

Reduce Waste, Reuse Resources: Organics Recycling Plan for the City of Ramsey, MN



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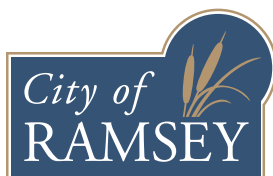
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Resilient Communities Project

UNIVERSITY OF MINNESOTA

Building community-university partnerships for sustainability

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**Reduce Waste, Reuse Resources:
Organics Recycling Plan for the
City of Ramsey, MN**



**Sustainable Communities:
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Executive Summary

This report will determine the most suitable options for the City of Ramsey, MN, to implement an effective organics recycling program taking into account the city's social, economic, and environmental considerations. Other communities with successful organic recycling programs will be explored, including the various components of these programs relating to their operations, mitigation, feasibility, and overall workings of their drop-off and/or curbside programs, if applicable. In addition, the possibility of combining yard waste with the organic recyclables will be investigated. The differences between onsite and offsite composting will also be compared, in reference to the key economic, social, and environmental factors. We will conclude with three recommendations: short-term, mid-range, and long-term.

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Organics Recycling Plan for the City of Ramsey

Background

With a population of 25,329 residents and growing at a rate of 1.94% each year, the City of Ramsey is a vibrant and tight knit community that is quickly expanding.¹ With large industries in the areas of manufacturing, healthcare, social assistance, and retail trade, 14,573 individuals are currently employed within the city; this number is increasing at a quick rate of 4.44% each year.¹ Currently, with 36% of the Ramsey's land area being rural residential and another 10.2% being used for agriculture, a large portion of the city remains undeveloped.² Medium to high density areas continue to grow throughout the city with 10.4% of land being used as single-family homes and only 1.3% of land developed as multi-family housing.² As the city continues to grow both in population as well as in density, Ramsey must continue to expand their infrastructure and services in order to keep up with the growing demand of the community.

Nearly every community in the United States has a developed recycling program for household objects such as cans, paper, and glass, but recently a new form of recycling is taking hold in many cities across the country. Organics recycling is gaining in popularity and allows for the diversion of food and yard waste from the landfills. Composting organics, although not widely utilized, has a lot of benefits for both the community and the environment compared to landfilling or incineration. By composting organics, the materials are exposed to oxygen—which is not present in closed landfills—and allows the organic matter to be broken down into 30-50% of its original size.³ Along with a reduction in size, the composted organics also act as an inexpensive soil conditioner which is a benefit not provided through landfilling or incineration. When the composting process is complete, the organic mixture can be added to gardens as a means of “[improving] the structure and texture of the soil enabling it to better retain nutrients, moisture, and air”.³ This completes the cycle and returns the nutrients back into the soil from which they

¹“Ramsey, MN.” *Data USA*, datausa.io/profile/geo/ramsey-mn/#economy

² City of Ramsey, “City of Ramsey 2030 Comprehensive Plan”, Chapter 5: Land Use, September 2010
https://www.ci.ramsey.mn.us/DocumentCenter/View/682/Chapter-5_-Land-Use-PDF

³“Benefits and Uses.” *University of Illinois Extension: Composting for the Homeowner*, web.extension.illinois.edu/homecompost/benefits.cfm.

came. These benefits make organics composting a great alternative to traditional means of disposal.

As communities strive to become more sustainable and reduce their environmental impacts, waste management is often a target for quick and easy improvement. With nearly 75% of all municipal solid waste in the state of Minnesota being either compostable or recyclable (Figure

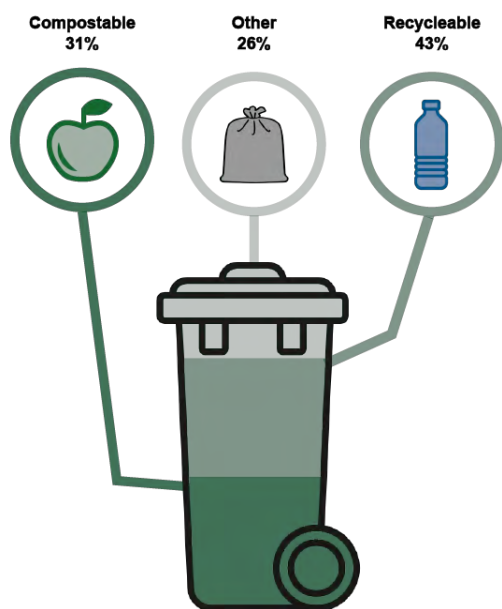


Figure 1:
Minnesota Pollution Control Agency's
Municipal Solid Waste Composition
Study

<https://www.pca.state.mn.us/waste/minnesotamsw-composition-study>

1), there is a lot of room for improvement regarding proper disposal methods.⁴ Minnesota is following along the path of better waste management and has set a goal for the Twin Cities Metropolitan Area to achieve 75% organics recovery and recycling by the year 2030.⁵ Currently, 49.9% of municipal solid waste is recycled in the Twin Cities area, however, only 10% of that is organic waste.⁵ In order for the Twin Cities Metropolitan Area to reach goal, suburban communities, such as Ramsey, will need to improve their organics recycling programs significantly to match the 75% recovery rate set by the state and adopted by Anoka County. Although not all communities have embraced this statewide goal, Ramsey has expressed interest in developing a more advanced organics program.

Currently, the City of Ramsey is partnered with ACE Solid Waste to provide recycling hauling services to all members in the community. For a small fee of \$2.95 a month, each household involved in this curbside pickup program receives a recycling bin upon

⁴ United States, Congress, Research Department, and Bob Eleff. "Minnesota Trash: What's in it." *Minnesota Trash: What's in it*, Feb. 2016. www.house.leg.state.mn.us/hrd/pubs/mntrash.pdf

⁵ Kertesz, Johanna; Sandhei, Peder; Scheurle, Sigurd; Hetzel, Colleen; Kerr, Anna; Rust, Mark; Farnan, Tim; Heffron, Susan. "Metropolitan Solid Waste Management Policy Plan 2016 – 2036", Minnesota Pollution Control Agency, March 2017. <https://www.pca.state.mn.us/sites/default/files/w-sw7-21.pdf>

request delivered to their driveway.⁶ The recycling process is made easy for members of the community by allowing for the mixing of all recyclable materials such as paper, glass, plastic, and metals, and offers bi-weekly curbside pickup throughout the city.⁶ Anoka County, where the City of Ramsey is located, has successfully diverted 52% of their overall waste from landfills as of 2016 with 44% of this reduction being from recycling and the remaining 8% from organics composting.⁷ In order to divert an even larger portion of waste from the landfills, the City of Ramsey began a pilot program for organics collection and composting in July of 2017.⁸ With one drop-off site and 90 participants, Ramsey has seen little growth in community interest and involvement; the city is looking forward to expanding the program to reach more residents and, with time, achieve the 75% organics recovery and recycling mark by 2030.⁸

By researching possible collection and disposal methods, gaining a better understanding of the needs of the community, and exploring the feasibility of many different implementation strategies, we will develop recommendations for an organics recycling program for the City of Ramsey that serves the needs of the residential and commercial communities while pushing Ramsey toward the Twin Cities Metropolitan Area's goal of 75% organics recovery. We aim to determine if a drop-off program or a curbside pickup program would be better suited for the community based on existing infrastructure as well as program demand by community members. Additionally, we will propose either the creation of a local composting facility or the use of a regional facility which will be determined by the collection method chosen. In order for the program to be a success, there must also be community outreach and education about how and why to sign up for the program as well as potential member benefits such as free compost.

In order to make decisions that best serve the community, we will look to surrounding communities for successes regarding organics recycling. By looking to nearby cities for inspiration, we can determine an approach that has been implemented successfully in a community of a similar size with similar climate conditions. Through interviews and community feedback, we will gain in depth knowledge about what systems work best as well as what can be improved. After

⁶ City of Ramsey, "Curbside Recycling Information". <https://www.ci.ramsey.mn.us/DocumentCenter/View/614/Curbside-Recycling-PDF>

⁷ Anoka County, "Recycling & Resource Solutions Committee." April 2017
https://www.anokacounty.us/AgendaCenter/ViewFile/Agenda/_04122017-908

⁸ Anderson, Chris. Personal Interview. 21 February, 2018.

gaining a deep understanding of the process and methods of organics recycling, we will shape a proposal that is realistic and capable of meeting the needs of both the residential and commercial sectors of the City of Ramsey.

I. Organics in Other Cities

Ramsey, MN

The city of Ramsey currently has a pilot organics recycling program that started in 2018. Residents can sign up for this drop-off only program by going to the Planning Division at the Ramsey Municipal Center, calling the center, or going online. Ramsey also offers free organics recycling start up kits for participants containing a 5 gallon pail, a roll of 8 gallon compostable bags, a 3 gallon bin and a roll of 3 gallon bags. Residents can also dispose of their yard waste by calling the local recycling hauler, ACE Solid Waste, and set up a subscription pick up service with them.⁹ Anoka County also has two yard waste drop off sites in Coon Rapids and Lino Lakes. The following tables, *Table 1* and *Table 2*, indicate the costs for each kind and size of waste they can bring to the facility.

