In 2013, the City of Roseville had a remarkable 1.81% residual rate, meaning that over 98% of all the material collected in Roseville was recycled into new products. The fact that Roseville's residual rate remains one of the lowest residual rates in the state of Minnesota is truly astounding and something to be very proud of!

Engaging with residents through education, including the Guide to Recycling, educational tags and postcards, continues to lead to a lower residual rate. This outreach and education also creates buy-in to the program inspiring people to support their zero-waste recycling program. Regular communications and household-specific education efforts make it easy for Roseville residents to stay informed and be clear about what is and is not recyclable in their city.

Residual Rates in Single-Sort Recycling Programs

Eureka Recycling shares Roseville's concerns that mixing all the recycling together will result in less material actually getting recycled—it is true that most single-sort recycling programs have a much higher residual rate than Roseville's program does.

Eureka's role as the Zero-Waste Lab makes us committed to being the testing ground for how single-stream recycling impacts our ability to get to zero waste. We're not going to just *do* single-stream recycling; we will be tracking and reporting the impacts of single-stream on the materials that we collect, process, and sell. With this information, we will improve our own single-stream system—and help others do the same—so that each bottle, can, and piece of paper that cannot first be prevented can be recycled to its highest environmental use. This slows down manufacturers' ever-increasing rate of natural resources consumption.

Type of Material	2006	2007	2008	2009	2010	2011	2012	2013
	% of Total Tonnage	% of Total Tonnage	% of Total Tonnage	% of Total Tonnage	% of Total Tonnage	% of Total Tonnage	% of Total Tonnage	% of Total Tonnage
Total Annual Tons	3,441	3,681	3,556	3,281	3,322	3,244	3,173	3,225
Papers								
News Mix	63.98%	56.46%	66.00%	61.65%	59.68%	51.53%	56.86%	54.40%
Cardboard	6.71%	13.23%	4.50%	5.48%	7.34%	10.33%	9.09%	8.78%
Boxboard	2.37%	7.60%	2.60%	5.48%	3.79%	7.04%	5.81%	2.54%
Wet Strength	0.36%	0.10%	0.50%	0.00%	1.77%	0.46%	0.50%	0.58%
Phone Books	1.33%	0.11%	0.10%	0.02%	0.12%	0.14%	0.28%	0.37%
Milk Cartons & Juice Boxes	Not collected	Negligible	Negligible	Negligible	0.02%	0.03%	0.47%	0.07%
Textiles	0.40%	Negligible	Negligible	0.02%	0.02%	Negligible	0.20%	0.09%
Residual	0.24%	0.11%	0.50%	0.06%	0.07%	0.27%	0.19%	0.07%
TOTAL	75.40%	76.60%	74.20%	72.72%	72.81%	69.79%	73.40%	66.90%
Containers								
Total Glass	14.89%	15.15%	16.70%	17.54%	17.31%	18.08%	16.94%	18.78%
Steel Cans	2.64%	2.00%	2.40%	2.43%	2.65%	2.49%	2.38%	3.30%
Aluminum	1.48%	1.10%	1.40%	1.40%	1.43%	2.10%	1.37%	1.99%
Total Plastics	4.70%	4.01%	4.60%	5.75%	5.67%	6.94%	5.63%	7.29%
Residual	0.89%	0.15%	0.70%	0.17%	0.12%	0.60%	0.28%	1.74%
TOTAL	24.60%	22.40%	25.80%	27.28%	27.19%	30.21%	26.60%	33.10%
Total Residual	1.13%	0.26%	1.20%	0.23%	0.19%	0.91%	0.47%	1.81%

For more information on the methodology of the composition analysis done by Eureka Recycling, please see Appendix B.

Annual Participation and Set-Out Rate Studies

Roseville is one of the few cities in the metropolitan area in which the actual city-specific participation trend information is available. Roseville continues to maintain one of the highest participation levels in the country! This shows that the recycling in Roseville is easy and that residents get consistent feedback on what is happening in their program.

Each year in the same areas of the city, Eureka Recycling counts set-out rates on each collection day for four straight weeks. This study yields information on how many residents set out material in any given week as well as the total percentage of residents that take part in the program.

This information gives city staff and Eureka Recycling the ability to target efforts and messages to the areas that need it the most. This not only saves in the cost of sending unnecessary mailings, it provides the opportunity to examine the specific areas that need improvement and find ways to reduce the barriers to participation in a more targeted and tailored way.

	2006	2007	2008	2009	2010	2011	2012	2013
Set Out Rate	60%	50%	58%	53%	50%	53%	57%	53%
Participation Rate	74%	75%	82%	78%	76%	75%	80%	76%

Eureka Recycling conducted the annual participation and set-out rate trend study in the fall of each year. (See Appendix C for the definitions and methodologies of the participation and set-out rate studies.)

Multifamily Building Recycling

The City of Roseville plays a leading role in establishing successful recycling programs for **all** of its residents. This is demonstrated by the 100% participation rate of its multifamily recycling program. Very few cities in Minnesota (and even in the entire country) have made the commitments necessary to assure that residents who live in apartments buildings, condos and townhouses have the same opportunity to recycle and reduce waste as their neighbors in single family homes. That represents over 6,000 households of people in Roseville who, if they lived in another city, may not even have recycling at their building. Here they not only have it as a token program, but it is successful because of a serious investment.

Recycling at each property is managed differently, making sure the needs of individual property managers and residents can be met to maximize their waste reduction efforts and assure success at each building. We provide recycling information in multiple languages and work with property managers to organize resident meetings to answer people's questions and show them how to recycle at their building.

In an annual letter to each property manager, Eureka Recycling shares each building's total amount of recycling from the previous year to acknowledge their commitment to the recycling program. Sharing this information with the property managers, who share it with their residents, creates a level of transparency. This is an important element of a zero-waste recycling program and inspires individuals about the impact they make by recycling at their building. The tons recycled at each building can be seen in Appendix A of this report.

