

Manistee-Missaukee-Wexford Multi-County Materials Management Planning Committee

Date: June 25, 2025
Time: 10:00 a.m. – 12:00 p.m.
Location: Missaukee County Annex Building
105 South Canal Street
Lake City, MI 49651

PROPOSED AGENDA

- I. Call to Order
- II. Public Comment
- III. Approval of Agenda
- IV. Approval of May 28, 2025 Meeting Minutes
- V. Materials Management Planning
 - a. Survey Update
 - b. Process Update
 - c. County Demographics
 - d. Previous Planning Efforts
 - e. Community Engagement Thoughts
- VI. Committee Member Comments
- VII. Public Comment
- VIII. Adjourn

Posted: _____

Signature: _____

**Manistee-Missaukee-Wexford Multi-County
Materials Management Planning Committee Minutes
May 28, 2025 at 10:00 AM
Manistee County Government Center
415 3rd St, Manistee, MI 49660**

| MMPC Member Attendance | | | |
|--|---|--|--|
| Chris Gee, GFL <i>rep. of a solid waste disposal facility</i> | P | Nikki Koons, Manistee County <i>elected official of the county</i> | P |
| Todd Harland, Republic Services <i>rep. of a hauler</i> | P | Larry Paquette, Cedar Creek Township <i>elected official of a township</i> | E |
| <i>To be appointed as alternate</i> Luke Mattison, Ms. Green <i>rep. of a materials recovery facility</i> | A | Joe Gryzbowski, City of Manton <i>elected official of a city or village</i> | P |
| Jason Murphy, Waste Management <i>rep. of a composting facility</i> | P | Cory Brown, Northern Disposal <i>business rep. generating material</i> | P |
| Karla Kasten-Smith, BARC <i>rep. of a diversion, reuse, or reduction</i> | P | Mike Szokola, Networks Northwest <i>rep. of the regional planning area</i> | P |
| Renee Mallison, Manistee Conservation District <i>rep. of an environmental interest group</i> | E | Sherry Blaszak, Missaukee County Planning Commission <i>Member of General Public</i> | P |
| Jason Baughan, Wexford County <i>multi-county appointment</i> | E | | |
| TO BE APPOINTED <i>Multi-County Elected Official (Wexford)</i> | - | <i>Attendance Key:</i> <i>A – Absent</i> | <i>P – Present</i> <i>E - Excused Absence</i> |
| Staff in Attendance: Lisa Sagala (Manistee County), Mathew Cooke (DPA Representative) | | | |

1. Call to Order

Larry Paquette, MMPC Chair, called the meeting to order at 10:05 a.m.

2. Public Comment

None.

3. Review Proposed Agenda

Motion by Karla Kasten-Smith, supported by Jason Murphy, to approve the May 29, 2025 MMPC agenda as presented. Motion carried unanimously.

4. Approval of April 23, 2025 Meeting Minutes

Motion by Chris Gee, supported by Sherry Blaszak, to approve the April 23, 2025 MMPC Meeting Minutes as presented. Motion carried unanimously.

5. EGLE Materials Management Planning Presentation

Tracy Tomazsewski, EGLE Recycling Specialist, provided a Materials Management Planning presentation (attached).

6. Materials Management Planning

Survey

The MMPC reviewed the draft surveys and offered the following comments:

Resident Survey

- Change municipality to township, city, or village
- Asking if residents know how much/if they pay for recycling
 - Millage, taxes, PA 59, etc.
- Asking if residents would pay more for increased services
 - Would you participate, pay to participate, pay more to participate
 - pay for recycling services, organics, none, etc.

Local Units of Government Survey

- Add non-existent to Q6 options
- Add Quarterly, Multiple times per year to Q10 answers
- Add question: If they do not recycle, why?

Business Survey

- Question about business food waste
- Styrofoam and to-go containers - how are they handled?

7. Public Comment

None.

8. Committee Comments

None.

9. Adjourn

Mathew Cooke mentioned the next meeting is planned for June 25th at 10:00am at the Missaukee County Annex Building in Lake City.

Motion by Mike Szokola, supported by Joe Gryzabowski, to adjourn the May 28, 2025 MMPC meeting at 11:26 am. Motion carries unanimously.

DRAFT

MMP Resident Survey

Start of Block: Demographics

INTRO Michigan is updating its Materials Management Plans (formerly Solid Waste Plans) by July 2027 to prioritize sustainable practices like recycling and composting, as required by updated state law. This survey will assist the respective Materials Management Planning Committees with updating the plans to ensure proper management of all non-hazardous materials, establish guidelines for facility locations, document existing and future infrastructure needs, and define community goals for a more sustainable approach to materials management; more information is available at nwm.org/mmp Responses to the 25 question MMP Resident Survey are confidential and anonymous, and should take about 8 to 10 minutes to complete. If you leave your email to be entered to win 1 of 5 \$50 Gift Cards, it will only be used for that purpose. If there are any questions, you would like a paper copy of the survey, or need any additional assistance, please contact Mathew Cooke, Community Planner at Networks Northwest by email at mathew.cooke@networksnorthwest.org or phone at (231) 929-5056.

Q1 Are you a permanent resident, seasonal resident, or visitor in the Northwest Lower Michigan region? This includes Antrim County, Benzie County, Charlevoix County, Emmet County, Grand Traverse County, Kalkaska County, Leelanau County, Manistee County, Missaukee County, and Wexford County

- Permanent Resident (1)
 - Seasonal Resident (2)
 - Visitor (3)
-

Display this question:

If Q1 = Permanent Resident

And Q1 = Seasonal Resident

Q2 What is your County of residence, permanent or seasonal?

- Antrim County (7)
- Benzie County (8)
- Charlevoix County (9)
- Emmet County (10)
- Grand Traverse County (11)
- Kalkaska County (12)
- Leelanau County (13)
- Manistee County (14)
- Missaukee County (15)
- Wexford County (16)
- Other - please list (17) _____

Display this question:

If Q1 = Visitor

Q3 Which counties do you visit most often for business, recreation, or otherwise? Select all that apply.

- Antrim County (7)
- Benzie County (8)
- Charlevoix County (9)
- Emmet County (10)
- Grand Traverse County (11)
- Kalkaska County (12)
- Leelanau County (13)
- Manistee County (14)
- Missaukee County (15)
- Wexford County (16)
- Other - please list (17) _____

Display this question:

If Q2 = Antrim County

Q2A Which Antrim County municipality (Township, City, or Village) do you reside in?

▼ Banks Township (1) ... Unsure (21)

Display this question:

If Q2 = Charlevoix County

Q2B What Charlevoix County municipality (Township, City, or Village) do you reside in?

▼ Bay Township (1) ... Unsure (20)

Display this question:

If Q2 = Manistee County

Q2C What Manistee County municipality (Township, City, or Village) do you reside in?

▼ Arcadia Township (1) ... Unsure (21)

Display this question:

If Q2 = Missaukee County

Q2D What Missaukee County municipality (Township, City, or Village) do you reside in?

▼ Aetna Township (1) ... Unsure (18)

Display this question:

If Q2 = Wexford County

Q2E What Wexford County municipality (Township, City, or Village) do you reside in?

▼ Antioch Township (1) ... Unsure (22)

Q4 How long have you lived at your primary residence?

- Less than 1 year (1)
 - 1 to 3 years (2)
 - 3 to 5 years (3)
 - 5 to 10 years (4)
 - 10 plus years (5)
-

Q5 How important do you believe recycling is for our communities, environment, and natural resources?

- Not at all important (1)
 - Slightly important (2)
 - Moderately important (3)
 - Very important (4)
 - Extremely important (5)
-

Q6 How important is it for our community to reduce the amount of waste going into landfills?

- Not at all important (1)
- Slightly important (2)
- Moderately important (3)
- Very important (4)
- Extremely important (5)

End of Block: Demographics

Start of Block: Block 1

Q7 How do you pay for material management (Trash, Recycling, Organics, etc.) services?
Select all that apply.

- County Millage (1)
- Public Act 69 (Taxes) (2)
- Property Taxes (7)
- Private Hauler (3)
- Subscription Service (4)
- Other - Please list (5) _____
- I am not sure (6)

Display this question:

If Q2 = Charlevoix County

Q7A Are you aware of the Charlevoix County Recycling Millage?

- Yes (1)
- No (2)

Q8 Does your household currently participate in recycling?

- Yes (1)
- No (2)

Skip To: Q9 If Q8 = No

Display this question:

If Q8 = Yes

Q8A If yes, what types of materials do you typically recycle at home? Select all that apply.

- Paper (1)
- Cardboard (2)
- Plastic Bottles & Jugs (3)
- Plastic Tubs & Containers (4)
- Glass Bottles & Jars (5)
- Metal cans (6)
- Food Scraps (7)
- Yard Waste (8)
- Textiles (9)
- Electronic Waste (10)
- White Goods (such as appliances) (11)
- Bulk Waste (such as furniture, mattresses) (12)
- Other - Please list (13) _____

Display this question:

If Q8 = Yes

Q8B How is your recycling collected? Select all that apply.

- Curbside pick-up (1)
- Drop-off Center (2)
- Private Service (3)
- Subscription Service (4)
- Other (please list) (5) _____

Display this question:

If Q8 = Yes

Q8C What are your main reasons for recycling? Select all that apply.

- Environmental Responsibility (1)
- Reducing Pollution (2)
- Cost Savings (3)
- Promote Sustainability (4)
- Other (please specify) (5) _____

Q9 If you don't recycle, would you be interested in increased recycling availability?

- Yes (1)
- Maybe (2)
- No (3)

Q10 Are there barriers that prevent you from recycling? Select all that apply.

- Costs (1)
 - Lack of curbside recycling (2)
 - Location of drop-off sites (3)
 - Don't believe there is value (4)
 - Too difficult (5)
 - Other - please list (6) _____
-

Q11 What information or resources about recycling and waste reduction would you find helpful? Select all that apply.

- Clearer Guidelines (1)
 - Online Resources (2)
 - Workshops (3)
 - Community Recycling Events (4)
 - Other - please list (5) _____
-

Q12 How does your household typically dispose of trash (i.e. non-recyclable waste)? Select all that apply.

Private hauler curbside pickup (1)

Tax paid curbside pickup (2)

Drop-off site (3)

Private - Pay to throw (4)

Other - Please list (5) _____

Page Break

Q13 Do you participate in composting?

Yes (1)

No (2)

Display this question:

If Q13 = Yes

Q13A How do you compost? Select all that apply.

Compost at home (1)

Community compost program (2)

Local farm compost (3)

Compost Subscription Service (4)

Other - Please list (5) _____

Display this question:

If Q13 = No

Q13B If you do not utilize compost programs, what would encourage you to participate in composting? Select all that apply.

- Affordability (1)
 - Access (2)
 - Educational Programs (3)
 - Increased Information (4)
 - Access to composting equipment (5)
 - Other - Please list (6) _____
-

Q14 Are the rules and guidelines clear for recycling in your community clear?

- Yes (1)
 - No (2)
 - I am unsure of my community's guidelines (3)
-

Q15 Do you know what recycling items are not accepted by your local program?

- Yes (1)
 - No (2)
 - Unsure (3)
-

Q16 Are there any specific types of waste or materials that you find particularly difficult to recycle or dispose of properly? Please list all.

Q17 What ways could our communities be doing a better job of managing waste and resources? Select all that apply.

- Reducing waste (1)
- Reusing items (2)
- Composting more (3)
- Other - Please list (4) _____

Q18 What services would you like to see offered in your community? Select all that apply.

- Subscription Compost Program (1)
- Increased recycling access (2)
- Bulk Waste Pick-up (3)
- Green Waste Pick-up (4)
- Electornic Waste Drop-Off (5)
- More Household Hazardous Waste Collection (6)
- Other - Please list (7) _____

Q19 How interested are you in learning more about waste reduction and management, recycling, and organics in your community?

- Not interested at all (1)
 - Slightly interested (2)
 - Moderately interested (3)
 - Very interested (4)
 - Extremely interested (5)
-

Q20 Are you willing to pay for increased service and access? Select all that apply.

- I would pay more to increase access to recycling services (1)
 - I would pay more to increase access to organic services (2)
 - I would pay more to increase access to household hazardous waste services (3)
 - I would pay more to increase access to mattress, furniture, appliance recycling (4)
 - I would not pay for increased services (5)
-

Q21 Are there any other considerations in regards to materials management (trash, recycling, organics, etc.) planning that should be considered or examined by the respective Materials Management Planning Committees?

Q22 What age range do you fall into?

- Under 18 (1)
 - 18 - 24 (2)
 - 25 - 34 (3)
 - 35 - 44 (4)
 - 45 - 54 (5)
 - 55 - 64 (6)
 - 65 - 74 (7)
 - 75 - 84 (8)
 - 85 or older (9)
 - Prefer not to say (10)
-

Q23 Which of the following describes the number of people, including yourself, living in your household?

- 1 (1)
 - 2 (2)
 - 3 (3)
 - 4 (4)
 - 5 (5)
 - 6 or more (6)
-

Q24 Which of the following best describes your total annual household income?

- Under \$30,000 (1)
 - \$30,000 to \$49,999 (2)
 - \$50,000 to \$69,999 (3)
 - \$70,000 to \$89,999 (4)
 - \$90,000 to \$109,999 (5)
 - \$110,000 to \$129,999 (6)
 - \$130,000 to \$149,999 (7)
 - \$150,000 and over (8)
 - Prefer not to answer (12)
-

Q25 Please leave your email if you would like to be entered to win 1 of 5 \$50 Gift Cards.

End of Block: Block 1

MMP LUGs Survey

Start of Block: Default Question Block

Intro Michigan is updating its Materials Management Plans (formerly Solid Waste Plans) by July 2027 to prioritize sustainable practices like recycling and composting, as required by updated state law. This survey will assist the respective Materials Management Planning Committees with updating the plans to ensure proper management of all non-hazardous materials, establish guidelines for facility locations, document existing and future infrastructure needs, and define our community's goals for a more sustainable approach to materials management; more information is available at nwm.org/mmp Responses to the MMP Local Units of Government Survey are confidential and anonymous, and should take about 8 to 10 minutes to complete. If you supply an email, it will only be used for the purpose of the response. If there are any questions, you would like a paper copy of the survey, or need any additional assistance, please contact Mathew Cooke, Community Planner at Networks Northwest by email at mathew.cooke@networksnorthwest.org or phone at (231) 929-5056.

End of Block: Default Question Block

Start of Block: Block 1

Q1 What County is your municipality (Township, City, Village, or County itself) located in?

- Antrim County (11)
- Benzie County (12)
- Charlevoix County (13)
- Emmet County (14)
- Grand Traverse County (15)
- Kalkaska County (16)
- Leelanau County (17)
- Manistee County (18)
- Missaukee County (19)
- Wexford County (20)
- Other - Please list (21) _____

Display this question:

If Q1 = Antrim County

Q1A Which Antrim municipality do you represent?

▼ Banks Township (1) ... Antrim County (21)

Display this question:

If Q1 = Charlevoix County

Q1B Which Charlevoix municipality do you represent?

▼ Bay Township (1) ... Charlevoix County (20)

Display this question:

If Q1 = Manistee County

Q1C Which Manistee municipality do you represent?

▼ Arcadia Township (1) ... Manistee County (21)

Display this question:

If Q1 = Missaukee County

Q1D Which Missaukee municipality do you represent?

▼ Aetna Township (1) ... Missaukee County (18)

Display this question:

If Q1 = Wexford County

Q1E Which Wexford municipality do you represent?

▼ Antioch Township (1) ... Wexford County (22)

Q2 What best describes your role with your community?

- Supervisor (1)
- Mayor (2)
- Clerk (3)
- Other Elected Official (4)
- Administrator (5)
- Resource Recovery/Recycling Director, or the like (8)
- Other - Please list (7) _____

Q3 What types of materials management programs or services are currently implemented or supported by your community? Select all that apply.

- Curbside recycling (1)
- Recycling drop-off center (2)
- Composting (3)
- Household Hazardous Waste (HHW) Collection (4)
- Public education events (5)
- Other - Please list (6) _____

Display this question:

If Q3 != Curbside recycling

And Q3 = Recycling drop-off center

And Q3 = Composting

And Q3 = Household Hazardous Waste (HHW) Collection

Q3A If you do not offer recycling, household hazardous waste, or composting, why? Select all that apply.

- Costs (1)
- Funding (2)
- Access (3)
- No Community Interest (4)
- County offers services (5)
- Private services are available (6)
- Other - Please list (7) _____

Q4 How would you rate the effectiveness of the current materials management infrastructure and services within your community?

- Extremely effective (1)
 - Very effective (2)
 - Moderately effective (3)
 - Slightly effective (4)
 - Not effective at all (5)
-

Q5 What do you believe are the biggest materials management challenges facing your community? Select all that apply.

- Infrastructure (1)
 - Limited landfill capacities (2)
 - Recycling contamination (3)
 - Educational awareness (4)
 - Public participation (5)
 - Lack of end markets (6)
 - State and local regulations (7)
 - Other - Please list (8) _____
-

Q6 How well are different types of materials currently managed within your county?

| | Excellent (1) | Good (2) | Average (3) | Poor (4) | Terrible (5) | Non- Existent (6) |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Paper (1) | <input type="radio"/> |
| Plastics (2) | <input type="radio"/> |
| Glass (3) | <input type="radio"/> |
| Metals (4) | <input type="radio"/> |
| Construction Debris (5) | <input type="radio"/> |
| Electronic Waste (6) | <input type="radio"/> |
| Mattresses (7) | <input type="radio"/> |
| Tires (8) | <input type="radio"/> |
| Household Hazardous Waste (9) | <input type="radio"/> |
| White Goods (appliances) (11) | <input type="radio"/> |
| Bulky Waste (furniture, mattresses) (12) | <input type="radio"/> |
| Yard Waste (13) | <input type="radio"/> |
| Prescription Drugs (10) | <input type="radio"/> |

Display this question:

If Q6 = Terrible

And Q6 = Poor

And Q6 = Non-Existent

Q6A If you answered poor, terrible, or non-existent, please briefly explain why? Feel free to offer ideas to increase how materials can be managed better.

Q7 What should be the primary focus of the updated County Materials Management Plan from your community's perspective? An example could be increased recycling participation and access within the community or launching a compost option in the community.



Q8 Which of the following areas should receive the most attention in the updated County plan to best support your community's materials management efforts? Select your top three.

- Funding for infrastructure development in your county (1)
 - State-level public education and outreach resources (2)
 - Clearer State policies and regulations (3)
 - Market development initiatives for recycled materials relevant to your county (4)
 - Guidance and resources for prevention and waste reduction programs (5)
 - Support for reducing contamination in recycling in your county (6)
 - Other - Please list (7) _____
-

Q9 What types of infrastructure investments are most needed in your county to improve materials management? Select all that apply.

- Funding for local recycling facilities (1)
 - Click to write Choice 7 (2)
 - Composting sites (3)
 - Collection equipment (4)
 - Transfer stations (5)
 - Landfill (6)
 - Other - Please list (7) _____
-

Q10 Do you see value in pursuing the opportunity for region-wide collection of household hazardous waste year round, waste authority, or a single regional contract for collection events? Select all that apply.

- Both year round collection and single contract (1)
 - Year round collection (2)
 - Quarterly collection (3)
 - Collection multiple times per year (4)
 - Regional HHW Contract (5)
 - Multi-County HHW Contract (6)
 - Both year round collection and single contract (7)
 - Waste Authority (10)
 - None of the above (8)
 - Other - Please list (9) _____
-

Q11 What are the most effective ways to educate the public within your county about proper recycling and waste reduction practices? Select all that apply.

- Providing standardized materials (1)
 - Funding local campaigns (2)
 - Increased community recycling events (3)
 - Other - Please list (4) _____
-

Q12 What are the biggest barriers to increasing recycling rates for materials in your community?

- Funding (1)
 - Access (2)
 - Education (3)
 - Other - Please list (4) _____
-

Q13 After your communities recycling is collected, do you know where it goes to?

- Yes (1)
 - No (2)
 - Unsure (3)
-

Display this question:

If Q13 = Yes

Q13A If yes, could you please list where they end up? (such as a recycling end-market organization or Emmet County Materials Recovery Facility (MRF))

Q14 How does your community currently pay for recycling? Select all that apply.

- Recycling Millage (1)
 - PA 69 Funding (2)
 - Property Taxes (3)
 - County Funding (4)
 - Other - please list (5) _____
-

Q15 What costs are associated with your communities recycling programs and services funding? Select all that apply.

- Recycling drop-off site host (1)
 - HHW collection (2)
 - Composting (3)
 - Trash pick-up (4)
 - Education (5)
 - Other - Please list (6) _____
-

Q16 Could you provide an estimate of how much your community expends on material management services and programs? Please use a \$XXX,XXX format.

Q17 Is there anything else you would like us to know about materials management and your community?

End of Block: Block 1

MMP Business Survey

Start of Block: Default Question Block

INTRO Michigan is updating its Materials Management Plans (formerly Solid Waste Plans) by July 2027 to prioritize sustainable practices like recycling and composting, as required by updated state law. This business survey will assist the respective Materials Management Planning Committees with updating the plans to ensure proper management of all non-hazardous materials, establish guidelines for facility locations, document existing and future infrastructure needs, and define our community's goals for a more sustainable approach to materials management; more information is available at nwm.org/mmp Responses to the MMP Business Survey are confidential and anonymous, and should take about 8 to 10 minutes to complete. If there are any questions, you would like a paper copy of the survey, or need any additional assistance, please contact Mathew Cooke, Community Planner at Networks Northwest by email at mathew.cooke@networksnorthwest.org or phone at (231) 929-5056.

Q1 What County does your business primarily operate in?

- Antrim County (1)
- Benzie County (2)
- Charlevoix County (3)
- Emmet County (4)
- Grand Traverse County (5)
- Kalkaska County (6)
- Leelanau County (7)
- Manistee County (8)
- Missaukee County (9)
- Wexford County (10)
- Other - Please list (11) _____

Q2 What sector best describes your primary business activity?

- Retail (1)
 - Manufacturing (2)
 - Service Industry (e.g., hospitality, healthcare, professional services) (3)
 - Food Service (4)
 - Construction (5)
 - Agriculture (6)
 - Education (7)
 - Other - Please list (8) _____
-

Q3 Approximately how much total non-hazardous waste (trash, recycling, etc.) does your business generate on average per week?

- Less than 50 lbs (1)
 - 50 - 200 lbs (2)
 - 201 - 500 lbs (3)
 - 501 - 1000 lbs (4)
 - More than 1000 lbs (5)
 - Unsure (6)
-

Q4 Could you estimate your business recycling to waste rate? (i.e. 50% recycling to 50% trash)

0 100

Estimated Recycling to Waste Rate ()



Q5 How does your business recycle?

- Single stream recycling (all of your recycling goes into one container) (1)
- We separate recycling (2)
- Send recycling to end market (3)
- We do not currently recycling (4)

Display this question:

If Q5 = We separate recycling

Q5A Which of the following materials does your business currently separate for recycling?
Select all that apply.

- Cardboard (1)
- Paper (mixed, office, newspaper) (2)
- Plastics (bottles, containers, film) (3)
- Glass (4)
- Metals (aluminum, steel) (5)
- Food Waste (6)
- Other - Please list (7) _____

Display this question:

If Q5 = Send recycling to end market

Q5B What materials are you sending to an end market? Please feel free to share what end market you work with.

Display this question:

If Q5 = We do not currently recycling

Q5C If you do not recycle, why?

Q6 Does your business currently participate in any composting or organic waste diversion programs?

- Yes (1)
 - No (2)
 - We are exploring or considering options (3)
-

Q7 How do you currently handle your food waste collection? Select all that apply.

- Private Service (1)
 - Local Farm (2)
 - Food Rescue (3)
 - Food Bank (4)
 - On Site Composting (7)
 - Not Applicable (5)
 - Other - Please list (6) _____
-

Q8 How is your business non-hazardous waste recycling picked up? Select all that apply.

- Collection by private hauler (1)
 - Paid services to business who manage recycled materials (2)
 - Drop-off at transfer station (3)
 - Household Hazardous Waste Collection Events (4)
 - We do not recycle Household Hazardous Waste (5)
-

Display this question:

If Q2 = Food Service

Q9 If your business offers take-away, what materials do you utilize for to-go orders? Select all that apply

Styrofoam (1)

Plastic (2)

Compostable Materials (3)

Other - Please list (4) _____

Q10 What are the primary methods your business currently uses for the disposal of non-recyclable/non-compostable waste? Select all that apply.

Collection by a private waste hauler (1)

Drop-off at a transfer station or landfill (2)

Other - Please list (3) _____

Unsure (4)

Q11 Does your business currently have any specific goals or initiatives related to reducing waste generation or increasing recycling/composting rates?

Yes - Please list (1) _____

No (2)

We are considering setting goals in the future. (3)

Q12 What are the biggest challenges your business faces in implementing or expanding sustainable materials management practices (e.g., recycling, composting)? Select all that apply.

- Cost of implementation or service fees (1)
 - Lack of space for storage or sorting (2)
 - Insufficient information or resources (3)
 - Lack of employee engagement or training (4)
 - Logistical challenges with collection or processing (5)
 - Other - Please list (6) _____
 - We do not currently face significant challenges. (7)
-

Q13 Is your business interested in learning more about or participating in local programs or initiatives that support business recycling, composting, or waste reduction?

- Yes, very interested (1)
 - Yes, somewhat interested (2)
 - Not currently interested (3)
 - Unsure (4)
-

Q14 Does your business anticipate any significant changes in the types or volumes of materials it generates in the next 3-5 years?

- Yes (1)
 - No (2)
 - Unsure (3)
-

Display this question:

If Q14 = Yes

Q14A If yes, what types of waste do you expect to increase in the next 3-5 years?

Q15 Does your business produce a material (by-product or otherwise) that could be recycled, but you do not have an end-user or alternative use for?

Yes (1)

No (2)

Display this question:

If Q15 = Yes

Q15A If yes, what materials could be recycled but need an end user or alternative use for?

Q16 Does your business purchase recycled materials for use?

- Yes (1)
- No (2)
- Unsure (3)
- We would if available (4)

Display this question:

If Q16 = Yes

Q16A If yes, what typed of recycled materials do you purchase? Select all that apply.

- Recycled Plastics (1)
- Recycled Metals (2)
- Recycled Paper & Cardboard (3)
- Recycled Glass (4)
- Recycled Textiles (5)
- Recycled Rubber (6)
- Recycled Wood (7)
- Recycled Electronics (8)
- Recycled Concrete & Aggregates (9)
- Recycled Organics (Compost) (10)
- Recycled Oil (11)
- Other - Please list (12) _____

Display this question:

If Q16 = We would if available

Q16B What recycled materials could your business purchase to utilize if they were available?

Q17 How could businesses better engage with the circular economy through re-use of recycled materials? Select all that apply.

- Use recycled plastic in packaging (1)
- Design products that can be easily disassembled and their parts reused or recycled (2)
- Offer take-back programs for their products so the materials can be used again (3)
- Partner with companies that specialize in processing recycle materials for new applications (4)
- Incorporate recycled fabrics into clothing or textiles (5)
- Utilize crushed recycled glass in construction materials (6)
- Refurbish and resell returned or used products (7)
- Use recycled paper and cardboard for office supplies and packaging (8)
- Other - Please list (9) _____

Q18 Optional: Please provide the name of your business and a contact person/email if you are willing to be contacted for further information or discussion of materials management planning.

Business Name (1) _____

Contact Person (2) _____

Contact Email (3) _____

End of Block: Default Question Block

POPULATION AND HOUSING



542.3 SQ. MILES
AREA



46.56 PEOPLE/SQ. MILES
POPULATION DENSITY

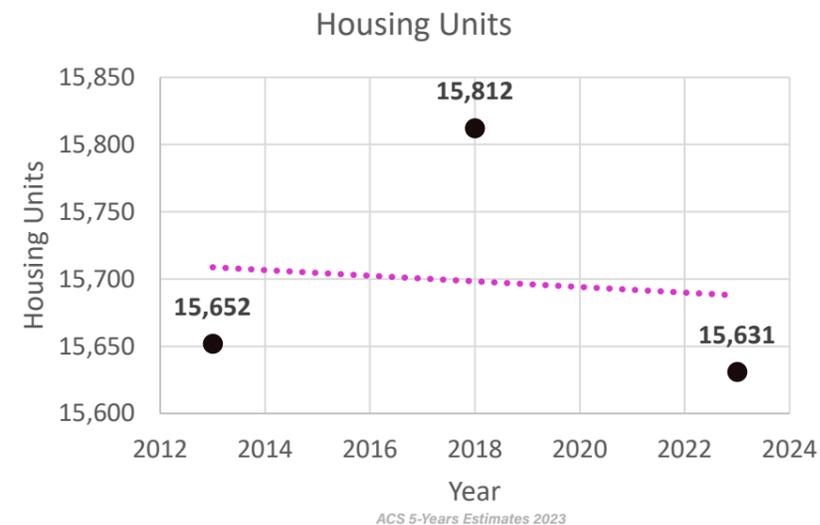
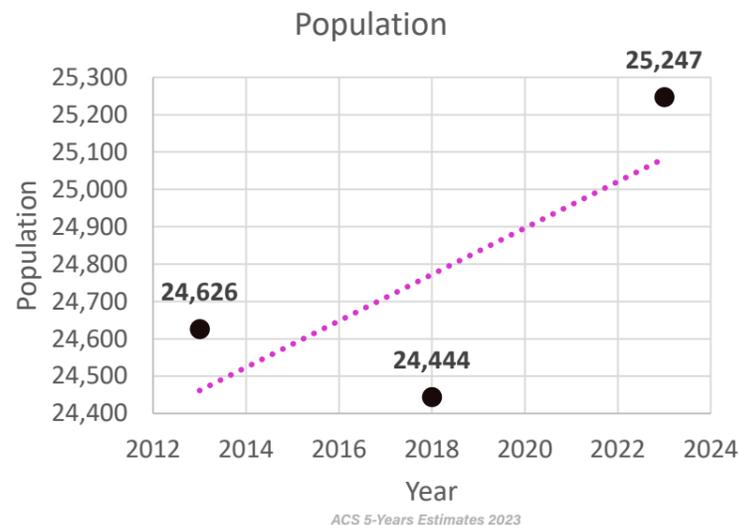


25,247
TOTAL POPULATION
ACS 5-Years Estimates 2023

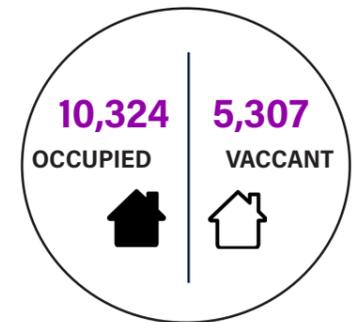


MI Labour Market Information

| AGE | 2025 |
|----------|-------|
| Total | 25782 |
| 0 To 4 | 984 |
| 5 To 9 | 1169 |
| 10 To 14 | 1195 |
| 15 To 19 | 1243 |
| 20 To 24 | 1364 |
| 25 To 29 | 1473 |
| 30 To 34 | 1417 |
| 35 To 39 | 1332 |
| 40 To 44 | 1414 |
| 45 To 49 | 1283 |
| 50 To 54 | 1359 |
| 55 To 59 | 1645 |
| 60 To 64 | 2079 |
| 65 To 69 | 2331 |
| 70 To 74 | 2145 |
| 75 To 79 | 1603 |
| 80 To 84 | 935 |
| 85+ | 811 |



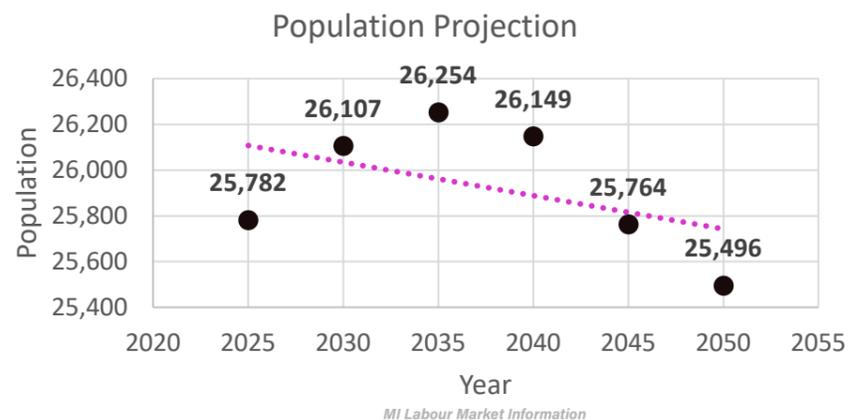
15,631
HOUSING UNITS



2.30
AVERAGE HH SIZE



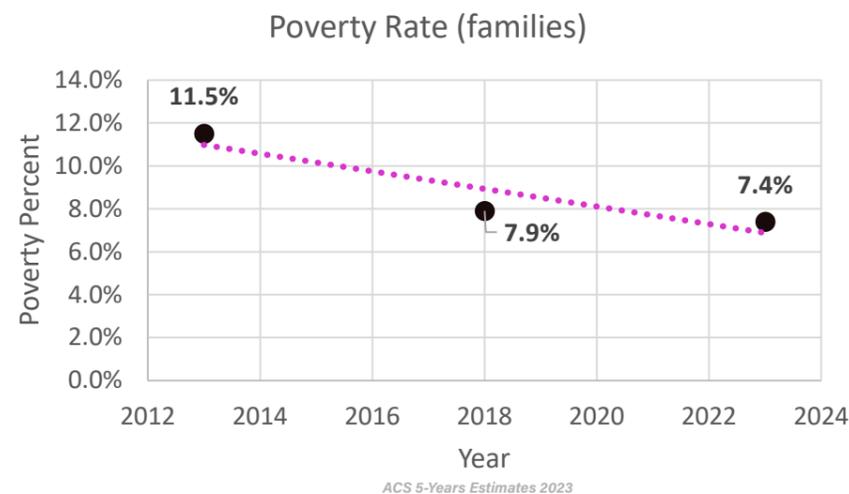
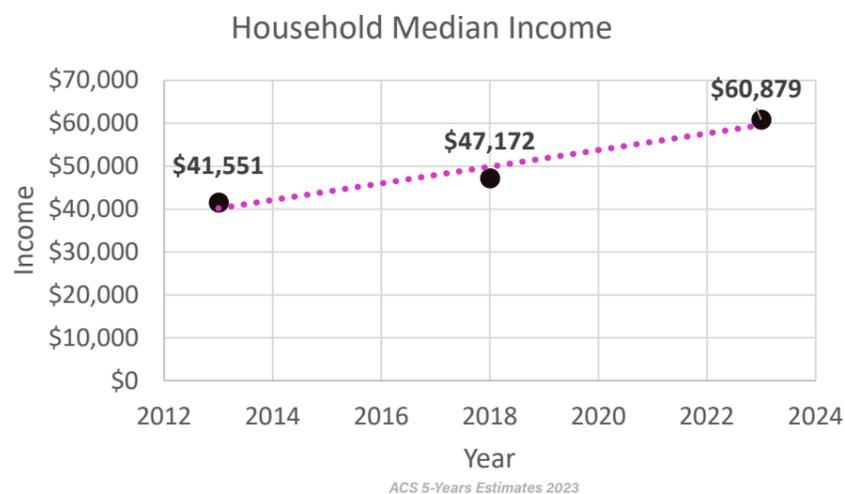
ESTIMATED POPULATION PROJECTION



| MUNICIPALITY | 2020 CENSUS POPULATION |
|----------------------|------------------------|
| Arcadia Township | 657 |
| Bear Lake Township | 1831 |
| Brown Township | 704 |
| Cleon Township | 1063 |
| Dickson Township | 980 |
| Filer Township | 2318 |
| Manistee Township | 4022 |
| Maple Grove Township | 1342 |
| Marilla Township | 398 |
| Norman Township | 1567 |
| Onkama Township | 1338 |

| MUNICIPALITY | 2020 CENSUS POPULATION |
|------------------------|------------------------|
| Pleasanton Township | 870 |
| Springdale Township | 849 |
| Stronach Township | 834 |
| City of Manistee | 6259 |
| Village of Bear Lake | 342 |
| Village of Copenish | 195 |
| Village of East Lake | 415 |
| Village of Kaleva | 507 |
| Village of Onkema | 399 |
| Manistee County | 25032 |

