



Solid Waste Management Plan

2024 – 2042



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Sponsor: Public Health

Meeting Date: 10/8/2024

Title: Ramsey County Solid Waste Management Plan 2024-2042

File Number: 2024-454

Background and Rationale:

Ramsey County is required by state statute to revise the Ramsey County Solid Waste Management Plan every six years. The county's plan has a 20-year horizon and guides county activities related to waste management.

Solid Waste Management Plan revision is guided by the Minnesota Pollution Control Agency's Metropolitan Solid Waste Management Policy Plan, which includes objectives for abating the need for land disposal of mixed municipal solid waste. The county's plan describes how the county will implement the Policy Plan. The policies and strategies in the county's plan should not be viewed only through the lens of MPCA goals but are designed to align with Ramsey County's goals of well-being, prosperity, opportunity, and accountability.

The Ramsey County Solid Waste Management Plan reflects the strong partnership with Washington County and Ramsey/Washington Recycling & Energy in managing waste. The Ramsey County plan and Washington County plan are written in close alignment to facilitate this collaboration.

Plan objectives relate to waste reduction, recycling, organics recovery, resource recovery and landfilling. Areas of particular focus in this plan include:

- Reuse
- Measurement
- Deconstruction (taking buildings apart instead of demolishing them so that materials can be reused)
- Food scraps collection
- Exploration of new technologies for recovering value from waste

The plan is organized into 15 chapters with seven appendices. The topical chapters include policies and strategies. Policies are statements of principle: the "why" of the plan. Strategies are statements of action: the "how" of the plan. The appendices include supporting documents such as a description of the existing solid waste management system, relevant ordinances, environmental justice review, acronyms, and definitions.

Saint Paul-Ramsey County Public Health presented on the revised plan to the Ramsey County Board at a board workshop on July 9, 2024. The Ramsey County Board held a policy discussion of the revised plan on September 4, 2024. Upon board approval, The Solid Waste Management Plan will be submitted to the Commissioner of the Minnesota Pollution Control Agency for review and approval.

Recommendation:

The Ramsey County Board of Commissioners resolved to:

1. Adopt the Ramsey County Solid Waste Management Plan 2024-2042.
2. Authorize Saint Paul - Ramsey County Public Health to submit the Solid Waste Management Plan to the Commissioner of the Minnesota Pollution Control Agency for review and approval.

A motion to approve was made by Commissioner Xiong, seconded by Commissioner Ortega.

Motion passed.

Aye: - 6: Frethem, McGuire, Moran, Ortega, Reinhardt, and Xiong

By: 

Mee Cheng, Chief Clerk - County Board



Background

The purpose of the 2022-2042 Ramsey County Solid Waste Management Plan (Plan) is to guide county waste management activities. This plan revises the 2018-2036 Solid Waste Management Plan and includes strategies and policies to address waste throughout the county. The Plan was developed with guidance from the Metropolitan Solid Waste Management Policy Plan 2022-2042 (Policy Plan) adopted by the Minnesota Pollution Control Agency (MPCA) in January 2024.

Metropolitan Solid Waste Management Policy Plan 2022-2042

The Policy Plan provides guidance to all entities responsible for solid waste management in the Twin Cities Metropolitan Area. It was developed in accordance with the requirements of Minn. Stat. §473.149, subd. 2d. It describes broad regional system objectives, a landfill diversion goal and strategies for solid waste programs and services to meet the region's needs for the next 20 years.

The Policy Plan includes strategies developed by the state to advance waste reduction and increase recycling and organics recovery. These strategies are designated in the Policy Plan as either required or optional for counties to implement, or led by the state.

New in this version of the Policy Plan, optional strategies are assigned a point value between one and nine, and each county must include a minimum of 75 points-worth of strategies in their Plan. *Appendix G* lists the strategies and point values in this plan.

Key themes and the full list of strategies can be found in the final Policy Plan document on the [MPCA's website](#).

Policy Plan Objectives

Through the Policy Plan, the state sets specific strategies that the county must work towards to reduce the amount of waste put into landfills through 2042. The objectives are provided in five-year increments beginning in 2021. They include goals for waste reduction, recycling, organics recovery, waste to energy and landfilling. Strategies in this plan outline how the county plans to advance towards these set objectives.

The chart below shows the state's objectives, as the percentage of solid waste managed using these methods in the Twin Cities metropolitan area. This includes the percentages of how waste is managed according to the most recent annual county reports to the MPCA (as of the publication of the draft Policy Plan).

Management Method	Current System 2021	Policy Plan Objectives (Goals)			
		2025	2030	2036	2042
Waste Reduction	0%	2.9%	6.4%	10.7%	15%
Recycling	28.6%	36.9%	47.4%	47.4%	47.4%
Organics	16.6%	21.5%	27.6%	27.6%	27.6%
Waste-to-Energy	21.4%	24%	20%	20%	20%
Landfill	33.4%	17.6%	5%	5%	5%

Solid Waste Management Plan Preparation

Required Plan Iteration

The Ramsey County Solid Waste Management Plan (2024-2042) replaces the 2018-2036 Plan. This new plan guides waste management activities through 2030, while striving to reduce the amount of waste disposed of in landfills through 2042.

Minnesota Statute §473.803 requires counties in the Twin Cities metropolitan area to prepare plans following the release of the MPCA's Policy Plan every six years. Upon the publication of the Policy Plan, each of the seven metropolitan counties has nine months to submit their plan to the MPCA for approval. This is the county's seventh solid waste management plan since 1980.

The Plan is an important tool in protecting public health and the environment. It establishes policies and strategies to reduce waste that impact health and the environment.

Solid Waste Management Plan

Background and History

The waste management system in Minnesota has evolved over time. Since the early 1980s, Ramsey County solid waste management plans have guided changes in solid waste management from being a system dependent on land disposal to one that integrates a variety of management strategies. The Plan sets clear policy direction, protects public and environmental health and stabilizes the economics of the waste management system.

A historical example of this stability is found in the development of curbside recycling. In the early 1990s, curbside recycling was in its infancy, and there was skepticism about its value and longevity. Ramsey County's Plan established clear policy direction that:

- Municipalities be responsible for the collection of recyclables.
- Recycling collection service be institutionalized.
- Long-term funding sources for recycling be developed.

This direction established a clear role for household recycling and was the basis for the service being a permanent fixture in the system.

Another important role of the Plan has been to address various risks to public health, safety and the environment. For example, the county's Plans have established policies, regulations and services to reduce the hazardous character of waste. This reduces a variety of risks, especially occupational health risks to waste industry workers, risks to waste industry equipment and health risks related to waste disposal and environmental emissions.

The Plan has also addressed economic risks. Public policies — such as requiring delivery of waste to the Ramsey/Washington Recycling & Energy Center (R&E Center) and ensuring stable sources of recycling funding — have facilitated a system that is financially stable. The system has reduced environmental liability risks for businesses and government entities in the county.

Partnership with Washington County and Ramsey/Washington Recycling & Energy (R&E)

Ramsey and Washington counties have been working together since the early 1980s on waste reduction, reuse, recycling and solid waste management. By working together, the counties achieve efficiency and consistency across the region. The two counties created R&E to help facilitate and continue this collaborative work.

Development of this plan was supported through partnership with Washington County and R&E. Through this partnership, a joint alignment workgroup was formed. The workgroup consisted of Ramsey County, Washington County and R&E staff who met regularly throughout the planning process and focused on plan development, alignment of strategies and policies and drafting of the plans.

The workgroup conducted a joint workshop in February 2024 to engage with staff responsible for implementing strategies in the existing plans. Staff input was used to inform the drafting strategies and policies listed in the Plan. More information on this partnership can be found in *Chapter 3*.

Interested Parties Engagement

Community engagement was integral in developing the county's Solid Waste Management Plan. Engagement ensures that the needs and perspectives of the community are reflected in the Plan, which is key for the development of strategies that best serve the Ramsey County community.

The Plan was prepared by staff from Saint Paul — Ramsey County Public Health, Environmental Health Division, alongside staff from Washington County Department of Public Health and Environment and staff from R&E, with direct input through a public engagement process.

Engagement included:

- **Waste Reduction Advisory Committee.** This group of 29 people included members of the community, municipality representatives and waste industry representatives. The group also included a representative from Saint Paul—Ramsey County Public Health's Community Health Services Advisory Committee. A representative from the MPCA participated as an ex-officio member. The group met four times to provide Plan input. Members were compensated for their time and expertise.
- **Pop-up community engagement.** Staff attended 15 community events to request feedback on plan priorities. Community members were compensated for their time and expertise.
- **Resident survey.** The county conducted a statistically significant survey of residents that included questions to guide Plan preparation.
- **Municipality engagement.** Ramsey County municipal representatives were surveyed and attended an in-person workshop to discuss the Plan.
- **Waste industry engagement.** With the help of a consultant, the county hosted conversations with representatives from the waste industry serving the region for feedback on Plan preparation.

Key themes that emerged from conversations with partners and community include the following:

Residents shared their desires for the county to prioritize its response to climate change. They want the county to improve food scraps collection and to support opportunities for waste reduction and reuse. Residents indicated that bulky items (e.g., mattresses and furniture), household hazardous waste (HHW) and electronics are most challenging for them to dispose of. They suggested more support for waste reduction in multi-unit residential properties and expanded public education on best practices for managing waste.

Representatives from municipalities said that they would like county assistance with addressing wood waste, which has increased dramatically due to emerald ash borer. They preferred that decisions about recycling pickup frequency to be made at the municipality level, as solutions vary by community, and decisions have significant budget ramifications for municipalities. Municipalities indicated interest in working with the county to support deconstruction activities.

Waste haulers are supportive of the Food Scraps Pickup Program to bring food scraps collection service to residents in all housing types and without the need for additional carts/trucks/drivers. Haulers said they were concerned about the possibility of weekly recycling collection due to labor shortages. Haulers prefer organized trash/recycling collection to be a municipality decision, rather than a county decision.

Members of the Waste Reduction Advisory Committee recommended expanded public education efforts. They had a strong interest in policy solutions such as bans/restrictions/fees on single-use items like grocery bags and takeout containers/utensils. They also supported legislation advancing extended producer responsibility and right-to-repair initiatives. In addition to policy-level solutions, they also supported building community capacity to address waste issues at a hyper-local level. They advocated for curbside/community collection of challenging materials (e.g., bulky items and HHW) and the development of improved recycling markets.

Ramsey County is grateful for the opportunity to share decision making with community and thanks those who participated in this engagement process.

Responding to Change

Since the previous Solid Waste Management Plan, published in 2018, changes in policy, economics and social dynamics have shifted the context for solid waste planning. For example, in recent years, recycling rates have not increased at the pace needed to meet waste objectives. This means Ramsey County needs new strategies to reach the state's 75% recycling goal by 2030. In addition, efforts to prevent waste and increase recycling require the commitment of residents and businesses. However, relying on voluntary behavior changes is insufficient when the marketplace does not offer consumers enough no- or low-waste choices or products that are easy to recycle.

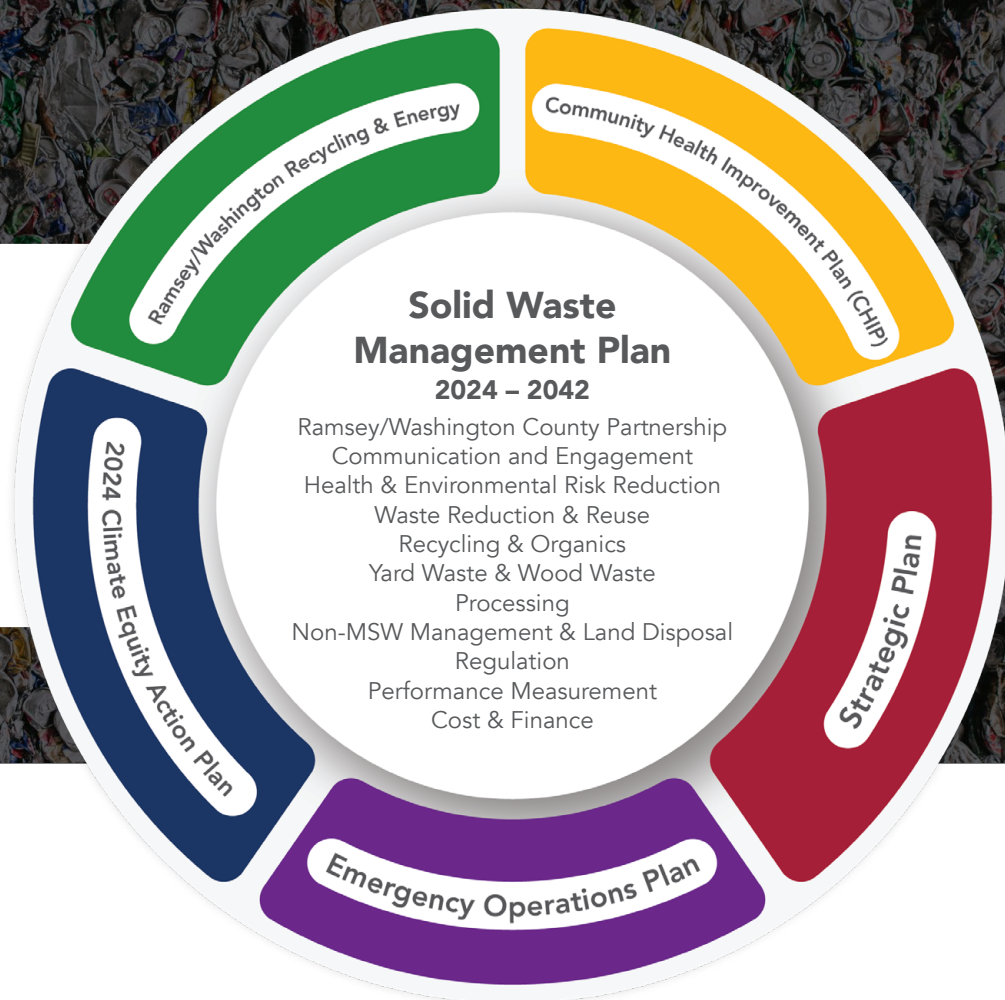
Ramsey County sees the need for more policy strategies to drive reuse and increase recycling rates, such as extended producer responsibility, which brings producer resources and problem-solving to the table. Additionally, shifts in international recycling markets in the past several years, such as China's restrictions on importing recyclables, show the importance of strong local recycling infrastructure and markets.

With the purchase of the R&E Center by Ramsey and Washington counties in late 2015 and the formation of R&E, the two counties can better leverage their resources for more efficient and effective solid waste solutions for the East Metro. For example, the counties are now collaborating to address bulky waste like mattresses and to move the management of organics higher up the waste hierarchy.

The built environment has significant impacts on the environment and public health. Nearly as much waste is created from building construction and demolition as goes in the trash at our homes and businesses every day. Ramsey County is working to find more ways of salvaging materials when buildings are remodeled or removed through deconstruction, reuse and recycling. These practices save resources and landfill space, create new economic activity and reduce climate impacts.

Ramsey County is committed to improving how it measures the results and impact of programs and services, going beyond measuring tons disposed or recycled. The county values authentic engagement with communities and prioritizes work through a public health equity lens across a variety of program areas, including solid waste management. In addition, the county continues to assess how the COVID-19 pandemic permanently impacted waste generation and disposal patterns, and how this might change programming and strategy.

Key connections between Ramsey County Solid Waste Management Plan and other county plans and efforts



Ramsey/Washington Recycling & Energy

- Recycling & Energy Center.
- Waste reduction programming.
- Partnership on Waste and Energy.

Climate Equity Action Plan

- Climate mitigation and adaptation strategies.
- Clean transportation.
- Thriving communities.
- Healthy lives.
- Clean energy and efficient buildings.
- Climate-smart natural land.
- Clean economy.

Emergency Operations Plan

- All-Hazards Response and Recovery Plan.
- Solid and hazardous materials management.
- Disaster debris management.

Strategic Plan

- Residents first: effective, efficient and accessible operations.
- Advancing racial and health equity and shared community power.
- Responding to climate change and increasing community resilience.

Community Health Improvement Plan (CHIP)

- Informed by Community Health Assessment (CHA).
- Considers social determinants of health.
- Identifies community priorities for action.

Plan Implementation

Ramsey County's Solid Waste Management Plan provides a roadmap for addressing waste in the county. Following the plan's approval, the county will develop detailed tactics for addressing the strategies outlined in this document. Determining timelines, responsible parties and performance metrics are all crucial elements of plan implementation.



CHAPTER 1: Introduction

The Ramsey County Solid Waste Management Plan (Plan) provides policy-based guidance for a solid waste system that supports healthy people, a healthy economy and a healthy environment. Per Minnesota statute, solid waste management plans are submitted to the Minnesota Pollution Control Agency (MPCA) for approval in response to direction from the Metropolitan Solid Waste Management Policy Plan.

Ramsey County's policies for the solid waste system align with the county board's goals of wellbeing, prosperity, opportunity and accountability and its vision for a vibrant community where all are valued and thrive. Solid waste planning for Ramsey County is conducted within Saint Paul—Ramsey County Public Health.

Ramsey and Washington counties are committed to working together directly and through Ramsey/Washington Recycling & Energy, which views waste as a resource. This collaboration framework has led Ramsey and Washington counties to be national leaders in solid waste planning and program development.

Ramsey County Guiding Principles

Vision

A vibrant community where all are valued and thrive.

Mission

A county of excellence working with you to enhance our quality of life.

Goals



Strengthen individual, family and community health, safety and well-being.



Cultivate economic prosperity and invest in neighborhoods with concentrated financial poverty.



Enhance access to opportunity and mobility for all residents and businesses.



Model fiscal accountability, transparency and strategic investments.

Values



People:

We respect one another by cultivating strong relationships, teamwork, recognition and growth.



Integrity:

We continually build trust by being honest, transparent and ethical.



Community:

We value community experience and expertise in decision-making.



Equity:

We transform structures, policies and practices to reduce disparities and improve outcomes for all.



Leadership:

We lead with humility by sharing knowledge and power.

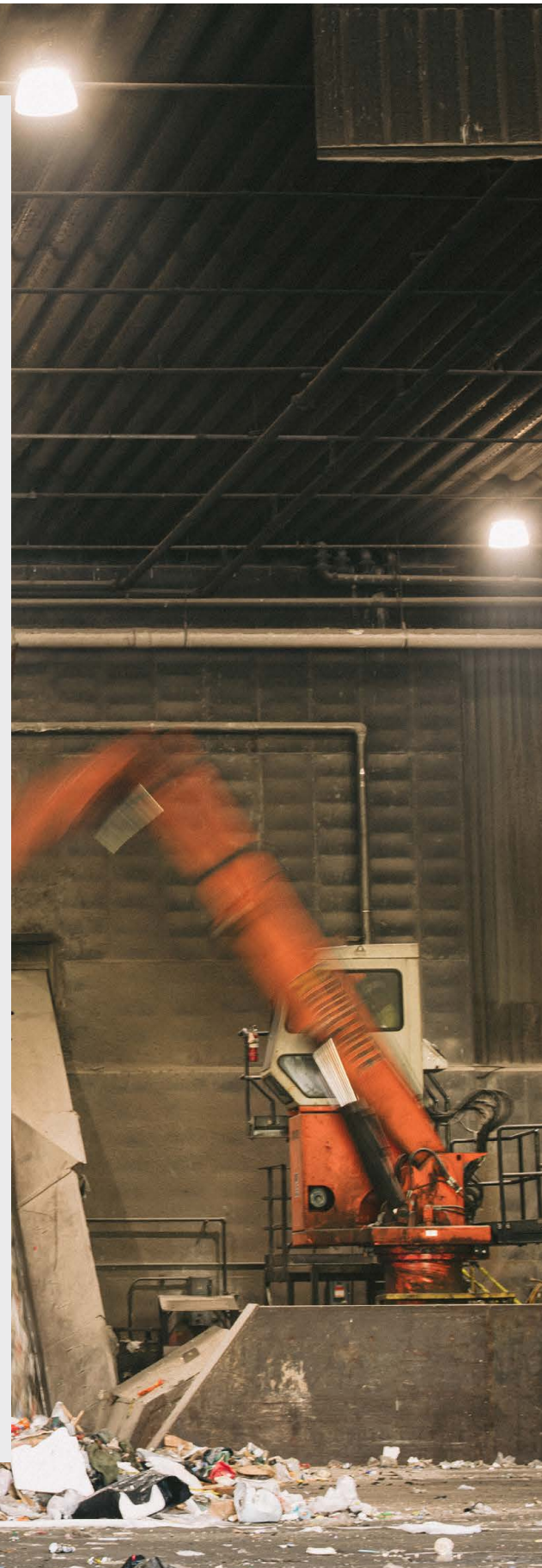
Strategic Plan Priorities

The following priorities from Ramsey County's **Countywide Strategic Plan** are addressed in the Solid Waste Management Plan:

- **Residents first: effective, efficient and accessible operations.**
- **Advancing racial and health equity and shared community power.**
- **Responding to climate change and increasing community resilience.**

Plan Priority Areas

- **Reducing risk to public health and environment** – ensuring a safe and sustainable future for current and future generations.
- **Waste reduction and reuse** – focusing on actions at the top of the waste hierarchy.
- **Preventing and managing food waste** – working toward food security for all while reducing greenhouse gas emissions and conserving resources.
- **Reducing greenhouse gas emissions** – mitigating climate change through programs and policies.
- **Advancing race and health equity** – addressing inequity to improve the health and wellbeing of all.
- **Environmental justice** – ensuring that all communities have equal access to a clean and healthy environment and are not disproportionately burdened by environmental hazards, pollution and climate change.
- **Policy development** – using local and state policy tools to advance solid waste reduction, recycling, responsible solid waste management and environmental health goals.
- **Extended producer responsibility** – holding manufacturers accountable for the environmental impact of their products throughout the product lifecycle, encouraging more sustainable and less toxic products.
- **Market development** – ensuring markets for recycled materials exist and are sustained to foster a circular economy.
- **Trash as a resource** – fostering innovation in waste management technologies and creating opportunities for the development of new opportunities to recover value from waste.
- **Support for businesses** – working with businesses to encourage improvements in waste reduction and management.



CHAPTER 2:

Solid Waste Management Plan Overarching Policies

This plan's overarching policies establish the approaches for the county and its partners to implement the Solid Waste Management Plan and the Metropolitan Solid Waste Management Policy Plan. Overarching policies are intended to be applied across the implementation of all Plan chapters. They also identify the priority of county efforts and funding in the solid waste management system.

1. Health Equity and Environmental Justice

Ensuring that all communities have equitable access to information and the ability to participate in waste management services is essential for promoting public health and well-being. This includes not only the collection and disposal of waste but also the prevention of environmental hazards that can disproportionately affect some communities.

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. The environment is the physical and natural world and the indoor and outdoor places where people live, work, play and learn.

Environmental justice encompasses the principle that all people and communities have the right to be protected from environmental degradation or environmental policies that put them at a disadvantage. It adopts a public health model of prevention and protects people, their communities and the natural environment.



Ramsey County is the most racially and ethnically diverse county in the state, with the greatest diversity in the city of Saint Paul, the largest city in the county. There are more than 114 languages spoken in Saint Paul Public Schools alone (spps.org). The most frequently spoken languages other than English are Spanish, Hmong, Karen and Somali (stpaul.gov). Asian Americans make up 15.9% of the population in Ramsey County and 18.4% of the population in Saint Paul, Black/African American residents make up 13.6% of the population in Ramsey County and 15.6% of the population in Saint Paul, Hispanics or Latinos make up 7.8% of the population in Ramsey County and 8.6% of the population in Saint Paul and American Indian and Alaska Native make up 1.1% of the population in Ramsey County and 0.7% in Saint Paul. Those who represent two or more races make up 3.9% of the population in Ramsey County and 7.8% of the population in Saint Paul (census.gov; QuickFacts).

Although Minnesota is one of the top states for positive health outcomes, several communities within Ramsey County face disparities in health outcomes (health.state.mn.us). Nearly 14% of Ramsey County residents live in poverty (census.gov; 2022 population estimates) and in 2021, 11% of the county's adults and 17% of the county's children were food insecure, compared to 9% and 13% statewide, respectively (ramseycounty.us). Of those living in poverty, people of color are disproportionately represented. This can be seen in usage rates for those accessing supplemental food benefits in Ramsey County. In 2021, 43% of Black/African American residents, 30% of Asian residents, 20% of Native American residents and 10% of Hispanic/Latinx residents received SNAP benefits (U.S. Department of Agriculture's Supplemental Nutrition Assistance Program) in Ramsey County compared to only 5% of white residents (ramseycounty.us).

While there is some new housing in Ramsey County, 72% was built before 1980. Children living in these older homes are at greater risk for lead exposure, which can affect brain development (Ramsey County Community Health Assessment).

Community members may face barriers and challenges to participating in waste reduction and management programs that others would not. For example, those not fluent in English may have language barriers to understanding program information presented in English. As another example, those who cannot afford to own a vehicle may have challenges transporting materials to a collection site.

By incorporating health equity and environmental justice into waste management planning, we can address systemic inequalities, reduce exposure to harmful toxins and promote a cleaner, safer environment for everyone. Community engagement and collaboration in the decision-making process can help ensure that all communities' needs and concerns are considered, leading to more effective and sustainable waste reduction and management solutions.



2. Working With Partners

Ramsey County recognizes that county waste programs are part of a comprehensive system which is most effective when using strategies of coordination, cooperation and collaboration with other governmental entities and the private sector to achieve its goals.

For example, Ramsey and Washington counties have worked together since the 1980s on waste reduction, reuse, recycling and solid waste management. This work, in more recent years, includes joint administration of waste management activities via Ramsey/Washington Recycling & Energy (R&E). Details on the policies of partnership between Ramsey and Washington counties through R&E are found in Chapter 3 of this plan.

Ramsey County also works with its municipalities by partially funding their recycling programs, offering technical resources and partnering on pilot projects, as well as communicating waste reduction and recycling messages to residents and businesses through their communication channels. Municipal staff are kept informed of the county's solid waste efforts through quarterly meetings and direct communication as needed.

Ramsey County will work with partners to implement this plan through multiple approaches. This will allow the county and its partners to continue harnessing efficiencies, cross-county consistency and economies of scale to maximize effectiveness.

3. Connection With Other Relevant County Plans

The county will provide leadership by protecting land, air, water and other natural resources, as well as public health. The policies and strategies in the Solid Waste Management Plan overlap with many other priority areas of county work. Recognizing this, the county will find opportunities across its different planning initiatives, leverage resources and meet common goals. These areas of overlap are reflected in this plan. See page 12 for a graphic depiction of these connections.

4. Facilitating Meaningful and Sustained Behavior Change

Behavior change is crucial for reducing and better managing waste. Efforts such as communication initiatives, community engagement, incentives, effective solid waste programming and equitable infrastructure development motivate and empower individuals to adopt habits such as reducing consumption, composting, recycling and managing waste responsibly. These key activities are embodied in this plan.

5. Use of Public Policy to Drive Environmentally Responsible Systems Change

Using incentives, assistance and education to drive individual behavior change are the priority methods for implementing waste reduction and solid waste system improvements. Additional tools can be used when voluntary efforts alone cannot drive effective change. The county supports evaluating and, if appropriate, adopting public policies—such as ordinances and state statutes—to drive environmentally responsible systems improvement when individual action is not effective.

For example, a product stewardship framework known as extended producer responsibility (EPR) creates producer-led reduction, reuse and recycling programs to address a product's lifecycle impacts from design through end-of-life management, without relying solely on state and local governments. Product stewardship has historically focused on hazardous products, but is increasingly focused broadly on other materials, such as packaging and bulky items including mattresses. This approach reduces the need for government programs and funding to ensure proper end-of-life management of materials. This type of approach cannot be implemented with local incentives and policy alone; it requires a statewide economy of scale to be feasible. As such, Ramsey County has supported state legislation to implement EPR in Minnesota.





6. **Embodying Sustainable Materials Management and Circularity in Decision-Making**

Sustainable materials management offers a systematic approach to using and reusing materials more productively over their entire life cycles. Sustainable materials management considers the environmental impact of the entire life cycle, not just disposal. This generally minimizes associated environmental impacts, including greenhouse gas emissions. This holistic approach emphasizes management methods at the top of the waste hierarchy and reduces toxicity.

Circularity, also known as the circular economy, keeps materials and products in circulation for as long as possible. A circular economy reduces material use and recaptures “waste” as a resource to manufacture new materials and products. Circularity is embraced within the sustainable materials management approach.

Ramsey County will view solid waste management through the lens of sustainable materials management and circularity in its planning and implementing strategies in this plan.

7. **Sustainable End Markets**

Minnesota needs comprehensive and sustained market development to pivot the solid waste management system from waste to resource. When a material is discarded in a landfill, it is waste. When that material is used by someone else, it is a resource. For that to happen, there needs to be a market for the recycled end product.

Recycling and waste processing harvest resources by recovering discarded materials and processing them into new products. Recycling and processing in Minnesota captures these resources and generates economic activity in the state and region, but only if reliable end markets exist. This includes end markets for recyclables, food waste, wood waste, bulky waste and other discarded materials.

The State of Minnesota has a primary role and should facilitate collaboration with the parties that make up the state’s solid waste system. Any new initiative should have local government representation in scoping and implementation. Ramsey County supports the Minnesota Pollution Control Agency leading market development research and investment on a local level to pilot and pursue new material processing approaches, ensure markets for challenging materials and build needed capacity.

CHAPTER 3:

Governing Partnerships

Ramsey/Washington Recycling & Energy

Ramsey and Washington counties have been working together successfully since the early 1980s on waste reduction, reuse, recycling and solid waste management. Ramsey and Washington counties created the Ramsey/Washington Recycling & Energy (R&E) board with the commitment to continue this collaborative work. Ramsey County is responsible for implementing the strategies outlined in this plan. However, the implementation of sections of this plan depends on continued and strengthened partnership through the R&E board as well as additional coordination between the counties. In many cases, implementation is more effective and efficient through East Metro collaboration. Strategies outlined in this plan have been aligned with Washington County with the intention to plan and/or implement jointly where it mutually benefits and allows better stewardship of resources.

The R&E **Joint Powers Agreement** was adopted on Sept. 22, 2015, and most recently amended and approved by both county boards on July 18, 2023, as of the publication of this plan. The Joint Powers Agreement demonstrates both counties' commitment to implementing the counties' solid waste management plans via waste processing and joint solid waste activities, stating:

The counties recognize the clear environmental, financial and policy benefits to public ownership and operation of the [Ramsey/Washington Recycling & Energy Center] Facility and desire to amend and restate their Joint Powers Agreement for the purpose of owning, operating and improving the Facility; advancing recycling and other waste management goals of the Counties; and overseeing other joint waste management activities.

The counties' highest shared priority is to prevent waste through upstream efforts. This has resulted in the creation and growth of the programs and projects funded by the two counties and administered through R&E to address the shared solid waste priorities of the two counties. Section 5 of the R&E Joint Powers Agreement, Scope and Authority, sub-section 9, lists the responsibilities of R&E to administer joint solid waste management activities, including (but not limited to):

- Conducting waste education and outreach related to reduction, recycling, waste processing and other waste management practices.
- Engaging in educational activities with schools.
- Administering non-residential recycling programs.
- Making plans and conducting research in pursuit of the goals of the Joint Powers Agreement.



For waste not managed upstream, the next shared priority is to prevent waste from going to landfills through waste processing. This priority was strengthened through the extensive evaluation of the future of waste processing, resulting in the purchase of the Recycling & Energy Center (R&E Center), a waste processing facility in Newport, Minnesota at the end of 2015. Commissioners in both counties recognize the need to pivot from a waste stream to a resource stream. The counties do this by recovering additional value from the trash through recovering recyclables and energy from the trash and finding markets for these materials. At the same time, the counties work to support waste reduction and recycling in the community. Through investment in enhancing the R&E Center's operations, additional recyclables and food scraps and other materials are recovered from the trash, helping the counties move closer to the state's 75% recycling goal.

The counties, through R&E, are pursuing the use of next generation technologies to get the most value from discarded materials. The Ramsey/Washington Recycling & Energy Board (R&E Board) is also seeking non-combustion solutions for processed waste using technologies that produce bio-based fuels or other products. These technologies have been operating in Europe, North America and around the world on a commercial scale for years or decades. In the United States, facilities like anaerobic digesters have moved from pilot to commercial scale operations and are becoming more common as a viable and sustainable way to manage organic materials.

New technologies can help increase jobs locally and offer alternative uses for materials found in trash, preventing environmental harm and financial liability risks to taxpayers that would otherwise result from landfilling waste. R&E continues to monitor, evaluate and support the development of these technologies, and their environmental, economic and community impacts.

Additional details about R&E are included in *Appendix A*.



Ramsey/Washington Recycling & Energy Vision, Mission and Values

Vision

Vibrant, healthy communities without waste.

Mission

Enhancing public health and the environment by creating value from waste through partnerships.

Values



Commitment:

Committed to public health, safety and the environment.



Trust:

Maintaining diligent stewardship of public trust and funding, with our work informed by research and science.



Teamwork:

Making the biggest impact by working beyond ourselves.



Innovation:

Focusing on excellence, continual improvement and adaptation in pursuit of the mission.



Respect:

Treating the earth and all people with esteem, dignity and compassion.

Ramsey and Washington Counties Partnership Policies

1. Shared principles for collaboration or joint administration of waste management programs and activities should:
 - a. Be designed and communicated in a manner that focuses on seamless services that are not confusing to the public.
 - b. Be consistent with both counties' vision, mission and goals.
 - c. Enhance, not diminish, the quality and effectiveness of the individual county programs.
 - d. Ensure accountability of the two counties and be consistent with their respective plans.
 - e. Provide general efficiencies in the use of county resources.
 - f. Be flexible so the program can serve urban, suburban and rural areas.
2. The counties will continue to fund and seek opportunities to work together on waste management programming through:
 - a. Joint activities formally delegated to the R&E Board (such as BizRecycling).
 - b. Operational agreements outside the R&E Board (such as joint procurement of products and services).
 - c. Reciprocal use for independently operated programs (such as household hazardous waste).
 - d. A purchase of service agreement. The counties will develop a process for identifying, analyzing and deciding on program alignment and joint activities.

3. The counties will continue to work together through the R&E Board to promote and implement the vision for solid waste management in the two counties, established as part of the decision to purchase the R&E Center, including:
 - a. The Scope for Resource Management.
 - iv. Increased source-separation efforts for recycling and organics from residential and non-residential waste generators.
 - v. The use of a front-end recyclables recovery system to recover additional recyclables and organic-rich materials that remain in mixed municipal solid waste.
 - vi. Organic waste being used as a feedstock for anaerobic digestion.
 - vii. A transition beyond using refuse-derived fuel for electrical generation.
 - b. The R&E Board principles.
 - viii. Plan for a 20- to 30-year horizon.
 - ix. Assure flexibility.
 - x. Manage risk.
 - xi. Pivot the view from “waste” to “resources” to add value to the local economy and environment.
 - xii. Move resources up the waste management hierarchy.
4. The R&E Board will continue to own, operate and improve the R&E Center as outlined in the **Ramsey and Washington Counties Joint Waste Designation Plan**.
5. The R&E Board will continue to conduct and facilitate shared programs and projects that address solid waste goals of the two counties and will evaluate these activities and remain responsive to evolving needs and priorities of the counties’ diverse communities.
6. The R&E Board will continue to evaluate and implement appropriate changes to its governance structure and size to ensure effectiveness.

Partnership on Waste and Energy

Ramsey, Washington and Hennepin counties collaborate in areas of waste and energy management, including legislation and policy development, communication and outreach, planning and evaluation. The counties do this through a Joint Powers Agreement between Hennepin County and R&E. The resulting entity is called the Partnership on Waste and Energy (Partnership). The Partnership seeks to end waste, promote renewable energy and enhance the health and resiliency of the communities we serve, while advancing equity and responding to the challenges and opportunities of a changing climate.

The Partnership is led by a governing board comprised of a commissioner from each county. Hennepin County appoints a commissioner, while the chair and vice chair of the R&E Board represent Ramsey and Washington counties. Hennepin County and R&E contribute resources to fund the Partnership’s activities. R&E is the administrative agent for the Partnership, providing staff support for administrative activities, finance, procurement and communications. The governing board approves an annual legislative platform on waste and energy issues and engages in advancing that platform.