Revenue from the Sale of Recyclables

The monetary value created by the set-out, collection, processing and sale of recyclable material in Roseville is shared back with the residents who protected that material from being trashed. A zero-waste recycling program that includes revenue share recognizes the value of these materials and how that value can be used to support other recycling and waste reduction initiatives.

Since 2006, the City of Roseville has received more than \$796,000 in revenue from the sale of its recyclables. This revenue gives the city the resources to continue to support the zero-waste recycling program, zero-waste services at events, the citywide clean-up program, backyard composting workshops and other additional engagement and education opportunities

In 2013 the prices paid for many of the different materials collected in the city's program were lower than in previous years. Newspaper prices were down 25% compared to 2012, cardboard pricing was at same 2012 levels, aluminum was down 5% from 2012, steel was down 28%, PET plastic (#1 soda and water bottles) was down 18%, and HDPE plastic (#2 – milk jugs and laundry detergent bottles) was down 22%.

Aluminum and Plastic pricing is trending upward in the 1st quarter of 2014.

Revenue from the Sale of Roseville's Recyclables

	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Total
2006 Revenue	\$21,165.32	\$23,403.59	\$19,483.86	\$22,661.14	\$86,713.91
2007 Revenue	\$22,749.81	\$27,992.48	\$30,002.00	\$34,551.08	\$115,295.37
2008 Revenue	\$33,159.16	\$39,090.85	\$47,928.25	\$14,170.61	\$134,348.87
2009 Revenue	\$859.83	\$4,810.17	\$8,587.23	\$15,946.38	\$30,203.61
2010 Revenue	\$21,111.03	\$28,141.61	\$23,044.87	\$32,448.84	\$104,746.35
2011 Revenue	\$38,554.41	\$50,099.29	\$47,235.78	\$36,455.29	\$172,344.77
2012 Revenue	\$28,147.55	\$28,580.68	\$16,163.19	\$14,043.27	\$86,934.69
2013 Revenue	\$15,806.58	\$18,344.18	\$14,702.67	\$16,981.51	\$65,834.94

The materials that Roseville residents set out each week are valuable. They required tons of natural resources, a great deal of energy, and hours of labor to produce. Much of that value still remains in the items after they are used. Recycling captures that value and renews it. The market for material generates billions of dollars each year in the United States alone and is highly sought after by manufacturers who want to make new products out of it.

The Environmental Benefits of Roseville's Zero-Waste Recycling Program

The environmental benefits of Roseville's zero-waste recycling program are quantified transparently using widely-accepted environmental models. This assures that all residents have a chance to see how their efforts and the impact of those efforts can be measured.

There are many ways to calculate the benefits of recycling. To better explain these benefits in commonly understood terms, government agencies, research scientists and economists have created several “calculators” to translate the amounts of recycled materials collected and processed into equivalent positive societal and environmental benefits.

Most recently, it has become imperative to measure waste reduction (and all of our activities) in terms of its impact on climate change. This allows us to speak in a common language, understand the impact of our choices and help us prioritize the personal and policy actions that we take. Many cities around the country work with the International Council for Local Environmental Initiatives (ICLEI) to quantify and now register the climate change impacts of their city. It is also important to calculate the carbon impact of waste reduction as the global effort continues to enact a carbon "cap and trade" system.

In addition to climate change mitigation, there are other environmental benefits to recycling, including saving energy and protecting air quality, water quality, natural resources, natural beauty, habitat and human health.

The Environmental Protection Agency (EPA) WARM Calculator

The equations used in environmental calculations try to take into account the “full life cycle” of each material—everything from off-setting the demand for more virgin materials (tree harvesting, mining, etc.) to preventing the pollution that would have occurred if that material were disposed of (burned or buried). Different calculators may include some or all of the many factors that contribute to the “full life cycle” so results will vary from calculator to calculator.

While there are many models emerging to calculate greenhouse gas reductions, the most recognized and standard model is the U.S. Environmental Protection Agency’s Waste Reduction Model (WARM). WARM was designed to help solid waste planners and organizations track and voluntarily report greenhouse gas emissions reductions from several different waste management practices. WARM, last updated in February 2012, recognizes 46 material types.

	Total Recycling	Carbon Equivalent Reduction	Carbon Dioxide Equivalent Reduction
2006	3,441 tons	2,328 metric tons (MTCE★)	8,537 metric tons (MTCO ₂ E)
2007	3,682 tons	2,460 metric tons (MTCE★)	9,018 metric tons (MTCO ₂ E)
2008	3,556 tons	2,383 metric tons (MTCE★)	8,736 metric tons (MTCO ₂ E)
2009	3,281 tons	2,206 metric tons (MTCE★)	8,090 metric tons (MTCO ₂ E)
2010	3,322 tons	2,303 metric tons (MTCE★)	8,443 metric tons (MTCO ₂ E)
2011	3,244 tons	2,190 metric tons (MTCE★)	8,030 metric tons (MTCO ₂ E)
2012	3,173 tons	2,090 metric tons (MTCE★)	7,663 metric tons (MTCO ₂ E)
2013	3,225 tons	2,104 metric tons (MTCE★)	7,716 metric tons (MTCO ₂ E)

★MTCE (Metric tons of carbon equivalent) and MTCO₂E (Metric tons of carbon dioxide emissions) are figures commonly used when discussing greenhouse gas emissions.

What do all these numbers mean?

The numbers above help municipalities calculate and track their environmental footprint. For more information about the process of measuring the environmental benefits of waste reduction, visit <http://epa.gov/climatechange/wycd/waste/measureghg.html#click>.

These numbers, however, don't have much meaning to the average person. To help recyclers understand the significance of their actions, the EPA has also developed tools to translate these numbers into equivalent examples that people can more easily understand.

