

# HENNEPIN COUNTY MINNESOTA



## 2022 Recycling Progress Report

Moving forward with organics recycling



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# Introduction

The Recycling Progress Report provides an update on implementation of Hennepin County’s Solid Waste Management Plan, progress toward waste diversion goals, and a summary of the 2022 results for the county’s waste management programs.

State statute requires metropolitan counties to prepare solid waste management plans every six years that identify strategies to meet the recycling goals and objectives in the state’s Metropolitan Solid Waste Management Policy Plan. The policy plan was adopted by the Commissioner of the Minnesota Pollution Control Agency (MPCA) on April 6, 2017, establishing the framework for managing solid waste in the metro area through 2036.

The policy plan sets objectives for each waste management method, with an emphasis on the upper end of the waste management hierarchy in order to achieve the legislative goals for recycling and organics recovery. Minnesota State Statute 115A.551 establishes a 75% recycling rate goal by 2030.

Hennepin County developed its 2018 Solid Waste Management Plan to make progress toward the goal of recycling 75% of waste by 2030. The plan demonstrates the county’s commitment to conserving natural resources, protecting the environment, and ensuring public health and safety.

The county’s solid waste management plan was developed to be consistent with the Hennepin County Board of Commissioner’s mission “to enhance the health, safety and quality of life of our residents and communities in a respectful, efficient and fiscally responsible way.” It is also consistent with the Hennepin County Environment and Energy Department’s mission of “protecting the environment and conserving resources for future generations” and overarching strategic goal that “Hennepin County’s environment is preserved for future generations.”

Learn more about the plan at [hennepin.us/solidwasteplanning](https://hennepin.us/solidwasteplanning).

## Developing the next solid waste management plan

The MPCA began drafting changes to the Metropolitan Solid Waste Management Policy Plan in 2021. This kicks off the next planning cycle for counties to update their solid waste management plans.

### Next steps in the planning process

- June 2023: MPCA releases draft policy plan
- Winter 2023: MPCA approves the final policy plan
- Summer 2024: County develops and adopts its solid waste management plan

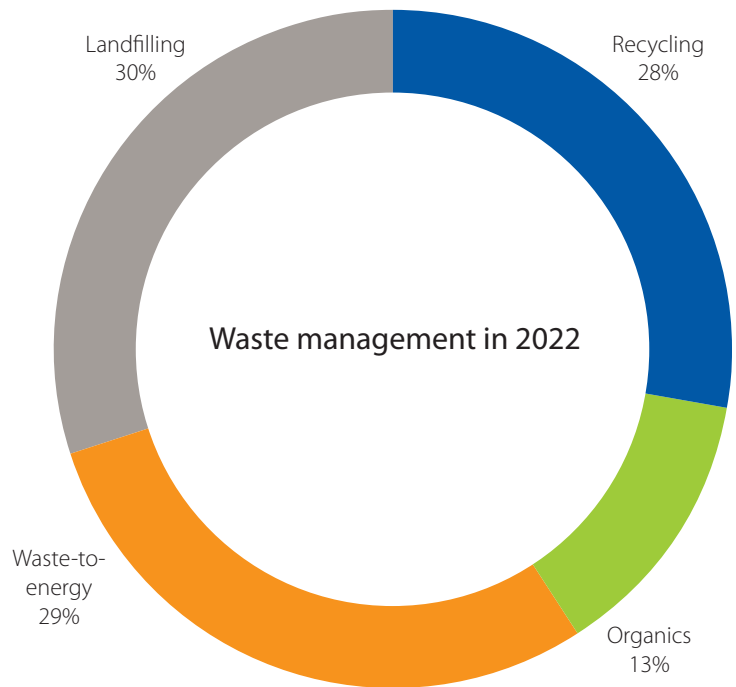


# Progress toward goals

Minnesota statute requires metro counties achieve a 75% recycling rate by 2030. Although we've made incremental progress, significant changes in waste management systems and individual behaviors will be needed to meet that goal.

About 1.27 million tons of solid waste, which includes recycling, organics, and trash, were generated in Hennepin County in 2022. That is a 2% decrease from 2021, or about 31,000 tons less.

Of the total tons generated, 41% was managed as recycling and organics. The remaining 59% was managed as trash at a waste-to-energy facility or landfill.



## Changes in waste management

The amount of waste diverted to recycling increased by 4% and the amount managed as organics recycling increased by 3% in 2022 compared to 2021. The amount of waste sent to waste-to-energy increased by 2%, while the amount of waste landfilled decreased by 13%, or 56,000 tons less.

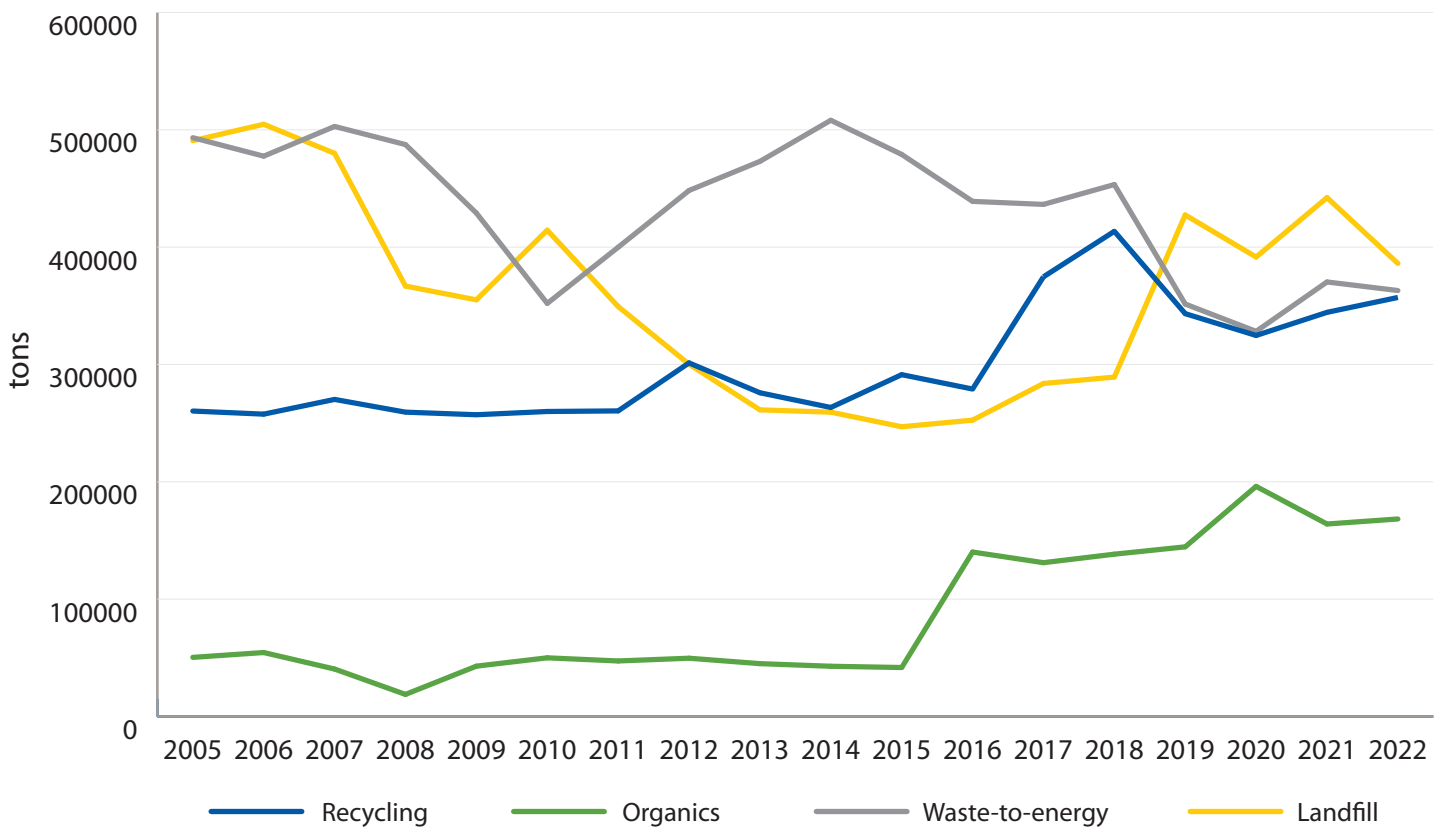
The amount of trash generated often follows economic trends. The 2% decrease in trash from 2021 to 2022 may be influenced by two economic trends – a shift in spending from goods to services as pandemic restrictions eased and inflation leading people to cut back on discretionary spending.