Table 1: Leaves, grass, and non-woody waste fees.¹⁰

Cubic Yards	Fee
0-4 cu yd	No Charge
5-8 cu yd	\$ 5.00
9-12 cu yd	\$ 10.00
13-16 cu yd	\$ 15.00
17-20 cu yd	\$ 20.00

⁹ Ramsey. "Organic Recycling." *Ramsey, MN*, 2018, www.ci.ramsey.mn.us/578/Organic-Recycling.

¹⁰ Anoka County, "Recycling & Resource Solutions Committee." April 2017 https://www.anokacounty.us/AgendaCenter/ViewFile/Agenda/_04122017-908

Table 2: Tree waste fees¹¹

Description	Fee
Branches/trunks/logs, 6 in. or less in diameter	\$6/cubic yard
Branches/trunks/logs, 6 - 18 in. in diameter	\$10/cubic yard
Branches/trunks/logs, 18 in.+ in diameter	\$20/cubic yard
Stumps, 1-36 in. in diameter	\$40/cubic yard
Stumps, 36 in.+ in diameter	\$60/cubic yard
Dirty loads, loads with materials mixed together	\$20/cubic yard
Christmas trees (decorations removed)	No Charge
Christmas wreaths	\$5.00/wreath

Hutchinson, MN

One example of a city with a successful organics program is Hutchinson, Minnesota. With a population of nearly 14,000, this city is similar in size to Ramsey. It is therefore an excellent resource to see how Ramsey could possibly implement a composting program.

Hutchinson started their composting program in 1997 in three phases. First, they started collecting organic waste from large businesses and grocery stores. Then they added school cafeterias to the collection followed by a residential organics collection program. Organic waste collection from large business, grocery stores, and school cafeterias ended in 2001 because of the lack of funding. However, the residential program expanded to city-wide from its original 250 homes. Today, the program includes around 6,000 homes and has a 98% participation rate.¹² Participating residents are given a 90 gallon organics cart, and it is picked up weekly on the same day as the trash. Residents can put all food scraps, paper goods, and yard waste in their cart. The yard waste accepted is grass clippings, garden waste, and branches in 2 foot sections under ¼ inches in diameter. The cost of the service depends on the size of the resident’s trash cart. There is no additional charge. This gives residents the incentive to recycle their organics so they can use

¹¹ Anoka County, “Recycling & Resource Solutions Committee.” April 2017
https://www.anokacounty.us/AgendaCenter/ViewFile/Agenda/_04122017-908

¹² EcoCycle Solutions. “Curbside Composting: Hutchinson, Minnesota, USA | Eco-Cycle Solutions Hub.” *EcoCycle*, 2018, ecocyclesolutionshub.org/location/curbside-composting-hutchinson-minnesota-usa/.

a smaller trash cart and save money each month. Rates for the 30, 60, and 90 gallon bins are \$20.12, \$29.02, and \$39.02 respectively, so residents can save about \$10 a month by recycling enough organics to reduce their bin size.¹³ Participants also receive 8 compostable kitchen bags each month and a brochure on the appropriate items to compost.

Hutchinson has their own composting facility called Creekside. Creekside has 20 in-vessel composting containers where they produce about 12 different soil and garden products. These products are sold at the facility and shipped to customers in a five-state area for profit to sustain the operation. This model has proven to be successful; Creekside has increased their production from 1.2 million bags of compost in 2007 to almost 2 million bags in 2009. The initial start-up cost of the facility was \$3.4 million, with assumed payback in 5 years from the compost sales. Hutchinson funded the project by combining money from their water, sewer, and refuse payments, a grant from the Minnesota Office of Environmental assistance, and money from McLeod County. Creekside has an operating budget of \$2.5 million, but is self-supporting through the compost sales and was expected to contribute \$100,000 to the city's revenue in 2011.¹⁴ More recently, in 2016 and 2017, Creekside make \$295,000 and \$114,000 in revenue respectively. Creekside, despite the decrease in revenue still transferred \$110,000 to the city funds in both years.¹⁵

Minneapolis, MN

Another city that has a successful organics recycling program is Minneapolis. Minneapolis has a residential curbside collection program as well as a business organics collection service. Residents can call Minneapolis Solid Waste & Recycling or go online to sign up for the program. There is the option to receive an organics cart in small or medium size that is picked up on their regular trash collection day. There is an additional cost for this program, but it is included in the base fee for all customers, even if they are not participating in organics recycling. Residents can also pick up a free organics pail for in their home and compostable bags at several locations throughout Minneapolis. The program accepts all food waste, paper products, floral trimmings,

¹³ City of Hutchinson. "Garbage." *City of Hutchinson*, 2018, www.ci.hutchinson.mn.us/refuse-recycling-organic-pick-ups/garbage/.

¹⁴ EcoCycle Solutions. "Curbside Composting: Hutchinson, Minnesota, USA | Eco-Cycle Solutions Hub." *EcoCycle*, 2018, ecocyclesolutionshub.org/location/curbside-composting-hutchinson-minnesota-usa/.

¹⁵ Davis, Terry. "Changes at Creekside Appear to Be Working." *Crow River Media*, 2 Feb. 2017, www.crowrivermedia.com/hutchinsonleader/news/business/changes-at-creekside-appear-to-be-working/article_978a7f15-9159-57cd-8a0b-d34fafd301a5.html.

and houseplants, but not yard waste. Minneapolis also operates nine organics waste drop off sites throughout the city. Yard waste is collected separately from the organic waste where residents have to provide their own reusable container and/or compostable bags. The organic waste collected by contracted haulers and is brought outside of the city to commercial composting facilities. One location is The Mulch Store in Rosemount/Empire Township where the generated compost is given back to Minneapolis for their community gardens and is also sold back to customers. As of August 2017, 43% of residents or about 46,132 households are participating in the organics recycling program.¹⁶

Minneapolis also has businesses, schools, and organizations involved in organics recycling. These places have 3 options for organics recycling: organics recycling for composting, food to people, or food to animals. The food to people programs allows these facilities to donate their extra food to people in need. Businesses that participate in this program can be recognized as a Hennepin County Environmental Partner. Businesses that participate in organic waste recycling and diversion can apply online to be recognized by this program. This partnership allows businesses to communicate to their customers their recycling efforts. The food to animals program gives the option for their food waste to be processed into feed for livestock. Businesses, schools, and organizations can contact haulers from each of these programs to become participants.¹⁷

St. Louis Park, MN

St. Louis Park also has a successful organics recycling program. Residents can call or sign up online to receive a 30, 60, or 90 gallon cart for organics recycling. Joining the program is free for all residents. The city also provides free compostable bags for participants of the program. Residents can put food waste, paper products, and yard waste such as grass clippings, leaves, and branches less than 4 inches in diameter, which must fit in the organics cart with the lid closed. The organics cart is collected by a contracted hauler, Advanced Disposal.¹⁸

St. Louis Park's businesses can also participate in the organics waste program. Small businesses can participate if they are along an existing residential route, and their generated waste

¹⁶ Minneapolis Solid & Waste Recycling. "Organics." *Ci.minneapolis.mn.us*, www.ci.minneapolis.mn.us/solid-waste/organics/index.htm.

¹⁷ Environmental Services. "Hennepin County Environmental Partners." *Hennepin County, Minnesota*, hennepin.us/business/recycling-hazardous-waste/hennepin-environmental-partners.

¹⁸ St. Louis Park. "St. Louis Park, MN." *Organics Recycling | St. Louis Park, MN*, 2018, www.stlouispark.org/services/garbage-recycling/organics-recycling

can fit in the carts provided. Businesses have the same requirements as residents participating in the program. There are no extra fees for businesses to participate.¹⁹

Table 3: Summary of each city’s organics recycling program.

City	Hutchinson	Minneapolis	St. Louis Park
Year Launched	1997 (pilot) 2001 (city-wide)	2013	2013
Participation	98%	43%	27%
Cost	Included in trash fees	Included in trash fees	Free
Hauler & Location	West Central Sanitation, Wilmar, MN	City haulers	Advanced Disposal, St. Paul
Processing Facility Location	Creekside Soils, Hutchinson, MN	Hennepin County Energy Recovery Center, Minneapolis, MN	
Bin Sizes	96 gallons	32, 64 gallons	30, 60, 90 gallons
Pickup frequency	1x a week with trash collection	1x every 2 weeks with recycling	1x a week with trash collection
Yard waste accepted?	Yes - plant trimmings, branches under ¼” in diameter and 4” in length	No - residents can call city for pickup in personally owned bins	Yes - plant trimmings branches less than 4” in diameter
Business Organics recycling?	No	Yes	Yes
Tonnage Collected	12,571 tons total, 4,596 tons from residents	~ 4,000 tons	281 tons
Available Sign Up Methods	By phone, In office	Online, By phone, In office	Online, By phone, In office

II. Best practices for scaling up an organics drop-off program

Resident engagement and education

The city of Ramsey currently has a pilot program for organic recycling, but it is currently underutilized. With 90 current participants, there has not yet been any feedback on how they perceive the program.²⁰ In order to scale up the program, the City of Ramsey would benefit from hearing their perspectives and asking for their opinions on what is working for them and the changes they would like to see. These insights could be very influential in shaping the direction of the program.

¹⁹ St. Louis Park. “St. Louis Park, MN.” *Business Recycling / St. Louis Park, MN*, 2018, www.stlouispark.org/business/business-resources/business-recycling.

²⁰ Anderson, Chris. Personal Interview. 21 February, 2018.