CHAPTER 4:

Communication and Engagement

Introduction

Ramsey County strives to engage with its community in an authentic, meaningful and inclusive way that recognizes the value, lived experiences and expertise of those it serves.

Ramsey County must have the trust, active participation and partnership of its community to achieve its mission, vision and goals. The following principles guide Ramsey County's community engagement work and are in accordance with its organizational values.

- **Equity:** Ensure those directly impacted are engaged by making efforts to remove existing barriers to information access and participation. Seek out and elevate the voices of community members who are underrepresented in the decision-making processes (i.e., racially and ethnically diverse communities, LGBTQIA+, youth, persons with disabilities, elderly communities, etc.) to learn and benefit from creative insights, ideas, and approaches to problem solving.
- **Respect:** Engage community members thoughtfully by effectively using their time, energy and contributions. This means ensuring engagement activities are action-oriented and drive toward outcomes the community can see and feel as a result of their participation. Share the impact of their contributions through timely information sharing.
- **Partnership:** Acknowledge and treat community as a partner in accomplishing the county's mission, vision and goals. Work to build trust and genuine relationships with community members, leaders and organizations with the understanding that this takes time and ongoing effort.
- **Continued Learning:** Commit to ongoing growth in understanding of community engagement and racial equity; commit to improving approaches to working with community through thoughtful reflection, dialogue and action.

Ramsey County values communication and engagement for achieving solid waste management and environmental health goals. Using the International Association of Public Participation (IAP2) spectrum of public participation as a framework, the county can identify the optimal level of participation for a program, project or effort.

In this plan, the term "communication" refers to any means of conveying information to an audience. In the IAP2 spectrum, communication is the "inform" level. Through ongoing communication efforts, the county strives to ensure that the public is well-informed. This includes using various methods to reach diverse audiences and expand that reach via collaboration with community partners.

"Community engagement" refers to meaningful dialogue and shared decision-making through public participation activities. In the IAP2 spectrum, engagement refers to the levels "consult," "involve," "collaborate" and "empower." These processes treat communities as the experts in identifying both the challenges they face and the solutions to these challenges. Input from interested parties across the solid waste system is instrumental in shaping policies and practices.

Together, communication and engagement efforts enable the community to be informed, provide input and participate in Ramsey County's robust system of waste reduction, recycling and responsible waste management system.

IAP2 Spectrum of Public Participation

Increasing impact on the decision →

	Inform	Consult	Involve	Collaborate	Empower
Public Participation Goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
Promise to the Public	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extend possible.	We will implement what you decide.

Policies

1. Ramsey County will conduct **authentic engagement practices as described in the county's Community Engagement Guidance**, which establish trust-based relationships by adhering to best practices and ethical engagement standards and continuously evaluating efforts for improvement. The county will prioritize efforts guided by insights from community members. Ramsey County will maintain transparency on interested parties' influence on decision-making processes.
2. Ramsey County recognizes the importance of an **equity lens** in waste management initiatives. By prioritizing equity, communication and engagement can address systemic barriers and empower all community members, fostering genuine dialogue and meaningful participation.
3. Ramsey County commits to **proactively monitoring emerging communication and engagement tools, resources and approaches**, including advancements in technology-based methods. The county will try new methods when those methods can improve communication and engagement efforts.
4. Ramsey County will **collaborate with partners, including Washington County and Ramsey/ Washington Recycling & Energy (R&E)**, to ensure consistency in communication.

Strategies

1. Communication Tools and Resources

Develop and utilize a range of outreach and education tools and resources to educate residents, businesses and others about waste reduction and management.

- a. Use communication tools, including (but not limited to) web, social media, media engagement, print materials, direct mail, community events, workshops and webinars.
- b. Implement educational programming, including (but not limited to):
 - iii. Lesson plans and education programs for school and community groups.
 - iv. Tours of the Recycling & Energy Center, county environmental centers, compost facilities, material recovery facilities, transfer stations and other facilities to facilitate understanding of the counties' and residents' role in the waste system.
- e. Use a lens of the broader impacts of waste reduction and management, such as community, economic and climate benefits, to educate about waste reduction and management.

2. Engagement Tools and Resources

Use interactive engagement tools and practices (e.g., social media, focus groups, surveys, community partner engagement) to gather community input and guidance on solid waste programs and services.

3. Environmental Justice Principles

Prioritize environmental justice through meaningful engagement with community and build staff capability to develop responsive solid waste programming.

4. Access and Relevance

Ensure specific, equitable, relevant and accessible communication and engagement that meets the public's diverse needs across waste reduction and management topics for residents, businesses and others.

- a. County communications and engagement efforts will identify and address the needs specific to culture, ability, education level, language, housing type, technology access and geographic location.
- b. Explore, implement and continually enhance translation best practices for materials.

5. Building Community Capacity

Invest in community members to enable them to conduct outreach and education activities in their communities.

- a. Use programs that include education and resources to create champions in the community for recycling and waste reduction, such as the Recycling Ambassador and Apartment Recycling Specialist programs.
- b. Explore and implement programs to provide community groups with resources and training to support them in conducting their own programs and education related to waste reduction and management.



6. Removing Barriers to Participation and Engagement

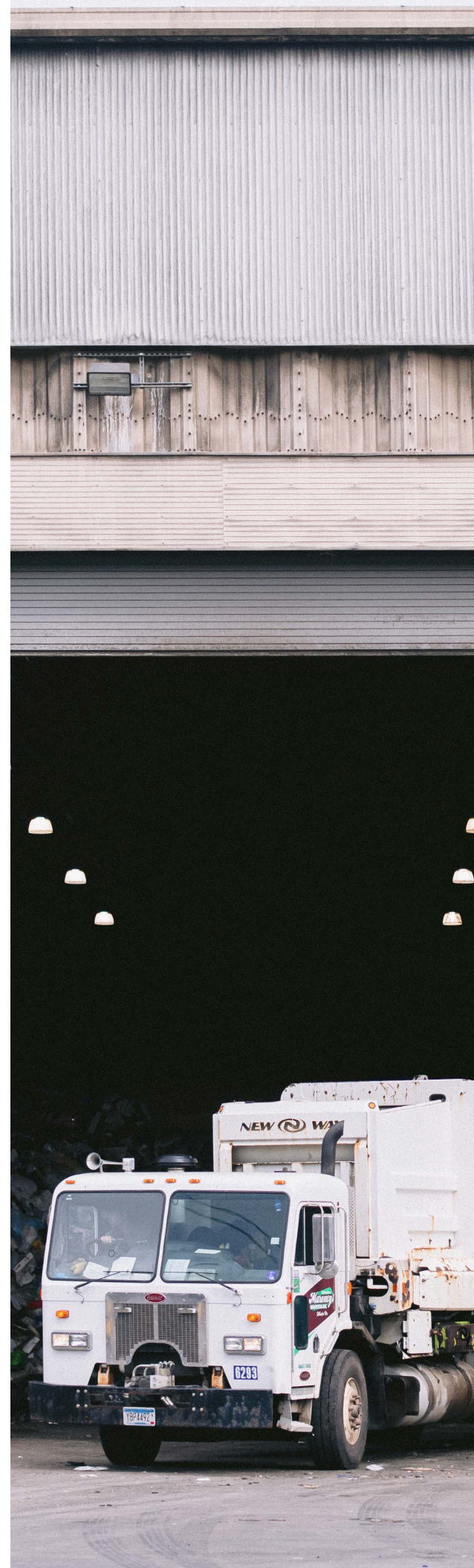
Identify and address barriers to participation in county engagement activities. Removing barriers may include (but is not limited to):

- a. Addressing transportation and childcare needs through tactics such as transit vouchers, flexible scheduling, remote meetings, food offerings and childcare.
- b. Compensating for time, expertise and lived experience following direction established in the Ramsey County Community Engagement Compensation Guide.
- c. Providing multiple options for engagement (e.g., digital surveys, community meetings, focus groups, pop-up engagement).
- d. Working with community liaisons, cultural consultants, translated materials, interpreters and communicating in multiple languages.

7. Regional Consistency

Commit to standardize communication and engagement by conducting outreach collaboratively, as appropriate, with Washington County and R&E (*Policy Plan required strategy 10*). Additionally, leverage opportunities for regional communication efforts, such as (but not limited to):

- a. Participation in the Recycling Education Committee and coordination with other counties on messaging.
- b. Collaborative efforts with the Partnership on Waste and Energy.
- c. Collaborative regional outreach and messaging efforts with other entities such as counties, haulers, organics processors, anaerobic digestion facilities, material recovery facilities, product stewardship and producer responsibility organizations and recycling end markets.
- d. Participation in professional groups (e.g., Minnesota Resource Recovery Association, Recycling Association of Minnesota, Association of Recycling Managers, Minnesota Reuse Association, Minnesota Chapter of the Solid Waste Association of North America, Minnesota Composting Council and Solid Waste Administrators Association).
- e. Participate in an annual joint commissioner/staff meeting on solid waste (*Policy Plan required strategy 9*).



8. Coordinating With Partners

Coordinate with key waste system partners (e.g., haulers, businesses, municipalities and other public entities) to communicate and engage about waste issues and programs. Coordination may include (but is not limited to):

- a. Working through local health departments to reach businesses and other regulated entities.
- b. Working with public entities, institutions, community groups and other organizations, such as the University of Minnesota Extension Program, to develop and/or distribute information.
- c. Collaborating with waste haulers to develop and distribute communication resources in alignment with county messaging. Topics may include the Food Scraps Pickup Program, County Environmental Charge, tipping fees and the R&E Center. Waste haulers are responsible for communicating accurate and consistent information to their customers.
- d. Working jointly with municipalities in the developing of messages and tools. Municipalities are responsible for providing information specific to their programs to their residents. As a condition of receiving SCORE (Select Committee on Recycling and the Environment) funds, municipalities must use elements of county communication materials.
- e. Using regional partnerships to engage the community on environmental issues related to waste management, such as air and water quality, emergency response and healthy homes, to expand reach and ensure consistency.

9. Workforce Development

Work with partners to support education programs and training to facilitate future careers in waste management and environmental health. This could include (but is not limited to):

- a. Offering internships and volunteer programs.
- b. Continuing the fellowship program that recruits a diverse workforce and emphasizes developing of skills for future careers in waste management or environmental health.





CHAPTER 5:

Product Stewardship and Extended Producer Responsibility

Introduction

Ramsey County is focused on a product stewardship approach to managing materials. Extended producer responsibility (EPR) policies are a way to implement product stewardship and can help encourage sustainable materials management and a circular economy that eliminates waste and maximizes the continued use and regeneration of resources. An EPR policy approach extends the producer's responsibility to address environmental impacts from all stages of the product's life cycle. This can include durability, reusability, recyclability, toxicity reduction and finding the highest and best use of materials and waste. EPR policies also often include producer responsibilities for end-of-life management systems and costs.

Policies

1. Ramsey County, with Washington County and Ramsey/ Washington Recycling & Energy (R&E), supports a **product stewardship approach** that creates effective, flexible, producer-led reduction, reuse and recycling programs to deal with a product's lifecycle impacts from design through end-of-life product management. This means that state and local governments do not have primary responsibility for managing waste and financing such efforts. The county will accept reimbursement for eligible county expenses as provided for in product stewardship or EPR programs.
2. Ramsey County will implement **residential collection programs** until product stewardship collection systems are reliably in place for consumer materials that are hazardous or problematic to manage.
3. Ramsey County will **coordinate with others** to ensure programs and services implemented under EPR and product stewardship laws and voluntary industry-led efforts meet the needs of residents, municipalities and others who are eligible for services, and to ensure programs and services are implemented in ways that advance the policies in this plan.



Strategies

1. Extended Producer Responsibility

Through collaboration on legislation and policy development with partners, such as the Partnership on Waste and Energy, support policies that implement and improve EPR for key products and materials, such as (but not limited to):

- a. Product packaging.
- b. Non-recyclable or hard-to-recycle plastic products and films.
- c. Mattresses and other bulky items such as furniture, carpet, etc.
- d. Appliances and electronic waste (including emerging materials like solar panels).
- e. Batteries.
- f. Paint, pharmaceuticals, sharps and other hazardous products.
- g. Textiles and clothing.

2. Partnering on Product Stewardship

Support regional and state efforts to advance product stewardship efforts, including (but not limited to) participation in committees and reporting on materials managed through county facilities.

- a. Participate with the Product Stewardship Committee under the Solid Waste Administrators Association (*Policy Plan required strategy 60*).





CHAPTER 6:

Health and Environmental Risk Reduction

6A: Health and Environmental Risk Reduction

Introduction

Reducing risk to public health and the environment is a foundational element of the solid waste management system. This chapter addresses Ramsey County's health and environmental risk reduction policies and strategies, including toxicity reduction and hazardous waste management. Minnesota's regulation of hazardous waste generated by commercial entities is among the strictest in the nation. Ramsey County's hazardous waste compliance program focuses on ensuring compliance and encouraging pollution prevention.

Hazardous waste generated at home is known as household hazardous waste (HHW). HHW includes household chemicals, paint, cleaning products and other household-generated materials that pose a hazard to human or environmental health. Other problem household-generated materials that need special disposal include electronic waste, propane cylinders, tires, batteries, lead, devices that contain mercury (e.g., fluorescent lamps), pharmaceuticals and medical needles (sharps).

Ramsey County is expanding its HHW and other waste collection services with the construction of an Environmental Service Center anticipated to be operational in 2025.

Policies

1. Ramsey County will prevent, mitigate and manage risks to public health and the environment in a manner that upholds the county's **environmental justice and equity** values while addressing and improving **climate resilience** throughout the county.
2. Ramsey County will regulate the generation and management of hazardous waste as required by Minnesota statutes using a **variety of methods to ensure compliance and focus on risk reduction**. The county, with Washington County and Ramsey/Washington Recycling & Energy, will provide technical and financial assistance to improve management of toxic and hazardous wastes.
3. Ramsey County will be a leader in **reducing the use of materials that contain toxic and hazardous ingredients in county operations**.

Strategies

1. Regulated Entity Hazardous Waste Management and Pollution Reduction

Provide training, education, technical assistance and other resources to regulated entities to facilitate proper management of solid and hazardous wastes. Assistance includes opportunities to reduce air, land and water pollution by changing business practices related to hazardous materials and hazardous wastes, such as lead.

- a. Monitor emerging waste streams, such as cannabis product waste, and work with regulated entities to ensure materials are being properly managed.

2. HHW Disposal and Management

Provide convenient and safe HHW disposal and management for residents by partnering with municipalities to provide education and services.

- a. Continue county participation in the reciprocal use agreement for HHW collection sites across the metro area (*Policy Plan required strategy 62*).
- b. Partner with municipalities to increase participation in HHW collection (*Policy Plan required strategy 63*).
- c. Manage county HHW collection sites in accordance with the Ramsey County Storm Water Management Plan.

3. Address Barriers to HHW Collection

Explore, identify and implement methods to remove barriers to using HHW collection, including (but not limited to) hosting drop-off sites at various locations, providing pick-up services, etc., with specific focus on historically underserved communities (*Policy Plan optional strategy 64*).

- a. Complete construction and begin operations in the new Environmental Service Center. This facility will provide more convenient and accessible HHW collection services.
- b. Explore offering a residential pickup program and addition of permanent satellite collection sites.

4. Residential Problem Materials

Develop a range of residential communication tools and disposal opportunities for the managing of HHW and other problem materials to ensure these materials do not end up at resource recovery facilities, recycling facilities, compost sites or landfills. Problem materials include, but are not limited to, hazardous materials recovered during residential building demolition, pharmaceuticals, sharps, lead, cannabis product waste, propane tanks, batteries and electronics.

- a. Work with law enforcement and examine possibilities for public-private cooperation for collection of household pharmaceuticals until a statewide product stewardship approach has been implemented.
- b. Encourage retailers to increase consumer awareness of responsible end-of-life handling for products containing lithium-ion batteries (*Policy Plan required strategy 61*).



5. Hazardous Waste Management in County Operations

Ensure that hazardous and universal wastes that are generated in county operations are properly managed. This includes waste illegally dumped in public spaces, at municipal or county facilities and waste from the abatement of public health nuisances.

6. Very Small Quantity Generator (VSQG) Program

Provide a convenient and cost-effective education and collection for eligible hazardous waste generators.

7. Healthy Homes

Develop education, outreach and comprehensive programming to help residents understand how the home environment can affect their health, how to reduce exposure to potentially harmful substances in and around the home and mitigate exposure to home environmental hazards.

- a. Continue to implement programs that target various environmental hazards, including (but not limited to) abatement of public nuisances, hoarding, lead, mercury, radon, pesticides and other household contaminants.
- b. Continue to offer a lead paint remediation program that aims to reduce lead poisoning in children, ensures proper disposal of building components coated in lead-based paint (such as old windows) and provides more energy-efficient housing.

8. Partnerships

Continue partnerships with state agencies (MDH, MPCA), municipalities and non-profits. Coordinate efforts, leverage funding opportunities and support vulnerable communities.

9. Climate Resiliency

Explore and address climate resilience as an approach to environmental health risk reduction. Consider climate resilience as a factor for solid and hazardous waste management programming decisions.

10. Inventory of Old Dumps

Maintain an inventory of old landfills and periodically review the status of those sites. Work with other agencies if environmental or public health issues are identified. Take action to evaluate or mitigate health and environmental risks.



6B. Emergency Debris Management

Introduction

Proper management of waste that results from emergency situations, such as natural or human-caused disasters, is important to protect health and the environment. Debris from emergencies may include trees, sand, gravel, building components, vehicles, hazardous waste and other personal property. The following policies and strategies serve as an addendum to the Ramsey County Comprehensive Emergency Operations Plan and the Multi-Hazard Mitigation Plan and are intended to complement those plans.

Policies

1. Ramsey County will work collaboratively and proactively across departments to ensure that the **clearance, removal and proper management** of debris from emergencies is carried out safely, comprehensively and effectively to reduce risks to public health, public safety and the environment.
2. Ramsey County encourages **using emergency debris to its highest and best purpose** when feasible. This is consistent with requirements of the Federal Emergency Management Agency (FEMA) and Minnesota Homeland Security and Emergency Management (HSEM).



Strategies

1. Assist in Emergency Debris Management

Assist in ensuring the management of municipal solid waste (MSW), non-MSW, household and commercial hazardous waste, major appliances, tires and related waste resulting from emergency situations. Address challenges and barriers to proper materials management related to emergency preparedness and response.

- a. Ramsey County will include a provision allowing temporary collection of household hazardous waste (HHW) generated from emergencies, such as flooding and other storm damage, as part of its contract for HHW collection services.
- b. The county will use its discretion in an emergency to halt, redirect or waive restrictions on services to properly manage waste.
 - iii. In an emergency, Ramsey County may temporarily waive restrictions prohibiting construction & demolition haulers from transporting MSW to improve the region's capacity to move materials as quickly as possible.
 - iv. If municipalities are managing recovery of material through contracted vendors, the county may temporarily waive restrictions prohibiting commercial service vehicles from delivering tree and shrub waste to county yard waste sites during and following an emergency.
 - v. The county may utilize its existing contract services for removal of tree and shrub waste from county yard waste sites at other locations if additional collection areas are needed.
- c. The county will act in accordance with the Ramsey County Comprehensive Emergency Operations Plan and the Multi-Hazard Mitigation Plan.

2. Assist Municipalities

Help municipalities plan and coordinate management of emergency debris by offering technical assistance and resources, and identifying recycling and reuse opportunities.

3. Environmental Service Centers in Emergencies

As appropriate, explore opportunities to broaden the use of county environmental service centers as a hub for emergency operations.

4. Climate Adaptation

Evaluate, account for and increase awareness of the impacts of climate change on debris management from storms, heavy rainfall, flooding and high wind events to reduce the volume and/or toxicity of debris. Continue to prioritize the public health vulnerability assessment and the **Climate Equity Action Plan**.

5. Community Relationship-Building

Educate, promote services and build trusting relationships with the community, including those not typically reached, to ensure equity of preparedness and response services.

6. Environmental Health Annex

Prepare and update an environmental health annex to the county's All-Hazard Response and Recovery Plan.





CHAPTER 7:

Waste Reduction and Reuse

7A. Waste Reduction and Reuse

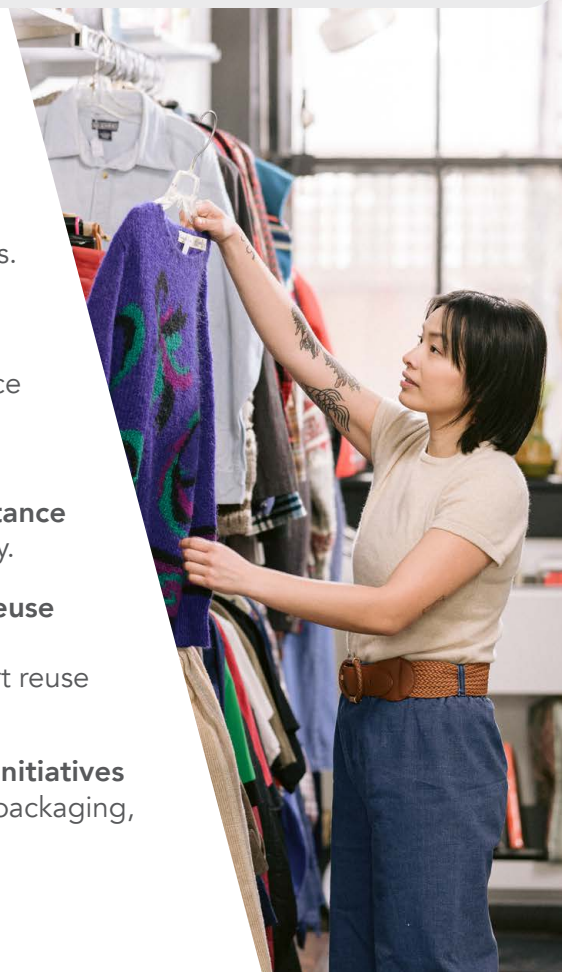
Introduction

Waste reduction is the act of preventing waste by not producing items that need disposal or other management. Reduction is the most preferred waste management method in Minnesota's waste management hierarchy. Waste reduction results from decisions made in the production, purchase and use of materials. While some waste reduction results from individual choices by residents in the products they consume, major waste reduction is the result of systemic change, such as when manufacturers, distributors or retailers change packaging for products or make products in a manner that extends their lives. Programs that promote product stewardship are examples of systemic changes that can favor reduced waste.

The following policies and strategies highlight Ramsey County waste reduction, reuse and repair efforts, including joint efforts through Ramsey/Washington Recycling & Energy (R&E).

Policies

1. Ramsey County will focus on removing barriers to achieving a **zero-waste approach** to waste management.
2. Ramsey County supports efforts to ensure **reuse information, programs and resources** are available to all residents and businesses.
3. Ramsey County, with Washington County and R&E, **encourages public and private entities to incorporate waste reduction and reuse** activities within their operations, including product and service design, manufacturing and transportation to end markets.
4. Ramsey County, with R&E, will provide technical and financial **assistance to businesses to support waste reduction and reuse** in the county.
5. Ramsey County will be a **leader in internal waste reduction and reuse activities** by continuously improving operations to conserve natural resources and energy, reduce or eliminate hazardous waste, support reuse markets and reduce the need for landfilling and waste-to-energy.
6. Ramsey County will coordinate, as appropriate, with **producer-led initiatives** to promote and support reuse and refill programs and services for packaging, including food and beverage packaging.



Strategies

1. Waste Reduction and Reuse Programs

With R&E, expand collaboration with partners, including (but not limited to) the Minnesota Pollution Control Agency, counties, municipalities and community organizations to implement and promote new and existing waste reduction and reuse programs at residential, commercial and institutional levels.

- a. Explore offering grants, technical assistance and resources to residents, community organizations, businesses and other entities to develop and expand waste reduction, reuse and repair.
- b. Support collection of usable items through reuse businesses and organizations.
- c. Work with schools to explore and implement reuse opportunities.

2. Increase Reuse and Repair Opportunities

Support and expand reuse and repair opportunities within the county.

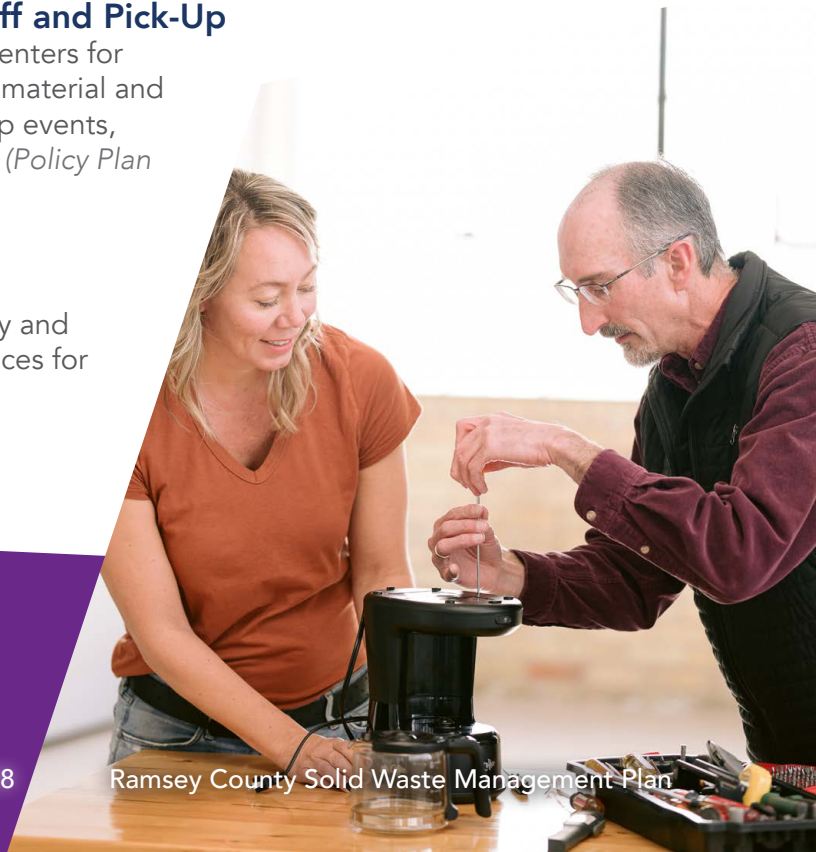
- a. Host, promote and track waste diversion through reuse and repair events such as Fix-It Clinics and product reuse rooms at county environmental centers.
- b. Promote community-centered reuse. For example, promote items exchange in local Buy Nothing groups and lending libraries. Support building community capacity for direct reuse.
- c. Expand community capacity for repair. Through existing county programs such as Fix-It Clinics and collaboration with partners, increase opportunities for skilled individuals to teach repair and mending skills and promote repair as an alternative to purchasing new (*Policy Plan optional strategy 25*).
- d. With R&E, develop and promote a reuse and repair resource directory. Explore opportunities to collaborate with other metro counties and partners such as Reuse Minnesota.
- e. Work with municipalities to evaluate and, as appropriate, implement curbside set-out days to allow residents to set out used items for reuse (*Policy Plan optional strategy 27*).
- f. Explore ways to quantify and/or document community reuse and repair activities.

3. Reuse Location for Residential Drop-Off and Pick-Up

Maintain free product rooms at environmental centers for residential reuse of household hazardous waste material and explore hosting and/or supporting material swap events, including with municipalities and other partners (*Policy Plan optional strategy 26*).

4. Waste Reduction at Events

Support waste reduction at public events, such as those sponsored by municipalities, the county and other entities. Develop and promote best practices for waste reduction at events.



5. Non-Residential Waste Reduction and Reuse Grants

Through R&E (e.g., BizRecycling), offer support, resources and incentives to businesses and other non-residential entities related to waste reduction and reuse. Support and incentives may include (but is not limited to):

- Offering grants for waste reduction, reuse and repair (*Policy Plan required strategy 20*).
- Offering grants or rebates for organizations to transition to reusable food and beverage service ware (*Policy Plan required strategy 19*).

6. Regulatory and Legislative Solutions

Explore regulatory and legislative solutions that promote waste reduction and reuse.

As appropriate, support regulatory and legislative solutions being proposed by other entities. These may include:

- "Right to repair" legislation.
- Restrictions on disposable food serviceware provided with takeout.
- Mechanisms that discourage the use of single-use bags in retail stores.

7. Staff Education via a Reuse Network

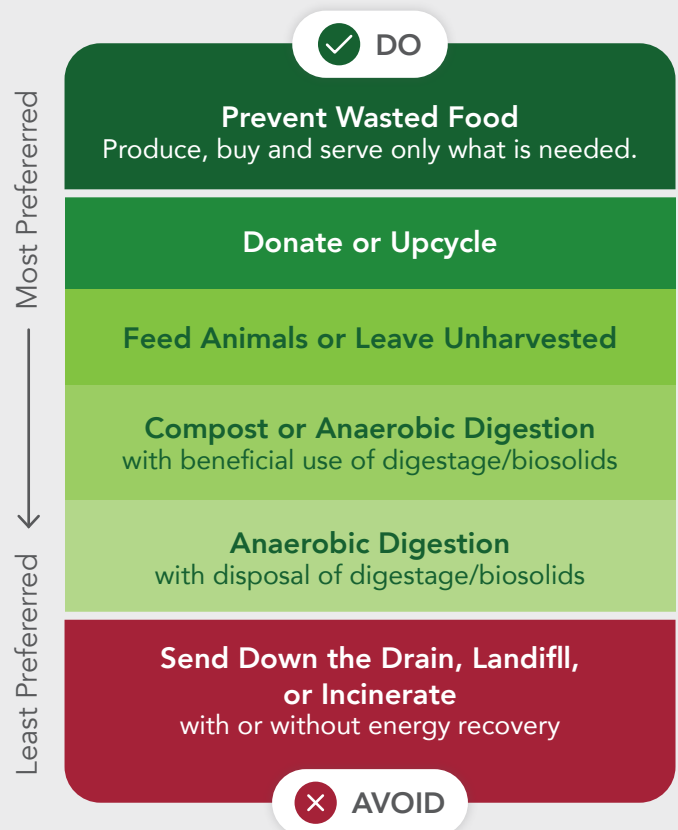
Join and/or actively participate in a reuse network, like Reuse Minnesota, to provide county and city staff with learning opportunities to broaden their reuse expertise (*Policy Plan optional strategy 24*).

7B. Upstream Food Management

Introduction

Through programming, funding and technical assistance, Ramsey County collaborates with residents, businesses and other entities to focus on preventing food waste. The county prioritizes food-to-people opportunities for diverting food to individuals who need it. The following policies and strategies outline the innovative ways that Ramsey County, with R&E, approaches upstream food waste management.

The United States Environmental Protection Agency (EPA) developed the Wasted Food Scale in October 2023 to provide guidance on how to prioritize activities that prevent food from being wasted, and divert wasted food from the trash. The scale can be used as a tool to guide decisions on programming and policy.



EPA Wasted Food Scale

Policies

1. Ramsey County will use the **EPA Wasted Food Scale** as guidance in making policy decisions about food waste, prioritizing the prevention of wasted food and food surplus recovery.
2. Ramsey County will make policy decisions that **ensure equitable program outcomes** for residents, including supporting access to culturally relevant foods and spaces for people to grow their own food.

Strategies

1. Food Waste Prevention

Continue to support food waste prevention at the residential, commercial and institutional level — such as in schools, businesses, hospitals and commercial kitchens. Counties may partner with municipalities to expand such efforts.

2. Support Food Recovery

Support food recovery via food-to-people partnerships and local food donation programs, including (but not limited to):

- a. Incentives for institutions to participate in food recovery.
- b. Support for a robust and adaptable system of recovered food through food banks, shelves, pantries and hubs.
- c. Support for distribution, transportation and logistics in food systems.
- d. Recovery of surplus food from farmers markets, community gardens and farms.
- e. Partnerships between food recovery organizations and restaurants/stores to increase food recovery (*Policy Plan required strategy 14*).
- f. Support for access to culturally-relevant food by encouraging household and community garden food growing, gleaning and partnerships that grant additional space to grow food.

3. School Food Recovery

Work with schools with kitchens to identify and address barriers to food waste prevention and food recovery.

4. Health Inspector Education

Work with health inspectors to educate restaurants and other establishments on donation opportunities for surplus prepared food (*Policy Plan optional strategy 18*).

5. Regulatory and Legislative Solutions

Support regulatory and legislative solutions that improve or promote food donation and food recovery.



CHAPTER 8: Recycling and Organics

8A. Residential Recycling

Introduction

Residential recycling is a fundamental part of reaching the state's 75% recycling goal and is an essential component of waste management in Ramsey County. The county expects residents, businesses and institutions to incorporate recycling in the handling of discarded materials and recognizes it is the responsibility of everyone in the county to help achieve state recycling goals.

Policies

1. Ramsey County requires that **municipalities follow best practices for recycling** by seeking continual improvement and ensuring the availability of those accessible recycling services for all residents, including those in multi-family housing.
2. The county expects residents to recycle and recognizes that it is the **responsibility of everyone** in Ramsey County to achieve state recycling goals.
3. Ramsey County, with Ramsey/Washington Recycling & Energy (R&E), will **work with municipalities, the waste and recycling industries and public entities to maximize recycling opportunities**. The county will use outreach and education, planning and evaluation, regulation, financial incentives, technical assistance and consultation to accomplish recycling objectives.



Strategies

1. Municipality Assistance

Provide technical assistance and resources to support municipalities in meeting recycling objectives.

- a. With municipalities, will explore ways to maximize capacity for recycling collection, such as bin size options and collection frequency.
- b. Provide technical assistance to municipalities for procurement of recycling and organics services including (but not limited to) contracts, ordinance revisions and the impacts on and opportunities for municipal programs and services under extended producer responsibility (EPR) laws.
- c. Facilitate partnerships, networking and shared resources among municipalities and community groups.
- d. Assist municipalities to ensure the following minimum levels of service as directed by the MPCA:
 - v. Recycling services for traditional curbside recyclables are available to all residents at their place of residence, including multi-units.
 - vi. Contract for residential recycling collection and/or recycling collection on same day as trash (*Policy Plan required strategy 30*).
 - vii. Collection of the county's standard list of residential curbside recyclables as referenced in SCORE agreements.
 - viii. Add materials to their collection streams as markets become available.
 - ix. Track municipal progress toward meeting waste objectives.

2. Multi-Unit Assistance

The county, with R&E, will provide assistance to multi-unit properties to improve recycling (*Policy Plan required strategy 37*).

- a. Educating residents and property managers on how to recycle items that are accepted as part of building-provided collection, as well as how to recycle items that are not accepted as part of building-provided collection.
- b. Providing financial and/or technical assistance for infrastructure improvements and implementation of improvements.
- c. Ensuring property managers plan for and provide sufficient space for collecting recycling based on the number of residents.
- d. Collaborating with cities to promote assistance resources, on-site education and implementation of recycling improvements.
- e. Working with multi-family association networks (e.g., Minnesota Multi Housing Association) to promote resources, including opportunities for services and financial incentives available under any EPR laws.



3. Textile Diversion

Address textile waste through programs/ education that encourage diversion of this material, prioritizing reduction, repair and reuse. Work with municipalities and other partners on opportunities for residential textile recycling, such as curbside collection and collection/drop-off when markets become available.

4. Away-From-Home Recycling

Counties, with R&E, will support municipalities and other entities to increase away-from-home recycling opportunities, such as at parks, athletic fields, recreation centers, arenas, fairgrounds and events. This includes supporting opportunities made possible under any EPR laws.

5. Municipality Requirements

Require municipalities to uphold and improve residential recycling standards.

