

Sustainable Residential Recycling

Development & Funding



New Opportunities



Part 115 Legislation

- Update solid waste planning to include recycling and composting
- Prioritize local control of siting recycling and composting facilities
- Increase the regulatory oversight of composting and recycling facilities
- Require financial assurance from all permitted facilities
- Eliminate import/export authorizations for disposal



Part 115 legislation

- Specify local funding mechanisms for recycling
- Enable municipalities and counties to require haulers to provide recycling services
- Preserve the right to flow material to publically managed facilities
- Establish benchmarks for access to curbside and drop-off recycling
- Require planning areas to plan for and make progress toward recycling goals
- Provide grants to support recycling growth and development



Funding Initiative: SB 943

- Support development of material management plans at the county, regional, state level
- DEQ oversight
- Grant Funding to support:
 - Implementation of county/regional plans
 - Development of programs & infrastructure
 - Develop statewide educational campaign
 - Attract public and private sector investment



Seed funding critical!

- Many long term programs successfully operating today received grant funding from the state in the late 1980s early 1990s



Engagement Required!

PROFILE OF THE HIGHEST-PERFORMING CITIES SURVEYED (OVER 400 LBS/HH/YR)

WHEN THE LOCAL GOVERNMENTS ARE ENGAGED IN THE RECYCLING PROGRAM AND HAVE TRIGGERED AN "ACTION" TO INCENTIVIZE RECYCLING IS WHEN YOU SEE THE MOST SUCCESS.

100%
PUBLIC ACTION



[RecyclingPartnership.org/
updated-2016-state-of-curbside-report/](http://RecyclingPartnership.org/updated-2016-state-of-curbside-report/)



Types of Services

- Recycling
 - Drop off site
 - Curbside
 - Super Drop off
 - Events
 - Public Space
- Composting
 - Yard waste
 - Food scraps



There's a progression

- Rural to Urban
- Increasing Convenience
- Increasing Comprehensiveness
- Continued cost effectiveness



The More Convenient, and the More Comprehensive, the More it will cost (per ton, per service, per household)



So.... How do you design programs to be sustainable and funded?

- What we did in a nutshell
- Planning
- Millage + Ordinance + Licensing Haulers + PAYT
- Grants
- Potential State Funding
- Markets – gotta be able to sell the materials (or have very savvy risk-sharing agreement with private or non-profit sector partner)



Decision Making Process

- Initial Millage
- Recycle Funding Committee
- Solid Waste Ordinance
 - Pay-As-You-Throw
 - Flow Control for level playing field
 - License/Regulate Haulers





Public-Private Partnership Transportation & Disposal



Solid Waste Ordinance

Licensing Haulers

PAYT: Pay As You Throw

Flow Control



Emmet County Solid Waste Ordinance

- Level Playing Field for Haulers
 - Solid waste haulers licensed by county
 - Haulers must use designated facility for disposal
 - Haulers must offer commercial cardboard collection



CartonOpportunities.org/supporting-policy-tools



About carton recycling and the Carton Council

Get involved:

Communities/Facilities

Companies/Brands

Carton Recycling Markets

Schools






Supporting Policy Tools

Supporting Policy Tools

Want to improve your recycling program? Unsure how to move the needle?

The Carton Council works to maximize the extent to which cartons (both gable top and aseptic containers) are recycled – this requires strong recycling programs and participation. The Carton Council has found that certain policies are particularly effective in strengthening recycling programs and incentivizing individuals to participate. To that end, we have created several tools to assist local governments and others in developing and implementing policies that have been shown to improve recycling programs, particularly when implemented using a best practices approach. Additionally, we've found that implementing these policies helps boost the recycling of *all* commodities.

These tools are unbranded – feel free to download, print, and share how you see fit. For example, they can be shared with interested parties via email, in presentations, in informational packets to elected officials, and via electronic or printed newsletters. These tools are suitable for all types and sizes of communities.

Tool	Description
 <p>Strong Recycling Programs Benefit the Economy and the Environment</p>	Recycling helps communities environmentally, as well as economically. This fact sheet describes why strong recycling programs are important. This information is often helpful in securing program support from elected officials.
 <p>Carton Council Policy Infographic (JPG)</p> <p>Carton Council Policy Infographic (PDF)</p>	These infographics show, broadly, how specific types of policies can help bring about various desirable recycling program attributes.
 <p>Mandatory Provision of Service Through Hauler Permitting/Licensing</p>	Hauler Licensing is one approach to ensuring that haulers provide a certain level of service, even if the municipality does not provide the service directly or contract for service. This tool describes a variety of permitting and licensing approaches, with examples and links to ordinances, and a description of associated best practices.
 <p>Pay-As-You-Throw: A Proven Way to Reduce Waste, Increase Recycling, and Reduce Disposal Costs</p>	Use of "Pay-as-You-Throw" variable rate user fees has proven to incentivize recycling and reduced generation of less waste. This fact sheet describes different ways PAYT can be implemented and results experienced in different U.S. communities. It also addresses concerns decision makers may have about PAYT.
	"Universal recycling" generally means that recycling is available wherever trash disposal is available. This tool describes



Flow Control Supreme Court Decision

- Flow Control “...is a convenient and effective way to finance... integrated package of waste-disposal services...”
- “create enhanced incentives for recycling...”
- “increase ability to enforce recycling laws...”