In order to gain more participants, awareness of the program needs to spread to all of the residents within Ramsey. In addition, the city should also demonstrate how simple composting can be. Our research team attended the April Environmental Policy Board (EPB) city council meeting; we noticed that there were trash and recycling bins at city hall—but no organics collection bin. Even if the bin would be underutilized in city hall, having one located there symbolizes the city’s commitment to incorporating organics recycling into common practice. Fully committing to implementing an organics program can start at the city level and spread from there. Additionally, signage about composting in public buildings can be utilized by the program and provide residents with important composting information.

Resident education can come in the form of various community outreach programs. The Recycling Association of Minnesota has put together a report on best practices for communicating with residents and businesses about organics recycling. The *Organics Recycling Outreach Guide* details the best terminology to use and is comprehensive in what is permissible to compost.²¹ This guide was put together by a committee of Recycling Managers, with representation from all over Minnesota, including a representative from Anoka county. Additionally, there were delegates from places such as

<p>Usage</p> <p>The use of these terms is completely voluntary and is meant for public education. Examples of educational materials in which this guide might be used include:</p> <ul style="list-style-type: none">• Brochures and print materials• Website content• One-on-one education (phone, in person, email)• Interviews for print or recorded media events• Videos• PSA (paid or free media – billboards, press releases, etc.)• Social Media• Media campaign (includes one or more from the above)

Hutchinson, various recycling facilities, and the Minnesota Pollution Control Agency. The recommendations of this report can be useful in designing effective promotional materials and outreach programs for cities. *Image 1* above details potential platforms for educational outreach.

*Image 1*²¹

Scaling up

The current drop-off site location is in an area that is inconvenient and challenging to get to. According to a city council member at the EPB meeting, participants have stated it is like off-roading and they need a carwash after dropping off their recycling. In order to make the transition

²¹ “Organics Recycling Outreach Guide.” recycleminnesota.org/wp-content/uploads/2014/08/2017-Organics-Recycling-Outreach-Guide378.pdf.

to recycling organic materials the norm in the city of Ramsey, the drop-off location should be in an area that is frequently trafficked by community members. Additionally, the drop-off facility should be visible so that residents become curious about the program and want to learn more. Ideally, the drop-off location would be partnered with a commercial site. In Minneapolis, the Wedge Community Co-op has a drop-off site on one side of the building. When people drive by the store they see the organic bins outside as well as when patrons walk in to go grocery shopping. It's imperative for the drop-off site to be visible and easily accessible by the public. It's important to keep in mind that no matter how great the program is structured, the success is ultimately dictated by the residents themselves. Accessibility and equitable access is crucial in order to make it easy for people to participate in the program.

The recommended security for the organic recycling bins is a padlock on each bin. Once residents register with the city, the participants will receive the padlock code along with information on how to properly recycle their organics. The current pilot organic recycling program in Ramsey utilizes this method and has been successful doing so.²² *Appendix A* contains an email that the city of Minneapolis sends to residents once they register for the organics recycling program. This email is complete with information on what is permissible to compost and how to drop-off their recycling.

Contamination can be a huge issue for organic recycling. By requiring a code, only the residents who have received the proper education will be able to drop off their recycling. This reduces the likelihood of extraneous contaminants entering the organic bins. This approach has been taken by the city of Minneapolis, who operates a crew of collection inspectors that check for contamination in the drop-off bins across the city. Alternatively, the city of Minneapolis has one staffed station. Here, residents bring their organics to the station attendant where the recycling is inspected for quality.²³ Typically this approach is more costly than locked drop-off bins due to the cost of hiring full time staff for the station. However, there can be cost savings associated with this process if contamination is becoming a large issue for the independent drop-off locations. Rejected organic recycling is a liability and there are associated costs to transporting recycling that is not acceptable. This is a trade-off that should be taken into consideration.

²² Anderson, Chris. Personal Interview. 21 February, 2018.

²³ "Drop-Off Sites." Minneapolismn.gov, www.ci.minneapolis.mn.us/solid-waste/organics/drop-off-sites.

Once the first drop-off site has been in operation for a few months and the logistics have been worked out, adding additional drop-off sites is recommended. Success has been seen in Minneapolis by expanding drop-off sites to city parks, which keeps the sites accessible. A strategic way to identify the best locations to implement drop-off sites would be to survey current participants and learn about where they live, regularly commute, and want a drop-off location. If it's apparent that only people in the immediate vicinity of the drop-off site are participants, then it can be understood that people are unwilling to go out of their way to drop-off their organic recycling. If people are travelling to the single drop-off site, learning about their location could provide insights on where to begin expanding. This would make it easier for current participants and would encourage them to continue their participation. Additionally, word of mouth is an incredibly powerful form of advertising. By encouraging neighbors to spread the word, the city could effectively grow its participation.

III. Feasibility of collecting yard waste and organics

Collecting both yard waste and organic waste is feasible, but it depends on what kind of facility the waste is going to and if it is appropriately equipped to process yard waste. For example, St. Louis Park and Hutchinson accept yard waste in their organics cart as long as it fits and meets the specific size requirements mentioned previously. Yard waste that is larger than the specified size can still be picked up by the city, but residents must provide their own reusable bins and compostable bags. However, most yard waste such as grass clippings, small branches, and leaves can be easily picked up and composted with a curbside pickup program. This is the same case in St. Louis Park's organics recycling program. Currently, Ramsey's organic recycling facility, the Mulch Store in Empire Township, is equipped to recycle any yard waste for a fee per cubic yard.²⁴ In the future as participation in Ramsey's organic program grows, they could adopt a similar collection method to St. Louis Park and Minneapolis.

²⁴ Empire Township, The Mulch Store. "Disposal." *Mulch Store Fabrics & Edging*, 2018, www.mulchstoremn.com/disposal.html.

IV. Organic Waste Management

Existing Program: Off-Site Composting

Currently, a small-scale organic recycling drop-off program is in place in the City of Ramsey. This program contains around 90 participants in total (as of date), around 75% of whom are considered consistent members. Since July of 2017 when the program started, the participating members have effectively diverted over 3 tons of organic waste from the landfill by means of composting.²⁵ Composting has been chosen over landfilling as, “Organic matter generally degrades more rapidly and more completely if oxygen is plentiful,” during the composting process.²⁶ To become a participant in the free program, residents sign up through the city’s newsletter, join the program’s email group, and receive a starter kit of supplies: rolls of biodegradable bags, a small kitchen-appropriate container for food waste, a separate bucket with a lid, the combination for the drop-off site’s lock, and sheets of information about the entirety of the program. These community members usually drive to the drop-off site weekly with biodegradable bags full of organic food waste—no yard waste has been accepted yet—collected from their very homes. This drop-off site is minimal and consists only of several 50 gallon barrels with locked lids—nothing more is needed. This is especially the case since there also is no staff to maintain or hire; ACE Solid Waste, Inc. the removes the organic material from the collection drums. This material is not actually processed in Ramsey, however; currently, there is no composting site within the city. Rather, the organic material is brought to the Eureka Recycling facility in Minneapolis to be processed for travel ; this includes tightly squeezing and compacting the organics to remove water weight, and loading the material into a semi tractor-trailer.²⁷ The organic waste is then trucked 50-60 miles south to a composting site in Empire Township or SKB Environmental in Rosemount, where the organic waste is finally processed via composting efforts.²⁷ The tipping fee associated with organic material is similar to that of MSW on average, with MSW at around \$50/ton and organics around \$62/ton.^{28 29 30} The truck that transported the

²⁵ Anderson, Chris. Personal Interview. 21 February, 2018.

²⁶ Polprasert, Chongrak. *Organic Waste Recycling: Technology and Management*. IWA Pub., 2007.

²⁷ Anderson, Chris. Personal Interview. 21 February, 2018.

²⁸ U.S. Environmental Protection Agency Office of Resource Conservation and Recovery. “Volume-to-Weight Conversion Factors.” *Volume-to-Weight Conversion Factors*, EPA, Apr. 2016, www.epa.gov/sites/production/files/2016-04/documents/volume_to_weight_conversion_factors_memo_randum_04192016_508fnl.pdf.

²⁹ Rosengren. “SWEEP: Average Landfill Tip Fees Increased in 2016.” *Waste Dive*, Industry Dive, 12 Jan. 2017, wastedive.com/news/sweep-average-landfill-tip-fees-increased-in-2016/433932/.

³⁰ The Mulch Store. “Organics Recycling.” *The Mulch Store: Empire Township*, www.mulchstoremn.com/organics.html.

organic material, however, returns those 50 miles north to ACE’s facility in Ramsey, as can be seen in *Figure 2*²⁷. Overall, this process could definitely become more environmentally friendly. As can be seen in *Table 4*, left, heavy-duty diesel vehicles—such as the semi driving from Ramsey to Empire Township—will emit a vast range of criteria pollutants as they travel.³¹ These emissions can directly be tied to the current composting program mitigation efforts, reducing the positive environmental impact of the program overall.

