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City of Roseville 2023 Year-End Recycling Report

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 helping residents understand the benefits of recycling. Participation continues to be at or among the highest in Ramsey County at 96%. Despite the continued lightening of packaging, the tons of recycling collected in Roseville in 2023 stayed steady with only a small decrease. Roseville residents demonstrate a genuine desire to support the program, understand what can truly be recycled, and recycle as much as possible.

In the current recycling climate, it is even more critical to work to keep Roseville's recycling clean and free of contamination, which is one of the reasons Eureka Recycling decided to launch a recycling app in 2018. By working with a company called ReCollect, we launched a recycling app that Roseville residents can use online at eurekarecycling.org or can download to their mobile device for free by searching for "Eureka Recycling" in their app store. The app allows residents to look up individual items to find out if they are accepted in their recycling program or not, and can also be connected to Ramsey County listings and resources for guidance in handling hard to recycle items like electronics, scrap metal, and appliances. The app also allows residents to see their recycling schedule and sign up for reminders to support their participation in Roseville's recycling program.

In 2023 we saw a continued increase in the number of Roseville residents using the app. Overall, 5,803 unique Roseville addresses have been searched through the app, and over 21,454 materials have been looked up to see if they can be recycled. There are currently 1,346 Roseville residents signed up for recycling day reminders: 60% of those residents are signed up through a mobile app and the rest are signed up for email, text, or phone call reminders. We look forward to working with the City to further promote this new app and expand on this success.

This year-end report contains information on several areas that Eureka Recycling tracks to monitor the success of Roseville's zero waste recycling program over the course of each year. As a non-profit social enterprise, we believe tracking and reporting this data is an essential way to ensure program transparency. It also gives Eureka Recycling and city staff the tools needed to successfully manage the program.

www.eurekarecycling.org 2828 KENNEDY STREET NE | MINNEAPOLIS, MN 55413 | 612-669-2783

ENVIRONMENTAL BENEFITS SUMMARY

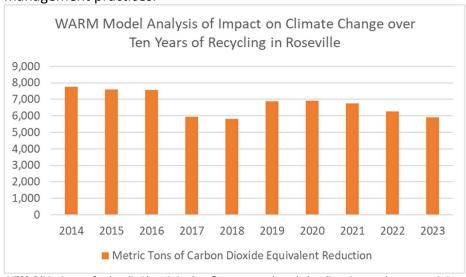
The environmental benefits of Roseville's zero-waste recycling program are quantified transparently using a widely accepted environmental model. This ensures that all residents have a chance to see how their efforts can be measured and quantified. There are many ways to calculate the benefits of recycling. 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.

Because of the increasing societal focus on both the causes of and the solutions to climate change, it has become imperative to measure waste reduction (and all our activities) in terms of its impact on the environment. 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. In addition to climate change mitigation, there are other environmental benefits to recycling, including saving energy, 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 consider 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 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.



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

According to the WARM model, Roseville's recycling activities in 2023 reduced greenhouse gas emissions by 5,924 MTCO2E (metric tons of carbon dioxide equivalent).

What do all these numbers mean?

In addition to preventing pollution, an important impact of recycling is that it conserves a huge amount of energy. Making products and packaging from raw materials harvested from nature uses a much larger amount of energy than using recycled materials. Every manufactured item has the energy used to make it "embedded" into it. Recycling takes advantage of that energy, as it is easier and more energy efficient to make a glass bottle from another glass bottle than from raw materials.

The WARM model and other calculators measure the difference between recycling all these tons of materials and using them to make new products versus sending them to an incinerator and making replacement products from raw materials. This difference is expressed as the amount of CO2 that was not produced because we did not have to make and use all the energy that would have been needed if we used raw materials.

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 https://www.epa.gov/warm.

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.