- For example, using the figures above, the EPA estimates that **Roseville would have had to remove 1,608 cars from the road for one year to have had the same environmental impact in 2013 as they did by recycling.** To achieve this, approximately 10% of Roseville's households would have had to give up one car for a year.
- Another example of how these efforts can be translated into energy savings can be found in the EPA calculator. It shows that the energy savings gained by the recycling efforts of Roseville's residents in 2013 could power 385 homes for one year (over 2.5% of households).

Although WARM is the most widely peer-reviewed and accepted model, it is considered to have several flaws. Many believe the use of this calculator is conservative and understates the real impact of waste reduction efforts, but it offers a conservative starting place to measure our impacts and work towards our goals. Even with these conservative calculations, the impacts of Roseville's recycling program prove to be quite significant.

(http://epa.gov/climatechange/wycd/waste/calculators/Warm_Form.html)

Measuring Environmental Benefits Calculator (MEBCalc™)

Jeffrey Morris, Ph.D., Economist at Sound Resource Management in Seattle, has developed a calculator that begins with the EPA's WARM calculator and expands upon it to gather information on not just carbon and CO₂, but also several other important environmental and human health indicators. Although not yet widely used, this calculator shows the significant benefits that WARM does not consider.

	2006	2007	2008	2009	2010	2011	2012	2013
Total Recycling	3,441 tons	3,682 tons	3,556 tons	3,281 tons	3,322 tons	3,243 tons	3,173 tons	3,225 tons
Carbon Dioxide Equivalent Reduction (eCO ₂)	9,437.3 metric tons	9,619.0 metric tons	9,683.5 metric tons	8,814.0 metric tons	8,739.3 metric tons	8,425.1 metric tons	8,106.2 metric tons	8,478.7 metric tons
Human Health—Carcinogens Reduction (eBenzene)	1.9 metric tons	1.9 metric tons	1.9 metric tons	1.9 metric tons	1.9 metric tons	2.0 metric tons	1.8 metric tons	1.9 metric tons
Human Health—Non-Carcinogen Toxins Reduction (eToluene)	4,609.7 tons	5,253.0 tons	4,665.7 tons	4,452.0 tons	4,518.0 tons	4,699.6 tons	4,375.0 tons	4,280.1 tons
Human Health—Particulates Reduction (ePM _{2.5})	4.4 metric tons	6.6 metric tons	4.2 metric tons	4.4 metric tons	4.8 metric tons	5.9 metric tons	5.1 metric tons	4.2 metric tons
Acidification Reduction (eSO ₂)	26.9 tons	27.0 tons	27.3 tons	25.3 tons	25.5 tons	27.1 tons	24.3 tons	25.7 tons

For more information about the process of measuring the environmental benefits of waste reduction, visit <http://epa.gov/climatechange/wycd/waste/measureghg.html#click>

The MEBCalc™ model expands and shows the benefits other than just energy savings and carbon savings. Recycling materials with zero waste in mind recognizes not just the value in the resource itself, but the contribution to the health of the community when materials are kept out of landfills and incinerators, avoiding the toxic and carcinogenic emissions.

City of Roseville

Outreach and Education Summary 2013

Roseville's recycling program continues to be a leader in the country. Outreach and education elements of the program are an important part to ensuring good participation and help residents understand the benefits of recycling. In 2013, Eureka Recycling and the City of Roseville continued to support the efforts of the city of Roseville to make city events zero-waste. This was the third year we distributed recycling bins and educational material at Night to Unite parties. The Living Smarter Fair, Wild Rice Festival, and Earth Day celebration were also successful events—bringing Roseville residents' attention to zero-waste issues while diverting 93-98% of the material from the waste stream. These successes continue to show the City of Roseville's leadership in its commitment to zero waste and sustainability.

Roseville residents continue to participate in their zero-waste recycling program at rates that are among the highest in the state. In 2013, we continued to educate residents about the curbside zero-waste recycling program and the benefits of reducing waste, recognizing that there is more to waste reduction than just recycling and how easy it is to participate.

Zero-Waste Hotline

In 2013, Eureka Recycling's hotline staff had 885 conversations with Roseville residents who live in single-family homes (or duplexes) about their zero-waste recycling program.

Hotline staff also answered 94 calls from apartment and townhouse residents and building managers who participate in the zero-waste recycling program and had questions unique to their program. Eureka Recycling worked with these residents and building staff to help them manage their multi-family recycling set-ups, add carts or collection days, provide them with education materials for their residents, and help improve their service in many other ways.

	2007	2008	2009	2010	2011	2012	2013
Hotline Calls							
Curbside Calls	425	540	480	410	330	415	885
Multi-family Calls	49	78	35	74	81	72	94
Total Calls	474	618	515	484	411	487	979
Requests for Printed Materials							
Curbside	41	74	21	43	47	33	41

Requests for Printed Education Materials

Throughout the year, Eureka Recycling mailed specific curbside recycling schedules, sorting information, and clothes and linens stickers to 41 Roseville residents in response to their questions and calls.

Curbside Program

Guide to Recycling

All Roseville residents in the zero-waste recycling program received the 2013 Guide to Recycling through direct mail. In addition to the basic instructions for how recycling should be set out and the materials collected, the 2013 Guide to Recycling focused on the benefits of recycling and on highlighting the changes to the program that were coming in 2014. Many residents appreciated this additional information and chose to call the Zero-Waste Hotline to learn more.



Direct Education

Eureka Recycling and the City of Roseville share a value that all the material that can be recycled should be and that material that cannot be recycled should not be collected. Taking non-recyclable items on a ride in a recycling truck and through a processing facility not only wastes the fuel and energy to transport and process the material, it also leaves the residents with the mistaken impression that the material can be recycled when in fact it cannot.