In order to obtain an optimal relationship between the distance organic waste is shipped

Table 4: Average in-use emission rates for heavy duty vehicles (in g/mi driven)	
Pollutant	Heavy-Duty Diesel Vehicle
CO ₂	1516 g/mi
VOC	0.447 g/mi
CO	2.311 g/mi
NO _x	8.613 g/mi
PM _{2.5}	0.202 g/mi
PM ₁₀	0.219 g/mi
Table 4 based on data from referenced, <i>Office of Transportation and Air Quality USA, "Emission Facts."</i>	

and the composting efforts themselves, the difference between composting and landfilling emissions must first be addressed. Both landfilling and composting produce greenhouse gas emissions (GHGs); landfill GHGs however, consist of about 50% carbon dioxide (CO₂) and about 50% methane (CH₄) where composting emissions should *not* contain any methane.³² This distinction is important in that methane effectively holds up to 21 times the amount of the heat that carbon dioxide can carry.³³ In other words, methane will contribute to the warming of the earth at a much greater rate than carbon dioxide will; this is why removing methane from landfill emissions is so important in stabilizing climate change. Given the average diesel semi emissions of 1,516

g/mi driven, the 21 times different in heat retention between carbon dioxide and methane, and the roughly 50%-50% composition of carbon dioxide and methane in landfill GHGs, it can be calculated that about 72 g of methane-carbon-dioxide-equivalent are produced on average per mile; this results in 0.32 lbs. of organic material on average to be composted in order to offset each

³¹ Office for Transportation and Air Quality, USA. “Average In-Use Emissions from Heavy-Duty Trucks - Emission Facts .” EPA, Environmental Protection Agency, Oct. 2008, nepis.epa.gov.

³² Resource Recycling Systems. “Compost vs Landfill.” *Recycle.com*, RRS, 20 Jan. 2017, recycle.com/organics-compost-vs-landfill/.

³³ USCC. *Greenhouse Gases and the Role of Composting: A Primer for Compost Producers*. USCC, 2008, *Greenhouse Gases and the Role of Composting: A Primer for Compost Producers*, compostingcouncil.org/wp/wp-content/uploads/2015/12/GHG-and-Composting-a-Primer-for-Composters-final.pdf.

mile driven.^{31 32 33} This equates to a break-even rate of about 32 lbs. of organic waste on average per 100 mile round trip from Ramsey to either composting station and back.

Future Possibility: On-Site Composting

Although the current program is fairly effective at diverting organic waste from the landfill, on-site composting could result in a much more streamlined and environmentally friendly process. To begin, the addition of a composting site within the community will lower GHGs as a result of transportation via diesel trucks. As the organic waste will not be traveling more than 10 miles before being composted, mobile source pollution in connection with this program will decrease dramatically. In addition, there is no middleman or need to process the organic material before reaching the composting stage. This reduction in processing steps will also greatly reduce GHG emissions—another positive gain for the environment. Locating the composting site within the City of Ramsey may also help to encourage more community members to participate in the program. Also if an onsite composting location is established within Ramsey, a possible incentive for joining this program could involve giving some of the composted material back to the actively participating members to use as fertilizers or as an organic soil additive. This could encourage participation rates within the program, positively reward the community members for contributing, and provide a route for composted material to leave the site—leaving space for fresh organic waste to be composted. In addition, the composition of the soil in Ramsey is primarily sand, silt, clay, and loamy soil—a mixture of the three; in other words, this soil does *not* retain water well, resulting in frequent overwatering by residents.^{34 35} The addition of composted organic material to this soil will help retain water, provide nutrients for enhanced plant growth, and could help to limit overwatering by residents.

Another benefit of a community-based site includes the addition of yard waste to the composting pile. As mentioned previously, ACE does not allow residents involved in this program to drop off their yard waste at the compost collection site. Rather, a curbside truck route has been established in addition to the garbage route to collect the community's yard waste via an optional paid program directly through one of the city's contract haulers; a list of these licensed haulers and

³⁴ United States Department of Agriculture. "Web Soil Survey." *Web Soil Survey - Home*, 21 Aug. 2017, websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

³⁵ Anderson, Chris. Personal Interview. 21 February, 2018.

contact information can be found on the city’s website.^{35 36} With the addition of an on-site composting facility, residents may be allowed to add their yard waste to this facility, eliminating further mobile source GHG and diesel emissions.

However, there are some challenges associated with hosting a composting site within the community. First off, if yard waste is allowed to be added to the composting site, care should be taken to break down the larger material before adding to the composting pile; this would involve breaking down large branches into smaller sticks to ensure a quicker composting time and more even distribution of organic material within the composting pile. This operation also may involve the hiring of a staff member or two—or at least a few volunteers. Currently, Creekside in Hutchinson has 7 permanent employees and hires 7 additional seasonal workers for assistance in the bagging operations. The purpose of these workers would be to ensure the cleanliness of the site and the health of the composting pile—including mixing the organic material, breaking down large yard waste, and removing inorganics as necessary. A worker would not need to be present at the site constantly; rather, a quick daily check of the pile and surrounding site, plus performing any chores mentioned above would be quite sufficient at this community-based level. In addition to the cost of possibly hiring a worker, the city may not be able to handle an increased participation rate in terms of providing free starter kits for members. Rather, a flat fee of a couple dollars a month would most likely need to be incurred at this point for participating residents. The city could then use these earnings to put towards materials, starter kits, and maintaining the composting site overall. One possible negative effect of membership fees could be a reduced interest in the program; community members may not be encouraged to go out of their way to dispose of their organic waste if any cost is involved—no matter the positive environmental impacts.

Another issue in creating an on-site composting facility involves the location of the site. As mentioned previously, there is no place in Ramsey in which community members may compost other than their own backyard. This raises the risk of zoning issues regard permitted uses of the site. The possibility of working with the city in creating a small composting site at one of the community’s parks is an option, but this option may also cause unsatisfactory externalities as composting often produces unpleasant odors. These odors are minimal and would not be overwhelming within the park space, but could make some members unsatisfied with the

³⁶ City of Ramsey. “Resource Directory.” *Ramsey, MN*, www.ci.ramsey.mn.us/BusinessDirectoryII.aspx?lngBusinessCategoryID=24.

composting site's location. One of the more promising possibilities involves placing the composting site within the Employment District—Ramsey's industrial ward. The zoning within this area is more lenient in regards to permitted uses and would most likely allow such a site if properly proposed.

However, the MPCA treats composting facilities larger than 120 cubic yards the same as they treat landfills in respect to permitting, according to *Minnesota Rule 7035.0300 Subp 99a*.³⁷ This will result in much more cost associated with preparing and permitting the composting site if the material collected exceeds the 120 cubic yard threshold and may not be economically beneficial compared to hauling the organic waste outside of Ramsey. It is difficult to estimate the exact volume of organics that could be expected city-wide, especially given the low participation rate of the current program. However, on average Americans waste around 6 pounds of food per household per week, or roughly 0.006 cubic yards per household per week.³⁸ This means that after only 2 weeks of city-wide composting (assuming a 100% participation rate at each of the 9,000 households in Ramsey), the single composting site will have exceeded a small scale operation size. One possible solution to avoid a large-scale permit operation could result in opening several small scale composting sites throughout Ramsey, but this would also increase the amount of resources—workers, capital, time, space—needed to run the full operation.

V. Case studies of businesses that divert organic material from the waste stream

Communities are made of more than residents: businesses, locally owned and bigger corporations, also play a key role. In order to have a fully effective organic recycling program in a community, one must interact with the entire community, including the business sector. Many cities across Minnesota have successfully integrated organic recycling into their commercial sector by utilizing different programs. Some of these incentivize owners to start organic recycling in their business. Many communities offer a grant that can be used by the business to establish an organic recycling program. Other communities utilize recognition programs that do not promise funding,

³⁷ MPCA. "Small Compost Sites." *Minnesota Pollution Control Agency*, 24 Feb. 2017, www.pca.state.mn.us/waste/small-compost-sites.

³⁸ U.S. Environmental Protection Agency Office of Resource Conservation and Recovery. "Volume-to-Weight Conversion Factors." *Volume-to-Weight Conversion Factors*, EPA, Apr. 2016, www.epa.gov/sites/production/files/2016-04/documents/volume_to_weight_conversion_factors_memorandum_04192016_508fnl.pdf.

but rather awards the businesses efforts. Hennepin County and Dakota County are two places in Minnesota that have established effective recognition programs for local businesses that integrate environmentally friendly waste disposal practices. Anoka County also provides resident businesses a number of resources they can use in order to further encourage a commercial organic recycling program.

Hennepin County

Minneapolis has been pushing toward a more conservative and sustainable way of living. This has been portrayed through the many different programs and projects the city has implemented over the past 10 years. One program that has been effective in integrating businesses into the sustainable goals of the city is the Hennepin County Environmental Partners program. This is a program specifically geared towards promoting the diversion of waste that local businesses produce from the landfill through actions such as composting, donating edible food to local organizations, or sending scraps of food to local farmers as food for their animals.³⁹ Businesses need to have an effective and fully functioning program in order to be eligible for this recognition. Businesses have the freedom to decide which programs they want to implement. Once the business finishes the application process, the Hennepin County business recycling staff will inspect the operations of the program. This visit is usually an hour long and allows them to see that it is being used as effectively as possible. Once the inspection is done, the business will either be approved or denied the recognition award. If a business is approved, then not only are they considered an environmental partner for three years, but they also have the choice of getting electronic decals, table tents, and window clings of the type of environmental program the business has implemented; these are shown in *Figure 2*, right. This also allows for businesses that go above and beyond by implementing multiple programs to get more recognition by receiving multiple decals rather than every business getting the same form of recognition across the board. This creates even more incentive for businesses to show consumers they are going the extra mile for the community, compared to other competitors. Minneapolis also has a directory online for consumers to look up businesses in the area that are a part of this recognition program. This gives the businesses more online presence and allows consumers another way to learn more about the

³⁹ Environmental Services. "Hennepin County Environmental Partners." *Hennepin County, Minnesota*, hennepin.us/business/recycling-hazardous-waste/hennepin-environmental-partners.

community that they are a part of.³⁹ This is also a way for businesses to keep a good public image in the eyes of consumers and the local government.