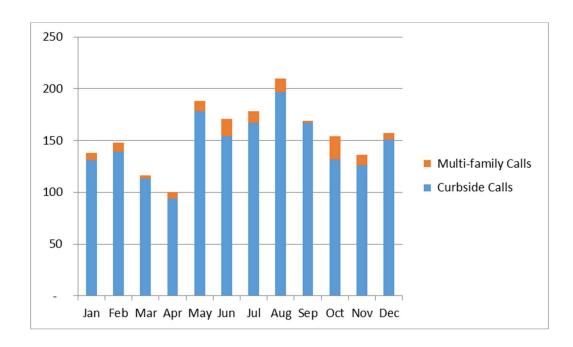
- For example, using the figures above, the EPA estimates that Roseville would have had
 to remove 1,258 gasoline-powered cars from the road for one year to have had the
 same environmental impact in 2023 as they did by recycling.
- Another way to look at it is that the residents of Roseville saved an amount of energy equivalent to 246,840 propane cylinders for backyard barbeques.

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 impact of Roseville's recycling program proves to be quite significant.

2023 Roseville Annual Report from Eureka Recycling

Education Summary for Curbside and Multifamily Programs

ROSEVILLE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Hotline Calls and Emails													
Curbside Calls	131	139	113	94	178	154	167	197	167	132	126	151	1,749
Multi-family Calls	7	9	3	6	10	17	11	13	2	22	10	6	116
Total Calls	138	148	116	100	188	171	178	210	169	154	136	157	1,865
Requests for Printed Materials	1	-	2	2	1	-	-	-	-	-	-	-	6



Total Number of Stops

Single Family Homes	9,487
Multifamily Buildings	89
Parks	23
Total Number of Stops	9,599

Total Number of Tags Left

Eureka Recycling drivers educate residents at the curb using educational tags for specific problems. In 2023, drivers left approximately 814 educational tags on recyclers' carts.

The most common reason residents received a tag in 2023 were contamination, including plastic bags, bulky plastic items, and other miscellaneous non-recyclable items.

Amount stored, by recyclable material

No recyclables have been stored at our facility longer than needed to generate quantities to ship.

The markets generally used for the sale of recyclables

Eureka Recycling continues to use the same markets for recyclables as were noted in the RFP. Eureka Recycling has always prioritized supporting local markets. In 2023, 69 percent of the material we processed stayed in Minnesota, 95 percent in the Midwest, and 99 percent stayed in the US.

Parks Recycling

We provided service to 27 Roseville Parks in 2023, with many of them being serviced as part of our regular routes collecting from multifamily or single family homes.

We separately track tonnage for the dedicated park routes providing weekly or twice weekly service for 65 carts located in Central Park Lexington and Central Park Victoria West at the pavilions, near the ballfields, and along the pathways, and also the carts at Acorn, Concordia, and Lexington Parks. We collected a total of 17,420 pounds of recycling from these parks throughout the season.

Month	Pounds of Recycling Collected
May	2840
June	3120
July	2940
August	2940
September	2640
October	2940
Total	17420

Participation Trend Study Report

Over the past few years, Eureka Recycling has transitioned away from doing participation studies by hand-counting the number of carts that are out in several 200 household areas throughout each city, and replacing that study with a citywide, digital participation study using data from our digital routing system.

The study spans six weeks. Each time the truck tips a cart, that collection is recorded for that specific address. This data allows us to analyze all collection during a specific study period. The percentage of all addresses in each day's routes that register a tip in a given week is recorded as that week's set out rate, which is then averaged over the course of the study to calculate the city's set out rate.

The reports for each collection day are then sorted by address and duplicates are removed for households that set out more than once during the study period or who have more than one cart. The remaining list of addresses represents all households that participated in recycling at least once during the study, to arrive at the participation rate for the city.

There are some important things to remember when looking at this participation study data:

- For both digital and hand count data, the data is based on a "per building" or "per address" basis. If a cart is out at a duplex or a triplex, we count that address as participating on that day, and if there is not a cart out we count the address as not participating. There is no way for us to know which units are using the cart or carts that are set out. Similarly, for a single family home with two carts, we still count them as one participating address regardless of how many carts are out for collection.
- The "set out rate" is calculated by counting the number of addresses that set out a cart on each collection day, and taking the average of the number of carts set out each day during the six week study period.
- The "Participation Rate" is calculated by counting the percentage of unique addresses that participated in the program at least once during the six week study period.

