

TOGETHER

Transforming Recycling For Good





Jill Martin

Director of Community Programs



Cassandra Ford

Community Program Coordinator



Each day we work together with communities and companies to help families in America recycle, and recycle well.



How?

Increase access to recycling

Increase capture of recyclables

Improve quality of recyclables



It's working.

We have already reached a quarter of the U.S. population with system-wide recycling solutions that are improving communities, the planet, and people's lives.

Our Funding Partners



A few of the communities we've worked with...



DENVER, CO



EL PASO, TX



MASSACHUSETTS



OHIO



ATLANTA, GA



CHICAGO, IL



SANTA FE, NM



ATHENS, OH



ST PAUL, MN

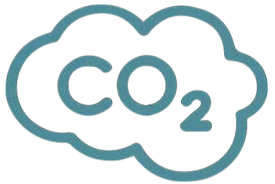


OUTAGAMIE CO, WI



74MM

Households
Impacted



251k

GHG Avoidance
(KMT CO₂e)



712k

Carts

\$56MM

Infrastructure

5.7:1

Leverage of Spend

233Mlbs

Recyclables
Diverted



1430


Community
Partners



What Are Recyclables Anyway?



RAW MATERIALS



**MANUFACTURING
FEEDSTOCK** that competes
with **OTHER** raw materials

Only when **RECYCLED
CONTENT REPLACES** virgin
content, will we enjoy the
ECONOMIC and
ENVIRONMENTAL benefits
RECYCLING promises and
delivers.

Healthy Recycling Needs a Systems Approach





+20%

contamination rates
cost the system **money & time,**
and **safety hazards**
for workers.

Recycling Partnership



Why Clean Up Recycling?



A large industrial facility, likely a recycling plant, with a massive pile of compressed plastic waste in the foreground. The waste consists of numerous clear plastic bottles and containers, some with colorful labels, tightly packed together. In the background, there are large blue metal structures, possibly part of a conveyor system or sorting equipment, and a white building with a door and stairs. The floor is a light-colored concrete. The text "We Want This" is overlaid in the center of the image.

We Want This



...Not This

...Or This

A large, messy pile of garbage, including plastic bottles, food wrappers, and other debris. A white circular callout with a black border is overlaid on the left side of the image.

...Or This

contamination

[kuh n-tam-uh-**ney**-shuh]

1. The wrong materials in the system.
2. The right materials prepared the wrong way.

single
stream
→

dual
stream
↔

source
separate
↔



RESIDENTIAL



bins



carts



drop-off

Common contaminants

Food

Propane/Helium Tanks

Needles



Scrap
Metal



Yard
Waste



Batteries

Hoses & Cords



Textiles

Plastic Bags



PROGRAM STEPS

Feet On The Street Program

A systematic approach that provides curb side feedback in an effort to improve recycling quality and encourage behaviour change



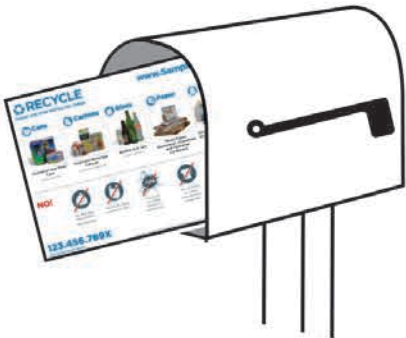
THREE COMMUNICATIONS TO DRIVE PARTICIPATION AND IMPROVE QUALITY

Curbside

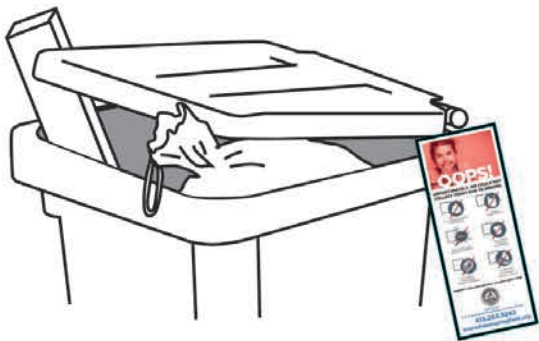
1 INFORM AND TRIGGER

2 PERSONALIZED FEEDBACK

3 ISSUE SPECIFIC COMMUNICATIONS



Annual Info Card Mailer



Curbside Feedback



Top Issue Mailer



Top Issue Signage



Drop Off

INFORM – BASIC DO'S AND DON'TS



CLEAR SIGNAGE
(Ideally reinforced by
mailers, which promote site)