Changes in waste management methods, 2021 to 2022

Management method	2021 (tons)	2022 (tons)	Percent change
Recycling	344,419	357,101	4%
Organics (includes yard waste)	164,032	168,311	3%
Waste-to-energy	354,436	363,014	2%
Landfill	442,187	386,110	-13%
Total	1,305,047	1,274,536	-2%

Over the past 15 years, the most noticeable trend is the increase in organics. This increase was driven by several factors – commercial organics collection expanded, cities rolled out new curbside organics programs, and the Minnesota Pollution Control Agency allowed yard waste to be included in the organics numbers.

Changes in waste management, 2005 to 2022



## Reuse in Hennepin County

For the first time in 2022, Hennepin County received data from several reuse businesses on the amount of goods that were reused. In total, these seven businesses facilitated the reuse of more than 16,600 tons of goods in 2022.

Although this is a small sample of what is reused in the county each year, this data provides insights into how reuse businesses and organizations contribute significantly to eliminating the amount of waste that needs to be managed. The county will continue to try and gather more information from reuse businesses to better understand and report the impact of the reuse sector.

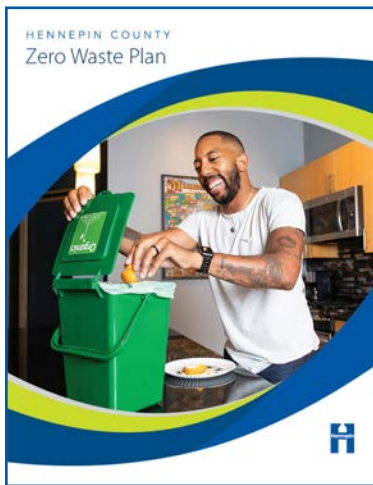




# Mapping a zero waste future

Hennepin County is committed to achieving a zero-waste future where all materials are designed to become resources for others to use, the volume and toxicity of waste and materials is systematically eliminated, and all resources are conserved and recovered and not burned or buried.

Despite implementing many new waste reduction and recycling programs and policies over the past 20 years, it has been challenging to achieve a diversion rate greater than 50% in Hennepin County. Achieving zero waste will require significant changes in our individual behaviors and transformative changes in the policies, programs and resources that make up the solid waste system.



The draft Hennepin County Zero Waste Plan was developed in 2022, informed by a robust community engagement effort and shaped by action planning work groups. The plan's proposed actions are designed to collectively move the

county as close as possible to the goal of zero waste. The county has defined zero waste as preventing 90% or more of all discarded materials from being landfilled or incinerated.

## Developing the plan

The plan's development process was guided by Hennepin County's Racial Equity Impact Tool (REIT) to ensure the plan aligns with the county's goal to reduce disparities. The plan was also developed to complement the county's newly adopted Climate Action Plan and will be the foundation for the county's state-mandated 2024 Solid Waste Management Plan.

The development process and the ensuing plan was designed to value waste reduction, reuse, recycling, and composting above waste-to-energy and landfilling, to prioritize actions over aspirational language, and to include space for diverse stakeholders to be fully engaged. The plan was shaped by broad community engagement and community voices and intentionally placed diversity, equity, and inclusion at the forefront of planning.



The engagement process included more than 500 conversations with community members, collaboration with 18 community groups,

10 meetings with industry stakeholders with a total of 170 participants, and surveys, stories and ideas shared by 457 site visitors on **BeHeardHennepin.org**.

The project team then collaborated with county staff, stakeholders, and community members to identify and refine programs, actions, and solutions for inclusion in the Zero Waste Plan. Nearly 150 participants formed action planning work groups where, through four virtual meetings, they learned about community and system needs, heard findings from research, and explored and amended the zero-waste actions.

## Plan actions

The proposed actions for the Zero Waste Plan are organized around four aims:



Create a materials management system that reduces racial disparities and advances equity



Expand the reach of county waste education, grants, and programs



Adopt policies that accelerate the transition to a zero-waste future



Implement programs to advance circularity, reduce waste, and support reuse

The actions:

- Increase the recovery of recyclables and organics
- Address harder to recycle materials such as bulky items and construction debris
- Reduce consumption and increase circularity
- Bolster and expand end markets
- Encourage or incentivize behavior change
- Look upstream to reduce waste by influencing what is sold into the regional market

Change is achieved through optimizing existing programs, developing new programs, investing in infrastructure, engagement, and grants, passing local and regional policy, and increasing partnerships with local community groups and others.

## Plan implementation

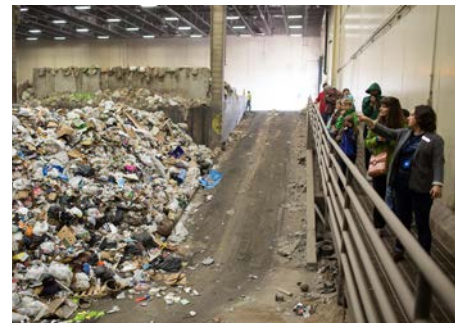
The county will use the solid waste management planning process to prioritize the implementation of actions in the county's Zero Waste Plan over the next six years.

The county will continue to work with community groups to carry out the plan's strategies and will report on progress toward implementing the actions through this annual recycling progress report.

# 2022 highlights and major accomplishments

In addition to developing the Zero Waste Plan and identifying actions to significantly increase recycling and decrease waste in Hennepin County, we continued to make progress on priority initiatives, including:

- Expanded organics recycling with implementation of the county's requirement that residential organics recycling be offered in all cities.
- Celebrated 10 years of Fix-It Clinics and returned to hosting in-person clinics.
- Served 137,000 households at drop-off facilities and collection events to ensure safe disposal and recycling.
- Helped residents adopt low-waste habits through the Stop Food Waste and Plastic-Free Challenges – more than 1,400 people took actions that resulted in over 5,000 pounds of plastic items avoided and nearly 1,000 pounds of food waste prevented.
- Trained 92 new Community Recycling Ambassadors.
- Reopened education tours of waste facilities and gave 11 tours to 99 participants.
- Drafted actions for the Zero Waste Plan – 62 actions were developed by 167 work group participants based on feedback from more than 1,000 residents.
- Launched a new program called MNimize to help food businesses reduce their use of single-use plastics.
- Continued a food donation/food rescue audit to identify gaps and opportunities in the food donation system.
- Conducted inspections to increased compliance with the Ordinance 13 business food waste recycling requirements and provide education and resources to businesses.
- Selected a preferred proposer for development of the anaerobic digestion facility to expand infrastructure for processing organics.
- Increased outreach and funding for multifamily recycling by contracting with Waste Wise to provide outreach and technical assistance and allocated more state SCORE funds for city projects.
- Received an award from the National Association of Counties for the building reuse grant program.





## Partnership on Waste and Energy

The Partnership on Waste and Energy (PWE) is a Joint Powers Agreement between the Ramsey/Washington Recycling & Energy Board and Hennepin County.

The partnership collaborates in areas of waste and energy management, including legislation and policy development, communication and outreach, planning and evaluation of waste processing, and other selected programs.

### Legislative work and highlights

Through its legislative advocacy efforts, PWE seeks to end waste, promote renewable energy, and enhance the health and resiliency of its communities while advancing equity and responding to the challenges of a changing climate. Each year, the partnership board adopts a legislative platform. In the 2022 legislative session, lobbying activities advanced partnership interests in the following areas:

- Advanced efforts to redirect Solid Waste Management Tax receipts from the state general fund into SCORE grants to counties
- Secured a small amount of funding to begin addressing the ongoing issue of wood waste from the emerald ash borer infestation
- Created opportunities to address PFAS, a forever chemical
- Laid the groundwork for product stewardship policies on materials such as packaging and mattresses
- Restored funds previously borrowed from the Metropolitan Landfill Contingency Action Trust

Partnership board members, staff, and lobbyists engaged with legislators around these topics and continued ongoing collaboration with partners toward common goals. In addition, the partnership provided written and oral testimony and created policy position statements to advance its interests.

### Product stewardship

Product stewardship is a policy approach that holds producers responsible for the management of their products and packaging for the full life cycle of the materials to minimize the environmental and social impacts.

The partnership works with the Minnesota Solid Waste Administrators Association (SWAA) Product Stewardship Committee to advance a shared vision of product stewardship across the state. This includes:

- Supporting product stewardship efforts that reduce lifecycle impacts of products and packaging
- Reducing financial burdens associated with waste disposal on local government and taxpayers
- Establishing measurable and enforceable goals

In 2022, the partnership continued its work with the Product Stewardship Institute to develop a bill in Minnesota for extended producer responsibility for packaging. This work included a committee process to develop elements of a bill that is customized to Minnesota. The committee included a broad group of stakeholders that met multiple times in spring and fall 2022. Staff also completed one-on-one calls to stakeholders to get additional feedback on bill elements.