Eureka Recycling drivers educate residents at the curb using educational tags for specific problems. In 2013, drivers left approximately 20,341 educational tags in recyclers' bins. This number is higher than we have seen in most previous years and is likely due to residents getting confused about when the single stream and additional plastic changes were happening to the program as they heard news of the changes.

	2006	2007	2008	2009	2010	2011	2012	2013
Driver Tags	9,540	10,156	7,367	13,565	13,010	50,061	9,736	20,341
Postcards	650	822	451	742	559	1,136	951	7,576
Personalized Letters	30	51	0	3	10	41	179	20

Our experience has shown that the absolute best place to educate residents about their zero-waste recycling program is right at the curb. We work with our drivers to ensure they take advantage of every opportunity to provide additional education. This is efficient because drivers can educate the residents that are confused and it also begins a conversation with the residents. All of Eureka Recycling's tags encourage residents to call our hotline where zero-waste educators are waiting to clear up confusion about why certain items are not recyclable or to explain how residents' efforts at the curb can have such an important impact on the value of the material and the environmental benefits of recycling.



Sample Tags

Postcards and Letters

When there are no bins available in which to leave a tag, drivers report any issues on a separate form, and we send educational postcards in order to communicate with these recyclers directly. These are similar to the tags and encourage residents to give us a call with questions.

It was a great year for our education team; drivers were diligent in their educational tagging and Eureka Recycling staff made sure residents received all the extra education they needed to successfully participate in the program. Drivers and hotline staff worked together to send out 617 educational postcards in 2013.

As in previous years, the most common issues for residents that required direct education were confusion about plastics (what types of plastic are recyclable) and proper sorting.

Personalized letters are another form of communication about programs and services Eureka Recycling provides. There are four types of personalized letters sent to residents:

1. Chronic problem letters provide detailed information and instructions about setting out recycling. These letters are used when the usual tags and postcards have not been successful in correcting repeated problems. Drivers keep a daily record of the addresses that have received tags but still need further education. Addresses that have received tags or postcards for three consecutive weeks with no change in how they are recycling receive a personalized letter that encourages the resident to contact us so we can have a more in-depth conversation.
2. Letters about containers that are too large for our drivers to service. Ensuring our drivers can safely lift a recycling container is important for the health of our drivers and is valuable because safety is important. When drivers pick up over 1000 stops every day, even one container that is large enough to prevent them from using safe lifting techniques can cause issues. Letters were sent to residents to notify them that they could not use their large container and included information about where to get the blue recycling bins that are provided free of charge by the city.
3. Letters to update service information for Special Pickup Instruction (SPI) customers. These letters are sent when SPI residents have changed the location of their recycling, or if it appears the resident has moved out of the home and no longer needs the service.
4. Letters to address service issues that are filed by residents or issues that are reported by drivers. These letters help residents better understand the program and are a more personal way to have detailed conversations with them about issues that may be confusing.

In 2013, Eureka Recycling sent 3 personalized letters to residents. This large increase comes because of the large number of safety issues we were having with large containers in Roseville. We worked with many residents to help them use bins that are safer for our drivers to lift. Additionally, we sent more chronic problem letters this year in an effort to reach out to those who don't quite understand the program. Sending these letters has allowed us to start solving issues more quickly and efficiently.

Special Pickup Addresses

To ensure that every resident has the opportunity to recycle, Eureka Recycling offers to collect recycling from locations other than the curb for residents who request special pickup service due to short- or long-term physical limitations. This service is provided free of charge to ensure that anyone who would like to recycle has the opportunity to do so by helping to remove any physical barriers residents may have. At the end of 2013, the service was extended to 137 Roseville residents. Of those 137 Roseville residents that requested special pickup service, 21 of those were added in 2013.

Multifamily Zero-Waste Recycling Program

The City of Roseville has a very organized multifamily zero-waste recycling program. In 2013 Eureka Recycling added recycling services for one building: Cherrywood Pointe. We now have a total of 176 multifamily complexes, 164 residential buildings, and 11 city buildings/parks, 1 business and 1 nonprofit for a total of 6,049 units being serviced in Roseville's multifamily program.



In February 2013, Eureka Recycling mailed reports to all of Roseville's multifamily building managers, providing them with data on the tonnage recycled for their building(s), a comparison of the amount of tonnage recycled for the whole city's multifamily program, and the environmental benefits of the entire city's effort in recycling. This communication provides the building managers with a concrete tool to work with their residents to get them inspired and motivated to increase their recycling rate. Eureka Recycling's staff also updated building managers' contact information whenever possible. This has a significant impact on staying connected with buildings and the residents. If it were not for the diligent work of Eureka Recycling staff to ensure correct and updated data, effective and timely communication, like the tonnage summaries for buildings, would not be possible.

Multifamily Educational Materials and Customer Service

Eureka Recycling continues to monitor the performance at each account on an ongoing basis in order to improve participation. Our drivers track issues and Eureka Recycling staff are able to follow up immediately to offer suggestions that address the specific needs of the building and to provide educational materials for residents. Eureka Recycling provided 658 pieces of recycling education (instructional posters, brochures, schedules, etc.) to the building management and residents of the newly established and existing multifamily accounts in 2013.

Eureka Recycling continues to monitor the performance and service issues at each account in order to adjust service levels on an ongoing basis. We ensure that we are providing adequate service levels to all buildings by working with our attentive drivers and involved on-site contacts to add more carts as residents recycle more.

This year we tracked outgoing Multifamily calls to property managers to work with them to coordinate issues such as trash or blocked carts, on call pickups, and outreach such as updating contact information and coordinating outreach efforts.

Special Education and Outreach

Outreach at Roseville Events

In 2013, Eureka Recycling and the City of Roseville partnered once again to give Roseville residents an opportunity to learn about recycling and to experience that waste is preventable at three events this year. Eureka Recycling provided Zero-Waste Event Services, including sending staff to help monitor the zero-waste stations and educated residents about recycling and zero-waste issues at these events.