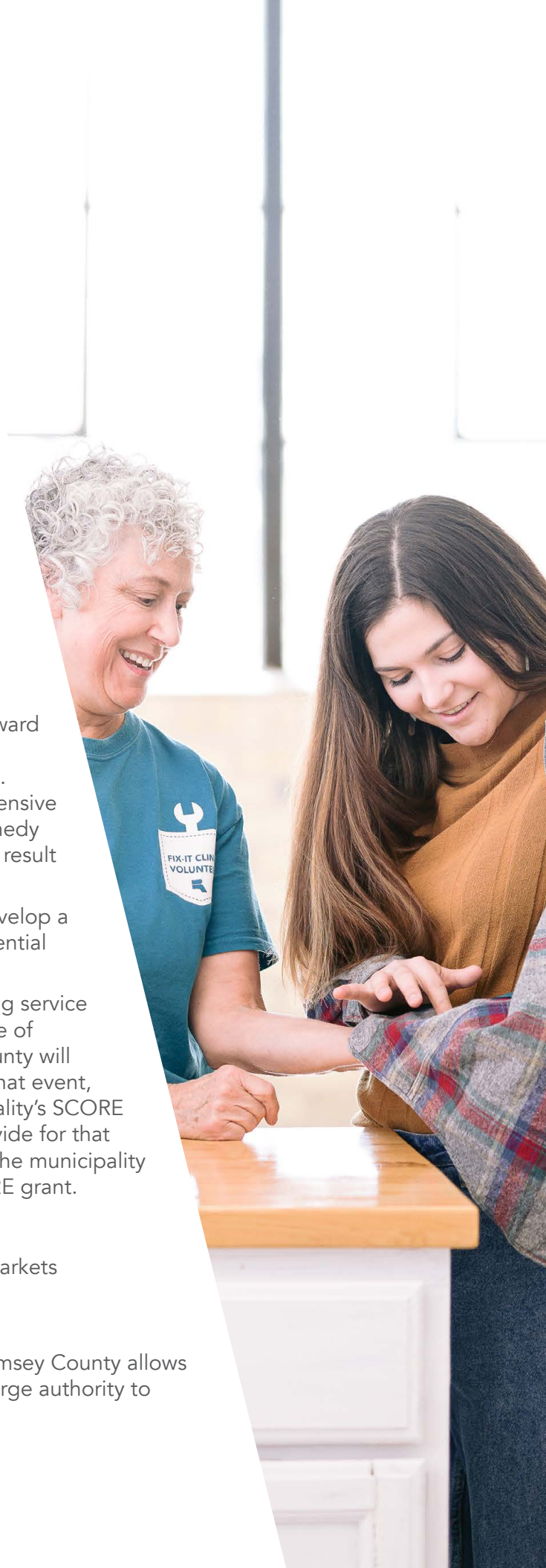
- a. Continue the mutual development and use of a performance work plan for cities, including performance measures to plan their progress toward achieving recycling outcomes. Municipalities will work with the county to monitor annual progress. Failure to meet stated outcomes will result in intensive collaboration with the county to identify and remedy gaps and, as a least-preferred consequence, will result in the county withholding SCORE grant funds.
- b. Ramsey County requires each municipality to develop a long-term financing mechanism to fund its residential recycling program.
- c. If a municipality fails to maintain existing recycling service on an ongoing basis to all residents at their place of residence, including multi-unit buildings, the county will step in and ensure provision of such service. In that event, the county will retain any portion of the municipality's SCORE grant sufficient to cover the county's cost to provide for that service and will charge the appropriate party in the municipality for costs not covered by the municipality's SCORE grant.

6. Recycling Market Support Fund

Continue to maintain the existing County Recycling Markets Support Fund.

7. Municipal Recycling Fee

Through joint powers agreements with the county, Ramsey County allows municipalities to use the county's statutory service charge authority to collect a municipal recycling fee.





8B. Residential Food Scraps

Introduction

Food scraps comprise over 20% of residential trash and are one of the largest single materials in the waste stream. Food scraps recycling is important to Ramsey and Washington counties' solid waste management system. The strategies outlined below will push the county toward the state goal of 75% recycling in metropolitan counties by 2030 by focusing on food scraps recycling. In particular, rollout of the Food Scraps Pickup Program allows the county to reduce the amount of food scraps ending up in the trash/waste stream by composting these materials. In the future the county will use anaerobic digestion to process food scraps. See Appendix A for an overview of the Food Scraps Pickup Program.

Policies

1. Ramsey County, with R&E, will work with local partners, private haulers, recyclers, transfer stations and other counties to **divert food scraps from the residential waste stream** using a variety of organics management methods, including anaerobic digestion. This will be done in a manner that ensures that all residents are aware of and have access to services.
2. Ramsey County, with R&E, will **use resources strategically** to ensure that residents optimize organic waste management. The county will use outreach and education, planning and evaluation, regulation, financial incentives, technical assistance and consultation as necessary to accomplish organic waste management objectives.
3. Ramsey County will continue to provide free **food scrap drop-off sites** and will continue to support drop-off sites for residents at other locations in partnership with local entities.

Strategies

1. Residential Curbside Food Scraps Collection

Make residential curbside organics collection available to all residents of Ramsey County by 2030 via continued expansion of the Food Scraps Pickup Program (*Policy Plan required strategy 40*).

- a. The program will be available to all residents, including those in multi-unit buildings.
- b. Apply continuous evaluation and process improvement. This considers effective and equitable residential food scrap collection through collaboration with R&E, private haulers, transfer stations and municipalities.

2. Food Scraps Education

Expand education to residents on the benefits of food scraps recycling and the organics system.

- a. Continue regular promotion of and education about the Food Scraps Pickup Program and food scrap drop-off sites, recognizing that terminology and program structure may vary from other regions with food scraps collection programs.
- b. Educate and inform residents on progress on state Metropolitan Solid Waste Management Policy Plan objectives for organic waste management, service availability and markets for organic-derived and finished products.

3. Residential Food Scraps Recycling Drop-Off Sites

Develop and maintain accessible residential food scraps drop-off sites. Establish additional residential food scraps drop-off sites through partnerships with municipalities and others. (*Policy Plan optional strategy 43*). All sites will be available to residents at no cost.

4. At-Home Composting Support

Support at-home/backyard composting and sustainable approaches to managing stormwater. Partner with municipalities to promote backyard composting and rainwater collection, such as outreach and funding for compost bin/rain barrel distribution. Promotions will include online information, county publications and social media. (*Policy Plan required strategy 41*).



8C. Non-Residential Recycling and Organics

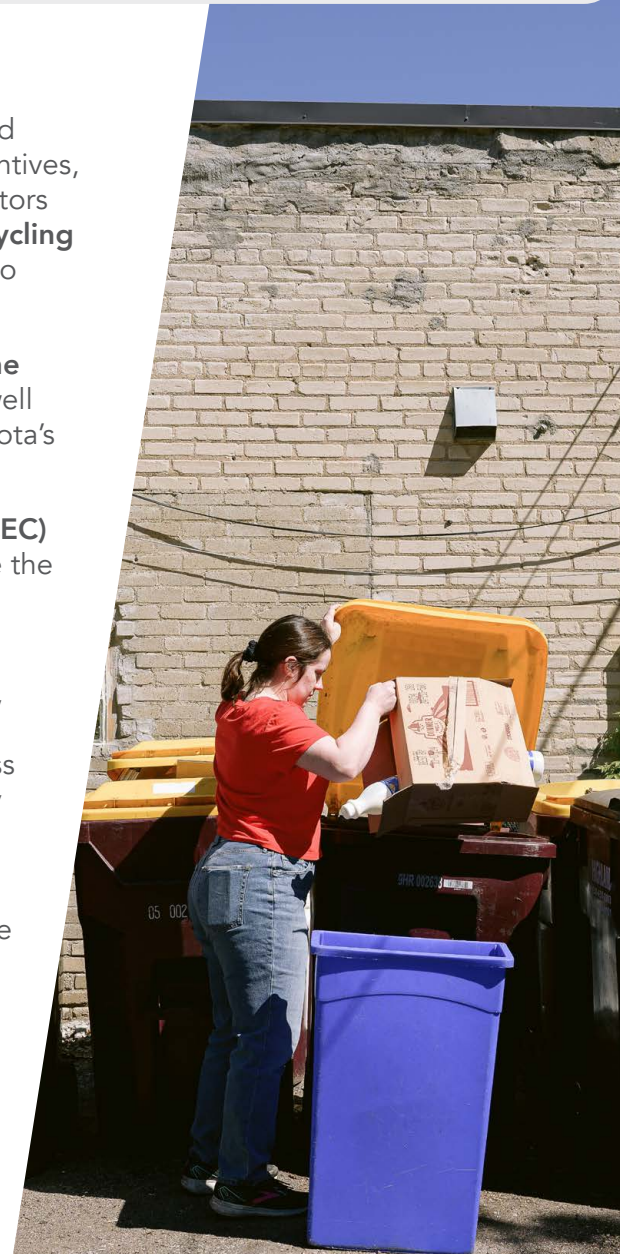
Introduction

Achieving the state's 75% recycling goal will depend heavily on increased recovery and recycling of traditional materials and organics from non-residential entities and multi-unit residential properties. Non-residential entities include businesses, institutions, nonprofit organizations and schools. Multi-unit properties are a type of housing where multiple separate units for residential living are contained within one building.

BizRecycling, one of Ramsey and Washington counties' joint programs through R&E, leads efforts to engage non-residential and multi-unit entities to reduce waste and recycle traditional materials and organics. It is important to note that state law mandates recycling in most businesses.

Policies

1. Ramsey County, through R&E, will provide public education and information, planning and evaluation, regulation, financial incentives, technical assistance and consultation to non-residential generators such as businesses, schools and municipalities to **facilitate recycling and organics opportunities** and will work with public entities to assure these opportunities are maximized.
2. Ramsey County, with R&E, will evaluate progress in **meeting the state's objectives** for non-residential diversion from trash, as well as the level of service availability, with the aim to reach Minnesota's 75% recycling goal.
3. Ramsey County will **use the County Environmental Charge (CEC) as an incentive for non-residential recycling** and will promote the financial benefits of non-residential recycling.
4. Ramsey County **supports the state law that mandates recycling in businesses** (Minnesota Statutes, section 115a.551, subdivision 2a) and will continue to make businesses aware of the law. Should evaluation show there is not significant progress towards improving non-residential recycling collection, Ramsey and Washington counties will jointly explore the local use of regulatory tools to improve business recycling.
5. Ramsey County supports efforts to work collaboratively with the Minnesota Pollution Control Agency (MPCA) and all relevant parties to develop a **standard non-residential recycling and organics data collection program**.
6. Ramsey County, with R&E, supports efforts to work collaboratively with the MPCA, producer responsibility organizations created under extended producer responsibility (EPR) laws and all relevant parties on **recycling and organics market development**.

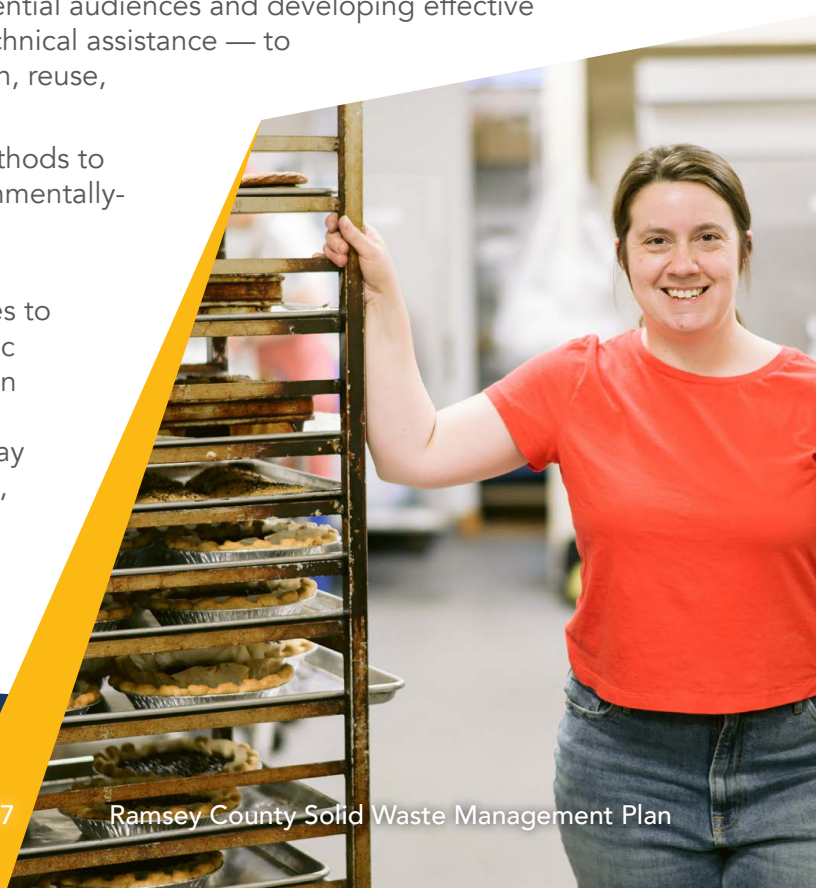


Strategies

1. BizRecycling

Continue to promote and utilize R&E's BizRecycling program to work with non-residential generators — including but not limited to multi-units, businesses and institutions such as health care facilities and schools — to increase participation in waste reduction, reuse, recycling and organics programs and activities:

- a. Focus on non-residential generators through various outreach methods and provide education and awareness on waste reduction, reuse opportunities and recycling and organics management.
- b. Provide technical assistance — including business-to-business consultations — to help non-residential generators assess and implement best practices to manage waste up the waste management hierarchy, prioritizing waste reduction.
 - iii. Recruit a minimum of 12 commercial businesses a year to recycle at least three materials from their operations and promote environmental and resource benefits (*Policy Plan required strategy 35*).
 - iv. Provide grants for, or access to, software that can track food waste (*Policy Plan required strategy 13*).
- e. Continue to provide a diverse grant portfolio that supports non-residential generators' efforts to reduce and manage waste following the solid waste hierarchy.
- f. Continue partnership program to engage non-residential generators.
- g. Continue to establish partnerships with organizations that represent cultural, ethnic and/or traditionally underserved business communities.
- h. Implement, as appropriate, research-based, equitable and innovative strategies to increase program effectiveness and adaptability across a wide range of non-residential generator audiences. This includes (but is not limited to):
 - ix. Evaluating and adapting program incentives such as grants to maximize effectiveness.
 - x. Acknowledging nuances in non-residential audiences and developing effective and targeted strategies — such as technical assistance — to assess and implement waste reduction, reuse, recycling and organics opportunities.
 - xi. Researching and collaborating on methods to reduce costs and ensure more environmentally-sustainable products are used in non-residential generators' operations.
 - xii. Researching and developing strategies to increase employee, student and public engagement at non-residential sites, in waste reduction, reuse, recycling and organics opportunities. These sites may include grocery and retail, restaurants, festivals and events, parks and gas stations.





2. Multi-Unit Residential Properties

Through R&E (e.g., BizRecycling), support recycling and waste reduction in multi-units through efforts like partnerships, municipal support, resources and improvement strategies.

- a. Explore BizRecycling's definition of multi-unit residential properties to ensure that it includes the full range of housing types to be supported by the program (e.g., townhomes, manufactured homes, etc.). Develop strategies, methods and best practices to serve these entities.

3. Assistance to Schools

Ramsey County, and R&E, will provide technical assistance, resources, best practices and grants to schools and associated activities and spaces (e.g., sporting events) to support sustained recycling and organics programs.

- a. Harness efficiencies through R&E programs (e.g., BizRecycling), such as procurement opportunities.
- b. Continue using a continuum based on best practices to evaluate, set standards and measure progress of school districts in the county in meeting reuse and recycling goals. Revise the continuum as needed.
- c. Facilitate partnerships and networking opportunities to share resources among schools and assist with obtaining leadership support for efforts.
- d. Promote awareness of and provide technical assistance for recycling services and financial incentives available to eligible schools under any EPR law.

4. Organics Diversion for Large Generators

Explore and work with partners to develop requirements for the management of organics from large commercial food generators by 2030. Work with the MPCA, Washington County and other metro counties to explore opportunities for regional consistency (*Policy Plan required strategy 42*).

5. Very Small Business/School Collection

Explore opportunities for small businesses, schools and other entities that generate small quantities of waste to use alternative collection methods not normally available for businesses when volumes do not justify separate collection. This may include municipal organized recycling collection, food scraps drop-off sites or the Food Scraps Pickup Program. Work with municipalities, haulers and other partners to implement.

6. Outreach Through Regulators

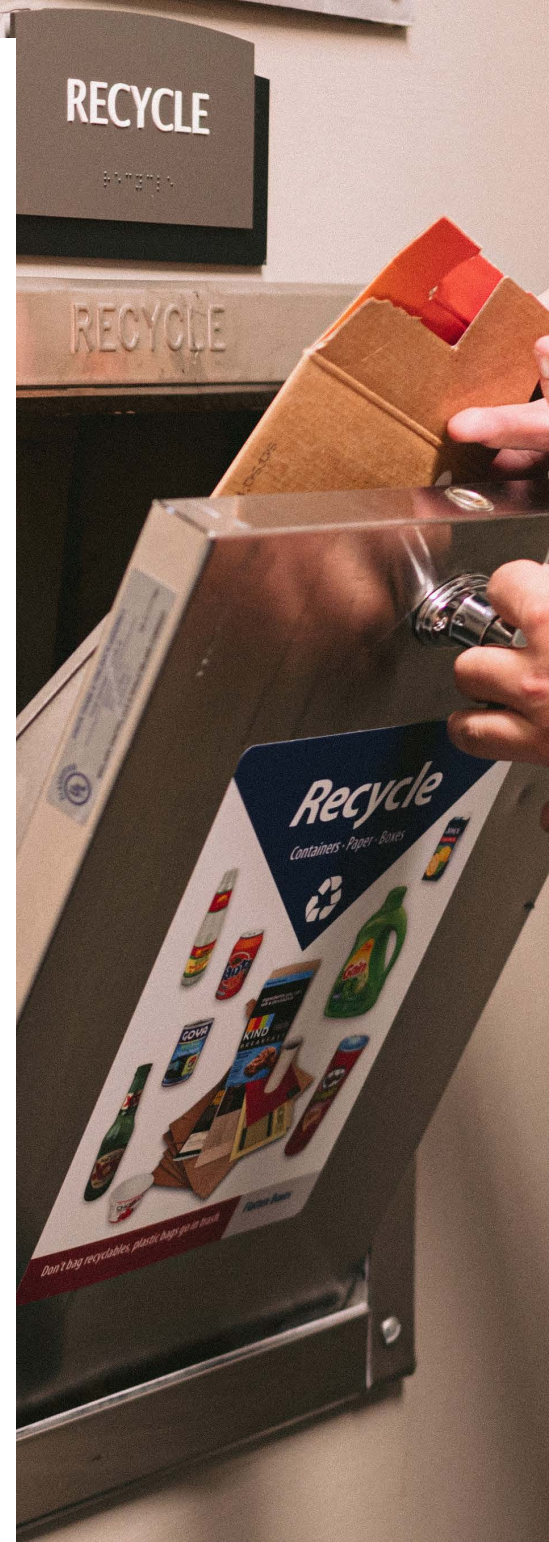
Monitor opportunities for non-residential entities and events (e.g., food establishments, schools, special events and food vendors) to improve waste reduction and recycling and reach those entities through connections with county regulation programs (e.g., food, pools and lodging inspections, event permitting). Outreach in this area may include:

- a. Connecting establishments to educational resources, financial incentives, programs and services to aid in waste management.
- b. Assisting in obtaining baseline information on waste management practices and identifying barriers to implementing improvements.
- c. Exploring incentives, policy change and other methods to ensure new establishments recycle organics. This may include ensuring that building designs include space and enclosures for organics collection before permits are approved or providing credit for organics recycling.
- d. Working with event organizers and public entities to encourage implementation of best management practices for purchasing and collection of recycling and food scraps.
- e. Conducting ongoing assessments to determine sustainability improvements through surveys or site visits.

7. Space for Recycling

Through partners, reach businesses and multi-unit developers engaging in construction and remodeling to encourage inclusion of space for recycling collection service co-located with waste collection (including enclosures and recycling chutes).

- a. Inspectors will review plans submitted by licensed food and beverage establishments to ensure licensees meet recycling requirements in Ramsey County's Food Protection Ordinance.
- b. Ramsey County will work with state and local entities and other partners to improve state and local commercial and multi-unit building/zoning codes to ensure recycling best practices for collection, enclosures and signage.



8D. Internal Recycling and Organics

Introduction

Ramsey County emphasizes internal recycling, reduction and reuse strategies to be a leader in achieving solid waste management goals. Internal county properties include parks, libraries, building entrances and lobbies, correctional facilities and service centers.

Policies

1. Ramsey County will **lead by example**, ensuring that county-occupied property is designed for recycling and organics management and that county policies and practices support waste reduction and recycling.

Strategies

1. County Facilities

Ensure new or remodeled facilities are designed or remodeled to include space for collection of recycling, food scraps and waste both indoors and outdoors.

2. Internal Sustainable Practices

Increase employee awareness of and commitment to environmentally-sustainable practices in the county workplace.

- a. Partner with other departments to ensure county properties implement best practices for waste reduction, reuse, recycling and organics.
- b. Develop and implement a county policy encouraging the use of reusable food and beverage service ware at county hosted events and department activities. (*Policy Plan optional strategy 22*).
- c. Develop and implement a green meeting policy for county-hosted events and department activities (*Policy Plan required strategy 21*).
- d. Encourage contract specifications and internal policies related to waste management expectations such as double-sided printing, electronic communication versus printing, etc.
- e. Evaluate and measure performance of county programs using techniques such as waste audits or employee surveys.



3. Reuse of County Surplus Items

Prioritize the reuse of surplus items (e.g., furniture) from county facilities. Explore opportunities for residents to purchase county surplus items.

4. Environmentally Preferable Purchasing

Working with county procurement staff, develop and implement a county sustainable purchasing policy using MPCA guidance by January 2026 (*Policy Plan required strategy 16*). This policy will account for and complement county CERT Small Business Enterprise purchasing policies. As part of this effort, explore opportunities through state contracts, including supporting the MPCA to develop sustainable state contracts.

- a. Participate in Responsible Public Purchasing Council meetings (*Policy Plan required strategy 17*).

5. Materials Exchange

Participate in materials exchange programs to best serve the county.

6. Organics-Derived Products

Create policies for the county and municipalities to incorporate food-derived compost and other organics-derived products into construction, landscaping and remediation projects (*Policy Plan required strategy 55*).

7. Maximize Recovery of Materials

As the county develops or redevelops land, maximize recovery of materials that result from that work through reuse, recycling or energy recovery and minimize land disposal (*Policy Plan optional strategy 66*).



CHAPTER 9:

Bulky Waste Management



Introduction

Bulky waste continues to pose waste management challenges. Bulky items include mattresses, carpeting, textiles, furniture and lumber – anything that may not fit in curbside collection carts. Improper bulky waste disposal, such as illegal dumping, results in stressors to the waste management system and has societal and environmental impacts affecting residents' quality of life.

The following policies and strategies focus on the management of bulky waste. This includes county programs and programming through Ramsey/Washington Recycling & Energy (R&E) and key partners. The strategies focus on collaboration needed to move bulky items higher on the waste hierarchy to where they can be reused and repurposed before becoming waste, prioritizing community health and safety.

Policies

1. Ramsey County, with R&E, will focus on the **waste management hierarchy** for all material management, improving public and environmental health.
2. Ramsey County, with R&E, will support **policies that include product stewardship** for bulky waste items, including mattresses and other hard-to-manage materials.
3. Ramsey County, with R&E, will collaborate with municipalities, government entities, community organizations and other partners to **address the contributing factors leading to bulky waste generation** such as housing instability and "fast-fashion" furniture.



Strategies

1. Mattress Recycling Programs

Through R&E, implement mattress recycling programs by working with the mattress industry (e.g., manufacturers, wholesalers and retailers), non-profit entities and mattress processors/recyclers. Expand programming to include other bulky items as opportunities arise.

2. Community Bulky Waste Management

Partner with municipalities, waste haulers, businesses and schools to implement and promote for proper, convenient and affordable management of bulky materials. These efforts will help people best manage these materials and reduce illegal dumping, burning and nuisance situations.

- a. Increase support for municipal bulky waste collection programs.
- b. Set requirements for city bulky waste clean-up events.
- c. Identify and remove barriers for convenient bulky waste collection.

3. Bulky Item Reuse

Partner with municipalities, reuse organizations and other entities to promote, implement and educate people about bulky item reuse opportunities, including at clean-up events.

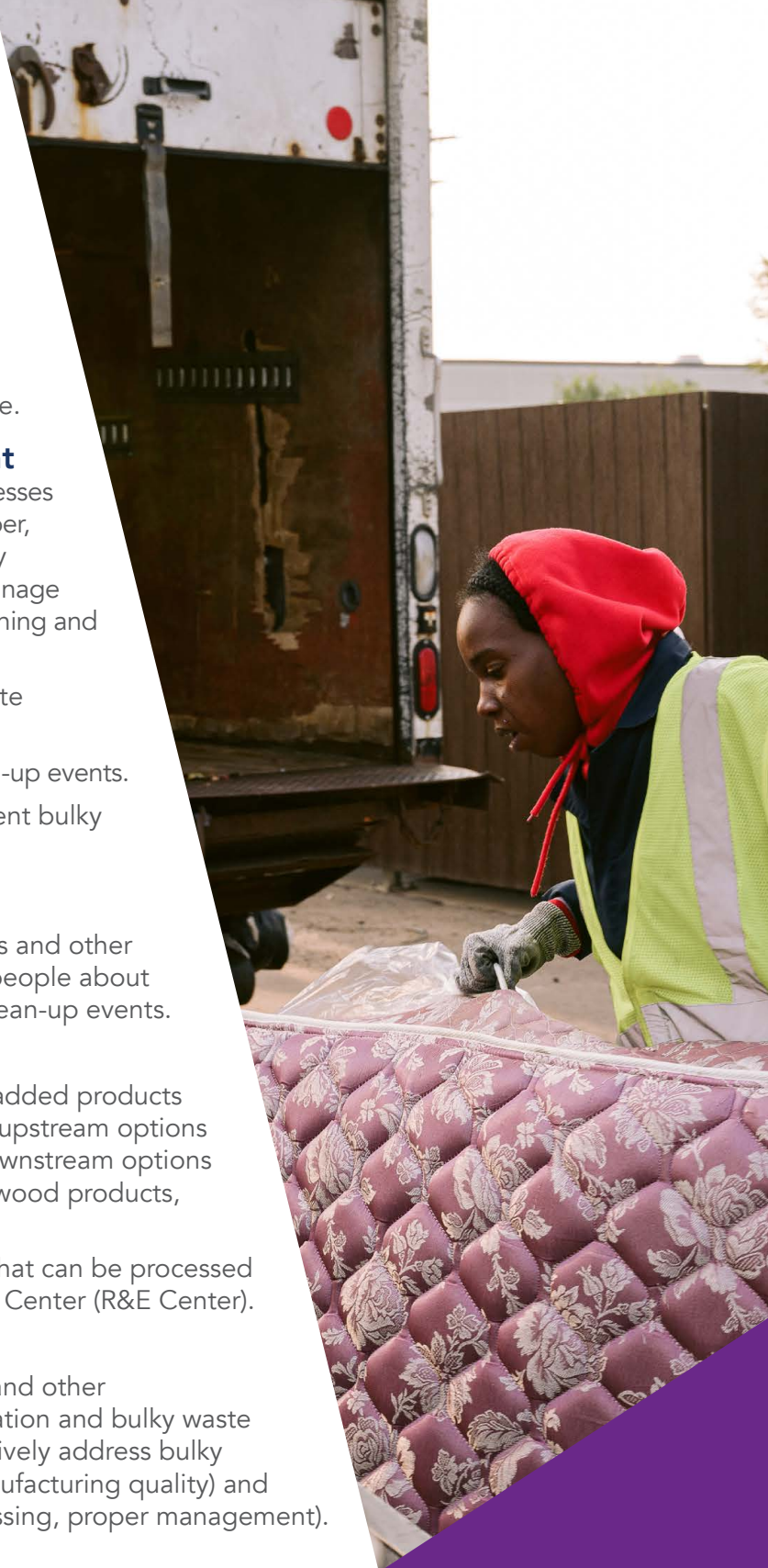
4. Bulky Waste End Markets

Evaluate and support opportunities for value-added products from bulky waste. These markets may include upstream options (reuse and repurposing of bulky items) and downstream options (e.g., wood materials into mulch, engineered wood products, biochar and/or fuels).

- a. Continue processing bulky waste items that can be processed by equipment at the Recycling & Energy Center (R&E Center).

5. Bulky Item Trends

Evaluate and monitor how trends in furniture and other bulky items and their impacts on waste generation and bulky waste management. Explore opportunities to proactively address bulky waste issues both upstream (e.g., design, manufacturing quality) and downstream (e.g., collection, recycling, processing, proper management).



CHAPTER 10: Yard Waste and Wood Waste

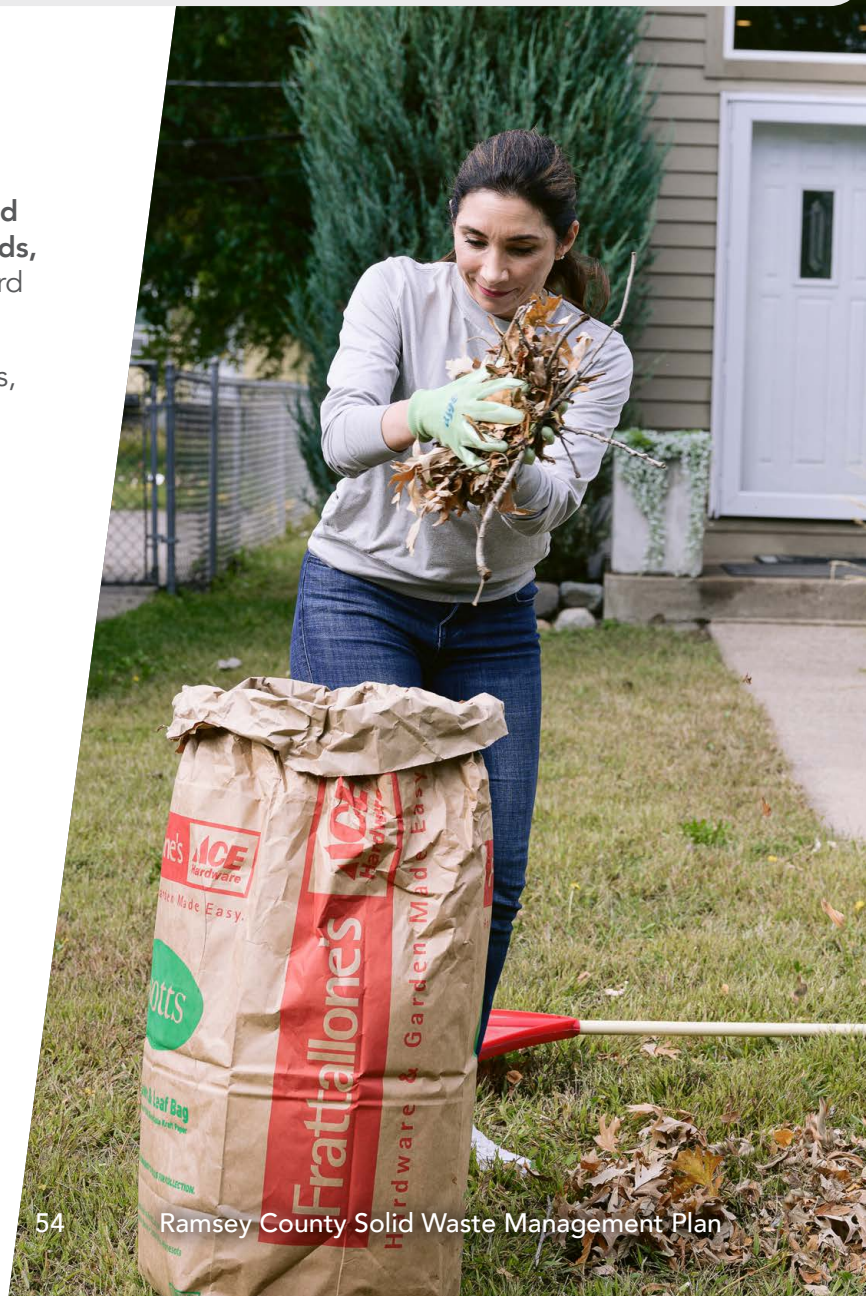


Introduction

Yard and wood waste management are important components of the Ramsey County solid waste management system. Issues such as climate change, invasive species, pests and financial barriers affect how the county manages these waste streams. This section addresses how Ramsey County handles those issues.

Policies

1. Ramsey County is committed to **ensuring residential yard waste is properly managed through accessible and convenient methods**, including at county owned and operated yard waste sites.
2. Ramsey County will work with state agencies, municipalities and other entities to **ensure a healthy and sustainable tree canopy** by responding and adapting to emerging threats of disease, invasive species and climate change.
3. Ramsey County will partner with state agencies, municipalities and other entities to **prioritize the highest and best use of wood waste** resulting from emerald ash borer (EAB) and other causes.



Strategies

1. Yard Waste Site Operations

Continue to operate county yard waste sites.

- a. Ramsey and Washington counties will continue the reciprocal use of yard waste programs.
- b. Maintain existing system of seven yard waste sites, considering the convenience to Ramsey County residents and acknowledging the barriers of finding a location for a new or relocated site in a mostly developed county.
- c. Two of the county's yard waste sites are located within county parkland: Tony Schmidt Regional Park and Poplar Lake County Park. These sites shall continue to operate as an allowable use of parkland and shall be designed and operated to fit into park activities. Should either site need to be relocated, Saint Paul – Ramsey County Public Health and Ramsey County Parks and Recreation shall identify alternate space to locate the displaced service.
- d. Ramsey County will manage its yard waste sites in accordance with the Ramsey County Storm Water Management Plan.

2. Proper Yard Waste Management

Ensure proper yard waste management for residents through education, technical assistance and continuous improvements to yard waste operations — including addressing capacity to manage materials.

3. Provide Compost and Wood Mulch

When available, provide free finished compost and wood mulch at compost sites to residents and public entities. Promote and remove barriers to access finished product.



4. Community Group Use of Yard Waste Sites

Allow access to specific yard waste sites for education and civic engagement including (but not limited to):

- a. Volunteer opportunities for community groups.
- b. Fundraising activities that improve quality of service to county residents and/or encourage physical activity.
- c. Provide access to its property at the Frank and Sims yard waste site, called the “Big Urban Woods,” through joint powers agreements with participating schools for use as a school forest. Ramsey County will work with the schools, the Department of Natural Resources, University of Minnesota Extension and community groups to develop and maintain the property as a school forest.

5. Wood Waste Management Plan

Develop plans to prevent and manage wood waste in the county and throughout the region by the end of 2025. Work collaboratively on regional planning and offer support to municipalities, including working with the Minnesota Pollution Control Agency to identify funding sources for these efforts. Evaluate alternative processing methods and emerging technologies, such as gasification, to manage wood waste (*Policy Plan required strategy 45*).

6. Forest-Related Threats

Identify, monitor and respond to current and emerging threats to vegetation that impact yard/wood waste management. These include impacts of climate change; pathogens; and invasive species including, but not limited to, EAB, spongy moth, oak wilt, Asian longhorned beetle, elongate hemlock scale and mountain pine beetle. Partner with relevant government agencies, higher education and research institutions and community organizations to increase awareness and share best practices, such as proper pruning to avoid spread of disease and reduce volume of wood waste.

7. EAB Tree Care Education

Develop and distribute EAB tree care education programs for privately owned land. This includes educating on tree removal options (*Policy Plan optional strategy 49*).

8. Removing Cost Barriers to Tree Care

Explore opportunities to assist with cost barriers to tree care and removal, such as allowing assessments on property taxes to spread the cost of tree care over a multi-year timeframe (*Policy Plan optional strategy 51*).

9. End-Use of Wood Waste

Promote existing programs that use EAB-effected wood and other wood waste for furniture, home goods, flooring and other purposes. Expand to include other wood waste uses as opportunities arise, including (but not limited to) milling; prioritizing purchasing of products from recovered waste wood; and production of biomass pellets, renewable fuels or carbon soil amendments. (*Policy Plan required strategy 46*).





CHAPTER 11:

Construction & Demolition Waste and Deconstruction

Introduction

Ramsey County has well-established policies and strategies for managing materials not classified as mixed municipal solid waste (MSW) (i.e., non-MSW) such as construction and demolition (C&D) waste. The county also encourages deconstruction, which is the process of taking apart a structure so that building materials can be reused. The policies and strategies below state Ramsey County's commitment to ensuring the responsible management of these materials to create a more robust waste management system.