Participation Trend Study Results for the Past Ten Years

Roseville	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Set Out Rate	76%	78%	77%	76%	75%	85%	77%	79%	77%	83%
Participation Rate	93%	93%	94%	93%	92%	97%	96%	98%	95%	96%

Recycling Market Outlook for 2024

Prices for recycled material reached significant lows during the summer of 2023 but we expect them to level out in 2024. This past year saw reduced demand as companies were bracing for a recession. However, in the fall, as fears of a recession eased and inflation came under control, prices began to rise.

End markets are hopeful that this increase will continue through this year – though typically during the post-holiday winter months pricing holds steady or slumps we did not see this usual trend in January. No one expects pricing to return to the highs we saw during the pandemic, but they are cautiously optimistic that the recession people feared last year has been averted.

Eureka Recycling continues to have good relationships with our end markets and was able to move all our material in 2023 except for pop and beer boxes. We have at least three markets interested in each material except for pop and beer boxes (see more details on this in the paper section) and glass. We regularly get positive comments regarding the quality of the recyclables we sell. Additionally, we continue to focus on local markets when possible – in 2023, 69 percent of the material we processed stayed in Minnesota, 95 percent in the Midwest, and 99 percent stayed in the US. These business practices have been in place for years and reflect our values around the environmental, economic, and human impacts of recycling.

Paper Markets: WestRock closing their cardboard line in the fall of 2022 deeply impacted the Minnesota and Midwest recycled paper markets during the beginning of the year. The closure of WestRock's cardboard line resulted in a lot of extra cardboard in the Midwest which contributed to a decrease in prices for this material. However, by mid-year markets had adjusted and demand has been strong, especially in Wisconsin. Some of the strong demand is due to a decrease in volume as people continue to reduce their paper usage at home and in the office and companies find ways to reduce the amount of cardboard and packaging they use.

With the closing of the WestRock cardboard line we had no place to send pop and beer boxes for many months. We did find one market in the Midwest that turns this material into construction products (so it isn't turned into paper). We are evaluating the impact of this and continue looking for other markets that accept this material. Prior to the closing of the WestRock cardboard line, we sent pop and beer boxes to this line where it could be pulped for longer. Because of the extra plastic lining on pop and beer boxes, when this material stays with the paper it isn't likely to get recycled. When we remove it and ship it separately, some cardboard mills with the right equipment can pulp it separately for longer to separate the fiber from the plastic. We don't generate a lot of this material so we are currently able to move what we have but will continue to monitor this situation throughout the year regarding whether we can continue to accept this material.

Plastics markets also had a volatile year and varied significantly by material type. Demand for PET bottles started weak and built up a bit in spring before falling dramatically in the summer — this summer dip in pricing and demand is consistent and is due to there being more bottles available in the warm summer months (when people drink more bottled beverages). Most markets believe we'll see a similar trend this year with pricing climbing a bit through the cold months but declining when it gets warmer. Eureka continues to engage with several brands directly about how to connect their corporate commitments to using recycled content with the actual supply chain to realize the flow of PET bottles back into PET bottles.

HDPE Color followed a similar trend as PET but the sale of this material is more reliant on the agriculture industry, as much of this material gets made into drainage tile and piping for farms. When there is significant uncertainty (such as due to a pandemic or concerns about ability to trade agricultural products to other countries) farmers tend not to invest in new irrigation infrastructure, which can negatively impact the HDPE Color markets. HDPE Natural is the same type of plastic as HDPE Color, but because it has no coloring added it is a more versatile product and can be turned into any type of product – most of our HDPE Natural is turned back into bottles. Both HDPE Color and Natural took a surprising dip last spring and slowly climbed back up in the fall. Many in the industry believe the reduced pricing was caused by unused petroleum being dumped on the market as many were worried about a recession and didn't want to hold on to inventory that may lose its value. Extended Producer Responsibility in the form of minimum content rules (which would require manufacturers to use a minimum amount of recycled content) would reduce this type of market fluctuation and is one type of EPR for which Eureka advocates.

