Chief Elected Official: Chris Christensen

Board Chair: Nicole Sulak

Chief Executive Officer: Janie McNabb

Antrim County Materials Management Planning Committee

Date: June 26, 2025

Time: 2:00 p.m. – 4:00 p.m. **Location:** 203 E. Cayuga Street Bellaire, MI 49615

PROPOSED AGENDA

- I. Welcome and Introductions
- II. Public Comment
- III. Approval of Agenda
- IV. Approval of April 23, 2025 Meeting Minutes Cancelled
- 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:	
ignature:	



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Thursday, June 26, 2025

To: Antrim County Materials Management Planning Committee

Fr: Mathew Cooke, Community Planner **Re:** Materials Management Planning

Materials Management Planning

Survey Update

Attached you will find the surveys that will be sent out on Monday, June 23rd. Revisions made include:

- MMP Resident Survey
 - Added a back button on the survey
 - Ensured question numbers are present
 - o Ensured "Select all that apply" options are correct
 - Ensured text entry options are present for Other Please list responses
 - Question 7: Clarified property taxes, PA 69 taxes in responses
 - o Question 19: Corrected responses from interesting to interested
 - Question 24: Reduced income bracket responses, added 'prefer not to answer' option
- MMP Local Units of Government Survey
 - Added a back button on the survey
 - Ensured question numbers are present
 - Question 16: Added to ask for estimates on expenditures related to materials management
- MMP Business Survey
 - o Added a back button on the survey
 - Ensured question numbers are present
 - Question 5: Clarified single stream recycling

We will send out the resident survey through a press release and social media posting. Local units of government will be contacted by their Clerk and Supervisor, and the business will be targeted by existing business contact lists, economic development organizations, and Northwest Michigan Works!. Follow up communications will be sent out to targeted organizations within the multi-County area for all applicable surveys. Please let me know if you have any organizations that come to mind that we should contact to help spread the survey awareness.

Process Update

As we engage with getting survey results from the community and engaging with communities at community events over the summer, other tasks such as calculating the municipal solid waste rates and other date collection will take place. On Friday, June 27th we will be meeting with staff from RRS to plot out the path to achieve these tasks with their technical assistance and support.

Attached you will find the County profile utilizing data from the Census Bureau and other noted sources. As you review these, please let us know if there are any other data points that would be beneficial to the process.



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I have attached several previous planning documents for your review as we start to engage in some discussions on goals and objectives. The first planning document is the individual County and Region Materials Management County Engagement report. This report will give some information on what services exist in the County and considerations to gaps and needs. The next documents are from the State of Michigan with County Profiles related to Materials Management, again providing some existing information on access and locations. The next documents are provided by SEEDs with information related to organics waste diversion. Lastly, the goals and objectives from the existing solid waste plan are included but I have linked the full plan below.

	Antrim County
MMCE Report	<u>Link</u>
EGLE County Profile	<u>Link</u>
Solid Waste Plan	<u>Link</u>

Community Engagement Thoughts

At the meeting, we intend to provide a follow up memo with a calendar of events in the community for our attendance. We are still working on the scheduling of these with staff calendars. At these events, we will look to have a few activities for response to push the community MMP survey and awareness of the process and materials management in general.

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

\bigcirc	Permanent Resident (1)
0	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?
O Antrim County (7)
O Benzie County (8)
Charlevoix County (9)
C Emmet County (10)
○ Grand Traverse County (11)
○ Kalkaska County (12)
C Leelanau County (13)
Manistee County (14)
○ Missaukee County (15)
○ Wexford County (16)
Other - please list (17)
Display this question:
If O.1 Vicitor

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?
C Less than 1 year (1)
O 1 to 3 years (2)
3 to 5 years (3)
O 5 to 10 years (4)
O 10 plus years (5)
Q5 How important do you believe recycling is for our communities, environment, and natural resources?
O Not at all important (1)
Slightly important (2)
O Moderately important (3)
O Very important (4)
Extremely important (5)
Q6 How important is it for our community to reduce the amount of waste going into landfills?
O Not at all important (1)
○ Slightly important (2)
O Moderately important (3)
O 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)
am not sure (6)
Display this question:
If Q2 = Charlevoix County
Q7A Are you aware of the Charlevoix County Recycling Millage?
O Yes (1)
O No (2)
Q8 Does your household currently participate in recycling?
○ Yes (1)
O No (2)
Skip To: Q9 If Q8 = No

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 recyling availability?
O Yes (1)
○ Maybe (2)
O 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?
O Yes (1)
O 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)
O No (2)
O 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)
O No (2)
O 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.

•	could our communities be doing a better job of managing waste and ct all that apply.
Reducing	g waste (1)
Reusing	items (2)
Composi	ing more (3)
	lease list (4)
)40 \\/\bar\ar\ar\ar\ar\ar\ar\ar\ar\ar\ar\ar\ar\a	
(18 what service	es would you like to see offered in your community? Select all that apply
Subscrip	tion Compost Program (1)
Increase	d recycling access (2)
Bulk Wa	ste Pick-up (3)
Green W	aste Pick-up (4)
Electorni	c Waste Drop-Off (5)
	usehold Hazardous Waste Collection (6)
	accitora i razaracas vvacio conconori (0)

Q19 How interested are you in learning more about waste reduction and management, recycling, and organics in your community?
O Not interested at all (1)
○ Slightly interested (2)
O Moderately interested (3)
O Very interested (4)
Extremely interested (5)
Q20 Are you willing to pay for increased service and access? Select all that apply.
would pay more to increase access to recycling services (1)
would pay more to increase access to organic services (2)
would pay more to increase access to household hazardous waste services (3)
would pay more to increase access to mattress, furniture, appliance recycling (4)
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?

