



OTTER TAIL COUNTY SOLID WASTE MASTER PLAN

December 2021



OTTER TAIL
COUNTY - MINNESOTA

ACKNOWLEDGEMENTS

County Board

Dan Bucholz	District 1 Commissioner
Wayne Johnson	District 2 Commissioner
Kurt Mortenson	District 3 Commissioner
Betty Murphy	District 4 Commissioner
Lee Rogness	District 5 Commissioner

Project Management Team

Chris McConn	Solid Waste Director
Zach Fjestad	Assistant Solid Waste Director
Cedar Walters	Public Information & Education Officer
Rena Simon	Recycling Manager
Nick Heeter	Household Hazardous Waste Manager
Rick West	Former Public Works Director

Project Review Committee

Kelly Melgard	Steve’s Sanitation	Curt Osterfeld	North Central, Inc.
Dale Tellinghuisen	Lakes Area Coop	Lonnie Ballweg	Westlake Resort
Myron Lueders	Thumper Pond Resort	Gene Kelm	City of Battle Lake
John Kruse	OTC COLA	Amanda Hansen	Brunswick
Robert Gray	West Central Turkeys	Len Taylor	City of Fergus Falls
Tom Rufer	Lake Region Healthcare	Ken Herbranson	Dairy Farmer
Trevor Steeves	Pelican Rapids School District	Mark Leighton	Rothsay Truck Stop
Jake Ellefson	Otter Tail Power Company	Eric Mounts	City of Dalton
Anthony Hicks	Green Plains Ottertail, LLC		



Table of Contents

Acknowledgements	i
Executive Summary	iii
Introduction.....	1
Otter Tail County Long-Range Planning Efforts	1
County Role in Managing Solid Waste.....	2
County Population and Demographics	4
Public Engagement.....	5
Developing a Solid Waste Master Plan	6
Public Areas of Interest.....	6
Otter Tail County Solid Waste Master Plan Guiding Principles	6
Otter Tail County Solid Waste Master Plan Proposed Solutions	9
Otter Tail County Master Plan Solutions and Guiding Principles.....	13
Construction and Demolition.....	14
Education	15
Household Hazardous Waste.....	17
Operations.....	17
Organics	19
Recycling	21
Waste Reduction	22
Waste-to-Energy	23
Appendix A - Otter Tail County Solid Waste Management System Description	A-1
Appendix B - Otter Tail County Solid Waste Engagement.....	B-1
Appendix C - Plan Review Committee Findings.....	C-1
Appendix D - Technology Evaluation.....	D-1



Executive Summary

This Solid Waste Master Plan (Master Plan) contains solutions designed to support and ultimately improve Otter Tail County's existing solid waste management system. Public engagement played a central role in the development of this Master Plan. The public input was collected during community engagement events such as pop-up events, community surveys, focus group meetings, a virtual open house, a hub/project website, and meetings with the Project Review Committee (PRC).

Community engagement identified seven interests to focus the development of this Master Plan: cost to user, environmental quality (land and water), customer convenience, long term liability from landfilling, equity, protect public health, and risk and feasibility. These seven interests were used to create seven guiding principles within this Master Plan. These guiding principles are an expression of the public input and allow the County Board and program staff to understand the community's desires related to the management of solid waste. The seven guiding principles of the Master Plan demonstrate that Otter Tail County is a leader in solid waste management practices and is committed to:

- A path toward zero landfilling
- Supporting waste-to-energy
- Working towards regional solutions.
- Moving waste up in the Minnesota Solid Waste Management Hierarchy
- Protecting the County's natural resources
- Providing quality and equitable solid waste services
- Providing fiscally responsible investments.

An evaluation of the existing solid waste management system was conducted to determine current diversion from landfilling, and what policies, programs, or technologies could be implemented to improve recycling, solid waste management and waste diversion from landfills. This evaluation found that many different solutions exist to divert more material from landfilling, but for the County to achieve its principle, a path toward zero landfilling, a combination of solutions is necessary. Therefore, solutions were developed to help align the County with the seven guiding principles of this Master Plan. These solutions were separated into eight solid waste categories currently part of the existing Otter Tail County solid waste management system: construction & demolition, education, household hazardous waste, operations, organics, recycling, waste reduction, and waste to energy/ash. The solutions include a planning and implementation schedule throughout the twenty-five year duration of this Master Plan to support the success of all programs and ultimately set a path toward zero landfilling.



Introduction

Otter Tail County (County) has spent the past twenty-five years developing an integrated solid waste management system that includes accessible, cost-effective solid waste options for its residents, businesses, and visitors. The County's system has focused on recycling and proper management of waste. Extensive planning has been conducted to determine the best locations for waste and recycling collection and management facilities.

The County Board is interested in building on the existing solid waste system to increase waste reduction, improve recycling and proper management of waste, and evaluate technological opportunities to improve processing and sorting of waste and recyclables. The County Board, Otter Tail County Solid Waste staff, Foth Infrastructure & Environment (Foth), and SRF Consulting Group (SRF) spent two years obtaining public input, evaluating options, and designing this Otter Tail County Solid Waste Master Plan (Master Plan).

This Master Plan is intended to be a community "blueprint" for the solid waste system that supports healthy people, the economy, and the environment. It was developed through engagement with residents, businesses, and visitors to determine the solid waste system goals. It sets a "Path Toward Zero Landfilling" in the County. In order to make progress on this path, opportunities to improve and promote recycling and proper management of waste, as well as exploring new technologies for waste management have been defined.

Otter Tail County Long-Range Planning Efforts

Otter Tail County has completed a number of long-range planning efforts that set goals and identify implementation actions across many different systems. This Master Plan, the Transportation Plan and Long-Range Strategic Plan are recent examples of these long-range efforts. Each planning effort examines existing conditions, sets future goals, and analyzes actions needed to achieve the County's established goals.

The **Otter Tail County Long-Range Strategic Plan (LRSP)** was adopted in 2020 and serves as the County's guiding document for decision making. The LRSP tackles six systems, including resilience, economy, land use, public infrastructure, natural resources, and parks and recreation. The goals of the LRSP are further supported by the guiding principles established in this Master Plan. Additionally, the LRSP calls for the implementation of the solutions identified in this planning effort as a public infrastructure implementation action.



County Role in Managing Solid Waste

Otter Tail County is responsible for meeting state goals for recycling and waste management and protecting public health and the environment. The County's role addresses all aspects of solid waste management: reduction, reuse, recycling, composting (and other methods of organics diversion and management), energy recovery, landfilling, and proper treatment and disposal of various waste streams (including household hazardous waste, industrial waste, municipal solid waste, and construction and demolition waste). Otter Tail County's current integrated solid waste system is based on the waste management hierarchy, emphasizing the prevention of environmental problems and the protection of public health¹.



The County has six solid waste facilities that are permitted by the Minnesota Pollution Control Agency (MPCA). These facilities are also regulated by County and City ordinances. The County Board oversees management and operation of these facilities. The County's facilities include transfer stations and landfills that provide solid waste services for residents throughout the County and surrounding counties. Each facility location, history, and operational information is described in **Appendix A: Otter Tail County Solid Waste Management System Description**.

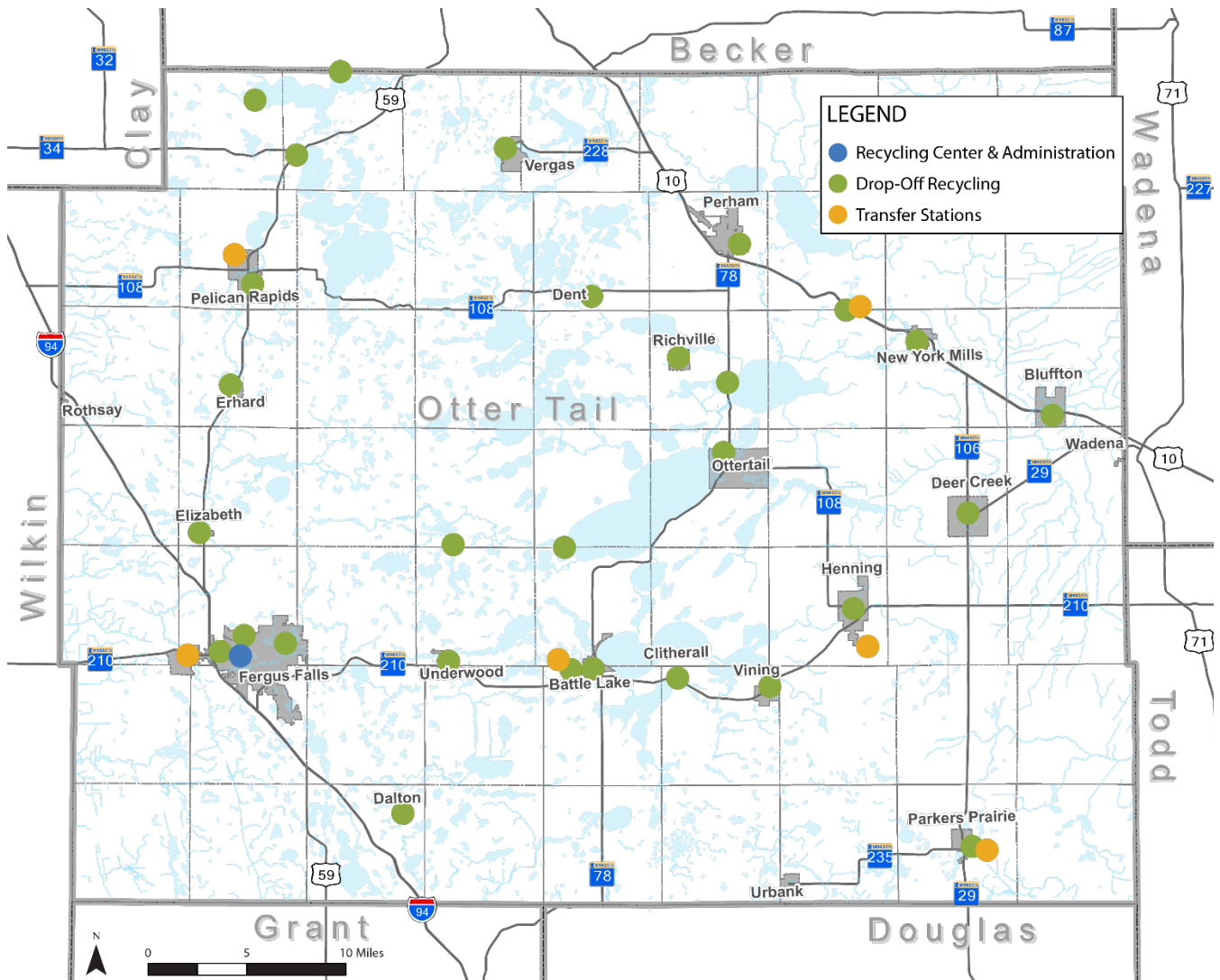
In general, solid waste is regulated through permits with the MPCA, County, and city ordinances and is overseen by the County board. Counties are responsible for all aspects of solid waste: reduce, reuse, recycle, composting, and waste-to-energy services. Counties are also responsible for meeting state goals for recycling and solid waste management and protecting public health and the environment.

Having strong ordinances and policies are essential for counties to manage solid waste successfully. It is important that Counties understand their communities and provide programs and services necessary to manage solid waste and recyclables. Having an integrated solid waste management system that reduces risk to health and the environment is the best approach to management of solid waste.

¹ <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials#Generation>



Figure 1: Otter Tail County Solid Waste Facilities



Waste generation is one of the major environmental problems of urban and rural environments. Research suggests that each person produces six pounds of garbage and recyclables each day at home, work, or school². Based on these statistics, the increasing numbers in population will increase the total waste and recyclables tonnages managed by the County. An integrated solid waste management system is essential for communities to responsibly manage their waste.

² <https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/national-overview-facts-and-figures-materials>



County Population and Demographics

The 2020 population of Ottertail County was 60,081 according to the 2020 Census, and the Minnesota State Demographic Center projected the County's population to decline to 57,332³ in 2045, through the 25-year duration of the Master Plan. This represents a population decline of 2,749, approximately 4.6%, from 2020 to 2045. However, given the changes that have been observed during the COVID-19 pandemic, these numbers may change over the next 25 years (e.g., more people working from their second homes in the County will add to the total population and waste generated in the County).

During the 25-year period, the population age demographic projections are expected to remain relatively stable⁴. The largest increase in population age demographic projections occurs in the age group of 20 to 39, from 19.7%⁵ of the total population in 2019 to 22.9% of the total population in 2045. The largest decrease in population age demographic projections occurs in the age group of 40 to 64, from 33.4% of the total population in 2019 to 26.6% of the total population in 2045.

The County's location attracts a significant number of seasonal visitors and residents, especially during the summer months. It is estimated by County officials that the County population doubles or triples during the summer months to an estimated 100,000 to 150,000 people. This large population variation can strain the solid waste services provided in the County since more collection services are needed during summer months particularly at County operated drop sites. With the COVID-19 pandemic, some of these seasonal visitors may be staying longer in the County while working remotely, which adds to the tonnage of waste managed by the County.

Another aspect of the County's population that strains the solid waste services is its large geographical area. **Table 1** shows how the County's population is distributed. This rural aspect of the County makes collection services challenging.

Table 1: Otter Tail County Population, 2020

	Total Population	
	Total	Percent
County Population	60,081	--
City Population	27,351	45.5%
Township Population	32,730	54.5%

Source: 2020 Decennial Census Redistricting Data

³ Minnesota State Demographics Center, 2020 (<https://mn.gov/admin/demography/>)

⁴ Minnesota State Demographics Center, 2020 (<https://mn.gov/admin/demography/>)

⁵ US Census American Community Survey 5-year estimates, 2019 (data.census.gov)



Public Engagement

Understanding the community's perceptions and needs are key elements in the development of this Master Plan. Different methodologies were used to engage the community, such as pop-up engagement, community surveys, focus group meetings, a virtual open house, and a hub site/project website. During these events, the County was supported by its consultants, Foth and SRF. These activities are described in detail in the [Appendix B: Otter Tail County Solid Waste Engagement](#) which was outlined by SRF. These public engagement activities were impacted by the Covid-19 pandemic and the County may want to reengage the public in several years to confirm that the message from the public remains the same.

A major component of the public engagement was the meetings with the Project Review Committee (PRC). The PRC was a group of selected individuals that gathered five times during this process and were responsible for guiding and providing input for this Master Plan. The members included county residents, businesses, and members of the local hospitality industry. [Appendix C: Plan Review Committee Findings](#) is a detailed description of what was discussed during the PRC meetings.



Developing a Solid Waste Master Plan

Otter Tail County developed this twenty-five year Master Plan that outlines several solutions designed to align the County with the guiding principles developed as part of this Master Planning process.

Public Areas of Interest

Through public engagement, seven areas of interest were highlighted that define what is important to the community when developing new solid waste management solutions as part of this Master Plan. These areas of interest were used as the basis for the development of the County's seven guiding principles for this Master Plan, which are discussed in the next section.



This Master Plan analyzed the current aspects of the integrated solid waste management system, identifying potential improvements to existing services and evaluated new opportunities to align the Master Plan to its guiding principles.

Otter Tail County Solid Waste Master Plan Guiding Principles

Seven guiding principles were developed as part of this Master Plan that represent the public's input gathered throughout this Master Plan development process. By developing these guiding principles around the community's areas of interest, Otter Tail County has a better understanding of the community's desires related to the management of solid waste. The development of these principles took over nine months to craft, refine, test, and finalize.



Otter Tail County is a leader in solid waste management practices and is committed to:



Working toward a path to zero landfilling



Supporting waste-to-energy



Working towards regional solutions



Moving waste up the MN Solid Waste Management Hierarchy *(prioritizing the reduction of waste, then reuse, recycling, organics recycling, waste to energy, and landfilling, in that order)*



Protecting the County's natural resources



Providing quality and equitable solid waste services



Providing fiscally responsible investments



Below are the Master Plan's seven guiding principles, along with a description.

1. Otter Tail County is committed to working toward a path zero landfilling.



A path toward zero landfilling is an initiative to eliminate the practice of bringing waste to landfills but may not achieve zero landfilling during the Master Plan's 25-year planning horizon. This guiding principle is an effort to reduce the amount of materials usually destined to landfills.

2. Otter Tail County is committed to waste-to-energy.



Waste-to-energy technologies process waste to generate energy, thus reducing the amount of waste disposed at landfills. Otter Tail County is committed to continuing to support the regional Perham Resource Recovery Facility.

3. Otter Tail County is committed to working toward regional solutions.



Regional solutions can have both fiscal and environmental benefits. Grant opportunities often prioritize regional programs. Otter Tail County considers regional partners when improving current programs and planning new program initiatives.

4. Otter Tail County is committed to moving waste up the MN Solid Waste Management Hierarchy.



Minnesota's waste hierarchy identifies preferred ways to manage waste. Source reduction and reuse of materials are the most preferred, while treatment and disposal, i.e., landfilling, are the least preferred. This principle prioritizes activities that are higher up on the hierarchy, and it's intrinsically connected to the path toward zero landfilling principle.



5. Otter Tail County is committed to protecting the County's natural resources.



The County's lakes, rivers, and open spaces provide residents with a sense of identity and pride and provide recreational and economic development opportunities. Protecting these resources for future use and enjoyment is important to the County.

6. Otter Tail County is committed to providing quality and equitable solid waste services.



The County strives to provide quality and equitable services for all residents and businesses, including different geographies, demographic groups, and business types.

7. Otter Tail County is committed to providing fiscally responsible investments.



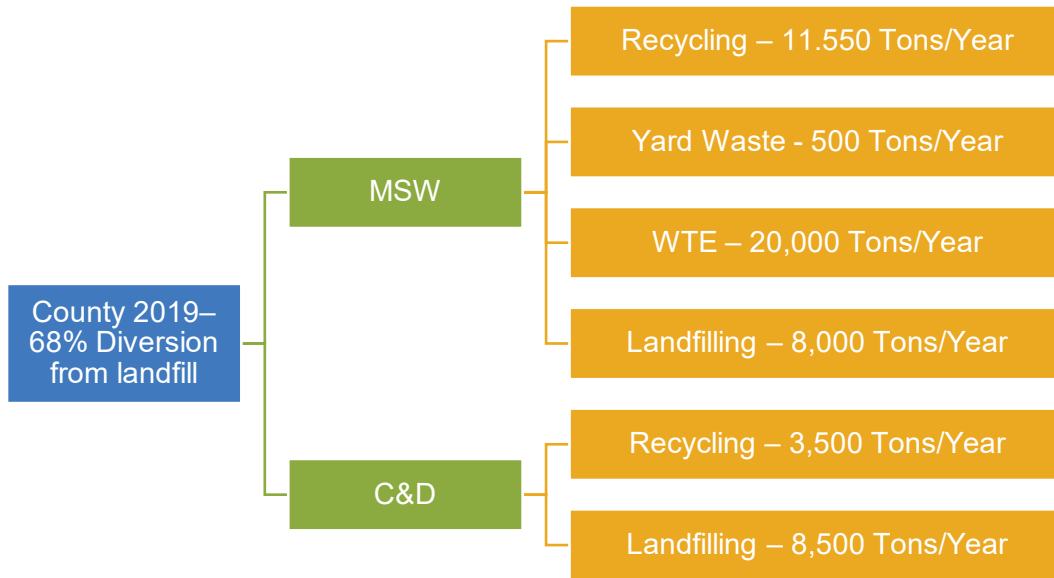
The County is committed to making fiscally responsible investments to best provide services for the community. All new solutions for waste management and investment decisions will consider the fiscal impact and benefits to the community.

Otter Tail County Solid Waste Master Plan Proposed Solutions

The current solid waste management system was evaluated to determine the current waste diversion rates from landfilling, see [Appendix A: Otter Tail County Solid Waste Management System Description](#). Based on the most recent data from 2019, the County is currently diverting approximately 68% of the waste generated by residents and visitors from landfills.



Figure 2: 2019 Diversion Totals



The system was evaluated to determine opportunities for programs or technologies that could improve recycling, alternatively manage, or divert waste from landfills. See [Appendix D: Technology Evaluation](#) to learn more about the individual opportunities that were evaluated. If programs are added or adjusted surrounding recycling, organics, waste-to-energy, construction and demolition processing, and education, it is estimated that the County could achieve a minimum of an 83% diversion rate in 25 years.

Figure 3: 2045 Diversion Potential applied to 2019 Tonnages



This evaluation found that many different solutions exist to divert more material from landfilling, but for the County to achieve its principle, a path toward zero landfilling, a combination of solutions is necessary. The solutions that were evaluated include increasing diversion by the waste generator, providing more opportunities for waste generators to reuse and recycle materials prior to combustion



or landfilling, and utilizing technologies to remove materials from the waste stream before final disposal. Waste reduction, reuse, and education will be critical in all years of this Master Plan for the County to meet its goals.

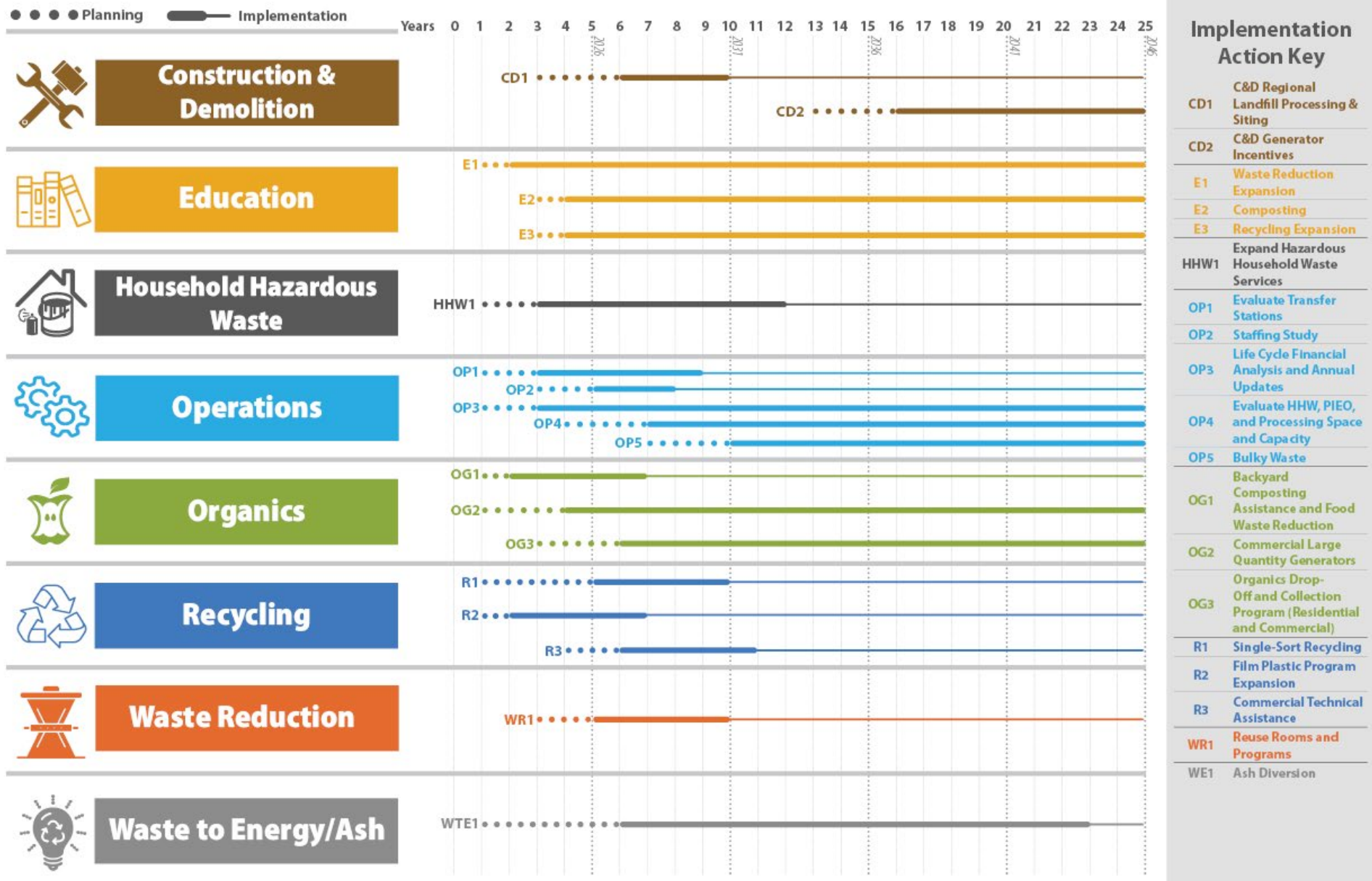
Figure 4: Otter Tail County Master Plan – Path Toward Zero Landfilling



This Master Plan was developed using the guiding principles to determine the timelines for planning and implementation of solutions, estimated costs, and estimated waste diversion from the landfill.















Figure 5: Otter Tail County Solid Waste Master Plan Solution Timeline







Otter Tail County Master Plan Solutions and Guiding Principles

The solutions identified in the following pages support one or more of the guiding principles identified in this Master Plan. Implementation of each solution will support the County's alignment to the guiding principles of this Master Plan. The following table summarizes the solutions and which guiding principles they support.

Table 2: Solid Waste Master Plan Solutions and Guiding Principle Matrix

Solution		1. Toward Zero Landfilling	2. Waste-to-Energy	3. Leader in Solid Waste	4. Solid Waste Management Hierarchy	5. Protect Resources	6. Quality & Equitable Services	7. Fiscally Responsible
								
	CD1	✓	✓	✓	✓		✓	✓
	CD2	✓	✓	✓	✓		✓	✓
	E1	✓		✓	✓			
	E2	✓		✓	✓			
	E3	✓		✓	✓			
	HHW1	✓		✓	✓	✓	✓	✓
	OP1	✓		✓	✓	✓	✓	✓
	OP2	✓		✓	✓	✓	✓	
	OP3			✓			✓	✓
	OP4			✓			✓	✓
	OP5	✓	✓	✓	✓		✓	✓
	OG1	✓		✓	✓	✓	✓	✓
	OG2	✓		✓	✓	✓	✓	
	OG3	✓		✓	✓	✓	✓	



Solution		1. Toward Zero Landfilling	2. Waste-to-Energy	3. Leader in Solid Waste	4. Solid Waste Management Hierarchy	5. Protect Resources	6. Quality & Equitable Services	7. Fiscally Responsible
								
	R1	✓		✓	✓		✓	
	R2	✓	✓	✓	✓			✓
	R3	✓	✓	✓	✓	✓		
	WR1	✓		✓	✓		✓	✓
	WE1	✓	✓	✓	✓	✓		



Construction and Demolition

C&D Regional Landfill Processing and Siting (CD1)

The current C&D landfills have approximately 10 to 15 years of existing life. In this solution, work would be completed to:

- Identify where a new C&D landfill and processing facility should be located;
- Identify what type of processing (extracting materials for recycling and reuse) should be installed; and
- Build a new C&D landfill with a processing and waste diversion facility.

Master Plan Guiding Principles Supported



This solution has an estimated waste diversion rate of 1,550 to 5,650 tons per year, with the higher diversion rate including drywall recovery. The difficulty and cost associated with this solution are considered moderate to high. The planning phase is scheduled for Years 3 and 5, and the implementation phase is scheduled for Years 6 through 9.



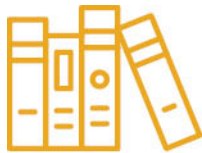
C&D Generator Incentives (CD2)

This solution proposes offering construction waste reduction and recycling programs with possible incentives to prevent waste generation, improve deconstruction practices, increase material reuse, and increase recycling.

Master Plan Guiding Principles Supported



While it is anticipated that this solution would lead to waste diversion, the specific rate of diversion is difficult to estimate with the available information. This solution should be considered in future years, as there are opportunities for additional diversion. The implementation cost associated with this solution is considered moderate to high, and the difficulty is moderate. The planning phase for this solution is scheduled for Years 13 through 15, and the implementation phase is scheduled for Years 16 through 24.



Education

Waste Reduction Expansion (E1)

Educating the community on ways to reduce waste generation is critical to the success of current solid waste management programs and future programs. The County is committed to increasing spending on public education related to Solid Waste programs each year.

The Solid Waste Public Information and Education Officer (PIEO) will inform residents and businesses of the impacts that new programs will have on the County's waste management system, educate the community on proper disposal, and provide information on reducing waste at home and at work. In addition, the PIEO will continue to create and promote programs, resources, events, and workshops that will encourage proper disposal and waste reduction through reuse, recycling, and composting.

Master Plan Guiding Principles Supported



The implementation cost and level of difficulty associated with this solution are considered low, and its associated waste diversion rate is currently unknown. The planning phase for this solution is scheduled to be in Year 1 and implemented in Years 2 through 25.



Composting (E2)

Similar to the waste reduction expansion solution, the County is committed to increasing spending on public education related to composting each year.

Residents and commercial generators will be informed of County efforts to increase organics diversion as they are developed. The scheduled solutions associated with organics diversion include backyard composting, large generator organics collection and organics drop-off locations, and residential organics collection.

The County will educate residents on acceptable materials for composting, how to compost, and the benefits of using compost for soil health and the environment.

Master Plan Guiding Principles Supported



The implementation cost and level of difficulty associated with these solutions are considered low to moderate, and its waste diversion rate is currently unknown with currently available information. However, waste composition studies show 25%-35% organics in the waste stream, indicating potential for substantial waste diversion as these solutions are developed. The planning phase for this solution is scheduled for Year 3, and the implementation phase is scheduled for Year 4 through 25.

Recycling Expansion (E3)

Similar to the waste reduction expansion and composting solutions, the County is committed to increasing spending on public education related to recycling each year.

Residents will be informed on expanded services at drop-off locations, expansion of single-sort recycling beyond the current communities that are offered this service, and recycling opportunities for specialty materials such as boat wrap film. The County will continue to promote existing recycling programs, recycling yes/no lists for each program, and promote and educate about the environmental benefits of recycling and how recycling helps residents and the County.

Master Plan Guiding Principles Supported



The implementation cost and level of difficulty associated with this solution are considered low. The associated waste diversion rate is currently unknown. However, communities that have switched to single-sort recycling have traditionally observed an increase in their recycling rate. The planning phase



for this solution is scheduled for Year 3, and the implementation phase is scheduled for Year 4 through 25.



Household Hazardous Waste (HHW)

Expand Household Hazardous Waste Services (HHW1)

This solution consists of increasing participation and continuity of service by adding HHW collection at Transfer Stations, mobile collections, etc.

Master Plan Guiding Principles Supported



The waste diversion rate associated with this solution is low. However, it is critical that this waste stream is not disposed in landfills and instead is processed at the waste-to-energy (WTE) Perham facility. The Perham Facility is a WTE processing site where municipal solid waste (MSW) is incinerated to generate steam. The implementation cost associated with this solution is low to high (depending on the services ultimately provided) and the difficulty is considered moderate. The planning phase is scheduled for Years 1 through 2, and the implementation phase is scheduled for Years 3 through 12.



Operations

Evaluate Transfer Stations (OP1)

This solution expands transfer station drop-off programs for HHW, organics, and other recyclables. It also includes an evaluation of potential transfer station locations with special concern related to the distance residents need to travel, with subsequent consistent services and functions amongst all transfer stations.

Master Plan Guiding Principles Supported



The waste diversion rate associated with this solution depends on the success of other proposed solutions and solid waste management programs. The difficulty associated with this solution is moderate, and the cost is considerate low to moderate. The planning phase is scheduled for Years 1 through 2, and the implementation phase is scheduled for Years 3 through 9.



Staffing Study (OP2)

This solution consists of conducting an analysis of current and future personnel required for managing the current solid waste management programs and proposed solutions included in this Master Plan.

Master Plan Guiding Principles Supported



This solution will have minimal direct impact on waste diversion rates but will be important in determining the proper operating staff to effectively manage the solutions in this Master Plan. The difficulty and cost associated with this solution are considered low to moderate. The planning phase is scheduled for Years 3 and 4, and the implementation phase is scheduled for Years 5 through 8.

Life Cycle Financial Analysis and Annual Updates (OP3)

This solution consists of providing a planning tool for future solid waste management, recycling, and waste diversion activities.

Master Plan Guiding Principles Supported



This solution may not have a direct impact on waste diversion rates but will be an important planning tool for successful solid waste management programs. The difficulty and cost associated with this solution are considered low to moderate. The planning phase is scheduled for Years 1 through 2, and the implementation phase is scheduled for Years 3 through 25.

Evaluate HHW, PIEO, and Processing Space and Capacity (OP4)

This solution consists of evaluating current Otter Tail County facilities to understand space available and capacity. The study should include evaluating if existing spaces will be sufficient for anticipated future tonnages, whether locations are optimal, and if locations and capacities meet operational needs now and for future programs. If identified as a need, new spaces may need to include additional square footage for educational initiatives and event recycling.

Master Plan Guiding Principles Supported



The waste diversion rate associated with this solution depends on the success of other proposed solutions and solid waste management programs. The difficulty associated with this solution is low, and



the cost is considered low to high depending on findings. The planning phase is scheduled for Years 4 through 6, and the implementation phase is scheduled for Years 7 through 25.

Bulky Waste (OP5)

This solution consists of recovering items that aren't currently being processed at the Perham Facility. Bulky items such as mattresses and furniture are currently landfilled since they are too big to be processed at the Perham Facility.

This solution proposes shredding mattresses and furniture to a size that can be processed through the Perham Facility to capture recyclable scrap metal contained within these bulky items.

Master Plan Guiding Principles Supported



This solution has an estimated waste diversion rate of 300 tons per year, depending on generation and regional support. The difficulty associated with this solution is considered moderate, and it involves regional solutions and cost concerns. The planning phase is scheduled for Years 7 through 9, and the implementation phase is scheduled for Years 10 through 25.



Organics

Backyard Composting Assistance and Food Waste Reduction (OG1)

This solution consists of launching a backyard composting program and supporting the community to promote maximum engagement. The County will create education campaigns to educate the community on the benefits of composting and how to start composting in their backyards. The County will promote waste reduction and provide and distribute reduced-cost compost bins or promote public workshops where residents can build their own bins.

Master Plan Guiding Principles Supported



This solution has a waste diversion rate of 60 to 480 tons per year with the higher tonnage occurring when 10% of residents participate, and its implementation cost is low. There are relatively few difficulties associated with implementing this solution with the exception of potential concerns with odors and animal vectors. The planning phase is scheduled for Year 1, and the implementation phase is scheduled for Year 2 through 11.



The success of this program is intrinsically connected to the success of the Composting program.

Commercial Large Quantity Generators (OG2)

This solution proposes offering technical assistance, recognition programs, and other incentives to large organics generators such as institutions, health care centers, restaurants, and industry.

Master Plan Guiding Principles Supported



This solution has an estimated waste diversion rate from 480 to 9,500 tons per year depending on participation which is expected to increase with program maturity. The implementation cost associated with this program is considered high based on capital expenditures likely required for a facility to manage the material, and the difficulty is low to moderate. The planning phase is scheduled for Years 1 and 3, and the implementation phase is scheduled for Years 4 through 25.

Organics Drop-Off and Collection Program (Residential and Commercial) (OG3)

The organics drop-off solution will be divided into three phases. Phase 1 would consist of providing organics collection dumpsters at transfer stations and other strategic locations for residents and businesses. Depending on the success of phase 1, phase 2 may use collection to increase participation. Depending on the success of phase 2, phase 3 may be implemented, which expands the program to include special events and festivals.

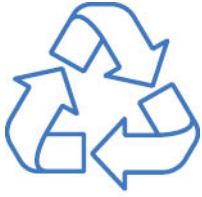
Master Plan Guiding Principles Supported



This solution has an estimated waste diversion rate of 480 tons per year when 10% of residents and small businesses participate during phase 1. This program may intersect with backyard composting for residential customers, and residents will likely participate in one of the offered solutions. Its implementation cost is low to moderate. There are some operational difficulties associated with implementing this solution, but these are considered low difficulty. The planning phase is scheduled for Years 3 through 5, and the implementation phase is scheduled for Year 6 through 25.

Community engagement is fundamental for the success of this solution.





Recycling

Single-Sort Recycling (R1)

Single-sort recycling has traditionally increased recycling rates for communities that have converted from source separated or dual stream recycling by 25-30%.

Single-sort expansion can occur in many different ways, including staged implementation. It may evolve in steps that could start with cities and then move to townships. It can be driven by ordinances. It can be performed by private parties or county staff. Expansion of this program will be most successful with input from many stakeholders.

Master Plan Guiding Principles Supported



This solution has a waste diversion rate of 1,200 to 1,400 tons per year more than the existing source-separated recycling system, and its implementation cost is moderate to high. The difficulty associated with implementing this solution is moderate. The planning phase is scheduled for Years 1 and 4, and the implementation phase is scheduled for Years 5 through 25.

The success of this solution is intrinsically connected to the success of the Recycling program.

Film Plastic Program Expansion (R2)

Low-density polyethylene (LDPE) film protects boats when stored for the winter and is used for agricultural silage bags and hay wrap. Currently, this film is collected at two of five transfer stations.

This solution consists of expanding film collection to all transfer stations and providing collection bins to large marinas and boat storage facilities during spring. A challenge associated with this solution is the removal of vents and strings used to hold the wrap on the boat before it can be recycled.

Master Plan Guiding Principles Supported



The waste diversion rate associated with this solution depends on the successful management of the material that is collected at the transfer stations and in the collection bins. The difficulty and cost associated with this solution are low to moderate. The planning phase is scheduled for Year 1, and the implementation phase is scheduled for Years 2 through 25.



Commercial Technical Assistance (R3)

The County will provide technical guidance for local businesses to improve their recycling operations, initiate organics collections, promote working relationships with other businesses to promote reuse of waste, or even assist with operational modifications to reduce waste generation. This technical guidance may be provided by County technical staff or by grants and incentives for businesses to hire qualified consultants, purchase equipment, or pay for material transport.

This solution is covered under the recycling, organics, and waste reduction categories of this Master Plan.

Master Plan Guiding Principles Supported



This solution has a potentially large waste diversion rate depending on how many businesses participate, and it has an implementation cost of low to moderate. The difficulty associated with this solution is considered low but also challenging since it will require on-going services, funds, and support. The planning phase is scheduled for Years 4 and 5, and the implementation phase is scheduled for Years 6 through 25.



Waste Reduction

Reuse Rooms and Programs (WR1)

This solution consists of developing a robust reuse program, including reuse rooms and locations, and evaluating policy options to remove usable materials from the trash. The Reuse Rooms could be made available at shopping centers, transfer

stations, etc.

Master Plan Guiding Principles Supported



The waste diversion rate associated with this solution is estimated to be low, as it extends a product's useful life and prevents waste from being disposed before the products useful life. The difficulty associated with this solution is medium, and the cost is considered low. The planning phase is scheduled for Years 3 through 4, and the implementation phase is scheduled for Years 5 through 25.





Waste-to-Energy

Ash Diversion (WE 1)

This solution proposes collecting fly ash, the light fraction of combustor ash, collected in baghouses as well as bottom ash, the heavy fraction and divert it for alternative usages such as road and structural base. Bottom ash contains recoverable materials such as metals and sand/gravel that can be collected and recycled. This solution also involves collecting materials previously landfilled.

Master Plan Guiding Principles Supported



Fly ash - This solution has an estimated waste diversion rate of 1,550 tons per year from all counties participating in the Perham Resource Recovery Facility and approximately 600 tons per year from Otter Tail County's portion of the waste combusted. The difficulty associated with this solution is high, and the cost is considered high. This solution may not be feasible without grant funding and support from regional partners. The planning phase is scheduled for years 1 through 5, and the implementation phase is scheduled for years 6 through 23.

Bottom ash - This solution has an estimated waste diversion rate of 7,880 tons per year from all counties participating in the Perham Facility and approximately 3,100 tons per year from Otter Tail County's portion of the waste combusted. Bottom ash consists of approximately 1,000 tons per year of metals, 6,730 tons per year of sand/gravel, and 150 tons per year of unburned material. The difficulty associated with this solution is high, and the cost considered high. This solution may not be feasible without grant funding and support from regional partners. The planning phase is scheduled for Years 1 through 5, and the implementation phase is scheduled for Years 6 through 23.

The current ash handling system at Perham combines the fly ash and bottom ash prior to removal from the facility. The solution will evaluate beneficial use of this combined ash similar to the process used in Polk County at their facility in Fosston, Minnesota during the planning phase. Using the combined fly and bottom ash will likely be a less costly solution.



Appendix A: Otter Tail County Solid Waste Management System Description

Introduction

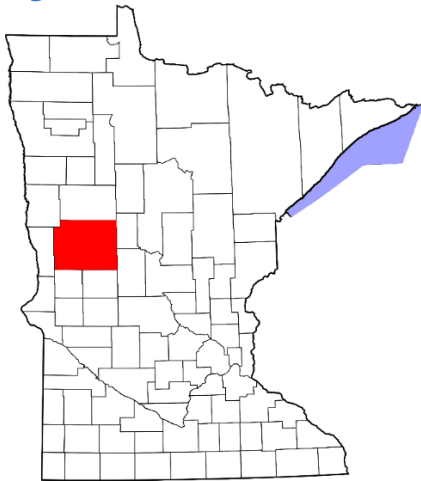
This Technical Memo (Appendix A) provides information on Otter Tail County's solid waste management system and existing facilities. Data on Otter Tail County (County) general geography and demographics are included to provide the variables on which the current solid waste management system has been developed. This Appendix also discusses the County solid waste policy structure, including the existing Solid Waste Management Ordinance and the recently issued Solid Waste Designation Ordinance.

County Geography

The County is located in west-central Minnesota (MN). The County seat is located in the City of Fergus Falls. It is located approximately 180 miles northwest of the Twin Cities Metro Area (TCMA). It is directly accessible to the TCMA by Interstate 94, which runs through the County's western region. The County primarily consists of cultivated land, forests, wetlands, and lakes. Approximately 170,000 acres of the County consists of lakes, which make up 11.9 percent (%) of the County's total acreage (Minnesota Land Management Information Center, 1990).

The location of the County within Minnesota is presented in **Figure 1**.

Figure 1: Location of Otter Tail County

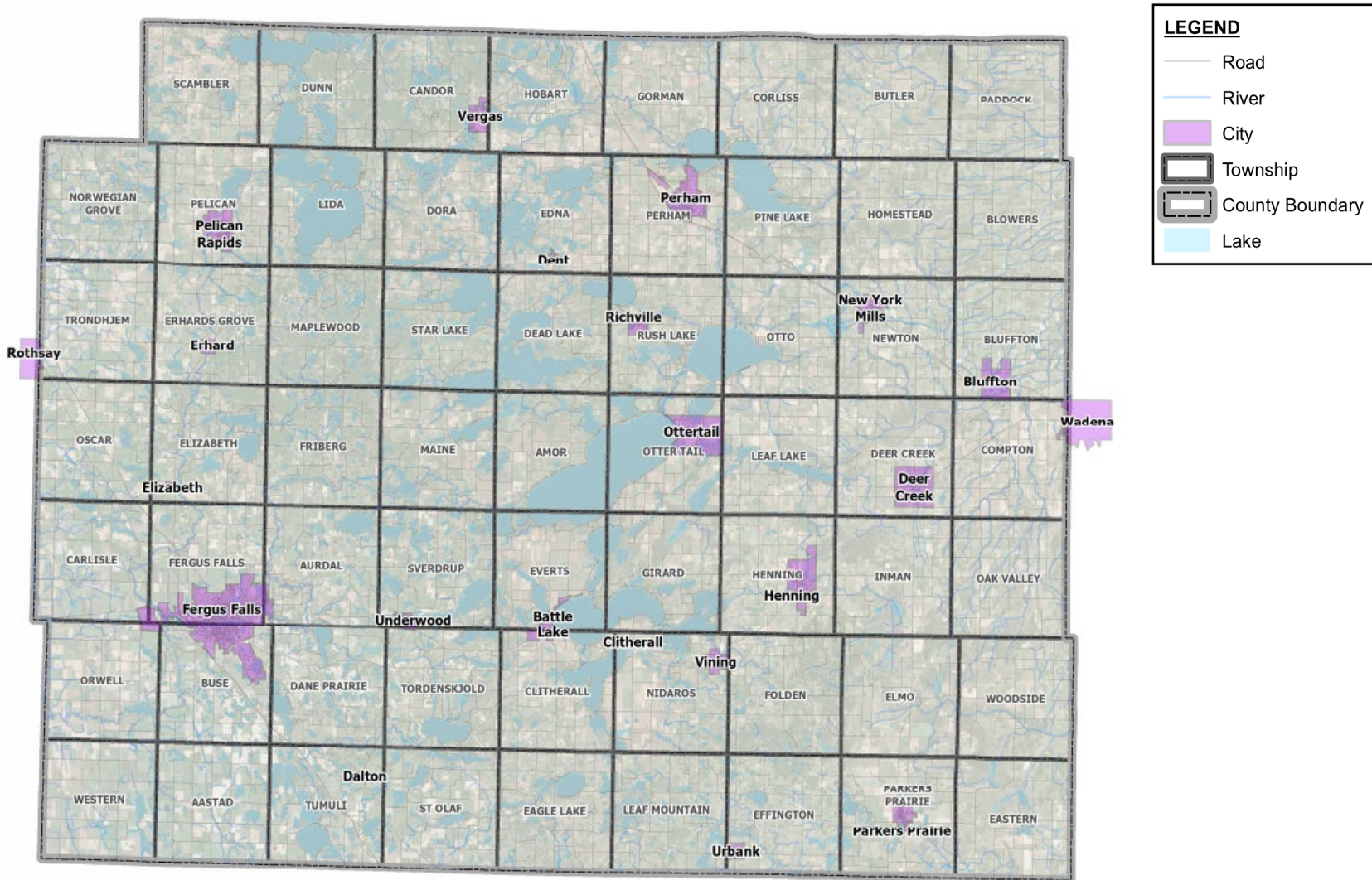


Source: Google Maps, 2020

Within the County, there are 22 incorporated cities and 62 townships. **Figure 2** depicts incorporated cities and townships located within the County.



Figure 2: Map of Cities and Townships



Demographics

The estimated 2018 population for the County was 58,736 people (SRF Consulting Group, July 2020). Population data for the County is provided in Table 1.

Table 1: City and Township 2018 Population

City	2018 population
Battle Lake	936
Bluffton	216
Clitherall	115
Dalton	250
Deer Creek	325
Dent	187
Elizabeth	168
Erhard	146
Fergus Falls	13,747
Henning	825
New York Mills	1,226
Ottertail	640
Parkers Prairie	1,024
Pelican Rapids	2,525
Perham	3,388
Richville	87
Rothsay	228
Underwood	360
Urbank	54
Vergas	363
Vining	69
Wadena (part)	63
Total City Population	26,942
Total Township Population	31,794
Total County Population	58,736

Source of Data: "Otter Tail County Solid Waste Plan Survey," Prepared by: EWW
 prepared by SRF Consulting Group, Inc. July 2020 Checked by: CAV

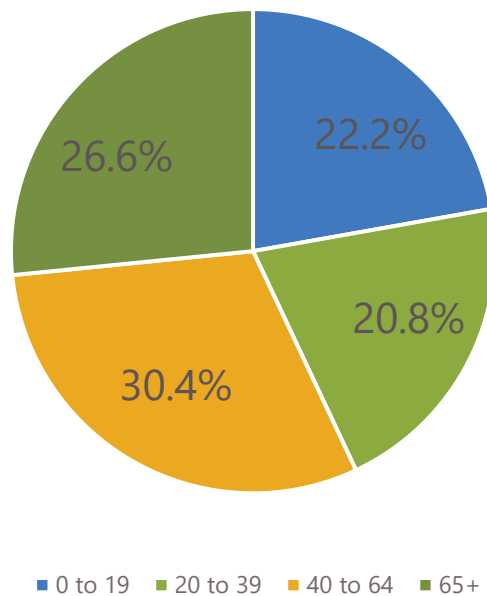


The County's population had been increasing and was reported as the 28th fastest growing County in Minnesota from 2010 to 2019 (Minnesota Employment and Economic Development, 2020). In 2019, the County's median age was 46.5 years, which is older than the statewide median age of 38.3 years, and had a larger percentage of people aged 65 years or older at 24.5% of the County's population (Minnesota Employment and Economic Development, 2020).

The Minnesota State Demographic Center projects the County's population in 2020 to be 58,127 and 57,332 in 2045, through the 25-year duration of the Otter Tail County Solid Waste Master Plan (Plan) (Minnesota State Demographic Center, 2020). This represents a population decline of 795 (approximately 1.4%) from 2020 to 2045.

Population age demographics are useful to inform County solid waste management planning. Population age demographic projections are not expected to change significantly from 2020 to 2045 (Minnesota State Demographic Center, 2020). The largest increase in population age demographic projections occurs in the age group of 20 to 39, from 20.8% of the total population in 2020 to 22.9% of the total population in 2045. The largest decrease in population age demographic projections occurs in the age group of 40 to 64, from 30.4% of the total population in 2020 to 26.6% of the total population in 2045. The age groups of 65+ and 19 and younger both show an increase of 1.1% from 2020 to 2045. Population age demographics for the County are depicted in Figures 3 and 4 below.

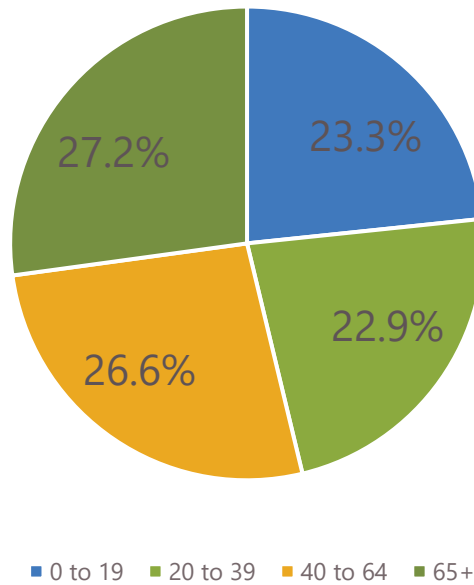
Figure 3: 2020 County Population Projection by Age



Source of Data: Minnesota State Demographic Center Population Projections
<https://mn.gov/admin/demography/data-by-topic/population-data/our-projections/>



Figure 4: 2045 County Population Projection by Age



Source of Data: Minnesota State Demographic Center Population Projections
<https://mn.gov/admin/demography/data-by-topic/population-data/our-projections/>

The many lakes and recreational activities in the County provide a significant seasonal variation in the population. Many people from the TCMA and surrounding areas own secondary homes in the County. The area also attracts seasonal tourists. This influx occurs primarily during the summer months; however, there is also a significant tourist population associated with winter sports activities. It is estimated by County officials that the County population doubles or triples during the summer months to an estimated 100,000 to 150,000 people. This large population variation can strain the solid waste services provided in the County.

A County Profile published by the Minnesota Department of Employment and Economic Development (DEED) is provided in Attachment 1. The County Profile includes data and statistics on County population demographics, employment characteristics, economics, and occupation labor force.



Solid Waste Management System Description

This section describes the existing solid waste management regulatory structure, historical waste generation and recycling data, and solid waste facilities that service the County. This section also describes the solid waste programs the County administers to manage the waste and recyclable materials generated from its residents, businesses, and institutions.

Solid Waste Regulatory Structure

The Minnesota Pollution Control Agency (MPCA) has primary responsibility for waste management in Minnesota. Counties are the units within the government charged with planning for waste management and are held accountable for several responsibilities under the guidance of the MPCA. Minnesota's approach to waste management is built on the public health model of prevention. This approach intends to prevent pollution, conserve resources, protect health and the environment, and prevent passing costs onto future generations.

To provide direction regarding this approach, Minnesota law includes a hierarchy of preferred methods to manage waste, emphasizing the prevention of environmental problems and the protection of public health. The Waste Management Act of 1980, as amended (Minnesota Statutes, section 115A), identifies in order of preference, how the State prioritizes 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 (MSW), composting or incineration;
5. Land disposal that produces no measurable methane gas or which involves the retrieval of methane gas as a fuel from the production of energy to be used on-site or for sale; and
6. Land disposal that produces measurable methane and does not involve the retrieval of methane gas as fuel for the production of energy to be used on-site or for sale.



Source: MPCA Managing Waste: Planning and Research
<https://www.pca.state.mn.us/waste/managing-waste-planning-and-research>

In 2010, Otter Tail, Becker, Todd, and Wadena Counties entered into a Joint Powers Agreement to form the Prairie Lakes Municipal Solid Waste Authority (PLMSWA) to facilitate regional cooperation on solid waste management among the member counties. Clay County joined the PLMSWA in 2014.



In 2011, the PLMSWA became owner and operator of the Perham Resource Recovery Facility (PRRF), a waste-to-energy facility located in Perham, MN. The five member-counties deliver more than 50,000 tons per year of solid waste to the PRRF.

Solid Waste Management Facilities and Collection

The County provides tonnage and volume data for managing solid waste annually to the MPCA through the Select Committee on Recycling and the Environment (SCORE) reporting program. Based on data reported by the County to the SCORE program, waste managed in 2017 and 2018 (the most recent data set available through the SCORE program) is presented in **Table 2**.

Table 2: Summary of County Solid Waste Management

Management Method	Method	2017		2018	
		Tons	Percent of Total Waste Generation	Tons	Percent of Total Waste Generation
Mixed MSW	Landfill	9,466	13.4%	9,954	15.1%
	Onsite	231	0.3%	189	0.3%
	Waste to Energy	22,192	31.4%	18,181	27.6%
	Total	31,889	45.1%	28,324	43.0%
Combined Recycling and Organics	Organics	22,592	32.0%	19,815	30.1%
	Recycling	16,224	22.9%	17,693	26.9%
	Total	38,816	54.9%	37,508	57.0%
Grand Total		70,705	100.0%	65,832	100.0%

Prepared by: EWW; Checked by: CAV

Existing County Solid Waste Management Facilities

- The MPCA's "What's in My Neighborhood" database (MPCA Database) identifies six permitted solid waste facilities operating in the County. Permitted solid waste facilities in the County include:
 - Fergus Falls Landfill, owned by the City of Fergus Falls.
 - Fergus Falls Transfer Station (Fergus Falls TS), owned by the County.
 - Henning Transfer Station (Henning TS) and Demolition Landfill, owned by the County.
 - Northeast Otter Tail (NEOT) Phase II Ash and Demolition Landfill, owned by the County.
 - PRRF, owned by PLMSWA.
 - Hoot Lake Plant Landfill, owned by the Otter Tail Power Company.



There are three Permit by Rule (PBR) Transfer Stations owned by the County located in Battle Lake, Parkers Prairie, and Pelican Rapids.

The MPCA Database identifies 127 PBR disposal sites located in the County. There are two sites in the County permitted for General Concrete Burial (Minnesota Pollution Control Agency, 2020). In addition, the database identified three closed landfills located in the County:

- Battle Lake Area Sanitary Landfill, owned by the MPCA Closed Landfill Program (CLP).
- NEOT County Landfill, owned by the MPCA CLP.
- Pelican Valley Demolition Landfill, owned by the Pelican Valley Landfill Association.

Recyclable materials are generally accepted at the previously identified municipally-owned permitted solid waste facilities. Additional recycling facilities located in the County include:

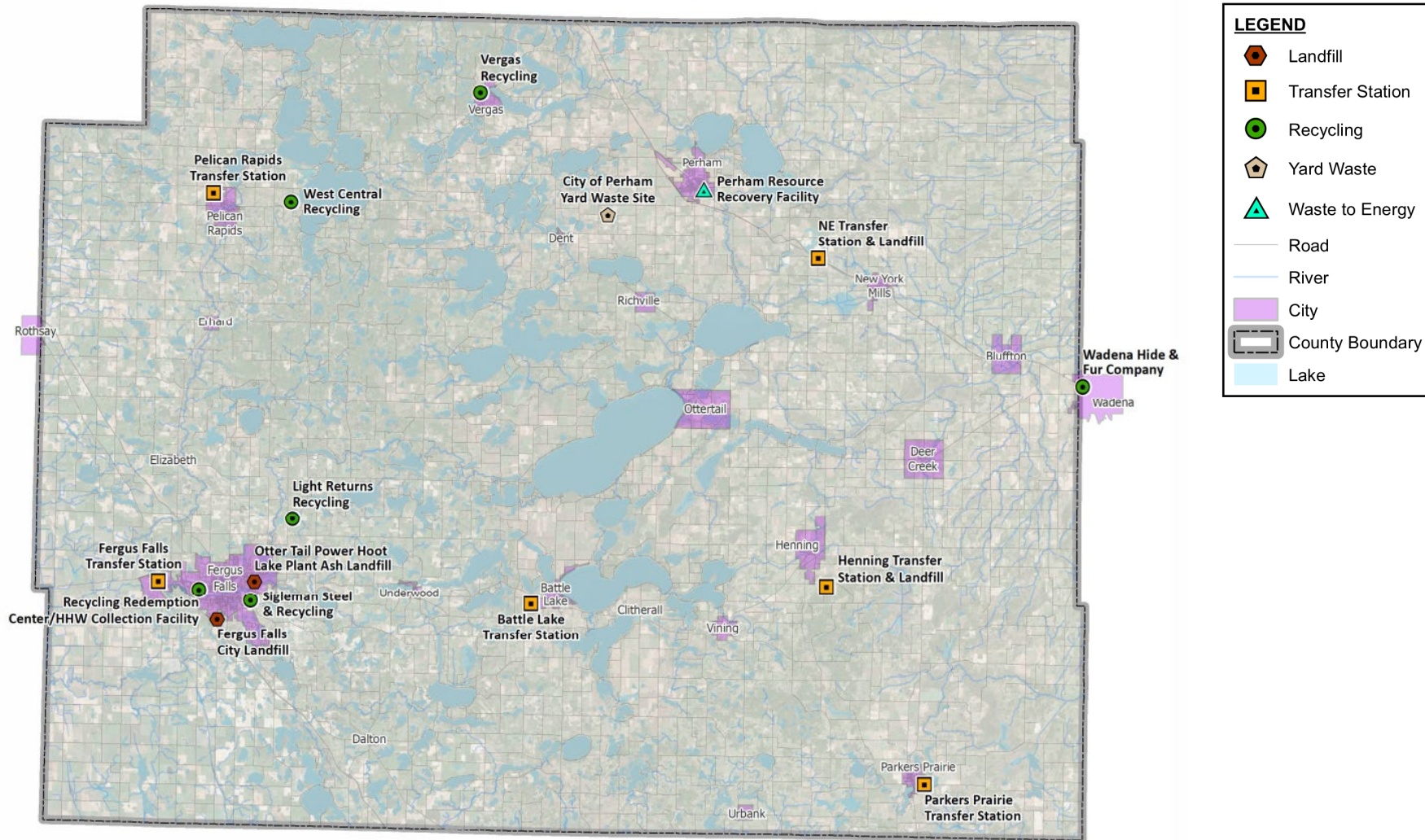
- Recycling and Redemption Center/Household Hazardous Waste (HHW) Collection Facility located in Fergus Falls and Sigelman Steel and Recycling located in Fergus Falls.
- Recycling material drop-off locations at select businesses, churches, and municipalities throughout the County. There are approximately 29 drop-off locations as of the issuance of this Plan. Material acceptance and County collection vary by location.

Yard waste is generally accepted at the previously identified transfer stations and the City of Fergus Falls Landfill. Various cities operate yard waste composting sites, including Perham and Vergas.

Solid waste facilities located in the County are depicted in Figure 5 below. (PBR, CLP sites, and recycling drop-off locations are excluded.)



Figure 5: County Solid Waste Facilities



Solid waste facilities located outside of the County that provide disposal services for waste generated in the County include the Dakota Landfill owned by Waste Management, Inc. (WMI) and located in Gwinner, North Dakota.

Currently operating permitted solid waste facilities and PBR transfer stations are detailed below.

Fergus Falls Landfill

The Fergus Falls Landfill is located on 183 acres in the City of Fergus Falls, Minnesota and is owned and operated by the city. The site was operated as an MSW disposal landfill until its closure in the mid-1990s. Upon the MSW landfill closure, the city permitted and constructed an ash monofill for the Landfill. The ash monofill operated from the mid-1990s until its closure in the fall of 2006. The city continued to accept construction and demolition waste at the landfill until August 2010. The city built a new construction and demolition disposal landfill on the site in 2011 and a lined demo landfill in 2018. The current site includes an MSW TS, a yard waste compost area, a citizen drop-off area for recyclables, and a landfill office and management area that handles electronics, appliances, tires, batteries, and select problem bulky wastes.

Fergus Falls Transfer Station (TS)

The Fergus Falls TS is located in the city's western area and is owned by the County. The TS and associated activities are located on a fenced 8-acre parcel, with the County-owned surrounding 32 acres used as a buffer. The TS is permitted to process up to 109,500 tons of MSW per year; however, it typically manages approximately 36,500 tons of MSW per year. The TS accepts commercial, residential, and industrial waste from County residents and businesses. Acceptable wastes at the site include tires, scrap iron, batteries, white goods and appliances, electronics, recyclables, oil and oil filters, and antifreeze. The TS is designed to handle 300 tons of waste per day; however, the typical weight received daily is 100 tons. MSW collected at the site is transferred to the PRRF. This site has a scale.

The County contracts with a private trucking company to provide transportation of the MSW to the PRRF. Appliances, electronics, and tires are accepted at the station and stored in separate areas in the back of the transfer station

Henning Transfer Station (TS)

The County-owned TS is located 2.5 miles southeast of the City of Henning and was constructed in 1986. The site is comprised of 40 acres and is accessible to the public and licensed waste haulers.

The site consists of a 60-foot (ft) by 70-ft steel-sided building with a concrete tipping floor and office, surrounded by areas designated for appliance drop-off and storage, tire drop-off and storage, yard waste composting, and burning of diseased brush. The TS was built on a side slope to allow vehicles to unload waste from the upper level into open-topped walking floor trailers. It receives approximately 10 to 20 tons of MSW per day. The waste is transferred approximately 30 miles (one way) to the PRRF for processing. This site has a scale.



The County contracts with a private trucking company to provide transportation of the MSW to the PRRF. Appliances, electronics, and tires are accepted at the station and stored in separate areas in the back of the TS.

An MPCA-permitted construction and demolition (C&D) landfill that receives approximately 5,500 cubic yards (cy) of demolition debris per year is located on the same site as the TS.

NEOT Phase II Ash and Demolition Landfill

The County owns and operates the NEOT TS and Demolition Landfill located approximately two miles west of New York Mills on US Highway 10. The site is comprised of approximately 179 acres and is accessible to the general public and haulers. The site manages waste transfer areas for appliances, electronics, scrap metal, and tires. The site also includes a yard waste composting area and an area for bulky tree and brush waste managed through scheduled burning.

An MPCA-permitted C&D landfill is located at the TS site. The C&D landfill receives approximately 7,000 cy of demolition debris per year. The site also maintains a separate ash monofill dedicated to receiving ash from the PRRF.

Perham Resource Recovery Facility

The PRRF is a waste-to-energy (WTE) processing site located in Perham. MSW transported to the PRRF is incinerated to generate steam. The steam generated is used by two nearby businesses in Perham: Tuffy's and Bongards. In the past, the Facility generated electricity through a turbine generator. The PRRF consists of four major components:

- Waste receiving, storage;
- Waste processing and sorting;
- Waste combustion;
- Energy generation (i.e., steam and electricity); and
- Air pollution control equipment.

The PRRF opened in 1986 and was operated by Quadrant, a subsidiary of Otter Tail Power. MSW was incinerated to supply energy in the form of steam to two private industries: Land 'O Lakes and Tuffy's, until July of 1998 when it was no longer able to meet the permit requirements for air emissions standards. In December of 1998, the PRRF owners transferred it and the property to the City of Perham. Grant funding was sought and secured, which provided equipment upgrades and the installation of necessary air quality control mechanisms to meet required air emission standards. Beginning in 2000/2001, the Barlow Group retrofitted the Facility, and in 2002, the Facility reopened under an operating agreement with Barlow. At this time, a steam turbine generator was added to provide electricity for Otter Tail Power. In 2004, operations were switched from Barlow to the City of Perham. In 2010, Otter Tail's three surrounding counties (Becker, Todd, and Wadena) created a Joint Powers Agreement called the Prairie Lakes Municipal Solid Waste Authority, and in 2011 PLMSWA took



ownership of the Facility from the City of Perham. PLMSWA applied for and received state bonding money to expand the Facility and make overdue improvements. In 2013/2014, an additional waste boiler was added along with new air pollution equipment and a front-end processing facility called a Materials Recovery Facility (MRF). The PRRF receives waste from 5 different counties (Clay County joined in 2014) and generates steam for Bongards and Tuffy's.

MSW brought to the PRRF undergoes sorting to make the waste stream more suitable for incineration. The waste processing includes the removal of select recyclable materials, including large old corrugated cardboard (OCC), materials not suitable for combustion, ferrous and non-ferrous metals, and fine particulates that may cause damage or deterioration to the processing equipment. The PRRF manages approximately 50,000 tons of MSW per year generated by the PLMSWA region.

Hoot Lake Plant Landfill

The Hoot Lake Plant Landfill is owned by the Otter Tail Power Company and is located in the City of Fergus Falls. The Landfill is used for the disposal of coal ash from the Hoot Lake Power Generation Plant. The Landfill has been in operation since 1979 and encompasses approximately 18 acres. This plant is scheduled to be decommissioned in 2021.

Battle Lake PBR Transfer Station (TS)

The County owns and operates a PBR TS 1.5 miles west of Battle Lake on Highway 210, located adjacent to the CLP Battle Lake Landfill. The TS consists of 80 acres, on which a small office building and a 2-yard double ram compactor compacts waste into a 40-yard roll-off container. The site receives an estimated 2 to 5 tons of waste per day, depending on seasonal variation. The waste is transferred to the PRRF by a private hauler.

Appliances, electronics, and tires are accepted and stored in separate areas throughout the TS property. The site also includes a yard waste composting area and an area for bulky tree and brush waste managed through scheduled burning.

Parkers Prairie PBR Transfer Station (TS)

The County owns and operates a PBR TS site adjacent to the County Highway Department, approximately one-half mile east of the City of Parkers Prairie on County Hwy 46. The transfer station services 3,000 to 4,000 residents in the southeast region of the County.

The site is less than 1 acre in size and contains two 8-yard dumpsters for disposal of MSW. Waste volumes are estimated at less than 1 ton per month. The County contracts with a local waste hauler to transfer the waste to the Henning TS. The Parkers Prairie TS is open one half-day per week on Saturdays.



Pelican Rapids PBR Transfer Station (TS)

The County owns and operates a TS approximately 2 miles northwest of the City of Pelican Rapids, on State Hwy 108. The County operates the site as a waste TS, yard waste composting site, and diseased brush burning site. The TS typically receives less than 1 ton of MSW per week.

Appliances, electronics, and tires are accepted and stored in separate areas throughout the TS property. The site also includes a yard waste composting area and an area for bulky tree and brush waste managed through scheduled burning.

Table 3 provides historical annual MSW tonnages managed at County transfer stations.

Table 3: Annual MSW Management at County Transfer Stations (tons)

Year	Fergus Falls TS	Henning	Battle Lake	Pelican Rapids	NEOT	Parkers Prairie
2014	15,755	2,954	415	124	643	
2015	15,327	2,738	355	130	676	
2016	15,869	2,871	458	132	655	
2017	14,824	3,359	339	130	418	
2018	15,139	3,314	333	145	386	
2019	15,254	3,274	326	133	390	

Source of Data: County Prepared by: EWW; Checked by: CAV

Existing Solid Waste Collection

In the County, a majority of the areas have an open market for collection services. In 2019, the County approved 17 haulers to collect and transport MSW or recycling. Solid waste haulers are required to have a Solid Waste Collection and Transportation license. All licensed solid waste haulers employ volume-based pricing as required by the license.

Waste collection is primarily handled by small commercial firms that contract directly with the individual generators. County officials estimate that 90% of the city and 80% of rural residents use collection services. In total, it is estimated that nearly 100% of the County population is served by a hauler or has access to some types of collection service (hauler-provided services or transfer station/disposal sites). An unknown portion of Otter Tail County's population disposes of their waste illegally by on-site burning or burial. The most recent MPCA data indicates that 25% of rural residents burn their garbage. The County has reported this issue to be more prevalent in rural residential or seasonal recreational lakeshore properties.

The cities of Fergus Falls and Perham manage an organized waste collection. In Fergus Falls, the city staff collects MSW and recycling for single-family and multi-family households. City rates are collected from residents through a utility bill. In Perham, a contracted hauler collects MSW and recycling for



single-family and multi-family households. Similar to Fergus Falls, the residents of Perham are invoiced for waste collection through a utility bill.

A general summary of curbside collection data for residential and commercial customers within the City of Fergus Falls is provided in Table 4.

Table 4: Annual Fergus Falls MSW Curbside Collection Residential and Commercial Tonnage

Year	Residential Customer Count	Commercial Customer Count	Residential Tonnage	Commercial Tonnage	Total Tons
2014	4,041	550	N/A	N/A	1,473.26
2015	4,082	552	N/A	N/A	1,420.54
2016	4,159	545	N/A	N/A	1,253.36
2017	4,179	575	885.46	233.4	1,118.86
2018	4,217	584	843.29	114.67	957.85
2019	4,244	583	886.72	136.65	1,023.37

Note: N/A = data not available

Source of Data: City of Fergus Falls

Prepared by: EWW; Checked by: CAV

As detailed in Section 1.2, the County has a significant seasonal population variation. Two haulers in the County offer scheduled garbage pickup for non-residents through a colored bag purchase program.

A list of licensed haulers is provided in Attachment 2.

Existing Recycling Collection

As indicated in Section 2.2.1, the County manages a Recycling and Redemption Center located in Fergus Falls. The Recycling and Redemption Center sits on a 4.6-acre parcel of land and accepts select recyclable materials from County residents.

Curbside single-sort recycling is available to residents in Fergus Falls and Perham. The City of Fergus Falls provides the collection in Fergus Falls, and a private hauling company (currently Steve's Sanitation) is contracted to provide the collection in Perham.

For the remaining cities within the County that do not offer curbside recycling collection, residents can drop off their source-separated recycling at one of the 29 recycling drop-off locations or the Recycling Center.

The County maintains 29 recycling drop-off sites located across the County. A map of the County drop-off recycling sites is provided in Attachment 3.



Hauler Collection Rates

In general, the County residents are charged \$23 to \$30 per month for weekly curbside trash pickup and bi-weekly curbside residential cart pickup. These rates vary by cart size and hauler contracting. Commercial rates vary by dumpster size and collection schedule but are similar to the residential rate by volume.

A County Solid Waste Fee Schedule is provided as Attachment 4.

Solid Waste Management Programs

This section discusses current County implemented solid waste management programs and associated data for collection volumes, units, and tonnages.

Residential Recycling

The County recognizes recycling opportunities as a valuable component of an integrated solid waste management program. Minnesota Stat. 115A.551, Subp. 2(1) establishes a goal for counties located outside the TCMA to recycle 35% of the total waste generated by December 31, 2030. Through its current recycling programs, the County has been able to exceed that recycling goal.

As detailed previously, the cities of Perham and Fergus Falls offer curbside residential recycling collection, and the County manages 29 recycling drop-off sites throughout the County (see Attachment 3). The County manages the Recycling and Redemption Center in Fergus Falls as a convenience facility for residents to bring in recyclables. Currently, the recyclable materials accepted at the public drop-off sites, the Recycling and Redemption Center, and through single-sort curbside programs include:

- Aluminum and tin cans;
- Glass bottles and jars;
- #1 through #7 plastic containers;
- Newspaper, office paper, magazines, and paperboard; and
- Cardboard.

Acceptable materials and a service schedule for each location are published on the County website: <https://ottertailcountymn.us/content-page/otter-tail-county-recycling-guide/>.

Data on recyclable materials managed through the Recycling and Redemption Center is provided in **Table 5**. Note this total reflects aluminum that goes through the Redemption Center.



Table 5: Annual Redemption Center Aluminum total (tons)

Year	Recycling and Redemption Center Total Recyclables
2017	45.84
2018	40.73
2019	42.17

Source of Data: County Prepared by: EWW; Checked by: CAV

Recyclable materials managed through the curbside pickup programs in the cities of Perham and Fergus Falls are provided in **Table 6**. The curbside single-sort programs began in late 2017 and resulted in substantial tonnage increase seen.

Table 6: Annual Curbside Residential Recyclable Materials Management (tons)

Year	City of Perham Total Curbside Recyclables	City of Fergus Falls Total Curbside Recyclables
2017	44.5	218.67
2018	184.56	843.18
2019	187.5	886.72

Source of Data: County Prepared by: EWW; Checked by: CAV

Recyclable materials annual tonnage managed through the County's drop-off sites are presented in **Table 7**. Note, these numbers also include recyclables that the City of Fergus Falls drops off at the recycling center from commercial source-separated collections as well as aluminum from redemption.

Table 7: Annual Recyclable Materials at County Drop-Off Sites (tons)

Year	County Drop-Off Sites Total Recyclables
2014	4,289.94
2015	4,153.65
2016	4,134.78
2017	4,185.87
2018	3,652.77
2019	4,056.49

Source of Data: County Prepared by: EWW; Checked by: CAV

In addition, cities and townships may coordinate with the County to provide recycling opportunities at local events at no cost to the event holder. For small events, this may include portable recycling bins with bags. For large events, an event recycling trailer may be brought to the event. The trailer includes



collapsible bins, clear recycling bags, signage for recycling stations, stakes, and various education supplies.

Commercial and Business Recycling

The County collects data from local businesses and industries to evaluate commercial and industrial recycling efforts. In general, the County does not institute policies or requirements for commercial and industrial recycling. The County works with waste haulers to determine commercial and industrial waste tonnage generated in the County and evaluate recycling commercial and industrial waste opportunities.

Efforts are being made to increase commercial and industrial recycling tonnages. A primary emphasis has been a revised volume-based waste tipping fee structure at the Landfill, which provides businesses an incentive to send as little waste as possible to processing and disposal facilities. Businesses will continue to be evaluated in public education efforts regarding efforts to stimulate recycling activities.

Available commercial recycling data for the County is provided in **Table 8**.

Table 8: Annual Commercial Recycling Tonnage Estimates

	2014	2015	2016	2017	2018
Plastic	452.29	381.3	164.74	192.84	25.38
Paper	3,246.48	4,243.54	3,912.95	3,724.27	1,388.01
Metal	27,848.06	27,508.37	27,445.59	30,463.21	24,950.64
Glass	0	0	0	0	0

Source of Data: County Prepared by: EWW; Checked by: CAV

Household Hazardous Waste

State law requires counties to provide facilities and programs to ensure the proper disposal of HHW. To help accomplish the goals set by the MPCA along with the requirements set by state rules and to ensure the protection of the environment, public health, and safety, the County implements a HHW program to provide for compliance with laws, rules, and ordinances. The County emphasizes toxicity reduction to manage risks that are associated with waste. Proper management of hazardous wastes can reduce health, safety, environmental, and property risks.