At the Roseville Living Smarter Fair on February 16, 2013, we were able to have several conversations about backyard and worm composting. Living Smarter participants had many great questions regarding what types of materials can be placed in backyard compost bins. Our display compost bin also drew a lot of people in who were interested in getting started with backyard composting, giving us an excellent opportunity to show Roseville residents how easy it is! People were also interested in the Twin Cities Free Market and were glad to hear they have this option available when they need to get rid of their usable items.

Preventing Wasted Food and Backyard Composting Workshops

Eureka held a preventing wasted food and backyard composting workshop at city hall. The workshop was very well received and about 6 people attended.

On April 20, 2013, at the Roseville Earth Day event, Eureka Recycling and the city had a table of information about recycling, backyard composting, and Eureka Recycling's other zero-waste programs. We engaged with people attending the event with information about composting and the kids played the bean bag recycling game. Residents also came to us with many questions about plastics recycling, and we distributed recycling bins and other information about the recycling program.

Roseville Residents Experience Zero Waste For Themselves!

This year Eureka Recycling's continued sponsorship of zero-waste events in Roseville provided residents with the opportunity to have a personal experience seeing zero waste in action. Eureka Recycling supported making all of the following events zero-waste:

- The Living Smarter Fair (93%)
- The Earth Day Celebration at Harriet Alexander Nature Center (99%)
- The Wild Rice Festival (98%)

The percentage listed after each event above represents the total percentage of items discarded by event attendees that was either recycled into new products or composted into nutrient-rich soil. Public events tend to be huge waste generators. Roseville's efforts to address this problem, and the 93-99% diversion of waste from these public events, continues to show the city's incredible leadership. Eureka Recycling receives consistent requests from other cities to help them develop the knowledge and build the commitment to waste reduction that would make them as successful as Roseville.

Night to Unite

In 2013, we again joined the City of Roseville in their Night to Unite celebration. Together, we recognized it as an opportunity to connect with Roseville residents on a night where the community gathers. The city and Eureka Recycling see this event as a great opportunity to bring resources to residents as well as take the time to build community and answer questions. With a full truck of recycling bins, Roseville city staff and Eureka Recycling staff headed out to at least 14 neighborhood gatherings and distributed approximately 44 recycling bins to residents who didn't have one, or needed an extra one to help them recycle more. Staff spent time at these events answering recycling questions and talking to residents about the environmental and economic benefits of recycling. Residents were very excited not only to get recycling information and more recycling bins, but also to have conversations about other zero-waste topics, such as ways to influence producers to make more sustainable products and packaging.

We also distributed 2013 Guides to Recycling and brochures with information about the Twin Cities Free Market to anyone interested.

Leading up to this event, we once again supported the city's effort to encourage block party organizers to register their parties with the city by offering a free backyard composting bin to any registered neighborhood party that wanted one. A total of 13 compost bins were given to leaders of Roseville block parties. Registering parties helps the city to retain the information about who the energized and engaged residents are and develop stronger relationships with those residents to get community feedback and to help disseminate information on important community initiatives to neighbors through these highly engaged residents. Several parties raffled the bins off to party attendees, while others used them to compost the food scraps from the party. We also offered a fact sheet about making neighborhood events zero-waste. This fact sheet is available on our composting website:

http://www.makedirtnotwaste.org/pdf/Your_zero_waste_neighborhood_event.pdf.

Twin Cities Free Market

Residents of the City of Roseville have the opportunity to exchange reusable materials via the Twin Cities Free Market (www.twincitiesfreemarket.org). As mentioned in the 2013 year-end report, the Twin Cities Free Market is a great way for residents to give and get free, reusable items while keeping them out of the landfill or incinerator. 840 Free Market users exchanged just over three tons (6,756 pounds) of usable items, mostly furniture, electronics, and appliances, were spared from the landfill or incinerator by Roseville residents in 2013 because they had the Twin Cities Free Market as an alternative to disposing of these items!

