

Best Practices – The Art and Science of Recycling

Michigan Recycling Coalition
Annual Conference
Thursday, May 5, 2016



Who we are, what we do in a nutshell

- Focus for today:
 - How we funded our comprehensive suite of services
 - How we developed a super drop off, and how you can too!



Successful Public Sector Recycling



- Who we are
- What we do
- How we got here
- How to develop strong public-private partnerships with sound policy and best-practices for stand-out programs!



Who we are: Emmet County by the #s



30,000 people
14,000 households



How we started



County Solid Waste Planning Process





Emmet's Early Steps

- Solid Waste Plan
- Hire dedicated staff
- Recycling Funding Committee
 - Short term funding: capital needs
 - Long term funding: operating/Enterprise Fund
- Consider options: Grants, millage, PA 185, PA 69, fee for service, ordinance, hauler licensing
- Hired consultant to facilitate process – meetings of all stakeholders



Decision Making Process

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



Start-up Funding

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



Seed funding critical!

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



Initial Capital Investments

Expenditures

Buildings	\$146,842.00
Equipment	\$207,608.00
Truck/containers	\$144,274.00
<u> </u>	<u> </u>
Total	\$498,724.00

Contributions to Capital

County Millage	\$376,750.00
State Grants	\$218,920.00
<u> </u>	<u> </u>
Total	\$595,670.00



Recycle Drop-off Sites





Policy is key

- Best practices set policy that incentivizes and funds 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
 - Hauler licensing requirements



Solid Waste Ordinance

Licensing Haulers

PAYT: Pay As You Throw

Flow Control



Emmet County Solid Waste Ordinance

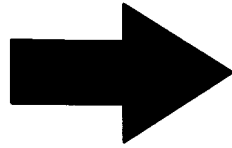
- Level Playing Field for Haulers
 - Solid waste haulers licensed by county
 - Haulers must use designated facility for disposal
 - Haulers must offer commercial cardboard collection



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...”