The third type of plastics we sort, polypropylene (PP, #5) remained flat throughout 2023 and markets expect to hold steady in the upcoming year as well.

Metals markets strengthened slightly at the beginning of 2023 and then fell towards the end of the year. Even with the decrease aluminum has remained the most valuable material in the stream (unlike 2021 when HDPE Natural was worth more for a few months). Experts believe aluminum pricing will remain higher than other materials, although this material is especially sensitive to the impacts of tariffs and trade agreements.

Market Dynamics and Public Policy Initiatives are intertwined because how policy is designed can support or weaken end markets and recycling programs. Eureka Recycling continues to advocate for EPR and policies that strengthen recycling in our communities and minimize the environmental impact of manufacturing. The potential enactment of Extended Producer Responsibility (EPR) legislation in Minnesota holds the power to profoundly reshape the plastics markets, influencing both operational strategies and market dynamics. Under EPR, producers would be accountable for the entire life cycle of their plastic products/packaging, stimulating a fundamental shift in material and design choices. This shift puts pressure on producers to prioritize recyclable and recycled materials in their designs, creating a surge in demand for recycled plastics and a reduction in non-recyclable plastics in the marketplace.

Prioritizing recyclability in product design would present a dual benefit. As producers incorporate recycled materials into their products, the potential for heightened demand in recyclable materials emerges, which could positively influence pricing dynamics. Simultaneously, the legislation aims to mitigate the proliferation of problematic packaging that cannot be sorted at Material Recovery Facilities (MRFs), thereby diminishing residual rates and capturing a more substantial volume of recyclable material. In essence, the prospective implementation of EPR in Minnesota represents a crucial juncture to enhance recycling effectiveness, contribute to a cleaner and healthier environment, and alleviate the recycling burden and confusion experienced by residents and average consumers.



2023 Roseville Tonnage Report

Month	Percent	January	February	March	April	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Tons By Commodity
SUD Route Tons		200.08	151.11	182.35	162.08	175.49	177.30	172.76	183.56	165.71	177.64	175.27	175.93	
MUD Route Tons		41.94	37.46	45.53	38.15	40.96	42.38	35.14	41.65	39.30	37.62	39.05	39.82	479.00
Total Tons		242.02	188.57	227.88	200.23	216.45	219.68	207.90	225.21	205.01	215.26	214.32	215.75	2578.28
Single Stream Composition														
News Mix	29.76%	72.03	56.12	67.82	59.59	64.42	65.38	61.87	67.02	61.01	64.06	63.78	64.21	767.30
Cardboard	15.81%	38.26	29.81	36.03	31.66	34.22	34.73	32.87	35.61	32.41	34.03	33.88	34.11	407.63
Mixed Paper	17.37%	42.04	32.75	39.58	34.78	37.60	38.16	36.11	39.12	35.61	37.39	37.23	37.48	447.85
Aluminum Cans	2.23%	5.40	4.21	5.08	4.47	4.83	4.90	4.64	5.02	4.57	4.80	4.78	4.81	57.50
Steel Cans	1.91%	4.62	3.60	4.35	3.82	4.13	4.20	3.97	4.30	3.92	4.11	4.09	4.12	49.25
HDPE NAT	0.94%	2.27	1.77	2.14	1.88	2.03	2.06	1.95	2.12	1.93	2.02	2.01	2.03	24.24
HDPE Col	0.80%	1.92	1.50	1.81	1.59	1.72	1.75	1.65	1.79	1.63	1.71	1.70	1.72	20.50
PET	4.79%	11.58	9.02	10.91	9.58	10.36	10.51	9.95	10.78	9.81	10.30	10.26	10.33	123.39
Tubs and Lids	0.68%	1.64	1.28	1.54	1.36	1.47	1.49	1.41	1.53	1.39	1.46	1.45	1.46	17.48
Mix Glass	16.91%	40.93	31.89	38.53	33.86	36.60	37.15	35.16	38.08	34.67	36.40	36.24	36.48	435.99
Milk Cartons/Juice Boxes	0.38%	0.91	0.71	0.86	0.75	0.82	0.83	0.78	0.85	0.77	0.81	0.81	0.81	9.71
Residual	8.44%	20.41	15.91	19.22	16.89	18.26	18.53	17.54	19.00	17.29	18.16	18.08	18.20	217.48
Totals	100.00%	242.02	188.57	227.88	200.23	216.45	219.68	207.90	225.21	205.01	215.26	214.32	215.75	2578.30