Appendix A

Roseville Multi-Family Tonnage by Property - 2013

Property Name	Primary Address	# Units	2006 Total lbs.	2007 Total lbs.	2008 Total lbs.	2009 Total lbs.	2010 Total lbs.	2011 Total lbs.	2012 Total lbs.	2013 Total lbs.
1144 Dionne Street	Dionne Street, 1144	23	7,150	8,457	5,961	5,167	6,906	5,892	5,539	5,557
1363 County Road B	County Road B, 1363	11	1,892	1,910	2,744	2,629	2,255	2,090	2,426	2,296
161 McCarrons Street	McCarrons Street, 161	11	439	198	-	-	-	-	-	-
161 Minnesota Avenue	Minnesota Avenue, 161	6	148	678	423	646	1,076	1,264	1,258	1,226
1610 County Road B	County Road B, 1610	11	2,266	2,324	1,967	2,396	2,079	1,858	1,827	1,808
1614 Eldridge Avenue	Eldridge Avenue, 1614	11	1,424	1,280	2,651	4,237	3,583	3,858	3,230	1,457
1615 Eldridge Avenue	Eldridge Avenue, 1615	11	1,809	1,091	1,721	2,076	1,922	1,678	1,479	1,336
1624 Eldridge Avenue	Eldridge Avenue, 1624	11	2,541	2,029	1,996	2,629	2,249	1,842	4,753	3,897
1629-1635 Skillman Avenue	Skillman Avenue, 1629-1635	14	2,505	3,002	2,951	2,686	2,151	1,981	2,897	1,929
1635 Eldridge Avenue	Eldridge Avenue, 1635	11	3,284	1,702	1,650	2,333	2,380	2,026	1,881	1,912
1705 Marion Street	Marion Street, 1705	0	1,437	1,578	224	291	1,370	840	587	523
1750 Marion Street~	Marion Street, 1750	24	3,511	3,576	4,317	3,906	3,386	2,741	1,617	2,080
2125 Pascal	Pascal Street, 2125-2133	22	2,514	3,184	5,239	4,717	4,829	5,007	5,093	5,538
2180 Haddington Road	Haddington Road, 2180	5	964	1,285	737	1,690	1,484	1,214	1,749	1,784
2275 Rice Street ^	Rice Street, 2275	8	1,924	2,830	2,852	2,973	869	-	-	-
2447 County Road B	County Road B, 2447	17	2,584	2,867	3,143	2,519	2,567	2,572	2,642	2,098
2610 Snelling Curve	Snelling Curve, 2610	17	2,929	2,696	3,164	3,113	3,284	3,323	3,678	3,055
2900 Highcrest Road	Highcrest Road, 2900	11	4,581	4,436	2,715	2,534	3,597	3,512	3,720	3,444
2950 Highcrest Road	Highcrest Road, 2950	12	2,980	2,295	2,486	2,685	2,496	1,742	1,817	1,209
Applewood Pointe	Applewood Court, 1480	94	47,799	58,215	46,499	39,220	36,217	30,640	25,912	23,956
Applewood Pointe at Langton Lake	Langton Lake Drive, 1996	48	-	-	-	-	-	7,419	16,144	24,786
Aquarius Apartments	County Road C2, 2425	99	-	-	15,391	17,449	12,570	11,702	13,094	15,157
Bonaventure	Lexington Avenue North, 3090	30	7,490	8,105	7,033	5,367	5,497	5,281	5,033	4,465
Centennial Gardens East & West	Centennial Drive, 1400-1420	190	26,759	21,852	22,677	23,021	21,122	20,025	20,137	20,888
Cherrywood Pointe	Cleveland Ave North, 2966	50	-	-	-	-	-	-	3,962	8,407
Coventry Seniors Apartments	Snelling Avenue, 2820	196	19,939	19,110	22,729	24,917	22,952	21,268	21,247	21,275
Dale Terrace Apartments	County Road B, 720	42	9,360	7,793	12,033	13,323	12,343	11,572	10,371	9,892
Dellwood Condominiums	Dellwood Street, 1725	12	1,226	1,923	2,650	2,630	2,721	3,298	2,891	2,439

Property Name	Primary Address	# Units	2006 Total lbs.	2007 Total lbs.	2008 Total lbs.	2009 Total lbs.	2010 Total lbs.	2011 Total lbs.	2012 Total lbs.	2013 Total lbs.
Eagle Crest	Lincoln Drive, 2925	216	13,892	60,799	56,057	57,249	64,086	67,291	70,827	68,040
Executive Manor Condos	Old Highway 8, 3153-3155	72	12,385	14,530	17,674	17,185	15,918	16,897	19,637	18,055
Garley Apartments	County Road B, 1634	11	2,153	1,161	1,415	1,547	1,420	1,793	1,897	1,487
Greenhouse Village	Larpenteur Avenue, 1021	102	19,032	37,098	28,751	24,581	30,384	25,402	22,453	25,797
Hamline House Condos	Hamline Avenue, 2800	150	34,102	33,973	32,182	29,441	24,522	22,481	20,586	21,206
Hamline Terrace	Terrace Drive, 1360-1410	102	12,817	12,230	17,366	19,233	23,416	23,105	20,080	20,639
Heritage Place	County Road B West, 563	50	21,892	23,110	17,258	16,066	19,781	18,879	16,649	18,963
Hillsborough Manor	Woodbridge Street, 2335-2345	206	16,298	17,755	28,418	35,852	29,398	21,312	19,284	24,054
Karie Dale Apartments	Dale Street North, 2355-2393	44	6,691	7,455	9,794	8,483	7,508	7,910	6,931	7,151
Lake Josephine Condominiums	Lexington Avenue North, 3076	23	9,411	8,313	7,040	6,632	6,179	6,603	6,389	5,817
Lar Dale Apartments	Larpenteur Avenue West, 655	17	2,068	2,189	2,348	1,546	2,472	2,865	3,326	3,224
Lexington Court	Lexington Avenue, 2192-2206	52	3,390	2,970	4,293	5,076	4,092	4,808	5,924	7,020
Lexington Twin Apartments	Lexington Avenue, 1890	22	5,674	5,519	5,456	5,689	5,014	5,371	5,791	5,549
Lexlawn/Roselawn Apartments	Lexington Avenue, 1943	34	3,142	2,888	3,774	4,033	3,788	4,074	3,788	3,369
Marion Street/ Brittany Apartments	Larpenteur Avenue, 175	277	11,980	16,150	17,191	17,485	18,645	11,838	11,263	8,711
McCarrons Apartments	McCarrons Boulevard North, 166-204	67	5,092	4,919	5,543	5,039	4,939	4,172	3,743	3,884
McCarrons Lake Condos	McCarons Boulevard N., 185	42	-	-	-	-	-	5,076	7,757	9,407
Midland Grove Condos	Midland Grove Road, 2200-2250	174	48,162	60,937	50,758	45,718	48,159	50,575	54,288	49,123
MSOCS - Group Home	Huron Street North, 1898	0	-	-	-	615	4,326	3,717	2,452	2,369
Northwestern College Apartments	Lydia Avenue, 1610	40	6,061	7,839	4,941	4,379	4,055	4,111	3,418	3,653
Northwestern College/Snelling Terrace	Snelling Drive East, 2906	48	7,386	16,027	12,542	12,253	12,443	10,702	11,261	11,308
Palisades	Sandhurst Drive West, 535-570	330	40,078	41,635	55,306	51,667	45,972	47,910	40,893	45,973
Parkview Estate Condominiums	Oxford Street, 2670-2680	204	28,447	29,206	30,816	29,683	24,738	24,793	23,440	25,588