PERSONALIZED FEEDBACK



ONSITE STAFF

ISSUE SPECIFIC COMMUNICATIONS



MAILERS + MEDIA

Step 1-Set it up



Michigan

Goal: Clearly set roles and responsibilities with all stakeholders

- Agreement between Grantee and The Partnership
- Hold Onboarding workshops with grantees
- Stakeholder meetings clearly defining roles/responsibilities
- Establish project timeline and budget

Step 2-Sort it out



Michigan

Goal: Find out where we are starting from

- Visit MRF and community to determine if and how current inbound contamination is measured
- If not measured, set plan in place to conduct a sort
- The Partnership, MSW consultants, MRF, District and community all participate in the sort
- Sort into 23 categories, find the blended value

Estimated Composition

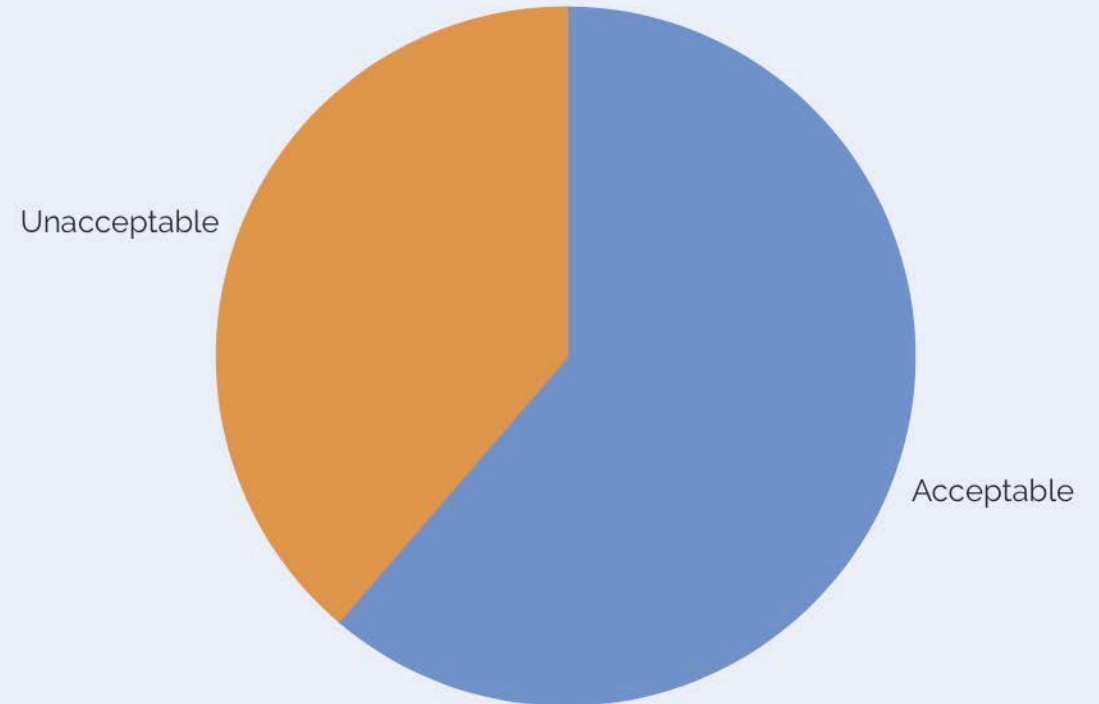
Number of samples: 14

Code	Material Description	Mean	Std. Dev.	+/-	Tons	lbs/HH	Market*
1	Corrugated Cardboard	24.96%	8.50%	3.74%	1,247.8	75.6	\$37,435
2	Mixed Recyclable Paper	24.39%	10.70%	4.71%	1,219.5	73.9	(\$3,049)
3	Newspapers in Sleeves	0.00%	0.00%	0.00%	0.0	0.0	--
4	Aseptic Containers and Gable Top Cartons	0.50%	0.26%	0.11%	24.9	1.5	--
5	Non-Recyclable Fiber	0.00%	0.00%	0.00%	0.0	0.0	--
6	#1 PET Bottles	2.92%	0.73%	0.32%	145.9	8.8	\$39,769
7	#2 HDPE Natural Bottles	1.39%	0.88%	0.39%	69.3	4.2	\$31,195
8	#2 HDPE Colored Bottles	1.26%	0.78%	0.34%	62.8	3.8	\$13,187
9	#3-#7 Plastic Bottles	2.47%	1.00%	0.44%	123.7	7.5	\$2,474
10	Plastic Film	1.29%	0.51%	0.23%	64.5	3.9	(\$2,167)
11	Rigid Non-bottle Plastic	2.23%	2.01%	0.88%	111.7	6.8	(\$3,752)
12	Glass Bottles and Jars	4.75%	2.49%	1.09%	237.3	14.4	(\$2,966)
13	Broken Glass	0.00%	0.00%	0.00%	0.0	0.0	--
14	Steel Cans	1.73%	0.69%	0.30%	86.3	5.2	\$10,782
15	Aluminum Cans	1.71%	0.85%	0.37%	85.6	5.2	\$95,923
16	Scrap Metal	0.96%	1.41%	0.62%	48.2	2.9	(\$1,618)
17	Putrescible Organics	0.00%	0.00%	0.00%	0.0	0.0	--
18	Textiles	0.00%	0.00%	0.00%	0.0	0.0	--
19	Batteries	0.00%	0.00%	0.00%	0.0	0.0	--
20	HHW	0.00%	0.00%	0.00%	0.0	0.0	--
21	Opaque Bagged Materials	9.90%	7.56%	3.32%	495.2	30.0	(\$16,639)
22	Tanglers	0.00%	0.00%	0.00%	0.0	0.0	--
23	Other Non-Recyclable Materials	19.55%	11.36%	4.99%	977.3	59.2	(\$32,836)
TOTALS:		100.00%			5,000.0	303.0	\$167,738

*Recyclable materials market index provided by RecyclingMarkets.net

Current value per ton: \$33.55/ton

Material Classes by Percentage



* Does not take into account increased processing costs due to contamination



Step 3-Implement the program



Michigan

Goal: Educate and Change Behavior

- Pre-Campaign-Let the community know what is happening
- Conduct the Feet on the Street (FOTS) program or drop off audit
- Education campaign and Tagging program
- Don't forget to include the stakeholders along the way
- Measure and collect data

Training - Resources