INCOME AND POVERTY



INDUSTRY AND EMPLOYMENT



TOTAL NUMBER OF ESTABLISHMENTS
606



TOTAL NUMBER OF JOBS
4,213



TOP 5 INDUSTRIES

- » Retail and Trade
- » Manufacturing
- » Accomodation and Food Services
- » Construction
- » Other services (except public administration)

POPULATION AND HOUSING



564.9 SQ. MILES
AREA



26.8 PEOPLE/SQ. MILES
POPULATION DENSITY



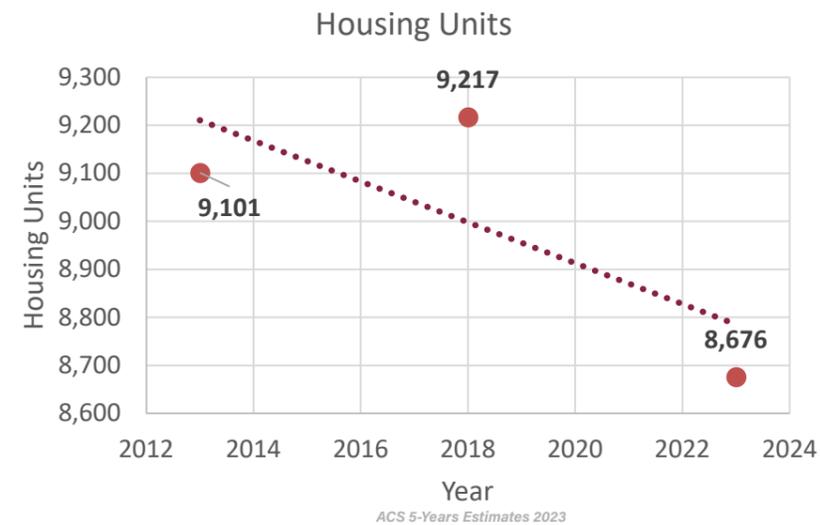
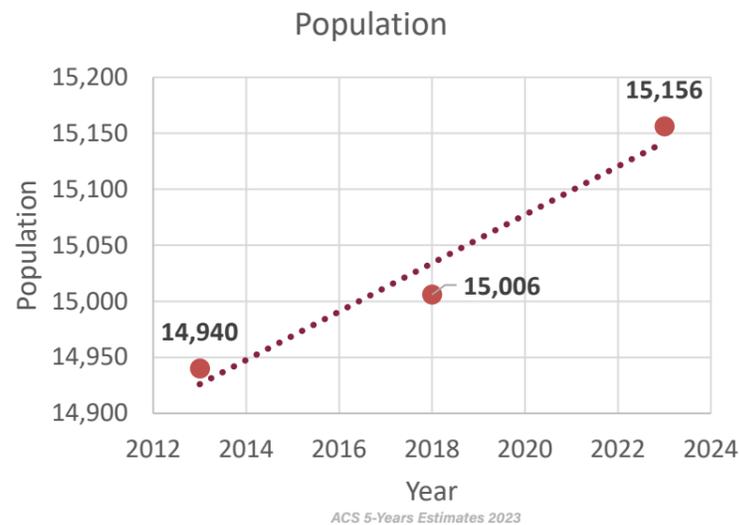
15,156
TOTAL POPULATION

ACS 5-Years Estimates 2023



MI Labour
Market Information

| AGE | 2025 |
|----------|-------|
| Total | 15427 |
| 0 To 4 | 842 |
| 5 To 9 | 925 |
| 10 To 14 | 975 |
| 15 To 19 | 868 |
| 20 To 24 | 728 |
| 25 To 29 | 871 |
| 30 To 34 | 940 |
| 35 To 39 | 889 |
| 40 To 44 | 900 |
| 45 To 49 | 768 |
| 50 To 54 | 804 |
| 55 To 59 | 958 |
| 60 To 64 | 1280 |
| 65 To 69 | 1149 |
| 70 To 74 | 962 |
| 75 To 79 | 756 |
| 80 To 84 | 465 |
| 85+ | 347 |



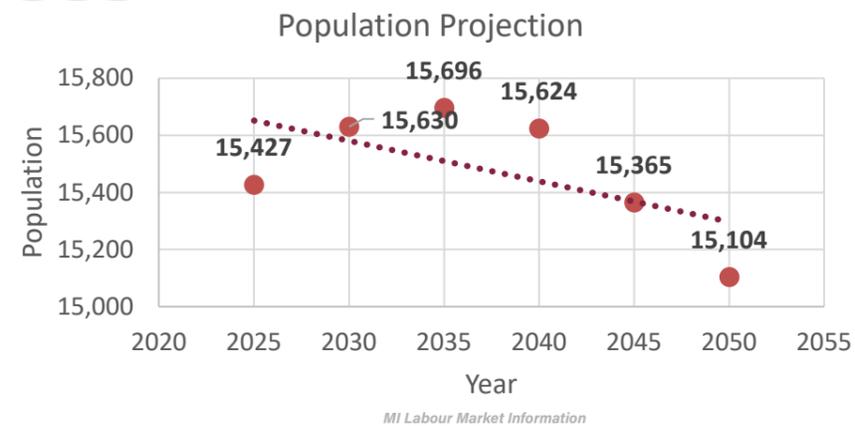
8,676
HOUSING UNITS



2.61
AVERAGE HH SIZE



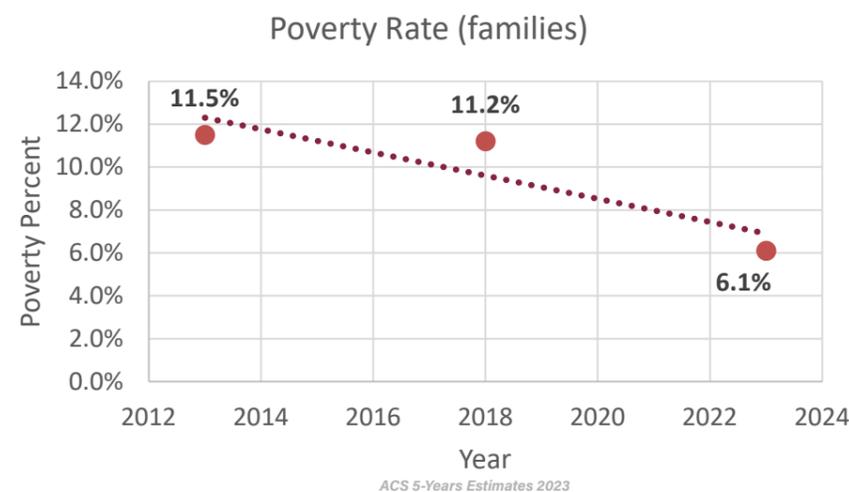
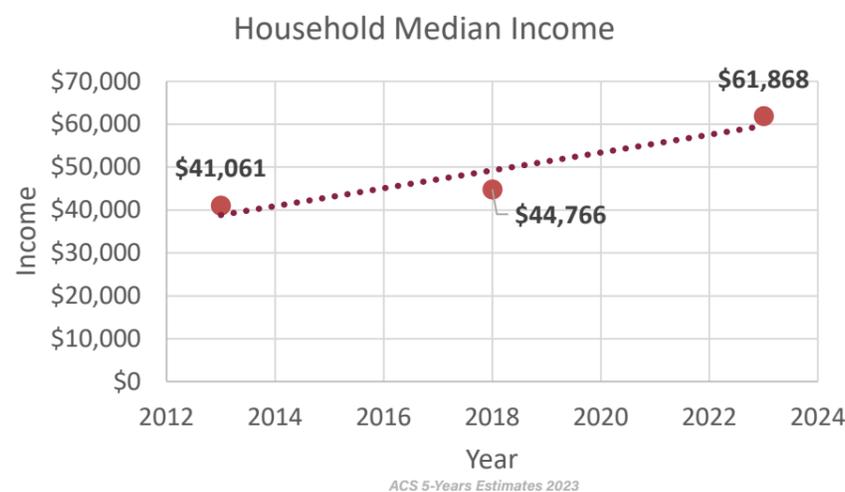
ESTIMATED POPULATION PROJECTION



| MUNICIPALITY | 2020 CENSUS POPULATION |
|----------------------|------------------------|
| Aetna Township | 429 |
| Bloomfield Township | 574 |
| Butterfield Township | 473 |
| Caldwell Township | 1394 |
| Clam Union Township | 907 |
| Enterprise Township | 174 |
| Forest Township | 1184 |
| Holland Township | 221 |
| Lake Township | 2827 |

| MUNICIPALITY | 2020 CENSUS POPULATION |
|-------------------------|------------------------|
| Norwich Township | 631 |
| Pioneer Township | 508 |
| Reeder Township | 1199 |
| Richland Township | 1489 |
| Riverside Township | 1124 |
| West Branch Township | 452 |
| City of McBain | 637 |
| City of Lake City | 829 |
| Missaukee County | 15052 |

INCOME AND POVERTY



INDUSTRY AND EMPLOYMENT



TOTAL NUMBER OF ESTABLISHMENTS
393



TOTAL NUMBER OF JOBS
2,992



TOP 5 INDUSTRIES

- » Agriculture, forestry, fishing and hunting
- » Manufacturing
- » Retail and Trade
- » Construction
- » Accommodation and Food Services

POPULATION AND HOUSING



564.9 sq. MILES
AREA



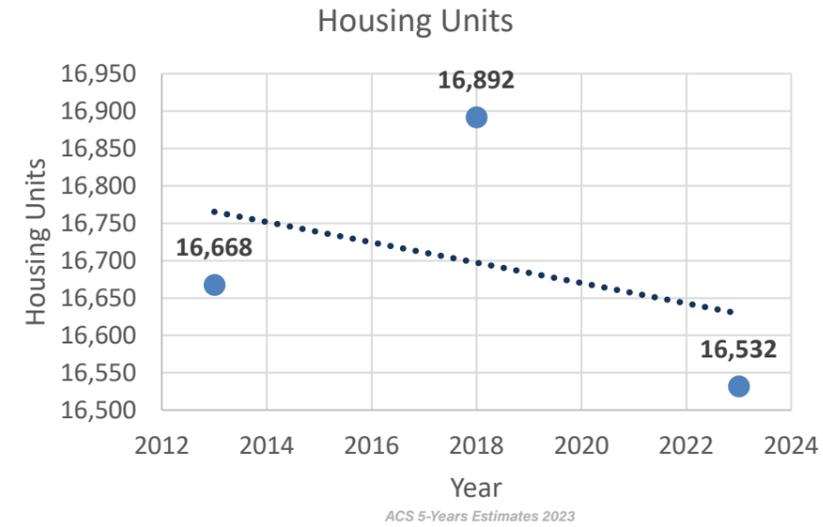
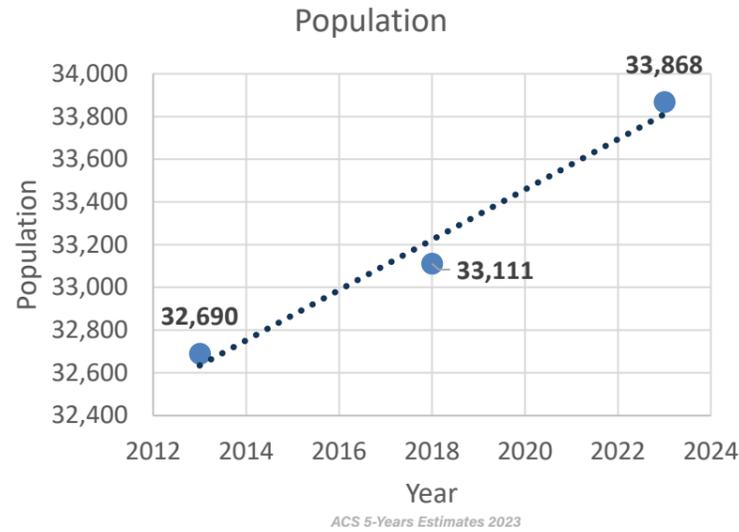
59.9 PEOPLE/SQ. MILES
POPULATION DENSITY



33,868
TOTAL POPULATION
ACS 5-Years Estimates 2023



| AGE | 2025 |
|----------|--------|
| Total | 34,493 |
| 0 To 4 | 1,764 |
| 5 To 9 | 2,127 |
| 10 To 14 | 2,180 |
| 15 To 19 | 2,185 |
| 20 To 24 | 1,794 |
| 25 To 29 | 1,931 |
| 30 To 34 | 2,135 |
| 35 To 39 | 2,029 |
| 40 To 44 | 2,180 |
| 45 To 49 | 1,903 |
| 50 To 54 | 1,925 |
| 55 To 59 | 2,119 |
| 60 To 64 | 2,473 |
| 65 To 69 | 2,484 |
| 70 To 74 | 2,055 |
| 75 To 79 | 1,503 |
| 80 To 84 | 902 |
| 85+ | 805 |



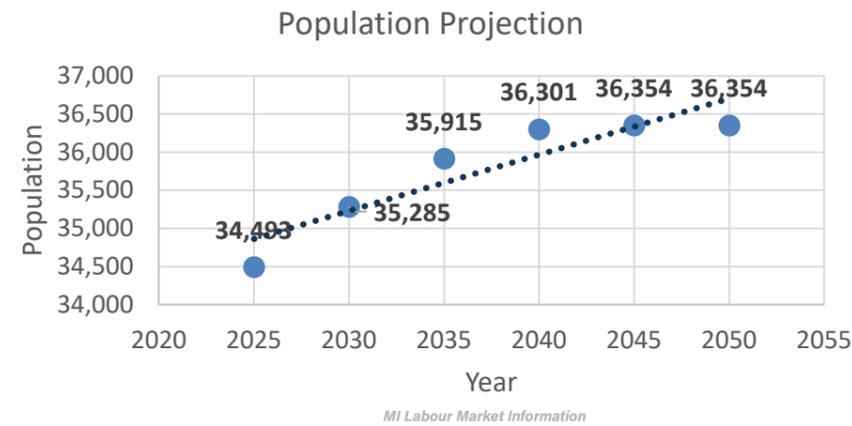
16,532
HOUSING UNITS



2.49
AVERAGE HH SIZE



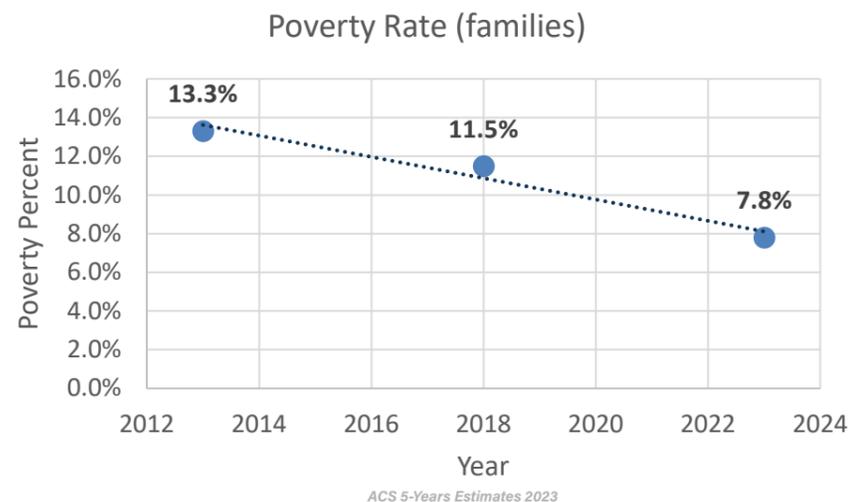
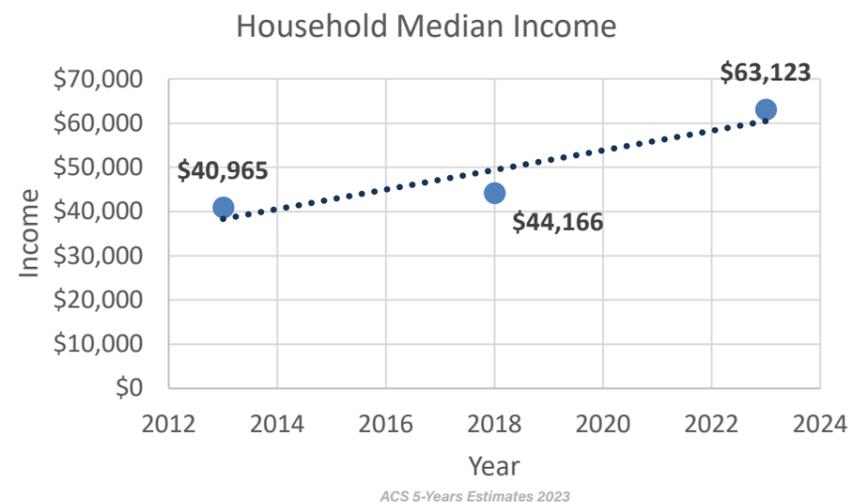
ESTIMATED POPULATION PROJECTION



| MUNICIPALITY | 2020 CENSUS POPULATION |
|-----------------------|------------------------|
| Antioch Township | 900 |
| Boon Township | 650 |
| Cedar Creek Township | 1855 |
| Cherry Grove Township | 2421 |
| Clam Lake Township | 2325 |
| Colfax Township | 897 |
| Greenwood Township | 633 |
| Hanover Township | 1698 |
| Haring Township | 3556 |
| Henderson Township | 183 |
| Liberty Township | 936 |

| MUNICIPALITY | 2020 CENSUS POPULATION |
|-----------------------|------------------------|
| Selma Township | 2233 |
| Slagle Township | 509 |
| South Branch Township | 348 |
| Springville Township | 1739 |
| Wexford Township | 1161 |
| City of Cadillac | 10371 |
| City of Manton | 1258 |
| Village of Mesick | 397 |
| Village of Harrietta | 151 |
| Village of Buckley | 775 |
| Wexford County | 33673 |

INCOME AND POVERTY



INDUSTRY AND EMPLOYMENT



TOTAL NUMBER OF ESTABLISHMENTS
920



TOTAL NUMBER OF JOBS
11,212



TOP 5 INDUSTRIES

- » Manufacturing
- » Retail and Trade
- » Health Care and Social Assistance
- » Accommodation and Food Services
- » Transportation and Warehousing



Supplement: Manistee County Materials Management County Engagement

March 1, 2023

PREPARED BY:

RRS  | [recycle.com](https://www.recycle.com)

COMMISSIONED BY:

 **Networks
Northwest**
Talent / Business / Community

EXECUTIVE SUMMARY

Working together with Networks Northwest and member communities, RRS completed a comprehensive set of tasks that fulfills the objectives of Michigan Department of Environment, Great Lakes, and Energy (EGLE) Materials Management Community Engagement (MMCE) grant and lays the groundwork for regional collaboration in materials management planning among member communities.

The MMCE grant process is intended to help counties in the transition to materials management and begin to identify partnership within regions and counties, understand current materials management deficiencies and opportunities, highlight future changes to the planning process, and outline steps that can occur now at the county and regional levels to assist with the development of future materials management programs and infrastructure.

Key improvements and recommendations for counties within Networks Northwest are found in the respective sections in the report. RRS identified forty (40) recommendations that are categorized into seven areas which form the basis for a robust materials management system:

- Community Access
- Facilities and Infrastructure
- Robust Markets, including Materials of Focus
- Public/Private Partnerships
- Supportive Policy
- Education and Outreach
- Regional Planning

Specific to Manistee County and as required by the EGLE grant, RRS identified the top five needs and the top three materials management projects that Manistee County should consider.

TOP FIVE NEEDS:

1. Sustainable funding
2. Consistent education and outreach
3. At least one Center for Hard to Recycle Materials (CHaRM)
4. Hub-and-spoke collections for key materials, particularly yard and food waste
5. More frequent household hazardous waste collection opportunities

TOP THREE MATERIALS MANAGEMENT PROJECTS:

Based on the top five needs above, RRS recommends Manistee County focus on three projects that could have significant impact on accessibility, awareness, and sustainable funding for programs and services.

1. Engage County and municipal leaders in conversations about materials management solutions in light of changes in state law.
2. Evaluate the funding and infrastructure needed to regularly or periodically collect additional materials, including more frequent household hazardous waste events, mattresses, food waste, and other difficult to recycling items.
3. Develop consistent recycling outreach materials in partnership with the hauler, the processor, the mills, and, as appropriate, the region.

STAKEHOLDERS

A stakeholder list was developed in collaboration with each county recycling contact to determine priority county, municipal, and other invested stakeholders. Perspectives were sought from either direct interview (in person or via phone) or through a set of questions distributed via email. Emails were sent at least twice seeking feedback.

| First | Last | Organization | Primary Stakeholder Type | Contact Type |
|----------|--------------|--|--------------------------|--------------|
| Meg | Batzer | Manistee County | county official | Email |
| Karla | Smith-Kasten | BARC | recycling coordinator | Email, call |
| Frank | Beaver | Little River Band (Manistee) | tribal | Email |
| Sarna | Salzman | SEEDS | community organization | In-person |
| Ann | Rogers | Northern Michigan Environmental Action Council | community organization | Email |
| Renee | Mallison | Manistee Conservation District | community organization | |
| Mark | Bevelhmer | GFL/American Waste | hauler | In-person |
| Todd | Harland | Republic Services | hauler | Email |
| Jill | Reynolds | Waste Management | hauler | Email |
| Jeff | Dontz | Manistee County | county official | Email |
| Karen | Goodman | Manistee County | county official | Email |
| Pauline | Jaquish | Manistee County | county official | Email |
| Richard | Schmidt | Manistee County | county official | Email |
| Nikki | Koons | Manistee County | county official | Email |
| Eric | Gustad | Manistee County | county official | Email |
| Margaret | Batzer | Manistee County | county official | Email |
| Janice | McCraner | Arcadia Township | municipal official | Email |
| Jeff | Harthun | Bear Lake Township | municipal official | Email |
| Shelly | Lynnes | Village of Bear Lake | municipal official | Email |
| Paul | Adamski | Brown Township | municipal official | Email |
| David | Myers | Cleon Township | municipal official | Email |
| Patrick | Milliron | Village of Copemish | municipal official | Email |
| Sharon | Buning | Dickson Township | municipal official | Email |
| Terry | Walker | Filer Township | municipal official | Email |
| Dennis | Bjorkquist | Manistee Township | municipal official | Email |
| Wendy | Banicki | East Lake Village | municipal official | Email |
| H. Wayne | Beldo | Maple Grove Township | municipal official | Email |
| Dan | Holtz | Village of Kaleva | municipal official | Email |
| Douglas | Glick | Marilla Township | municipal official | Email |
| Richard | Mobley | Norman Township | municipal official | Email |

| | | | | |
|---------|--------------|---------------------|--------------------|-------|
| David | Meister | Onekama Township | municipal official | Email |
| Roger | Burger | Village of Onekama | municipal official | Email |
| Carol | Merrill | Pleasanton Township | municipal official | Email |
| Brian | Moore | Springdale Township | municipal official | Email |
| Phil | Vadeboncoeur | Stronach Township | municipal official | Email |
| William | Gambill | City of Manistee | municipal official | Email |

MANISTEE COUNTY - GAPS



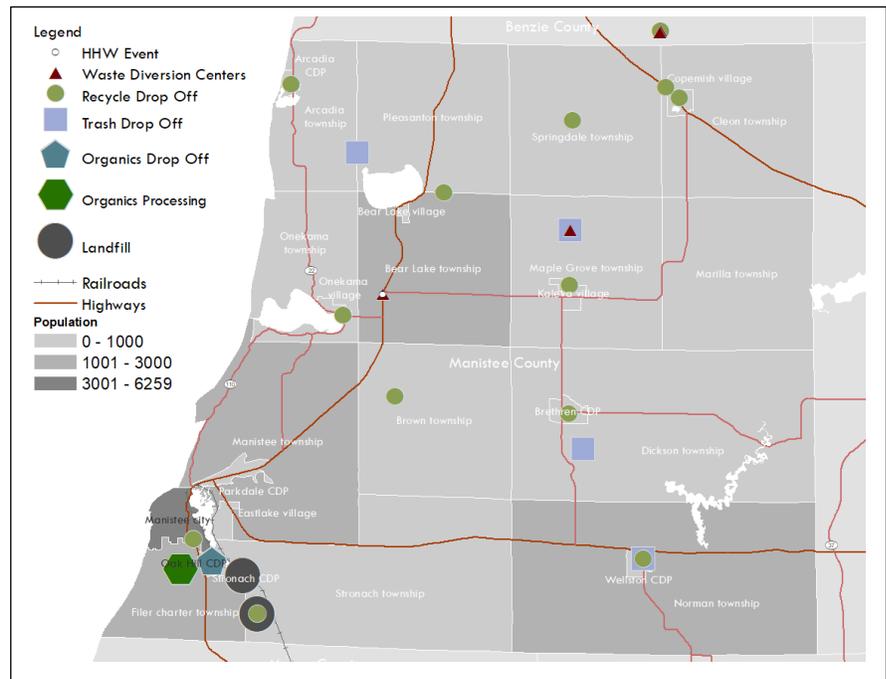
Community Access: Every household and business in a community needs convenient access to effective programs. This access can be through curbside collection, drop-off site locations, or a combination of the two. Material diversion and recovery needs to be as convenient as waste disposal as a first step sustainable materials management.

- Manistee County offers recycling drop-off stations at 9 locations.
- Several townships, City of Manistee, and Republic Services have programs that operate independently and provide different recycling guidelines based on the recycling processor.

Processing Facilities: The material collected at the home and business needs to be processed before reaching the end market. It is crucial for the County to own or have access to processing facilities conveniently located, technologically advanced, and with enough capacity to handle the population's current and future material streams. These facilities act as the "middleman" between the local government and the end market.

- Manistee County does not own or operate any recycling processing facilities but does contract for solid waste and recycling.
- There is a secondary processor in the county: Packaging Corporation of America (PCA – Filer City.)
- There is one organic processing facility that accepts yard waste.

| | |
|--------------------------------|--------|
| Population: | 25,032 |
| Square Miles of Land Area: | 542.3 |
| Households: | 9,701 |
| Employer Establishments: | 558 |
| Countywide Curbside Trash: | NO |
| Countywide Curbside Recycling: | NO |
| Countywide Curbside Organics: | NO |
| Countywide Drop-off Trash: | NO |
| Countywide Drop-off Recycling: | YES |
| Countywide Drop-off Organics: | NO |
| Countywide Drop-off HHW: | YES |





Robust Markets: The success of end markets that receive the recyclables that are collected leads to success in growing a sustainable circular economy that ultimately allows material to be diverted from landfills over the long term. By increasing demand, Networks Northwest creates a ‘pull’ for additional materials that in turn, drives supply.

- Within Manistee County there is one identified market for recovered materials: Packaging Corporation of America (PCA-Filer City).

Public/Private Partnerships: The business community and Networks Northwest will need to work closely together to find success. These partnerships can be found through funding opportunities with private companies, shared owner/operator agreements for MRFs and composting facilities, marketing and educational campaigns, and everything in between. Many retailers and packaging companies are realizing that local governments are responsible for the end of life for their products, thus leading to the sustainability of their product. Therefore, the benefits of public/private partnerships are becoming more apparent and accessible.

- Manistee County partners with local organizations to host recycling drop-off stations.

Supportive Policy: To reach high landfill diversion goals, policy will need to be crafted to ensure responsible recovery of material is the standard practice throughout the community, not just the best practice. A variety of policy approaches can be explored for Networks Northwest that have found success in other parts of the country and the globe.

- Manistee County utilizes PA 69 to fund current programs.

Education and Outreach: Once a strong infrastructure is in place, all citizens and businesses will need to know how to handle material in their home and at work. Recycling systems continue to evolve as material composition changes and technologies change. Thus, information needs to be put in front of the citizens of your community on a regular basis in many different ways to feed MRFs and end markets with good quality material, while continuing to decrease the material buried in landfills.

- There does not appear to be a consistent message about recycling locations and materials across the county.
- City of Manistee uses a Waste Advisor (ReCollect) ‘app’ on the city’s website to help direct people to recycling and disposal outlets.

SURVEY

Over 1,650 individuals across the Networks Northwest region took the survey that included questions about current participation in recycling-related activities as well as future needs and demographic information to inform trends. 98 people from Manistee County participated in the survey.

This survey was not intended to meet statistical minimums. Rather, it was intended to be a snapshot to inform the current usage and future needs of the region. The set of questions that were asked was purposefully restricted to reduce the chance of survey fatigue, wherein participants close the survey prior to completing it.

The survey was intended to take no more than 10 minutes to complete, with participants being told in the introduction that it should take no more than 5-8 minutes. The survey was distributed by community recycling coordinators and Networks Northwest via social media and press release. Survey logic was built into the flow of questions to ensure that the appropriate type of question was asked based on previous responses. As such, participation rates in each question varied. The majority of survey respondents are current recyclers and is the result of the way the survey was distributed. Further studies to understand reasons for non-participation may be needed.

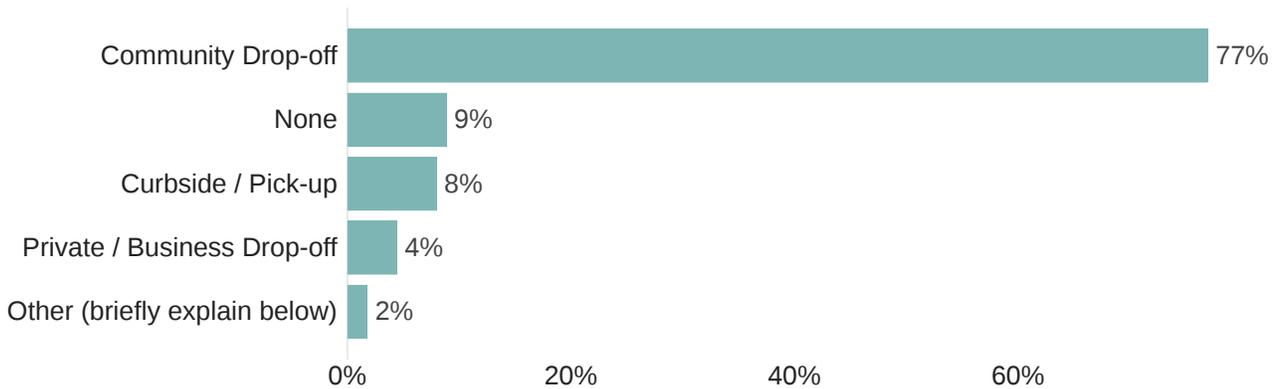
The full survey results for Manistee County are on the following pages.

MMCE Networks Northwest Survey Results Summary (Manistee County)

Q1 - What recycling services are available in your area? (select all that apply)

SUMMARY - Community Drop-off is the predominate recycling service type offered across the studied counties. While 9% express not having access to any form of recycling service.

98 Responses



Q1 - "Other" text responses

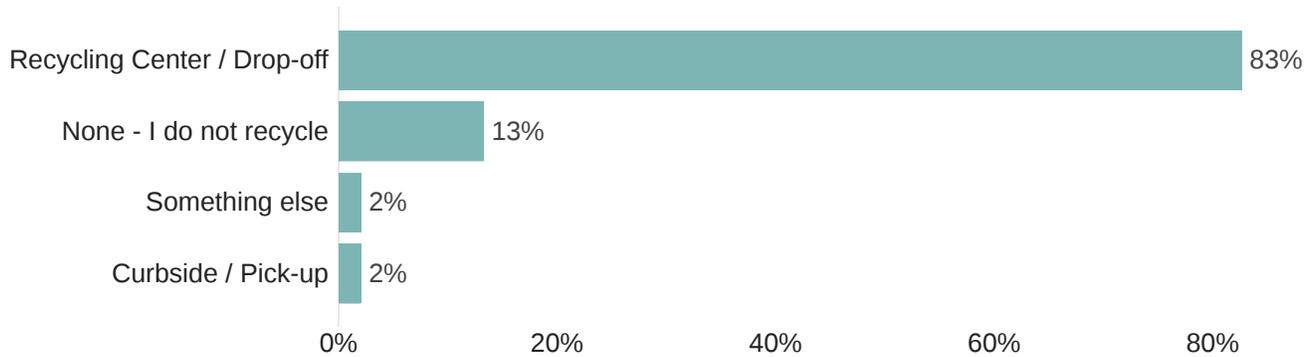
2 Responses

limited
disappointing
yard curbsidewaste
inadequate
pickup

Q2 - What type of recycling services do you most often use, not including bottle returns?

SUMMARY - Given the stated availability of recycling services, it is unsurprising that Drop-off services are most often used. 13% do not recycle at all.

98 Responses



Q2 - What type of recycling services do you most often use, not including bottle returns? Text responses

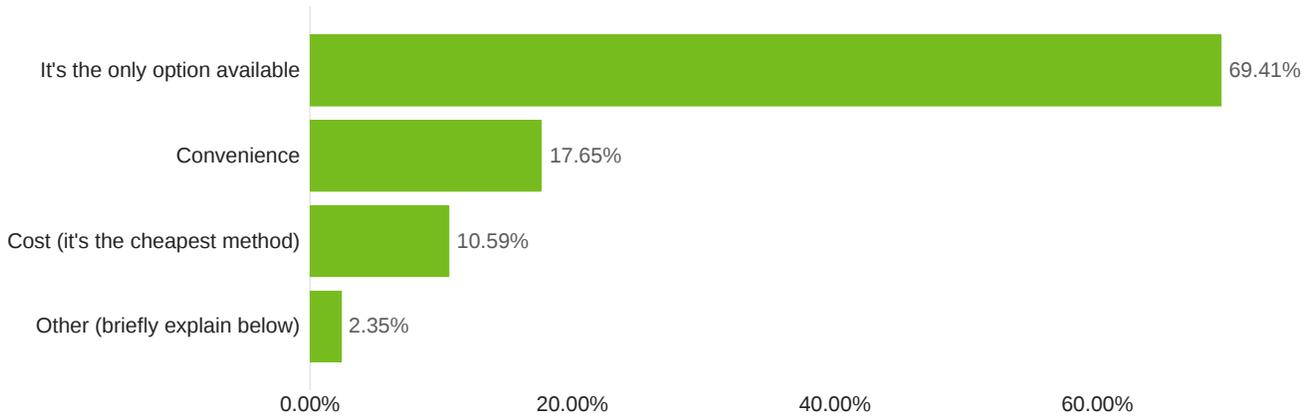
2 Responses

adjacent
community
drop illegal

Q3 - What is the most important reason you choose to recycle this way?

SUMMARY - Nearly 70% chose their method of recycling because it is the only option offered.

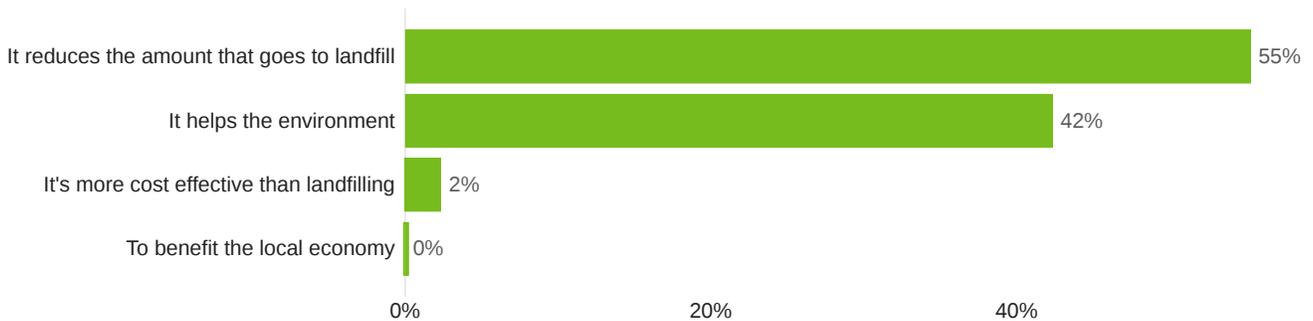
85 Responses



Q4 - Why do you recycle?