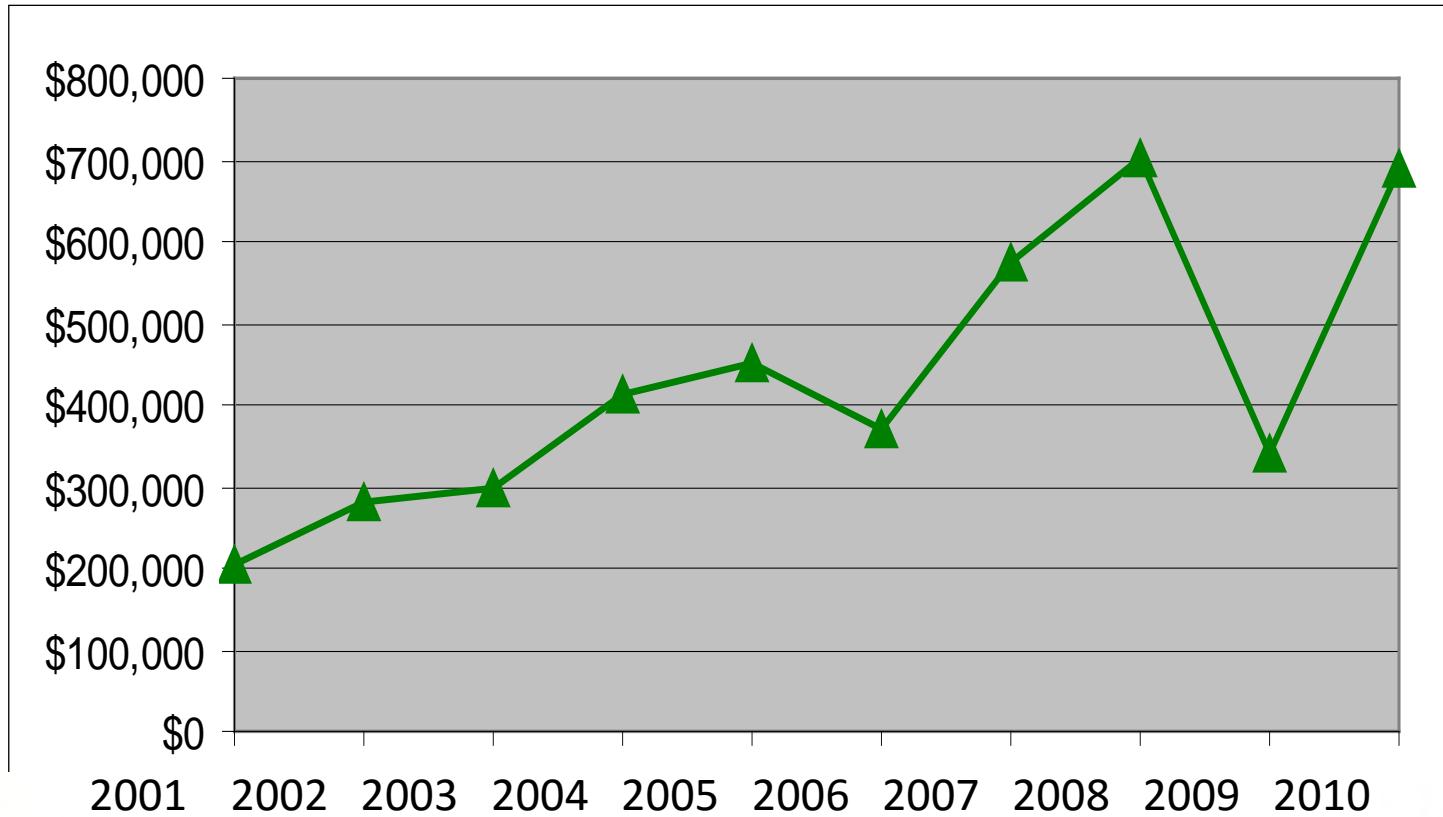
Local Markets, Win-Win

- Improving processing & transportation efficiencies





Aggressive Marketing of Recyclables



Decade Total \$4,320,224.04

2011: \$1,064,066.53



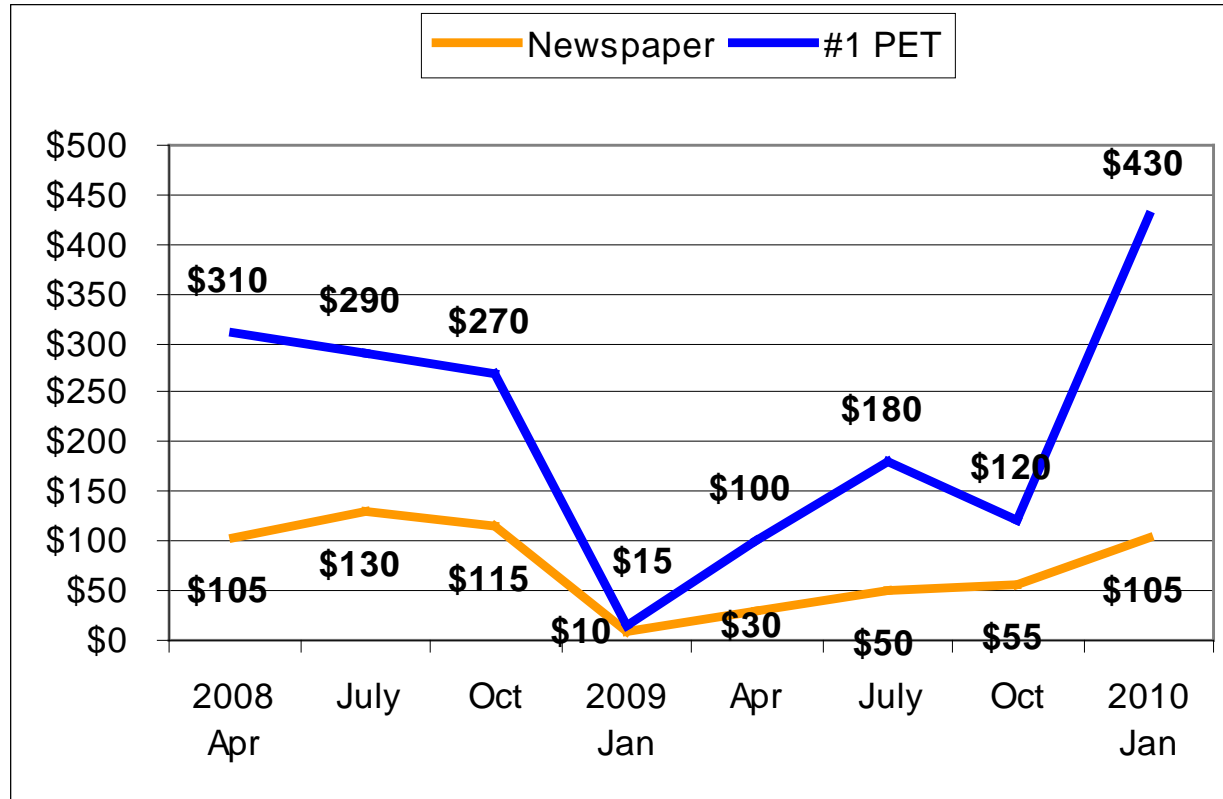
97% of Our Recyclables Supply Businesses in Michigan



