

# Recycling Baseline Study Summary Of Muskegon County 2008

## Introduction

The Recycling Baseline Study has been conducted to establish the status of current recycling efforts throughout Muskegon at all levels, including home, business, and some commercial locations.

Under the sponsorship of the Muskegon Area Sustainability Coalition and through the efforts of the Recycling Committee, ongoing measures and assessments will be made to determine the levels of increased recycling as a result of greater educational outreach, improved citizen awareness, and enhanced recycling opportunities.

To view or download the full report of the Recycling Baseline Study, please visit [www.muskegonasc.org](http://www.muskegonasc.org) or [www.sustainablemuskegon.wikispaces.com](http://www.sustainablemuskegon.wikispaces.com).

Inside this Summary	Page
Background Information	2
Recycling Haulers and Stations	3
Business Survey Findings	4
Household Survey Findings	5
Map of Flow of Recyclables	6
Identified Gaps and Opportunities	7
Next Steps	8

*A project of the*  
Muskegon Area  
Sustainability Coalition



Muskegon Area Sustainability Coalition

*Produced by the*  
Recycling Committee

*Research conducted by*  
Woods Consulting Group

*Funding provided by*  
ADAC Automotive  
Beacon Recycling  
Community Foundation for  
Muskegon County's  
Environmental Fund & the  
Bob and Joanne Zayko  
Environmental Fund  
Muskegon County Solid Waste  
Muskegon Rotary Foundation  
Shoreline Recycling  
Alan and Annoesjka Steinman



This document is printed on 100% recycled paper.

## Background Information

The **intent** of the baseline study included four objectives:

- 1) Identify and quantify the recycling efforts in Muskegon County;
- 2) Quantify the volume of recycling occurring;
- 3) Map the flow of waste and recycling materials; and
- 4) Identify gaps in service and potential linkages to close those gaps.

These objectives were met with the exception of quantifying the volumes. None of the haulers shared volume information, either for proprietary reasons or because they simply didn't track the tons of recycled materials they had collected.

One exception is the City of Muskegon. They have required their contracted hauler to document the volume of recycled materials collected since 2004. The recorded volumes are:

2004	789 tons
2005	588 tons
2006	559 tons
2007	629 tons



As a result of the recycling baseline study, many haulers have agreed to start tracking the volumes of recycled materials they collect.

The **research** methodology for the study included:

- interviews with haulers, government employees, and major industries;
- written and electronic surveys to small and medium size businesses;
- personal interviews with random participants at the Lakes Mall; and
- mailed and electronic surveys for households.

Woods Consulting Group interviewed six hauling companies, every city and township that would return calls, Goodwill Industries, Shoreline Recycling, Resource Recovery, Nichols Paper, SAPPI Fine Paper, Herman Miller, Mercy General Health Partners, Muskegon County, and Alcoa Howmet.

More than 600 surveys were sent to area businesses through the Chamber of Commerce and Employers Association of West Michigan. A household survey was mailed to 2,500 addresses. The same survey was posted on Survey Monkey™ and 130 individuals were interviewed at the Lakes Mall.



The **main findings** from the research have been summarized here by the Recycling Committee Executive Group for easy review.

The summary does not cover the many details discovered through the research, but it does give a quick glimpse of where we are and where we need to go with recycling efforts in Muskegon.

The full 39-page report by Woods Consulting Group can be downloaded at [www.muskegonasc.org](http://www.muskegonasc.org) or [www.sustainablemuskegon.wikispaces.com](http://www.sustainablemuskegon.wikispaces.com).

The full report includes notes from the interviews, questions from the survey forms mailed to both businesses and households, and results of those surveys.



For additional information on recycling, visit the Muskegon County website, located at [www.muskegonhealth.net](http://www.muskegonhealth.net) and look under the "Resources" link.

# Recycling Haulers and Stations

## Haulers

The majority of recycling collection in Muskegon County is an added service through the local waste haulers. Below is an overview of the main waste haulers serving Muskegon County and the residential recycling services offered by each firm. It is interesting to note that while the haulers each accept different items, they all drop their collected recyclables at Community Recycling Services (CRS; owned by Allied), which accepts all of the items. Appliances, tires, and motor oil are taken to varying locations.