Potential Revenue Share Value for Roseville, 2023

Value per ton per month		J	January	F	ebruary	ı	March	April	May		June		July		August	S	eptember	·	October	١	lovember	D	ecember	
News Mix	29.76%	\$	40.00	\$	40.00	\$	40.00	\$ 40.00	\$ 40.00	\$	40.00	\$	40.00	\$	40.00	\$	45.00	\$	50.00	\$	55.00	\$	60.00	
Cardboard	15.81%	\$	35.00	\$	35.00	\$	35.00	\$ 40.00	\$ 45.00	\$	55.00	\$	55.00	\$	55.00	\$	60.00	\$	70.00	\$	75.00	\$	80.00	
Mixed Paper	17.37%	\$	-	\$	-	\$	5.00	\$ 10.00	\$ 15.00	\$	20.00	\$	20.00	\$	20.00	\$	30.00	\$	35.00	\$	40.00	\$	45.00	
Aluminum Cans	2.23%	\$	1,460.00	\$	1,550.00	\$	1,510.00	\$ 1,450.00	\$ 1,450.00	\$	1,410.00	\$	1,391.67	\$	1,350.00	\$	1,314.00	\$	1,260.00	\$	1,240.00	\$	1,247.00	
Steel Cans	1.91%	\$	178.75	\$	210.00	\$	237.00	\$ 280.00	\$ 271.67	\$	243.00	\$	226.67	\$	205.71	\$	200.00	\$	200.00	\$	200.00	\$	205.00	
HDPE NAT	0.94%	\$	1,315.00	\$	1,328.00	\$	1,455.00	\$ 1,533.00	\$ 1,585.00	\$	1,229.00	\$	673.33	\$	450.00	\$	482.00	\$	521.43	\$	600.00	\$	640.00	
HDPE Col	0.80%	\$	205.00	\$	252.00	\$	304.00	\$ 338.00	\$ 383.00	\$	286.00	\$	176.67	\$	138.57	\$	220.00	\$	315.71	\$	420.00	\$	460.00	
PET	4.79%	\$	255.03	\$	280.00	\$	298.04	\$ 305.00	\$ 302.93	\$	249.00	\$	150.00	\$	139.31	\$	167.00	\$	202.14	\$	229.00	\$	252.00	
Tubs and Lids	0.68%	\$	10.00	\$	10.00	\$	10.00	\$ 14.00	\$ 30.00	\$	30.00	\$	30.00	\$	30.00	\$	30.00	\$	30.00	\$	30.00	\$	30.00	
Mix Glass	16.91%	\$	(33.89)	\$	(27.13)	\$	(26.89)	\$ (24.54)	\$ (32.80)	\$	(33.35)	\$	(33.68)	\$	(33.00)	\$	(31.59)	\$	(34.20)	\$	(33.25)	\$	(33.02)	
Milk Cartons/Juice Boxes	0.38%	\$	2.50	\$	2.50	\$	2.50	\$ 2.50	\$ 2.50	\$	2.50	\$	2.50	\$	2.50	\$	2.50	\$	2.50	\$	2.50	\$	2.50	
Residual		\$	(99.35)	\$	(99.48)	\$	(102.96)	\$ (99.30)	\$ (99.49)	\$	(99.87)	\$	(97.93)	\$	(103.32)	\$	(106.18)	\$	(105.00)	\$	(103.93)	\$	(103.57)	
SubTotals	100.00%	\$	65.57	\$	71.00	\$	73.71	\$ 76.92	\$ 77.86	\$	72.05	\$	60.61	\$	56.02	\$	61.40	\$	66.60	\$	72.41	\$	77.67	
Rev Share	80%	\$	52.46	\$	56.80	\$	58.97	\$ 61.54	\$ 62.29	\$	57.64	\$	48.49	\$	44.82	\$	49.12	\$	53.28	\$	57.93	\$	62.14	
Processing fee	\$75									L		L		L						L				
Net value per ton		\$	(22.54)	\$	(18.20)	\$	(16.03)	\$ (13.46)	\$ (12.71)	\$	(17.36)	\$	(26.51)	\$	(30.18)	\$	(25.88)	\$	(21.72)	\$	(17.07)	\$	(12.86)	
Roseville Recycling Tonnage			242.02		188.57		227.88	200.23	216.45		219.68		207.90		225.21		205.01		215.26		214.32		215.75	
otal Potential Revenue Shar	е	\$	(5,455.71)	\$	(3,432.13)	\$ ((3,653.58)	\$ (2,695.73)	\$ (2,750.79)	\$	(3,813.58)	\$	(5,512.35)	\$	(6,797.05)	\$	(5,305.96)	\$	(4,674.92)	\$	(3,659.17)	\$	(2,775.25)	\$