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



Market Volatility (value per ton)



Diverse Funding Portfolio

How we fund our programs

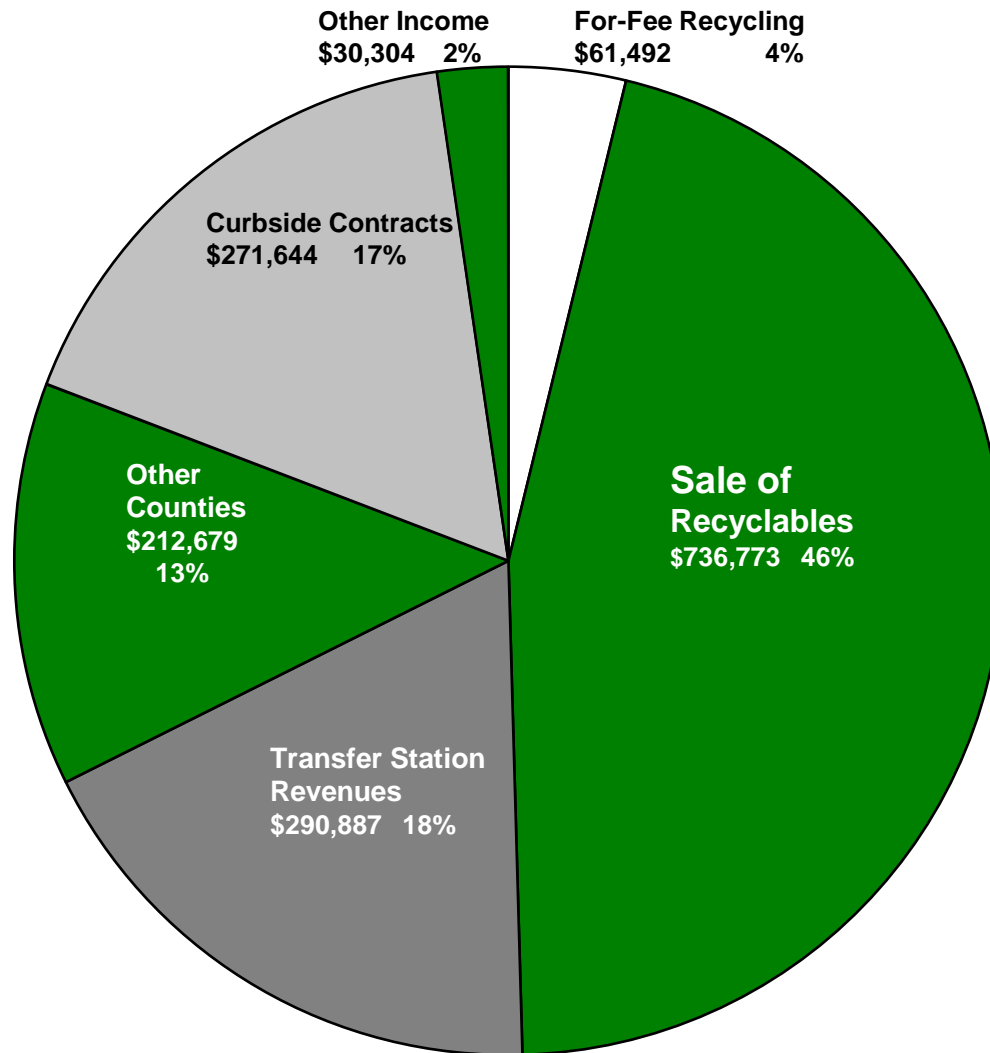
- Fees for Service
 - Solid Waste Disposal
 - Contracts for Service
 - Residential Curbside
 - Commercial Curbside
 - Incentive-based Pricing
 - Tires
 - Some electronics
 - Some C&D
- Recycle Mats Sales
 - MRF processing
 - Recycle Drop Sites
 - Education/Promotion
 - Capital Purchases
- Transfer Station
 - HHW
 - Hazardous Recyclables
 - Stabilize Fluctuations