Policies

1. Ramsey County supports the management of C&D waste according to the waste management hierarchy. The county will work with municipalities and other entities to develop policies, programs and strategies that promote **managing of non-MSW higher on the hierarchy**. County projects and contracts shall maximize reuse, recycling and lastly processing for C&D when feasible.
2. Ramsey County is committed to **reducing health, safety and property risks** associated with C&D waste.

Strategies

1. Green Building Practices

Improve use of green building best practices, taking a sustainable materials management approach by using the Minnesota Sustainable Building guidelines in new building design, construction or remodeling projects. Consider energy efficiency, conservation and reducing impacts to the environment and public health.

- a. Work with appropriate county departments to explore county policies for deconstruction and reused building materials in county projects, considering reduction of health risks caused by toxic materials such as lead.
- b. Work with Ramsey County Property Management, Public Works and Parks and Recreation departments to implement the use of building material management plans. Consider adopting MPCA's Material Management Plan Template (*Policy Plan required strategy 65*).

2. Pre-Demolition Inspections

Working with municipalities, continue to support a pre-demolition inspection program, ensuring hazardous building materials and wastes, including asbestos, are properly identified, removed and managed from structures slated for renovation or demolition.

3. Support Deconstruction

Support deconstruction, building material salvage and recycling for construction, remodeling and demolition materials through partnerships, programs, technical assistance and consultation. This includes:

- a. Through Ramsey/Washington Recycling & Energy, provide financial assistance through grants to offset the additional cost of building deconstruction, used building material installation and/or structural moving (*Policy Plan optional strategy 68*).
- b. Provide deconstruction training — with consideration for toxic materials such as lead — for municipal officials, architects, designers, general contractors and the public (*Policy Plan optional strategy 69*).
- c. Explore programs and workforce development to increase deconstruction, reuse and appropriate management of C&D materials.
- d. Host or support home and building repair and refurbishment trainings (*Policy Plan optional strategy 70*).
- e. Work with partners to host a building material collection event or swap (*Policy Plan optional strategy 67*).
- f. Continue to work with municipalities to consider deconstruction that supports the goal of reusing as many building materials as feasible while considering environmental risks.
- g. Explore requirements to encourage reuse of building materials. This could include requirements for material management plans or deconstruction assessments when projects are being permitted.
- h. Explore other emerging technologies and practices that enable the reduction, reuse and recycling of building materials.
- i. Explore training county staff conducting pre-demolition inspections to identify and promote deconstruction and building materials reuse.
- j. Consider support of material reuse in tax forfeited properties.

4. Deconstruction Markets

Work with the MPCA and other partners to explore, support, develop and/or expand markets for materials associated with construction, demolition, deconstruction and industrial wastes. Collect data on how much waste is being generated and where it is diverted or disposed of to understand market opportunities.

5. Externalities of C&D Waste

Explore opportunities to better account for the externalities of C&D waste. This includes working with the Partnership on Waste and Energy and advocacy groups and supporting state-wide solid waste management tax increases for C&D waste.

CHAPTER 12: Processing



12A. Waste Processing

Introduction

In 2018, Ramsey and Washington counties implemented waste designation to the Ramsey/Washington Recycling & Energy Center (R&E Center). Defined in Minnesota law, waste designation allows counties to enact an ordinance that requires all municipal solid waste (MSW) to be delivered to a designated waste management facility. The R&E Center employs multiple methods to add value to waste through processing, including recyclables recovery, sortation of food scraps and the production of refuse-derived fuel (RDF). These processes are essential for maximizing landfill diversion and resource recovery.

Waste delivered to the R&E Center is comprised of MSW generated within Ramsey and Washington counties, encompassing household, commercial and institutional waste. Unacceptable or non-processible waste includes construction or demolition debris, loads containing large quantities of metal, vehicle parts, hot tubs, propane tanks, major appliances, hazardous waste, infectious and biological waste and yard waste.

Public entities, defined by Minnesota Statute §115A.471, play a crucial role in waste management and are responsible for ensuring that the MSW they collect in Ramsey and Washington counties is processed at the R&E Center.

Policies

1. Ramsey County, with R&E, supports waste reduction, reuse and recycling, including the separate management of organics. Efforts will be made to **continue increasing source-separation** for recycling and organics from both residential and non-residential waste generators.
2. Consistent with the state hierarchy, Ramsey County, through R&E, affirms **processing of waste**, for the purpose of recovering energy, recyclables and other useful materials, as the preferred management method over landfilling for waste that is not reduced, reused, or separately recycled or composted. This applies to both MSW and non-MSW. This policy applies both to waste generated throughout the county and specifically to MSW generated by public entities, including contracts for organized collection of solid waste.

3. Ramsey and Washington counties shall jointly own the R&E Center in Newport, MN. Decisions regarding the R&E Center's operations will be guided by principles that include:
 - a. Planning for a 20- to 30-year horizon.
 - b. Building on the current system and allowing changes in processing to emerge over time.
 - c. Assuring flexibility.
 - d. Managing risks.
 - e. Pivoting the view from "waste" to "resources" to add value to the local economy and environment.
4. Ramsey County shall continue to **enforce its waste designation ordinance** to ensure that all acceptable waste generated within its jurisdiction is delivered to the R&E Center. This ensures proper management of waste and supports the processing of materials for resource recovery.



Strategies

1. R&E Joint Powers Agreement

Continue working cooperatively on specific waste management issues through a Joint Powers Agreement to enhance waste management services efficiency and help achieve regional processing goals in the East Metro.

2. Joint Designation Plan

With Washington County and R&E, continue to enforce compliance with the Ramsey and Washington Counties Joint Designation Plan. Evaluate the amount of MSW generated and the volume delivered for processing.

3. Enforce Restrictions on Disposal

Work cooperatively with the MPCA, as the state enforces provisions found in Minnesota Statutes section §473.848, which requires waste to be processed before land disposal, to enforce restriction on disposal (*Policy Plan required strategy 58*).

- a. Ramsey and Washington counties adopt the MPCA criterion for determining when MSW is unprocessable. That criterion states that waste will be certified as unprocessable only when there is no reasonably available capacity in the Twin Cities metropolitan area system that could process solid waste generated in the county.

4. Unacceptable/Non-Processible Waste

Work with municipalities, waste generators and haulers regarding methods to reduce delivery of unacceptable or non-processible materials to the R&E Center.

5. Resource Recovery

Ramsey and Washington counties will coordinate resource recovery activities through R&E.

6. Processing Improvements

Continue to identify, evaluate and implement new processing and sorting opportunities for the R&E Center and throughout the waste system, including technologies to enhance recycling.

- a. Continue to operate pre-processing of waste at resource recovery facilities, such as the food scraps bag sortation line and recyclables recovery system at the R&E Center (*Policy Plan required strategy 36*).



12B. Processing Technologies and End Products

Introduction

Processing technologies enable the county to recover value from waste, conserving resources, reducing climate impacts, minimizing the need for land disposal and creating new end products.

Ramsey County emphasizes the importance of recovering organic waste to create organics-derived end products. This decreases the amount of waste created and helps meet the MPCA goal of 75% recycling by 2030. The county describes organics-derived products as including finished compost, biochar and other value-added products made from processing organic waste.

Policies

1. Ramsey and Washington counties will continue work as identified in the **Ramsey/Washington Recycling & Energy Board's Scope for Resource Management**, an integrated vision for recycling, organics and processing. The scope strongly supports the waste hierarchy and the US Environmental Protection Agency food waste hierarchy in managing waste higher on the hierarchies. The Scope for Resource Management includes:
 - a. Increased source-separation efforts for recycling and organics from residential and non-residential waste generators.
 - b. Using a front-end recyclables recovery system to recover additional recyclables and organic-rich materials that remain in mixed municipal solid waste (MSW).
 - c. Using organic waste as a feedstock for anaerobic digestion.
 - d. A transition beyond using refuse-derived fuel (RDF) to generate electricity.
2. Ramsey County supports ensuring the quality of **organics-derived products**, including minimizing contamination in feedstocks and supporting standards, testing and appropriate use of organics-derived materials that is aligned with county public and environmental health goals.
3. Ramsey and Washington counties, with R&E, **support the use of anaerobic digestion (AD)** for the processing of organic waste separated at the source and through mixed waste processing and for the MPCA to quickly develop clear regulatory pathways for its implementation. AD implementation in the Twin Cities region will be critical for ensuring sufficient capacity exists for organics processing.



Strategies

1. Organics-Derived Product Market Development

Support the development of scalable markets for organics-derived products, e.g., biochar, compost products and renewable natural gas.

2. Organics-Derived Products Use

Expand and support the use of organics-derived products in local, county, district and state projects and programs.

- a. Support the expanded and preferred use of compost derived from food scraps and yard waste in Minnesota Department of Transportation and local transportation projects.

3. Standardized Testing, Labeling and Use of Organics-Derived Products

Collaborate with partners to educate about, support and encourage standardized testing, labeling and appropriate use of organics-derived products to assure quality and benefits for local end-uses, for example (but not limited to):

- a. Promoting use of the US Composting Council Seal of Testing Assurance Program.
- b. Promoting compliance with current MN compost labeling requirements.
- c. Promoting compliance with MN Rule 7035.2836 for production, distribution and end-use of compost.

4. Developing Organics Processing Capacity

Support increased capacity for organics processing (e.g., composting, mulching, food-to-animals, anaerobic digestion and biochar production) beyond existing operations (*Policy Plan optional strategy 52*).

- a. Continue to support composting, mulching and biochar operations (*Policy Plan required strategy 47*).
- b. Find new outlets to increase food-to-animal operations (*Policy Plan optional strategy 56*).
- c. Support and pursue the use of anaerobic digestion for organic waste feedstocks through R&E and partner with the MPCA to develop clear regulatory pathways for the development of regional digestion facilities.

5. Transitioning Use of RDF

Through R&E, explore and work toward the transition from using RDF and/or MSW to generate electricity using next-generation, non-combustion technologies that have climate, public health and environmental benefits, producing transportation fuels and other products.

6. Collaboration on Solid Waste Infrastructure

Share information, learnings and research on emerging and alternative technologies with the MPCA and other interested parties to raise understanding, address concerns and proactively adopt efficient regulatory frameworks. With regional partners, engage in efficient and value-added infrastructure planning (*Policy Plan required strategy 11*).

7. Contingency Planning

Develop plans for large facility closures or changes to operation to reduce landfill use, including considering opportunities to redirect the CEC used for resource recovery purposes to efforts that shift resources to higher levels of the waste management hierarchy, including waste and toxicity reduction, reuse, recycling, organic waste management and other issues, such as illegal dumping and innovative processing technologies (*Policy Plan required strategy 12*).



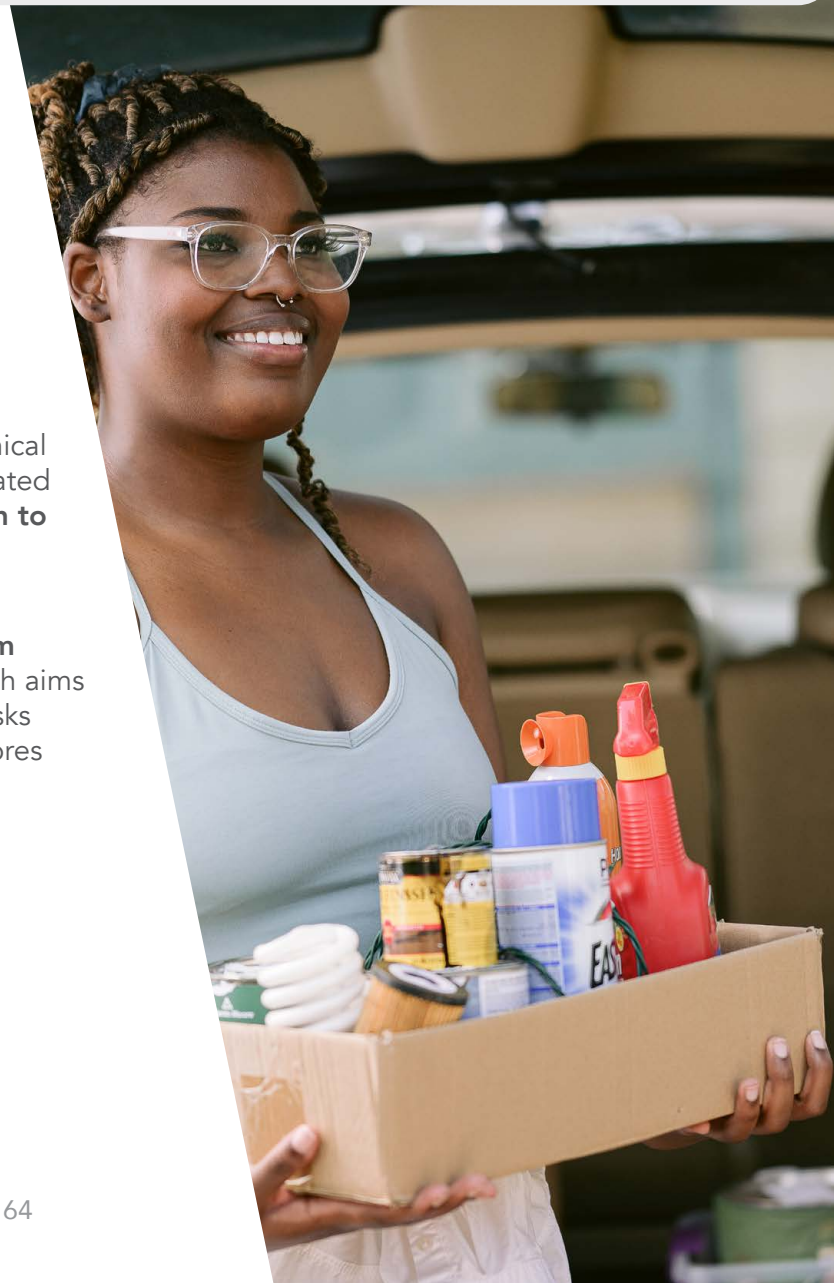
CHAPTER 13: Regulation

Introduction

Ramsey County ensures protection of public health and the environment through a well-established solid and hazardous waste regulation program. The county ensures compliance with applicable laws, rules and ordinances related to the management of solid and hazardous waste as required by Minnesota Statutes, section 473.811. Ramsey County implements its solid and hazardous waste compliance program focused on risk reduction.

Policies

1. Under the authorization of Minnesota Statute section 473.811, Ramsey County will **regulate and enforce solid and hazardous waste activities** to ensure compliance with applicable laws. This includes holding solid waste haulers and regulated facilities accountable for following the guidelines outlined in this plan.
2. Ramsey County will provide information, technical assistance, outreach and consultation to regulated parties, emphasizing a **collaborative approach to regulatory compliance**.
3. Ramsey County places a priority on identifying and **removing toxic or harmful materials from municipal solid waste**. This proactive approach aims to mitigate environmental and public health risks associated with hazardous waste and underscores the county's commitment to responsible waste management practices.





Strategies

1. Licensing and Monitoring

Continue to license solid waste haulers, waste facilities and hazardous waste generators. Inspect, monitor and use data from licensee operations for compliance with county regulations to ensure proper management of solid and hazardous materials/waste.

2. Regional Hauler Licensing

Continue to participate in the Regional Hauler Licensing program with other metropolitan counties. Explore improvements to the existing program which may result in more effective or efficient implementation of other plan strategies.

3. Risk-Based Compliance Programs

Implement solid and hazardous waste compliance programs based on risk. Charge fees for regulated activities based on risk factors.

4. Regulatory Tools

Evaluate progress toward waste reduction and management objectives. Should evaluation show there is not significant progress towards meeting objectives, Ramsey and Washington counties will explore the use of local regulatory tools and incentives, in partnership with the MPCA and other metro counties.


- a. Support state law that mandates recycling in businesses (*Minnesota Statutes, section 115a.551, subdivision 2a*).

5. Connecting Ordinances to Goals

Review county ordinances, such as the county food code and hazardous waste ordinances and, explore opportunities to connect ordinance language to waste and recycling goals, where relevant. This will help ensure regulatory frameworks remain effective and up to date with evolving industry standards and best practices.

6. Regulation Process Improvement

Evaluate and improve regulatory programs, including commercial hazardous waste generator programs, to ensure efficient licensing, reporting and inspections, while addressing health and environmental risks to air, water and land.



CHAPTER 14: Performance Measurement

Introduction

Performance measurement refers to monitoring and evaluating programs, project, initiatives and other activities to understand their effectiveness. Metrics can be applied to all aspects of the solid waste management system described throughout this plan. Performance measures are important to ensure ongoing quality improvement of programs and to evaluate Ramsey County's progress in meeting Plan goals and objectives.

Policies

1. Ramsey County, with Ramsey/Washington Recycling & Energy (R&E), is committed to **integrating performance management and continuous improvement into its waste programs**. Performance management provides a framework for regular collection, analysis and reporting of performance measures to track resources used, work produced and specific results achieved.
2. Ramsey County, with R&E, will use **data-driven decision-making to prioritize efforts** with the greatest benefits to the community, economy and environment.
3. Ramsey County will **share updates with the public and partners** on solid waste management activity progress to uphold results-based accountability. With Ramsey County and R&E, communicate East Metro data and performance measures to the public.
4. Ramsey County encourages MPCA to transition from the current 75% recycling goal to an approach that incorporates **life cycle analysis**. This approach incorporates the total impact of managing materials from production to final disposal. Life cycle analysis informs decision making around the full impact of a material and its management compared to simply whether it is recycled.
5. Ramsey County, with R&E, prioritizes **proactivity in data collection and measurement activities**, including responding to changes in systems and utilizing new technology opportunities.
6. Recognizing waste reduction results from systemic change, such as product stewardship initiatives, sustainable materials management or price signals that favor reduced waste, Ramsey County believes the **MPCA must lead public sector waste reduction and measurement**.

Strategies

1. County and MPCA Collaboration

Pursue collaboration with Washington County, R&E, MPCA and other metro counties to ensure consistent data collection, reporting and analysis.

- a. Strive for increased compliance with hauler reporting per Minn. Stat. § 115A.93 (*Policy Plan required strategy 1*).
- b. Provide required county reporting to the MPCA (*Policy Plan required strategy 2*).
- c. Leverage and strengthen existing partnerships such as R&E and the Partnership on Waste and Energy to advance measurement and analysis efforts.

2. Partner Data and Reporting

Work with funding recipients, such as municipalities, schools and businesses, to track performance and progress.

- a. Use a performance work plan for municipalities to measure progress toward achieving waste objectives. Require municipalities to enter data into a software system identified by the county to record programmatic, contract and financial data. Evaluate to continuously improve efforts.
- b. Evaluate performance metrics for public generators (e.g., schools) and municipalities to measure effects of waste management changes and improvements (e.g., school continuum) to ensure effectiveness and continuously improve efforts.

3. Collaborative Use of Software Tools and Technology

Align waste data collection programs with Washington County as appropriate and, through R&E, use software tools to collect, analyze and share data among the two counties.

4. Waste Composition Studies

Conduct waste composition studies through R&E, including on non-municipal solid waste materials, to inform waste reduction/diversion efforts.

5. Alternative Measurement

Supporting the MPCA's role in setting responsive measurement standards, collaborate with public entities and the waste industry to research, develop and implement performance measures beyond tonnage-based metrics. Alternative measurements to tonnage may include (but are not limited to) pounds per person per day, material-specific capture rates, reductions in material use and toxicity, material reuse and climate impacts.

- a. Leverage other entities' life cycle analyses, as available, to measure impacts of programs and waste management activities and guide decision-making.
- b. Use data-driven decision making to prioritize efforts with the greatest benefit.

CHAPTER 15: Cost and Finance

Introduction

Ramsey County cost and finance policies and strategies are well-established. The policies and strategies below restate Ramsey County's commitment to ensure funding of its solid waste management programs and services.

Policies

1. Ramsey County will make **effective use of public resources and allocate costs equitably** to waste generators, while assuring maximum environmental protection.
2. Ramsey County supports **consistent and visible waste management costs** and billing by the waste industry for residential and nonresidential customers that is based on volume and paid directly by the generator.
3. Ramsey County will continue to use the **County Environmental Charge (CEC) as a funding tool** for environmental efforts and programs and as an incentive to manage waste higher on the waste management hierarchy.
4. **Amendments to the Solid Waste Ordinance that change CEC rates will include a notice period of 90 days** for generators and haulers before the rate change becomes effective to provide the opportunity to adjust billing systems.
5. Ramsey County supports **increased Select Committee on Recycling and the Environment (SCORE) funding for recycling programs** and encourages the state to fully use Solid Waste Management Tax dollars for SCORE and related recycling purposes.

6. Ramsey County will continue to manage and use state funding as appropriate to support programs relating to the waste management system, including **SCORE and Local Recycling Development Grant funds**.
7. Ramsey County will provide **funding for and approval of the Ramsey/Washington Recycling & Energy (R&E) Joint Activities Budget** in accordance with Ramsey/Washington Recycling & Energy (R&E) Joint Activities Budget Board Joint Powers Agreement, Section VII and Bylaws Article V, Section II.
8. The Ramsey County policy related to the use of **solid waste fund balance** is as follows:
 - a. Pursuant to State law, Minn. Stat. § 473.811 subd. 9, solid waste fund balance may be used for purposes only described in the Solid Waste Management Plan.
 - b. Maintain the commitment of \$3,000,000 of fund balance for liability associated with waste management activities.
 - c. Maintain the commitment of \$500,000 of fund balance for a recyclable market support fund.
 - d. Establish the following priorities for use of solid waste fund balance by Ramsey County, in this order:
 - v. Maintenance of a reserve fund for R&E bond obligation.
 - vi. Maintenance of waste-related capital equipment/sites.
 - vii. Financial incentives, such as grant programs, for the purpose of achieving solid waste goals.
 - viii. Operating expenses that present significant opportunities for meeting environmental goals.
 - ix. Capital purchases/investments that present significant opportunities for meeting recycling goals.
 - x. One-time waste management related expenses, such as purchase or development of fixed assets or capital equipment.
 - e. Saint Paul – Ramsey County Public Health, in consultation with the county manager and Finance Department, will bring requests forward for new funding commitments through the Capital Improvement Program process and/or through the requests for county board action process.



Strategies

1. Public Entity Funding

Continue and evaluate grant programs that provide funds to local public entities for starting and/or improving waste reduction and reuse, recycling and organics diversion.

2. Incentivize Progress Toward Waste Goals

Identify opportunities (such as reduced program fees) to incentivize businesses and organizations in reaching county waste management goals in waste reduction and reuse, recycling and organics diversion.

3. CEC

Continue to implement the CEC, a service charge on waste fees, to better account for the externalities of land disposal. Evaluate the amount of funds generated from the CEC (*Policy Plan optional strategy 59*).

4. LRDG Funds

Use LRDG funds to support Ramsey County yard waste and organics management programs.

5. SCORE Funding

Pass through a portion of SCORE funding from the state to municipalities in a way that supports and encourages waste reduction, recycling and organics management outcomes. This funding is subject to SCORE grant requirements.

- a. Use CDC's Environmental Justice Index to assist in allocating SCORE funding to municipalities, according to the following funding mechanism:
 - ii. Base funding (guaranteed to each municipality submitting a SCORE application) represents 86.5% of total SCORE funding for municipalities and is distributed as follows:
 1. An equal amount that each municipality will receive; plus
 2. An additional amount that is determined by a price per household calculation based on the Environmental Justice Index tiers (see table on page 70).
- a. Incentives Grant Program Funding (optional) represents 13.5% of total SCORE funding for municipalities and is distributed as follows:
 - ii. A municipality is eligible for additional funding by adding up to two incentive projects to be completed within the fiscal year. The Incentives Grant Program Funding amount is determined by the tier in which each municipality is ranked, and then divided in half for each possible incentive.



Environmental Justice Index Tiered SCORE Funding Allocation

Municipalities categorized in higher ranking tiers (tier three being the highest ranking) are allocated higher dollar amounts per household and are assigned greater percentages of funds in the Incentives Grant Program.

Ramsey County Municipalities	EJI Index	Tiers for 2025 Optional Incentives
North Oaks	0.08	Tier One
Shoreview	0.09	
White Bear Township	0.14	
Vadnais Heights	0.16	
North St. Paul	0.24	Tier Two
Falcon Heights	0.27	
Maplewood	0.27	
Mounds View	0.27	
White Bear Lake	0.28	
Gem Lake	0.33	
Saint Anthony	0.35	
Roseville	0.35	
New Brighton	0.42	Tier Three
Arden Hills	0.42	
Saint Paul	0.44	
Lauderdale	0.46	
Little Canada	0.56	

1. Municipalities are listed based on their EJI index (lowest to highest).
2. Ramsey County EJI ranking equals 0.30.

6. CEC and Internal Waste Management

Fund internal waste management operations using the CEC, employing best management practices and demonstrating leadership in waste management.

APPENDICES

APPENDIX A:

Solid Waste Management System Description

Section 1: Solid Waste Management System Description

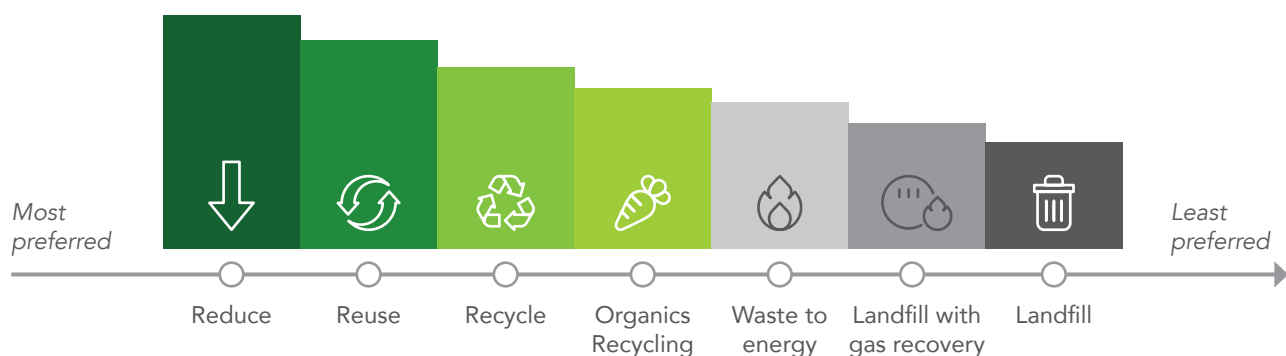
This section describes the existing system of solid waste generation, collection, processing and disposal within Ramsey County. It begins with an overview of the state's approach to waste management and then provides a general geographical and population description before detailing the specific programs and activities of the county's solid waste management system, many conducted in strategic partnership with Washington County.

Overview

Since 1980, Minnesota has taken a systems approach to waste management, built on the public health model of prevention. This approach prevents pollution, conserves resources, protects health and the environment and prevents passing costs on to future generations. Minnesota law includes a hierarchy of preferred methods to manage waste, emphasizing the prevention of harmful environmental impacts and protection of public health.

The Waste Management Act of 1980, as amended (Minnesota Statutes, section 115A), identifies in order of preference the state priorities for the following waste management practices (Minnesota Statutes, section 115A.02(b)):

1. Waste reduction and reuse.
2. Waste recycling.
3. Composting of source-separated compostable materials, including but not limited to yard waste and food waste.
4. Resource recovery through mixed municipal solid waste composting or incineration.
5. Land disposal which produces no measurable methane gas, or which involves the retrieval of methane gas as a fuel to produce energy used onsite or for sale.
6. Land disposal which produces measurable methane and which does not involve the retrieval of methane gas as a fuel for the production of energy to be used onsite or for sale.



The MPCA has primary responsibility for waste management in Minnesota. Counties are the units of government charged with planning waste management and being accountable for several responsibilities under the guidance of the MPCA. Metropolitan counties are held to a different standard than greater Minnesota counties and are required to develop plans that implement the MPCA's Metropolitan Solid Waste Management Policy Plan.

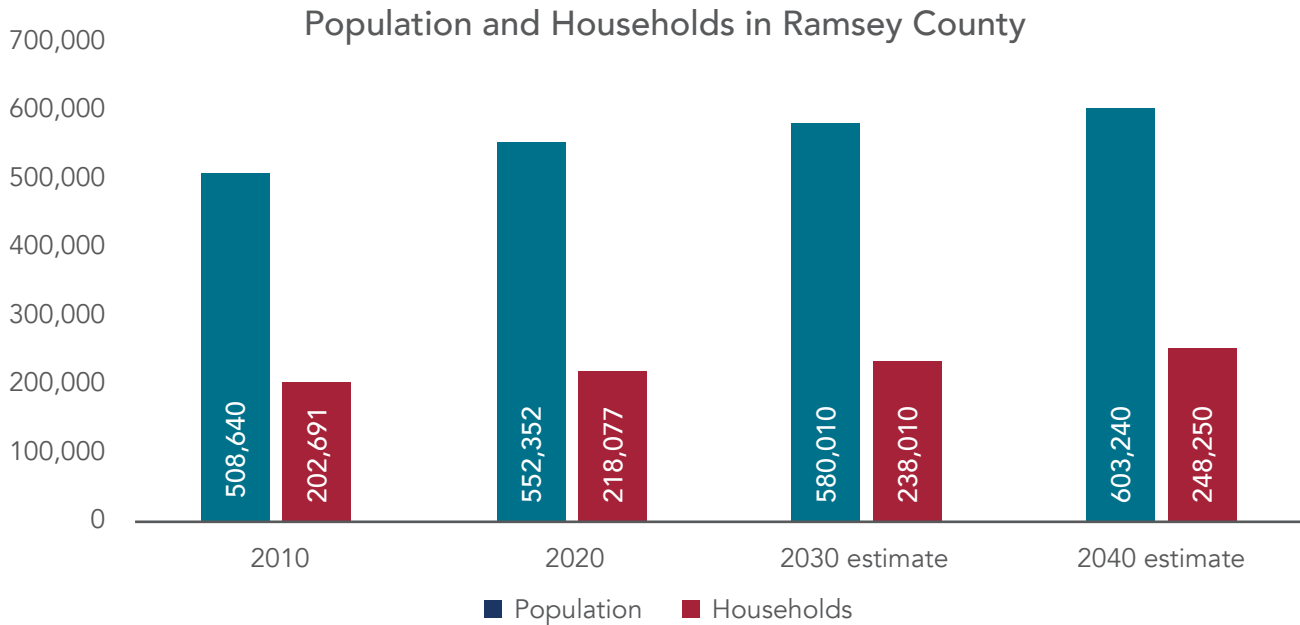
Ramsey County carries out waste management responsibilities according to the following principles:

- **Developing sound policy** at the state, regional and local level by leading the development of legislation on product stewardship and system funding and developing solid waste management plans that guide the system.
- **Partnering** with municipalities including cities and towns, school districts, and private and non-profit entities, recognizing the system is operated by a wide variety of entities.
- **Financing the system** using the County Environmental Charge (CEC), designed to reflect the volume of waste generated by users of the system and provide an incentive to reduce waste and increase recycling.
- **Providing grants** to cities, school districts, businesses, and institutions.
- **Dispersing the Governor's Select Committee on Recycling and Environment (SCORE) funds** to municipalities and ensuring cities are addressing solid waste management with innovative activities.
- **Investing in new and emerging technologies** to most responsibly reduce and manage waste.
- **Regulation:** Adopting ordinances to establish standards; licensing hazardous waste generators, waste haulers and solid waste facilities; ensuring compliance through training and consultation; and taking enforcement action when necessary.
- **Direct services:** Collecting and managing yard waste, brush and organics; collecting household hazardous waste (HHW) and electronics; collecting food scraps, providing very small quantity generator (VSQG) hazardous waste collection; and providing pharmaceutical collections in association with law enforcement.
- **Contracting for services** with other counties for reciprocal use of HHW facilities; with providers of services for recycling, hazardous waste management and organics management; and with haulers and transfer stations for delivery of waste.
- **Providing education and outreach** broadly and deeply into the county, using a wide variety of methods and tools, with emphasis on reaching all people in the county.
- **Consulting with and providing technical assistance** to municipalities, school districts, businesses, regulated entities and institutions through staff and consultants, emphasizing pollution prevention, reduction and reuse, recycling and waste management based on best practices.
- **Addressing climate change** to ensure resilient communities.

This comprehensive approach has resulted in an effective and accountable system in the county.

Section 2: General Description of Ramsey County

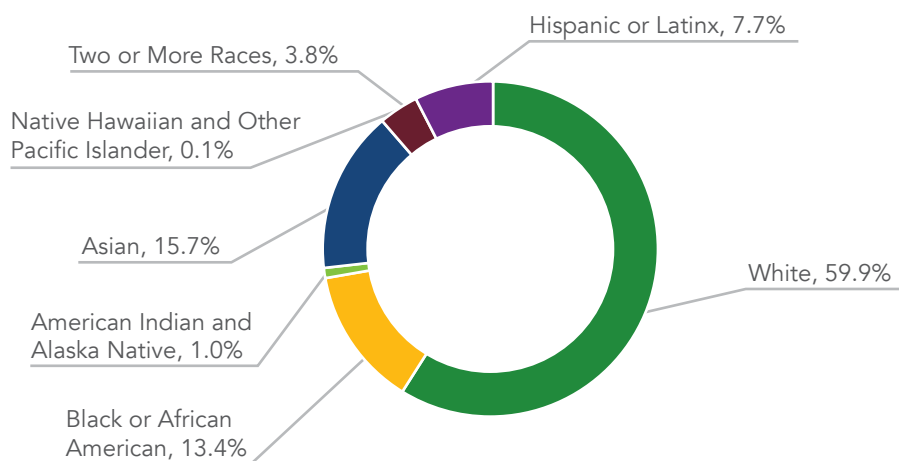
Ramsey County is geographically the smallest Minnesota county at 170 square miles. It is also the most densely populated county in Minnesota. The population has grown from 508,640 in 2010 to 552,352 in 2020. The number of households has increased from 202,691 in 2010 to 228,546 in 2020. The median household income in 2022 was \$75,113 (Census.gov). While pockets of developable land remain, most of Ramsey County is fully developed. Redevelopment continues to occur throughout the county.



Sources: U.S. Census Bureau Decennial Census, Metropolitan Council Annual Estimates and Metropolitan Council Forecasts

Ramsey County's population is increasingly diverse in terms of race, ethnicity, culture and language. Nearly 23% of Ramsey County population speaks a language other than English at home, and notably, people of color have increased from less than 25% in 2000 to over 40% in 2022, according to 2020 U.S. Census data and 2022 American Community Survey estimates.

2022 Population by Race and Ethnicity in Ramsey County



Source: 2022 American Community Survey Estimate

Ramsey County includes all or part of 19 communities, the largest being city of Saint Paul. The 2020 U.S. Census population for the Ramsey County portion of all communities is shown below. (Note: The Ramsey County Solid Waste Management Plan focuses on 17 communities. The cities of Blaine and Spring Lake Park, with almost all their populations in Anoka County, are addressed in Anoka County's plan).

2020 US Census Population by Municipality			
Arden Hills	9,939	North St. Paul	12,364
Blaine (part)	—	Roseville	36,254
Falcon Heights	5,369	Shoreview	26,921
Gem Lake	528	Spring Lake Park (part)	205
Lauderdale	2,271	Saint Anthony (part)	3,645
Little Canada	10,819	Saint Paul	311,527
Maplewood	42,088	Vadnais Heights	12,912
Mounds View	13,249	White Bear Lake (part)	24,486
New Brighton	23,454	White Bear Township	11,049
North Oaks	5,272		
Ramsey County Total 552,352			

Section 3: Waste Generation

Historic Waste Generation

The chart below summarizes the last ten years of waste generation in both Ramsey and Washington counties. Ramsey County's data shows trends of increasing recycling percentage rates, total mixed municipal solid waste (MSW) managed and decrease in the amount of MSW sent to landfill as unprocessed waste.