The County has developed a coordinated HHW Program that also serves five neighboring counties, including Grant, Stevens, Traverse, Wadena, and Wilkin. For the six counties (including Otter Tail County), the program provides 25 mobile collections in partnership with local cities and townships from May until September. During these mobile collections, residents of any of the six counties can bring in and safely dispose of their HHW. There are ten mobile collections for the County residents in the summer months administered in partnership with local cities and townships.

The County facility located in the Recycling and Redemption Center in Fergus Falls accepts HHW year-round. The center also includes a reuse program as a waste diversion initiative. County personnel are



trained in safe and proper HHW material management and determine if the material can be reused. If the product is in useable condition, then it is offered back to the public at no charge at the Recycling and Redemption Center. Examples of products include spray paint, floor cleaner, lawn and garden chemicals, and drywall compound. Material that cannot be reused is then properly stored and packaged. The County contracts with a vendor for HHW material pickup and disposal/recycling.

Items accepted include:

- **Automotive Items:** antifreeze, battery acid, brake fluid, carburetor cleaner, car wax/polish, degreasers, fuels, gasoline, leather cleaners, and used oils and filters.
- **Home Improvement Items:** adhesives, caulking, concrete cleaner, crack fillers/ putty, driveway sealer, latex paint, oil-based paint, paint remover/thinner, roofing tar, solvents, stain/varnish, turpentine, wallpaper paste, and wood preservative.
- **Household Items:** aerosols, batteries (button and rechargeable), drain cleaners, furniture polish, gun cleaning solvents, mercury thermometers, metal polish, mothballs, nail polish/remover, oven cleaners, spot removers, window cleaners, fluorescent light tubes/bulbs (maximum of 10 per household), and sharps in puncture-resistant containers.
- **Lawn & Garden:** bug spray, charcoal lighter fluid, and fertilizer, fertilizer with weed killer, pesticides, herbicides, insecticides, pool chemicals, and rodent bait.

Items not accepted include business hazardous waste (except for fluorescent bulbs, for a fee), prescription medication, vehicle batteries, and electronics or appliances.

Table 9 and **Table 10** provide participation counts and pounds of materials collected at the Recycling and Redemption Center in Fergus Falls and at the County-administered mobile collection events.

Table 9: Annual County HHW Event Participation Count

Year	Recycling and Redemption Center	Otter Tail Mobile Events	Grant Mobile Events	Stevens Mobile Events	Traverse Mobile Events	Wadena Mobile Events	Wilkin Mobile Events
2017	3,417	760	188	236	38	406	166
2018	3,154	797	166	281	85	372	175
2019	3,931	840	229	270	75	300	149

Source of data: County Prepared by: EWV; Checked by: CAV



Table 10: Annual HHW Material Collected at Events (pounds)

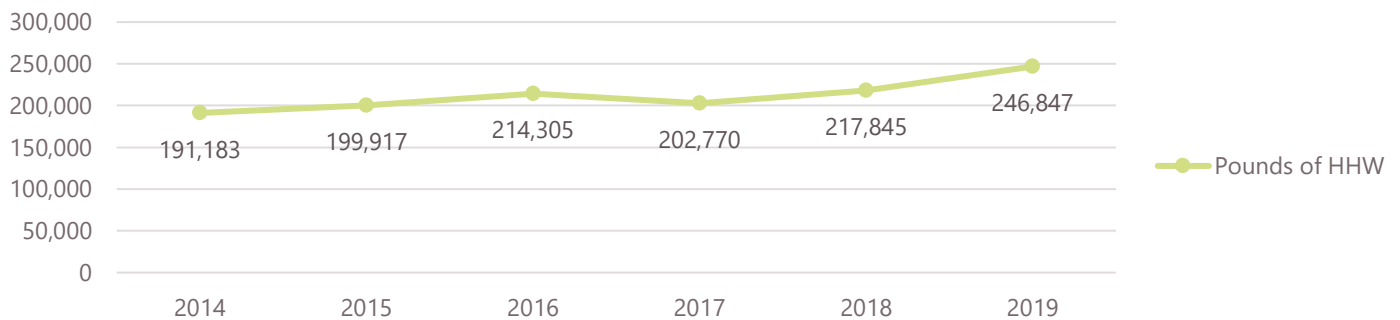
Year	Recycling and Redemption enter	County Mobile Events	Grant Mobile Events	Stevens Mobile Events	Traverse Mobile Events	Wadena Mobile Events	Wilkin Mobile Events
2017	111,387	36,514	8,917	18,711	3,182	16,656	7,403
2018	111,803	37,201	11,181	18,188	6,300	23,700	9,470
2019	134,910	45,079	12,962	20,116	4,969	16,009	7,598

Source of data: Otter Tail County Prepared by: EWW; Checked by: CAV

The County reports the quantity of HHW materials managed at its facilities and mobile collection events to the MPCA through the SCORE program annually. HHW materials reported through the SCORE report include oil-based paint, latex paint, solvents, waste oil, lithium iron phosphate (LFP), aerosols, pesticides, poisons, dioxins, corrosive acids, corrosive bases, mercury, organic peroxides, nickel-cadmium (NiCad) batteries, antifreeze, oxidizers, and silver waste.

Annual pounds of HHW materials managed by the County are presented in **Figure 6**.

Figure 6: Annual HHW Material Collection Totals (pounds)



Source of Data: Annual MPCA SCORE Reports

Yard Waste

Minnesota Statute 115A.936 bans the disposal of yard waste at landfills and incinerators. The County recognizes that yard waste disposal in the mixed MSW stream can be reduced by providing convenient yard waste composting sites and promoting backyard composting.

The County incorporates yard waste management opportunities into its solid waste public education programs. The County distributes news releases and provides informational handouts at sites that accept yard waste for composting. Information distributed includes the locations where yard waste is accepted, proper material acceptance, and backyard composting best management practices. Residents are encouraged not to collect grass clippings after mowing when practical.



Yard waste compost sites are located throughout the County. The transfer stations located in Fergus Falls, Henning, Battle Lake, Pelican Rapids, and New York Mills accept yard waste for composting. Yard waste is accepted at the City of Fergus Falls Landfill for composting. Various cities operate yard waste sites, including Perham and Vergas.

Table 11 details the annual volume of yard waste managed at County facilities.

Table 11: Annual Yard Waste Managed at County Facilities (cy)

Year	North East	Henning	Pelican Rapids	Battle Lake
2014	325	250	3,200	3,700
2015	600	250	1,200	1,850
2016	50	265	1,350	2,500

Source of Data: County Prepared by: EWW; Checked by: CAV

Waste Reduction and Reuse

The County regards source reduction as its priority in solid waste management. The County intends to serve a leadership role in waste reduction to local municipalities, businesses, and residents by reducing waste generated from County sources. The County's waste reduction initiatives promote education as the most effective method of reducing waste generation.

The County strives to achieve a 3% annual reduction in waste generation, as stated in its 2013 Otter Tail County Solid Waste Management Plan. The County intends to accomplish this goal through the following activities, some of which are also discussed in Section 2.5:

- Provide recycling opportunities to all County employees.
- Educate all new County employees on waste reduction actions they can take at work to champion waste reduction through reuse and recycling.
- Publish waste reduction opportunities on the County website and social media accounts.
- Distribute source reduction brochures, flyers, and posters to County businesses and the public.
- Distribute brochures, flyers, and posters to residents.
- Develop, help finance, and advertise reuse programs and initiatives.
- Promote source reduction actions to reduce HHW.
- Visit schools to promote source reduction, reuse, and recycling.

Non-MSW Waste Management

"Non-MSW" encompasses solid waste materials that are not managed as mixed municipal solid waste. Non-MSW includes materials determined by the State to be problem materials (e.g., treated wood) and certain items specifically excluded from the statutory definition of MSW or otherwise managed as separate waste streams. Non-MSW is mainly construction/demolition debris, industrial solid waste, and infectious waste.



The County has a highly developed system to manage C&D waste. The County applies the State hierarchy of waste management to C&D waste as well as MSW. It develops strategies, regulations, and programs to promote the management of non-MSW higher on the hierarchy and reduce the health, safety, and property risks associated with non-MSW.

C&D is managed and handled by the County transfer stations located in Battle Lake and Pelican Rapids. The County C&D landfills are located in Henning and New York Mills (NEOT) and the Fergus Falls C&D Landfill. C&D waste accepted at the Fergus Falls transfer station is transferred to the Gwinner WMI landfill, and C&D waste accepted at the Battle Lake or Pelican Rapids transfer stations is transferred to the C&D landfills located in Henning or at the NEOT site. The transfer stations located in Battle Lake and Pelican Rapids are limited to C&D material acceptance of 3 yards or less.

Items accepted at these facilities are aggregate (concrete, brick, and bituminous concrete), untreated wood, shingles (no asbestos), masonry, windows, plastic building materials, insulation, and sheetrock. Prohibited items include asbestos, treated wood, paint, hazardous waste, fluorescent lightbulbs, scrap metal, MSW garbage, furniture, and appliances.

County staff inspects C&D loads that are brought into the transfer station facilities. County staff is trained to categorize incoming loads into "clean" loads or "dirty" loads. In general, "clean" loads are loads that have been sorted into like materials prior to arrival at the transfer stations. For example, a "clean" load of shingles would include shingles, nails, and tar paper but would not include wood, plastic, metal vents or flashing, or paper shingle bags. Likewise, a "clean" load of concrete would only include concrete and rebar. The County incentivizes residents to sort and clean their loads by charging \$19.50 per yard for unsorted demo and \$6.50 per yard for clean concrete and shingles.

C&D waste managed at the County transfer stations is summarized in **Table 12**.

Table 12: Annual C&D Waste Management at Transfer Stations (cy)

	Henning	North East	Battle Lake	Pelican Rapids	Fergus Falls
2014	4,702	9,304	1,537	1,716	10,960
2015	8,256	7,330	1,340	1,431	11,036
2016	8,828	7,019	1,422	1,292	11,940
2017	8,132	12,092	1,787	1,228	10,142
2018	5,600	8,943	2,132	1,303	11,140
2019	4,665	9,790	1,890	1,152	10,106

Source of Data: County Prepared by: EWV; Checked by: CAV

The County collects clean loads of shingles and concrete for beneficial reuse at the Henning TS and NEOT sites. Shingles are ground up for use in road aggregate. Clean concrete is crushed periodically



for road base or use in new concrete production. **Table 13** depicts the annual quantities of concrete and shingles the County has managed as a beneficial reuse product.

Table 13: Annual Concrete and Shingle Beneficial Re-Use Summary

Year	Henning		NEOT	
	Concrete (cy)	Shingles (cy)	Concrete (cy)	Shingles (cy)
2014	962	1,012	375	2,754
2015	473	1,004	306	2,743
2016	866	760	515	1,538
2017	847	752	5,327	1,404
2018	1,045	1,088	1,276	872
2019	480	1,679	1,000	877

Prepared by: EWW; Checked by: CAV

The NEOT site also accepts and manages all of the ash generated at the Perham Facility. As described in Section 2.2.1, The NEOT site includes an ash monofill to manage ash generated at the Perham Facility. **Table 14** summarizes the annual ash waste managed at the NEOT site monofill.

Table 14: Annual NEOT Ash Monofill Waste Summary

Year	Air Space Consumption (cy)	Ash Delivered (tons)
2014	4,556	2,962
2015	6,916	9,657
2016	6,369	10,853
2017	9,065	10,498
2018	6,935	10,085
2019	7,099	10,432

Source of Data: the County Prepared by: EWW; Checked by: CAV

Community Engagement, Education, and Communication

The County generates various engagement, education, and communication outreach activities and programs to encourage all of its citizens, businesses, and institutions to properly reduce, reuse, repair, and recycle.

The Solid Waste Department within the County has a full-time Public Information & Education Officer (PIEO). The PIEO has been a position within the County for the past 30 years. The PIEO creates and



provides public presentations, school visits, facility tours, business waste consulting, educational events for the public, and coordination of school and community programs.

The County's waste education program includes but is not limited to education in the following program areas:

- Source reduction.
- Reuse.
- Recycling.
- Repair.
- Yard waste management.
- Composting.
- WTE at the PRRF.
- Electronics and appliances.
- Used oil.
- Lead-acid and dry cell batteries.
- HHW and non-toxic alternatives.
- Demolition debris.
- Waste tires.
- Sharps and unwanted medications.
- Other waste materials as needed.

The County uses various media methods to provide education about reduction, reuse, repair, recycling, and proper waste management. The methods and media include but are not limited to the following:

- Creating and updating web content.
- Posting weekly to Facebook, Twitter, and Instagram.
- Publishing a seasonal e-newsletter.
- Performing waste audits and surveys.
- Distributing fact sheets, brochures, flyers, posters, pamphlets, etc.
- Creating and/or disseminating waste reduction and disposal videos via YouTube, Facebook, or other platforms.
- Offering events through Community Education and/or partnerships with local libraries and other community partners.
- Providing ongoing on-site and telephone assistance.
- Publishing press releases.
- Publishing information on how, when, and where to recycle and properly dispose of various waste items at least every three months.
- Participating in and hosting events such as Waste Reduction Week, America Recycles Day, Earth Day, International Composting Week, etc.



- Pursuing and promoting speaking opportunities in schools, civic meetings, etc.
- Producing radio public service announcements (PSAs) and advertisements.
- Publicizing County Board resolutions.

The PIEO also coordinates free event recycling services for County events. Free event recycling supplies, including portable recycling bins and an event recycling trailer, are available for use at any County event. More than 20 events use these supplies each year, including:

- County Fairs;
- Festivals;
- Weddings;
- Graduations parties;
- Block parties; and
- Concerts.

The County also utilizes an external program from the recycling education service, ReCollect, called the Waste Wizard. The Waste Wizard is an online lookup tool that allows residents to search for types of waste to determine how to recycle or dispose of materials. It is available on the County website as well as a free downloadable app for mobile devices. Data from app usage indicates which items are looked up the most and is used to inform education efforts.

Solid Waste Ordinances

The County has a published solid waste ordinance to describe authorization and management requirements for waste generated within the County. The purpose of the ordinance is to "protect the public's health and safety, and the environment and natural resources of the County, from improper management of solid waste." (County Board of Otter Tail County)

In 2015 on behalf of the County and its other four member-counties, PLMSWA prepared a waste designation plan. To establish waste designation, the County took two additional steps: 1) Obtained waste delivery agreements from licensed waste haulers; and 2) approved a waste designation ordinance (December 2019). The waste designation ensures MSW waste delivery to the County to satisfy its waste supply commitment to the PRRF.

The County solid waste ordinance current as of the publication of this Plan is provided in the Appendix.

References

County Board of Otter Tail County. *Solid Waste Management Ordinance*.

Minnesota Employment and Economic Development, 2020. *County Profile for Otter Tail County*.

Minnesota Land Management Information Center, 1990. Retrieved from Minnesota Department of Transportation: http://www.mngeo.state.mn.us/maps/LandUse/lu_otte.pdf.



Minnesota Pollution Control Agency (MPCA), 2020. Minnesota Pollution Control Agency. Retrieved from What's in My Neighborhood: <https://www.pca.state.mn.us/data/whats-my-neighborhood>.

Minnesota State Demographic Center, 2020a. Retrieved from PopFinder for Minnesota, Counties & Regions: <https://mn.gov/admin/demography/data-by-topic/population-data/our-estimates/pop-finder1.jsp>.

Minnesota State Demographic Center, 2020b. Retrieved from Population Projections: <https://mn.gov/admin/demography/data-by-topic/population-data/our-projections/>.

SRF Consulting Group, 2020. *Solid Waste Plan Survey*. July 2020.

Attachments

- Attachment 1 Minnesota Department of Employment and Economic Development (DEED) Profile for Otter Tail County
- Attachment 2 Otter Tail County Licensed Haulers
- Attachment 3 Otter Tail County Drop-Off Recycling Site Map
- Attachment 4 Otter Tail County Solid Waste Fee Schedule



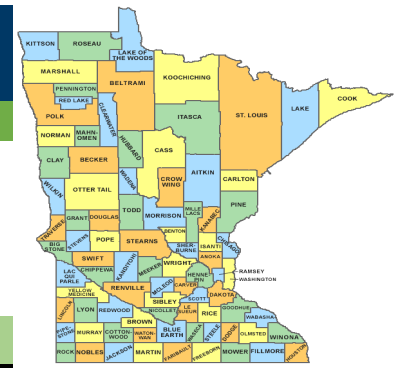
**Attachment 1: Minnesota Department of Employment and Economic Development (DEED)
Profile for Otter Tail County**



COUNTY PROFILE

Otter Tail Co.

Otter Tail Co. is a part of Economic Development Region 4, which is located in the Northwest Planning Region.



POPULATION CHARACTERISTICS

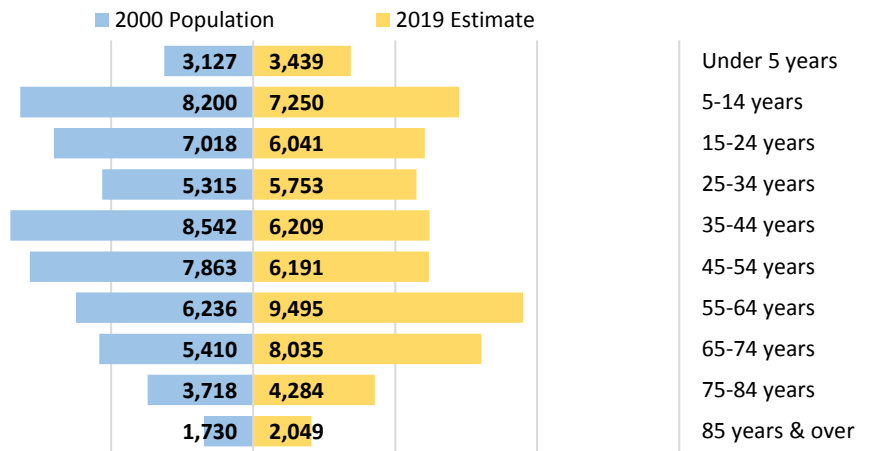
Otter Tail Co.'s population has increased so far this decade, ranking as the 28th fastest growing of the 87 counties in the state from 2010 to 2019. It is now the 17th largest in the state. Otter Tail Co.'s population has an older median age than the state and a larger percentage of people aged 65 years and older. The population is aging, especially as the Baby Boom generation moves through the population pyramid (see Figure 1).

Current population:	58,746 people	Median Age:	46.5 years
Population change, 2010-2019	1,443 people 2.5% increase	state:	38.3 years

	Number	Percent
Under 5 years	3,439	5.9%
5-14 years	7,250	12.3%
15-24 years	6,041	10.3%
25-34 years	5,753	9.8%
35-44 years	6,209	10.6%
45-54 years	6,191	10.5%
55-64 years	9,495	16.2%
65-74 years	8,035	13.7%
75-84 years	4,284	7.3%
85 years & over	2,049	3.5%
Total Population	58,746	100.0%

Source: U.S. Census Bureau, Population Estimates

Figure 1. Population Pyramid, 2000-2019



Otter Tail Co. suffered a negative natural increase - more deaths than births from 2010 to 2019, but also experienced net in-migration - meaning more people moved in than moved out. In addition to domestic in-migration, Otter Tail Co. welcomed net international in-migration - gaining new Minnesotans from foreign countries (see Table 2).

	Total Population Change	April 1, 2010 to July 1, 2019					
		Natural Increase	Vital Events		Net Migration		
			Births	Deaths	Total	International	Domestic
Otter Tail Co.	1,445	-247	6,002	6,249	1,755	432	1,323
State of Minnesota	335,705	250,488	637,356	386,868	88,161	114,414	-26,253

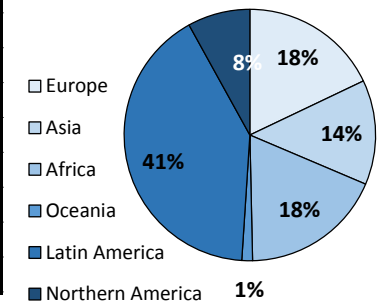
Source: U.S. Census Bureau, Population Estimates Program

Compared to the state, Otter Tail Co. has a smaller percentage of foreign-born residents. From 2010 to 2018, Otter Tail Co. saw a decrease in the number of foreign-born residents, though it was slower than the statewide increase.

	Otter Tail Co.		Change 2010-2018		Minnesota	
	Number	Percent	Number	Percent	Percent	Change
Foreign-born Population	1,456	2.5%	-71	-4.6%	8.4%	25.8%
Europe	261	17.9%	-92	-26.1%	10.2%	4.8%
Asia	196	13.5%	-58	-22.8%	37.7%	27.8%
Africa	266	18.3%	85	47.0%	24.5%	61.1%
Oceania	20	1.4%	16	400.0%	0.5%	41.9%
Americas:	713	49.0%	-22	-3.0%	27.1%	9.8%
Latin America	596	40.9%	-67	-10.1%	24.6%	11.8%
Northern America	117	8.0%	45	62.5%	2.6%	-6.0%

Source: U.S. Census Bureau, 2014-2018 American Community Survey

Figure 2. Place of Birth for the Foreign Born Population, 2018



Otter Tail Co.'s population was becoming more racially diverse over time. Since 2000, the county's white population declined, but the number of people of other races increased (see Table 4).

Figure 3. Population by Race, 2018

- White
- Black or African American
- American Indian
- Asian
- Some Other Race
- Two or More Races

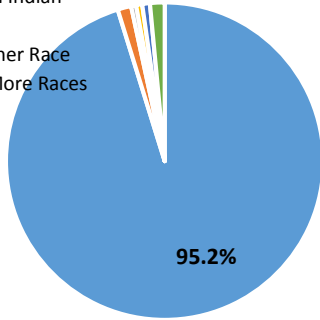


Table 4. Race and Hispanic Origin, 2018	Otter Tail Co.			Minnesota	
	Number	Percent	Change from 2000-2018	Percent	Change from 2000-2018
Total	57,992	100.0%	1.5%	100.0%	12.4%
White	55,217	95.2%	-0.5%	83.3%	4.7%
Black or African American	802	1.4%	392.0%	6.2%	99.3%
American Indian or Alaska Native	296	0.5%	1.7%	1.1%	7.3%
Asian or Other Pac. Islanders	358	0.6%	28.8%	4.8%	83.8%
Some Other Race	457	0.8%	-4.6%	1.8%	48.7%
Two or More Races	862	1.5%	94.6%	2.9%	90.7%
Hispanic or Latino origin	1,945	3.4%	103.2%	5.3%	104.2%

Source: U.S. Census Bureau, 2014-2018 American Community Survey

POPULATION PROJECTIONS

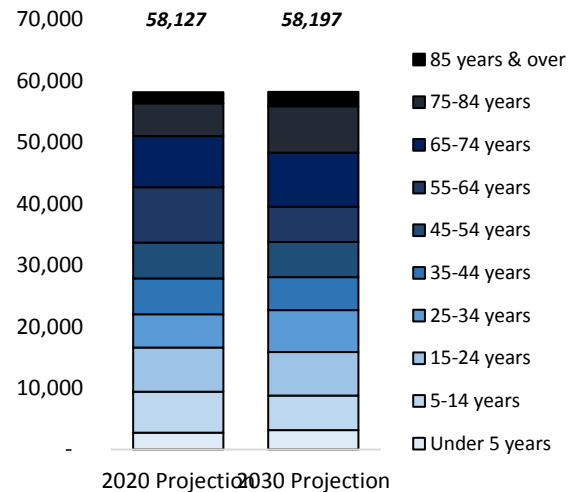
According to the Minnesota State Demographic Center, Otter Tail Co.'s population is expected to grow from 2020 to 2030, with a rate of change that is slower than the projected statewide growth rate (5.0%). In addition to the overall growth, the number of people aged 65 years and older is expected to increase over the next decade (see Figure 4 and Table 5).

Table 5. Population Projections by Age Group, 2020-2030

Otter Tail Co.	2020 Projection	2030 Projection	Numeric Change	Percent Change
Under 5 years	2,755	3,138	383	13.9%
5-14 years	6,627	5,623	-1,004	-15.2%
15-24 years	7,197	7,095	-102	-1.4%
25-34 years	5,403	6,822	1,419	26.3%
35-44 years	5,847	5,391	-456	-7.8%
45-54 years	5,865	5,723	-142	-2.4%
55-64 years	8,982	5,728	-3,254	-36.2%
65-74 years	8,352	8,772	420	5.0%
75-84 years	5,318	7,560	2,242	42.2%
85 years & over	1,781	2,345	564	31.7%
Total Population	58,127	58,197	70	0.1%

Source: Minnesota State Demographic Center

Figure 4. Projections by Age Group, 2020-2030



EDUCATIONAL ATTAINMENT

Otter Tail Co. has a lower percentage of adults (18 years & over) with at least a high school diploma than the state (92.4%), and a lower percentage of people with at least some college experience. Otter Tail Co. also has a higher percentage of people with an Associate's degree and a lower percentage of people with a Bachelor's degree or higher.

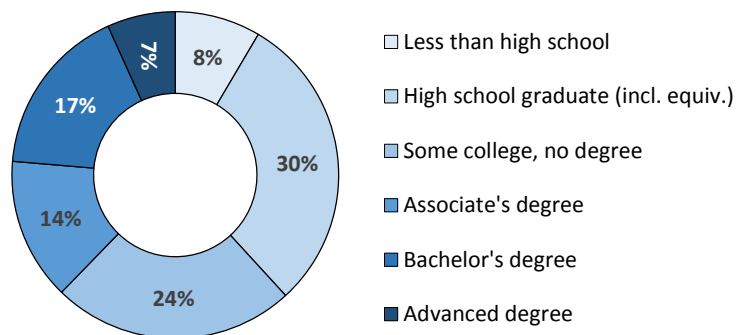
Percentage of the adult population (18 years & over) with at least a high school diploma:

91.5%

College-educated: 61.8%
state: 67.1%

Associate's Degree: 14.1%
Bachelor's Degree: 16.9%
Advanced Degree: 6.8%

Figure 5. Educational Attainment, 2018



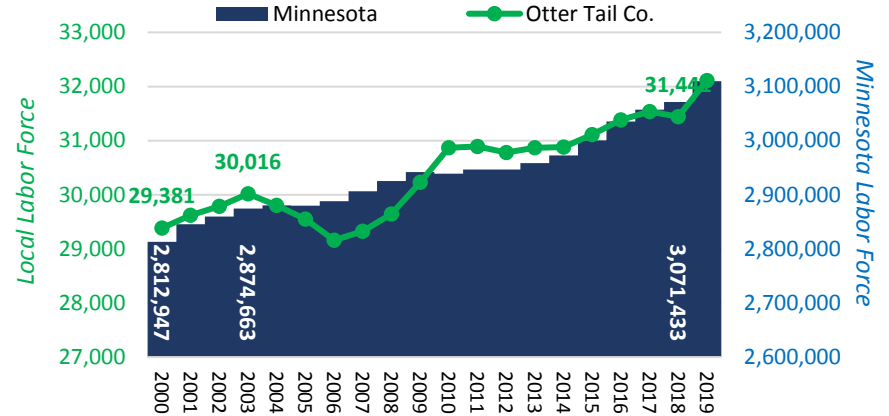
Source: U.S. Census Bureau, 2014-2018 American Community Survey

LABOR FORCE TRENDS

The number of workers in Otter Tail Co. increased over the past year. Long term, Otter Tail Co.'s labor force expanded more slowly from 2004 to 2019, compared to a statewide growth rate of 8.0% (see Figure 6).

31,441 available workers
Labor Force change, 2004-2019 2,304 workers 7.7% increase
4.2% unemployment rate
3.2% state
1,321 unemployed workers

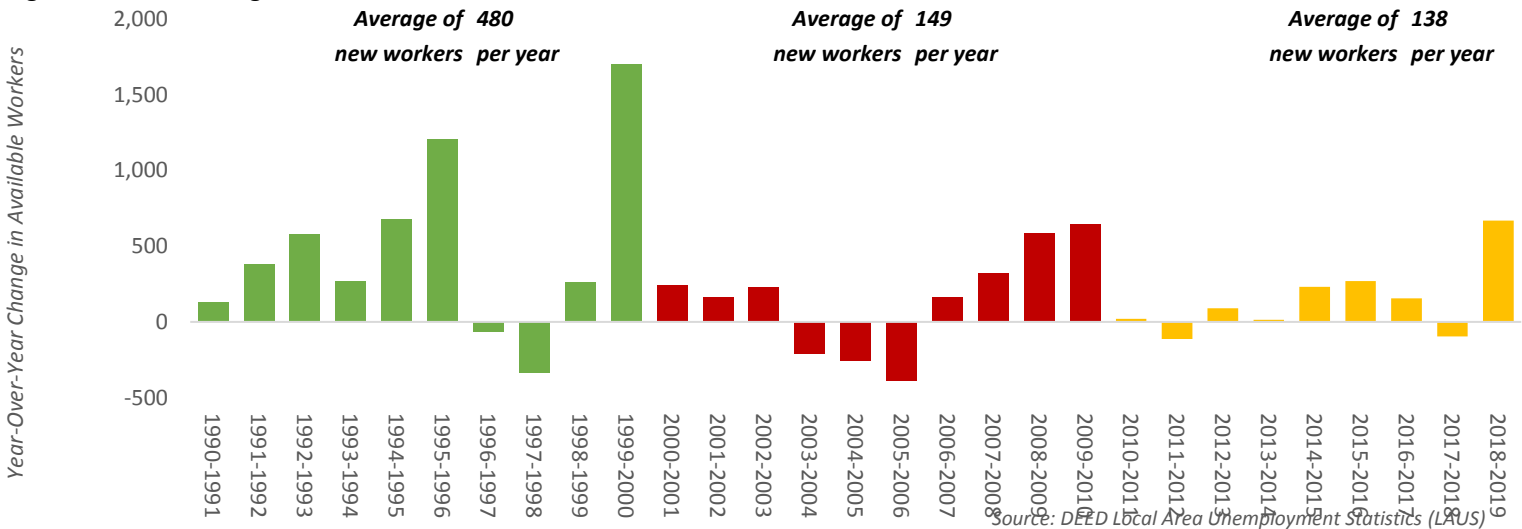
Figure 6. Annual Labor Force Estimates



Source: DEED Local Area Unemployment Statistics

At 4.2%, Otter Tail Co. had a higher unemployment rate than the state in 2019. Otter Tail Co.'s unemployment rate increased compared to 3.6% in 2018, and was lower than the 8% rate posted in 2009. The number of unemployed workers actively seeking work in Otter Tail Co. increased over the past year, and is down compared to 2009.

Figure 7. Annual Change in Labor Force, 1990-2019



Source: DEED Local Area Unemployment Statistics (LAUS)

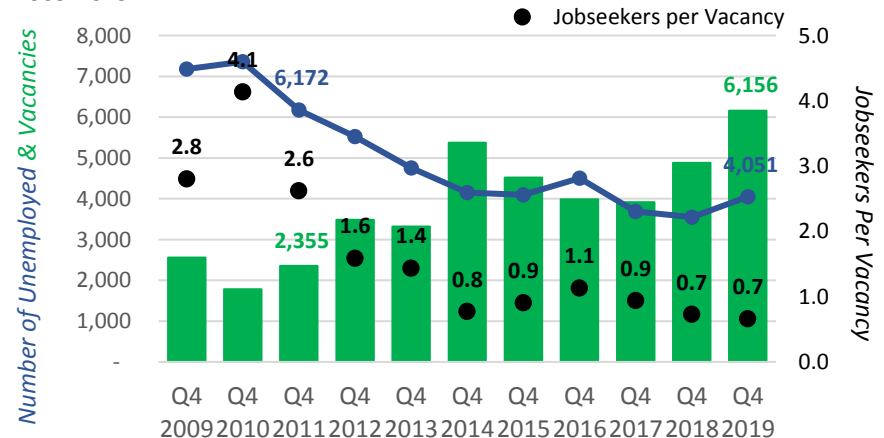
Labor force growth has slowed in recent years. After experiencing a net gain of workers from 1990 to 2000, Otter Tail Co. averaged an annual gain of new workers from 2000 to 2010, and most recently a gain of new workers since 2010 (see Figure 7). Moving forward, Otter Tail Co. is expected to see a labor force decline from 2020 to 2030 (see Table 6).

	Labor Force Projection	
	2020	2030
16 to 24 years	4,847	4,826
25 to 54 years	15,009	15,741
55 to 64 years	6,309	4,023
65 years & over	2,590	2,882
Total Labor Force	28,755	27,472

Source: Minnesota State Demographic Center

Otter Tail Co. is a part of Region 4, which includes Becker, Clay, Douglas, Grant, Otter Tail, Pope, Stevens, Traverse, and Wilkin County. The labor market has grown extremely tight in recent years, dropping to a ratio of 0.9 jobseekers per vacancy during the 4th quarter of 2019 (see Figure 8).

Figure 8. Jobseekers Per Vacancy, 2009-2019



Source: DEED Job Vacancy Survey, LAUS program

LABOR FORCE CHARACTERISTICS

Otter Tail Co. had a lower labor force participation rate than the state. The labor force in Otter Tail Co. is less racially diverse than the state (where 85.5% of workers are white alone), but is becoming more diverse over time.

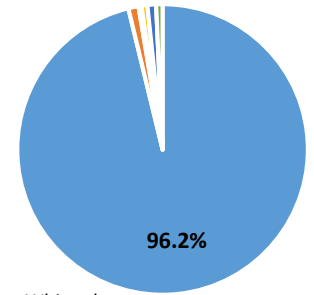
Table 7. Employment Characteristics, 2018

	Otter Tail Co.			Minnesota		Otter Tail Co.	
	In Labor Force (available workers)	Labor Force Partic. Rate	Unemp. Rate	Labor Force Partic. Rate	Unemp. Rate	Male	Female
Total Labor Force	29,208	62.4%	3.4%	69.7%	3.9%	15,727	13,459
16 to 19 years	1,569	59.0%	11.7%	52.9%	11.7%	845	724
20 to 24 years	2,500	86.7%	1.7%	84.4%	6.4%	1,316	1,184
25 to 44 years	10,003	88.6%	3.1%	88.6%	3.5%	5,346	4,659
45 to 54 years	6,181	85.9%	3.1%	87.3%	2.8%	3,285	2,897
55 to 64 years	6,698	70.2%	3.0%	72.6%	3.0%	3,616	3,083
65 to 74 years	1,828	25.4%	2.5%	27.6%	2.4%	1,045	786
75 years & over	399	6.6%	2.5%	6.3%	2.6%	274	126

Employment Characteristics by Race & Hispanic Origin

White alone	28,087	62.4%	3.3%	69.5%	3.3%
Black or African American	332	60.7%	15.1%	70.7%	9.9%
American Indian & Alaska Native	96	37.5%	10.4%	58.5%	12.8%
Asian or Other Pac. Islanders	188	77.7%	1.1%	71.3%	4.7%
Some Other Race	282	77.0%	0.0%	77.2%	6.2%
Two or More Races	208	54.2%	3.8%	73.1%	7.6%
Hispanic or Latino	1,019	82.1%	4.0%	76.3%	6.5%

Figure 9. Labor Force by Race, 2018



- White alone
- Black or African American
- American Indian & Alaska Native
- Asian or Other Pac. Islanders
- Some Other Race
- Two or More Races

Employment Characteristics by Disability

With Any Disability	1,584	50.3%	5.7%	52.5%	9.0%
---------------------	-------	-------	------	-------	------

Employment Characteristics by Educational Attainment

Population, 25 to 64 years	22,890	81.7%	3.1%	84.2%	3.2%
Less than H.S. Diploma	1,135	63.1%	5.2%	65.4%	4.5%
H.S. Diploma or Equivalent	5,720	78.0%	2.6%	78.6%	2.6%
Some College or Assoc. Degree	9,899	83.2%	2.5%	85.2%	3.2%
Bachelor's Degree or Higher	6,135	87.8%	1.5%	89.8%	1.9%

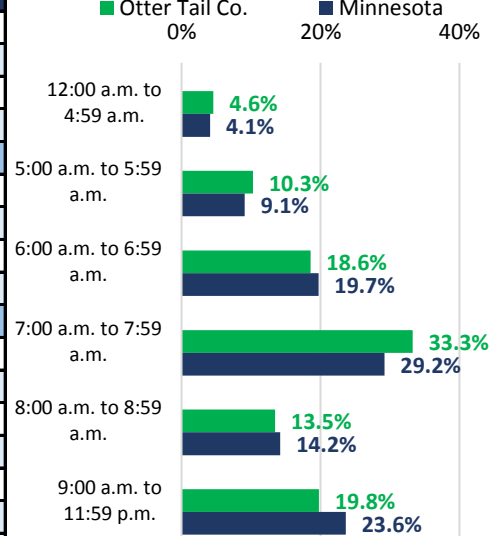
Source: 2014-2018 American Community Survey, 5-Year Estimates

A larger percentage of workers in Otter Tail Co. worked in the same county in which they live compared to the state. Otter Tail Co. also had a shorter average commute time than the state.

Table 8. Commuting Characteristics, 2018

	Otter Tail Co.		Minnesota	
	Number	Percent	Number	Percent
Worked in state of residence	25,969	94.0%	2,807,811	97.5%
Worked in county of residence	21,190	76.7%	1,831,557	63.6%
Worked out of county of residence	4,807	17.4%	979,134	34.0%
Worked outside state of residence	1,658	6.0%	71,995	2.5%
MEANS OF TRANSPORTATION TO WORK				
Car, truck, or van	24,174	87.5%	2,488,152	86.4%
Public transportation (excl. taxicab)	332	1.2%	103,673	3.6%
Other method (walk, bike, taxi, etc.)	1,519	5.5%	126,711	4.4%
Worked at home	1,630	5.9%	164,149	5.7%
TRAVEL TIME TO WORK				
Less than 10 minutes	7,570	27.4%	455,009	15.8%
10 to 19 minutes	8,924	32.3%	869,701	30.2%
20 to 29 minutes	4,476	16.2%	639,317	22.2%
30 to 44 minutes	3,536	12.8%	564,442	19.6%
45 to 59 minutes	1,326	4.8%	192,947	6.7%
60 or more minutes	1,823	6.6%	158,389	5.5%
Mean travel time to work (minutes)	21.3 minutes		23.5 minutes	

Figure 10. Time Leaving Home to go to Work, 2018



Source: 2014-2018 American Community Survey, 5-Year Estimates

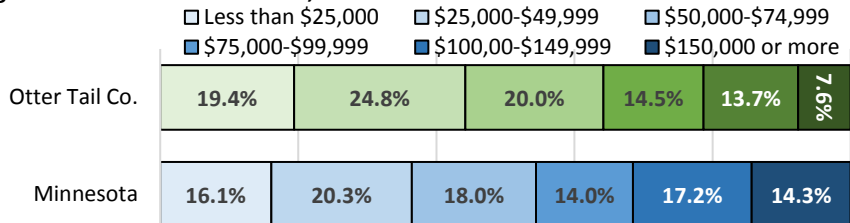
INCOMES, COST OF LIVING, & HOUSING

Otter Tail Co. had a lower median household income than the state, and a higher percentage of households with incomes below \$50,000. Overall, Otter Tail Co. had the 42nd highest median household income of the 87 counties in the state.

Median Household Income	\$57,131
state	\$68,411
Median Family Income	\$70,578
state	\$86,204
Per Capita Income	\$30,846
state	\$36,245

Source: 2014-2018 American Community Survey

Figure 11. Household Incomes, 2018



Source: 2014-2018 American Community Survey 5-Year Estimates

Otter Tail Co. also had a lower cost of living than the state, with a required hourly wage of \$13.17 for a single person living alone to meet a basic needs cost of living, and an hourly wage requirement of \$15.25 for a typical family with 2 adults and 1 child (see Table 9).

Table 9. Basic Needs Cost of Living Estimates, 2019

Single Adult, 0 children	Single Yearly Cost of Living	Hourly Wage Required	Monthly Costs						
			Child Care	Food	Health Care	Housing	Transportation	Other	Taxes
Otter Tail Co.	\$27,396	\$13.17	\$0	\$331	\$166	\$537	\$703	\$243	\$303
State of Minnesota	\$30,900	\$14.86	\$0	\$335	\$137	\$759	\$629	\$336	\$379

Typical Family: 2 Adults (1 working full-time, 1 part-time), 1 child	Family Yearly Cost of Living	Hourly Wage Required	Monthly Costs						
			Child Care	Food	Health Care	Housing	Transportation	Other	Taxes
Otter Tail Co.	\$47,580	\$15.25	\$231	\$757	\$659	\$718	\$817	\$414	\$369
State of Minnesota	\$55,548	\$17.80	\$511	\$764	\$484	\$986	\$729	\$537	\$618

Source: DEED Cost of Living tool

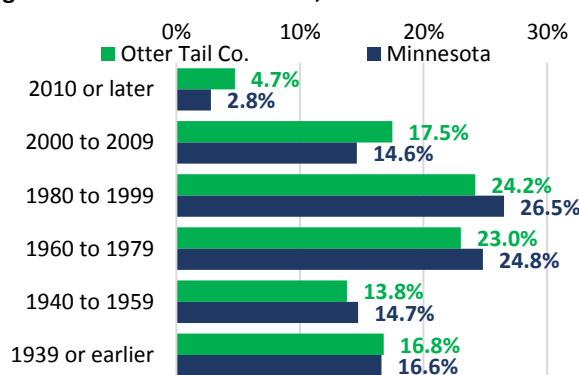
Otter Tail Co. had a lower median house value than the state, having the 24th highest value of the 87 counties in 2018. Otter Tail Co.'s housing stock was newer than the state's, with a higher percentage of units built since 2000 (see Figure 12).

Table 10. Estimated Value of Owner-occupied Housing Units, 2018

	Otter Tail Co.		Minnesota
	Total	Percent	Percent
Total	19,100	100.0%	100.0%
Less than \$50,000	1,162	6.1%	5.7%
\$50,000 to \$99,999	2,985	15.6%	9.4%
\$100,000 to \$149,999	3,268	17.1%	15.2%
\$150,000 to \$199,999	3,173	16.6%	19.8%
\$200,000 to \$299,999	3,864	20.2%	25.7%
\$300,000 to \$499,999	3,173	16.6%	17.6%
\$500,000 or more	1,475	7.7%	6.6%
Median (dollars)	\$179,500		\$199,700

Source: 2014-2018 American Community Survey, 5-Year Estimates

Figure 12. Year Structure Built, 2018



Median monthly owner costs, owner-occupied units with a mortgage **\$1,254**

state \$1,547

Percentage of households with a mortgage spending 30% or more of their income on housing costs **26.2%**

state 22.6%

Median monthly rent costs **\$669**

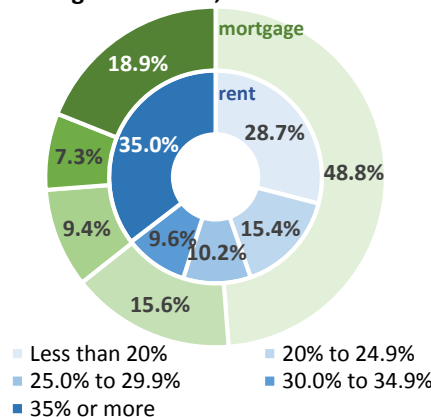
state \$944

Percentage of renters spending 30% or more of their household income on rent **44.6%**

state 45.9%

Source: 2014-2018 American Community Survey, 5-Year Estimates

Figure 13. Housing Costs as a Percentage of Income, 2018



OCCUPATIONS

At \$18.66 in 2020, wages were lower in Region 4 than the state. Overall, Region 4 had the 7th highest median hourly wage level of the 13 economic development regions in the state. Wages were highest for management occupations (\$42.12) and lowest for food preparation and serving related jobs (\$12.06) (see Table 11).

Table 11. Occupational Employment Statistics, 2020

Occupational Group	Region 4				State of Minnesota		
	Median Hourly Wage	Estimated Regional Jobs	Share of Total Jobs	Regional Location Quotient	Median Hourly Wage	State-wide Jobs	Share of Total Jobs
Total, All Occupations	\$18.66	90,000	100.0%	1.0	\$21.49	2,880,650	100.0%
Management	\$42.12	3,700	4.1%	0.7	\$24.38	165,310	5.7%
Business & Financial Operations	\$27.41	2,500	2.8%	0.5	\$12.43	244,300	8.5%
Computer & Mathematical	\$33.10	960	1.1%	0.3	\$17.72	4,060	0.1%
Architecture & Engineering	\$29.81	1,510	1.7%	0.9	\$20.03	363,800	12.6%
Life, Physical & Social Science	\$30.91	610	0.7%	0.7	\$24.31	100,060	3.5%
Community & Social Service	\$22.01	2,190	2.4%	1.2	\$13.65	70,290	2.4%
Legal	\$30.13	210	0.2%	0.3	\$18.06	216,890	7.5%
Education, Training & Library	\$24.29	11,250	12.5%	2.2	\$38.00	55,520	1.9%
Arts, Design, Entertainment & Media	\$16.01	1,020	1.1%	0.8	\$28.97	104,900	3.6%
Healthcare Practitioners & Technical	\$28.57	5,180	5.8%	0.9	\$37.35	20,050	0.7%
Healthcare Support	\$14.84	6,590	7.3%	1.3	\$24.52	38,540	1.3%
Protective Service	\$25.60	1,640	1.8%	1.2	\$15.37	277,000	9.6%
Food Preparation & Serving Related	\$12.06	4,330	4.8%	0.6	\$23.34	57,200	2.0%
Building, Grounds Cleaning & Maint.	\$14.98	3,580	4.0%	1.4	\$15.23	83,860	2.9%
Personal Care & Service	\$12.50	1,510	1.7%	0.7	\$36.07	190,800	6.6%
Sales & Related	\$14.27	8,920	9.9%	1.0	\$42.71	97,960	3.4%
Office & Administrative Support	\$18.05	10,320	11.5%	0.9	\$52.70	170,650	5.9%
Farming, Fishing & Forestry	\$20.22	140	0.2%	1.1	\$19.03	212,650	7.4%
Construction & Extraction	\$21.46	3,460	3.8%	1.1	\$22.45	45,030	1.6%
Installation, Maintenance & Repair	\$22.84	3,850	4.3%	1.2	\$14.81	163,160	5.7%
Production	\$19.06	10,360	11.5%	1.6	\$33.87	171,550	6.0%
Transportation & Material Moving	\$18.06	6,170	6.9%	0.9	\$34.35	27,070	0.9%

Source: DEED Occupational Employment Statistics, Qtr. 1 2020

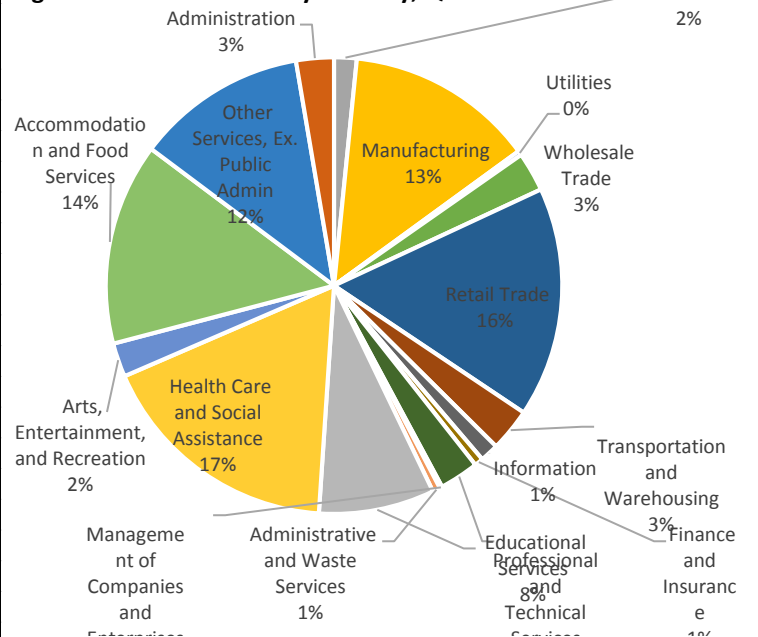
JOB VACANCY SURVEY

Otter Tail Co. is a part of Region 4, which includes Becker, Clay, Douglas, Grant, Otter Tail, Pope, Stevens, Traverse, and Wilkin County. There were 4579 job vacancies posted by employers in the 4th Quarter of 2019, indicating extensive opportunity in the region, with openings across several occupations and industries (see Figure 14).

Table 12. Region 4 Job Vacancy Survey Results, Qtr. 4 2019

Occupational Group	Number of Vacancies	Wage Offer
Total, All Occupations	4,579	\$14.68
Management	204	\$29.79
Business & Financial Operations	75	\$12.94
Computer & Mathematical	12	\$22.51
Architecture & Engineering	41	\$28.71
Life, Physical & Social Sciences	#N/A	#N/A
Community & Social Service	99	\$14.94
Education, Training & Library	4	\$26.51
Healthcare Practitioners & Technical	210	\$14.79
Healthcare Support	27	\$12.40
Protective Service	355	\$19.67
Food Preparation & Serving Related	147	\$13.82
Building, Grounds Cleaning & Maint.	103	\$10.92
Personal Care & Service	568	\$9.97
Sales & Related	103	\$12.54
Office & Administrative Support	568	\$12.97
Construction & Extraction	579	\$13.95
Installation, Maintenance & Repair	290	\$15.47
Production	32	\$17.50
Transportation & Material Moving	274	\$19.82

Figure 14. Job Vacancies by Industry, Qtr. 4 2019



Source: DEED Job Vacancy Survey, Qtr. 4 2019

OCCUPATIONS IN DEMAND

Table 13. Northwest Occupations in Demand, 2019

Less than High School	High School or Equivalent	Some College or Assoc. Deg.	Bachelor's Degree or Higher
Cashiers \$23,786	Heavy & Tractor-Trailer Truck Drivers \$43,420	Registered Nurses \$72,740	Secondary School Teachers \$58,240
Personal Care Aides \$25,859	First-Line Supervisors of Retail Sales Workers \$38,753	Nursing Assistants \$33,025	Physical Therapists \$86,468
Retail Salespersons \$26,276	First-Line Supervisors of Food Prep & Serving Workers \$33,190	Licensed Practical & Licensed Vocational Nurses \$44,340	Software Developers, Applications \$82,009
Combined Food Preparation & Serving \$23,717	Teacher Assistants \$30,528	Electricians \$54,844	Speech-Language Pathologists \$64,692
Maids & Housekeeping Cleaners \$27,599	Maintenance & Repair Workers, General \$39,560	Heating, Air Cond. (HVAC) & Refrig. Mechanics \$49,128	Child, Family, & School Social Workers \$52,059
Janitors & Cleaners \$29,961	Secretaries & Administrative Assistants \$37,053	Automotive Service Technicians & Mechanics \$39,943	Financial Managers \$92,497
Cooks, Restaurant \$27,757	Computer-Controlled Machine Tool Operators, Metal \$37,226	Radiologic Technologists \$63,730	Market Research Analysts & Marketing Specialists \$55,481
Laborers & Freight, Stock & Material Movers, Hand \$31,939	Sales Representatives, Wholesale & Manufacturing \$52,984	Clinical Laboratory Technologists & Technicians \$54,492	Family & General Practitioners \$205,245
Waiters & Waitresses \$22,570	Welders, Cutters, Solderers, & Brazers \$41,694	Medical Records & Health Information Technicians \$45,171	Industrial Engineers \$78,049
Construction Laborers \$35,085	Driver/Sales Workers \$34,851	Dental Assistants \$44,030	Human Resources Specialists \$54,389

Source: DEED Occupations in Demand

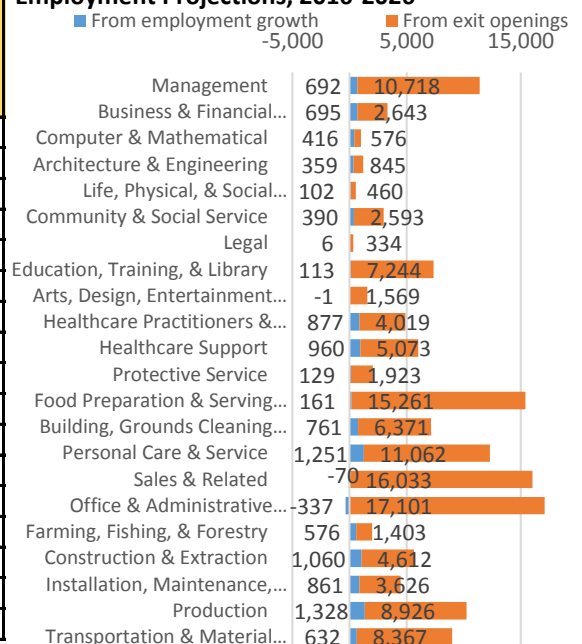
Otter Tail Co. is a part of the Northwest planning region, which is projected to see a 4.2% increase in employment levels over the next decade. In addition to new jobs created, there will be a much larger number of exit openings (see Figure 15).

Table 14. Regional Industry Employment Projections, 2016-2026

Northwest Planning Region	Estimated Employment 2016	Projected Employment 2026	Percent Change 2016-2026
Total, All Industries	262,786	273,747	4.2%
Natural Resources & Mining	6,204	7,474	20.5%
Utilities	1,193	1,146	-3.9%
Construction	10,252	11,287	10.1%
Manufacturing	28,471	30,356	6.6%
Wholesale Trade	11,833	13,030	10.1%
Retail Trade	28,429	27,261	-4.1%
Transportation & Warehousing	7,030	7,246	3.1%
Information	2,660	2,599	-2.3%
Finance & Insurance, Real Estate	7,335	7,553	3.0%
Professional Services & Mgmt. of Companies	5,653	6,045	6.9%
Administrative & Waste Services	5,031	6,427	27.7%
Educational Services	23,095	22,758	-1.5%
Health Care & Social Assistance	36,018	39,725	10.3%
Leisure & Hospitality	25,622	26,206	2.3%
Other Services, Ex. Public Admin	10,328	10,314	-0.1%
Public Administration	21,609	22,418	3.7%

Source: DEED 2016-2026 Employment Outlook

Figure 15. Regional Occupational Employment Projections, 2016-2026



ECONOMIC CHARACTERISTICS

After losing jobs over the past year, Otter Tail Co. had the 18th largest economy of the 87 counties in the state. Otter Tail Co. was the 59th fastest growing in the past year and the 41st fastest growing since 2014. From 2014 to 2019, employers in Otter Tail Co. added jobs, which lagged the state's 6.3% growth rate.

1,798 business establishments

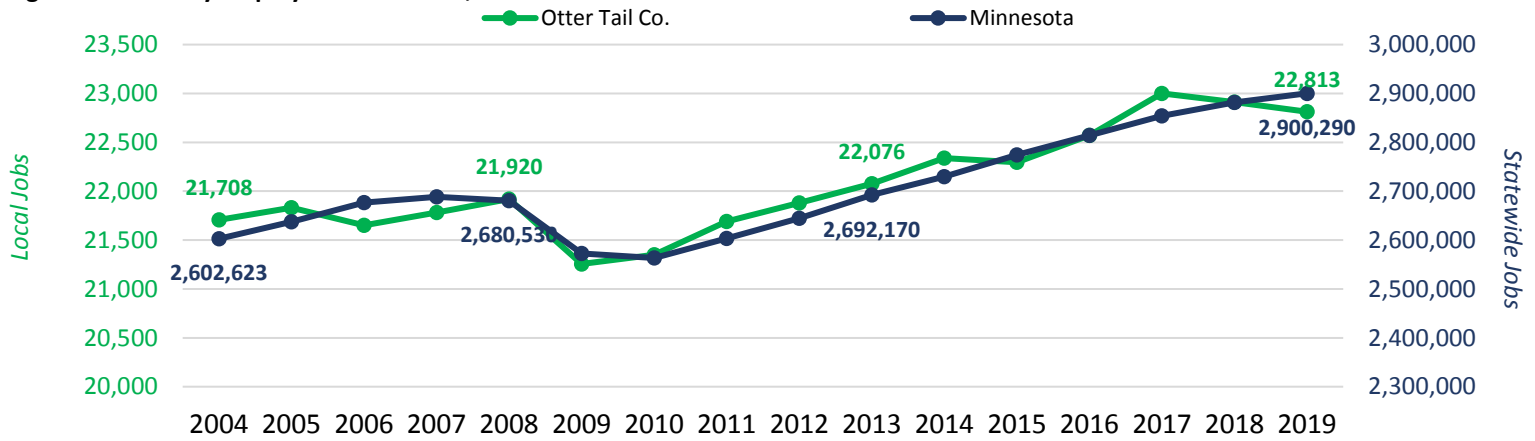
\$40,741 annual average wage

22,813 jobs

\$929,435,555 total industry payroll

Job change, 2014-2019: 475 jobs, 2.1% increase

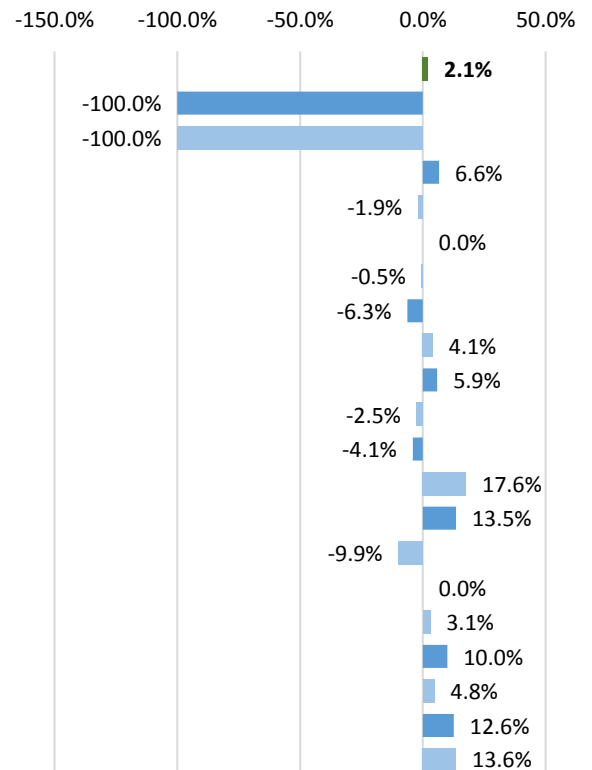
Figure 16. Industry Employment Statistics, 2004-2019



Source: DEED QCEW program

Table 15. Otter Tail Co. Industry Employment Statistics, 2019	Number of Jobs	Percent of Total Jobs	Average Annual Wage
Total, All Industries	22,813	100.0%	\$40,741
Agriculture, Forestry, Fish & Hunt	0	0.0%	#DIV/0!
Mining	0	0.0%	#DIV/0!
Construction	1,245	5.5%	\$47,648
Manufacturing	4,055	17.8%	\$49,692
Utilities	478	2.1%	\$94,756
Wholesale Trade	650	2.8%	\$44,478
Retail Trade	2,621	11.5%	\$27,166
Transportation & Warehousing	561	2.5%	\$35,663
Information	378	1.7%	\$54,692
Finance & Insurance	516	2.3%	\$59,331
Real Estate & Rental & Leasing	94	0.4%	\$27,875
Professional & Technical Services	434	1.9%	\$48,657
Management of Companies	160	0.7%	\$130,212
Admin. Support & Waste Mgmt. Svcs.	655	2.9%	\$35,944
Educational Services	0	0.0%	#DIV/0!
Health Care & Social Assistance	4,599	20.2%	\$40,254
Arts, Entertainment, & Recreation	253	1.1%	\$12,977
Accommodation & Food Services	1,918	8.4%	\$15,461
Other Services	768	3.4%	\$21,942
Public Administration	1,323	5.8%	\$50,761

Figure 17. Change in Jobs, 2014-2019



Source: DEED Quarterly Census of Employment & Wages (QCEW)

For more information on Otter Tail Co.'s population, labor force, and economic trends, contact:

Erik White | Regional Analyst, Northwest Minnesota
 CareerForce Bemidji | 616 America Ave NW, Suite 210 | Bemidji, MN 56601
 Office: 218-333-8253 | Email: erik.white@state.mn.us
 web: www.mn.gov/deed/data/regional-lmi/

Data updated: July 31, 2020

Attachment 2: Otter Tail County Licensed Haulers



2020 Otter Tail County Licensed Solid Waste Haulers

Alex Rubbish & Recycling

1301 36th Ave. W.
PO Box 746
Alexandria, MN 56308
Shaynen Schmidt
320-763-4712
shaynen@protainer.com

Ballard Sanitation **

PO Box 368
Pelican Rapids, MN 56572
Maxine Ballard
218-863-1386

Big Red Boxes **

18731 Co. Hwy. 10
Elizabeth, MN 56533
Paul Brusven
218-770-6766
pbrusven@icloud.com

Denzel's Region Waste **

27766 Joten Lake Road
Dalton, MN 56324
Randy & Heidi Denzel
218-589-8880
hdenzel65@gmail.com

Detroit Lakes Disposal Service/Wilke Enterprises

PO Box 479
Detroit Lakes, MN 56502
Travis Wilke
218-841-8383

City of Fergus Falls **

112 W. Washington
Fergus Falls, MN 56537
Len Taylor/Bill Sonmor
218-3332-5418
len.taylor@ci.fergus-fall.mn.us

Fuchs Sanitation Services

PO Box 67
Glyndon, MN 56547
Kent Fuchs
218-498-2875
fuchssanitation@hotmail.com

G & T Sanitation

PO Box 186
Sebeka, MN 56477
Tim & Rita Nolte
218-837-5846
Gtsanitation@wcta.net

Lakes Area Sanitation **

PO Box 385
Battle Lake, MN 56515
Brady Braun
218-864-5352
lakesareasanitation@gmail.com

Long Prairie Sanitation Inc.

604 7th St. N.E.
Long Prairie, MN 56327
Terry Lanoue
320-732-6464
terry@LPSanitation.com

MinnKota EnviroServices

PO Box 1864
Fargo, ND 58107
Brad Holm
701-293-7404
bholm@minnkota.biz

North Central Inc. **

PO Box 365
Perham, MN 56573
Curt Osterfeld
218-371-1486
needdirtcallcurt@arvig.net

Ottertail Trucking

PO Box 402
Fergus Falls, MN 56537
Mike Clark
218-739-3393
mclark@ottertailcoaches.com

Steve's Sanitation **

140 6th Ave. NE
Perham, MN 56573
Kelly Melgard
218-346-4834
Kelly@steveissanitation.com

Toutges Sanitation

49601 Brandborg Creek Rd.
Henning, MN 56551
Steven Meyer
218-583-2949
stevetmts@outlook.com

Wadena Hide & Fur **

PO Box 309
Wadena, MN 56482
Tom Paper
218-631-2617
tom@whfco.com

Waste Management Inc.

39864 US Hwy. 71
Sauk Centre, MN 56378
Brenda Dinger
320-762-9608
1-800-654-4306
bdinger@wm.com



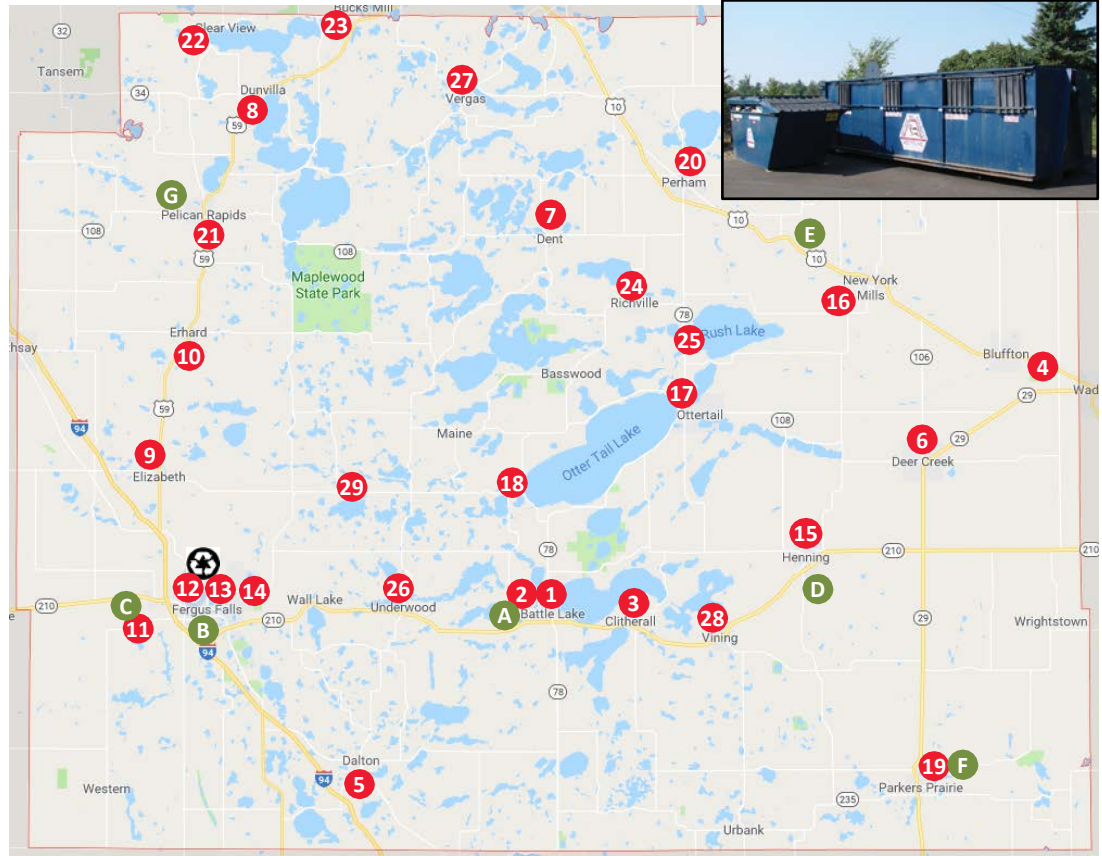
Attachment 3: Otter Tail County Drop-Off Recycling Sites Map



Drop-off Recycling Sites and Transfer Station Locations

Drop-off Recycling

- 1 Battle Lake** – Behind Larry's Supermarket
- 2 Battle Lake** – Transfer Station
- 3 Clitherall** – Crossroads Convenience Center
- 4 Bluffton** – Tom's Body Shop
- 5 Dalton** – Fire Hall
- 6 Deer Creek** – Senior Citizen's Center
- 7 Dent** – Sacred Heart Church on Hwy 108
- 8 Dunvilla** - Lakeland General Store
- 9 Elizabeth** – General Store
- 10 Erhard** – County Highway Garage
- 11 Fergus Falls** – Transfer Station
- 12 Fergus Falls** – Recycling Center
- 13 Fergus Falls** – Sunmart parking lot
- 14 Fergus Falls** – Lakeway Express
- 15 Henning** – Balmoral Ave.
- 16 New York Mills** – City Utility Building
- 17 Ottertail** – Carr's Supermarket
- 18 Otter Tail Lake** – Beach Bums
- 19 Parkers Prairie** – Cty Highway Garage
- 20 Perham** – Resource Recovery Facility
- 21 Pelican Rapids** – next to Dairy Queen
- 22 Pelican Lake** – Pelican Hills Park
- 23 Pelican Lake** – Fair Hills Park
- 24 Richville** – Post Office
- 25 Rush Lake** – Hwy 78/Rush Lake Loop
- 26 Underwood** – Railroad Park
- 27 Vergas** – OTC Hwy 17 (North side of town)
- 28 Vining** – Big Foot MN Hwy 210
- 29 Weetown** - OTC Hwy 1



Transfer Stations, Demolition Landfills and Recycling Center/Household Hazardous Waste

A	Battle Lake Transfer Station	36005 MN Hwy 210	218-864-8666
B	Fergus Falls City Landfill	2010 Oak St. S.	218-736-5916
C	Fergus Falls Transfer Station	275 Airport Rd.	218-998-8920
D	Henning Transfer Station/Landfill	51122 Rocky Ridge Rd.	218-583-2129
E	NE Transfer Station/Landfill	50356 Landfill Rd.	218-385-3660
F	Parkers Prairie Transfer Station	56356 County Hwy 46	No Phone #
G	Pelican Rapids Transfer Station	1101 9 th St. NW	218-863-8496
	Household Hazardous Waste Facility	1115 N Tower Rd, Fergus Falls	218-998-8950
	Recycling Redemption Center		



Hours vary depending on location. Visit website for summer and winter hours.



RECYCLE MORE!



A Brief Guide to Recycling in Otter Tail County



glass

bottles and jars
no boxes,
no bags



cans

aluminum
and tin
no bags



paper

newspaper,
office paper,
magazines,
paperboard



cardboard

flattened and dry



plastic

plastic
containers
#1-7
no bags



Thank you for recycling right!

NO bagged recycling

NO plastic bags or other film plastics

(bring plastic bags back to retail for recycling)

NO food or liquids (empty containers)

NO tanglers (hoses, lights, clothing)

NO Styrofoam

Attachment 4: Otter Tail County Solid Waste Fee Schedule



Solid Waste Fee Schedule

2020

	County Fee:	State Assessment:	Total:
<u>Mixed Municipal Waste/Household Waste:</u>			
Per Ton (Contract Price)	\$ 114.53	\$ 19.47	\$ 134.00
Per Ton (Non-Contract Price)	\$ 129.03	\$ 21.94	\$ 150.97
13-Gallon White Garbage Bag (Minimum Charge)	\$ 2.14	\$ 0.36	\$ 2.50
30-33-Gallon Black Garbage Bag	\$ 4.27	\$ 0.73	\$ 5.00
Full Garbage Can (35 Gallon Garbage Bag or Larger)	\$ 5.13	\$ 0.87	\$ 6.00
Cubic Yard (uncompacted)	\$ 17.95	\$ 3.05	\$ 21.00
Cubic Yard (compacted)	\$ 35.90	\$ 6.10	\$ 42.00
<u>Unsorted Loads:</u>			
Per Ton (Contract Price)	\$ 343.59	\$ 58.41	\$ 402.00
Per Ton (Non-Contract Price)	\$ 387.09	\$ 65.81	\$ 452.90
Per Cubic Yard (uncompacted)	\$ 53.85	\$ 9.15	\$ 63.00
Per Cubic Yard (compacted)	\$ 107.69	\$ 18.31	\$ 126.00
Sorting Cost Per Hour (Per Employee, \$25 Minimum)	\$ 85.47	\$ 14.53	\$ 100.00
<u>Unprotected Loads:</u>			
2.0 Times the Posted Rate			
<u>Handling Fees</u>			
Per Load (Frozen, Stuck, etc.)	\$ 42.74	\$ 7.26	\$ 50.00
<u>Demolition Debris:</u>			
Per Yard (<i>Pelican Rapids & Battle Lake 3yds or less</i>)	\$ 12.40	\$ 0.60	\$ 13.00
Clean Concrete (per yard minimum, Henning & NEOT only)	\$ 6.50	N/C	\$ 6.50
Clean Shingles (per yard minimum, Henning & NEOT only)	\$ 6.50	N/C	\$ 6.50
Per Yard (mixed demo with shingles or concrete-Henn/NEOT)	\$ 18.90	\$ 0.60	\$ 19.50
<u>Electronics:</u>			
Microwaves	\$ 5.00	N/C	\$ 5.00
Computers (CPU's, laptops, includes keyboard and mouse)	\$ 5.00	N/C	\$ 5.00
Small Electronics (Desktop Printers/Copiers, FAX, DVD, VCR, etc.)	\$ 4.00	N/C	\$ 4.00
Large (Floor Type Copy Machines, etc.)	\$ 50.00	N/C	\$ 50.00
Televisions/Computer Monitors (TV Size < 27", tube type)	\$ 10.00	N/C	\$ 10.00
Televisions (TV Size ≥ 27", tube type)	\$ 15.00	N/C	\$ 15.00
Televisions/Computer Monitors (Flat Screen-All Sizes)	\$ 10.00	N/C	\$ 10.00
<u>Whitegoods:</u>			
Appliances - Non-Freon (Stoves, Dishwashers, Washers, Dryers,	\$ 5.00	N/C	\$ 5.00
Appliances - Freon (Refrigerators, Freezers, A/C units, etc.)	\$ 10.00	N/C	\$ 10.00
Commercial Appliances (freezers, coolers, etc.)	\$ 50.00	N/C	\$ 50.00
<u>Batteries:</u>			
Car/Boat/Motorcycle	\$ 1.00	N/C	\$ 1.00
Truck/Tractor	\$ 4.00	N/C	\$ 4.00
Commercial	\$ 10.00	N/C	\$ 10.00
<u>Tires:</u>			
Small Passenger Tire (Up to 15")	\$ 2.50	N/C	\$ 2.50
Large Passenger Tire (16"+)	\$ 3.50	N/C	\$ 3.50
Small Passenger Tire With Rim (Up to 15")	\$ 5.00	N/C	\$ 5.00

Solid Waste Fee Schedule

	County Fee:	State Assessment:	Total:
<u>Tires, cont.:</u>			
Large Passenger Tire With Rim (16"+)	\$ 6.00	N/C	\$ 6.00
Semi-truck/Trailer Tire	\$ 12.00	N/C	\$ 12.00
Semi-truck/Trailer Tire with Rim	\$ 20.00	N/C	\$ 20.00
Tractor (all)	\$ 30.00	N/C	\$ 30.00
Flotation Tire (as quoted)	quote	N/C	quote
Other Sizes Not Listed, Tracks, Etc.	\$200.00/ton	N/C	\$200.00/ton
<u>Miscellaneous:</u>			
Stuffed Chair/Recliner	\$ 5.13	\$ 0.87	\$ 6.00
Sofa	\$ 10.26	\$ 1.74	\$ 12.00
Hide-A-Bed Sofa	\$ 17.09	\$ 2.91	\$ 20.00
Twin-Size Mattress (Per Piece)	\$ 7.69	\$ 1.31	\$ 9.00
Queen/Full-Size Mattress (Per Piece)	\$ 10.26	\$ 1.74	\$ 12.00
King-Size Mattress (Per Piece)	\$ 12.82	\$ 2.18	\$ 15.00
Carpeting (per square yard)	\$ 0.85	\$ 0.15	\$ 1.00
Propane Tanks (5-20-40 pounds)	\$ 4.00	N/C	\$ 4.00
<u>Scrap Iron & Metal:</u>			
Minimum	\$ 1.00	N/C	\$ 1.00
Cubic Yard	\$ 2.50	N/C	\$ 2.50
<u>Brush:</u>			
We only accept 3" to 4" in diameter or less			
Per Yard	\$ 2.00	N/C	\$ 2.00
Pickup/Trailer (level box)	\$ 5.00	N/C	\$ 5.00
Dump Truck (10 yards)	\$ 20.00	N/C	\$ 20.00
<u>Non Otter Tail County Waste:</u>			
Non Otter Tail County Waste	3 times the county rate		
<u>Yard Waste:</u>			
Must be clean and free of contaminates	Free	Free	Free
Lake Weeds - Must include permit to haul	Free	Free	Free
<u>Haulers License Fees:</u>			
License Fee (base)	\$ 100.00	N/C	\$ 100.00
License Fee (per truck)	\$ 10.00	N/C	\$ 10.00
Bond	\$5,000.00	N/C	\$5,000.00
<u>Service Fee:</u>			
Per Service Fee Point	\$ 14.00	N/C	\$ 14.00
<u>Credit Card Fee:</u>			
Per Transaction (\$10 Minimum, Charges \$10-\$78)	\$ 1.95	N/C	\$ 1.95
Per Transaction (Over \$78)	2.50%	N/C	2.50%

Notes:

1. The Transfer Station Attendant/Operator make the final determination on all transactions
2. The compacted MMSW rate is to be used only for packer trucks when a scale is unavailable
3. All lightweight material (foam, film, etc.) will be charged at the MMSW cubic yard price

Appendix B: Engagement Overview

Community engagement helped Otter Tail County identify important themes and public concerns with solid waste management across the County. As part of Otter Tail County's effort to create a Solid Waste Master Plan, the project team conducted multiple rounds of public engagement designed to inform planning for the future of solid waste management in Otter Tail County. Each engagement event offered community members the opportunity to identify their concerns and share their input on the Solid Waste Master Plan.