Product	Allied	Ames	Kuerth's	RMS	Waste Management
Paper	Yes	Yes	Yes	Yes	Yes
Cardboard	Yes	No	Yes	No	Yes
Plastic	Yes	No	Yes	Yes	Yes
Glass	Yes	Yes	Yes	Yes	Yes
Metal cans	Yes	No	Yes	Yes	Yes
<i>Above taken to:</i>	CRS	CRS	CRS	CRS	CRS
Appliances	Extra fee	Extra fee	Extra fee	No	No
Tires	No	No	No	Yes, if cut	No
Motor Oil	No	Yes	Yes	No	No
<i>Appl. taken to:</i>	Landfill	Randy's	Landfill	-	-
<i>Tires taken to:</i>	-	-	-	Landfill	-
<i>MO taken to:</i>	-	Landfill	Haz. waste	-	-
<b>% of customers that recycle:</b>	25%-35%	25%	30%	40%	No estimate

## Urban/Suburban services

The Cities of Roosevelt Park and Muskegon provide curbside waste and recycling pickup to residents as a city service, paid for through taxes. Muskegon Heights also provides curbside waste pick up, but recycling is not included or available to residents as part of the service. Residents of the Cities of Whitehall, Montague, North Muskegon, and Norton Shores are left to contract for waste and recycling pickup through a private hauler or to transport items to a landfill or recycling/transfer station themselves.

## Rural services

Waste haulers do not service all rural areas for recycling. Some townships in Muskegon provide waste transfer stations for their residents but not all transfer stations provide recycling opportunities. See page four of the full Recycling Study for specific transfer station information. Basic information includes:

Township Transfer Stations	Collection options	Recycling options
Cedar Creek	Waste only	None
Dalton	Waste and recycling	Paper, plastic, metal, organics, others
Fruitland	Waste and recycling	Paper, plastic, metal, glass, cardboard, oil, tires
Holton	Waste and recycling	Full range of items
Muskegon Township	Waste only	None
White Lake Area	Waste and recycling	Full range of items

## Business Survey Findings

### Small/medium businesses survey

Six hundred surveys were mailed through the Muskegon Chamber of Commerce. E-surveys were sent to Muskegon members of the Employers Association of West Michigan; only 51 survey responses were received. While the results shared below paint a picture of positive feedback, keep in mind only 8% of the companies that were sent surveys actually responded.

#### *Results of the returned business surveys:*

- By volume, the top 3 recyclable products currently being thrown away are paper products, cardboard, and plastic.
- Respondents reported the main recycling challenges as being the lack of a cost effective collection and delivery system, limited end markets for specialized materials, and the perceived cost/time to prepare the materials for disposal.
- Respondents do use recycled paper products in their businesses, followed by recycled cardboard and plastic products.
- 80% of respondents would be interested in a website that would assist them with the removal and marketing of waste products for reuse by another organization.
- 70% of respondents reported a “strong” or “very high” interest in reducing the volume of recyclable products in their waste stream, but they need help to do it.

#### *Key findings of the large businesses interviews:*

- Nichols Paper reduced its waste stream by 31 tons between January and September 2008, reducing its hauling fees by \$750/month. That is a \$9,000 cost savings annually for Nichols! They report earning \$746 by selling 4.5 tons of recycled plastic wrap during the same time frame.
- SAPPI recycles water and paper; they have started looking at ways to reduce waste and recycle other current “waste” items.
- Herman Miller has a goal of “zero waste” by 2010; they are 90% there. The company has a long-term culture of sustainability and has created several products with “Cradle to Cradle” certification.
- Mercy Health Partners (Sherman Campus) has very limited recycling, mostly paper, cardboard, and metal. They are looking into expanding efforts.
- Muskegon County has each department execute its own recycling plan. Some paper is recycled but overall little recycling is occurring in-house.
- Alcoa Howmet of Whitehall is recycling its boilerclave wax to another business. This keeps 530 tons annually out of the landfill. They are investigating recycling of monoshell material (high zirconium content). This would keep 2,260 tons annually out of the landfill.



Aluminum recycling at Shoreline Recycling



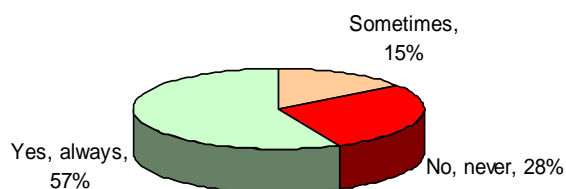
Clothing to be recycled through Goodwill

# Household Survey Findings

Surveys were mailed to 2,500 households in five urban zip codes and six rural zip codes; 160 surveys were returned. Surveys were dropped off at local “blue collar” employers; 67 were returned. An online survey was provided via SurveyMonkey™; 537 individuals completed the survey (this was advertised in the Chronicle and through email lists). In addition, 109 Muskegon individuals were interviewed at the Lakes Mall by students from Montague High School’s FFA Club regarding their household recycling habits. Here are results for four of the nine questions asked.