SUMMARY - 55% recycle as a means to reduce the amount of waste headed to landfills. 42% do so for environmental reasons.

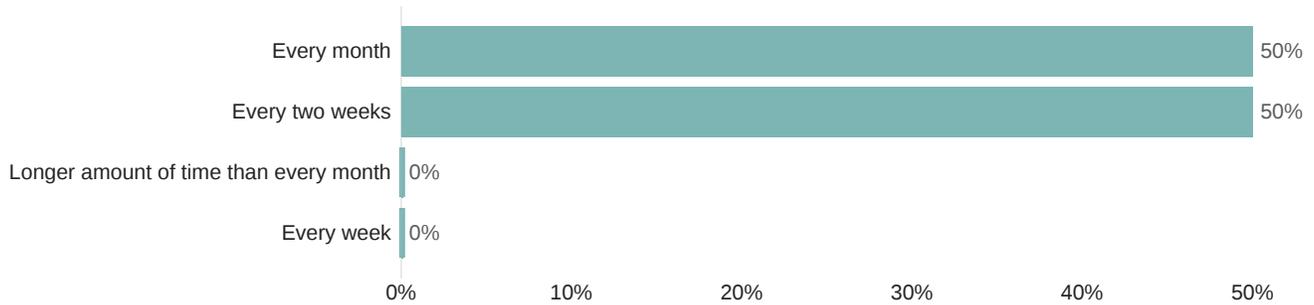
85 Responses



Q5 - How often do you recycle using curbside / pick-up?

SUMMARY - Of those who are offered Curbside Pick-up services, one uses curbside every other week and the other uses the service monthly.

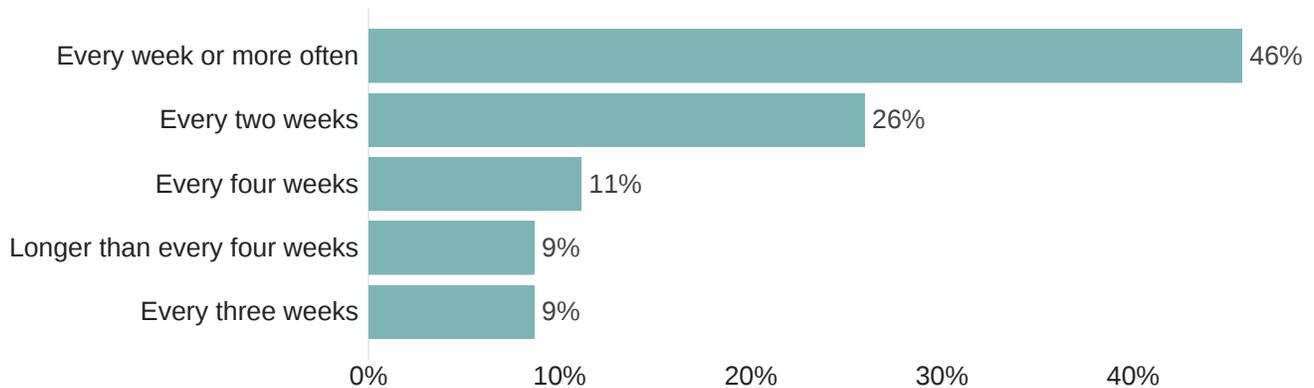
2 Responses



Q6 - How often do you recycle using a Recycling Center or drop-off?

SUMMARY - Those with access to Drop-off recycling services to are likely to use the service either every week or every other week.

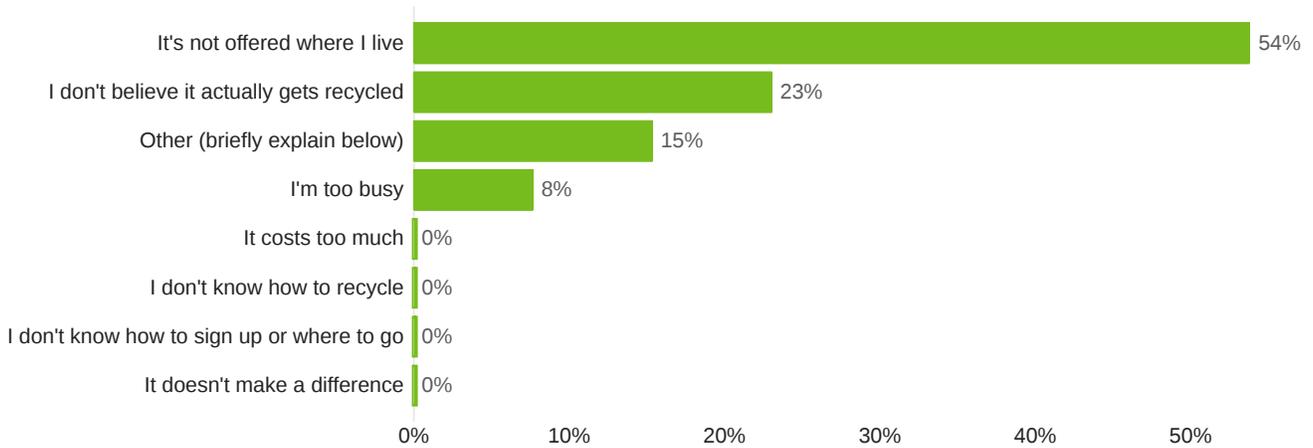
81 Responses



Q7 - What is the most significant reason you do not recycle?

SUMMARY - Of those who do not recycle, 54% say that recycling services are not offered near where they live. Another 23% believes that the materials do not actually get recycled.

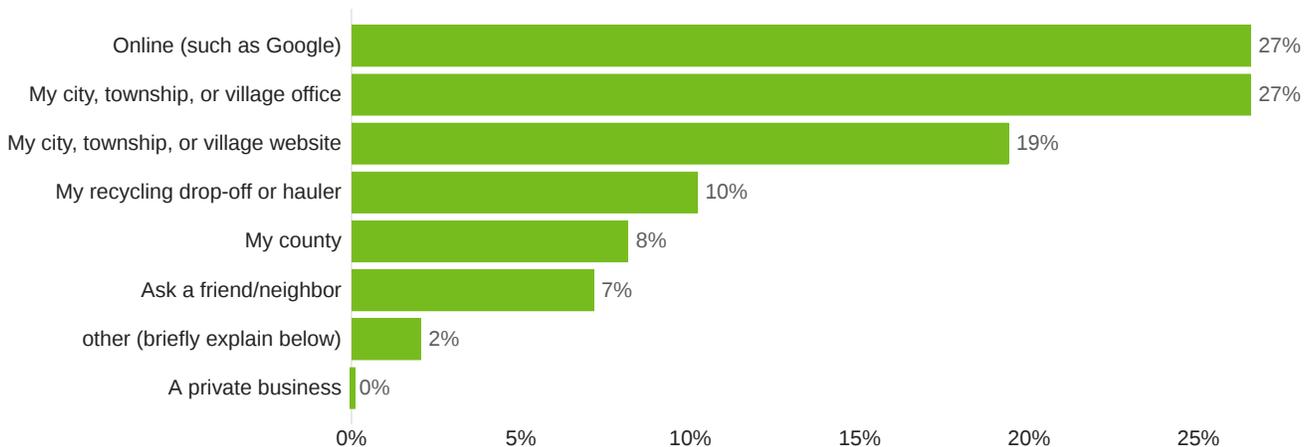
13 Responses



Q8 - If you had questions about recycling, where would you first seek out information?

SUMMARY - 64% first look towards their municipality and recycling providers to answer questions about recycling. 34% seek information from Google and friends.

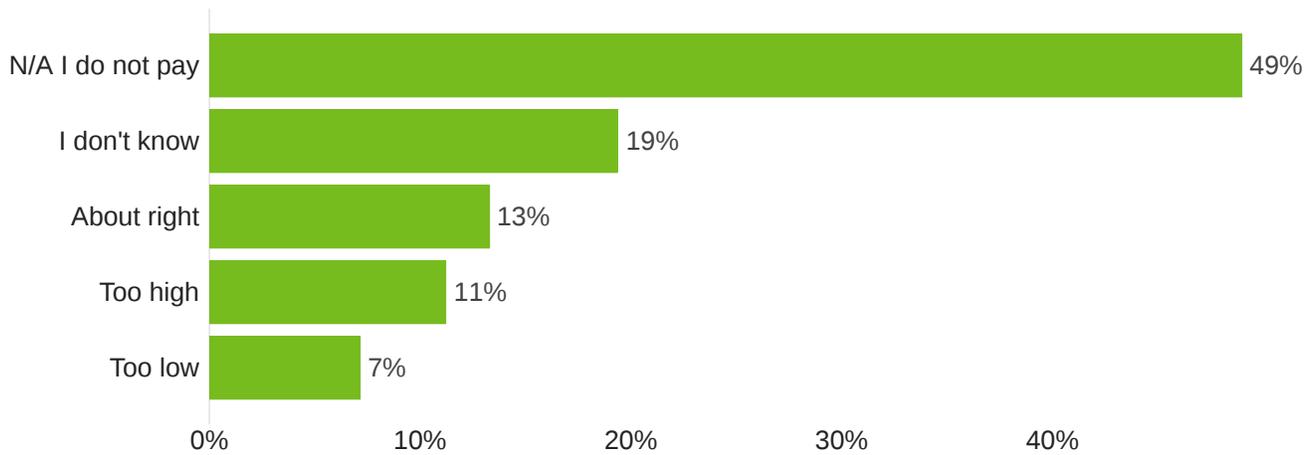
98 Responses



Q9 - Do you think the cost of recycling is too high, about right or too low? Please respond even if you do not recycle.

SUMMARY - 49% do not pay for recycling. While 19% feel that the price of recycling is about right. NOTE: One potential problem with this question, is that the survey did not capture whether the respondent knows if the cost of recycling is bundled into the cost of their trash pickup.

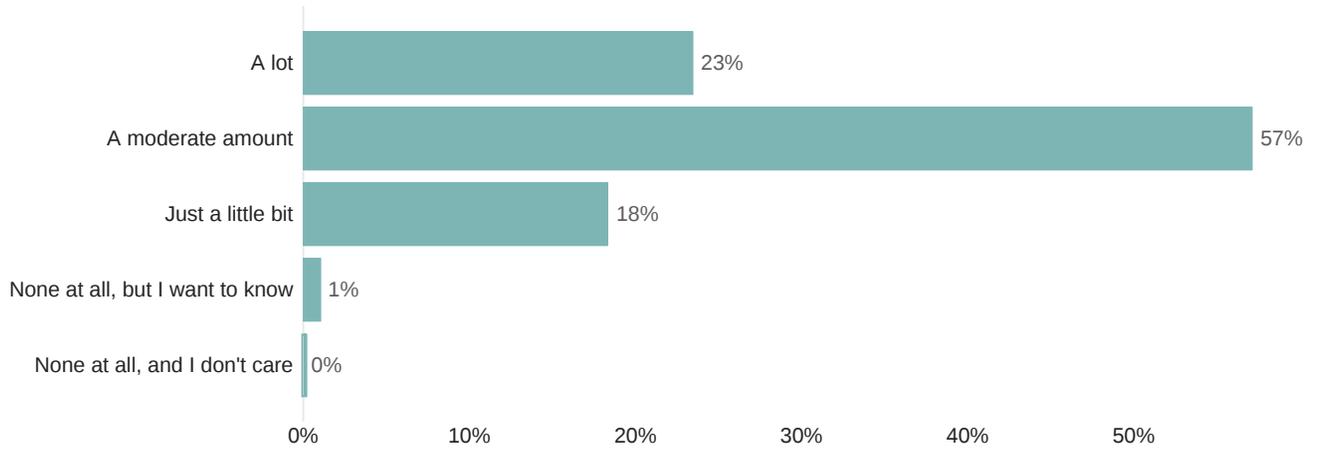
98 Responses



Q10 - How much do you know about recycling, generally speaking?

SUMMARY - A majority feels they know a moderate amount about recycling. Whereas only 23% feels that they know a lot.

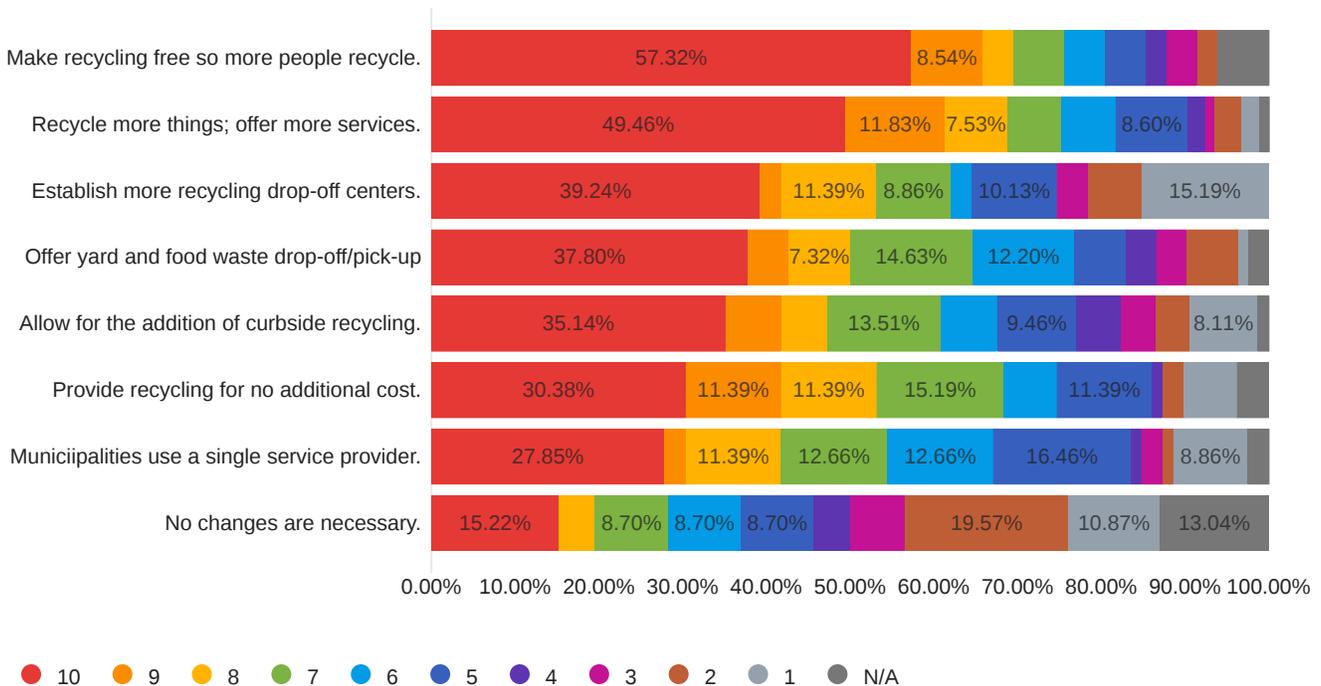
98 Responses



Q11 - Leaders in Northwest Michigan are exploring ways to improve recycling and other waste management services offered to residents and businesses. On a scale of 1-10, with 10 being VERY IMPORTANT and 0 being NOT AT ALL IMPORTANT, how important are each of the following potential improvements to you? If you already have access to an option, select 'not applicable'

SUMMARY - Although residents who currently recycle feel that recycling costs either the right amount or little to nothing for them, they express an importance for recycling to be completely free to allow for greater accessibility and participation from more people. As well, residents would like to see more recycling services to support the recovery of items not currently recycled in their areas.

97 Responses

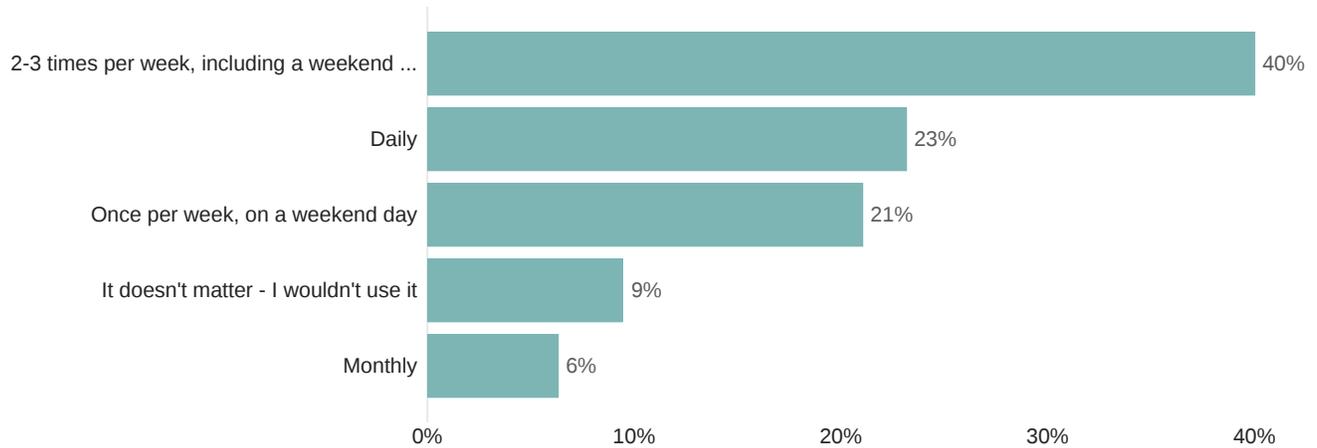


Select a field

Q12 - If a convenient recycling or food waste drop-off site were available close to where you live, how often would you want it open?

SUMMARY - 61% of people would like a Drop-off site open at least once per week on the weekend day. About a quarter would like Drop-off sites open daily.

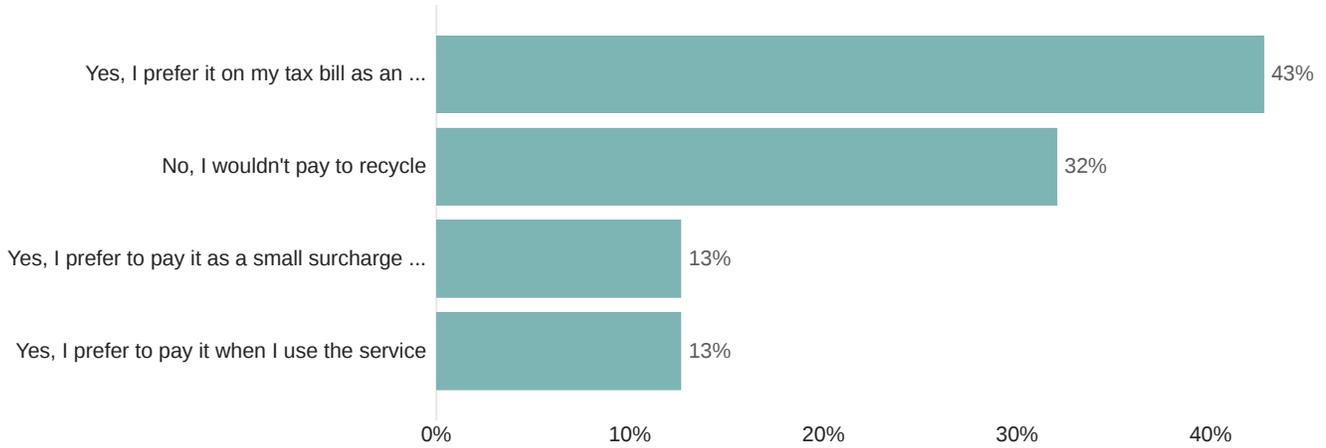
95 Responses



Q13 - Would you be willing to pay a small fee to have convenient access to recycling or food waste collection?

SUMMARY - Residents primarily prefer to pay for recycling or food waste collection through an assessment or fee on their tax bill. 32% do not want to pay anything for recycling or food waste collection services.

98 Responses

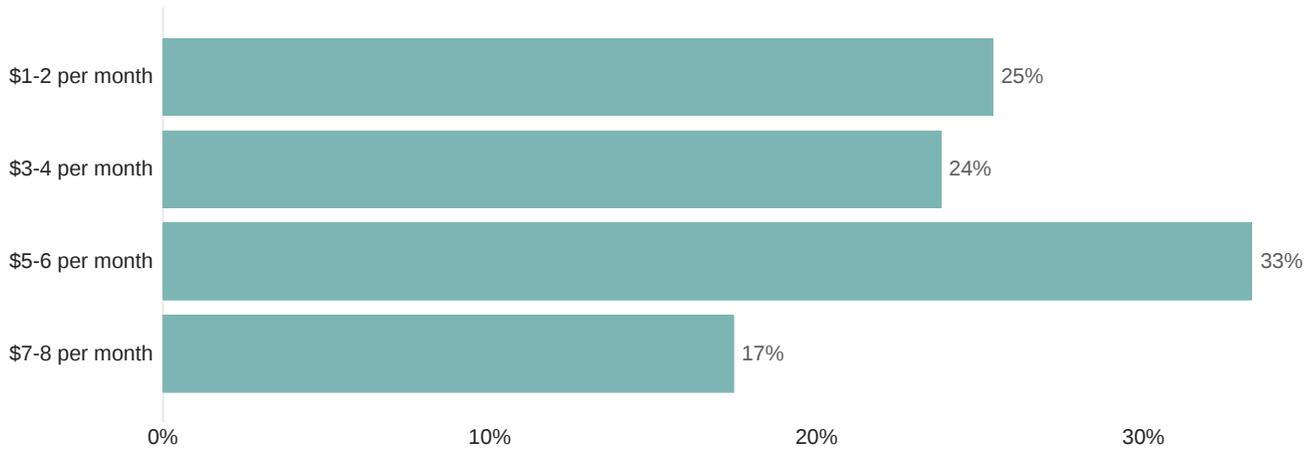


Q14 - What would you be willing to spend to get convenient access to recycling or food waste collection?

SUMMARY - A sizeable fraction of respondents (32%) would not pay anything for convenient access to recycling or food waste collection. Of those willing to pay for recycling or food waste collection, 82% want to pay \$6 or less a month for recycling or food waste collection; \$5-6 per month is most preferred.

Note: 32% of respondents would not pay anything.

63 Responses



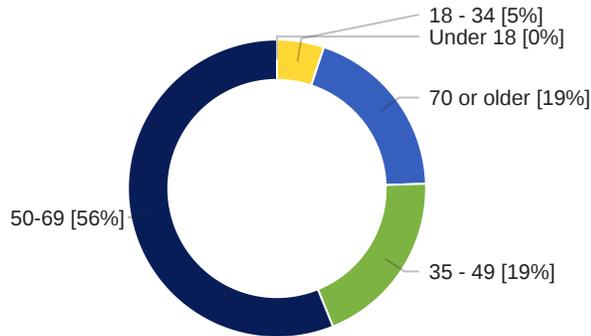
Demographics and Background of Respondents

SUMMARY:

- Respondents are primarily 50 years of age or older. Though, one-fifth is between ages 35-49.
- Respondents are predominately female.
- 92% have some college education or higher.
- 95% of respondents own the home that they live in.
- 95% live in Manistee County year around.
- Unsurprisingly, because of the higher age range of our respondents, 81% do not have children living at home who are school age or younger.
- 92% of respondents are white with little representation of other racial or ethnic groups.
- Median yearly household income falls around \$50,000 - \$75,000 per year.
- Of those who rent or lease their home, a majority does not have on-site recycling available to them, but would like to have the option. One-third have access to and use on-site recycling services.

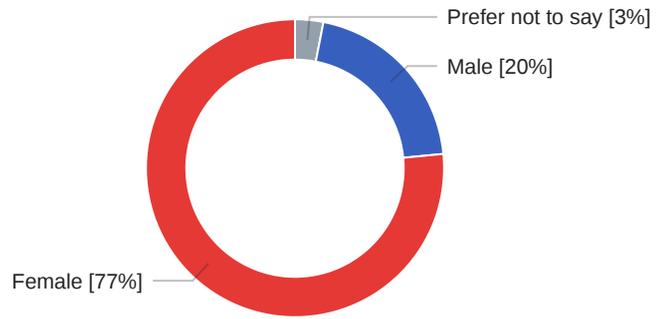
Q16 - Which of these best fits your age?

98 Responses



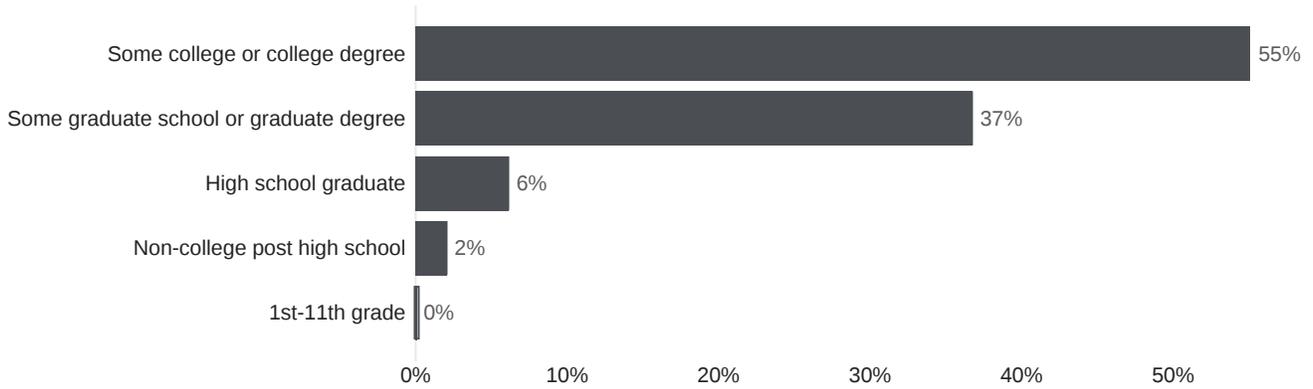
Q17 - What is your gender?

98 Responses



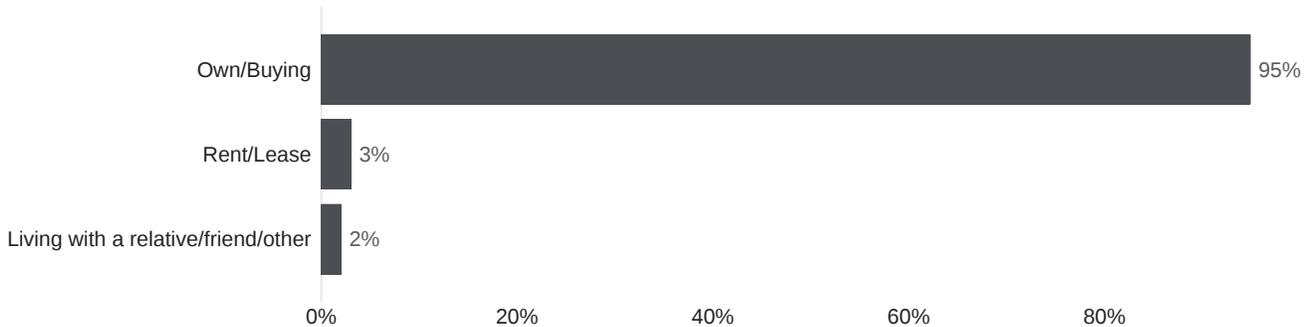
Q18 - What is the last grade or level of schooling you completed?

98 Responses



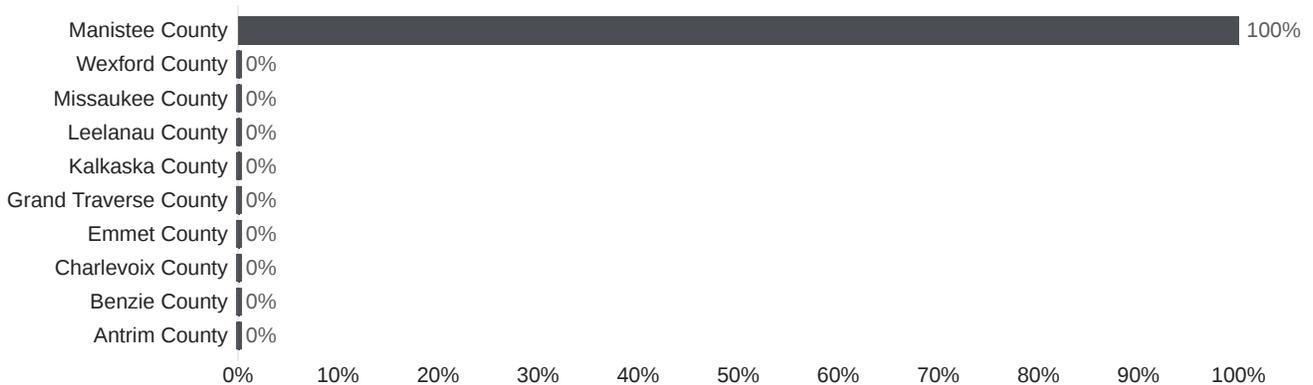
Q19 - Do you own your own home, are you buying a home, or do you lease or rent where you live?

98 Responses



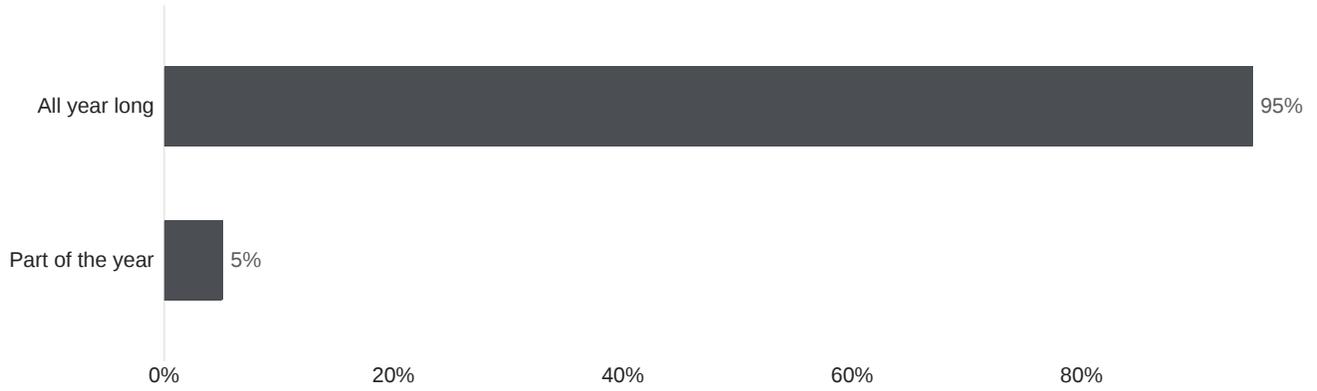
Q20 - County

98 Responses



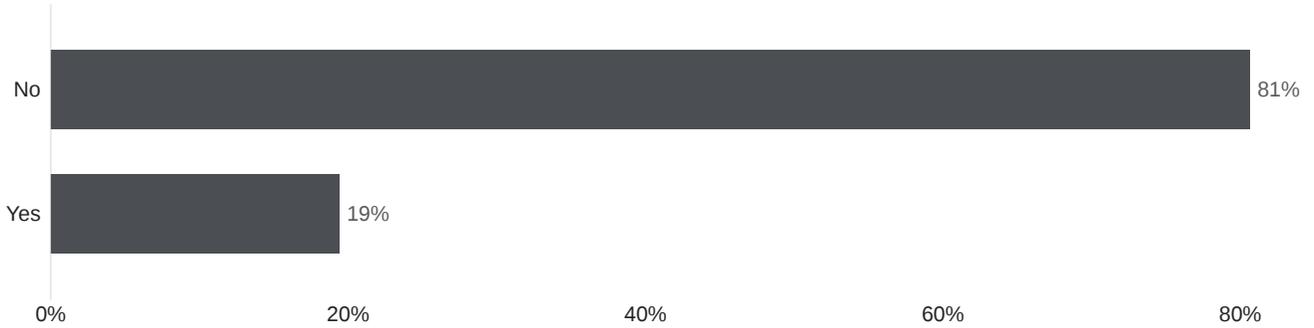
Q21 - How much of the year do you live in this county?

98 Responses



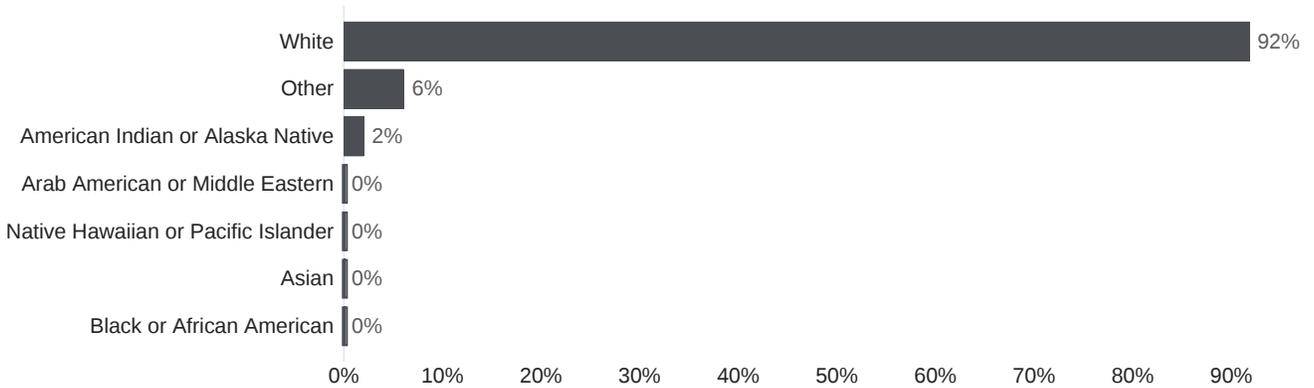
Q22 - Do you have children living in your home who are school age or younger?

98 Responses



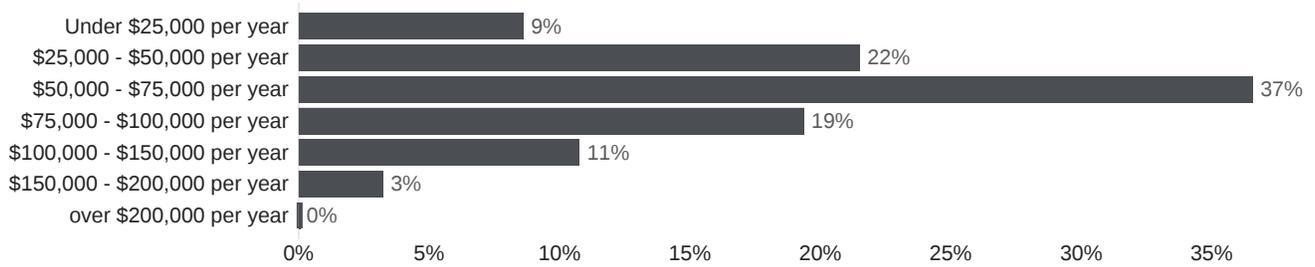
Q23 - Which racial or ethnic group best describes you?

98 Responses



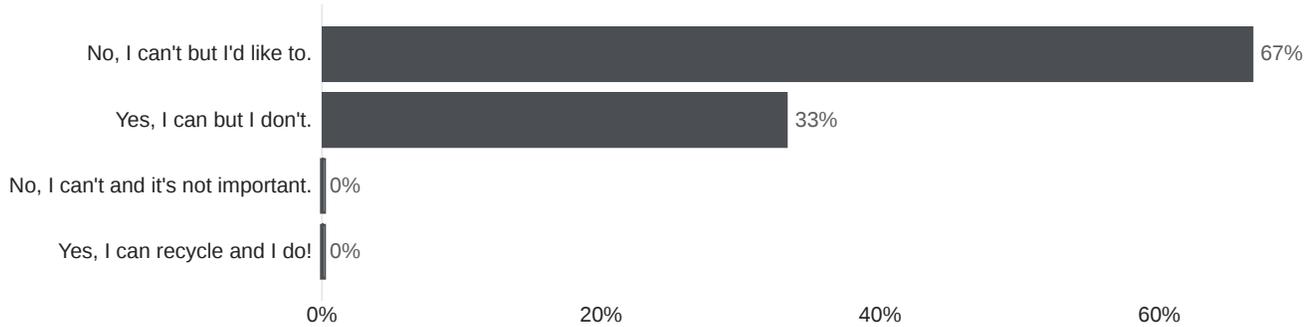
Q24 - In which of the following categories does your total yearly household income fall, including everyone in the household? If retired, please select an income category based on retirement income.