Page Break —

Q22 What age range do you fall into?
O Under 18 (1)
O 18 - 24 (2)
O 25 - 34 (3)
O 35 - 44 (4)
O 45 - 54 (5)
O 55 - 64 (6)
O 65 - 74 (7)
O 75 - 84 (8)
85 or older (9)
O Prefer not to say (10)
Q23 Which of the following describes the number of people, including yourself, living in your nousehold? 1 (1) 2 (2) 3 (3) 4 (4) 5 (5) 6 or more (6)

Q24 Which of the following be	st describes your total annual household income?
O 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)
O \$110,000 to \$129,999	(6)
○ \$130,000 to \$149,999	(7)
\$150,000 and over (8)	
O Prefer not to answer(12)
Q25 Please leave your email	f 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?
O Antrim County (11)
O Benzie County (12)
O Charlevoix County (13)
C Emmet County (14)
○ Grand Traverse County (15)
○ Kalkaska County (16)
C Leelanau County (17)
O 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
O1C Which Manietes remaining the decrease and
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)
O2 M/hat haat dagarihaa waw rala with waw asar www.'t-2
Q2 What best describes your role with your community?
O Supervisor (1)
O Mayor (2)
O Clerk (3)
Other Elected Official (4)
O 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)
O Very effective (2)
O Moderately effective (3)
○ Slightly effective (4)
O 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)	\circ	\circ	\circ	\circ	\circ	\circ
Plastics (2)	\circ	\circ	\circ	\circ	\circ	\circ
Glass (3)	\circ	\circ	\circ	\circ	\circ	\circ
Metals (4)	\circ	\circ	\bigcirc	\circ	\circ	\bigcirc
Construction Debris (5)	\circ	\circ	\circ	\circ	\circ	\circ
Electronic Waste (6)	\circ	\circ	\circ	\circ	\circ	\circ
Matresses (7)	\circ	\circ	\circ	\circ	\circ	\circ
Tires (8)	\circ	\circ	\circ	\circ	\circ	\circ
Household Hazardous Waste (9)	\circ	\circ	\circ	\circ	\circ	\circ
White Goods (appliances) (11)	0	0	0	0	0	0
Bulky Waste (furniture, mattresses) (12)	0	0	0	0	0	0
Yard Waste (13)	\circ	\circ	\circ	\circ	\circ	\circ
Prescription Drugs (10)	\circ	\circ	\circ	\circ	\circ	\circ
'						

If	Q6 = Terrible	
Ar	nd Q6 = Poor	
Ar	nd Q6 = Non-Existent	
	f you answered poor, terrible, or non-existent, please briefly explain why? Feel f to increase how materials can be managed better.	ree to offer
_		
your c	hat should be the primary focus of the updated County Materials Management Frommunity's perspective? An example could be increased recycling participation is within the community or launching a compost option in the community.	

Display this question:

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)

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)

Q10 Do you see value in pursuing the opportunity for region-wide collection of household

Q12 What are the biggest barriers to increasing recycling rates for materials in your community	?
O Funding (1)	
O Access (2)	
O Education (3)	
Other - Please list (4)	
Q13 After your communities recycling is collected, do you know where it goes to?	
○ Yes (1)	
O No (2)	
O 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.					

17 Is therements	-	you would lik	ke us to know	about materi	als managemer	nt and your

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.

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Q1	What County does your business primarily operate in?
	O Antrim County (1)
	O Benzie County (2)
	Charlevoix County (3)
	C Emmet County (4)
	○ Grand Traverse County (5)
	Calkaska County (6)
	C Leelanau County (7)
	O Manistee County (8)
	O Missaukee County (9)
	○ Wexford County (10)
	Other - Please list (11)

Q2 What sector best describes your primary business activity?
O Retail (1)
O Manufacturing (2)
O Service Industry (e.g., hospitality, healthcare, professional services) (3)
O Food Service (4)
Oconstruction (5)
O Agriculture (6)
O 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

Page 4 of 12

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)
O 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 greation.
Display this question: If Q2 = Food Service

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?
O Yes - Please list (1)
O 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 apple		
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? O Yes, very interested (1)		
Yes, somewhat interested (2)		
O Not currently interested (3)		
O 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)		
O No (2)		
O Unsure (3)		

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?	l ,
○ Yes (1)	
O 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?	

Display this question:

Q16B What recycled materials could your business purchase to utilize if they v	were available?
Q17 How could businesses better engage with the circular economy through r materials? Select all that apply.	e-use of recycled
Use recycled plastic in packaging (1)	
Design products that can be easily disassembled and their parts reuse	d or recycled (2)
Offer take-back programs for their products so the materials can be use	ed again (3)
Partner with companies that specialize in processing recycle materials applications (4)	for new
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)	

willing to be contacted for further information or discussion of materials management planning.	
O Business Name (1)	
O Contact Person (2)	
O Contact Email (3)	
End of Block: Default Question Block	

POPULATION AND HOUSING



475.7 sq. MILES ΔREΔ



50.2 PEOPLE/SQ. MILES POPULATION DENSITY

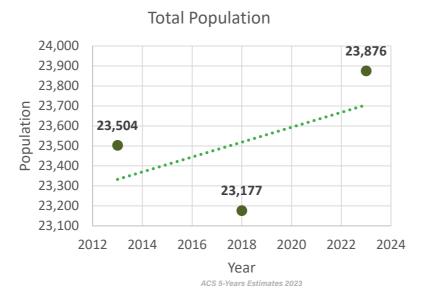


23,876
TOTAL POPULATION

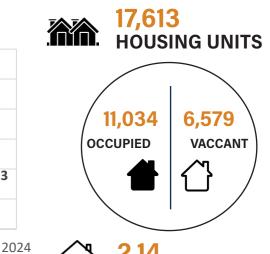
ACS 5-Years Estimates 2023



AGE	2025
Total	24,645
0 To 4	1,030
5 To 9	1,054
10 To 14	1,186
15 To 19	1,109
20 To 24	1,095
25 To 29	1,157
30 To 34	1,298
35 To 39	1,252
40 To 44	1,240
45 To 49	1,259
50 To 54	1,304
55 To 59	1,720
60 To 64	2,299
65 To 69	2,412
70 To 74	2,035
75 To 79	1,503
80 To 84	960
85+	730





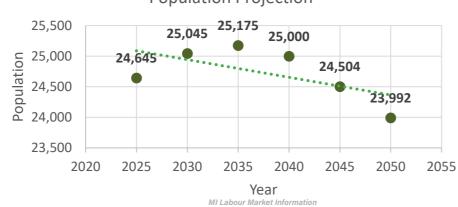


2.14
AVERAGE HH SIZE



ESTIMATED POPULATION PROJECTION

Population Projection

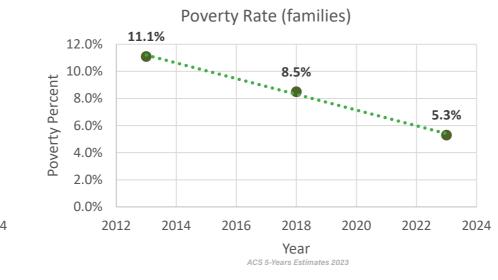


MUNICIPALITY	2020 CENSUS POPULATION
Banks Township	1588
Central Lake Township	2159
Chestonia Township	512
Custer Township	1150
Echo Township	952
Elk Rapids Township	2521
Forest Home Township	1675
Helena Township	937
Jordan Township	887
Kearney Township	1780
Mancelona Township	4311