Historical Waste Generation Chart

*Historical Waste Management, Processing, Recycling and Landfill Data**

Total MSW Managed	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ramsey County	240,000	250,000	250,000	242,000	289,000	294,000	292,000	275,000	280,000	278,000
Washington County	240,000	84,000	87,000	85,000	95,000	104,000	103,000	95,000	97,000	97,000
Total Ramsey/ Washington	480,000	334,000	337,000	327,000	384,000	398,000	395,000	370,000	377,000	375,000
Percent Recycled	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ramsey County	28%	33%	35%	37%	40%	48%	50%	46%	37%	51%
Washington County	34%	37%	38%	43%	49%	49%	47%	51%	50%	53%
Total MSW Delivered for Processing	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ramsey County	240,000	250,000	250,000	242,000	289,000	294,000	292,000	275,000	280,000	278,000
Washington County	81,000	84,000	87,000	85,000	95,000	104,000	103,000	95,000	97,000	97,000
Total Ramsey/ Washington	321,000	334,000	337,000	327,000	384,000	398,000	395,000	370,000	377,000	375,000
Total Unprocessed MSW Landfilled	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Ramsey County	60,000	80,000	90,000	130,000	133,000	61,000	68,000	84,000	82,000	69,000
Washington County	8,000	9,000	12,000	19,000	11,000	7,000	9,000	12,000	13,000	11,000
Total Ramsey/ Washington	68,000	89,000	102,000	149,000	144,000	68,000	77,000	96,000	95,000	80,000

*Numbers rounded to the nearest 1,000 – weight in tons

Current Waste Generation

Ramsey County managed 630,982 tons of MSW in 2022. Of the total:

- **51%** was recovered for recycling. The number includes traditional recyclables and organics, including yard waste.
- **45%** was delivered to the R&E Center waste processing facility. The majority of the MSW delivered was converted to refuse derived fuel after metals were recovered for recycling.

Section 4: Ramsey/Washington County Alignment

Ramsey and Washington counties have worked together to manage waste responsibly since the 1980s. The counties now work jointly through Ramsey/Washington Recycling & Energy (R&E). R&E is governed by the joint powers R&E Board, which is composed of commissioners from the two counties and ex officio members from the city of Newport and the MPCA. R&E serves over 810,000 residents and 70,000 businesses, and its vision is “vibrant, healthy communities without waste.” Through R&E, the counties strive to protect health and the environment and meet the state’s 75% recycling goal by 2030. R&E views waste as a resource stream and works to extract maximum value from discarded materials.

Ramsey/Washington Recycling & Energy Center

The waste processing facility located in Newport, Minnesota has been in operation since 1987. Initially a privately-owned facility, it was purchased by Ramsey and Washington counties in late 2015 and has since become the Ramsey/Washington Recycling & Energy Center (R&E Center).

The counties have made significant investments to modernize the R&E Center using the following principles and priorities:

- Plan for a 20-to-30-year horizon.
- Assure flexibility and manage risk.
- Pivot the view from “waste” to “resources” to add value to the local economy and environment.
- Move resources up the waste hierarchy.

The facility has an annual intake of approximately 400,000 tons of MSW. Ferrous and non-ferrous metal, plastics, cardboard and food scraps are recovered from the waste stream for recycling, and the remaining material is processed to create refuse-derived fuel, which is used to generate electricity. The waste processing section of this appendix further describes these processes.

Ramsey/Washington Recycling & Energy Programming

R&E prioritizes work “upstream”, before items are discarded, and focuses on best use and management of materials. R&E programs touch various aspects of the waste management system. Further details regarding these programs are included in the corresponding sections of this appendix.

BizRecycling

BizRecycling provides free technical assistance, resources and grant funding to support commercial waste generators and multi-unit residential buildings in the following waste management activities:

- Waste reduction and reuse.
- Trash, recycling and organics management.
- Recovering surplus, edible food to distribute to people in need.

Program details are included in various sections of this appendix.

Business Pollution Prevention

The Business Pollution Prevention Program provides technical and financial assistance to help businesses reduce employee, community and environmental health risk. Program details are included under the Hazardous Waste section of this appendix.

Food Waste Prevention

Through programming, financial and technical assistance, Ramsey and Washington counties collaborate with residents, businesses and other entities to focus on preventing edible food waste.

Food Scraps Pickup Program

The Food Scraps Pickup Program offers residents a way of recycling their food scraps from home. Program details are included under the Organics section of this appendix.

Compost Market Development

R&E works to ensure that there is demand for compost produced from food scraps. Education and grants are offered to help increase demand for this product.

Deconstruction

R&E administers deconstruction grants to encourage deconstruction rather than demolition. Deconstruction is the process of taking apart a building so that building materials can be reused. Grant program details are included in the Non-MSW Management section of this appendix.

Outreach and Education

R&E has long provided tours to community groups. Between 2020 and 2022, tours were on pause due to COVID-19. During this time, staff were able to plan and implement interactive educational enhancements to the tour space at the facility. Tours started again in mid-2022. Since then, tours have engaged a wide range of audiences including K-12 groups, community groups, business/industry and government groups. In addition to in-person tours, R&E also offers virtual tours available online.

R&E also conducts educational campaigns to raise awareness of issues related to waste. Examples include campaigns on proper battery disposal and on food waste reduction.

Partnership on Waste and Energy

Ramsey, Washington and Hennepin counties collaborate in areas of waste and energy management, including legislation and policy development, communication, outreach, planning and evaluation of waste processing technologies. They do this through a joint powers agreement between Hennepin County and Ramsey/Washington Recycling & Energy (R&E) – the resulting entity is called the Partnership on Waste and Energy.

Section 5: Waste Reduction and Reuse

Ramsey County engages in various outreach activities and programs to encourage residents and businesses to reduce and reuse.

Reduction

Residents

Partnering with Hennepin and Washington counties, Ramsey County offers “challenges” to residents using an interactive online platform. These challenges focus on reducing food waste and the use of single-use plastics. The 2023 Stop Food Waste Challenge had 590 participants who reported keeping 2,330 pounds of food waste out of the trash.

Businesses

For businesses, schools and non-profits, Ramsey County offers grants and resources through the joint Ramsey/Washington county BizRecycling program. Interested organizations can apply for the Waste Reduction & Innovation Grant. Funds of up to \$50,000 can be used for planning, equipment, supplies and capital improvements that result in the significant reduction of trash produced by the organization.

Ramsey and Washington counties work together to ensure that as much food as possible is used by people, rather than being wasted. The counties work together to prevent edible food from being wasted through:

- Financial and technical assistance to help organizations rescue edible food and get it to people who can use it.
- Education and promotion of opportunities for individuals to reduce food waste.
- Collaborating within and across counties, and with other partners, to identify opportunities and plan programs to reduce food waste.

In 2023, the two counties:

- Provided operational support for five food recovery organizations totaling over **\$175,000**.
- Approved 17 grants totaling over **\$208,000** to organizations looking to recover more food.
- In total, R&E support helped recover over **eight million pounds** of food and redistribute it to people in need.

Reuse

Residents

Residential reuse information is incorporated into the annual Ramsey Recycles communication campaign, and there is a webpage with reuse and donation resources at RamseyRecycles.com/Reuse.

The county offers reuse opportunities as well, including the Product Reuse Room, where residents can find free products such as paints, automotive fluids and pesticides that other residents no longer need. The Product Reuse Room is operated in conjunction with the county's household hazardous waste collection site in Saint Paul. In 2023, 174,018 pounds worth of products were taken and reused by 8,798 residents for an estimated disposal cost savings of \$93,543.

Another reuse opportunity is the county's Fix-It Clinic program. Fix-It Clinics have been in operation since July 2015. (This program was suspended in March 2020 due to the pandemic and resumed in November 2022.) The clinics are held monthly in locations rotating throughout the county. At the clinics, residents bring in small household items like appliances, clothing and electronics and receive free guided assistance from volunteers with repair skills. The clinics continue to be very popular, with 15-20 volunteers and 30 to 60 residents attending each clinic. Since its inception, over 2,781 items totaling 18,998 pounds have been fixed.

Residents and companies doing major remodeling can apply for a grant through Ramsey/Washington Recycling & Energy to help fund deconstruction work so that building materials can be reused. More information on this program is available in the Non-MSW Management section. Information on building material reuse outlets is provided on the county's website.

Businesses

The BizRecycling program supports reuse efforts for businesses. Read more about BizRecycling in Section 8.

In 2023, Ramsey/Washington Recycling & Energy completed a research and engagement project that evaluated the reuse and repair network of businesses and resources, while also gauging resident interests in and knowledge of reuse and repair activities. This research will inform future work to support reuse activities in the counties in the coming years.

Ramsey County promotes the Minnesota Technical Assistance Program materials exchange program at trainings and in the HazWaste Quarterly newsletter.



Section 6: Toxicity Reduction

Ramsey County encourages residents to use fewer toxic products and safely dispose of hazardous items through the various county programs designed to protect people and the environment. This work includes collection services for household hazardous waste, electronics and medicine. The county also works with residents to address home environmental hazards, such as radon and lead.

Household Hazardous Waste Collection

The county provides safe disposal options for automotive products, batteries, pesticides and other hazardous items for free at its household hazardous waste collection sites. There is a year-round collection site in Saint Paul and mobile collection sites operating from April through October. The mobile collection sites move to a different community each month. Ramsey County participates in a reciprocal use agreement with six other metropolitan counties, which allows residents of Ramsey County to use household hazardous waste services in any of those counties for free and residents of those counties to use Ramsey County's services for free.

In 2023, 26,505 households brought household hazardous waste to one of the county's collection sites, bringing in 640 tons of discarded materials. Of the household hazardous waste collected, 52% was recycled, 39% was reused or recovered to produce energy, 8% was incinerated and 1% was landfilled.

Environmental Service Center

Ramsey County is building an Environmental Service Center in Roseville. Construction began in November 2023 and is expected to be completed in 2025.

The 30,530 square-foot facility is part of *Enhancing Environmental Health Services*, a county initiative to redesign and add recycling and waste disposal services to better meet community needs. The county started this process in 2020 by surveying residents to learn more about their needs for recycling and waste collection. This center is one of the first projects developed due to feedback from the 2020 survey.

Everything about the site has been designed to make recycling and waste reduction easier for county residents. Estimated project costs are \$27-29 million.

The site will feature:

- A covered drive-through drop-off for household hazardous waste and electronic waste so residents can conveniently drop off waste year-round in all types of weather.
- A free product reuse room.
- Space for Fix-It Clinics and other environmental education and activities.
- Food scraps and general recycling drop-off.



Once the Environmental Service Center is open, services offered at the current year-round household hazardous waste site in Saint Paul will move to the new facility. Mobile collection sites will discontinue initially as the county continues to evaluate how services are provided to the community. In addition, a pickup service will be considered for those who have transportation barriers.

Medicine Collection

In cooperation with law enforcement, Ramsey County provides residents with free collection drop boxes to safely dispose of unwanted, expired and unused medicines. Multiple pharmacies and medical clinics in the community also offer this service. Safely disposing of medicine helps prevent crime, drug abuse and accidental poisoning, and protects our environment. In 2023, 2,080 pounds of pharmaceutical waste were collected and properly managed.

Electronics Recycling

Electronics are the fastest growing type of waste in the United States. Recycling electronics instead of throwing them in the trash prevents toxic metals – such as lead, mercury and cadmium – from entering the environment, recovers valuable metals and allows the electronic items to be refurbished for reuse or recycled into new products.

In 2022, Ramsey County formed a partnership with Repowered to collect unwanted electronics from residents at their Saint Paul facility at no charge to residents. Repowered is an industry leader in electronics recycling and refurbishing. In addition to a commitment to environmental responsibility, Repowered provides job training to people facing barriers to employment. Items collected include computers, TVs, cell phones and devices that connect to them, such as keyboards, printers, DVD players, gaming consoles, chargers and headphones.

All data from electronics is destroyed physically or electronically wiped by Repowered. Items with life left in them are refurbished and sold. Other items are taken apart and recycled. In 2023, Repowered collected more than 815,000 pounds of electronics from Ramsey County residents.





Healthy Homes

Ramsey County promotes healthy homes by reducing health and environmental hazards associated with lead, mercury, radon, and other emerging contaminants, and by proper management and abatement of public health nuisances. Specific hazards addressed include asthma triggers, childhood lead exposure, radon and mercury-containing skin lightening products. In 2023, Healthy Homes staff removed lead-based paint hazards from 73 homes, inspected 67 childhood elevated lead cases and provided 440 radon test kits while mitigating seven homes for radon.

Municipalities

Abandoned waste

Ramsey County accepts abandoned Household Hazardous Waste (HHW) in quantities of five gallons or less from municipal public works and parks departments. If a city or township finds abandoned HHW on the roadside or on park property, they can arrange to bring it to the Ramsey County HHW collection facility at no charge.

Community Cleanups

Several municipalities provide annual cleanup events to collect bulky waste, like furniture, lawn mowers and mattresses, and other problem materials from residents. The county helps promote these collections and provides technical assistance in managing them. The county also partners with some municipalities to collect HHW and electronics at cleanup events.

Section 7: Hazardous Waste

See Section 6 – Toxicity Reduction – for information on household hazardous waste.

State law requires metropolitan counties to regulate the generation and management of hazardous waste by non-residents. To help accomplish the goals set by the MPCA and the standards set by Minnesota law, and to ensure protection of the environment, public health and safety, the county uses a variety of regulatory tools.

Ramsey County emphasizes toxicity reduction to manage risks associated with waste. Proper management of hazardous waste can reduce health, safety, environmental and property risks. If waste is corrosive, reactive, ignitable, toxic or lethal, then it is required to be handled in a cradle-to-grave regulatory system. This regulatory system requires hazardous waste to be specially packaged, transported, handled and disposed of, with a paper trail that follows the waste.

Most states regulate businesses that are considered “large quantity generators” (generators of more than 2,200 pounds (approximately 220 gallons) of hazardous waste produced per month) or “small quantity generators” (220 pounds to 2,200 pounds (approximately 22 to 220 gallons) of hazardous waste produced per year). In those states, businesses that produce less waste are not strictly regulated, and it is more likely that hazardous waste from those businesses will end up in municipal solid waste. Minnesota, however, regulates all business generators including “very small quantity generators” (less than 220 pounds (approximately 22 gallons) per month of hazardous waste produced) to ensure hazardous waste does not enter the municipal solid waste system. Ramsey County is required by Minnesota law to license generators, inspect facilities and enforce hazardous waste regulations.

In 2023, Ramsey County licensed 1689 businesses for hazardous waste generation and performed 910 initial, routine, complaint, follow-up and closure inspections. Ramsey County operates a volume-based fee system – license fees are structured to create an incentive for businesses to produce less hazardous waste.

Ramsey County provides training, education and technical assistance to waste generators about hazardous waste collection and disposal options, reduction of the toxicity of materials and the use of alternative products. Hazardous waste education for generators and other businesses through the Hazardous Waste Business Assistance program is a non-regulatory resource for businesses. Two hazardous waste training sessions (one in-person and one virtual) serving 177 people were held in 2023. This is in addition to Ramsey County’s online training, a self-paced, on-demand training module available in English and Spanish anytime. A workshop was held in January 2023 to help generators fill out their hazardous waste annual reports, which served over 50 licensed businesses. The *HazWaste Quarterly*, an informational newsletter for hazardous waste generators, was electronically distributed four times in 2023 to over 6000 people, with an average unique open rate of 37%.



Ramsey/Washington Recycling & Energy's Business Pollution Prevention Program assists businesses in reducing employee, community and environmental health risks.

The Business Pollution Prevention Program provides technical and financial assistance to help businesses:

- Reduce the use of harmful chemicals.
- Transition to safer, more sustainable chemicals.
- Install modern, high-efficiency equipment.

This program reduces health risks while also providing businesses with the opportunity to reduce hazardous waste production and increase efficiencies. In 2023, the program awarded seven grants to businesses totaling over \$188,000 for projects that reduce emissions and improve worker and community health. This program contributed to the discontinuation of perchloroethylene, in favor of less toxic solvent alternatives, at all dry cleaners in the county.

Section 8: Recycling

Recycling includes traditional curbside or single stream recycling, and recycling drop-off programs. Organics management includes food waste prevention, food rescue, food-to-animals and food scraps collection for composting. Minnesota statute establishes a goal for Twin Cities metro counties to ensure that 75% of solid waste generated is recycled (including organics that are composted) by 2030.

The County Environmental Charge (CEC), a service charge on the cost of trash collection, was developed, in part, as an incentive to increase recycling, especially for non-residential waste generators (i.e. businesses, schools and colleges). Both traditional recyclables and commercial organic waste are exempt from the CEC when recycled separately from trash.

Recycling Collection and Management

Recycling is an essential component of waste management in Ramsey County. The county took the lead in developing curbside recycling programs and recycling processing in the early 1990s. The county expects residents, businesses and institutions to incorporate recycling into the handling of discarded materials and recognizes it is the responsibility of everyone in Ramsey County to help achieve state recycling goals. The county works with municipalities, school districts and businesses to ensure recycling opportunities are maximized.

Residential Recycling

The county requires municipalities to ensure recycling service is available to all residents at their place of residence, including multi-unit dwellings. 16 of the 17 municipalities in the county contract for residential recycling service for all single-family households. The county also uses outreach and education, planning and evaluation, regulation, financial incentives, technical assistance and consultation to accomplish recycling objectives. Ramsey County provides financial support to municipalities using state SCORE funds to support municipal recycling and related programs. The county provides technical assistance to municipalities for recycling contracts and program design, as well as a recycling-market support fund to cover some of the risk associated with recycling markets.

Residential recyclables are collected through municipal programs, which work with the county to monitor progress toward meeting recycling goals. Ramsey County measures municipal progress towards recycling goals using recycling performance work plans, developed with each municipality.

Ramsey County has reserved funds to provide financial assistance to municipalities for funding up to 50% of a municipality's cost of purchasing recycling carts for residents. Five cities – Arden Hills, Lauderdale, North Oaks, Saint Paul and North St. Paul – have used this funding to purchase recycling carts for their residents.

Multi-unit residential buildings with five or more units are considered commercial entities and are subject to state recycling mandates. Ramsey/Washington Recycling & Energy's BizRecycling program provides plans, resources and grants to help apartment and condo buildings and other multi-unit residential properties manage waste and recycle better. The program offers recycling totes and educational materials for residents and grants to support the purchase of items such as recycling containers and dumpster enclosures.

Ramsey/Washington Recycling & Energy's Apartment Recycling Specialist program works to build community capacity in this area and recognizes that residents can be the best influencers and have the best perspectives on how to implement improvements in waste management. Through the program, interested residents complete a training program and then implement waste reduction and recycling projects in their buildings.

Business, Commercial and Institution Recycling

Ramsey and Washington counties launched BizRecycling in 2013 to help businesses start or enhance recycling and organic waste management programs, providing free resources and assistance to help businesses achieve these goals. The program has evolved since 2013 to meet the unique needs of the business community in the two counties. Many grantees have decreased their waste volumes by initiating or improving recycling and organics programs.

BizRecycling goals are to:

- Provide technical assistance to East Metro businesses and institutions to help them increase recycling rates, lower costs and manage waste higher on the hierarchy.
- Develop and promote robust communications resources for East Metro businesses and institutions to help them learn how to reduce costs, better manage commercial waste, and access support resources.
- Make targeted and equitable investments (through grants) to East Metro businesses and institutions to encourage the development and institutionalization of recycling and organics recovery programs.
- Provide direct service to businesses to rescue usable food for redistribution in the community and increase organic recovery rates.
- Conduct strong data analysis and performance evaluation so that all program efforts are targeted to maximize the recycling and organic material diversion rates.

Since 2014, these efforts have resulted in:

- **2,800 businesses, schools, and multi-units** have received technical assistance.
- **1,048 grants** have been awarded.
- **1,067 entities** have new or expanded recycling.
- **449 entities** have started organics collection.
- **8 million tons** of total waste diversion have been reported.

In 2023, BizRecycling expanded its grant portfolio to better support local businesses and apartment buildings to manage waste higher up on the waste management hierarchy.

BizRecycling also offers partner grants to Ramsey and Washington county business associations (like chambers of commerce, business leagues, economic development commissions/authorities and non-profit development corporations) to conduct outreach to member businesses and business audiences about the importance of recycling, including the free services provided by BizRecycling. BizRecycling currently has 15 partners in this work.



School Recycling

Ramsey County has long supported increased opportunities for waste reduction, recycling and organics management in schools. The county has worked with districts and individual charter schools to increase the opportunity to recycle through grants, technical assistance, direct assistance and training. The county provides technical assistance and grant funding to schools for the implementation of food waste recovery and recycling systems. Recycling can result in cost savings when coupled with “right-sizing” of garbage collection to reduce pickup frequency and/or container size at schools.

The school grants program offered by Ramsey County was expanded in 2021 to become the Ramsey County School Waste Reduction and Recycling Grant Program. This program is available to K-12 schools with student enrollment of 250 and above. Program objectives include greater efficiency and potential cost savings for schools by developing a resource management approach to waste and recycling, and enhanced understanding and awareness of the value of recycling on the part of students, administrators, faculty, staff and visitors. Since 2020, nine charter schools and three school districts have received grants.

Schools that are not eligible to participate in Ramsey County’s school grants program described above can receive assistance through BizRecycling. BizRecycling supported 16 schools with waste reduction initiatives in 2023. Read more about BizRecycling in the section above.

Restaurant Recycling

Ramsey County’s Food Protection Ordinance includes recycling requirements. The county reviews plans submitted by licensed food and beverage establishments and ensures that licensees meet these recycling requirements. The county also works with the largest cities and municipalities in the county to encourage them to take similar actions.

BizRecycling supports many food establishments in reducing and managing waste, particularly food waste. Read more about BizRecycling in the Business, Commercial and Institution Recycling section above.



Extended Producer Responsibility

More than 40% of municipal solid waste is packaging and paper products. Recycling rates for many types of packaging, paper and single-use products have stagnated. The increasing complexity of packaging makes recycling more challenging, and many types of packaging have no realistic recycling path. Too many products are designed for single-use or are designed using more material than is needed to serve their intended purpose. Local governments and consumers are left to manage these complex materials, with communities covering the costs.

Starting in 2020, Ramsey County, through Ramsey/Washington Recycling & Energy's membership in the Partnership on Waste and Energy, was involved in crafting a legislative proposal to establish an extended producer responsibility (EPR) policy for packaging and paper products. In 2024, the state legislature passed the Packaging Waste and Cost Reduction Act to create an EPR system for packaging, paper and single-use products. This act puts responsibility on brand owners and producers of these products to use packaging that is more sustainable and bear a significant share of the cost to reuse, recycle or compost what they put on the market in the state. The Packaging Waste and Cost Reduction Act incentivizes redesigning of packaging to reduce waste and use of toxic ingredients, and requires packaging and products covered under the act to be reusable, recyclable or compostable by 2032. It requires producers to pay:

- At least 90% of the cost of recycling services for residents,
- Government buildings and public areas,
- Schools and smaller non-profit organizations starting in 2031;
- Fund improvements in reuse,
- Recycling and composting systems;
- Engage in outreach and educational efforts statewide;
- And ensure recycling services are available to all residents.

The Minnesota Pollution Control Agency is tasked with oversight of the producer-led EPR program, with guidance from an advisory board representing a variety of public and private sector interests.

Section 9: Organics

Food Scraps Collection and Management

Most of the food Minnesotans throw out — about 62% — could have been eaten or donated, according to an MPCA-commissioned study of solid waste in 2019 and 2020.

Food and compostable paper and packaging make up a quarter of everything households and businesses throw in the trash.

Within that category:

- **40%** is food that could have been eaten at some point before it spoiled
- **6%** is unopened and unexpired food that could go to people in need
- **25%** is inedible food scraps ideal for composting or anaerobic digestion, such as vegetable peels and eggshells
- **24%** is paper and packaging that could be composted alongside food scraps

The MPCA's goal is to cut the amount of food wasted in Minnesota in half by 2030, using 2013 numbers as a starting point.

Food Scraps Pickup Program

The Food Scraps Pickup Program is a food scraps recycling program offered to residents of Ramsey and Washington counties. Participating residents collect food scraps in specially designed compostable bags. When the bags are full, residents tie a knot at the top of the bag to seal it, then place them in their trash cart or dumpster. The bags are collected along with the trash, reducing the need for additional curbside bins or trucks on the road. The trash is brought to the Ramsey/Washington R&E Center in Newport where food scrap bags are separated from trash by machinery that is programmed to recognize and sort out the bags. This will also occur at transfer stations in the future.

The food scrap bags and their contents are then sent to an industrial composting facility and turned into compost. Ramsey and Washington counties are planning a new facility that uses anaerobic digestion, a biological process, to create renewable energy and a soil nutrient from food scraps. Eventually, food scraps collected from this program will go to that anaerobic digestion facility.

In 2023, the counties completed a successful pilot test of the Food Scraps Pickup Program and proceeded to launch the program to all residents of Cottage Grove, Maplewood, Newport, and North St. Paul. In spring 2024 the program rolled out to an additional six municipalities in Washington County. The program will continue to roll out over the next several years, until all residents in Ramsey and Washington counties can participate.



Food Scraps Drop-off Sites

Ramsey County offers food scrap drop-off at its seven yard waste collection sites, as well as at 10 additional food scrap drop-off sites that are open 24/7. Residents are given free compostable bags to use for their home collection. In 2023, 3,063,497 pounds of food scraps were collected from yard waste sites (1,041,019 pounds) and 24/7 sites (2,022,478 pounds)

Businesses

BizRecycling supports businesses in starting and improving organics collection (in addition to traditional recycling programs). See above for more information on BizRecycling.

Ramsey County incentivizes organics recycling by offering a discount on license fees to participating food establishments.

Compost Market Development

As Ramsey and Washington counties help increase the residential collection of food scraps, Ramsey/Washington Recycling & Energy is working to ensure that the end products (such as compost) created from those food scraps can benefit communities. End products derived from food scraps can benefit agricultural, gardening, landscaping, construction and other projects by adding nutrients to soil, encouraging healthy plant growth, increasing moisture retention, improving drainage and more. R&E offers resources to community gardens, businesses, and public entities to encourage using compost in an effort to grow market demand for this product. R&E provides free soil tests and analysis to community gardens and provided over 231 cubic yards of food scrap-derived compost to community gardens in 2023.

Food-to-Hogs Program

In 2005, Saint Paul Public Schools began a pilot food-to-hogs program, with five sites where food scraps and milk were collected in the lunchroom, picked up by a hauler and recycled into pig food. These pilots were successful, which led to the expansion of the program. In 2023, schools in Ramsey County contributed 925 tons through the program.

Programs that collect food waste for delivery to hog farms operate district-wide in White Bear Lake, Saint Paul and Roseville, and at one school in Mounds View. In addition, there are private and charter schools throughout the county participating in the program.

Compost Bins

Each spring, residents can purchase a discounted backyard compost bin sold through the Recycling Association of Minnesota's annual sale in partnership with Ramsey County. In 2023, 140 bins were purchased from Ramsey County residents through this sale.

PFAS

Ramsey County, through the Partnership on Waste and Energy (which also includes Washington and Hennepin counties) has supported legislative action to reduce sources of PFAS, protecting public health and minimizing the potential for PFAS to appear in waste materials and facilities managing those materials. Such efforts have led to greater transparency and contributed to legislation restricting the use of PFAS in certain consumer products, addressing concerns of consumers, local governments and waste system operators and preventing legacy costs that taxpayers are often forced to manage when PFAS enters the environment.

Yard Waste Collection and Management

State law prohibits yard waste from being put in the trash or being disposed of in a landfill or resource recovery facility. Yard waste includes leaves, grass clippings, garden waste and tree and shrub waste. A combination of public and private systems provides generators of yard waste with several management options.

Most residents are served by waste haulers that offer separate collection of yard waste, including tree and shrub waste. Rates vary for this service. In the communities with organized trash collection, residents are offered yard waste pickup, either as an optional cost or as part of the contracted service. Haulers typically specify preparation requirements, and some place limitations on the quantity collected per stop. Some lawn services and tree services also provide collection of yard waste.

Ramsey County operates seven yard waste collection sites. The sites are open five days per week, totaling 38 hours, from April through November (weather permitting) and are also open on weekends during the winter. Each site has at least one site monitor present to direct and assist residents and to prevent illegal dumping. There are no user fees at the sites. On average, the sites receive about 400,000 site visits and 40,000 to 45,000 tons of yard waste and 25,000 to 30,000 tons of tree and brush waste annually.

The county distributes finished compost to all sites for residents to take free of charge. Compost is also made available for community gardens. Yard waste from other sites is composted by private vendors. Tree and shrub waste is collected from residents at four of the seven sites. The material is processed into wood mulch, most of which is used as a biofuel at Saint Paul District Energy's combined heat and power plant. The county also provides wood mulch to residents.

Education at Yard Waste Sites

Through educational initiatives, the county encourages residents to reduce the amount of yard waste and brush they generate.

Ramsey County contracts with the University of Minnesota Extension Service–Ramsey County to work with the Master Gardener program to educate residents on wise turf management, organics (food scraps) recycling, water protection (including rain gardens) and pesticide safety, as well as how to improve the health of trees and shrubs to minimize their waste, and encourage the use of wood chips to control weeds. Master Gardeners engage residents and distribute information on multiple occasions each year to each yard waste site. The Extension Service, primarily through Master Gardener activities, continues to make contacts through classes and clinics, as well as their hotline and website. Approximately 8,000 copies of the Master Gardeners extension publication are distributed yearly to Ramsey County residents at yard waste sites. In 2023, 381 Master Gardeners performed 19,700+ community service hours, engaging 13,600+ residents.



Education at Yard Waste Sites Cont.

Ramsey County provides access to its property at the Frank and Sims yard waste site called the “Big Urban Woods” through joint powers agreements with participating schools for use as a school forest. Ramsey County works with the schools, the Department of Natural Resources, the University of Minnesota’s Extension Service and community groups to develop and maintain the property as a school forest.

Ramsey County also allows community groups to use the yard waste sites to provide public services and fundraising. Typically, these activities involve members of community groups offering to unload residents’ yard waste from their vehicles in exchange for a voluntary donation. These activities enhance public service and promote civic engagement.

In addition, rain barrel education stations are located at all yard waste sites. Site monitors have been trained in how to educate residents on construction and maintenance of rain barrels.

Wood Waste

The county monitors the effects of Emerald Ash Borer infestation in partnership with the Minnesota Department of Agriculture and the Department of Natural Resources. The county provides an outlet for residents to dispose of wood waste, including wood infested by the Emerald Ash Borer, at four of its yard sites. Residents may also bring wood waste to Washington County’s Northern Yard Waste site in Hugo under a reciprocal use agreement between the two counties. Wood waste is also collected from residents by several private waste haulers and tree care companies.

Some wood waste generated in the county is taken to one of several private wood yards and converted into mulch. However, most wood waste generated in Ramsey County is taken to the Saint Paul Cogeneration facility operated by District Energy in downtown Saint Paul and used as a biomass energy source. The long-term financial viability of this facility to continue to accept wood waste to produce renewable energy is uncertain as energy markets continue to evolve.

Ramsey County has worked with many partners, including through the Partnership on Waste and Energy that also includes Washington and Hennepin counties, to raise the urgency of finding near- and long-term solutions for managing the growth of wood waste, particularly due to the surge in volumes created by Emerald Ash Borer (EAB) infestation. The Partnership has conducted studies on EAB and the wood waste management system and continues to work for legislative and regulatory solutions to keep District Energy operating, as it is currently the only large-scale, viable wood waste management market. Other efforts include partnering with state agencies and other interested parties to identify additional management pathways for wood, including growth in the use of wood mulch, development of urban wood products manufacturing and market demand for higher-value products and exploring innovative wood utilization options such as biochar.

Section 10: Waste Collection

Ramsey County is responsible for licensing solid waste haulers and inspecting solid waste transfer stations based or operating in the county. In 2023, the county issued operating licenses to 87 waste haulers and six transfer stations.

Ramsey and Washington counties track waste generated in both counties and delivered to the R&E Center and transfer stations under contract with R&E. In 2023, the largest three waste hauling firms collected and delivered 59% of the mixed municipal solid waste (MSW) in the two counties, and the 10 largest haulers collected and delivered 93%.

Municipalities in Ramsey County require people who generate waste – both at home and at work – to contract for regular waste collection service. Residents in Saint Paul, Little Canada, Maplewood, North St. Paul, Saint Anthony, Vadnais Heights, White Bear Lake and White Bear Township are served by haulers through organized collection. Organized collection means the municipality arranges for waste collection for all of its residents, or at least all single-family residential properties, by contracting with one or more waste haulers. The residents in the remaining municipalities and all businesses, industries and institutions are served by open collection, also known as “subscription service.” This type of collection means waste generators contract directly with a waste hauler. A summary of municipal ordinances in Ramsey County related to waste management and the content of this solid waste plan is available in *Appendix B*.

In 2018, Ramsey and Washington counties implemented waste designation, which requires all MSW generated in the county be delivered to the R&E Center or a transfer station under contract with R&E.

Hauler Rates and Facilities

Rates and Charges

Competition between haulers and a variety of contracting methods between municipalities make it challenging to compare rates across the county.

Obtaining pricing from private-sector companies is difficult. Contracts are negotiated between the facilities and their customers, and it is considered private information. Contract pricing varies based on volume, location and other factors.

Pricing at recycling facilities varies because recycling markets vary. Pricing also depends on other factors, including whether the waste is from residential or business generators and the cleanliness of the materials.

Organized Collection Rates

Municipalities in Ramsey County contract for both residential trash and recycling collection: Saint Paul, Little Canada, Maplewood, North St. Paul, St. Anthony, Vadnais Heights, White Bear Lake and White Bear Township. The table on the following page reflects prices residents of these municipalities paid in 2023 for curbside collection of waste and recycling and any other base services that all residents served under the collection contract were required to pay for. Prices for optional services are not included. Some municipalities include an allowance for a certain number of bulky items per year at no extra charge, and most municipalities offer yard waste collection as an optional service with an additional fee. Rates shown include all applicable services when residents choose 30-38 gallon, 60-68 gallon or 90-96 gallon waste collection service levels. Other rates, such as for unlimited service or a senior rate, are not included. The State Waste Management Tax (9.75%) and Ramsey County Environmental Charge (28% for residential) are included. Rates are shown per month, but billing cycles may be quarterly.

2023 Total Monthly Rates for Recycling and Trash Services for Municipalities that Contract for Residential Waste and Recycling Collection

Municipality	30-38 Gallon	60-68 Gallon	90-96 Gallon	Included bulky/yard waste services
Little Canada	\$18.48	\$21.66	\$25.61	3 bulky items/year, no yard waste
Maplewood	\$14.60	\$21.85	\$28.00	No bulky or yard waste included
North St. Paul	\$18.11	\$22.75	\$26.23	No bulky or yard waste included
Saint Anthony	\$22.97	\$26.41	\$29.86	No bulky or yard waste included
Saint Paul	\$24.78	\$34.75	\$38.80	Up to 3 bulky items/year, no yard waste
Vadnais Heights	\$17.60	\$20.22	\$23.98	1 bulky item/year, no yard waste
White Bear Lake	\$16.48	\$25.60	\$36.11	No bulky or yard waste included
White Bear Township	\$30.39	\$34.34	\$40.27	3 bulky items/year, yard waste included

Open Collection Rates

Some cities with open hauling markets publish residential service rates for monthly recycling and trash services. Rates are shown per month, but billing cycles may be quarterly. These rates fall into the ranges listed below and exclude taxes and fees:

30-38 Gallon	\$13.95	\$45.20
60-68 Gallon	\$14.95	\$56.19
90-96 Gallon	\$15.95	\$63.09

Commercial Collection Rates

Commercial collection rates are considered confidential business information and are privately negotiated between businesses and haulers. These rates are variable due to many factors, including business location, length of contract and service requirements.

Waste Collection Facility Rates

The facilities in the table below accept waste from Ramsey County.