Property Name	Primary Address	# Units	2006 Total lbs.	2007 Total lbs.	2008 Total lbs.	2009 Total lbs.	2010 Total lbs.	2011 Total lbs.	2012 Total lbs.	2013 Total lbs.
Parkview Manor	Dale Street North, 2202-2210	34	4,931	4,553	5,085	5,612	4,698	4,518	4,242	4,799
Parkview Terrace Condos	Oxford Street, 2690-2700	105	3,960	33,244	28,285	23,919	21,702	19,169	17,420	16,521
Ramsey Square Condos	Dale Street North, 2700-2730	192	-	35,796	34,991	35,127	41,288	38,930	37,992	40,702
Riviera Apartments	Highway 36 West, 925 & 965	64	12,473	13,597	19,108	17,369	15,204	15,900	14,110	15,255
Rose Hill Estates	County Road B, 591	51	4,341	4,904	5,880	5,345	3,775	5,514	5,281	7,552
Rose Mall Apartments	Albert Street, 2201-2221	54	37,328	41,412	43,984	47,376	41,250	42,786	39,486	37,841
Rose Park Apartments	Fry Street, 2128-2136	22	4,757	5,426	6,065	6,466	4,253	4,591	5,084	1,336
Rose Vista Apartments	Rose Vista Court, 1222-1263	175	19,697	18,366	24,634	26,822	23,830	23,146	20,789	20,499
Rosedale Estates North	Rice Street, 2835 & 2855	180	21,885	24,253	33,475	34,083	26,954	22,234	19,283	20,899
Rosedale Estates South	Rice Street, 2735	180	20,750	23,864	26,581	27,377	23,770	21,632	19,071	20,251
Roselawn Village	Roselawn Avenue, 1074	32	5,576	5,950	5,616	5,417	4,730	5,563	5,633	4,792
Rosepointe	Hamline Avenue North, 2545 & 2555	190	32,645	29,485	33,312	31,688	31,195	29,229	27,706	28,977
Roseridge Estates	Samuel Street, 2086-2090	18	2,653	3,099	3,829	4,537	3,744	5,739	6,519	5,255
Rosetree Apartments	Highway 36, 655	48	12,251	12,394	12,654	11,831	10,236	8,515	8,026	7,421
Roseville Apartments, LLC	Eldridge Avenue, 1625	11	2,037	2,546	1,833	2,106	1,730	2,172	2,538	3,764
Roseville Arms Condos	Elmer Street, 160-170	34	789	1,565	3,269	3,068	2,074	2,780	3,049	3,148
Roseville Commons	County Road C2 West, 2496	30	8,332	7,515	8,281	9,065	6,415	6,470	5,999	6,841
Roseville Estates	Lexington Avenue, 2599	107	5,593	9,842	12,312	10,028	7,472	6,588	9,453	8,345
Roseville Seniors	Larpenteur Avenue, 1045	127	25,581	33,600	30,521	27,577	23,698	24,268	20,647	24,456
Roseville Terrace	Dunlap Street, 1759	36	5,363	4,785	5,032	5,469	4,658	4,167	3,876	3,671
Roseville Townhomes	Old Highway 8, 3085	40	-	13,423	20,619	24,021	23,733	22,322	29,349	23,836
Rosewood Estates (Roseville)	Victoria Street, 2750	106	20,205	22,122	23,413	21,614	20,340	18,408	17,719	16,316
Rosewood Village	Highway 36 West, 1630	201	44,374	41,062	34,271	43,368	38,264	36,605	39,188	41,640
Sienna Green Apartments*	Snelling Avenue, 2225	120	9,199	9,683	9,659	11,486	7,813	13,325	15,008	19,042
South Oaks Apartments	County Road D West, 1080	25	4,067	5,951	6,751	5,930	5,969	4,886	4,344	4,101
Sun Place Apartments	Marion Street, 1721	30	5,169	4,093	4,926	6,107	6,451	5,942	4,896	5,678
Sunrise Assisted Living	Snelling Avenue North, 2555	77	17,031	16,647	15,869	16,693	13,118	11,330	12,300	14,856
Talia Place	Old Highway 8, 3020	11	2,790	1,683	1,761	2,569	2,620	1,892	1,891	1,868
Terrace Park	Terrace Drive, 1420	36	12,784	13,045	9,853	8,911	10,533	11,067	9,371	8,640
The Lexington (Roseville)	Lexington Avenue North, 2755	150	37,081	30,796	35,417	35,409	38,816	39,023	42,959	40,501
The Riviera 2	Highway 36 West, 885	32	6,562	6,602	8,968	8,053	6,740	5,431	6,168	6,773
Valley 8 Apartments	Old Highway 8, 3050	85	11,085	9,910	12,626	13,491	11,637	12,593	12,702	10,655
Victoria Place	Victoria Street North, 2250	58	-	14,911	16,130	14,015	14,647	15,396	16,260	15,389
Villa Park Community Condominiums	County Road B, 500	95	15,890	14,276	18589	16,924	17,962	15,178	11,537	13,001
Villas at Midland Hills	Fulham Street, 2001	32	2,873	11,653	12,600	11,506	11,375	11,722	12,318	13,667
Total Pounds - Residential		6,049	889,659	1,103,172	1,161,075	1,154,984	1,095,854	1,065,358	1,059,275	1,081,089