MUNICIPALITY	2020 CENSUS POPULATION
Milton Township	2355
Star Township	1028
Torch Lake Township	1212
Warner Township	364
Village of Bellaire	1053
Village of Central Lake	960
Village of Elk Rapids	1529
Village of Ellsworth	367
Village of Mancelona	1344
Antrim County	23301

INCOME AND POVERTY

Household Median Income \$71,421 \$80,000 \$70,000 \$52,589 \$60,000 \$45,362 \$50,000 \$40,000 \$30,000 \$20,000 \$10,000 \$0 2012 2014 2016 2018 2020 2022 2024 Year ACS 5-Years Estimates 2023



INDUSTRY AND EMPLOYMENT



TOTAL NUMBER OF ESTABLISHMENTS 608



TOTAL NUMBER OF JOBS 3,831



TOP 5 INDUSTRIES

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

Supplement: Antrim County Materials Management County Engagement

March 1, 2023

PREPARED BY:

RRS recycle.com

COMMISSIONED BY:



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 Antrim County and as required by the EGLE grant, RRS identified the top five needs and the top three materials management projects that Antrim 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
- 5. More frequent household hazardous waste collection opportunities

TOP THREE MATERIALS MANAGEMENT PROJECTS:

Based on the top five needs above, RRS recommends Antrim 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 collect additional materials, including more frequent household hazardous waste events, mattresses, food waste, and other difficult to recycling items, regularly or periodically.
- 3. Develop consistent recycling outreach materials in partnership with the hauler, the processor, the mills, and, as appropriate, the region.

ANTRIM COUNTY - GAPS



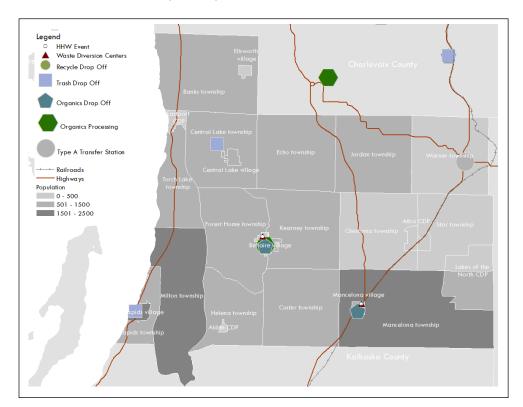
Population:	
Square Miles of	475.5
Land Area:	
Households:	10,166
Employer	548
Establishments:	
Countywide	NO
Curbside Trash:	
Countywide	
Curbside	NO
Recycling:	
Countywide	
Curbside	NO
Organics:	
Countywide	YES
Drop-off Trash:	
Countywide	
Drop-off	YES
Recycling:	
Countywide	
Drop-off	NO
Organics:	
Countywide	YES
Drop-off HHW:	

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.

- Antrim County offers seven (7) access points for drop-off of recyclables, averaging one for every 68 square miles (1:68).
- Curbside recycling is not available in Antrim County.
- HHW days are offered three (3) times per year at three (3) different locations around the county.
- There is no countywide organic waste collection program for either yard waste or food 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.

 Antrim County does not own or operate processing facilities, but contracts with a privately-owned MRF.



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 Antrim County there are no identified markets 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.

• Antrim County partners with the conservation district to administer recycling and HHW programs.

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.

A millage provides funding for recycling-related 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.

Antrim County reports having had a grant for developing recycling messaging in partnership with The
Recycling Partnership. However, no such educational material was found on the county or conservation district
website. There does not appear to be a consistent message about recycling locations and materials across the
county.

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
Jeremy	Scott	Antrim County	County recycling contact	primary
Melissa	Zelenak	Antrim Conservation District	Recycling coordinator	Phone, email
Joshua	Watrous	Antrim County	County Commissioner, District 2	Email
Karen	Bargy	Antrim County	County Commissioner, District 3	Email
Ed	Boettcher	Antrim County	County Commissioner, District 4	Email
Terry	VanAlstine	Antrim County	County Commissioner, District 5	Email
Brenda	Ricksgers	Antrim County	County Commissioner, District 6	Email
Dawn	LaVanway	Antrim County	County Commissioner, District 7	Email
Jason	Helwig	Antrim County	County Commissioner, District 8	Email
Christian	Marcus	Antrim County	County Commissioner, District 9	Email
Dan	Bennett	Village of Bellaire	municipal official	Email
Nicole	Essad	Village of Bellaire	municipal official	Email
Bradley	Keiser	Village of Bellaire	municipal official	Email
Rob	Tyler	Village of Central Lake	municipal official	Email
Allie	Hines	Village of Central Lake	municipal official	Email
Jon	Shooks	Village of Central Lake	municipal official	Email
James	Janisse	Village of Elk Rapids	municipal official	Email
Bryan	Gruesbeck	Village of Elk Rapids	municipal official	Email
Kaitlyn	Szczypka	Village of Elk Rapids	municipal official	Email
Kevin	Lane	Village of Elk Rapids	municipal official	Email
Hugh	Campbell	Village of Ellsworth	municipal official	Email
Marlene	Drenth	Village of Ellsworth	municipal official	Email
Mike	Allison	Village of Mancelona	municipal official	Email
Maureen	Naumcheff	Village of Mancelona	municipal official	Email
Craig	Hart	Mancelona Area Water & Sewar Authority	municipal official	Email
Alex	Busman	Banks Township	municipal official	Email
Donna	Heeres	Banks Township	municipal official	Email
Stan	Bean	Central Lake Township	municipal official	Email
Judy	Kosloski	Central Lake Township	municipal official	Email
Nathan	Bootz	Chestonia Township	municipal official	Email