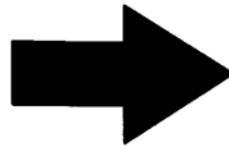


So how did we incorporate best practices?

- Ordinance
- Hauler licensing
- PAYT (incentivize waste reduction)
- Incentivized pricing
- Highest and best use
- Strong market relationships
- Intergovernmental agreements and public private partnerships



Pay-as-you-Throw Incentives Waste Reduction



Start-Up Funding

- Solid Waste Alternatives Program grant
- Clean Michigan Fund grant
- County millage (.25 mil, two year)



Initial Capital Investments

Expenditures

Buildings	\$146,842.00
Equipment	\$207,608.00
Truck/containers	<u>\$144,274.00</u>

Total
\$498,724.00

Contributions to Capital

County Millage	\$376,750.00
State Grants	<u>\$218,920.00</u>

Total
\$595,670.00



Grant/Funding Opportunities

- USDA Rural Development Grants
- USEPA
- State DEQ (Tire grants, others)
- Keep America Beautiful Bin Grants
- The Recycling Partnership Cart Grants
- Local and State Foundations
- Casino Revenue Share Grants
- Millage, PA 69, PA 138



Recycling Drop sites – Rural Plus



12 sites, 24/7 access, 70,000 yds



Recycle Drop-off Sites



The Emmet County Model



Emmet County Recycling

Convenient

Comprehensive

Cost-Effective

Ordinance

Flow Control

Pay-As-You-Throw



Curbside Recycling Residential & Commercial



Curbside Recycling Collection



2017 All time high: 163,300 pick-ups
Over 80% Residents Recycle





Leveraged funding = Carts at the Curb
Increased capacity = increased recovery



The Recycling Partnership

- 100% of successful programs have strong public sector involvement
- TRP provides technical support
- Many on-line tools and resources
- Grant-funding
- And Much More!