2023 Estimated Tonnage by Multifamily Building

Multifamily building tonnage is estimated based on each building's service level, the volume of recycling collected at each building on a weekly basis, and the total tonnage collected from Multifamily buildings in the City of Roseville.

customer code	Business Name	civic	street	Total pounds of recycling	Units	Pounds Per Unit
MULTRSV1897	1144 Dionne Street	1144	Dionne St	3,315	23	
MULTRSV1892	1363 County Road B	1363	County Rd B	1,823	11	165.75
MULTRSV1909	161 McCarrons Street	161	McCarrons St	1,326	11	120.55
MULTRSV1919	161 Minnesota Avenue	161	Minnesota Ave	3,191	6	531.79
MULTRSV1883	1614 Eldridge Apts	1614	Eldridge Ave	1,326	11	120.55
MULTRSV1886	1615 Eldridge Apts	1615	Eldridge Ave	891	11	80.99
MULTRSV1882	1624 Eldridge Apts	1624	Eldridge Ave	1,512	11	137.50
MULTRSV1885	1625 Eldridge Apts	1625	Eldridge Ave	725	11	65.92
MULTRSV1880	1634 Edlridge Apts	1634	Eldridge Ave	912	11	82.88
MULTRSV1884	1635 Eldridge Apts	1635	Eldridge Ave	684	11	62.16
MULTRSV1890	2125-2133 Pascal Street	2125	Pascal St	1,367	22	62.16
MULTRSV1876	2180 Haddington Road	2180	Haddington Rd	344	4	86.09
MULTRSV1872	2447 County Road B	2447	County Rd B	1,885	17	110.91
MULTRSV1941	2610 Snelling Curve	2610	Snelling Curve	2,279	17	134.07
MULTRSV1947	2900 Highcrest Road	2900	Highcrest Rd	3,232	11	293.84
MULTRSV1946	2950 Highcrest Road	2950	Highcrest Rd	2,022	11	183.84
MULTRSV1937	Applewood Pointe	1480	Applewood Court	56,356	94	599.53
MULTRSV2688	Applewood Pointe at Central Park	2665	Victoria St N	31,029	106	292.73
MULTRSV2191	Applewood Pointe at Langton Lake	1996	Langton Lake Dr	12,991	89	145.97
MULTRSV1978	Aquarius Apartments	2425	County Rd C2	12,183	99	123.06
MULTRSV1925	Bonaventure	3090	Lexington Ave N	4,745	30	158.16
CDLRSV1912	Cedarholm Golf Course	2323	Hamline Ave N	3,149	NA	NA
MULTRSV1936	Centennial Gardens East & West	1420	Centennial Dr	10,567	190	55.61
MULTRSV2413	Cherrywood Pointe at Cleveland	2996	Cleveland Ave N	7,065	50	141.30
MULTRSV2684	Cherrywood Pointe at Lexington	2680	Lexington Ave N	7,210	115	62.70
CDLRSV1930	City Hall (Roseville)	2660	Civic Center Dr	8,640	NA	NA
MULTRSV1940	Coventry Seniors Apartments	2820	Snelling Ave	10,132	196	51.69
MULTRSV1901	Dale Terrace Apartments	720	County Rd B	6,423	42	152.93
MULTRSV1893	Dellwood Condominiums	1725	Dellwood St	3,543	12	295.25
MULTRSV1981	Eagle Crest (RSV)	2925	Lincoln Dr	43,386	218	199.02
MULTRSV1948	Executive Manor Condos	3153	Old Highway 8	15,498	72	215.25
CDLRSV1933	Fire Station 1 (Roseville)	2701	Lexington Ave	1,948	NA	NA
MULTRSV1877	Garley Apartments	1634	County Rd B	725	11	65.92
MULTRSV2023	Greenhouse Village	1021	Larpenteur Ave	21,797	102	213.69
MULTRSV1950	Hamline House Condos	2800	Hamline Ave	18,875	150	125.83
MULTRSV1934	Hamline Terrace	1360	Terrace Dr	17,093	102	167.58
MULTRSV1905	Heritage Place	563	County Rd B W	11,706	51	229.54
MULTRSV1918	Hillsborough Manor	2335	Woodbridge St	34,228	206	166.16
MULTRSV1914	Karie Dale Apartments	2355	Dale St N	7,728	44	175.64
MULTRSV1963	Keystone Communities (Roseville)	2750	Victoria St	11,561	106	109.07
MULTRSV1926	Lake Josephine Condominiums	3076	Lexington Ave N	4,351	23	189.18
MULTRSV1910	Lar Dale Apartments	655	Larpenteur Ave W	1,575	17	92.63
MULTRSV1900	Lexington Court	2192	Lexington Ave	5,864	52	112.76