RRS

Nancy	Shepard	Chestonia Township	municipal official	Email
Roxann	Flake	Custer Township	municipal official	Email
Stacy	Simon	Custer Township	municipal official	Email
Bill	Derenzy	Echo Township	municipal official	Email
Diane	Kucharek	Echo Township	municipal official	Email
Dorance	Amos	Elk Rapids Township	municipal official	Email
Shelly	Boisvert	Elk Rapids Township	municipal official	Email
Terry	Smith	Forest Home Township	municipal official	Email
Sue	Mahan	Forest Home Township	municipal official	Email
Butch	Peeples	Helena Township	municipal official	Email
David	Peterson	Helena Township	municipal official	Email
		Jordan Township	municipal official	Email
Ed	Niepoth	Kearney Township	municipal official	Email
Michelle	Valuet	Kearney Township	municipal official	Email
Chuck	Johnson	Mancelona Township	municipal official	Email
Mike	Biehl	Mancelona Township	municipal official	Email
Lon	Bargy	Milton Township	municipal official	Email
Sandra	Ball	Milton Township	municipal official	Email
Bob	Marsh	Star Township	municipal official	Email
Phyllis	Hoogerhyde	Star Township	municipal official	Email
Bob	Cook	Torch Lake Township	municipal official	Email
Kathy	Windiate	Torch Lake Township	municipal official	Email
Martin	Franckowiak	Warner Township	municipal official	Email
Pamela	Zaremba	Warner Township	municipal official	Email
Jarris	Rubingh	Antrim County	County Commissioner, District 1	Email
Ann	Rogers	Northern Michigan Environmental Action Council	community organization	Email
Jill	Reynolds	Waste Management	hauler	Email
Todd	Harland	Republic Services	hauler	Email
Mark	Bevelhymer	GFL/American Waste	hauler	In person interview
Sarna	Salzman	SEEDS	community organization	In person interview

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. 41 people from Antrim 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.

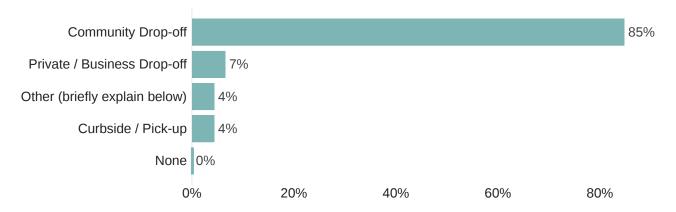
The full survey results for Antrim County are on the following pages.

MMCE Networks Northwest Survey Results Summary (Antrim County)*

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

SUMMARY - 85% of Antrim County residents have access to Community Drop-off recycling services, and a few have access to Business Drop-off recycling services.

41 Responses



Q1 - "Other" text responses

2 Responses

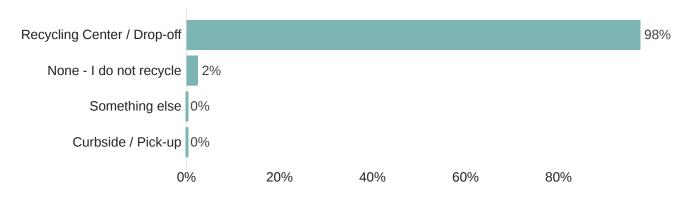
specialty ake itemdropspecial yrbuilding central government

^{*}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. 2% don't recycle at all and none use Curbside Pick-up recycling services.

41 Responses



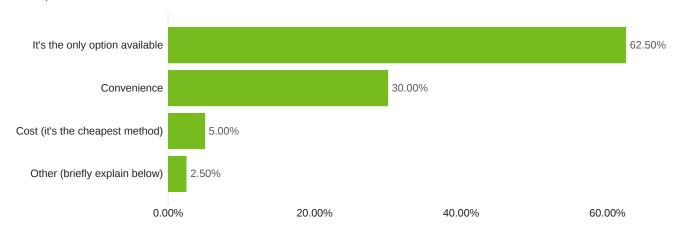
Q2 - What type of recycling services do you most often use, not including bottle returns? Text responses

No data found - your filters may be too exclusive!

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

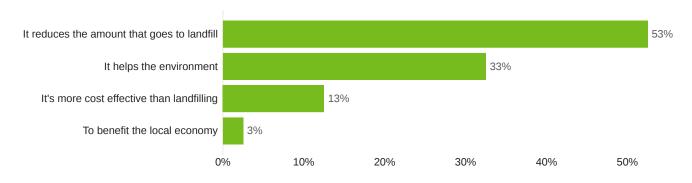
SUMMARY - Nearly 63% of residents chose their method of recycling because it is the only option offered.

40 Responses



Q4 - Why do you recycle?

SUMMARY - 53% recycle as a means to reduce the amount of waste headed to landfills. 33% do so for environmental reasons.



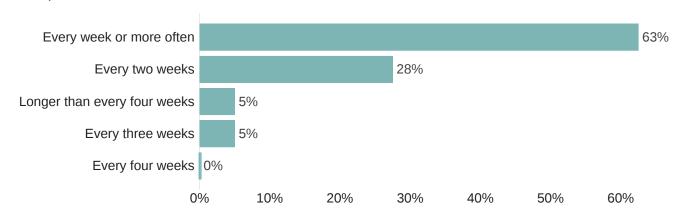
Q5 - How often do you recycle using curbside / pick-up?

SUMMARY - N/A - no responses.

No data found - your filters may be too exclusive!

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

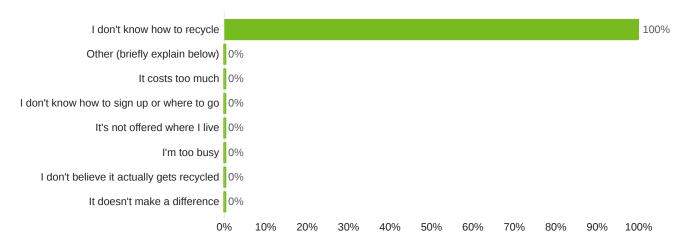
SUMMARY - Those with access to Drop-off recycling services to are likely to use the service either every week or every other week.



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

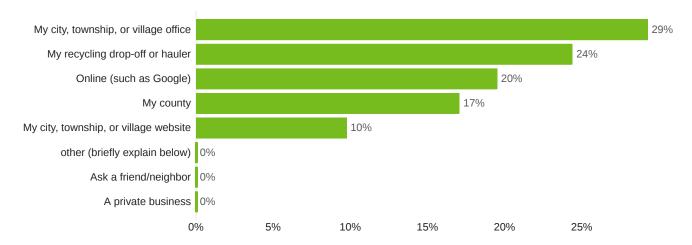
SUMMARY - One individual expressed not knowing how to recycle as their reason for not recycling.

1 Responses



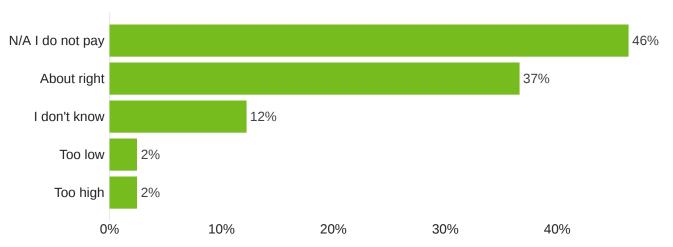
Q8 - If you had questions about recycling, where would you first seek out information?