Dakota County

In Dakota County a collaboration of cities, Apple Valley, Burnsville, Lakeville, and Eagan, have started a program called ARROW: Awards for Reduction and Recycling of Waste. The department that ARROW is run by, Dakota Valley Recycling (DVR), is a combined recycling department of each city that is involved. This allows for each city to not only save money by pooling resources together in order to establish an effective recycling department, but also helps create a sense of community among the county as a whole. ARROW is a program for all of the local businesses, schools, and other organizations that currently perform at least 1 of these 5 different environmentally friendly acts: recycling at least 3 different items, purchasing recycled materials, selling recycled materials, reducing the rate of consumption a business has for supplies, or reusing items or selling reused items.⁴⁰ If a business is approved, they will receive the recognition materials they requested on the application; the options include a certificate, window cling, and online recognition award decals for their website in addition to being recognized annually in the local newspaper and on the DVR Business Recycling webpage. Businesses that are a part of the ARROW program will also be on the mailing list for an annual newsletter that contains different grant options and resources to help businesses expand their environmentally



friendly practices. This program has seen tremendous success with the local community in the four cities that are involved in DVR and there has been over 150 businesses that have been ARROW members since 2002.⁴⁰ This is a comprehensive program that is a great example of a recognition program that is not only supported by local businesses but also the local government within each

⁴⁰ Orrick, Ellie. "ARROW Program." *Dakota Valley Recycling*, 2018, www.dakotavalleyrecycling.org/arrow.

community. By creating a separate agency that focuses solely on recycling, each city helped to organize their budgets when it came to the solid waste management. They also made the resources for recycling available to residents as well as local businesses. This program focuses more on forms of waste management than other organic recycling allowing for local organizations to diversify the way they interact with environmentally friendly practices.

Anoka County:

In terms of organic recycling, Anoka County has two major programs that businesses can utilize in order to receive recognition for their recycling efforts. While neither of these programs are organic specific, they are still applicable to those starting organic recycling. The first program is a grant through the Anoka County that local businesses can apply for. In order to receive the grant, a business must first submit a referral to Anoka County; see **Appendix B**. The Minnesota Chamber of Commerce's Waste Wise program will help the business finish its grant application and give advice on what style of recycling program the business should implement. This grant is worth up to \$10,000 and helps the business expand the amount of recycling that it is involved in. Some forms of expansion that qualify for the grant would include things like desk side organic collection containers, establishing an organic recycling program, or compostable products like garbage liners or compostable bags (Anoka County, 2018). If a company wanted to use the funding to obtain compostable products, the county will provide those products through their access to state contracts, allowing them to purchase these items at a cheaper rate.⁴¹ It is important to note that this grant is only available once for each business location. However, as per the terms of the grant, businesses must continue their recycling efforts. Anoka County also provides free bin labels for business to help make sure that each bin will be used properly (Anoka County, 2018). Anoka County also has a county wide award that the Solid Waste Abatement Advisory Team gives to businesses, schools, individual recycling champions, service providers, community organizations, and municipalities every year who have implemented extensive recycling policies. In **Appendix C**, a list of previously recognized business along with descriptions of their recycling program and effects each can be found. This is a very prestigious award since it is throughout the entire Anoka County; only 2-3 organizations receive this recognition a year.⁴²

⁴¹ Ulbricht, Amy. Personal Interview. 27 April 2018.

Conclusion and Recommendations:

Short term recommendations (0-2 years)

To begin to implement a more comprehensive organics recycling program, we recommend that the city of Ramsey conduct research into the current state of the program. The data that will be collected from current participants will help to optimize the program and offer insights on participant's opinions of what is working and what could be improved. In order to scale up, it's crucial for the program to be meeting resident standards. Encouraging open communication between current members and the city should be prioritized. The current members are an asset to generating program growth and development, and their input should be a priority.

The city of Ramsey has a webpage with the information regarding the organics recycling program, but we would recommend for the city to optimize the website to be more user friendly and contain all of the necessary information. The website does offer some useful information, but does not seem complete. For example, the webpage does not indicate where the organics recycling drop off sites are. It is only referenced as "drop-off location" on the website. New members of the program would not know where to bring their waste unless they directly ask someone associated to the program; participants or Ramsey staff. The webpage is a critical point of communication between the city of Ramsey and the residents, so it should contain all the necessary information.

To begin scaling up the drop-off program, we recommend for the city of Ramsey to move their current pilot drop-off location to a more visible and frequented location, specifically we recommend Coborns. Creating a partnership with a local business is great for making the drop-off site accessible to the public and it helps to generate buzz and curiosity surrounding the organics recycling program. We recommend starting with this one location and scale up to 5 total drop-off locations, as demand and participation increase. It's imperative that the drop-off locations are accessible in order to encourage participation. We recommend for the city of Ramsey to locate the initial site at a commercial location, such as the Coborns, but expand to city park drop-offs. The city of Minneapolis has seen great success with drop-off sites in parks and by keeping locations in residential areas, residents have easy access that doesn't require driving to commercial locations.

In order to create more demand for the drop-off location, community engagement must be prioritized. We recommend that the city of Ramsey promote the program through various media

channels, such as newsletters, on its website, and through signage in public areas. Including signage near trash and recycling bins is a simple way to inform people about the waste they're generating and educate them on the organic recycling program the city is implementing. Additionally, we recommend the city add organic recycling bins in public spaces where there are already trash and recycling bins.

In regard to commercial operations, we recommend the business recognition program be modeled after the program in Dakota County. This will allow a variety of businesses to participate and can also create opportunities for innovation within the commercial recycling sector.

Mid-term:

This is a recommendation for the City of Ramsey when they are at least 2 years into implementing the short term recommendations. During this time, the possibility of implementing curbside organic recycling should be revisited in regard to the garbage and recycling haulers in Ramsey. A better representation of the community's eagerness to participate in organic recycling can be determined by this point in time as a result of participation rates over the previous years. Community outreach in regards to curbside mitigation implementation should be performed to accurately assess the desires of the residents. The commercial organic recognition program should have been in effect for at least one year at this point in the plan. This means that there should be two feedback sessions already done on the program by businesses that decide to get involved. Using the feedback the program should be evolving to meet a combination of the local business community and city government's visions of what a recognition program will look like in the City of Ramsey. This being said the program should begin looking towards other industries to include in the recognition program so that it is not exclusive to the commercial sector. Some viable sector additions would be nursing homes, apartment buildings, and assisted living communities. These are local businesses that do not fit in with the commercial sector but have a significant accumulation of waste specifically organic waste due to the high volume of people that are constantly in the building. If the program is in its second year the commercial recycling recognition program should have enough evidence to show that the program is effective and the City of Ramsey should consider creating a joint program much like Dakota Valley Recycling. By creating a joint department the city of Ramsey will have the Counties support along with more financial

backing in sustaining the recognition program. This will also allow the recognition program to be less of a time consuming program for the City of Ramsey and can share the workload across the County with the cities that join the program.

Long term (3+ years):

This recommendation is after the city's organics program has been implemented for 3 or more years and has considerable data showing the success of the program. We recommend the City of Ramsey to explore creating an on-site recycling facility with Anoka County. The City of Ramsey should aim to create a partnership with the county to help increase participation in organics recycling. This partnership could help facilitate a law or ordinance requiring all residents of the county to have an organics recycling bin. With the potential of a large increase in generated waste, an on-site organics processing and recycling facility could be a great option for the county to further decrease their carbon footprint. An on-site facility would save haulers from traveling to and from the current recycling facilities and could potentially be the processing facility for many of the northwest metro communities. Creating a facility in the northwest metro would provide these communities with a proximal recycling facility saving fuel for the haulers, carbon emissions from the atmosphere, and generate higher participation in other organics recycling programs, allowing for their expansion and increased waste diversion. However, there are many factors that contribute to the potential of creating a facility like this, in regards to the long term, curbside pickup of organic refuse should definitely become an option for residents in Ramsey. The drop-off sites throughout the city could still remain operational, possibly with the incorporation of yard and garden waste. This gives residents the option to choose between a free service that requires driving to the drop-off site or paying a small fee for curbside pickup. No matter what happens in the future, both programs encourage organic recycling.

In summation, we're confident that the City of Ramsey will be able to develop an organics recycling program that engages the community members and diverts waste from landfills. Through our research and recommendations, we hope to have provided clarity for recommended best practices and actionable steps for the city to take.

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Appendix A: Minneapolis Recycling Email

5/7/2018

University of Minnesota Twin Cities Mail - MLK Park Organics Drop-Off



Marie Olson <olso6932@umn.edu>

MLK Park Organics Drop-Off

Kish, Kellie L. <Kellie.Kish@minneapolismn.gov>

Mon, May 7, 2018 at 7:46 AM

Hello organics recyclers!

Thank you for your interest in recycling organics by signing up to participate in the MLK Park Residential Organics Drop-Off! Green organics recycling carts are located in the parking lot at MLK Park. Our collection crews monitor the carts to identify if there's contamination placed inside the carts. Locks have been put on the carts to prevent contamination from park patrons. The code to the locks is 2014. Align the numbers on the locks and push the square portion of the lock into the U portion and it should pop open. Please let us know if you have any issues with the locks.