Cart Tagging Training Video

- <https://tinyurl.com/TRPCartTagging>



THE RECYCLING PARTNERSHIP
recyclingpartnership.org
cmarsshall@recyclingpartnership.org

ACCEPTABLE MATERIALS WORKSHEET

MBF: _____ DATE: _____
CITY: _____

Please go through each item on the list and check whether the item is acceptable or not acceptable. This document will be used to get the local governments and the MRF on the same page. It can set the framework for front line staff employees building educational materials that are consistent throughout the community. It also provides the framework to start.

You will see two categories under the "Do Not Accept" column. Here is how they are defined:
Not Dangerous: Item is not sent to a market for recycling, but does not cause any major problems if found in the stream.
Dangerous: Item can shut down or damage equipment, harm employees, and/or degrade the value of material.

PAPER PRODUCT	ACCEPT		DO NOT ACCEPT	
	ACCEPT	DO NOT ACCEPT	DO NOT WANT ON LIST BUT ACCEPT	
OCC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Pizza Boxes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Newspaper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Magazines	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hard Cover Books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Paperback Books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Office Paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Junk Mail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cartons (gable top containers like milk, orange juice, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Shredded Paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Directions on how to Prepare	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Round Can (fiber body, metal bottom)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cold Cups (e.g. paper fountain drink cup)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hot Cups (e.g. coffee cup)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Take-out Containers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Paperboard Boxes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Kraft Bags	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Tissue Paper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ice Cream Containers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

MRF MATERIAL TRACKING FORM

City: _____ Date: _____
Hauler: _____

Truck Number: _____ Container Number (if drop-off): _____

Route Number: _____ Container Material (if drop-off): _____
(e.g. bottles/cans, cardboard, paper)

QUALITY GRADE (circle one)

A Quality is acceptable. Less than 10% of material is contaminated.

B Quality is poor. 10% to 20% of material is contaminated.

C Quality is bad. Over 20% of material is contaminated.