SUMMARY - 80% first look towards their municipality and recycling providers to answer questions about recycling. 20% seek information from Google.



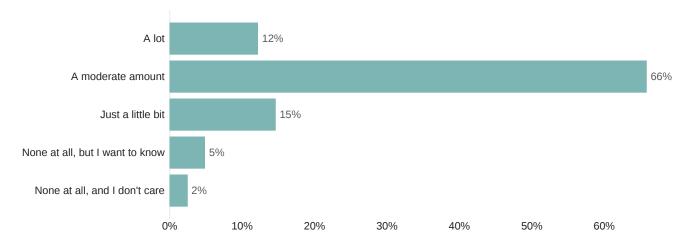
Q9 - Do you think the cost of recycling is too high, about right or too low? Please respond even if you do not recycle.

SUMMARY - 46% do not pay for recycling. While 37% 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.



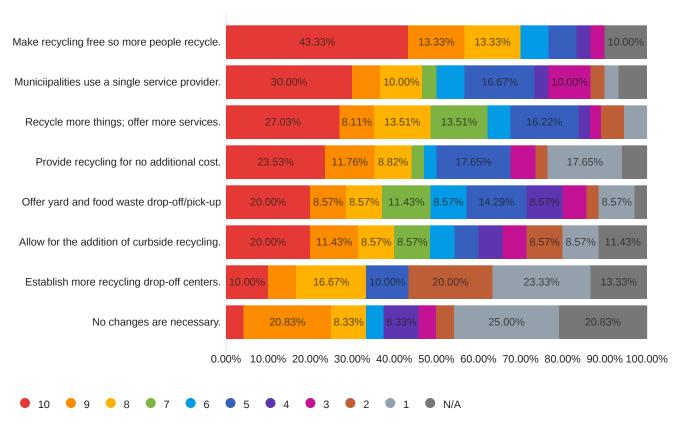
Q10 - How much do you know about recycling, generally speaking?

SUMMARY - A majority feels they know a moderate amount about recycling. Whereas only 12% feels that they know a lot.



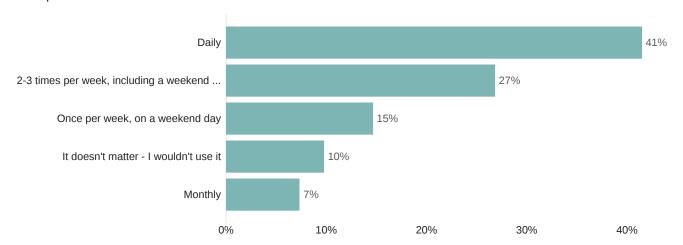
Q11 - Leaders in Northwest Michigan are exploring ways to improve recycling and other waste management services offered to residents and businesses. On a scale of 1-10, with 10 being VERY IMPORTANT and 0 being NOT AT ALL IMPORTANT, how important are each of the following potential improvements to you? 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 municipalities to use a single service provider and offer services to allow for the recovery of more materials.



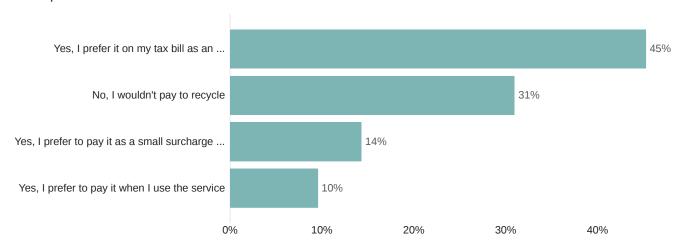
Q12 - If a convenient recycling or food waste drop-off site were available close to where you live, how often would you want it open?

SUMMARY - 42% people would like a Drop-off site open at least once per week on the weekend day. And, 41% a quarter would like Drop-off sites open daily.



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

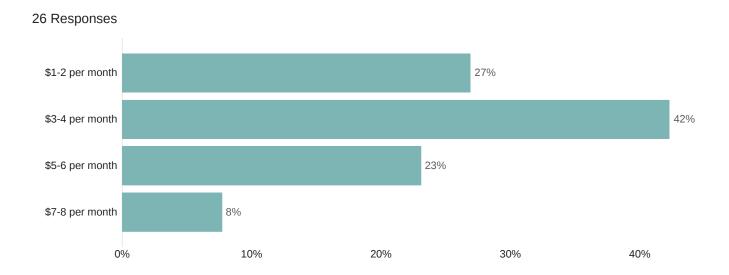
SUMMARY - Residents primarily prefer to pay for recycling or food waste collection through an assessment or fee on their tax bill. 31% do not want to pay anything for recycling or food waste collection services.



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

SUMMARY - A sizeable fraction of respondents (31%) would not pay anything for convenient access to recycling or food waste collection. Of those willing to pay for recycling or food waste collection, 92% want to pay \$6 or less a month for recycling or food waste collection; \$3-4 per month is most preferred.

Note: 31% of respondents would not pay anything.

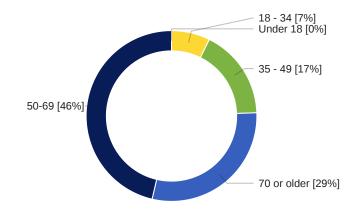


Demographics and Background of Respondents

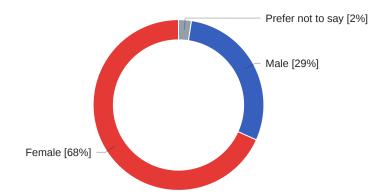
SUMMARY:

- Respondents are primarily 50 years of age or older.
- Respondents are predominately female.
- 91% have some college education or higher.
- 95% of respondents own the home that they live in.
- 78% live in Antrim County year around.
- Unsurprisingly, because of the higher age range of our respondents, 78% do not have children living at home who are school age or younger.
- 95% 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.
- N/A no responses.

Q16 - Which of these best fits your age?

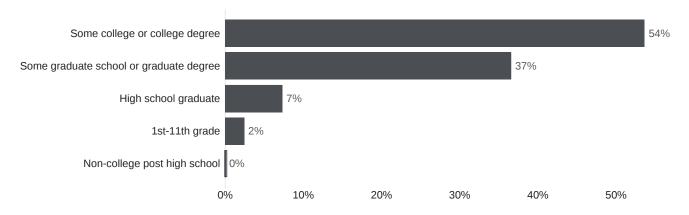


Q17 - What is your gender?