Municipal Buildings

Property Name	Primary Address	Sites	2006 Total lbs.	2007 Total lbs.	2008 Total lbs.	2009 Total lbs.	2010 Total lbs.	2011 Total lbs.	2012 Total lbs.	2013 Total lbs.
Acorn Park	County Road C, 286	1	-	-	-	-	-	184	761	487
Central Park Lexington	Lexington Avenue North, 2540	1	-	-	-	-	-	-	-	33
Central Park Victoria West	Victoria Street North, 2495	1	-	-	-	-	-	46	741	628
City Hall (Roseville)	Civic Center Drive, 2660	1	28,244	28,474	24,682	20,562	21,228	21,590	18,786	16,775
Evergreen Park Ballfield	County Road B West, 1810	1	497	515	456	818	305	336	404	190
Fire Station 1 Roseville^	Lexington Avenue, 2701	1	3,226	3,630	2,134	2,058	2,063	1,890	**	214
Fire Station 3 Roseville	Dale Street North, 2335	1	1,564	2,786	3,604	2,960	3,968	3,437	2,911	2,568
Golf Course (Roseville)	Hamline Avenue, 2395	1	2,729	2,654	2,080	2,149	2,689	2,048	2,093	1,671
License Center	Lexington Avenue, 2737	1	79	178	10	38	31	26	-	-
Owasso Ballfields	Victoria Avenue, 2659	1	120	36	400	361	295	-	171	134
Public Works Garage (Roseville)	Woodhill Drive, 1140	3	8,341	12,089	13,916	13,566	16,863	16,644	17,608	17,680
Skating Center	Civic Center Drive, 2661	2	4,877	5,038	5,244	3,938	5,057	7,514	6,692	8,806
State Farm Insurance	Lexington Avenue North, 2201	1	-	-	705	1,758	718	759	241	480
Wildlife Rehabilitation Center	Dale Street North, 2530	1	14,607	13,948	12,726	12,513	11,840	10,509	9,158	9,649
Total Pounds - Municipal		17	64,283	69,348	65,957	60,720	65,057	64,983	59,566	59,315

Nonprofits

Property Name	Primary Address	Sites	2006 Total lbs.	2007 Total lbs.	2008 Total lbs.	2009 Total lbs.	2010 Total lbs.	2011 Total lbs.	2012 Total lbs.	2013 Total lbs.
Keystone Foodshelf (Roseville)	Hamline Ave North, 2833	1	-	-	-	-	-	14,258	27,119	29,787
Total Pounds - Nonprofits		1	-	-	-	-	-	14,258	27,119	29,787

			2006 Total lbs.	2007 Total lbs.	2008 Total lbs.	2009 Total lbs.	2010 Total lbs.	2011 Total lbs.	2012 Total lbs.	2012 Total lbs.
MultiFamily & Non-Residential Totals			953,942	1,172,520	1,227,032	1,215,704	1,160,911	1,144,598	1,145,960	1,170,191

Total Units in 2013	6,049
Total Units in 2012	6,049
Total Units in 2011	5,999
Total Units in 2010	5,781
Total Units in 2009	5,781
Total Units in 2008	5,781
Total Units in 2007	5,662
Total Units in 2006	5,367

Eureka Recycling Composition Analysis Methodology

Eureka Recycling collects materials in two streams: a “papers” stream consisting of various grades of paper (including cardboard), and a “containers” stream consisting of food and beverage containers (including glass, plastic bottles, and metal cans). As outlined in our contract, Eureka Recycling conducts an annual composition study of the two streams to create a basis on which the percent of each commodity collected in the two-stream commingled program can be estimated based upon total weight collected in the truck.

Composition by Stream

During the composition study, Eureka Recycling weighs each truck before and after tipping the papers to determine the weight of the papers and containers streams. Each truck has a stored tare weight that is updated regularly for accuracy. This weighing process allows us to determine what percentage of the total recycling collected makes up the papers stream, and what percentage makes up the containers stream.

Composition by Commodity of Each Recycling Stream



The composition study starts with Eureka Recycling storing all of the materials collected in the city in the containers stream during a one-week period in a separate bunker from all other materials at the facility. Eureka Recycling sorts these containers by material separately from all other containers at the facility using the sort line.

The sorted materials are then baled or put into a hopper and transported with a forklift to the truck scale to be weighed. Finally, Eureka Recycling weighs the total amount of each sorted material grade (including residual) to establish a percentage of composition each grade represents within the containers stream.

The entire process is then repeated with the papers stream to establish a composition percentage of each grade of paper within the stream.

(651) 222-SORT (7678)

www.eurekarecycling.org

Our mission is to reduce waste today through innovative resource management and to reach a waste-free tomorrow by demonstrating that waste is preventable, not inevitable.

An affirmative action, equal opportunity employer.

 Printed on 100% postconsumer recycled paper that was processed without the use of chlorine.

Eureka Recycling Participation Analysis Methodology

Eureka Recycling conducts an annual participation study in which both set-out and participation rates are analyzed and documented.

The **set-out rate** is the average number of households that set materials out for recycling collection on a given day. For example, every Monday for one month, collection drivers count the number of households that set out recycling on that day. Then the four numbers are averaged to determine the average number of households who set out recycling on a given Monday.

The **participation rate** is the number of households who set materials out for recycling collection at least once over a period of one month. The participation rate is a better indication of overall recycling participation because it includes households that recycle at least once a month, recognizing that some households may not set out recycling every week. It more accurately indicates how many households are participating in the recycling program *overall*, as opposed to the number of participants on a specific day.



Summary of Process

The study spans one month of collections. Eureka Recycling selects random sections to study for each daily recycling route, each section being comprised of about 200 households per day, for a total study of over 1,000 households. These same sections will be studied every year for consistency. Over a four-week period, Eureka Recycling tallies the exact number of households that set out recycling for collection in the morning of their collection day, before the driver services the section. The four-week study tracks recycling set-outs over the five days of collections during the week, totaling 20 days of set-out tracking.

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Our mission is to reduce waste today through innovative resource management and to reach a waste-free tomorrow by demonstrating that waste is preventable, not inevitable.

An affirmative action, equal opportunity employer.

♻️ Printed on 100% postconsumer recycled paper that was processed without the use of chlorine.