Commercial Recycling

Over 350
businesses
contract for
Curbside
Recycling service



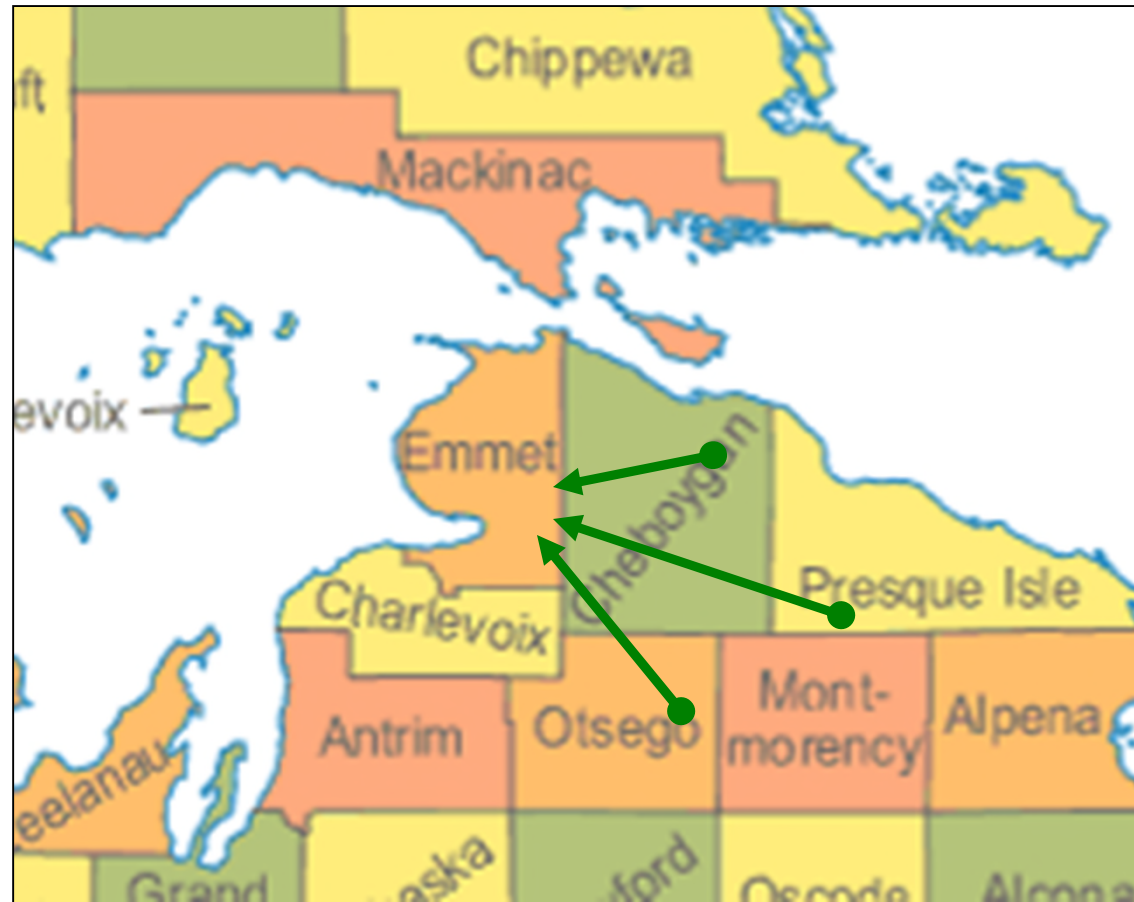


Creating Economies of Scale

- Hub & Spoke regional MRF
- High Quality Grades
- Processing & Shipping



Hub and Spoke



Serving a population of 100,000



Dual-stream expansion 2010



This was a policy decision



2 Categories



Paper, Boxes and Bags



Mixed Containers













Nearly 12,000 tons in 2017