Ongoing Funding

- Allocation from Transfer Station Funds
 - “Tip Fee Surcharge”
 - Used for HHW, Hazardous Recyclables, to Stabilize Fluctuations in markets
- Fees for Service
 - Tires, mattresses, some Construction & Demo materials
- Aggressive marketing of Recyclables
 - Funds processing
 - Drop sites
- Contracts for Services
 - Residential Curbside
 - Commercial Curbside





Recycling Revenue Sources:
Total Revenue \$1,631,959.05



No County
tax dollars
since 1991.



The Emmet County Model



Emmet County
Recycling

Convenient

Comprehensive

Cost-Effective

Ordinance

Flow Control

Pay-As-You-Throw





Cost effective option for rural areas



Curbside Recycling Collection



Recycling

- 80%+ of residents using Recycling Program
- Nearly 300 businesses using Curbside Recycling service



Emmet County Transfer Station and Recycle Processing



Dual-stream expansion 2010



2 Categories



Paper, Boxes and Bags



Mixed Containers











Regional Synergies: Hub and Spoke



Comprehensive Super Drop-off!

Expanding from our Base-line Services

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 jars

- All numbers #1, #2, #3, #4, #5, #6, and #7
- NO Styrofoam
- NO motor oil jugs
- Please rinse and flatten. *There is no need 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. *There is no need 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.
- *There is no need to remove labels.*
- NO light bulbs, window glass, or glass dishes

Paper, Boxes and Bags

Cardboard and paper bags

- Boxes from frozen and refrigerated foods are okay.
- Bookboard—like cereal boxes and paper towel boxes—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 tote.
- NO loose plastic bags. Please stuff all plastic bags into one bag and tie it shut.