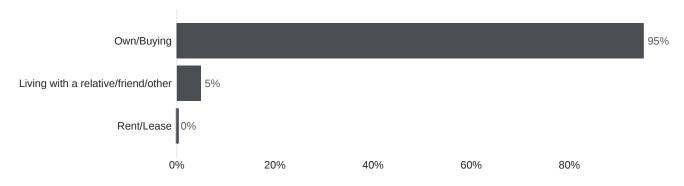
Q18 - What is the last grade or level of schooling you completed?

41 Responses

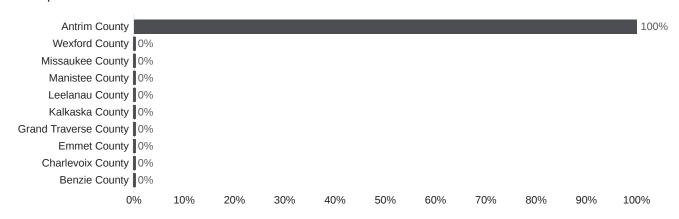


Q19 - Do you own your own home, are you buying a home, or do you lease or rent where you live?

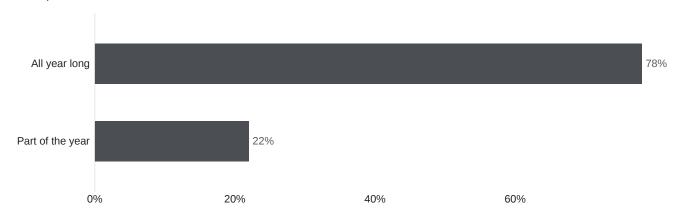
41 Responses



Q20 - County

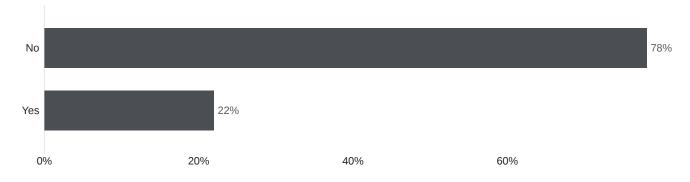


Q21 - How much of the year do you live in this county?

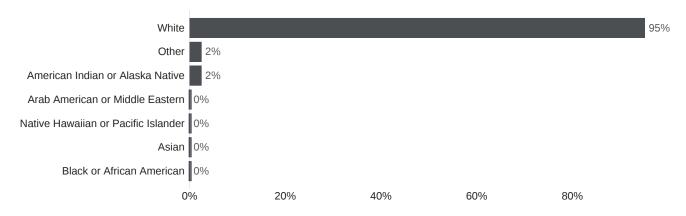


Q22 - Do you have children living in your home who are school age or younger?

41 Responses

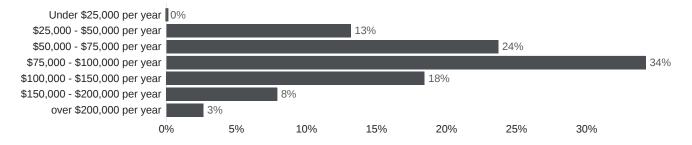


Q23 - Which racial or ethnic group best describes you?



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.

38 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!

ANTRIM COUNTY

PROFILE | FEBRUARY 2023



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 counites 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

There are no county-run curbside programs in Antrim County. Eight drop-off recycling sites are available throughout the county under the management of the Antrim County Conservation District. Antrim County Conservation District also provides county residents with temporary household hazardous waste (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

Residents of Antrim County can drop-off trash materials at the Village of Elk Rapids Compactor or GFL's Elmira Hauling & Transfer Station. Custer Township provides residents with curbside trash services though a local millage, while several communities their residents with annual clean-up days to dispose of excess trash materials.

RECYCLING

Residents can access drop-off recycling through the Antrim County Recycling Program, which is managed by the Antrim County Conservation District. Here, residents can drop off recyclables, including mixed paper, cardboard, glass, mixed plastics, metal cans and foil.

YARD WASTE

Two communities in the county provide their residents with brush pickup seasonally, Village of Elk Rapids and Village of Mancelona. Village of Mancelona also provides its residents and the residents of Mancelona Township with access to drop-off yard waste services as the local brush drop-off.

HOUSEHOLD HAZARDOUS WASTE

Antrim County hosts household hazardous waste events, which accept materials such as tires, batteries, paint, lawn chemicals, electronics, and fluorescent bulbs.

OTHER

No information obtained about Other programs.

LIST OF ACTIVE HAULERS

- Green for Life (GFL)
- Revolution Waste Solutions

CURBSIDE SERVICES BY COMMUNITY

MUNICIPALITY NAME	TRASH COLLECTOR	RECYCLING	YARD WASTE	OTHER CURBSIDE
		COLLECTOR	COLLECTOR	SERVICES
Alba CDP (part)				
Alba CDP (part)				
Alden CDP				
Bellaire village				
Central Lake village				
Custer township	GFL Environmental			
Eastport CDP				
Echo township				
Elk Rapids village	Village of Elk Rapids Public Works Spring Clean-up		Village of Elk Rapids Monthly Brush Pick Up	
Ellsworth village				
Jordan township				
Lakes of the North CDP (part)				
Lakes of the North CDP (part)				
Mancelona village	Village of Mancelona Fall Trash Pick Up		Village of Mancelona Brush Pickup	
Milton township				
Banks township				
Central Lake township				
Chestonia township				

Elk Rapids township			
Forest Home township	Forest Home Township Clean-Up		
Helena township			
Kearney township			
Mancelona township			
Star township			
Torch Lake township			
Warner township			

DROP-OFF SERVICES BY COMMUNITY

MUNICIPALITY NAME	TRASH DROP-OFF SERVICES (PERMANENT)	RECYCLING DROP-OFF SERVCES (PERMANENT)	YARD WASTE OR OTHER ORGANICS DROP-OFF (PERMANENT)	OTHER PERMANENT DROP-OFF SERVICES	TEMPORARY DROP-OFF SERVICES
Alba CDP (part)	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program			Antrim Conservation District
Alba CDP (part)	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program			Antrim Conservation District
Alden CDP	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program			Antrim Conservation District
Bellaire village	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program	Village of Bellaire Yard Waste Drop- Off Locations		Antrim Conservation District
Central Lake village	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program			Antrim Conservation District
Custer township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program			Antrim Conservation District



Eastport CDP	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Echo township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Elk Rapids village	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Ellsworth village	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Jordan township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Lakes of the North CDP (part)	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Lakes of the North CDP (part)	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District