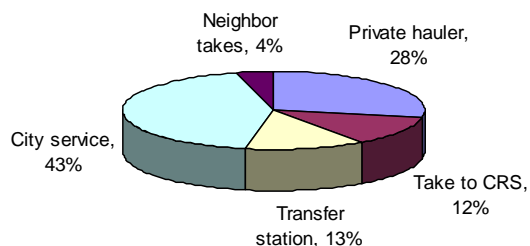
## Key findings of the household survey:

### 1. Does your household recycle on a regular basis?



\*These numbers are skewed due to the large number of SurveyMonkey™ respondents, who seem more inclined to recycle. Haulers estimate the number of households they service that recycle is 25% - 40%.

### 2. How do you recycle (for those answering yes)?



### 3. For those who answered no, which of the following best describes why you don't recycle? (Ranked by # of responses)

- #1—Don't know where to take recyclable items
- #2—Too confusing; don't know what I can recycle
- #3—Other (many reasons given by respondents)
- #4—My waste hauler doesn't take recycling
- #5—Takes too much time to separate
- #6—Costs too much to get bin from hauler
- #7—Recycle bins too small
- #8—I don't think it is very important

### 4. Would some form of financial reward or incentive make recycling more appealing?

Strong interest	31%
Somewhat motivated	19%
Neutral	25%
Not sure	5%
Not at all	20%

In the section of the survey that allowed for additional comments, people shared some interesting comments on why they do, or do not, recycle. Here are a few examples.

#### *I do recycle because:*

- 1) Duty to preserve the earth.
- 2) It is free where I live.
- 3) Cheaper than paying to throw away.

#### *I don't recycle because:*

- 1) I don't trust the items are really getting recycled when I put them in my recycle bin.
- 2) Don't know how.
- 3) Too complicated.
- 4) Apartment complex doesn't offer service.
- 5) Service not available where I live.

See the full report to read all the survey questions, the results, and additional comments provided by respondents. The full report does break out the results of mailed survey vs. the SurveyMonkey™, but we've lumped the totals shown to the left.