Plastic grocery and bread bags

- Stretchy 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 shrink wrap (used in wrap, food and cover dishes)
- NO cereal box liners
- NO "crunchy" plastics—cellophane, 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 transparent bag.*
- NO construction paper or dark or bright copy paper
- NO padded, plastic, or Kraft (gold paper) envelopes
- *There is no need to remove:*
 - paper clips
 - plastic windows from envelopes
 - staples
 - sticky notes
 - mailing labels
 - staples
 - tags

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

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

Large appliances

- Please put it in a transparent bag.
- NO construction paper or dark or bright copy paper
- NO padded, plastic, or Kraft (gold paper) envelopes
- *There is no need to remove:*
 - paper clips
 - plastic windows from envelopes
 - staples
 - sticky notes
 - mailing labels
 - staples
 - tags

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 fee 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**—E.W. Fairbanks 6555 5th
 - Harbor Springs**—Meyer Hardware 6700
 - DeWitt**—Fisher Building Center
 - Mackinaw City**—Coffman Hardware and the Village Hall
 - Pellston**—Cook Hardware
 - Petoskey**—Fischmann's CarQuest, Meyer Ace Hardware, and Radio Shack
- Batteries from homes are FREE
- Businesses \$1 per pound

Fluorescent light bulbs

- Compact Fluorescent Bulbs okay
- 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
- 12" each for car and light truck tires
- Bike tires 4 for \$2.00
- 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., with gas or sawy) to disposal 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 take rolls, for paper, and left
- Shingles must be from a home. If from apartments or condominiums there 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, cinder blocks and porcelain including toilets, sinks and bathtubs
- Broken and stone masonry are okay.
- Please remove seats, brackets, 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



Hazardous Recyclables Drop-off



Starting with batteries & motor oil in 1991





Common Chemicals Dropped Off

- Acids and bases
- Aerosols
- Chemicals
- Flammables
- Pesticides
- Oil based paints, thinners and finishes
- Adhesives and sealers
- Automotive products
- Cleaners and polishes
- Mercury
- Solvents
- Mystery/Unidentified chemicals





Electronics all the time!

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



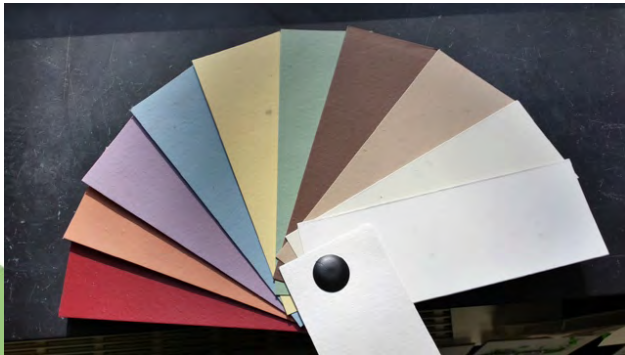
Latex Paint Recycling

- Convenience fee of \$1.00/gallon to help cover costs



Latex Paint Recycling

ePaint closing the loop in Michigan



Bulky Recyclables Drop-off



Yard Waste, Wood, Scrap Metal, Rubble, Tires, Shingles, Appliances, Oversize/Large Volume Cardboard