Mancelona village	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program	Mancelona Brush Drop-off	Antrim Conservation District
Milton township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Banks township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Central Lake township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program	Central Lake Township Waste Receiving Station	Antrim Conservation District
Chestonia township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Elk Rapids township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Forest Home township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District

Helena township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Kearney township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Mancelona township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program	Mancelona Brush Drop-off	Antrim Conservation District
Star township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Torch Lake township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District
Warner township	Village of Elk Rapids Compactor; GFL Elmira Hauling & Transfer Station	Antrim County Recycling Program		Antrim Conservation District

FACILITIES

MATERIALS MANAGEMENT FACILITIES IN COUNTY

FACILITY SUMMARY TABLE

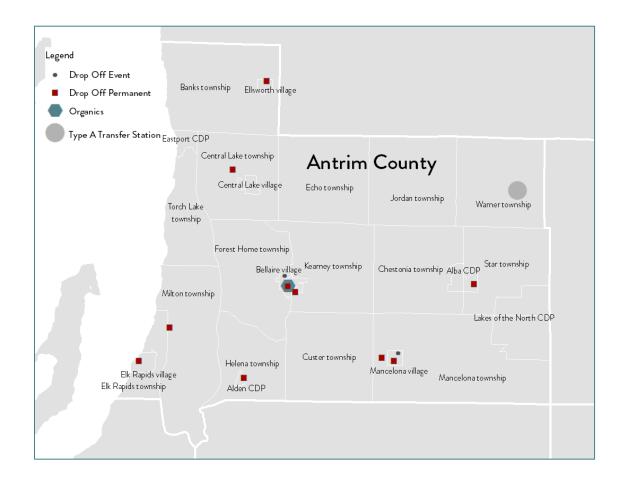
FACILITY TYPE	FACILITY NAME	FACILITY ADDRESS	CITY	PERMANENT OR TEMPORARY
Compost (Yard Waste)	Village of Bellaire brush and leaf drop-off	South Court St.	Bellaire	
Drop-off (WDC, NT)	Antrim County CD Household Hazardous Waste Days	319 East Lincoln Street Mancelona, 117 Lake St. Elk Rapids, 204 W Forest Home Ave Bellaire	Mancelona	Temporary Drop-off
Drop-off (NT, T)	Antrim County Recycling - Alden Site	8751 Helena Rd	Alden	Permanent Drop-off
Drop-off (NT, T)	Antrim County Recycling - Bellaire Site	4700 S M88 Hwy	Bellaire	Permanent Drop-off
Drop-off (NT, T)	Antrim County Recycling - Ellsworth Site	9627 Lake Street	Ellsworth	Permanent Drop-off
Drop-off (NT, T)	Antrim County Recycling - Kewadin Site	7268 Cairn Hwy	Kewadin	Permanent Drop-off
Drop-off (NT, T)	Antrim County Recycling - Mancelona Site	9610 S M 88 Hwy	Mancelona	Permanent Drop-off
Drop-off (NT, T)	Antrim County Recycling - Star Township Site	6775 Alba Hwy.	Elmira	Permanent Drop-off
Drop-off (T, B, C&D, NT)	Central Lake Township Waste Receiving Station	3510 North M-88	Central Lake	Permanent Drop-off



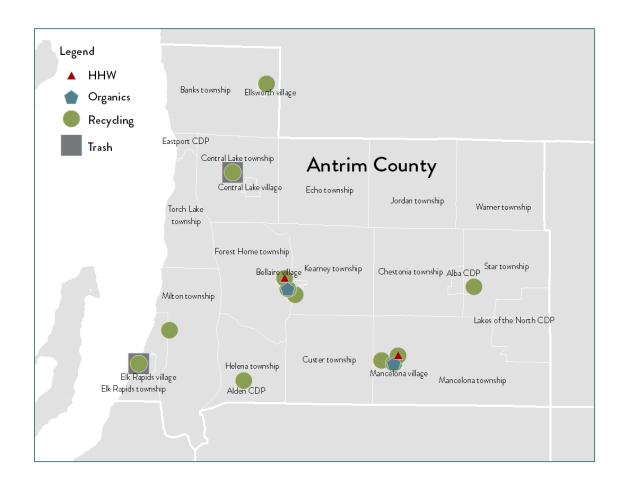
Drop-off (O)	Mancelona DPW Garage Yard Waste & Brush Drop Off	404 Center St	Mancelona	Permanent Drop-off
Drop-off (O)	Village of Bellaire brush and leaf drop-off			Permanent Drop-off
Drop-off (NT, T)	Village Of Elk Rapids Transfer Station	315 Bridge St	Elk Rapids	Permanent Drop-off
Transfer Station – Type A	GFL Elmira Hauling & Transfer Station	10164 M-32 HWY	Elmira	

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

MUNCIPAL ORDINANCES

Municipality	Policy type	Requirement
Bellaire village	Ordinance	Proper storage of garbage

MUNICIPAL FUNDING MECHANISMS

No funding mechanisms obtained.

COUNTY ORDINANCES

No county ordinances obtained.

COUNTY FUNDING MECHANISMS

No funding mechanisms 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)
Alba CDP	239	108	8	9	91
Alba CDP	216	98	7	8	83
Alden CDP	121	55	4	5	46
Banks township	1,090	494	35	42	417
Bellaire village	503	228	16	19	192
Bellaire village	405	184	13	15	155
Central Lake township	1,150	521	37	44	440
Central Lake village	996	451	32	38	381
Chestonia township	294	133	10	11	112
Custer township	909	412	29	35	348
Eastport CDP	243	110	8	9	93
Echo township	811	368	26	31	310
Elk Rapids township	1,060	480	34	40	406
Elk Rapids village	1,531	694	50	58	586
Ellsworth village	337	153	11	13	129
Forest Home township	1,279	580	42	49	489
Helena township	1,026	465	33	39	393
Jordan township	828	375	27	32	317
Kearney township	1,179	534	38	45	451
Lakes of the North CDP	554	251	18	21	212
Lakes of the North CDP	416	189	13	16	159
Mancelona township	2,103	953	68	80	805
Mancelona village	1,708	774	55	65	654
Milton township	2,466	1,118	80	94	944
Star township	261	118	8	10	100
Torch Lake township	1,217	552	39	46	466
Warner township	359	163	12	14	137
TOTAL	23,301	10,560	756	888	8,916

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)
Antrim	3,804	11,442	647	10,794

TOTAL WASTE GENERATED PROJECTIONS

County	Total Waste Generation (Tons) ¹	Total Diversion (Tons)	Total Requiring Disposal (Tons)
Antrim	22,002	2,292	19,710



ANTRIM 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.