The partnership also collaborates to advance policies related to other products, such as carpet, mattresses, batteries, and electronics.

## Wood waste



The partnership is concerned about the increasing amount of wood waste from trees infested with emerald ash borer. Local governments across the state face unfunded mandates to respond to emerald

ash borer and the growing volume of wood waste. The seven-county metro area is expected to enter the peak phase of ash tree loss during this decade, requiring the management and disposal of more than 1.67 million tons of wood waste. To better understand and address this issue, the partnership board included funding in the 2022 budget for wood waste market development.

In 2022, the partnership piloted a one-time grant for a local business that reclaims discarded ash trees to create high-quality wood products. The funding increased their processing of ash tree waste by supporting critical equipment purchases, staff time, and public messaging around the use of urban ash wood.

Additionally, the partnership used a professional consultant, Cambium Carbon, to assess current wood waste flows within wood waste disposal industries. The in-depth assessment included more than 30 stakeholder interviews to detail current volumes of wood waste and quantify the potential impact of waste generated by emerald ash borer on the current management system. The final report that details the research and findings and provides recommendations for future wood waste management is available at [recyclingandenergy.org/partnership-reports](https://recyclingandenergy.org/partnership-reports).

## Anaerobic digestion

Both Hennepin County and Ramsey/Washington Recycling and Energy identify food waste digestion as a key progression to capturing more value from waste and meeting climate goals. Food and other organics decompose and produce methane, a potent greenhouse gas. Anaerobic digestion is a top climate solution because the methane is captured using a controlled process, reducing greenhouse gas emissions, creating renewable natural gas that displaces fossil fuel use, and making valuable soil amendment products from the digestate.

Shared interest in recovering the resource value of organics drove the partnership's efforts on anaerobic digestion in 2022. This included support for legislative initiatives, such as the Future Fuels Act/Clean Transportation Standard. The partnership also participated in the Minnesota Public Utilities Commission's rule development process to implement the 2021 Natural Gas Innovation Act.

The partnership continues to support development of anaerobic digestion through collaboration with organizations such as the Great Plains Institute, Coalition for Renewable Natural Gas, American Biogas Council, the Minnesota Future Fuels Coalition, and the Bioeconomy Coalition of Minnesota.

# Progress on implementing solid waste management plan strategies

The Hennepin County Solid Waste Management Plan for 2018 to 2023 identifies strategies the county will pursue to reach the goals of recycling 75% of waste by 2030.

The plan includes the following strategies to help meet our goals of increasing recycling, preventing waste, and minimizing waste sent to landfills:

- Focus on organics recycling by establishing requirements for cities and certain businesses, increasing local capacity to manage organics, and working to prevent food waste.
- Build momentum for waste prevention and reuse by better understanding consumption habits and promoting waste prevention actions.
- Engage residents through outreach and education by raising awareness about changes in recycling programs, generating excitement about recycling and waste reduction, motivating environmental actions, and empowering residents to become leaders in their communities.
- Continue to serve residents where they are, including at home, work, school, and on-the-go.
- Provide and expand drop-off disposal options for hazardous waste, problem materials, and additional recyclables.
- Recover resources from the trash.

The following section includes updates on our progress of implementing these strategies.



# Focus on organics

Organic materials – which includes food, food-soiled paper, and other compostable materials – make up about 30% of our trash, so recycling them is key to achieving a 75% recycling rate and reducing the amount of waste we send to landfills. Diverting organics from the trash also helps address climate change by reducing emissions of greenhouse gases, especially methane, which is generated from the decomposition of organic materials in landfills.

## Infrastructure development

The existing organics recycling infrastructure in the Twin Cities is strained, and additional capacity is needed to both ensure the viability of existing programs and support the development of new programs for residents and businesses.

### 2022 results

- Advocated for state bonding for anaerobic digestion to meet long-term organics processing capacity needs.
- Reviewed proposals to develop an anaerobic digestion facility to process a minimum of 25,000 tons per year of organics.
- Selected a preferred proposer – Sacyr Infrastructure USA – to complete cost estimation and value engineering.





# Food waste prevention

Both residents and businesses play a significant role in preventing and reducing food waste in our communities. Not only does preventing wasted food significantly reduce waste, it also addresses food insecurity and is one of the highest impact climate solutions.

To prevent food waste, the county has conducted research to better understand food waste behaviors and motivations, audited the food donation system to identify gaps and opportunities, supported organizations that rescue food to distribute to people in need, and engaged residents in reducing wasted food.

## 2022 results

- Awarded grants to two organizations totaling \$14,000 to expand their capacity to rescue and distribute food and reduce waste.
- Hosted a one-month online Stop Food Waste Challenge for the third time. The 345 participants completed more than 2,000 actions, avoiding 1,900 pounds of carbon dioxide emissions and preventing nearly 1,000 pounds of food waste. The Stop Food Waste challenge partnered with local chefs for two cooking demonstrations.
- Continued to educate residents on the importance of food waste prevention through the Zero Waste Challenge and Community Recycling Ambassador programs and connected those volunteers to food rescue opportunities.
- Continued a food donation/food rescue audit to identify gaps and opportunities in the food donation system.



# Organics recycling requirements

The Hennepin County Board of Commissioners approved revisions to the county's recycling ordinance (Ordinance 13) in November 2018. These changes required businesses that generate large quantities of food waste to implement food waste recycling by 2020, and cities to provide residents access to curbside organics recycling service by 2022.

## 2022 results

- Conducted 53 inspections of businesses throughout Hennepin County for Ordinance 13 compliance and to provide education and resources.
- Awarded the City of Orono an organics recycling drop-off grant totaling \$9,585 over two years to establish an organics drop-off site.
- Worked with the cities of Bloomington, Champlin, Excelsior, Hopkins, and Golden Valley to launch their citywide curbside organics recycling programs.
- Supported the cities of Dayton, Deephaven, Greenfield, Independence, Minnetonka Beach, Minnetrista, Mound, Orono, and Shorewood to open new organics recycling drop-off sites. There are now 45 organics recycling drop-offs available throughout Hennepin County.



*Minnetonka Beach opened an organics recycling drop-off at the Public Works Facility in 2022.*

# Waste prevention and reuse

Hennepin County offers several programs, such as Choose to Reuse, monthly Fix-It Clinics, and Zero Waste Challenges, to encourage waste reduction and reuse. To reach its waste reduction goals, the county also targets specific materials that represent the largest percentage of reusable goods found in the trash, including food waste, wood, textiles, furniture, and household goods.

## Choose to Reuse

Hennepin County encourages residents to support local reuse, rental, and repair retailers through the Choose to Reuse program, which includes the online Choose to Reuse Directory and support for reuse retailers.

Residents' buying choices and where they shop can protect the environment and support the local economy. The program aims to increase awareness of buying used goods and ultimately drive residents to purchase from their local reuse retailers. The resale business sector is strong and continuing to grow, but many local shops are competing with e-commerce marketplaces. Because of this, they recognize the power of partnering within their community to grow their local businesses.

### 2022 results

- Continued to partner with 29 local reuse retailers. Participating retailers get access to training, resources, and newsletters.
- Published 15 articles on buying used and living a low-waste lifestyle. Content highlights included how to reduce plastic use, resources for proper plastic recycling, fix-it and repair tips, sustainable living practices for young adults, and where to rent winter gear.
- Connected more than 85,000 visitors to the Choose to Reuse website, a 28% increase from 2021.





# Deconstruction and pre-demolition inspections

Construction and demolition projects can generate a lot of waste – but they don't have to. About 85 percent of the materials in a typical residential demolition project could be kept out of landfills, but currently only about 30 percent of building materials are reused or recycled.

The county promotes deconstruction, which involves carefully dismantling a building by hand and sorting materials into categories for efficient reuse and recycling. Deconstruction prevents usable materials from going to the landfill, makes used building materials available to the community, creates jobs, and supports local reuse retailers.

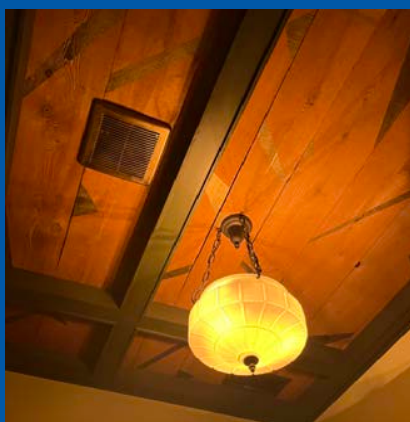
Since 2020, Hennepin County has offered grants to residential homeowners to help make deconstruction a more affordable option for remodeling and demolition projects. In 2022, Hennepin County expanded the building reuse grant program to include commercial and multiunit deconstruction, used building material installation, and structural moves.