Over 400 Semi-loads a Year



97% of Our Recyclables Supply Businesses in Michigan



- Returning value to our communities
- Keeping jobs and resources in Michigan



Sorted Cartons



Carton Bales



Great Lakes Tissue- Cheboygan Michigan



Great Lakes Tissue Products

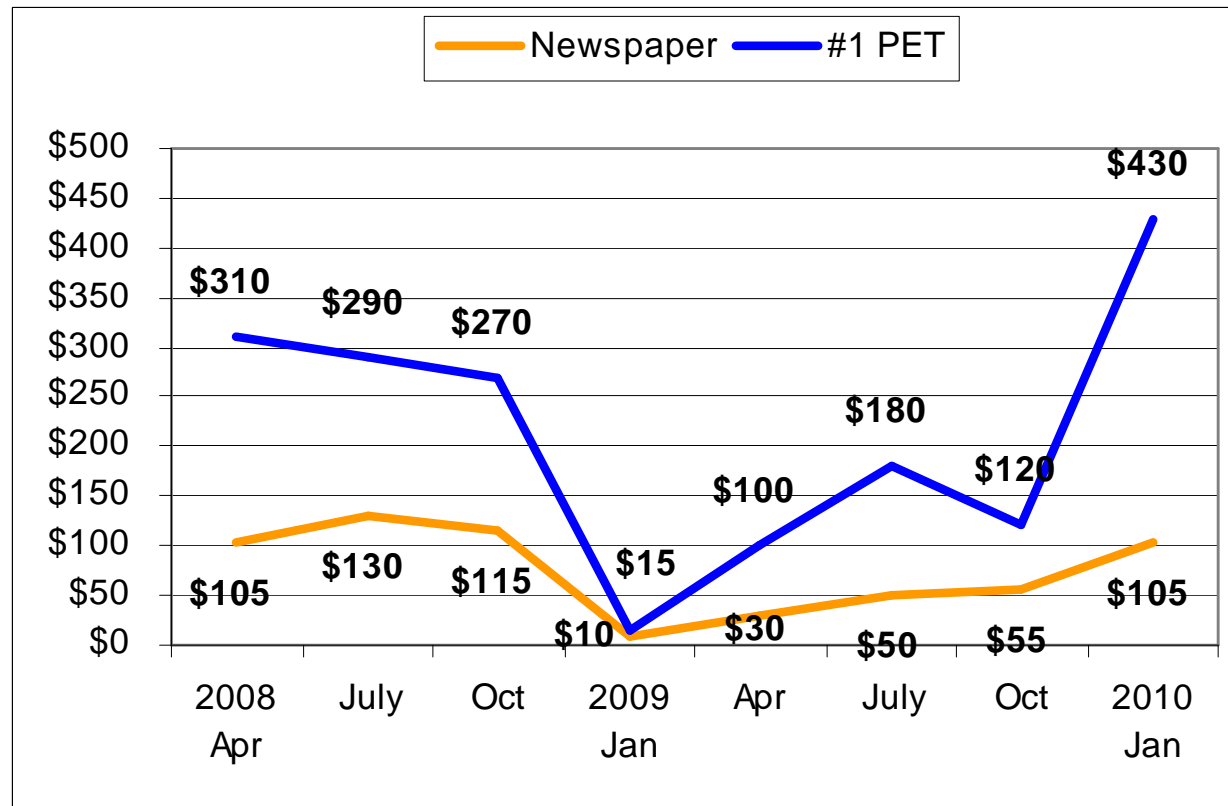


Local Markets, Win-Win

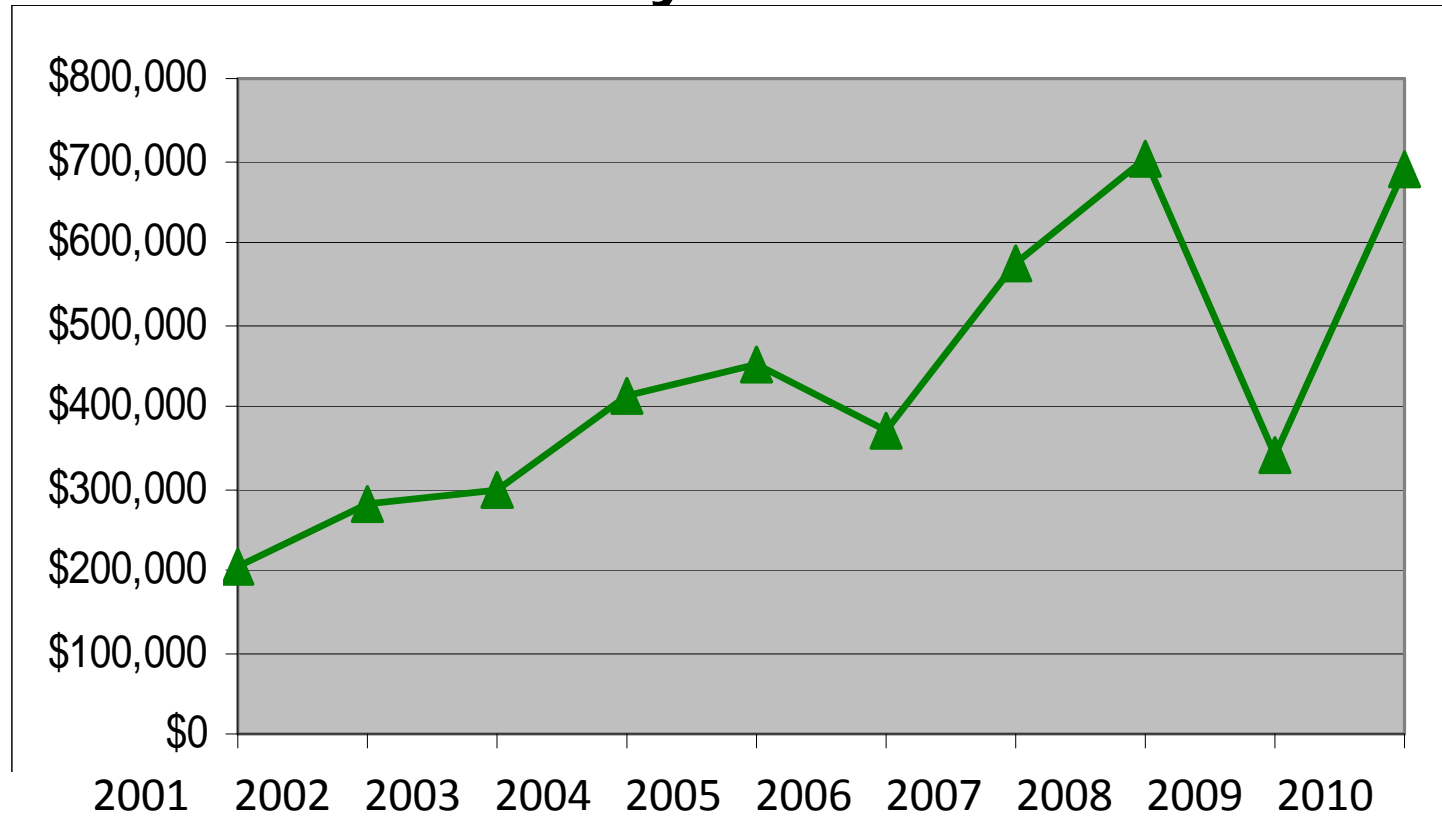
- Improving processing & transportation efficiencies



Market Volatility (value per ton)