Roofs to Roads: Asphalt Shingles Recycling



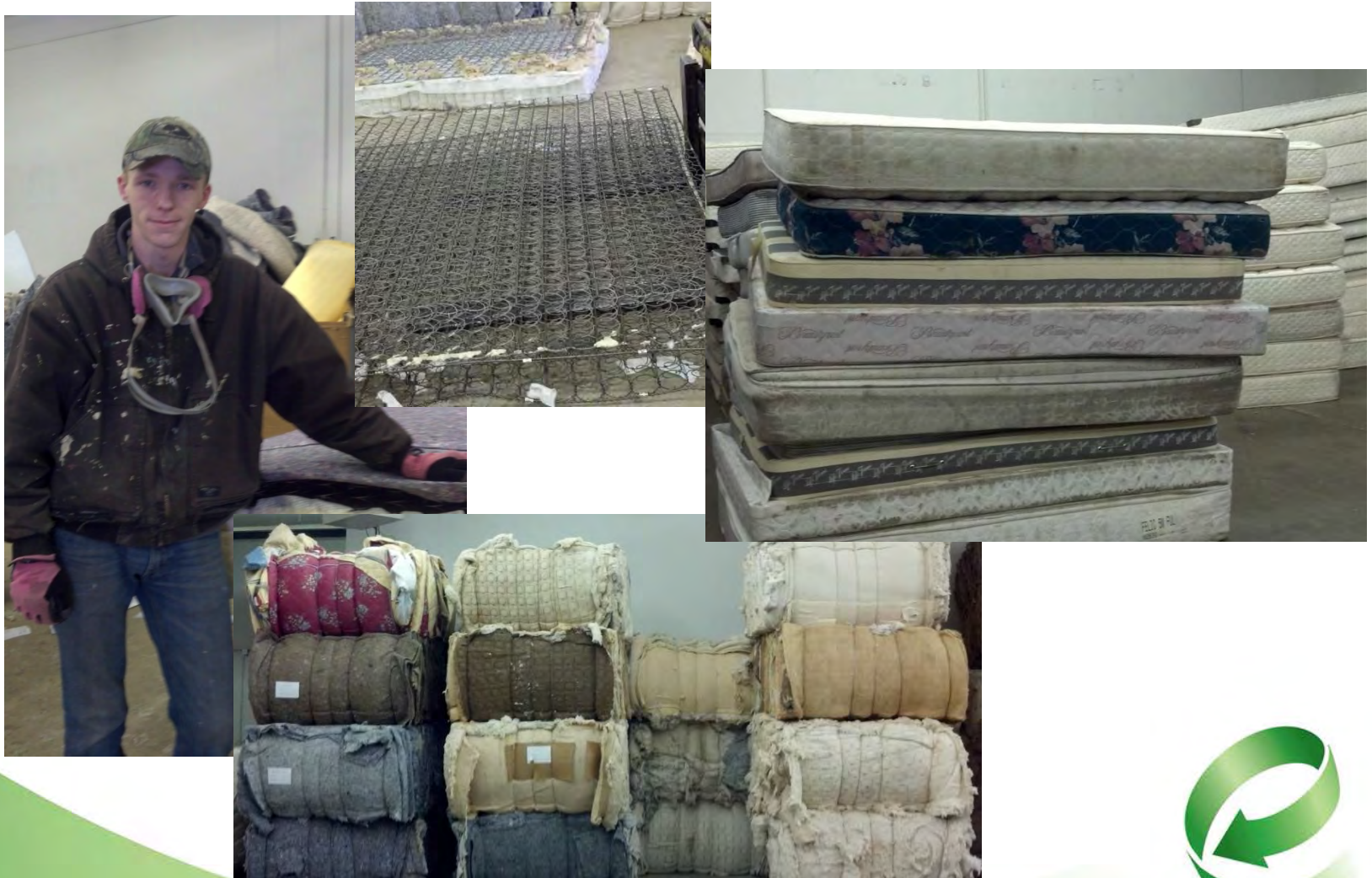
First year (2010)