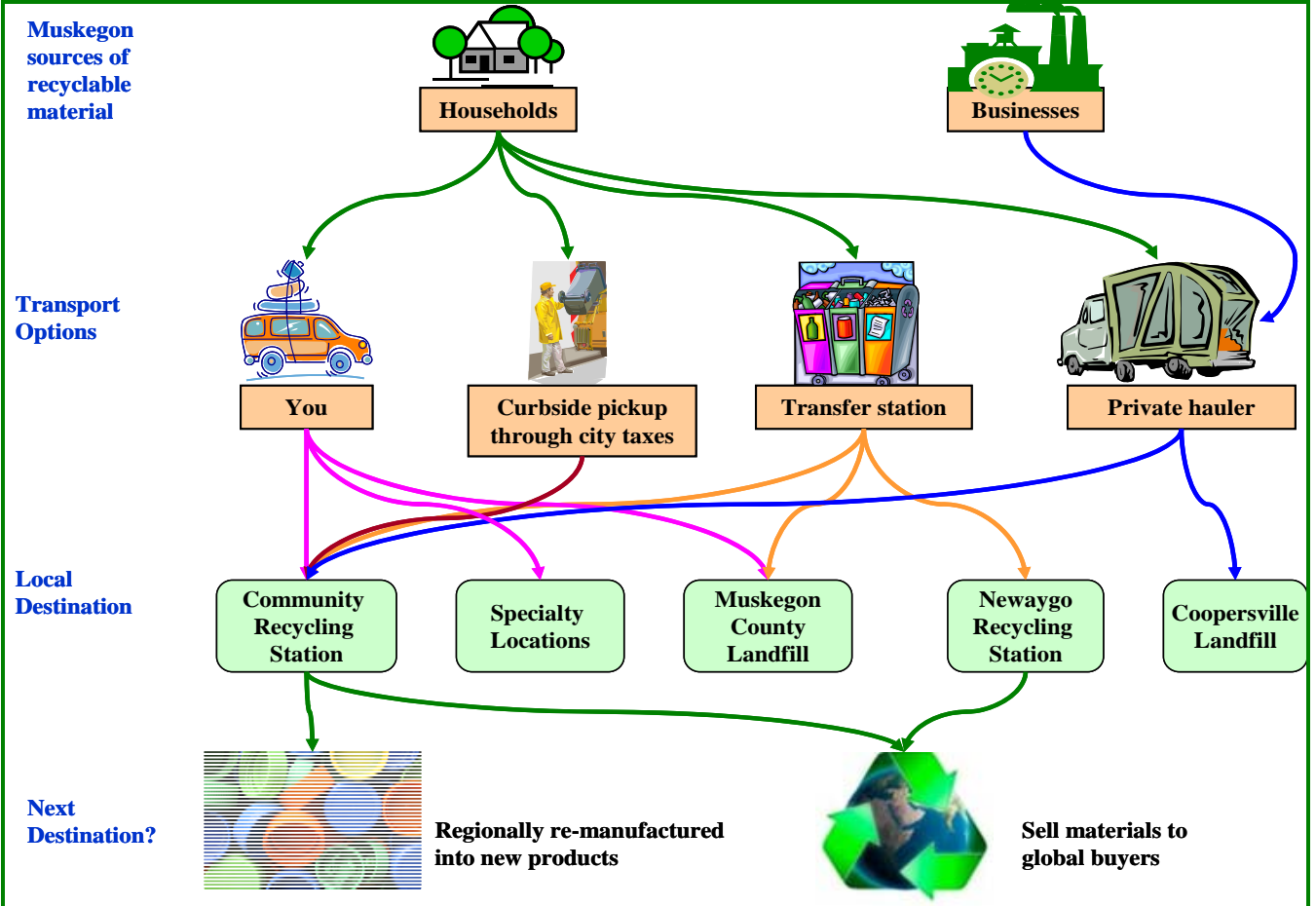
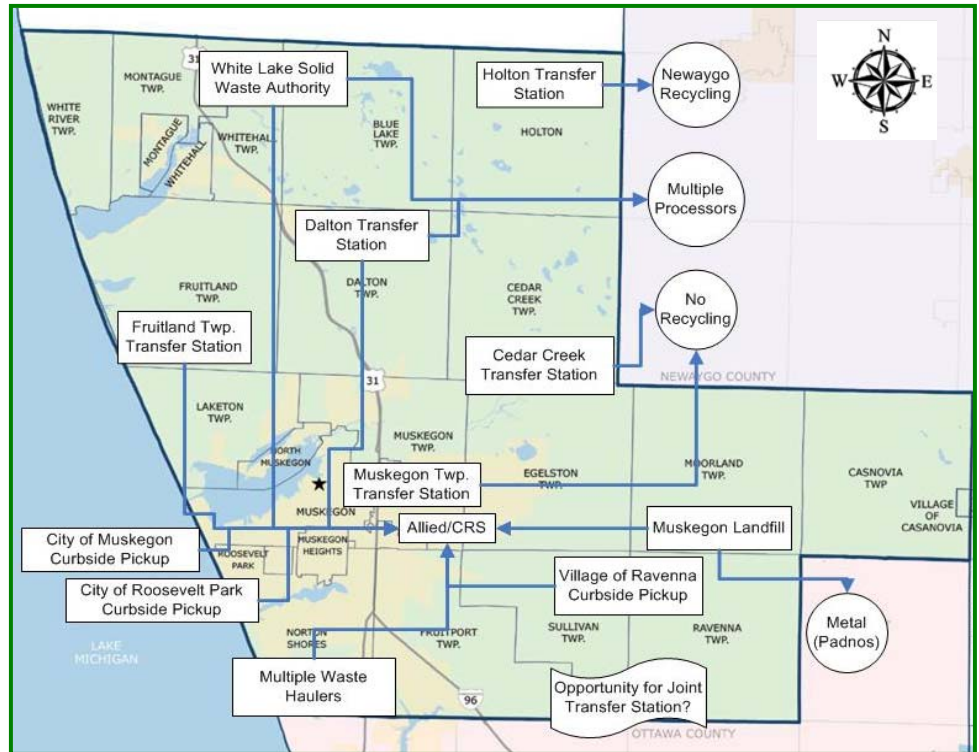


Household waste and recyclable materials being covered at Muskegon landfill

# Map of Flow of Recyclables

The map to the right shows the geographic flow of recycled materials throughout Muskegon County, whether picked up by a hauler or taken directly to transfer stations. A larger version of this map, prepared by Community Research Institute, is in the full report.

The conceptual model shown below maps the flow of recyclable materials depending on choices made by, and options available to, households and businesses.



# Identified Gaps and Opportunities

## Household Gaps

- 1) Limited recycling service and opportunities in rural areas.
- 2) Inconsistency among haulers of materials they accept and separation requirements of those materials—even though they all take the products to the same place, CRS.
- 3) Lack of convenient curbside recycling provided as a city-service (paid through taxes).
- 4) Lack of trust with haulers that recyclable materials are actually getting recycled once they are picked up.
- 5) Lack of education (county-wide) about why or how to recycle.