MULTRSV1898	Lexington Twin Apartments	1890	Lexington Ave	4,185	22	190.24
MULTRSV1899	Lexlawn/Roselawn Apartments	1943	Lexington Ave	2,818	34	82.88
MULTRSV2487	McCarrons Lake Condos	185	McCarrons Blvd N	8,868	42	211.14
MULTRSV1873	Midland Grove Condos	2200	Midland Grove Rd	40,154	174	230.77
MULTRSV1939	Northwestern College Apartments	1610	Lydia Ave	3,004	40	75.11
MULTRSV1938	Northwestern College/Snelling Terrace	2906	Snelling Dr E	9,075	48	189.06
MULTRSV1954	Palisades	560	Sandhurst Dr W	40,195	330	121.80
MULTRSV1932	Parkview Estate Condominiums	2670	Oxford St	16,161	204	79.22
MULTRSV1904	Parkview Manor	2202	Dale St N	3,046	34	89.58
MULTRSV1983	Parkview Terrace Condos	2690	Oxford St	14,400	105	137.14
CDLRSV1931	Public Works Garage (Roseville)	1140	Woodhill Dr	11,914	NA	NA
MULTRSV1921	Ramsey Square Condos	2710	Dale St N	32,653	192	170.07
MULTRSV1913	Riviera Apartments	925	Highway 36 W	12,452	64	194.57
MULTRSV1944	Rose 8 Apartments	3050	Old Highway 8	7,770	85	91.41
MULTRSV1903	Rose Hill Estates	591	County Rd B	5,615	51	110.10
MULTRSV1891	Rose Mall Apartments	2201	Albert St	22,128	54	409.78
MULTRSV1878	Rose Park Commons	1610	County Rd B	870	11	79.11
MULTRSV1887	Rose Park Estates	2136	Fry St	1,844	22	83.82
MULTRSV1894	Rose Vista Apartments	1222	Rose Vista Ct	9,116	175	52.09
MULTRSV1985	Rosedale Estates North	2835	Rice St	16,803	180	93.35
MULTRSV1956	Rosedale Estates South	2735	Rice St	15,332	180	85.18
MULTRSV1953	Roselawn Village	1074	Roselawn Ave	3,232	32	101.01
MULTRSV1942	Rosepointe	2545	Hamline Ave N	83,187	190	437.83
MULTRSV1879	Roseridge Estates	2086	Samuel St	3,108	18	172.66
MULTRSV1955	Rosetree Apartments	655	Highway 36	9,054	48	188.63
MULTRSV1907	Roseville Arms Condos	160	Elmer St	3,626	34	106.64
MULTRSV1958	Roseville Commons	2496	County Rd C2 W	5,097	30	169.90
MULTRSV1979	Roseville Estates	2599	Lexington Ave	11,831	113	104.70
MULTRSV1911	Roseville Seniors	1045	Larpenteur Ave W	21,502	127	169.30
MULTRSV1896	Roseville Terrace	1759	Dunlap St	2,652	36	73.67
MULTRSV2162	Roseville Townhomes	3085	Old Highway 8	10,928	41	266.54
MULTRSV1888	Rosewood Village	1630	Highway 36 W	22,853	219	104.35
MULTRSV1889	Sienna Green Apartments	2275	Snelling Ave	5,176	170	30.44
CDLRSV1929	Skating Center	2661	Civic Center Dr	11,706	NA	NA
MULTRSV1881	Skillman Villas	1629	Skillman Ave	1,388	14	99.16
MULTRSV1924	South Oaks Apartments	1080	County Rd D W	2,818	25	112.71
MULTRSV2597	Suite Living	197	County Rd B2 W	4,344	25	173.78
MULTRSV1951	Sun Place Apartments	1721	Marion St	2,923	30	97.45
MULTRSV1957	Sunrise Assisted Living	2555	Snelling Ave N	16,886	77	219.30
MULTRSV1945	Talia Place	3020	Old Highway 8	3,766	11	342.39
MULTRSV1935	Terrace Park Apts	1420	Terrace Dr	5,180	36	143.88
MULTRSV1964	The Lexington (Roseville)	2775	Lexington Ave N	24,677	150	164.51
MULTRSV1984	The Riviera 2	885	Highway 36 W	4,910	32	153.45
MULTRSV1960	Victoria Place		Victoria St N	10,360	58	178.61
MULTRSV1906	Villa Park Community Condominiums	500	County Rd B	8,308	100	83.08
	I villa Fark Community Condominatins	1 300	County Nu b	0,500	1 -00	05.00