Hennepin County also continued pre-demolition inspections of buildings prior to demolition to ensure hazardous materials, such as asbestos and items containing mercury or lead are managed properly. Managing these types of hazardous wastes properly is important for protecting public health and the environment and is required by law.

## 2022 results

- Awarded 18 building reuse grants totaling over \$76,000 for projects that reused and recycled materials in the removal or renovation of a building. These grants included:
  - 13 residential deconstruction projects
  - 1 commercial deconstruction project
  - 4 used building material installation projects
- Salvaged 26 tons of building material for reuse and 135 tons for recycling from the 11 grant projects completed in 2022, totaling 160 tons of building material diverted from landfills.

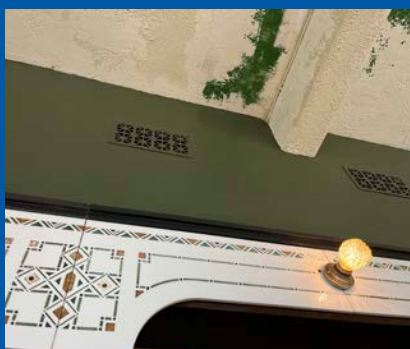
## Dutch Bar in northeast Minneapolis focuses on reusing building materials



The Dutch Bar, a new bar and restaurant in northeast Minneapolis, reused, repaired, and repurposed many of the materials in the remodeling of their space from office to bar.

The plan for the space centered around the bar, which was originally built for a barber shop in Chicago and found at an antique store in Buffalo. The bar top was crafted from a tree that fell in Prospect Park. The Dutch Bar also refinished and repaired the wood flooring, installed leftover tile from reuse stores, and repurposed light fixtures.

This project was supported by a \$5,000 Hennepin County used building material installation grant.



Hennepin County's new used building material installation grants provide funds for property owners to incorporate salvaged building materials into remodeling, renovation, or new construction projects to reduce embodied energy associated with new materials. Projects that incorporate used building materials instead of buying new also help build market demand and supports the local reuse economy.



- Received an award from the National Association of Counties (NACo) for the building reuse grant program.
- Continued to support deconstruction through public-private partnerships by contracting with the nonprofit Better Futures MN to fully deconstruct six buildings and partially deconstruct 21 buildings. These projects diverted over 520 tons of material from the landfill, including 168 tons of building material for reuse and 350 tons of material for recycling, and provided over 7,700 of labor hours for Better Futures staff and trainees.
- Provided education and outreach on reusing and recycling building materials to residents, contractors, and other partners through eight webinars and conference presentations.
- Continued to develop an internal construction and demolition waste policy to increase reuse and recycling of building materials on county-owned projects.
- Conducted 98 pre-demolition inspections with 46 unique contractors in 17 cities to ensure proper management of hazardous materials prior to demolition. This included 25 in-person inspections and 73 document-only inspections as an alternative to in-person visits.

## Salvaging and reusing materials from the county's 625 office building remodel

Hennepin County and Better Futures partnered to salvage and reuse materials from the county's 625 office building downtown Minneapolis that is being remodeled into new office spaces. Better Futures reclaimed materials from three floors of the building totaling over 50,000 square feet.

The project diverted 72 tons of materials from the landfill. To date, Better Futures has sold more than 243 items and generated approximately \$25,000 in revenue from the sale of those items to help support their rehabilitation services.



# Fix-It Clinics

Hennepin County Fix-It Clinics provide free, hands-on assistance from knowledgeable volunteers to disassemble, troubleshoot, and repair household items. In-person clinics were restarted in 2022.

## 2022 results

- Resumed in-person Fix-It Clinics in June. The seven clinics hosted in 2022 had:
  - 552 participants
  - 80 volunteers donating 1,221 hours
  - A 78% fix rate (662 out of 854 items fixed)
  - 3,745 pounds diverted from the waste stream

## Fix-It Clinics celebrate 10 years!

September 2022 marked the 10-year anniversary of Hennepin County Fix-It Clinics, which teach repair skills, build community connections, and reduce the number of repairable objects thrown in the trash.

Volunteers make these events possible by helping residents disassemble, troubleshoot, and fix everything from vintage toys and dog harnesses to blenders and hairdryers.

People come with their broken stuff, some of it cherished family heirlooms, and are delighted when they find out it can be fixed. They also learn how to repair things, which is both fun and empowering.

Fix-It Clinic volunteers offered individual virtual repair assistance to residents during the pandemic. Although this was a valuable service that offered some unique repair opportunities, nothing can replace the energy of being in person in a room full of people working on stuff.

Many people experience a eureka moment when they realize they can fix their own stuff. Being able to repair something rather than throwing it away is a great feeling and avoids waste.

## By the numbers

Fix-It Clinics have achieved impressive results over the past 10 years, including:

- More than 6,000 attendees
- More than 6,600 items repaired
- More than 44,000 pounds of waste diverted
- 79% of items fixed
- More than 10,400 hours volunteered



# Waste prevention at businesses

The county provides funding, technical assistance, and educational resources to help businesses prevent waste. Areas of focus can include prevention of food waste, reuse and recovery of goods and materials, and development and use of recovered products.

## 2022 results

- Allocated \$194,000 to 11 business waste prevention projects.
- Supported the launch of MNimize, a single-use plastic reduction pledge and certification program for food businesses. The program had 7 businesses participating by the end of 2022, and their efforts avoided the use of over 78,000 single-use plastic items.

## MNimize: Free new plastic reduction program for food businesses



Minnesota Waste Wise, in partnership with Hennepin County, launched a new program called MNimize to help food businesses reduce single-use plastic waste and receive recognition for their efforts.

MNimize awards businesses at one of four achievement levels based on their efforts to reduce single-use plastic. The program also helps businesses identify opportunities to continue reducing single-use plastic and provides technical assistance so they can take further action.

Additionally, eligible participating businesses can get up to \$500 through the MNimize Rebate toward expenses to reduce single-use plastic. This rebate could be used to purchase durable reusable or certified compostable alternatives to replace single-use plastic items or for other creative plastic reduction strategies.

Reducing single-use plastic is an impactful opportunity for businesses to divert waste, keep plastic out of the environment, build brand loyalty with existing and new customers, and generate cost savings.

## 2022 business waste prevention grantees

- Cali Nails: \$7,800 to use returnable shipping boxes to replace disposable boxes.
- Camden Collective: \$10,000 to expand their storage capability for rescued food.
- Create Catering: \$22,655 to expand their storage capability for rescued food.
- Du Nord Foundation: \$10,000 to expand their storage capability for rescued food.
- Excelsior Candle: \$6,240 to expand their candle-container return program to reuse more glass, metal and other types of containers during candle production.
- For They Skin Care: \$16,852 to start a returnable container program.
- La Perla Tortillas: \$47,000 to implement a tortilla remaking process and equipment to minimize food waste during food manufacturing.
- Luum Collective: \$5,000 to promote food rescue awareness and resources among event industry professionals in the Twin Cities.
- McKinley Community: \$9,300 to replace single-use disposal dishes with reusables.
- Next Stage: \$10,000 to provide a marketplace for the resale, rental, and deconstruction for reuse of theatrical materials.
- Second Harvest Heartland: \$50,000 to expand their storage capability for rescued food.

# Engaging residents through education and outreach

Hennepin County promotes environmental stewardship by raising awareness about changes in recycling programs, generating excitement about waste reduction, and partnering with organizations in the community to motivate behavior change.

## Zero Waste Challenge

The Zero Waste Challenge launched in 2016 to help participants live lower-waste lifestyles. The program now includes the original eight-month personalized challenge for households as well as the online Plastic-Free Challenge and Stop Food Waste Challenge.

These challenges continue to successfully help residents learn about their waste and consumption habits, identify the most effective actions for their household to take, reduce the amount of waste they generate, and motivate others to take action.