Facility	Material Type	2023 Rate
J&J Recycling, Inc. Transfer Station	MSW, C&D	MSW: \$38/cubic yard C&D: \$30/cubic yard
Keith Krupenny Transfer Station	C&D	MSW: \$25.64/cubic yard C&D: \$14.40-24.40/cubic yard
R&E Center	MSW	\$103/ton
Republic Pine Bend Landfill*	MSW	N/A*
Twin City Refuse & Recycling Transfer Station, Inc.	MSW, C&D	MSW: \$25/cubic yard C&D: \$22/cubic yard
Waste Management (formerly Advanced Vasko Solid Waste, Inc.) Transfer Station	MSW, C&D	MSW: \$103/ton C&D: \$126/ton
Waste Management Burnsville Sanitary Landfill*	Non-processable MSW/residue/bypass waste	\$65.89-79.79/ton, depending on material type
Waste Management Elk River Landfill*	Non-processable MSW/residue/bypass waste	\$65.50-74.66/ton, depending on material type

*MSW originating from Ramsey County may not be disposed of in a landfill unless directed there by R&E under the terms of waste delivery agreements/waste designation. R&E does not currently have a contract in place with Republic Pine Bend Landfill.

Facilities

Residential and business materials are delivered to facilities inside and outside the county. Facilities located within Ramsey County are listed on the following page.

Material Recovery Facilities

There are no material recovery facilities located in Ramsey County. Recyclables collected in the county are delivered to facilities outside of the county.

Source Separated Organics Drop-off Sites

There are 17 source separated organics drop-off sites located in Ramsey County:

- Ramsey County Food Scraps Drop-off Site, Como Park
- Ramsey County Food Scraps Drop-off Site, Falcon Heights
- Ramsey County Food Scraps Drop-off Site, Highland Park
- Ramsey County Food Scraps Drop-off Site, Maplewood
- Ramsey County Food Scraps Drop-off Site, New Brighton
- Ramsey County Food Scraps Drop-off Site, Roseville
- Ramsey County Food Scraps Drop-off Site, Saint Anthony
- Ramsey County Food Scraps Drop-off Site, Union Park
- Ramsey County Food Scraps Drop-off Site, Vadnais Heights
- Ramsey County Food Scraps Drop-off Site, White Bear Lake

Note that food scraps are also collected at all the Ramsey County yard waste collection sites listed in the following section. Ramsey County sites listed above are free for residents to use.

Yard Waste Facilities

Yard waste has increased significantly since Emerald Ash Borer arrived in the county. There are nine yard waste facilities located in Ramsey County:

- Environmental Wood Supply, Saint Paul
- Roseville Leaf Recycling Center, Roseville
- Ramsey County Yard Waste Collection Site, Arden Hills
- Ramsey County Yard Waste Collection Site, Battle Creek, Saint Paul
- Ramsey County Yard Waste Collection Site, Frank and Sims, Saint Paul
- Ramsey County Yard Waste Collection Site, Midway, Saint Paul
- Ramsey County Yard Waste Collection Site, Mounds View
- Ramsey County Yard Waste Collection Site, Summit Hill, Saint Paul
- Ramsey County Yard Waste Collection Site, White Bear Township

Ramsey County sites listed above are free for residents to use.

Transfer Stations

There are six transfer stations located in Ramsey County:

- Berwald Roofing Transfer Station, Saint Paul
- J&J Recycling, Inc. Transfer Station, Saint Paul
- Keith Krupenny Transfer Station, Saint Paul
- Ray Anderson & Sons Transfer Station, Saint Paul
- Twin City Refuse & Recycling Transfer Station, Inc., Saint Paul
- Waste Management (formerly Advanced Vasko Solid Waste, Inc.) Transfer Station, Saint Paul

Resource Recovery Facilities

There are no resource recovery facilities located in Ramsey County. All MSW generated in the county is delivered to the R&E Center waste processing facility in Newport, which is located in Washington County.

Land Disposal Facilities

There are no active landfills located in Ramsey County. Waste that cannot be processed at the R&E Center is delivered to Waste Management's landfills in Burnsville and Elk River.

Household Hazardous Waste Facilities

Ramsey County contracts with Bay West to collect household hazardous waste at its facility in Saint Paul, listed below. The county also contracts with Bay West to operate mobile collection sites that rotate locations throughout the county. These collection sites are free for residents to use.

The county contracts with Repowered to collect electronics at its Saint Paul facility, also listed below. This collection site is free for residents to use.

- Bay West, Saint Paul
- Repowered, Saint Paul

In 2025, the county will open its Environmental Service Center in Roseville. This facility will collect household hazardous waste, electronics and more and will replace both facilities listed above.

Section 11: Waste Processing

Consistent with Minnesota’s waste management hierarchy, the county processes waste for the purpose of recovering energy, recyclables and other useful materials. Waste processing is preferred over landfilling for waste that is not reduced, reused or separately recycled or composted.

In late 2015, R&E purchased the waste processing facility now called the Recycling & Energy Center, (R&E Center), in Newport, Minnesota. Ownership of the facility and the use of waste designation provides greater stability to the solid waste management system in the counties, has enabled significant progress in recycling, reduced landfilling and increased recovery of resources from waste. In 2022, 89% of waste generated by residents and businesses in Ramsey and Washington counties was diverted from landfills into recycling or energy production.

The R&E Center receives approximately 1,500 tons of MSW per day from Ramsey and Washington counties. The R&E Center uses shredding, magnetic separation and density separation to recover recyclables and convert waste into refuse-derived fuel (RDF). In 2023, over 13,029 tons of metal, including ferrous and non-ferrous metals, were recovered at the R&E Center for recycling. The facility generates approximately 340,000 tons of RDF per year. After being processed, RDF is transported to two facilities owned by Xcel Energy, Inc. in Red Wing and Mankato, Minnesota that use the RDF to generate electricity. These two plants provide enough electricity to power the equivalent of 13,000 homes annually.

In 2023, the R&E Center installed a new resource recovery line that will pull an additional 25,000 tons of recyclable materials (cardboard, plastics, metal) from the waste stream and separate organic-rich material that will eventually be sent to anaerobic digestion. Also in 2023, the R&E Center installed a new food scrap recycling building and equipment, including AI-powered robotics that will pull food scrap bags from the waste stream. See section 9 for more information on the Food Scraps Pickup Program.

Overall, the R&E Board’s ownership and control over the R&E Center allows it to:

- Evaluate new technologies to best manage waste.
- Continue to ensure waste is managed to protect the environment and public health.
- Strive to meet Minnesota’s 75% recycling goal.
- Support local jobs.
- Work towards a more stable, predictable waste processing system that controls costs and saves taxpayers’ money.

With the ownership of the R&E Center, there is opportunity for the counties to determine the downstream uses of the products that result from waste processing, and market that material toward beneficial end uses. R&E continues to evaluate technology to best manage the waste generated in the counties.

Waste Designation

During a three-year planning and evaluation period, the counties anticipated the use of waste designation as a critical policy choice to achieve state waste management goals. The MPCA approved the Ramsey/Washington County Joint Waste Designation Plan on November 22, 2016, and the plan went into effect January 1, 2018. Waste designation requires that all residential and commercial solid waste generated within Ramsey and Washington counties be delivered to the R&E Center, where it is processed to recover value. By implementing waste designation, the counties ensure all waste is processed to recover recyclable materials and to produce RDF for energy. The two counties use waste designation as a critical strategy to achieve state waste management goals. Designation is detailed in the Ramsey/Washington County Joint Waste Designation Plan.

Anaerobic Digestion

Ramsey and Washington counties have been evaluating next-generation technologies to manage waste for two decades. The R&E Board has led this effort on behalf of the two counties to achieve environmental and economic benefits for the East Metro. Pursuing new technologies to capture more value from waste is a key strategy for the counties to meet the state's 75% recycling goal by 2030.

One such technology is anaerobic digestion (AD). In the AD process, organic materials are placed into a container deprived of air with specialized microbes to produce biogas and digestate. Biogas is composed mainly of methane and carbon dioxide. It can be used for heat or for generating electricity, or it can be refined into renewable natural gas (RNG) as a substitute for fossil fuels. RNG can be used for vehicles or in the natural gas utility system for homes and businesses. RNG from food waste has a negative carbon intensity, which provides an environmental benefit by reducing greenhouse gas emissions in the transportation sector compared to diesel, conventional natural gas and RNG from landfills.

Digestate, the solid and/or liquid products from AD, contains plant nutrients from the breakdown of organic waste. Solid digestate can be composted to make a soil amendment or further processed into other value-added products. Digestate can also be converted into biochar through pyrolysis or gasification. Biochar is used for soil amendment, remediation and filtration, and as a way to sequester carbon. The biochar process also allows for a first-of-its-kind potential mitigation solution to PFAS in the waste stream. AD is a proven technology for managing organic wastes, with flexibility and decades of operation and success in North America and worldwide.

In August 2020, R&E began a solicitation process for vendors capable of meeting the need for processing technologies and end-use markets for byproducts from the R&E Center, such as source-separated food scraps and organic-rich material. After a two-phase solicitation and multiple dimensions of proposal evaluation, the R&E Board approved an organic material feedstock supply agreement with the vendor Dem-Con HZI BioEnergy (Dem-Con) in September 2023. Under the agreement, the vendor will permit, construct, own and operate a facility by 2027 that digests organic materials from the R&E Center, upgrades and sells the biogas as RNG, and processes the digestate into biochar. R&E will deliver at least 50,000 tons of organics per year, paying a tipping fee to the AD facility. The agreement also includes a revenue-sharing agreement for the sale of biogas and biochar.

Bulky Waste Management

Bulky wastes are large, difficult to manage materials that are discarded along with regular trash. This includes items like mattresses, carpet and large pieces of furniture from residences; building materials; as well as certain industrial materials from commercial generators.

Bulky Waste Management Cont.

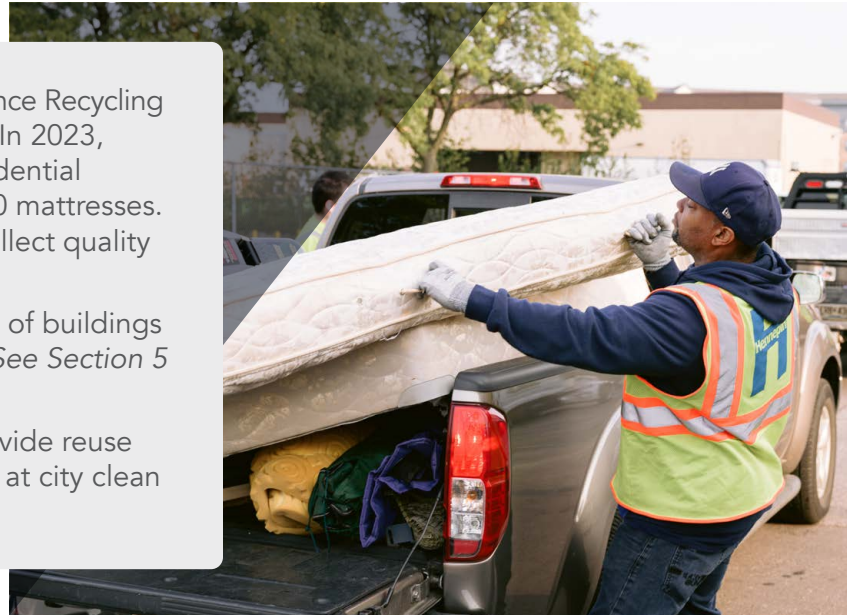
Ramsey County works with other entities to promote proper, convenient, affordable management of bulky materials to reduce illegal dumping and burning. The county expects municipalities to provide clean-up events or separate waste collection programs for residents to ensure bulky waste is separated and managed appropriately. The county also works with municipalities to collect and properly dispose of major appliances, electronics, tires and other bulky waste items.

From a policy perspective, the county supports a product stewardship approach in cases in which bulky items are best managed through shared responsibility by manufacturers, distributors, retailers and consumers.

Some bulky waste items are processed by equipment at the R&E Center. However, these materials can be challenging to recycle and are problematic for waste processing, which means large amounts of bulky materials end up in the landfill. When managed properly, some of these materials can be reused or recycled through specialized processes.

Ramsey and Washington counties are addressing bulky waste materials through:

- Partnering with organizations like Second Chance Recycling to reuse or recycle mattresses and furniture. In 2023, R&E partnered with cities and multi-unit residential properties to collect and recycle nearly 5,000 mattresses. R&E has also launched a pilot program to collect quality mattresses and furniture that can be reused.
- Incentivizing deconstruction over demolition of buildings to promote the reuse of building materials. See *Section 5* for more information on this program.
- Working with cities and municipalities to provide reuse and recycling options for materials collected at city clean up events.



Landfilling

There are no operating landfills in Ramsey County. Some MSW generated in the county is delivered as unprocessed waste to landfills located in Minnesota. In the past, landfills in Iowa, Wisconsin and North Dakota have also been used. Because some MSW is landfilled and some wastes from the R&E Center are delivered to landfills, the county uses responsible waste management principles when arranging for land disposal of waste. Other public entities in Ramsey County are expected to do the same.

Dump Inventory

Since 1988, Ramsey County has maintained an inventory of old dump sites in Ramsey County. The inventory includes known sites developed before regulations were in place, sites that operated under permits or other approvals and are now closed, solid waste disposal sites on the State or Federal Superfund list and illegal dump sites. There are about 300 sites in the inventory, approximately 25 of which are sites that were at some time issued a permit or license to operate by a municipality, Ramsey County or the MPCA.

Section 12: Non-MSW Management

Non-municipal solid waste (non-MSW) encompasses solid waste materials that are not managed as mixed municipal solid waste (MSW). Non-MSW includes materials determined by the state to be problem materials (e.g., treated wood), items specifically excluded from the statutory definition of MSW, or materials otherwise managed as separate waste streams. In general, non-MSW includes construction, demolition and industrial solid waste. Management of non-MSW occurs primarily through private sector services. Some materials are collected by haulers specializing in transporting particular types of waste materials, while others may be collected by MSW haulers or delivered by the generator directly to a collection, transfer or management facility.

Ramsey County is fully developed. Most new development or redevelopment is associated with demolition of old structures. As a result, Ramsey County gives special attention to construction and demolition (C&D) waste that is generated within the county. Ramsey County applies the state hierarchy of waste management to C&D waste and develops strategies, regulations and programs to promote the management of non-MSW higher on the hierarchy to reduce health, safety and property risks associated with non-MSW.

There are significant efforts by the private and public sectors to recover items and recycle materials from demolition projects in the county. One success story is at the Twin Cities Army Ammunition Plant site. Demolition and remediation was able to recycle or reuse 93% of the removed materials.

These materials included:

- **13,000 tons** of steel (recycled).
- **400,000 tons** of concrete and asphalt (recycled).
- **8 miles** of railroad track (reused).
- **250,000 board feet** of old growth Douglas Fir (reused).
- **250 steel girders** weighing 5,000 pounds each (reused).

Pre-Demolition Inspection Program

Ramsey County regulates demolition activities through a pre-demolition inspection program that was initiated in 2008. The program ensures hazardous building materials, including asbestos, are properly identified, removed and managed from structures slated for renovation or demolition. The program encourages deconstruction, salvage and recycling. The county partners with municipalities to implement this program, which is the first of its kind in Minnesota.

Pre-Demolition Inspection Program Cont.

The regulatory standard for demolition contractors creates consistency, reduces the toxicity of wastes disposed, protects occupational exposure to hazards and reduces landfilling of waste. As demolition permits are issued by municipalities, an inspection by the county is required before demolition work begins. Ramsey County staff work closely with local building and zoning officials and place a priority on integrating the pre-demolition program requirements within existing permitting processes. In 2023, 50 onsite inspections were completed as part of the program. During the inspection, staff document problem materials and afterward confirm that those materials were recovered and properly managed prior to demolition. Approximately 78% of the buildings slated for demolition were documented to contain asbestos in 2023. The success of the program has been rooted in the collaborative relationships between contractors, city staff, county staff and waste managers.

Deconstruction Grants

Through the joint work of Ramsey/Washington Recycling & Energy, Ramsey County also offers deconstruction grants to incentivize the reuse of building materials for both residential and commercial projects. Deconstruction is the process of carefully dismantling a building structure to preserve building materials so that they can be reused. In this process, a building is taken apart mostly by hand and materials are sorted into categories for efficient recycling and reuse. Building materials can then be donated to non-profit organizations, sold to private companies or individuals, and/or reused on another project. The funding provided by the county aims to assist bridging the gap between the cost of deconstruction compared to traditional demolition.

In 2023, R&E approved three grants, allowing for more than 18 tons of building materials to be reused or recycled.

Section 13: Communication and Engagement

Ramsey County connects with communities in a variety of ways to encourage reducing, reusing and recycling. Ongoing communication engages residents in these activities, and the county uses a variety of approaches to reach multiple audiences.

County staff continue to provide outreach to residents, businesses, schools and institutions to raise awareness about waste management. Topic areas have included waste reduction, reuse, general recycling, yard waste collection, electronics recycling, household hazardous waste, food scraps collection and medicine collection. The county continually seeks feedback and direction from various audiences using surveys, focus groups and other engagement. Messages are tailored to a targeted audience and delivered in a manner that is most likely to reach them. Partnerships with other entities are key to reaching people in the county.

Residential Audiences

Websites, social media, direct mail, e-newsletters, email, 24/7 hotline (651-633-EASY) and one-on-one contact are all part of the county's approach to education and promotion of its residential programs. The county uses various social media platforms to reach various audiences, including Facebook, Twitter, Instagram, Snapchat and TikTok. Every household receives at least four mailings a year. The county also works with cities to share program information through their communication channels. Considerable effort is made to reach people with limited English proficiency, using modes of communication appropriate to the target audience.

Since 2015, Ramsey County has promoted its residential programs under the Ramsey Recycles campaign – a multicultural, multifaceted campaign targeting a broad audience that reflects the dynamics of the community. Ramsey Recycles focuses its comprehensive advertising and marketing plan on four main categories: general recycling, household hazardous waste, yard waste and food scraps collection. The campaign includes identifying target audiences, using appropriate strategies and specific messaging, and evaluating their effectiveness. The campaign can be found at RamseyRecycles.com, on social media platforms, and in print and radio advertising.

To better engage its diverse communities, Ramsey County retains cultural consultants to help in program design, communications and community engagement. The consultants work as liaisons with the community, have relationships with key leaders, and can effectively build relationships with those communities. Culturally specific education is delivered through presentations, events, flyers, newspaper, radio, social media and email. The Ramsey County 24/7 Recycling & Disposal hotline provides interpreters for residents who need them. In 2023, the hotline answered 20,893 calls from residents.

To build community capacity in this area, Ramsey County created the Recycling Ambassador program. Recycling Ambassadors take a six-week training program to learn more about environmental health, waste systems and recycling. Recycling Ambassadors agree to volunteer 20 hours annually to encourage others to reduce, reuse and recycle. So far, 160 individuals have completed the program.



Residential Audiences Cont.

Ramsey/Washington Recycling & Energy regularly offers facility tours so people can learn more about the region's waste system. Tour content, delivery, and facility access are planned based on the audience. In 2023, R&E welcomed 817 individuals from 97 different groups for tours. As a condition of receiving SCORE funds, municipalities must promote the county's solid waste programs through their communication channels. Ramsey County works with municipalities on sharing messages and tools, including consistent promotion of RamseyRecycles.com; the 24/7 Recycling & Disposal hotline; the A to Z Recycling & Disposal Guide; and information on Ramsey County's yard waste, household hazardous waste, electronics recycling and medicine collection programs.

Ramsey County also works with other public and private entities, including schools, businesses, institutions, government agencies and non-profit organizations to develop coordinated communication messages that minimize confusion the public may have regarding recycling and waste management. The county provides resources to increase education and awareness of away-from home recycling opportunities in places such as parks, athletic fields and arenas, and for special events, such as festivals, family reunions and parades. Temporary recycling and food scraps containers are available to borrow from the county and several cities and Saint Paul district councils for events.

Business and Commercial Audiences

Business engagement is jointly conducted by Ramsey and Washington counties through Ramsey/Washington Recycling & Energy's BizRecycling program. Communications to the businesses and institutions in the two counties are designed as business-to-business communications and are carried out in several ways. The BizRecycling website (BizRecycling.com) is specifically aimed at educating businesses in the two counties on the opportunities for and benefits of better waste management. BizRecycling directs business owners to the website via paid advertising and social media content.

Since 2015, BizRecycling has partnered with the Saint Paul Saints to increase the visibility of recycling opportunities and ensure state of the art recycling at CHS Field. The partnership includes an on-field recycling game between innings that engaged fans, radio commercials during games, ad space in the team's annual pocket schedule distributed at all partner locations, and a rotating banner ad on the Saints' website. BizRecycling also provided the Saints with technical assistance from the project consultant, Minnesota Waste Wise Foundation, to help implement a robust recycling and organics program at CHS Field. All bins throughout the park are branded with BizRecycling trash, recycling and organics labels.



Section 14: County Leadership in Waste Management

Ramsey County has made significant efforts to lead by example and demonstrate ways to reduce waste within internal county operations. County meetings include trash, recycling and food scraps collection whenever possible, and waste management infrastructure is standard in county meeting spaces and public facilities. The county offers internal grant funding to county departments for projects that will increase recycling, reduce waste, reduce or eliminate toxins, conserve natural resources and energy, reduce greenhouse gas emissions and enhance other environmentally sustainable business practices.

The county encourages the reuse of equipment within county buildings, allowing items such as tables, chairs, filing cabinets and other equipment to be rehomed in other county departments or with non-profit organizations, schools or other government entities. Some items are posted to the MinnBid auction site if another destination is not found. In 2023, approximately 850 items were collected for reuse from 15 county departments, weighing about 12.5 tons. Of the items auctioned on MinnBid, around \$16,000 of revenue was returned to the county.

Ramsey County is applying Minnesota's B3 Sustainability Guidelines to construction of a new Environmental Service Center. The B3 guidelines meet sustainability goals for site, water, energy, indoor environment, materials and waste. Solar and geothermal systems are included in the design of the facility. There are also plans to use recycled asphalt, pavers and crushed granite in outdoor surfaces, adding artwork made from recycled materials, and incorporating compost made from food scraps into the final landscape plan.

Ramsey County's information systems department contracts with and sends unwanted county technology to Repowered for refurbishment or recycling. This combines environmental stewardship with the county's high standards of security for information technology. The county contracts with and sends unwanted mattresses from county operations (e.g. residential and correctional facilities) to Second Chance recycling so mattress components can be recycled.

Saint Paul — Ramsey County Public Health, Environmental Health Division works closely with other departments such as Parks and Recreation and Public Works to provide guidance on waste management best practices for county park spaces, public works projects and other county-led development and maintenance practices. In 2019, Environmental Health partnered with the county's property management department to centralize trash and recycling containers within select county departments to promote recycling among staff and efficiency for janitorial staff collecting waste.

As part of the Be Active! Be Green! Bench Initiative, the environmental health division of Saint Paul — Ramsey County Public Health has partnered with Active Living Ramsey Communities to provide park benches made from recycled plastic along pedestrian corridors throughout the county.

Ramsey County 2040 Comprehensive Plan

Ramsey County revised its previous 2030 Comprehensive Plan through a multi-step process in 2018, involving public comment and feedback and work with community partners. The county included waste management strategies and sustainability goals under the plan-wide theme of resiliency. In this plan, Ramsey County defines "resiliency" as "the capacity to respond, adapt, and thrive under changing conditions."

The plan outlined several goals in the areas of environment, solid waste, climate, and energy including:

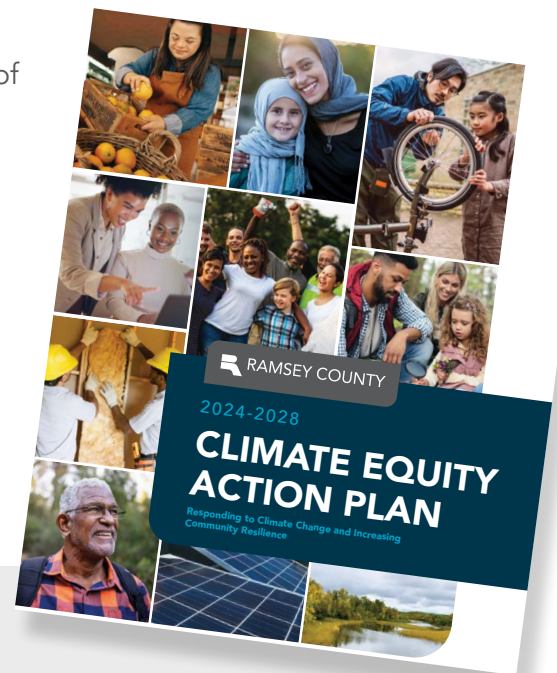
- Reduce greenhouse gas emissions by 80% by 2050 from 2008 levels.
- Complete climate vulnerability assessments, as well as develop and implement mitigation tools to protect the county's infrastructure and environment.
- Develop and implement a countywide renewable energy plan.
- Recover the greatest value from waste to add value to the local economy.
- Work with community partners to eliminate food insecurity by 2040.
- Transition the county vehicle fleet to electric vehicles when appropriate.

Climate Equity Action Plan

Climate change continues to impact the health and well-being of Ramsey County residents. Nobody is immune to these impacts, but ethnically and racially diverse and socioeconomically disadvantaged communities are most vulnerable. Following the county's strategic priority to "respond to climate change and increase community resilience," Ramsey County developed its Climate Equity Action Plan to guide the county's response to climate change. The plan builds on the Minnesota Climate Action Framework and incorporates feedback from Ramsey County residents, input from key partners and guidance from internal county subject matter experts.

The Climate Equity Action Plan focus areas include:

- Clean transportation.
- Thriving communities.
- Healthy lives.
- Clean energy and efficient buildings.
- Climate smart natural land.
- Clean economy.



Section 15: Cost and Finance

Ramsey County's solid waste programs and services are made possible by a combination of funding sources.

Revenue

County Environmental Charge

Ramsey County implemented the County Environmental Charge (CEC) in 2003. All customers of garbage services in Ramsey County see this service charge on their hauler bills. The CEC also applies to residents and other entities who self-haul their own garbage to a solid waste facility in Ramsey County. In 2003, the CEC replaced the previous waste management service charge that was collected on property tax bills.

The CEC only applies to services to collect, transport, process or dispose of MSW generated in Ramsey County, including equipment rental. The CEC does not apply to waste separated for recycling or composting. The CEC also does not apply to waste services for construction and demolition waste, infectious waste or certain types of industrial waste.

The CEC is more visible to generators than the old property-tax based service charge, especially for generators who do not pay a property tax but do pay a garbage bill. The increased visibility and costs of the CEC provide greater incentives to reduce waste. Generators see how much it really costs to manage their garbage because costs are presented in one place, rather than with some costs on a garbage bill and some costs on a property tax statement. The CEC is more closely related to volume of waste than the old property-tax based service charge because haulers charge customers according to the amount of garbage collected. The CEC is the primary funding source for Ramsey County's solid waste programs.

SCORE Grant

The State of Minnesota assesses a Solid Waste Management Tax on certain waste management activities. This tax goes into Minnesota's general revenue fund, and a portion is provided to counties in the form of SCORE grants. Eligible expenses include waste reduction, recycling, problem materials management, public information and education, technical assistance and MSW processing. Ramsey County passes along its SCORE funds to municipalities in the form of an internally-calculated base funding amount plus additional incentive funding for special projects to advance city-level waste management programs and education. The county is mandated to submit an annual report of SCORE-funded activities at the county and city levels, which renews eligibility for the following year's SCORE grant funds and summarizes progress towards existing solid waste plan strategies.

Local Recycling Development Grant (LRDG)

Landfills in the metropolitan area must collect a surcharge on waste tipped at those facilities and remit those funds to the state. Per statutory formula, a portion of those proceeds becomes Local Recycling Development Grants for metropolitan counties. Ramsey County uses LRDG funds to support its yard waste collection and food scraps drop-off sites.

License Fees

Ramsey County licenses waste haulers, solid waste and hazardous waste facilities and commercial hazardous waste generators. License fees collected are used for solid and hazardous waste compliance programs administered by the county. Ramsey County policy states that license fees must cover the cost of operating the regulatory program, including indirect administrative costs.

Household Hazardous Waste Program Contracts

Ramsey County has an agreement with Xcel Energy for reimbursement of costs associated with collecting and managing fluorescent lamps through the county's household hazardous waste program. The county is also part of the region's reciprocal use agreement, which entitles the county to be reimbursed by another county for costs associated with serving a resident of that county.

Expenses

Ramsey County uses CEC proceeds to fund its solid and hazardous waste management programs.

These programs offer a variety of services, including but not limited to:

- Mandated planning, evaluation and reporting.
- Outreach, promotion and education.
- Direct services to the public, such as yard waste collection sites and household hazardous waste services.
- Business waste assistance services.
- Technical assistance and consultation to municipalities, school districts and other public entities.
- Certain regulatory activities not funded by license fees (such as old dump inventory and evaluation, solid and hazardous waste dumping complaints and pre-demolition inspections).
- Resource recovery services.
- Sustainability programming.
- Research and evaluation.

Each of the above activities is related to a strategy or policy in the county's Solid Waste Management Plan.

Section 16: Research

To better understand the opportunities and barriers related to the development of the next generation's solid waste management system, R&E and Partnership on Waste and Energy have commissioned several studies:

An Integrated Organic Waste Management System: From the Perspective of Commercial Waste Generators (May 2010) analyzes anaerobic digestion as a new organic waste management concept from the perspective of commercial waste generators located in the Ramsey and Washington counties by exploring logistics of daily operations, types of upfront costs and changes in the configuration of waste management services.

Organic Materials from Commercial Establishments: A Supply Assessment (June 2010) contains preliminary estimates of quantities of commercial organic materials not currently recovered by other programs that may be available as feedstock for an anaerobic digestion facility. It also characterizes the types of commercial establishments that may be sources of specific organic materials such as food scraps and non-recyclable paper.

Alternative Technologies for Municipal Solid Waste (July 2013) provides a review of the status and application of the following technologies: gasification, pyrolysis, plasma arc, mass burn, anaerobic digestion, mixed waste processing and plastics to fuel.

Preliminary Resource Recovery Feasibility Report (January 2014) addresses the technologies selected for continued evaluation as part of the future of waste processing in the region: anaerobic digestions, gasification, mass burn, mixed waste processing and plastics to fuel.

Waste Composition Study (September 2014) determined the composition of waste from residential and commercial generators to inform planning efforts for future options for processing and disposal of waste. The results in the report are useful for the planning process addressing state goals for recycling and organics recovery.

Anaerobic Digestion (AD) – Update on Technology Status (April 2015) provides an update on the planned scope of AD; existing projects providing AD systems; and economics and marketability of AD products (i.e. biogas and compost).

Seasonal Waste Composition Study (December 2017) determined the composition and quantity of waste from residential and commercial generators at four points during the year using a characterization technique that tried to mimic potential equipment to inform the planning efforts for future options for processing waste. The results in the report were used to inform decisions for processing at the R&E Center and are useful for the planning process to address state goals for recycling and organics recovery.

Anaerobic Digestion Evaluation Study (September 2018) reviews how anaerobic digestion technology has worked in other locations and evaluates the primary economic factors that contribute to the financial feasibility of an anaerobic digestion operation in the Twin Cities metro area.

Preliminary Design for Processing Enhancements at the Recycling & Energy Center (March 2019) reviewed potential options for recovering organics using a co-collection model with food scraps in compostable bags collected with MSW and removed at the R&E Center, as well as options for equipment to recover additional recyclables and moving additional materials up the waste hierarchy.

Case Study: Renewable Natural Gas in a Minnesota Clean Fuels Policy (Fall 2020) explores how renewable natural gas from an anaerobic digestion (AD) facility could perform in a clean fuels policy in Minnesota. The study analyzes carbon intensity and the economics of AD using various feedstocks.

Policy and Regulatory Considerations to Develop Food Waste Digestion in Minnesota (December 2020) focused on food waste digestion, this report investigates Minnesota's existing permitting and regulatory environment and explores potential policies and incentives that would support development of anaerobic digestion in the state.

Twin Cities Metro Area Emerald Ash Borer Wood Waste Study (December 2022) provides an opportunity analysis for alternative and higher use of wood waste for the Twin Cities metropolitan area towards the goal of effectively managing an increasing amount of emerald ash borer-driven waste within Hennepin, Ramsey and Washington counties.

APPENDIX B:

2024 Ramsey County and Municipal Ordinances Relating to Waste

Ramsey County ordinances relevant to this plan include:

<https://www.ramseycounty.us/your-government/ordinances-regulations>

- Administrative Ordinance.
- Food Protection Ordinance (under public health and safety).
- Hazardous Waste Management Ordinance (under solid and hazardous waste).
- Public Health Nuisance Ordinance (under public health and safety).
- Solid Waste Ordinance & Amendment (under solid and hazardous waste).
- Dumping Ordinance (under solid and hazardous waste).
- Illicit Discharge and Connection Storm Water (under solid and hazardous waste).

Municipal ordinances pertaining to garbage, recycling, and other solid waste issues are found in the following municipal codes and specific ordinances (provisions related to setting specific fees and to clandestine drug labs have generally not been included).

Arden Hills

<https://www.cityofardenhills.org/136/City-Code>

- Chapter 03, License and Regulations.
- Chapter 06, Nuisances and Offenses: Section 660, Garbage, Refuse, and Recycling, and other provisions.
- Chapter 07, Recreation Areas: Section 710.12.1, Protection of Shade Trees.
- Chapter 13, Zoning: Section 1320, District Provisions; Section 1325, General Regulations.
- Chapter 14, Property Maintenance Code.
- Chapter 15, Erosion and Sediment Control.

Falcon Heights

<https://www.falconheights.org/government/city-code>

- Chapter 14, Businesses: Article VII, Refuse Haulers.
- Chapter 22, Environment: Article II, Blight.
- Chapter 26, Fire Prevention and Protection: Section 26-4, Recreational Fires.
- Chapter 38, Solid Waste.
- Chapter 50, Utilities: Article IV, Illicit Discharge and Disposal Prohibited.
- Chapter 105, Buildings and Building Regulation: Article III, Housing Code.
- Chapter 107, Stormwater Management: Section 107.8, Approval Standards.
- Chapter 113, Zoning: Section 113.240, Accessory Buildings and Structures; Section 113.370, Exterior Storage.

Gem Lake

<https://www.gemlakemn.com/ordinances>

- Ordinance No. 43K, Zoning Ordinance Section 18.
- Ordinance No. 45, Garbage and Refuse.
- Ordinance No. 83, Housing Maintenance Code; Storage.
- Ordinance No. 86, Nuisance Ordinance.
- Ordinance No. 131, Consolidated-land-use-ordinance; No. 66, Tree Preservation; No.92, Environmental Review.

Lauderdale

<https://www.lauderdalemn.org/city-code>

- Title 4, Health and Sanitation: Chapter 2, Garbage and Refuse; Chapter 3, Shade Tree Disease; Chapter 6, Health and Safety; Nuisances.
- Title 5, Police Regulations: Chapter 7, Open Burning.
- Title 8, Public Works: Chapter 4, Stormwater Management; Chapter 5, Illicit Discharge Ordinance.
- Title 9, Building Regulations: Chapter 11, Rental Housing Licensing Provisions.

Little Canada

<http://www.ci.little-canada.mn.us/312/City-Code>

- Chapter 600, Public Health and Welfare: 601, Nuisance Ordinance.
- Chapter 800, Regulated Activities and Businesses: 809, Mixed Municipal Solid Waste and Recyclable Materials Storage and Collection.
- Chapter 900, Zoning Code: 903, General Provisions; 928, Stormwater Management Ordinance.
- Chapter 1400, Garbage, Rubbish and Trash; Chapter 1401, Burning Regulations.
- Chapter 1700, Control of Dutch Elm Disease and Nuisance Trees.
- Chapter 3200, Rental Housing Licensing.

Maplewood

<https://maplewoodmn.gov/85/City-Code>

- Chapter 12, Buildings and Building Regulations: Article XIII, Licensing of Rental Dwellings.
- Chapter 14, Businesses and Licensing: Article VI, Food and Food Handlers.
- Chapter 18, Environment: Article II Nuisances; Article III, Erosion and Sedimentation Control; Article V Environment and Natural Resources, Division 3, Trees; Division 4, Stormwater management; Division 5, Renewable Energy; Division 9, Community and Market Gardens.
- Chapter 20, Fire Prevention and Protection: Article II, Setting Fires.
- Chapter 30, Solid Waste Management.
- Chapter 44, Zoning.