Public Engagement activities for the Otter Tail County Solid Waste Master Plan included:

- Project website
- Pop-up engagement at transfer stations
- Two rounds of community surveys
- Focus Group meetings
- A live virtual open house

Most engagement activities were conducted virtually due to COVID-19 guidelines, and specific strategies were tailored to encourage broad participation from community members from across Otter Tail County. A range of promotional strategies were utilized to promote engagement, including social media, traditional media, and passive advertising at County transfer stations. Throughout the process, community members were informed of the 2021 Solid Waste Master Plan and invited to participate in public input opportunities.

Otter Tail County kicked off public engagement with the launch of a project website designed to introduce the project, explain the purpose of a Solid Waste Master Plan, and share a project timeline along with upcoming public input opportunities. The first public input opportunities were a community survey and several pop-up engagement events at local transfer stations.

Pop-Up Event

To understand how community members currently utilize the solid waste system, pop-up events were held at several transfer stations. The project team met with visitors of the Henning, Battle Lake, Parkers Prairie, and Pelican Rapids stations between July 11 and July 25, 2020. At these pop-ups, the project team shared information about the plan, promoted an active community survey, shared ways to stay involved, and answered any immediate questions. Overall, **175 residents were engaged at these Transfer Station Pop-Up events**. The majority of residents had a positive reaction to the project and expressed interest in the plan and survey participation.



Large informational posters were placed at each location, which described the purpose of a Solid Waste Plan. As the project team discussed the plan with each resident, they were also offered a project flyer and survey postcard. The project flyer provided information on plan development, included a link to the project website, and asked residents to complete an online survey. The survey postcard provided respondents with the opportunity to complete the survey via mail. (Pop-up summary available as **Attachment 1**)



Community Survey #1

An initial Otter Tail County Solid Waste Plan **survey was active from July 12th, 2020, through July 31st, 2020. A total of 654 people responded to the survey, with 99.5% living in Otter Tail County year-round or seasonally.** In addition to 654 community survey responses, nine members of the Otter Tail County Solid Waste Plan Review Committee (PRC) completed the survey in October. The results the community survey and a summary of PRC survey responses are included in **Attachment 2**.

The survey was promoted by a combination of online and in-person methods. The survey link was distributed online using Facebook, email blasts, and website updates. Information about the plan and survey opportunity were also distributed at 4 in-person pop up events and flyers were distributed to residents at transfer stations within the County, which included a link to the online survey as well as an option to respond via mail.

Responses to the survey came from across the County, with a relatively even split between City and Township residents. There was also an even distribution of respondents across the five districts, of which 93% were single-family homeowners. Most respondents felt satisfied with the current County Solid Waste Services, but the majority (67%) also felt it is important for the County to set measurable goals and timelines toward zero landfilling. A large amount (75%) of respondents would be willing or very willing to separate organic waste if the County offered a program to manage it.

Focus Groups

Virtual focus group meetings were conducted in March of 202, and these meetings provided an opportunity for the planning team to gather industry representatives together to discuss specific ideas and concepts of the Solid Waste Master Plan. The County engaged three different stakeholder groups, **Solid Waste Haulers, Manufacturing Industry, and Organics**. Focus group participants were identified by County staff and invited to hear an update on the Solid Waste Master Plan process, discuss the draft guiding principles, and share insights on program opportunities and hurdles.

- The **Hauler** focus group gathered representatives from organizations that currently operate within Otter Tail County to haul the various waste streams in the County.



- The **Manufacturing Industry** focus group gathered representatives from major industries throughout the County to discuss waste management and diversion opportunities.
- The **Organics** focus group gathered representatives from the healthcare, grocery, restaurant, and education sectors across Otter Tail County to discuss opportunities for management of organic materials.

Each of the focus group meetings was broken into two components: a presentation of the Otter Tail County Solid Waste Master Plan and focus group discussion. (Focus group summaries are available as **Attachment 3**)

Virtual Open House and Community Survey #2

A live virtual public open house meeting was held on March 29, 2021, to share updates about the development of the Otter Tail County Solid Waste Master Plan and to gather public feedback to inform the next steps in the planning process. A total of 16 members of the public attended the open house which was organized into three sections: a **presentation, engagement exercises, and question-and-answer session.**

- The **presentation** was intended to provide attendees with an overview of solid waste management in Otter Tail County, an introduction to the Solid Waste Master Plan, and to highlight the draft guiding principal statements.
- The **engagement activities** were intended to gather feedback on the public's support of the draft guiding principles and insight on priorities and concerns.
- Finally, the **question-and-answer** portion of the agenda provided attendees with the opportunity to ask questions of the staff and consultant team.

A total of 19 members of the public responded to a community survey that was open from March 29 to April 19, 2021. (Summary of virtual community meeting and community survey #2 available as **Attachment 4**)

Virtual Engagement Webpage

The virtual open house was supplemented with an engagement webpage designed to provided Otter Tail County residents and stakeholders with an opportunity to learn more about the Solid Waste Master Plan. The virtual engagement webpage included:

- An overview of the Solid Waste Master Plan
- A summary of draft guiding principles
- An opportunity to share input by "ranking your level of support for guiding principles."
- An opportunity to share input via community survey
- A short Otter Tail County services video
- A timeline that featured next steps



The virtual engagement page received 1,160 site visits, 68 survey responses and 12 comments. (Virtual engagement summary available as **Attachment 5**)

The process to prepare the Otter Tail County Solid Waste Master Plan included a range of data collection and technical analysis elements that were linked with engagement from Otter Tail County residents. Throughout the plan's development, engagement opportunities were held to understand residents' goals and desires for solid waste management. This information was documented, and the results of community input were reviewed by the project team and PRC throughout the duration of the project. The results of public engagement were documented and are available in the appendix of this report.



Attachment 1: Pop-Up Event Summary

As part of Otter Tail County’s effort to create a Solid Waste Management Plan, the project team engaged the public to provide feedback during the initial stage of development. To understand how County residents currently utilize the system, pop ups were held at several transfer stations. At these pop ups, the project team shared information about the plan, shared possibilities for feedback, and answered any immediate questions.



Following is a description of the transfer station engagement events:

Summary

Transfer stations provide Otter Tail County residents the opportunity to properly dispose of recyclable materials. The stations are located across the County, presenting an ideal location to engage the public on the Solid Waste Management Plan.

A total of 4 pop up events staffed by the SRF at Transfer Stations within Otter Tail County. The SRF project team visited the Henning, Battle Lake, Parkers Prairie, and Pelican Rapids stations on July 11 and July 25 for approximately three hours each. Additionally, Otter Tail County staff held pop up events at the other transfer stations. Below is a summary of each location and the approximate number of individuals reached:

Station Location	Number of People Engaged
Henning Transfer Station	22
Battle Lake Transfer Station	76
Parkers Prairie Transfer Station	30
Pelican Rapids	47
NE Transfer Station	45
Fergus Fall City Landfill	45
	265 people engaged at pop-up events



Each event included a variety of materials to spread awareness and promote engagement with the project. Large informational posters were placed at each location, which described the purpose and timeline of a Solid Waste Plan. As the project team discussed the plan with each resident, they were also offered a project flyer and survey postcard. The project flyer provided information on plan development, included a link to the project website, and asked residents to complete an online survey. The survey postcard provided respondents with the opportunity to complete the survey via mail.



Following is a list of specific comments received while attending the pop up events:

- No need for change, the system works great for us
- Thanks, I have already filled out the survey
- This is awesome, we will be sure to complete the survey. Could we take some additional flyers to share with our neighbors?
- Good to hear, we work for a property management company. We are out at the transfer stations all the time. I will look at the survey, thanks.
- Cool, I support this effort
- When will the County be moving towards single sort recycling?
- This transfer station works great! We live a few miles away and we are glad we don't have to pay the price of trashing hauling.
- How can transfer stations keep people from throwing plastic bags into the recycling bins?! It could not be more clear marked asking people not to add plastic bags to the bins!
- I am glad the County is thinking about the future, I will share the survey with my neighbors. I recommend putting a security camera at the Parkers Prairie location, because people are dumping items here and the Henning location must come pick it up.
- Thanks, will share with my neighbors. I am concerned about improper dumping, as I recently saw a plasma TV and microwave shoved into the recycling bins.
- I am very happy the recycling and trash sites are open during COVID, it allows me to clean out the house and stay busy. I am pretty happy with the system the way it is working now.
- I do not currently have recycling at my duplex community and want it! Can I share this survey and information with my community? (I provided extra survey cards for him to share with neighbors)
- Will the City be offering a large item collection this year (such as fridges)? They typically offer it once a year, and it is a great way to safely get rid of our large trash.
- Great to hear the County is looking at this, this is a really important issue.
- I work for the County. I hadn't heard about this planning process. I must have missed the internal message. I'll be sure to help spread the word!
- Plastics seem to be the biggest trash item that should be recycled. Do the gas stations recycle plastics?



- I'd like to see a few recycling bins added to the transfer station to make trash and recycling a one stop trip. It's not hard to go down to Larry's to drop off recycling, but it would be nice if I could drop it here.
- I think everyone needs to chip in a little bit in order to help the County recycle
- I live in town (Pelican Rapids) and use the recycling bins near Larry's / Dairy Queen. I bring my yard waste out here to the transfer station. Yard waste is the material that gives me the biggest hassle.
- I have one easy and important suggestion for this planning process. There should be a 40-watt solar array at every transfer station in the County. I've been encouraging the County to invest in solar for four years. Solar arrays could easily be maintained and adjusted by transfer station staff and can help offset energy costs and additional unused energy can be sold to offset installation. This could be opportunity to connect renewables with recycling.
- I think the Pelican Rapids transfer station works great. Really like the easy disposal of automotive oil when I change the oil in my vehicles. I come to this facility regularly, I got sick of XXXXX taking away my trash.
- Cool, I'll do the survey online. This is my first time at the Pelican Rapids transfer station.
- No questions or concerns here, the Pelican Rapids transfer station works pretty well for me.
- The County has really improved waste management since the 1980s and 1990s. I've clean up a lot of trash and can piles on family property. It seems like burning trash is a lot less common these days.
- I'd like to see a few recycling bins added to the transfer station to make trash and recycling a one stop trip. It's not hard to go down to Larry's to drop off recycling, but it would be nice if I could drop it here.
- Good to know about this, thank you.
- We are very happy with the facilities in Otter Tail County. We live in Fargo and have a lake cabin here. We are very grateful to have the transfer station available rather than haul our trash home with us. This is great, thank you for looking into solid waste management, we'll complete the survey.

A total of 24 people responded to the survey via the distributed postcards. Following is a summary of their responses:

How do you currently manage trash and recycling produced in your household/business?

Trash is picked up at my home/business	13
Recycling is picked up at my home/business	4
We take our trash to a transfer station	9
We take our recycling to a drop off recycling site	22
We do not recycle	0



What types of waste management services would you be interested in?

Increase curbside service	3
Organics Recycling	3
Increase accepted materials at transfer stations	18
Reuse programs	7
Maintain current operations	6

What are the most pressing needs in your community regarding solid waste management?

- include plastic bag recycling, transfer station at nym is my only way of getting rid of garbage
- try to get more people to recycle. I manage a 6 unit complex and I am the only one that recycles.
- we really like the service provided in PP. We really keep our garbage down by recycling. We don't need to bury it in the ground - for dumb!
- we are summer residents only at our lake cottage. The current program works well for us!
- more pick ups of recyclable material, not frequent enough. Security cameras for unauthorized dumping.
- increase materials at transfer stations.
- make a more local, friendly manner to drop off paint and hazardous materials.
- encourage more people to recycle.
- I think its pretty good now.
- I'm just happy we have such a good system to recycle and dispose of trash.
- host city wide cleanup weeks. Have a couple of sites for large item disposal a couple of times a year, charge is needed.
- free household/junk disposal at dump 2x a year - help clean up our city!
- getting more people to recycle
- city of perham needs to provide pick up for businesses. Not just residents.
- there are so many electronics Tvs computers dvd/vcr, phones, appliances etc, that are not easy to get rid of when old or broken, etc.
- a place to bring hazardous materials, fluorescent bulbs, old paint, etc.

Overall, 175 residents were engaged at these Transfer Station pop up events. The majority of residents the project team interacted with had a positive reaction to the project and expressed interest in the plan and survey participation.



Attachment 2: Community Survey #1 Summary



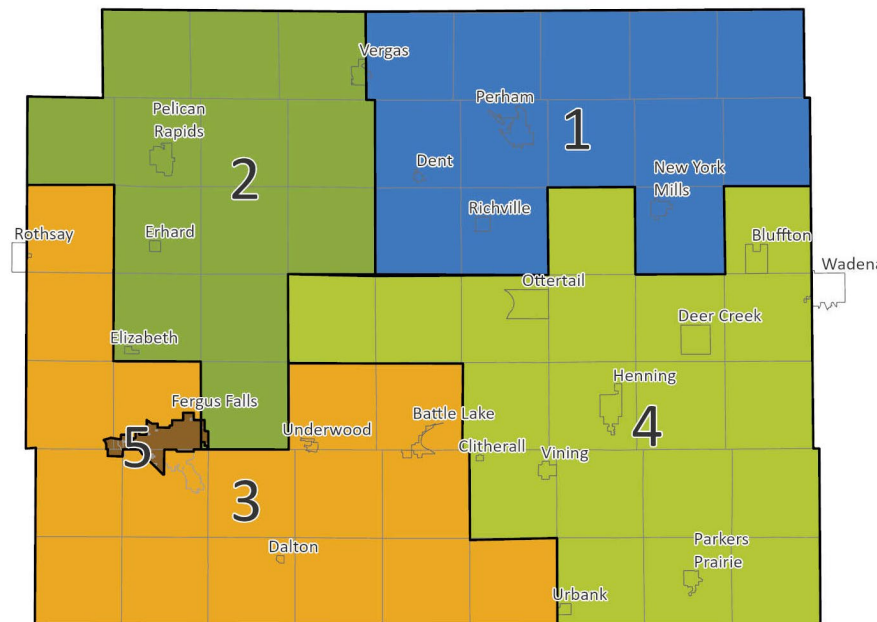
Otter Tail County Solid Waste Plan Survey Summary

Survey Summary:

The Otter Tail County Solid Waste Plan Survey was active from July 12th, 2020 through July 31st, 2020. 654 people responded to the survey, with 99.5% living in Otter Tail County year-round or seasonally. In addition to 654 community survey responses, nine members of the Otter Tail County Solid Waste Plan Review Committee (PRC) completed the survey in October. The results the community survey are summarized below, followed by a summary of PRC survey responses.

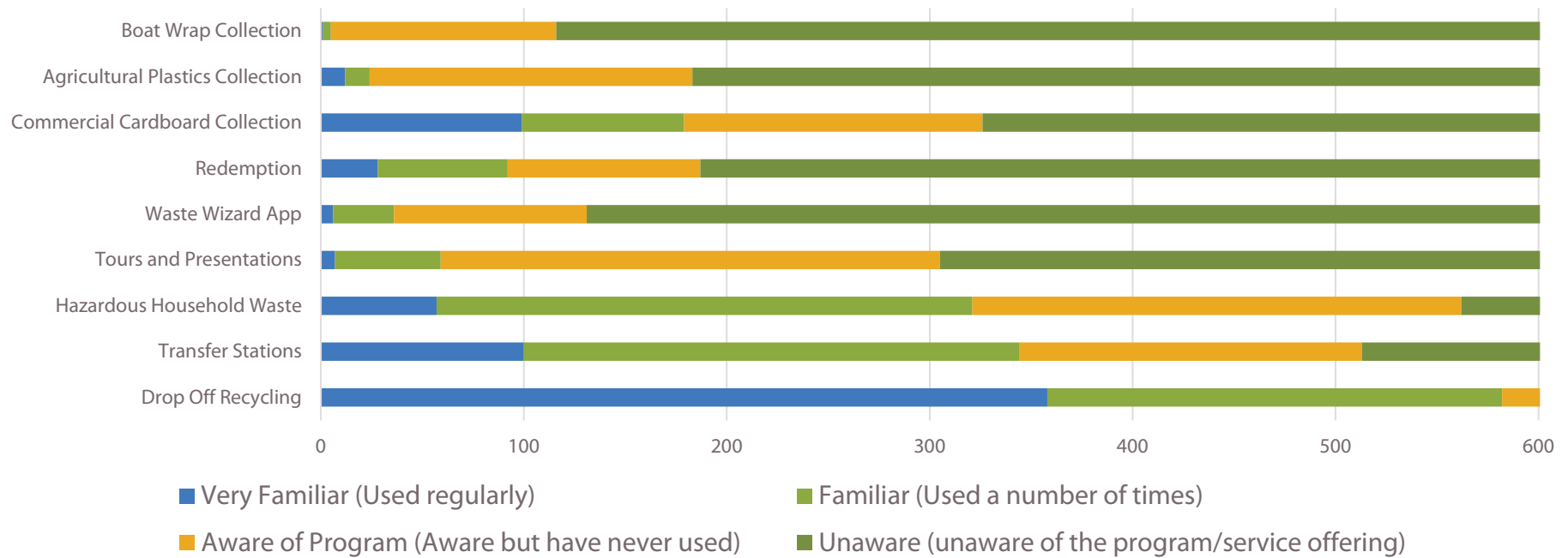
The survey was shared by a combination of online and in-person methods. The survey link was distributed online using Facebook, email blasts, and website updates. Information about the plan and survey opportunity were also distributed at 4 in-person pop up events and flyers were distributed to residents at transfer stations within the County, which included a link to the online survey as well as an option to respond via mail.

Responses to the survey came from across the County, with a relatively even split between City and Township residents. There was also an even distribution of respondents across the five districts (see map below for district boundaries), of which 93% were single-family homeowners. Most people feel satisfied with the current County Solid Waste Services, but the majority (67%) also feel it is important they set measurable goals and timelines toward zero landfilling. A large amount (75%) of respondents would be willing or very willing to separate organic waste if the County offered a program to manage it.



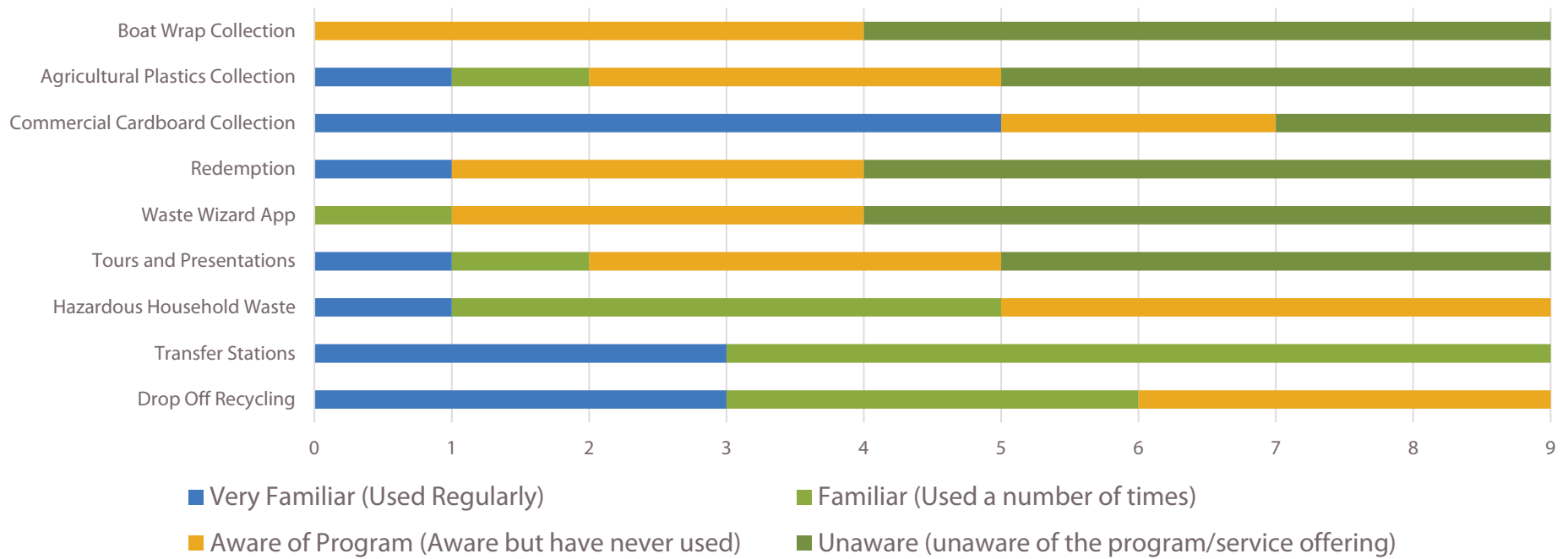
Question 1: Please rank your familiarity with the following services/programs provided by Otter Tail County.

	Very Familiar (Used regularly)		Familiar (Used a number of times)		Aware of Program (Aware but have never used)		Unaware (unaware of the program/service offering)		Total
Drop Off Recycling	55.16%	358	34.51%	224	7.55%	49	2.77%	18	649
Transfer Stations	15.63%	100	38.13%	244	26.41%	169	19.84%	127	640
Hazardous Household Waste	8.85%	57	40.99%	264	37.42%	241	12.73%	82	644
Tours and Presentations	1.09%	7	8.06%	52	38.14%	246	52.71%	340	645
Waste Wizard App	0.93%	6	4.67%	30	14.80%	95	79.60%	511	642
Redemption	4.39%	28	10.03%	64	14.89%	95	70.69%	451	638
Commercial Cardboard Collection	15.44%	99	12.48%	80	22.93%	147	49.14%	315	641
Agricultural Plastics Collection	1.88%	12	1.88%	12	24.96%	159	71.27%	454	637
Boat Wrap Collection	0.16%	1	0.63%	4	17.37%	111	81.85%	523	639



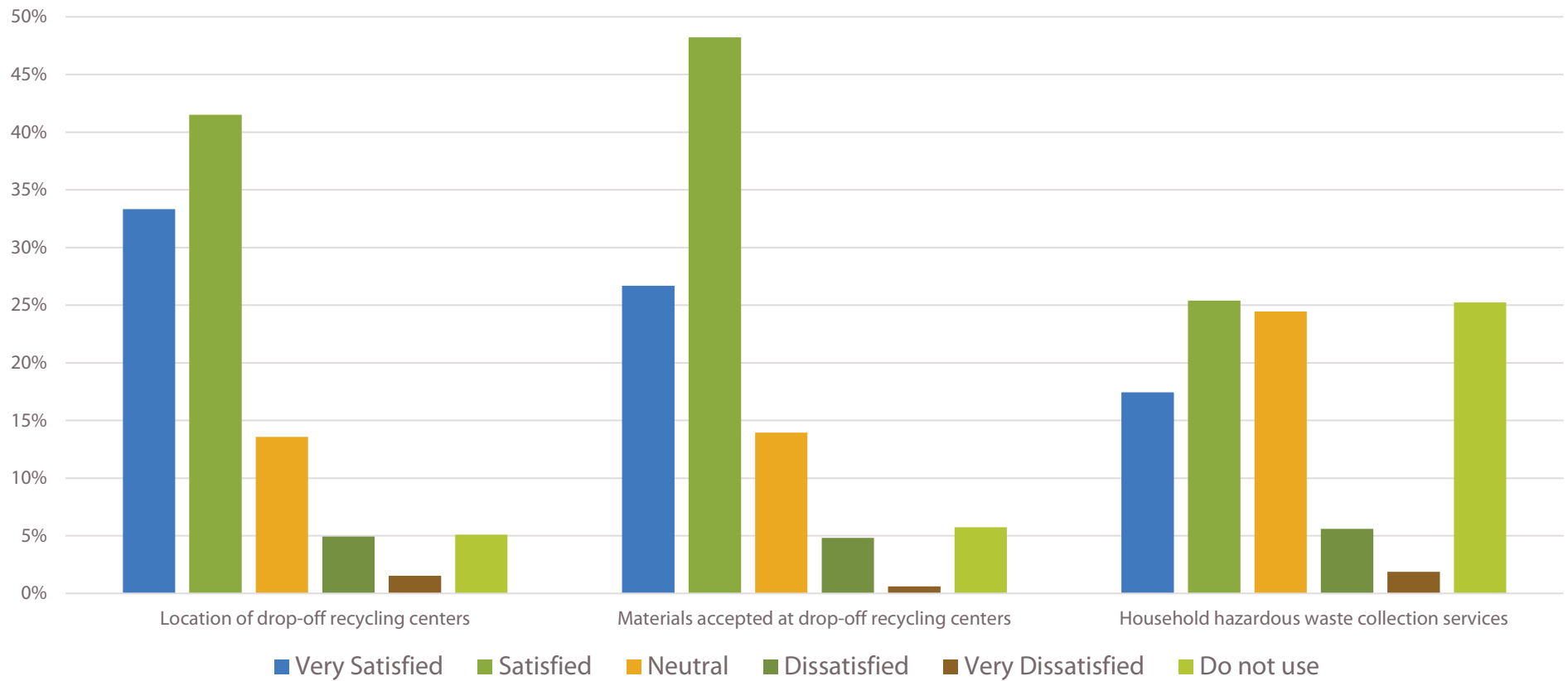
Question 1 (PRC Results): Please rank your familiarity with the following services/programs provided by Otter Tail County.

	Very Familiar (Used regularly)		Familiar (Used a number of times)		Aware of Program (Aware but have never used)		Unaware (unaware of the program/service offering)		Total
Drop Off Recycling	33.33%	3	33.33%	3	33.33%	3	0%	0	9
Transfer Stations	33.33%	3	66.66%	6	0%	0	0%	0	9
Hazardous Household Waste	11.11%	1	44.44%	4	44.44%	4	0%	0	9
Tours and Presentations	11.11%	1	11.11%	1	33.33%	3	44.44%	4	9
Waste Wizard App	0%	0	11.11%	1	33.33%	3	55.56%	5	9
Redemption	11.11%	1	0%	0	33.33%	3	55.56%	5	9
Commercial Cardboard Collection	55.56%	5	0%	0	22.22 %	2	22.22 %	2	9
Agricultural Plastics Collection	11.11%	1	11.11%	1	33.33%	3	44.44%	4	9
Boat Wrap Collection	0%	0	0%	0	44.44%	4	55.56%	5	9



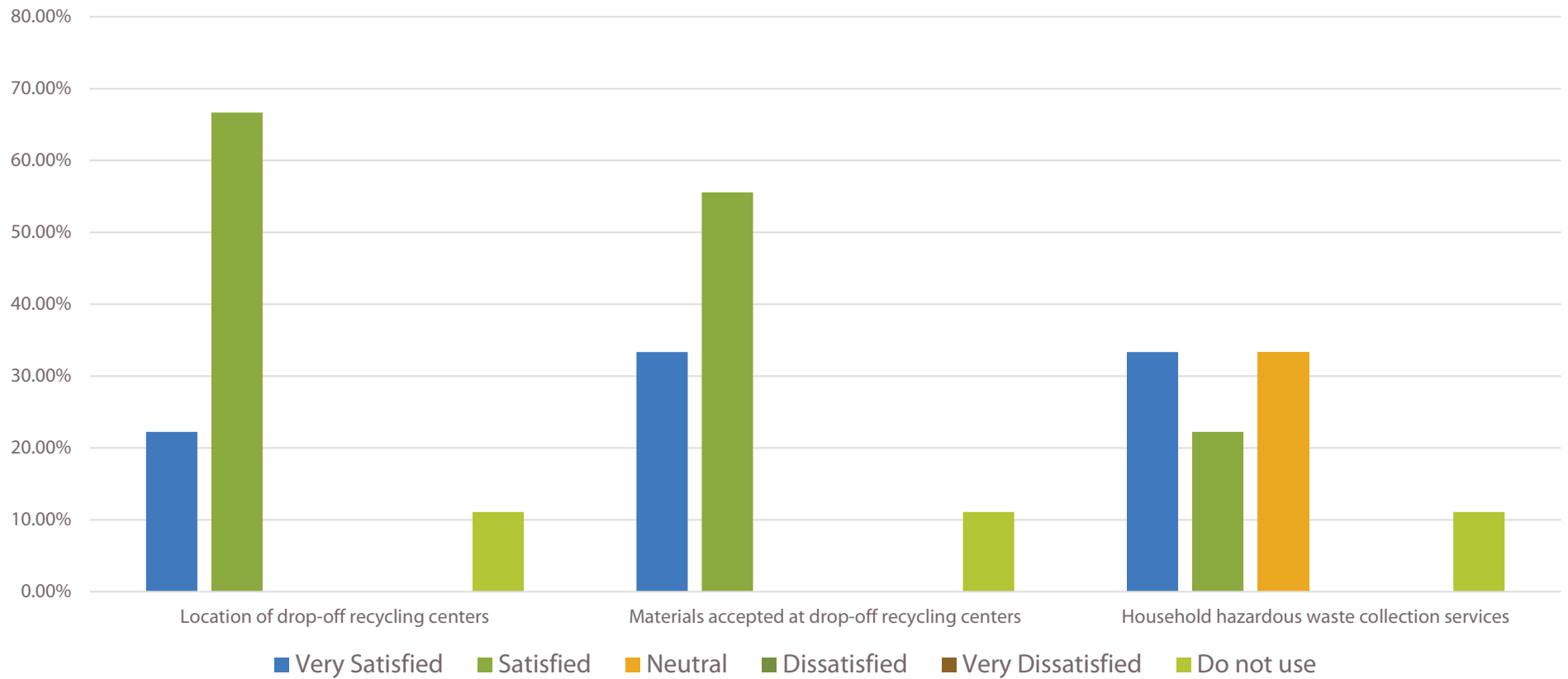
Question 2: Please rate your satisfaction with the availability of the following types of services in the community where you live:

	Very Satisfied		Satisfied		Neutral		Dissatisfied		Very Dissatisfied		Do not use	
Location of drop-off recycling centers	33.33%	216	41.51%	269	13.58%	88	4.94%	32	1.54%	10	5.09%	33
Materials accepted at drop-off recycling centers	26.67%	172	48.22%	311	13.95%	90	4.81%	31	0.62%	4	5.74%	37
Household hazardous waste collection services	17.45%	112	25.39%	163	24.45%	157	5.61%	36	1.87%	12	25.23%	162



Question 2 (PRC Results): Please rate your satisfaction with the availability of the following types of services in the community where you live:

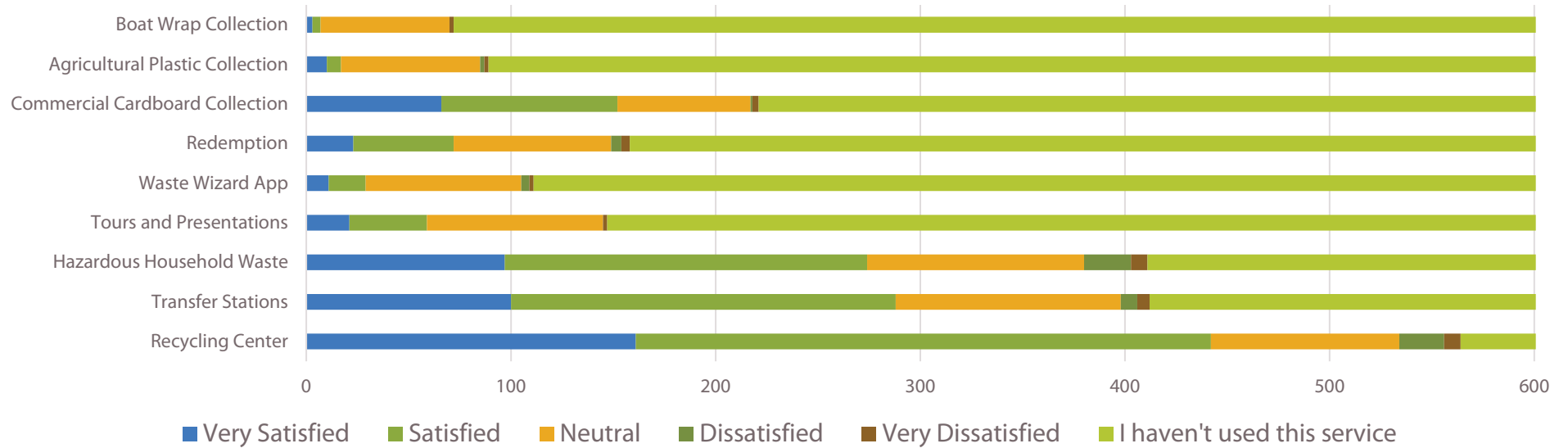
	Very Satisfied		Satisfied		Neutral		Dissatisfied		Very Dissatisfied		Do not use	
Location of drop-off recycling centers	22.22%	2	66.66%	6	0%	0	0%	0	0%	0	11.11%	1
Materials accepted at drop-off recycling centers	33.33%	3	55.56%	5	0%	0	0%	0	0%	0	11.11%	1
Household hazardous waste collection services	33.33%	3	22.22%	2	33.33%	3	0%	0	0%	0	11.11%	1



Question 3: How satisfied are you with Otter Tail County's Solid Waste Services?

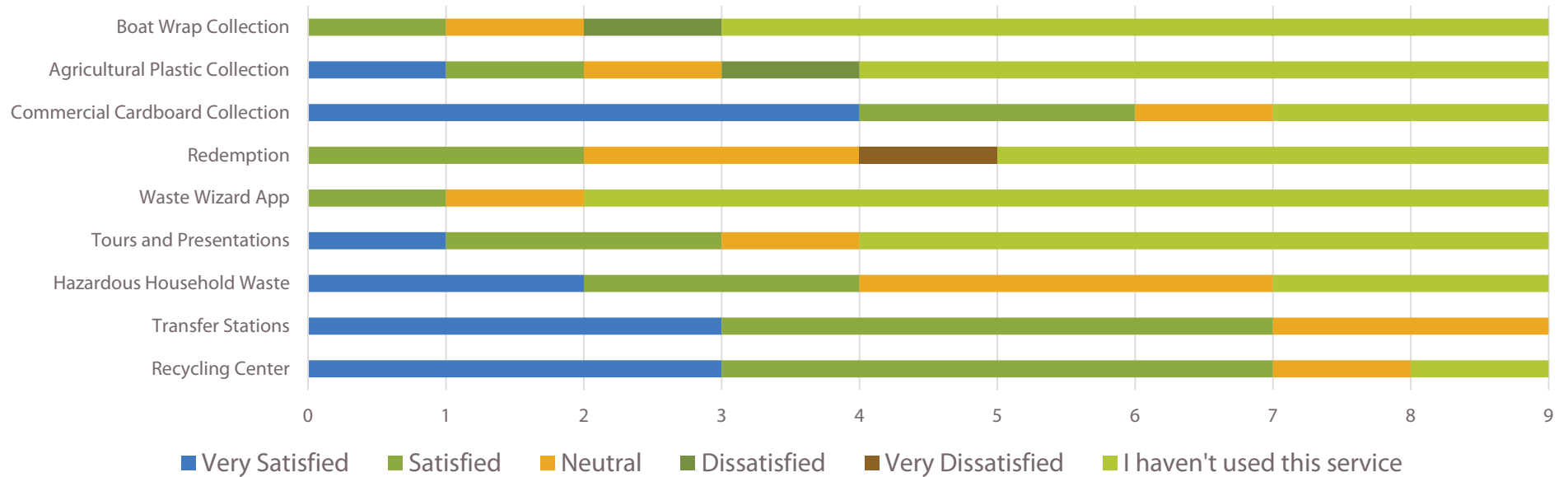
	Very Satisfied		Satisfied		Neutral		Dissatisfied		Very Dissatisfied		I haven't used this service	
Recycling Center	24.96%	161	43.57%	281	14.26%	92	3.41%	22	1.24%	8	12.56%	81
Transfer Stations	15.70%	100	29.51%	188	17.27%	110	1.26%	8	0.94%	6	35.32%	225
Hazardous Household Waste	15.16%	97	27.66%	177	16.56%	106	3.59%	23	1.25%	8	35.78%	229
Tours and Presentations	3.28%	21	5.94%	38	13.44%	86	0.00%	0	0.31%	2	77.03%	493
Waste Wizard App	1.71%	11	2.80%	18	11.84%	76	0.62%	4	0.31%	2	82.71%	531
Redemption	3.62%	23	7.72%	49	12.13%	77	0.79%	5	0.63%	4	75.12%	477

Commercial Cardboard Collection	10.28%	66	13.40%	86	10.12%	65	0.16%	1	0.47%	3	65.58%	421
Agricultural Plastic Collection	1.56%	10	1.09%	7	10.58%	68	0.31%	2	0.31%	2	86.16%	554
Boat Wrap Collection	0.47%	3	0.63%	4	9.86%	63	0.00%	0	0.31%	2	88.73%	567



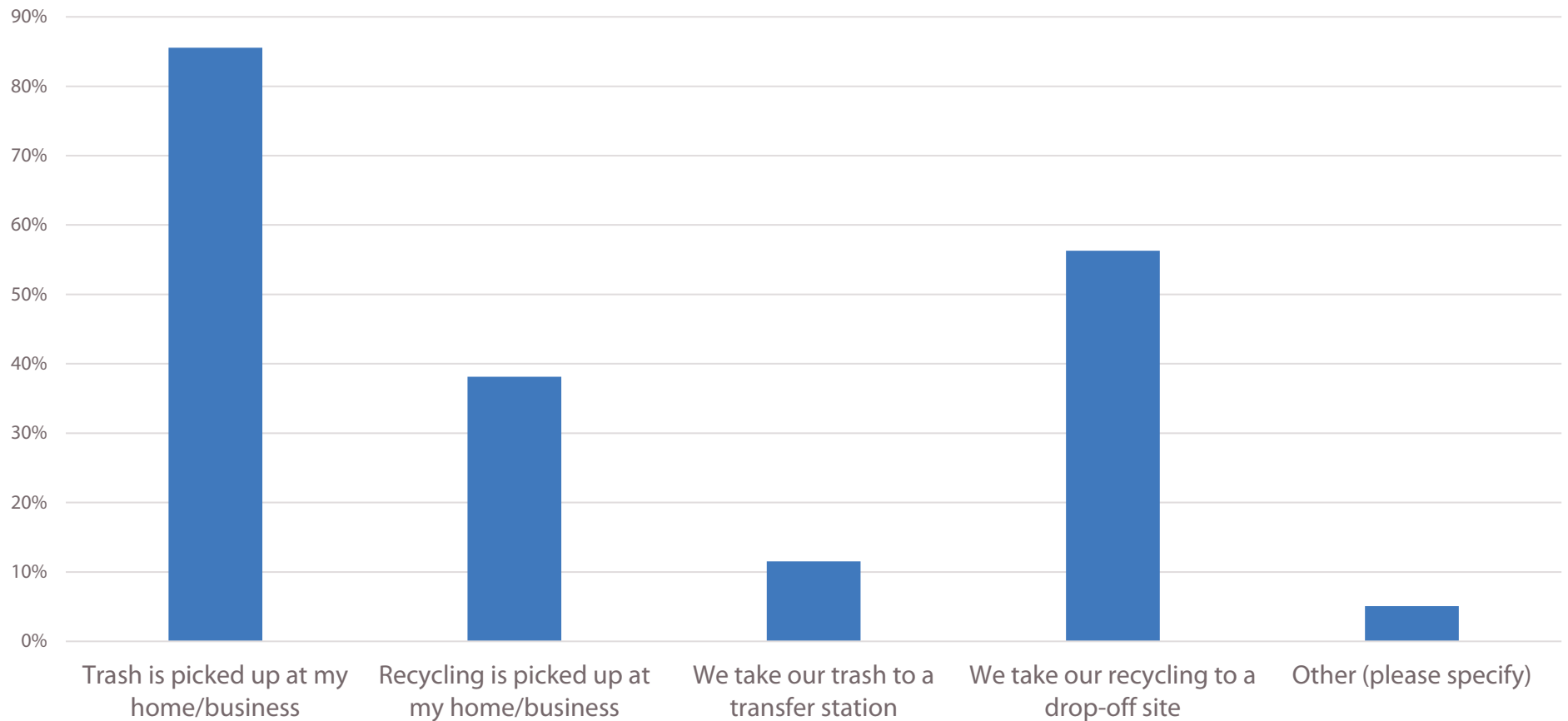
Question 3 (PRC Results): How satisfied are you with Otter Tail County's Solid Waste Services?

	Very Satisfied		Satisfied		Neutral		Dissatisfied		Very Dissatisfied		I haven't used this service	
Recycling Center	33.33%	3	44.44%	4	11.11%	1	0%	0	0%	0	11.11%	1
Transfer Stations	33.33%	3	44.44%	4	22.22%	2	0%	0	0%	0	0%	0
Hazardous Household Waste	22.22%	2	22.22%	2	33.33%	3	0%	0	0%	0	22.22%	2
Tours and Presentations	11.11%	1	22.22%	2	11.11%	1	0%	0	0%	0	55.56%	5
Waste Wizard App	0%	0	11.11%	1	11.11%	1	0%	0	0%	0	77.78%	7
Redemption	0%	0	22.22%	2	22.22%	2	0%	0	11.11%	1	44.44%	4
Commercial Cardboard Collection	44.44%	4	22.22%	2	11.11%	1	0%	0	0%	0	22.22%	2
Agricultural Plastic Collection	11.11%	1	11.11%	1	11.11%	1	11.11%	1	0%	0	55.56%	5
Boat Wrap Collection	0%	0	11.11%	1	11.11%	1	11.11%	1	0%	0	66.67%	6



Question 4: How do you currently manage solid waste produced within your household/business? (Select all that apply)

Answer Choices	Responses	Responses
Trash is picked up at my home/business	85.54%	556
Recycling is picked up at my home/business	38.15%	248
We take our trash to a transfer station	11.54%	75
We take our recycling to a drop-off site	56.31%	366
Other (please specify)	5.08%	33



"Other" Responses

We take our trash to the sanitary landfill

Annual Hazardous Waste Drop-off

We take our garbage back home. We are weekenders but always totes our garbage back to fargo and throw it in our garbage can

Donate aluminum cans to humane society

bring back to Mpls. for drop off

Would like curbside pickup recycling

Daughter takes to Aitkin for me since the recycling sites aren't closed and I don't have to sort

We have trash picked up, a commercial cardboard bin at our business but no availability for glass and plastic recycling unless we go dump at Larry's which is not feasible

I want my garbage hauler to pick up my recycling.

I would love home recycling pick up

commercial dumpster located in Country Manor park

Take trash to family dumpster

Large items drop off and pay a fee.

Richville doesn't have much to offer. We pay Steve's sanitation, for services. The county doesn't do anything for us. Would be nice to have brush pickup since we pay for waste removal in your taxes \$75 (a year); what is that charge for???

try to use the cans we pay for but the city sometimes skips us or on;y takes half

We take our trash to the Battle Lake dump. Our recycling piles up as can't drop off mixed recycling anywhere. We also separate compost -- it ends up in the landfill if we don't take it to composting collection in Minneapolis. We have a small composting bin here.

Compost

We compost a significant amount of our household waste.

we compost and are now taking bones to a green recycling bin in Alex.

I used to redeem pop cans in pelican rapids, but it closed. i wish it would reopen. i have taken pop cans to detroit lakes and redeemed them. pelican rapids was very convenient.

The recycle bins in town are filled the day they are emptied so we have to haul all recycles to Fergus. It is pathetic!

Compost

We're currently building and we had a dumpster service for a bit but since that is gone, we bring our garbage back to ND with us. We're planning to use the transfer station for the first time in the next week though.

Pay fergus falls city dump fees

We try to take our recycling in, but often times we end up just throwing it away. Wish we had recycling pick up where we live. We're on Riverside Drive off of 111.

I compost. Also I take some yard waste to the landfill and burn some in my fire pit.

Depending on how much recycling we have, it either gets picked up or dropped off

I have taken our recycling to a Becker County drop off site near my work since the other closest OTC location is in Perham.

We place as much as we can in recycling, but if the can is full before pickup, we place what's left in the regular trash bin.

Aluminum to Humane Society

Hauling recycling into town is too much of a pain.

Recycling bins used if I have an above normal amount at home that won't fit in the can.

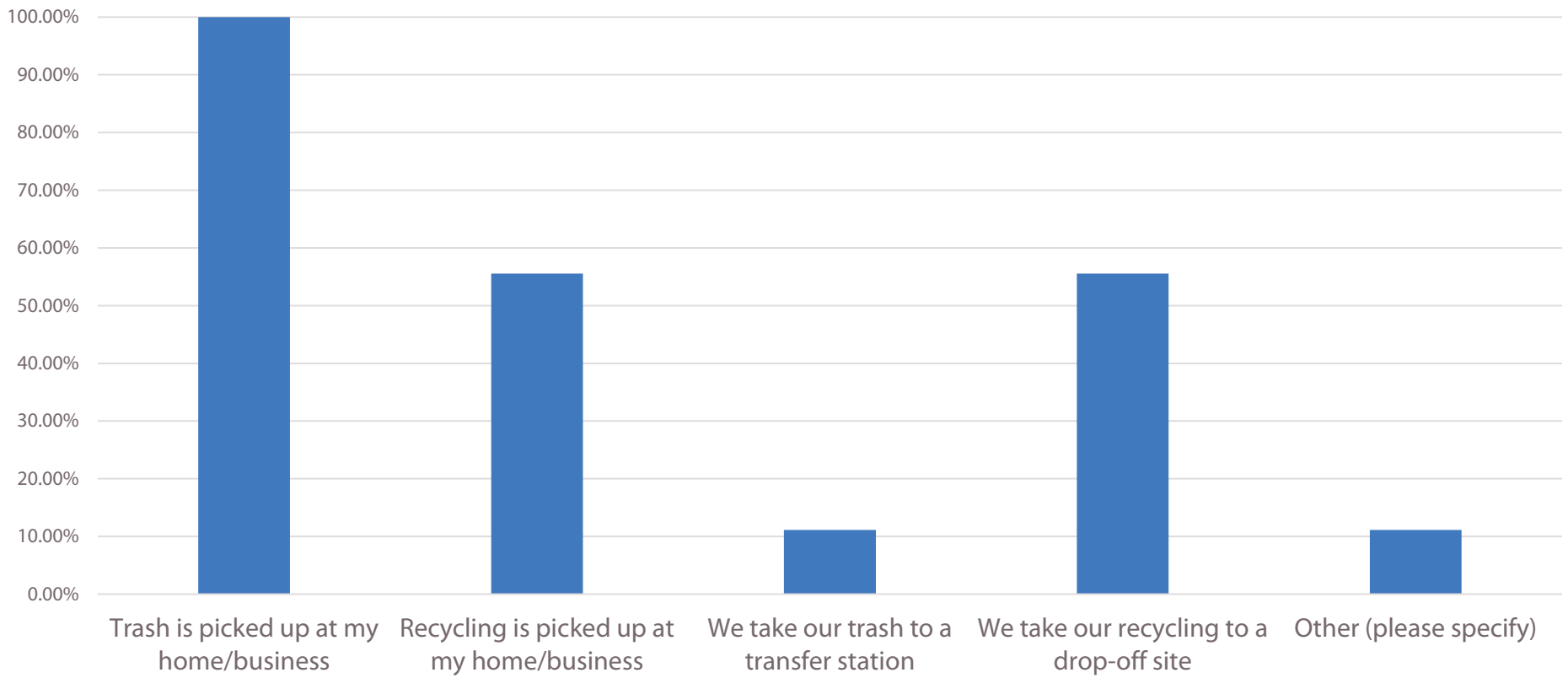
We compost what we can

**Question 4 (PRC Results): How do you currently manage solid waste produced within your household/business?
(Select all that apply)**

Answer Choices		Responses
Trash is picked up at my home/business	100%	9
Recycling is picked up at my home/business	55.56%	5
We take our trash to a transfer station	11.11%	1
We take our recycling to a drop-off site	55.56%	5
Other (please specify)	11.11%	1

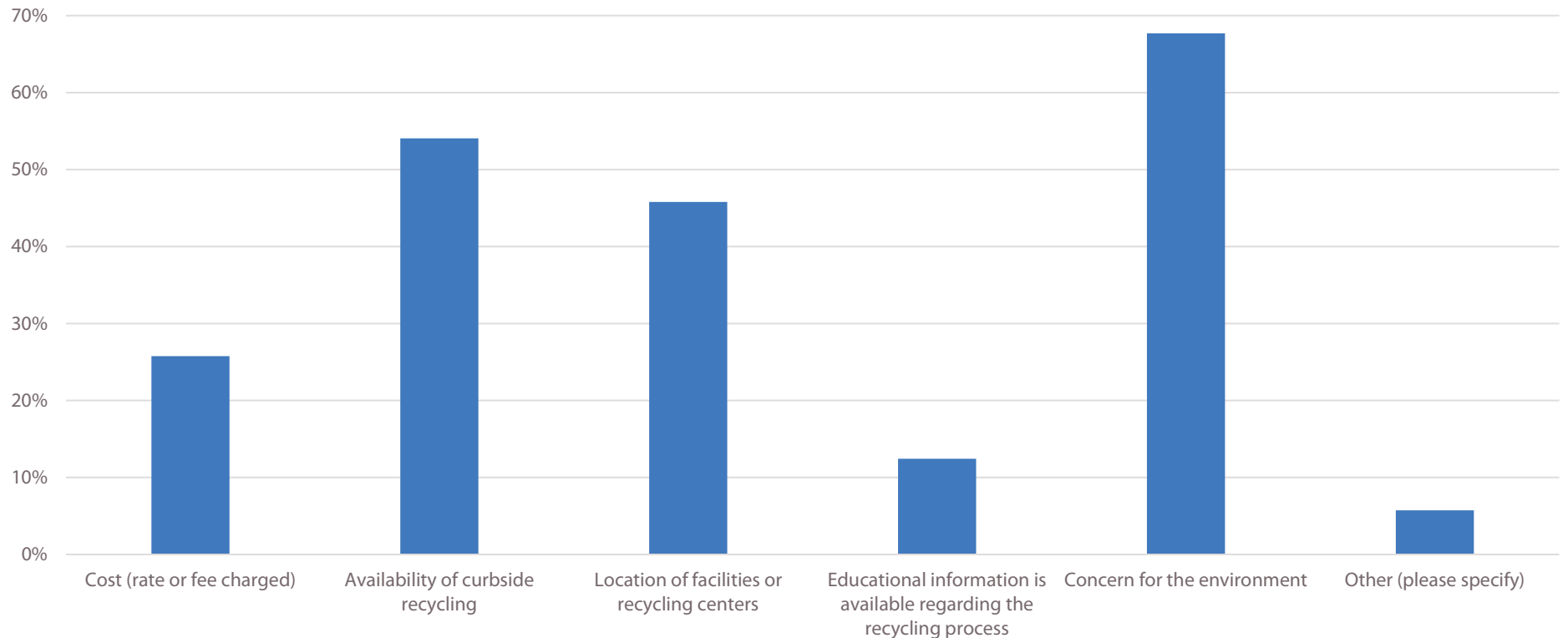
“Other” Responses

Our facility uses a combination of all of these including haulers for hazardous/universal waste



Question 5: In your opinion, which of the following influence your participation in a recycling program? (Select all that apply)

Answer Choices	Responses	
Cost (rate or fee charged)	25.78%	166
Availability of curbside recycling	54.04%	348
Location of facilities or recycling centers	45.81%	295
Educational information is available regarding the recycling process	12.42%	80
Concern for the environment	67.70%	436
Other (please specify)	5.75%	37



"Other" Responses

My cost of trash pick up is based on amount. Recycling greatly reduces the amount and there for the cost.

Single sort would be nice for people not within city limits

Cost effective to reduce waste

Saves about 30% to 40% waste going into our trash pickup each week!

I think OTC needs to expand pick up services. I live on wall lake and believe lake residents as a whole would participate

Don't care

Due to limited space in trash collection container I recycle to reduce the amount in the trash can

Processes advertised more so we know about their processes and who can use them.

Its the right thing to do

Keeps the garbage bin a smaller size so cost savings there too

We lived in town and had no sort cans and loved it. When we moved to country we kept recycling but miss no sort. We still bring to town to recycling center.

Having to separate recyclables

I know we would recycle more if we had single-sort bins picked up out here in the Perham countryside the way they are picked up in Perham city limits.

Restrictions on what can and can't be recycled

Single sort drop off

My wife makes me.

able to drop mixed (not sorted) recycling would be amazing

Perceived environmental concern and economics at the county (sorting etc.) level.

Convenience

Reducing our carbon footprint.

Be nice to have a container for all recycling to go into & be picked up weekly like our trash is at our home in battle lake I know we would recycle much more

Cell

Lack of curbside recycling. If we can't recycle curbside it would be nice for there to be a mix drop off option at the drop off sites.

No sort recycle

Hours of drop off site. For items not picked up hours are not easy for me to drop off household hazardous waste.

Would love to see recycling picked up in rural areas!!

I live outside of city limits. Recycling pick up is not available

We ship to China and they dump in ocean. Recycling material should be bought from the homeowner.

Not having to sort it

acceptability of materials like loose plastic film or plastic bags - would help if they can be collected at drop off sites

Accessibility and understanding of WHY recycling is important both environmentally, but also economically.

The postings on Facebook are very informative and helpful. Good way to educate the public. I would like to see more, regarding all aspects of recycling.

I wish it could all be dumped together for country people

Curbside / single sort pickup in rural areas would be nice

Would LOVE to see curbside recycling available in the rural area as we don't have space to store so many types of materials for recycling

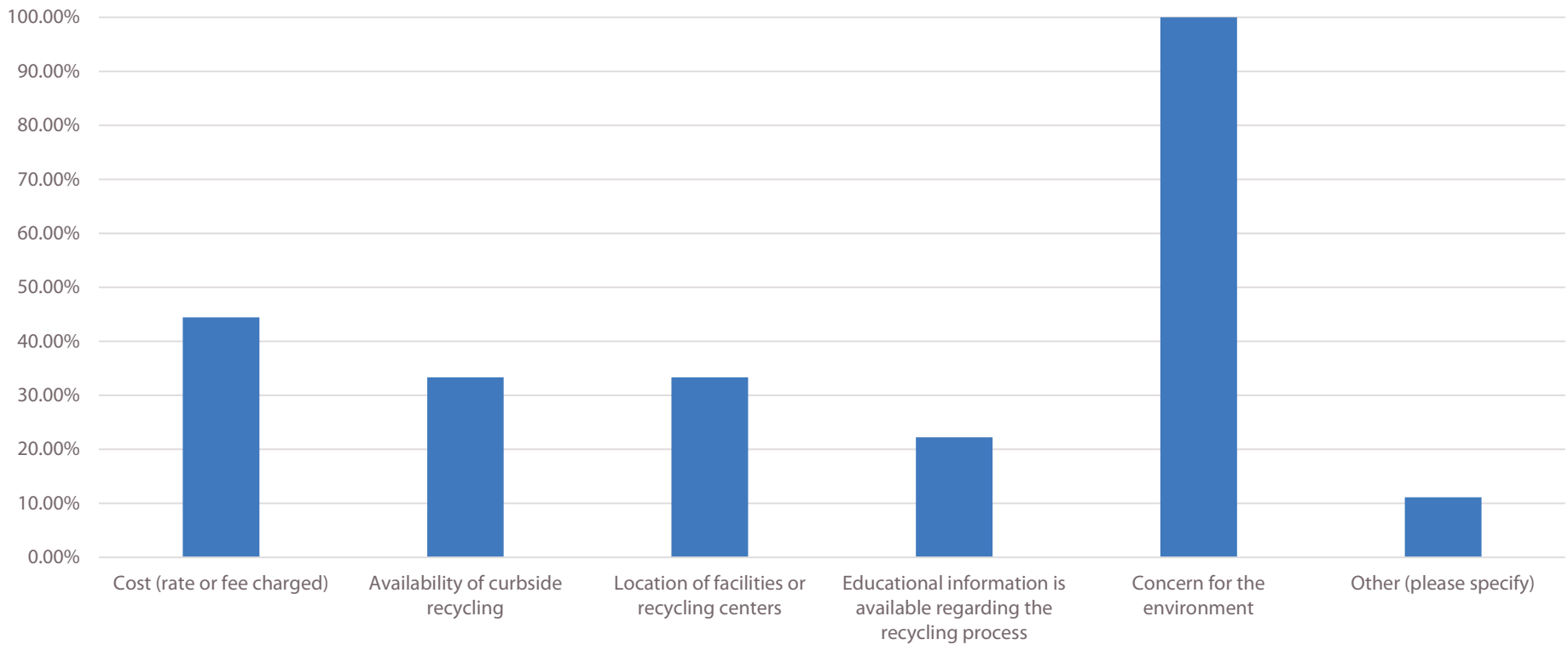
I wish the county had recycling bins like Fergus.

I just want to have less garbage in the dumpster.

Question 5 (PRC Results): In your opinion, which of the following influence your participation in a recycling program? (Select all that apply)

Answer Choices	Percentage	Responses
Cost (rate or fee charged)	44.44%	4
Availability of curbside recycling	33.33%	3
Location of facilities or recycling centers	33.33%	3
Educational information is available regarding the recycling process	22.22%	2
Concern for the environment	100%	9
Other (please specify)	11.11%	1

Comment: Finding vendors to take the specific materials we generate



Question 6: What types of materials do you regularly recycle or would like to recycle?

	Currently Recycle/Compost		Don't recycle but would like to		Not interested in recycling or not applicable	
Paper and Cardboard	91.36%	592	5.71%	37	2.93%	19
Metals	76.37%	488	15.49%	99	8.14%	52
Glass	89.04%	577	7.87%	51	3.09%	20
Loose Plastic	76.91%	493	18.41%	118	4.68%	30
Compost Food Scraps at Home	24.80%	156	35.77%	225	39.43%	248
Scrap Metal	46.74%	294	27.03%	170	26.23%	165
Used Oil/Oil Filters	31.15%	195	30.03%	188	38.82%	243
Plastics #1-7	85.67%	544	11.34%	72	2.99%	19

Plastic Bags (by bringing back to a participating retail store)

43.26%

276

36.68%

234

20.06%

128

E-waste/Electronics

34.17%

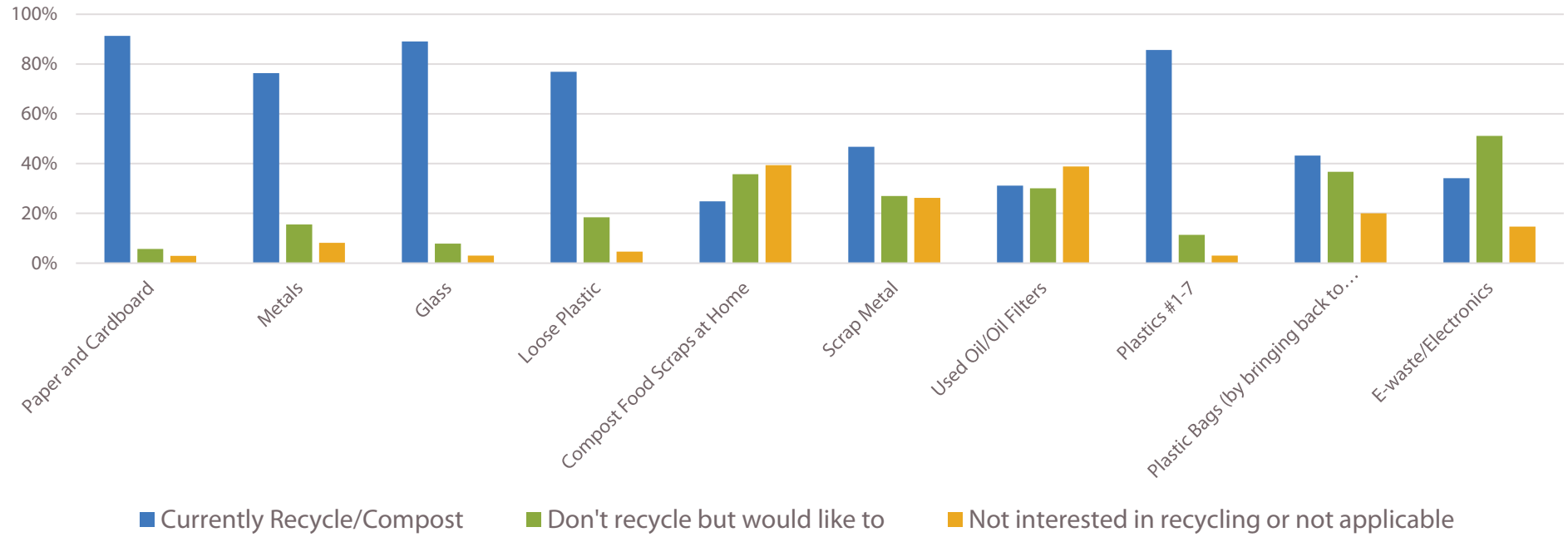
217

51.18%

325

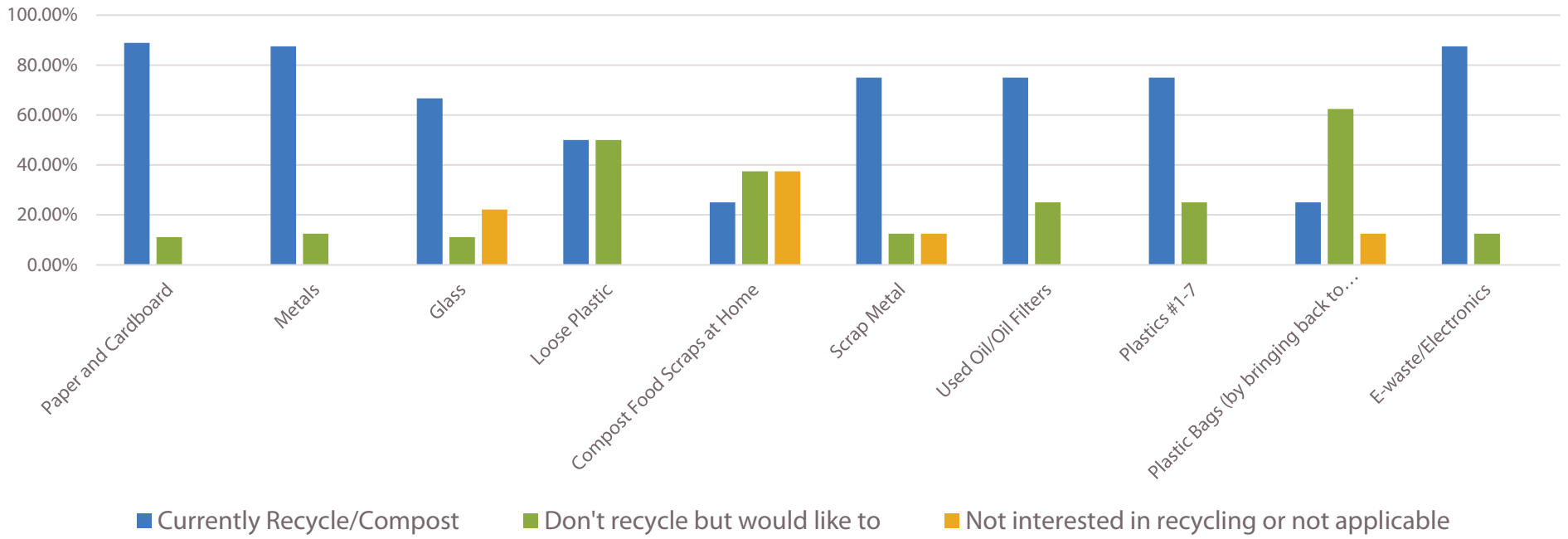
14.65%

93



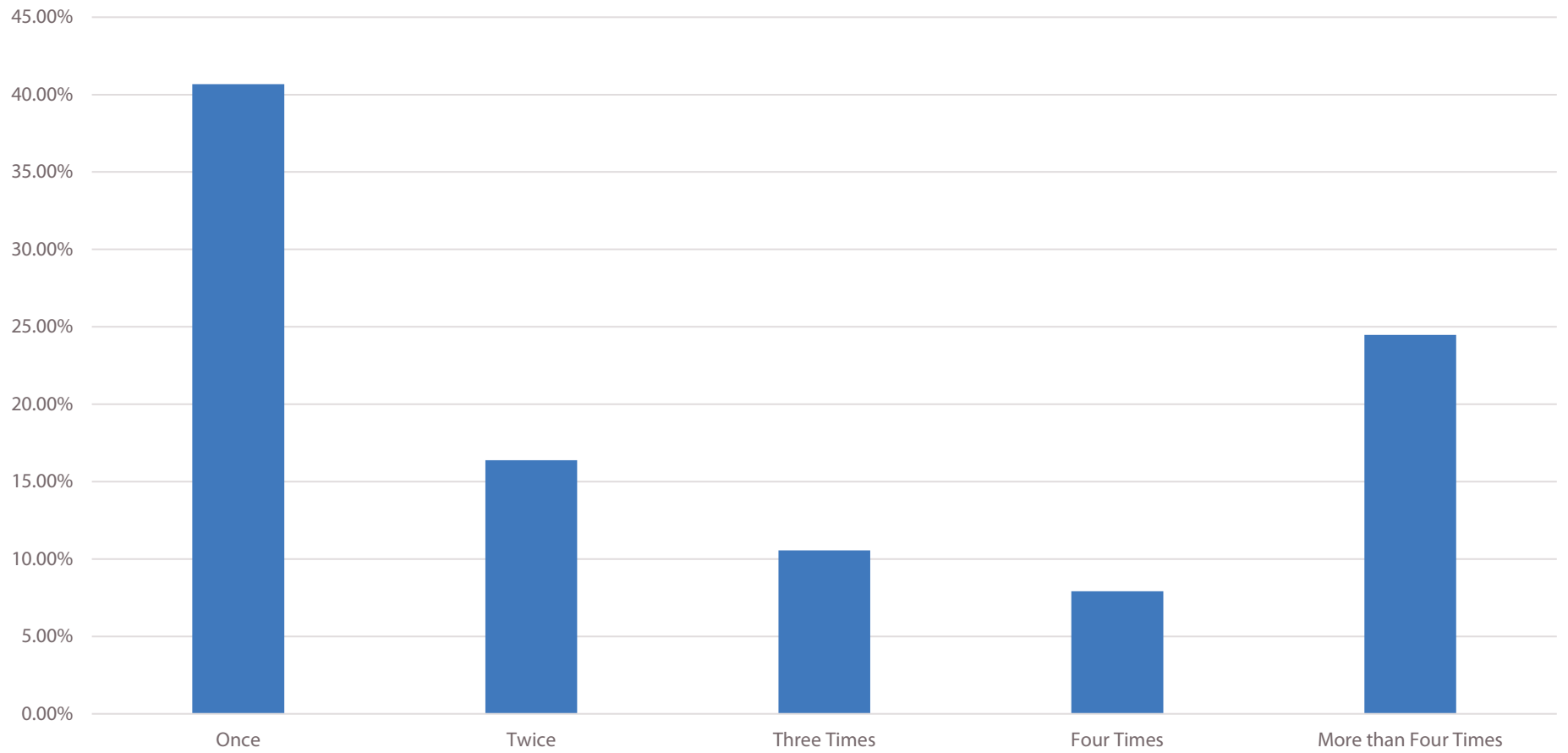
Question 6 (PRC Results): What types of materials do you regularly recycle or would like to recycle?

	Currently Recycle/Compost		Don't recycle but would like to		Not interested in recycling or not applicable	
Paper and Cardboard	88.89%	8	11.11%	1	0%	0
Metals	87.50%	7	12.5%	1	0%	0
Glass	66.67%	6	11.11%	1	22.22%	2
Loose Plastic	50 %	4	50 %	4	0%	0
Compost Food Scraps at Home	25%	2	37.5%	3	37.5%	3
Scrap Metal	75%	6	12.5%	1	12.5%	1
Used Oil/Oil Filters	75%	6	25%	2	0%	0
Plastics #1-7	75%	6	25%	2	0%	0
Plastic Bags (by bringing back to a participating retail store)	25%	2	62.5%	5	12.5%	1
E-waste/Electronics	87.50%	7	12.5%	1	0%	0



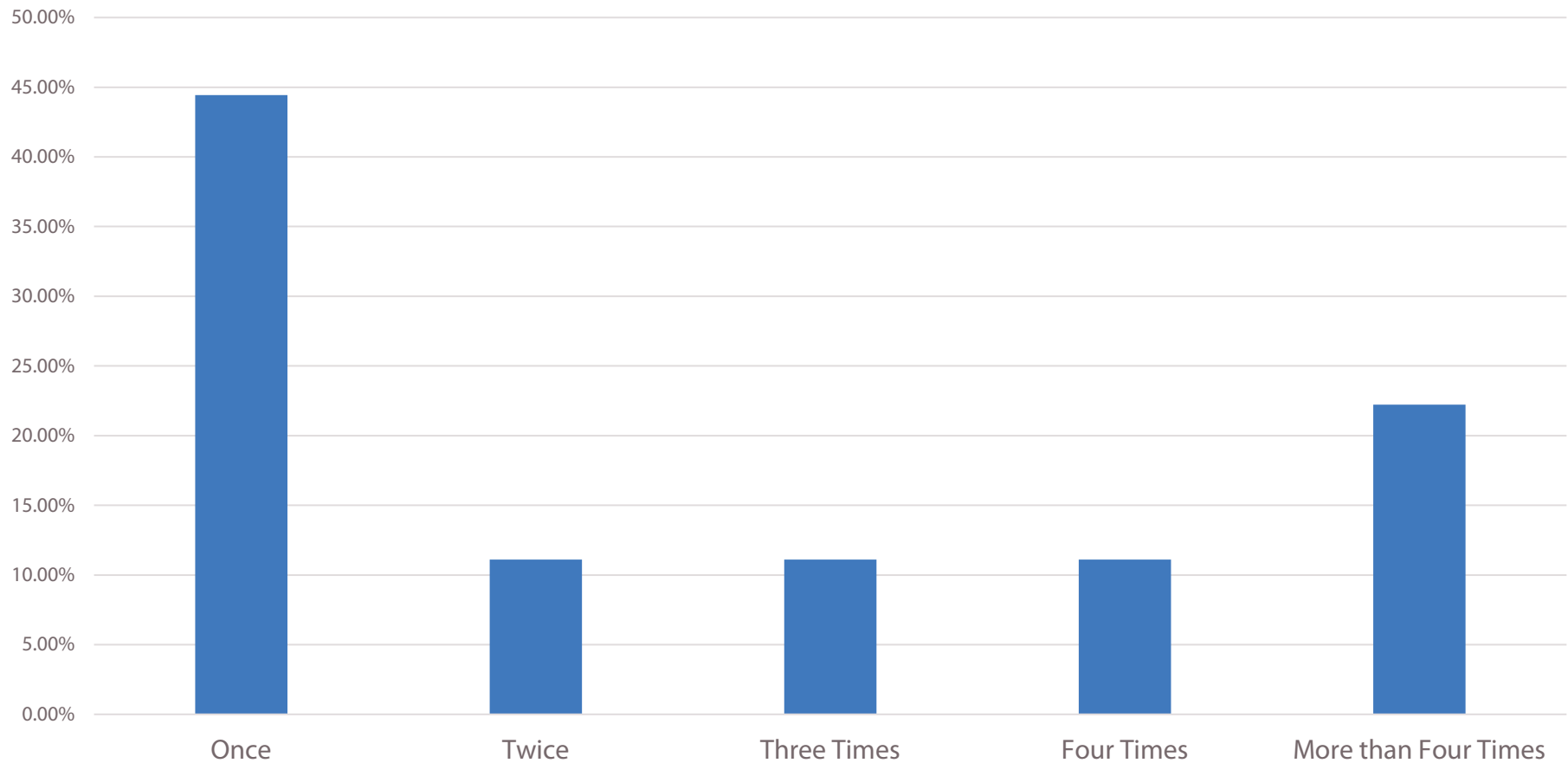
Question 7: Transfer Stations - How many times in the past year did you or someone from your household take trash or other waste items to a transfer station?