Grade B or C? ☐ Recyclables in Bags ☐ Refuse in Bags ☐ Loose bags/film ☐ Scrap Metal

Check main contaminant: ☐ Wood Waste ☐ Large bulky/heavy items ☐ Hazardous Waste ☐ Tangles ☐ Textiles

Other: _____

Photographed? ☐ Quality Inspection Signature: _____

Driver Signature: _____

Resources to Overcome Contamination

- <https://recyclingpartnership.org/for-communities>



Step 4-Sort it all out again



Michigan

Goal: Find out if and what impacts the program had

- Conduct a post-sort
- Analyze data - participation and set out
- Education campaign and Tagging program
- Don't forget to include the stakeholders along the way

Step 5-Tell the Story



Press Event

Akron

Akron launching new recycling program to crack down on contamination

Posted: 9:33 PM, Jun 01, 2019 Updated: 9:33 PM, Jun 01, 2019



By: Jade Jarvis




AKRON, Ohio — Do you know how to recycle properly? Well if not and you live in Akron, you'll soon be getting a lesson on how to do it the right way.

[Click to Read story](#)



Ready to run? Click here for details about the News 5K!

 **City of Akron, Ohio - Mayor's Office**
June 3 · 🌐

As a reminder, the “feet on the street” initiative to reduce contamination in Akron’s recycling stream officially begins today!

There will be specially-trained personnel conducting curbside cart observations. Residents who have contaminants in their recycling carts will receive informational “Oops” tags on their carts with direct feedback designed to improve recycling cart contents. Recycling carts found to contain contaminants will not be emptied. Instead, residents will be given the opportunity to correct the mistake and return the cart to the curb the following week. Customers who continue to contaminate the recycling stream by placing prohibited items or garbage in their recycling cart will no longer be permitted to participate in the program.

For more information, check out the full release:
<https://www.akronohio.gov/.../news/44b6f1ba851b007c/index.html>

 **RECYCLE** THANK YOU FOR RECYCLING THESE:

 Cans Aluminum and Steel Cans empty and rinse	 Cartons Food and Beverage Cartons empty, rinse and remove caps	 Paper Cereal Boxes, Newspaper, Magazines, Mail, Flattened Cardboard and Paper Tubes	 Plastic Kitchen, Laundry, Bath: Bottles and Jugs empty, rinse and remove caps
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NO!

 No Plastic Bags or Plastic Wrap (return to retailer)	 No Glass	 No Yard Waste	 No Textiles	 No Bulky Items	 No Food or Liquid (empty all containers)
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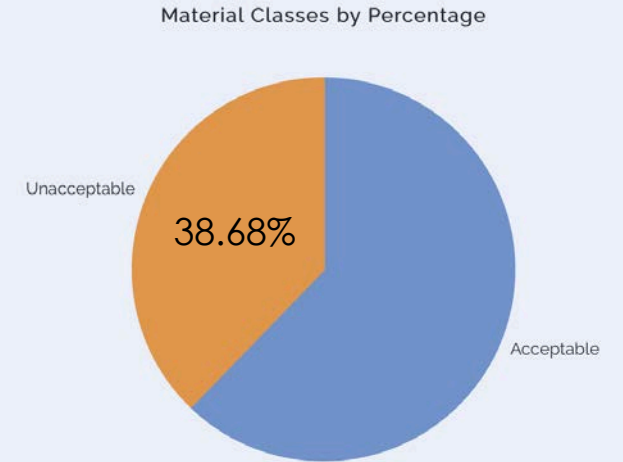
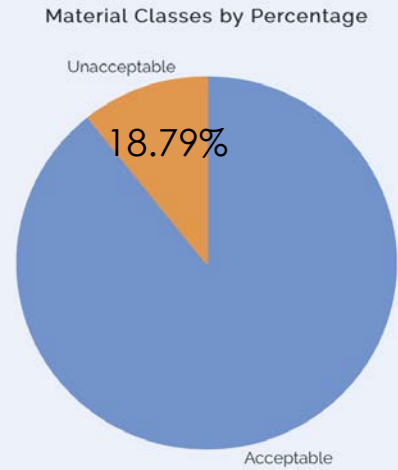
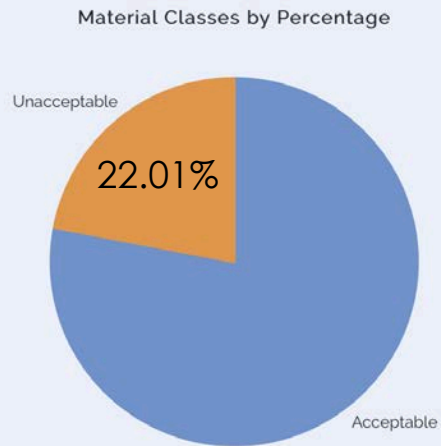
RESULTS