Aggressive Marketing of Recyclables

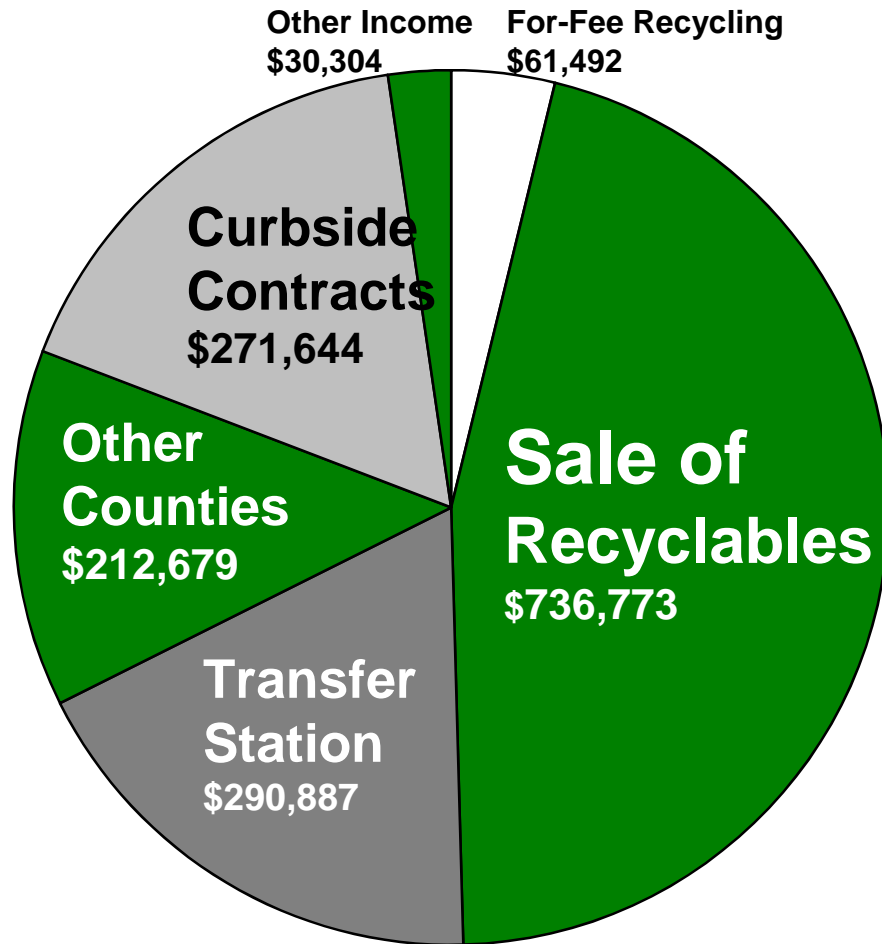


Decade Total \$4,320,224.04

2011: \$1,064,066.53



Recycling Revenues



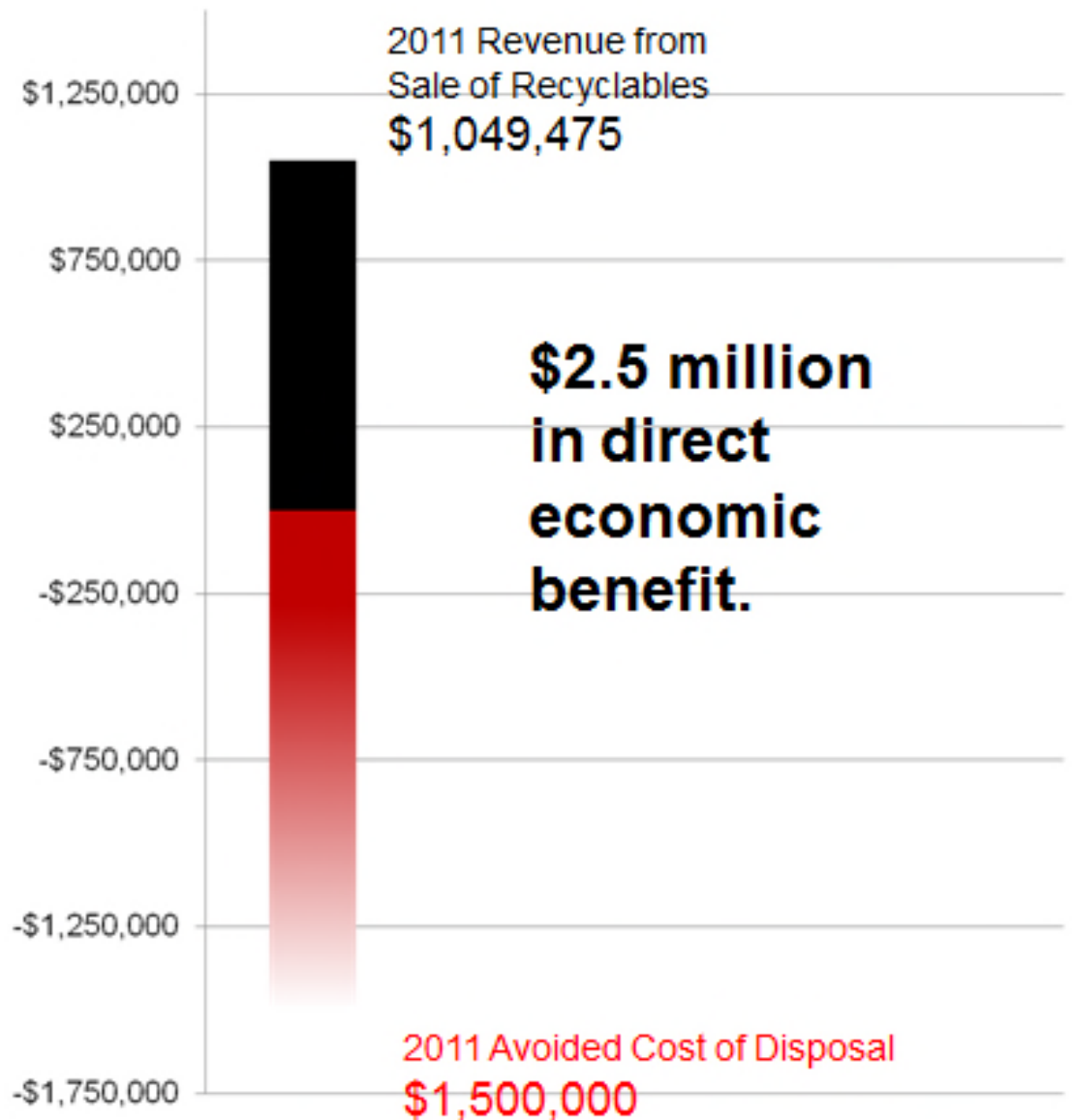
Diverse Funding Portfolio

- Fees for Service
 - Solid Waste Disposal
 - Contracts for Service
 - Residential Curbside
 - Commercial Curbside
 - Incentive-based Pricing
 - Tires
 - Mattresses
 - And much more!
- Recycle Materials Sales
 - MRF processing
 - Recycle Drop Sites
 - Education/Promotion
 - Capital Purchases
- Transfer Station
 - HHW/hazardous recyclables
 - Stabilize Fluctuations in all program areas



No County
tax dollars
since 1991.