### 2022 results

- Provided individualized support to 42 households in the 8-month challenge. In addition to staff, 11 Community Recycling Ambassadors served as mentors for the families. Participating households attended an intro training and at least four monthly workshops and tracked their waste generation three times over the course of eight months. Households reduced their waste by nearly 25% over the course of the challenge.
- Held two month-long online challenges, engaging nearly 1,500 total participants who completed over 10,500 waste-prevention actions and spent almost 8,000 minutes learning about waste topics. Some challenge highlights:
  - Collaborated with partner organizations to increase promotion, recruitment, and engagement for the challenges, which was a new facet for the challenges. The Stop Food Waste Challenge had 17 partners, and the Plastic-Free Challenge had 22 partners.
  - Engaged more than 345 people in the Stop Food Waste Challenge. These participants

completed over 2,000 actions, avoiding 1,900 pounds of carbon dioxide emissions and preventing almost 1,000 pounds of food waste.

- Partnered with chefs for two events during the Stop Food Waste Challenge: Chowgirls Chef Liz Mullen hosted a virtual event on making pizzas with your leftovers, and Chef Christopher Loew did a demonstration at Eastside Co-op on how to get the most out of your food.
- Engaged more than 1,000 participants who completed more than 8,600 actions in the Plastic-Free Challenge. These actions resulted in more than 2,200 pounds of packaging waste avoided, over 4,900 plastic items, such as bottles, containers, utensils, and straws, not used, nearly 7,300 minutes spent learning, and 4,450 pounds of carbon dioxide not emitted.





## Food waste wins during the Stop Food Waste Challenge

Many participants in the Stop Food Waste Challenge shared their “food waste wins” – times they learned and tried new things and got creative to prevent wasted food. Here are some highlights:

### Had good conversations with their kids

“We talked about how throwing away an item from his lunch means more than just the tossed item - there is the water used to grow it, the gas in the vehicle to drive it to our store, etc... That led to a nice conversation about food shelves and what food insecurity means. What a day!” -Crystal F.

### Tried out new resources

“I downloaded the app ‘Cooklist’ and was beyond impressed! It gives you a personalized shopping list that caters to your needs.” -Emma M.

### Connected with neighbors

“After a potluck community dinner, there was fresh salad and other leftovers I thought I had to throw away. However, I came home and my new neighbors were moving in, so I offered the leftovers to them, and they were happy to have something already made and ready to eat! VOILA! No food waste!” -Julie R.

### Tried creative strategies

“I’m finding that my sticky note labeling method is working out really well to remind me of what’s in drawers in the fridge... The little brightly colored notes give me a little nudge every time I open the fridge, reminding me to use those foods before they spoil.” -Krina D.

### Chose “ugly” foods

“Today at church, I purposefully chose the split tomatoes (figuring they were the least desirable) from the garden offerings. I also picked the ‘ugly’ double tomato. It was actually quite interesting looking.” -Kathy D.

### Realized all of the benefits

“As a mother, I was initially interested in controlling food waste as a way to save money. Saving money on my family’s food made it possible for me to donate food to the local food shelf that was supported by my church. It wasn’t until later that I learned how wasted food is also an environmental issue. So now I have several reasons for cutting my food waste.” -Anne S.



Learn how to cook creatively and make just the right amount.

Join the Stop Food Waste Challenge

[hennepinfoodwaste.ecochallenge.org](http://hennepinfoodwaste.ecochallenge.org)



Combat climate change by not wasting food. It's one of the most important actions you can take.

Join the Stop Food Waste Challenge

[hennepinfoodwaste.ecochallenge.org](http://hennepinfoodwaste.ecochallenge.org)

# Community Recycling Ambassadors

Community Recycling Ambassadors learn about waste prevention, recycling, and composting from industry experts and tours of waste processing facilities during a six-week course. They then commit to volunteering 30 hours inspiring others in their communities to reduce waste, recycle more, and compost through activities such as answering questions at events and designing and implementing waste reduction and recycling projects.

The county continued to hold the Community Recycling Ambassadors class as well as a continuing education events for current volunteers online.

## 2022 results

- Held two virtual class sessions with 92 volunteers completing the training (bringing the program total to 784).
- Supported volunteers in contributing 1,035 hours to recycling and waste reduction projects in their communities. More than 20,000 residents were contacted by or impacted by the work of Community Recycling Ambassadors, and Community Recycling Ambassadors helped out at events attended by nearly 36,000 residents.
- Held a continuing education event for active volunteers called the Fall Recycling Review.
- Rebranded the program from Master Recycler/Composters to Community Recycling Ambassadors.



## Master Recycler/ Composters rebranded to Community Recycling Ambassadors

The Master Recycler/Composter program was rebranded to Community Recycling Ambassadors, a name that better reflects the county's efforts to reduce disparities and serve all residents in all areas, including waste reduction and recycling.

The word "master" has negative associations with plantation slavery in the U.S. The county is moving away from its use because we are committed to confronting racism, creating systems that build equity, and creating a future where all residents thrive.

During the rebranding process, name ideas were gathered from volunteers and residents, and a public vote was held to select the final name. This approach was taken to incorporate the opinions of both current volunteers and those who interact with volunteers.

The final vote received 190 responses, and Community Recycling Ambassador was the top choice.

# Environmental education, outreach, and communication efforts

Environmental education, outreach and communication efforts engage our community and partners in developing the knowledge, skills, attitudes and motivation to work individually and collectively towards sustaining a healthy environment.

The county raises awareness about environmental issues and solutions through a wide variety of communication channels. Through Green Partners environmental education grants, the county funds organizations to actively educate, engage, and motivate residents to become environmental stewards and make positive behavior changes.

The county also supports a broad network of partners to empower residents to reduce waste and increase recycling by providing training and networking opportunities, resources and supplies, tours and field trip transportation, and project support.

## 2022 results

- Awarded 26 Green Partners environmental education grants - 13 for youth environmental education and 13 focused on motivating adult audiences to take environmental actions. These projects are expected to engage more than 6,000 residents in becoming environmental stewards and taking action to protect the environment and reach more than 120,000 residents with environmental messages. Of the 26 projects, 22 are engaging audiences that face disparities and 7 are incorporating solid waste topics.
- Continued to support the 22 organizations that were awarded grants in 2021 and wrapped up in August 2022. These grantees engaged more than 3,400 youth in environmental education and green jobs and 3,100 primarily adult participants in taking environmental actions. Environmental messages were shared with more than 75,000 residents through grantee networks.

## Green Partners grantee feature: The Minneapolis Area Synod “EcoFaith Network” cuts plastic waste

Many different types of faith groups have received Green Partners environmental education grants to engage their audiences in taking action to protect the environment.

Through a focused “Cut the Plastics” initiative, the Minneapolis Area Synod engaged 12 Lutheran congregations in reducing the use of single-use plastics. The initiative took place during the church season of Lent, a time of reflection with a focus on behavior change. For six weeks, participants explored plastic waste issues and practiced plastic reduction strategies.

Many participants started the series with an uneasy feeling – eliminating plastic from their life felt daunting and unachievable. By the end, every participant reported that they had successfully eliminated their chosen single-use plastic item, and 88% were confident in their ability to find the next regularly consumed plastic item that they could eliminate from their life.





- Supported the environmental education network, which is open to anyone working to engage their community in learning about and taking action to protect the environment, by hosting four virtual network meetings with more than 137 total attendees and growing the Hennepin County environmental education network Facebook group to 192 members.
- Reopened educational tours of the Brooklyn Park Transfer Station and Hennepin Energy Recovery Center, and gave 11 tours to 99 participants.
- Supported green jobs pathways programs to increase access to environmental careers to diverse job seekers. Coordinated the first cohort of the Green Pathways Internship Program, which provided job shadowing opportunities for three recent high school grads and one college coordinator. Started an operator apprenticeship program at the Hennepin Energy Recovery Center that recruited and hired three diverse candidates to participate in a nine-month training program.
- Shared messages through Hennepin Environment's Facebook, Instagram, and Twitter that have a total of 13,000 followers. The 739 posts shared throughout the year received 5,600 reactions and generated 2,700 link clicks.
- Sent 152 digital newsletter editions to over 43,000 total subscribers covering topics such as recycling, waste prevention, zero-waste initiatives, hazardous waste disposal, grant programs, and more.
- Promoted the Green Disposal Guide, an online guide to help residents find information on the best way to recycle, reuse, or dispose of household items. The guide was visited by 222,312 unique visitors.

## Green Pathways interns explore a variety of environmental careers

Hennepin County Environment and Energy piloted a new internships training program called Green Pathways in summer 2022. A cohort comprised of a college-aged Urban Scholar and three recent high school graduates recruited through BrookLynk spent their summer learning about various environmental careers.

Among many experiences, the interns fulfilled orders for recycling and environmental education resources, toured recycling and waste facilities, surveyed haulers at waste management facilities, conducted outreach at events about reducing food waste and during National Night Out, and learned about communications and motivating behavior change.

The goals of the program were to create a supportive cohort of youth of color, learn skills to add to professional resumes, and inspire youth to consider environmental careers.