Here are few reminders about organics recycling for you before you get started:

Residential organics include: (See attachment for detailed Yes/No list. This list can also be found on the [Acceptable Organics webpage](#).)

- All Food (including meat, bones and dairy products)
- Food-soiled and non-recyclable paper (no plastic lined paper [ex. coffee cup] unless it is labeled compostable)
- Compostable Plastics (bags and food service items must be labeled certified compostable to be accepted) Plastic bags **MUST** have the BPI logo on them to be accepted. There are no black plastic bags that are compostable.
- Other compostable items (coffee grounds and tea bags, hair and nail clippings, wood chopsticks, popsicle sticks, toothpicks, cotton balls, facial tissue, etc.)

Organics do NOT include:

As a reminder, here are a couple of tricky items that **should not be placed** in organics recycling carts:

- **Plastic-lined cups, bowls, and plates** unless they have the BPI or Cedar Grove logo on the item
 - Colored or other pretty decorative plates, coffee cups, milk cartons (these can go in your recycling carts), ice cream tubs, and to-go containers with shiny linings
- **Wax paper, butcher paper, parchment paper, etc.** unless they have the BPI or Cedar Grove logo on the box
 - Unfortunately most wax products do contain some amount of plastic in them and without the BPI or Cedar Grove logo identifying they've been tested to make sure they'll fully and safely break down, its best to keep them out of the organics
- **Recyclables** including soda and other food boxes, glass, aluminum, plastic bottles
 - These will not have the opportunity to be made into a new product if they end up at the composting facility.
- **Pet waste, feminine hygiene products, diapers**
 - The State does not allow source-separate organics composting facilities to accept these items
- **Yard waste** – yard waste collection will begin for Solid Waste & Recycling customers the week of April 9th.
 - Keeping yard waste and organics separate allow the composting facility to more appropriately mix the two in their operations to produce the best quality compost.

Other Reminders:

- **Organics must be bagged** in a paper grocery bag or certified compostable plastic bag that has the BPI logo on it.

- Bags labeled degradable, oxo-degradable, biodegradable, earth friendly, etc. are not accepted.
- If you have friends or family who want to participate, please have them visit our [Organics Drop-Off webpage](#) and sign up to participate. If you live in a building with City garbage and recycling services, you can sign up to have a cart at your home. To sign up to receive a cart at your home, fill out our [sign-up form](#). If you live in an apartment building with dumpsters, you can encourage your landlord to sign up for organics service. Hennepin County offers technical assistance and grants to help add or improve recycling or organics recycling programs. For more information visit their [Apartment, condo, and townhouse recycling webpage](#).

Lastly, remember that reduce comes before recycle (or in this case compost). Learn how to reduce wasted food by visiting [Eureka Recycling's Zero Waste Composting website](#). The site has helpful tips to help you plan meals, purchase the right amount of food, and store food to remain edible longer. When hosting gatherings at your home, use [Rethink Recycling's Event Planning guide](#) for tips on low-waste events.

Please continue to send us any questions you may have regarding the organics drop-off program or other waste reduction, reuse, recycling, composting, or household hazardous waste. Thanks you all again for contributing to the success of this program!



Kellie

Kellie Kish | *Recycling Coordinator* | City of Minneapolis – Division of Solid Waste & Recycling | 309 2nd Ave S, Room 210, Minneapolis, MN 55401 | Office: 612-673-3536 | kellie.kish@minneapolismn.gov

Please consider the environment before printing this e-mail.



2 attachments

-  **Organics YesNo list - 1.25.17.pdf**
319K
-  **Organics Training 12.5.17 PPT.PDF**
2386K

Appendix B: Business Recycling Assistance Program Referral Form

Business Recycling Assistance Program Referral Form [Sign in to Save Progress](#)

What is your organization interested in?*

Check all that apply.

- Start recycling
- Start organics recycling (food waste, soiled paper)
- Improve existing recycling
- Reduce or prevent waste

Which best categorizes your business or organization?*

- Commercial business
- Non-profit or other organization

Which best describes your business or organization?*

- Accommodation and food service (ex. hotel, restaurant)
- Arts, entertainment and recreation (ex. theater, fitness center)
- Finance and insurance (ex. bank, broker, insurance)
- Health care and social assistance (ex. clinic, hospital, nursing home, assisted living)
- Information (telecommunications, publishing)
- Retail (ex. grocery, convenience, clothing, sports, personal care store)
- Real estate (ex. property management, multi-unit housing)
- Other

If you selected Other, please specify.

Are you in control of your trash/recycling hauler contract?*

- Yes
- No
- Don't know

How did you learn about the Business Recycling Assistance Program?

- Mailing from Anoka County
- Chamber of Commerce
- Internet search
- Anoka County website
- Advertisement
- Another business
- Non-governmental organization
- Hauler
- Other

If you selected Other, please specify.

Provide your contact information

First Name

Last Name

Email Address

Phone number

Business Name

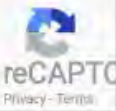
Address1

Address2

City

State

Zip

I'm not a robot  reCAPTCHA
Privacy - Terms

Receive email copy

Email address

This field is not part of the form submission.

Submit

* indicates a required field

Anoka County Business Recognition Awards

2017 Businesses Recognized

1) Corner Express, Centerville

Under the direction of Manager Todd Steffen, a single stream recycling program was implemented at gas pump islands, the store entrance and behind the counter. Recycling was also expanded to other tenants of the commercial property where they are located. Corner Express is diverting an estimated 52,000 pounds each year of single stream recycling.

2) Especially for Children, Circle Pines

Especially for Children is a childcare center and a wonderful representation of teaching young people environmental stewardship through example. Director Linda Burke lead the effort to implement improved single stream recycling and is in the final stages for starting an organics diversion program. Additionally, they created an educational component to the program teaching children about recycling and composting. The center is now diverting an estimated 7,197 pounds of single stream recycling annually.

3) Coborn's, Ramsey

Store Director, Vicki Wredberg wanted to recycle more and reduce overall waste. Some of the improvements made at the Ramsey store include adding single stream recycling in public areas throughout the building, at store entrances, gas pump islands and in the café area. The improvements divert an estimated 51,463 pounds of waste annually.

2016 Businesses Recognized

1) Culver's, Anoka

Culvers in Anoka has:

- Added Single Stream Recycling
- Also added Organics Recycling back and front of house. Front of house means customers are expected to separate waste themselves
- Updated outdoor enclosures to make room for new recycling streams and added new collection bins for additional material streams with grant funding from Minnesota Chamber of Commerce
- Estimated diversion of 57,000 pounds of organics and 10,400 pounds of single stream recycling annually
- Estimated cost savings of \$1,920/annually
- Gone from 2,000 pounds of trash per week to less than 600 pounds.

Anoka location owner intends to implement similar changes at her West St. Paul and Savage locations. Changes will also be made at all Culver's locations in Minnesota.

2) National Sports Center, Blaine

The National Sports Center has:

- Placed bins throughout the complex along with customized signage
- Purchased a cardboard baler with grant funding from Minnesota Chamber of Commerce
- Estimated diversion of approximately 270,000 pounds of recycling annually
- Allocated revenue from cardboard sales to help fund future environmental improvement programs including waste reduction efforts.

These efforts are especially important because the National Sports Centers welcomes 4 million visitors annually at its 8 sheet ice arena, 50 soccer fields, 18 hole golf course, cycling velodrome and indoor training and meeting space.

3) McDonald's Owners, Jeff Smith and Melissa Kennedy

McDonald's has:

- Implemented organics recycling back of house at all eight Anoka County locations
- Also implemented single stream recycling
- Hosted a plate to garden compost event in May 2015 to showcase the organics recycling program to customers
- Potential to divert approximately 250,000 pounds annually in organics and single stream recycling.
- Decreased food waste going to trash by adding more recycling opportunities

Constantly assessing opportunities for future waste reduction efforts including the potential of adding organics recycling collection to their customers in the front of the house.

2015 Businesses Recognized

1) The Farmstead

A Presbyterian Homes & Services senior living community located in Andover.

- Determined that an organics recycling program had potential to significantly reduce the community's waste stream. With a full-service kitchen and dining room on campus, a commercial composting program, which would allow the campus to recycle food scraps and other compostable materials, such as napkins, placements and coffee cups.
- In January 2014, The Farmstead implemented a pilot organics recycling program with Sanimax, and by February the program was in full swing with twelve 13-gallon carts filled with organic material from the kitchen being collected twice per week.
- Is diverting an estimated 1,000 pounds of organics from the trash every week, which is turned into nutrient rich compost. In total, the senior living community expects to compost 26 tons of organic materials annually.
- Residents are thrilled to be composting and staff also likes "being green".

2) Central Power Distributors

A wholesale distributor of engine parts, lawn and garden parts, and other equipment and accessories in Anoka.

- They were already reusing cardboard as packaging material by using a shredding machine but wanted to do more.
- Worked with hauler to add a single stream recycling program which will allow them to divert significant volumes of recyclable material.
- An estimated 57,800 pounds of recyclable materials are being diverted from their waste stream annually.
- Although they haven't yet realized cost savings, Central Power Distributors is excited to be doing the right thing for the environment.
- Staff is proud to report that their 4 yard recycling dumpster was full at every pick-up.
- Until they find a recycling option, plastic film is also being used as packaging material.
- These changes help Central Power Distributors reach their goals of reducing waste and having a positive impact on the environment.