Answer Choices		Responses
Once	40.68%	216
Twice	16.38%	87
Three Times	10.55%	56
Four Times	7.91%	42
More than Four Times	24.48%	130



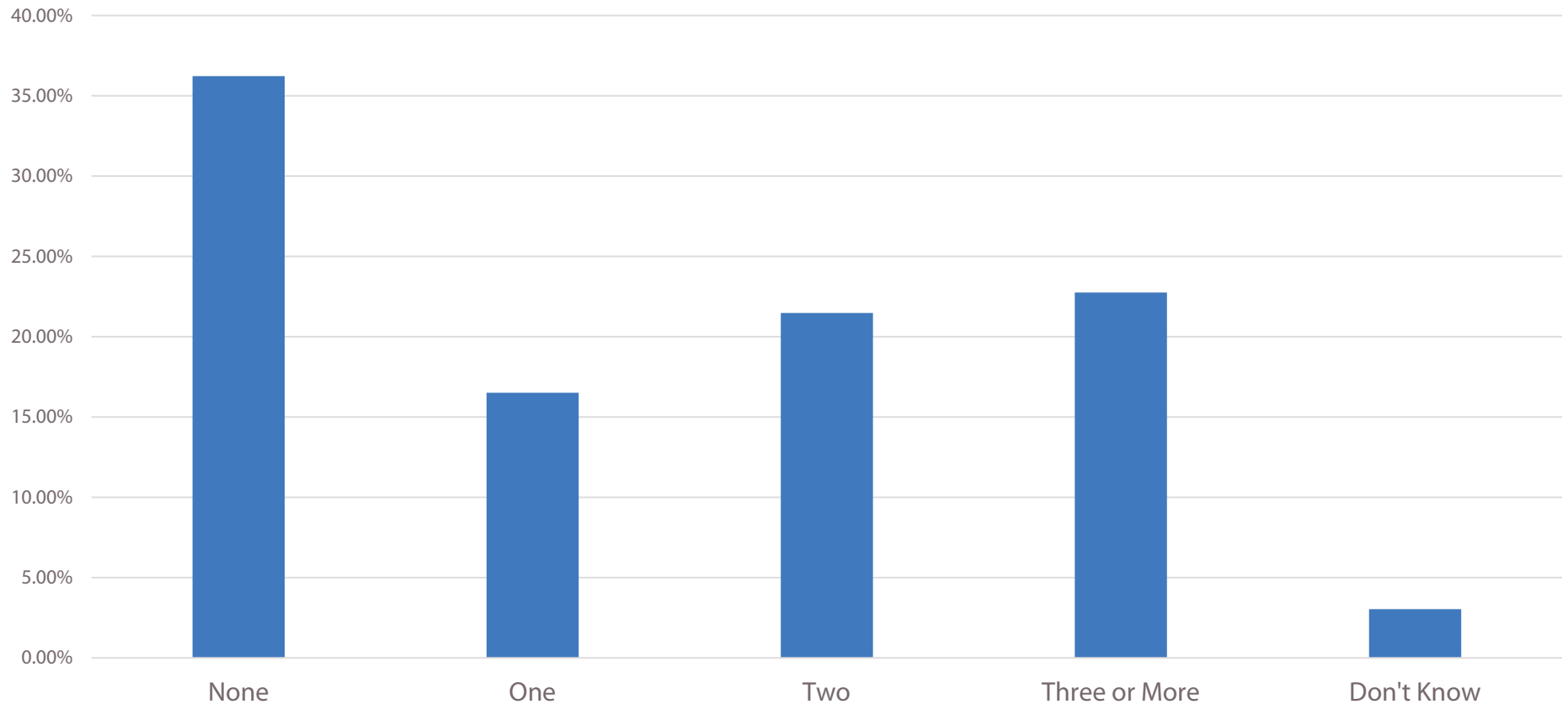
Question 7 (PRC Results): Transfer Stations - How many times in the past year did you or someone from your household take trash or other waste items to a transfer station?

Answer Choices	Responses
Once	44.44%
Twice	11.11%
Three Times	11.11%
Four Times	11.11%
More than Four Times	22.22%



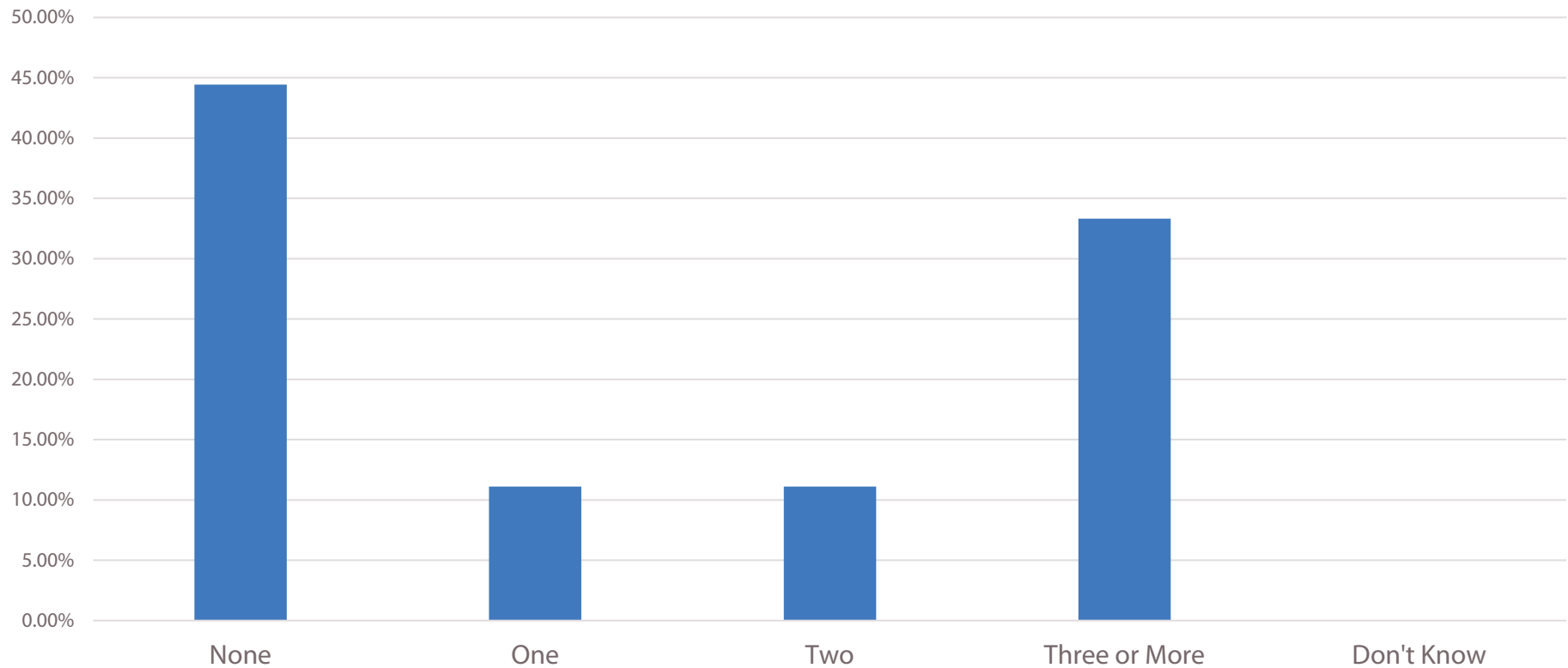
Question 8: Electronics - Do you have computers or televisions that you are no longer using and have in storage? if so, how many?

Answer Choices	Responses	
None	36.22%	226
One	16.51%	103
Two	21.47%	134
Three or More	22.76%	142
Don't Know	3.04%	19



Question 8 (PRC Results): Electronics - Do you have computers or televisions that you are no longer using and have in storage? if so, how many?

Answer Choices		Responses
None	44.44%	4
One	11.11%	1
Two	11.11%	1
Three or More	33.33%	3
Don't Know	0%	0



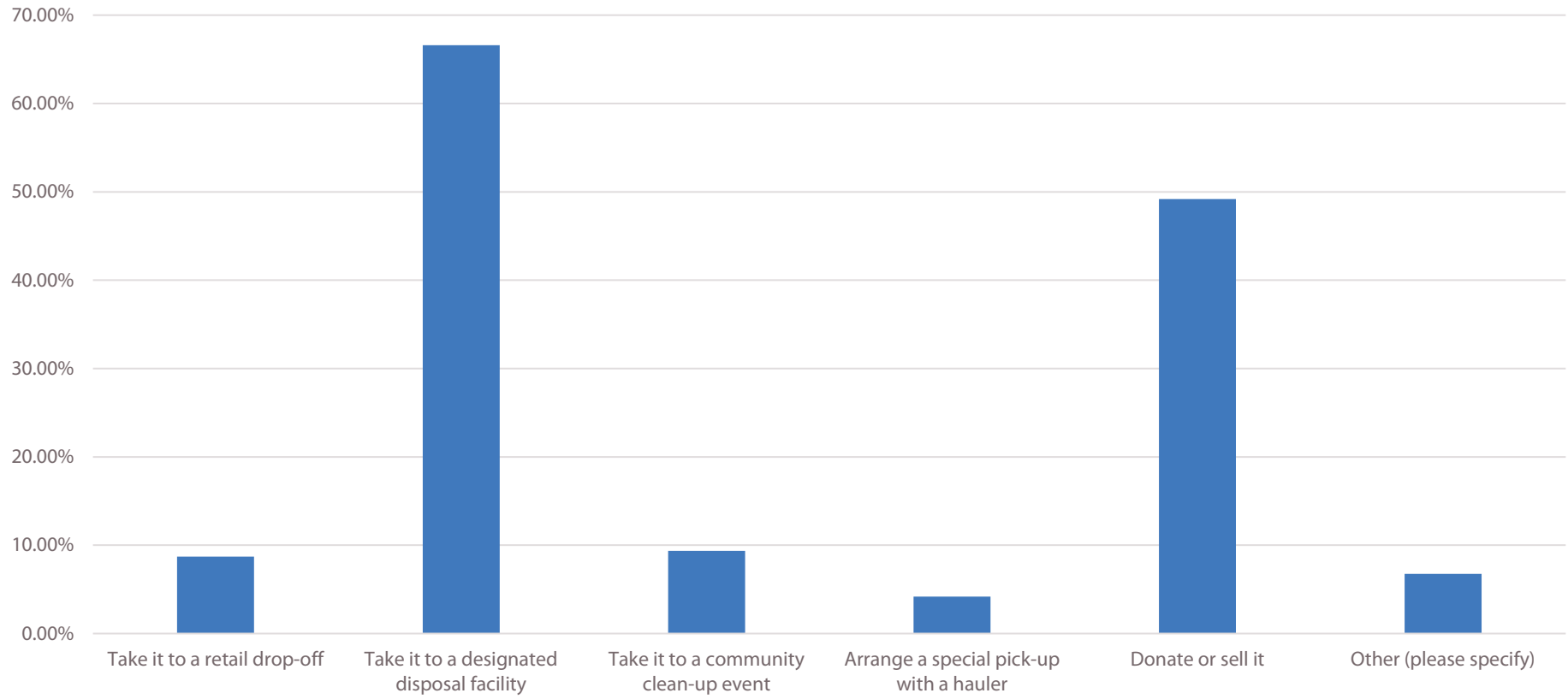
Question 9: Bulky waste - How do you generally dispose of large items such as furniture, mattresses, or construction materials that are too large for your garbage cart? (select all that apply)

Answer Choices	Percentage	Responses
Take it to a retail drop-off	8.71%	54
Take it to a designated disposal facility	66.61%	413
Take it to a community clean-up event	9.35%	58
Arrange a special pick-up with a hauler	4.19%	26
Donate or sell it	49.19%	305

Other (please specify)

6.77%

42



"Other" Responses

Burn

church rummage sales

Family land

Put it on the curb with a free sign and hope it disappears. It usually does.

Land fill

Still sitting around, we dont know what to do with the.

Burn

Burn

Burn it

U

Burn

Burn

burning

Bonfire

Take it to the transfer station

Picked up by maintenance in our building and pay a landfill fee.

Relative takes it

New York Mills ottertail cry landfill

Burn probably illegally

It's sits in my garage until I can get rid of it.

We chop it up in disposing we put in trash pickup or burn.

smash it up til it fits in the trash can or toss it out on road

sitting here

Battle Lake dump

Burn it

Take to dump

Landfill

Have not had any

Burn

Save it for a free pick up

curb

Sell or give away on FB

Landfill

Store

Have a friend haul it for me to his dumpster

Don't have any

Curb free pick up on a buy/sell site

DUMP or free on swap & shop sites

we need a community cleanup event!!!!

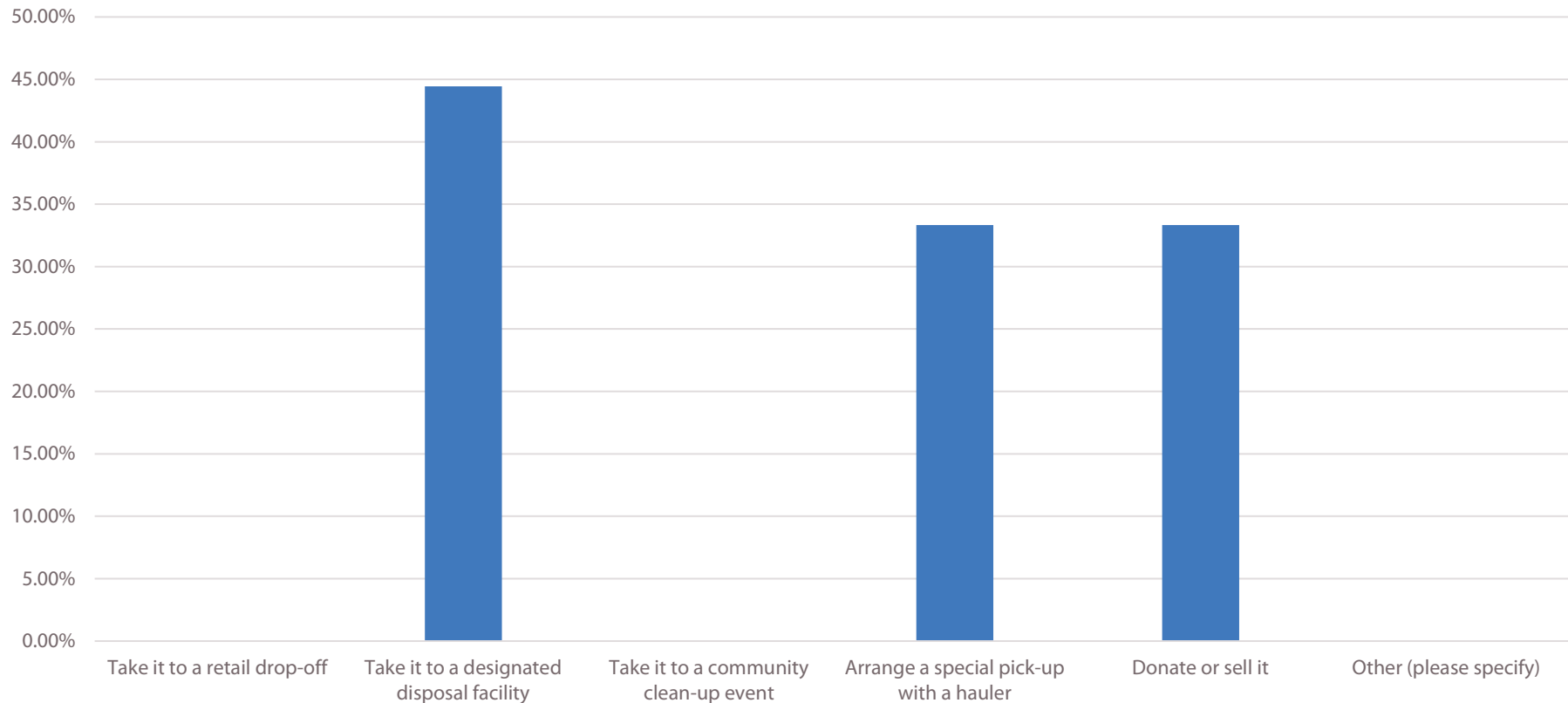
Dumpster

Take to transfer station.

Burn

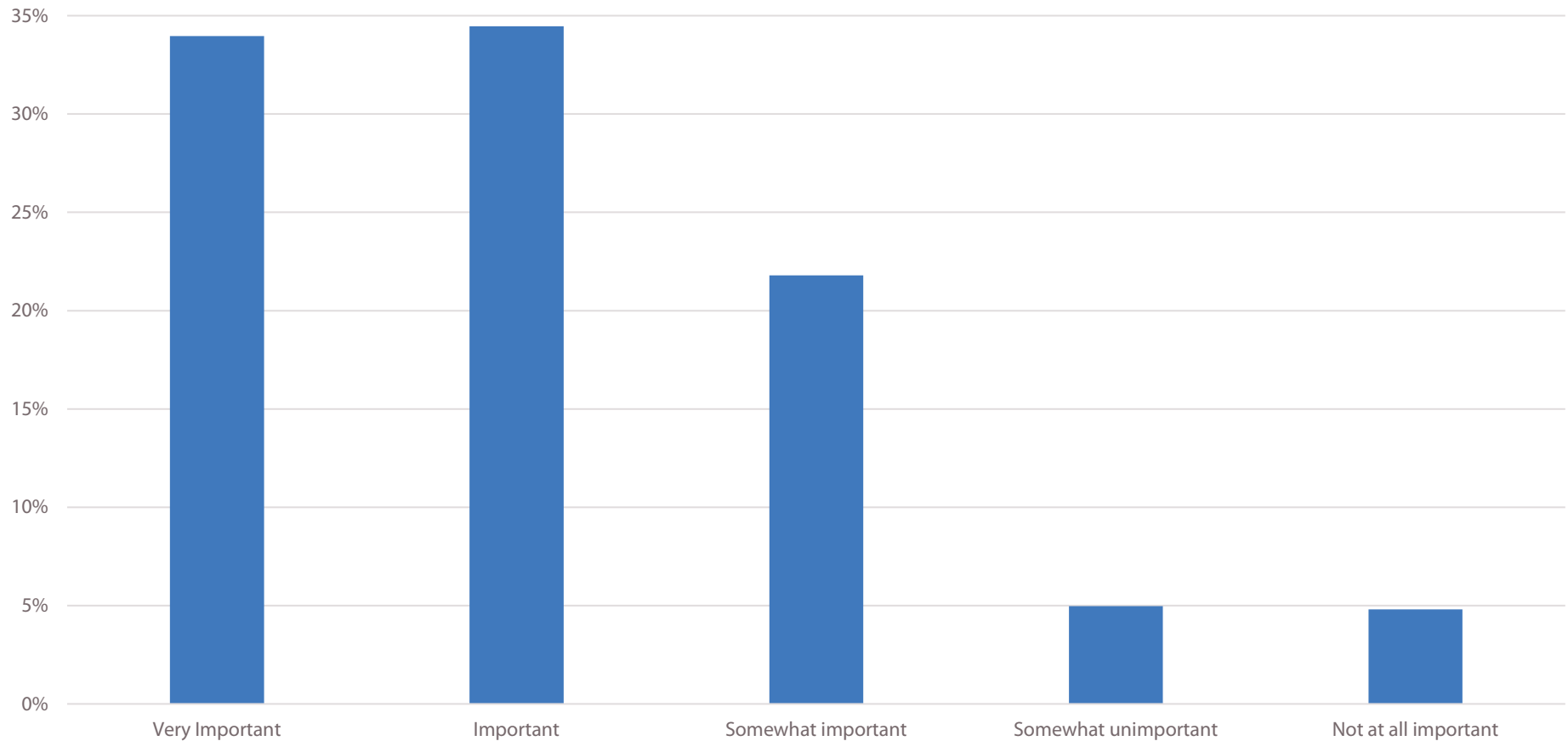
Question 9 (PRC Results): Bulky waste - How do you generally dispose of large items such as furniture, mattresses, or construction materials that are too large for your garbage cart? (select all that apply)

Answer Choices	Responses	Responses
Take it to a retail drop-off	0%	0
Take it to a designated disposal facility	44.44%	4
Take it to a community clean-up event	0%	0
Arrange a special pick-up with a hauler	33.33%	3
Donate or sell it	33.33%	3
Other (please specify)	0%	0



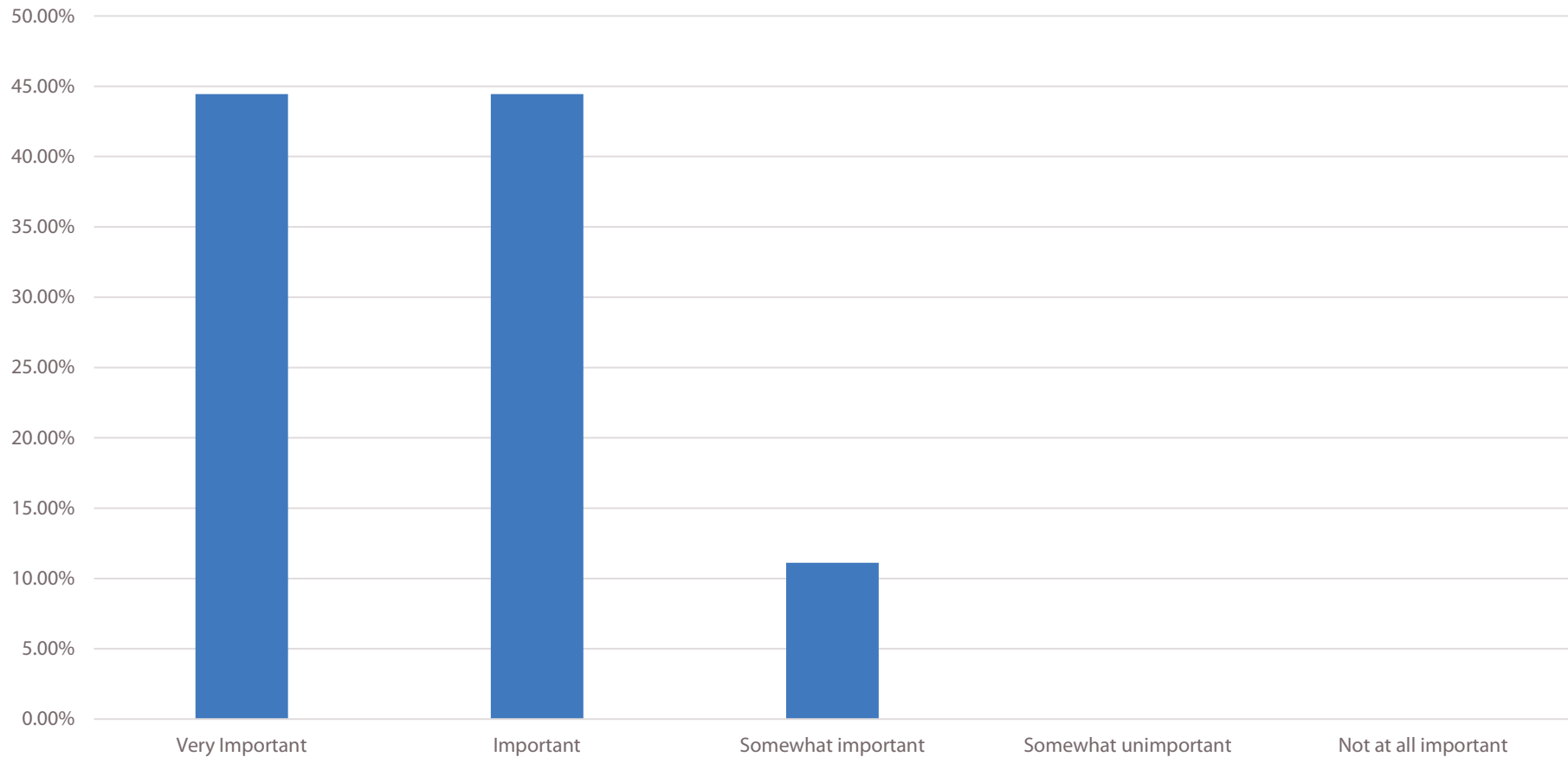
Question 10: Planning - How important is it to you that Otter Tail County sets measurable goals and timelines to work towards processing on a path toward zero landfilling?

Answer Choices	Responses
Very Important	33.97% 212
Important	34.46% 215
Somewhat important	21.79% 136
Somewhat unimportant	4.97% 31
Not at all important	4.81% 30



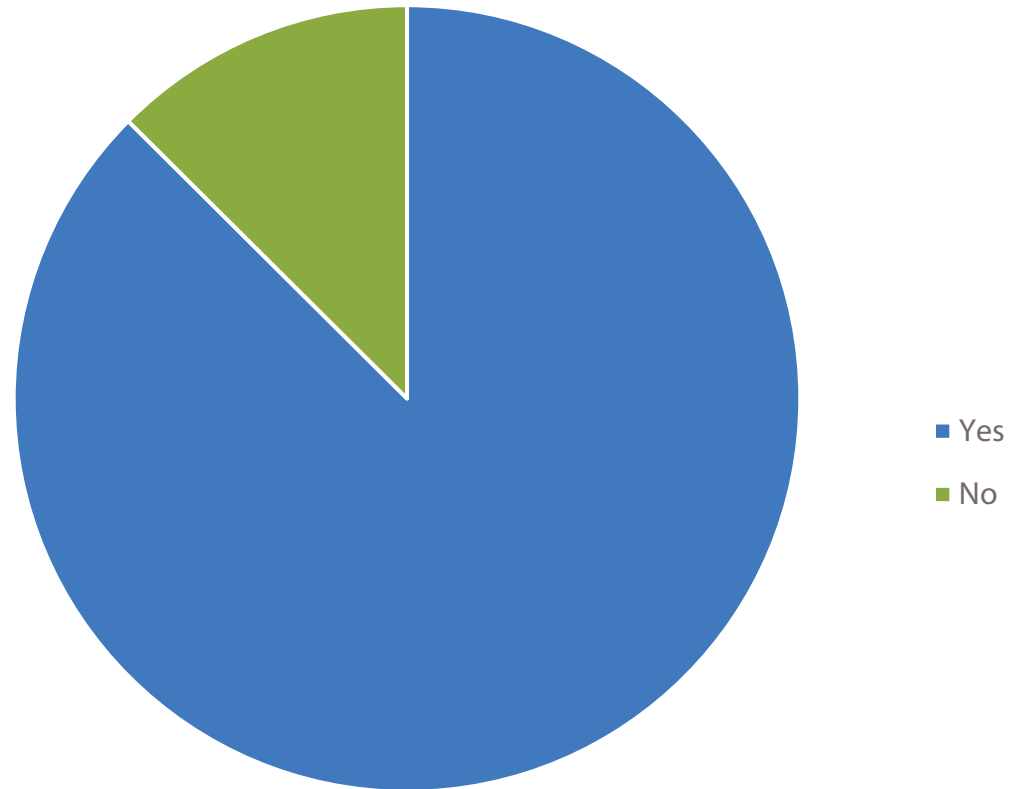
Question 10 (PRC Results): Planning - How important is it to you that Otter Tail County sets measurable goals and timelines to work towards processing on a path toward zero landfilling?

Answer Choices	Responses	Responses
Very Important	44.44%	4
Important	44.44%	4
Somewhat important	11.11%	1
0	0%	0
Not at all important	0%	0



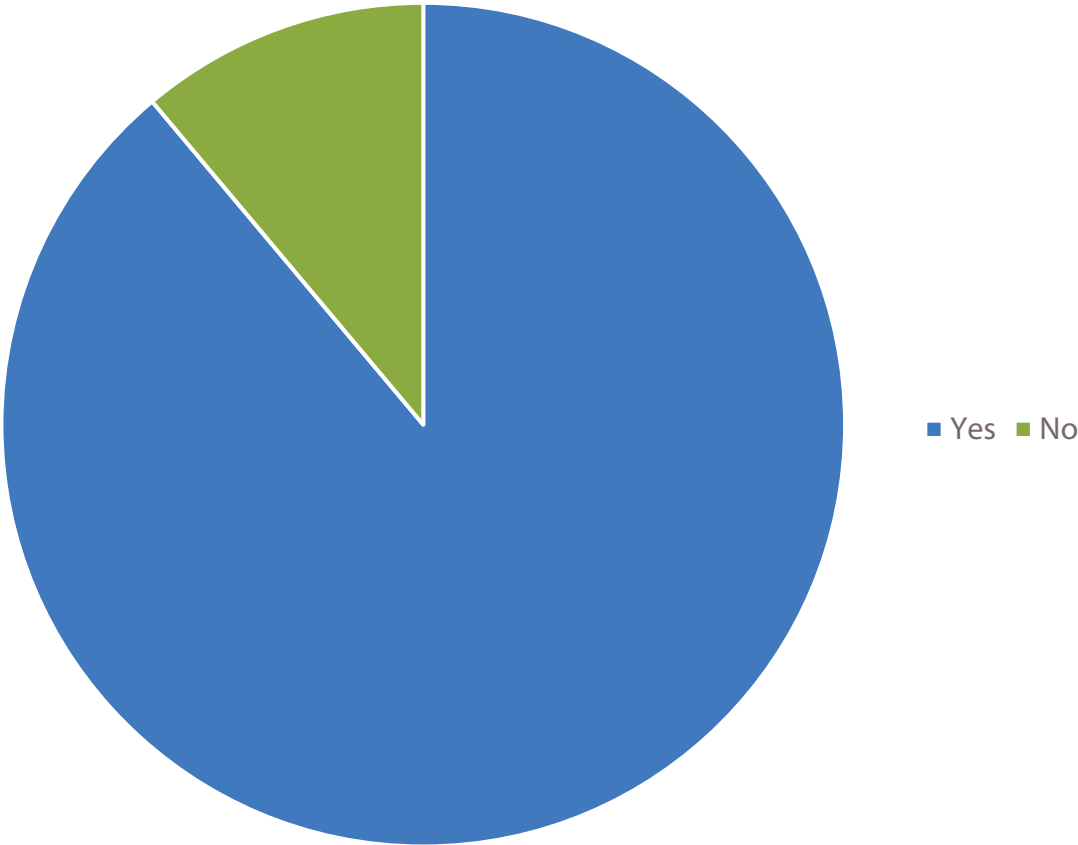
Question 11: Reuse/Reduction - Would you support a zero landfilling goal such as Otter Tail County reducing the amount of trash going to the landfill by 1% each year?

Answer Choices	Responses
Yes	87.46% 537
No	12.54% 77



Question 11 (PRC Results): Reuse/Reduction - Would you support a zero landfilling goal such as Otter Tail County reducing the amount of trash going to the landfill by 1% each year?

Answer Choices	Responses
Yes	88.89% 8
No	11.11% 1



If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

Responses

clothing or textile items, household goods, sporting equipment, lawn or outdoor items, everything!

Clothing, household.

anything that is still functional

Clothing, household goods

All of the above

Clothes

Clothing, outdoor items, household goods

Everything I think would have value to someone else

clothing and household goods

Clothing household goods

All of them

Everything we can that's not destroyed or broken. Clothes, toys, decorations, household items, sports stuff, etc

Mostly clothing

Clothing, household goods, furniture

As many items as possible.

Clothing, home goods. Blankets. Everything

clothing, household goods

clothes, household items, book, toys

All of the above

Clothing, household/kitchen items, outdoor recreation items, etc

Everything we can. Mattresses and anything we cant give away get brought to landfill.

clothing house hold goods

Clothing and some small household items

Clothing, household items

Almost everything

All mentioned

Clothing and shoea

Clothing

Clothing items, shoes

clothing and household items

Clothes (that can be used again), books, home goods, games

clothing, household goods, large variety of things

clothing

Everything that may be useable by someone

clothes, household, all above. Packing/wrap/peanuts, boxes etc. I would like to have a resource or listing of where to drop items that others may use.

Clothing, toys, anything still in good shape

All of the above

Clothing, household goods, furniture

Clothing, kitchen items, outdoor equipment, nearly everything I no longer need

Clothing, household goods,

All of those mentioned

If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

Responses

Clothing, household goods, sporting equipment, lawn or outdoor, electronics, furniture, books, movies, toys.

Clothing, household

Clothing, household goods, textiles,

Clothing, household goods, lawn and outdoor stuff

Most of the things listed.

Everything. Mostly clothes and household items

Clothing, books, games, toys

Clothes, any items that are still in good condition and reusable, and or have convenient drop off locations.

We don't have garage sales but donate instead.

clothing

Anything that can be used again. Especially clothes and household items.

clothing, lawn/outdoor items, sporting equip, car equip, household goods

All usable items I no longer need

Clothing, textiles, household goods, sport equipment, toys

Clothing/household & sporting goods/furniture/etc

EVERYTHING that is still in good condition & works.

Anything that has a resale possibility

Everything.

Clothing, household goods, everything

Clothing, furniture, household items

Cloths, furniture, home decor

Anything that can be used again and isn't broken or stained.

All of the above

Everything we don't use, if they don't take it we bring to the landfill.

Clothing, home goods, basically anything in good shape we donate to the b&G club thrift store

all the above

Clothing, hsehold goods, books

Household goods, clothing

clothing and household goods

Clothing

All of the above

Furniture clothing shoes appliances decor

Clothing, household goods,

Clothing, household

All the above! Anything I can repurpose, I do!

Clothing, Household, whatever we can!

All of the above

Clothing, textile items, outdoor items. Anything usable.

Clothing household items

Clothing, sporting goods, furniture, anything if it's in good enough shape.

Clothes mostly

Clothing

clothing, household goods

If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

Responses

Cloths

Clothing, textiles, electronics

donate

Clothes Furniture books

Clothing, household goods, stuff

Clothing, household items, lawn, outdoor, any items that can be sold legally and has life left in it

Clothing

Clothes, usable appliances, home decor, toys, lawn items, honestly if it can remotely be used again I donate or sell it instead of throwing it away!

Clothes and household

Clothes, household items

Clothing, household goods, kids toys

All the mentioned

Clothing

anything that is reusable

Clothing

Try to donate or reuse all household items that are in usable condition.

Everything I can that is in good shape to donate.

Clothing and misc household goods

Lots of stuff

Clothes furniture

Clothing, toys , furniture, electronics, sporting goods . Anything that is sellable or reusable or recyclable.

Household stuff, clothing, furniture, anything I think someone else can use that a donation site will take

Clothing, furniture, household goods

Clothing books kitchen household foods. Outdoor equipment sports equipment

Clothing household goods

Clothes and household goods

Clothing

Clothing, household goods, and textiles

Clothing, household items

All listed

Clothes, household goods

Clothing furniture tools decorations household

Clothes

Clothes and household items that did not get utilized

Clothes

All

Clothes, household items, pictures, puzzles, rugs, furniture, flooring including tile, laminate and carpet and some useable electronics.

Clothes, household goods

anything that I can no longer use and that is still serviceable

Household items, clothing

Clothes

If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

Responses

Clothing

All of the below

clothing, shoes, household goods

Clothing, household goods

Clothing

As much as is sellable

Clothing

Clothing, furniture, sport equipment, kitchen items

Clothing, furniture

Clothing, household items. We try to donate whatever we can or is accepted

Clothing, household items

clothing

Clothing, household items

Clothes, toys

Anything we can.

Clothing, household goods

Everything

All of the above

All clothing, shoes, and working household goods

Clothing towels household items

clothing, household goods

Clothing, sporting equipment, furniture

Pretty much everything I can

All of these. Whatever I can that is still usable

Clothing

Drop off at dav bins, social media to sell

clothes, household, toys, electronics, small appliances, furniture, etc.

Clothing, furniture, sports stuff, outdoor stuff a little bit of everything

Clothing, household, sport equipment, bikes, anything someone can use

Anything of value

clothing

Any and all household things that are not being used

Clothing

Clothes, household items

clothing, household

Clothing household items

Anything in good enough shape to donate. Clothes and shoes, household goods. By the time we ate done with most things they aren't in any condition to donate.

clothing, household goods

All the sbove

All items mentioned

Clothing

None of your business, this is not a SOCIALIST COUNTRY

If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

Responses

Clothing and household items.

Clothing, Household Items

All of the above

All

Anything that others can still use. Even containers that people use for crafts.

Clothing, household

All the above !

Clothing, baby items, purses, shoes, household goods

Clothes, households, furniture

Clothing

All of the above.

Clothing, household goods

Lawn, outdoor, household, kitchen appliances, recreation

Clothing, household goods

Most large items, household goods, clothes, sports equipment

All if able. Use other means as well like Salvation Army

All of the above

Clothes, household goods

clothes, furniture, home decor, and lawn equipment

Clothing, household items like kitchen supplies/storage, all types of items no longer useful I donate or sell.

Clothing household sporting goods

Clothing, household goods

Almost everything useable!

Clothing, household, furniture lawn items

Clothing household sports equipment

Clothing

Mostly clothing, household goods and toys

Clothes, furniture, household stuff, lawn & outdoor stuff.

All mentioned above in example...

Clothing, household goods, toys, furniture

Clothing and miscellaneous items

Bike, clothes, radios

Clothing, household goods

clothing, household goods, basically anything someone would want.

Everything

Clothing, household goods

Clothing, textiles, sports equipment, household items, books, shoes, toys, etc.

Clothes, household items, toys kids have outgrown

Clothing, household appliances, outdoor items, sporting equipment etc. Anything that is in a decent condition that someone else would benefit from

all of the above

Clothing, dishes, small and large appliances, best, furniture

Clothes, household

If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

Responses

clothes, furniture

All of the above.

Clothing and household goods

Clothing, furniture

Clothing

Clothing

clothes

Everything that could be used again. Only throw away unusable things.

Anything that has life and can be reused

Every thing they will take

Clothing, furniture

Clothing

Pretty much anything of any use

All the above

Clothes, furniture, toys, household goods

Clothing, household good, sporting equipment, outdoor items, outgrown kid stuff

Clothing and some household

Everything that can be

Clothing

All of the examples given

Anything that's still in good reporting or repairable shape I will donate or gift to family or friends.

Clothing

Clothing

Clothing household

Clothing, household, etc

Everything

Clothing, furniture

clothing, mostly

clothing, household goods

Clothing, household goods.

Misc

Clothing, household

Clothing, furniture, household items, electronics

clothes, household goods

Clothing and household outdoor items

All of the examples

Everything noted in question

Clothing, textiles, household goods, sporting equipment, lawn and outdoor items, etc

Clothes at drop containers

Everything that someone else will take

Clothing

All of the above.

clothing & household goods

If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

Responses

Clothes, I cannot find a spot anymore to drop off

All things that can be donated or sold are

Clothing, household goods

As much that we can

Clothing

Household goods. Clothing. Electronics.

Clothing, household goods

Clothing, toys, bedding, sports equipment

All of the above.

clothing

Clothing, household goods, etc.

clothing, household goods.

Clothing, household items, furniture, toys, outdoor items

Household, clothes, shoes

All the examples

All the above.

Everything possible; clothing, furniture, electronics, etc

I donate what I would pass on to a friend.

clothes, furniture

All of the above

Clothing, household goods

Clothing

clothing, household goods

Clothing, sporting equipment

cloths, unused but usable housewares, like glass jars

Everything

Clothing, house good

All of the above

Everything!!!

All

All above

Clothing

Anything of value / not broken

clothing, furnishings, functional electronics

Clothing, cabinets etc

All that I can

All the above

Clothing, shoes

Clothing, household goods

Clothing, furniture, household goods

Clothing and toys

Clothing, electronics,

Clothing, books, toys, lawn equipment

If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

Responses

Clothing, toys, other misc household items

Clothes household lawn outdoor

Everything

Clothing. Small appliances. Misc

clothes, household, whatever they take, really ...

Clothing, household goods, sporting equip, outdoor items

Clothing furniture

All of the above

Clothing household

Clothing, household items

clothing, household items, farm items

anything i don't need anymore

clothing and house hold goods

Clothing,household,

Clothing, furniture, sports equipment

Clothes, decor, furniture

Clothing, decor, books, kids toys

Clothing, kid items, books, misc

Clothes

Clothing, household goods

Baby stuff, clothes, furniture, working electronics or small appliances.

All of the above

Clothing

clothing, household

All

All listed

Everything I possibly can

Anything that still works & has "life" to it.

Clothing, furniture, household items

all that i can.

All the above

Clothing

Clothing, outdoor items, household goods, sports equipment, furniture, textiles

Clothing, household, anything that can't be recycled. No wish cycling here.

Anything that has use and value

All

Everything

Clothing

Anything possible

Clothing home decor

Clothing, household goods

Clothing, sporting equipment, appliances, furniture

kitchen items, clothing, outdoor items, sporting goods

If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

Responses

Clothing, household goods, exercise equipment, and collectibles

All of the above. We try to donate or sell any useable item before we dispose.

All the above

All

Clothing. Scrap steal

clothing

Clothing, household goods, lawn and outdoor items, or anything in good condition.

Anything not used/needed

Clothing

Clothing, household

Clothing furniture household

Clothing

All those listed above.

All household items are donated if in good condition

Clothing

All of the above

clothing, household goods, furniture

Clothing, linens,decor items, shoes,

Any items that are still in good condition and working

Any and all things

Clothes, housewares

Everything that has usefulness is passed on.

Clothing, household goods

clothing, furniture, electronics

Clothing, household items, kitchen appliances

Anything I can

clothing, doors, countertop,

All of the above

Clothing, decor, kitchen wares, shoes, toys, books, movies,

Virtually all types of clothing & household items and furniture.

Clothing, household items

Clothing, equipment, etc.

Clothing

anything of value, clothing, equipment, household, lawn, etc.

Clothing, furniture, anything still usable

Yes all of the above

Clothing

Clothes and firniture

Clothing

All

Clothing and household goods

Clothing, toys, household end and decor.

Clothing, household items

If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

Responses

Clothes, toys, household goods

Clothes, furniture, household

All of the above

Clothing, household goods; outdoor recreation equipment

Anything that still has life left in it for someone else to use

Mostly Clothing, some furniture

All of the items mention in your example

My first resort is to find friends I can gift items to for re-use/new life. My second option is to sell items that friends don't want/use. My third option is donating to local places (welcome house, salvation army, etc.). Lastly is the dump/throw away.

Many household items, including clothing, toys and furniture.

Clothing, kitchen, sports, kids items, misc items, shoes, jackets, boots,

Clothing and household items

All of above

Clothing, household goods, lawn and outdoor items

Clothes

Clothing

clothing

Miscellaneous ,clothing, furniture, household items

Clothing

All of the above

clothing, textiles, sporting equipment

Books, clothes, household goods, sporting items, toys

clothing, household goods

Everything that is still in good condition.

clothing, household goods

mostly clothing items

All of the above

clothing, household goods

Clothing Household items

Clothing, toys, shoes, sports equipment, bedding, furniture, appliances

clothing furniture outdoor items shoes

clothing, anything that still has a life

All of the above

clothes, books, household goods, etc

White goods, anything they can use again or sell to support the place we donate

Clothing

Donate clothing at drop off bins in Fergus. Tools/equipment/materials no longer used get set at end of driveway with a free sign.

Clothing, furniture, household goods, outdoor items, toys

Clothing, kitchen items, home decor

Anything still usable. The Salvation army is very judgemental in what they will take now. The wouldn't take some clothes because they weren't ironed.

Clothes, small appliances, kitchen utensils

If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

Responses

Everything I can.

Clothing, outdoor items

clothing, household goods, books, magazines,

All of the above!

All listed above

Clothing, household items, toys, yard equipment

Clothing, bedding, toys, etc

clothing or textile items, household goods, sporting equipment, lawn or outdoor items, electronics

Clothing, household items, toys

All listed

Furniture, household items

clothing, sporting equipment

clothing, household goods

clothes, decorations, toys,

Clothes

clothing, household goods, sporting equipment

Clothing, household goods, sporting equipment

Clothing, household items, sporting goods, toys, outdoor items

Clothing, household goods,

EVERYTHING we can

all of the above

clothes

Clothing, household goods, anything that is in useable shape. Would rather not throw in garbage if someone else can use it.

All of the above. We regularly try to give away or donate prior to disposal

clothing, household good, yard equipment, tools -- anything of value we donate

clothing

Clothes, lawn and garden equipment

Clothing. Toys. Books.

anything usable.

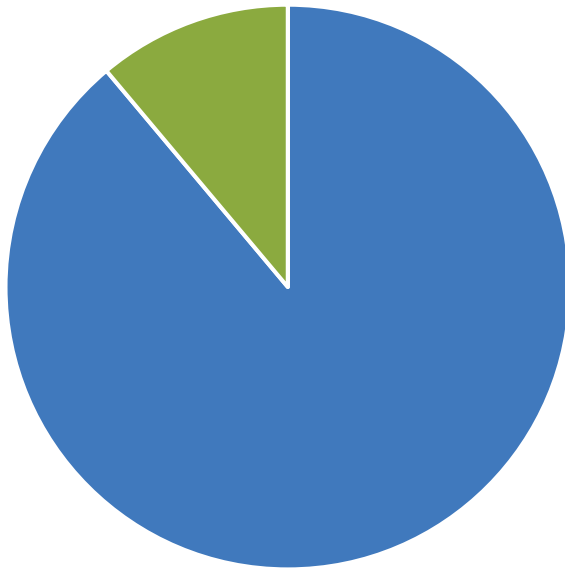
All of the above

clothing, toys, books, misc household items

Clothing, toys, sporting goods

Question 12 (PRC Results): Do you currently donate, reuse, or sell items no longer in use or need at your households, such as clothing or household items?

Answer Choices	Percentage	Responses
Yes	88.89%	8
No	11.11%	1
Don't know	0.00%	0



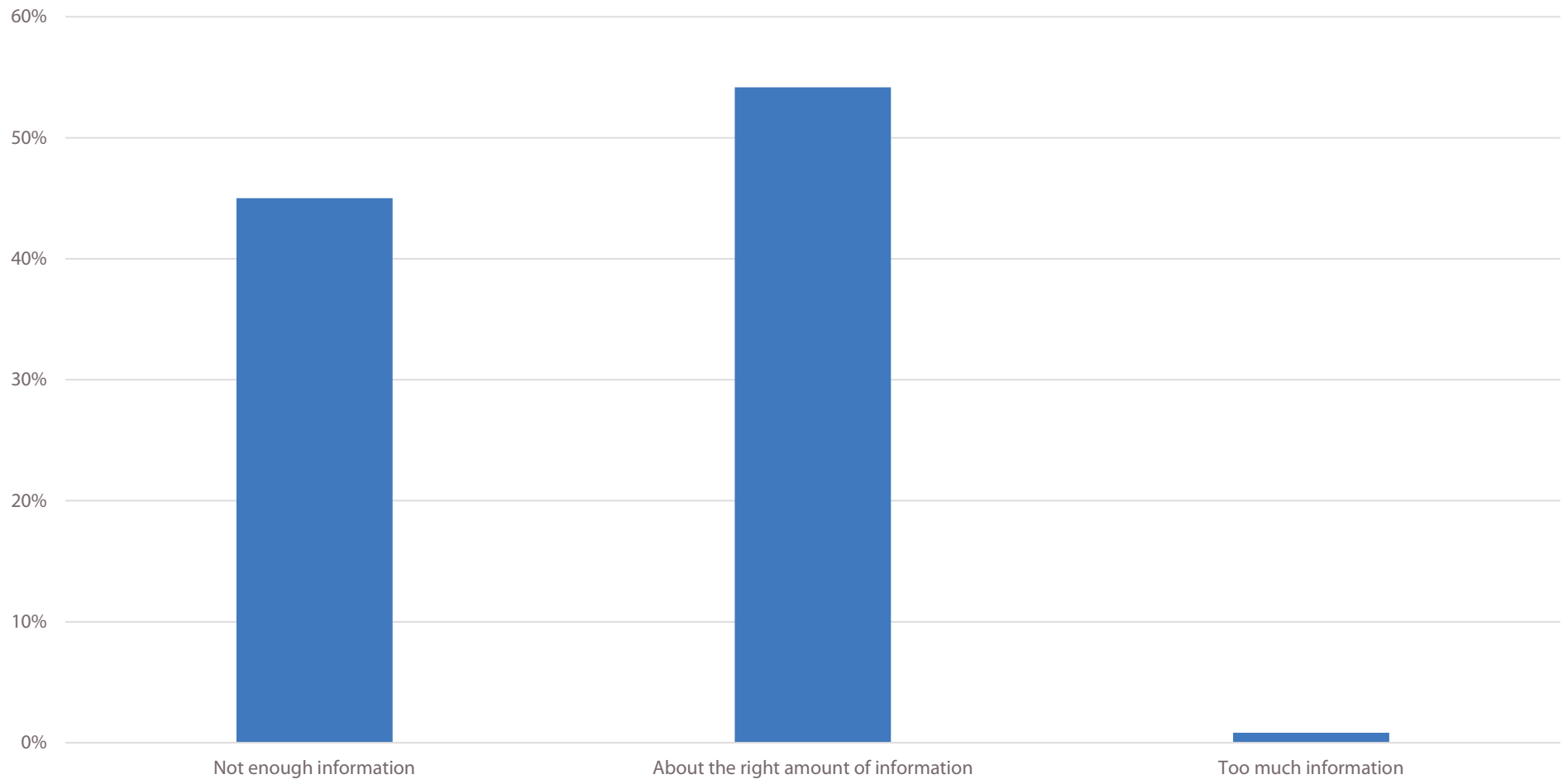
■ Yes ■ No ■ Don't know

If yes, what items do you currently donate, reuse, or sell? (e.g., clothing or textile items, household goods, sporting equipment, lawn or outdoor items)

- Responses**
- all of the above
 - clothes, house wares
 - all of these
 - clothing, outdoor items
 - clothing,
 - Clothing, Sporting Equipment
 - Most of these type of items are old equipment and go to scrap metal

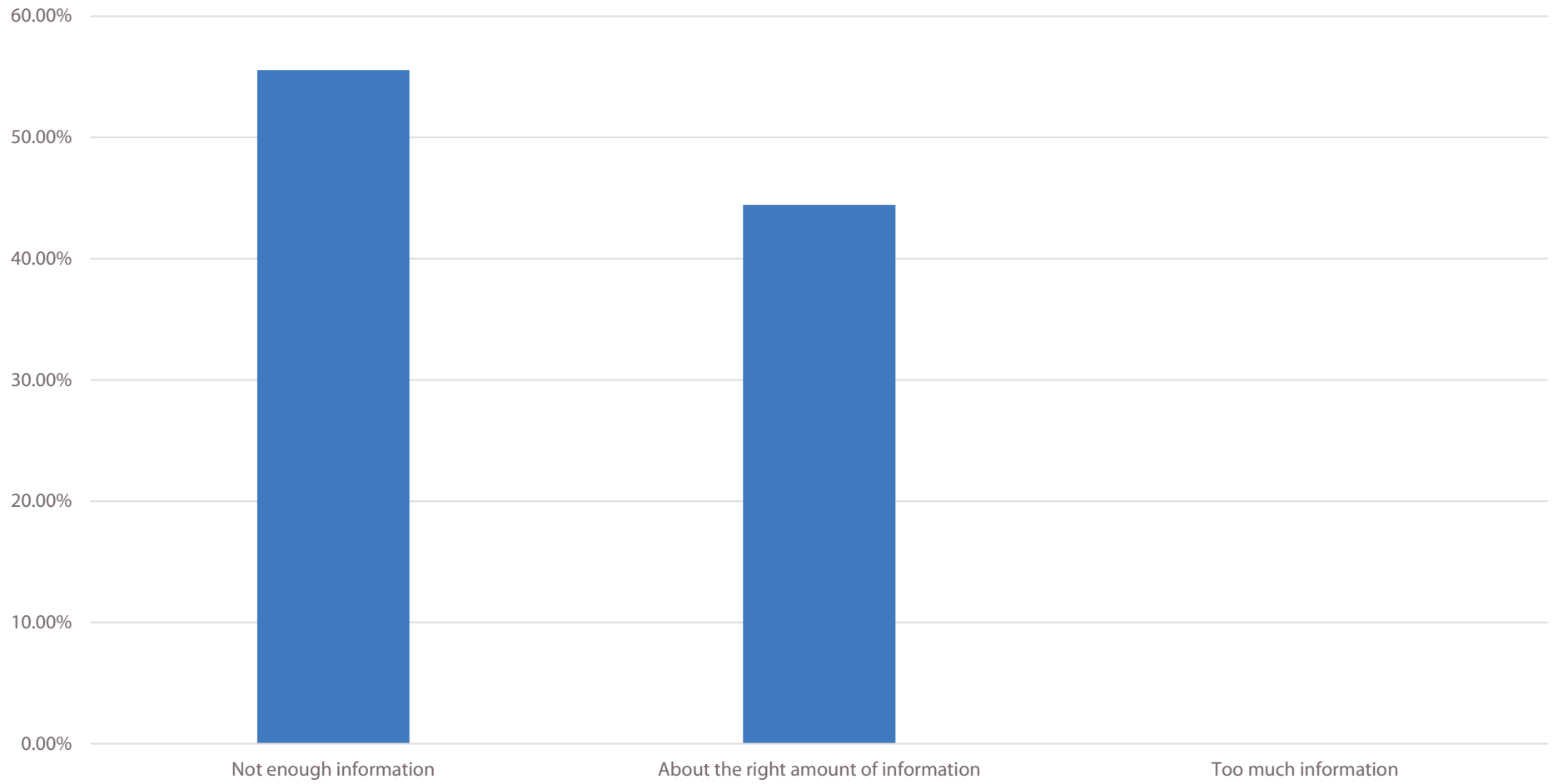
Question 13: Please think about the information you receive from Otter Tail County about recycling and trash management. Would you say you receive...

Answer Choices	Responses	
Not enough information	45.00%	270
About the right amount of information	54.17%	325
Too much information	0.83%	5



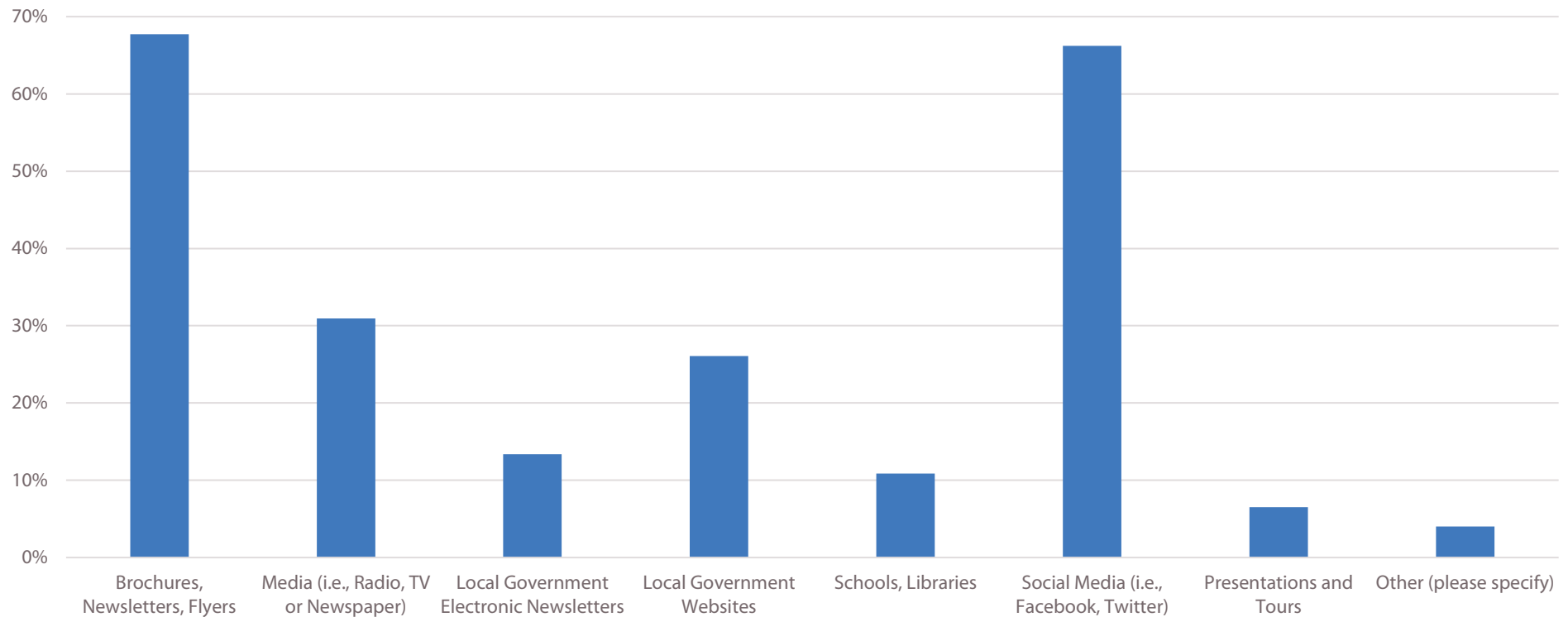
Question 13 (PRC Results): Please think about the information you receive from Otter Tail County about recycling and trash management. Would you say you receive...

Answer Choices		Responses
Not enough information	55.56%	5
About the right amount of information	44.44%	4
Too much information	0%	0



Question 14: In your opinion, what is the most effective way for you to get information regarding waste disposal programs and services to the residents and businesses of Otter Tail County? (Select all that apply)

Answer Choices	Responses	Responses
Brochures, Newsletters, Flyers	67.73%	405
Media (i.e., Radio, TV or Newspaper)	30.94%	185
Local Government Electronic Newsletters	13.38%	80
Local Government Websites	26.09%	156
Schools, Libraries	10.87%	65
Social Media (i.e., Facebook, Twitter)	66.22%	396
Presentations and Tours	6.52%	39
Other (please specify)	4.01%	24



“Other” Responses

mailed flyer with coupon

Mail

Text message

Make recycling available to out of town residents

Mailings

Email and other electronic communication

Bars n restaurants mandated to recycle

online websites

The Waste Wizard doesn't answer all my recycling questions

Text messages

I like the text message option you have for being notified of upcoming collection events

G

Waste of hard working TAXPAYER'S MONEY

Email

One page mailer with program information - once per year as a reminder

magnet or calendar or something to easily see and reference.

Online.. social media

Email

Lake assoc. news letter and web site

None. Don't bother me

Print information on the side of recycling bin

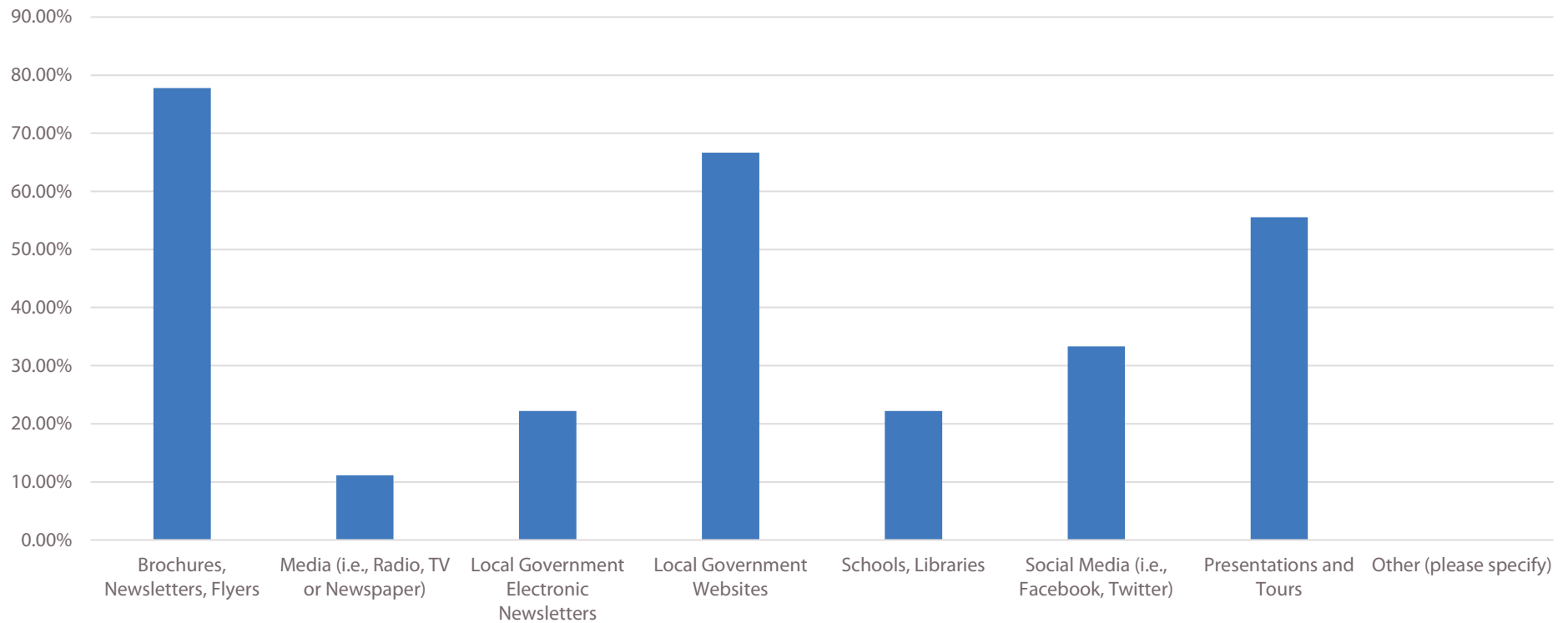
Phone calls

The Fergus news guy in Facebook

I would like to see more videos that highlight facilities, staff and the WHY behind the planning/programs in place.

Question 14 (PRC Results): In your opinion, what is the most effective way for you to get information regarding waste disposal programs and services to the residents and businesses of Otter Tail County? (Select all that apply)

Answer Choices	Responses	Responses
Brochures, Newsletters, Flyers	77.78%	7
Media (i.e., Radio, TV or Newspaper)	11.11%	1
Local Government Electronic Newsletters	22.22%	2
Local Government Websites	66.67%	6
Schools, Libraries	22.22%	2
Social Media (i.e., Facebook, Twitter)	33.33%	3
Presentations and Tours	55.56%	5
Other (please specify)	0.00%	0



Responses

Single sort recycling and recycling pick-up. Create incentives for recycling. Help restaurants, cities, and businesses recycle more easily (gas stations, parks, etc.).

No

Curbside recycling

Recycle more styrofoam. Deposit "program" on soda bottles/cans, water bottles, juice bottles/cans - this will minimize road side trash too

No sort recycling bins for homes

Offer curbside pick up with garbage pick up...perhaps offer some sort of incentive for families to recycle?

It would be nice to have free electronic recycling that is available throughout the year.

More hazardous waste disposal dates available. Currently there is only one date available each year.

Have recycling bins at all transfer stations. Accept hazardous waste at transfer stations.

Let's be more worried about the cost to tax payers and less worried about hugging trees.

County wide single sort recycling bins for households.

Simply and easy to read flyers with pictures

Have more free disposal of hazardous material

If people didn't have to sort!

Pick up recycling outside of city limits

Put tar down where the recycling bins are so they aren't a mud pit

offer paper trash bags, to replace plastic ones, at a reasonable/discounted price.

Larger bins in apartment settings, or more frequent pickup?

a challenge, but the use of burning barrels that may include many items able to be recycled. Items do not go into landfill, but are burned/ smoke into the environment.

Have the county pick up the recycling large bins more often. Sometimes when I go to my closest recycling area, the bins are stuffed full.

Have more bins available for plastic disposal. Anything local to us is taken up by restaurants. Or collect plastic more often. Or require larger restaurants to have their own bins.

Plastic grocery bag recycling next to drop off centers could reduce bags mixed with cans and bottles. I wish we could drop off hazardous materials at the local transfer station.

Accepting plastic bags

Burn garbage to provide heat

I would love to see a plastic bag recycling bin. So much easier to drop off there than at Wal-Mart.

Offer single sort recycling at business locations!!!!

Recycling of plastic bags!!

take mattresses, the, etc for free or do a curb side pickup once a year

Single stream recycling with bin pickup just like garbage

I would like to know if there is a market for the recyclables and be kept up to date as it is extra work for us to haul recyclables in and wouldn't bother if it is ultimately not be reused/remanufactured.

Would love if could drop off ALL recyclables into one bin (unsorted).

More education to the people about the first step which is reduction. Most people seem to not think about the waste when purchasing items. After a tour at the resource recovery facility a few years ago, we have been a bit more cognizant of waste/recycling and try to let that also be reflected in our purchases and habits. Making people aware of what is currently able to be cost effectively recycled and what is not would be good. I know I heard that at one point China was taking a lot of our plastics, but in more recent years, they aren't and the US doesn't have a market for all that plastic. Where is it going?? If people were more aware, they may make changes to their habits. I also think more knowledge would help give people the confidence to affect change in other ways. One thing that bugs me as a former DQ employee is the increase use of plastic containers. When I was younger and worked there, they used wax coated paper cups for all beverages, now they use plastic for many of the treats (malts/shakes/moolates).

Responses

Charge people a fine for not recycling

No sort recycling

promote/offer a free site where items that are still good can be given to someone for free or donated rather than being thrown in the landfill.

Show how to reduce use of plastics. More days of free drop off at dump.

Make disposition convenient, easy and inexpensive for residents

Have curbside recycling for the whole county

Recycling pick up rurally (lakes).

Stop taking garbage from other counties.

Offer pick up in rural areas. Its hard to get to pick up sites. also hard to remember where they are located.

I would love to have an option to compost at home or separate compost waste for the city.

You need more drop off sights, especially towards the south side of Fergus Falls.

Would like to be able to recycle styrofoam and plastic sheeting

Educate about compost- provide containers.

Making sure the recycling bins are rotated often enough so there is room.

Curbside. So many more people would recycle if they didn't have to haul it themselves.

Less sorting

Many times the bins at the Pelican Rapids dropoff are too full to add items. That frustrates me that I have to bring my recycling back home. It's almost always the plastic bins. Also, I would like more information signs on the bins, such as #1 plastic is this (with picture) and it is or is not acceptable. And warning posters about using bags for cans and also not to dump garbage into bins. I think the signs currently on the drop-off bins are great, but I think you could have more to help educate. Also would be great if the bins were easier to access from both sides.

No.

Glass recycling for battle lake bars and restaurants- we really need it! I would be happy to recycle our glass.

Maybe let people know how easy it is and how is the best way to do it

Make curb side single sort recycling available to those residents out of town

curbside pickup

I can make the existing systems work given the costs that would necessarily be associated with going to improved services (for instance, curbside, mixed recycling).

Curbside pickup. Most people don't want to go through the effort of driving to a drop off location

More recycling bins closer to edge of city for out of town residents

Burn trash. Have a yearly pick up day free

Increase information and events

Educate lake people on how to not bag recyclable....very lazy

I know it would be difficult and expensive but I think recycling pickup by our refuse collector would be the best and make it easier for more households to do it!

add styrofoam recycling

Expand recycling services!

Educate the public about the importance and how to recycle.

No

No

More coupons

Make summer residents aware of recycling! Have more recycling bins available or give each resident a recycling bin....make it MANDATORY to use it!

Responses

Educate and monitor North Dakotans who come to live and play in the area. They need to realize this is MN and we have better laws regarding the environment and hopefully how it is cared for.

We are lake property owners and take our recycling back to St. Cloud, because we are not aware of pickup at our property. /would be nice to get this info with our tax statement?

It would be helpful to have a bin at the recycling center for mixed recycling

rural single sort recycling collection. And to not have to sort recycling to be dropped of at collection containers

Offer recycling pick up in rural areas

The pelican rapids transfer station should compost the grass and offer the dirt for free to the public. It would encourage more people to come and better community support. Also, don't charge for sticks and branches because you just burn them and that is silly.

Have a recycling program where the haulers pick up at homes without having to separate it.

Let ARR pick up my recycling.

County wide single sort, curbside recycling pickup would be helpful.

Social media is a great way to get more people aware and interested.

Curbside recycling on rural routes.

The battle lake transfer station is excellent I haul my garbage there every other week. Very good group of guys.

have first 4 tires free of charge, like adjacent counties-such as Becker County

None

The new looking dumpsters are much cleaner and more appealing to see and use. Repaint them all to make Ottertail residents proud of what they own.

Pickup recycling at rural homes

I have heard that our recycling is shipped somewhere and utilized. I don't have the facts.

I would recommend installing Solar at every site. Recycling and transfer stations. My 9 kw array produces \$1500/yr in electricity. Your sites use minimal electricity. They all could be providing a credit annually toward other county electricity costs. No justifiable reason not to do this. Oh cost. But then again federal tax credit for another year. Payback is 10-12 years with 25-40 year product. You will do this eventually. Why not now. Create some jobs too.

No

reduce cost of using landfill, inform all residents of services (not just those who get paper bills), reduce cost of disposing of electronics. add free pick up of bulky items

DEFUND

No

curbside pick up throughout county or at least in neighborhoods.

Increase collection of agricultural plastic bags

Single sorry pick up in more areas

Look at what other states, counties and countries are doing. There are so many other nations that are doing compost and recycling so much better than us. We need to reduce plastic pollution. Look at places that have implemented brown bins for compost waste.

Also open to a tax that would make the programs for trash and recycling free to all residents.

Appreciate the coupon in the newsletter

Care about the smaller communities too, we pay the same tax fee as everyone else

Curb recycling weekly

Curbside recycling with my hauler

Have another location by MN Motors. I come from underwood and I have to drive across town to recycle. At my place of work the recycling bin behind the building is gone. 125 w. Lincoln ave

We need a clean up week and other options of getting rid of old appliances

Responses

Single sort or curb pickup

Curbside Recycling in Underwood

LI

Free information and frequent posts on social media. Easy to navigate website.

No sorry

Single sort for the entire county!

Allow all recycling to be in one bin to save time for residents to not have to sort. Offer curbside pickup of recycling for free 1-2x month

You dont sort products in the big towns. But small towns all have to sort bins. Should all just be one big bin everything goes into.

Rural homes need pick up service even if there's a fee.

I miss the curbside pick up of recycling I was familiar with before moving here. I know I recycled more then.

Recycling pickup at homes!!

Please bring single-sort recycling pick up to the countryside! We have missed that since moving here from the Twin Cities. Now that Perham has this within city limits, it should be easy enough to expand routes to the surrounding countryside. I know we would recycle even more if it was as easy as it once was when we lived in the Twin Cities and had curbside pick up of recyclables. PLEASE bring this service to the country!! Even if only monthly or every other week instead of weekly as the trash pick up is.

Expand recycling pick up to rural areas. I feel a lot of people do not do this because they don't have the storage space or want to deal with hassle of hauling in.

Compost pickup, city cleanup where items can be put on the curb, more info or opportunities on household hazardous waste events, plastic bag recycling in our bins

Pick up recycling weekly. Our recycling bin gets full

get better workers, actually pick up all the trash from residents, hire people to go thru trash and separate what can be recycled out, like Brazil does at a profit

Include rural areas or small towns with recycling

No

Curbside recycling option.

Better presence on special events & programs on social media.

Keep working hard. We appreciate you!

attract new and diverse businesses throughout the county to reduce shipping material waste from online shopping.

city folk get such a advantage with curb pickup. Couldn't something be done in the country?

Curbside pickup in all of Ottertail Co. I think many additional people would recycle a lot more if there was curbside pickup. Many people feel it is a hassle to go to drop off sites and follow the rules of the drop off site. If you want to reduce waste and lessen the amount that goes into the landfill, I feel curbside pickup will make it much easier for people to recycle

1) what is recyclable on the home page so I don't have to dig for the information

2) Do something about the people who drop off NON recyclable at the bins. I other see grills, TVs, box's not broken down. Put up cameras, or even fake cameras to make them think they are being recorded. They are going to ruin it for those that do recycle!

Offer a Yard Waste Bin/Can for residential.

You have limited hours; I get it. Seems like there are limited days, too. Hours outside the typical 9 to 5 would be appreciated. How about partnering with a local service club to have a Saturday morning unwanted ewaste/electronics exchange? Drive through and hand it off. How about having a little drop off slot for those little button batteries at the local center, that can be accessed anytime of day? Almost like a mail slot because

Responses

those batteries are about the size of a quarter or nickel but they would get lost if put into a recycle bin and I don't think you want those thrown in there anyway.

Single sort recycling

Have free pickup week for rural people

Single sort drop off location

A reward program would be nice. Provide award to those that bring most recycling

No

Offer curbside recycling pickup in rural areas.

Not at this time.

Education, ease of use, incentives of no fees for drop offs.

Better/more info about what is and isn't recyclable i.e. cardboard egg cartons, plastic packaging etc

Having solutions for cabin owners is important -- the cabin next door to us just puts everything in the garbage, and it's picked up by a private Dalton-based service. I have bags and bags of mixed recycling in my garage, thinking that I'll bring it in to Fergus and put it in my family's bins, but theirs are already full.

There is no longer a place in Perham that accepts used motor oil. I would like to see a permanent disposal site in Perham.

perhaps some type of system for credit on one's bill for recycling and reducing the landfill

Accept more items at recycling drop off sites, like computer paper and junk mail.

Go to single sort recycling at drop off sites

Accept more recycling items than currently offered, offer curbside pick up in rural areas (e.g. Dent, MN).

Recycling pick up in rural communities would be wonderful. Trying to find time to get to the drop center can be difficult.

Find a way to recycle styrofoam

Single sport recycling for EVERY HOME in the county, including the rural ones!!!!

When I lived in the cities I had very little trash because of single sort recycling. Now, I have to go to a drop off and I get lazy and toss items instead of recycling them... sorry it's the truth!

rural recycling pickup

Compost sure for household scraps.

Get info to all lake associations

Picking up recycling weekly with the garbage instead of bi-weekly would be helpful

I wish we could see the aluminum redemption in pelican again, even once a month would be nice. Also, it would be nice to have recycling at Lida Lake boat access.

We personally think Ottertail County has a very strong and effective and efficient waste and recycle program and policy...I think the problem lays with the people that just throw away everything without thinking of recycling...like cardboard for instance....

We are extremely happy with the trash and recycling program in Ottertail County!!!!

Thank you!!!!

Updated signage around recycling drop-offs on what is and isn't recyclable.

Recycling etiquette - like not being a lazy Karen and piling everything in front of the doors preventing everyone else from recycling.

I'm from a rural area. I haul my recycle items into Perham as needed. Wish we had a place for Flourescent bulbs, Household chemicals etc. Seems they only have a couple times a year for hazzard materials.

Electronics should have a site free of cost. Many times we see these things thrown into the ditch. Tv's , Computer items, even a dryer ! No fun to come up on with a snowmobile !

Responses

I wish we could get our recycling picked up weekly and our garbage picked up biweekly. We often only have one bag of garbage each week, but find our recycling bin is quite full after 2 weeks! I'm sure this would be a pain for the drivers, but it would be great for this household!

An incinerator would help.

Recycling home pick up.

I want to have what other communities have-curbside unsorted recycling pickup.

N/A

No

Allow curbside recycling. I'm sure more people would recycle if they had that option. Ridiculous when I live a mile from another County and they allow curbside recycling. Also, my garbage hauler has the capability of doing it. In this day and age, it is ridiculous to have the haul your recycling out to a dumpster, especially in the winter when the wind is blowing, it is icy all around and just pray you don't fall. Get with the times and offer this to the citizens of Otter Tail County. Oops, I forgot, Fergus Falls already has it. I'm sure the majority of residents would be willing to pay the extra money for it.

Contact Mark at Larry's Super Market in Pelican Rapids if plastic bag recycling is available, and if the county could provide the collection containers.

Thank you,

Mark Dokken

Larry's

Rural Recycling Curbside

The grass clipping drop should be open 24/7

People who drop off their own recycling deserve no sort, too. We already work many times harder than those with curbside

no

Please offer pick up in all of ottertail county. Or have more sites we live really in Otter Tail County and we recycle everything we haven't bought our own recycling containers and we love them to the recycling centers at least once a week the majority of our trash and garbage is something that can be recycled so we have very little garbage but I will be honest with you it is a real hassle and I wish living in such a large community even really I wish we had more availability to have the service picked up I think people would be recycling more if they didn't have to separate everything out and bring it to the recycling centers themselves

Have recycling pickup throughout the county.

No

1) Accept retail plastic bags. 2) Collect residential recycling cans once a week and waste cans every other (opposite of current)

Charge less money

Set usable items to the side and let people take usable items. Instead of disposing of perfectly usable items. Allow picking.

Encourage grocery stores in Otter Tail County to move away from disposable plastic bags.

More examples of what can and cannot be recycled. Specific callouts if a certain type of plastic cannot be accepted at our facilities.

Invite reduce-reuse-recycle tips from the public and announce them via social media or news media. Like one a week. If you used social media, you could run a poll allowing people to vote for their favorites.

I'd love to see an expansion of options for plastic bags and plastic wrap - specifically what's used to wrap toilet paper, paper towels, etc. Styrofoam recycling would also be a huge asset. We try to avoid it when we can, but it's often used in packaging and we'd love to be able to recycle it somehow.