93 Responses



Q27 - As a renter/lessee, do you have recycling available on the property where you live?

3 Responses





Supplement: Missaukee County Materials Management County Engagement

March 1, 2023

PREPARED BY:

RRS  | [recycle.com](https://www.recycle.com)

COMMISSIONED BY:

 **Networks
Northwest**
Talent / Business / Community

EXECUTIVE SUMMARY

Working together with Networks Northwest and member communities, RRS completed a comprehensive set of tasks that fulfills the objectives of Michigan Department of Environment, Great Lakes, and Energy (EGLE) Materials Management Community Engagement (MMCE) grant and lays the groundwork for regional collaboration in materials management planning among member communities.

The MMCE grant process is intended to help counties in the transition to materials management and begin to identify partnership within regions and counties, understand current materials management deficiencies and opportunities, highlight future changes to the planning process, and outline steps that can occur now at the county and regional levels to assist with the development of future materials management programs and infrastructure.

Key improvements and recommendations for counties within Networks Northwest are found in the respective sections in the report. RRS identified forty (40) recommendations that are categorized into seven areas which form the basis for a robust materials management system:

- Community Access
- Facilities and Infrastructure
- Robust Markets, including Materials of Focus
- Public/Private Partnerships
- Supportive Policy
- Education and Outreach
- Regional Planning

Specific to Missaukee County and as required by the EGLE grant, RRS identified the top five needs and the top three materials management projects that Missaukee County should consider.

TOP FIVE NEEDS:

1. Sustainable funding for program growth
2. Consistent education and outreach
3. At least one Center for Hard to Recycle Materials (CHaRM)
4. Hub-and-spoke collections for key materials, particularly recyclables and yard/food waste
5. More frequent household hazardous waste collection opportunities

TOP THREE MATERIALS MANAGEMENT PROJECTS:

Based on the top five needs above, RRS recommends Missaukee County focus on three projects that could have significant impact on accessibility, awareness, and sustainable funding for programs and services.

1. Engage County and municipal leaders in conversations about materials management solutions in light of changes in state law.
2. Evaluate the funding and infrastructure needed to regularly or periodically collect additional materials, including more frequent household hazardous waste events, mattresses, food waste, and other difficult to recycling items.
3. Develop consistent recycling outreach materials in partnership with the hauler, the processor, the mills, and, as appropriate, the region.

STAKEHOLDERS

A stakeholder list was developed in collaboration with each county recycling contact to determine priority county, municipal, and other invested stakeholders. Perspectives were sought from either direct interview (in person or via phone) or through a set of questions distributed via email. Emails were sent at least twice seeking feedback.

| First | Last | Organization | Primary Stakeholder Type | Contact Type |
|-----------|-------------------|--|--------------------------|-----------------------|
| Linda | Hartshorne-Shafer | Missaukee County | Planning Administrator | Email |
| Elizabeth | Vogel | Missaukee County | Recycling Coordinator | Email |
| Mark | Bevelhymer | GFL/American Waste | hauler | In-person |
| Todd | Harland | Republic Services | hauler | Email |
| Jill | Reynolds | Waste Management | hauler | Email |
| Sarna | Salzman | SEEDS | community organization | In-person |
| Ann | Rogers | Northern Michigan Environmental Action Council | community organization | Email |
| Lan | Bridson | Missaukee County | county official | Contact not available |
| Frank | Vanderwal | Missaukee County | county official | Email |
| Pamela | Niebrzydowski | Missaukee County | county official | Email |
| Roger | Ouwinga | Missaukee County | county official | Contact not available |
| Dean | Smallegan | Missaukee County | county official | Email |
| Star | Hughston | Missaukee County | county official | Contact not available |
| Gary | Gladu | Missaukee County | county official | Email |
| Linda | Brown | Aetna Township | municipal official | Email |
| | | Bloomfield Township | municipal official | Email |
| | | Butterfield Township | municipal official | Email |
| Shelley | Sloat | Caldwell Township | municipal official | Email |
| | | Clam Union Township | municipal official | Email |
| | | Enterprise Township | municipal official | Email |
| | | Forest Township | municipal official | Email |
| | | Holland Township | municipal official | Email |

| | | | | |
|--|--|----------------------|--------------------|-------|
| | | Lake Township | municipal official | Email |
| | | Norwich Township | municipal official | Email |
| | | Pioneer Township | municipal official | Email |
| | | Reeder Township | municipal official | Email |
| | | Richland Township | municipal official | Email |
| | | Riverside Township | municipal official | Email |
| | | West Branch Township | municipal official | Email |
| | | City of Lake City | municipal official | Email |
| | | City of McBain | municipal official | Email |

MISSAUKEE COUNTY - GAPS



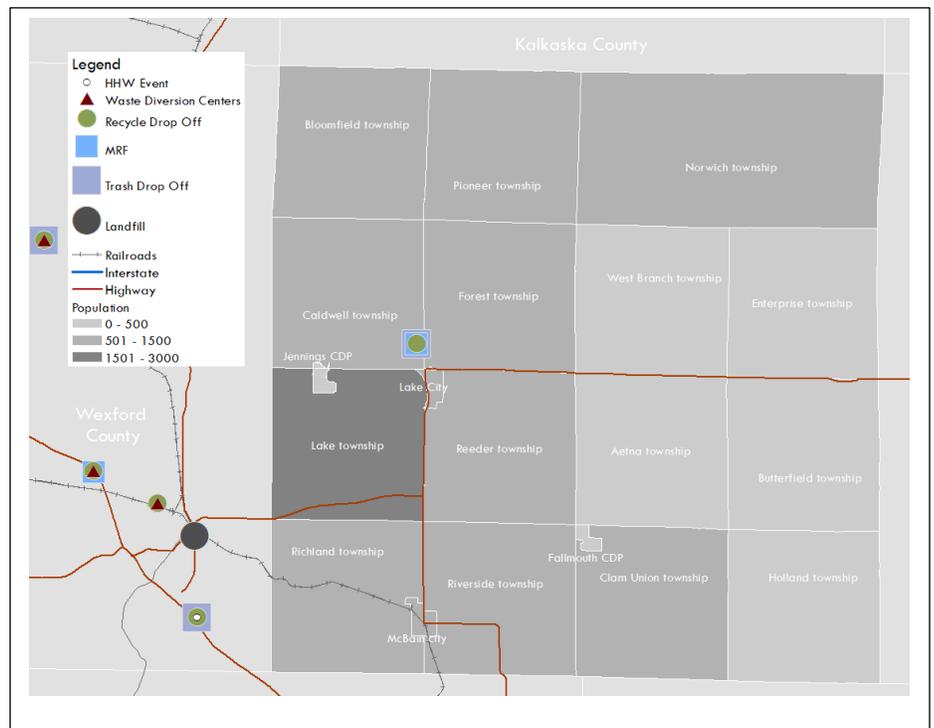
Community Access: Every household and business in a community needs convenient access to effective programs. This access can be through curbside collection, drop-off site locations, or a combination of the two. Material diversion and recovery needs to be as convenient as waste disposal as a first step sustainable materials management.

- Curbside recycling is not available in Missaukee County.
- Drop-off recycling is available at one location in the county.
- HHW services are provided through a single day event.

Processing Facilities: The material collected at the home and business needs to be processed before reaching the end market. It is crucial for the County to own or have access to processing facilities conveniently located, technologically advanced, and with enough capacity to handle the population's current and future material streams. These facilities act as the "middleman" between the local government and the end market.

- Missaukee County owns and operates a small materials recovery facility that also accepts trash and miscellaneous other recoverable items.

| | |
|--------------------------------|--------|
| Population: | 15,052 |
| Square Miles of Land Area: | 564.8 |
| Households: | 6,194 |
| Employer Establishments: | 299 |
| Countywide Curbside Trash: | NO |
| Countywide Curbside Recycling: | NO |
| Countywide Curbside Organics: | NO |
| Countywide Drop-off Trash: | YES |
| Countywide Drop-off Recycling: | YES |
| Countywide Drop-off Organics: | NO |
| Countywide Drop-off HHW: | YES |





Robust Markets: The success of end markets that receive the recyclables that are collected leads to success in growing a sustainable circular economy that ultimately allows material to be diverted from landfills over the long term. By increasing demand, Networks Northwest creates a ‘pull’ for additional materials that in turn, drives supply.

- There were no markets identified in Missaukee County for recovered materials.

Public/Private Partnerships: The business community and Networks Northwest will need to work closely together to find success. These partnerships can be found through funding opportunities with private companies, shared owner/operator agreements for MRFs and composting facilities, marketing and educational campaigns, and everything in between. Many retailers and packaging companies are realizing that local governments are responsible for the end of life for their products, thus leading to the sustainability of their product. Therefore, the benefits of public/private partnerships are becoming more apparent and accessible.

- There were no partnerships identified.

Supportive Policy: To reach high landfill diversion goals, policy will need to be crafted to ensure responsible recovery of material is the standard practice throughout the community, not just the best practice. A variety of policy approaches can be explored for Networks Northwest that have found success in other parts of the country and the globe.

- Missaukee County uses funding from a millage to operate the Missaukee County Recycling Center.

Education and Outreach: Once a strong infrastructure is in place, all citizens and businesses will need to know how to handle material in their home and at work. Recycling systems continue to evolve as material composition changes and technologies change. Thus, information needs to be put in front of the citizens of your community on a regular basis in many different ways to feed MRFs and end markets with good quality material, while continuing to decrease the material buried in landfills.

- There does not appear to be a consistent message about recycling locations and materials across the county.

SURVEY

Over 1,650 individuals across the Networks Northwest region took the survey that included questions about current participation in recycling-related activities as well as future needs and demographic information to inform trends. 16 people from Missaukee County participated in the survey.

This survey was not intended to meet statistical minimums. Rather, it was intended to be a snapshot to inform the current usage and future needs of the region. The set of questions that were asked was purposefully restricted to reduce the chance of survey fatigue, wherein participants close the survey prior to completing it.

The survey was intended to take no more than 10 minutes to complete, with participants being told in the introduction that it should take no more than 5-8 minutes. The survey was distributed by community recycling coordinators and Networks Northwest via social media and press release. Survey logic was built into the flow of questions to ensure that the appropriate type of question was asked based on previous responses. As such, participation rates in each question varied. The majority of survey respondents are current recyclers and is the result of the way the survey was distributed. Further studies to understand reasons for non-participation may be needed.

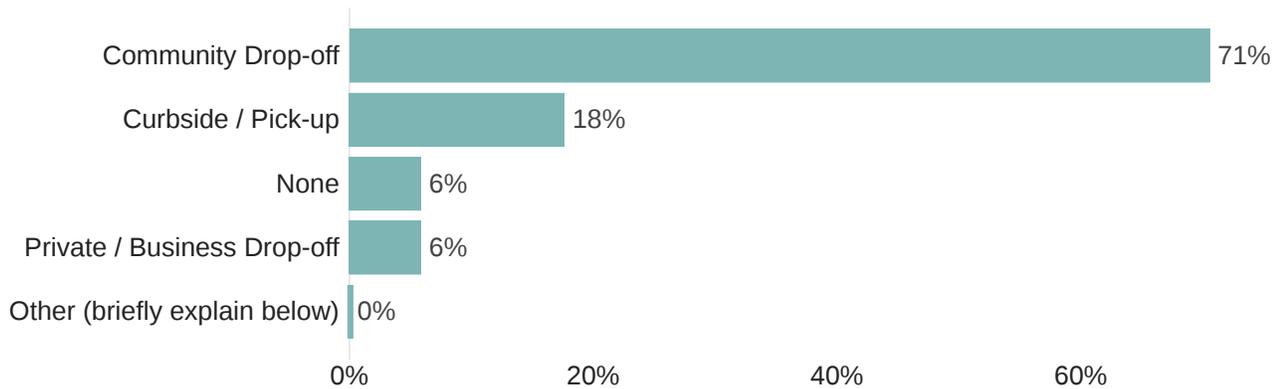
The full survey results for Missaukee County are on the following pages.

MMCE Networks Northwest Survey Results Summary (Missaukee County)*

Q1 - What recycling services are available in your area? (select all that apply)

SUMMARY - 71% of Missaukee County residents have access to Community Drop-off recycling services, and a few have access to Curbside Pick-up recycling services.

16 Responses



Q1 - "Other" text responses

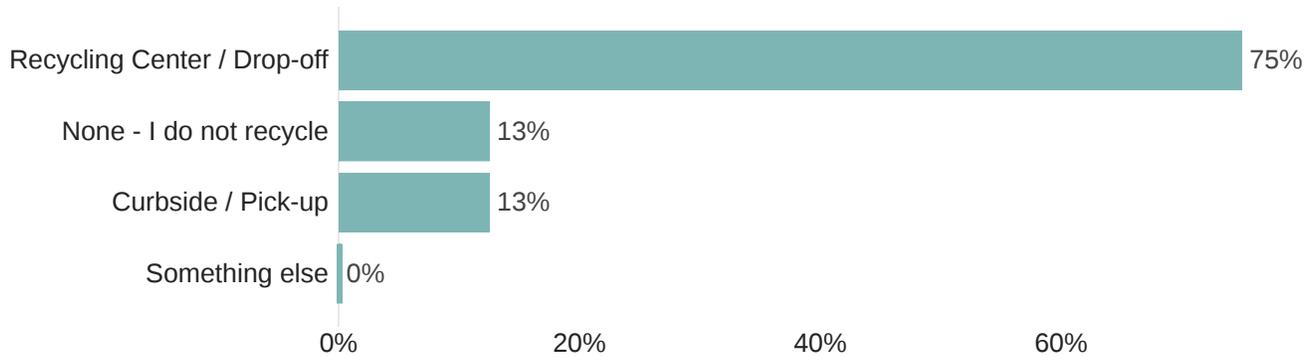
No data found - your filters may be too exclusive!

*Very low base size (n<30) for county. With only 16 responses, please do not consider data representative of the county and instead use only for its qualitative insights. Grey boxes stating, "No data found - your filters may be too exclusive," indicate questions with without responses from respondents as a result of low base size and/or non-required survey questions.

Q2 - What type of recycling services do you most often use, not including bottle returns?

SUMMARY - Given the stated availability of recycling services, it is unsurprising that Drop-off services are most often used. 13% don't recycle at all and 13% use Curbside Pick-up recycling services.

16 Responses



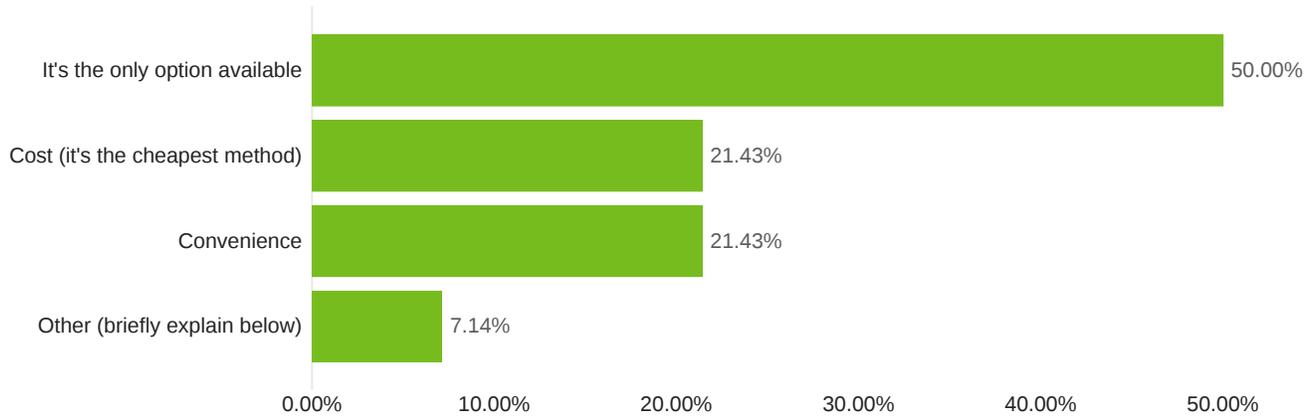
Q2 - What type of recycling services do you most often use, not including bottle returns? Text responses

No data found - your filters may be too exclusive!

Q3 - What is the most important reason you choose to recycle this way?

SUMMARY - Half of Missaukee residents chose their method of recycling because it is the only option offered.

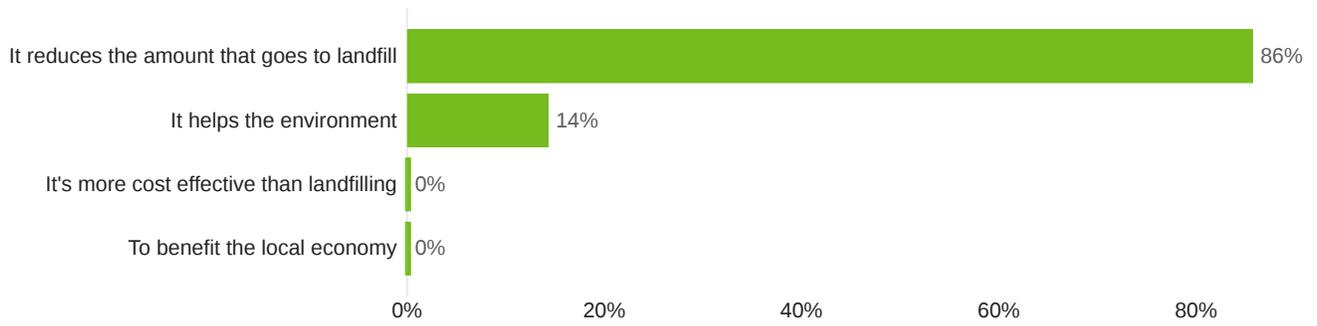
14 Responses



Q4 - Why do you recycle?

SUMMARY - 86% recycle as a means to reduce the amount of waste headed to landfills. 14% do so for environmental reasons.

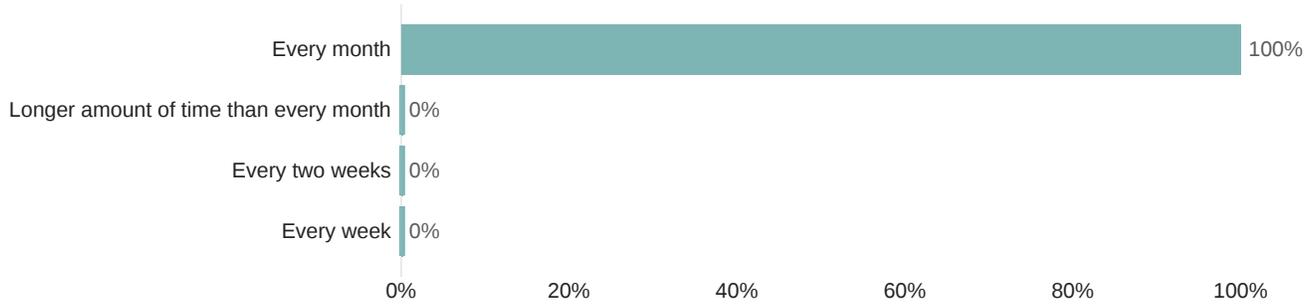
14 Responses



Q5 - How often do you recycle using curbside / pick-up?

SUMMARY - Of those who are offered Curbside Pick-up services, all use the service every month.

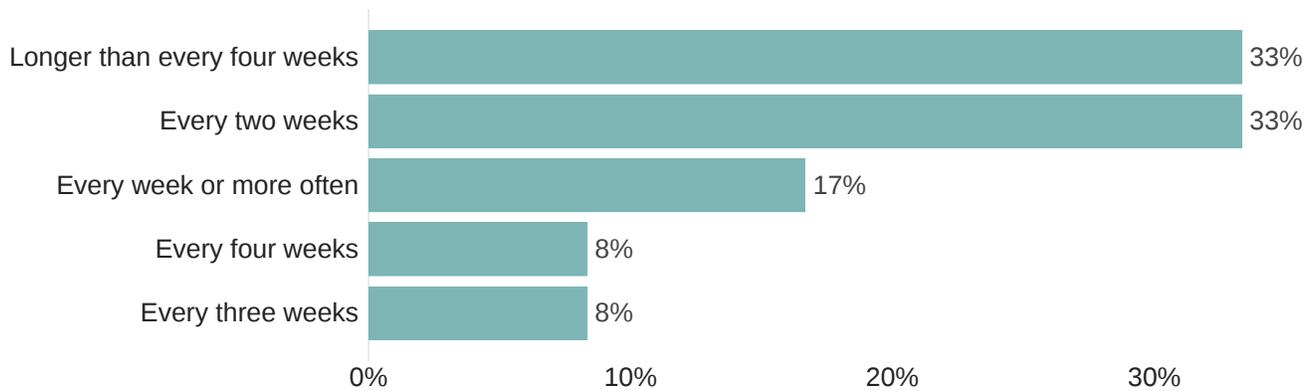
2 Responses



Q6 - How often do you recycle using a Recycling Center or drop-off?

SUMMARY - Those with access to Drop-off recycling services to are likely to use the service either every other week or longer than every month.

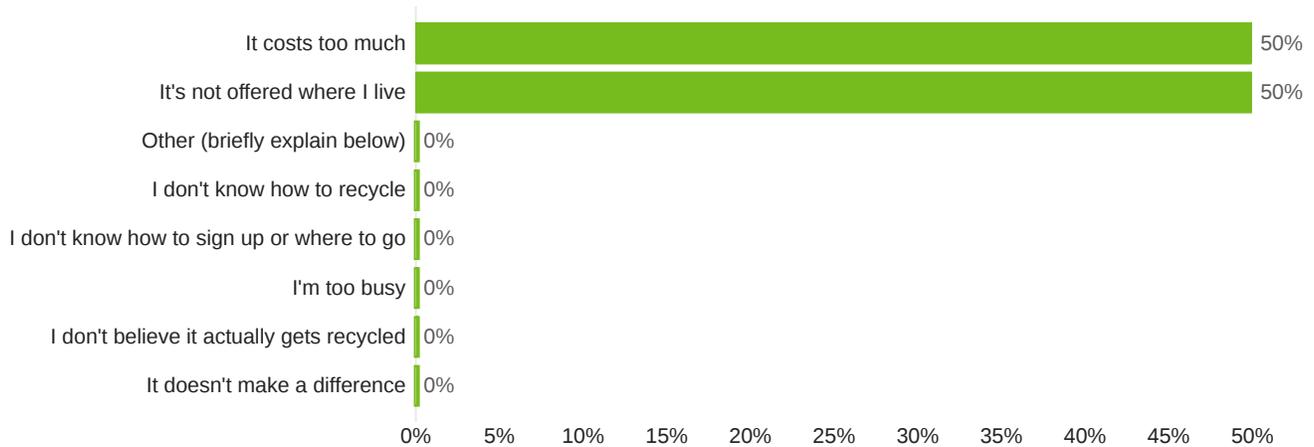
12 Responses



Q7 - What is the most significant reason you do not recycle?

SUMMARY - Cost and accessibility are the reasons that two individuals do not recycle.

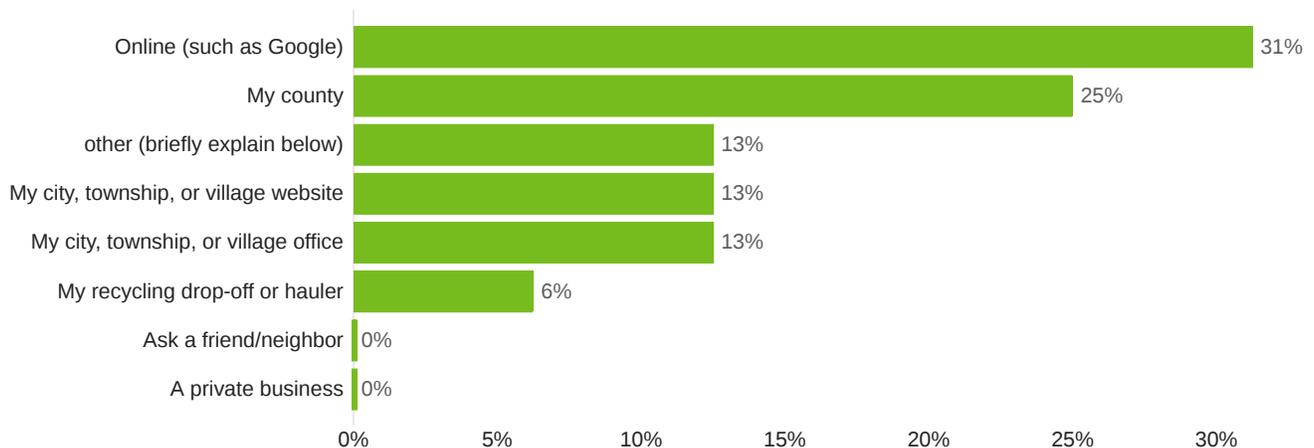
2 Responses



Q8 - If you had questions about recycling, where would you first seek out information?

SUMMARY - 57% first look towards their municipality and recycling providers to answer questions about recycling. 31% seek information from Google. And, a few others get information from Missaukee Conservation District.

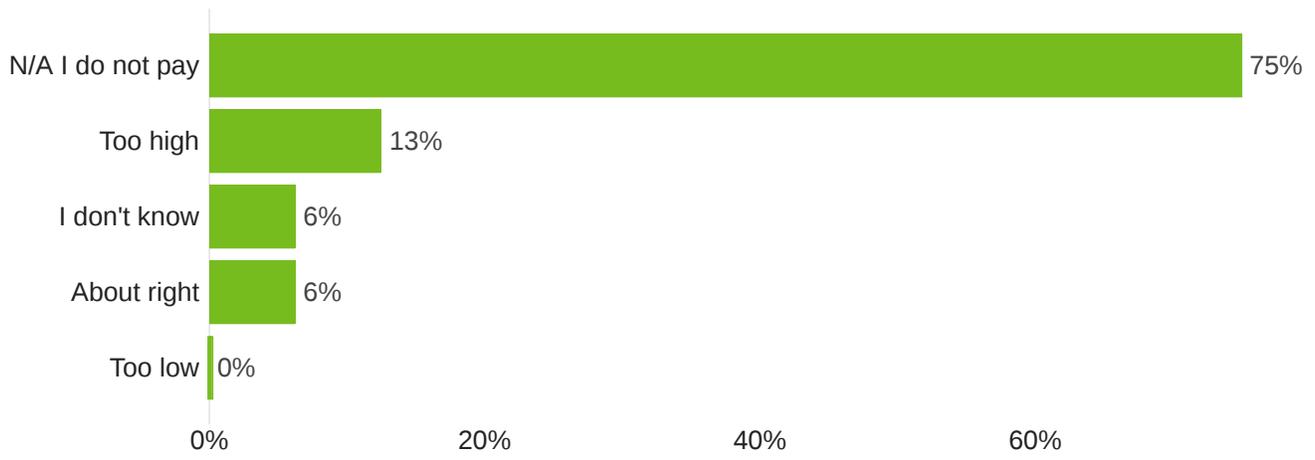
16 Responses



Q9 - Do you think the cost of recycling is too high, about right or too low? Please respond even if you do not recycle.

SUMMARY - 75% do not pay for recycling. While 13% feel that the price of recycling is too high. NOTE: One potential problem with this question, is that the survey did not capture whether the respondent knows if the cost of recycling is bundled into the cost of their trash pickup.

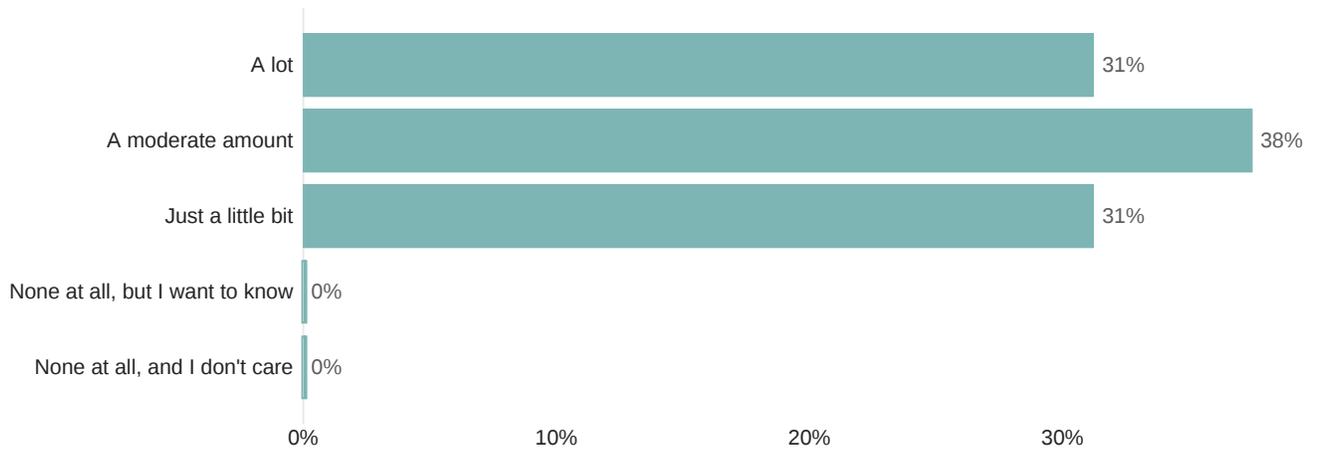
16 Responses



Q10 - How much do you know about recycling, generally speaking?

SUMMARY - Missaukee residents are about equally split between feeling that they know a lot, know a moderate amount, and know just a little bit about recycling.

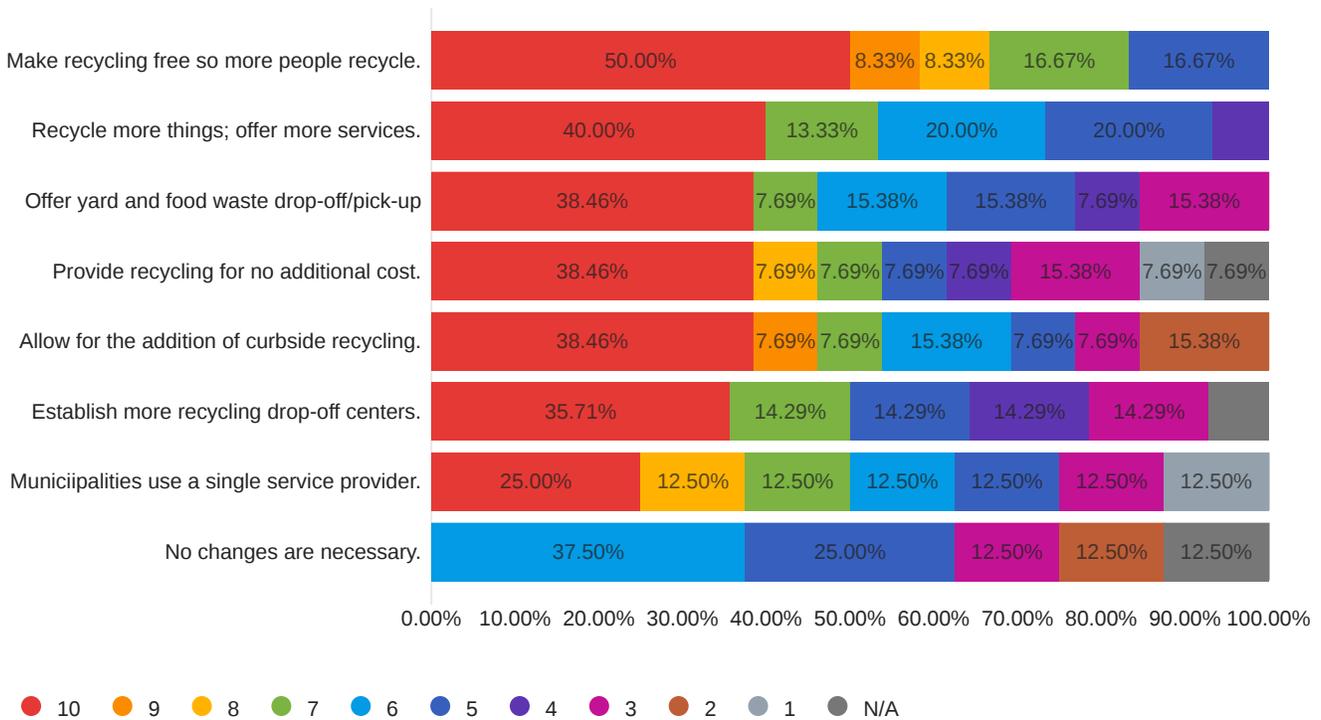
16 Responses



Q11 - Leaders in Northwest Michigan are exploring ways to improve recycling and other waste management services offered to residents and businesses. On a scale of 1-10, with 10 being VERY IMPORTANT and 0 being NOT AT ALL IMPORTANT, how important are each of the following potential improvements to you? If you already have access to an option, select 'not applicable'

SUMMARY - Although residents who currently recycle feel that recycling costs either the right amount or little to nothing for them, they express an importance for recycling to be completely free to allow for greater accessibility and participation from more people. As well, residents would like to see more recycling services to support the recovery of items not currently recycled in their areas, such as yard and food waste pick-up.

16 Responses

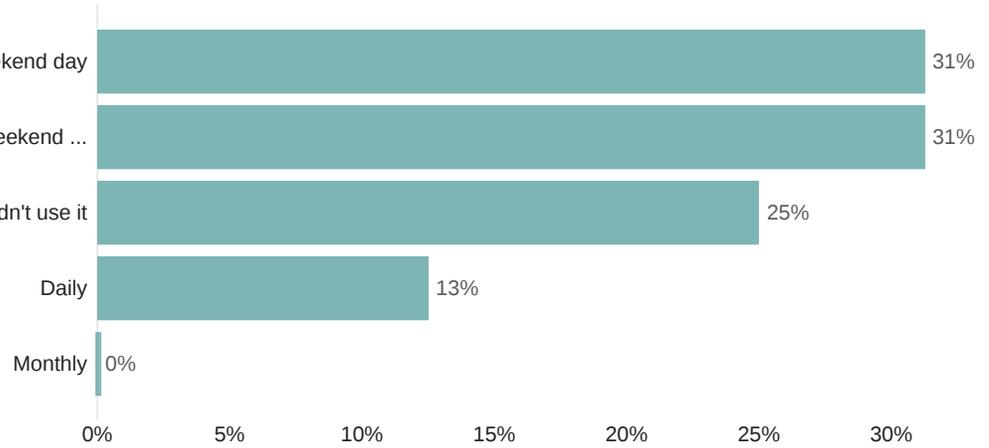


Select a field

Q12 - If a convenient recycling or food waste drop-off site were available close to where you live, how often would you want it open?

SUMMARY - 62% of people would like a Drop-off site open at least once per week on the weekend day. While a quarter would not use a drop-off site regardless of when it was open.