Fairfield
11,594 Households

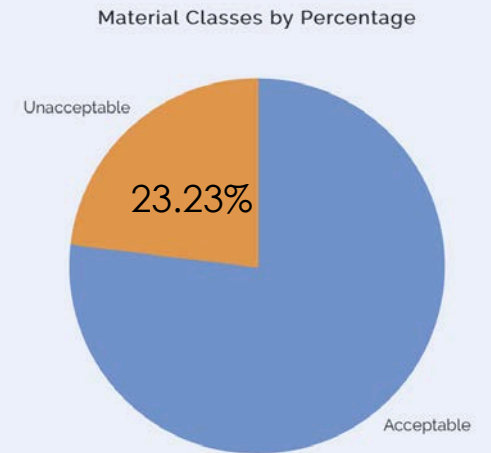
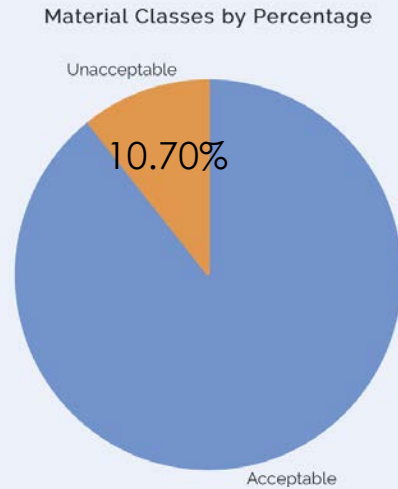
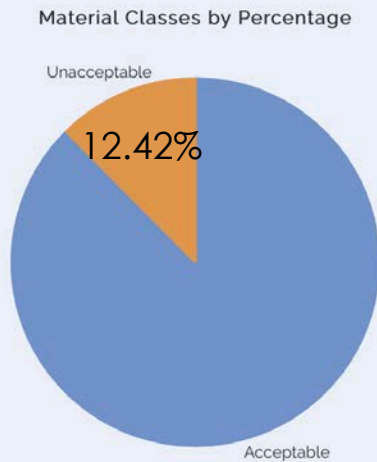
Centerville
1,492 households

Akron
33,000 Households

BEFORE



AFTER



44% reduction

40% reduction

43% reduction

Before and After Impacts on Blended Value

Prices are based on Index, does not reflect MRF pricing

0% 5% 10% 15% 20% 25% 30%

Estimated Composition Number of samples: 15

Code	Material Description	Mean	Std. Dev.	+/-	Tons	lbs/HH	Market*
1	Corrugated Cardboard	24.98%	8.19%	3.48%	2,123.1	128.7	\$63,692
2	Mixed Recyclable Paper	25.10%	10.67%	4.53%	2,133.1	129.3	(\$5,333)
3	Newspapers in Sleeves	0.00%	0.00%	0.00%	0.0	0.0	--
4	Aseptic Containers and Gable Top Cartons	0.53%	0.28%	0.12%	45.0	2.7	--
5	Non-Recyclable Fiber	0.00%	0.00%	0.00%	0.0	0.0	--
6	#1 PET Bottles	2.94%	0.71%	0.30%	250.2	15.2	\$55,038
7	#2 HDPE Natural Bottles	1.36%	0.85%	0.36%	115.7	7.0	\$64,801
8	#2 HDPE Colored Bottles	1.27%	0.76%	0.32%	107.9	6.5	\$22,667
9	#3-#7 Plastic Bottles	2.62%	1.11%	0.47%	222.3	13.5	\$4,446
10	Plastic Film	1.28%	0.50%	0.21%	108.6	6.6	(\$5,099)
11	Rigid Non-bottle Plastic	2.42%	2.06%	0.88%	205.5	12.5	(\$9,648)
12	Glass Bottles and Jars	4.97%	2.56%	1.09%	422.8	25.6	(\$5,286)
13	Broken Glass	0.00%	0.00%	0.00%	0.0	0.0	--
14	Steel Cans	1.75%	0.67%	0.29%	148.9	9.0	\$18,611
15	Aluminum Cans	1.72%	0.82%	0.35%	145.9	8.8	\$160,504
16	Scrap Metal	1.09%	1.45%	0.61%	92.5	5.6	(\$4,340)
17	Putrescible Organics	0.00%	0.00%	0.00%	0.0	0.0	--
18	Textiles	0.00%	0.00%	0.00%	0.0	0.0	--
19	Batteries	0.00%	0.00%	0.00%	0.0	0.0	--
20	HHW	0.00%	0.00%	0.00%	0.0	0.0	--
21	Opaque Bagged Materials	9.29%	7.65%	3.25%	790.0	47.9	(\$37,083)
22	Tanglers	0.00%	0.00%	0.00%	0.0	0.0	--
23	Other Non-Recyclable Materials	18.69%	11.44%	4.86%	1,588.4	96.3	(\$74,559)
TOTALS:		100.00%	View Market History		8,500.0	515.2	\$248,413