Pick up recycling weekly!! We often end up bagging recyclables and putting in regular trash because our recycle bin can't handle more.

Responses

Provide education to businesses hospitals manufacturers

Provide curbside pickup outside of Fergus Falls and Perham. I live in the country and would recycle significantly more if this was available. We just had to get a bigger garbage can because it is inconvenient to have large amounts of recyclables in the home and have to transport them regularly at least 10 miles.

Recycle containers like our trash cans that you can put all recycling in & gets picked up weekly

I wish the city of Fergus would collect recycling each week instead of every other.

Would like recycling picked up with our weekly garbage

Curbside pickup if recyclables will help.

Yes, open the landfill transfer sites to people who want to take furniture, building supplies, art materials and reuse or repurpose them, instead of charging us to dispose of useable furniture the locking it up in the sun so nobody can reuse it. The thrift stores are overwhelmed with donations, so the landfills are filling up due to Covid19. Organize free on the curb days or open the dump for rural folks to browse.

Make the openings big enough to accept home recycle bins to dump, especially if you don't want plastic bags filled with the items.

Promote recycling by offering discounted waste pickups (or only charged for 1 waste pick up a month) we recycle so much that it would take a month before we even come close to filling our garbage can. Would be nice to not have to pay for each week when we don't need it.

Bigger signs on recycle bins for no trash or bags. Though those people will still likely ignore it.

Educational outreach

Weekly or biweekly curbside recycling in all towns, we're behind the curve on this for sure!

Make it free to dispose of everything including electronics.

Recycling bins for rural households like the town of Perham offers.

Yes, empty the recycle bins more often or drop a 2nd one...for the love of God!

No

Accessible Composting program- I like what Douglas Pope Solid Waste Management has going on. Recycling program for clothing/textiles that are not in condition for donation.

Accept clam shell plastics, all plastics 1-7. It's ridiculous the amount of plastics OTC doesn't take. #poorlandfill

A curbside container for yard waste would be helpful.

Offer loose plastic recycling pickup. I never get communication on cleanup days, if that was posted on city Facebook or emailed to services customers would help. Waste wizard is not useful, tried to use a couple times with no value.

Rural pick-up

Curbside recycle

Would like to see household battery recycling

Have the brush, wood chips, compost area separate from the construction debris and metals. Wouldn't need to wait in line and risk getting flat tires. Could be completely different area with longer hours or open continuously and have camera surveillance.

PLEASE initiate single sort recycling in the county AND rural curbside pickup of recycling. I believe the results would be a huge increase in county recycling.

Rural curbside pickup

More open time to drop off hazardous waste.

Accept ALL plastics and recyclable at the drop sites.

Once a month curbside pick up for rural residents

Rural recycling pickup. We drive ours into town and then find them all filled up. It can be frustrating.

Burn and bury, sell what is reusable.

Responses

Provide recycling pick up for those of us outside the city limits. Our family from Oregon visited recently and were shocked our recycling didn't get picked up. Out there everyone receives recycling and compost bins, even people who live in the country.

Curbside recycling all in one separate from garbage. Having an actual garbage bin.

I haven't lived here long enough to really evaluate the program.

curbside recycling

Community-wide initiative with education, challenges, incentives, partnering with businesses, etc

Burn wood

Get rid of the fees like other local counties such as Hubbard and Becker! We already pay for it in our property taxes!

Allow residents in rural Otter Tail County to have recycling pickup curbside. It should be our choice if we want to pay for the service. Please remove the ordinance that prohibits this. Curbside pickup would help the impact on landfills as well.

I would love for my recycling to be picked up every week - not every other week. We end up with overflow every week, some that ends up in the garbage. I think that a lot of people would recycle more if it were picked up more often.

Ensure local lake area restaurants are recycling as much as possible and do all they can to support lake residents in recycling. I believe many of the lakes residents don't recycle since it is easier to throw things in the trash as opposed to driving it to a recycling drop off. Also a large portion of the lakes residents in our area are older and do not want to take the time to recycle by driving somewhere if they don't have to.

Let us recycle cardboard cartons

Provide household composting services

Provide combo tours of the landfill and recycling center

I would love an option to have compost waste picked up such as food scraps etc

Single sort dumpsters at recycling centers

Recycling pickup for business.

The bins in New York Mills, especially plastic, are often overflowing.

Curbside recycling outside of city limits

if possible, I think it would be helpful to have haz waste collections more than once per year per community.

We have SO much food waste in our community - I would love to see some programs with our local restaurants and schools out there that could mimic something like what UMD offers (they compost all food waste and ship it to ag workers). Or a community composting station for drop off/pick up. More education on what is/is not recyclable & how to prepare it for the can would be really beneficial for millennial families (seen too many over-greased pizza boxes in recycling bins at friends' homes).

Curbside recycling county wide.

We bring our recyclables to The Dalton site, yet often, the dumpster is full and we have to take our stuff back home. This can discourage recycling.

More local Household Hazardous waste pick up days, only one per year is ridiculous.

Free recycling picked up either weekly or bi weekly.

No sort recycling

Hazardous Waste Collections are always during regular business hours, which makes it hard for daytime workers to ever make it to a dropoff location.

I am shocked that the County strongly promotes recycling but does not have curb side recycling collection, and does not have recycling units at apartment buildings

Recycling pick up at rural residences.

The huge increase of seeing the services over the past couple of years has been great!

Responses

Creating fun 'games' (goals) for school aged kids - they help parents and grandparents change their ways when it comes to kids.

1. Set up bottle / can collectors at convenience stores and gas stations. Much of this waste is recyclable, but is now all going into garbage stream. 2. Continue incineration of some amount of MMW for a balanced approach. 3. Post more signage on dumpsters to deter people from depositing electronic devices in the garbage stream at apartment complexes. 4. Create a "bounty payment" for plastic harvested from highway ROW by service groups -- say \$5 per pound. Creates funding for service groups and incentive to dispose of plastics.

more frequent hazardous waste drop off dates

Provide a recycling pick up service

start using a street clean up event like fargo and moorhead do. Its amazing how much junk gets cleaned up from peoples yards etc. Atleast try it and see how effective it is.

Single sort recycling at recycling center drop off.

I'd like to have a recycle bin that holds plastics, glass, papers and cans that can be picked up at my home.

PLEASE go to single sort recycling for rural areas

increase swapping of satellite recycling dumpsters during lake season. Eg mid may to mid September

None

People with normal day jobs don't really have a chance to get to facilities during operating hours.

Have the ability to recycle more plastics. Encourage local businesses to use reusable, recyclable, and compostable packaging.

It would be nice to have a way to make it easier for rural homes to have adequate recycling. I currently bring my recycling into Fergus Falls and put it into my work recycling bin. No sorting is the most convenient thing about that but I do understand about having to sort items at the recycling center because it cuts down on staff costs, etc to sort those items.

Provide a location for drop off of food scraps for composting. Home composting doesn't work for everyone.

Keep educating the public in every way.

Annual clean-up days really help.

I would like to see more tours offered and offered at different times throughout the day to make it easier for working individuals to take the tours

It would help if companies outside of the city would offer pickup at the curb. Most of my neighbors dont do anything because of this.

I don't mind sorting our recyclables, but I think maybe more people would be apt to use the recycling bins if sorting items wasn't needed.

Yes, we need another recycling drop off site for people on the southeast side of town. (old Pamida building/Otter Preschool/ECFE bldg area) 210 and Pebble Lake Road. It would be so helpful for people living out of town that direction.

Free rural recycling pickup

Free electronic recycling with no limitation as to number of items

Free annual shredding program

Moving to single stream recycling would make it more widely acceptable and convenient. This would increase usage of recycling.

I live very close to the Douglas County line and use a Douglas County garbage hauler. They are totally willing to give me a bin to put recycling in right at my home for them to pick up. They are not allowed to do that as OTC will not let them. I pay the same money for garbage hauling as anyone in Douglas County who has recycling pickup, but cannot have my recycling picked up due to your regulations. That makes me very frustrated!! Please allow those of us who have a hauler who will pick up our recycling the ability to do that. I don't think that should be your decision when I am paying the fee already. I also have a small home and it

Responses

makes it hard to have so much recycling pile up before I take a large batch to general pick up. I also shouldn't have to haul my recycling to a general pick up spot in crappy weather like rain, snow, ice, excessive water standing, heat (with bees everywhere), etc. I understand you want the recycling money to stay in OTC and it is cheaper for the county to have a general pick up area. My concern is that some people don't recycle because it isn't as convenient as having it picked up at your home. I also think it is dangerous for elderly people during some of the conditions listed to recycle. Someone shouldn't break a hip trying to recycle if they can do so in a bin at their home. It should be each taxpayers choice. Also, you seem to cater to Fergus Falls and that area. Those of us at the edge of the county don't seem super important.

Curb side pick up along with general household garbage - one stop pick up.

not really

Make the County website more user friendly.

trash bins at public access on lakes and rivers to encourage visitors from throwing them out the windows. Have single can recycle cans available as well as having a twice a year recycle event for electronics . Clean up lakes and river program for county (we cannot clean our lake from debris if we don't pay to dump it) it is not our stuff and want our waters clean

No

Ash re-utilization

Allow single-sort recycling in the rural areas like in the City of Fergus Falls.

Rename the Transfer Stations to County Landfill. Transfer Station sounds like something Otter Tail Power owns for electricity. It is confusing.

organics, reuse facility

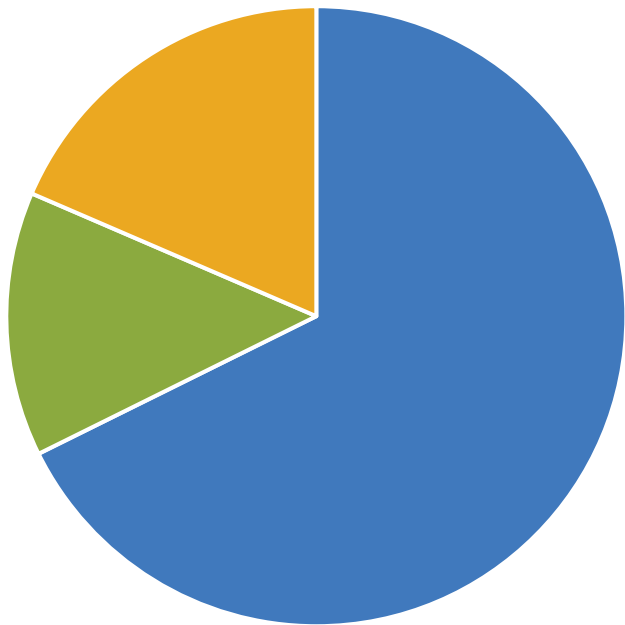
on the right track by asking for input!

Question 16: Do you believe you have a clear understanding of solid waste management in your community?

Answer Choices		Responses
Yes	67.68%	402
No	13.80%	82
Not Sure	18.52%	110

For those who entered unsure, the most common responses included:

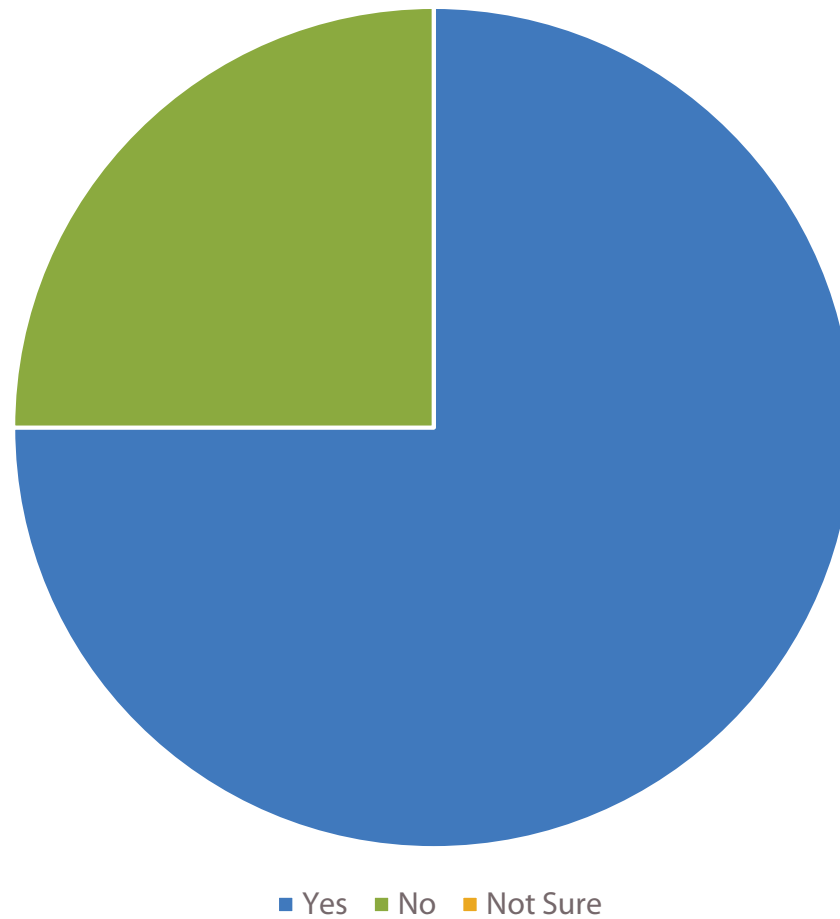
- What types of plastics are recyclable?
- Does food need to be cleaned off recyclable items?
- E-waste
- Styrofoam
- Large items (mattresses, computers, etc.)



■ Yes ■ No ■ Not Sure

Question 16 (PRC Results): Do you believe you have a clear understanding of solid waste management in your community?

Answer Choices	Responses	
Yes	75.00%	6
No	25.00%	2
Not Sure	0.00%	0



If you answered no or unsure, which items are you confused about? (Which plastics are recyclable, pizza boxes, glass, juice boxes, e-waste/electronics, paint, used oil, bulky items, mattresses, sorting requirements, collection days, other)

Responses:

Some confusion about which plastics are recyclable, pizza boxes, glass, juice boxes, etc.

All of the above.

Plastics

Which plastics

plastics. More knowledge is always good.

all of the above

Plastics, cleanliness of food items such as glass, cans, and liquid containers.

Anything beyond plastic, glass, and cans.

sorting requirements (can lids? plastic rings on glass bottles? pull tabs on cans? crush plastic so I can fit more into my bins before needing to recycle? etc)

yes, above items.

sorting, ewaste, toxic waste disposal,

the daily items are very clear, the odd items, can use a review and updated details.

I thought I read that most all plastics are recycled now, and I have been sending them, but I am not 100% certain.

Used batteries AA C D cells

e-waste

Plastics

Which plastics

Some styrofoam containers have recycling symbols & numbers on them. I never know if I should put them in recycling or not.

How much more we could be doing in addition to donating & recycling.

Which plastics are recyclable.

I could use a reminder about what is recycleable.

Bulky, oil, paint

Where to take old paint, oil,

Unsure where all the recycling sites are...

Actually not clear on any of these items.

Which plastics are recyclable, what is hazardous household waste

plastics, would appreciate a list of what can be recycled

Plastics and certain cardboard items

What e-waste can be recycled and how?

all

Plastic bag and electronic devices

I don't always know which plastic containers I can recycle. Would love a sign on the drop-off bins with pictures of a #1, #2, etc

If I'm unsure, I go to website—will have to check out app!

Plastics recyclable, oil/chemical empty containers.

Electronics and oil and hazardous waste

Batteries, old paint

Not sure exactly what plastic and cardboard is recyclable and where to take used oil?

Mattresses

Oil, hazardous waste, pizza boxes, bulky items,

If you answered no or unsure, which items are you confused about? (Which plastics are recyclable, pizza boxes, glass, juice boxes, e-waste/electronics, paint, used oil, bulky items, mattresses, sorting requirements, collection days, other)

Responses:

Which plastics

Plastics

What materials can be recycled and what to do with those that can't

What is truly recyclable

definitely plastics and glass

it would help to have an easy to understand a complete list (with examples) of what exactly is accepted and where in the city and when.

Juice cartons some say recycle others no which is it?

I'm not sure.

plastics recyclable, e-waste, bulky items. make disposal easier

Which plastics are recyclable, what is accepted or not accepted.

We take all of that stuff, including brush and lawn mulch to the dump.

I could always learn more

If a plastic bag is labeled with a numbered recycling symbol, can it be placed in my single sort bin?

sorting requirements. Too many and complex to remember.

Collection days and locations, some are hidden. More clarification on what plastic is garbage. Like fruit containers that strawberries come in? Or the plastic/foam in packaging- it has a recycle stamp.. but I don't think it's recyclable for us.

Clarifications on what can be recycled and at what locations.

plastics, sorting requirements, all information would be great to receive in a paper form

I don't understand why they leave half my trash in the can

I don't know what information I might be missing.

cardboard

Received contradicting information of the past about what is recyclable.

Those little button batteries....I think they aren't supposed to go into the garbage. And what about regular batteries? How about rechargeable batteries? Some good social media from that wonderful Cedar on batteries would be awesome!

Plastics, food containers like pizza boxes , fast food bags

Sorting. Free days.

What is all acceptable recycle-able in OTC

Plastics

Where does the waste go and how do I know that it actually is recycled and not shipped somewhere to be burned?

Options available to me at my lake cabin. (Dalton/Underwood)

Cost of material brought to NE Landfill. It seems to vary greatly.

Availability of services in our community (outside of Fergus Falls)

Anything that is not at the local drop off location.

Not confused, just don't see how you would ever get to zero land fill point.

e-waste, paint, used oil, bulky items

Large items that are too large to haul in a car. If you do not have a truck, how can you get your items disposed of properly?

Metals

Which items are recyclable

I'm not confused but other people throw alot of non recycling items in the bins

If you answered no or unsure, which items are you confused about? (Which plastics are recyclable, pizza boxes, glass, juice boxes, e-waste/electronics, paint, used oil, bulky items, mattresses, sorting requirements, collection days, other)

Responses:

all the above

What and where to recycle, the easier the better

How to get rid of hazardous or electronic waste

Electronics, used oil, bulky items collection days and locations and costs

What plastics are recyclable and e-waste

E-waste/electronics, transfer stations, mattresses

Bulky items

If waste wizard worked on phone would be easy.

Plastics and cartons. Also didn't think should be charged the same for a crib mattress as a queen size mattress.

Which plastics are recyclable and which aren't and why.

Oil, electronics

Pizza boxes, sorting, furniture- where do I take it?

This is not something I am interested in or will pursue or support. I don't believe in it.

Plastics

all recycling that is available

Oil, country drop off for more than plastic paper and metal

Electronics, household waste, batteries,

What can and cannot be recycled

Oil

Which boxes don't qualify, plastic

I feel as though my understanding of the current offerings I use is good, but I had no idea about all the other offerings - i.e. boat wrap recycling, etc.

How to dispose of large items that I can't move myself or put in my collection can. ie: storm door, furniture, etc.

Electronics, oil filters, mattress

Some confusion about which items can be recycled and how they must be treated in order to be recycled (rinsed out, etc.)

where does e-waste and bulky items end up?

some plastics are questionable whether item is recyclable.

what is recyclable, what is accepted at landfill

Not knowing exactly what can and can't be recycled. I'm sure the information is out there somewhere I just haven't taken the time to dig for it.

Paint, used oils, stains, electronics

What services I am eligible for being a county resident but not city

Oil, which plastics & why not all? Why aren't plastic bags accepted?

Large items, used oil are not easily picked up in Parkers Prairie

yes. as in... everything.

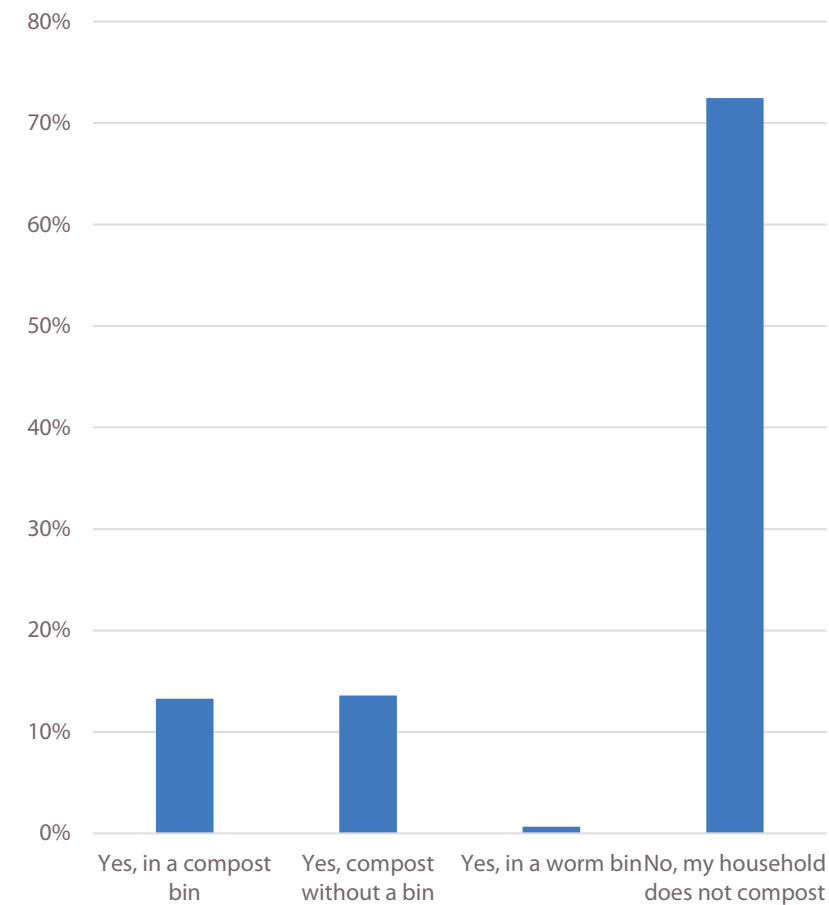
What can be recycled.

Paint recycling

I don't know what I don't know

Question 17: Do you compost food (such as banana peels, coffee grounds, and uneaten food) in a backyard compost bin or worm bin?

Answer Choices	Responses	Percentage
Yes, in a compost bin	79	13.26%
Yes, compost without a bin	81	13.59%
Yes, in a worm bin	4	0.67%
No, my household does not compost	432	72.48%

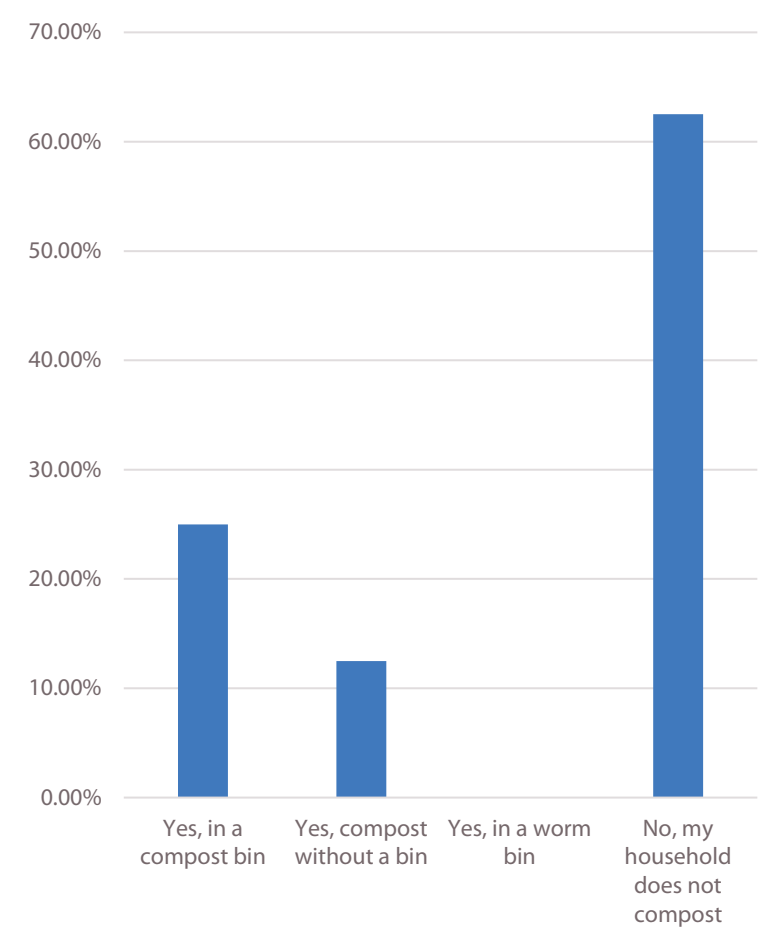


For those who do not compost, the most common reasons they do not include:



Question 17 (PRC Results): Do you compost food (such as banana peels, coffee grounds, and uneaten food) in a backyard compost bin or worm bin?

Answer Choices	Responses	
Yes, in a compost bin	25.00%	2
Yes, compost without a bin	12.50%	1
Yes, in a worm bin	0.00%	0
No, my household does not compost	62.50%	5



For those who do not compost, the most common reasons they do not include:

- PRC Comments**
- yuck
 - no area to do
 - We land apply wastewater sludge

If no, why not?

Responses:

No bin

I tried it and didn't like it

Animals

We don't have the space outside or the knowledge

Don't have the bin

We feed scrap food to animals.

I live in an apartment

Don't know how to do it safely

Would like to, but don't know enough about process.

rural and have problems with varmints

Pigs need to be slopped.

Not educated enough

Don't have a bin/time to set up/not informed

Not familiar enough to do it

two people, not much waste

not interested

Not interested in composting

Would the city allow it?

I do not have a compost or bin, I throw it out into the woods usually or in the regular trash

apartment

Never think of doing it

out of city, there are woods to toss things; but no food!

Animal get into it. Not set up to do it right.

I don't know how

don't know what to do with it

Don't know how and don't usually have much vegetable type waste

Don't have a bin.

We would not use the compost.

Don't have a good spot to have a bin

Not sure how

I put our compostable items in with the grass clippings & yard waste for pickup. During the winter it usually just goes in the garbage.

No space

Small lot. No room

I rent my home

animals in the area, we live rural

Dont have a bin for it

Just never have

I think it's gross.

Too much extra work.

I don't have anything to do it

Do not want this in our yard.

Don't really know much about starting one.

Dont have a garden

If no, why not?

Responses:

Tried got skunks

Don't have a bin

Garbage disposal or garbage can.

Unsure how to

Too much of a hassle for the results

Not comfortable with how, concerned about attracting animals

Too many animals around!

We do not have a setup to do so but would love to!

attracts to many fly's bugs etc.

Not sure how to do it

We live in country . Animal issues

Would love a container to try it!

haven't had much luck with it also have problems with wild animals

I would love to but I don't have a bin and without one it would attract critter

Not familiar with the process and benefits of composting.

Lack of space

Yuck

attracts bugs in the house

Not enough information.

We just looked into city regulations on composting and now we are looking to buy one

Uninformed

No desire to

Do not know what to do with the food waste in winter.

I would but live in Apt building

I don't know what to do with the compost.

I have a small back yard and live in a twin home...no space and I don't have the need for compost

I am not sure why. Mainly i guess i never thought anoit it

Afraid it will attract animal pests

Not interested.

It's a waste of calories

Just dont

It would attract pests

Don't have enough to do this.

Too much work and takes up too much space.

uneaten food is fed to the dog the rest decomposes easily so not worried about sending that to the landfill.

Don't know how.

Garbage disposal

Don't like the smell it's a hassle

Seems like it would be a messy hassle

Lazy

Hassle factor, if there was a place to bring it, like a transfer station, then I would be interested.

no room, its messy and we have no use for the finished composte.

Confusing and expensive

Waste of time, smell. I have dogs

If no, why not?

Responses:

Lazy

We have animals that eat scraps

I do have animals and chickens.

Don't know how it will help

lack of space

Unfamiliar with how to do it

No option in our highrise.

Lack of access to get started

Just never started. Worried it might attract pests.

Haven't started I guess, never done, not enough knowledge about.

Worried about pest control problems.

Didn't grow up with it. I assume we will have another bin to separate it out too.

Do not have a compost bin

Attractive to bugs and skunks

Concerned about space, smell, how to manage it, education

Not sure what can be

Stinks

Too much wildlife around my house. It would draw in more animals.

don't have a clue how and afraid it might attract animals and critters.

No place to put it

I don't have a bin

Inconvenient

Live in rural area and do not want to attract unwanted animals

Time and place and knowledge

No place to compost

Not educated on the proper process

Lazy

we do not have a bin

I don't have a place for it to go

have never done it.

Not enough product

Didn't know about it.

Too many dogs and country critters around

WE don't have a good place away from wild animals yet. We are working towards this.

Lack of receptacle

I do not know how.

don't eat bananas or drink coffee

I compost by putting in the garden.

no info on how to do it

Don't know how.

Don't know how

Never thought of it

Haven't gotten a bin yet. I really want to!!

To avoid attracting animals.

If no, why not?

Responses:

feed some to cats some to chicken

Fear of rodents

Good question. The kitchen door walks out onto the deck, so having something handy that way might be a chore. And our kitchen is small and even finding a place for the garbage can is not ideal. So it probably doesn't make sense to have a bin in the kitchen. If there was a possible solution, we'd listen!

Idk

We want to, just haven't started

Why?

I haven't looked into the compost necessities.

No need to do it.

I don't know enough about doing that.

Goes to chickens

No where to go with it

We are not set up for this.

We don't have enough food waste to contribute well enough

Bears

It might attract the bears and raccoons

Space

Need to learn/research more on this. Would like to have a program in place through county for compost

Don't have equipment to do it

Plan on setting it up, I just need to figure out the strategics

My parents do but I don't, not sure why I don't.

Don't know what to do and if animals would be attracted to it.

Not enough to make it worthwhile

Time consuming and marginal benefit for our household.

We compost some but not all.

No need for use of compost

I live in a townhome complex...I cannot create a compost situation as we do not own the property...

just haven't started! intend to, especially when we build in the country, don't have a compost bin now, little kids would get into it if it was right by house

No idea on how this works

only two of us.

Small animals would create a mess.

Uninformed.

Haven't started yet.

N/A

Sometimes dump directly in garden. Just haven't set up a bin.

we rent, too much hassle to get permission from our landlord.

No space

We did, but did not have access to a larger bin outside.

Never thought about it.

no space

don't want to

Mess & Smell

If no, why not?

Responses:

Have not started yet.

Space, smell, neighbors complain(?)

Tried it but it brought unwanted critters to my yard

Need more info

Inconvenient

Not happening. No desire.

Don't know enough resources on how to do it

No interest at this time

Laziness

Dont have the equipment

Use a garbage disposal for most food items.

I don't have a solid answer

No space for a bin

Don't know how

Don't have a spot to do so and not sure what food can be composted.

No need to use compost.

Skunks Raccoons Dogs Flys !!!!!

No time to build compost bin.

Not sure what to do and concerned about nuisance animals in rural area

I tried awhile ago and it never really took off. I would like to try again if we had a good spot for it

Need information on how to

too much hassle, not much waste

Just not interested

No where to do it

We know nothing about it.

I don't want skunks, snakes or other varmints in the yard.

Don't know enough about it

Do not feel I have adequate space for composting and challenges with previous attempts to get compost going

Garbage disposal

Used too. Not anymore.

Don't have the time or room.

Smells

No good place to do it

Never thought about it. Don't have a compost spot.

Live in town, no yard

No use for compost

Never thought about it

tried it once, no fun in the winter

Have chickens and feed the scraps to them

Suspect neighbors would not approve.

No use for it, but I would use a community-wide composting program.

Don't know how

Inconvenient

If no, why not?

Responses:

no compost bin outside yet

Seems messy and smelly

I have so little it's not important to me

We have pets that eat scraps

Only because it makes soil better.

Do not have a bin

I would like to. I just haven't started yet.

Don't know how to

It is something we are considering in the future

No place to

Have never tried it. Don't know a lot about it.

I use a disposal for most of it.

Used to use a worm bin. Moved and need to buy more worms.

I'm not sure our yard is large enough to accommodate composting. Smell, attracting animals.

Life is too short

Where would I take it?

I am afraid of the smell and the close proximity of my neighbors. Also, I don't know how to do it safely.

My compost bin is simply made of pallets

No compost

Too much work to maintain

Some gets fed to our animals. Other wise I don't know enough about composting.

I don't know what I would do with the compost. I don't garden and have only a small amount of flower beds.

Yuck

I have a garbage disposal or I throw it in the trash.

No space for a compost on my land

Not enough waste and hard to understand the mixture needed

Lack of Knowledge

We've tried composting - and once we move to the country and have a garden/space for it, we will again. But I simply lack the education to be able to compost well without it becoming a source of bad smells and molding food.

Don't have a bin

We used to compost, but attracted mice.

to messy and attracts critters

I need to set up a space and am not sure how to do so in an affordable way

I live in town, don't own a composting bin.

don't have a compost bin and I wouldn't want it near my home for smelly reasons

Not sure what to do.

Don't know how or enough about it

I'm not completely sure how to do it - nervous to do it right.

inconvenience, smell, mess, animals digging in it

Not sure how to go about it.

Throw away very minimal amounts of food items

It stinks

not sure how to handle it

If no, why not?

Responses:

No yard

Gross

Recycling is my main goal. Not composting.

Easy just to throw it in the garbage bag.

It's not doable where we live, but we would if there was a drop off location.

Do not have a place to compost or a container

Have tried in the past but did not work out.

i am in an apartment

Very little of it.

No, room. We also have dogs.

No room

would like to see a program offered, hard to start on our own

we live on a farm and many of our animals eat left overs

Use a garbage disposal.

space

smells bugs etc

Too lazy

I have no room or place for it.

We are just starting to use a composter

I guess I am not sure how to do it, but will look into it. Sometimes I just throw the uneaten food out in the trees for the deer and other animals.

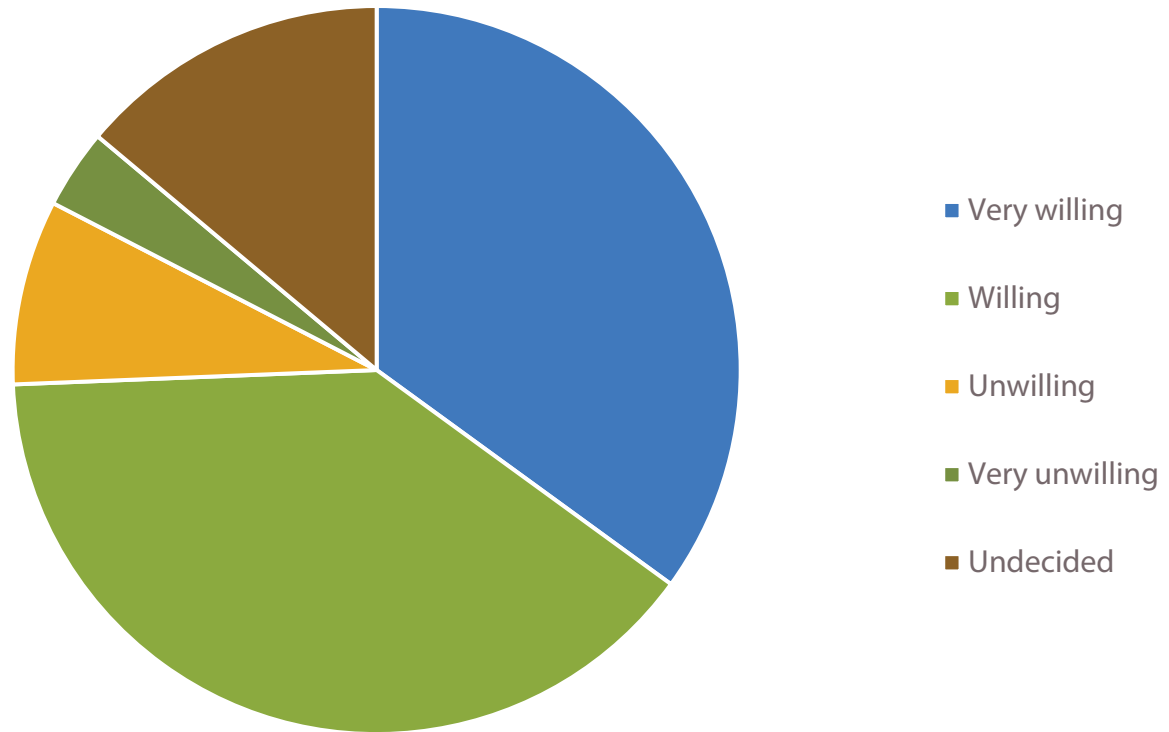
attracts too many critters, don't have much space available/convenient for it

Wayyyy too much work. Not convenient

Not sure how to do it, tried it once and things got rather gross & smelly.

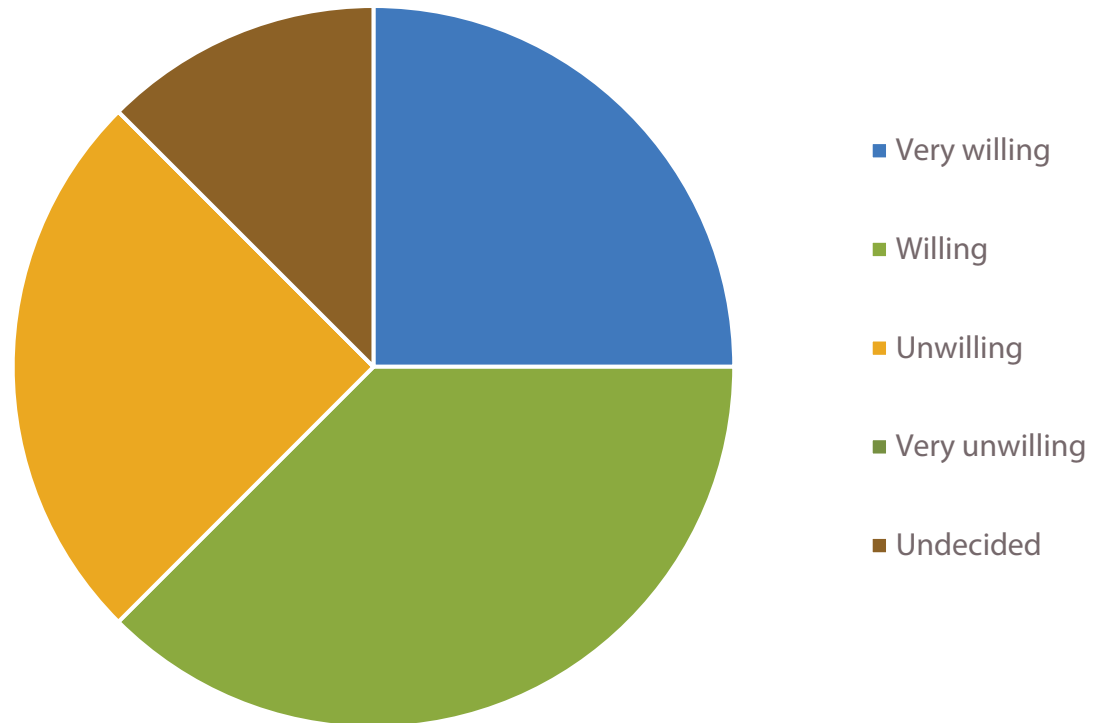
Question 18: In general, how willing would you be to separate organic waste (such as banana peels and other food scraps and non-recyclable paper products like paper towels) from the rest of your household’s trash if your community had a program that would allow you to manage this waste?

Answer Choices		Responses
Very willing	35.01%	209
Willing	39.36%	235
Unwilling	8.21%	49
Very unwilling	3.52%	21
Undecided	13.90%	83



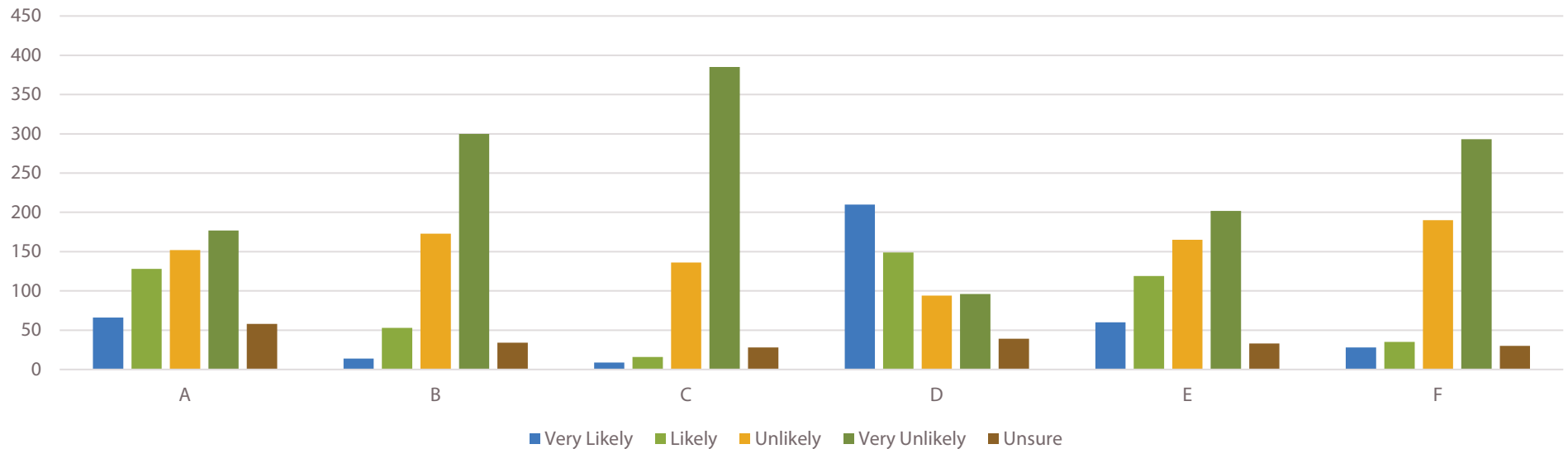
Question 18 (PRC Results): In general, how willing would you be to separate organic waste (such as banana peels and other food scraps and non-recyclable paper products like paper towels) from the rest of your household's trash if your community had a program that would allow you to manage this waste?

Answer Choices	Responses	Percentage
Very willing	2	25.00%
Willing	3	37.50%
Unwilling	2	25.00%
Very unwilling	0	0.00%
Undecided	1	12.50%



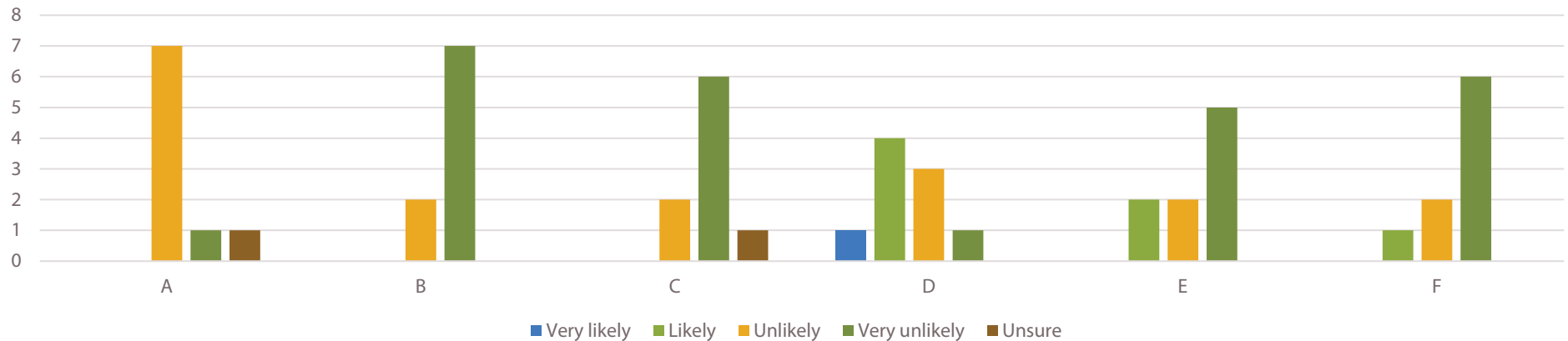
Question 19: One potential organic waste recycling program is a centralized drop-off station where residents can drop off their organic waste (such as food scraps and used paper products like paper towels and tissue). If your community provided a drop-off station for organic waste, how likely is it that you would take your organic waste to this station in the following situations?

	Very likely	Likely	Unlikely	Very unlikely	Unsure	Total
A You would be charged a small fee per month, and the drop-off station would be within 10 minutes of your home?	11% 66	22% 128	26% 152	30% 177	9% 58	581
B You would be charged a small fee per month, and the drop-off station would be within 20 minutes of your home?	2% 14	9% 53	30% 173	52% 300	5% 34	574
C You would be charged a small fee per month, and the drop-off station would be within 30 minutes of your home?	1% 9	2% 16	23% 136	67% 385	4% 28	574
D You would have no additional charge month, and the drop-off station would be within 10 minutes of your home?	35% 210	25% 149	15% 94	16% 96	6% 39	588
E You would have no additional charge, and the drop-off station would be within 20 minutes of your home?	10% 60	20% 119	28% 165	34% 202	5% 33	579
F You would have no additional charge, and the drop-off station would be within 30 minutes of your home?	4% 28	6% 35	32% 190	50% 293	5% 30	576



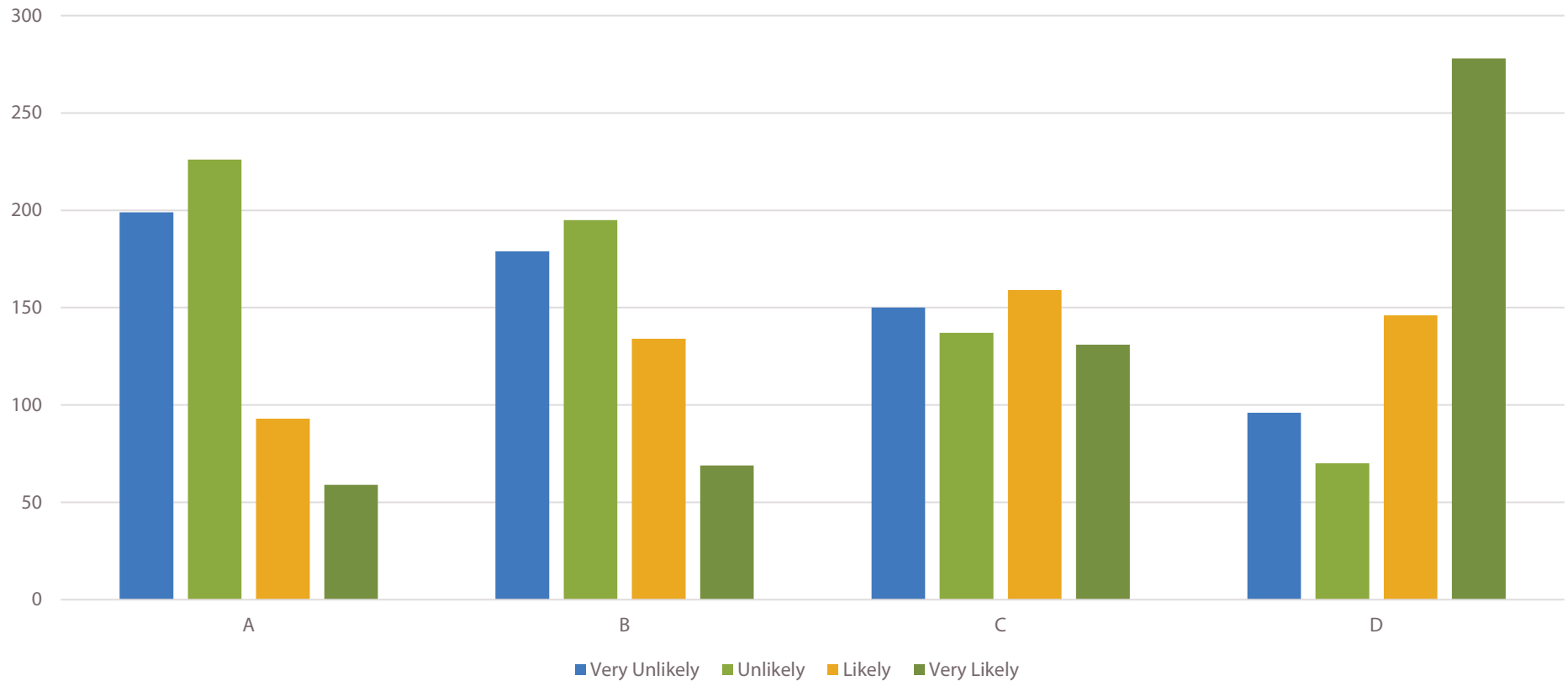
Question 19 (PRC Results): One potential organic waste recycling program is a centralized drop-off station where residents can drop off their organic waste (such as food scraps and used paper products like paper towels and tissue). If your community provided a drop-off station for organic waste, how likely is it that you would take your organic waste to this station in the following situations?

	Very likely	Likely	Unlikely	Very unlikely	Unsure	Total					
A You would be charged a small fee per month, and the drop-off station would be within 10 minutes of your home?	0.00%	0	0.00%	0	77.78%	7	11.11%	1	11.11%	1	9
B You would be charged a small fee per month, and the drop-off station would be within 20 minutes of your home?	0.00%	0	0.00%	0	22.22%	2	77.78%	7	0.00%	0	9
C You would be charged a small fee per month, and the drop-off station would be within 30 minutes of your home?	0.00%	0	0.00%	0	22.22%	2	66.67%	6	11.11%	1	9
D You would have no additional charge month, and the drop-off station would be within 10 minutes of your home?	11.11%	1	44.44%	4	33.33%	3	11.11%	1	0.00%	0	9
E You would have no additional charge, and the drop-off station would be within 20 minutes of your home?	0.00%	0	22.22%	2	22.22%	2	55.56%	5	0.00%	0	9
F You would have no additional charge, and the drop-off station would be within 30 minutes of your home?	0.00%	0	11.11%	1	22.22%	2	66.67%	6	0.00%	0	9



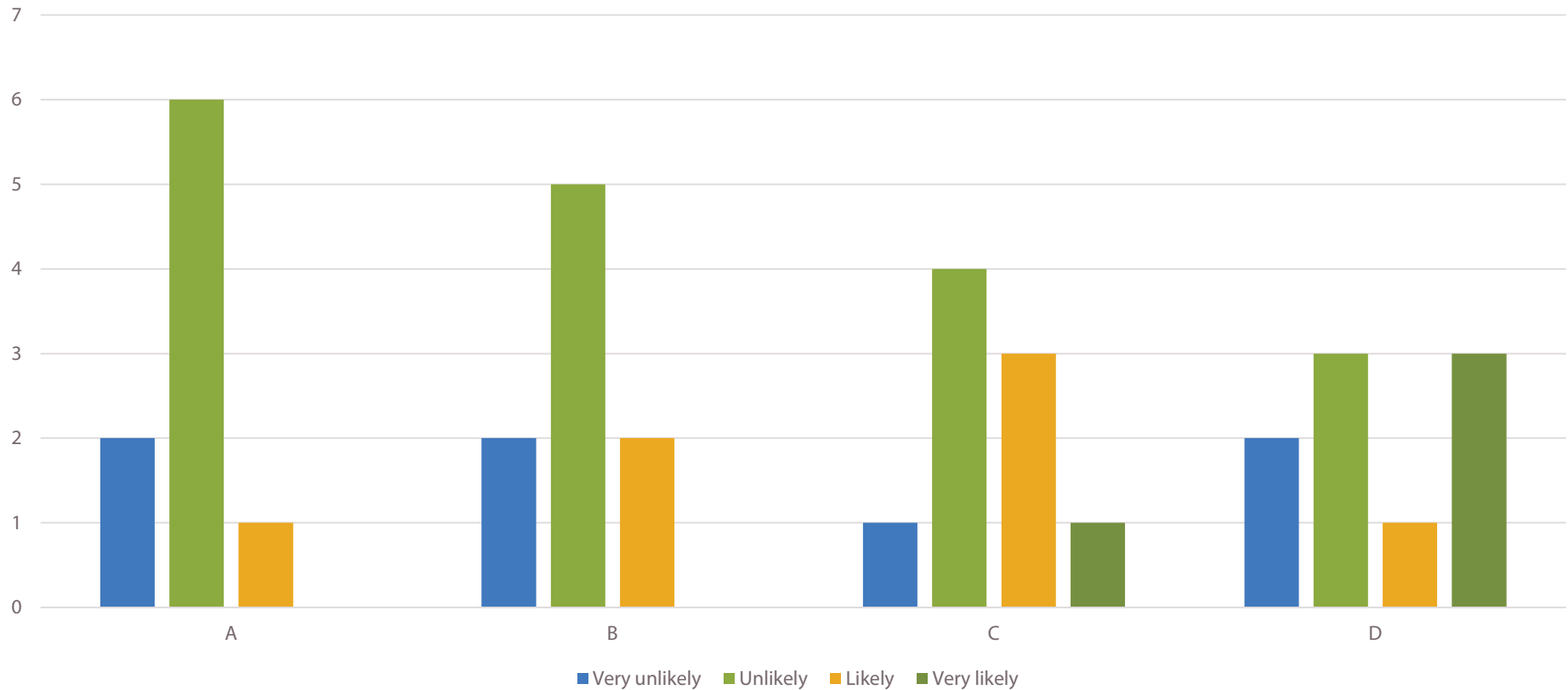
Question 20: Another potential organic waste recycling program would include the use of a special bag (called durable compostable bag) to co-collect organics waste inside with your trash. The durable compostable bags would then be separated from the trash by the county or trash provider. How likely are you to participate in a co-collection organics program if...

	Very unlikely	Unlikely	Likely	Very likely	Total
A You would be charged an additional \$6 to \$8 per month?	34% 199	39% 226	16% 93	10% 59	577
B You would be charged an additional \$4 to \$6 per month?	31% 179	34% 195	23% 134	12% 69	577
C You would be charged an additional \$2 to \$4 per month?	26% 150	24% 137	28% 159	23% 131	577
D There would be no additional charge for this program.	16% 96	12% 70	25% 146	47% 278	590



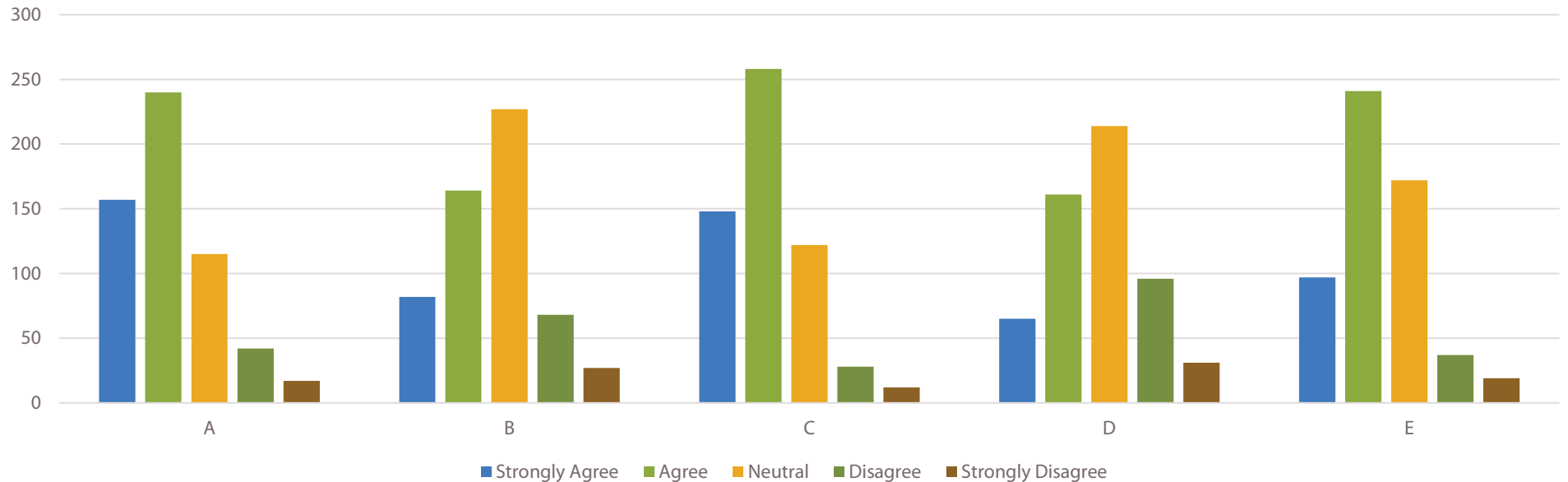
Question 20 (PRC Results): Another potential organic waste recycling program would include the use of a special bag (called durable compostable bag) to co-collect organics waste inside with your trash. The durable compostable bags would then be separated from the trash by the county or trash provider. How likely are you to participate in a co-collection organics program if...

	Very unlikely	Unlikely	Likely	Very likely	Total
A You would be charged an additional \$6 to \$8 per month?	22.22% 2	66.67% 6	11.11% 1	0.00% 0	9
B You would be charged an additional \$4 to \$6 per month?	22.22% 2	55.56% 5	22.22% 2	0.00% 0	9
C You would be charged an additional \$2 to \$4 per month?	11.11% 1	44.44% 4	33.33% 3	11.11% 1	9
D There would be no additional charge for this program.	22.22% 2	33.33% 3	11.11% 1	33.33% 3	9



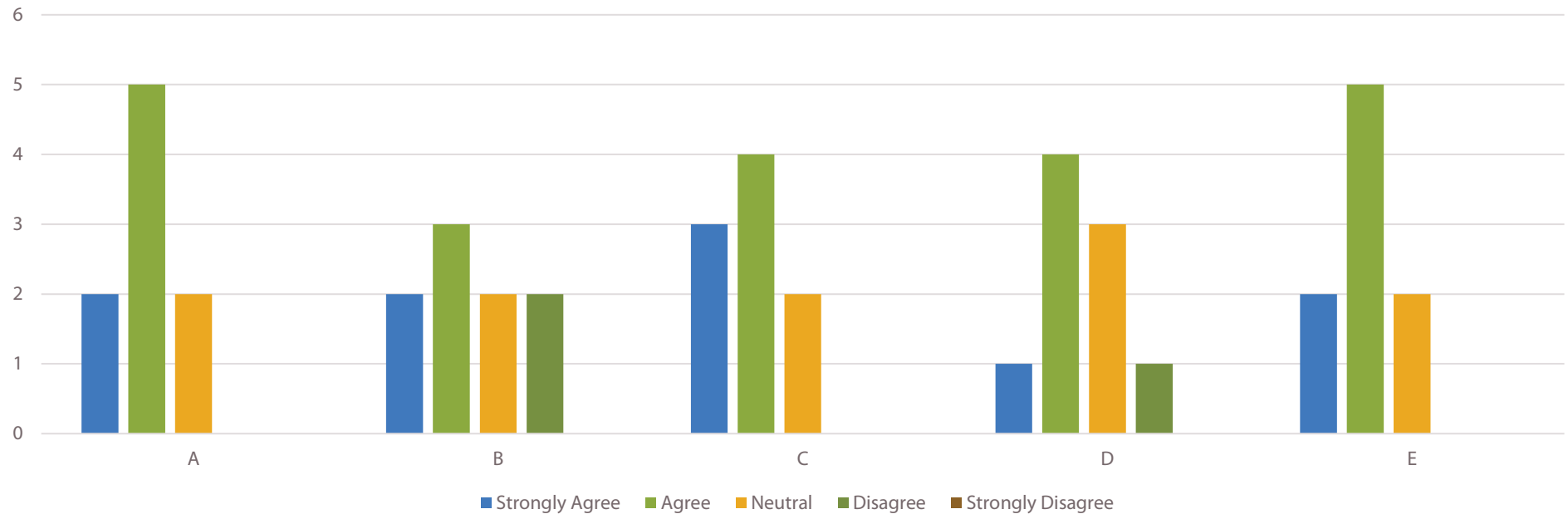
Question 21: Please rate your level of agreement with the following statements:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
A Recycling and trash services are not free. I agree we should recycle as much as possible even if it adds to the cost of managing solid waste.	28% 157	42% 240	20% 115	7% 42	3% 17	571
B Otter Tail County should export as little waste as possible to other counties, even if it costs less than managing waste locally.	14% 82	29% 164	40% 227	12% 68	5% 27	568
C Financial incentives should be used to encourage reduction in waste and recycling/composting use.	26% 148	45% 258	21% 122	5% 28	2% 12	568
D Otter Tail County should implement programs to divert food waste from the landfill even if it will add to collection costs.	11% 65	28% 161	38% 214	17% 96	5% 31	567
E The Otter Tail County Solid Waste Master Plan should define actions and priorities to move the County "Towards Zero Landfilling."	17% 97	43% 241	30% 172	7% 37	3% 19	566



Question 21 (PRC Results): Please rate your level of agreement with the following statements:

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total					
A Recycling and trash services are not free. I agree we should recycle as much as possible even if it adds to the cost of managing solid waste.	22.22%	2	55.56%	5	22.22%	2	0.00%	0	0.00%	0	9
B Otter Tail County should export as little waste as possible to other counties, even if it costs less than managing waste locally.	22.22%	2	33.33%	3	22.22%	2	22.22%	2	0.00%	0	9
C Financial incentives should be used to encourage reduction in waste and recycling/composting use.	33.33%	3	44.44%	4	22.22%	2	0.00%	0	0.00%	0	9
D Otter Tail County should implement programs to divert food waste from the landfill even if it will add to collection costs.	11.11%	1	44.44%	4	33.33%	3	11.11%	1	0.00%	0	9
E The Otter Tail County Solid Waste Master Plan should define actions and priorities to move the County “Towards Zero Landfilling.”	22.22%	2	55.56%	5	22.22%	2	0.00%	0	0.00%	0	9



Question 22: What are the most pressing needs in your community regarding solid waste management?

Themes which emerged from public comment include:

- Rural recycling pickup
- Single sort recycling
- Increase education and awareness of recycling options
- Request to add bins or empty more frequently at transfer stations
- Mandatory/strongly suggested restaurant recycling
- Pickup recycling more often

PRC Comments

Our biggest challenge right now is a good home for our plastic film. This poses a challenge because it is usually comprised of multiple layers sometimes of different types of plastic.

Availability of recycling. Most times the dumpster is full



Responses:

Recycling pick up and single sort recycling. More public recycling at businesses, in parks, etc.

My community is Vergas. I have been told that particular one is only for Vergas residents, so recycle in Perham. I would think any recycling center should be available to anyone driving by.

Need more people to recycle.

The recycling bins near our home typically are full, especially during the summer months. Also having a drop off for plastic bags would increase our likelihood of recycling plastic bags. We don't remember to take them with us when we go to stores.

More hazardous waste options and reducing solid and hazardous waste fees.

we just all need to recycle. I believe it starts in the classroom. Make it fun. The kids will pester their parents to recycle.

Curbside recycling

Waste disposal costs are way out of hand in this area. We need to look for more cost effective ways to dispose of the waste. Maybe landfills in some of these old gravel pits would be more cost effective than the indentation

Incinerator. It seems like the solid waste department just spends money not concerned about cost to tax payers.

Education and environmental protection

Get the word out and use PSA about how-to make changes and reasons for the recycle options. I would like a list of Who can use items, or where to drop items to avoid burning or discarding. or landfilling. etc.

Easier to drop off recycle materials

Public participation with integrity (clean, unbagged recycling). I wish we had commingled recycling pickup for bottles, cans, and cardboard.

Many people still don't recycle because they believe it is tedious or time consuming.

not sure

Convenience

Not sure.

Kitchen waste for composting.

Getting more people to recycle. Maybe increase the recycling pickup to weekly.

getting everyone to participate

protecting air and water quality.

I live 5 miles from Perham and we share a dumpster with my parents for trash. We bring our recycling to the collection site in Perham. I would LOVE the opportunity to have recycling picked up at our home (my parents next door) with our trash.

Education

I like the idea of offering financial incentives to people who participate in programs. Gets the ball rolling with some. Many need more education on the WHY we need to address landfills, recycling, etc. Presentations in the classroom should be done in all schools in the county at a certain grade level(s).

Encourage/instruct homeowners and school age children to recycle.

Availability

Landfill space, cost

Perhaps we could get home composting bins at a reduced price

Need to minimize the time and effort to ensure compliance. I currently sort, bag or box and transport recycling 7+ miles almost weekly for two properties. Also need a convenient option for oil, paint, old computers, televisions...I may just need to be educated regarding options!

Electronics, couches Mattresses, general household. Many plastics are not accepted in Henning. What do we do with those?

N/A

Responses:

Limiting waste and recycling what we can

Unsure

Single sort for those outside of city limits and a convenient and easy drop off for disposal OR better yet, a pickup option.

availability. Options

In the summer the Pelican Rapids recycling drop-off bins are often full. Specifically the plastic bin. We could either use another bin (we currently have two) or the bins be picked up more often. I ended up bringing my plastics home six times because they would not fit into the bins over a two week period. I ended up throwing them (3 large storage totes full) in my dumpster last week because I was so frustrated.

Encouraging and informing more homes to recycle.

Recycling accessible for bars and restaurants

Hazard waste what and where to take things

Have some recycling available for curbside to those residents out of town

Access to recycling in rural areas. Challenging to make it convenient enough to make folks willing.

Accessibility

These questions seem to relate mostly to city. What about a focus on outside city limits

There's still a lot of people that don't recycle. We need to educate more people on this subject.

I do not understand zero landfilling.....I am going to have to research that....never heard of it before :)

Being able to recycle all materials found with grocery store products. Increase frequency of collecting recycling, increased maintenance of recycling areas (consider concrete so that broken glass, etc can be easily cleaned.

Bars n restaurants not recycling...so damn wasteful....its a utter shame the amount they toss in one day in beer bottles liquor bottles n cardboard...should be mandated

Getting more people to recycle!

I think it is good....leave it alone!!!

"Food waste" HELPS in the process of breaking down organics in the Land Fill, And my Property Tax should pay for Recycling instead of paying for the Mayors Pet Projects!

Not sure

Tires

Hasmat

Summer residents being clueless about recycling. Also, NO restaurants in Battle Lake recycle...think of all the glass that gets thrown away...these restaurants need a service to pick up recycling and then it should be MANDATORY that they recycle.

Education and motivation for people to care.

Not enough people do it.

The collectors need to be switched more often. They are always full and overflowing which means people just start throwing recycling in the normal trash. This is in Pelican Rapids.

Cost

Home recycling

Prevention. Our packaging sucks.

Unsorted pickup of recycling. I want what other communities have.

Lack of curbside recycling

I think compost piles managed at the township level or at town halls, and oil dump spots. I understand it's a hazardous waste but oil can be hard to transport for homeowners. Zero landfilling would be extremely difficult. Another garbage burner near dalton or the sw corner of the county could be a good investment.

Less plastic

I live in the country, 8 miles from town. Everything leaves here in a 4 yd bin that steves sanitation hauls away

Responses:

Available recycling bins in Dalton. They fill so fast.

Aren't food wastes the easiest to decompose. I don't know the pros and cons or choices we have

People fail to take their garbage to the transfer station.

cost and convenience of use. It would make is easier for cans and bottles to be recycled if they could be in plastic bags, esp. for older people.

Continued access to single sort recycling and expanding this access.

Encourage recycling by everyone n

Trying to find a way to recycle everything that is recyclable.

single sort recycling pick up

Plastic reduction, and affordability. Depending on the waste, drop off can be costly. If more folks could afford it, they are more likely dispose of it properly and at the correct facility.

People using the drop off sites correctly and not just dumping unwanted items

Road pickup for lawn waste

Not sure

People abuse the recycling area by placing items that are not recyclable.

Options

More communication about hazardous waste disposal opportunities.

Don't know

Limited choices for services

Hazardous waste

A compost site.

Convenient

easy access

Recycling at homes.

Single-sort recycling pick up in the countryside

Compost

The recycling isn't picked up often enough. This would help reduce solid waste. By the middle of the second week I am bringing my recycling to a coworkers house or simply throwing it away.

to actually provide the services we're already being forced to pay for!

Accessibility for rural residents to recycling.

Expanded curbside services in townships to include recycling and plant/paper compost

Composting availability

I do not see any needs locally.

Over flowing recyclable bins

A Yard waste can for non-compost material.

With Covid, the future isn't as predictable. So increasing prices when there may be more people struggling to make ends meet doesn't seem real strategic. Maybe there are some options or revenue streams that haven't been explored yet?

Cities have clean up week. I as a rural person would love to have this available

I am concerned if we don't try to move the needle towards zero landfilling. I greatly appreciate the ease of our recycling program and would be very excited about composting or organic waste options

Curbside recycling pickup in the country

Nothing at this time.

Education on importance

Responses:

We're spoiled in Minneapolis, with curbside recycling, composting, and trash. When we have our typical schedule of 10 days here/10 days there, we carry our trash, compost and recycling back to Minneapolis. With Covid, we've been up here solidly since early March. We don't have a good plan for longer stays up here.

We need a full-time hazardous waste drop-off in Perham. It would include used motor oil.

Curbside recycling pickup.

to get everyone to comply lots of items could be recycled instead of in the general garbage pickup

We need someplace closer to drop off yard waste, branches and downed trees.

Single sort recycling at drop off points

Easy accessibility, curbside pick up offered in rural areas, etc.

More education

N/A

Places to bring composting waste, plastic bags, and styrofoam.

Single sort recycling in the rural parts of the county

Get rid of plastic bags

Recycling getting picked up weekly

Why the need to compost as food breaks down anywhere it is disposed of...???

I understand that is the most important problem now being circulated...but is it really necessary....

Just my opinion....

Clarification on Cold Ashes vs Hot Ashes.

I pay taxes every year part of which goes towards solid waste management. I should not be paying a monthly fee for trash and recycle collection

More access to drop off recycling. Often the limited locations are full when we arrive to drop off recycling, especially card board. More locations for drop off could help with this overflow, especially for weekends and after hours.

Home recycling pick up.

Curbside pick up for recycling, even in more rural areas. Simple Sort would be nice as well.

Curbside recycling.

Getting more people to recycle. I know there are a lot of people that do not because of the inconvenience of hauling it.

No recycling pickup offered.

Bigger recycling container or weekly pick up

?

Our recycling bins are full! We go there every week and they are full people are recycling but not as much as we should have we need to have more of those recycling bins just everywhere in absolutely every location so that when you bring your items you're not throwing them on the ground which is happening all over

Need recycling pickup in rural areas in the county.

Having the compost pile open more than twice a week.

?

education.

Responses:

The increase of cost

Informing residents how to compost (banana perls, organic foods) & putting a system in place.

Lower the cost, a dump load of demo debris is \$250, that's tyranny right there.

Education in order to get more people to recycle.

NA

Stop burning. Urge use of reusable shopping bags and reusable containers. Ban single use plastics. Make public aware of microplastics in the environment and that the globe is drowning in plastic.

I think additional education is needed to maximize the single sort recycling that is offered in Fergus Falls. Many of my coworkers and others that I talk to either try to recycle items that can't be (plastic straws are a big one) or they place the bag into the recycle bin vs. emptying it.

being rather isolated between town/cities ... I have a hard time driving to Fergus Falls for other than local bin recycling. I'm in Alexandria once a week and an agreement with them (as in the food waster project) would be nice.

More convenient options for recycling. More people would recycle outside of city limits if curbside was available.

Dont know

Recycle Styrofoam products and some food packaging.

Encouraging more participation

Needs to be local.within 5-10 miles,needs to be cheap,needs to be easy

Large furniture and junk being dumped in my slough because people can't or won't pay to bring to dump.

Motivating lazy people

I wish recycling was picked up more than every other week. Sometimes we forget to bring it down at night, and that's not a problem with the trash, but our recycling fills up quicker than trash. This is also a personal problem we could address by just setting an reminder :)

Education

Recycling at home. People are busy and don't want to haul waste around in their cars.

For smaller households we don't need the garbage picked up every week!! This should be an option for billing!!!!!!

I don't have any.

Accessible composting. Expanded recycling options for textiles

No idea

Recycle as much as possible

Continue to drive more to recycle and reduce overall waste, especially plastic.

Lawn clipping

Curbside recycle

More education on what is currently recyclable and adding to the list of what. An be recycled.

More rural options

Rural curbside pickup and single sort recycling.

A can for compost.



Costs are to high for county landfills vs city landfills

It would be beneficial to pick up recycling in out of town locations or put the recycling drop off bins on the outer limits of town so it would be more convenient for those that do not have the option for pick up.

Education

Random pickup times of toxic items and too far to travel. No idea where to take tvs etc.

Responses:

Our driveway is way too long to haul trash to the street. Two bins is ridiculous.

More storage at recycling center in our small town. Even better, rural pickup.

Lower costs to stop people from dumping on roads and lakes. Computers are showing up in ditches because of the fees.

Recycling pick up outside city limits. My neighborhood has a dozen houses and we all have to drag our recycling into town. I'm not sure how many people actually do.

It would be helpful to have more frequent pick up of recycling vs every two weeks.

Recycling

Electronic recycling. Currently, I believe the only option is to haul to Fergus Falls during business hours. As a working person, this is not convenient.

Unsure

Reduce landfill usage, encourage composting and recycling

Not aware of any

High costs

Allowing residents in rural Otter Tail County to choose to pay for curbside recycling pickup. This ordinance is an overreach.

The ease of general recycling for areas that do not have recycling pick ups.

Getting more people to participate in the current recycling program

Making cardboard cartons recyclable

Finding a way to get people to follow the rules such as empty your bags in the recycling bins. Unlikely I know, but it's annoying!

Amount of trash in the ditches, also I think local businesses should be pushed towards less styrofoam and plastic.

Making sure recycling bins are not overflowing. Or directions of what to do if they are full.

Love you sign about not leaving plastic bags! 😊

Not knowing what all can be recycled

Business recycling

Expansion of programs to reduce household waste and increase recycling.

Community wide curb pick up day each year...

Affordable collection options in rural areas so that trash isn't burned or buried.

When it comes to Fergus Falls, I believe general wide-spread education and understanding is a great need. As of right now - people across all socio economic status lean toward the trash rather than recycling. Or - try to recycle, but do not prepare the recyclables (aka wash them) before placing them in the bin.

Curbside recycling

Curbside composting

Accessible sites to drop large and unusual items off.

Household hazardous waste, electronics

Convenience

Lack of recycling due to no curb-side recycling pick up services

Single sort recycling would be easier.

Rural pickup

Curb side recycling

I would like to see curbside recycling.

More recycling

Responses:

proper sort of recycling

Getting the community excited about recycling and making a difference in OTC's growing landfills. People want to feel like they can make a positive change - giving them a challenge that is fun and exciting will make it a family venture!

I pay for trash removal and transport recyclables to a site either in Ottertail or Battle Lake. My neighbors do not recycle but I believe they would if there were curbside pickup.

?

Have a curbside recycling pick up

just sounds like something that wont work

lower fees to encourage use of facilities.

Home recycling pick up

Mandatory Single sort recycling is needed

people unwilling to properly dispose of large items and instead burn them

Garbage in the recycling. Needs to stay out!!

Reduce the amount of recyclable waste at the landfill

Composting of food scraps and plants in the fall.

Every business that provides plastic bags should be required to recycle them as well.

curbside pickup outside of town.