Household Hazardous Waste



HHW as incubator increased volumes ten-fold!

- Electronics
- Motor Oil, Antifreeze
- Paints
- CFLs, florescent lite bulbs
- Batteries



Electronics all the time!

- Computers
- Monitors and Small TVs
- Small Plastic Appliances
- Miscellaneous e-waste



Hazardous Recyclables Drop-off



Bulky Recyclables Drop-off



Hard to Recycle Materials/Bulkys



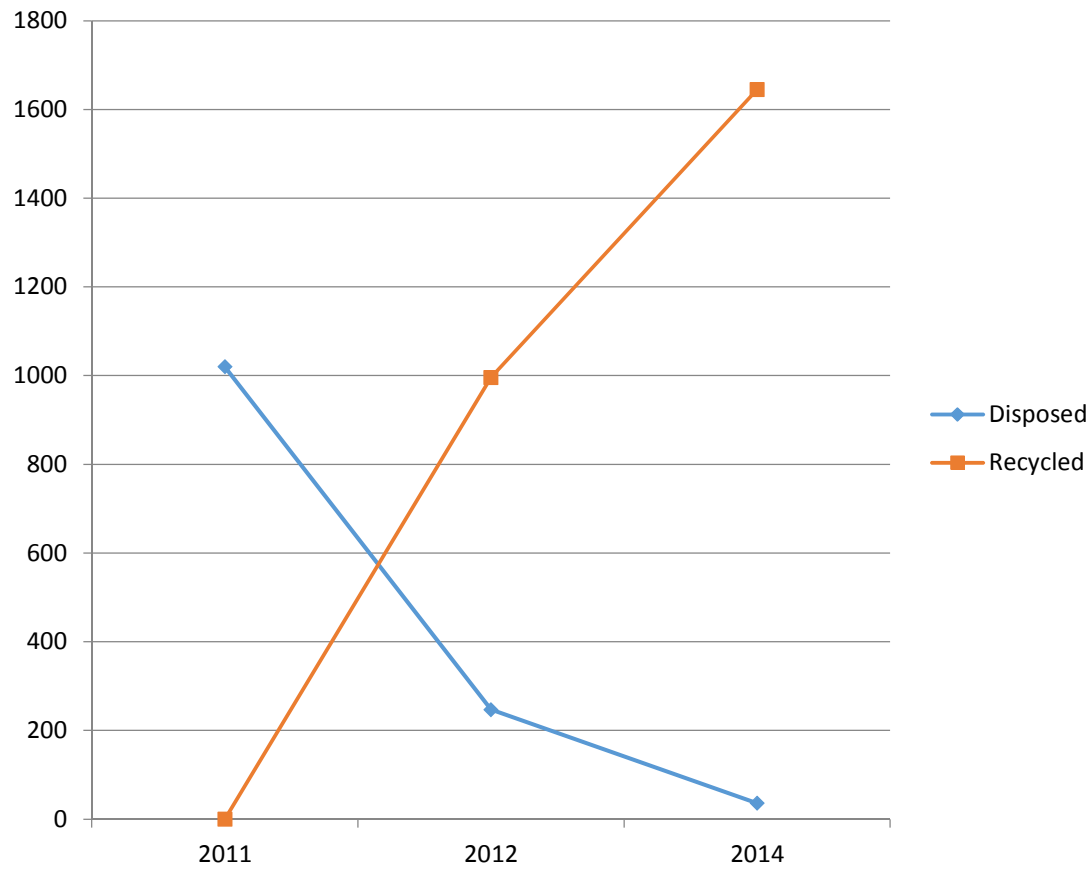




Bay Area Recycling for Charities (BARC)