2014 Businesses Recognized

No businesses recognized in 2014.

2013 Businesses Recognized

North Park Elementary School

North Park Elementary School in Fridley, part of Independent School District 13, serves 500 students from kindergarten through 5th grade. The school has 90 employees.

In February 2012, North Park Elementary implemented a composting program and enhanced its recycling program. The creation of the composting program was driven by highly committed students, teachers and custodians. At a sorting table in the lunchroom, students separate compostable materials, recyclables, reusable items and garbage. Recently, the school expanded the composting program to include paper towel waste from the hand washing stations.

Compostable materials such as food waste and non-recyclable paper products are placed in a 4 cubic yard dumpster. The school district's garbage and recycling hauler picks up the material once a week and delivers it to a commercial composting facility. The composting process converts the material into valuable compost after about 18 months.

North Park Elementary students have demanded that composting and recycling be available at all evening family functions. School staff ensure that the sorting table is set up for use at evening events. Staff or students supervise the separation of materials by parents; the students do not require supervision while they sort because they are familiar with the process.

Since the diversion of organic materials from the garbage, the number of lunchroom garbage barrels filled has decreased from 18 per day to less than 1. The school has reduced the size of its garbage dumpster from 8 cubic yards to 6 cubic yards while maintaining twice weekly garbage pickup.

In 2012, 12.22 tons of organic materials were hauled from the school for composting. The school also recycled 11.18 tons of cardboard, paper, cans and bottles.

2012 Businesses Recognized

No businesses recognized in 2012.

2011 Businesses Recognized

1) Cummins Power Generation

A global power leader for more than 90 years, Cummins Power Generation (CPG) provides the world with power generation products and services. Almost 1,800 employees work at the CPG corporate headquarters in Fridley.

The location serves as a manufacturing and warehousing facility for CPG. In 2010, the facility recycled 3,427 tons of metals, cardboard, pallets, cans and bottles, fluorescent bulbs and electronics. In addition, CPG works with vendors to reuse totes, plastic drums, wooden and metal skids, and wire spools. Cardboard is shredded on-site for reuse as packing material. Nearly 10 tons of shrink wrap were recycled from the end of November 2010 through March 2011. In 2008, CPG introduced powder coat painting operations that have reduced the amount of paint and solvent waste by 70%.

CPG partners with Rise, Inc., for assistance in separating and sorting recyclable materials. Rise, Inc. is a nonprofit agency serving people in Minnesota who have disabilities and other barriers to housing and employment.

An employee green team at CPG brings waste reduction and recycling information to the employees at the Fridley location through events for Earth Day and America Recycles Day. The team has provided opportunities for employees to recycle shoes, holiday lights and plastic bags during these events.

Anoka County recognizes the commitment to recycling and resource conservation of Cummins Power Generation.

2) Independent School District 15 St. Francis

Independent School District 15 in St. Francis has seven schools with almost 6,000 students and 1,000 staff and teachers.

The Nutrition Services Department implemented a food-to-hogs food waste recovery program in 2002. It currently operates in the district's three elementary schools. The schools collect food scraps from kitchen prep and uneaten food and beverages from cafeteria meals. Barthold Farms transports the food waste to their farms in St. Francis. The food waste is fed to hogs after heating to kill potentially harmful bacteria.

Barthold Farms empties and cleans the food waste barrels when they pick up the food waste. The food-to-hogs program reduces odor and pest problems at the schools' loading docks. The program teaches students that food waste is a resource.

Since 2002, the district has crushed cans used in food service to reduce the volume of empty cans placed in recycling containers. Implementation of the can crushing and food waste programs has cut the district's costs for garbage and recycling in half. The district's cost for the food-to-hogs program is significantly lower than the cost to manage the food waste as garbage.

In 2010, the district recycled 447 tons of cardboard, paper, beverage containers, scrap metal, fluorescent bulbs, and electronics. Since 2002, more than 1.3 million pounds of food waste have been recycled.

2010 Businesses Recognized

1) Aveda Corporation, Recycle Caps with Aveda Program

Founded in 1978 and currently located in Blaine, Minnesota, Aveda manufactures innovative botanically-based beauty products which are available in 29 countries. Aveda strives to conduct business in an environmentally sustainable manner, including its thoughtful approach to creating responsible packaging systems for all Aveda products.

Aveda retail product bottles and jars are made from post-consumer recycled content #2 HDPE, #1 PET or glass that can be recycled through most municipal recycling programs. However, as broad scale recycling programs for rigid plastic caps do not exist, these caps frequently become litter or pollutants that end up in bodies of water.

In 2006, Aveda employees partnered with elementary schools on a pilot program to collect and recycle rigid plastic caps. In 2008, the company formally launched "Recycle Caps with Aveda" with help from its retail store network and growing partnership with schools. This recycling initiative to collect plastic caps extends the

boundaries of recycling and elicits community participation. The primary goals of the program are to raise awareness of the alarming amounts of dangerous plastic pollutants entering oceans, waterways, and landfills, to educate children about the importance of recycling for the future of our environment, and to persuade municipalities to consider #5 plastics a viable recycling stream. The company finds the participation inspiring. More than 1,300 schools are now enrolled nationwide to collect caps.

Since its inception, this breakthrough program has prevented more than 270,000 pounds of plastic caps from ending up in bodies of water or garbage. An estimated 30 million caps have been collected and recycled. Resin from the recycled caps is used to make new caps for Aveda product packages. To date, these include Limited Edition Vintage Clove Shampoo, launched in September 2008, and Full Spectrum Permanent Hair Color, launched in January 2010.

2) Computer Cut EDM Inc.

Computer Cut EDM Inc. (CCEDM) is a precision machining business that was founded in 1993. The company makes (1) tools that other companies use to manufacture products and (2) precision parts that other companies assemble into machines. CCEDM has two full-time employees and one part-time employee.

Recycling has been part of the culture at CCEDM since the company built its Coon Rapids facility in 1997. In 2009, the company recycled 4.4 tons of mixed paper and 4.6 tons of scrap metal consisting of solid, chipped and particulate aluminum and steel, brass EDM wire, and cast iron. The company reuses cardboard boxes and office paper.

The wire-cut Electrical Discharge Machining (EDM) process generates burnt metal particles that are captured by filters. De-ionized water is the coolant that carries the particles into the filters. Each filter is the size of an opened paper grocery bag and weighs about 20 pounds new. Each filter can be used for 3-4 months.

In 2000, the company built a tumbling device to tumble the burnt metal particles out of a drained and dried filter. This allows the company to extend the life of a filter significantly and to reclaim recyclable metal that would otherwise be thrown away in the filter. Tumbling a filter removes about 15 pounds of metal particles that are recycled. Each filter can be tumbled and reused four times before it is no longer usable. At the end of its life, a filter is tumbled a final time to remove the metal particles for recycling and is then placed in the garbage. At this time, a recycling option for end-of-life filters has not been identified.

CCEDM has six EDM machines, each of which uses two filters. By keeping multiple filters in circulation through a system of use, date marking, drying, tumbling, and reuse, CCEDM uses each filter for 2 to 3 years instead of 3 to 4 months. In a 2-year period, CCEDM saves \$825 to \$1155 per pair of filters for each EDM machine. As Tom Holewa stated, "I have tried to teach my employees how important recycling is, and to go beyond if possible."

2009 Businesses Recognized

1) Medtronic CONSERVE Team

Medtronic, Inc., founded in 1949 and located in Fridley, is the world's largest independent medical technology company. World Headquarters (WHQ) in Fridley has 730 employees.

The WHQ CONSERVE Team was established in 2007 to provide an opportunity for employees to offer waste reduction and recycling suggestions and solutions to waste issues at WHQ. The Team's tagline is "Promoting initiatives that positively affect Medtronic's impact on human health and the environment."

WHQ recycled paper, cardboard, plastic and glass prior to the establishment of the CONSERVE Team. The Team has identified recycling options and implemented recycling for less common recyclables such as pipette tip boxes made of polypropylene, polystyrene foam and food waste. WHQ has recycled 200 pounds of polypropylene boxes since June 2008 and 250 pounds of polystyrene since November 2008. The food-to-hogs program was initiated at WHQ and expanded to seven additional Medtronic Twin Cities locations. Since February 2008, more than 460,580 pounds of food waste have been recycled.

Examining the recycling practices at WHQ was the impetus for the CONSERVE Team to identify irrigation as a campus water use where significant reduction could be achieved. The frequency of irrigation was reduced and the irrigation design was modified to create more efficient irrigation zones. During summer 2008, 1,300,000 fewer gallons were used for irrigation at WHQ than in summer 2007, which was a reduction of 16.5 percent.

The CONSERVE Team continues to research waste reduction and recycling options for other materials at WHQ. The Team shares information about its initiatives and educates WHQ employees through internal communications and at events focused on the environment.

2) Vision-Ease Lens

Vision-Ease Lens (VEL) is a manufacturer of polycarbonate ophthalmic/eyewear lenses with headquarters and a manufacturing facility in Ramsey. There are 310 employees in Ramsey.

VEL has made a commitment to sustainability and is setting new sustainability standards for lens manufacturers. In recent years, VEL has implemented waste minimization and renewable energy measures.