- 1,621 cubic yards recycled
- equivalent to 270 roofs

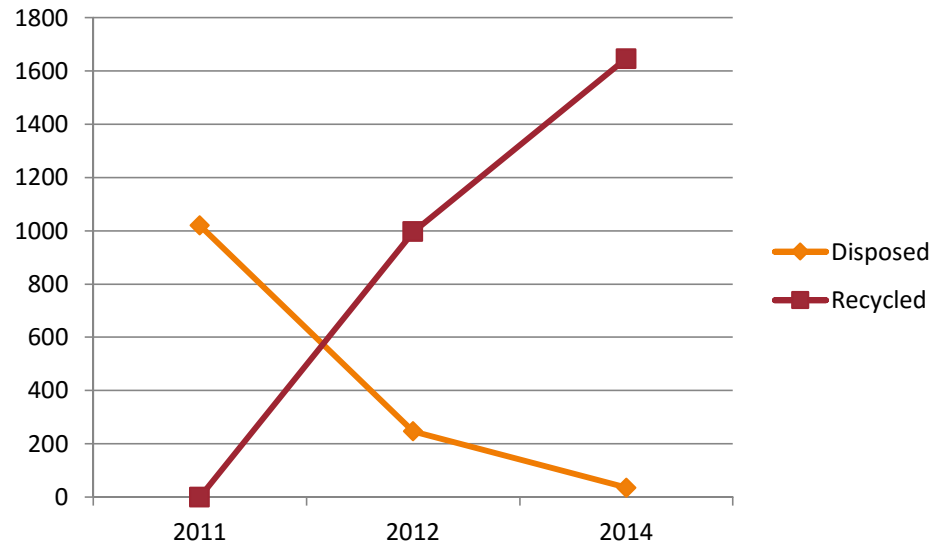




1,787 Mattresses Recycled in 2015



Incentivized Pricing in Mattresses



Spring Clean-ups

Anytime Bulky Waste & Recycling



- City sponsored spring clean-ups partner with Emmet County to get bulky recyclables off the curb.
- “Anytime Clean Up Vouchers” partnering with townships & cities



Yard Waste Composting







We're sowing the future of food scraps!

Feed farms and gardens, not landfills.



**Emmet County
Recycling**

We thank this establishment for participating in

**Emmet County Recycling's
Food Scraps Collection Pilot Project**

June-October 2015.

Project Totals

90,000 Pounds of Food and Floral Scrap Recovered

150 Yards of Food and Floral Scraps Recovered

In the peak of the summer on August 4th we collected **3,880lbs** or **6.5 cubic yards** in one day



What else goes on at our Super Drop Off

Recycling of:

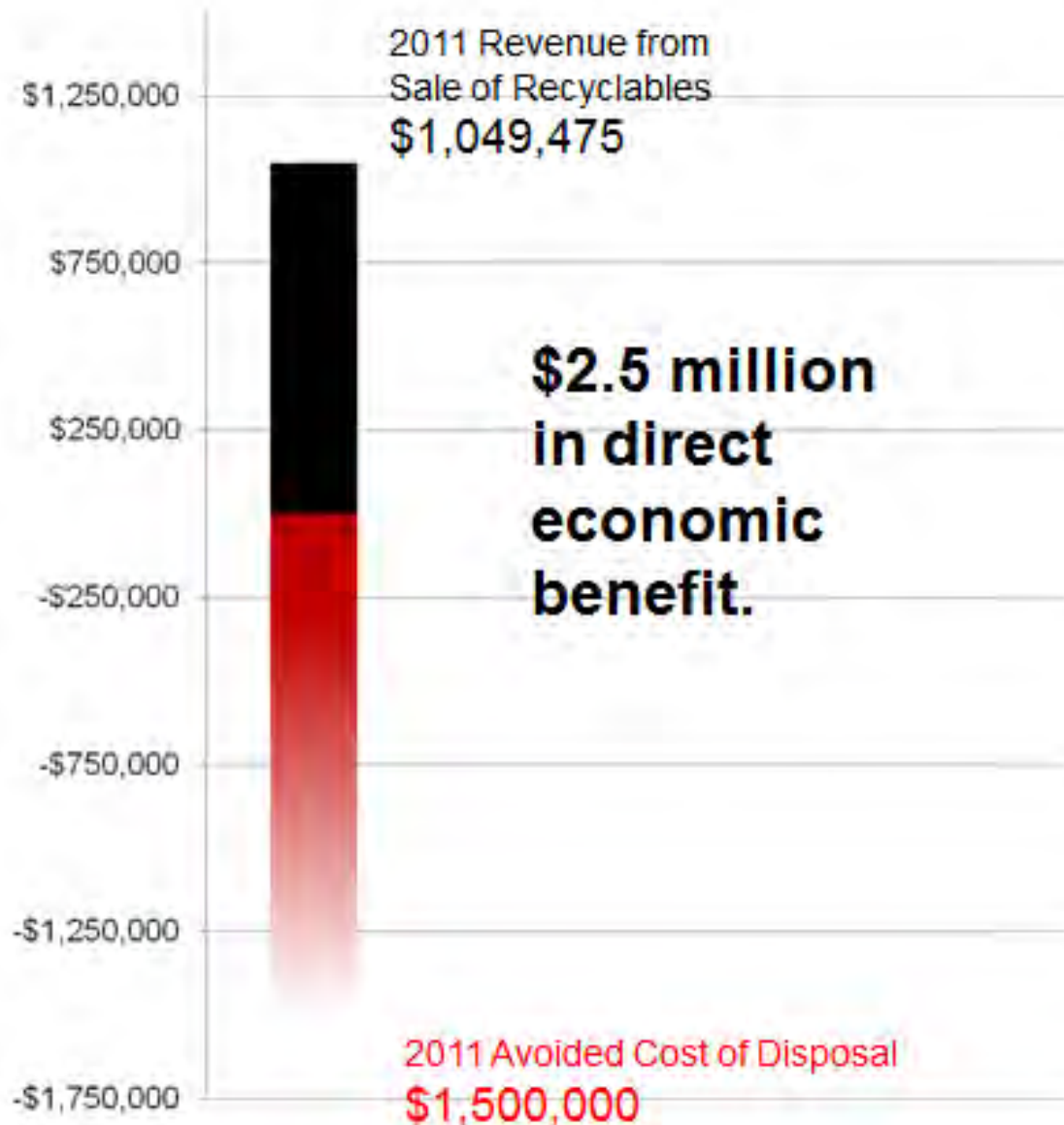
- Clothing & Bedding
- Belts, backpacks, bags
- Shoes