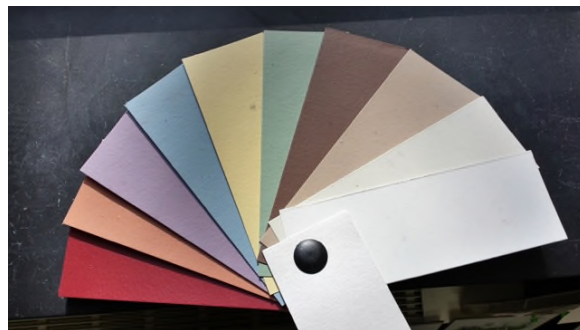
Incentivized Pricing in Mattresses



Latex Paint Recycling



Latex Paint Recycling ePaint closing the loop in Michigan



Recyclable	Priority*	Landfill fee	Cost to Recycle	How funded
Mattresses		\$24 ea	\$12 ea	\$ Incentive
Wood	High	\$24/cu.yd.	\$12/cu.yd.	\$ Incentive
Latex Paint	Not sw/hhw	Dried out = solid waste	\$1.00/gallon	Convenience Fee
E-waste	High		Under review	Solid Waste Tip fee
HHW	High		Free EC Res.	Solid Waste Tip fee
Tires		Banned	\$3.00 ea.	User Fee
Shingles		\$24/cu.yd.	\$12/cu.yd.	User Fee

Can be based on cost to divert, diversion from landfill potential, prioritizing banned items, toxic items, demand, etc.



Super Drop off Center

Comprehensive:

- Solid waste
- Recycling
- Compost
- Hazardous Recyclables
- Food Scraps & FOGs

Convenient:

Open six days/week to the public and haulers





Drop-off Center

RECYCLING | COMPOSTING | WASTE TRANSFER

Emmet County DPW



Event Recycling

- Festival by the Bay
- Soccer Tournaments
- July 4 Parades
- Art in the Park
- Bliss Fest Music Festival
- And many more!



Public Space Recycling



Yard Waste Composting





Thurs 10:30 AM: All Things Composting
Nicole (RRS), Lindsey (EC), Cliff (Hammond Farms),
Bill (Spurt Industries)









Over 428,000 lbs collected in 2017





Emmet County Home Grown Compost



Community Foundation Grants Funding Food Waste Reduction Efforts





Remove barriers to maximize recovery



Engagement Required!

PROFILE OF THE HIGHEST-PERFORMING CITIES SURVEYED
(OVER 400 LBS/HH/YR)



83%

COLLECT IN CARTS



93%

PROVIDE COLLECTION
AUTOMATICALLY



96%

SINGLE-STREAM
COLLECTION

WHEN THE LOCAL GOVERNMENTS
ARE ENGAGED IN THE RECYCLING
PROGRAM AND HAVE TRIGGERED
AN "ACTION" TO INCENTIVIZE
RECYCLING IS WHEN YOU SEE
THE MOST SUCCESS.

100%
PUBLIC ACTION



[RecyclingPartnership.org/
updated-2016-state-of-curbside-report/](http://RecyclingPartnership.org/updated-2016-state-of-curbside-report/)



Beware of bundling!

- Private sector most comfortable doing what they know best, typically solid waste collection & disposal
- The further you get from their comfort zone, the less well they will deliver on services, the more involved and engaged you need to be, and the more accountability you need built into contracts
- If you have an authority, a recycling consulting firm, or a non-profit specializing in recovery, you are in luck
- While bundling has benefits, consider splitting service contracts so waste provider does SW, others can bid strictly on recycling or yard waste or HHW or event recycling



Be the expert, access available resources, hire or contract to represent your interests

- Iris
- RRS
- There are others, just make sure they are resource recovery experts and advocates, and check references



Why building policy into funding plan makes sense, tip fee makes sense

- Emmet as microcosm of what's possible at state level (while recognizing Emmet is unique, all sw local and all recovery and available markets impacted by local environment and politics)



Policy is key

- Incentivize and fund

Waste reduction and recycling

- Solid waste flow control
- Bundling of services
- Franchising/competitive bidding
- Embedded pricing
- Pay as you throw
- 'Free' comprehensive, convenient services
- Landfill bans (Tires & Yard Waste in MI)
- Hauler licensing requirements





Emmet County Transfer Station and Recycle Processing



Comprehensive

Recycle more, sort less Drop Site and Curbside

Mixed Containers

Juice boxes, milk cartons and paper cups

- Please rinse and flatten.
- NO juice pouches or straws.

Plastic bottles, jugs and jans

- All numbers: #1, #2, #3, #4, #5, #6, and #7
- NO Styrofoam
- NO motor oil jugs
- Please rinse and flatten. *Don't be afraid to remove labels.*
- NO toys, buckets, or durable dishes
- NO "biodegradable" or corn-based plastics (PLA)
- NO plastic bags. They belong with your Paper, Boxes and Bags.

Plastic tubs, trays and cups

- All numbers: #1, #2, #3, #4, #5, #6, and #7
- NO Styrofoam
- Please rinse and flatten. *Don't be afraid to remove labels.*
- NO durable dishes, wash tubs, buckets, etc.
- NO "biodegradable" or corn-based plastics (PLA)
- NO plastic bags. They belong with your Paper, Boxes and Bags.

Metal cans, foil and trays

- Metal lids are okay.
- Aluminum, steel and tin
- Please rinse and flatten.
- NO aerosol cans or propane tanks

Glass bottles and jars

- Clear, green, brown, and blue
- Please rinse.
- NO light bulbs, window glass, or glass dishes

Paper, Boxes and Bags

Cardboard and paper bags

- Boxes from frozen and refrigerated foods are okay.
- Boardboard-like cereal boxes and paper towel cores—is okay.
- Please remove packing materials and flatten.
- NO Styrofoam
- NO pet food bags
- Accepted at all drop sites.
- Curbside Only: Cardboard must fit entirely in your green tone.
- NO loose plastic bags. Please stuff all plastic bags into one bag and tie it shut.