Emmet Charlevoix Antrim Leelanau Kalkaska Grand Benzie Traverse Manistee Wexford Missaukee

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 NW 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 selective food waste collections within portions of the county and coordinate with Grand Traverse County on the development of food waste collection and hauling strategies.

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

ANTRIM COUNTY STATISTICS

ORGANIC WASTE IN TONS/YEAR

6,149

1.402

GENERATED

CURRENTLY DIVERTED

TARGET DIVERSION

GENERATION OF FOOD WASTE IN TONS/YEAR



RESTAURANTS 665

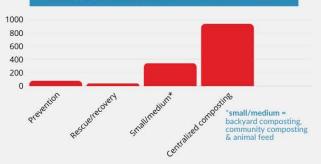


FOOD STORES 110



OTHER 240

2030 DIVERSION TARGETS IN TONS/YEAR



HOW ANTRIM COUNTY COMPARES IN THE REGION

Of the 10 counties in northwest Michigan, Antrim County is 1 of:

- · 4 with at least 1 municipality that has an ordinance affecting organic waste diversion.
- 7 whose Solid Waste Management Plan states that they will develop a yard waste drop-off for county-wide use.
- 7 who have not yet developed a county-wide yard waste drop off location





I-2 INTRODUCTION

To comply with Part 115 and its requirements, the Antrim County Solid Waste Plan establishes an Enforceable Program and Process that is directed toward goals and objectives based on the purposes stated in Part 115. Section 11538.(1)(a), 11541.(4) and the State Solid Waste Policy adopted pursuant to this Section, and Administrative Rules 711 (b)(i) and (ii).

GOALS AND OBJECTIVES

Goals and Objectives for the Antrim County Plan's Enforceable Program and Process as adopted by the Solid Waste Planning Committee follow:

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 1.0: Establish and maintain a high quality environment within Antrim County by developing and implementing a planned solid waste management system, which provides for the protection of public health and the natural environment through conserving natural resources.
 - Objective 1.1: Develop a solid waste management plan which provides adequate guidance for both short term and long term concerns.
 - Objective 1.2: Ensure that solid waste management methods comply with water and air quality standards.
 - Objective 1.3: Develop and enforce regulations governing odor, noise, and appearance of solid waste collection, recovery, disposal, and storage facilities.
 - Objective 1.4: Eliminate illegal dumping of waste in authorized areas by developing and enforcing a county ordinance which provides for fines and other penalties and encourage witness to report illegal dumping by offering cash rewards.
 - Objective 1.5: Encourage and support practices of volume reduction of solid waste.
 - Objective 1.6: Annually provide means for the proper disposal of household hazardous wastes.
 - Objective 1.7: Participate in or provide means for the proper disposal of waste generated by agricultural and manufacturing interests which may require special handling and disposal.
 - Objective 1.8: Annually provide means and submit evidence to the Michigan Department of Environmental Quality for at least sixty six months of landfill capacity for Antrim County's waste stream.
- Goal 2.0: Educate the public in order to assure all citizens are properly informed and understand the solid waste management system within Antrim County
 - Objective 2.1: Establish a solid waste management educational program which makes information readily available to students in the Antrim County educational system.
 - Objective 2.2: Utilizing the available media (radio, T.V., newspapers, newsletters), provide advanced notification to citizens regarding the various solid waste management opportunities which exist, such as recycling, household hazardous waste collections, composting, and special planning concerns.

- Objective 2.3: Involve and encourage citizen participation in all aspects of solid waste management, including education on costs of solid waste management facilities, funding alternatives, solid waste planning, resource recovery, and composting,
- Objective 2.4: Involve and encourage the commercial/manufacturing sector of Antrim County to participate in waste reduction, recycling, and composting programs to reduce the amount of materials being disposed of in landfills.
- Goal 3: Maintain support, and expand recycling programs and facilities to decrease the dependence on landfills for solid waste disposal.
 - Objective 3.1: Encourage local research and experimental efforts in volume reduction and recycling by private, governmental, and civic groups.
 - Objective 3.2: Support inter-county (regional) cooperation in the research and development of recycling and resource recovery programs and facilities.
 - Objective 3.3: Promote development of local industries which use recycled materials.
 - Objective 3.4: Encourage source separation of recyclables by providing drop off sites throughout the city.
 - Objective 3.5: Encourage reduction of non-recyclable materials in packaging.
 - Objective 3.6: Encourage solid waste management information sharing from private, public, and civic groups.
 - Objective 3.7: Encourage and pursue a county-wide coordinated recycling program for the County of Antrim.
 - Objective 3.8: Develop a waste exchange program with Antrim County which utilizes a waste exchange handbook which lists all the opportunities for recycling and the exchange of potential items which may still be available to other individuals/organizations.
- Goal 4: Develop and implement a financially feasible solid waste management program.
 - Objective 4.1: Encourage development of multi-county disposal/recycling facilities which maximize energy and materials recovery while minimizing costs.
 - Objective 4.2: Develop recycling programs which are self-supporting
 - Objective 4.3: Where economically feasible, utilize private enterprise in the ownership and operation of solid waste management facilities
- Goal 5: Provide for a solid waste management implementation program which best suites the solid waste management needs of Antrim County
 - Objective 5 1: Define the solid waste management authorities of the various units of government, private sector, and civic groups.
 - Objective 5.2: Identify opportunities for efficient and effective coordination between operations of solid waste facilities serving the various communities of northern lower and the State of Michigan.
- Goal 6: Recommend being involved in waste-to-energy facilities as part of an integrated solid waste management program when technologically, economically, and environmentally feasible.

EXECUTIVE SUMMARY AND INTRODUCTION

- Objective 6.1: If solid waste management conditions warrant, identify and encourage additional inter-county research and cooperation in the development of waste-to-energy facilities
- Objective 62: Encourage work in identifying potential customers and markets which will purchase the energy form such facilities
- Goal 7: Develop inter-county and contingency agreements for collection, transportation, and disposal of solid waste to be utilized in the event that any portion of the primary system of use becomes unavailable.
 - Objective 7.1: Designate specific backup sites for all facilities included in the selected system.
 - Objective 7.2: Negotiate and sign inter-county agreements as needed for contingencies.
 - Objective 7.3: Encourage the use of landfills located in other regions of the state as a potential disposal option in order to assure the residents of Antrim County have economic feasible disposal of solid waste.