Rural recycling requires effort and personal time and cost not incurred if you live in town and can just throw it in a separate bin so not a lot of incentive for people to do it.

Also, I walk my ditches several times per summer and have already picked up four kitchen bags of litter of which the contents I do not recycle as very dirty and do not think they should be touched by me or county workers. Littering is a big problem.

More drop off areas.

Single sort recycling drop off areas and access to recycling pick up.

Sites are too far away

Illegal dumping of waste.

Education

methane reclamation

not enough garbage cans around town, lakes, public access and rivers

I don't know.

Demo Waste, Ash Re-utilization, Recycling and Composting

Not being from Fergus Falls, it would be nice if HHW mobile collections were available in my town more than once per year. That's a long time to hang on to stuff.

single sort recycling and problem waste management like mattresses. Not burn the brush at transfer stations.

Would be nice if transfer stations took bigger chunks of trees or limbs like after storm clean up (like Fergus.)

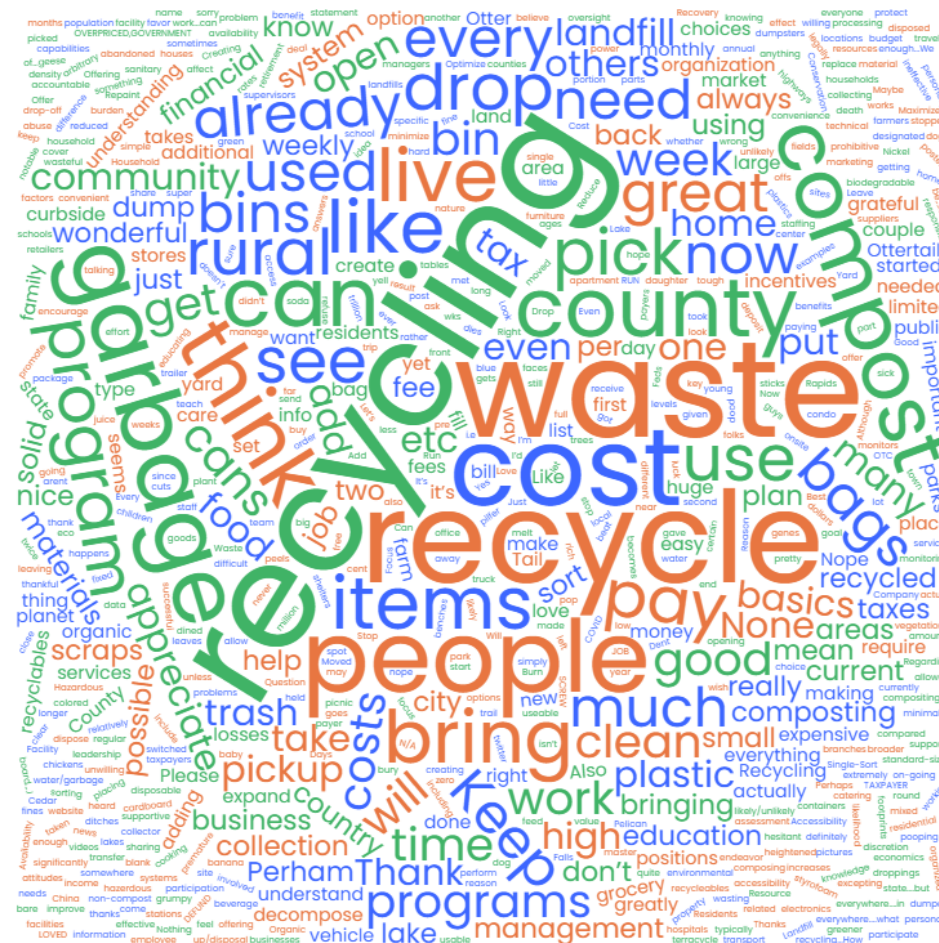
more business routes, resort route, more capacity, organics

educating and promoting backyard composting and its importance - how it can save the county as a whole big bucks!

Question 23: Do you have any additional comments or questions about Otter Tail County's Solid Waste Management operations or the Solid Waste Master Plan?

Themes which emerged from public comment include:

- Many requests for single sort, curbside, and more frequent recycling pickup
- Widespread support for repainting the dumpsters
- Several requests for more visual information at transfer stations (images of types of materials accepted)
- Requests for more education (both in school and in the community) about why recycling is important and how to do so
- Some residents would like an "opt-out" option for composting provided by the County with a fee, as they already compost themselves



PRC Comments

As an individual, I think the HHW and Single Sort Recycling (I live in Fergus) are excellent. As a business, we think the Perham Resource Recovery Facility is a big bonus for our County.

Responses:

Thank you for doing this, it is so important!

No

It cannot add any financial burden our taxes are already to high. I will be leaving here at retirement. It's to expensive to live here on a fixed or limited income.

A goal of zero land filling is not possible. There will always be a need for a land fill. Maximize the use of the The Perham Resource Recovery Facility.

We drop off recycling every week, we bring cans to the collection center and drop one bag at the sanitary landfill. We recycle as much as we can. We compost and feed scraps to our chickens .

Let's put tax payers first not some one on a power trip to make a new program with there name on it.

Thanks for being there!

I left quite a few blank because I don't know the eco footprints of what would replace the current systems.

Keep an on-going list of who/ business or where to 'share' items that can be used by others. Maybe list in news or on a website. Keep talking and sharing of information. thanks

Question #20 switched the order of likely/unlikely choices. I hope that doesn't affect your data.

Reason I'm hesitant about adding more cost is right now I pay \$45 for 2 garbage bags in 6 wks and 1/4 full recycle bin.

no

No

Love the single sort recycling.

So thankful there are bins near by to take our recycleables. Thank you Otter Tail

is there a market for the recyclables?

Let's keep our planet clean!

We bring our recycling weekly and it cuts down on our family of 5's garbage significantly. Most of our garbage is diapers and takes up a lot of space. We are very grateful to live close to the recycling drop off and every couple months we bring our garbage to the landfill.

We have LOVED the no sort recycling bins. Best thing ever!

I have heard that many plastics can be recycled, but actually arent, no market for it.

No

Would definitely be in favor of 'curbside' pickup in lakes country!

It would be nice to have a rural pick up for hazerdous and large items, electronics this type of thing. Its hard to get a vehicle to transport my items. And when is the dump even open? And when it is open the people there are grumpy and yell at you for not sorting or bringing to the wrong spot. I have no idea how that a works.

Why isn't styrofoam a part of our recycling program?

N/A

None

Offering a place for people to bring their big items for free so they don't end up in farmers fields and ditches, or in abandoned farm sites!

I do not want my taxes to go up to support recycling.

I would love to see more education posters (with pictures, super simple, not too much info & easy to understand) at recycling drop-off locations & transfer stations & grocery stores, etc

Why would it cost monthly money when we could offer incentives and resources to compost and expand access and knowledge on recycling

No

We live on a farm and already compost everything that we can. I would not be willing to pay for a program for others to do the same.

Leave it be....it is fine!!

No

Responses:

You have a good program but it's time to expand it. I feel like Lake residents need to be held more accountable for recycling. I live year round on a lake and see how people abuse and refuse to use the current recycling system.

Good luck.

Cost of garbage collection - we typically have one or two small bags of garbage per week and pay the same as those who have two or more standard-size cans per week. We recycle most of our waste.

We pay more twice amount fees in our water/garbage bill then the actual bill..

I'm sick of being Nickel and dined to death.

Stop catering to rich lake people.

No

Repaint all dumpsters, they look great

No

No

I appreciate the effort the collecting staff put into their work.

By financial incentives to recycle, I think that should mean that it costs more for garbage pick up/disposal than it does for recycling - a notable difference between the two

DEFUND, OVERPRICED, GOVERNMENT RUN TAXPAYER SCREW JOB.

No

If costs are too high, we take and deal with garbage on our own (legally), cost increases do effect many households. I always took my recycling to the community bins, until they got the large recycle cans at homes, now I recycle more and fill that baby up. If the cost to compost is expensive. I would just create something for at my home to do myself.

include garbage for bags at recycling drop offs

My answers related to compost and the likelihood of me using a designated facility is because I live in the country and do my own composting. I think a brown bin system for in town would be a wonderful way to get more people to do this with their organic waste.

Availability, affordability and easy of use hinder many people in OTC from properly disposing their waste. The current structure is not equitable. For example, someone may not have a personal vehicle to travel to waste or recycling facilities. My family is open to an additional tax that can help with costs so more people can participate. We all have to do our parts to improve waste management, live greener and protect the planet. Appreciate the recycling bin in Underwood. Occasionally needs to be dumped more frequently.

No

No

I would recycle more things if I didn't have to separate all the recyclables. Also, it's frustrating driving to a drop site only to find all of them overflowing and having to bring everything home again. Otherwise satisfied. Tx.

I have always been impressed with our waste management system and appreciate all they do!!! Thank you!!

OT co is huge, be sure to cover all areas.

No sorry

no

None

PLEASE bring single-sort recycling pick up the countryside!

There should be NO additional charges to waste management. I have talked with people from all around MN and Fergus Falls has by far the highest cost.

why should I care about organic waste in a landfill? I don't even see why people should work there at all in the first place! they do the bare minimum!

Responses:

Recycling programs in rural areas have limited chance for success because of logistics and residents attitudes. Before China stopped excepting plastic recycling was an ineffective program. Now the processing capabilities are so low in the US the economics require a high population density to be cost effective or even possible.

Offer residential Yard waste cans for non-compost material.

More Cedar videos!

No

Nothing at this time.

No

Nope! I'd love to drop off my mixed recycling somewhere!

We need to see clear set rates for items taken to the NE Landfill. The cost of bringing items there now seems arbitrary. It is at the discretion of the county employee working that day.

Please bring curbside recycling & compost pick up to rural Dent & other rural areas!

No

Thank you for doing this!!!

We pay a fee now for recycling...How much is enough...We really recycle because we are clean and organized and want a clean county and state....but what about others who do not care ... like dog poop not being picked up and disposed of...geese droppings everywhere....what I mean is there are not enough programs to get everyone on board....I personally wish there were fines for dogs pooping everywhere....in state parks, city parks etc...

We greatly appreciate Ottertail County We think you all are doing a great job!!!

The solid waste budget should come from county and city taxes not monthly fees

I pre buy my bags and take them in to drop them off. Then bring in my recycle items at the same time. I used to live in Perham and started recycling when the program started. Moved to the country and still do it. I teach and promote it .

Keep up the good work. Am very grateful for Household Hazardous Waste day.

No.

No

No

we have more recycling than waste, could do recycling every week and waste every 2 weeks.

Nope

No

I think we should encourage grocery stores to stop using disposable plastic bags. I also believe that we need to start educating children as young as possible about the benefits of recycling, this way it becomes second nature to them.

No

I would like to know more about the problems our county faces with its landfills, whether financial or environmental. Also what happens to the materials that go into our recycling bins? Like, specific examples: Company X used X to make X. Can retailers ask suppliers to package goods in biodegradable materials?

Regarding composting... the only reason I'm unlikely to use those services is because I already compost onsite at my home. If didn't have that option, I'd likely use such a service, even if there were a fee, as long as it was relatively convenient. As it is now, it's tough to beat the convenience of simply bringing it out to my compost bin in the back yard!

No

Responses:

Look at staffing levels that are currently used to manage waste. Optimize the organization and minimize creating of any new positions - like the positions opening for monitors. If monitoring is needed get supervisors and managers out of the office and perform oversight. Run the county like a business.

My daughter moved to a FF apartment and has yet to receive any recycling info. More education needed.

No

Yes, open dump up so people can pilfer through the useable furniture and materials others dump.

If the recycling could be put back into the local area, i.e park benches, picnic tables, or shelters made from recycled plastic. It would put more of the result of recycling in front of the public. Right now all I know is a truck takes it away. Does the county sort and melt down clean or do we send it off to another area where only a small portion actually gets recycled.

None

No

Drop more recycle bins! Just because a community us small dies not mean we have less recycling.

No

I think Ottertail county is the only county that has blue for solid waste rather than recycling like other counties.

Add vegetation recycle options, including pick up. In this city of trees it is difficult for those of us that do not have a pickup or trailer to recycle this waste. My food waste is extremely minimal compared to the branches, sticks and leaves I need to dispose of.

No

No

You are wasting tax payer money. Burn or bury waste and let it decompose, unless the items are usable.

No

No

Reduce costs!

Residents in rural Otter Tail County can and should be allowed to be responsible for making their own recycling choices.

weekly recycling pick up

I'm very supportive of composting but all unwilling to pay for it since i already compost in my yard

We appreciate all you do for us!

The school programs that are done are great. (Although sometimes a little to technical for certain ages), Conservation Days participation is wonderful. Keep up the great work...can never have too much education.

Keep the costs down, don't add to the already high cost per household

Recycling bins to the lake houses.

Our community could use a terracycle program.

By offering a choice of weekly or every other week pick up for garbage with a reduced cost if you do every other, people would recycle more, I'd think.

I think I really only have one option for our trash collector - is that right? And is that good?

There would be great benefit to adding in a green bag for food waste. Every time I have cooking scraps I think about how wasteful I'm being by placing them in my trash knowing that they'll take so much longer to decompose. Accessibility and understanding will be huge factors for this master plan (not just the \$), so anything that can allow for heightened accessibility and broader understanding of a value of these programs will be key in getting the public to back the plan.

We are already paying a solid waste fee, the Feds just gave out a couple trillion dollars, why wasn't some used for this? Or some of that \$30 million being used to create the trail between Perham and Pelican Rapids? As the cost of trash and recycling goes up more rural folks are using their own 'landfill'.

I think that the leadership team does a wonderful job at this organization. I would like to see the community more involved in this important work.

Responses:

Organic composting is great, but seems premature given that the basics of genes recycling and availability are not being met by the county yet

I would recycle much more if the collection was done at my home. Even if we could have different colored bags that we set out with our regular trash pickup.

Creating a good marketing plan will help greatly in making this a successful endeavor!

What does the annual assessment on my property tax statement pay for?

no

No

no

No

None

I live in a condo. It would be nice to have a composting bin here for food and plant scraps.

I don't see food waste as a problem for myself. Perhaps there is more of a need for some businesses, schools, hospitals, etc. to use this type of recycling.

Please do not add cost to taxpayers for services. With COVID and job losses and business losses this is not the time to add cost to programs.

Like many state require a 5 cent deposit on all beverage containers such as - soda, water, juice. Will help to clean us the highways.

not really

No.

Single-Sort pickup would be nice for rural, but i understand the cost would be pretty prohibitive.

Keep up the good work. I see you guys post on twitter.

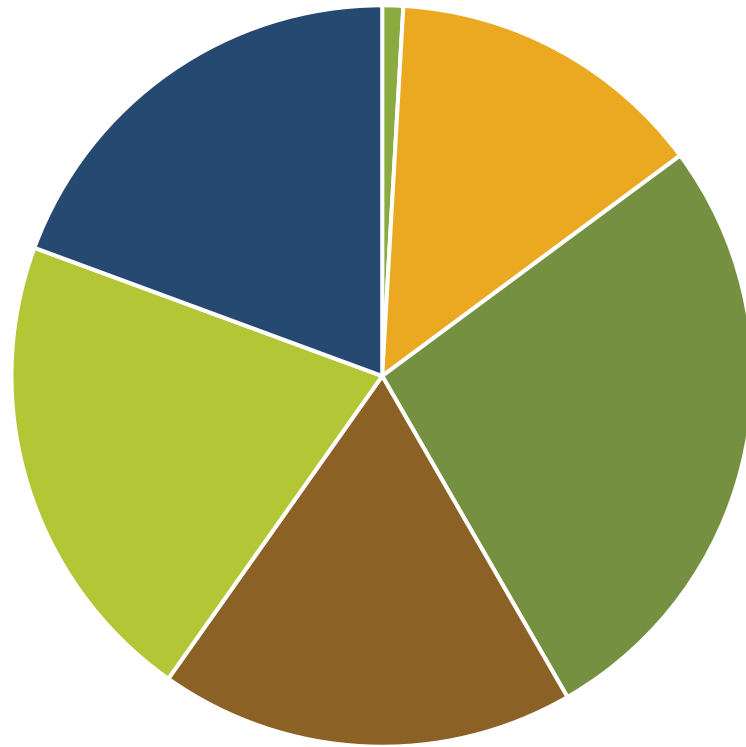
I would focus more on recycling the basics like cardboard, plastic, pop cans etc. If you can't get people to recycle the basics, they aren't going to recycle banana peels.. Focus on the basics or recycling.

nope

thank you for doing it

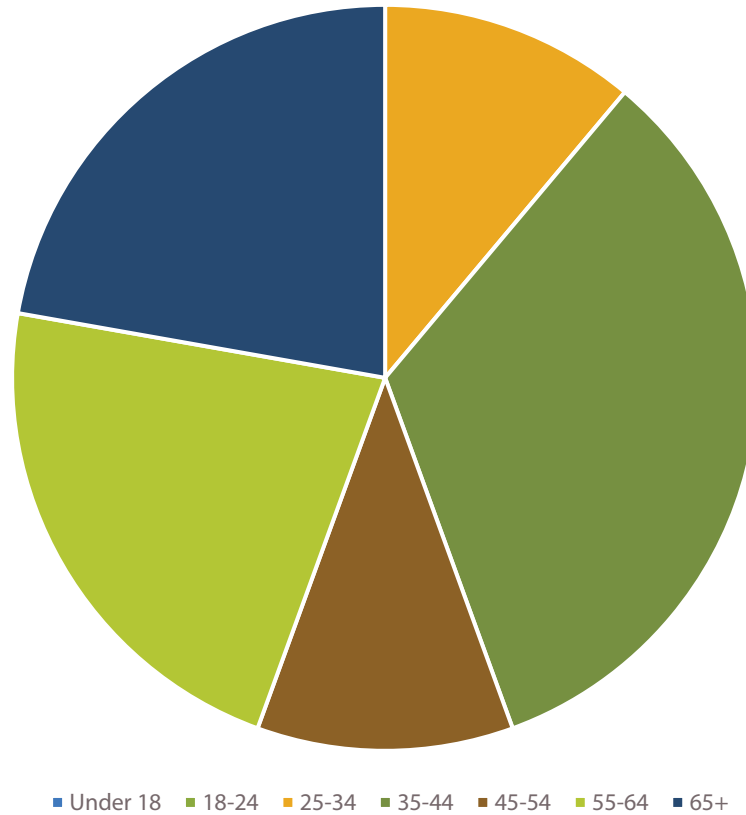
Question 24: Please identify your age group.

Answer Choices	Responses	
Under 18	0.00%	0
18-24	0.91%	5
25-34	13.95%	77
35-44	26.81%	148
45-54	18.12%	100
55-64	20.83%	115
65+	19.38%	107



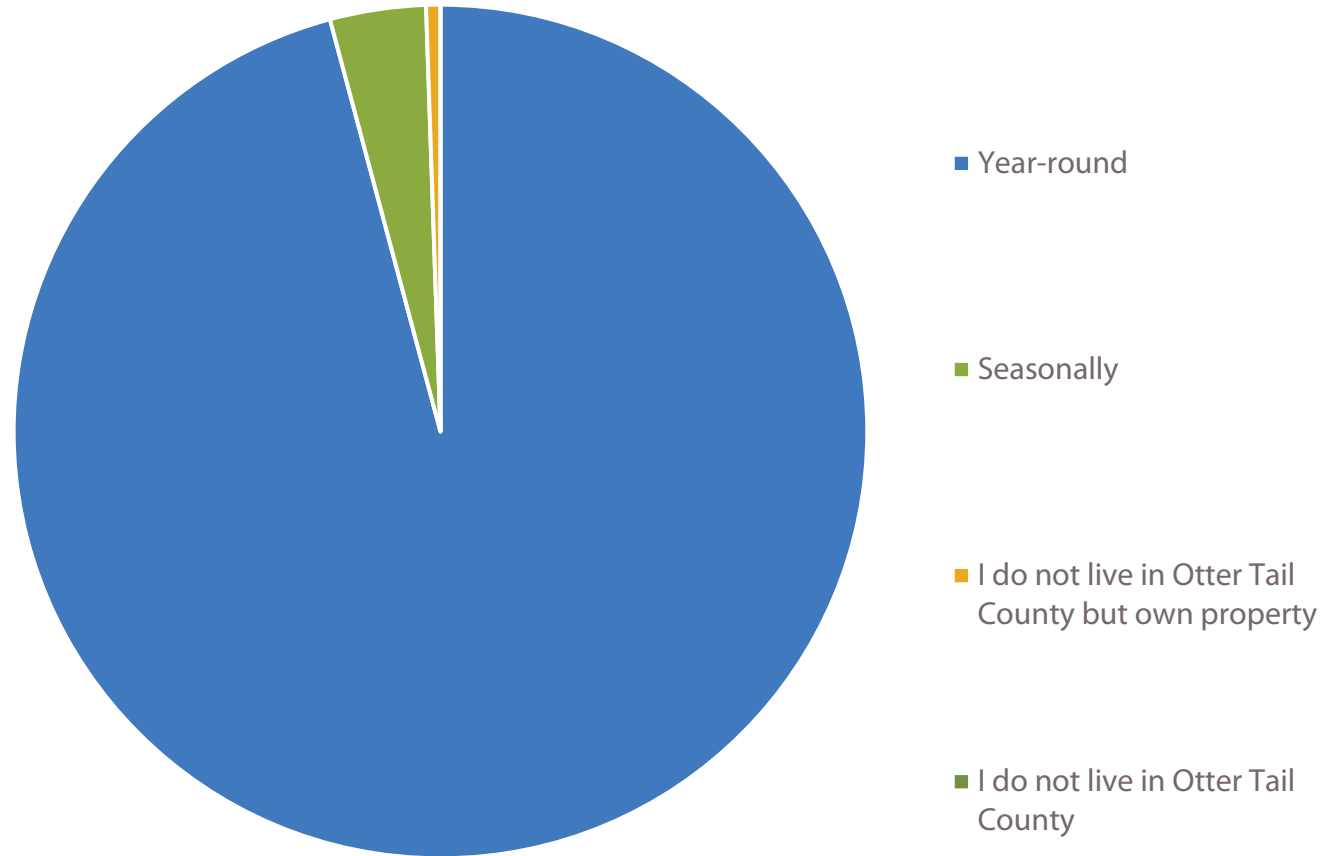
Question 24 (PRC Results): Please identify your age group.

Answer Choices	Responses
Under 18	0.00% 0
18-24	0.00% 0
25-34	11.11% 1
35-44	33.33% 3
45-54	11.11% 1
55-64	22.22% 2
65+	22.22% 2



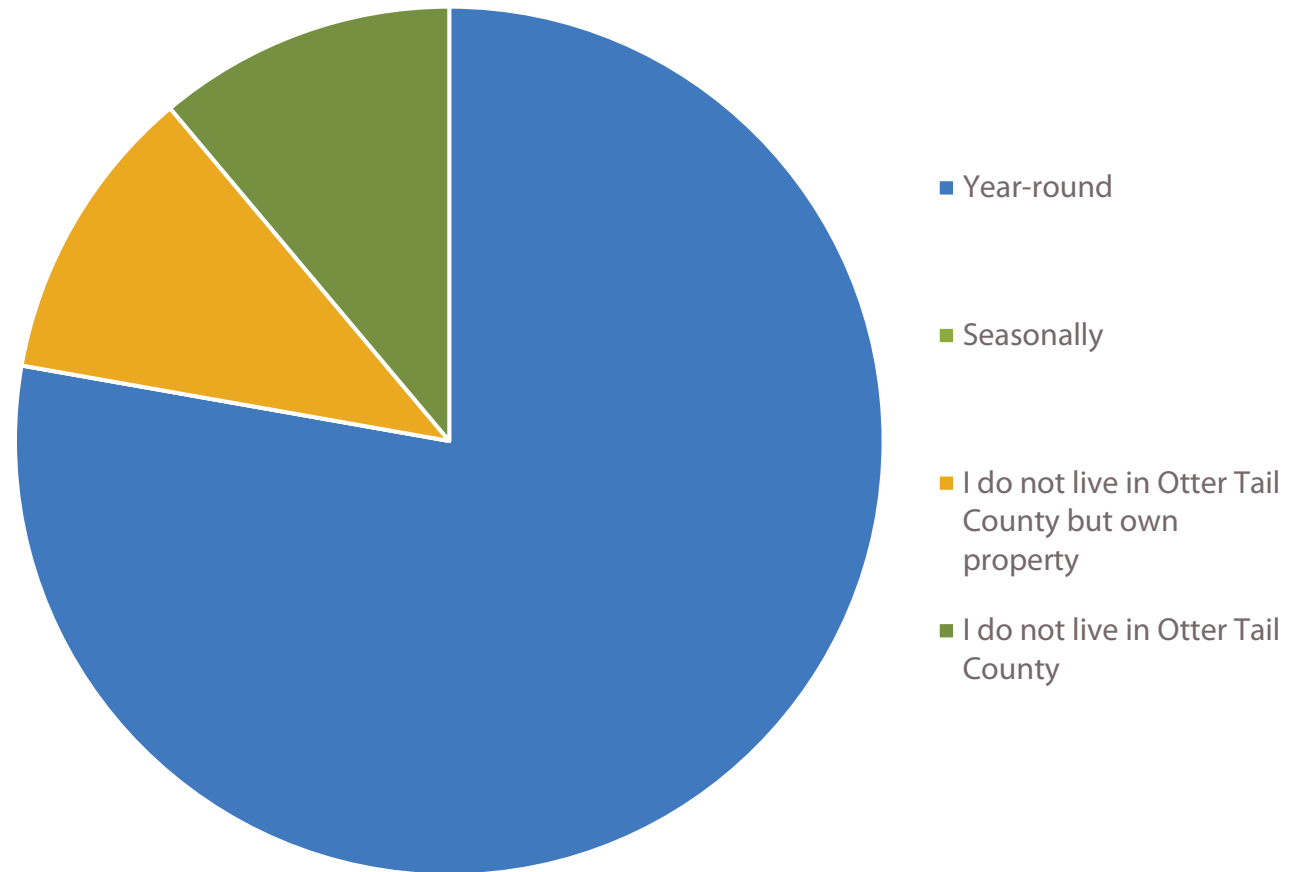
Question 25: Do you live in Otter Tail County seasonally or year-round?

Answer Choices	Responses	Responses
Year-round	95.83%	528
Seasonally	3.63%	20
I do not live in Otter Tail County but own property	0.54%	3
I do not live in Otter Tail County	0.00%	0



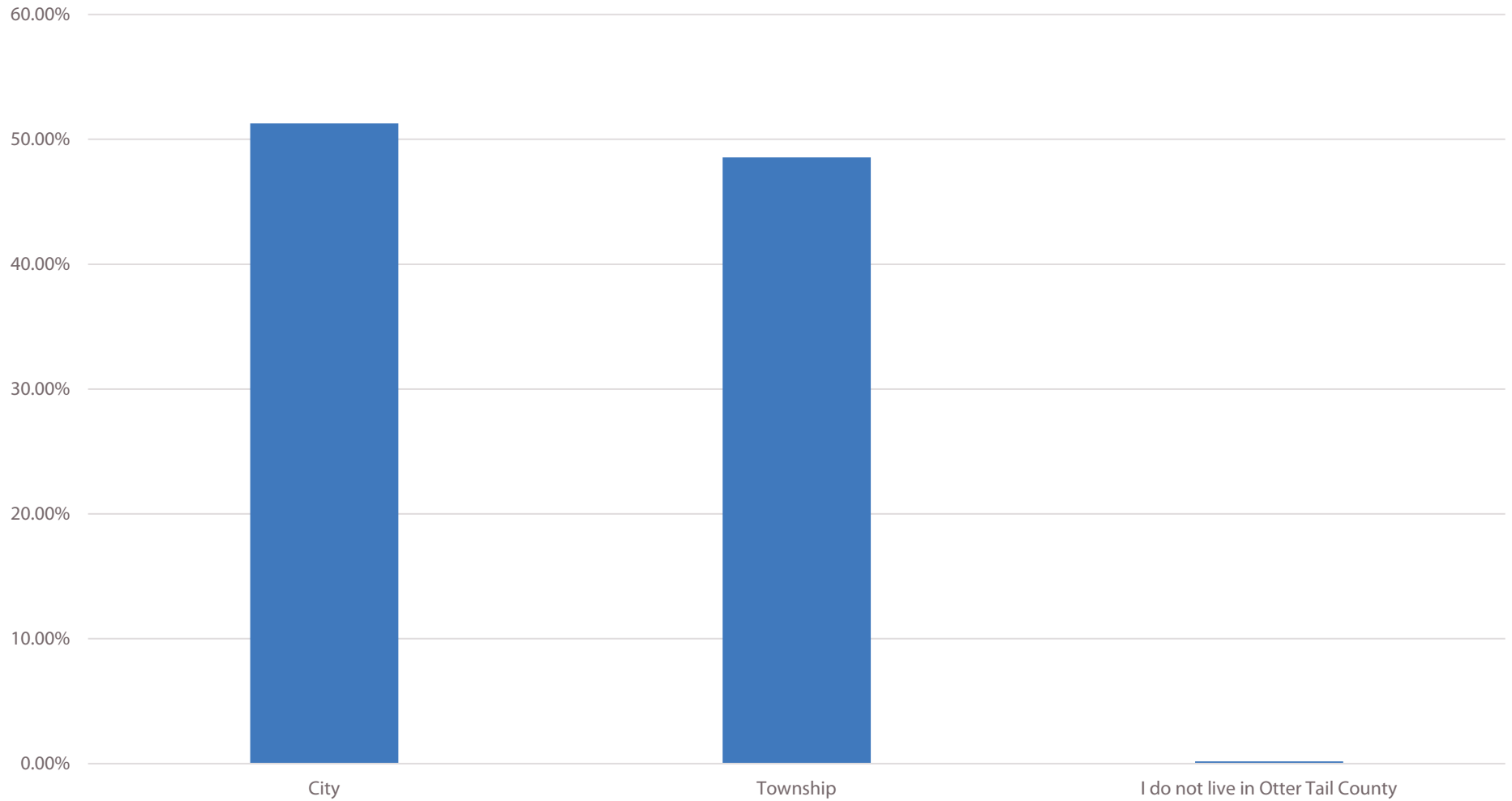
Question 25 (PRC Results): Do you live in Otter Tail County seasonally or year-round?

Answer Choices	Responses
Year-round	77.78% 7
Seasonally	0.00% 0
I do not live in Otter Tail County but own property	11.11% 1
I do not live in Otter Tail County	11.11% 1



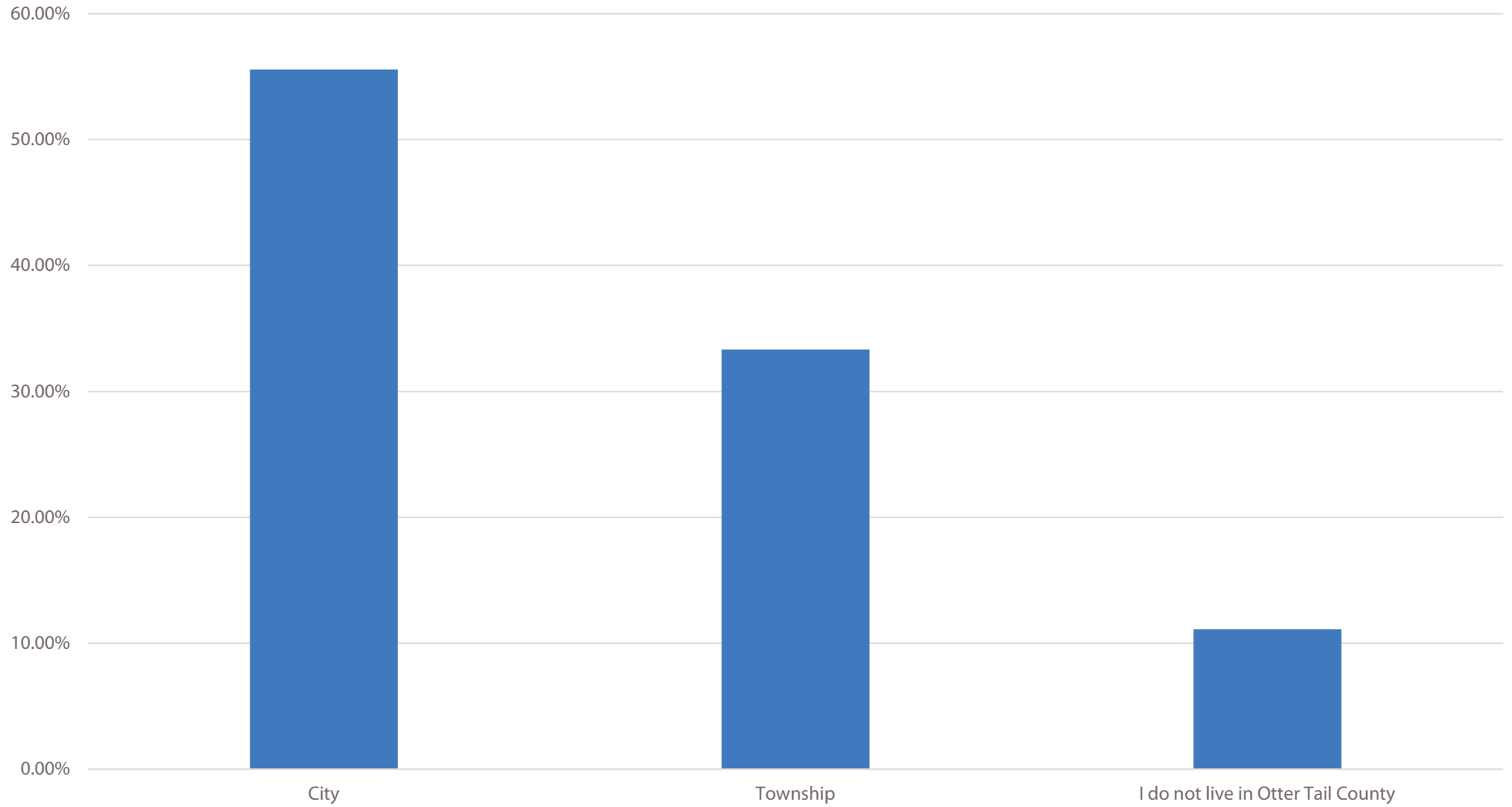
Question 26: Do you live in a city or township?

Answer Choices	Responses	
City	51.27%	283
Township	48.55%	268
I do not live in Otter Tail County	0.18%	1



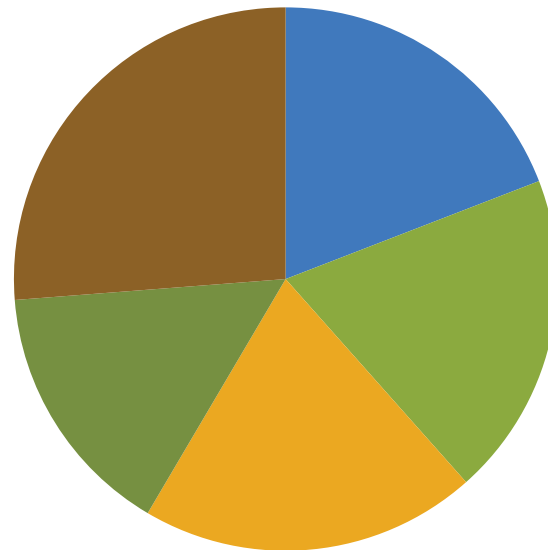
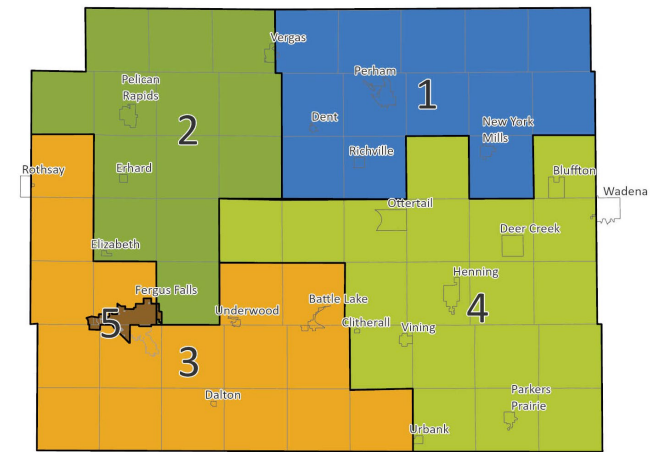
Question 26 (PRC Results): Do you live in a city or township?

Answer Choices	Responses
City	55.56% 5
Township	33.33% 3
I do not live in Otter Tail County	11.11% 1



Question 27: Which district do you live in?

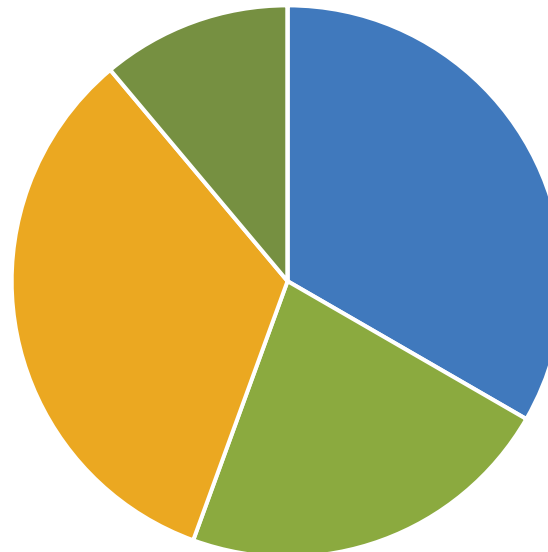
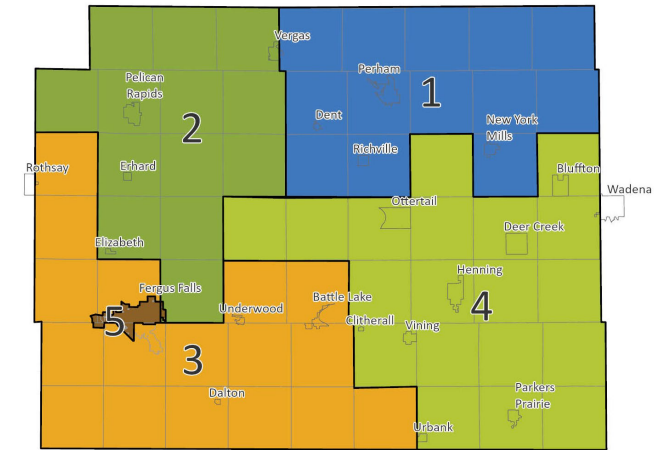
Answer Choices	Responses	
District 1	19.13%	105
District 2	19.31%	106
District 3	20.04%	110
District 4	15.30%	84
District 5	26.23%	144



- District 1
- District 2
- District 3
- District 4
- District 5

Question 27 (PRC Results): Which district do you live in?

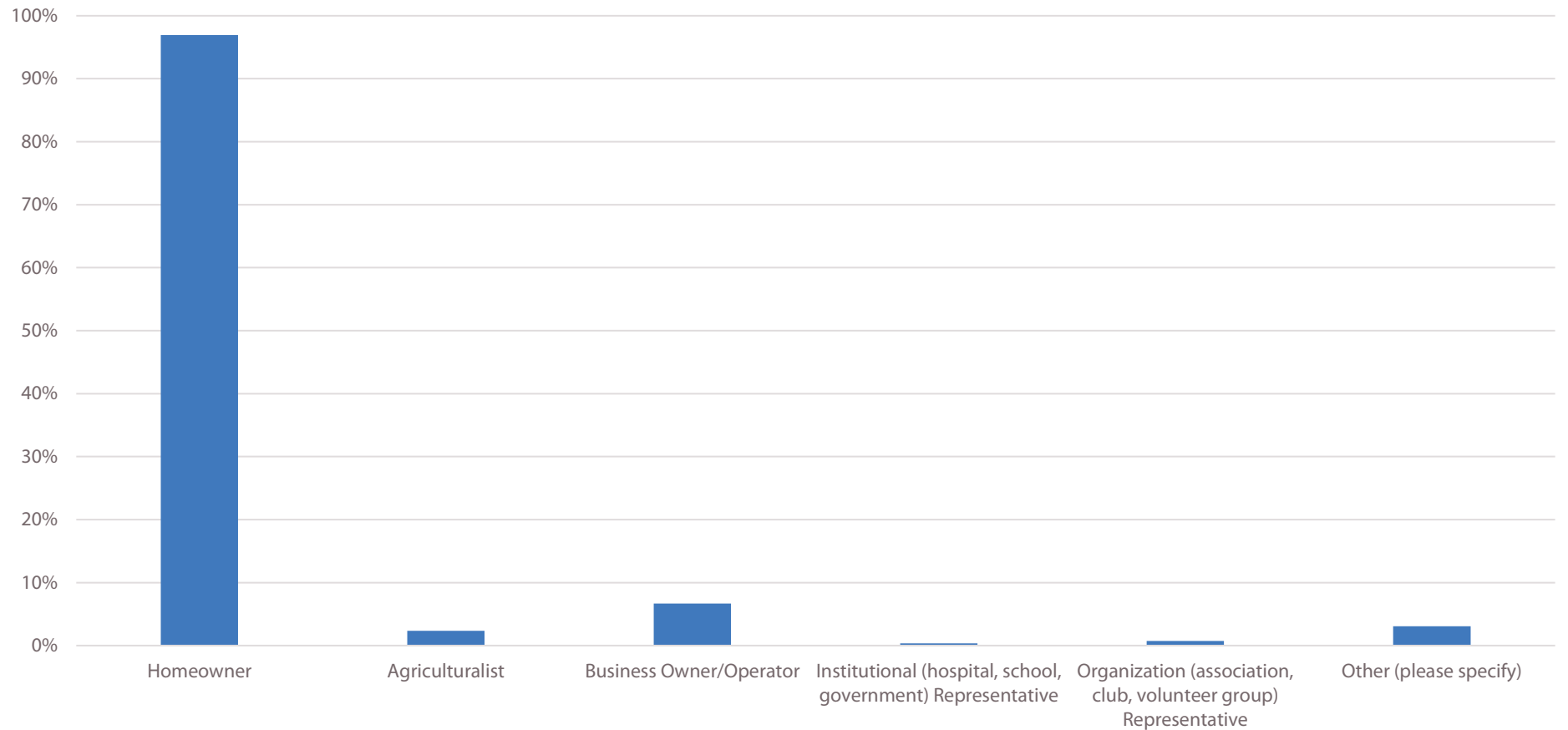
Answer Choices	Responses	
District 1	33.33%	3
District 2	22.22%	2
District 3	33.33%	3
District 4	11.11%	1
District 5	0.00%	0



- District 1
- District 2
- District 3
- District 4
- District 5

Question 28: Which category best describes your viewpoint as you answer this survey?

Answer Choices	Responses	Count
Homeowner	96.93%	536
Agriculturalist	2.35%	13
Business Owner/Operator	6.69%	37
Institutional (hospital, school, government) Representative	0.36%	2
Organization (association, club, volunteer group) Representative	0.72%	4
Other (please specify)	3.07%	17



Responses:

Rental homeowner

renter

renter

cabin owner

a household of 1

Resident in senior high rise

Leased townhome....we pay extra for recycling...the fee is not included with the lease payment

private home

Citizen

Rural land owner

Renter

home owner

Renter

Homeowners, school teacher and 4-H volunteer.

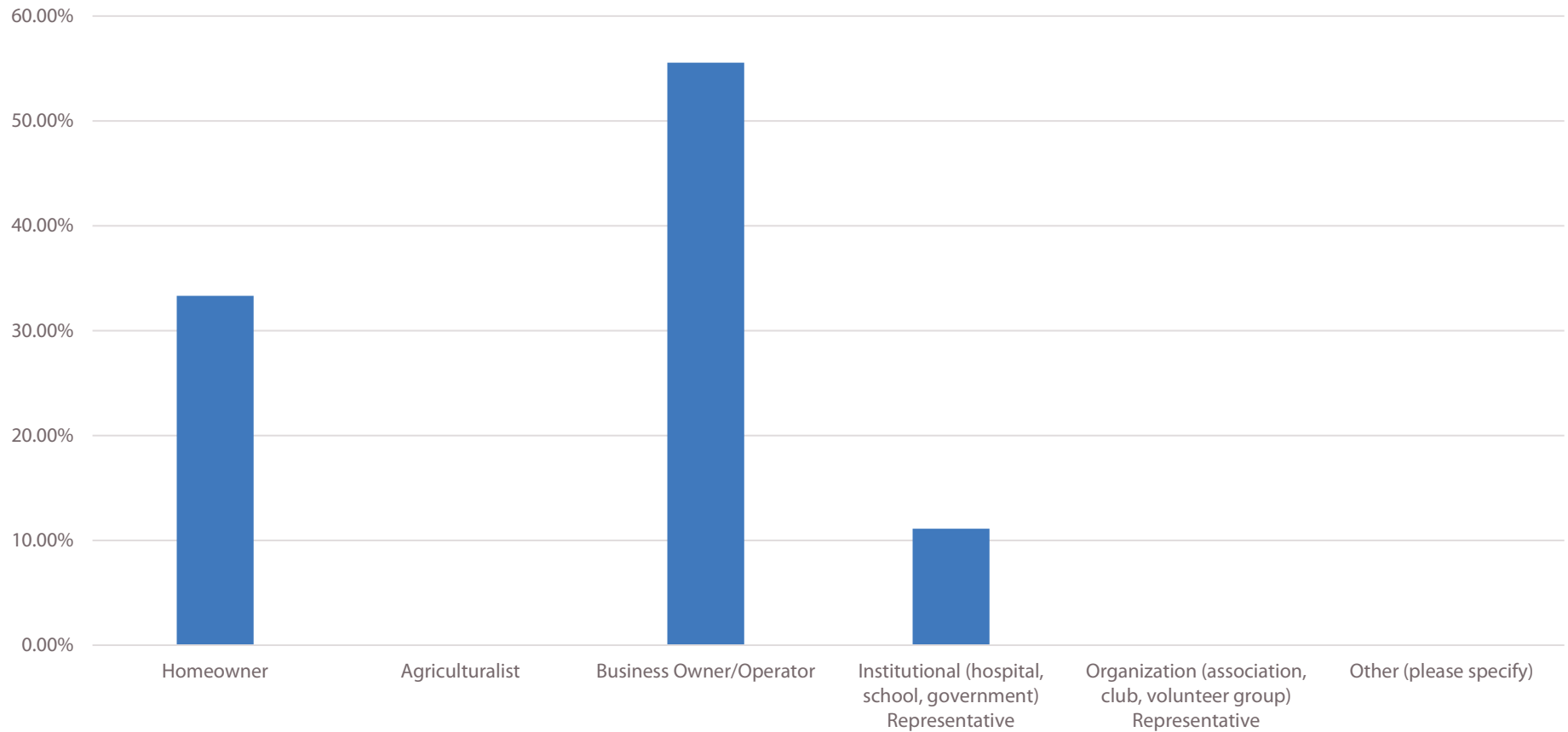
Active community member

Lake home

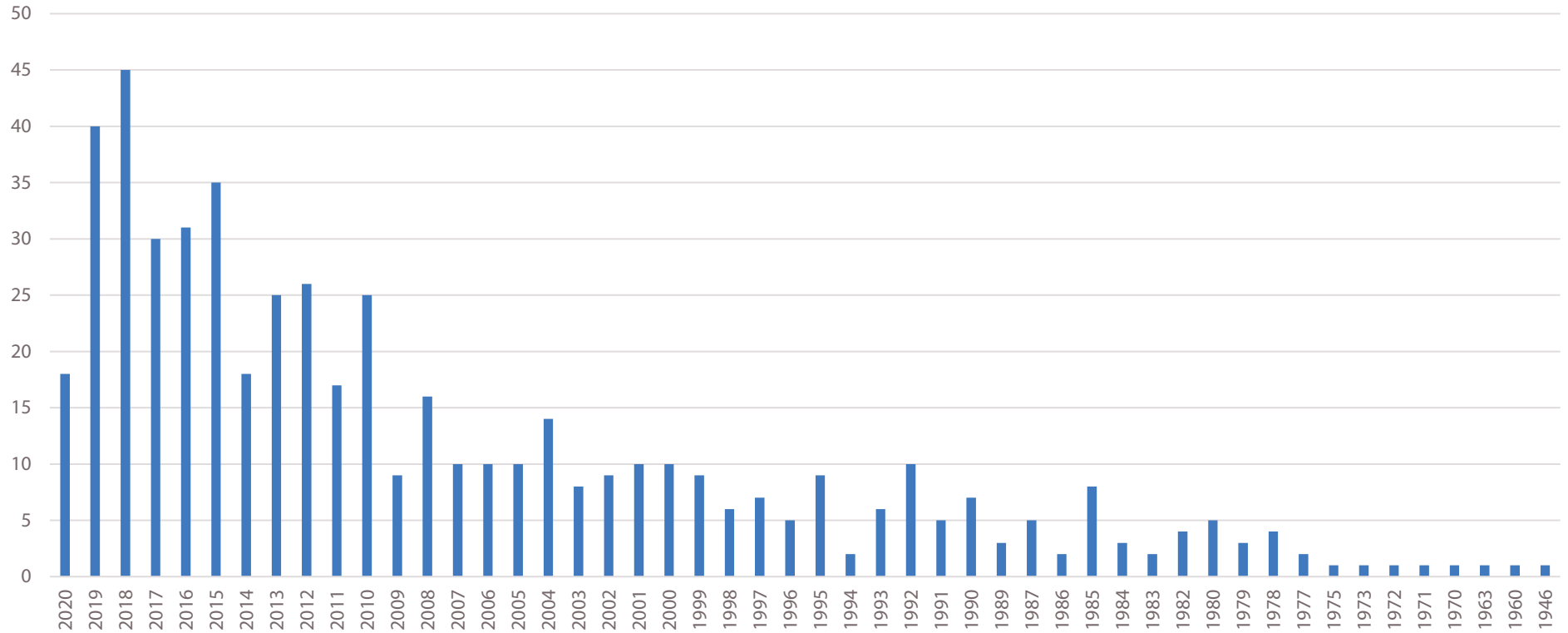
apartment

Question 28 (PRC Results): Which category best describes your viewpoint as you answer this survey?

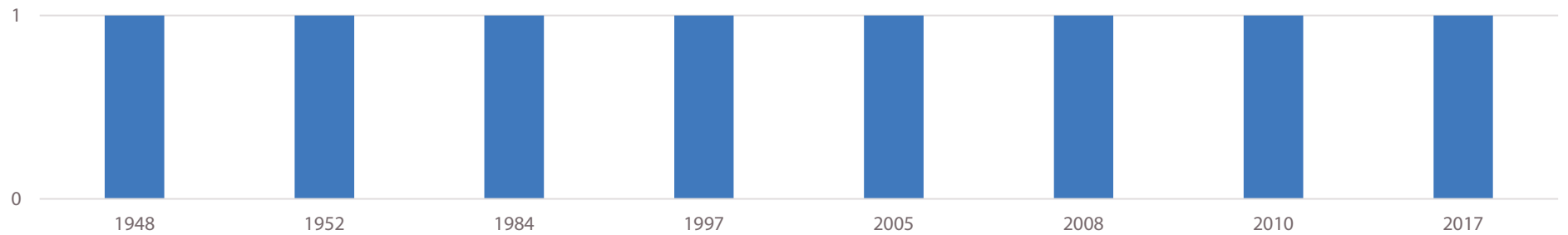
Answer Choices	Responses	
Homeowner	33.33%	3
Agriculturalist	0.00%	0
Business Owner/Operator	55.56%	5
Institutional (hospital, school, government) Representative	11.11%	1
Organization (association, club, volunteer group) Representative	0.00%	0
Other (please specify)	0.00%	0



Question 29: In what year did you move to your current home?

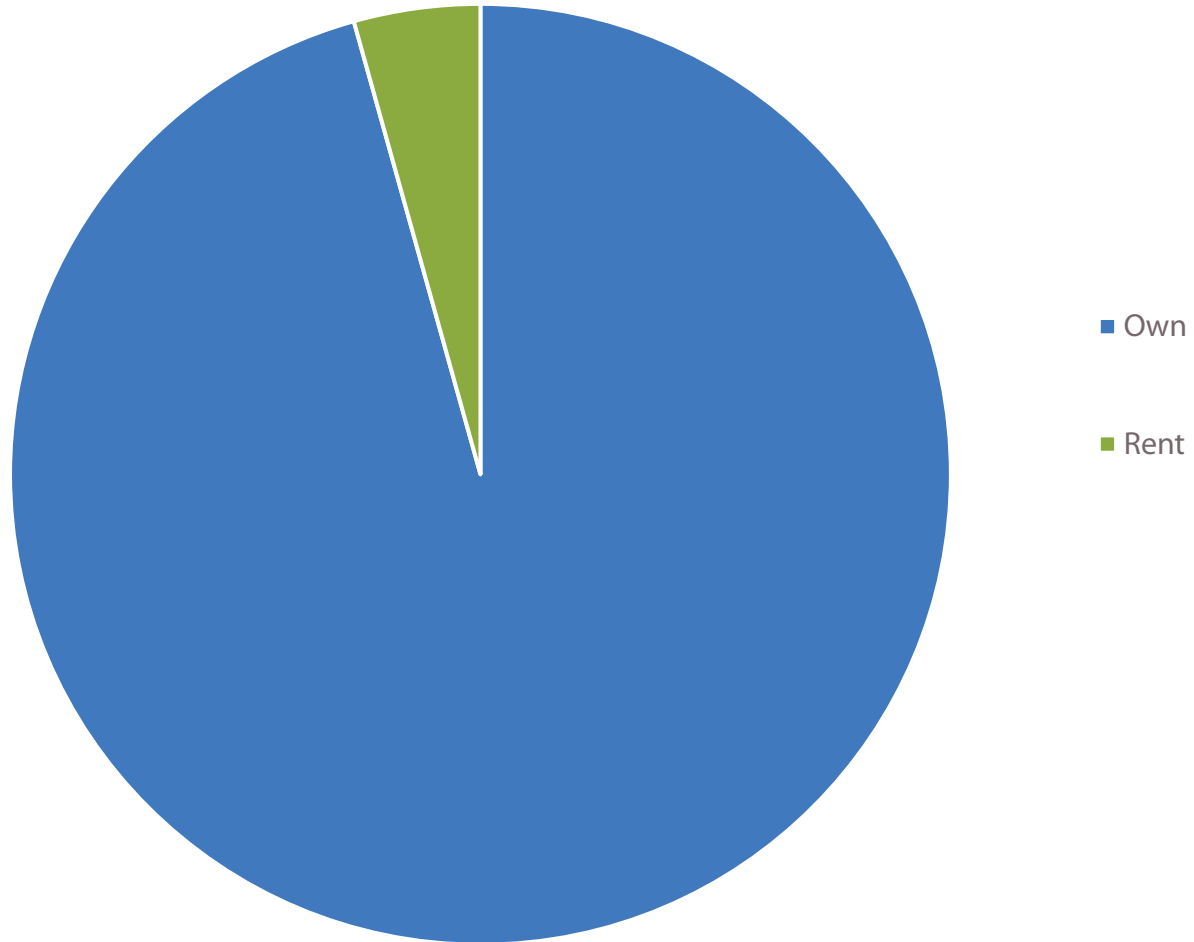


Question 29 (PRC Results): In what year did you move to your current home?



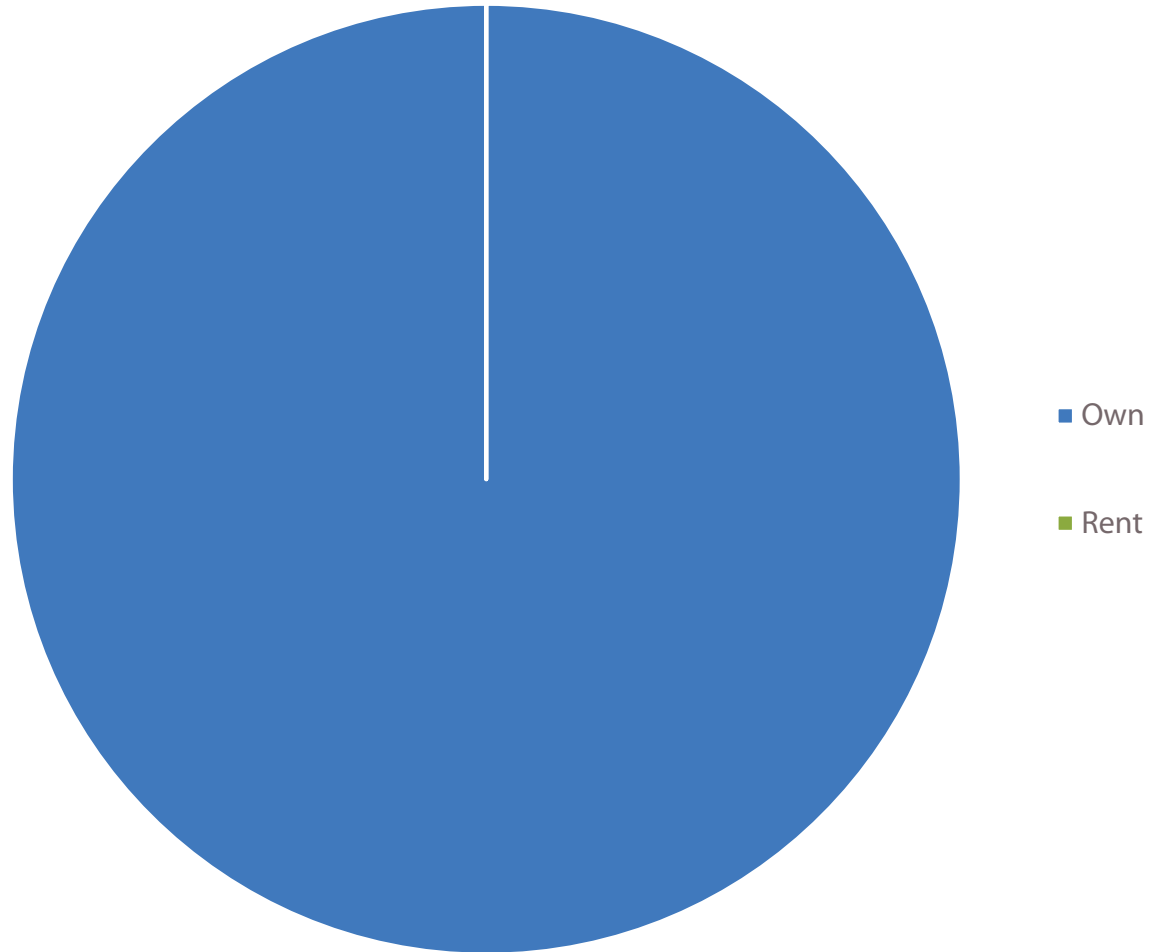
Question 30: Do you own or rent your current home?

Answer Choices		Responses
Own	95.66%	529
Rent	4.34%	24



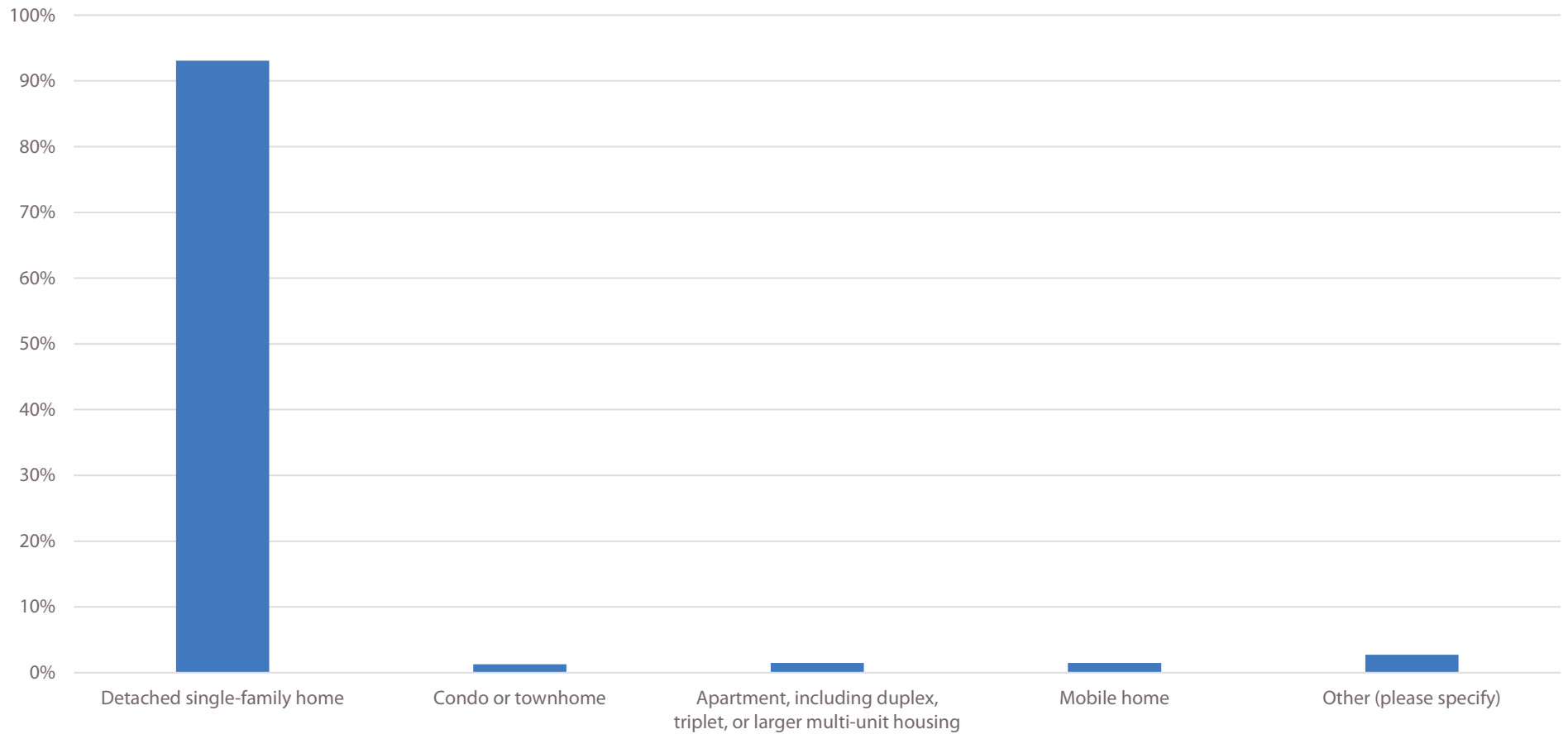
Question 30 (PRC Results): Do you own or rent your current home?

Answer Choices		Responses
Own	100.00%	9
Rent	0.00%	0



Question 31: What type of home do you live in?

Answer Choices	Percentage	Responses
Detached single-family home	93.08%	511
Condo or townhome	1.28%	7
Apartment, including duplex, triplet, or larger multi-unit housing	1.46%	8
Mobile home	1.46%	8
Other (please specify)	2.73%	15



Responses:

Twinhome

homestead. House with out buildings

Campers

Cabin

Rambler

Acreage, single family home

twin home

Lake cottage

Farm

Ko

O

Modular

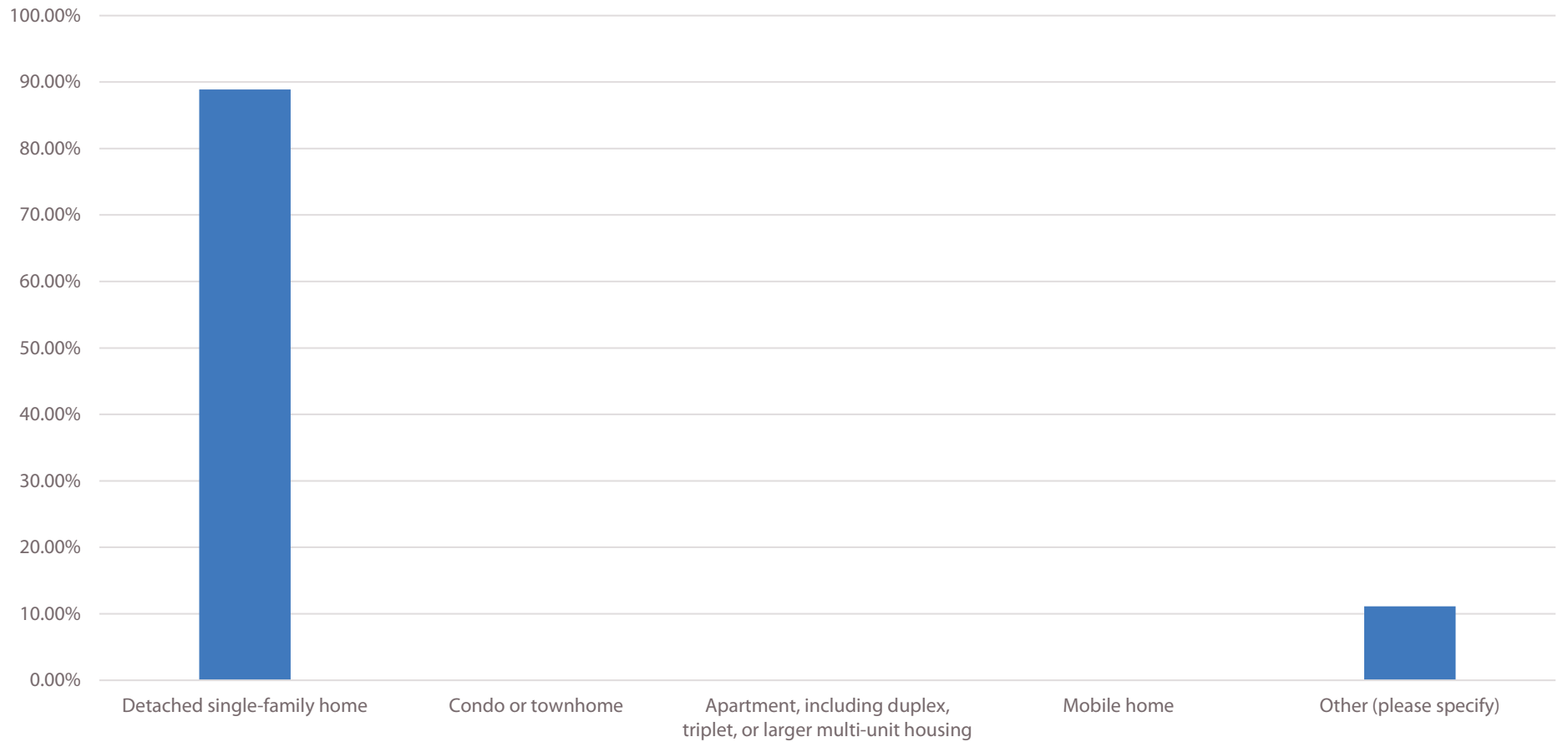
Rambler type

Business

Shouse (Shop/House)

Question 31 (PRC Results): What type of home do you live in?

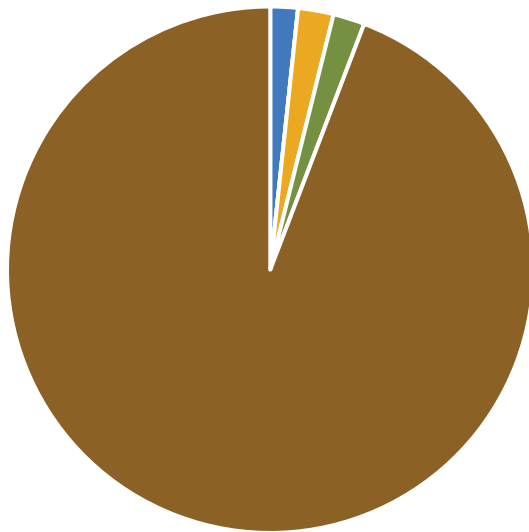
Answer Choices	Responses	Count
Detached single-family home	88.89%	8
Condo or townhome	0.00%	0
Apartment, including duplex, triplet, or larger multi-unit housing	0.00%	0
Mobile home	0.00%	0
Other (please specify) Business	11.11%	1



Question 32: If you live in an apartment, condo, or townhome, does your building have recycling?

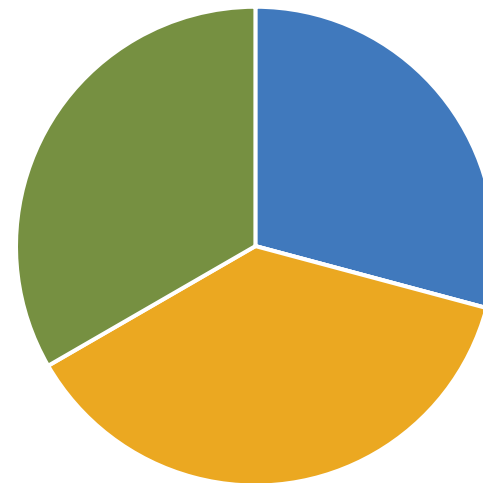
Answer Choices	Responses	
There are no recycling bins available at my building	1.69%	7
Bins are available in my building, but there are not enough	0.00%	0
Bins are available in my building	2.18%	9
Not sure	1.94%	8
Not applicable - I do not live in an apartment	94.19%	389

All Responses



- There are no recycling bins available at my building
- Bins are available in my building, but there are not enough
- Bins are available in my building
- Not sure
- Not applicable - I do not live in an apartment

Apartment Responses Only



- There are no recycling bins available at my building
- Bins are available in my building, but there are not enough
- Bins are available in my building
- Not sure

Question 32 (PRC Results): If you live in an apartment, condo, or townhome, does your building have recycling?

Answer Choices	Responses	
There are no recycling bins available at my building	0.00%	0
Bins are available in my building, but there are not enough	0.00%	0
Bins are available in my building	0.00%	0
Not sure	0.00%	0
Not applicable - I do not live in an apartment	100.00%	6

Question 33: What language do you speak most at home?

Answer Choices	Responses	
English	98.73%	543
Spanish	0.00%	0
Hmong	0.00%	0
Somali	0.00%	0
Other (please specify)	1.27%	7



“Other” Responses

Fin

Why does this matter?

Not relevant

English and Spanish

IN AMERICA WE SPEAK ENGLISH

single family

english

Question 33 (PRC Results): What language do you speak most at home?

Answer Choices	Responses	
English	100.00%	9
Spanish	0.00%	0
Hmong	0.00%	0
Somali	0.00%	0
Other (please specify)	0.00%	0



Attachment 3: Focus Group Summaries



Otter Tail County Solid Waste Master Plan Hauler Focus Group Summary

Focus Group Details

Date: March 18, 2021

Time: 3:00 to 4:30pm

Meeting Location: Zoom Meeting



Focus Group Overview

Focus groups provided an opportunity for the planning team to gather industry representatives and discuss specific ideas and concepts of the Solid Waste Master Plan. County stakeholders from the three focus group topics of Organics, Manufacturing Industry, and Solid Waste Haulers were identified and invited to hear an update on the Solid Waste Master Plan process, discuss the draft guiding principles, and share insight on program opportunities and hurdles. **The Hauler Focus Group gathered representatives from the organizations that currently collaborate with Otter Tail County to haul the various waste streams in the County.**

Focus Group Themes

Voluntary efforts are supported for participation in new initiatives

Education will be key to implementing new programs

The hauler community is supportive of the exploration of new waste streams, but considerations for **cost, route density, new equipment, and additional infrastructure** must be considered.

Convenience and Cost are two primary values



Agenda

The Focus Group meeting was broken into two components, a presentation of the Otter Tail County Solid Waste Master Plan and Focus Group Discussion. The following agenda was used to guide the ninety minute meeting.

- Introductions
- Zoom Overview and Meeting Logistics
- What is a Solid Waste Master Plan?
- What is the planning process?
- What have we heard?
- Where are we now?
- Focus Group Discussion
- Next Steps

Solid Waste Master Plan Overview

A presentation was provided to focus group members to provide an overview of the Solid Waste Master Plan and the planning that has occurred to date. This information was provided to give attendees an understanding of the overall planning process and introduce the draft guiding principles.

Focus Group Discussion

A total of five discussion questions were asked of the focus group members regarding future programs and initiatives that may be considered as part of the Solid Waste Master Plan. The discussion between attendees is summarized below.

#1

New initiatives will be developed to divert more materials from landfills. Would you prefer to initiatives be volunteer efforts or required? Why?

- a. If you support voluntary efforts, how can the county ensure efforts are made in a voluntary environment?
- b. What do you need to make a change? Grant dollars? Equipment? Technical Assistance?
 - Voluntary efforts are better and avoids the perception of the heavy hand of the government. New programs or infrastructure cost money, so grant dollars or the provision of equipment is needed. The MPCA, EPA and others could be resources. Different types of collection, such as organics, would require more equipment, more staff, and more time.
 - Voluntary is better and needs to be made accessible. Available labor has not been an issue, but there would be a significant adjustment to workflow and equipment needs. Thinking about the different trailer or equipment needs to execute new programs.
 - o Where does the byproduct go to? Recycling to Fergus Falls, other materials to the incinerator? It will need a major expansion to handle increased waste. The County already meets the maximum contributions.
 - Voluntary efforts are always easier, but there needs to be motivating factors (incentives or consequences to ensure participation). In Perham things may be a bit different as it goes to the Resource Recovery Facility. Educating employees on the importance of proper solid waste management. The harder you make it for people to do what you want to do, the less likely they are going to do it.
 - Voluntary efforts are preferred. There is a significant cost in the change, and the haulers will need time in advance to prepare for the change, and determine equipment needed and countywide participation to ensure it is cost effective. Route density needs to be a consideration.
- c. Would a recognition program be helpful for your business?
 - Recognition is always valuable, no question, but not sure the impact it would actually make.



- For programs to work they need to be cost effective. Recognition is valuable but may not be effective.

#2

This is a 25-year plan; let's talk about the order of importance to you.

a. What is the most important area for the county to focus on first? Why?

- 50% Additional education; 25% Waste Prevention/Reuse; 25% Organics Program
- **Additional Education**
 - This is a 25-year plan, if we do not educate them, we will not get buy-in to get things started.
 - If people do not understand what is going on or the details, it will be hard to achieve success
- **Waste Prevention/Reuse**
 - Waste prevention and reuse is a valuable way to avoid waste entering the system. Convenience is a huge priority for participation. Getting a recycling bin at my house made it a lot easier to participate.
- **Organics Program**
 - Get more of the wet waste (organics) out of the stream. If we were to implement, it would reduce tonnage and result in cost savings to residents. We can easily get organics out of the waste stream.

b. What do you value most?

- 50% Convenience; 50% Cost
- It is hard to separate the values, we all agree it is important to protect the environment, but it always comes down to cost.

#3

Moving toward single-stream recycling county-wide has been expressed as a needed program requirement. How would this impact your operations? Do you have concerns?