- Promoted waste prevention, recycling, proper disposal, and health and safety practices by providing tips and resources on the following topics:
  - Preventing pollution by reducing our reliance on plastics
  - Spring cleaning at home and in your community
  - Repair strategies for clothing, electronics, and household goods
  - Managing yard waste amid services changes and disruptions
  - Environmental education resources for back-to-school
  - Reducing waste when you move
  - Sustainable holidays
  - Renting and buying used winter gear
- Fulfilled over 480 orders for more than 30,000 items for recycling and environmental education resources for residents, businesses, schools, and multifamily properties.



**Hagaha Dib-u-warshadaynta Walxaha nool**  
Organics recycling guide

**Dhammaan cuntada**

- Miraha iyo khudurada
- Hilba, kullanka iyo lafaha
- Alaabta caanaha
- Ukun iyo qolol ukun
- Baasto, dig iyo baris
- Roozi iyo badarka
- Loviska iyo qololka

**Waraaqda cuntada ee carada u eg**

- Baalkadaha
- Pizza da lagu geyro
- Intaashooyinka iyo kawaadada waanagaha
- Karboonnada ukunta

**Alaabta la burburin karo ee shahaadaysan**

- Kooxalka baqaadiga ah ee la burburin karo: sioxanada, baqaadiga, maacunta iyo weelaha

**Alaabooyinka kale ee guriga lagu burburin karo**

- Meesha kafeega iyo Riikarada
- Timo iyo cadyo janta
- Kubadaha suufka ah iyo suufyo leh caano waqad ah
- Dhara qayga iyo libaxa
- Alaabooyinka alwaayada ah sida birta, ulaha pappete iyo cadaya

Ka saadi energy "la burburin karti" ama loogada BPI ee alaabta la xaqiijiyay.

**Lama aqbalo:** Qashinka daynka "baahalo" xafayadda • alaabta caadada • qashinka wadaha iyo xawaarada, qashin ama gogolka • radifirka ama tiriska ilmiha • dufan ama salid • "Deynta" • marada salabaha iyo waarta qalabka • alaabta dila iyo warshadaynta karo (barso, dhalko, bi, waqad, caagi) • baalkadaha cuntada la qaboojiyay • baaha lagu firi baabuurada • kargo waayadaha lagu firi carabiyaha dhalaha halabax • alaabada lagu qalabsoobiyay "waxaa lagu burburin karaa baalkooyin"

**Guía de Reciclaje**  
Recycling guide

**Papel**

- Papeles de correo, oficina y escolares
- Revistas y catálogos
- Perifoneos y suplementos
- Directorios telefónicos

**Cajas:**

- Cartón
- Cajas de cereales y galletas
- Cajas de zapatos, cajas de regalos y cajas de electrónica
- Cajas de pasta de dientes, de medicamentos y otros artículos de aseo personal

**Envases de Cartón**

- Cajas de leche
- Cajas de jugos
- Envases de sopa, caldo y vino

**Vidrio**

- Botellas y frascos de alimentos y bebidas

**Plástico**

**Botellas y jarras:**

- Agua, gaseosas y botellas de jugo
- Jaras de leche y jugo
- Botellas de salsa de tomate y aderezo para ensaladas
- Botellas de líquido para lavar platos y jaras de detergente
- Botellas de champiñón y lociones

**Vasos y recipientes:**

- Vasos de yogurt, de pudines y frutas
- Tazas y platos desechables transparentes
- Envases de margarina, queso cottage y otros recipientes
- Recipientes de frutas y verduras, charcutería y comida para llevar

**Metal**

- Food and beverage cans

Saber qué no reciclar es igualmente importante. Para mayor información, ver el reverso de este folleto.



# Serving residents where they are

## At home

Recycling, organics, and trash service depends on where you live. Cities provide recycling service to most houses and smaller multifamily buildings (those with two to eight units). This service is commonly referred to as single-family curbside recycling. Larger, multi-unit residential buildings have waste services provided by the property owner or manager.

## City recycling programs

Cities play an important role in the solid waste management system, collecting nearly 110,000 tons of recyclable materials from 374,179 households in 2022.

Hennepin County provides funding to support city recycling programs and assists with educational efforts and contracting. The county also participates on regional and statewide teams to improve consistency in recycling programs and education.



### 2022 results

- Distributed \$3.7 million in SCORE funding to cities to support curbside recycling and organics programs, organics drop-off sites, and multifamily recycling. To receive a grant, cities were required to meet the terms of the county's residential recycling funding policy.
- Allocated \$262,000 in SCORE funding to seven cities for multifamily waste reduction and recycling programs and outreach.
- Assisted cities with promotional efforts and sending recycling guides to residents to increase consistent use of terminology and recycling messages.
- Continued to participate in the Recycling Education Committee, a statewide group formed by the MPCA to support the development of better recycling education and outreach. Representatives from the recycling industry, local government, and other organizations met regularly to build consensus on what is universally accepted, coordinate consistent messaging to the public, and improve communication.
- Provided technical assistance to cities on recycling RFPs and contracts. City recycling contracts allow cities to communicate consistent educational messages, provide a variety of resources, and deliver the best overall price for service.

# How are we doing with recycling? Minneapolis waste sort provides insights

The City of Minneapolis sorted garbage, recycling, and organics from 700 randomly selected single-family homes in 2022. This provided a clear picture of what's in the garbage, recycling, and organics and helped identify the biggest opportunities for improvement.



## How can we recycle more?

The waste sort also looked at capture rates, which measure how much of a material was successfully diverted from the trash. For example, what percent of all aluminum cans were recycled.

## Biggest opportunities for improvement

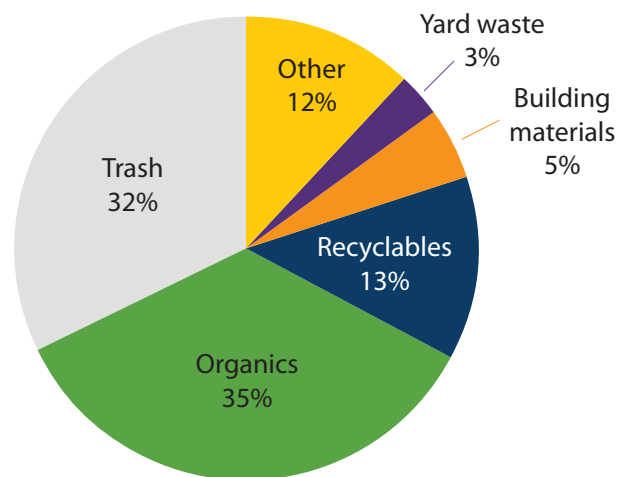
Capture rates of different materials help identify the biggest opportunities for improvements. This study identified the following materials as the biggest opportunities:

1. Wasted food: Wasted food makes up the majority of the trash for both households that have organics (19.8% of the trash) and those that don't (29% of the trash).
2. Aluminum cans: Aluminum is the highest valued recyclable material, but on average, only 51.5% of aluminum cans are recycled.
3. Paper: Paper, including cardboard, mixed paper, and newspaper, makes up about 50% of all materials put in recycling carts. But citywide, only half of the recyclable paper is put in a recycling cart.

## Key findings

- Over 10,000 tons of recyclable material that has a value of \$1.2 million is being thrown away each year.
- Over 19,000 tons of edible food that has a value of over \$581,000 is being thrown away each year.
- Residents who have a green organics cart are more active and more accurate recyclers.
- A lot of plastic that cannot be recycled or composted is being put in recycling and organics carts.

## What's in the garbage?





# Multifamily recycling

Hennepin County revised its recycling ordinance in 2018 to include new recycling requirements for multifamily properties. Property owners and associations are required to provide adequate recycling service and ensure residents have annual recycling information and easy access to recycle.

The county offers resources to improve recycling at multifamily properties, including grants, educational materials, container labels, and staff assistance.

## 2022 results

- Allocated a portion of SCORE funds to support multifamily recycling and waste reduction efforts. Distributed multifamily funding to seven cities that opted in to support efforts such as:
  - Creating educational materials
  - Collecting data on multifamily properties
  - Conducting outreach through mailers, newsletters, and social media
  - Conducting site visits and providing technical assistance to properties
  - Opening organics drop-off sites specifically for apartment residents
- Provided technical support to improve waste reduction, recycling, and organics recycling at more than 27,000 units at 284 properties. Served 226 new properties and provided follow up assistance to 58 properties.
- Distributed free recycling and organics recycling bins and compostable bags to 26 multifamily properties through the bin and compostable bag grant.
- Awarded four multifamily recycling grants to assist with organics hauling start-up costs and reuse opportunities.
- Restarted in-person programming at multifamily properties, including offering presentations and educational tabling on food waste prevention and organics recycling.
- Began a two-year partnership with Minnesota Waste Wise to provide additional outreach and technical assistance to multifamily properties.
- Created the Apartment Recycling Champions in response to community input from the Zero Waste Plan. The effort, which will launch in 2023, will involve paying residents at multifamily buildings to help educate their neighbors about recycling and composting and motivate everyone to reduce waste.