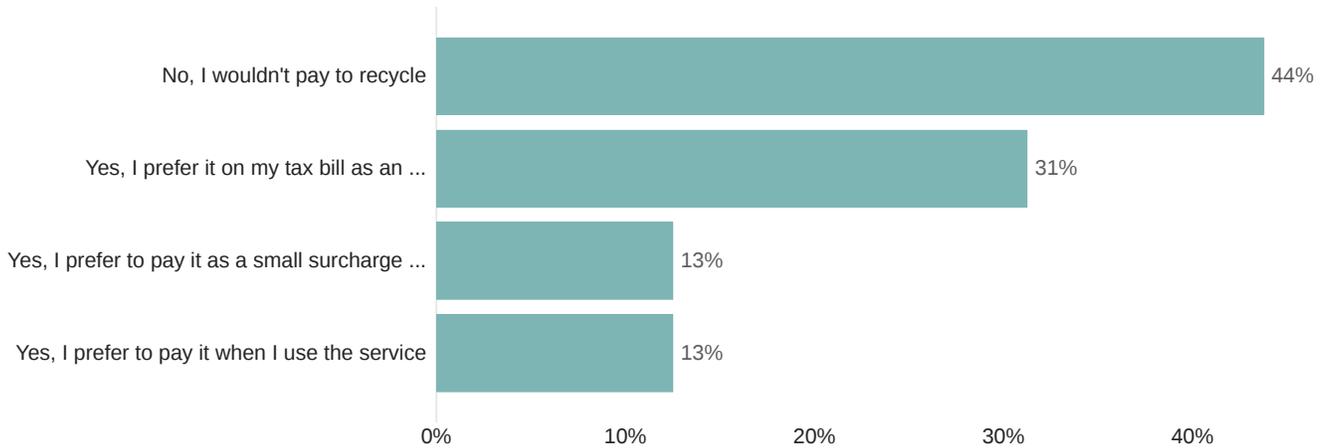
16 Responses



Q13 - Would you be willing to pay a small fee to have convenient access to recycling or food waste collection?

SUMMARY - Most residents do not want to pay for recycling or food waste collection services. But 31% prefer to pay for recycling or food waste collection services as an assessment or fee on their tax bill.

16 Responses

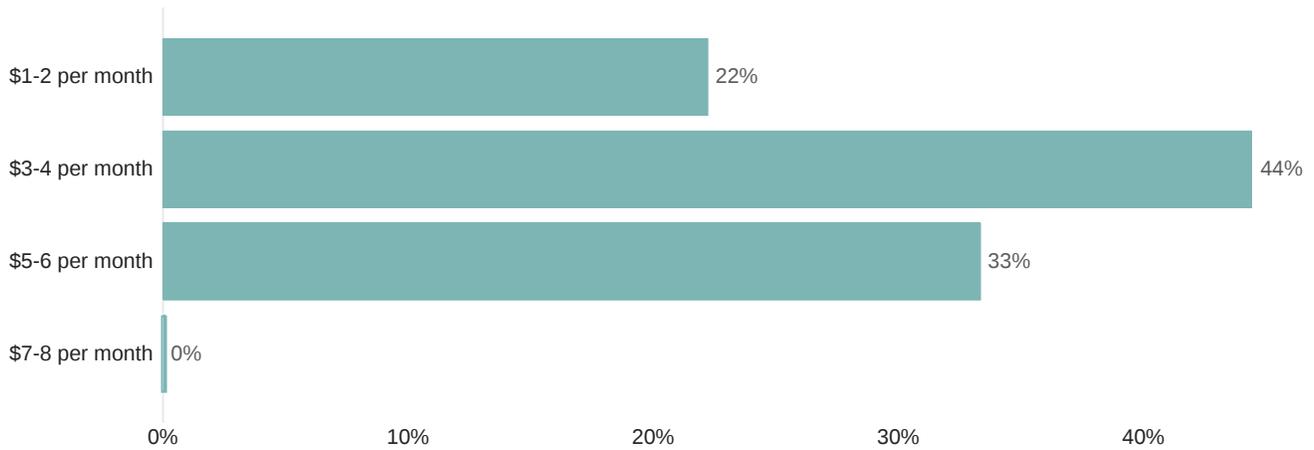


Q14 - What would you be willing to spend to get convenient access to recycling or food waste collection?

SUMMARY - A sizeable fraction of respondents (44%) would not pay anything for convenient access to recycling or food waste collection. Of those willing to pay for recycling or food waste collection, ALL want to pay \$6 or less a month for recycling or food waste collection; \$3-4 per month is most preferred.

Note: 44% of respondents would not pay anything.

9 Responses



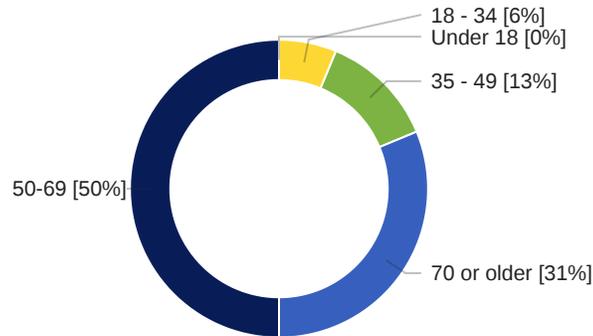
Demographics and Background of Respondents

SUMMARY:

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- Respondents are predominately female.
- 75% have some college education or higher.
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- 88% live in Missaukee County year around.
- Unsurprisingly, because of the higher age range of our respondents, 81% do not have children living at home who are school age or younger.
- 100% of respondents are white with no representation of other racial or ethnic groups.
- Median yearly household income falls around \$50,000 - \$75,000 per year.
- N/A - no responses.

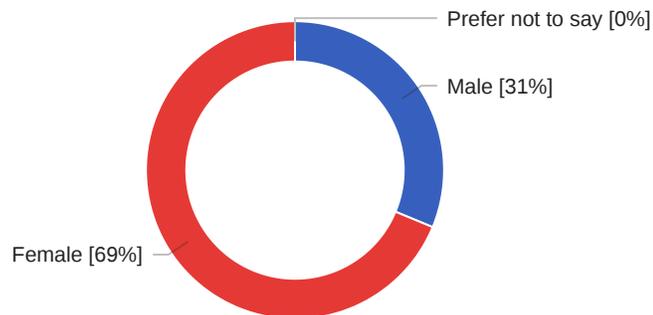
Q16 - Which of these best fits your age?

16 Responses



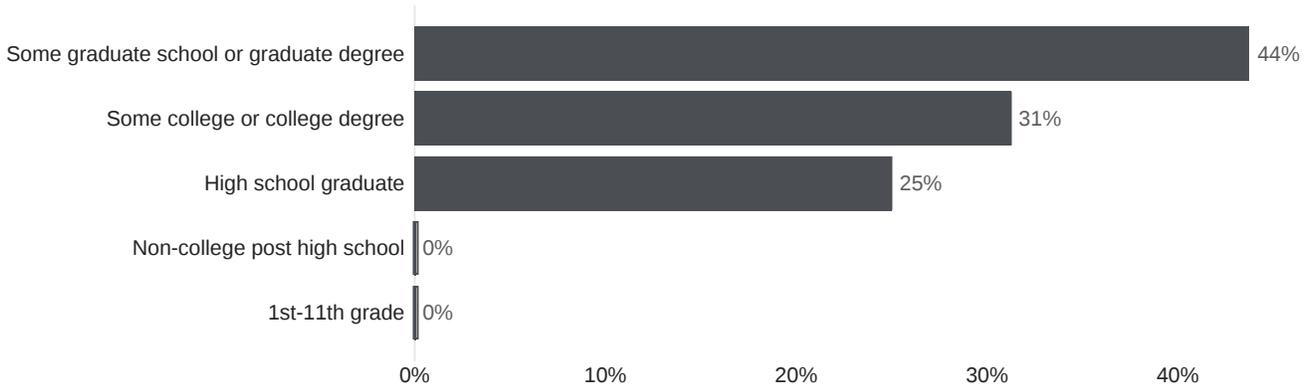
Q17 - What is your gender?

16 Responses



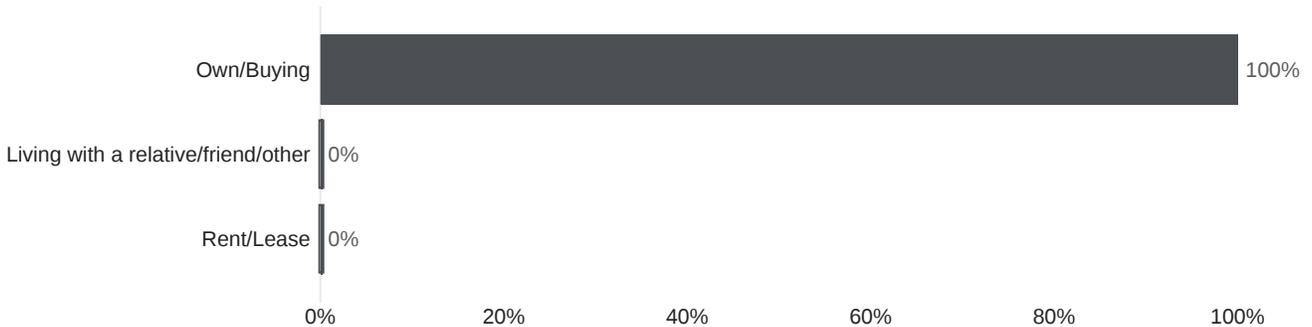
Q18 - What is the last grade or level of schooling you completed?

16 Responses



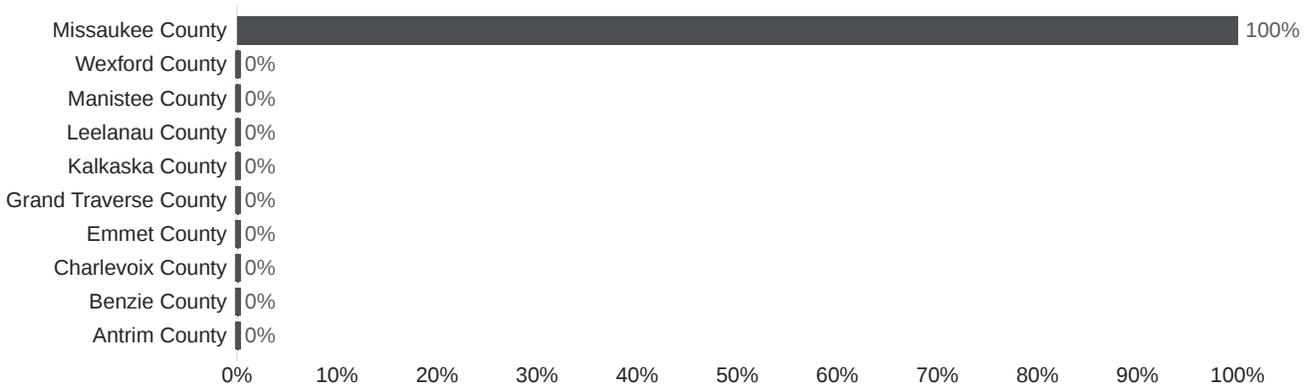
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16 Responses



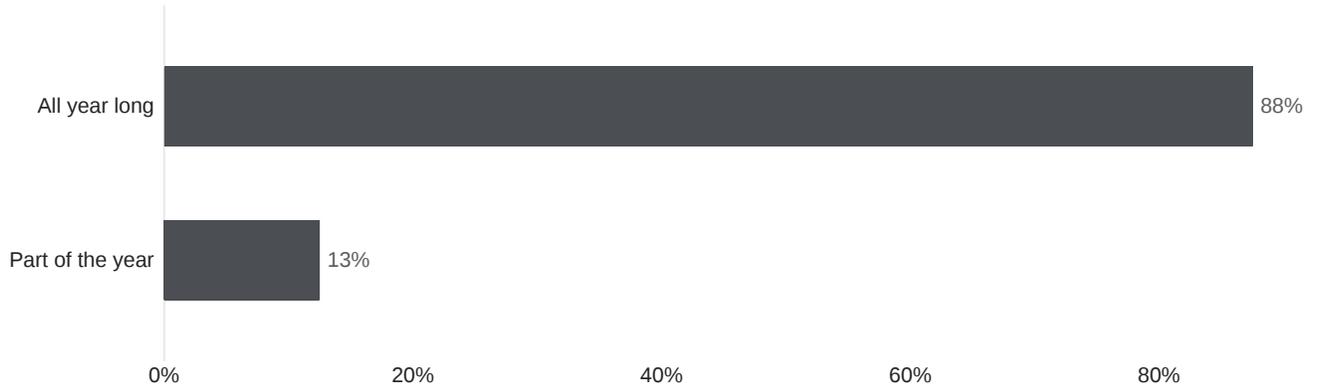
Q20 - County

16 Responses



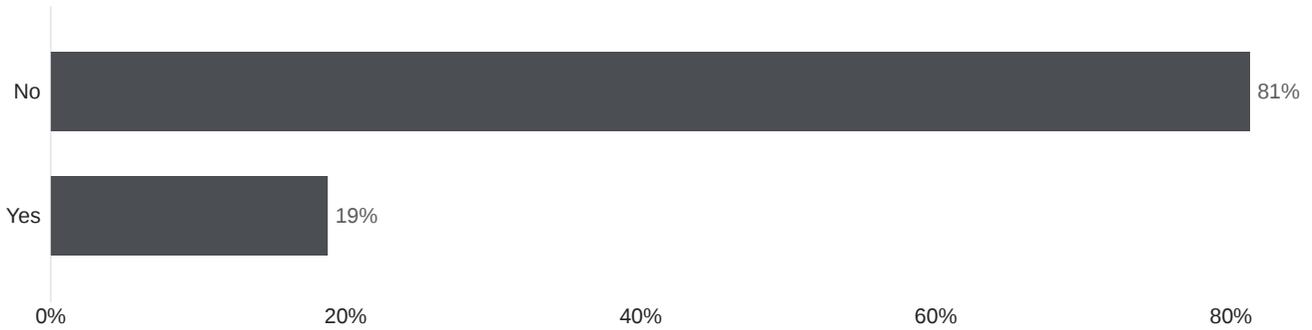
Q21 - How much of the year do you live in this county?

16 Responses



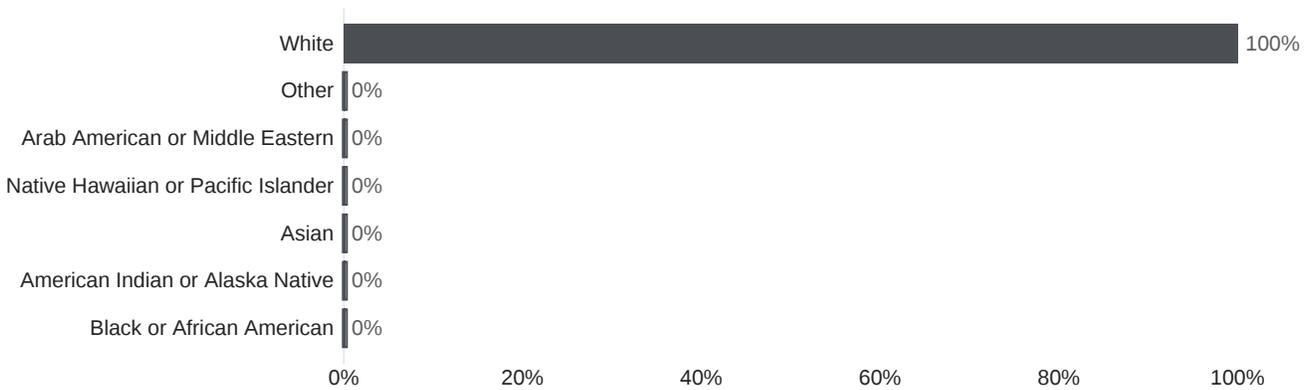
Q22 - Do you have children living in your home who are school age or younger?

16 Responses



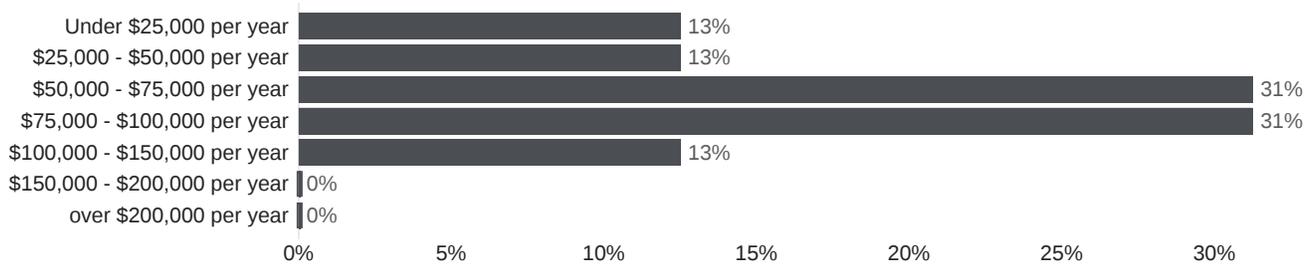
Q23 - Which racial or ethnic group best describes you?

16 Responses



Q24 - In which of the following categories does your total yearly household income fall, including everyone in the household? If retired, please select an income category based on retirement income.

16 Responses



Q27 - As a renter/lessee, do you have recycling available on the property where you live?

No data found - your filters may be too exclusive!



Supplement: Wexford County Materials Management County Engagement

March 1, 2023

PREPARED BY:

RRS  | [recycle.com](https://www.recycle.com)

COMMISSIONED BY:

 **Networks
Northwest**
Talent / Business / Community

EXECUTIVE SUMMARY

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The MMCE grant process is intended to help counties in the transition to materials management and begin to identify partnership within regions and counties, understand current materials management deficiencies and opportunities, highlight future changes to the planning process, and outline steps that can occur now at the county and regional levels to assist with the development of future materials management programs and infrastructure.

Key improvements and recommendations for counties within Networks Northwest are found in the respective sections in the report. RRS identified forty (40) recommendations that are categorized into seven areas which form the basis for a robust materials management system:

- Community Access
- Facilities and Infrastructure
- Robust Markets, including Materials of Focus
- Public/Private Partnerships
- Supportive Policy
- Education and Outreach
- Regional Planning

Specific to Wexford County and as required by the EGLE grant, RRS identified the top five needs and the top three materials management projects that Wexford County should consider.

TOP FIVE NEEDS:

1. Drop-off recycling stations + assurance of curbside recycling, where populations justify the service
2. Consistent education and outreach
3. At least one Center for Hard to Recycle Materials (CHaRM)
4. Hub-and-spoke collections for key materials
5. More frequent household hazardous waste collection opportunities

TOP THREE MATERIALS MANAGEMENT PROJECTS:

Based on the top five needs above, RRS recommends Wexford County focus on three projects that could have significant impact on accessibility, awareness, and sustainable funding for programs and services.

1. Engage County and municipal leaders in conversations about materials management solutions in light of changes in state law.
2. Evaluate the funding and infrastructure needed to regularly or periodically collect additional materials, including more frequent household hazardous waste events, mattresses, food waste, and other difficult to recycling items.
3. Develop consistent recycling outreach materials in partnership with the hauler, the processor, the mills, and, as appropriate, the region.

STAKEHOLDERS

A stakeholder list was developed in collaboration with each county recycling contact to determine priority county, municipal, and other invested stakeholders. Perspectives were sought from either direct interview (in person or via phone) or through a set of questions distributed via email. Emails were sent at least twice seeking feedback.

| First | Last | Organization | Primary Stakeholder Type | Contact Type |
|----------|-------------|--|--------------------------|---------------------------------------|
| Joe | Porterfield | Wexford County | County Administrator | primary |
| Mark | Bevelhymmer | GFL/American Waste | hauler | In-Person |
| Todd | Harland | Republic Services | hauler | Email |
| Jill | Reynolds | Waste Management | hauler | Email |
| Sarna | Salzman | SEEDS | community organization | In-person |
| Ann | Rogers | Northern Michigan Environmental Action Council | community organization | Email |
| Joseph | Hurlburt | Wexford County | county official | Email via County Administrative Staff |
| Michael | Musta | Wexford County | county official | Email via County Administrative Staff |
| Ben | Townsend | Wexford County | county official | Email via County Administrative Staff |
| Kathleen | Adams | Wexford County | county official | Email via County Administrative Staff |
| Michael | Bush | Wexford County | county official | Email via County Administrative Staff |
| Julie | Theobald | Wexford County | county official | Email via County Administrative Staff |
| Gary | Taylor | Wexford County | county official | Email via County Administrative Staff |
| Jason | Baughan | Wexford County | county official | Email via County Administrative Staff |
| Brian | Potter | Wexford County | county official | Email via County Administrative Staff |

WEXFORD COUNTY - GAPS



Community Access: Every household and business in a community needs convenient access to effective programs. This access can be through curbside collection, drop-off site locations, or a combination of the two. Material diversion and recovery needs to be as convenient as waste disposal as a first step sustainable materials management.

- Curbside recycling is available in the City of Cadillac through a private hauler. It is not offered in the remainder of Wexford County.
- Drop-off recycling is available at one location in the county.
- HHW services are provided through a single day event.
- There are no organics collection locations for food or yard waste.

Processing Facilities: The material collected at the home and business needs to be processed before reaching the end market. It is crucial for the County to own or have access to processing facilities conveniently located, technologically advanced, and with enough capacity to handle the population's current and future material streams. These facilities act as the "middleman" between the local government and the end market.

- Wexford County has a small, privately owned materials recovery facility with baling capacity.

| | |
|--------------------------------|--------|
| Population: | 33,673 |
| Square Miles of Land Area: | 565.0 |
| Households: | 13,212 |
| Employer Establishments: | 882 |
| Countywide Curbside Trash: | NO |
| Countywide Curbside Recycling: | NO |
| Countywide Curbside Organics: | NO |
| Countywide Drop-off Trash: | NO |
| Countywide Drop-off Recycling: | NO |
| Countywide Drop-off Organics: | NO |
| Countywide Drop-off HHW: | YES |





Robust Markets: The success of end markets that receive the recyclables that are collected leads to success in growing a sustainable circular economy that ultimately allows material to be diverted from landfills over the long term. By increasing demand, Networks Northwest creates a 'pull' for additional materials that in turn, drives supply.

- There were no markets identified in Wexford County for recovered materials.

Public/Private Partnerships: The business community and Networks Northwest will need to work closely together to find success. These partnerships can be found through funding opportunities with private companies, shared owner/operator agreements for MRFs and composting facilities, marketing and educational campaigns, and everything in between. Many retailers and packaging companies are realizing that local governments are responsible for the end of life for their products, thus leading to the sustainability of their product. Therefore, the benefits of public/private partnerships are becoming more apparent and accessible.

- There are no public/private partnerships in Wexford County.

Supportive Policy: To reach high landfill diversion goals, policy will need to be crafted to ensure responsible recovery of material is the standard practice throughout the community, not just the best practice. A variety of policy approaches can be explored for Networks Northwest that have found success in other parts of the country and the globe.

- Wexford County does not use policy to fund or ensure convenient access to programs.

Education and Outreach: Once a strong infrastructure is in place, all citizens and businesses will need to know how to handle material in their home and at work. Recycling systems continue to evolve as material composition changes and technologies change. Thus, information needs to be put in front of the citizens of your community on a regular basis in many different ways to feed MRFs and end markets with good quality material, while continuing to decrease the material buried in landfills.

- There does not appear to be a consistent message about recycling locations and materials across the county.

SURVEY

Over 1,650 individuals across the Networks Northwest region took the survey that included questions about current participation in recycling-related activities as well as future needs and demographic information to inform trends. 77 people from Wexford County participated in the survey.

This survey was not intended to meet statistical minimums. Rather, it was intended to be a snapshot to inform the current usage and future needs of the region. The set of questions that were asked was purposefully restricted to reduce the chance of survey fatigue, wherein participants close the survey prior to completing it.

The survey was intended to take no more than 10 minutes to complete, with participants being told in the introduction that it should take no more than 5-8 minutes. The survey was distributed by community recycling coordinators and Networks Northwest via social media and press release. Survey logic was built into the flow of questions to ensure that the appropriate type of question was asked based on previous responses. As such, participation rates in each question varied. The majority of survey respondents are current recyclers and is the result of the way the survey was distributed. Further studies to understand reasons for non-participation may be needed.

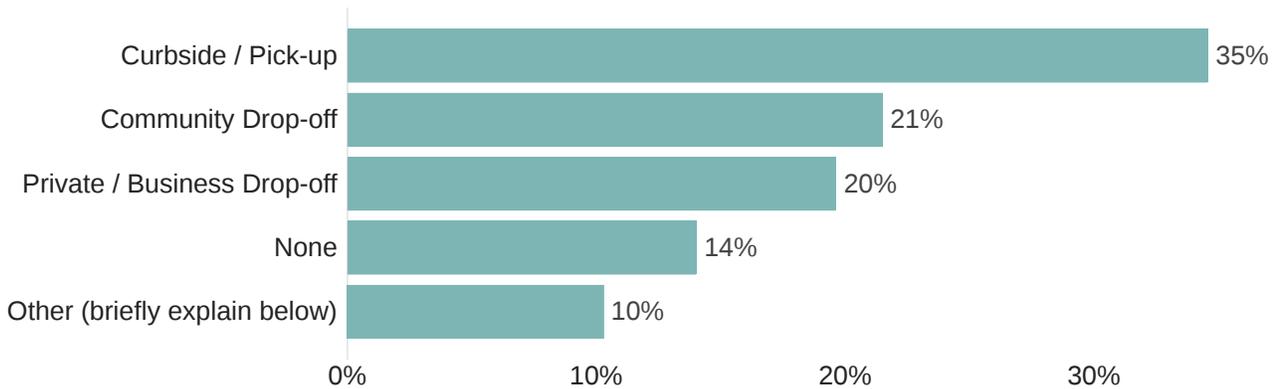
The full survey results for Wexford County are on the following pages.

MMCE Networks Northwest Survey Results Summary (Wexford County)

Q1 - What recycling services are available in your area? (select all that apply)

SUMMARY - 17% express having access to both Curbside Pick-up and Community Drop-off recycling services. Many noted that these services are offered through private businesses, such as Ms Green, for a fee.

77 Responses



Q1 - "Other" text responses

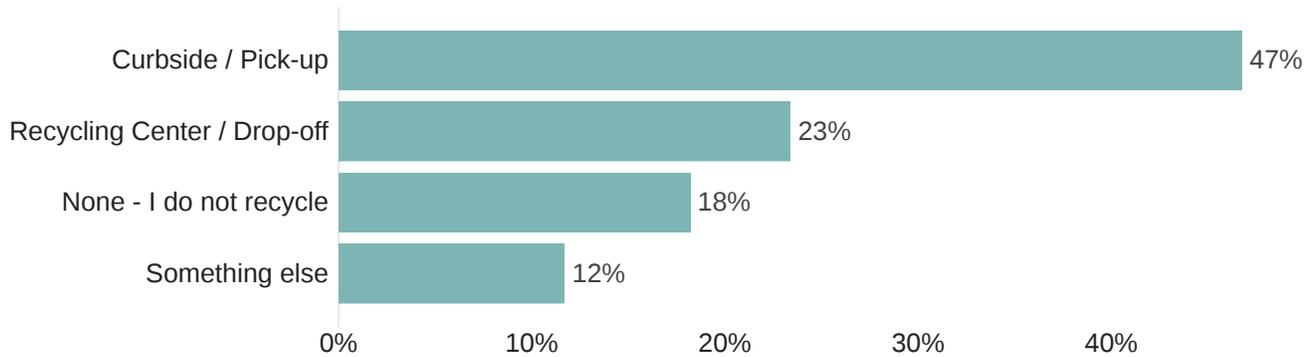
11 Responses



Q2 - What type of recycling services do you most often use, not including bottle returns?

SUMMARY - Although most use Curbside Pick-up recycling services many express traveling elsewhere, to a different county, to recycle. 18% do not recycle at all.

77 Responses



Q2 - What type of recycling services do you most often use, not including bottle returns? Text responses

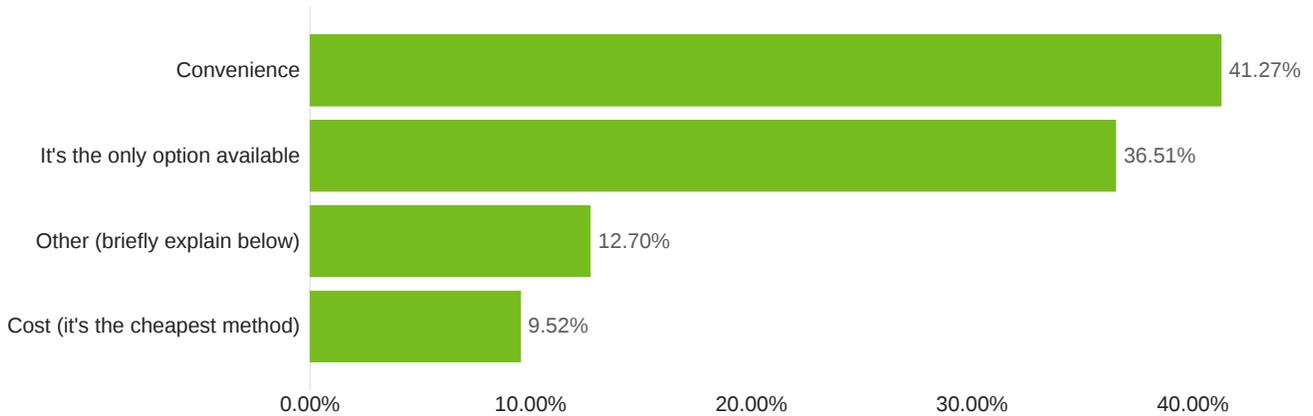
7 Responses



Q3 - What is the most important reason you choose to recycle this way?

SUMMARY - For Wexford residents, convenience is the leading reason for choosing the method of recycling.

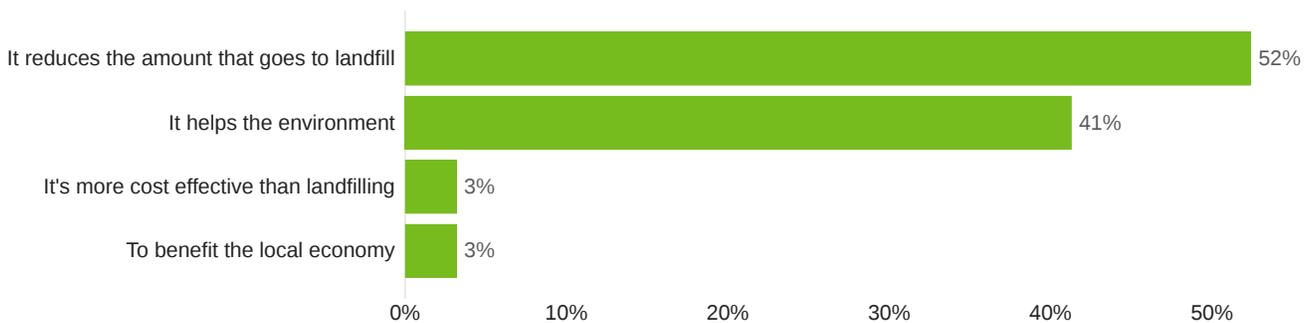
63 Responses



Q4 - Why do you recycle?

SUMMARY - 52% recycle as a means to reduce the amount of waste headed to landfills. 41% do so for environmental reasons.

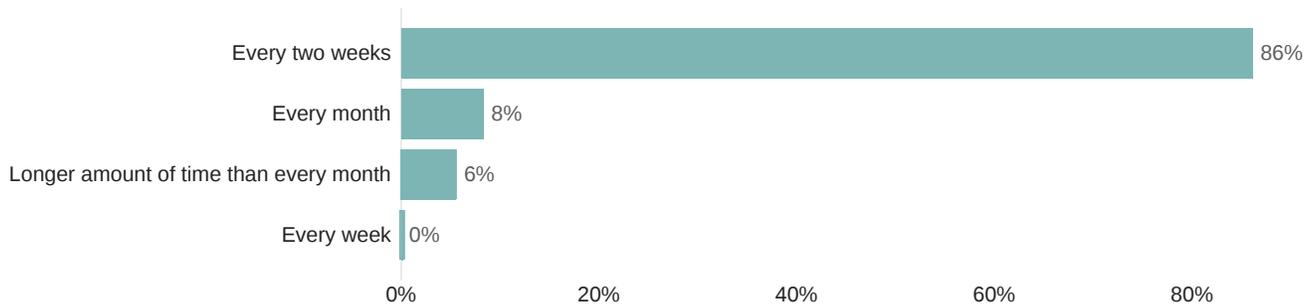
63 Responses



Q5 - How often do you recycle using curbside / pick-up?

SUMMARY - Of those who are offered Curbside Pick-up services, 86% use the service every two weeks and no one uses it weekly.

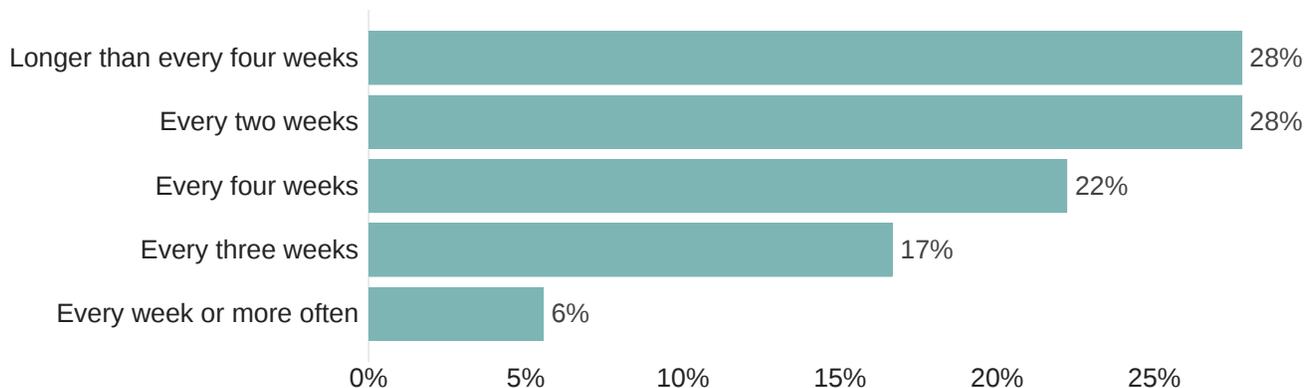
36 Responses



Q6 - How often do you recycle using a Recycling Center or drop-off?

SUMMARY - Those with access to Drop-off recycling services are likely to use the service either every other week, monthly, or longer than monthly. This is likely due to distances required to travel to the Drop-off sites.

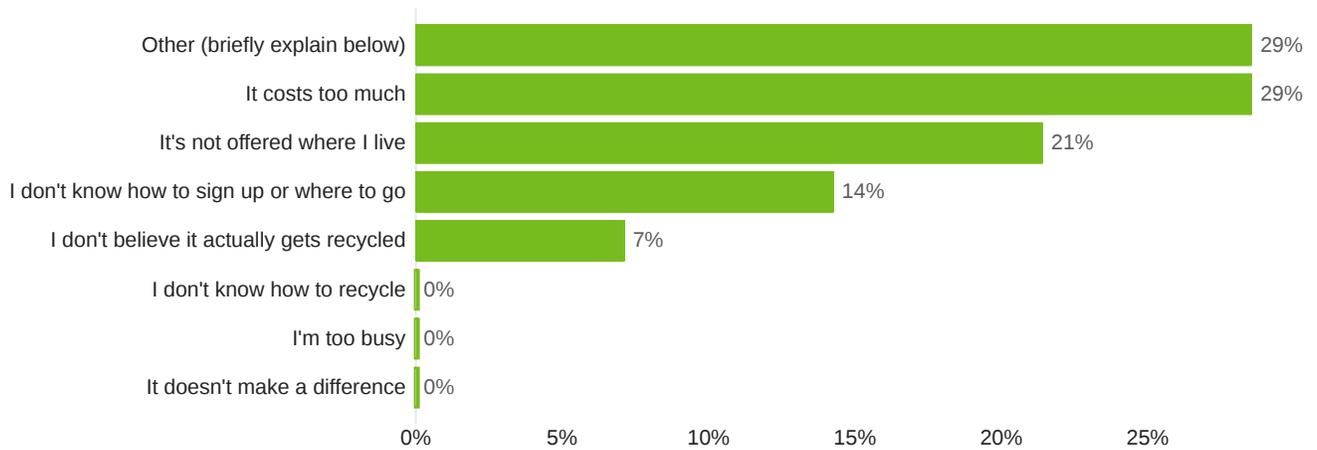
18 Responses



Q7 - What is the most significant reason you do not recycle?