- Single Stream has worked out well for us in Fergus Falls. The story shared about being more active with recycling after program implementation, can be repeated across the city. It comes with some costs and growing pains, but it has been well received from residents.
- Our trucks pick up from all over the county, and the recycling that cannot be processed in Fergus Falls goes elsewhere. We have one truck a week that takes recycling down to Shakopee/Twin Cities because we run out of capacity in Fergus Falls. We had to buy more equipment to support the single stream process, but it is working out well.
- Not sure of the specific costs for what we are shipping out because we cannot handle it in Otter Tail County. Required elements are challenging. Thinking about implementation in a rural area may not be feasible and would come at a high cost. Route density is the number one issue, rather than equipment. Current garbage pick up includes traveling a few miles per customer, adding recycling to that adds a lot of travel per customer (3 miles for garbage, 10 miles for recycling estimated). Current operations dump loads in Perham, and materials are then transferred to Fergus Falls.
- There is not a single sort commercial collection option in Perham. What would have to change to make that happen?
 - Residential is less quantity, but commercial is larger and could be done on a dumpster basis. Our operations could be modified to manage it, but how would it be managed on the back end? Currently, in Becker County, we do it with garbage cans, but not a route with rear load containers. Conversations have occurred with the City of Perham.



HAULER FOCUS GROUP SUMMARY

- For our business, we have two totes that get picked up as part of our route.
- If we limited the number of totes a business had, that would make it a better system, rather than an open market. Having a limit on the amount that would help with route planning.
- Kids from preschool through high school have access to a blue recycling bin every day. They come home and want to recycle and home too. Education is an important part of this, as the kids can educate their families.
- We have do recycle at our business. We have a cardboard compactor, and our close proximity to the resource recovery makes things easier. We do not have single sort, but we do separate out our recycling and keep it at the facility until we have enough to move, this includes:
 - Scrap iron
 - Waste food products go to Gwinner, formally recycled as animal food
 - Waste oil
 - Batteries,
 - Florescent bulbs
 - Computer Waste
 - Plastics, glass, etc.

#4

Does your organization have the ability to collect another waste stream? Such as food waste?

- a. To collect new material, do you have a preference on how materials are collected – bagged, carted, i.e.?
 - b. How much time would your organization need to add a new material for collection? What concerns do you have?
 - c. How would your organization support new programs for waste recycling/management?
- Otter Tail County has received a grant from the MPCA to explore an organics program in Fergus Falls that will focus on large generators. It will be a good test run experiment that will tell us a lot about the questions we have and how we can separate food waste. The material will be hauled to Hoffman, Minnesota, which is 35 miles away.
 - We are currently hauling organics, but it is just missed in with everything else. There would need to be some infrastructure figured out, new equipment and a different trailer. Our organization would be interested but would need to adjust.
 - Collecting the organic materials in containers would be preferred. The grant program is using rear load dumpsters, but a cart could be used too.
 - In Perham, yard waste is collected in bags, and it is difficult to collect. Efforts are being made to change that pick up.
 - Compostable bags provide the opportunity to high unacceptable materials, aside from food scraps and compostable materials.
 - We currently separate our animal grade compost and send it to Gwinner, ND. It was previously used for a food for pigs program, but changes in the food safety modernization act have removed this as a possibility.

#5

What waste issue would you like to see the County tackle first? Why? What role could your organization play in the solution?



HAULER FOCUS GROUP SUMMARY

- We are already getting started with organics with the MPCA grant received. It will help us understand where we can go in the County. County-wide single sort would also be a great next step.
- Whatever the County can collect, we can haul it!
- We can haul whatever the County determines is the best approach. We can always adapt and make changes. One of the biggest concerns is market penetration. For example, the impacts of County-wide single sort could be financially unfeasible.
- Educating business and residents across the County is a priority. If we get people to buy in, they will participate.



Otter Tail County Solid Waste Master Plan

Manufacturing Industry Focus Group Summary

Focus Group Details

Date: March 18, 2021

Time: 9:00 to 10:30 am

Meeting Location: Zoom Meeting



Focus Group Overview

Focus groups provided an opportunity for the planning team to gather industry representatives and discuss specific ideas and concepts of the Solid Waste Master Plan. County stakeholders from the three focus group topics of Organics, Manufacturing Industry, and Solid Waste Haulers were identified and invited to hear an update on the Solid Waste Master Plan process, discuss the draft guiding principles, and share insight on program opportunities and hurdles. **The Manufacturing Industry Focus Group gathered representatives from major industries throughout the County to discuss waste management and diversion opportunities.**

Focus Group Themes

Voluntary efforts are supported for participation in new initiatives

Organizations are open to receiving **technical assistance** to understand how to better manage waste within their operations

Plastic sheeting is a material that could be managed differently

Collaboration between Otter Tail County and local industries could be used to find opportunities to manage waste streams more effectively and reduce costs for disposal and materials

People will do things for two reasons, for the **green dollar** or the **green environment**

Convenience and Cost are two primary values



Agenda

The Focus Group meeting was broken into two components, a presentation of the Otter Tail County Solid Waste Master Plan and Focus Group Discussion. The following agenda was used to guide the ninety minute meeting.

- Introductions
- Zoom Overview and Meeting Logistics
- What is a Solid Waste Master Plan?
- What is the planning process?
- What have we heard?
- Where are we now?
- Focus Group Discussion
- Next Steps

Solid Waste Master Plan Overview

A presentation was provided to focus group members to provide an overview of the Solid Waste Master Plan and the planning that has occurred to date. This information was provided to give attendees an understanding of the overall planning process and introduce the draft guiding principles.

Focus Group Discussion

A total of four discussion questions were asked of the focus group members regarding future programs and initiatives that may be considered as part of the Solid Waste Master Plan. The discussion between attendees is summarized below.

#1

New initiatives will be developed to divert more materials from landfills. Would you prefer to initiatives be volunteer efforts or required? Why?

- a. If you support voluntary efforts, how can the county ensure efforts are made in a voluntary environment?
 - b. What do you need to make a change? Grant dollars? Equipment? Technical Assistance? Recognition?
- Voluntary efforts are preferred, new forced programs are not the best way (we already have a lot of these). We also need to make it easy to do. Most people want to do the right thing, if you make it easier, they are going to do it. They will automatically gravitate towards it.
 - Voluntary efforts would be better. Looking at both what is going into the landfill and the incinerator and understanding how it could be recycled or reused. Waste diversion should not look at only how we can divert waste from the landfill but also from the incinerator.
 - Voluntary basis is the best route. We try to reduce the amount of garbage we produce and recycle as much as we can. We have recycled sheet plastics. This has changed with COVID, with an increase in shield and barriers, the market for regrind is not there. We now have a lot of scrap material that we need to determine how to use and waiting for the market to come back. Part of our process looks at reducing the amount of waste as possible.
 - Fan of voluntary efforts versus required efforts. Our organization voluntarily recycles materials beyond what is required by the MPCA (including five metals, batteries, batteries, carbon lights, cardboard, papers, films, material cut offs, oils, pallets, etc.). Some of this material requires a payment for recycling. Recycling is not a free service. Sheet films are one material that still goes into the dumpster. If there are ways to recycle this, we would be interested. Anything that you can do to help us, rather than require us to do things, is appreciated.
 - Our plastic materials come with a film plastic that becomes a waste product. Can the county's film plastic program take that material? There could be options to bail the film plastic as a way to manage it.



MANUFACTURING INDUSTRY FOCUS GROUP SUMMARY

- Discussion of where dumpster material goes, the incinerator or to the landfill. It can depend on the location and volume at the facility.
 - For example, one organization bags wood and plastic shavings that currently go to our dumpster. If they could be used in a different way, we would be happy to manage that.
- Is there a reuse opportunity in Otter Tail County? Pallets, for example, could be used by other organizations for different uses. It was added that reuse is the best dollar investment, as it gives materials another life. The County has been working to think of reuse more, including the use of reusable products and programs that connect organizations/people to materials.
- Where can the County and the industries collaborate on waste produced and how it should be managed? What are the different streams of waste produced, and how can they be managed? There are many factors that should be considered for implementation, grant dollars, additional space needs, regular pick up, etc. However, having **technical assistance come to businesses to understand waste produced and discuss opportunities for management would be a big step forward.**
 - Attendees agreed that their organizations would be open to bringing in technical assistance to provide insight on their waste streams and management techniques would be helpful.

#2

This is a 25-year plan; let's talk about the order of importance to you.

- a. What is the most important area for the county to focus on first? Why?
 - 25% Increase Recycling; 25% Increase Education; 25% Prevention and Reuse; 25% Organics Program
 - **Recycling** – This is an easy first priority as many people see it as the right thing to do, but it needs to be as easy as possible.
 - **Education** – Understanding how to best manage waste and what programs are available. Education can help increase recycling.
 - **Prevention and Reuse** – Thinking about this in the same vein as recycling. How can we increase prevention opportunities? It boils down to cost and ease of use.
 - **Organics** – It seems like an opportunity to take a waste stream and turn it into a value stream.
- b. What do you value most?
 - 75% Cost; 25% Convenience
 - Convenience is tied to cost/value. If it costs the same, I am going to do the right thing, but part of that cost is making it as convenient as possible. If you make it easy, people are going to do. **Whether you define it as green as in the environment or green as in the dollar, people are going to make the green choice.** There are many times where the green dollar wins over the green environment.

#3

Where do you see the greatest potential for waste diversion or prevention in your operations?



MANUFACTURING INDUSTRY FOCUS GROUP SUMMARY

Organics

Plastics

Paper

Polyester
Sheeting

Single Sort
Recycling

- Manufacturing process still uses a lot of paper. It is collected in boxes and efforts are made to recycling by dropping it off at the recycling center. There may be opportunities to work with others. If there was a single sort option, there would be a lot of material diverted out of the dumpster.
 - Our organization includes paper with our cardboard that is sent down to Rock 10 in the Twin Cities. We wait for a truck load to ship it down. There might be an opportunity for us to work together.
- Polyester sheeting is one of our biggest wastes, and we do not have an out for it. It is a virgin material. There is no way for us to eliminate it, so if we could come up with a solution that would be great. The sheeting is similar to polyethylene bottles (#2 plastics), why can't they be handled the same?

#4

Do you have a sustainability manager or point person response for waste management at your facility/organization?

Does your organization have sustainability or waste diversion goals?

- No to both questions. We are always looking for ways to be more environmentally friendly, but we do not have any specific sustainability or waste diversion goals.
- No to both questions. However, this is something we would like to work towards and participate in.
- No to both questions. The way people manage waste at home transfers to the way they manage it at work. We are happy to help as we can.
- We do have clients that require us to do some sustainability reporting. Their goals include sustainability and efficiency. We are aware of diversion efforts, but we do not have any specific goals.

#5

General Discussion

- We do point of purchase displays that use various materials (plastics, Styrofoam). Sometimes we have customers cancel an order or have waste that pops up, is there a number or organization that we can connect with to offer these materials? Find another use before we put it in the landfill.
 - Contact the Otter Tail County Solid Waste Department whenever you have a question like that.
- The group discussed who was invited to participate in the focus group.
- Focus Group attendees discussed opportunities to collaborate with certain waste materials to improve handling options.



Otter Tail County Solid Waste Master Plan Organics Focus Group Summary



Focus Group Details

Date: March 17, 2021

Time: 2:30 to 4:00 pm

Meeting Location: Zoom Meeting

Focus Group Overview

Focus groups provided an opportunity for the planning team to gather industry representatives and discuss specific ideas and concepts of the Solid Waste Master Plan. County stakeholders from the three focus group topics of Organics, Manufacturing Industry, and Solid Waste Haulers were identified and invited to hear an update on the Solid Waste Master Plan process, discuss the draft guiding principles, and share insight on program opportunities and hurdles. **The Organics Focus Group gathered representatives from the healthcare, grocery, restaurant, and education sectors across Otter Tail County to discuss opportunities for management of organic materials.**

Focus Group Themes

Voluntary efforts are supported for participation in new initiatives

Convenience and Cost are two primary values

Education will be key to implementing new programs and should start in our schools

Organizations are open to receiving **technical assistance** to understand how to better manage waste within their operations

Organics programs appear to be the next step beyond recycling

Storage infrastructure, space, and pick-up scheduling are major considerations for an organics program

Workshop Attendees

The following individuals were invited to attend the Organics Focus Group. Those that attended the meeting are identified in the table below, along with the County staff and consultant team in attendance.



Agenda

The Focus Group meeting was broken into two components, a presentation of the Otter Tail County Solid Waste Master Plan and Focus Group Discussion. The following agenda was used to guide the ninety minute meeting.

- Introductions
- Zoom Overview and Meeting Logistics
- What is a Solid Waste Master Plan?
- What is the planning process?
- What have we heard?
- Where are we now?
- Focus Group Discussion
- Next Steps

Solid Waste Master Plan Overview

A presentation was provided to focus group members to provide an overview of the Solid Waste Master Plan and the planning that has occurred to date. This information was provided to give attendees an understanding of the overall planning process and introduce the draft guiding principles.

Focus Group Discussion

A total of six discussion questions were asked of the focus group members regarding future programs and initiatives that may be considered as part of the Solid Waste Master Plan. The discussion between attendees is summarized below.

#1

New initiatives will be developed to divert more materials from landfills. Would you prefer to initiatives be volunteer efforts or required? Why?

- a. If you support voluntary efforts, how can the county ensure efforts are made in a voluntary environment?
 - b. What do you need to make a change? Grant dollars? Equipment? Technical Assistance? Recognition?
- Voluntary is preferred. When living in Washington, we only needed a garbage pick up once a month or less, and still probably put the garbage out one a month in Fergus Falls. How do we incentivize – cost savings. If you don't use trash collection, why do you have to pay for unused services? If mandatory, then this is the reward. There must be a back end to it, if there isn't some kind of reward, why bother to separate. This is called the pay as you go model.
 - Think about how this works for residents and businesses. For example, schools made the switch to milk pouches from milk cartons in Washington State. It reduced food district service trash by 70 percent. It reduced the number of pick ups across the city immediately. If we were to deploy a composting program here in Fergus Falls, we would see a reduction in pick-ups.
 - Voluntary programs have historic successes in other locations. Mandatory programs are residents is hard. From a commercial side, we are willing to implement it. Need to think about efficiencies. Consider the number of bins that take up space and time to sort while working at a fast pace. Funding for infrastructure would be helpful.
 - We would like to recycle plastic bags, but it appears that I need to buy the containers to collect the bags, and then have be bring them places.
 - Considerations for commercial changes include efficiency issues, the costs, and the amount of physical space lost.



ORGANICS FOCUS GROUP SUMMARY

- Our facility was built in the 1970's, and space for deliverables and garbage/recycling is an issue. With staffing, we are having trouble keeping up. Not sure how we would delegate the staff time for separating out food waste. This task seems a little daunting.
- Alexandria started composting a few years ago, and some of the challenges, frustrations, and opportunities were shared. That could be an opportunity to collaborate. Learning from others is very important.
- Agreement that separating waste at a restaurant is challenging when you think about how food is delivered. From the gas station perspective, we change the garbage cans at the pumps two to three times a day. If the County moved to a mandatory program, we may see an increase in people bringing their garbage to the gas stations. It needs to be voluntary or people will have other outlets.
- Education at the school level is a huge opportunity. Whatever programs are put together, education in the schools will be very helpful – they will bring that knowledge home.
- We manage our waste into a few different streams including bailing cardboard, recycling bins, and separate food. We separate our food waste because it cannot be kept for a month. Where does that food waste go?
- We are doing what we can right now. An organics program would be a great thing, but it would take a lot of effort to get going, including grant dollars, equipment, etc.
 - Agreed, it would be difficult in the long-term care environment to get things started but could be easy to keep going. There is a lot of food wasted each day, and it is sad to see it go out to the landfill.

#2

This is a 25-year plan; let's talk about the order of importance to you.

- a. What is the most important area for the county to focus on first? Why?**
- b. What do you value most?**

- a. What is the most important area for the county to focus on first? Why?
 - 42% Organics Program; 29% Education; 29% Prevention and Reuse
 - Recycling isn't going to be the sole savior for the environment, there needs to be more done. Organics management seems to be the next step.
 - In just the time I've been here, we have added single sort recycling, that has already started to change habits, and it is now time to go to the next step (organics).
 - Waste prevention – the amount of waste we have is incredible. An example of something we are already doing is buying chemical in gallon containers rather than smaller sizes. We are producing a lot of plastics and do have containers for recycling. It would be nice to see some creative ways to see our waste reduced.
- b. What do you value most?
 - Cost or Value was top response
 - In discussion with Alexandria – the cost of special compostable bags is a concern. That is an increased cost, and it is a cost that will continue to increase. What options are there for operating without bags, grant funding, etc.
 - Recognition – we are very competitive for employees in the health care industry. If we were able to have a badge or recognition, that could be a good way for us to draw in employees.



#3

What does your organization need to start a new organics diversion program?

- A lot of the organics produced within the School District are food service related, but the expenditure would go beyond the food service department. We would be looking for some kind of grant funding to get things started. A guarantee of pick up frequency would also be needed. Considerations for school year and summer operations.
- Start up help is important, but education is also a key component. If we can educate staff, clients, and visitors on how much waste we are producing and how we can better manage it they will get on board quickly. If we could get the education that would go along way.
- The group agreed that their organizations would be open to a technical assistance consultant coming in to learn about their waste generators and how they could change their structure and infrastructure.
 - That would be a win-win.
 - Seeing that individuals produce 6 pounds of garbage a day is terrible, especially seeing it go to the landfill.
 - That type of assistance would be helpful for us, bringing in an outside expert.
 - Could organics be frozen before collection? With a small kitchen we would need collection more than one a week.

#4

What limitations does your organization/company have for diverting more/recycling more/starting an organics program?

- Staff time, education and funding have been mentioned throughout the conversation.
- Space has been discussed as a concern. Would adding a third dumpster for organics ben an issue?
 - Yes, there would need to be work done, fencing removed, slope considerations.
 - We would have to make some big changes with our current operations. We would need to think about the public view.
 - Some programs use carts rather than dumpsters. Would that flexibility be better for organizations?
 - It all comes down to logistics, and those questions are going to drive how we execute and determine space and infrastructure needs.
 - From a school district, the hope would be that we could reduce the size of our dumpsters as we divert waste providing more room. Would see an organics station created inside that would operate similar to our recycling bins.

#5

Let's talk about organics management practices

- a. Does your organization have a preference on how the county manages organics – composting or anaerobic digestion?
- b. Does your organization have concerns or questions about these technologies?

- Do we care how the manage happens? Do people care what happens to the organic material when it leaves your home or business? Or what concerns do you have about that technology?
- What technologies are deployed locally? Would materials have to be shipped to other locations that would require shipping of materials and an increase in carbon emissions.



- This could be done either way, we are looking to build a program.
- No matter how we manage it, it should be cost effective.

#6

Do you have a sustainability manager or point person responsible for waste management at your facility/organization?

Does your organization have sustainability or waste diversion goals?

- The Fergus Falls School District has identified an internal champion to help with these efforts. For example, we have been using sugar cane trays that are compostable but are currently going into the landfill. The champion is looking at different ways to manage these materials, like sending them to a CSA or farmer to use for animal food.
- Is there any interest to get farmers involved – chickens and pigs also eat this food. Is that an option for us?
 - The waste must be cooked before it can be fed to an animal. There is an extensive network that is already happening outside of what the County manages.



Attachment 4: Virtual Open House and Community Survey #2 Summary



Otter Tail County Solid Waste Master Plan

Public Workshop Summary

Workshop Details

Date: March 29, 2021

Time: 6:00pm

Meeting Location: Zoom Webinar

Presentation Recording: https://youtu.be/rnqGU8-J_I

Engagement Activities Recording: https://youtu.be/0ux617_gxTY

Meeting Overview

A public workshop was held to engage the public on the Otter Tail County Solid Waste Master Plan and to gather feedback to inform the next steps in the planning process. The Workshop was organized into three sections, a presentation, engagement exercises, and question and answer.

- The presentation was intended to provide attendees with an overview of solid waste management in Otter Tail County, an introduction to the Solid Waste Master Plan, and to highlight the draft guiding principle statements.
- The engagement activities were intended to gather feedback on the public's support of the draft guiding principles and insight on priorities and concerns.
- Finally, the question and answer portion of the agenda provided attendees with the opportunity to ask questions of the staff and consultant team.

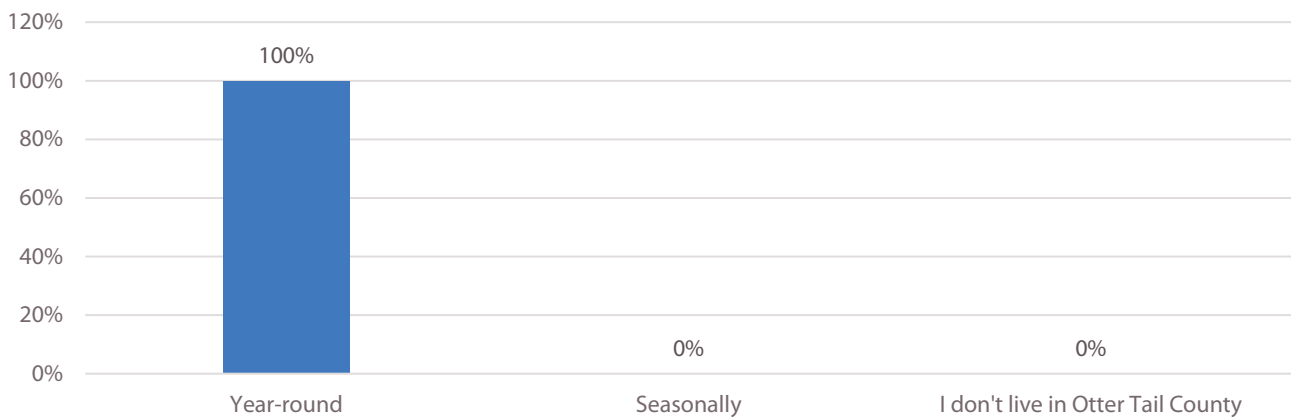


Engagement Activity Results

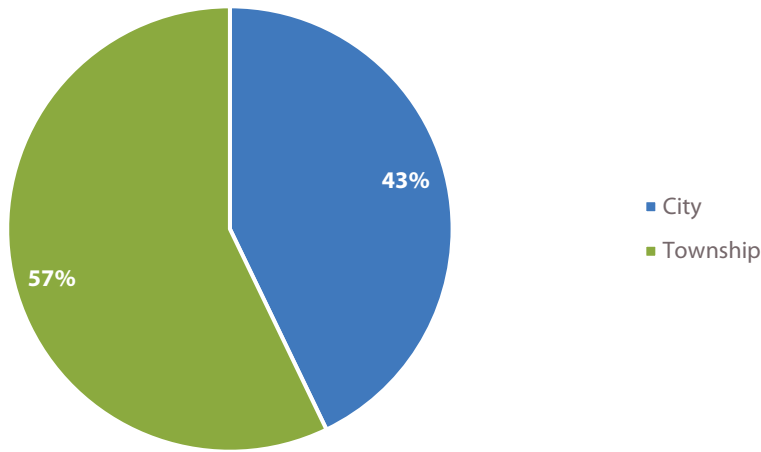
The engagement activity included a number of polls to gain feedback from attendees on the draft guiding principles. The follow summary provides the results from the members of the public. For the purposes of this summary responses from County Commissioners or Otter Tail County staff were removed.

Poll 1 – Tell Us About You!

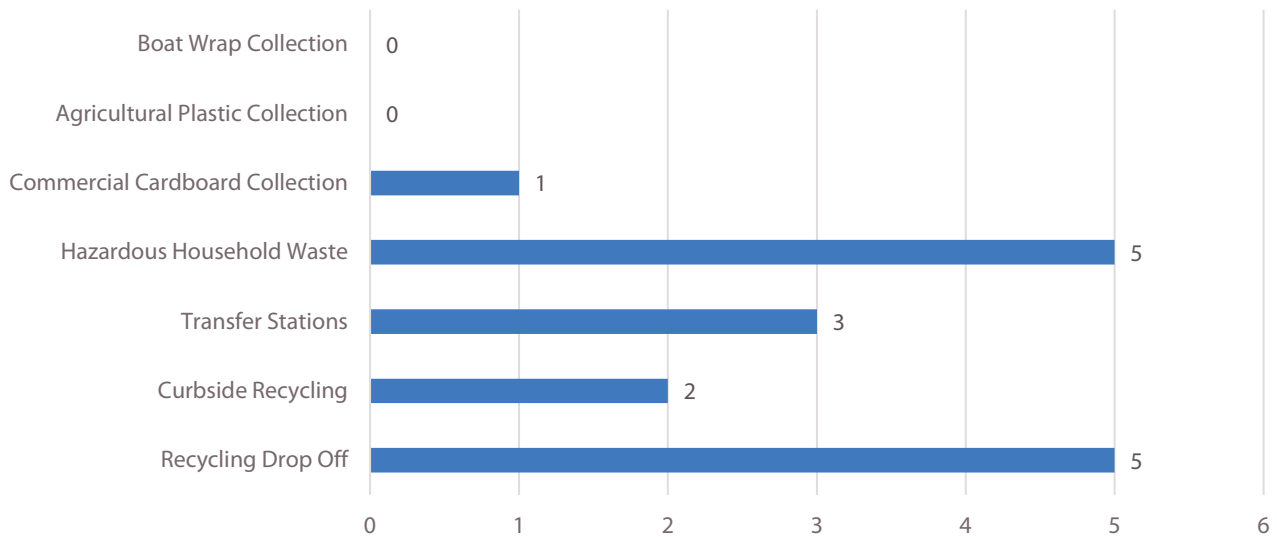
Do you live in Otter Tail County seasonally or year-round?



Do you live in a City or Township?

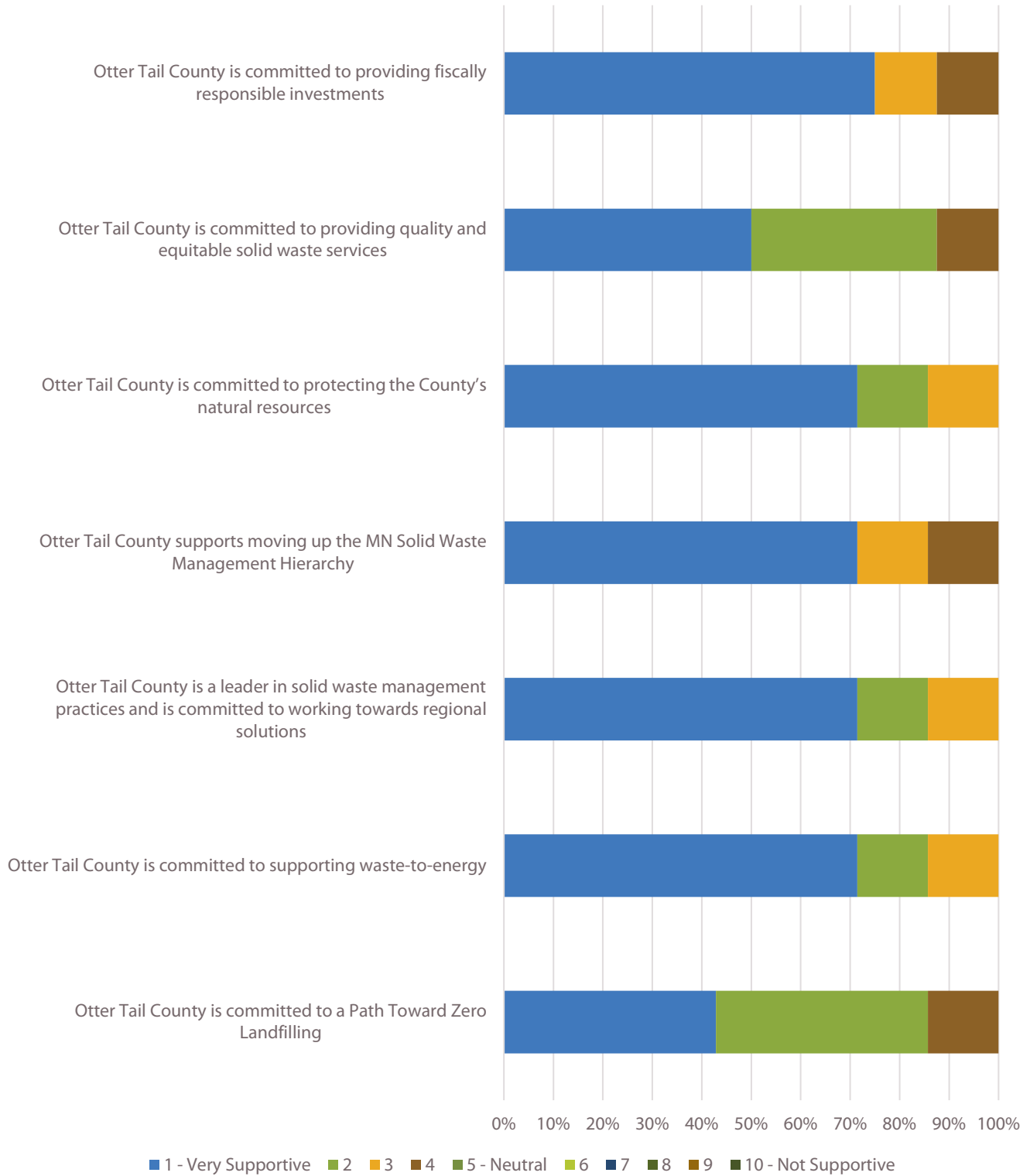


Which Solid Waste Programs/services do you current participate in? (Select all that apply)



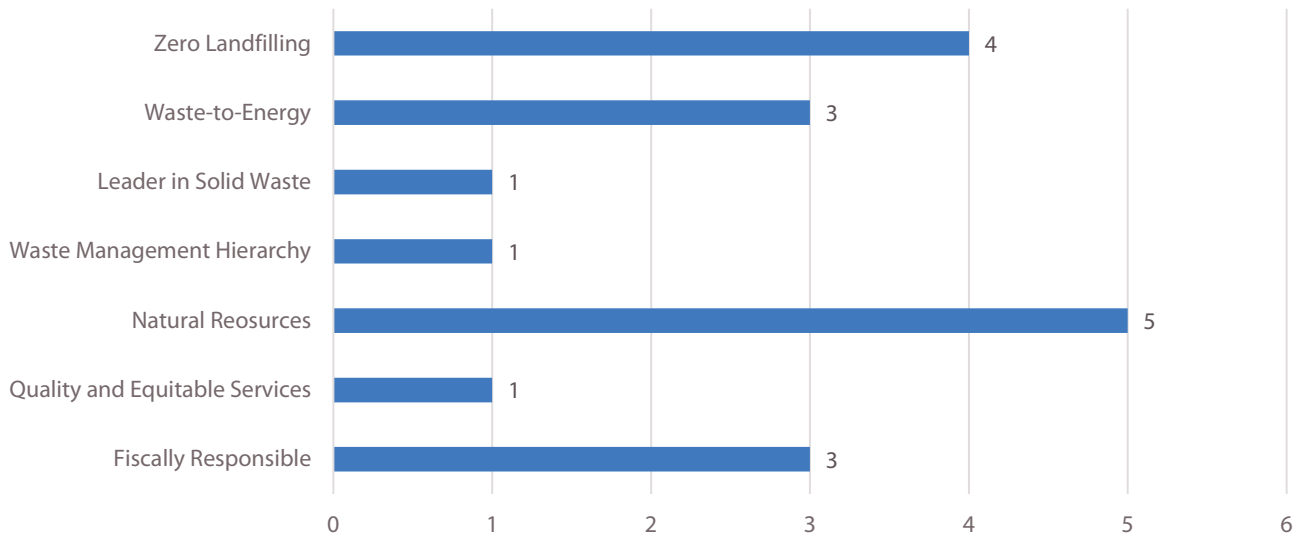
Polls 2 through 8 – Guiding Principles

Rate your level of support for each guiding principle statement

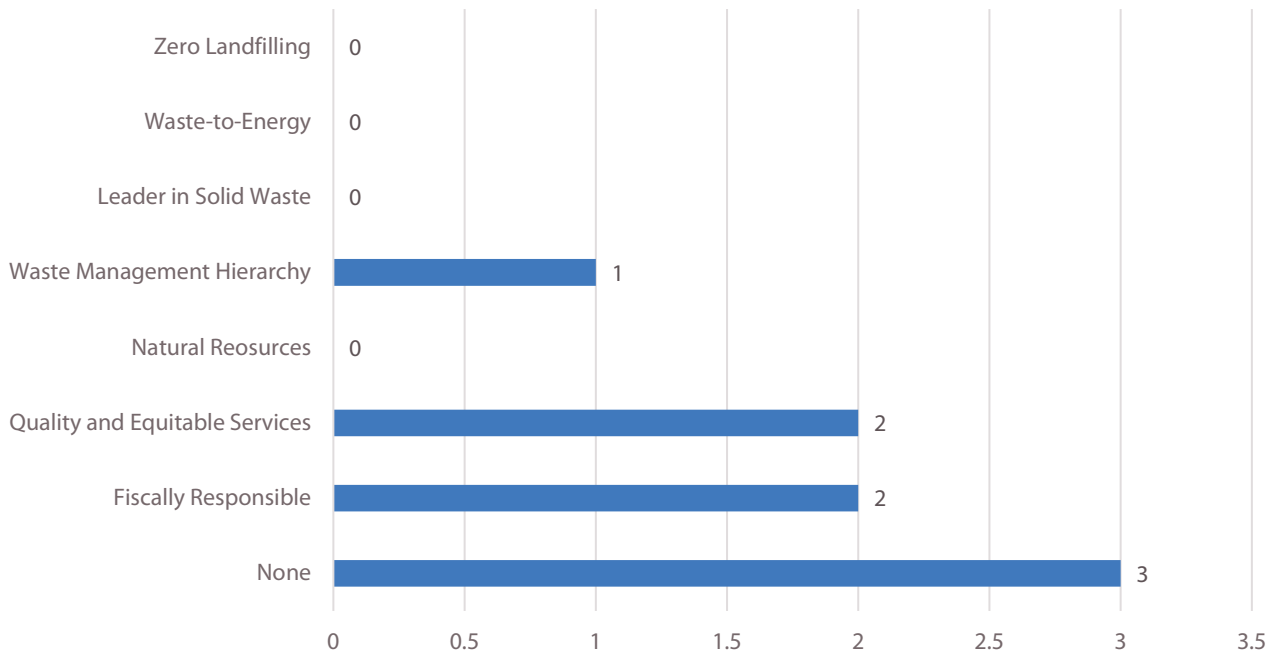


Poll 9 – Guiding Principle Conclusions

Which guiding principle should be the top priority for Otter Tail County? (Select all that apply)

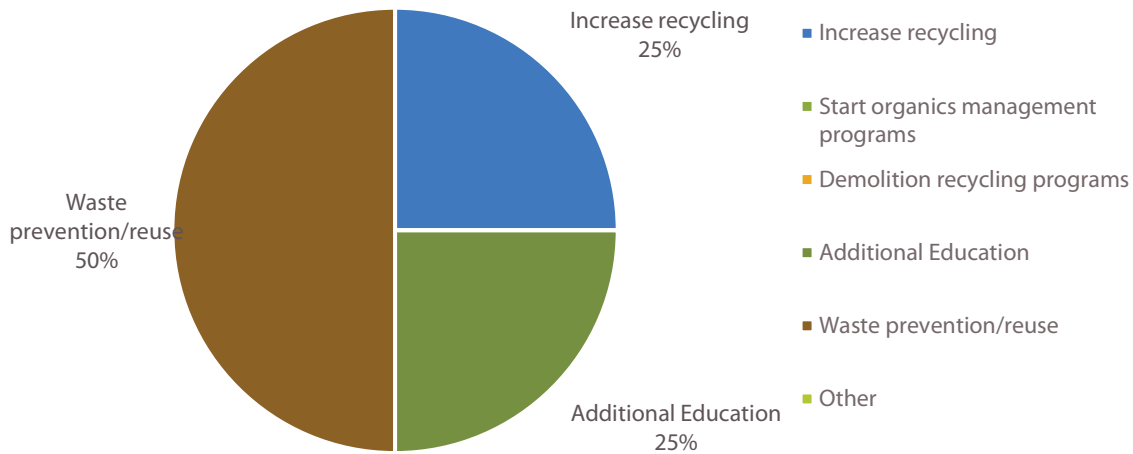


Which guiding principle raises the most concern for Otter Tail County?

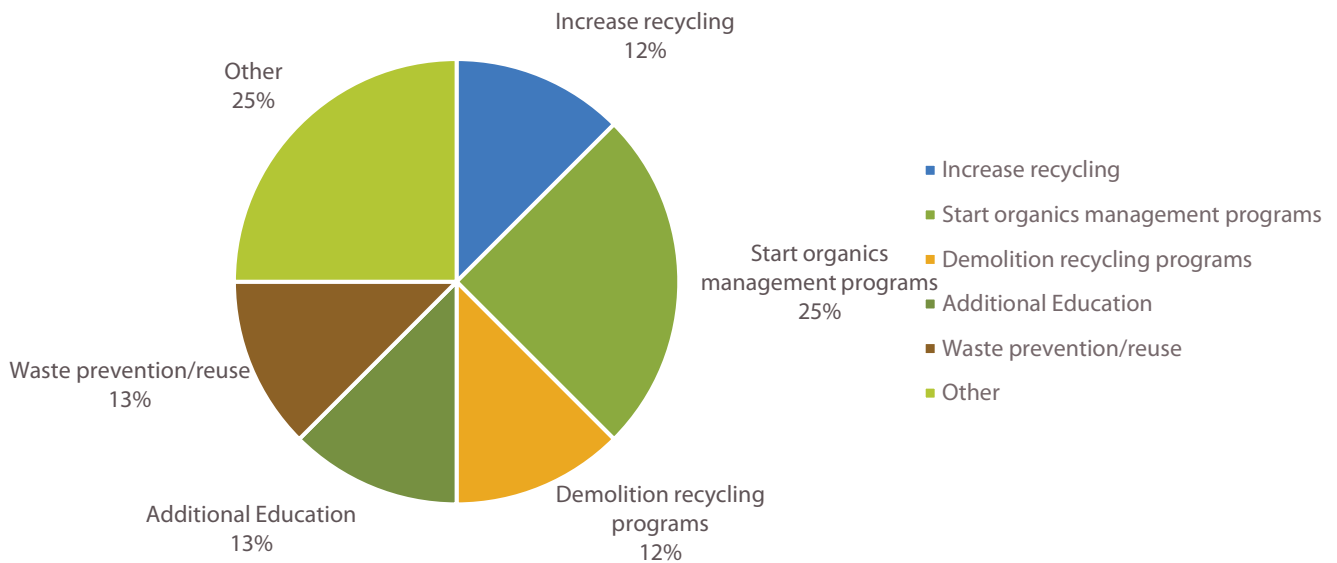


Poll 10 – 25-Year Plan Priorities

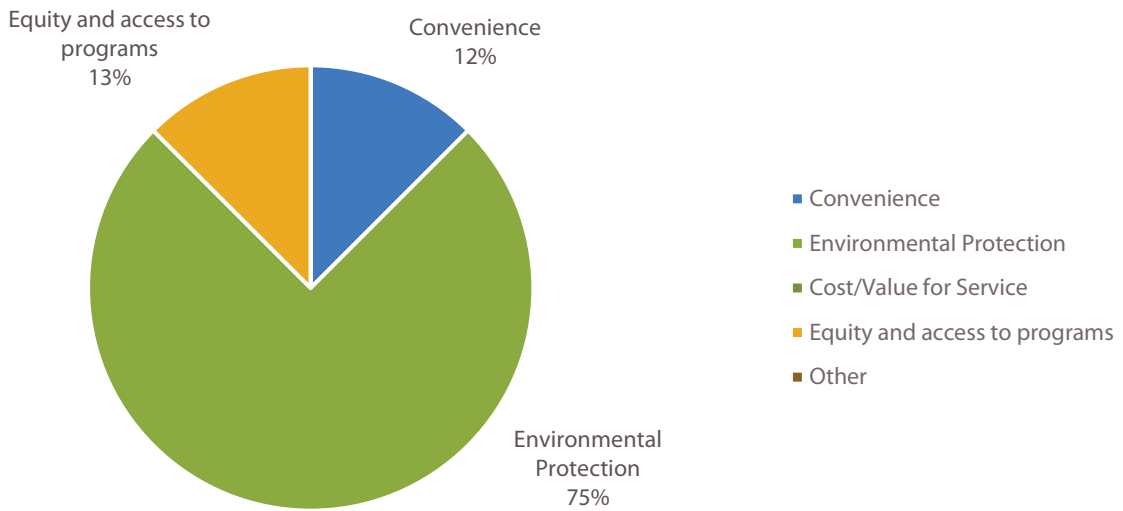
What is most important area for the county to focus on first?



What area do you have the most concern about the county implementing?

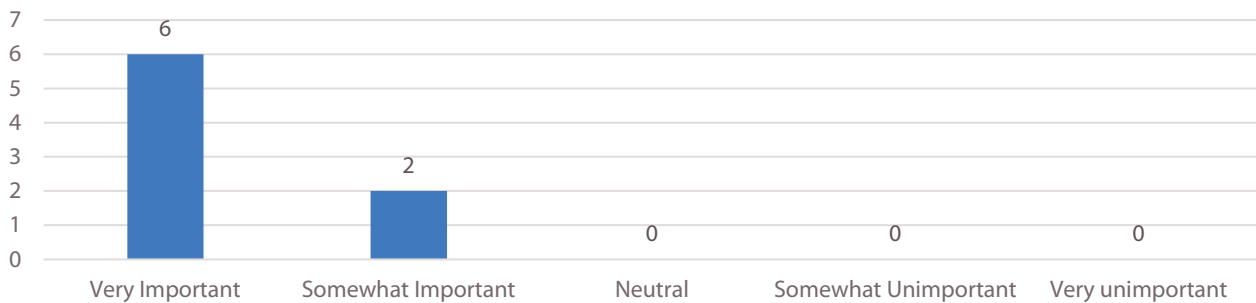


What do you value most?

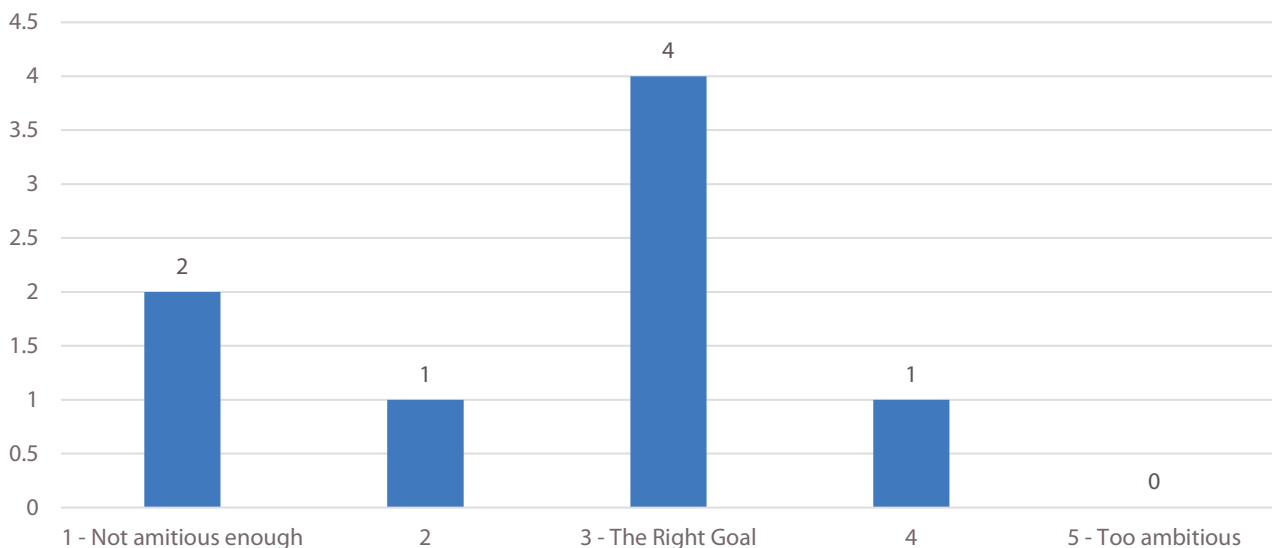


Poll 11 – Final Questions

How important is it to you that Otter Tail County set measurable goals for a path toward zero landfilling?



Does reducing the amount of trash going to the landfill by 1% each year seem too ambitious or not ambitious enough?



Question & Answer Summary

The question and answer portion of the workshop provided an opportunity for attendees to ask questions on the planning process, presentation materials, guiding principles, and any additional items. Some of the questions were responded to in the meeting with a written response, while others were responded to verbally during the meeting. The questions asked are summarized in the table below along with the response if provided in written form. To listen to the live responses, please watch the engagement summary located here: https://youtu.be/0ux617_qxTY

Question	Asker Name	Response
What does forecast waste tonnage look like for OTC for the next 25 years?	Anonymous Attendee	Jeff, currently Otter Tail County generates approximately 33,000 tons/year. If we don't change our solid waste programs, we expect that number to increase. -Chris McConn
What focus will be directed towards plastics pollution and / or plastics recovery in the years to come?	Jeff	Jeff, there are different components to that issue. For traditional recycling programs, the types of plastic accepted are set by the end-market, not by us. Although a goal is to increase recycling tonnage by increasing participation in recycling programs. In addition, I am increasing education and outreach related to waste reduction and reuse, as a way to more effectively address plastic pollution. There is also some possible legislation coming up that is trying to address that issue too.
We've partnered with other counties for converting waste to energy, what is potential to partner on other solid waste handling efforts?	Jeff	live answered
How many tons from OTC are burned / converted to energy each year?	Jeff	We process approximately 21,000 tons of MSW at the Perham Resource Recovery facility each year.
Interested to learn more about rural recycling options. I live only 3 mile out of Fergus Falls city limits and we have zero options. Marie Noplos	Marie	https://ottertailcountymn.us/content-page/recycling-drop-off-locations/
On the pie chart comparing OTC to National ... OTC shows high on waste to energy. What is the opinion of lower recycling ...!	otc	Great observation. Yes, we have room for improvement in recycling. Countywide curbside collection would be a great example of how to move that dial!
Chicken and egg with plastics. If we wait for end market to create demand, we'll never get ahead of the plastics problem will we?	Jeff	live answered
Good answer Zach!	Jeff	live answered
I use them all the time. I just hate seeing my neighbors burning.	Marie	Yes, that is a concern. You can report that anonymously.
Thank you Cedar.	Jeff	live answered



PUBLIC WORKSHOP SUMMARY

Question	Asker Name	Response
When is the LT plan next due to be updated / submitted to state for acceptance?	Jeff	live answered
Long term master plan.	Jeff	
How many people were included in tonight's polling?	Jeff	Not all participated in the polling, but we had 13 individuals that provided responses.
Can this questionnaire be put on the OTC website - or maybe I missed that. Thank you.	Betty	live answered
Thank you for participation ... Lee Rogness	otc	live answered



Attachment 5: Virtual Engagement Summary



Otter Tail County Solid Waste Master Plan

Virtual Engagement Webpage Summary

Virtual Engagement Webpage and Survey

Webpage and survey available from: March 11 - April 19, 2021

Site views: 1160 site visits

Survey responses: 68 responses

Survey comments: 12 comments

Engagement Webpage Link: <https://otc-solid-waste-srfconsulting.hub.arcgis.com/>

Virtual Engagement Webpage Overview

The virtual engagement webpage provided Otter Tail County residents and stakeholders with an opportunity to learn more about the Solid Waste Master Plan. The virtual engagement page included:

- An overview of the Solid Waste Master Plan
- A summary of draft guiding principles
 - And opportunity to share input by “ranking your level of support for guiding principles.”
- Opportunity to share input via community survey
- Watch a short Otter Tail County services video
- Learn about timeline and next steps

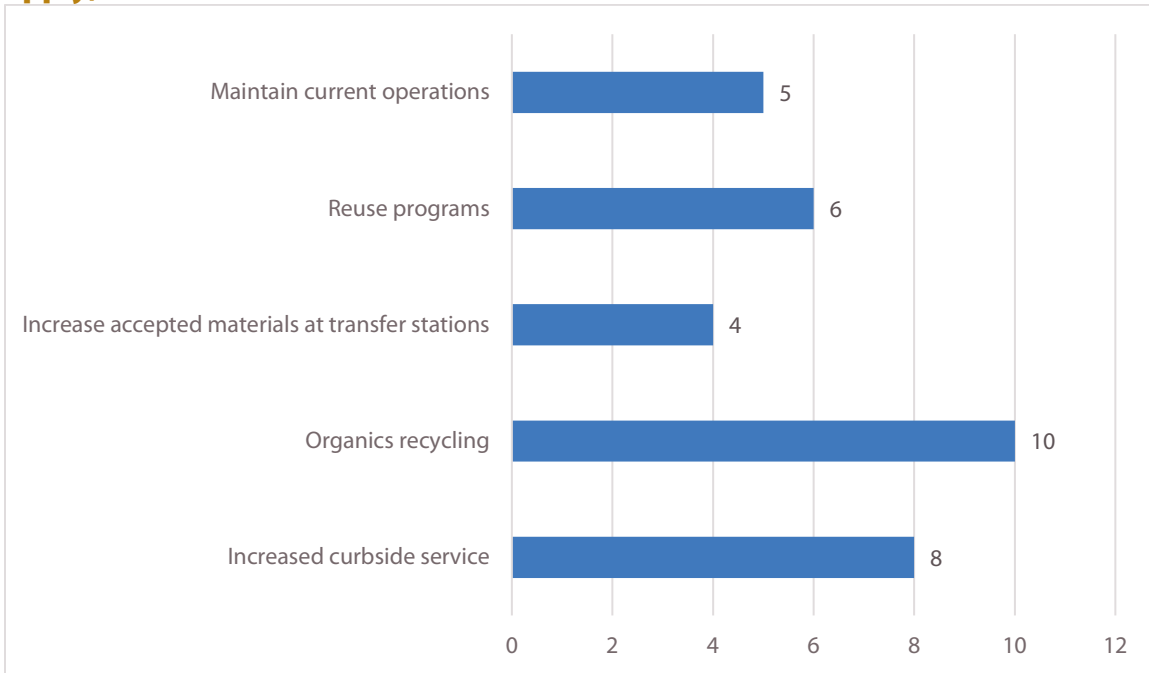
The virtual engagement page received 1160 site visits, 68 survey responses and 12 comments. The following charts and tables summarize the input received from the virtual engagement page survey questions.

<h3>What is a Solid Waste Master Plan?</h3> <p>The Otter Tail County Solid Waste Master Plan helps to support healthy people, a healthy environment, and a healthy economy across the County. The County has spent the past twenty-five years developing an integrated solid waste management system that includes accessible, cost-effective solid waste options for its residents, businesses, and visitors.</p> <p>The County's system has focused on recycling and proper management of waste. Extensive planning has been conducted to determine the best locations for waste and recycling collection and management sites.</p> <p>Watch this video to learn more about Otter Tail County Solid Waste programs and services, waste disposal locations, and other helpful information and by scrolling down to explore the rest of the site.</p> 	<h3>Draft Guiding Principles</h3> <p>Seven guiding principles have been drafted to define the goals and priorities for the management of solid waste.</p> <p>These principles will be used by the County Board and program staff as a resource for decision making related to programs, investments, and policies.</p> <p>The public input gathered throughout the Solid Waste Master Plan process was used to develop these draft principles, providing the County Board and program staff with an understanding of what the public wants them to develop, run, and fund related to the management of solid waste.</p>	<h3>Otter Tail County is</h3> <ul style="list-style-type: none"> Committed to a path toward zero landfilling Committed to supporting waste-to-energy A leader in solid waste management practices and is committed to working towards regional solutions Supports moving waste up the MN Solid Waste Management Hierarchy Committed to protecting the County's natural resources Committed to providing quality and equitable solid waste services Committed to providing fiscally responsible investments
---	---	---

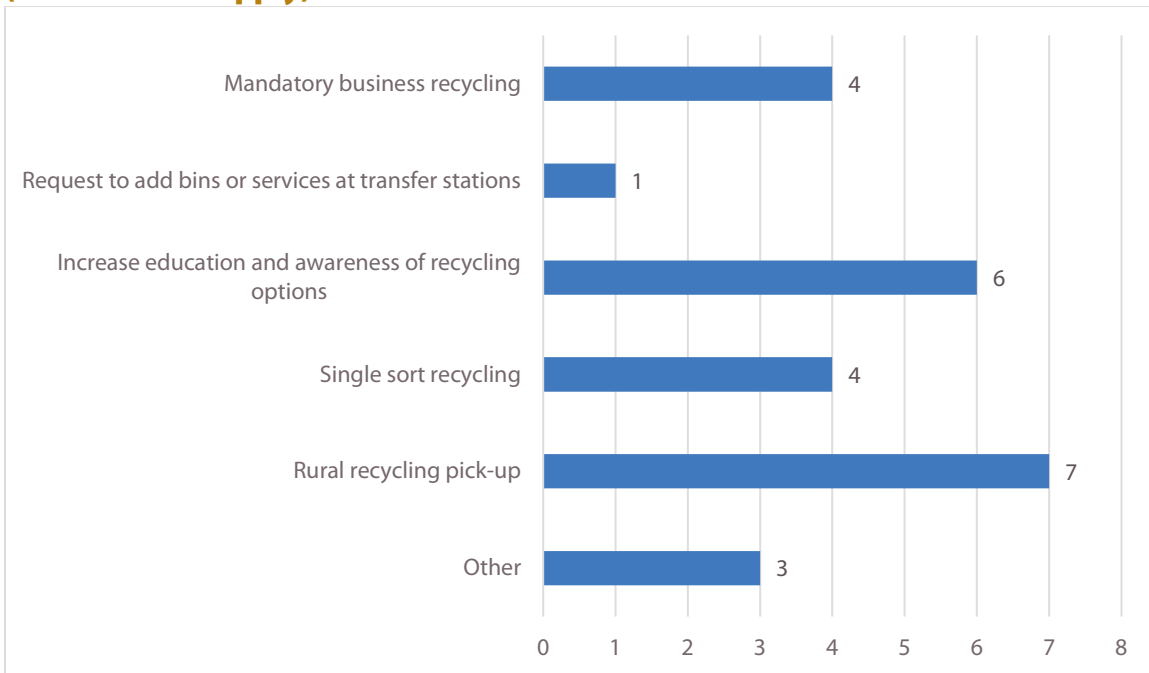


Virtual Engagement Webpage Survey Summary

What types of waste management services are you the most interested in? (select all that apply)

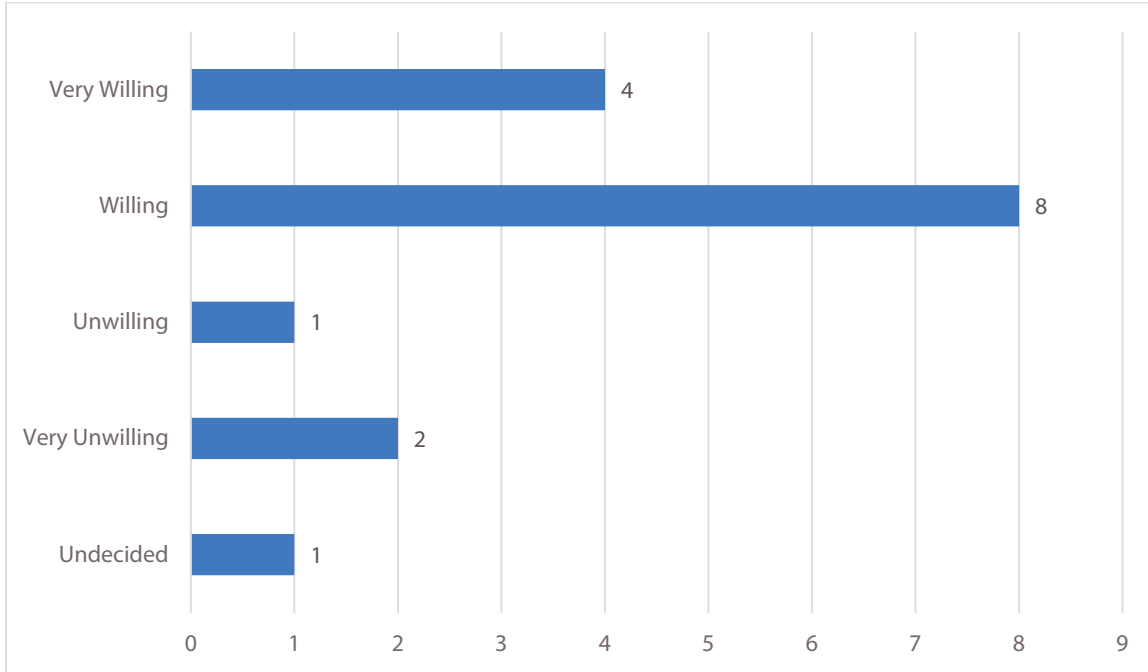


What are the most pressing needs in your community regarding solid waste management? (select all that apply)

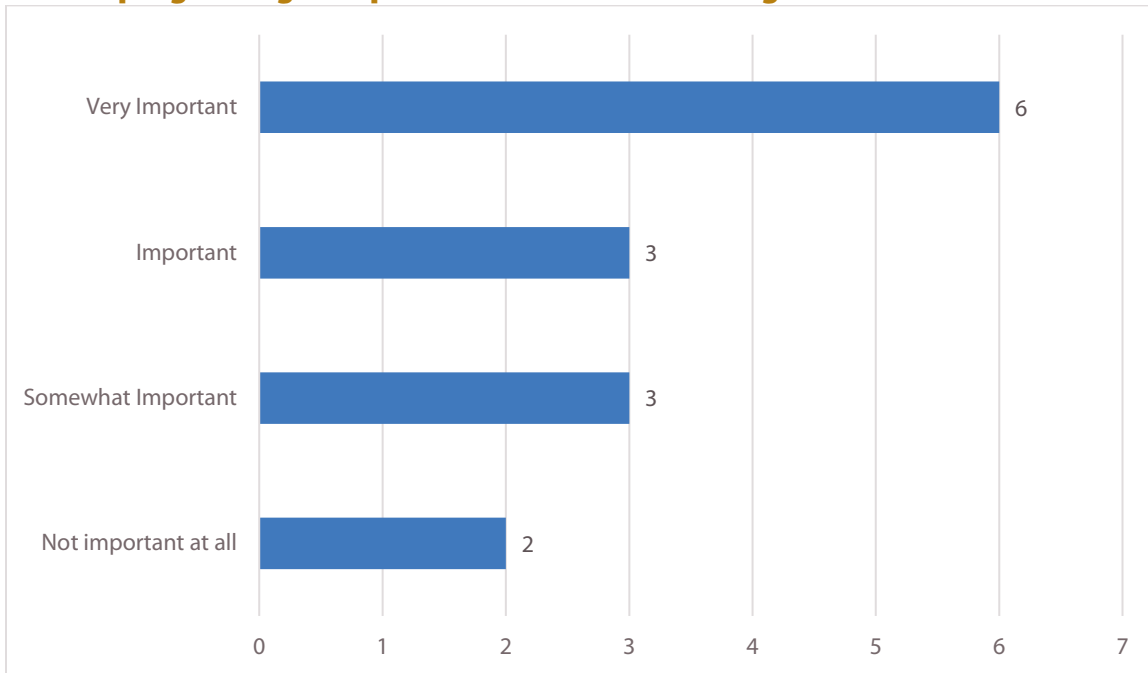


VIRTUAL ENGAGEMENT WEBPAGE SUMMARY

In general, how willing would you be to separate organic waste (such as banana peels and other food scraps and non-recyclable paper products like paper towels) from the rest of your household's (Or businesses) trash if your community had a program that would allow you to manage this waste?

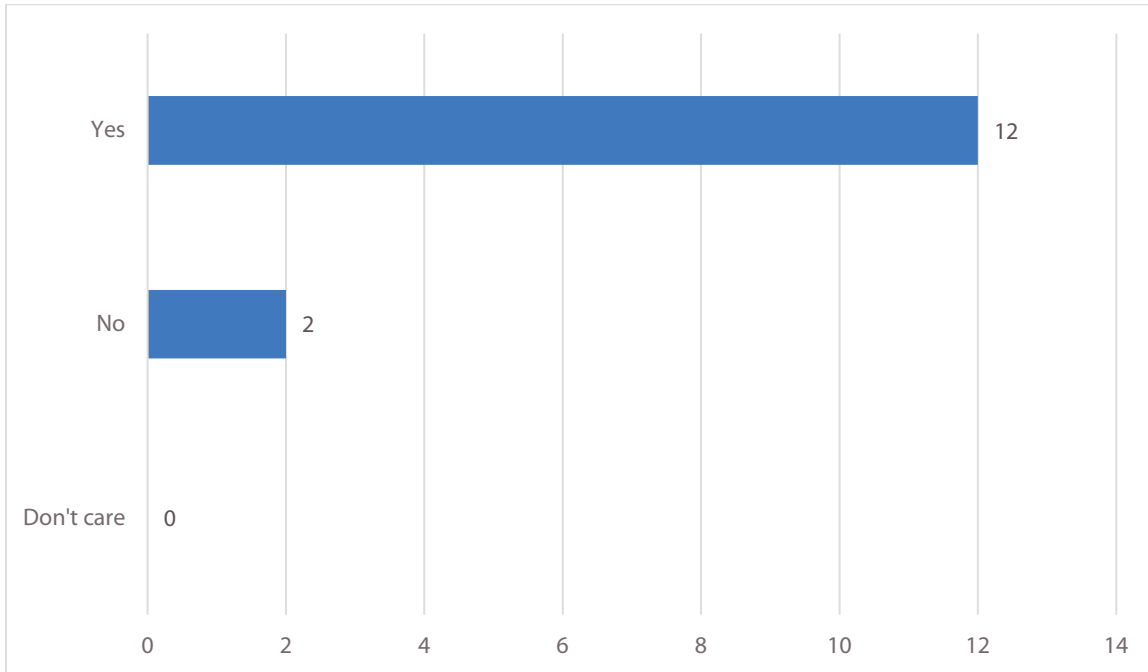


How important is it to you that Otter Tail County set measurable goals and timelines to work toward progressing on a path toward zero landfilling?



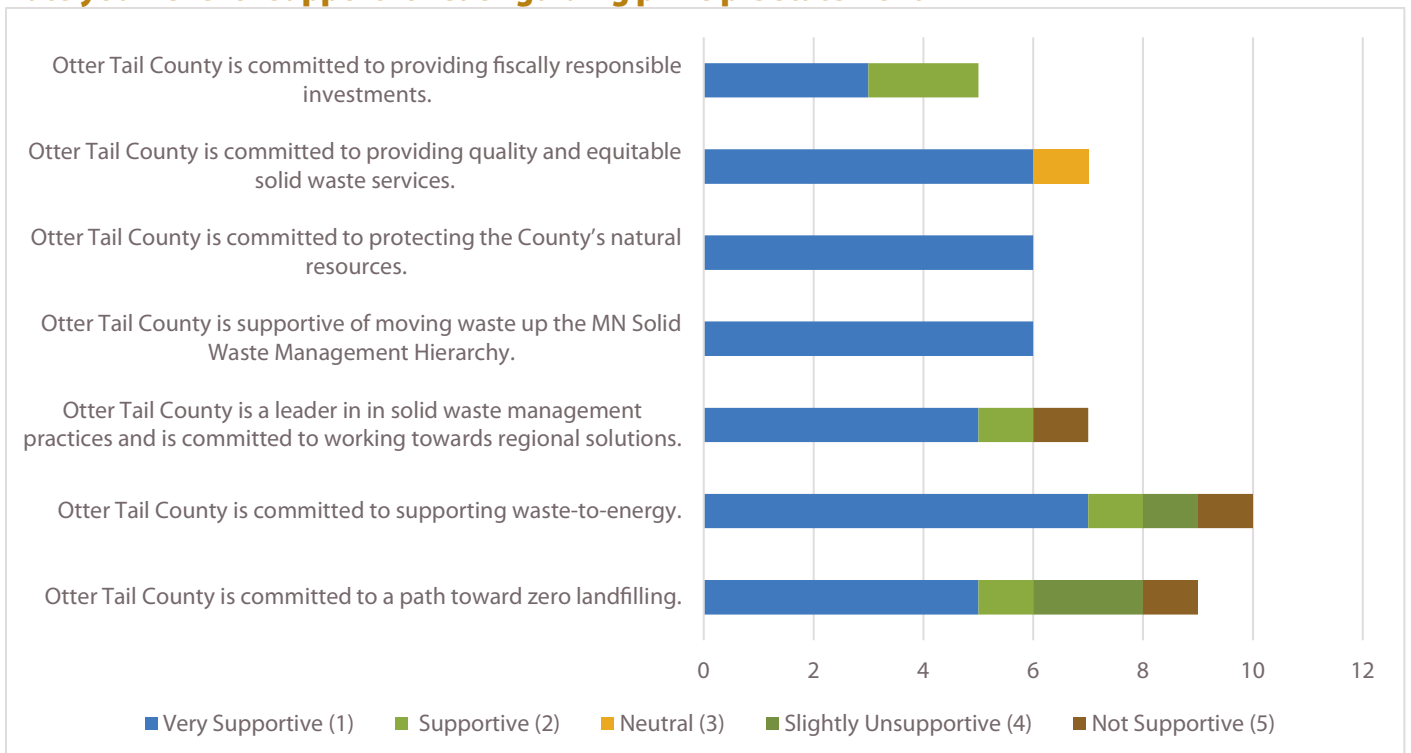
VIRTUAL ENGAGEMENT WEBPAGE SUMMARY

Would you support a zero-landfilling goal such as Otter Tail County reducing the amount of trash going to the landfill by 1% each year?



Guiding Principles Rankings

Rate your level of support for each guiding principle statement



Question & Answer Summary

Question	Public Comment
(Q6) Do you have any suggestions to help the Otter Tail County Solid Waste Department improve its programs and decrease waste and reduce landfilling?	Single Sort Recycling would be nice in every city within OTC, it is always a request we get in the City of New York Mills.
(Q6) Do you have any suggestions to help the Otter Tail County Solid Waste Department improve its programs and decrease waste and reduce landfilling?	Would love to learn more about expanding plastic recycling and learning about what percentage of recycled items actually are recycled.
(Q6) Do you have any suggestions to help the Otter Tail County Solid Waste Department improve its programs and decrease waste and reduce landfilling?	I think cost is a barrier for some people-they can't afford to take old items to landfills that should be disposed of. It gets dumped on the side of the road, or just sits around outside and makes their house look like a dump. Could we just pay a flat fee on our taxes and dispose of as much stuff as we need to at a county landfill?
(Q6) Do you have any suggestions to help the Otter Tail County Solid Waste Department improve its programs and decrease waste and reduce landfilling?	Allow churches to participate in curbside recycling with a cart for their recyclable materials, just like their neighbors. Churches generate a large volume of paper and cardboard and beverage containers and have limited personnel to bring it to a central recycling drop off.
(Q6) Do you have any suggestions to help the Otter Tail County Solid Waste Department improve its programs and decrease waste and reduce landfilling?	Let's work on achievable goals and not talking points that sound good that are unrealistic.
(Q6) Do you have any suggestions to help the Otter Tail County Solid Waste Department improve its programs and decrease waste and reduce landfilling?	What about compost? What is the plan for compost?
(Q6) Do you have any suggestions to help the Otter Tail County Solid Waste Department improve its programs and decrease waste and reduce landfilling?	Every single person working on this project agenda needs to go at least a full year generating ZERO landfilling waste from their families homes and businesses before trying to jamb this agenda down the throats of a public that has little time, motivation, or interest in doing it themselves when the rest of the world is not.
(Q6) Do you have any suggestions to help the Otter Tail County Solid Waste Department improve its programs and decrease waste and reduce landfilling?	Emphasis on reuse programs, waste reduction
(Q6) Do you have any suggestions to help the Otter Tail County Solid Waste Department improve its programs and decrease waste and reduce landfilling?	Large apartment size recycling bins similar to large waste bins...proper planning of buildings and properties that provide safe access to recycling and garbage bins
(Q6) Do you have any suggestions to help the Otter Tail County Solid Waste Department improve	It would make my life a little easier if all the Transfer Station in Minnesota had all kinds of recycling bins at



VIRTUAL ENGAGEMENT WEBPAGE SUMMARY

Question	Public Comment
its programs and decrease waste and reduce landfilling?	their locations. Recycling Batteries, Oil, Fluorescent Light Bulbs. Thanks for all the work you have done and are still doing to make Otter Tail County the best place on Earth to live.
(Q7) Do you have any additional comments or questions about Otter Tail County's Solid Waste Management operations or the Solid Waste Master Plan?	When would Single Sort Recycling be available to other communities within OTC?
(Q7) Do you have any additional comments or questions about Otter Tail County's Solid Waste Management operations or the Solid Waste Master Plan?	Make Rental Property owners aware of this master plan and the importance of providing equipment for 0 waste processing and recycling
(Ranking) Otter Tail County is supportive of moving waste up the MN Solid Waste Management Hierarchy.	I rent and my landlord does not value these principles. What can I do to show the importance?
(Ranking) Otter Tail County is committed to supporting waste-to-energy.	Living in Perham, I am concerned with heavy metals in the air as a result of burning trash. Prime concerns: lead and mercury. I see evidence of this on my white lawn furniture which was not present during a prolonged time without burning some years ago.
(Ranking) Otter Tail County is committed to supporting waste-to-energy.	Sign Me Up :)
(Ranking) Otter Tail County is committed to a path toward zero landfilling.	And where does the ash from the incinerator go???? When someone cleans out freezer????...you expect people to thaw all the food, remove from packaging...then compost food waste and discard/recycle package??? How will you make recycling work when the entire system is broken, inefficient, and expensive throughout the United States??? What do you expect haulers, cities and businesses to do with illegally dumped wastes??? mass amounts of junk will be dumped and need to be dealt with at an enormous time consuming expense. You people need to temper your fantasy with some reality.
(Ranking) Otter Tail County is committed to a path toward zero landfilling.	engaged 850 residents, 654 survey responses?...it should concern you how FEW people care to put effort into this...there are over 58,000 people in the county, and most of the people I deal with want their garbage gone the cheapest and easiest way possible...recycling is dirty, gross, and a time consuming pain in the rear. Americans were far better at reusing, recycling and repurposing 70 years ago than they are today...manufactures and ADVERTISERS destroyed that mentality and those efforts decades ago...you people are working on the wrong end of the horse...walk through Walmart or Target...everything, EVERYTHING is waste, and it is made to be sold that way
(Ranking) Otter Tail County is committed to a path toward zero landfilling.	Would like to have a yard waste can for leaves and grass clippings.



VIRTUAL ENGAGEMENT WEBPAGE SUMMARY



Appendix C - Plan Review Committee Findings

Executive Summary

The Project Review Committee (PRC) is a group of selected individuals responsible for guiding and providing input for the updated Solid Waste Master Plan developed by Otter Tail County (County). The Solid Waste Master Plan is a policy-based roadmap for the County's solid waste system. It supports healthy people, a healthy economy, and a healthy environment. It guides how County residents and businesses reduce waste, increase recycling, and divert waste from landfills.

The PRC represents the residents, industries, and businesses across the County that will be following the Solid Waste Master Plan. Each member of the PRC within their business type utilizes the County's solid waste services.

Table 1 outlines the individuals of the PRC by organization, business type, and district.

Table 1: Project Review Committee

Organization Name	Business Type	District	Committee Member Name
Lake Region Healthcare	Medical	5	Tom Rufer
Steve's Sanitation	Solid Waste Hauler	1	Kelly Melgard
Pelican Rapids School District	Education	2	Trevor Steeves
Otter Tail County COLA	Lake Owners Association	Multiple	John Krueer
Rothsay Truck Stop	Commercial	3	Mark Leighton
City of Battle Lake	City	3	Gene Kelm
Thumper Pond	Hotel/Restaurant	4	Myron Leuders
Green Plains	Industry	5	Anthony Hicks
City of Fergus Falls	City/Landfill Owner	5	Len Taylor
Otter Tail Power Co.	Business	5	Jake Ellefson
Weslake Resort	Tourism/Resort	4	Lonnie Ballweg
North Central Incorporated	Demo Hauler	1	Curt Osterfeld
Lakes Area Coop	Agriculture	1	Dale Tellinghuisen
City of Dalton	City	3	Eric Mounts
Ken Herbranson	Farmer	4	Ken Herbranson
Lund Boat Factory	Industry	1	Amanda Hansen
Jennie-O Turkeys/West Central Turkeys	Agriculture	Multiple	Robert Gray

Members of the PRC played a key role in the development of the Solid Waste Master Plan by participating in the process from start to finish. They participated in five PRC meetings to



provide their input on the plan. Each meeting touched upon different sections within the plan. Each member was allowed to provide insight on the sections and content.

Below is a summary of each of the five PRC meetings. Attachment 1 includes the notes from each meeting, including attendance records.

1. Meeting #1 (August 31, 2020)

The first PRC meeting occurred socially distanced in person. It was primarily used as an introductory meeting on who each member is, the Solid Waste Master Plan goals, and the steps taken from start to finish in developing the plan. Members introduced themselves and provided their input on issues and interests within current solid waste practices. The topics brought up by PRC members ranged across all industries. Meeting #1 also touched upon the different solid waste services within the County, such as municipal solid waste (MSW), construction and demolition, recycling, and household hazardous waste collection. Additionally, challenges, education and outreach, and public engagement were addressed. The PRC was instructed to fill out the Otter Tail County Solid Waste Master Plan Community Survey before Meeting #2.



Photo 1: In person Meeting #1 with PRC Members

2. Meeting #2 (October 6, 2020)

The second PRC meeting took place virtually and in person at the Perham Resource Recovery Facility, where the PRC members toured the facility. The Perham Resource Recovery Facility is a waste-to-energy facility where MSW is incinerated to produce energy. This facility also recovers recyclables and properly manages and disposes of hazardous waste materials. During the facility tour, the PRC members could view the tipping floor and understand the mechanical extraction of recyclables that remain in the MSW.





Photo 2: Perham Resource Recovery Facility
Tour discussing recycling markets



Photo 3: Discussing the process of
extracting recyclables from trash

In addition to the tour, the results from the survey findings were also discussed. Survey analysis showed that the PRC member's surveyed had similar results and how the PRC member's results differed from the public's response to the same survey. The focus discussion for Meeting #2 was to seek input from the PRC members on several critical path items and how the County should move forward in achieving a path toward zero landfilling. The key path items discussed are as follows:

- Cost;
- Environmental Impact;
- Customer Convenience;
- Liability;
- Equity and Access; and
- Risk and Feasibility.

Additionally, it was asked and discussed if PRC members would support the County's goal for a path toward zero landfilling.