The company eliminated a plastic foam liner that held the lenses in a cardboard box for shipment. The lenses could be shipped without damage without the box liner. Eliminating the plastic foam liner allowed the company to eliminate the use of 12.4 million cubic feet of plastic in 2005. This volume would fill a 1.4-million square foot retail superstore 9 feet deep.

Since March 1, 2008, VEL has manufactured its products in Ramsey with 100 percent of its electricity from renewable sources through Connexus Energy's Wellspring Renewable Energy program. This program draws energy from wind, solar, hydroelectric and biomass sources.

The Ramsey facility recycles significant quantities of cardboard and polycarbonate plastic. In 2008, VEL recycled 147 tons of cardboard and 685 tons of polycarbonate. It is noteworthy that VEL found a recycler for its polycarbonate and recycles this plastic because it is used in large quantities in its manufacturing process.

2008 Businesses Recognized

1) City of Anoka, Anoka Municipal Utility

Anoka Municipal Utility (AMU) is a community-owned, not-for-profit electric supplier serving the city of Anoka, portions of Coon Rapids, Ramsey, Champlin and Dayton. The citizens of Anoka chose to create AMU over a century ago to provide economical, reliable electric power and have local control over an essential service. AMU serves 9,900 residential, 1,150 commercial and 21 industrial customers. AMU has a staff of 25 full time employees dedicated to serving their customers by providing high quality electric service.

For the past four years, AMU has been updating its electric meters to read usage via radio frequency. In the past year, AMU has more aggressively replaced old meters, resulting in over 4,000 meters for disposal. In

2008, AMU anticipates replacing an additional 4,200 meters. Unable to find a buyer for the outdated meters and not wanting to send the meters for disposal, AMU created a system of dismantling the meters and recycling nearly all of the components. These components include stainless steel, aluminum, electronics, cardboard, polycarbonate plastic and glass. The revenue generated from recycling the metals has paid for the recycling process.

In addition to recycling most of the meter components, AMU has found reuse options for the outer polycarbonate covers of the meters. AMU has worked with a local school and a community group that use the meter covers in art projects. The covers are so popular that AMU can't keep up with the demand for them!

AMU has recycled approximately 7,800 pounds of materials to date and hopes to continue this reuse and recycling project until all of the electric meters are replaced.

2) John's Auto Parts, Blaine

John's Auto Parts in Blaine is the largest automotive recycler in the Midwest and is a retailer of new and rebuilt automotive parts. The company employs more than 120 people. In 2007, John's Auto Parts recycled 3,250 vehicles.

There has been some kind of auto salvage business at the location since the late 1940's or early 1950's. When the current owner purchased the business in 1973, it was a junk yard with a 20-foot by 40-foot building that had a leaky roof and no indoor plumbing. Since then, the 19-acre site has been developed into a state-of-the-art automotive dismantling and recycling facility. In the 1980's and 1990's, the owner developed a recycling handbook for the international association for automotive recyclers. He later worked with the State of Minnesota to develop the state's recycling guidelines and best management practices for auto salvage. The company has set aside mercury switches for recycling since the inception of the Minnesota collection program in 2004.

The nature of a modern automotive salvage business is to reduce waste and to reuse and recycle automotive materials. Recycling and resource conservation are part of every aspect of John's Auto Parts. In addition to adhering to high industry standards, John's Auto Parts reconditions used antifreeze for use in company vehicles and sold 2,400 gallons to customers in reused antifreeze and window washer fluid bottles. The company buys recycled-content paper for use in its offices. John's Auto Parts provides and promotes to its employees an in-house recycling program for paper and beverage containers.

John's Auto Parts leads by example in the automotive salvage industry. Anoka County recognizes the commitment to recycling and resource conservation efforts of John's Auto Parts and its employees.

3) HOM Furniture (RISE, Inc., and the City of Coon Rapids)

HOM Furniture is one of the nation's largest home furniture retailers, serving customers in Minnesota, Wisconsin, North Dakota, South Dakota and Iowa. HOM has thirteen showrooms and two warehouses. One warehouse is located in Coon Rapids.

When furniture and accessories arrive at the Coon Rapids warehouse, each piece is individually wrapped for protection. The wrapping and packaging materials include cardboard, low density polyethylene (LDPE) film plastic and polystyrene expanded foam.

In 2006, the company started an extensive recycling program. HOM partnered with Rise, Inc., for assistance in sorting and separating the wrapping and packaging materials. Rise, Inc. is a nonprofit agency serving people in Minnesota who have disabilities and other barriers to housing and employment. Two crews from Rise work on recycling at the Coon Rapids warehouse.

Much of the packaging material is polystyrene foam, which is not easily recycled in Minnesota. HOM Furniture purchased a machine made in Denmark that compresses the polystyrene foam into solid formed blocks. Each block weighs about 100 pounds and measures 4 feet long by 14 inches square. The blocks are sold to a manufacturer who uses them to make window casings, fencing, and deck products.

In addition to recycling the wrapping and packaging materials produced at the Coon Rapids location, the company backhauls wrapping and packaging materials from retail locations to this warehouse for recycling. HOM Furniture also picks up and recycles polystyrene foam that residents bring to the Coon Rapids Recycling Center.

HOM Furniture estimates that the company recycles a total of 1,300 tons of cardboard, 600,000 pounds of LDPE, and 225,000 pounds of polystyrene foam annually.

2007 Businesses Recognized

1) LAI International, Inc., Fridley

LAI International, Inc. is the largest provider of laser and waterjet contract manufacturing in the U.S. LAI custom manufactures precision components for industries ranging from aerospace to power generation, using materials from aluminum to zinc. The company was founded in 1979 and has four regional U.S. manufacturing facilities. LAI Midwest is located in Fridley and has 40 employees.

Recycling scrap metal has been a company practice for many years. The expanded recycling program resulted from a weekly staff meeting at which an employee noted that the company used 8,000 gallons of water daily for operations. Most of the staff were unaware of the quantity of water used, and discussion began as to how to reduce usage and waste. With support from management, employees put together a waste reduction and recycling program for more materials.

As a result of internal discussion and research, the company expanded the types of materials it recycles. In the second half of 2006, the company recycled cardboard, plastic and glass bottles, aluminum cans, and newspaper and magazines, in addition to 57 tons of scrap metal. The company is on track to cut its water consumption in half by the end of May 2007.

LAI Midwest promotes its waste reduction and recycling program through flyers, posters, company e-mails and meetings. Employees have implemented waste reduction measures including duplex printing, reuse of scrap paper, and the purchase of recycled content paper. The company has shared its knowledge with the Maryland facility, which has implemented a similar program.

Anoka County recognizes the initiative of the employees of LAI Midwest in expanding their waste reduction and recycling program.

2) Sannerud, Savarese and Associates, Ham Lake

Sannerud, Savarese & Associates, P.A., is an accounting firm located in Ham Lake since 1974. There are 7 full-time employees and 4 part-time employees. The employees take care to recycle as many materials as possible, even transporting recyclables to the recycling center in Ham Lake as needed.

The employees of Sannerud, Savarese and Associates recycle office and computer paper, newspapers, junk mail, cans, glass and plastic bottles, cardboard, and plastic wrap and bags. Some paper is also shredded and donated to the Animal Humane Society for use as animal bedding.

Recycling and resource conservation are part of their operation, even during tax season. The company takes pride in using the smallest garbage bin available and filling the recycling bin on a regular basis.

In 2005, when the company built its new office, material made of sunflower hulls was used for countertops. The tables in the reception area and conference rooms look like red granite and are made of a soybean and newspaper ink composite. The company also worked with Prairie Restorations to convert the back half of the grounds into native Minnesota prairie.

Anoka County recognizes the commitment to recycling and resource conservation efforts of the employees of Sannerud, Savarese and Associates.

2006 Businesses Recognized

1) Hoffman Enclosures, Inc., Anoka

Hoffman Enclosures, Inc., located in Anoka, is a manufacturer of electronic equipment enclosures.

Over a ten-year span, Hoffman has instituted process modifications and materials substitutions by converting nine out of eleven liquid spray-coating systems to powder coating systems.

Successful pollution prevention efforts include:

- reduced hazardous and non-hazardous materials use;
- eliminated hazardous and non-hazardous waste;
- reduced energy use and air emissions; and
- saving more than \$1.5 million annually.

As a result of the changes made to the spray-coating systems, Hoffman has changed hazardous waste generator status from a large quantity generator to a small quantity generator, producing less than 2,200 pounds of hazardous waste per month.

2) Johnson Printing & Packaging Corp., Fridley

Johnson Printing & Packaging Corporation, located in Fridley, provides commercial printing and packaging services.

In 2000, Johnson received the designation of Minnesota Great Printer by the Printing Industry of Minnesota because they go above and beyond environmental, health and safety requirements by minimizing wastes, reusing or recycling 95 percent of waste that cannot be prevented, and by maximizing energy efficiency.

Johnson recently announced that 100 percent of the electrical power needed to operate their 130,000 square foot facility is wind power through Xcel Energy's Windsourse® program. This conversion makes Johnson the

largest commercial business in Minnesota to derive their energy supply entirely from wind power. The environmental impact of this conversion is equivalent to planting over 123 acres of trees.

Tim Cattrysse reported: "Because so many of our customers are focused on environmental sustainability, we are continuously pursuing new options. The wind power is just another way we are benefiting our employees, our company and the world."