Mounds View

https://www.moundsviewmn.org/government/codes_regulations_and_fees/index.php

- Title V, Public Works: Chapter 50, Garbage and Recycling, including section 50.005 Yard Waste and Composting.
- Title IX, General Regulations: Chapter 91, Health and Sanitation; Nuisances.
- Title XI, Business Regulations: Chapter 119, Rental Dwellings; Chapter 120, Mobile Food Vehicles and Vendors.
- Title XV, Land Usage: Chapter 153, Trees; Chapter 156, Construction Site and Land Disturbance Runoff Control; Chapter 160, Zoning.

New Brighton

<https://www.newbrightonmn.gov/187/City-Codes>

- Chapter 7, Buildings.
- Chapter 9, Fire Protection and Prevention.
- Chapter 10, Food and Food Handlers.
- Chapter 11, Garbage and Trash.
- Chapter 13, Housing (13.166 Req MUD owners to provide recycling).
- Chapter 14, Land Excavation and Reclamation.
- Chapter 15, Licenses.
- Chapter 16, Mobile Homes.
- Chapter 17, Nuisances.
- Chapter 19, Parks and Recreation.
- Chapter 31, Stormwater Utility.
- Zoning Code: Chapter 4, Residence Districts; Chapter 6, Industrial Districts; Chapter 7, Planned Developments.

North Oaks

<https://www.northoaksmn.gov/ordinances/pages/north-oaks-city-ordinances>

- Title IX, General Regulations: Chapter 93, Health and Safety, Nuisances, Section 93.01-.07 Refuse, Garbage and Waste Material; Section 93.20, Fires Prohibited; Section 93.30-.99, Shade Tree Diseases.
- Title XV, Land Usage: Chapter 151, Zoning Code; Chapter 154 Erosion and Sediment Control.
- Ordinance 105, Illicit Discharge Ordinance.
- Ordinance 121, Regulate Residential Rental Properties.

North St. Paul

<https://www.northstpaul.org/153/City-Code>

- Chapter 32, Boards and Commissions: Environmental Advisory Commission.
- Chapter 33, City Policy on Abandoned Property.
- Chapter 55, Solid Waste, Recycling, and Composting (updated).
- Chapter 56, Sanitary and Storm Sewer System Utilities.
- Chapter 91, Fire Prevention and Protection.
- Chapter 92, Parks and Lakes: 92.02, Littering.
- Chapter 93, Trees.
- Chapter 94, Street and Sidewalks: 94.57, Dumpsters, Roll-offs or Similar Waste Receptacles.
- Chapter 98, Nuisances.
- Chapter 130, General Offenses: 130.19, Offenses Involving Public Health and Safety.
- Chapter 134: Regulation of Unattended Collection Bins.
- Chapter 152, Structures and Premises Maintenance and Occupancy Code.
- Chapter 154, Zoning Regulations.
- Chapter 155, Rental Housing.

Roseville

<https://www.cityofroseville.com/1613/City-Code>

- Chapter 204, Parks and Recreation Commission.
- Chapter 206, Public Works, Environment and Transportation Commission.
- Chapter 402, Solid Waste Collection.
- Chapter 403, Recycling.
- Chapter 404, Air Pollution Control.
- Chapter 407, Nuisances.
- Chapter 409, Residential Composting.
- Chapter 502, General Offenses.
- Chapter 701, Parks and Recreation.
- Chapter 706, Urban Forest Management.
- Chapter 803, Storm Water Drainage, 803.03, Storm Water Illicit Discharge and Connections.
- Zoning: Chapter 1005, Commercial and Mixed-Use Districts; Chapter 1006, Employment Districts; Chapter 1008, Park and Recreation District; Chapter 1011, Property Performance; Chapter 1017, Shoreland, Wetland and Storm Water Management.

St. Anthony

<https://www.savmn.com/306/City-Code>

- Title V, Public Works: Chapter 50, Storm Water and Sanitary Sewers Title IX, General Regulations: Chapter 92, Health and Safety, Nuisances; Chapter 93, Parks and Recreation; Chapter 94, Streets and Sidewalks; Chapter 97, Fire Prevention and Protection.
- Title XI, Business Regulations: Chapter 111, Licenses, Permits and the Like, sections including Mobile Home Parks; Haulers of Garbage, Refuse, Recyclables, and Yard Waste; Licensing of Multiple Dwellings and Rubbish Disposal.
- Title XIII, General Offenses: Chapter 130, sections including Garbage and Solid Waste Offenses, Disposal Requirements, Scavengers.
- Title XV, Land Usage: Chapter 150, Buildings, Housing, and Construction; Chapter 152, Zoning Code; Chapter 153, Storm Water Management.

Saint Paul

<https://www.stpaul.gov/link/city-charter-and-codes-0>

- Title VI, Building and Housing: Chapter 32, Collection of Municipal Solid Waste for Residential Properties and User Charge; Chapter 34, Minimum Property Maintenance Standards for All Structures and Premises; Chapter 41, Separation of Storm Drainage from Sanitary Sewage; Chapter 45, Nuisance Abatement; Chapter 51, Allowable Discharges to the Storm Sewer System.
- Title VIII, Zoning Code: Chapter 65, Land Use Definitions and Development Standards: 65.300, Public Services and Utilities (includes yard waste sites); 65.400, Commercial Uses (including retail sales and services; limited production, processing and storage); Industrial Uses (including infectious waste facilities; metal shredders; recycling processing centers; solid waste compost facility; solid waste transfer station); 65.900, Accessory Uses; Chapter 66, Zoning District Uses, Density and Development Standards (e.g., yard waste sites, recycling processing centers).
- Title XII, Streets, Sidewalks, Bridges and Other Public ways.
- Title XVI, Parks and Parkways.
- Title XV, Trees: Chapter 175, Dutch Elm Disease, Emerald Ash Borer, and Removal of Other Dangerous Trees.
- Title XXI, Health, Sanitation, and Disease: Chapter 210, Disposing of Contaminated Articles, Prohibition.
- Title XXII, Garbage and Rubbish: Chapter 220, Residential Coordinated Collection; Chapter 221, Littering by Contractors.
- Title XXIII, Public Health, Safety and Welfare: Chapter 232, Air Pollution Control Regulations; Chapter 236, Environmental Preservation: Plastic Packaging.
- Title XXIX, Licenses: Chapter 331A, Food Protection Standards; Chapter 354, Sanitary Disposal Vehicle; Chapter 357, Solid Waste; Chapter 362, Tree Trimming; Chapter 408, Recycling Collection Center/Recycling Processing Center; Chapter 429, Infectious Waste.

Shoreview

<https://www.shoreviewmn.gov/government/city-code>

- Chapter 200, Development Regulations: Section 205, Development Districts; Section 206, Site Development and Architectural Design Standards; Section 209, Environmental Standards; Section 210, Nuisance; Section 211, Property Maintenance Standards.
- Chapter 400, Public Property and Improvements: Section 401, Recreation Areas.
- Chapter 500, Municipal Utilities: Section 502, Municipal Sanitary Sewer System.
- Chapter 600, General Regulations: Section 602, Open Burning; Section 606, Unauthorized Collection for Recyclable Materials; Section 607, Residential Recycling Service Fees.
- Chapter 700, Licensing: Section 703, Solid Waste Haulers; Section 704, Tree Service License.

Vadnais Heights

<https://www.cityvadnaisheights.com/>

Search bar: City Code

- Chapter 8, Buildings and Construction: Article III, Additional Local Regulations, Division 2, Multiple-Occupancy Dwellings; Division 5, Residential Rentals.
- Chapter 10, Businesses: Article II, Specific Business License and Regulations, Division 1, Tree Removal Contractors; Article III, Commercial Waste Collectors.
- Chapter 14, Fire Prevention and Protection: Article III, Fire Regulations and Restrictions, Division 2, Open Burning.
- Chapter 22, Nuisances: Article I, In General; Article IV, Public Trees and Other Vegetation.
- Chapter 26, Parks and Recreation.
- Chapter 28, Solid Waste: Article I, In General; Article II, Collection and Disposal; Article III, Dumps, Sanitary Landfills and Filling of Land.
- Chapter 36, Utilities: Article III, Sewers; Article IV, Storm and Surface Water Management.
- Chapter 38: Zoning, Planning and Development.

White Bear Lake

<https://www.whitebearlake.org/administration/page/municipal-code>

- Article III, Commissions and Boards: Chapter 303, Park Advisory Commission.
- Article IV, Departments: Chapter 402, Municipal Sewer System; Chapter 405, Public Works Department.
- Article V, Public Health, Welfare and Sanitation: Chapter 501, Garbage Collection; Chapter 502, Minimum Housing Standards; Chapter 505, Curbside Recycling Scavenging; Chapter 507, Refuse and Recyclables Collectors; Chapter 508, Rental Dwelling Licensing; Chapter 509, Composting.
- Article VII, Police Regulations: Diseased or Dying Trees.
- Article VIII, Fire Regulations: Chapter 801, Fire Prevention; Chapter 802, Inflammable and Explosive Materials; Chapter 806, Open Burning.
- Article IX, Public Ways and Property: Chapter 905, Parks and Open Space.
- Article XI, Business Regulations: Chapter 1114, Rubbish Haulers and Junk Dealers.
- Article XIII, Zoning Code: Chapter 1302, General Provisions.

White Bear Township

<http://www.ci.white-bear-township.mn.us/220/Ordinances>

- Ordinance 13, Fire Use.
- Ordinance 16, Nuisances.
- Ordinance 18, Sewer.
- Ordinance 22, Dumping.
- Ordinance 27, Plant Pests.
- Ordinance 31, Refuse.
- Ordinance 35, Zoning Code.
- Ordinance 45, Parks, Open Space, and Recreational Areas.
- Ordinance 47, Housing Maintenance.
- Ordinance 49, Licensing of Tree Contractors.
- Ordinance 66, Compost Sites.
- Ordinance 83, Illicit Discharge, Detection and Elimination.
- Ordinance 94, Storage & Handling of Deicing Materials.

Ramsey County Existing Solid Waste Management System

Municipal Ordinances in Ramsey County

Collection and Transportation of Residential Waste						
Municipality	Organized Collection	Waste Service Required	Minimum Service Frequency ¹	Restrictions on Times of Collection	Type of Container Specified	Hauler Must Report Amts. Collected
Arden Hills	Yes ²	Yes	Yes	Yes	Yes	Yes
Falcon Heights	No	Yes	No	Yes	Yes	Yes
Gem Lake	Yes ²	No ²	Yes	Yes	Yes	No
Lauderdale	No	Yes	Yes	Yes	Yes	No
Little Canada	Yes	Yes ³	Yes	Yes	Yes	Yes
Maplewood	Yes	Yes	Yes	Yes	Yes	Yes ³
Mounds View	No	Yes	Yes	Yes	Yes	Yes ²
New Brighton	No	No	Yes	Yes	Yes	No
North Oaks	Yes ²	No ²	Yes	No	No	No
North St. Paul	Yes	Yes	Yes	Yes	Yes	Yes
Roseville	Yes ²	Yes	Yes	Yes	Yes	No
Saint Anthony	Yes	Yes ³	Yes	Yes	Yes	Yes
Saint Paul	Yes	Yes ³	Yes	Yes	Yes	Yes
Shoreview	Yes ²	Yes	Yes	Yes	Yes ²	No
Vadnais Heights	Yes ⁴	Yes ⁴	Yes ⁴	Yes ⁴	Yes	Yes
White Bear Lake	Yes	Yes	Yes	Yes	Yes	Yes
White Bear Township	Yes	Yes	Yes	Yes	Yes	Yes

¹ Minimum frequency of service is weekly unless otherwise specified. ² Recycling only.

³ Residential buildings with four or fewer units only. ⁴ Residential buildings of up to 8 units.

Municipal Ordinances in Ramsey County

	Waste Hauler/Facility Licensing					Waste Service Rates	
Municipality	Licensing of Haulers Required	Hauler Must Be Bonded	Hauler Must Be Insured	Worker's Comp. Required	Waste Facilities Licensed	Volume-Based Fees Must Be Provided	Residential Rates Must Be Filed
Arden Hills	Yes	No	Yes	Yes	No	No	Yes
Falcon Heights	Yes	Yes	Yes	Yes	No	Yes	Yes
Gem Lake	No	No	No	No	No	No	No
Lauderdale	Yes	Yes	Yes	Yes	No	No	Yes
Little Canada	Yes	Yes	Yes	Yes	No	No	No
Maplewood	Yes	Yes	Yes	No	No	Yes	Yes ⁵
Mounds View	Yes	Yes	Yes	Yes	No	Yes	No
New Brighton	Yes	Yes	Yes	Yes	No	No	Yes
North Oaks	No	No	No	No	No	No	No
North St. Paul	Yes	No	Yes	Yes	No	No	No
Roseville	Yes	Yes	Yes	N/A	No	Yes	Yes
Saint Anthony	Yes	No	Yes	No	No	Yes	Yes
Saint Paul	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shoreview	Yes	No	Yes	Yes	No	Yes	Yes
Vadnais Heights	Yes	Yes	Yes	No	Yes	Yes	Yes
White Bear Lake	Yes	Yes	Yes	Yes	No	Yes	Yes
White Bear Township	Yes	Yes	Yes	Yes	No	N/A	N/A

⁵ Single-family residential only.

Municipal Ordinances in Ramsey County

	Reduction	Recycling (residential and commerical unless noted)					
Municipality	Packaging Restrictions	Mandatory Recycling	Recycling Collection License Required	Waste Haulers Must Collect Recyclables	Must Collect Same Day as Garbage	Hauler Must Report Amts. Collected	Scavenging Recyclables Prohibited
Arden Hills	No	Yes ⁶	Yes	No	Yes	Yes	Yes
Falcon Heights	No	No	No	No	Yes	Yes	Yes
Gem Lake	No	No	No	No	No	No	No
Lauderdale	No	No	No	No	Yes ⁶	No	No
Little Canada	No	Yes	No	Yes	Yes	Yes	No
Maplewood	No	Yes	No	No	Yes ⁶	Yes	Yes
Mounds View	Yes	Yes	No	Yes	Yes	Yes	Yes
New Brighton	No	No	Yes	No	No	Yes	Yes
North Oaks	No	Yes	No	No	No	Yes	No
North St. Paul	No	Yes	No	No	Yes	Yes	No
Roseville	No	Yes ⁶	No	No	Yes ⁶	Yes ⁶	Yes
Saint Anthony	No	Yes	No	Yes	Yes	Yes	Yes
Saint Paul	Yes	Yes	Yes	No	No	Yes	Yes
Shoreview	No	Yes	No	No	Yes	Yes	Yes
Vadnais Heights	No	Yes	No	Yes	Yes	Yes	Yes
White Bear Lake	No	No ⁷	No	Yes	Yes	Yes	Yes
White Bear Township	No	Yes	Yes	Yes	Yes	Yes	Yes

⁶ Residential only. ⁷ Haulers are required to offer residential recycling.

Municipal Ordinances in Ramsey County

Residential Composting					Misc. Waste-Related Ordinances			
Municipality	Hauler Must Collect Yard Waste	Hauler Must Report Amts. Collected	Back Yard Composting Allowed and Regulated	Additional Materials Allowed (beyond yard waste)	Source Separated Organics	Burning and Burying Prohibited	Dumping or Littering Prohibited	Multi-Unit Enclosure Requirements
Arden Hills	No	No	Yes	No provision	No	Yes	Yes	Yes
Falcon Heights	No	No	Yes	No	No	Yes	Yes	No
Gem Lake	No	No	No provision	No provision	No	Yes ⁸	Yes	Yes
Lauderdale	No	No	Yes	Yes ⁹	No	Yes	Yes	Yes
Little Canada	No ¹⁰	No	Yes ¹¹	No	No	Yes	Yes	Yes
Maplewood	Yes	Yes	Yes	Yes ¹²	No	Yes	Yes	Yes
Mounds View	No	No	Yes	No	No	Yes	Yes	Yes
New Brighton	No	Yes	Yes	No provision	No	Yes	Yes	Yes
North Oaks	No	No	Yes ¹¹	No provision	No	No	Yes	No
North St. Paul	No	Yes	Yes	Yes ¹²	Yes	Yes	Yes	No
Roseville	Yes	No	Yes	Yes	No	Yes	Yes	Yes
Saint Anthony	Yes	No	Yes	Yes ¹³	No	Yes	Yes	Yes
Saint Paul	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Shoreview	Yes	No	Yes	No	No	Yes	Yes	No
Vadnais Heights	Yes	Yes	Yes ¹¹	Yes ¹³	No	Yes	Yes	Yes
White Bear Lake	Yes	Yes	Yes	No	No	Yes	Yes	Yes
White Bear Township	No	No	Yes	Yes	No	Yes	Yes	N/A

¹ Minimum frequency of service is weekly unless otherwise specified.

⁸ Burning allowed only as permitted by MPCA. ⁹ Fruit and vegetable scraps. ¹⁰ Optional service provided by haulers to residents.

¹¹ Not regulated. ¹² Food Scrap Pickup program available to residents. ¹³ Food scrap bin at city hall.

APPENDIX C:

Acronyms and Abbreviations

AD: Anaerobic digestion

Bylaws: R&E Bylaws

CEC: County Environmental Charge

C&D: Construction and demolition

DEI: Diversity, equity and inclusion

EAB: Emerald ash borer

EPA: Environmental Protection Agency

EPR: Extended producer responsibility

HHW: Household hazardous waste

IAP2: International Association of Public Participation

JPA: Joint Powers Agreement

LRDG: Local Recycling Development Grant

MDH: Minnesota Department of Health

MPCA: Minnesota Pollution Control Agency

MSW: Municipal solid waste

PFAS: Per- and polyfluoroalkyl substances

Plan: 2024-2042 Ramsey County Solid Waste Management Plan

Policy Plan: Metropolitan Solid Waste Management Policy Plan 2022-2042

RDF: Refuse-derived fuel

RNG: Renewable natural gas

R&E: Ramsey/Washington Recycling & Energy

R&E Board: Ramsey/Washington Recycling & Energy Board

R&E Center: Ramsey/Washington Recycling & Energy Center

R&E JPA: Recycling & Energy Joint Powers Agreement

SCORE: Select Committee on Recycling and the Environment

STA: US Composting Seal of Testing Assurance

VSQG: Very small quantity generator

APPENDIX D:

Definitions

Acceptable waste: Waste that is acceptable at the Ramsey/Washington Recycling & Energy Center in Newport, Minnesota. It includes any solid waste designated by county ordinance and not otherwise unacceptable.

Anaerobic digestion (AD): A technology that, in the absence of oxygen, uses microorganisms to convert various types of organic wastes into renewable energy and digestate. See also: biogas, renewable natural gas, digestate, biochar.

Biochar: Charcoal-like substance that can capture, store and/or sequester carbon produced through high temperature decomposition of organic material with little or no oxygen.

Biogas: Combination of mostly methane and carbon dioxide, with very small amounts of water vapor and other gases, generated during anaerobic digestion when microorganisms break down organic materials in the absence of oxygen.

BizRecycling: A Ramsey/Washington Recycling & Energy program that helps businesses, nonprofits, schools, apartment buildings and institutions reduce waste and recycle better.

Built environment: Human-made or modified structures that provide people with living, working, learning, mobility and recreational spaces.

Bulky items: Household items or other materials that, when discarded, due to their dimension and weight, become bulky waste. See also: bulky waste.

Bulky waste: A subset of municipal solid waste. Household items and other discarded materials that, due to their dimension and weight, are typically not collected as part of the regular trash and recycling or for which there is a separate fee for collection or management, such as furniture, carpeting and mattresses. Excludes major appliances and electronic waste. See also: bulky items.

Business: Entity that engages in commercial/non-residential activity as a means of livelihood. Includes both for-profit, non-profit and academic entities. See also: commercial.

Business Pollution Prevention Program: A program that offers technical and financial assistance to help businesses reduce the use of harmful chemicals; transition to safer chemicals that are more sustainable; and install less polluting, higher-efficiency equipment.

Circular economy: A system designed to eliminate waste and keep materials and products in circulation as long as possible through maximizing the reuse, recycling and regeneration of resources. See also: circularity.

Circularity: Practices that optimize resource use and eliminate waste across the entire production and consumption cycle, emphasizing sustainability and economic efficiency. Economic activities that mimic natural processes by optimizing resource use and eliminating waste across the entire production and consumption cycles of products and resources. See also: circular economy.

Climate change: Long-term shifts in the average weather patterns that have come to define Earth's local, regional and global climates. These changes have a broad range of observed effects that are synonymous with the term.

Climate resiliency (also: climate resilience): The ability of entities to anticipate, prepare for, respond to and recover from the impacts of climate change by reducing risk vulnerability.

Collection (as in "waste collection"): The aggregation of waste from the place at which it is generated and includes all activities up to the time the waste is delivered to a waste facility (Minn. Stat. §115A.03, Subd. 5). See also: curbside collection.

Commercial (as in "commercial waste" or "commercial recycling."): Refers to non-residential sources, including businesses, government facilities or operations, institutions, schools, non-profit organizations, managed multi-unit properties, community activities, etc. Interchangeable with "non-residential." See also: business.

Communication (also: communications): Any means of conveying information to an audience.

Compost: A biologically stable material derived from the composting process (Minn. Stat. §18C.005, Subd. 6). See also: composting.

Composting: The controlled, aerobic biological decomposition of organic material to produce a nutrient-rich material (Minn. Stat. §115A.02).

Community capacity: Ability of the community to effectively use resources to address its needs and achieve goals.

Community engagement: Actions resulting in meaningful dialogue and shared decision-making through public participation activities. See also: engagement.

Conservation: Avoiding the use of energy and/or depletion of natural resources.

Construction and demolition waste (C&D waste): Term referring to construction waste and demolition debris. See also: demolition debris, construction debris.

Construction debris (also: "construction waste"): Waste building materials, packaging and rubble resulting from construction, remodeling, repair and demolition of buildings and roads (Minn. Stat. § 115A.03, Subd. 7).

County Environmental Charge (CEC): The CEC is a percentage of the cost of certain waste services and must appear as a separate line item on a bill. Ramsey County's CEC rate is 28% for residential customers and 53% for non-residential customers (2024). It applies to trash collection and disposal service, fuel surcharges, account start-up or cancellation fees and any other administrative fees. It does not apply to construction and demolition waste, recyclables, medical and infectious waste, organic materials collected for composting and certain types of industrial waste. The CEC also does not apply to other taxes or government fees.

County Recycling Markets Support Fund: A fund created by the Ramsey County Board in 2000 to address occasional poor market situations that broadly threaten residential recycling programs, where there is pronounced and sustained difficulty in marketing one or more materials collected in residential recycling programs.

County Solid Waste Management Plan (plan): Guidance to all entities responsible for Twin Cities Metropolitan Area solid waste management that was developed in accordance with the requirements of Minn. Stat. §473.149, subd. 2d. for a land disposal abatement plan.

Curbside collection: Collection of waste (garbage, recyclables, yard waste, etc.) from residences at the point of generation. See also: collection.

Curbside recycling: Collection of recyclables from residences at the point of generation. See also: recycling.

Deconstruction: The process of dismantling buildings in a manner that allows for materials to be reused.

Demolition debris (also: demolition waste): Solid waste resulting from the demolition of buildings, roads and other man-made structures including concrete, brick, bituminous concrete, untreated wood, masonry, glass, trees, rock, plastic building parts and other inert waste materials, but not including asbestos wastes.

Designation: See Waste Designation.

Digestate: Product from anaerobic digestion consisting of solid and liquids rich in nutrients that can be used as a soil amendment or fertilizer for crops.

Disposal: The discharge, deposit, injection, dumping, spilling, leaking or placing of any waste into or on any land or water so that the waste or any other constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters (Minn. Stat. 115A.03, Subd. 9).

Downstream: Activities that take place after waste is generated. See also: upstream.

Dump: A landfill that never held a valid permit from the Minnesota Pollution Control Agency.

East Metro: Refers to the eastern part of the Twin Cities Metropolitan Area of Minnesota, consisting of Ramsey and Washington counties.

Electronic waste (also "e-waste," "electronics): a category of waste that includes items such as televisions, computers, printers, cell phones, etc.

Emergency debris: Waste that results from emergency situations, such as natural or human-caused disasters. This may include trees, sand, gravel, building components, wreckage, vehicles, hazardous materials and/or other personal property.

Engagement: Activities resulting in meaningful dialogue and shared decision-making of interested parties through. See also: community engagement.

Engineered wood products: Composite materials made from wood fibers, particles or veneers bonded with adhesives.

Environment: The physical and natural world, including indoor and outdoor spaces, where people, plants and animals live.

Environmental health: A branch of public health that centers around the relationships between human health and the environment.

Environmental justice: The fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.

Environmentally preferable purchasing (EPP): Intentionally choosing products or services that promote pollution prevention, waste reduction or reuse; purchasing products that can be easily recycled; buying recycled-content products; or making other purchasing decisions that are better for the environment when compared to traditionally purchased products or services.

Explore: With respect to strategies listed in the Solid Waste Management Plan, to gather information and data to determine feasibility (budget, staff capacity, impact, etc.) of pursuing further action.

Extended producer responsibility (EPR): A policy approach to hold product producers accountable for environmental impacts from all stages of the product's life cycle.

Fast fashion: Clothing that is quickly produced in response to the latest fashion trends, resulting in low-cost production and rapid turnover of items.

Feedstock: Material that is delivered to a facility to create an end product.

Fix-It Clinic: Program through which a resident can bring broken household items to a specialist for assistance in repairing them.

Food-to-animals: A type of food recovery effort that provides suitable food materials to livestock operations.

Food-to-people: A type of food recovery effort that provides safe-to-eat food to people.

Food recovery: An umbrella term referring to diverting food materials from being disposed of as waste. See also: food waste prevention, food-to-people, food-to-animals.

Food scraps (also: "food waste"): Unwanted food or parts of food items. See also: organic waste.

Food Scraps Pickup Program: A food scraps recycling program offered to residents of Washington and Ramsey counties. Residents collect food scraps in specially designed compostable bags, which are placed in their trash cart or dumpster and picked up by waste haulers. The haulers bring these bags to the R&E Center where they are sorted and sent to a composting or anaerobic digestion facility.

Food waste prevention: Eliminating or reducing the generation or disposal of food waste.

Gasification: An emerging technology for converting waste materials into a synthetic gas using intense heat.

Generator: Any person or entity that generates waste (Minn. Stat. §115A.03, Subd. 12).

Hazardous waste: Any refuse, sludge or other waste materials or combinations of refuse, sludge or other waste materials or discarded materials, or a combination of refuse or discarded materials in solid, semisolid, liquid or contained gaseous form which because of the quantity, concentration, or chemical, physical or infectious characteristics may: a) cause or significantly contribute to an increase in mortality or an increase in serious irreversible or incapacitation reversible illness; or b) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Categories of hazardous waste materials include, but are not limited to explosives, flammables, oxidizers, poisons, irritants and corrosives. Hazardous waste does not include source, special nuclear or by-product material as defined by The Atomic Energy Act of 1954, as amended (Minn. Stat. §116.06, Subd. 11).

Health equity: The state in which all people have a fair and just opportunity to attain their full health potential without the limits of structural barriers.

Household hazardous waste (HHW): Waste generated from household activity that exhibits the characteristics of or is listed as hazardous waste under Minnesota Pollution Control Agency rules. It does not include waste from commercial activities that is generated, stored or present in a household (Minn. Stat. §115A.96, Subd. 1).

Industrial (solid) waste: All solid waste generated from an industrial or manufacturing process and solid waste generated from nonmanufacturing activities such as service and commercial establishments. Industrial solid waste does not include office materials, restaurant and food preparation waste, discarded machinery, demolition debris, municipal solid waste combustor ash or household refuse. It does not include wastes regulated as hazardous wastes (Minn. Stat. §115A.03, Subd. 13a).

Infectious waste: Laboratory waste, blood, regulated body fluids, sharps and research- animal wastes that have not been decontaminated (Minn. Stat. § 116.76, Subd. 12).

Integrated solid waste management: A solid waste management system in which various waste management methods are used to manage waste (e.g., waste reduction, reuse, recycling, composting, resource recovery, landfilling, etc.), depending upon the characteristics of the waste and often according to a waste management hierarchy.

Interested parties: A person, group or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity.

Joint powers agreement (JPA): A legally binding agreement between two or more governmental entities. A tool for intergovernmental action on, for example, solid waste management activities.

Land disposal: The disposal of waste on land, typically at a landfill. See also: disposal, landfill.

Land disposal abatement: TActions that prevent placing waste into land disposal facilities or landfills, such as waste reduction, recycling, composting or resource recovery.

Landfill (also “land disposal facility”): A waste facility permitted by the Minnesota Pollution Control Agency that is designed or operated for disposing of waste on or in the land.

Life cycle analysis: An approach that assesses the total environmental impact of materials from raw material sourcing through production and use to final disposal. This approach is typically used to inform decision making to account for the full impact of a material and just its final management, such as simply evaluating whether or how it is recycled.

Local Recycling Development Grant (LRDG): Funds administered by the Minnesota Pollution Control Agency and allocated to metropolitan counties for the planning, development and operation of recycling and yard waste composting programs. Local Recycling Development Grant funds are distributed from the Metropolitan Landfill Abatement Account established under Minn. Stat. Sec. 473.844 using funds from a surcharge imposed by the state on waste delivered to metro area landfills.

Major appliances: Items banned by State law from disposal with solid waste (clothes washers and dryers, dishwashers, hot water heaters, heat pumps, furnaces, garbage disposals, trash compactors, conventional and microwave ovens, ranges and stoves, air conditioners, dehumidifiers, refrigerators and freezers). (Minn. Stat. §115A.03, Subd. 17a).

Materials recovery facility (MRF): Facility designed for centralized sorting, processing and/or grading of collected recyclable materials for marketing.

Markets (as in: end markets): Demand for a commodity or service, such as purchase of materials by a manufacturer or other entity to make products.

Mass burn: A waste-to-energy technology that uses unprocessed municipal solid waste for combustion to create steam for electricity production. See also: refuse-derived fuel.

Medical waste: Infectious waste and waste originating from the diagnosis, care or treatment of a person or animal, or waste resulting from biological research, whether or not the waste has been decontaminated (Minn. Stat. §116.76, Subd. 12). See also: infectious waste.

Metropolitan Solid Waste Management Policy Plan (also: Policy Plan): A regional policy plan for solid waste management in the Twin Cities metropolitan area, adopted by the Minnesota Pollution Control Agency as required under Minn. Stat. Sec. 473.149.

Minnesota Pollution Control Agency (MPCA): State agency responsible for overall environmental quality of the state, created by the legislature to protect Minnesota's air, water, and land, with a focus on preventing and reducing pollution and leading Minnesota's efforts to protect against the effects of climate change. primarily through enforcement of State rules, issuing of permits, distributing grants, collecting and analyzing data, providing technical assistance and coordinating educational initiatives and campaigns on a variety of environmental issues. The Governor appoints MPCA commissioner.

Municipal solid waste (MSW) (also: mixed municipal solid waste): Garbage, refuse and other solid waste from residential, commercial, industrial and community activities that the generator of the waste aggregates for collection. It does not include auto hulks, street sweepings, ash, construction debris, mining waste, sludges, tree and agricultural wastes, tires, lead acid batteries, motor and vehicle fluids and filters, and other materials collected, processed and disposed of as separate waste streams (Minn. Stat. §115A.03 Subd. 21).

Multi-unit: A classification of housing where multiple separate units for residential living are contained within one building. Multi-unit can also refer to mixed use properties, in which residential units and commercial units are contained within the same building.

Municipality: A county, town, city or other municipal corporation or political subdivision of the state authorized by law to enter contracts.

Non-MSW: Solid waste that is not managed as part of the MSW stream. Typically thought of as those items specifically excluded from MSW in the statutory definition of MSW as well as other wastes, such as non-hazardous industrial waste, C&D waste, infectious waste and other separately managed solid waste streams. See also: C&D waste, infectious waste, industrial (solid) waste.

Non-processible waste: Waste that a resource recovery facility cannot mechanically process due to its physical characteristics or potential harmful effects.

Non-residential: Refers to places other than where people live, such as businesses, government facilities or operations, institutions, schools, non-profit organizations, community activities, etc. Interchangeable with “commercial.”

Open collection: A solid waste collection system in which multiple waste haulers or collectors compete for collection accounts in the same geographical area.

Organic waste (also: “organics”): Overarching term for carbon-based wastes derived from plants and animal materials. Includes yard waste (leaves, grass, tree and shrub waste and other plant waste); food scraps, food manufacturing/production by-products; produce and meat trimmings; plant waste; certain paper products and similar materials that readily degrade in nature or in human-structured aerobic or anaerobic conditions. See also: food scraps.

Organics recycling: The process of breaking down organic waste into beneficial end-use products which can include biochar, digestate, and/or nutrient-dense compost. See also: biochar, compost, digestate.

Organics-derived products: The value-added output from processing organic waste, such as finished compost and biochar.

Organized collection: A system for collecting solid waste in which a specified collector or member of an organization of collectors is authorized to collect from a defined geographic service area or areas some or all of the solid waste that is released by generators for collection (Minn. Stat. §115A.94, Subd. 1).

Partnership on Waste and Energy: Entity resulting from a joint powers agreement between Hennepin County and Ramsey/Washington Recycling & Energy. Facilitates collaboration in areas of waste and energy management, including legislation and policy development, communication and outreach, and planning and evaluation of waste processing technologies.

Pollution prevention: Eliminating or reducing at the source the use, generation or release of toxic pollutants, hazardous substances and hazardous wastes (Minn. Stat. §115D.03, Subd. 8.).

Private sector: Part of the economy not directly controlled or owned by the government.

Problem material: Material that, when it is processed or disposed of with mixed municipal solid waste, contributes to one of the following results: 1) the release of a hazardous substance, pollutant or contaminant, as defined in section 115B.02, subdivisions 8, 13 and 15; 2) pollution of water, as defined in section 115.01, subdivision 5; 3) air pollution, as defined in section 116.06, subdivision 3; or 4) a significant threat to the safe or efficient operation of a solid waste processing facility (Minn. Stat. §115A.03, Subd. 24a).

Processing: The treatment of waste after collection and before disposal. Processing includes but is not limited to reduction, storage, separation, exchange, resource recovery, physical, chemical or biological modification, and transfer from one waste facility to another (Minn. Stat. §115A.03, Subd.25). For purposes of certification of unprocessed waste, per Minn. Stat. §473.848, "storage," "exchange," and "transfer" are excluded.

Product stewardship: The concept that all parties who have a role in producing, selling or using a product, including material suppliers, manufacturers, retailers and consumers, share responsibility for the environmental impacts of a product throughout its lifecycle. These include impacts from the selection of raw materials, the design and production processes, and the use and disposal of the product.

Public entity: Any unit of State or local government, including counties, cities, towns, metropolitan agencies and districts, special districts, school districts or any other general or special purpose unit of government in the state (Minn. Stat. §115A.471). With regard to certain public entity procurement standards established in Minn. Stat. §16B.122, "public entities" also includes any contractor acting pursuant to a contract with a public entity.

Public health: The health of the population as a whole, especially as the subject of government regulation and support.

Pyrolysis: Chemical decomposition induced in organic materials by heat in the near absence of oxygen to generate multiple by-products.

Ramsey/Washington Recycling & Energy (R&E): Entity resulting from a joint powers agreement between Ramsey and Washington counties that works to protect and ensure the public health, safety, welfare and environment of each county's residents and businesses through sound management of solid and hazardous waste generated in each county and collaboration on waste management activities.

Ramsey/Washington Recycling & Energy Board (R&E Board): Governing board of R&E. Comprised of commissioners from Ramsey and Washington counties.

Ramsey/Washington Recycling & Energy Center (R&E Center): A processing facility in Newport, MN owned by the Ramsey/Washington Recycling & Energy Board.

Reciprocal use agreement: An agreement among counties to allow residents of one county to use certain services (e.g., household hazardous waste collection) provided by another county that is party to the agreement.

Recyclable materials (also: "recyclables"): Materials that are separated from mixed municipal solid waste for the purpose of recycling or composting, including paper, glass, plastics, metals, automobile oil, batteries, source-separated compostable materials and sole source food waste streams that are managed through biodegradative processes. Refuse derived fuel or other material that is destroyed by incineration is not a recyclable material (Minn. Stat. §115A.03, Subd. 25a).