Plastic grocery and bread bags

- Stretch by bags only
- Clean, dry bags only
- Please put all of the bags into one bag and tie it shut.
- Shrink wrap—like around rolls of paper towels and cases of water bottles—is okay.
- NO cling wrap. *Send in wrap, find and cover dishes*
- NO cereal box liners
- NO "crunchy" plastics—collapsible, potato bag, potato chip bags, etc.



Newspapers and inserts

- NO newspapers which have gotten wet and/or yellowed

Magazines, catalogs and books

- Hardcover, paperback, and phone books are okay.

Office paper

- Accepted at all drop sites
- Junk mail and envelopes
- Copy paper, writing paper, and file folders.
- Shredded paper, too. *Please put it in a newspaper bag.*
- NO construction paper or dark or bright copy paper
- NO padded, plastic, or Kraft (gold paper) envelopes
- Don't be afraid to remove:*
 - rubber bands
 - paper clips
 - plastic windows from envelopes
 - stickers
 - sticky notes
 - mailing labels
 - staples
 - tape

Still not sure if it's recyclable?

Visit us at www.EmmetRecycling.org or call 231-348-0640

Recycle even more—at the Drop-off Center

Clothing and bedding

- Clean and dry only, please.
- FREE

Shoes and work boots

- Please rubber band in pairs.
- FREE

Small appliances

(also see Electronics)

- Please throw away removable parts not made of plastic or metal—vacuum-cleaner bags, glass carafes, wicks, microwave turntables, etc.
- FREE

Large appliances

(also see Electronics)

- \$5 per item handling fee
- Refrigerator, freezer, air conditioner or dehumidifier: If not tagged by a certified technician—as required by law before recycling or disposal—add \$25.

Electronics

ALL FREE! ALL THE TIME!

- All electronics from households and businesses with under ten employees are now accepted for FREE! Limit seven items per day.

* Businesses with over ten employees, please call for information.

Drop-off Center (continued)

Batteries

- All kinds of vehicle and household batteries are accepted at the Drop-off Center.
- Household batteries may also be dropped off during business hours at:
 - Alanson**—*ICE Fasteners & Son*
 - Harbor Springs**—*Major Hardware & Propane Fueler Building Center*
 - Mackinaw City**—*Coffman Hardware and the Village Hall*
 - Pellston**—*Good Hardware*
 - Petoskey**—*Fishman's CarQuest, Major Ace Hardware, and Radio Shack*
- Batteries from home use FREE
- Businesses \$1 per pound

Fluorescent light bulbs

- Compact fluorescent bulbs okay
- NO broken bulbs
- NO incandescent (ordinary) or halogen bulbs
- Bulbs from home use FREE
- Businesses please call 231-348-0640 for rates.

Tires

- On the rim is okay
- 1/2" each for car and light truck tires
- Bike tires 4 for \$2.50
- Call for other tire prices.

Motor oil plus

- Hydraulic fluid, fuel oil, automatic transmission fluid, lube oils, and diesel fuel are okay.
- NO gasoline or contaminated oil (e.g., oil with gas or water) to dispose of these call the Household Chemical Drop-off Program at 231-348-0640.
- FREE

Antifreeze

- Both ethylene and propylene glycol-based products
- FREE

Asphalt shingles

- Can include nails, tar paper, and felt
- Shingles must be from a home. If from apartments or condominiums these must be 4 units or fewer in the building.
- Accepted seasonally from April 1 to November 1
- NO cedar shakes, roll roofing, roofing tiles or drip edge
- SAVE! 110 cubic yard to recycle, \$22 to landfill

Rubble and ceramic fixtures

- Rocks, bricks, concrete, asphalt, ceramics and porcelain including toilets, sinks and bathtubs
- Rebar and wire mesh are okay.
- Please remove seats, fixtures, etc. from plumbing fixtures.
- NO lead paint or asbestos
- SAVE! 110 cubic yard to recycle, \$22 to landfill

Wood

- NO treated wood, plywood, or particle board
- Nails are okay.
- SAVE! 110 cubic yard to recycle, \$22 to landfill

Scrap metal

- Steel, aluminum, copper, cast iron, and other metals
- NO propane tanks
- NO vehicle tanks
- FREE



Drop site bins = message centers



- No scavenging
- Recycling info website address
- Phone number
- Visuals for what is (and is not) accepted
- No littering



Brochure Racks



Message Centers



Go to Kate & Tracy's session on
Education on a Budget Wed 4 PM!



Building Community







Keeping the Green in Northern Michigan





Emmet County Recycling

Elisa Seltzer, Director
Emmet County Dept. Public Works
eseltzer@emmetcounty.org
231 348-0640
www.EmmetRecycling.org