3. Meeting #3 (January 2, 2021)

The third PRC meeting took place virtually. For this meeting, the PRC members were given an overview of the guiding principles and why they are needed for this plan. The seven guiding principles for the plan are as follows:

1. Committed to a path toward zero landfilling.
2. Committed to supporting waste-to-energy.
3. A leader in solid waste management practices and is committed to working toward regional solutions.
4. Supportive of moving waste up the Minnesota Solid Waste Management Hierarchy.
5. Committed to protecting the County's natural resources.
6. Committed to providing quality and equitable solid waste services.
7. Committed to providing fiscally responsible investments.

The committee had a robust dialogue on the principle "committed to a path towards zero landfilling." The County believes that this practice is similar to Toward Zero Death (TZD) traffic goal. This goal will be challenging, it will take partnership, but it will be a worthwhile goal similar to the TZD goal.

4. Meeting #4 (Earth Day, April 22, 2021)

The fourth PRC meeting took place virtually. The key topics of this meeting were public engagement efforts and the implementation plan. It was presented to the PRC that, through public engagement events, it has been determined that the public is willing to do more to reduce trash; however, cost and convenience are large factors. The engagement efforts were focus groups, a public workshop, and a virtual engagement site.

The PRC was presented with the challenges facing implementing a Solid Waste Master Plan and achieving the guiding principle regarding the implementation plan. The PRC was led through a series of questions to help the County better understand the PRC member's priorities.

5. Meeting #5 (June 30, 2021)

The fifth and final PRC meeting took place virtually. During this meeting, Foth went over the road map for the implementation of the Solid Waste Master Plan. To achieve the set goals, programs and infrastructure that will be needed in all program areas: education, waste reduction, recycling, organics, household hazardous waste reduction, construction and demolition waste, waste-to-energy/ash, and county operations.



Additionally, the PRC went into detail and discussed the five key focus areas. The majority of the focus areas and programs will need time to plan, establish, and begin with pilot programs. The five key focus areas discussed are as follows:

1. Establish a county-wide single-stream recycling program for all residents
2. Establish county-wide organics program for both residents and businesses
3. Increase education and outreach
4. Establish a robust reuse program including reuse rooms/locations
5. Provide uniform services across the County, including evaluating transfer station locations and existing spaces

In the discussion, the PRC addressed the cost, diversion opportunities, and program establishment timeline for each key area.



Attachment 1: Meeting Notes





Agenda

Subject	Otter Tail County Solid Waste PRC Committee #1	Date	Monday, August 31, 2020
Meeting Organizer	Otter Tail County	Time: Start	2:00 p.m.
Location	Government Services Center, 520 Fir Avenue West, Fergus Falls, MN or via virtual online meeting (see meeting invite)	Time: End	4:00 p.m.

Description	
1.	Introductions
2.	Solid Waste Master Plan Overview
3.	PRC Role
4.	Current Waste Management System
5.	Moving Forward and Input

Meeting Attendees		
Name	Organization	Email
Kelly Melgard	Steven's Sanitation	kelly@steve sanitation.com
Curt Osterfeld	North Central Inc.	curtosterfeld@arvig.net
Dale Tellinghuisen	Lakes Area Coop	dalet@lakesareacoop.com
Lonnie Ballweg	Westlake Resort	Lballweg@mac.com
Myron Lueders	Thumper Pond Resort	emylu@arvig.net
Gene Kelm	City of Battle Lake	mayorkelm@gmail.com
John Kruer	OTC COLA	otccola2@gmail.com
Amanda Hansen	Brunswick	amanda.hansen@lundboats.com
Robert Gray	West Central Turkeys	RCGray@j-ots.com
Len Taylor	City of Fergus Falls	Len.Taylor@ci.fergus-falls.mn.us
Tom Rufer	Lake Region Healthcare	trrufer@lrhc.org
Ken Herbranson	Dairy Farmer	kenherbranson@hotmail.com
Trevor Steeves	Pelican Rapids School District	tsteeves@pelicanrapids.k12.mn.us
Mark Leighton		Mark@rothsaytruckstop.com
Jake Ellefson	Otter Tail Power Company	jellefson@otpco.com
Zach Fjestad	Otter Tail County	zfjestad@co.ottertail.mn.us
Rena Simon	Otter Tail County	ssimon@co.ottertail.mn.us
Chris McConn	Otter Tail County	cmconn@co.ottertail.mn.us
Cedar Walters	Otter Tail County	cwalters@co.ottertail.mn.us
Nick Heeter	Otter Tail County	nheeter@co.ottertail.mn.us
Rick West	Otter Tail County	rwest@co.ottertail.mn.us
Stephanie Falkers	SRF Consulting	sfalkers@srfconsulting.com



Meeting Attendees		
Lea Hensel	Foth	Lea.hensel@foth.com
Kate Bartelt	Foth	Kate.bartelt@foth.com

Meeting Notes	
1.	<p>Introductions</p> <ul style="list-style-type: none"> • Rick West welcomed PRC members to the meeting. Rick noted the PRC members are the sounding board as the county moves forward with recycling and solid waste operations over the next 20 years. • Kate Bartelt, Foth – consultant to Otter Tail County, noted that everyone here is a user in some capacity of the county’s solid waste services. Today’s purpose is about making sure we’re all on the same page and setting a stage for future diversion. <p>All PRC members gave an introduction. Members shared their interest in solid waste planning. Issues and interests were varied and included the following.</p> <ul style="list-style-type: none"> • Representing dairy farms, lots of issues with bail wraps, plastics • A demolition contractor, a lot of opportunities to help with the plan and reuse • A waste recycling and hauling service provider in the county, interested in plans • Curious what other ways there are to manage recycling • Interested in the future • Representing a lake association, interested in programs like this, more often than not folks are willing to participate; has a newsletter, readership in 2-3K, • Pushing large corporate initiative for zero waste, struggled to find a good outlet for recyclables • Representing a turkey processing company, looking for new recycling opportunities, the biggest opportunity is plastics, big fans of the Perham facility • A dairy farmer, representing agricultural side solid waste generation; produces lots of plastic and household waste and spend a lot to get it taken away but appreciate the opportunity to have it taken care of • Representing a healthcare company, representing the lake region, recycling nerd, overall interest in preserving the environment and habitat • Representing an Otter Tail County community would like to see what can be done with organics in the future • Representing the OT power company, handle a lot of the waste on-site through the management of ash; do not haul that out but will not be a long-term concern; internally rebuilding and recycling of key apparatus; direct disposal of conductors and other malleable; how we can reduce reliance on solid waste services • Representing a school district
2.	<p>Solid Waste Master Plan Overview</p> <ul style="list-style-type: none"> • See PPT presentation attachment
3.	<p>PRC Role</p>

Meeting Notes

- See PPT presentation attachment

Current Waste Management System

- See PPT presentation attachment for full details; additional notes and questions included below.
- Solid waste overview
 - What is the distinction between residential, commercial, and industrial?
 - MSW (municipal solid waste) – residential and commercial; estimates approximately 1/3 of all waste; composed of approximately 1/2 residential and 1/2 commercial
 - Industrial – waste created in the manufacturing process; estimates approximately 1/3 of all waste
 - C&D (construction and demolition) – remaining 1/3 of the waste; North Dakota refers to it as inert waste, means it's stable
 - What population of the county lives on the lakes or rivers?
 - Why doesn't 100% of waste go to the Perham facility?
 - The facility would not have the capacity to manage all of the waste; some waste is not able to be or best suited for incineration (mattresses, organics, etc.)
 - Reuse opportunity – last year, the shingles collected from construction and demolition waste were ground up and used for road material
 - Yard Waste is turned twice a year and turned into compost
- Recycling
 - Primarily for five materials – glass, cans, paper, cardboard, plastic
 - The majority of materials are transported to larger MRF in the Twin Cities
 - Good to remember that people do the actual sorting; so everything coming into the MRF is hand sorted; 9 of the staff have over 20 years of experience each
 - 2019 recycling composition and revenue – aluminum and cardboard are the biggest contributors to the revenue in the county, but important to note that revenue does not account for processing and transportation
 - Other communities have problems selling their recyclables – does OTC? We're lucky to be in OTC – not as many problems selling recyclables; there are fluctuations, and revenue does get tight from time to time with markets
 - What is the contamination rate? Not available offhand. One example is that OTC sends out two loads of mixed paper a year; last year, one load was completely rejected; it was the only load in jeopardy being rejected.
- Household Hazardous Waste
 - 1,300 pounds of latex paint last year
 - Mandated by State Law about what can and cannot be disposed of
 - How many reuse locations throughout OTC? Only in Fergus Falls.

4.

Meeting Notes

- Any thoughts of other locations? Possible – would need a facility, staff, etc.
- Are electronics HHW? No. Electronics are a different part of collections. But lightbulbs are considered HHW.
- Demo cement is crushed and put into the landfill/concrete recycling.
- How are recycling bin locations determined?
 - Sites have been there for a while, but no changes have been made if sites are working well; Battle Lake is looking at changing the site
 - Are they monitored? OTC tries but not 24 hours a day. Some cameras are up.
- Why can't HHW be taken to Salvation Army? Salvation Army won't accept it. OTC manages it and has the capacity and ability to store properly. Products are available for public reuse from the Fergus Falls location
- Who is a universal waste pickup? Veolia; with the state contract.
- Education and Outreach
 - Cedar takes all the services and opportunities shared today and gets it out to the public
 - How does an organization get event recycling reserved? Contact Cedar either through a website or phone call.
- Summary
 - Challenges
 - Ordinances are changes or waste is changing – there are problem materials
 - PFAS – it's in Teflon, fast food wrappers, lots of products
 - Leaves lots of opportunities for the county to focus on
 - Are there any targeted items, water bottles, for example? Not necessarily focuses on individual materials; OTC watches trends nationally with one of the biggest being moving towards single sort recycling; not an easy win-win because of potential increased contamination; the second large trend happening now is organics – it's a large part of the waste stream.
- Public Engagement
 - An important part of this process – goals to inform the public of the process, gathering the input of use and understanding of the system and gathering feedback to establish goals, objectives, and standards
 - Postcards for feedback
 - See PPT for results
 - Survey with 654 responses
 - See PPT for results

5.

Moving Forward and Input

Meeting Notes

- In the next meeting, we'll be looking for lots of input from members
 - What should be the primary values as we move forward with the solid waste management system; not individual solutions but the bigger picture of what drives the county of Otter Tail
 - What do you need for your resort community, your business, the agriculture industry, etc.?
- Homework
 - Take the Otter Tail County Solid Waste Master Plan Community Survey before the next meeting
 - <https://www.surveymonkey.com/r/OTCSolidWastePRC>
- Questions and personal takeaways
 - The waste-to-energy facility is impressive
 - County staff and leadership have built a solid foundation to build on; seem open and perceptive to feedback
 - Did not know boat wrap recycling existed – could there be additional boat wrap recycling options?
 - Potential for boat wrap recycling drop-off at facilities
 - Goes to Revolutions Plastics, based out of Little Rock, Arkansas
 - Film waste is an issue for one of the members; vendors want a large volume, or they're not willing to take it
 - Volume and collection of materials are global issues



Notes

Subject	Otter Tail County Solid Waste PRC Committee #2	Date	Tuesday, October 6, 2020
Meeting Organizer	Otter Tail County	Time: Start	12:15 p.m.
Location	Perham Resource Recovery Facility 201 6 th Ave NE Perham, MN 56573 Or Via virtual online meeting (see meeting invite)	Time: End	3:00 p.m.

Attendees

	Name	Organization	Tour	Meeting
1.	Chris McConn	OTC	No	In-Person
2.	Kate Bartelt	Foth	Yes	In-Person
3.	Nate Klett	Foth	No	Virtual
4.	Nick Vetsch	Foth	No	Virtual
5.	John Kruse	OTC COLA	No	Virtual
6.	Amanda Hansen	Brunswick NYM Operations	Yes	In-Person
7.	Tom Rufer	Fergus Falls	Yes	In-Person
8.	Rena Simon	OTC	No	Virtual
9.	Kelly Melgard	Steve's Sanitation	Yes	In-Person
10.	Rick West	OTC	Yes	In-Person
10.	Curt Osterfeld	North Central Inc	Yes	In-Person
11.	Mark Leighton		No	Virtual
12.	Zach Fjestad	OTC	Yes	In-Person
13.	Myron Lueders	Thumper Pond	Yes	In-Person
14.	Jake Ellefson	Otter Tail Power Company	Yes	In-Person
15.	Dan McNiel	SRF	No	Virtual
16.	Cedar Walters	OTC	No	Virtual
17.	Nick Heeter	OTC	No	Virtually

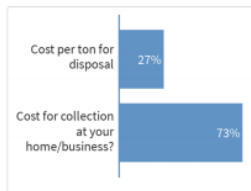


	Name	Organization	Tour	Meeting
18.	Len Taylor	Fergus Falls Public Works	Yes	In-Person
19.	Trevor Steeves	Pelican Rapids	Yes	In-Person
20.	Eric Mounts	City of Dalton	Yes	In-Person
21.	Anthony Hicks	Great Plains, Inc.	Yes	In-Person
22.	Gene Kelm		No	Virtual
24.	Robert Gray	West Central Turkeys	Yes	In-Person

Notes
<p>Tour Folks were lead on a tour of the Perham Resource Recovery Facility by Zach Fjestad. See pictures from the tour below.</p>
<p>Recap of First PRC meeting Zach Fjestad gave an overview of the first PRC meeting and a 2-minute overview of the services offered by Otter Tail County. There was discussion about education in terms of air monitoring and the community not being aware of the CEM (continuous emission monitoring) at Perham.</p>
<p>Survey Findings of PRC members Dan McNiell provided an analysis of how the PRC members' survey results were similar and different from that of the general public's response to the survey.</p> <p>Question - What is the minimum quantity for the Waste to Energy (WTE) facility to be economically feasible? Zach noted it would all depend on the size of the facility. For Perham, 60,000 tons per year of waste would be needed. For a recycling facility, that number would be closer to 18,000 tons per year of recyclables.</p>
<p>Seeking Input – How should the County achieve a path toward zero landfilling? The focus of the 2nd PRC meeting was to seek input from the PRC members on several critical path items. Below is a discussion of that work.</p> <p>Value – Cost Cost is a driving factor. There was a discussion on cost, convenience, and diversion.</p>

Notes

Costs - What cost matters most to you/your audience?



Response options

Cost per ton for disposal

Cost for collection at your home/business?

Count Percentage

4 27%

11 73%

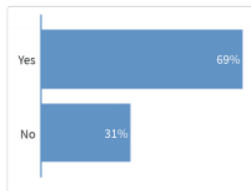
88%

Engagement

15

Responses

Costs - Would you be willing to pay more for additional curbside services?



Response options

Yes

No

Count Percentage

9 69%

4 31%

76%

Engagement

13

Responses

Value – Environmental Impact

Environmental impact is absolutely important, but the economics are the driving force behind decision making as there is a limited pool of funds that needs to be used efficiently.

Question: How does the current system not protect the environment?

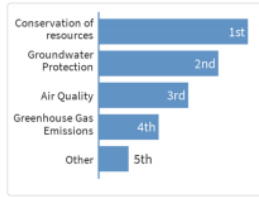
Chris: It's not the only metric but percent landfilled is a good metric for impacts on the environment because it represents resources both in what is being lost and the resources used to make and transport it. Waste in landfills also represents a liability. The waste hierarchy is another good tool to assess the benefits of landfill diversion.

Question: How are air emissions monitored from the Perham Facility.

Chris: Modern emissions control technology is so good for new diesel vehicles that you can breathe out of the tailpipe of a semi, and that's about how good our WTE facility is. We have constant monitoring of emissions. If we wanted to burn a nasty load late at night, the MPCA would know we turned off the computer. On odor - I toured HERC in the cities next to Target Field, and they have a guy who's a certified sniffer who walks around the outside and can't smell anything. Would they build a baseball stadium next to HERC if it was that bad? Just like at our facility, negative pressure created by the furnace pull any smell in to be burned.

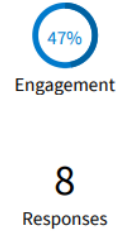
Notes

Environmental Impacts - Please rank what environmental impact matters most to you/your audience:

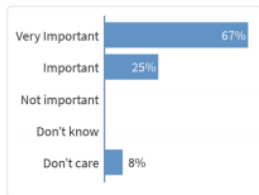


Response options
Conservation of resources
Groundwater Protection
Air Quality
Greenhouse Gas Emissions
Other

Rank
1st
2nd
3rd
4th
5th

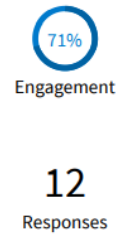


Environmental Impacts - How important is ensuring the environmental quality of Otter Tail County to you/your audience?



Response options
Very Important
Important
Not important
Don't know
Don't care

Count	Percentage
8	67%
3	25%
0	0%
0	0%
1	8%

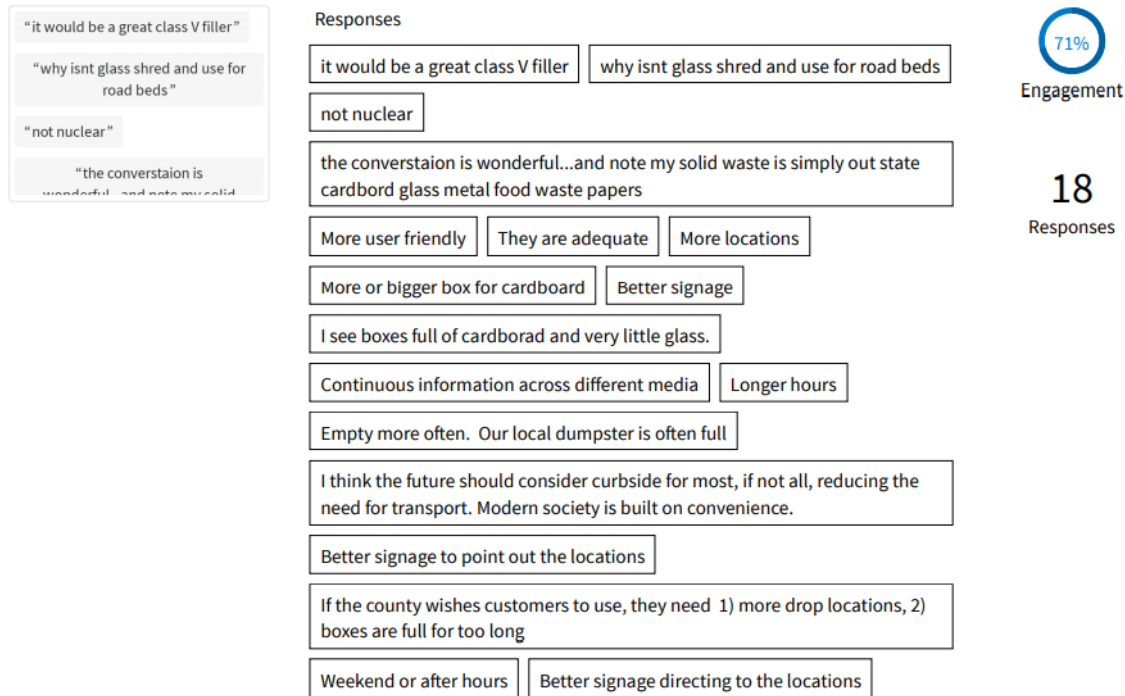


Value – Customer Convenience

A robust discussion was had on the importance of drop-off sites (public and private) in serving Otter County residents.

Notes

Customer Convenience - How can the drop-off locations be made easier for residents to use?



Question: Is the overflowing cardboard bins an ongoing issue? Is it seasonal?

Chris: He is not surprised by this, and if they don't empty the bins on Friday, they're overflowing by Sunday. These issues are why we need the voice of the public to tell us if you want to cut taxes or if you want to have more services and therefore spend taxes on them. The evolving waste stream is also a challenge. We're still using the same bins and categories which have seen a big drop in newspaper and, especially this year, a big spike in cardboard.

Comment: on how their recycling picks up every-other-week, but the trash picks up every week and how people then throw recyclables in the trash out of convenience when their recycling is full.

Comment: there are still myths circulating in the community that collected recyclables don't get recycled and are burnt or landfilled. There needs to be a clear message that recycling happens.

Chris: stated that no collected recyclables in the County have ever been landfilled or incinerated to his knowledge. Many people think recycling is supposed to be for making money, but sometimes it's a net cost to recycle.

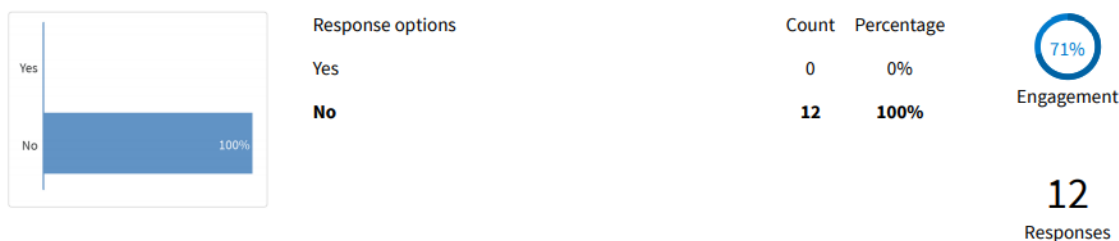
Rena: stated that Cedar spends a lot of time dispelling these types of myths and is a great public outreach coordinator.

Question: It was a big deal back in the day when they used crushed glass for a roadway project in the County, is there more of that happening?

Notes

A robust discussion followed. Rick West mentioned that there are current Otter Tail County efforts and plans to utilize glass aggregate shortly.

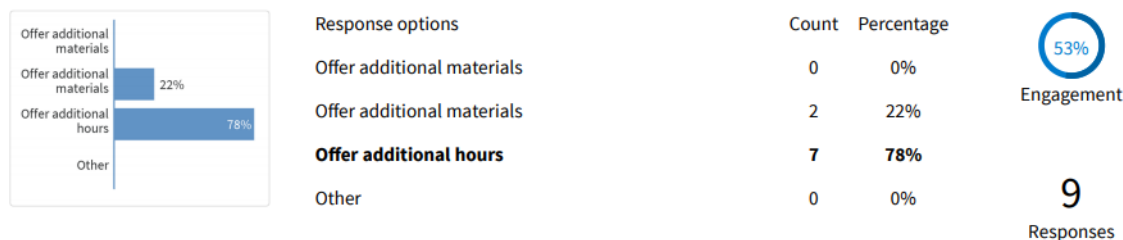
Customer Convenience - The drop-off locations all currently offer different services and look a bit different.



Question: Are the transfer stations tailor-made to the communities using them?

Chris: I don't think so. They accept the same things and charge the same prices. The hours are different at each. Some of the smaller sites only accept smaller loads of demolition waste.

Customer Convenience -How could the sites be improved to better serve your needs?



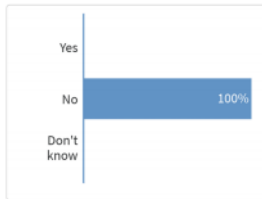
Comment: A member mentioned that adding hours costs money but changing hours doesn't necessarily. They suggested that it would be beneficial to stay open late one evening or shift some hours to the weekend.

Value – Liability

The committee agreed that landfills' long-term liability is not well understood and should be communicated to the public. Chris provided an example of a landfill going into financial despair. The EPA was still able to go after Ford Motor Company for waste they generated buried in that landfill.

Notes

Liability - Is the long term liability from landfilling understood in the community?



Response options

Yes

No

Don't know

Count Percentage

0

0%

12

100%

0

0%

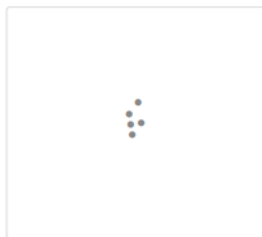
71%

Engagement

12

Responses

Liability - Do you think the long term liability should be communicated with the community?



Response options

Yes

No

Don't know

Count Percentage

11

100%

0

0%

0

0%

65%

Engagement

11

Responses

Question: What is the concern for hazardous waste?

Chris: Hazardous waste is always a concern.

When discussing if the long term liability of landfilling is communicated to the public, it was noted by a PRC member that people don't care unless it affects them directly.

Chris: The challenge is to find creative ways to make it relevant to the public. The community's general perception is the landfill is a catchall, and once waste is there, the individual doesn't need to worry about it.

An example was provided by a member about cleaning out a home. At that moment, the convenience of throwing everything into a dumpster outweighed the time and burden of recycling and separating materials for a family. In this case, there was not enough incentive to separate recyclables.

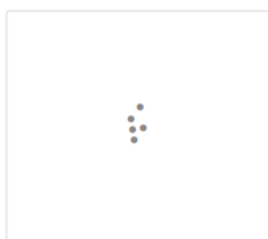
Value – Equity and Access

The PRC members discussed differences in services in Otter Tail county – geographic equity, serving folks in apartments, i.e., A member stated location is key, and services need to be simple

Notes

and easy to access. Curbside services are the most beneficial.

Equity - Are there potential concerns with access to services?



Response options

Yes

No

Count Percentage

5 45%

6 55%

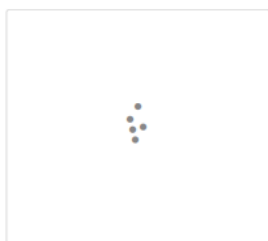


Engagement

11

Responses

Equity - How important is providing equitable services across the county to you/your audience?



Response options

Very Important

Important

Not important

Don't know

Don't care

Count Percentage

0 0%

9 82%

0 0%

2 18%

0 0%



Engagement

11

Responses

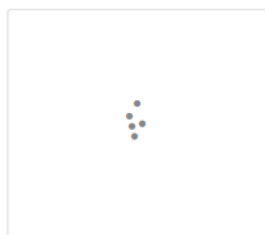
A member stated areas with more people need more services. Another member stated equity and access need to be defined in the plan.

A member commented regarding a specific service, "I have to drive to Fergus to do that?"

Value – Risk and Feasibility

Understanding how PRC members view risk will help guide the policymakers as they evaluate the feasibility of new technology solutions.

Risk - Are you/ is your audience open to embracing new technologies?



Response options

Yes

No

Count Percentage

11 100%

0 0%



Engagement

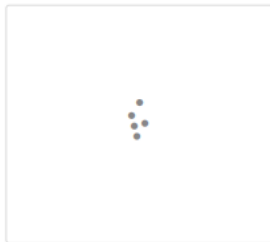
11

Responses

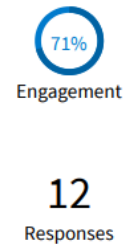
Notes

The committee had a robust discussion on risk, and the comfort level with new technologies varied. A consensus was formed in that the committee felt that cost and risks need to be weighed against benefits.

Risk - What is your comfort scale for embracing new technologies?



Response options	Count	Percentage
Very comfortable with new technologies – Cutting Edge	8	67%
Only comfortable with well-established technologies – Tried and True	4	33%
Not comfortable with new technologies	0	0%



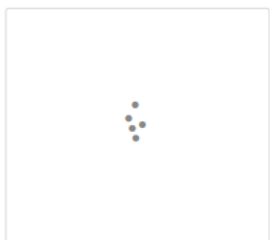
Comments:

- It depends on the level of risk. If talking about a nuclear plant, then they would want the tried and true.
- Some things just need to be tried instead of spending lots of money talking. A lot can be learned by doing, and it's easy as long as risks are low.
- New technologies can help to get more people on board with something, especially younger people.

Support for a County Initiative on a Path Toward Zero Landfilling

The PRC members were asked if they support a county initiative promoting a path toward zero landfilling. In general, there is support for this initiative; however, there is a need to define by when and what does a path toward zero landfilling really mean.

Zero Landfill - Would you support a county goal of a path toward zero landfilling?



Response options	Count	Percentage
Yes	7	70%
No	3	30%



Comments:

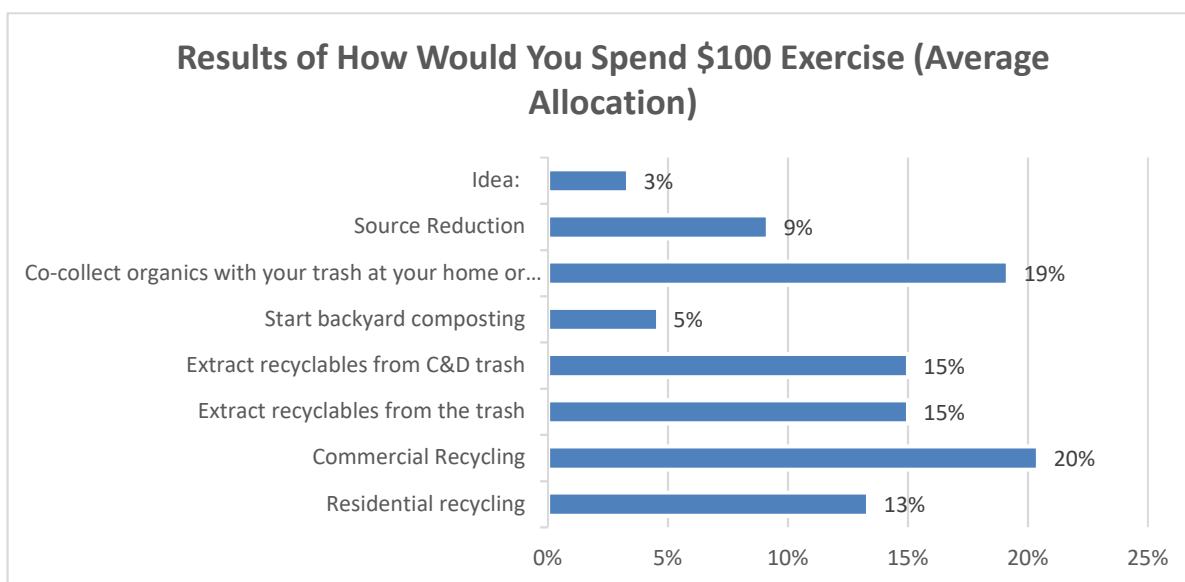
- Is it realistic and practical?

Notes

- Is there a better way to phrase the goal? Goals need to be attainable and clearly defined. Can we make it clearer and attainable?
Kate: This is the purpose of the PRC meetings to get input before defining the vision.
- Are any other counties pursuing this goal?
A member stated that for zero waste certification for a business, there are multiple certifying agencies with differing criteria and no national standards.
- Would need to define "What's in it for me?".
- A member mentioned a city that fines citizens for placing recyclables in the trash. They said people would fight it if this extreme is gone to.
- A member commented in relation to producer responsibility and difficult to recycle composite packaging materials. An Otter Tail staff stated this plan is about what the County can control, and the County can't control how Cheerios are packaged.
- Rick West related how a path toward zero landfilling is similar to the DOT's Path Toward Zero Death. It is a challenging goal but worthwhile. Making progress towards zero is important.

How would you fund the system?

The PRC members were asked to say how they would fund the system if they could. If the member was given \$100 toward making change, how would they spend it? The average of the spending is shown below as well as the individual allocations.



How would you spend \$100											
Residential recycling	10		20	20	10		25	25		20	30
Commercial Recycling	30		20	20	20	25	25	25	20	30	30
Extract recyclables from the trash	30	40	20	15	20		15	25			15
Extract recyclables from C&D trash	10	20	10	10	15	25	15	25	20	15	15
Start backyard composting			30	5	5					5	10

Notes											
Co-collect organics with your trash at your home or business	10	20		20	10	50				100	20
Source Reduction	10	20		10	20		20		20		10
Idea:									40*		
* Purchase the equipment for this and educate the populace											
<p>Comments:</p> <ul style="list-style-type: none"> • A member expressed a wish to install a private incinerator. • A member asked which of the options would be most impactful for waste diversion. Zach: Looking at volume, commercial recycling has the biggest potential. And organics/food waste. • Chris: We want to encourage backyard composting as much as we can, but apartments, seniors, and schools also need a viable option. A senior home used to have recycling, but nobody used it, so they stopped, so other challenges also exist. 											
<p>Next Steps</p> <p>The next PRC meeting will focus on evaluating initiatives that would help the County achieve increased diversion and improve the overall solid waste system. There will also be a discussion on further defining the overarching vision of toward zero landfilling.</p>											

Zoom – Virtual Comments

- I know small business paying \$1,000 per month
- Better efficient collection
- How is the current system not protecting the environment
- OTC solid waste is a bit different than Pittsburg
- No disrespect this is pretty bais outcome
- As a businessman there are some 10 people here at \$1,000 hours... it is unfortunate the commissioners are smart enough
- Why isn't glass being used
- How long will it take govt to become proactive with glass use in roads, class V asphalt etc
- Come on the tax payor isn't stupid
- More drop locations. Boxes to reflect usage
- Which I go back to my original comment....we will never never get to zero
- And it has truly become too complicated for the consumer ... like when dad dies and you clean out the house or remodel an old house
- Not really directed to handicap...there are services who help them...it simple boils down to location location location.
- If you want the public to recycle or sort. It must be simple
- Easy to access
- I have been trying for 10 years to get qualified incineration for my businesses

- The air coming out of the incinerator burning primary paper and food waste is better than we burn
- I can not get any State office to address this
- These incinerators are used at international airports to burn incoming foreign waste
- And medical and drop incinerations
- The State won't allow this
- I know one thing if I installed the clean incinerator without proper permit etc...there would be 300 state agent closing this down
- Simply impossible
- Lets be realistic
- If the State or County's goal is zero landfill...it will not be possible under today's regulatory constrains
- From the outside looking in...this seems to be a never ending costly study
- I challenge OTC to allow me to install a UL PCA approved incinerator
- Do I eat the paper or put in the garbage
- How does OTC change the State EPA restrictions
- If people like the OTC facebook, they will see more of our info
- I will bet the 100 dollars incineration is not allowed
- Perham Resource Recovery Facility Tour

Perham Resource Recovery Facility Tour



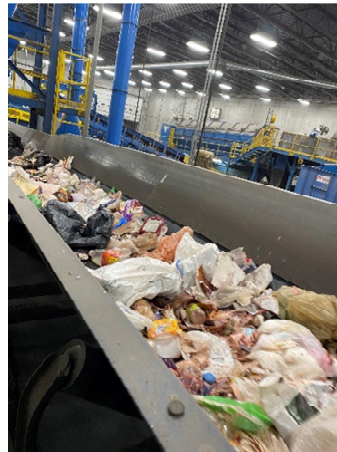
Discussing recycling commodity pricing



Discussing the process of extracting recyclable from trash



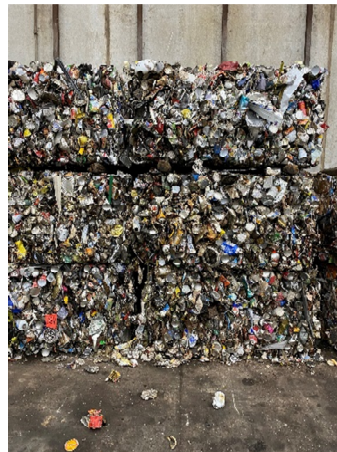
Tipping floor



Trash after recyclables have been extracted



Household hazardous waste found in trash



Bales of aluminum extracted from the trash for recycling



Notes

Subject	Otter Tail County Solid Waste PRC Committee #3	Date	Tuesday, January 19, 2021
Meeting Organizer	Otter Tail County	Time: Start	3:00 p.m.
Location	Virtual online meeting	Time: End	4:30 p.m.

Attendees

	Name	Organization
1.	Chris McConn	OTC
2.	Kate Bartelt	Foth
3.	Nate Klett	Foth
4.	Nick Vetsch	Foth
5.	John Kruse	OTC COLA
6.	Amanda Hansen	Brunswick NYM Operations
7.	Tom Rufer	LRHC
8.	Rena Simon	OTC
9.	Kelly Melgard	Steve's Sanitation
10.	Rick West	OTC
11.	Mark Leighton	Rothsay Truck Stop
12.	Zach Fjestad	OTC
13.	Myron Lueders	Thumper Pond
14.	Jake Ellefson	Otter Tail Power Company
15.	Dan McNiel	SRF
16.	Cedar Walters	OTC
17.	Nick Heeter	OTC
18.	Len Taylor	Fergus Falls Public Works
20.	Eric Mounts	City of Dalton
25.	Stephanie Falkers	SRF

Notes
PRC Meeting #2 Recap and Homework Follow-Up
At the last meeting, there was a tour of the Waste-to-Energy facility with recycling extraction.



Notes

The primary focus of the meeting was to understand the values of the PRC members. The following three values emerged as most important.

1. Environmental protection
2. Customer convenience
3. Costs

PRC members supported the concept of a Path Toward Zero Landfilling, but questions remain. The committee also reviewed technology solutions that could be used to divert, manage or process waste.

Guiding Principles

Kate Bartelt, Foth, gave an overview of guiding principles and why they are needed for this plan. She also detailed how the guiding principles were developed.

- Input from all of you given at the first two PRC meetings. Trying to capture your opinions, insight, and direction.
- From the survey of the public in 2020 and meeting with residents at pop-up events. Trying to capture the public's thinking and implement programs that support their desires to divert additional materials from the landfill.

Draft Guiding Principles as presented to the PRC members are as follows. Otter Tail County is:

1. Committed to a path toward zero landfilling.
2. Committed to supporting waste-to-energy.
3. A leader in solid waste management practices and is committed to working toward regional solutions.
4. Supportive of moving waste up the MN Solid Waste Management Hierarchy.
5. Committed to protecting the County's natural resources.
6. Committed to providing quality and equitable solid waste services.
7. Committed to providing fiscally responsible investments.

The committee had a robust dialogue on the principle "committed to a path toward zero landfill." OTC believes that this principle is similar to the Toward Zero Death (TZD) traffic goal. This goal will be challenging, it will take partnership, but it is for a worthwhile goal like the TZD goal. Many options are available to the county work towards its path toward zero landfilling, including:

- Waste reduction by generators;
- Increased diversion by waste generators;
- More options for waste generators to divert waste; and
- Increase technologies to remove materials from the trash before final disposal.

The committee reviewed waste generation and trends for the county. A summary of those trends is shared here for reference. In 2019, the County managed 51,500 tons of waste through its facilities (MSW & C&D). 68% of the waste is currently being diverted from landfills.

Notes

- Landfills continue to create a long-term risk for OTC.
- Recyclables are being recycled.
- Food waste represents over 25% of what is being currently landfilled.

Kate Bartelt discussed how OTC could move to 85% diversion from landfilling through a potential scenario by increasing waste diversion through source reduction, implementing single-stream recycling county-wide, beginning an organics composting program, adding additional processing enhancements, beginning construction and demolition waste processing, and finding additional ways to use ash.

General PRC member feedback and questions will be presented by principle. During several check-ins during the committee discussions, the members expressed overall support for the guiding principles. There was an in-depth conversation on why there is a 25-year planning horizon. It felt like too long to some members, but it is a typical county planning process.

1. Committed to a path toward zero landfilling.

- The committee discussed additional ways of using ash (called ash utilization) and current regulatory barriers.
- The committee discussed why the percentage of waste-to-energy (WTE) remains constant from now on in the path toward zero landfilling potential scenario from today. Chris McConn noted that OTC is a part-owner in the Perham Resource Recovery Facility. That partnership dictates how many tons of waste can be processed from OTC. OTC is currently utilizing all available tons for processing. WTE has been an important anchor for the county's waste management system; however, Chris noted that it would like to continue to move waste higher up the waste management hierarchy. (aka waste reduction and recycling are preferable to landfilling). The committee also discussed how specific materials would be better managed – such as organics. Organic waste is not a good product for WTE as organics diminish fuel quality but can instead be used to create a soil amendment if composted.
- The committee discussed composting methods and current regional efforts for organics diversion. Organics can be defined as such waste food scraps or as broadly also to include paper towels, napkins, and compostable products. The committee discussed that organics collection could range from backyard composting to co-collecting with trash to regional drop-off locations. Exactly how a program would be developed, rolled out, and educated in the county has not yet been developed.

2. Committed to supporting waste-to-energy

- Overall general support.
- Discussion regarding Minnesota Pollution Control Agency (MPCA) support and role in regulating WTE.
- Discussion on MPCA's goal of 35% recycling in Greater Minnesota by 2035¹. Otter Tail County (OTC) staff noted that counties in general typically do not support unfunded mandates.

¹ See <https://www.pca.state.mn.us/waste/managing-waste> for additional information.

Notes

- Discussion regarding that as the county works toward zero landfilling, a fraction of materials generated will need to be landfilled. WTE plays a critical role in waste volume reduction and energy production. OTC staff noted that they are interested in ash utilization and hope that in 20-30 years, we will have a use for the material beyond landfilling.
- A question was raised on the possibility of adding additional WTE capacity at the Perham Resource Recovery Facility. OTC staff noted that is possible but not probable. Adding a new WTE facility is very unlikely as permitting to construct a new facility would be very, very complicated. The County is not looking at this option right now.

3. A leader in solid waste management practices and is committed to working toward regional solutions.

Kate Bartelt and Chris McConn noted that OTC is a leader in waste management. The county has embraced a full spectrum of solutions that meet our rural county's needs while recognizing the county audiences. Tom Rufer noted that this track record of leadership is something OTC should be proud of. The committee disused that being a leader shows OTC as a progressive county that is part of the solution – reaping economic and environmental benefits from the additional waste diversion.

4. Supportive of moving waste up the MN Solid Waste Management Hierarchy.

The PRC members noted overall support for this principle. Zach Fjestad noted that this is a Minnesota State policy, and having a supporting principle will help the county when it seeks bonding monies or policy support for its programs.

5. Committed to protecting the County's natural resources.

The committee supported this principle. The committee had a valuable conversation on the verbiage of this principle. Should the verbiage be more specific (such as protect waterways, sustainability, stormwater protection) or kept broad? The decision was made to keep the verbiage broad.

6. Committed to providing quality and equitable solid waste services.

The committee had no concerns regarding this principle and supported the goal.

7. Committed to providing fiscally responsible investments.

The committee shared that they believe the county would do this regardless of a principle but good to have this as a principle.

Additional program ideas previously discussed by the PRC members:

- Potential for a program to certify or support businesses moving toward increased waste diversion or zero landfilling.
- Development of Master Recycler program or citizen recycling/waste diversion program.

Notes

Next Steps

Zach Fjestad outlined the next steps of the planning process as developing a road map to set priorities. These guiding principles will be shared with the public and focus groups to get their support and ideas. We will bring those ideas and feedback back to the PRC at its next meeting.

- **Prioritization of next steps**
 - Focus groups and virtual public open house (February 2021)
 - 4th PRC meeting (March 2021)
- **Preparing of the written plan**
 - Staff will prepare a draft plan (April 2021)
 - Draft plan will be shared with PRC members (May 2021)
 - **NEW** - Host a 5th PRC meeting to go over the draft plan (May 2021)
 - Share draft plan to the public (June 2021)
 - Present draft plan for approval to the Otter Tail County Board (July 2021)



Notes

Subject	Otter Tail County Solid Waste PRC Committee #4	Date	Earth Day April 22, 2021
Meeting Organizer	Otter Tail County	Time: Start	2:00 p.m.
Location	Virtual online meeting	Time: End	3:30 p.m.

Attendees

	Name	Organization
1.	Chris McConn	OTC
2.	Kate Bartelt	Foth
3.	Nate Klett	Foth
4.	Nick Vetsch	Foth
5.	Amanda Hansen	Brunswick NYM Operations
6.	Tom Rufer	LRHC
7.	Rena Simon	OTC
8.	Kelly Melgard	Steve's Sanitation
9.	Rick West	OTC
10.	Mark Leighton	Rothsay Truck Stop
11.	Zach Fjestad	OTC
12.	Jake Ellefson	Otter Tail Power Company
13.	Cedar Walters	OTC
14.	Nick Heeter	OTC
15.	Eric Mounts	City of Dalton
16.	Stephanie Falkers	SRF

Notes
<p>Earth Day Celebration</p> <p>Cedar Walters and Zach Fjestad, OTC, discussed the history and importance of Earth Day.</p>
<p>PRC Meeting #3 Recap and Homework Follow-Up</p> <p>Kate Bartelt, Foth, reviewed the key takeaways from the third PRC meeting. Key takeaways included:</p> <ul style="list-style-type: none"> • A vibrant discussion on setting Guiding Principles (Why and What), • A robust dialogue on the principle “Committed to a Path Toward Zero Landfilling”; and



Notes

- Strong commitment to protecting the County's natural resources and providing fiscally responsible investments.

Kate also reviewed the seven guiding principles. The guiding principles are as follows. Otter Tail County is:

1. Committed to a path toward zero landfilling
2. Committed to supporting waste-to-energy
3. A leader in solid waste management practices and is committed to working towards regional solutions
4. Supports moving waste up the MN Solid Waste Management Hierarchy
5. Committed to protecting the County's natural resources
6. Committed to providing quality and equitable solid waste services
7. Committed to providing fiscally responsible investments

Engagement

Stephanie Falkers, SRF, outlined the public engagement efforts between the third and fourth PRC meetings. Below is a summary of the engagement efforts. The engagement events found that folks are willing to do more to reduce trash, but costs and convenience are big factors.

- Focus Groups – Three focus groups were held between March 17 and 18 (haulers, manufacturing industry, and organics). The focus groups were used to gather industry representatives to discuss guiding principles and share insights on program opportunities and hurdles.
- Public Workshop – The workshop was held to inform the public of the Master Plan and gather feedback to inform the next steps of the planning process. The workshop participants shared a strong desire for waste prevention and reuse programs and strong support for protecting the County's natural resources.
- Virtual Engagement Site – The engagement site offered an online public portal to seek input on the planning process. The site had over 1,000 visits, and 60 folks responded to the survey on the site.

Implementation Plan

Kate presented the challenge to the PRC to begin the development of an implementation plan to achieve the guiding principles. Zach provided an example of developing an implementation strategy. Solid waste infrastructure is complicated and will take time to design, construct and implement.

Kate led the PRC members through a series of questions to help OTC understand PRC member's priorities.

Question – What is the most important area for the County to focus on first?

Polling results – 1. Increase recycling 2. Organics management 3. Waste prevention/reuse

Discussion highlights –

- Increased recycling would be beneficial to residents. Almost any resident or visitor can do recycling.

Notes

- Organics management is needed, but folks are not as educated on organics as they are on recycling. May need to start with early adopters with backyard composting programs. This may lead to an understanding of organic separation from the trash.
- Organics are wet and heavy – thus expensive to haul to the landfill.
- A discussion that technical assistance will be needed for business to understand how to set-up an organics management programs.

Question – What is the least important area for the County to focus on first?

Polling results – 1. Demolition recycling programs 2. Other 3. Waste prevention

Discussion highlights –

- Demolition waste doesn't impact all of us PRC members directly. Contractors seem to be handling the waste stream very well. There is a lot of wood pallets being generated currently that could be better managed.
- All are important, and all are needed.

Question – What do you value most?

Polling results – 1. Convenience 2/3 (tie) Environmental protection and Cost/Value for service

Discussion highlights –

- It is all about convenience for the user.
- There are Otter Tail County businesses that are striving for zero landfilling goals.
- We need to be conscious of environmental impact and programs but understand that there is a cost.

Question – Does reducing the amount of trash going to the landfill seem too ambitious or not ambitious enough?

Polling Results – range from “not ambitious enough” to “just right.”

Discussion highlights –

- PRC members are interested in learning more about how this would break down to changes for residents and businesses.
- PRC members felt that having a metric like this is critical for program success and performance.
- This goal will get harder to achieve as there is less waste available for landfill diversion.
- PRC members discussed that not all materials currently have a recycling, reduction, or management solution outside of landfilling but having a strong vision goal is important.

Next Steps

Kate outlined the next steps of the planning process as putting details and specific programs into the roadmap. We will bring the draft roadmap to the PRC at its next and final meeting

- **Preparing of the written plan**
 - Staff will prepare a draft plan (May 2021)
 - Draft plan will be shared with PRC members (Early summer 2021)
 - **NEW** - Host a 5th PRC meeting to go over the draft plan (Early summer 2021)
 - Share draft plan to the public (Early summer 2021)
 - Present draft plan for approval to the Otter Tail County Board (Late summer 2021)

Notes

Subject	Otter Tail County Solid Waste PRC Committee #5	Date	June 30, 2021
Meeting Organizer	Otter Tail County	Time: Start	2:00 p.m.
Location	Virtual online meeting	Time: End	3:30 p.m.

Attendees

	Name	Organization
1.	Chris McConn	OTC
2.	Kate Bartelt	Foth
3.	Nate Klett	Foth
4.	Nick Vetsch	Foth
5.	Amanda Hansen	Brunswick NYM Operations
6.	Kelly Melgard	Steve's Sanitation
7.	Len Taylor	City of Fergus Falls
10.	Mark Leighton	Rothsay Truck Stop
11.	Zach Fjestad	OTC
12.	Jake Ellefson	Otter Tail Power Company
13.	Cedar Walters	OTC
15.	Eric Mounts	City of Dalton
16.	Rena Simon	OTC

Notes

PRC Meeting #4 Recap and Homework Follow-Up

Kate Bartelt, Foth, reviewed the key takeaways from the fourth PRC meeting. Key takeaways included:

- Discussion on goals, key focus areas, and a robust conversation on priority order.
- The input given drove the development of the draft solid waste project and infrastructure road map.
- An overview of the engagement activities and results from the three focus group meetings, the public workshop, and the virtual public engagement site.

Kate also reviewed the seven guiding principles. The guiding principles are as follows. Otter Tail County is:



Notes

1. Committed to a path toward zero landfilling
2. Committed to supporting waste-to-energy
3. A leader in solid waste management practices and is committed to working towards regional solutions
4. Supportive of moving waste up the MN Solid Waste Management Hierarchy
5. Committed to protecting the County's natural resources
6. Committed to providing quality and equitable solid waste services
7. Committed to providing fiscally responsible investments

Road Map to Implementation

Kate noted that progress would need to be made in each of the target areas to achieve the goals set: education, waste reduction, recycling, organics, household hazardous waste reduction, construction and demolition waste, waste-to-energy/ash, and county operations.

The PRC has discussed five key focus areas. Kate discusses each in detail. Most programs will need time to plan, establish, and begin with pilot programs, so the program established year shared at the PRC meeting is to estimate when programs would be available throughout the county.

1. Establish a county-wide single-stream recycling program for all residents

Cost: Moderate to high

Diversion: 1,200 to 1,400 tons per year

Program Established: Year 5

PRC Feedback

* Hearing from folks that live outside of Fergus Falls and Perham that there is a desire to have single-stream recycling.

* Have seen an increase in the amount of cardboard to be recycled from residents—discussion on the national trend for increased online shopping and increased cardboard for recycling. Otter Tail County staff also provided details on how cardboard is currently being processed in Becker, MN.

*Discussion on how costs will be determined by the role played by Otter Tail County.

2. Establish county-wide organics collection program for both residents and businesses

Cost: Low to Moderate

Diversion: Potentially large

Programs Established: Year 10

PRC Feedback

* Discussion on organics tonnage potential by the generator: residential generation that could be managed in a backyard compost bin vs. larger tonnages generated by businesses and institutions that would need commercial organics processing.

* Organics management solutions will have to be designed to meet Otter Tail County residents and business needs – there is no one size fits all option.

Notes

3. Increase education and outreach

Cost: Low

Diversion: Not Known but critical

Programs Establish: Start in Year 1

PRC Feedback

* Support for an enhanced education and outreach program that builds on the existing systems and programs. Programs will need to be designed to fit the variety of Otter Tail county residents, businesses, and visitors using various platforms (Social media, newspapers, radio, i.e.).

4. Establish a robust reuse program including reuse rooms/locations

Cost: Low

Diversion: Extending the useful life of waste

Programs Established: Year 5

PRC Feedback

* Discussion on how new programs could complement existing reuse and thrift stores in Otter Tail County communities.

* Discussion on how reuse programs extend the useful life of products but do not eliminate the need for final disposal.

5. Provide uniform services across the county, including evaluating transfer station locations and existing spaces

Cost: Low to high

Diversion: Depends on programs added

Programs Established: Year 5

PRC Feedback

* The PRC had a robust discussion on how more folks need to participate in Otter Tail programs to increase recycling and waste diversion.

PRC Check-in Comments

- These steps would help.
- "I think this is a good plan – gotta start somewhere."
- Discussion on how there also needs to be a strong focus on construction and demolition recycling, reuse, and disposal. Chris noted that there are ten years of life remaining in the demolition landfill. Otter Tail County is tracking proposed State of Minnesota rule-making regarding the reuse of demolition debris that would impact the community (county?). There was a discussion on how difficult it is to separate material types from large demolition projects.
- Comfortable with the discussion had by PRC and proposed plans.

Next Steps

Kate outlined the next steps of the planning process.

- **Preparing of the written plan**

Notes
<ul style="list-style-type: none">• Staff will prepare a draft plan (Now)• Draft plan will be shared with PRC members (Summer 2021)• Share draft plan to the public (Summer 2021)• Present draft plan for approval to the Otter Tail County Board (Late summer 2021)

Appendix D - Emerging Technologies, Trendsvaluation, and Future System Analysis

This Technical Memo (Appendix D) provides information on emerging technologies, including a trends evaluation and future system analysis.

Introduction

Otter Tail County (County) is committed to finding technology solutions to supplement its current system that would divert additional materials from landfilling. The cornerstone of the existing system and the future waste management system is the refuse-to-energy facility. The County will continue to rely on the Perham Resource Recovery Facility as its primary management tool for municipal solid waste (MSW) generated within the County.

In addition to Perham, the County is currently delivering some of its MSW to North Dakota Landfills, with a portion of that being hard-to-handle or bulky waste. Alternative technology solutions are available or emerging to address these material types and improve the effectiveness of current management solutions.

The current state of emerging technologies and trends was evaluated for application under a future waste and recycling model for the County. The various technologies have been sorted into technologies currently available and technologies to be monitored.

Technology solutions have been reviewed based on potential waste diversion/management and diversion potential. Critical to this analysis is evaluating potential costs for the implementation/application of specific technologies within the County.



Technologies Currently Applicable to Otter Tail County

The following technologies are currently commercially available to the County.

Conversion of Recycling from Source Separated to Single-Sort County-Wide

Problem:	Single-sort recycling is currently only available to residents and businesses in Fergus Falls and residents of Perham.
Materials Targeted:	Metals, Cardboard, Plastics, Paper
Diversions Potential:	1,200 to 1,400 tons annually
Potential range in cost:	There are two potential options related to single-sort recycling, which include transferring bulk single-sort recyclables to an MRF for processing or design, build own and operate a single-sort MRF. The option to transfer includes the costs associated with transferring materials as well as a processing cost. The transfer costs are difficult to estimate without knowing where the processing facility is located. The processing costs could be in the range of \$75 to \$90 per ton. There may also be a revenue share with the MRF that provides some revenue back to the County from the sale of individual commodities by the MRF. This revenue share varies with the commodities market and has ranged from \$40-\$70 per ton for a net cost of \$20-\$35 per ton plus transportation costs. MRF design and construction could be on the order of ~\$2,500,000-\$3,500,000 (depending on design throughput and does not include site acquisition).
Solution:	Single-sort recycling is currently only available to residents and businesses in Fergus Falls

Recycling is an essential component of the waste management system in the County and is high on the state's waste management hierarchy, behind only reduce and reuse. The County took the lead in developing curbside recycling programs and markets in the early 1990s. Since that time, the recycling industry has grown considerably, curbside recycling has become a regular municipal service in urban areas, and residents are routinely recycling. Challenges remain as valuable resources continue to be discarded in the trash and as new products emerge that are difficult to recycle. 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 the goal of zero landfilling.

Recycling currently consists of a variety of collection systems that vary by individual municipality. In general, collection systems in the region use a single-sort or source-separated (three or more recyclable material separation by the generator) system. Fergus Falls and Perham are the two cities in the County that currently have curbside single-sort recycling collection. Recycling may be curbside or collected at drop-off locations.

Communities in the County have expressed interest in converting to a single-sort recycling system. Single-sort or commingled refers to the collection and further processing of unsorted recyclable materials in a material recovery facility (MRF) specially designed for sorting and processing commingled



loads of recyclables. The single-sort collection method's main advantages are high customer participation, higher diversion rates, and savings related to collection and processing costs.

Table 1: Advantages and Disadvantages of Single-Sort Recycling

Pros:	Cons:
<ul style="list-style-type: none"> ◆ Easy for consumers to participate in recycling programs. ◆ Increases diversion and recycling rates. ◆ Efficient collection as trucks accept all items in one cart. ◆ Allows MRFs to process more materials in a shorter time with the help of technology. ◆ Decreased garbage collection costs, as there's typically less to dispose of. 	<ul style="list-style-type: none"> ◆ Increase in contamination of recyclables at recovery facilities. ◆ Manual sorting process and equipment may be required at MRFs. ◆ Lower quality of recycled materials due to mixed collection. ◆ Difficulties in recycling all items (e.g., glass bottles can break during collection and sorting). ◆ Increased cost to sort commingled material.

Prepared by: EWW; Checked by: CAV

Materials Processing Enhancements at Perham Resource Recovery Facility

Problem:	Recyclables are found in trash despite robust waste reduction and recycling programs throughout the County. Metals (ferrous and nonferrous) are currently being extracted from waste received at the Perham Resource Recovery Facility before processing.
Materials Targeted:	Extraction of Plastics
Diversion Potential:	355 tons to 415 tons annually (185-225 tons PET; 170-190 tons HDPE)
Potential range in cost:	Depending on the design, \$400,000 to \$900,000 for one optical sorter with contingency for additional conveyors and \$275,000 to \$500,000 for one robotic sorter with contingency for additional conveyors.
Solution:	Material Processing Enhancements at the Perham Resource Recovery Facility

The County currently operates a front-end mixed waste processing (MWP) system at the Perham Resource Recovery Facility to remove large cardboard, ferrous and nonferrous materials as well as the fines fraction before combustion of the remaining waste stream. There may be potential to retrofit this system for recovery of additional materials (e.g., plastics) using optical sortation and a reduction in labor through the use of robotics for quality control.

The use of robots in conjunction with artificial intelligence (AI) to identify materials can be implemented at an MRF, MWP facility, or C&D processing facility to improve material recovery and reduce labor challenges minimally. They can be positioned on quality control lines, specifically positioned after optical sorters, on sorting stations where they can reach over wide belts, or even throughout the entire system. This technology can provide information on system performance and on material composition,



color, texture, shapes, and patterns. During sorting, robots using AI can gather data from materials and adapt to changing conditions and variables, always aiming to refine their performance.

Robots currently use two different methods of material extraction: a claw to grab (gantry-style) or air for suction (arm or delta-style). The gantry style is best suited for removing Durable Compostable Bags (DCBs) or C&D materials due to its ability to pick heavy materials. On the other hand, delta-style robots provide faster pick rates (60 to 80 picks per minute have been reported) compared to the gantry-style robots (25 to 30 picks per minute have been reported) and are better suited for quality control lines.

Also, robotic sorters can be programmed to pick more than one item based on the order of importance (i.e., if the robot's first priority is polyethylene terephthalate [PET] plastic, but no PET plastic is on the conveyor, the robot can pick nonferrous as a second priority). There is also a potential for one robot to be programmed to pick two different targets from separate waste streams. For instance, Randy's Sanitation evaluates the ability of one robot to pull both DCBs from MSW and concrete or other recyclable materials from demolition waste during a separate shift.

As an industry rule, one robot could perform the work of two employees on different shifts. That's especially advantageous considering the difficulty of finding people willing to work in MRF, MWP, or C&D processing environments.

The challenge for the County is that there are economies of scale in recycling, and the residents of the County may not produce enough single-sort recyclables to make the investment construction of a single-sort MRF feasible without additional recyclables to process. The County analyzed a regional MRF concept in May 2016¹ as a part of a regional MRF serving the County and the surrounding counties. This analysis also evaluated transferring all single-sort recyclables to the Twin Cities at one of the four larger MRFs. Generally, the regional single-sort MRF concept appeared to be successful if all surrounding counties participated in the program.

Construction & Demolition Recycling

Problem:	Construction and demolition recycling options are limited in the County but represent a larger volume of materials that are currently landfilled.
Materials Targeted:	C&D materials such as metals, concrete, cardboard, carpet, asphalt, shingles, ceiling tile, vinyl, and aluminum siding and wood.
Diversions Potential:	1,550 tons annually (using manual separation only) to 4,550 tons annually (using automated separation and sorting lines).
Potential range in cost:	The use of manual separation only could involve some additional equipment (grapple/crane) to separate and recovery materials and additional labor at an assumed cost of approximately \$200,000-\$400,000/year. Heavy mechanical sorting and processing using automated sorting lines with robotics could be installed with an assumed cost of \$1,500,000 to \$2,500,000 depending on the final design. The sorting

¹ Foth Infrastructure & Environment, LLC and InterState Engineering, 2016. *Recycling Evaluation*. May 2016.



line may be more realistic for a regional approach. C&D transfer would like to have a negotiated cost per ton (~\$60-\$80/ton) and would also depend on the location of the transfer and processing facility.

Solution: C&D Recycling in OTC or C&D transfer for recycling.

Solution 1: C&D Recycling

Clean loads of concrete and shingles are already separated at the NEOT and Henning transfer stations, but additional recovery is possible. C&D material recovery facilities can sort and process mixed materials such as metals, concrete, cardboard, carpet, asphalt, shingles, ceiling tile, vinyl, and aluminum siding and wood. Different add-on equipment may be necessary depending on the desired recovered material. C&D processing facilities operate on efficiencies of scale and have minimum tonnages and throughputs necessary to work out economically. For that reason, fully automated systems are mainly recommended for high production processing systems due to high implementation costs. See previous information on robotic technologies.

- C&D waste can be managed in much the same way as recycling. Technology solutions for addressing the size and weight of C&D materials continue to advance. The three main classifications of C&D waste processing include the following.²
 - Manual separation only: Waste is tipped, and large, identifiable materials with ready markets are removed by hand or with manually operated equipment.
 - Combination manual and mechanical separation (most common approach): Waste is tipped and screened. Manual labor is used to remove the components on a conveyor belt.
 - Heavy mechanical processing and separation: Waste is tipped and processed (often crushed) and sent through a complex train of mechanical equipment for separating the materials, which may include gantry-style robotic sorters.
- A successful C&D program needs to reflect the uncertainty of the recovered materials market in its goals, contracts, and equipment. Enacting policies requiring recycling of C&D debris and their reuse on structures can be a strategy to strengthen the market.

An example of a facility using mechanical processing and separation is at Zanker Recycling's C&D waste recycling facility located in San Jose, California, which operates a highly automated material feeding process with robots operating 20 hours per day and achieves a 20% increase in diversion of recyclables from the C&D stream.

Solution 2: C&D Transfer

Another way to succeed with a C&D program is to implement a hub and spoke model.

A hub and spoke model consists of centralized processing centers (called hubs) and surrounding communities (called spokes), which send their C&D debris to the main hub for processing. A similar

² United States Environmental Protection Agency (USEPA). Sustainable Management of Construction and Demolition Materials. <https://www.epa.gov/smm/sustainable-management-construction-and-demolition-materials>



model is used for recycling processing in Iowa. According to Rural Iowa Hub and Spoke Recycling Project (SCS, 2018), the recycling hubs are responsible for all processing material costs and will benefits. The spokes will not be liable for any of the expenses related to operating a recycling facility.

The hub and spoken model may be a valuable tool for managing C&D debris on a more regional level as the Minnesota Pollution Control Agency (MPCA) tightens construction requirements for C&D landfills throughout the state. This model is generally recommended for more rural communities with low population density.

The County may be able to work with surrounding counties on a regional approach for the management of C&D materials.

Organics Management

Problem:	Typically, over 30% of the waste stream is organics, based on previous waste characterization studies in MN. These organics include yard waste, food waste, and organic residue.
Materials Targeted:	Yard Waste, Food Waste, and Organic Residue
Diversions Potential:	480 tons annually (drop-off only); 1,500 tons annually (DCB co-collection); 6,000 to 8,000 tons annually (MWP organic fines)
Potential range in cost:	The installation and management of the drop-off only location could start at the existing transfer stations and maybe on the order of magnitude of \$30,000-\$50,000 per year. The use of DCB's co-collected with MSW is highly variable depending on who pays for the bags, but minimally would include a method of bag removal from the inbound MSW and could include additional front-end manual sorters (labor costs) to automated sorting using robotics that may on the order of magnitude of \$1,500,000 to \$2,500,000 depending on the final configuration. In addition to these costs, there are the costs for composting or anaerobically digesting the organics at a composting or anaerobic digestion facility. The cost of composting is highly dependent on the quality of the organic material but maybe as high as \$75-\$90 per ton. Organic fines are already removed at the Perham facility and are currently landfilled. These fines may be able to be composted or anaerobically digested as currently removed at a cost that would be negotiated but is anticipated to be \$80-\$100 per ton.
Solution:	Composting or anaerobic digestion of the organics

Solution 1: Composting

Composting is the natural chemical decomposition of organic materials by microorganisms. When organic waste (e.g., grass clippings, leaves, food waste, organic residue) is placed in piles along with bulking agents (e.g., dry leaves, wood chips, branches), it allows for the development of microorganisms responsible for the chemical decomposition process.



High temperatures (up to 150 degrees Fahrenheit [°F]), moisture content, and oxygen flow are indispensable for the livelihood of these microorganisms and, therefore, must be monitored routinely. According to the United States Environmental Protection Agency (USEPA), the following activities promote optimum decomposition rates:

- Grinding, chipping, or shredding feedstock – Increases the microbial activity surface area, produces a more homogeneous compost mixture, and improves pile insulation. Too-small particles, however, can prevent air from circulating in the pile.
- Irrigation – Maintains optimum moisture content.
- Aeration – Increases the decomposition rate. Too much oxygen, however, can dry out the pile, preventing decomposition.
- Temperature control – Low temperatures induce an anaerobic environment that has a lower decomposition rate.

Composting technologies generally involve static pile, aerated pile, and/or in-vessel systems, and in some cases, computer equipment to control the material environment parameters.

Solution 2: Anaerobic Digester (AD)

The use of AD for processing organic materials in a controlled oxygen-deficient (anaerobic) environment into biogas is a proven technology that has been used for low- and high-solids waste streams. There are two primary AD technologies: wet and dry.

- Wet (Low-Solids) AD – Indicated for feedstock consisting of 10% to 20% solids content (wastewater sludge, manure, rendering waste, etc.).
- Dry (High-Solids) AD – The desirable feedstock has solids content between 20% and 40% (organics separated from MSW using pre-processing technology).

The necessary permits for an AD facility will depend on the capacity of the facility. For example, if the facility were to have the capacity to utilize 250,000 dry tons or more per year of input for fuel conversion, an Environmental Impact Statement (EIS) would be mandatory per Minnesota Statute (Minn. Stat.) 4410.4400.

The ultimate goal for the material remaining after the AD process is to have a Class I or Class II compost with minimal landfilled material.³ In some cases, to obtain a Class I compost classification, the AD residue may require additional processing, glass being a known contaminant present in AD residue. X-ray, optical sorters, densiometric tables, or screens, or a combination of technologies could be applied further to reduce the inorganic fraction from the AD end product. This additional processing could be done before composting or after the curing of the compost. Other AD processes have some ability to remove some of the glass and plastics; this is a combination of skimmers to remove light material and screens to remove the heavier glass and grit.

³ The Minnesota Administrative Rule 7035.2836 indicates that Class I compost must not contain greater than 3% inert materials, and Class II compost must not contain greater than 4% inert materials.



Removing and recycling the organics from the MSW could make a significant impact on the County's path toward zero landfilling. The current processing equipment at the Perham Resource Recovery Facility removes the fine fraction from MSW that is highly organic, and this material is landfilled. An AD system could potentially be used to manage this material instead of landfilling.

Bulky Waste Recycling, Diversion, Management

Problem:	Bulky waste items are hard to manage at landfills, causing safety problems and consuming large volumes of air space. Bulky waste reuse, recycling, and management programs are limited in the County.
Materials Targeted:	Bulky Waste items
Diversion Potential:	300 tons annually
Potential range in cost:	Shredding and separating recoverable materials (metals) would include the cost of a shredder and additional labor for loading the shredder and material recovery. Depending on throughput, a shredder may be on the order of magnitude of \$600,000 to \$750,000 plus 1 FTE. Deconstruction of bulky waste would require significant labor, which is currently in shortage but could include 3-4 additional FTE's.
Solution:	Shredding or Deconstructing Bulky Waste

The County faces current challenges with bulky materials such as mattresses, furniture, carpets, etc.

One relatively simple solution and a method to increase the recycling rate is through the use of shredder equipment with a magnet to remove recyclable metal. The remaining "fluff" material can be combusted for energy recovery and volume reduction in the path toward zero landfills.

Another solution is the deconstruction of bulky waste items into material components. This has been commonly done with mattresses.

Beneficial Reuse Technologies

There are hard-to-manage items that are either not recyclable with current technologies (plastics) but could be managed higher on the waste hierarchy than landfilling or are being recycled in small quantities (glass and shingles) but could be recovered/recycled to a greater extent. Additionally, there may be an opportunity to beneficially reuse combustor ash and remove metals that may be combined with the combustor ash as they were not removed on the front-end MWP system.

Plastic Bags and Wraps

Plastic film, such as produce bags, dry cleaner bags, boat wraps, and more, can be recycled, but the market value is very dependent on the price of oil and can be unstable. There is relatively low diversion potential by weight, and costs are highly dependent. There are technologies emerging that may



provide an outlet for these plastics in the future (see technologies to be monitored in the section below).

Combustor Ash

Problem:	Combustor ash is generally composed of both fly ash and bottom ash generated from the combustion of solid waste, resulting in a moist, coarse, well-graded aggregate-like mixture with some unburned material. Combustor ash can contain metals of many sizes that can be beneficially used in industry across the country. Currently, ash from the Perham Resource Recovery Facility is being landfilled at the Northeast Otter Tail (NEOT) ash monofill.
Materials Targeted:	Fly ash (as is); metals, sand, and gravel (recovered from bottom ash)
Diversion Potential:	500 tons annually (fly ash); 2,520 tons annually (materials recovered from bottom ash)
Potential range in cost:	For removal of metal from the in-place ash at the landfill and ash coming to the landfill from Perham, a series of processing technologies would need to be installed. A system for the removal of ferrous and nonferrous metals could be in the range of \$1,500,000-\$2,500,000 depending on the final configuration. The beneficial reuse of fly ash (possible concrete additive) and bottom ash may be a net-zero cost since these materials would be offsetting other mined natural materials that have a cost.
Solution:	<p>Ferrous and Nonferrous metals may be recovered from combustor ash by applying an ash processing technology. A list of possible equipment to extract metals from the combustor ash include, but are not limited to:</p> <ul style="list-style-type: none"> • Crushing/Screening Processing (oversized material removal) • Ballistic Separator (partial removal of sticky particles ≤ 2 millimeters [mm]) • Magnetic Separator Processing (ferrous recovery) • Eddy Current Processing (nonferrous recovery) • Loading Operations for processed ash and recovered metals

Post-processed ash with ferrous and nonferrous removed could be beneficially reused as a road base material with coordination with the County Engineer and MPCA.

Shingles

Problem:	Clean loads of separated shingles are currently segregated at the C&D landfills and are charged at a lower rate to the individual bringing the material to the landfill. There is an opportunity to capture and recover additional shingles from the C&D materials coming to the landfill, but this may take additional education to keep the shingles separated within a load. Since the shingle is comingled with other C&D materials, recovery for beneficial reuse becomes cost-prohibitive.
Materials Targeted:	Shingles



Diversion Potential:	Not fully known without additional waste sorting activities
Potential range in cost:	If the shingles are source-separated, the main cost is for a mobile grinder to come to the landfill annually or once every other year to grind the shingle pile, or the County could purchase a grinder if there was an adequate volume of shingles to make this cost-effective. A grinder for shingles is estimated to be approximately \$450,000-\$650,000.
Solution:	Source separated shingles could be ground for use in recycled asphalt pavement or roads within the landfill property, offsetting the need for the use of virgin materials.

The County has had an ongoing asphalt shingles recycling program for many years. The program is based on residents or roofing companies "source separating" recyclable shingles for local residential re-roofing jobs and delivering "clean" shingles to one of four demolition landfills in the County.

The County stockpiles the clean asphalt shingles and, when enough clean material is available, will schedule a contractor to mobilize a portable grinding system. The shingles are ground and screened to meet engineering specifications. The recycled asphalt shingles (RAS) can supplement virgin materials to make hot mix asphalt (HMW).

The County Engineer should continue to specify the use of the County's RAS on selected asphalt paving projects to coincide with the availability of the County's RAS product. The County could develop a long-term (e.g., 5 to 10 years) end-market plan for the use of RAS in upcoming County asphalt paving projects.

The County has been a leader in Minnesota in the utilization of recycled products in transportation applications. This partnership between the County's solid waste/recycling program and the County Engineer's office will continue to be critical to the sustainability of shingle recycling and other selected recyclable commodities.

Glass

Problem:	Currently glass has limited market demand and haul distance is make recycling more difficult
Materials Targeted:	Glass
Diversion Potential:	Additional recyclable material characterization needed
Potential range in cost:	If source separated glass is transferred as a commodity to market it would likely be transferred to Fargo or the Twin Cities where the transportation costs outweigh the value so there is an ongoing cost. If a storage area was created in Fergus Falls, there would be a capital cost associated with building construction which is estimated to be \$100,000-\$250,000.



Solution:	The County is evaluating a storage area for clean source-separated glass received at the Recycling Center in Fergus Falls. This storage area would provide a space for glass that could be beneficially reused as road base or drainage material. This use of glass is advantageous since there is currently limited demand for post-consumer glass. It also limits the haul distance for glass management and provides a management method that keeps the material out of the landfill.
------------------	--

Technologies to be monitored

Chemical Recycling

Problem:	Many plastic items are not readily recyclable (generally #3-#7)
Materials Targeted:	Hard-to-Recycle Plastics
Diversion Potential:	As much as 3,900 tons per year (all plastics type #3-#7 and others)
Potential range in cost:	These technologies are still in development, so costs are difficult to predict.
Solution:	Chemical Recycling

Chemical recycling operations convert hard-to-recycle or disposed plastics into value-added commodities (fuels or plastic resins). Two types of chemical recycling technologies are most prevalent in the current chemical recycling market: Plastic to Fuel (PtF) and Plastic to Plastic/Product (PtP) operations.

- ◆ PtF operations and off-take markets are dependent on oil market pricing. For PtF operations to be financially viable, oil commodity pricing must be approximately \$50 a barrel or higher. Pyrolysis, Gasification, and their variations are the main examples of PtF technologies.
- ◆ PtP operations are less susceptible to oil market fluctuations, as the operations produce specific plastic resins but are dependent on off-take agreements. The current resins with different stages of technology development include PET, polystyrene (PS), and polypropylene (PP).

Chemical recycling is an emerging technology in the United States. The County will monitor the technology. A potential concern of plastic chemical recycling is the anticipated tonnage of plastics required to make a facility feasible. Generally, the current plastic chemical recyclers in the market suggest between 100,000 and 250,000 tons per year. However, the County may be able to work with surrounding counties on a regional approach for hard-to-recycle plastics.