SUMMARY - Of those who do not recycle, all express sentiments of inconvenience, high costs, and no curbside recycling offered.

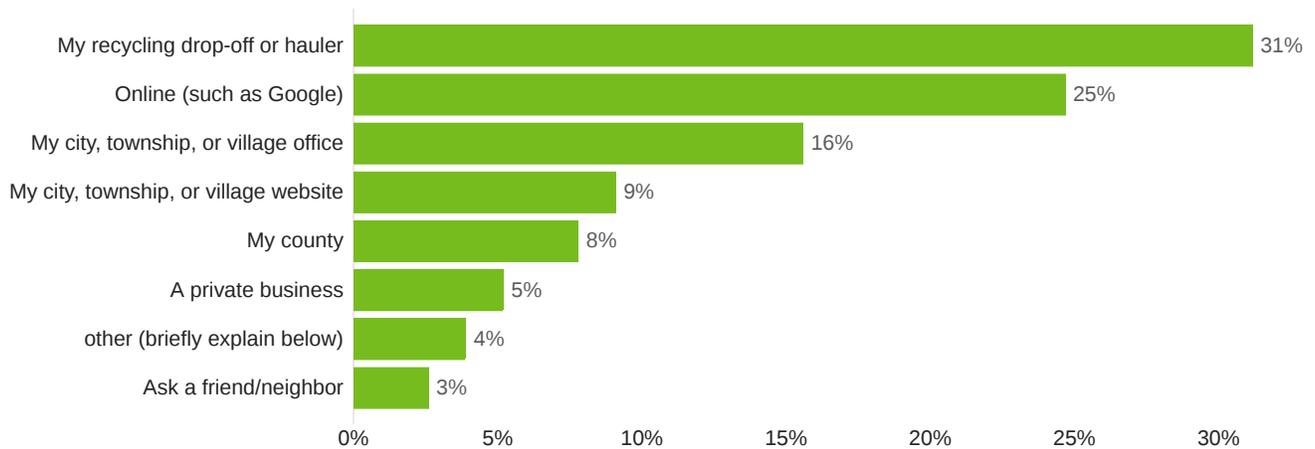
14 Responses



Q8 - If you had questions about recycling, where would you first seek out information?

SUMMARY - 64% first look towards their municipality and recycling providers to answers questions about recycling. 33% seek information from Google, friends, and private businesses. One individual expressed, "There is no help in Wexford County about recycling."

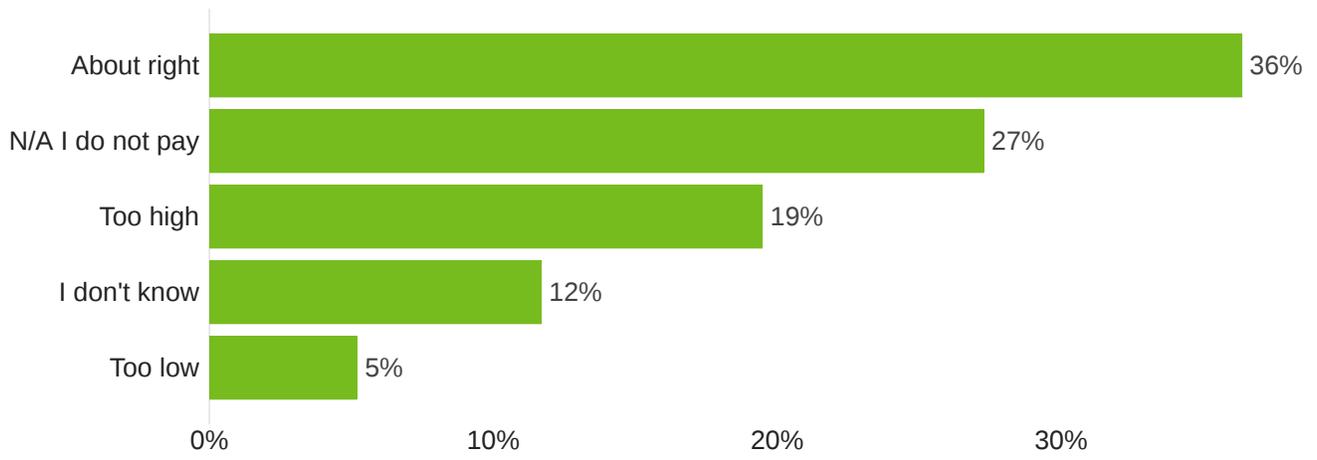
77 Responses



Q9 - Do you think the cost of recycling is too high, about right or too low? Please respond even if you do not recycle.

SUMMARY - 27% do not pay for recycling. While 36% feel that the price of recycling is about right. NOTE: One potential problem with this question, is that the survey did not capture whether the respondent knows if the cost of recycling is bundled into the cost of their trash pickup.

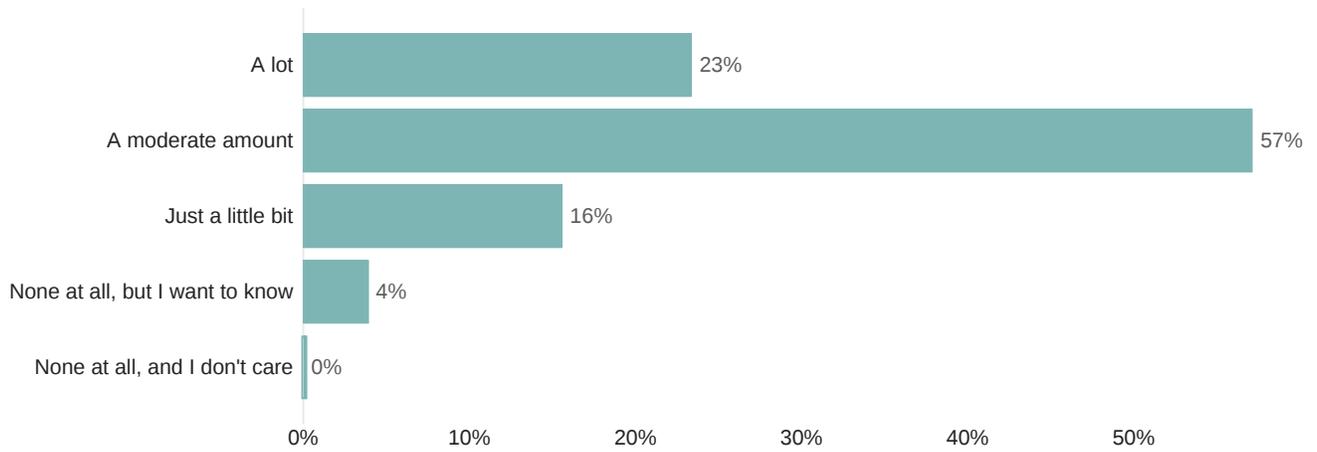
77 Responses



Q10 - How much do you know about recycling, generally speaking?

SUMMARY - A majority feels they know a moderate amount about recycling. Whereas only 23% feels that they know a lot.

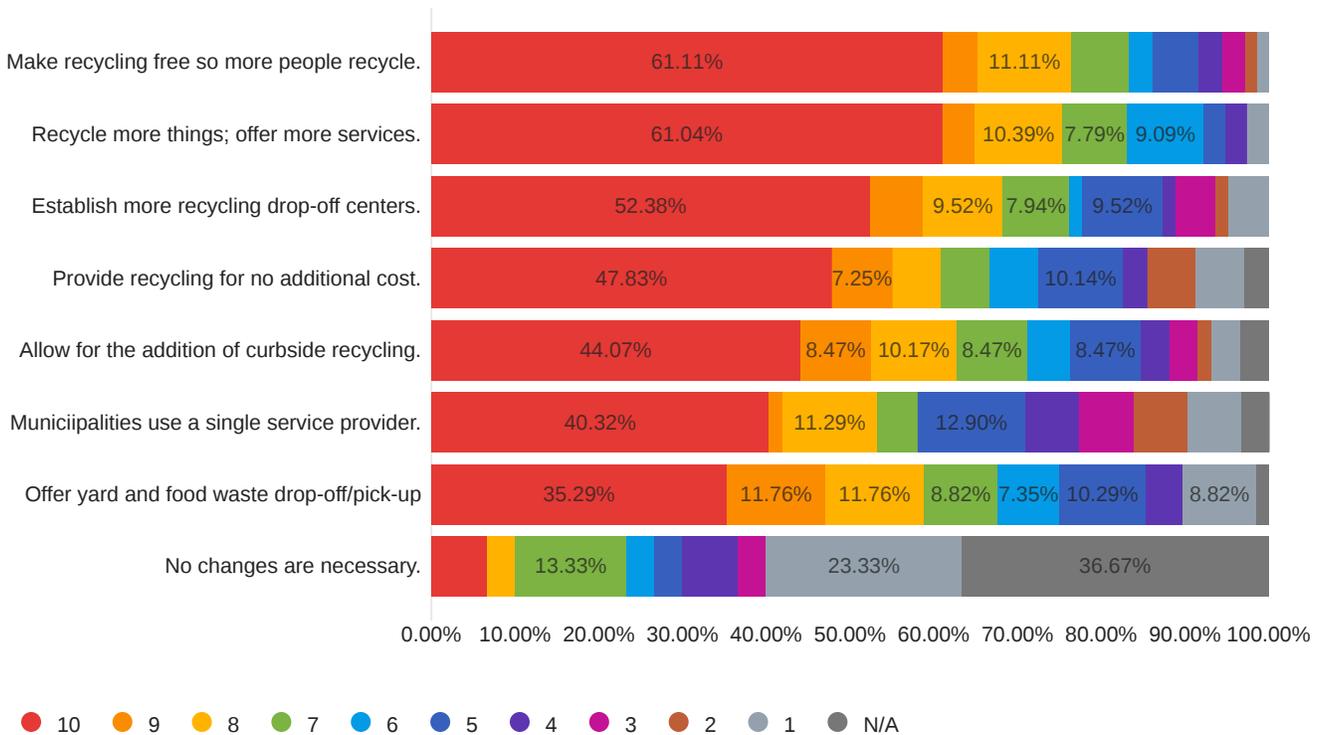
77 Responses



Q11 - Leaders in Northwest Michigan are exploring ways to improve recycling and other waste management services offered to residents and businesses. On a scale of 1-10, with 10 being VERY IMPORTANT and 0 being NOT AT ALL IMPORTANT, how important are each of the following potential improvements to you? If you already have access to an option, select 'not applicable'

SUMMARY - Although residents who currently recycle feel that recycling costs either the right amount or little to nothing for them, they express an importance for recycling to be completely free to allow for greater accessibility and participation from more people. As well, residents would like to see more recycling services to support the recovery of items not currently recycled in their area.

77 Responses

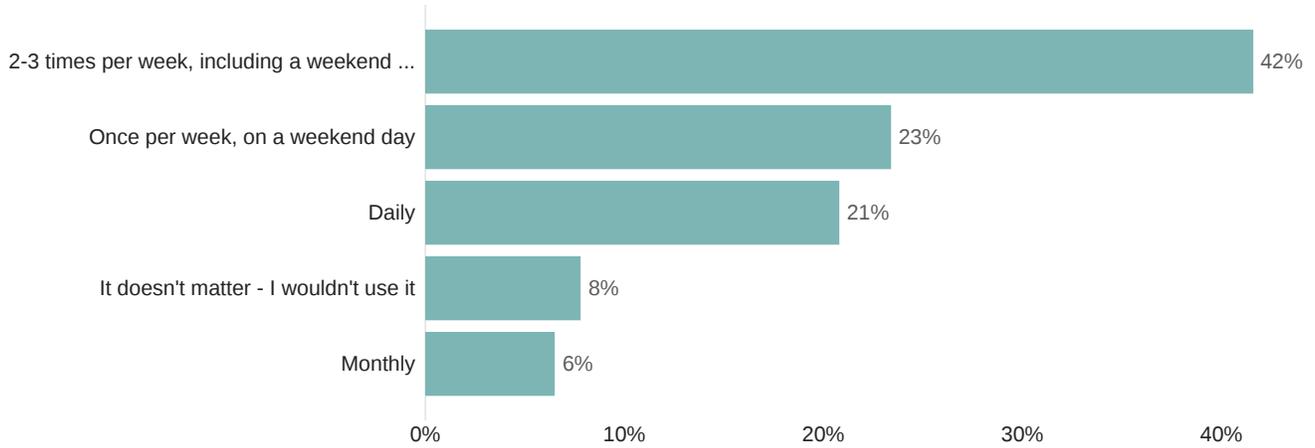


Select a field

Q12 - If a convenient recycling or food waste drop-off site were available close to where you live, how often would you want it open?

SUMMARY - 65% of people would like a Drop-off site open at least once per week on the weekend day. Less than a quarter would like Drop-off sites open daily.

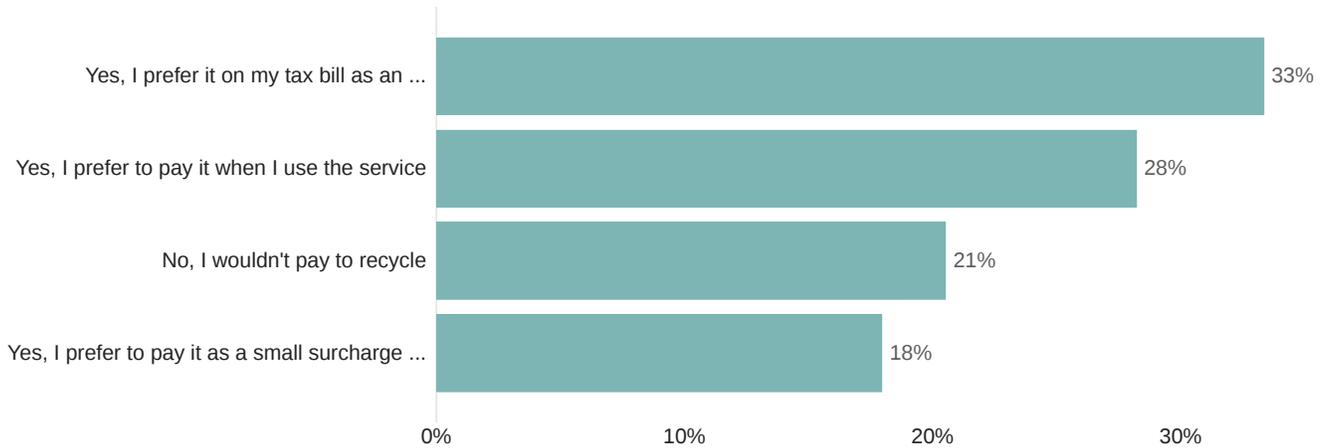
77 Responses



Q13 - Would you be willing to pay a small fee to have convenient access to recycling or food waste collection?

SUMMARY - Slightly less than a quarter of residents express a disinterest in paying for recycling. Instead, most prefer to have an assessment or fee on their tax bill or pay when they use the service.

77 Responses

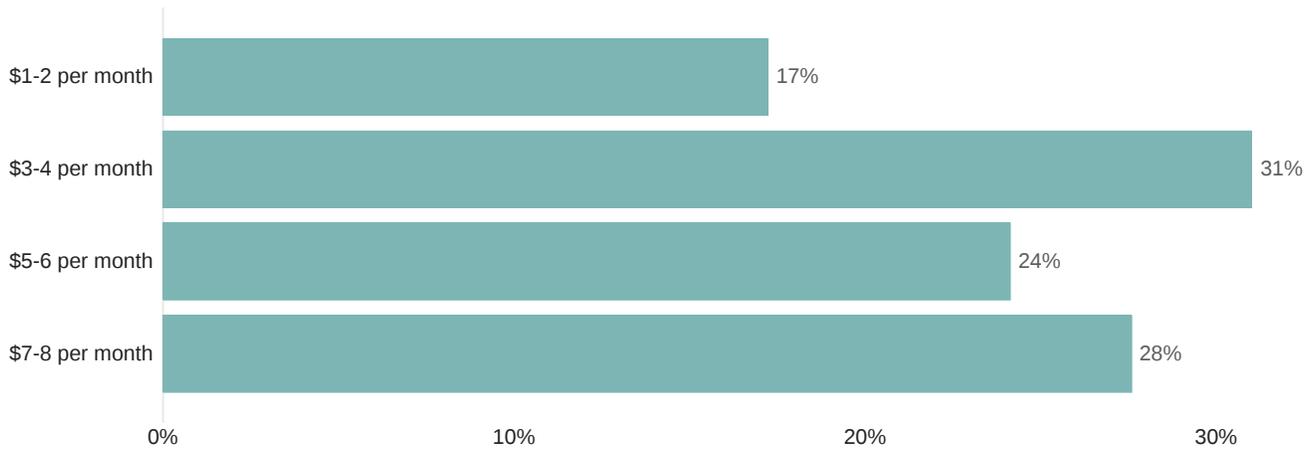


Q14 - What would you be willing to spend to get convenient access to recycling or food waste collection?

SUMMARY - A sizeable fraction of respondents (21%) would not pay anything for convenient access to recycling or food waste collection. Of those willing to pay for recycling or food waste collection, 72% want to pay \$6 or less a month for recycling or food waste collection; \$3-4 per month is most preferred.

Note: 21% of respondents would not pay anything.

58 Responses



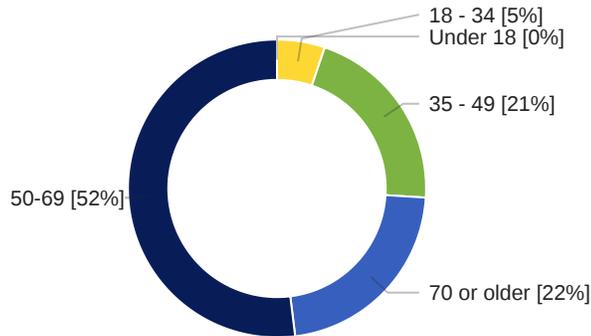
Demographics and Background of Respondents

SUMMARY:

- Respondents are primarily 50 years of age or older.
- Respondents are predominately female.
- 92% have some college education or higher.
- 96% of respondents own the home that they live in.
- 95% live in Wexford County year around.
- Unsurprisingly, because of the higher age range of our respondents, 81% do not have children living at home who are school age or younger.
- 96% of respondents are white with little representation of other racial or ethnic groups.
- Median yearly household income falls around \$75,000 - \$100,000 per year.
- Of those who rent or lease their home, one does not have recycling services available on the property, but would like the service and the other does have and uses recycling services available on the property.

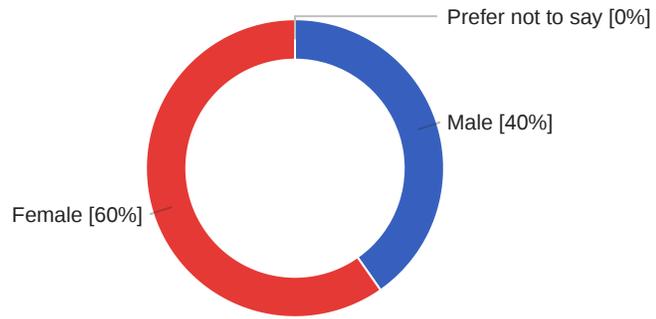
Q16 - Which of these best fits your age?

77 Responses



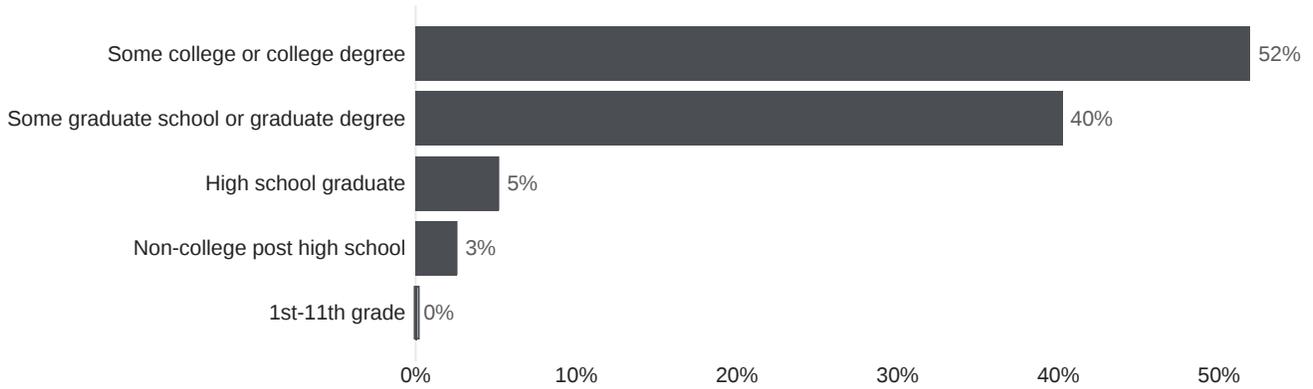
Q17 - What is your gender?

77 Responses



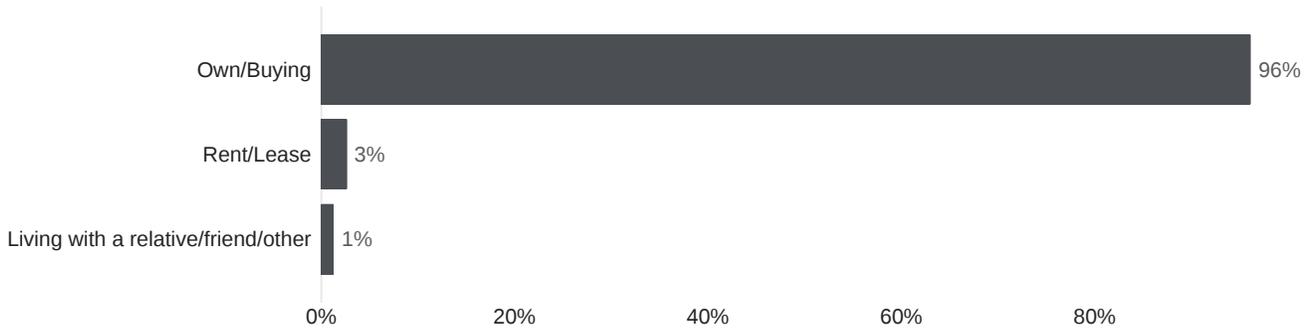
Q18 - What is the last grade or level of schooling you completed?

77 Responses



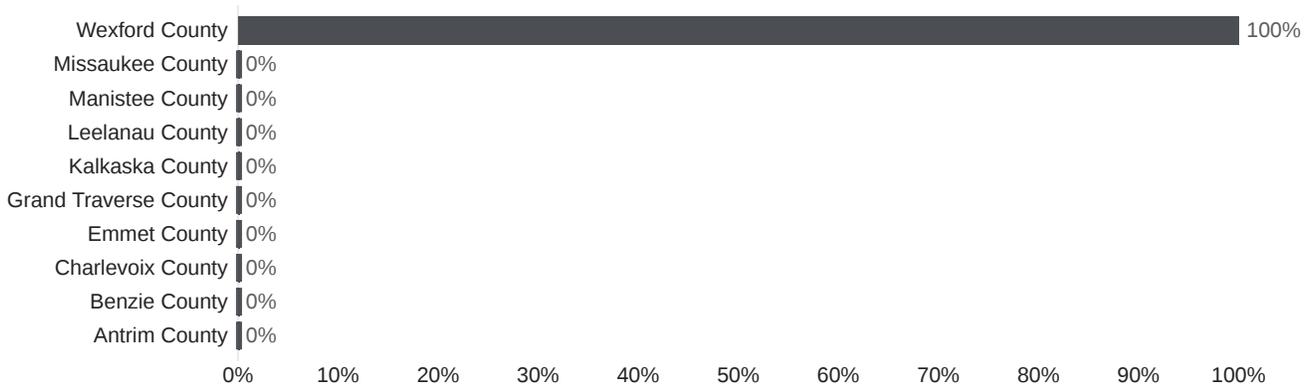
Q19 - Do you own your own home, are you buying a home, or do you lease or rent where you live?

77 Responses



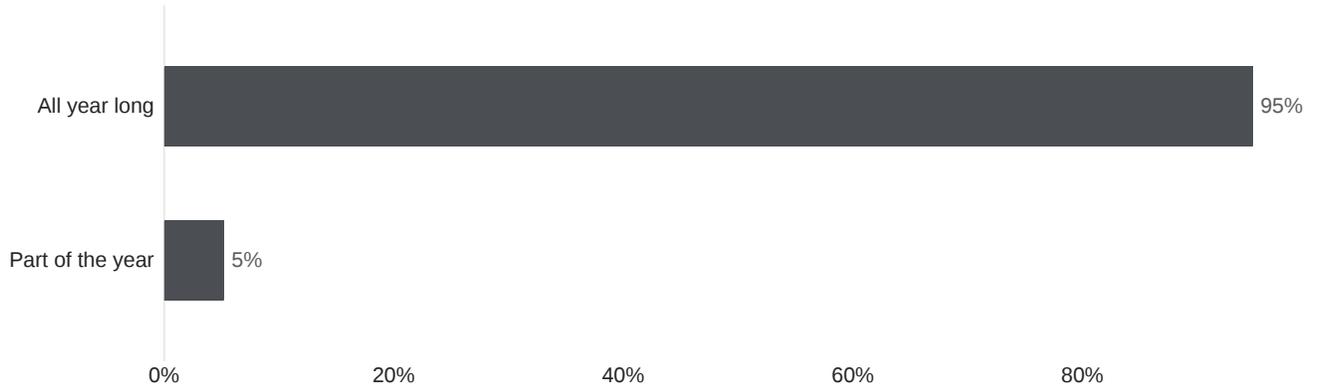
Q20 - County

77 Responses



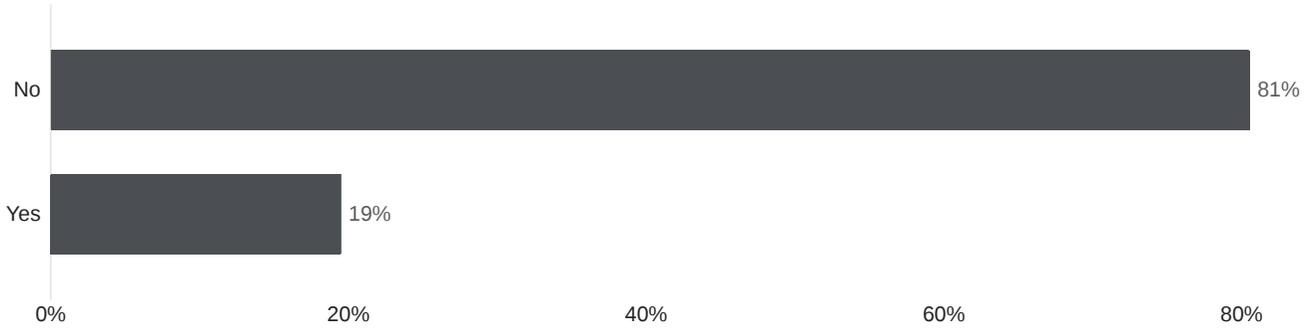
Q21 - How much of the year do you live in this county?

77 Responses



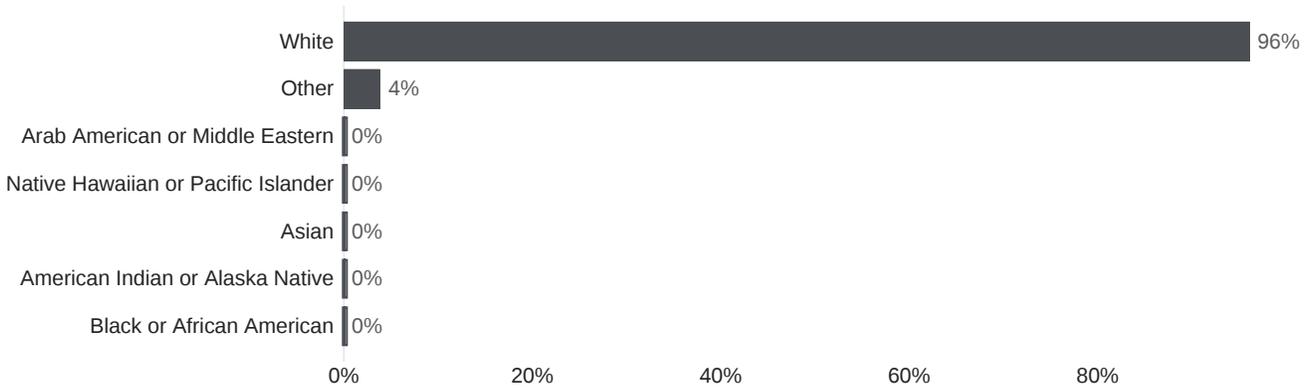
Q22 - Do you have children living in your home who are school age or younger?

77 Responses



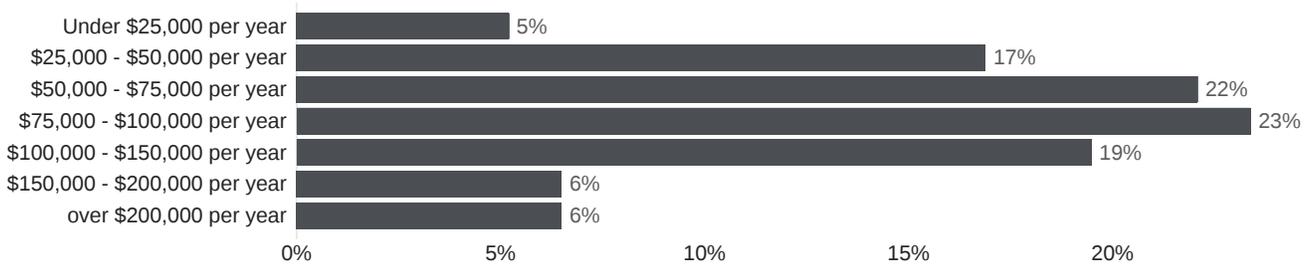
Q23 - Which racial or ethnic group best describes you?

77 Responses



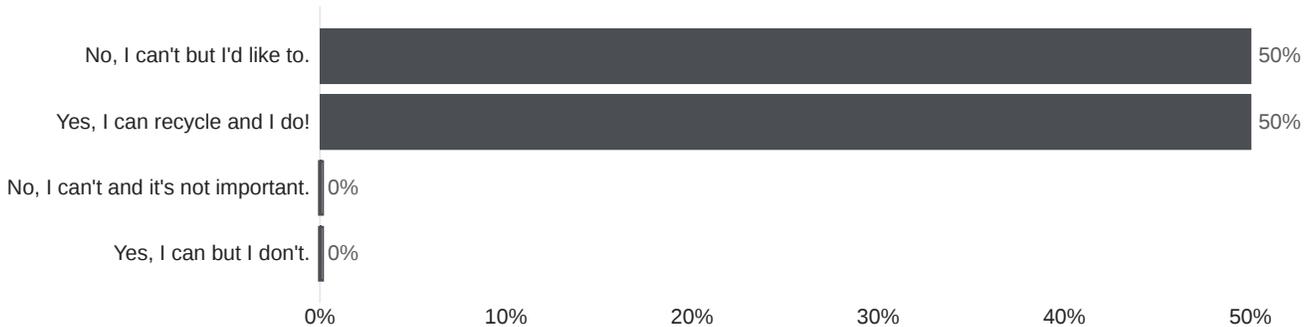
Q24 - In which of the following categories does your total yearly household income fall, including everyone in the household? If retired, please select an income category based on retirement income.

77 Responses



Q27 - As a renter/lessee, do you have recycling available on the property where you live?

2 Responses



MANISTEE COUNTY

PROFILE | FEBRUARY 2023



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

OVERVIEW

Michigan Department of Environment, Great Lakes, and Energy (EGLE) has shifted their focus from disposal as the primary effort towards a circular economy where all waste materials find their highest and best use. Michigan took its first steps towards materials management a few years ago by securing funding to support an economy that reuses and recycles resources. An important component of that funding is for Solid Waste Management Planning – also referred to as Materials Management Planning. Materials management plans form the foundation of the changes the state is preparing to make.

To support this new era of materials management and future planning activities, EGLE initiated a massive data collection project to document and inventory the current state of materials management systems in all municipalities within Michigan's 83 counties. The primary objective of the Michigan Materials Management Infrastructure and Program project, also known as Mega Data, is to provide the baseline of data necessary for counties to develop future materials management plans and provide a roadmap for materials management moving forward. The data collected through the project would also be applied to the Benchmark Recycling Standard analysis developed by EGLE to help understand access to recycling services in the state, where gaps exist, and where EGLE may focus their support to improve access and infrastructure in the state.

EGLE contracted with Resource Recycling Systems (RRS) to support this large undertaking to gather, compile and analyze information from across the state.

PURPOSE OF THE COUNTY PROFILE

The County Profile was developed for two purposes. First, the profiles provided the opportunity to summarize all the information collected for all 83 counties and their municipalities to date as a project milestone. Second, despite the extensive research and information collection, RRS acknowledges that the information presented here may be incomplete. The County Profiles offered the opportunity for each county to review, edit and add to their county's profile information before finalizing as a deliverable for the Mega Data project. Later in the process, EGLE added the review of the County Profile as a requirement of the Materials Management County Engagement Grants (MMCE).

COUNTY PROFILE DEVELOPMENT

The County Profiles contain information that reflects research and outreach to understand programs and services available at the county and municipal levels. The information summarized here corresponds to information required in the state's Solid Waste Management Plan format and will assist counties and designated planning agencies with plan development. This profile focuses on residential programs and services. The information for the Profiles was collected from the following sources:

- Approved Solid Waste Management Plans
- EGLE's Waste Data System (WDS)
- EGLE's Recycle Search tool
- EGLE's Recycling Specialist staff
- Interviews with County program coordinators and designated planning agents
- County Run Measurement Program Survey via ReTRAC
- Municipal Measurement Program Survey via ReTRAC
- Information obtained through Freedom of Information Act requests
- Direct outreach through phone calls, emails, and letters to all target audiences and related groups or organizations with access to target audiences

- Web research
- Participation by Counties in the MMCE Grant Program

DISCLAIMER

This information presented here was gathered and compiled over several years by RRS on behalf of EGLE for the Mega Data project. The profile was originally developed as a tool to summarize information collected and engage counties in review of the information for finalization. The profile is not intended for use as a reference guide for residents or purposes other than to provide counties with information to support future materials management planning. Information, programs, and services can change frequently and therefore information presented here may be out of date. If information has been omitted or requires update, please contact RRS at alynott@recycle.com.

ACCESS AND COLLECTION

COUNTY PROGRAM OVERVIEW

Manistee County offers recycling and household hazardous waste (HHW) services. Eight communities in the county utilize Public Act 69 to find a local recycling program for drop-off single-stream collection. This program accepts paper, plastic, and metals. Some sites also accept glass. HHW and tire drop-off events are available to all county residents.

MUNICIPAL PROGRAM AND SERVICES OVERVIEW

Programs and services offered or provided by municipalities for their residents are summarized by material type and then in two tables. One table features curbside services, and the other table features drop-off services.

TRASH

Several communities in Manistee County provide their residents with curbside trash collection services through contracted haulers. The remainder of the county is most likely served by the open market where residents make their own arrangements for trash collection, also known as subscription services. Most communities also offer annual Clean Up Days where residents can drop off their excess trash materials.

RECYCLING

Participating communities in Manistee County can access drop-off recycling services through the Manistee County PA69 Recycling Program. This program accepts paper, cardboard, glass, mixed plastics, metal cans and foil. There are currently no communities providing contracted curbside collection of recycling in the county.

YARD WASTE

Filer Township and Manistee City provide seasonal brush and yard waste curbside pickup to their residents. These same communities also provide drop-off locations for yard waste materials at local municipal buildings.

HOUSEHOLD HAZARDOUS WASTE

Manistee Conservation District provides annual events for household hazardous waste (HHW) and tire collection. During the HHW events, residents can drop-off materials such as automotive fluids, motor oil, anti-freeze, mercury, batteries, oil-based paint, lawn chemicals, freon, electronics, pharmaceuticals, fluorescent bulbs, sharps, and other HHW items.