## Business Gaps

- 1) Many haulers do not provide recycling options for small/medium businesses.
- 2) Lack of staff time to investigate which recyclable items they currently pay to send to the landfill could actually be recycled and sold to generate income.
- 3) Lack of incentives or corporate commitment.
- 4) Potential cost savings not understood.

## Opportunities to close the gaps

- 1) Haulers should simplify recycling rules for customers and be consistent with each other.
- 2) Cities should require curbside recycling services and work toward pick-up consistency.
- 3) County should increase recycling options at landfill for rural customers. It should also take a proactive approach, through collaboration with local units of government, when updating and implementing the County's Solid Waste Plan.
- 4) New business opportunity: We need a new business that would help small/medium businesses assess its current waste stream and identify what can be recycled; then connect them with a hauler or buyer.
- 5) Haulers should focus on new customer base of small/medium size businesses for recycling efforts. Some haulers provide the service but do not promote it and few businesses are aware of the service.
- 6) Create a new industrial park or local network of businesses in Muskegon and supply it with a steady stream of local recyclable products to be utilized in manufacturing NEW products, i.e. using crushed glass to make concrete blocks and shredding of plastic for easier resale.

## Noteworthy trends reported by Muskegon-based recyclable material processors:

**Goodwill Industries** currently has a program to de-manufacture computers through Dell's Reconnect program, in addition to other recycling initiatives. Goodwill is working with Grooters Development in Grand Rapids to create a "green" recycling industrial park.

**Shoreline Recycling** ( a division of Louis Padnos Iron and Metal Co.) says the demand for metals is very high; prices for some metals are up 20%. They have begun to accept/recycle paper, plastic and aluminum because there is a market for it. (*August 2008 statement, market has since decreased.*)

**Resource Recovery Corporation** has seen a decline in recycling foundry sand due to foundry closures. They are looking to expand in a new market of carpet and plastic recycling.

**Muskegon County Landfill** has an estimated 12-year capacity remaining. With increased recycling levels in Muskegon, the life of the landfill could be extended without having to expand or find a new site.

## Next Steps

**Education**—The Recycling Baseline Study results clearly suggest that increased efforts in recycling are urgently needed throughout the Muskegon region. Educational and mutual cooperation efforts may be the most effective pathways to success. In order to achieve a sustained increase in recycling, all sectors of the community will need to take a more proactive and engaged approach. Citizens, businesses, schools, neighborhood associations, religious organizations, etc., can all provide leadership to increase recycling and sustainable practices in a variety of ways.

### **Leadership projects could include:**

- 1) A renewed effort to educate the business community about the value of recycling and the potential impact of a cooperative effort to locally re-process and manufacture recycled materials.
- 2) A challenge opportunity to government entities to improve recycling in-house and to serve as community role models. Local government could challenge state government to do a better job advocating for the sustainable future by legislating for an increase in recycling programs state-wide.
- 3) Gather waste haulers and municipal leaders to discuss policy changes and encourage leadership, long-term vision, and innovative approaches to handling waste and recycling; explores a “pay as you throw” program or a single-stream recycling system for the Muskegon region. Challenge and assist waste haulers to create more uniform and comprehensive recycling services.

### **Proposed demonstration projects of the MASC Recycling Committee:**

- 1) Provide curbside household recycling initiatives in two test neighborhoods downtown and track recycling rates (need grant money to support this).
- 2) Host a waste assessment workshop for businesses and municipal government.
- 3) Continue to work with schools and other groups, such as Leadership Muskegon, to facilitate county wide school recycling programs.
- 4) Create billboards and signs to promote recycling throughout Muskegon County.

The Muskegon Area Sustainability Coalition (MASC) meets monthly to share information and explore opportunities. Meetings take place on the fourth Monday of each month from 12:00 to 1:30 PM at the GVSU-MAREC building. MASC welcomes new attendees.

To work directly on the advance of county-wide recycling efforts, consider joining the MASC Recycling Committee. This group meets the third Wednesday of each month at 8:30 AM at the GVSU-AWRI building.

Visit [www.muskegonasc.org](http://www.muskegonasc.org) for more information on joining either group.

### **Acknowledgements**

#### Project Team

Jim Fisher—Shoreline Recycling, Division of Louis Padnos Iron and Metal Co.

Lea Markowski—City of Muskegon Resident

Alyssa Merten—Muskegon Conservation District

Annoesjka Steinman—Community Foundation for Muskegon County