Weekly appointments for
document shredding





- Revenue from Sale of Recyclables
- Avoided Cost of Disposal



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.



What's next for our 'Super Drop-off', 'Resource Recovery Park', 'Convenience Center'

Fats, Oils, Greases 'FOGs' Tank

Food Scraps Drop-off

Grant-funded Tire Project



Education and Messaging



Brochure Racks



Building Community





Great Staff!



Great Leadership



Keeping the Green in Northern Michigan





Emmet County Recycling

Elisa Seltzer, Director
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231 348-0640
www.EmmetRecycling.org





Recycling Together



With organizations:

Straits Area Services

Straits Regional Ride

Dozens of vendors

Contracts for services

Public Private Partnerships



Recycling Together



Over

300

- businesses
 - institutional
 - nonprofit
- curbside customers

and so many more...



How the public sector can leverage funding opportunities to provide super drop off services for a wide range of hard to recycle mats.

See how with strong best practices, contracting savvy, and public sector leadership, you can develop a stand-out recycling program for your community.







Feeding Farms & Gardens, Not Landfills

- The 20-week pilot food scrap collection program included 20 restaurants and flower shops in Petoskey and Harbor Springs.
- We estimate that commercial food waste comprises 30% of the waste stream going to our local landfill
- Food scraps are resources from which restaurants can capture value by using reduction techniques, resources for feeding livestock, and, resources to compost to build the soil of local farms and gardens.



Highlights of program based on exit interviews

- Clean, convenient and comprehensive
- Even with small volumes, they saved on small things like trash liners
- Food scrap program is easier than recycling
- Twice a week service worked well-especially for flower shops because they receive deliveries two days a week
- “It’s the right thing to do”
- Can see how their prep cooks are preparing food, to help correct bad habits
- We would take overflow
- Driver was friendly, courteous and helpful
- Education materials were helpful
- Helped identify further waste stream diversion opportunities
- Many people were already donating to food pantries or animals



Drop site bins as message centers



- Labeling of bins critical education opportunity (Teachable moment!)
 - No scavenging
 - Recycling info website address
 - Phone number
 - Visuals for what is (and is not) accepted
 - No littering