# City organics recycling programs

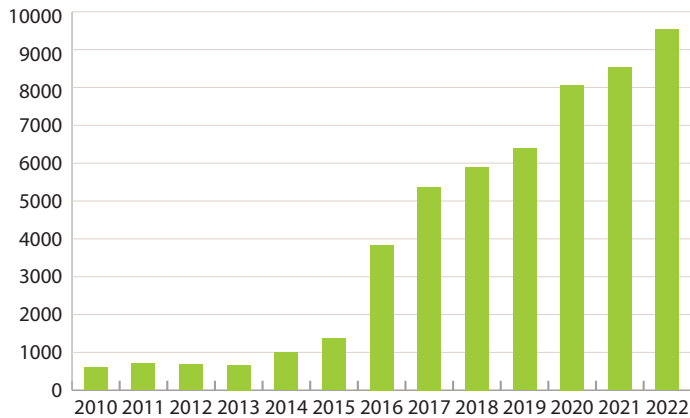
The county and cities are focused on offering more organics recycling opportunities and increasing participation in organics recycling programs. Cities offer different ways to participate in organics recycling, including through citywide programs, through specific haulers, and with drop-offs.

Organics recycling availability, participation, and amount collected have been gradually increasing over the last decade. All cities in the county were required to make organics recycling service available to households with curbside recycling service by 2022. Currently, more than 94,900 households – 25% of households in the county – participate in city organics recycling programs. Additionally, about 500 households are signed up to use an organics recycling drop-off site, and several more drop-off sites are available but don't collect sign up information.

## 2022 results

- Distributed \$3.7 million in SCORE funds to support curbside recycling and organics programs, organics drop-off sites, and multifamily recycling.
- Awarded the City of Orono a grant (not part of SCORE funding) totaling \$9,585 over two years to establish an organics recycling drop-off site.
- Supported the development of new organics recycling programs. Bloomington, Champlin, Excelsior, Hopkins, and Golden Valley launched citywide curbside organics recycling programs. Dayton, Deephaven, Greenfield, Independence, Minnetonka Beach, Minnetrista, Mound, Orono, and Shorewood opened new organics recycling drop-off sites.
- Assisted cities with promotional efforts and sending recycling and organics recycling guides to residents. Cities used county terminology and images and provided messages through a variety of channels including direct mail, newsletters, websites, social media, and events.

**Residential organics**  
tons collected



45

organics recycling drop-off sites available throughout the county

500

people signed up for organics recycling drop offs

94,900

households participating in city organics recycling programs

25%

of households in the county participate in an organics recycling program

# Backyard composting

The Environment and Energy department partners with Hennepin County Productive Day Program to build compost bins from cedar and wire mesh. To increase backyard composting, the county sells the compost bins at a discounted rate at the drop-off facilities. The county also offers composting workshops to help residents learn how to compost.

## 2022 results

- Sold 106 compost bins at the drop-off facilities in Bloomington and Brooklyn Park.
- Held four online and one in-person backyard composting workshop, providing education to 60 residents.



# At work

Hennepin County offers technical assistance, grants, and educational materials to help businesses start or improve recycling or prevent waste.

Hennepin County has provided grants since 2013 as well as technical assistance and educational materials to businesses and nonprofit organizations. Businesses that have received grants have increased the amount of materials they divert from the trash.

## 2022 results

- Distributed free recycling bins to 20 businesses and organizations to start or improve recycling or organics recycling. Bin and compostable bag grants are intended for smaller businesses (less than \$1 million annual revenue) and nonprofit organizations.
- Awarded \$194,000 in business waste prevention grants to 11 businesses. Six of these grants were to hunger relief organizations to reduce food waste and increase the availability of food for those in need. Waste prevention grants are available to all businesses and nonprofit organizations.
- Offered in-person assistance and training, which has increasingly become an important resource with the continued reopening and stabilization of businesses coming out of the COVID-19 pandemic.



## At school

Nearly 80% of school waste is recyclable or compostable. To help schools reduce waste and increase recycling and organics recycling, the county provides grants and technical assistance, distributes educational resources and signage, offers classroom presentations, and holds bi-monthly school recycling meetings.

### 2022 results

- Evaluated the school recycling grant program using the Racial Equity Impact Tool. Gathered feedback from school staff, volunteers, and students through surveys, phone interviews and an online feedback session, and analyzed the results and reach of past grant projects. The following major changes were made to the school recycling grants as a result of the evaluation:
  - The first round of funding will be reserved for schools where 50% or more students qualify for free or reduced lunch.
  - Funding for staff time of up to 75% of the total grant amount will be allowable. Many school representatives listed staff capacity as one of the top barriers to taking on a grant project at their school.
- Worked with Twin Cities Road Crew to develop an educational performance on recycling and waste reduction that will be presented to elementary students in 2023.
- Gave 16 presentations on waste reduction, recycling, and organics recycling to 580 students and 175 staff.
- Delivered 98 cubic yards of free compost in partnership with the Mulch Store to 24 schools to close the loop on organics recycling.

## At Hennepin County workplaces

Hennepin County knows that we must lead by example when it comes to waste management. Several county departments oversee different aspects of the county's internal waste management program.

- Environment and Energy coordinates in-house recycling programs. This includes working with Facility Services to ensure a robust recycling program in county offices and facilities, educating staff, and managing an in-house media recycling program for all county departments. The county recycled 7.4 tons of media in 2022, a 50% increase over 2021.
- Central Services handles the recycling of toner cartridges from county departments and maintains office supply listservs to facilitate the reuse of office supplies and furniture within county departments.
- Information Technology properly handles the recycling of non-usable and obsolete electronic equipment.

With employees returning to offices on a more regular basis after the COVID-19 pandemic, Environment and Energy staff are increasingly responding to questions and concerns from staff on how to best manage waste and materials generated at county offices and facilities.

## At events and on the go

The county partners with the cities of Brooklyn Park and Hopkins to make portable recycling and organics containers available for events throughout the county. In 2022 the containers were used at 29 events with approximately 237,020 attendees.

# Promoting drop-offs for hazardous waste and additional recyclables

## Drop-off facilities and events

Many items that aren't accepted in residential recycling programs can still be recycled through drop-offs. There are also items that contain hazardous materials that must be kept out of the trash because they can harm our health or the environment.

To ensure proper disposal of hazardous items, the county operates permanent drop-off facilities in Bloomington and Brooklyn Park for residents to bring appliances, electronics, excess recycling, and household hazardous wastes.

In addition to disposal services for residents, operations continued at the Brooklyn Park Transfer Station and the Hennepin Energy Recovery Center. These facilities are vital in keeping the solid waste system operational.

### 2022 results

- Served more than 141,000 residents and collected over 7.4 million pounds of household hazardous waste, problem materials, and recycling at county drop-off facilities and collection events.
- Held four household hazardous waste collection events. The four events, each held over two days, had more than 3,100 residents dropping off over 150,000 pounds of waste, or 50 pounds per participant.
- Collected almost 1.23 million pounds of cardboard.
- Fielded more than 18,400 calls from residents. Call center staff spent more than 500 hours responding to resident questions.

## What happens to hazardous waste brought to drop-off facilities?

Minnesota is a national leader when it comes to providing disposal and recycling services for residents to get rid of hazardous waste such as paint, gasoline, batteries, and more. But what happens to that waste after it's dropped off at a hazardous waste collection facility or event? The Star Tribune talked to Hennepin County's household hazardous waste program manager to find answers for a Curious Minnesota story in August 2022.

Some highlights:

- Latex paint is the most common material dropped off, and it's recycled locally into new paint.
- Gasoline and solvents are turned into industrial fuel.
- Motor oil is filtered in Mankato and used at asphalt plants.
- Electronics are disassembled, and the various parts are sold to be recycled into new products.
- Rechargeable batteries are taken apart to recover the valuable metals.
- Mercury is an important material to bring in for proper disposal because of the threats it poses to human health and the environment.





## Mattress recycling

Hennepin County and Second Chance Recycling have partnered on recycling and environmental services since the early 1980s. Second Chance is a Minneapolis-based nonprofit run by EMERGE that provides transitional employment opportunities for people with barriers to employment.