OTHER

No information obtained about Other programs.

LIST OF ACTIVE HAULERS

- Republic Services
- Waste Reduction Systems

CURBSIDE SERVICES BY COMMUNITY

| MUNICIPALITY NAME | TRASH COLLECTOR | RECYCLING COLLECTOR | YARD WASTE COLLECTOR | OTHER CURBSIDE SERVICES |
|---------------------|-------------------------|---------------------|---|-------------------------|
| Arcadia CDP | | | | |
| Bear Lake village | | | | |
| Brethren CDP | | | | |
| Brown township | | | | |
| Copemish village | | | | |
| Eastlake village | Waste Reduction Systems | | | |
| Filer City CDP | Republic Services Inc. | | Filer Charter Township Annual Brush Pickup | |
| Kaleva village | | | | |
| Manistee city | Republic Services Inc. | | City of Manistee Seasonal Curbside Pickup | |
| Marilla township | | | | |
| Oak Hill CDP | Republic Services Inc. | | Filer Charter Township Annual Brush Pickup | |
| Onkama village | | | | |
| Parkdale CDP | Waste Reduction Systems | | | |
| Pleasanton township | | | | |
| Arcadia township | | | | |
| Bear Lake township | | | | |
| Cleon township | | | | |
| Dickson township | | | | |

| | | | | |
|------------------------|----------------------------|--|---|--|
| Filer charter township | Republic Services Inc. | | Filer Charter Township Annual Brush Pickup | |
| Manistee township | Waste Reduction Systems | | | |
| Maple Grove township | | | | |
| Norman township | | | | |
| Onkama township | | | | |
| Stronach township | | | | |
| Springdale township | | | | |
| Stronach CDP | | | | |
| Wellston CDP | | | | |

DROP-OFF SERVICES BY COMMUNITY

| MUNICIPALITY NAME | TRASH DROP-OFF SERVICES (PERMANENT) | RECYCLING DROP-OFF SERVICES (PERMANENT) | YARD WASTE OR OTHER ORGANICS DROP-OFF (PERMANENT) | OTHER PERMANENT DROP-OFF SERVICES | TEMPORARY DROP-OFF SERVICES |
|----------------------|---|--|---|--|--|
| Arcadia CDP | | Manistee County PA69 Recycling Program | | | Arcadia Township Annual Dumpster Clean Up Day Manistee Conservation District Annual HHW Event |
| Bear Lake village | | Manistee County PA69 Recycling Program | | | Manistee Conservation District Annual HHW Event |
| Brethren CDP | Dickson Township Transfer Station | Manistee County PA69 Recycling Program | | | Manistee Conservation District Annual HHW Event |

| | | | | | |
|------------------|---------------------------------------|--|---|--|---|
| Brown township | Brown Township Hall Drop-off | Manistee County PA69 Recycling Program | | | Manistee Conservation District Annual HHW Event |
| Copemish village | | Manistee County PA69 Recycling Program | | | Manistee Conservation District Annual HHW Event |
| Eastlake village | | | | | Manistee Conservation District Annual HHW Event |
| Filer City CDP | | | Leaf and Grass Disposal Site (at Filer Charter Township Hall) | | Manistee Conservation District Annual HHW Event |
| Kaleva village | Maple Grove Township Transfer Station | Manistee County PA69 Recycling Program | | | Manistee Conservation District Annual HHW Event |
| Manistee city | | Manistee City Recycling Center | City of Manistee Garage Yard Waste Dumpster | | Manistee Conservation District Annual HHW Event |
| Marilla township | | Manistee County PA69 Recycling Program | | | Marilla Township Annual Clean Up Day Manistee Conservation District Annual HHW Event |
| Oak Hill CDP | | | Leaf and Grass Disposal Site (at Filer Charter Township Hall) | | Manistee Conservation District Annual HHW Event |
| Onekama village | | Manistee County PA69 Recycling Program | | | Manistee Conservation District Annual HHW Event |
| Parkdale CDP | | | | | Manistee Township Annual Trash Day |

| | | | | | |
|------------------------|---------------------------------------|--|---|--|--|
| | | | | | Manistee Conservation District Annual HHW Event |
| Pleasanton township | Pleasanton Twp Transfer Station | | | | Manistee Conservation District Annual HHW Event |
| Arcadia township | | Manistee County PA69 Recycling Program | | | Arcadia Township Annual Dumpster Clean Up Day Manistee Conservation District Annual HHW Event |
| Bear Lake township | Bear Lake Household Refuse Program | Manistee County PA69 Recycling Program | | | Manistee Conservation District Annual HHW Event |
| Cleon township | | Manistee County PA69 Recycling Program | | | Manistee Conservation District Annual HHW Event |
| Dickson township | Dickson Township Transfer Station | Manistee County PA69 Recycling Program | | | Manistee Conservation District Annual HHW Event |
| Filer charter township | | | Leaf and Grass Disposal Site (at Filer Charter Township Hall) | | Manistee Conservation District Annual HHW Event |
| Manistee township | | PCA Paper Trailers (2 locations) | | | Manistee Township Annual Trash Day Manistee Conservation District Annual HHW Event |
| Maple Grove township | Maple Grove Township Transfer Station | Manistee County PA69 Recycling Program | | | Manistee Conservation District Annual HHW Event |

| | | | | | |
|---------------------|--|--|--|--|---|
| Norman township | | | | | Norman Township Trash Cards Manistee Conservation District Annual HHW Event |
| Onkama township | | Manistee County PA69 Recycling Program | | | Onkama Township Annual Clean Up Day Manistee Conservation District Annual HHW Event |
| Stronach township | | | | | Manistee Conservation District Annual HHW Event |
| Springdale township | | Manistee County PA69 Recycling Program | | | Springdale Township Annual Clean Up Day Manistee Conservation District Annual HHW Event |
| Stronach CDP | | | | | Manistee Conservation District Annual HHW Event |
| Wellston CDP | | | | | Manistee Conservation District Annual HHW Event |

FACILITIES

MATERIALS MANAGEMENT FACILITIES IN COUNTY

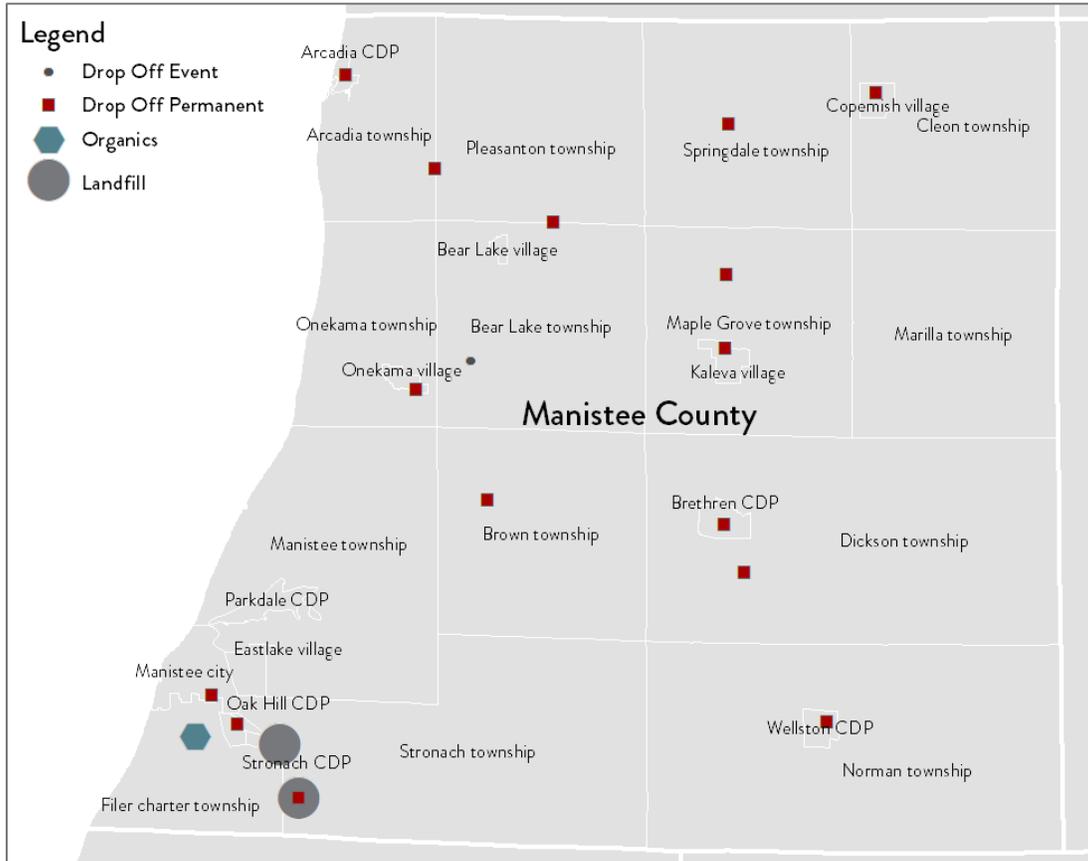
FACILITY SUMMARY TABLE

| FACILITY TYPE | FACILITY NAME | FACILITY ADDRESS | CITY | PERMANENT OR TEMPORARY |
|----------------------|--|-----------------------|-----------|------------------------|
| Compost (Yard Waste) | City of Manistee Compost Facility | 999 Adamczak Rd | Manistee | |
| Drop-off (T) | Arcadia Township PA-69 Drop-Off Site | 3422 Lake St | Arcadia | Permanent Drop-off |
| Drop-off (T) | Brown Township PA-69 Drop-Off Site | 3233 Coates Highway | Manistee | Permanent Drop-off |
| Drop-off (WDC) | Clean Sweep - Manistee County | 8946 Chippewa Highway | Bear Lake | Temporary Drop-off |
| Drop-off (T) | Cleon/Copemish Township PA-69 Drop-Off Site | | | Permanent Drop-off |
| Drop-off (B, NT) | Dickson Township Transfer Station | | | Permanent Drop-off |
| Drop-off (T) | Dickson Township/Bretheren PA-69 Drop-Off Site | | | Permanent Drop-off |
| Drop-off (O) | Filer Charter Township Leaf Dumpster | 2505 Filer City Road | Manistee | Permanent Drop-off |
| Drop-off (NT) | Larry Bowling Metal Recycling | 9347 13 Mile Rd. | Bear Lake | Permanent Drop-off |
| Drop-off (T) | Manistee City Recycling Center | 1200 US-31 | Manistee | Permanent Drop-off |
| Drop-off (T) | Manistee County Landfill - Recycling Drop Off | 3890 Camp Road | Manistee | Permanent Drop-off |

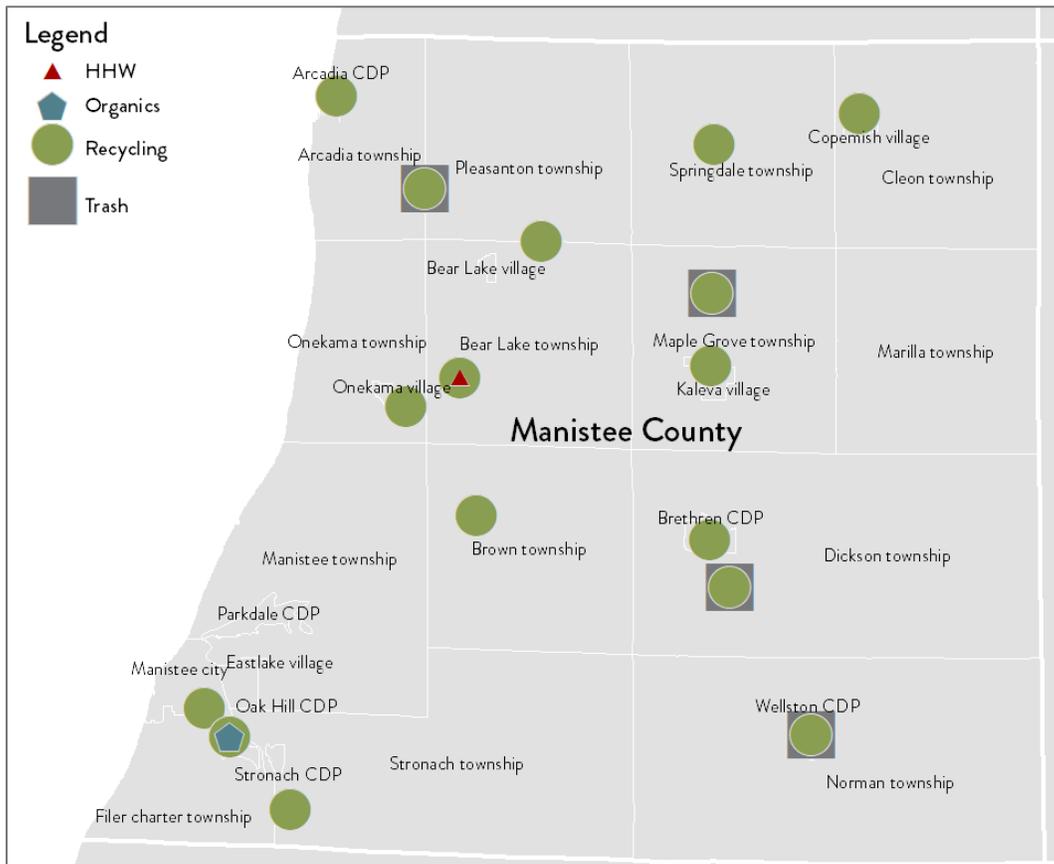
| | | | | |
|------------------------|---|--------------------------------|-----------------------------|--------------------|
| Drop-off (B) | Maple Grove Township & Village of Kaleva Transfer Station | | | Permanent Drop-off |
| Drop-off (T) | Maple Grove/Kaleva PA-69 Drop-Off Site | 14407 Industrial Blvd | Kaleva | Permanent Drop-off |
| Drop-off (B, T) | Norman Township Transfer Station | 1273 Seaman Road | Wellston | Permanent Drop-off |
| Drop-off | Onekama Township PA-69 and PCA Drop-Off Site | 5435 Main St | Onekama | Permanent Drop-off |
| Drop-off (B) | Pleasanton Township Transfer Station | 6007 Norconk Road | Bear Lake | Permanent Drop-off |
| Drop-off (T) | Springdale Township Hall PA-69 Drop-Off Site | 14492 Glovers Lake Rd 14992 | Bear Lake | Permanent Drop-off |
| Landfill | Republic Services Manistee County Landfill | 3890 Camp Road | Manistee | |
| Landfill | Tondu Energy Systems Inc Landfill | | Stronach Municipal Township | |
| End Market | PCA - Filer City | 2246 Udell St | Manistee | |
| End Market | Dr. Shrink, Inc. | 315 Washington Street | Manistee | |
| End Market | BARC - Kaleva | 14407 Industrial Dr | Kaleva | |

Drop-off Facility Types: B = Transfer Station Type B; C&D = Construction & Demolition; NT = Source-Separated Recycling Drop-off Non-Traditional; T = Source-Separated Recycling Traditional; O = Organics; WDC = Waste Diversion Center

FACILITY SUMMARY MAP



FACILITY BY MATERIAL TYPE



POLICY

MUNICIPAL ORDINANCES

No municipal ordinances were obtained.

MUNICIPAL FUNDING MECHANISMS

| Municipality | Waste Collection | Recycling Collection | Organics Collection | Bulky Item Collection |
|------------------------|-----------------------------------|-----------------------------------|-----------------------|-----------------------|
| Filer charter township | Legislatively Authorized Millages | | | |
| Onkama village | Subscription | | Funding not specified | |
| Onkama township | | Legislatively Authorized Millages | | |
| Arcadia CDP | | Municipal Utility/Services Fees | | |

COUNTY ORDINANCES

No county ordinances were obtained.

COUNTY FUNDING MECHANISM

| County | Type | Additional Information |
|----------|-------|--|
| Manistee | PA 69 | Funds recycling programs in participating communities. |

DATA

REPORTED DATA

Manistee County collects and tracks data for recycling programs.

RESIDENTIAL WASTE PROJECTIONS

| Municipality | Population | Total Waste Generation (Tons) ¹ | Total Recyclable Diversion (Tons) | Total Organics Diversion (Tons) | Total Requiring Disposal (Tons) |
|------------------------|---------------|--|-----------------------------------|---------------------------------|---------------------------------|
| Arcadia CDP | 212 | 96 | 7 | 8 | 81 |
| Arcadia township | 329 | 149 | 11 | 13 | 126 |
| Bear Lake township | 1,613 | 731 | 52 | 61 | 617 |
| Bear Lake village | 207 | 94 | 7 | 8 | 79 |
| Brethren CDP | 411 | 186 | 13 | 16 | 157 |
| Brown township | 626 | 284 | 20 | 24 | 240 |
| Cleon township | 592 | 268 | 19 | 23 | 227 |
| Copemish village | 184 | 83 | 6 | 7 | 70 |
| Dickson township | 516 | 234 | 17 | 20 | 197 |
| Eastlake village | 376 | 170 | 12 | 14 | 144 |
| Filer charter township | 2,004 | 908 | 65 | 76 | 767 |
| Filer City CDP | 67 | 30 | 2 | 3 | 26 |
| Kaleva village | 433 | 196 | 14 | 17 | 166 |
| Manistee city | 6,116 | 2,906 | 332 | 233 | 2,340 |
| Manistee township | 2,954 | 1,339 | 96 | 113 | 1,130 |
| Maple Grove township | 957 | 434 | 31 | 36 | 366 |
| Marilla township | 427 | 194 | 14 | 16 | 163 |
| Norman township | 1,267 | 574 | 41 | 48 | 485 |
| Oak Hill CDP | 577 | 262 | 19 | 22 | 221 |
| Onekama township | 875 | 397 | 28 | 33 | 335 |
| Onekama village | 380 | 172 | 12 | 14 | 145 |
| Parkdale CDP | 744 | 337 | 24 | 28 | 285 |
| Pleasanton township | 763 | 346 | 25 | 29 | 292 |
| Springdale township | 823 | 373 | 27 | 31 | 315 |
| Stronach CDP | 184 | 83 | 6 | 7 | 70 |
| Stronach township | 640 | 290 | 21 | 24 | 245 |
| Wellston CDP | 262 | 119 | 9 | 10 | 100 |
| TOTAL | 24,539 | 11,255 | 930 | 934 | 9,389 |

¹ Due to rounding, total waste generation tonnages may not equal the sum of the total diversion and disposal tonnages.

COMMERCIAL WASTE PROJECTIONS

| County | Approximate Number of Employees | Total Waste Generation (Tons) | Total Diversion (Tons) | Total Requiring Disposal (Tons) |
|----------|---------------------------------|-------------------------------|------------------------|---------------------------------|
| Manistee | 4,496 | 12,097 | 765 | 11,332 |

TOTAL WASTE GENERATED PROJECTIONS

| County | Total Waste Generation (Tons) <small>Bookmark not defined.</small> | Total Diversion (Tons) | Total Requiring Disposal (Tons) |
|----------|---|------------------------|---------------------------------|
| Manistee | 23,352 | 2,631 | 20,721 |

MISSAUKEE COUNTY

PROFILE | FEBRUARY 2023



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

OVERVIEW

Michigan Department of Environment, Great Lakes, and Energy (EGLE) has shifted their focus from disposal as the primary effort towards a circular economy where all waste materials find their highest and best use. Michigan took its first steps towards materials management a few years ago by securing funding to support an economy that reuses and recycles resources. An important component of that funding is for Solid Waste Management Planning – also referred to as Materials Management Planning. Materials management plans form the foundation of the changes the state is preparing to make.

To support this new era of materials management and future planning activities, EGLE initiated a massive data collection project to document and inventory the current state of materials management systems in all municipalities within Michigan's 83 counties. The primary objective of the Michigan Materials Management Infrastructure and Program project, also known as Mega Data, is to provide the baseline of data necessary for counties to develop future materials management plans and provide a roadmap for materials management moving forward. The data collected through the project would also be applied to the Benchmark Recycling Standard analysis developed by EGLE to help understand access to recycling services in the state, where gaps exist, and where EGLE may focus their support to improve access and infrastructure in the state.

EGLE contracted with Resource Recycling Systems (RRS) to support this large undertaking to gather, compile and analyze information from across the state.

PURPOSE OF THE COUNTY PROFILE

The County Profile was developed for two purposes. First, the profiles provided the opportunity to summarize all the information collected for all 83 counties and their municipalities to date as a project milestone. Second, despite the extensive research and information collection, RRS acknowledges that the information presented here may be incomplete. The County Profiles offered the opportunity for each county to review, edit and add to their county's profile information before finalizing as a deliverable for the Mega Data project. Later in the process, EGLE added the review of the County Profile as a requirement of the Materials Management County Engagement Grants (MMCE).

COUNTY PROFILE DEVELOPMENT

The County Profiles contain information that reflects research and outreach to understand programs and services available at the county and municipal levels. The information summarized here corresponds to information required in the state's Solid Waste Management Plan format and will assist counties and designated planning agencies with plan development. This profile focuses on residential programs and services. The information for the Profiles was collected from the following sources:

- Approved Solid Waste Management Plans
- EGLE's Waste Data System (WDS)
- EGLE's Recycle Search tool
- EGLE's Recycling Specialist staff
- Interviews with County program coordinators and designated planning agents
- County Run Measurement Program Survey via ReTRAC
- Municipal Measurement Program Survey via ReTRAC
- Information obtained through Freedom of Information Act requests
- Direct outreach through phone calls, emails, and letters to all target audiences and related groups or organizations with access to target audiences

- Web research
- Participation by Counties in the MMCE Grant Program

DISCLAIMER

This information presented here was gathered and compiled over several years by RRS on behalf of EGLE for the Mega Data project. The profile was originally developed as a tool to summarize information collected and engage counties in review of the information for finalization. The profile is not intended for use as a reference guide for residents or purposes other than to provide counties with information to support future materials management planning. Information, programs, and services can change frequently and therefore information presented here may be out of date. If information has been omitted or requires update, please contact RRS at alynott@recycle.com.

ACCESS AND COLLECTION

COUNTY PROGRAM OVERVIEW

Missaukee County provides trash, recycling, and household hazardous waste (HHW) services. The Missaukee County Recycling Center accepts residential trash and recycling, which includes paper, plastic, metals, glass, and electronics. The Missaukee County Recycling Center also hosts HHW collection events.

MUNICIPAL PROGRAM AND SERVICES OVERVIEW

Programs and services offered or provided by municipalities for their residents are summarized by material type and then in two tables. One table features curbside services, and the other table features drop-off services.

TRASH

Three communities in Missaukee County provide their residents with access to contracted curbside collection of trash materials. The remainder of the county is most likely served by the open market where residents make their own arrangements for trash collection, also known as subscription services. County residents can drop-off trash materials through the Missaukee County Recycling Center. Trash dropped-off at this facility must be in 30 gallon bags purchased from the county.

RECYCLING

The same communities that provide curbside trash collection through contracted haulers also provide access to curbside recycling through the same haulers. All county residents can drop-off their recyclable materials through the Missaukee County Recycling Center, which accepts paper, cardboard, glass, mixed plastics, metal cans and foil.

YARD WASTE

Only one community in Missaukee County provides its residents with access to contracted curbside collection for common yard waste materials, including leaves, grass clippings, and shrubs.

HOUSEHOLD HAZARDOUS WASTE

Missaukee County Recycling Center hosts household hazardous waste (HHW) collection events for residents, which accepts automotive fluids, motor oil, tires, oil-based paint, lawn chemicals, household cleaners, electronics, tube televisions, single-use propane tanks, and aerosol cans.

OTHER

No information obtained about Other programs.

LIST OF ACTIVE HAULERS

- GFL Environmental

CURBSIDE SERVICES BY COMMUNITY

| MUNICIPALITY NAME | TRASH COLLECTOR | RECYCLING COLLECTOR | YARD WASTE COLLECTOR | OTHER CURBSIDE SERVICES |
|----------------------|-------------------|---------------------|----------------------|-------------------------|
| Aetna township | | | | |
| Bloomfield township | GFL Environmental | GFL Environmental | GFL Environmental | |
| Butterfield township | | | | |
| Clam Union township | | | | |
| Enterprise township | | | | |
| Forest township | | | | |
| Holland township | | | | |
| Jennings CDP (part) | | | | |
| Jennings CDP (part) | | | | |
| Lake City city | GFL Environmental | GFL Environmental | | |
| McBain city | GFL Environmental | GFL Environmental | | |
| Norwich township | | | | |
| Pioneer township | | | | |
| Reeder township | | | | |
| Caldwell township | | | | |
| Lake township | | | | |
| Richland township | | | | |
| Riverside township | | | | |
| West Branch township | | | | |

DROP-OFF SERVICES BY COMMUNITY

| MUNICIPALITY NAME | TRASH DROP-OFF SERVICES (PERMANENT) | RECYCLING DROP-OFF SERVICES (PERMANENT) | YARD WASTE OR OTHER ORGANICS DROP-OFF (PERMANENT) | OTHER PERMANENT DROP-OFF SERVICES | TEMPORARY DROP-OFF SERVICES |
|----------------------|--|---|---|-----------------------------------|--|
| Aetna township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Bloomfield township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Butterfield township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Clam Union township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Enterprise township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Forest township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Holland township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Jennings CDP (part) | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Jennings CDP (part) | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |

| | | | | | |
|----------------------|--|-----------------------------------|--|--|--|
| Lake City city | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| McBain city | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Norwich township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Pioneer township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Reeder township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Caldwell township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Lake township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Richland township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| Riverside township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |
| West Branch township | Missaukee County Conservation District | Missaukee County Recycling Center | | | Missaukee County Conservation District |

FACILITIES

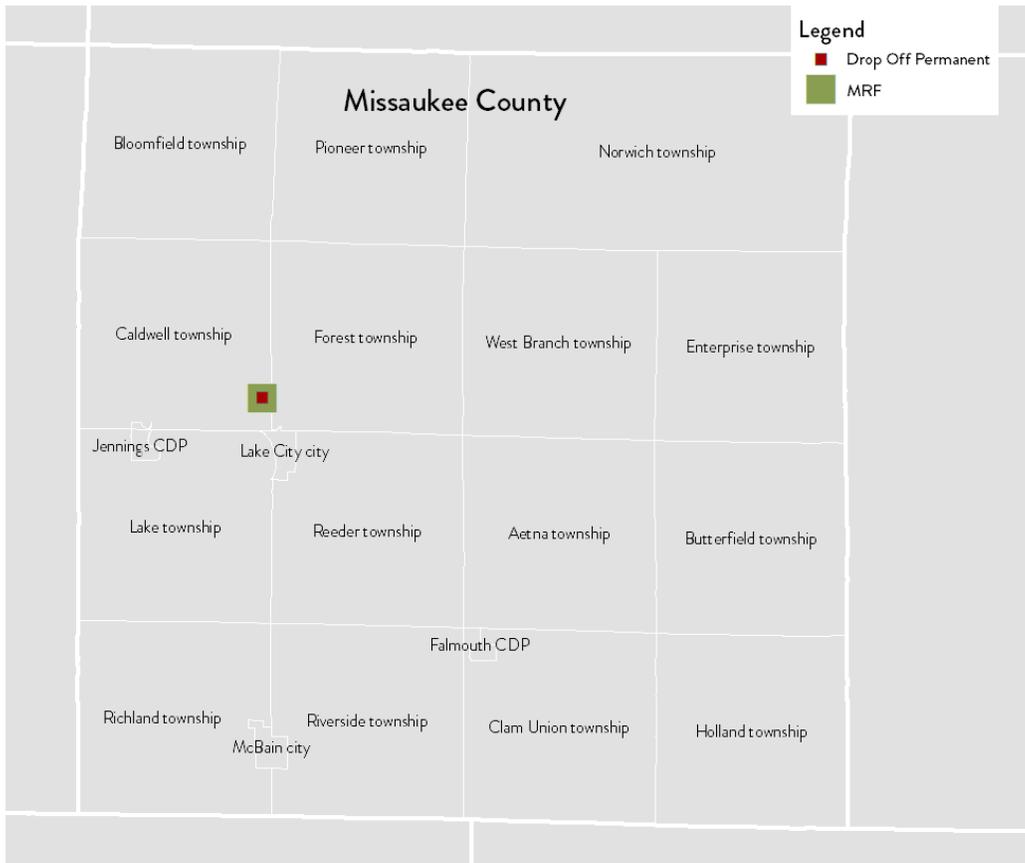
MATERIALS MANAGEMENT FACILITIES IN COUNTY

FACILITY SUMMARY TABLE

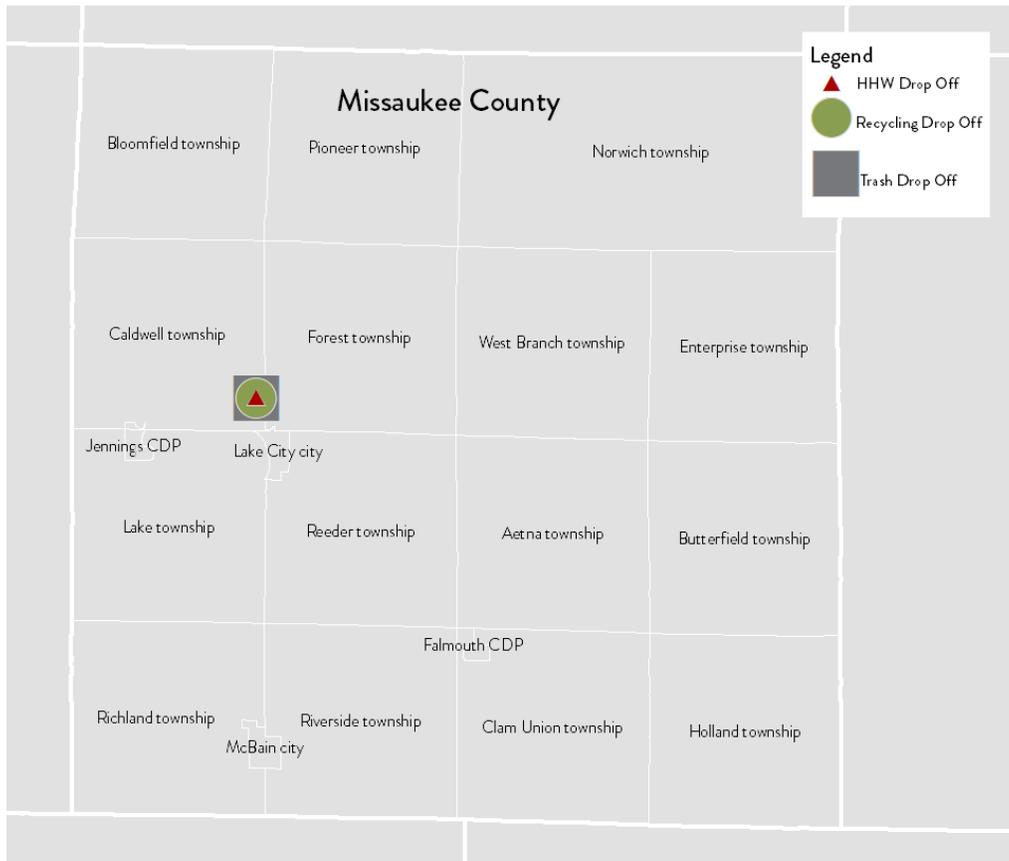
| FACILITY TYPE | FACILITY NAME | FACILITY ADDRESS | CITY | PERMANENT OR TEMPORARY |
|-----------------------|-----------------------------------|----------------------|-----------|------------------------|
| Drop-off (WDC, T, NT) | Missaukee County Recycling Center | 6240 W. Sanborn Road | Lake City | Permanent Drop-off |
| MRF | Missaukee County Recycling Center | 6240 W. Sanborn Road | Lake City | |

Drop-off Facility Types: B = Transfer Station Type B; C&D = Construction & Demolition; NT = Source-Separated Recycling Drop-off Non-Traditional; T = Source-Separated Recycling Traditional; O = Organics; WDC = Waste Diversion Center

FACILITY SUMMARY MAP



FACILITY BY MATERIAL TYPE



POLICY

MUNICIPAL ORDINANCES

No ordinances were obtained.

MUNICIPAL FUNDING MECHANISMS

| Municipality | Waste Collection | Recycling Collection | Organics Collection | Bulky Item Collection |
|----------------|---|----------------------|---------------------|-----------------------|
| Beaverton city | Hauler Collected Fees (by Municipality) | | | |

COUNTY ORDINANCES

No county ordinances obtained.

COUNTY FUNDING MECHANISM

| County | Type | Additional Information |
|------------------|---------|--|
| Missaukee County | Millage | FY 21-29. Previous funding was provided through the sale of product. |

DATA

REPORTED DATA

Missaukee County tracks data for the recycling program.

RESIDENTIAL WASTE PROJECTIONS

| Municipality | Population | Total Waste Generation (Tons) ¹ | Total Recyclable Diversion (Tons) | Total Organics Diversion (Tons) | Total Requiring Disposal (Tons) |
|----------------------|---------------|--|-----------------------------------|---------------------------------|---------------------------------|
| Aetna township | 603 | 273 | 20 | 23 | 231 |
| Bloomfield township | 454 | 227 | 36 | 17 | 174 |
| Butterfield township | 464 | 210 | 15 | 18 | 178 |
| Caldwell township | 1,535 | 696 | 50 | 59 | 587 |
| Clam Union township | 628 | 285 | 20 | 24 | 240 |
| Enterprise township | 316 | 143 | 10 | 12 | 121 |
| Falmouth CDP | 194 | 82 | 0 | 7 | 74 |
| Forest township | 1,222 | 554 | 40 | 47 | 468 |
| Holland township | 185 | 84 | 6 | 7 | 71 |
| Jennings CDP | 253 | 115 | 8 | 10 | 97 |
| Lake City city | 729 | 364 | 57 | 28 | 279 |
| Lake township | 2,572 | 1,166 | 83 | 98 | 984 |
| McBain city | 724 | 362 | 57 | 28 | 277 |
| Norwich township | 608 | 276 | 20 | 23 | 233 |
| Pioneer township | 489 | 222 | 16 | 19 | 187 |
| Reeder township | 1,058 | 479 | 34 | 40 | 405 |
| Richland township | 1,702 | 771 | 55 | 65 | 651 |
| Riverside township | 918 | 416 | 30 | 35 | 351 |
| West Branch township | 421 | 191 | 14 | 16 | 161 |
| TOTAL | 15,075 | 6,916 | 571 | 576 | 5,769 |

COMMERCIAL WASTE PROJECTIONS

| County | Approximate Number of Employees | Total Waste Generation (Tons) | Total Diversion (Tons) | Total Requiring Disposal (Tons) |
|-----------|---------------------------------|-------------------------------|------------------------|---------------------------------|
| Missaukee | 1,737 | 7,278 | 296 | 6,982 |

¹ Due to rounding, total waste generation tonnages may not equal the sum of the total diversion and disposal tonnages.

TOTAL WASTE GENERATED PROJECTIONS

| County | Total Waste Generation (Tons) ^{Error!} <small>Bookmark not defined.</small> | Total Diversion (Tons) | Total Requiring Disposal (Tons) |
|-----------|---|------------------------|---------------------------------|
| Missaukee | 14,191 | 1,441 | 12,750 |

WEXFORD COUNTY

PROFILE | FEBRUARY 2023



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

OVERVIEW

Michigan Department of Environment, Great Lakes, and Energy (EGLE) has shifted their focus from disposal as the primary effort towards a circular economy where all waste materials find their highest and best use. Michigan took its first steps towards materials management a few years ago by securing funding to support an economy that reuses and recycles resources. An important component of that funding is for Solid Waste Management Planning – also referred to as Materials Management Planning. Materials management plans form the foundation of the changes the state is preparing to make.

To support this new era of materials management and future planning activities, EGLE initiated a massive data collection project to document and inventory the current state of materials management systems in all municipalities within Michigan's 83 counties. The primary objective of the Michigan Materials Management Infrastructure and Program project, also known as Mega Data, is to provide the baseline of data necessary for counties to develop future materials management plans and provide a roadmap for materials management moving forward. The data collected through the project would also be applied to the Benchmark Recycling Standard analysis developed by EGLE to help understand access to recycling services in the state, where gaps exist, and where EGLE may focus their support to improve access and infrastructure in the state.