Recyclables recovery system: Processing equipment at the Ramsey/Washington Recycling & Energy Center that separates recyclables that generators have inadvertently placed in the waste stream and redirects those materials to beneficial end markets.

Recycling: The process of collecting and preparing recyclable materials and reusing the materials in their original form or using them in manufacturing processes that do not cause the destruction of recyclable materials in a manner that precludes further use (Minn. Stat. §115A.03, Subd. 25b).

Recycling facility: A facility at which materials are prepared for reuse in their original form or for use in manufacturing processes that do not cause the destruction of the materials in a manner that precludes further use. (Minn. Stat. § 115A.03, subd.25c).

Refuse-derived fuel (RDF): A product resulting from the processing of MSW in a manner that reduces the quantity of noncombustible material present in the waste, reduces the size of waste components through shredding or other mechanical means, and produces a fuel suitable for combustion in existing or new solid fuel-fired boilers (Minn. Stat. § 115A.03, subd. 25d). RDF results from techniques or processes used to prepare solid waste by shredding, sorting or compacting for use as an energy source. It consists of lighter weight materials such as paper products with most metals, glass and other non-combustible materials removed.

Renewable natural gas (RNG): Anaerobically-generated biogas that has been upgraded (or refined) for use in place of fossil natural gas. See also: biogas.

Resource recovery: The reclamation for sale, use or reuse of materials, substances, energy or other products contained within or derived from waste. (Minn. Stat. § 115A.03, Subd. 27) Resource recovery in the Solid Waste Management Plan typically refers to the recovery of energy and usable materials resulting from the processing of mixed municipal solid waste.

Resource recovery facility: A waste facility established and used primarily for resource recovery, including appurtenant facilities, such as transmission facilities and transfer stations primarily serving the resource recovery facility (Minn. Stat. §115A.03, Subd. 28).

Restriction on disposal: Restriction indicating that a person may not dispose of unprocessed mixed municipal solid waste generated in the Twin Cities metropolitan area at a waste disposal facility unless the waste disposal facility meets the following standards:

- a. The waste has been certified as unprocessable by a county.
- b. The waste has been transferred to the disposal facility from a resource recovery facility.
- c. No other resource recovery facility serving the metropolitan area is capable of processing the waste.
- d. The waste has been certified as unprocessable by the operator of the resource recovery facility.

Reuse: The practice of avoiding disposal of material that would become solid waste were it not used again in its original form.

Saint Paul–Ramsey County Public Health: The joint city and county public health department that provides a range of services to protect and improve the health of people and the environment in Ramsey County.

School: Educational institutions, including pre-kindergarten (pre-k), K-12 schools, higher education (e.g., public and private colleges and universities) and other academic institutions. Includes public, charter and private schools.

Select Committee on Recycling and the Environment (SCORE): A State task force appointed by the Governor that met in the late 1980s to recommend strategies for supporting recycling in Minnesota. SCORE is used to refer to a set of statutes enacted as a result of the recommendations, and most commonly to a particular State grant program that provides funding to counties to support local source reduction and recycling programs, as well as the improved management of household hazardous wastes, yard waste, and problem materials.

Service charge: Under the authority granted in Minn. Stat. §400.08 and §473.811, subd. 8a, a fee collected for services rendered by a county or by extension through joint powers agreements by municipalities of the county.

Solid waste: Refers to garbage, refuse or sludge from a water supply treatment plant or air contaminant treatment facility, and other discarded waste materials and sludges in solid, semisolid, liquid or contained gaseous form, resulting from industrial, commercial, mining and agricultural operations and from community activities. Solid waste does not include hazardous waste; animal waste used as fertilizer; earthen fill, boulders, rock; concrete diamond grinding and saw slurry associated with the construction, improvement, or repair of a road when deposited on the road project site in a manner that is in compliance with best management practices and rules of the agency; sewage sludge; solid or dissolved material in domestic sewage or other common pollutants in water resources, such as silt, dissolved or suspended solids in industrial wastewater effluents or discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as amended, dissolved materials in irrigation return flows; or source, special nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended (Minn. Stat. §116.06, Subd. 22).

Solid waste management: See Waste Management.

Solid waste management hierarchy (also: waste management hierarchy or waste hierarchy):

A ranking of waste management methods or preference practices in the order in which they are the preferred method or practice. Minn. Stat. §115A.02 establishes the following order of preference for waste management:

1. Waste reduction and reuse.
2. Waste recycling.
3. Composting of yard waste and food waste.
4. Resource recovery through mixed municipal solid waste composting or incineration.
5. Land disposal which produces measurable methane gas or which involves the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale.
6. Land disposal which produces no measurable methane gas and does not involve the retrieval of methane gas as a fuel for the production of energy to be used on-site or for sale.

Solid Waste Management Tax: Established in 1998, a tax collected by the State for management services for MSW and non-MSW (specifically construction waste, infectious waste and industrial waste). Services subject to the tax include collection, transportation, processing and disposal. Service providers (such as haulers and landfill operators) who directly bill generators or customers are responsible for collecting and remitting the tax. The current tax rate on the sales price of MSW services is 9.75% for residential generators and 17% for commercial generators.

Source separation: Separation of recyclable, compostable or other materials by the waste generator prior to collection of mixed wastes.

Source-separated compostable materials: Materials that:

1. Are separated at the source by waste generators for the purpose of preparing them for use as compost.
2. Are collected separately from mixed municipal solid waste and are governed by the licensing provisions of section 115A.93.
3. Are comprised of food wastes, fish and animal waste, plant materials, diapers, sanitary products and paper that is not recyclable because the commissioner has determined that no other person is willing to accept the paper for recycling.
4. Are delivered to a facility to undergo controlled microbial degradation to yield a humus-like product meeting the Minnesota Pollution Control Agency's class I or class II, or equivalent, compost standards and where process residues do not exceed 15% by weight of the total material delivered to the facility.
5. May be delivered to a transfer station, mixed municipal solid waste processing facility or recycling facility only for the purposes of composting or transferring to a composting facility, unless the commissioner determines that no other person is willing to accept the materials (Minn. Stat. §115A.03, Subd. 32b.).

Support: Offer an entity financial resources, expertise and/or connection to networks of common interests to achieve shared goals and objectives.

Sustainability (also "sustainable"): The ability to be maintained at a certain rate or level, typically to do so without depleting natural resources.

Sustainable materials management: An approach to serving human needs by using/reusing resources most productively and sustainably throughout their life cycles, generally minimizing the amount of materials involved and all the associated environmental impacts (source: EPA). Sustainable materials management focuses on the best use and management of materials based on how they impact the environment throughout their life cycle. Sustainable materials management considers the impacts of extracting raw materials, scarcity of materials, product design and production, product use and end-of-use management.

Tipping fee: The fee charged by solid waste facilities to waste haulers, collectors or other parties for the privilege of depositing or "tipping" waste.

Toxicity: Under Minn. Rules 7045.0131, one of the six characteristics of hazardous waste, typically exhibiting effects of being poisonous.

Toxicity reduction: Refers to efforts to reduce the toxic or hazardous character of the waste stream.

Transfer station: An intermediate waste facility in which waste collected from any source is temporarily deposited to await transportation to another waste facility (Minn. Stat. §115A.03, Subd. 33).

Tree canopy: The upper layer of tree branches, leaves, and stems that provide a dense cover over the ground when aerially viewed.

Tree care: Activities that maintain, improve or manage trees for health, structure, appearance or safety. These activities can include chemical treatment, trimming and removal.

Twin Cities Metropolitan Area: A geographical area that includes the seven metropolitan counties which include or surround the cities of Minneapolis and Saint Paul, also known as the Twin Cities. The seven counties include Anoka, Carver, Dakota, Hennepin, Ramsey, Scott and Washington.

Unacceptable waste: Waste not acceptable at a resource recovery facility. Unacceptable waste includes waste which would likely pose a threat to health or safety, or which may cause damage to or adversely affect the operation of the facility. See also: non-processible waste.

Unprocessable: In describing waste for the purpose of compliance with Minn. Stat. § 473.848, not capable, after collection and before disposal, of undergoing separation of materials for resource recovery through recycling, incineration for energy production, production and use of refuse-derived fuel, composting, or any combination of these processes to the extent that the weight of the waste is reduced at least 65% before disposal in a mixed municipal solid waste disposal facility, on an annual average.

Upstream: Activities that take place prior to waste generation and disposal, including material sourcing, product design, reuse, repair, recycling, composting, etc. See also: downstream.

US Composting Council Seal of Testing Assurance: A compost testing, labeling and information disclosure program designed to provide information on how to get the maximum benefit from the use of compost.

Very small quantity generator (VSQG): Entity that generates 100 kilograms or less per month of hazardous waste or one kilogram or less per month of acutely hazardous waste.

Waste: Solid waste, sewage sludge and hazardous waste (Minn. Stat. §115A.03, Subd. 34).

Waste designation: A requirement by a county or waste management district that all or any portion of the solid waste that is generated within its boundaries or any service area thereof be delivered to a processing or disposal facility identified by the district or county (Minn. Stat. §115A.81, Subd. 2).

Waste generation: The act or process of producing waste (Minn. Stat. §115A.03, Subd. 11).

Waste hauler (also: hauler): A business or other entity that collects waste from a generator and transports and disposes of it at a waste management facility. It does not include a person hauling his or her own residential waste.

Waste management: Activities which are intended to affect or control the generation of waste and activities which provide for or control the collection, processing and disposal of waste. (Minn. Stat. §115A.03, Subd. 36)

Waste Management Act: Chapter 115A of State Statutes which governs waste management activities in the State of Minnesota. Adopted in 1980 and amended by subsequent legislation. Some other sections of State Statutes also affect solid waste management but are technically not part of the Waste Management Act.

Waste reduction (also: source reduction): An activity that prevents generation of waste or the inclusion of toxic materials in waste, including:

- a. Reusing a production in its original form.
- b. Increasing the life span of a product.
- c. Reducing material or the toxicity of material used in production or packaging.
- d. Changing procurement, consumption or waste generation habits in smaller quantities or lower toxicity of waste generated (Minn. Stat. §115A.03, Subd. 36b).

Waste Reduction Advisory Committee: Committee convened to advise on the development of a county's Solid Waste Management Plan. Includes residents and representatives from waste haulers and municipalities.

Wasted Food Scale: Developed by the United States Environmental Protection Agency, the Wasted Food Scale prioritizes actions organizations can take to prevent and divert wasted food. Each tier focuses on different management strategies for wasted food with the top tier being the most preferred strategy.

Waste-to-energy (WTE): Process where MSW is burned to produce steam in a boiler, and the steam is used to power an electric generator turbine.

Wood waste: Waste resulting from the removal of trees or parts of trees from the landscape (aka "tree waste") and byproducts resulting from the use of trees or parts of trees to manufacture products and discarded products that were made from trees.

Yard waste: Garden wastes, leaves, lawn cuttings, weeds, shrubs and tree waste (Minn. Stat. §115A.03, Subd. 38) 115A.91.

Zero waste: The concept of resource conservation and the design of all products, packaging and materials to become resources rather than landfilling or combusting them.

APPENDIX E:

County Oversight of Waste Industry

Minnesota Statutes, section 473.803, subdivision 5 states:

Role of private sector; county oversight.

A county may include in its solid waste management plan and in its plan for county land disposal abatement a determination that the private sector will achieve, either in part or in whole, the goals and requirements of sections 473.149 and 473.803, as long as the county:

1. Retains active oversight over the efforts of the private sector and monitors performance to ensure compliance with the law and the goals and standards in the metropolitan policy plan and the county plan;
2. Continues to meet its responsibilities under the law for ensuring proper waste management, including, at a minimum, enforcing waste management law, providing waste education, promoting waste reduction, and providing its residents the opportunity to recycle waste materials; and
3. Continues to provide all required reports on the county's progress in meeting the waste management goals and standards of this chapter and chapter 115A.

This appendix explains Ramsey County's conformance with this law. The solid waste management system serving Ramsey County, and the East Metro area in general, is comprised of a combination of services provided by public and private entities. The private sector plays a critical role in carrying out solid waste functions in the county. The tools that the county uses to hold the private sector accountable include:

1. **Regulation** – ensuring compliance with county ordinances and, where applicable, state laws that relate to solid waste management.
2. **Contracts** – ensuring compliance with voluntary agreements entered into between a unit of government and a private entity.
3. **Monitoring and reporting** – gathering information from private parties to monitor actions related to the solid waste system.

The private sector, in partnership with the public sector, is responsible for portions of the solid waste system, with oversight by the county as shown in the table on the following page.

Function	Provided By	Oversight Method
Collection of waste, organics and yard waste	Private for-profit and non-profit companies, including specialty companies, and certain municipalities	<ul style="list-style-type: none"> • Licensing of haulers of mixed municipal solid waste. • Licensing and inspection of transfer stations for MSW and non-MSW. • Reporting by collectors of MSW, recyclables.
Delivery of acceptable waste to the R&E Center	Private for-profit and non-profit companies, including specialty companies, and certain municipalities	<ul style="list-style-type: none"> • Enforcing waste designation provisions of solid waste ordinance. • Monitoring and enforcing waste delivery agreements.
Processing and marketing of recyclables	Private for-profit and non-profit companies	<ul style="list-style-type: none"> • Monitoring of regulation by MPCA. • Responding to complaints. • Reviewing reporting required by contract or MPCA.
Land disposal	Private landfills in Minnesota and Wisconsin	<ul style="list-style-type: none"> • Ensuring compliance with contracts between R&E and landfills for disposal.
Portions of services provided to residents, such as yard waste sites, household hazardous waste services	Private companies under contract to Ramsey County	<ul style="list-style-type: none"> • Ensuring compliance with contracts.
Collection of residential recyclables	Services provided by contractors to municipalities, provided directly by municipalities or ensured via municipal ordinance	<ul style="list-style-type: none"> • Ensuring compliance with SCORE agreements between county and municipalities that outline residential recycling requirements. • Providing technical assistance to cities to ensure recycling service agreements are enforceable. • Reviewing reporting to municipalities by service providers. • Reviewing reporting to the MPCA by service providers.
Collection of non-residential recyclables, including organics	Services provided to municipalities under contract or via ordinance	<ul style="list-style-type: none"> • Increasing awareness of state law requiring recycling by certain businesses. • Monitoring service levels and quality through BizRecycling and other county and R&E programs.

APPENDIX F:

Environmental Justice Review

“Environmental justice” is the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Environmental justice is achieved when all people are provided the same degree of environmental protection from environmental and health hazards and have equal access to the decision-making processes that contribute to a healthy environment in which to live.

Environmental justice encompasses the principle that all individuals and communities have the right to be protected from environmental degradation or environmental policies that put them at a disadvantage. It adopts a public health model of prevention, protecting people and the natural environment.

Impacted Communities

Ramsey County is the most racially and ethnically diverse county in the state, with the greatest diversity in the city of Saint Paul, the largest city in the county. There are more than 114 languages spoken in Saint Paul Public Schools alone (spps.org). The most frequently spoken languages other than English are Spanish, Hmong, Karen and Somali (stpaul.gov). Asians make up 15.9% of the population in Ramsey County and 18.4% of the population in Saint Paul, Black/African American residents make up 13.6% of the population in Ramsey County and 15.6% of the population in Saint Paul, Hispanics/Latinx residents make up 7.8% of the population in Ramsey County and 8.6% of the population in Saint Paul and American Indian and Alaska Native residents make up 1.1% of the population in Ramsey County and 0.7% in Saint Paul. Those who represent two or more races make up 3.9% of the population in Ramsey County and 7.8% of the population in Saint Paul (census.gov; QuickFacts).

Although Minnesota is one of the top states for positive health outcomes, several communities within Ramsey County face disparities in health outcomes (health.state.mn.us). Nearly 14% of Ramsey County residents live in poverty (census.gov; 2022 population estimates), and in 2021, 11% of the county’s adults and 17% of the county’s children were food insecure, compared to 9% and 13% statewide, respectively (ramseycounty.us). Of those living in poverty, people of color are disproportionately represented. This can be seen in usage rates for those accessing supplemental food benefits in Ramsey County. In 2021, 43% of Black/African American residents, 30% of Asian residents, 20% of Native American residents and 10% of Hispanic/Latinx residents received SNAP benefits (U.S. Department of Agriculture’s Supplemental Nutrition Assistance Program) in Ramsey County compared to only 5% of white residents (ramseycounty.us).

Areas of concern for environmental justice are defined by the MPCA as meeting one or both of the following demographic criteria from the U.S. Census and American Community Survey:

- Total population of people of color greater than 40%.
- At least 35% of people reported income less than 200% of the federal poverty level.

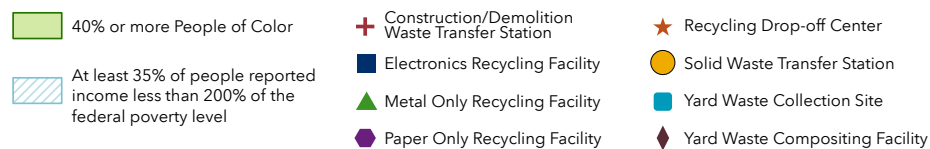
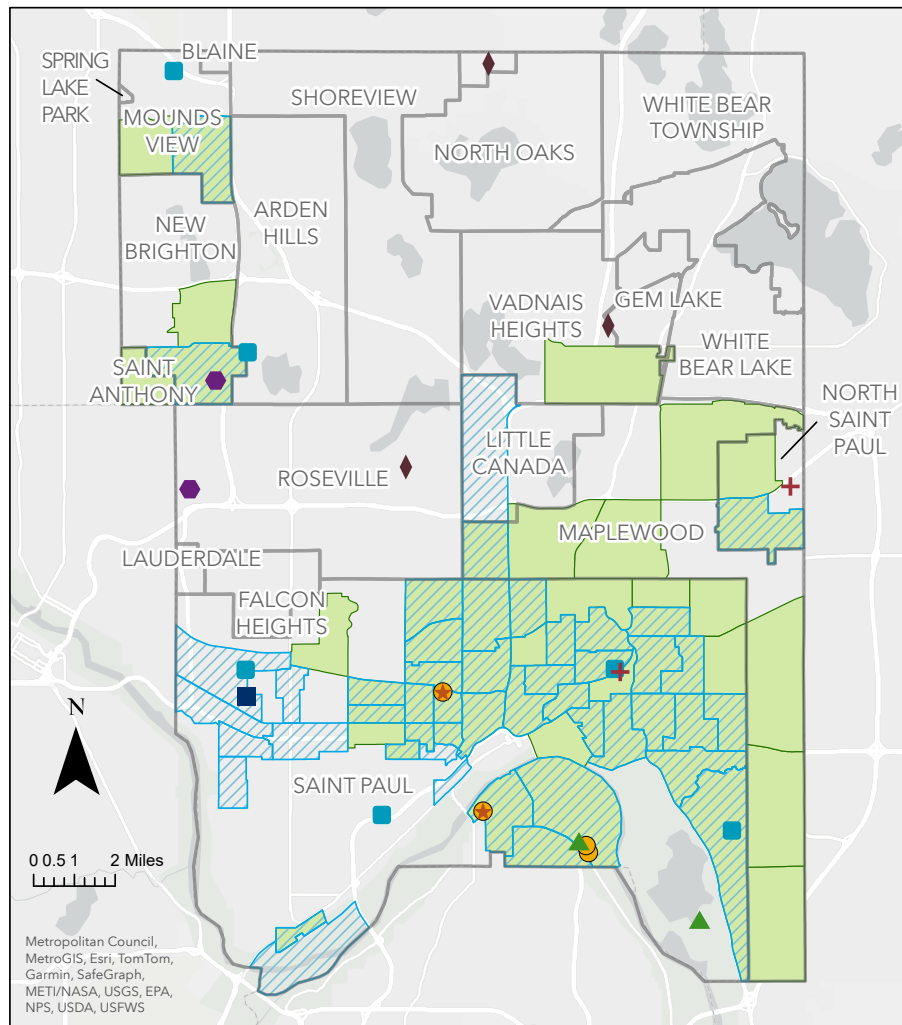
The MPCA chose these two criteria because research indicates that people of color and low-income people are disproportionately exposed to pollution, and bear disproportionate health impacts from pollution, regardless of other population characteristics.

List of Solid Waste Facilities in Ramsey County

Facility	Location	Facility Type
AMG Resources	Saint Paul	Metal Only Recycling Facility
Anderson Dumpster Box Service	Saint Paul	Construction/Demo Waste Only Transfer Station
Berwald Roofing Co.	North St. Paul	Construction/Demo Waste Only Transfer Station
City of Roseville Leaf Recycling Center	Roseville	Yard Waste Composting Facility
EMR - Northern Metal Recycling	Saint Paul	Metal Only Recycling Facility
International Paper Recycling	Roseville	Paper Only Recycling Facility
J & J Recycling	Saint Paul	Solid Waste Transfer Station
Keith Krupenny & Son Disposal Service	Saint Paul	Solid Waste Transfer Station
Pioneer Industries International	New Brighton	Paper Only Recycling Facility
Ramsey Co. Yard Waste Site - Arden Hills	Arden Hills	Yard Waste Collection Site
Ramsey Co. Yard Waste Site - Battle Creek	Saint Paul	Yard Waste Collection Site
Ramsey Co. Yard Waste Site - Frank & Sims	Saint Paul	Yard Waste Collection Site
Ramsey Co. Yard Waste Site - Midway	Saint Paul	Yard Waste Collection Site
Ramsey Co. Yard Waste Site - Mounds View	Mounds View	Yard Waste Collection Site
Ramsey Co. Yard Waste Site - Summit Hill	Saint Paul	Yard Waste Collection Site
Ramsey Co. Yard Waste Site - White Bear Township	White Bear Lake	Yard Waste Composting Facility
Repowered (Tech Dump)	Saint Paul	Electronics Recycling Facility
Twin City Refuse & Recycling Transfer Station	Saint Paul	Solid Waste Transfer Station
Twin City Refuse & Recycling Transfer Station	Saint Paul	Recycling Drop-off Center
Urban Companies	Vadnais Heights	Yard Waste Composting Facility
Waste Management of MN St. Paul Transfer Station	Saint Paul	Recycling Drop-off Center
Waste Management of MN St. Paul Transfer Station	Saint Paul	Solid Waste Transfer Station

Note: These are facilities permitted by the MPCA to collect, transfer or otherwise manage various waste streams, under a permit issued by rule or under a more rigorous solid waste facility permit, based on the activities on site. Those located within an environmental justice area of concern as determined by the MPCA are in **bold**.

Solid Waste Facilities and Environmental Justice Areas of Concern



Impacts

The Ramsey County Solid Waste Management Plan seeks to encourage best practices in waste management to protect public health and the environment, which is beneficial to all Ramsey County residents.

Waste Management Facilities

Ramsey County is home to 19 waste management facilities permitted by the MPCA to collect, transfer or otherwise manage various waste streams, including MSW, construction and demolition waste, recyclables and yard waste. Out of those 19 facilities, 11 are in areas of concern for environmental justice, either because at least 40% of residents are people of color, at least 35% of people fell below 200% of the federal poverty threshold or both. Five of these facilities are solid waste transfer stations, five collect or process recyclables (two of these are also solid waste transfer stations) and three are sites that collect yard waste for transfer to other locations.

Reducing the amount of waste sent to landfills and waste-to-energy facilities, as called for in this Plan, would result in material sent to regional recycling and organics recovery facilities, including facilities located within areas of concern for environmental justice. If this happens, the region may need more capacity for recycling and organics recovery facilities. The potential impacts of new or expanded facilities include increases in traffic and noise, as well as potential impacts to air quality due to increased vehicular traffic and facility emissions. Though the Plan does not anticipate any specific facility will be constructed within the county during the years it is in effect, Ramsey County will include community impacts and benefits, as well as health equity and environmental justice, in performing any role it may play related to the planning, development, licensing or operation of such facilities.

When exercising its licensing authority, including when issuing license renewals or responding to new license applications for facilities operating in areas of environmental justice concern, Ramsey County will:

- Identify facility types that warrant additional actions or specific license conditions based on the potential for adverse effects, using available data to avoid negative impacts on communities or populations already experiencing disparities in environmental conditions and health outcomes.
- Offer extensive community engagement opportunities to seek feedback from the community.

The county may conduct more frequent inspections at facilities in areas of concern for environmental justice when needed to ensure the facilities are meeting applicable regulations and license conditions. The county will look for opportunities to participate in discussions with other governmental entities and community representatives as appropriate to mitigate negative impacts of facilities it permits, particularly those in areas of concern for environmental justice.

The county does not exercise land use authority but will encourage state and municipal partners to site facilities in locations that minimize impacts to the environment and human health.

Health equity and environmental justice is an overarching policy of the Plan. Overarching policies are intended to be applied across the implementation of all Plan chapters. They also assist in prioritizing county efforts and funding. Successful implementation of policies in this plan that reduce waste generation would mean less material would need to be transported to and managed by these facilities, reducing the impact these facilities have on communities.

Numerous strategies in the Plan are intended to directly benefit communities in areas of concern for environmental justice:

- Removing barriers to participation in county engagement activities.
- Using Environmental Justice Index to allocate funding to municipalities, rather than just allocating funds based on population.
- Addressing barriers to household hazardous waste collection.
- Providing education and programming to help residents understand and mitigate home health hazards, such as lead and radon.
- Helping multi-unit residential properties to improve recycling opportunities.
- Continuing to roll out a food scraps collection program that mitigates additional vehicle traffic by using existing collection trucks and routes and is available to all residents, regardless of the type of housing in which they live.
- Supporting convenient and affordable management of bulky materials like mattresses.

Community Engagement

Community engagement and collaboration in the decision-making process can help ensure that all communities' needs and concerns are considered, leading to more effective waste reduction and management solutions. Community engagement was integral in developing Ramsey County's Solid Waste Management Plan.

Engagement included:

- **Waste Reduction Advisory Committee.** This group of 29 individuals included members of the community, municipality representatives and waste industry representatives. The group also included a representative from Saint Paul-Ramsey County Public Health's Community Health Services Advisory Committee. A representative from the MPCA participated as an ex-officio member. The group met four times to provide Plan input. Members were compensated for their time and expertise.
- **Pop-up community engagement.** Staff attended 15 community locations and events to request feedback on plan priorities. Pop-up engagement allows the county to connect with residents without asking them to go out of their way, minimizing barriers. Pop-up engagement was conducted in communities that are traditionally underserved by the county, including areas of environmental justice concern. Community members were compensated for their time and expertise.
- **Resident survey.** The county conducted a statistically significant survey of residents that included questions to guide Plan preparation.

Residents expressed a desire for the county to prioritize its response to climate change. They want the county to improve food scraps collection and to support opportunities for waste reduction and reuse. Residents indicated that bulky items (e.g., mattresses and furniture), household hazardous waste (HHW) and electronics are most challenging for them to dispose of. They suggested more support for waste reduction in multi-unit residential properties and expanded public education on best practices for managing waste.

Members of the Waste Reduction Advisory Committee recommended expanded public education efforts. They had a strong interest in policy solutions such as bans/restrictions/fees for single-use items like grocery bags and takeout containers/utensils. They also supported legislation advancing extended producer responsibility (EPR) and right-to-repair initiatives. In addition to policy-level solutions, they also advocated for building community capacity to address waste issues at a hyper-local level. They advocated for curbside/community collection of challenging materials (e.g., bulky items and HHW) and the development of improved recycling markets.

The county worked with a community engagement consultant and cultural consultants in conducting this engagement work. These consultants advised on accessible and inclusive methods of reaching Ramsey County residents. Multiple engagement opportunities and formats provided opportunities for different groups to provide feedback in the way that worked best for them.

As this Plan is implemented, the county will continue to be intentional about engaging community members, with a focus on those living or working in environmental justice areas of concern. The county will also utilize the MPCA's Environmental Justice Framework as a resource.

APPENDIX G:

Policy Plan Implementation Table

The Metropolitan Solid Waste Management Policy Plan outlines numerous strategies for reducing waste and increasing recycling and organics recovery. All interested parties in the system have roles and responsibilities to ensure successful implementation of these strategies. This table serves as an accountability plan for the implementation of strategies included in Chapters 3 through 14 of the County Plan. This table serves as an accountability plan for the implementation of Policy Plan strategies included in Chapters 3 through 14 of the County Plan. The Plan includes additional strategies not included in this implementation table.

Policy Plan optional strategy points (minimum of 75 points required): **127**

Policy Plan Strategy #	Type/ Point Value	County Plan Location		County Plan Strategy Language
		Chapter	Strategy	
Improving the Reliability of Data				
1	Required	13	1.a	Strive for increased compliance with hauler reporting per Minn. Stat. § 115A.93.
2	Required	13	1.b	Provide required county reporting to the MPCA.
Regional Solutions				
9	Required	4	7.e	Participate in an annual joint commissioner/staff meeting on solid waste.
10	Required	4	7	Commit to standardized communication and engagement by conducting outreach collaboratively, as appropriate, with Washington County and R&E.
11	Required	12B	6	Share information, learnings and research on emerging and alternative technologies with the MPCA and other interested parties to raise understanding, address concerns and proactively adopt efficient regulatory frameworks. With regional partners, engage in efficient and value-added infrastructure planning.
12	Required	12B	7	Develop plans for large facility closures or changes to operation to reduce landfill reliance, including considering opportunities to redirect the CEC used for resource recovery purposes, to efforts that shift resources to higher levels of the waste management hierarchy, including waste and toxicity reduction, reuse, recycling, organic waste management and other issues, such as illegal dumping and innovative processing technologies.

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Waste Reduction - Food Waste Prevention/Food Rescue and Purchasing				
13	Required	8C	1.b.ii	Provide grants for, or access to, software that can track food waste.
14	Required	7B	2.e	Establish partnerships between food recovery organizations and restaurants/stores to increase food recovery.
15	Required	7A	1.d	Implement biannual waste reduction challenges for residents.
16	Required	8D	4	Working with county procurement staff, develop and implement a county sustainable purchasing policy using MPCA guidance by January 2026.

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17	Required	8D	4.a	Participate in Responsible Public Purchasing Council meetings.
18	Optional 7 pts	7B	4	Work with health inspectors to educate restaurants and other establishments that have surplus prepared food to donate.
Reuse				
19	Required	7A	5.b	Offer grants or rebates for organizations to transition to reusable food and beverage service ware.
20	Required	7A	5.a	Offer grants for waste reduction, reuse and repair.
21	Required	8D	2.c	Develop and implement a green meeting policy for county hosted events and department activities.
22	Optional 6 pts	8D	2.b	Develop and implement a county policy encouraging the use of reusable food and beverage service ware at county hosted events and department activities.
24	Optional 6 pts	7A	7	Join and/or actively participate in a reuse network, like Reuse Minnesota, to provide county and city staff with learning opportunities to broaden their reuse expertise.
25	Optional 7 pts	7A	2.c	Expand community capacity for repair. Through existing county programs such as Fix-It Clinics and collaboration with partners, increase opportunities for skilled individuals to teach repair and mending skills and promote repair as an alternative to purchasing new.
26	Optional 7 pts	7A	3	Maintain free product rooms at environmental centers for residential reuse of household hazardous waste material and explore hosting and/or supporting material swap events, including with municipality and other partners.
27	Optional 7 pts	7A	2.e	Work with municipalities to evaluate and, as appropriate, implement curbside set-out days to allow residents to set out used items for reuse.
Collection Best Practices				
30	Required	8A	1.d.ii	Contract for residential recycling collection and/or recycling collection on same day as trash.

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Recycling Management				
35	Required	8C	1.b.i	Recruit a minimum of 12 commercial businesses a year to recycle at least three materials from their operations and promote environmental and resource benefits.
36	Required	12A	6.a	Continue to operate pre-processing of waste at resource recovery facilities, such as the food scraps bag sortation line and recyclables recovery system at the R&E Center.
37	Required	8A	2	The county, with R&E, will provide assistance to multi-unit properties to improve recycling.
Organics Management				
40	Required	8B	1	Make residential curbside organics collection available to all residents of Ramsey County by 2030 via continued expansion and funding of the Food Scraps Pickup Program.
41	Required	8B	4	Support at-home composting and sustainable approaches to managing stormwater by partnering with municipalities to promote at-home composting and rainwater collection, such as outreach and funding for compost bin/rain barrel distribution. Promotions will include online information, county publications and social media.
42	Required	8C	4	Explore and work with partners to develop requirements for the management of organics from large commercial food generators by 2030. Work with the MPCA, Washington County and other metro counties to explore opportunities for regional consistency.
43	Optional 7 pts	8B	3	Develop and maintain accessible residential food scraps drop-off services and establish additional residential food scraps drop-off sites through partnerships with municipalities and others.
Wood Waste and Impact of Emerald Ash Borer				
45	Required	10	5	Wood waste management plan. Develop plans to prevent and manage wood waste in the county and throughout the region by the end of 2025. Work collaboratively on regional planning and offer support to municipalities, including working with the Minnesota Pollution Control Agency to identify funding sources for these efforts. Evaluate alternative processing methods and emerging technologies, such as gasification, to manage wood waste.

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46	Required	10	9	Promote existing programs that use EAB-effected wood and other wood waste for furniture, home goods, flooring and other purposes. Expand to include other wood waste uses as opportunities arise, including (but not limited to) milling; prioritizing purchasing of products from recovered waste wood; and production of biomass pellets, renewable fuels or carbon soil amendments.
47	Required	12B	4.a	Continue to support composting, mulching and biochar operations.
49	Optional 8 pts	10	7	Develop and distribute EAB tree care education programs for privately owned land. This includes educating on tree removal options as part of tree care.
51	Optional 9 pts	10	8	Explore opportunities to assist with cost barriers to tree care and removal, such as allowing assessments on property taxes to spread the cost of tree care over a multi-year timeframe.
52	Optional 5 pts	12B	4	Support increased capacity for organics processing (e.g., composting, mulching, food-to-animals, anaerobic digestion and biochar production) beyond existing operations.
Organics Market Development				
55	Required	8D	6	Create policies for the county and municipalities to incorporate food-derived compost and other organics-derived products into construction, landscaping and remediation projects.
56	Optional 7 pts	12B	4.b	Find new outlets to increase food-to-animal operations.
Waste to Energy and Landfilling				
58	Required	12A	3	Work cooperatively with the MPCA, as the state enforces provisions found in Minnesota Statutes section §473.848, which requires waste to be processed before land disposal, to enforce restriction on disposal.
59	Optional 4 pts	14	3	Continue to implement the County Environmental Charge (CEC), a service charge on waste fees, to better account for the externalities of land disposal. Evaluate the amount of funds generated from the CEC.

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Product Stewardship				
60	Required	5	2.a	Participate with the Product Stewardship Committee under the Solid Waste Administrators Association (SWAA).
Household Hazardous Waste				
61	Required	6A	4.b	Encourage retailers to increase consumer awareness of responsible end-of-life handling for products containing lithium-ion batteries.
62	Required	6A	2.a	Continue county participation in the reciprocal use agreement for HHW collection sites across the metro area.
63	Required	6A	2.b	Partner with municipalities to increase participation in HHW collection.
64	Optional 8 pts	6A	3	Explore, identify and implement methods to remove barriers to use and access of HHW collection, including (but not limited to) hosting drop-off sites at various locations, providing pick-up services, etc., with specific focus on historically underserved communities.
Sustainable Building and Deconstruction				
65	Required	11	1.b	Work with the Property Management and Parks departments implement the use of a Building Material Management Plan and consider adopting the MPCA's Material Management Plan Template.
66	Optional 7 pts	8D	7	As the county develops or redevelops land, maximize recovery of materials that result from that work through reuse, recycling or energy recovery and minimize land disposal.
67	Optional 8 pts	11	3.e	Explore working with partners to host a building material collection event or swap.
68	Optional 8 pts	11	3.a	Through Ramsey/Washington Recycling & Energy, provide financial assistance through grants to offset the additional cost of building deconstruction, used building material installation and/or structural moving.
69	Optional 8 pts	11	3.b	Provide deconstruction training, with consideration for toxic materials such as lead, for municipal officials, architects, designers, the public and general contractors.
70	Optional 8 pts	11	3.d	Host or support home and building repair and refurbishment trainings.