Eureka Recycling **Composition Analysis Methodology**

Eureka Recycling collects materials in a single sort collection system with all paper, cardboard, metal and plastic, steel, aluminum and glass containers combined by residents into one cart. Each year we conduct an annual composition study of the single sort material to determine the percentage each material represents in the overall composition.



Composition by Commodity of Each Recycling Stream

During the composition study we weigh each truck before and after to determine the weight of the material. Each truck has a stored weight that is updated regularly for accuracy. This process allows us to determine the initial weight of the material set out by residents during the period being analyzed.

The composition study starts with Eureka Recycling storing all of the materials collected in the city during a one-week period. These materials are stored in a separate bunker from all other materials at the facility. We sort the material separately from all other recycling at the facility.





The sorted materials are then baled or put into a hopper and transported with a forklift to the truck scale to be weighed. Finally, we weigh the total amount of each sorted material grade including the non-recyclable material (residual) to establish the percentage of the total tonnage that each material type represents in the overall composition.



(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.



Participation Trend 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. Not every household sets out their recycling each week. If they are out of town, forget, or simply don't have very much in their cart they may not have a cart out for collection on their day. The set-out rate is the average percentage of households that set out material on a weekly basis during the study period.



The **participation rate** is the number of households who set materials out for recycling collection at least once over the period of the study.

The participation rate is a better indication of overall recycling participation because it includes households that recycle at least once over the course of six weeks, 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.

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Summary of Process

The study spans six collection weeks. Each time the truck tips a cart, that collection is recorded for that specific address. This data allows us to analyze all collection during a specific study period. The percentage of all addresses in each day's routes that register a tip in a given week is recorded as that week's set out rate, which is then averaged over the course of the study.

The reports are then sorted by address and duplicates are removed for households that set out more than once during the study period. The remaining list of addresses represents all households that participated in recycling at least once during the study, to arrive at the participation rate for the city.

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