EGLE contracted with Resource Recycling Systems (RRS) to support this large undertaking to gather, compile and analyze information from across the state.

PURPOSE OF THE COUNTY PROFILE

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COUNTY PROFILE DEVELOPMENT

The County Profiles contain information that reflects research and outreach to understand programs and services available at the county and municipal levels. The information summarized here corresponds to information required in the state's Solid Waste Management Plan format and will assist counties and designated planning agencies with plan development. This profile focuses on residential programs and services. The information for the Profiles was collected from the following sources:

- Approved Solid Waste Management Plans
- EGLE's Waste Data System (WDS)
- EGLE's Recycle Search tool
- EGLE's Recycling Specialist staff
- Interviews with County program coordinators and designated planning agents
- County Run Measurement Program Survey via ReTRAC
- Municipal Measurement Program Survey via ReTRAC
- Information obtained through Freedom of Information Act requests
- Direct outreach through phone calls, emails, and letters to all target audiences and related groups or organizations with access to target audiences

- Web research
- Participation by Counties in the MMCE Grant Program

DISCLAIMER

This information presented here was gathered and compiled over several years by RRS on behalf of EGLE for the Mega Data project. The profile was originally developed as a tool to summarize information collected and engage counties in review of the information for finalization. The profile is not intended for use as a reference guide for residents or purposes other than to provide counties with information to support future materials management planning. Information, programs, and services can change frequently and therefore information presented here may be out of date. If information has been omitted or requires update, please contact RRS at alynott@recycle.com.

ACCESS AND COLLECTION

COUNTY PROGRAM OVERVIEW

Wexford County, in conjunction with Cadillac City, provides an annual household hazardous waste (HHW) collection event for residents in the county.

MUNICIPAL PROGRAM AND SERVICES OVERVIEW

Programs and services offered or provided by municipalities for their residents are summarized by material type and then in two tables. One table features curbside services, and the other table features drop-off services.

TRASH

One community, City of Cadillac, provides its residents with access to curbside trash collection through a contracted hauler. The remainder of the county is most likely served by the open market where residents make their own arrangements for trash collection, also known as subscription services. Clam Lake Township and Colfax Township provide their residents with annual Clean Up Days where residents can dispose of excess trash materials.

RECYCLING

City of Cadillac is also the only community in the county to provide contracted services for curbside recycling collection. Through this program, residents can recycle paper, cardboard, metal cans and scrap, plastics #1, #2, #5, and #7. There are currently no recycling drop-off locations in the county.

YARD WASTE

Cadillac City also provides its residents with access to contracted curbside collection for common yard waste materials. There are currently no drop-off locations in the county for yard waste.

HOUSEHOLD HAZARDOUS WASTE

In conjunction with Cadillac City, Wexford County hosts an annual household hazardous waste (HHW) collection event day. Here, residents can drop-off rechargeable batteries, oil-based paints, lawn chemicals, household cleaners, pharmaceuticals, fluorescent bulbs, and aerosol cans.

OTHER

No information obtained about Other programs.

LIST OF ACTIVE HAULERS

- Ms. Green
- Republic Services

CURBSIDE SERVICES BY COMMUNITY

| MUNICIPALITY NAME | TRASH COLLECTOR | RECYCLING COLLECTOR | YARD WASTE COLLECTOR | OTHER CURBSIDE SERVICES |
|-------------------------|------------------------|---------------------|------------------------|-------------------------|
| Boon CDP | | | | |
| Buckley village | | | | |
| Caberfae CDP | | | | |
| Cadillac city | Republic Services Inc. | Ms. Green | Republic Services Inc. | |
| Cedar Creek township | | | | |
| Clam Lake township | | | | |
| Colfax township | | | | |
| Greenwood township | | | | |
| Haring CDP | | | | |
| Harrietta village | | | | |
| Henderson township | | | | |
| Liberty township | | | | |
| Manton city | | | | |
| Mesick village | | | | |
| Antioch township | | | | |
| Boon township | | | | |
| Cherry Grove township | | | | |
| Hanover township | | | | |
| Haring charter township | | | | |
| Slagle township | | | | |
| South Branch township | | | | |

| | | | | |
|----------------------|--|--|--|--|
| Springville township | | | | |
| Selma township | | | | |
| Wedgewood CDP | | | | |
| Wexford township | | | | |

DROP-OFF SERVICES BY COMMUNITY

| MUNICIPALITY NAME | TRASH DROP-OFF SERVICES (PERMANENT) | RECYCLING DROP-OFF SERVICES (PERMANENT) | YARD WASTE OR OTHER ORGANICS DROP-OFF (PERMANENT) | OTHER PERMANENT DROP-OFF SERVICES | TEMPORARY DROP-OFF SERVICES |
|----------------------|-------------------------------------|---|---|-----------------------------------|--|
| Boon CDP | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Buckley village | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Caberfae CDP | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Cadillac city | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Cedar Creek township | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Clam Lake township | | | | | Clam Lake Annual Cleanup Day City of Cadillac / Wexford County HHW Disposal Day |

| | | | | | |
|--------------------|--|--|--|--|---|
| Colfax township | | | | | Colfax Township Spring Clean-up Day City of Cadillac / Wexford County HHW Disposal Day |
| Greenwood township | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Haring CDP | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Harrietta village | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Henderson township | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Liberty township | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Manton city | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Mesick village | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Antioch township | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Boon township | | | | | City of Cadillac / Wexford County HHW Disposal Day |

| | | | | | |
|-------------------------|--|--|--|--|--|
| Cherry Grove township | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Hanover township | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Haring charter township | | | | | Wexford County HHW One Day Event |
| Slagle township | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| South Branch township | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Springville township | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Selma township | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Wedgewood CDP | | | | | City of Cadillac / Wexford County HHW Disposal Day |
| Wexford township | | | | | City of Cadillac / Wexford County HHW Disposal Day |

FACILITIES

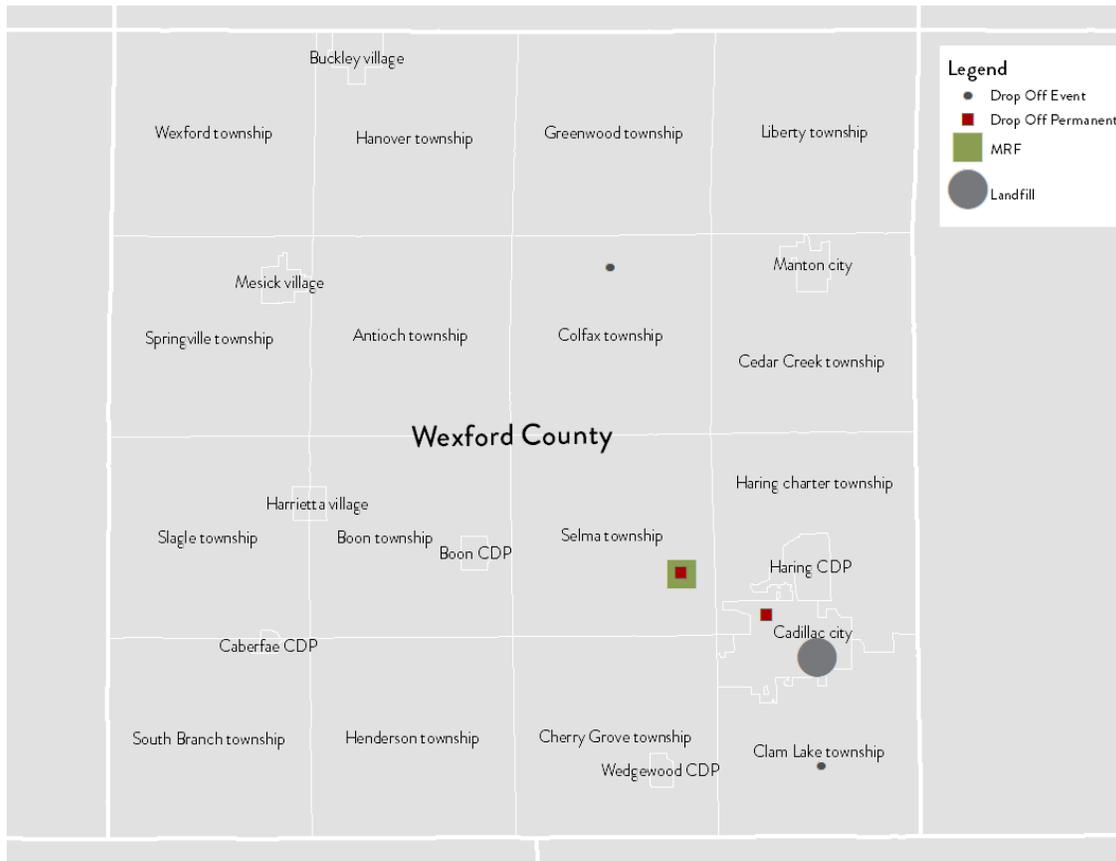
MATERIALS MANAGEMENT FACILITIES IN COUNTY

FACILITY SUMMARY TABLE

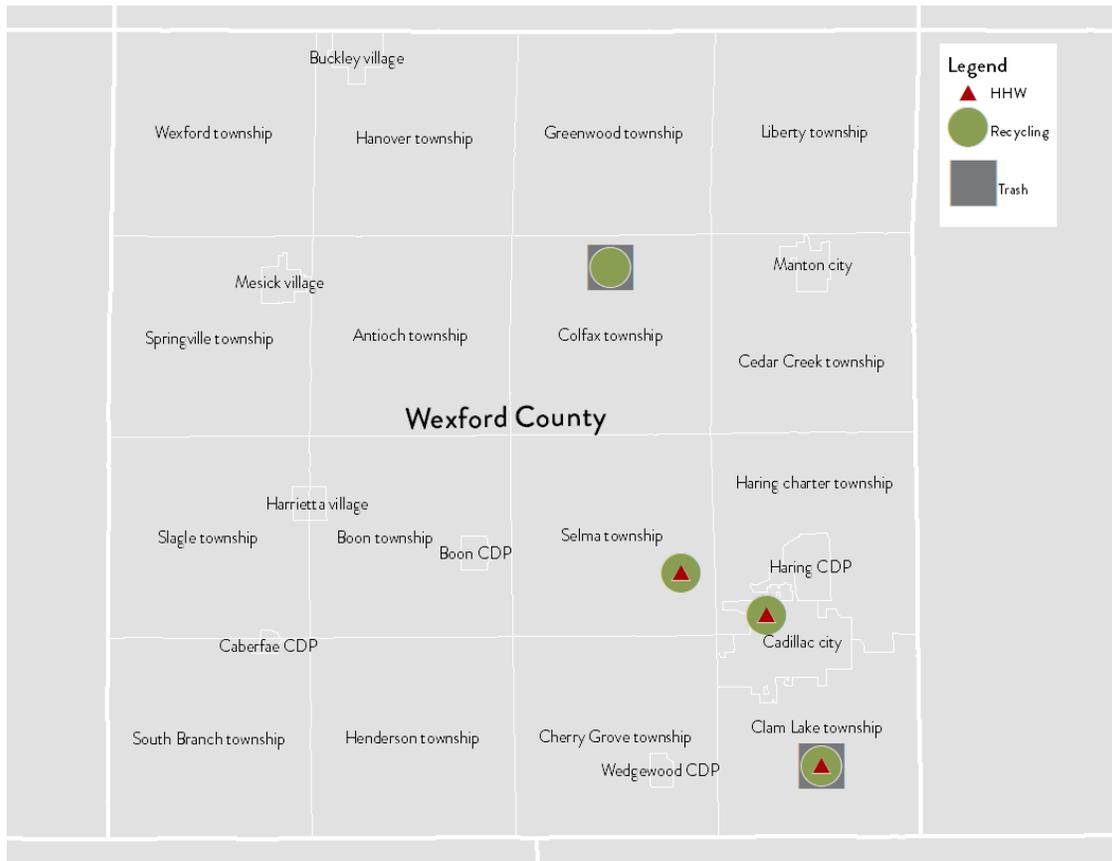
| FACILITY TYPE | FACILITY NAME | FACILITY ADDRESS | CITY | PERMANENT OR TEMPORARY |
|----------------------------|--|--------------------|----------|------------------------|
| Drop-off (WDC, B, NT, C&D) | Clam Lake Township Annual Clean Up Day | | Cadillac | Temporary Drop-off |
| Drop-off (B, NT, C&D) | Colfax Township Annual Clean-up Day | 4964 N 31 Rd | Manton | Temporary Drop-off |
| Drop-off (T) | Ms. Green LLC | 5018 M-115 Hwy | Cadillac | Permanent Drop-off |
| Drop-off (WDC, NT) | Padnos - Cadillac Recycling | 1111 Leeson Avenue | Cadillac | Permanent Drop-off |
| MRF | Ms Green Facility | 5018 M-115 | Cadillac | |
| Landfill | Wexford County DPW Landfill | 990 US 131 | Cadillac | |

Drop-off Facility Types: B = Transfer Station Type B; C&D = Construction & Demolition; NT = Source-Separated Recycling Drop-off Non-Traditional; T = Source-Separated Recycling Traditional; O = Organics; WDC = Waste Diversion Center

FACILITY SUMMARY MAP



FACILITY BY MATERIAL TYPE



POLICY

MUNICIPAL ORDINANCES

No municipal ordinances were obtained.

FUNDING MECHANISMS

No funding mechanisms obtained.

COUNTY ORDINANCES

No county ordinances obtained.

COUNTY FUNDING MECHANISMS

None were obtained.

DATA

REPORTED DATA

No reported data.

RESIDENTIAL WASTE PROJECTIONS

| Municipality | Population | Total Waste Generation (Tons) ¹ | Total Recyclable Diversion (Tons) | Total Organics Diversion (Tons) | Total Requiring Disposal (Tons) |
|-------------------------|---------------|--|-----------------------------------|---------------------------------|---------------------------------|
| Antioch township | 872 | 367 | 0 | 33 | 334 |
| Boon CDP | 93 | 39 | 0 | 4 | 36 |
| Boon township | 538 | 226 | 0 | 21 | 206 |
| Buckley village | 838 | 353 | 0 | 32 | 321 |
| Caberfae CDP | 51 | 21 | 0 | 2 | 20 |
| Caberfae CDP | 13 | 5 | 0 | 0 | 5 |
| Cadillac city | 10,462 | 4,971 | 569 | 399 | 4,003 |
| Cedar Creek township | 1,608 | 677 | 0 | 61 | 615 |
| Cherry Grove township | 2,364 | 995 | 0 | 90 | 905 |
| Clam Lake township | 2,630 | 1,107 | 0 | 100 | 1,006 |
| Colfax township | 1,009 | 425 | 0 | 38 | 386 |
| Greenwood township | 593 | 250 | 0 | 23 | 227 |
| Hanover township | 748 | 315 | 0 | 29 | 286 |
| Haring CDP | 358 | 151 | 0 | 14 | 137 |
| Haring charter township | 3,132 | 1,318 | 0 | 119 | 1,198 |
| Harrietta village | 185 | 78 | 0 | 7 | 71 |
| Harrietta village | 39 | 16 | 0 | 1 | 15 |
| Henderson township | 228 | 96 | 0 | 9 | 87 |
| Liberty township | 904 | 380 | 0 | 34 | 346 |
| Manton city | 1,228 | 517 | 0 | 47 | 470 |
| Mesick village | 381 | 160 | 0 | 15 | 146 |
| Selma township | 2,240 | 943 | 0 | 85 | 857 |
| Slagle township | 399 | 168 | 0 | 15 | 153 |
| South Branch township | 235 | 99 | 0 | 9 | 90 |
| Springville township | 1,123 | 473 | 0 | 43 | 430 |
| Wedgewood CDP | 243 | 102 | 0 | 9 | 93 |
| Wexford township | 919 | 387 | 0 | 35 | 352 |
| TOTAL | 33,433 | 14,639 | 569 | 1,274 | 12,795 |

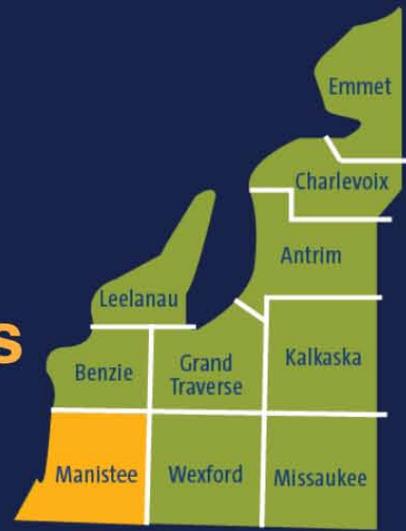
¹ Due to rounding, total waste generation tonnages may not equal the sum of the total diversion and disposal tonnages.

COMMERCIAL WASTE PROJECTIONS

| County | Approximate Number of Employees | Total Waste Generation (Tons) | Total Diversion (Tons) | Total Requiring Disposal (Tons) |
|---------|---------------------------------|-------------------------------|------------------------|---------------------------------|
| Wexford | 10,785 | 17,296 | 1,835 | 15,461 |

TOTAL WASTE GENERATED PROJECTIONS

| County | Total Waste Generation (Tons) <small>Bookmark not defined.</small> | Total Diversion (Tons) | Total Requiring Disposal (Tons) |
|---------|---|------------------------|---------------------------------|
| Wexford | 31,932 | 3,679 | 28,254 |



MANISTEE COUNTY

Organic waste diversion solutions

Our goal is to see one third of the organics currently going to landfills diverted into higher and better uses by 2030. That means diverting 26,000 more tons per year, mostly food scraps, across the 10-county region.

STRATEGIC GOALS FOR THE REGION

The goal of the 10-county Organic Waste Diversion Advisory Partnership, convened by SEEDS, is to reduce organic material going to landfills by over a third across northwest lower Michigan by 2030. Reducing and recycling organic waste streams can generate many benefits, including feeding hungry people, generating soil, supporting local farms, and supporting the local economy. In the U.S., residents spend ~\$2000/year on food that gets thrown away. The State of Michigan's recent mandate for counties to update their Materials Management Plans (MMPs) presents the perfect mechanism for embedding an effective and pragmatic plan for organic waste management into each county's strategic plan.

10-COUNTY REGIONAL TRENDS



OUR RECOMMENDATIONS

- Incentivize and allow on-site and backyard composting solutions.
- Enhance food donation opportunities by clearly communicating options, especially with institutions, schools and farms.
- Develop food waste collection, hauling and centralized composting strategies.

WHAT CAN YOU DO? Use the MMP planning process to develop and right-size strategies and incentives that work for Manistee County residents and institutions.

MANISTEE COUNTY STATISTICS

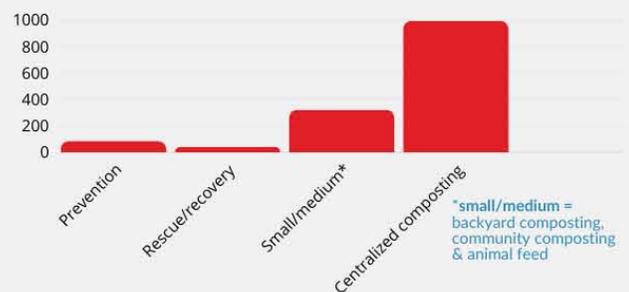
ORGANIC WASTE IN TONS/YEAR



GENERATION OF FOOD WASTE IN TONS/YEAR



2030 DIVERSION TARGETS IN TONS/YEAR



HOW MANISTEE COUNTY COMPARES IN THE REGION

Of the 10 counties in northwest Michigan, Manistee County:

- is 1 of 6 with a current organic waste diversion rate less than 10%.
- is 1 of 5 whose website provides resources to support organic waste diversion.
- could choose to develop a county-wide drop-off site for yard waste; so far, only 3 counties have.





MISSAUKEE COUNTY

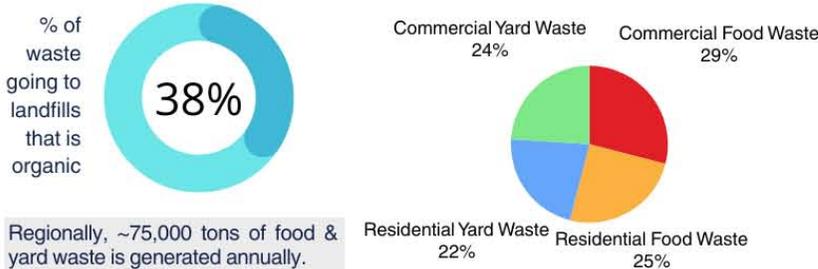
Organic waste diversion solutions

Our goal is to see one third of the organics currently going to landfills diverted into higher and better uses by 2030. That means diverting 26,000 more tons per year, mostly food scraps, across the 10-county region.

STRATEGIC GOALS FOR THE REGION

The goal of the 10-county Organic Waste Diversion Advisory Partnership, convened by SEEDS, is to reduce organic material going to landfills by over a third across northwest lower Michigan by 2030. Reducing and recycling organic waste streams can generate many benefits, including feeding hungry people, generating soil, supporting local farms, and supporting the local economy. In the U.S., residents spend ~\$2000/year on food that gets thrown away. The State of Michigan's recent mandate for counties to update their Materials Management Plans (MMPs) presents the perfect mechanism for embedding an effective and pragmatic plan for organic waste management into each county's strategic plan.

10-COUNTY REGIONAL TRENDS



OUR RECOMMENDATIONS

- Incentivize and allow on-site and backyard composting solutions.
- Enhance food donation opportunities by clearly communicating options, especially with institutions, schools and farms.
- Develop food waste collection, hauling and centralized composting strategies.

WHAT CAN YOU DO? Use the MMP planning process to develop and right-size strategies and incentives that work for Missaukee County residents and institutions.

MISSAUKEE COUNTY STATISTICS

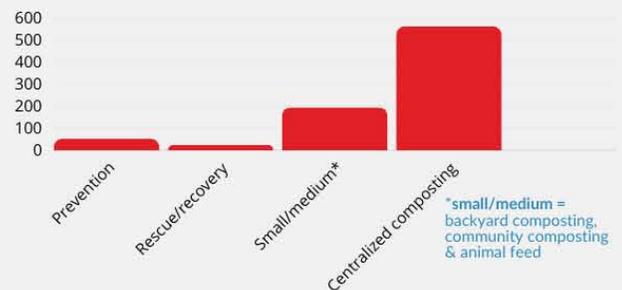
ORGANIC WASTE IN TONS/YEAR



GENERATION OF FOOD WASTE IN TONS/YEAR



2030 DIVERSION TARGETS IN TONS/YEAR



HOW MISSAUKEE COUNTY COMPARES IN THE REGION

Of the 10 counties in northwest Michigan, Missaukee County is:

- is 1 of 6 with a current organic waste diversion rate less than 10%.
- could choose to develop a county-wide drop-off site for yard waste; so far, only 3 counties have.





WEXFORD COUNTY

Organic waste diversion solutions

Our goal is to see one third of the organics currently going to landfills diverted into higher and better uses by 2030. That means diverting 26,000 more tons per year, mostly food scraps, across the 10-county region.

STRATEGIC GOALS FOR THE REGION

The goal of the 10-county Organic Waste Diversion Advisory Partnership, convened by SEEDS, is to reduce organic material going to landfills by over a third across northwest lower Michigan by 2030. Reducing and recycling organic waste streams can generate many benefits, including feeding hungry people, generating soil, supporting local farms, and supporting the local economy. In the U.S., residents spend ~\$2000/year on food that gets thrown away. The State of Michigan's recent mandate for counties to update their Materials Management Plans (MMPs) presents the perfect mechanism for embedding an effective and pragmatic plan for organic waste management into each county's strategic plan.

10-COUNTY REGIONAL TRENDS



OUR RECOMMENDATIONS

- Continue the significant effort the county has made toward organic waste diversion.
- Develop infrastructure for transportation, processing, storage and distribution of food donations from restaurants and other businesses to institutions, schools and farms.
- Develop selective food waste collections within portions of the county and coordinate with local composting facilities (e.g., Morgan Composting)

WHAT CAN YOU DO? Use the MMP planning process to develop and right-size strategies and incentives that work for Wexford County residents and institutions.

WEXFORD COUNTY STATISTICS

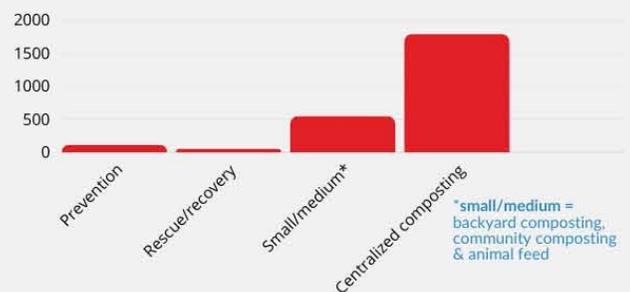
ORGANIC WASTE IN TONS/YEAR



GENERATION OF FOOD WASTE IN TONS/YEAR



2030 DIVERSION TARGETS IN TONS/YEAR



HOW WEXFORD COUNTY COMPARES IN THE REGION

Of the 10 counties in northwest Michigan, **Wexford County:**

- is 1 of 6 with a current organic waste diversion rate less than 10%.
- is 1 of 7 whose Solid Waste Management Plan states that they will develop a yard waste drop-off for county-wide use.
- could choose to develop a county-wide drop-off site for yard waste; so far, only 3 counties have.



Chapter A5: Goals and Objectives

To comply with Part 115 and its requirements, each *Plan* must be directed toward goals and objectives based on the purposes stated in Part 115, Sections 11538.(1)(a), 11541.(4) and the State Solid Waste Policy adopted pursuant to this Section, and Administrative Rules 711(b)(i) and (ii). At a minimum, the goals must reflect two major purposes of Solid Waste Management Plans:

- (1) To utilize to the maximum extent possible the resources available in Michigan's solid waste stream through source reduction, source separation, and other means of resource recovery and;
- (2) to prevent adverse effects on the public health and the environment resulting from improper solid waste collection, transportation, processing, or disposal, so as to protect the quality of the air, the land, and ground and surface waters.

THIS *Plan* works toward the following goals through actions designed to meet the objectives described under the respective goals which they support. This project is assuming funding is available. This *Plan* does not require government (municipal and county) funding. If funding is not available, that does not contravene this *Plan* and not pursuing the project does not contravene this *Plan*:

The following are defined as intended to be used in this Chapter.

| <u>WORD</u> | <u>DEFINITIONS</u> | <u>EXAMPLE</u> |
|------------------------|---|--|
| GOALS | The goal is the utopia, to provide direction or end-state; the Objectives, Policies, Strategies/Methods are to work toward. | <i>Have pure water everywhere.</i> |
| OBJECTIVES | The objective(s) is an achievable point to describe what is aimed at to resolve the issue. | <i>Maintain acceptable water quality</i> |
| STRATEGIES/ METHODS | The strategy(ies)/method(s) are the actual ways the policy(ies) or goals are carried out. | <i>Define standards and implement controls to achieve them and educate the public.</i> |

The purpose of this *Plan* is to accomplish the following goals and objectives:

- Goal 1: Implement a *Solid Waste Management Plan* which provides for the protection of the public health, environment and the conservation of natural resources.
- Objective 1.1: Provide for optimum volume reduction practices to be in effect throughout the solid waste management process.
- Strategy 1.1.1: Collaborate with private enterprises, municipalities, recycling agencies, regional, local and other related organizations to develop and implement waste reduction, recycling, and composting programs.
- Objective 1.2: Ensure that solid waste management procedures in effect are in conformance with the State of Michigan's air and water quality standards.

- Objective 1.3: Develop and enforce regulations governing the appearance, odor, and noise aspects of collection, storage, and disposal facilities.
- Objective 1.4: Support the elimination of dumping in unauthorized areas while increasing the enforcement of anti-litter and similar regulations.
- Objective 1.5: Include consideration for wastes generated by agricultural and manufacturing interests which may require special handling and disposal.
- Objective 1.6: Develop and implement regulations governing the location of landfill sites and transfer stations to avoid potential conflicts with adjacent uses.
- Objective 1.7: Recognize the potential uses of closed landfill sites.
- Objective 1.8: Develop an emergency response plan to recover recyclable materials after an emergency or natural disaster.
- Objective 1.9: Institute volume-based pricing for waste disposal within the county.
- Objective 1.10: Increase the ease and utilization of recycling opportunities with the cost to be subsidized by waste disposal fees.
- Objective 1.11: Develop and implement a household hazardous waste collection program.

Goal 2: Develop a solid waste management plan that is financially realistic and economically feasible.

- Objective 2.1: Work with regional and local agencies to provide solid waste disposal by maintaining current standards, reducing cost and increasing services provided.
- Objective 2.2: Support existing and future approved solid waste facilities which are intended to provide a service to the general public and which provide that service on a county-wide, or larger, area. Exceptions would be mono-solid waste facilities which handle such volume and type of material generated by a single manufacturing facility and unlicensed transfer stations.
- Objective 2.3: Encourage a competitive market place —more than one company providing the service— within the solid waste industry, while at the same time striving to avoid a saturation of supply in the marketplace so that major solid waste facilities are not abandoned or seek customers from outside this Plan's intended service area.
- Objective 2.4: Solid waste facilities should as a first priority be privately owned and operated. As a last resort solid waste facilities would be publically owned or operated. Exceptions to this objective include resource recovery (recycling, reuse and composting) facilities.

Goal 3: Inform citizens and businesses about solid waste management issues, concerns, and wise use of natural resources.

- Objective 3.1: Educate citizens and businesses about the need and costs of solid waste facilities, and alternatives for sharing of the public cost involved.
- Objective 3.2: Notify citizens at least annually about opportunities for recycling and special concerns.
 - Strategy 3.2.1: Request local businesses to stock and carry products made with recycled materials whenever possible.
 - Strategy 3.2.2: Support and encourage solid waste education program for K-12 grades by providing information, classroom speakers, and other curriculum aids.
 - Strategy 3.2.3: Develop funding to educate the public and businesses about solid waste management.

Goal 4: Maintain, support and expand recycling programs and facilities which will permit the solid waste facility operation to become a subsidiary function to an overall solid waste system which maximizes environmental quality.

- Objective 4.1: participate in the development of comprehensive multi-county disposal/recycling facilities which maximize energy recovery and salvage of materials while minimizing operational costs.
- Objective 4.2: Promote purchasing of products made with recycled products

- Goal 5: Encourage the utilization of private enterprise in the ownership and operation of landfill and resource recovery systems.
- Goal 6: Encourage and make certain the option for new solid waste facilities exist in Manistee County and new facilities are located and designed so as to provide resource recovery, recycling, energy production, source reduction and/or composting options, as applicable.
 - Objective 6.1: Expand existing facilities, as a higher priority, than creation of new facilities.
 - Objective 6.2: Ensure new facilities are sited as good or "better" location than facilities which exist at the time this *Plan* is adopted.
 - Objective 6.3: Ensure a new facility does not overburden public facilities in the area and/or results in a significant increase in public expenditures.

INTRODUCTION

GOALS AND OBJECTIVES

This Solid Waste Management Plan works toward the following goals through actions designed to meet the objectives described under the respective goals which they support:

Goal 1: Develop a solid waste plan and management system which is feasible, meets the needs of the community and protects the public's health and safety.

Objective 1a: Transfer stations, processing and recycling centers and disposal sites shall be located to adhere to adopted standards and to be compatible with land uses in the area.

Objective 1b: The routing of collection vehicles from designated collection routes to a transfer, processing, or disposal facility should be done with due consideration for traffic flow and for the residents along that route.

Goal 2: Control the generation and on-site storage of solid waste in order to stabilize volumes and prevent proliferation of vermin.

Objective 2a: Insure, through local ordinance, utilization of proper containers for refuse storage.

Objective 2b: Provide incentives to stimulate the use of reusable packaging.

Goal 3: Expand educational programs to inform all residents of the problems involved in solid waste management.

Goal 4: Encourage a system of recycling solid waste.

Objective 4a: Encourage civic groups to participate in recycling programs.

Objective 4b: Work towards a complete system of solid waste reclamation and recycling.

Goal 5: Consider wastes generated by agricultural and manufacturing interests which may require special handling, as well as special facilities required for collection and processing of junk vehicles, farm implements and large appliances.

Objective 5a: Encourage development of local junk ordinances for the control of accumulation of junk vehicles.

Objective 5b: Continue to seek resources to fund the collection and/or processing of materials requiring special handling.

Goal 6: Encourage a realistic program to effectively and efficiently implement the planned solid waste management system.

Objective 6a: Maintain an active roster of solid waste committee members to address concerns as they arise that could affect the solid waste management plan.

INTRODUCTION

GOALS AND OBJECTIVES

To comply with Part 115 and its requirements, each Plan must be directed toward goals and objectives based on the purposes stated in Part 115, Sections 11538.(1)(a), 11541.(4) and the State Solid Waste Policy adopted pursuant to this Section, and Administrative Rules 711(b)(i) and (ii). At a minimum, the goals must reflect two major purposes of Solid Waste Management Plans:

- (1) To utilize to the maximum extent possible the resources available in Michigan's solid waste stream through source reduction, source separation, and other means of resource recovery and;
- (2) to prevent adverse effects on the public health and the environment resulting from improper solid waste collection, transportation, processing, or disposal, so as to protect the quality of the air, the land, and ground and surface waters.

This Solid Waste Management Plan works toward the following goals through actions designed to meet the objectives described under the respective goals which they support:

Goal 1 Produce a solid waste management system which meets the solid waste disposal needs of the service area

Objective 1a: Work with the Michigan DEQ to expand and continue licensure of the Wexford County landfill

Objective 1b: Continue to assign responsibility of monitoring the use of waste disposal facilities in accordance with Act 451 and its rules to the County Department of Public Works

Goal 2 Design the solid waste management system for technical and economic feasibility

Objective 2a: Encourage the cooperative use of existing solid waste facilities and services, and the coordination of collection activities by solid waste haulers with local governments

Objective 2b: Promote continued financial assistance from the State of Michigan for solid waste management in all categories

Objective 2c: Processing and recycling centers and disposal sites shall be located to adhere to adopted standards, and be compatible with land uses in the area

INTRODUCTION

Goal 3: Protect the public health and safety, protect the natural environment from contamination, and promote volume reduction in the solid waste stream

Objective 3a: Ensure use of proper containers for refuse and storage through local ordinances to stabilize solid waste volumes and prevent proliferation of vermin

Objective 3b: Route collection vehicles from designated collection routes to the County's disposal facility with due consideration for traffic flow and for the residents along that route

Objective 3c: Encourage the growth of markets for recycled and recovered materials and the use of recyclable and recycled materials by government, business, industry, and the public

Objective 3d: Encourage the use of private/nonprofit organizations for operating and coordinating formal efforts in recycling and resource recovery

Objective 3e: Continue to implement State sponsored education programs for waste reduction, source separation, recycling, resources recovery, and integrated waste management for the residents of Wexford County

Objective 3f: Establish office paper recycling programs in the County, townships, City of Cadillac, and City of Manton government offices, local school districts, and promote a paper recycling program for major corporate and public institutions in Wexford County.

Objective 3g: Encourage civic groups to participate in recycling programs

Objective 3h: Identify any local government and public institution procurement policies if they exist and suggest their revision when necessary to encourage the use of recycled and recyclable materials

Goal 4: Consider wastes generated by agricultural and manufacturing interests which may require special handling, as well as special facilities required for collection and processing of junk vehicles, farm implements and large appliances

Objective 4a: Encourage development of local junk ordinances for the control of accumulation of junk vehicles and other discarded materials on private property

Objective 4b: Continue to seek resources to fund the collection and/or processing of materials requiring special handling, including hazardous wastes

INTRODUCTION

Goal 5: Encourage a realistic program to effectively and efficiently implement the planned solid waste management system

Objective 5a: Maintain an active roster of solid waste committee members to address concerns as they arise that could affect the solid waste management plan under the auspices of the Board of Public Works