Mattresses are collected for recycling at the Hennepin County drop-off facility in Brooklyn Park, and pickup service is available through Second Chance Recycling in Minneapolis and in the eastern part of the county.

### 2022 results

- Collected 1,302 mattresses and box springs, including 541 from apartments and condos and 761 from single-family homes.
- Collected 5,201 mattresses and box springs from residents at the Brooklyn Park Transfer Station.

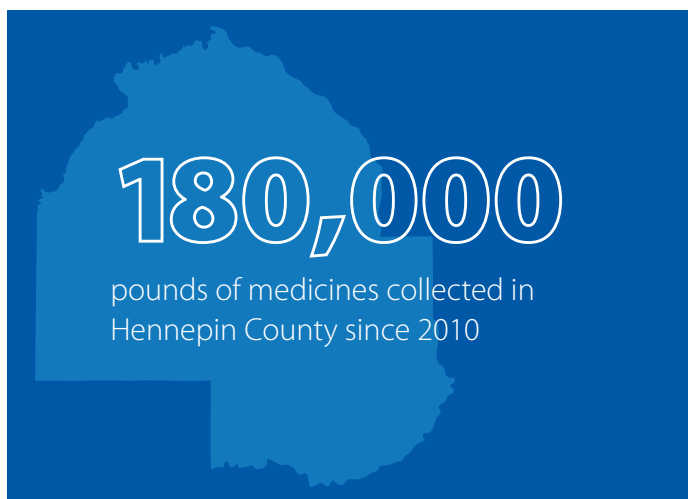
## Medicine

To facilitate the safe disposal of unwanted medicine, Hennepin County operates and promotes medicine drop boxes available throughout the county.



### 2022 results

- Promoted medicine disposal options at 65 medicine drop boxes – 23 of the boxes are operated in partnership with the county and 42 are operated by independent pharmacies.
- Properly disposed of nearly 14,500 pounds of medicine at drop boxes operated in partnership with the county.



## Paint



Paint is one of the most common materials brought to the Hennepin County drop-off facilities or collection events for recycling.

### 2022 results

- Collected over 1.3 million pounds of paint at county drop-off facilities and events.
- Promoted availability of paint disposal at 37 independent sites that partner with PaintCare, including hardware stores and paint stores. These independent sites collected 528,310 pounds of paint.
- Received \$542,000 from PaintCare for costs related to paint disposal.

# Recovering resources from the trash

## Waste-to-energy



Despite the focus on diverting materials from the trash through waste reduction, reuse, recycling, and organics recycling, residents and businesses put 734,282 tons of stuff in the trash in 2022. This is nearly 1,165 pounds per person. There are two options for managing waste that remains after recycling: burning it to recover resources or burying it in a landfill.

Hennepin County operates the Hennepin Energy Recovery Center (HERC), a waste-to-energy facility in downtown Minneapolis. According to the state's waste management hierarchy, processing waste to generate energy is preferable to landfilling, and climate experts recognize waste-to-energy's potential as a transitional solution because it:

- Reduces methane emissions by keeping waste out of landfills.
- Recovers scrap metal – more than twice the amount of metal collected in city curbside programs is recovered and recycled from the waste stream at HERC every year. Recycling steel requires 60% less energy than producing steel from iron ore.
- Creates baseload electricity and steam that might otherwise be sourced from coal or gas-fired power plants. HERC produces enough electricity to power 25,000 homes and provides steam to the downtown Minneapolis district energy system and Target Field.
- Processes waste close to where it is produced, minimizing the transportation of waste and associated truck emissions.

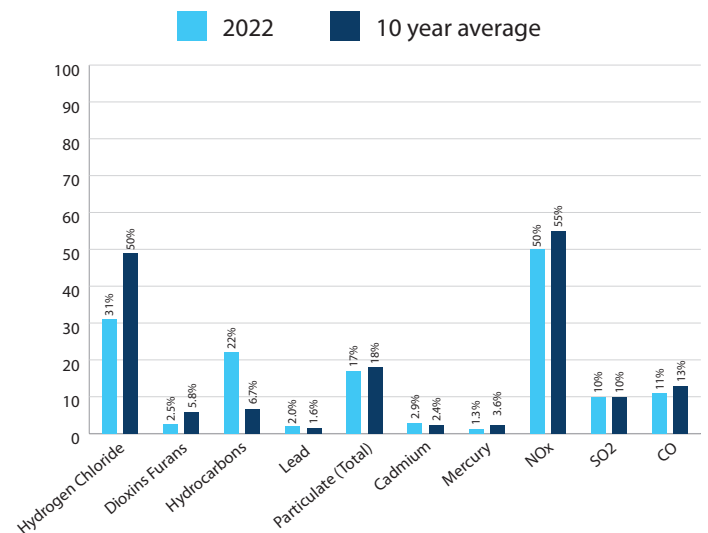
The county expects waste-to-energy to decline in importance as waste prevention, reuse, recycling and composting become more widely adopted.

However, residents and businesses still create a lot of trash, and we need to manage it responsibly. HERC makes environmental sense until we have successfully diverted most organic materials, including food waste, paper, and wood, from the trash. Until then, HERC operates with stringent safety standards and meets all air permit requirements.

### 2022 results

- Recovered 14,111 tons of metal for recycling.
- Met state law to process trash before landfilling with 350,343 tons of trash delivered to HERC.
- Cleaned and treated air emissions at HERC to remain well below MPCA permitted levels.

### HERC emissions as a percent of MPCA permit limit



# Landfills



According to Minnesota’s waste management hierarchy, sending waste to landfills is the least preferred way to manage trash. However, with fewer waste-to-energy facilities available and high financial and environmental costs associated with hauling trash to a non-metro facility, the Minnesota Pollution Control Agency (MPCA) has decided that additional metro-area landfill capacity is prudent and necessary. If landfills are not allowed to expand, Twin Cities residents could end up with no facility to send their waste.

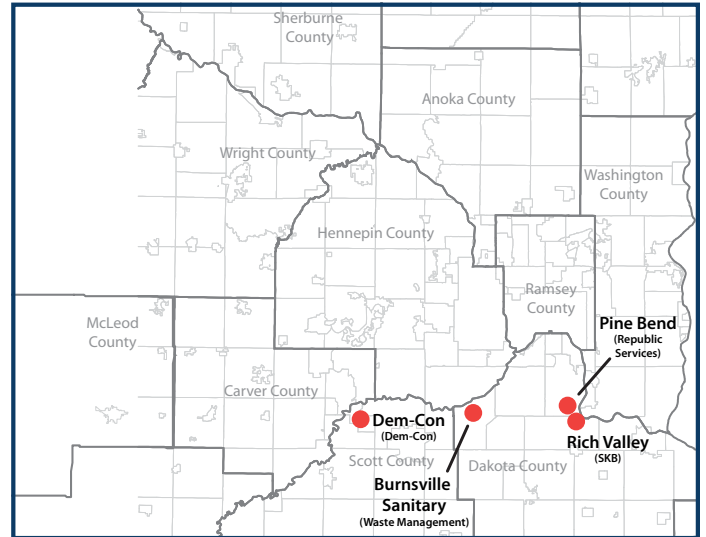
To ensure the proper management of waste, the MPCA determined that over the next seven years, approximately 6 million tons of trash from the metro area will need to be disposed of in a landfill.

The MPCA determined how metro area waste would be allocated to the four landfills that have requested additional capacity:

- Burnsville Sanitary Landfill: 1,692,893 tons
- Dem-Con Landfill: 627,244 tons
- Pine Bend Sanitary Landfill: 2,398,746 tons
- Rich Valley Landfill: 893,889 tons

These facilities may need to complete permitting and environmental review processes. If, for some reason, a facility does not receive a permit to accept municipal solid waste, that tonnage will be reallocated to other facilities that are capable of accepting the waste.

## Landfills seeking expansion



Source: Minnesota Pollution Control Agency (MPCA)

In July 2022, MPCA released a draft solid waste permit for Waste Management’s Burnsville Sanitary Landfill. The permit would allow for an expansion of the landfill’s disposal capacity and regulate waste disposal activities for the next 10 years. More than 80 percent of the solid waste entering the Burnsville Sanitary Landfill comes from Hennepin County and Dakota County. Solid waste forecasters expect the need for landfill disposal to continue to increase, and the need for this expansion project was identified during the MPCA’s Certificate of Need process.

In order to reduce the need for future landfill capacity, we need to work now to implement policies, increase resources, and make different decisions at our businesses, public institutions, and homes related to the waste we create.