*Recyclable materials market index provided by RecyclingMarkets.net
Disposal index used for market value calculation: \$46.94

Current value per ton: **\$29.23/ton**

Add Tonnage/Households Enter total tons collected:

Estimated Composition Number of samples: 8

Code	Material Description	Mean	Std. Dev.	+/-	Tons	lbs/HH	Market*
1	Corrugated Cardboard	23.78%	7.30%	4.24%	2,021.1	122.5	\$60,634
2	Mixed Recyclable Paper	36.26%	8.84%	5.14%	3,081.8	186.8	(\$7,704)
3	Newspapers in Sleeves	0.00%	0.00%	0.00%	0.0	0.0	--
4	Aseptic Containers and Gable Top Cartons	0.57%	0.21%	0.12%	48.2	2.9	--
5	Non-Recyclable Fiber	0.00%	0.00%	0.00%	0.0	0.0	--
6	#1 PET Bottles	4.67%	0.66%	0.38%	396.9	24.1	\$87,311
7	#2 HDPE Natural Bottles	1.61%	0.45%	0.26%	137.2	8.3	\$76,811
8	#2 HDPE Colored Bottles	1.41%	0.55%	0.32%	119.7	7.3	\$25,140
9	#3-#7 Plastic Bottles	3.71%	1.22%	0.71%	315.5	19.1	\$6,309
10	Plastic Film	0.69%	0.34%	0.20%	59.0	3.6	(\$2,769)
11	Rigid Non-bottle Plastic	2.26%	0.95%	0.55%	192.4	11.7	(\$9,033)
12	Glass Bottles and Jars	6.41%	2.36%	1.37%	545.0	33.0	(\$6,812)
13	Broken Glass	0.00%	0.00%	0.00%	0.0	0.0	--
14	Steel Cans	2.27%	0.95%	0.56%	192.8	11.7	\$24,099
15	Aluminum Cans	2.67%	0.81%	0.47%	226.8	13.7	\$249,515
16	Scrap Metal	0.20%	0.37%	0.22%	17.2	1.0	(\$809)
17	Putrescible Organics	0.00%	0.00%	0.00%	0.0	0.0	--
18	Textiles	0.00%	0.00%	0.00%	0.0	0.0	--
19	Batteries	0.00%	0.00%	0.00%	0.0	0.0	--
20	HHW	0.00%	0.00%	0.00%	0.0	0.0	--
21	Opaque Bagged Materials	0.08%	0.13%	0.09%	6.7	0.4	(\$315)
22	Tanglers	0.00%	0.00%	0.00%	0.0	0.0	--
23	Other Non-Recyclable Materials	13.41%	7.14%	4.15%	1,139.7	69.1	(\$53,498)
TOTALS:		100.00%	View Market History		8,500.0	515.2	\$448,880

*Recyclable materials market index provided by RecyclingMarkets.net
Disposal index used for market value calculation: \$46.94

Current value per ton: **\$52.81/ton**

Add Tonnage/Households Enter total tons collected:

Conceptual Program ROI - Akron (tonnage 8500)

	Before	After	Change
Contamination Rate	38.68%	23.23%	-40%
Blended Value/ton*	\$29.23	\$52.81	+\$23.58
Annual Blended Value	\$248,413	\$448,880	+\$200,467
Cost of Tagging program			-\$86,000
Net Increase			\$114,467

- ❖ Does not reflect cost of processing or collection
- ❖ Does not reflect savings for labor, reduced downtime or maintenance due to contamination

- Based on 10/6/19 RecyclingMarkets.net index pricing

Learned from State of Massachusetts

Rejection Works

45%

tagging decrease
in Dartmouth

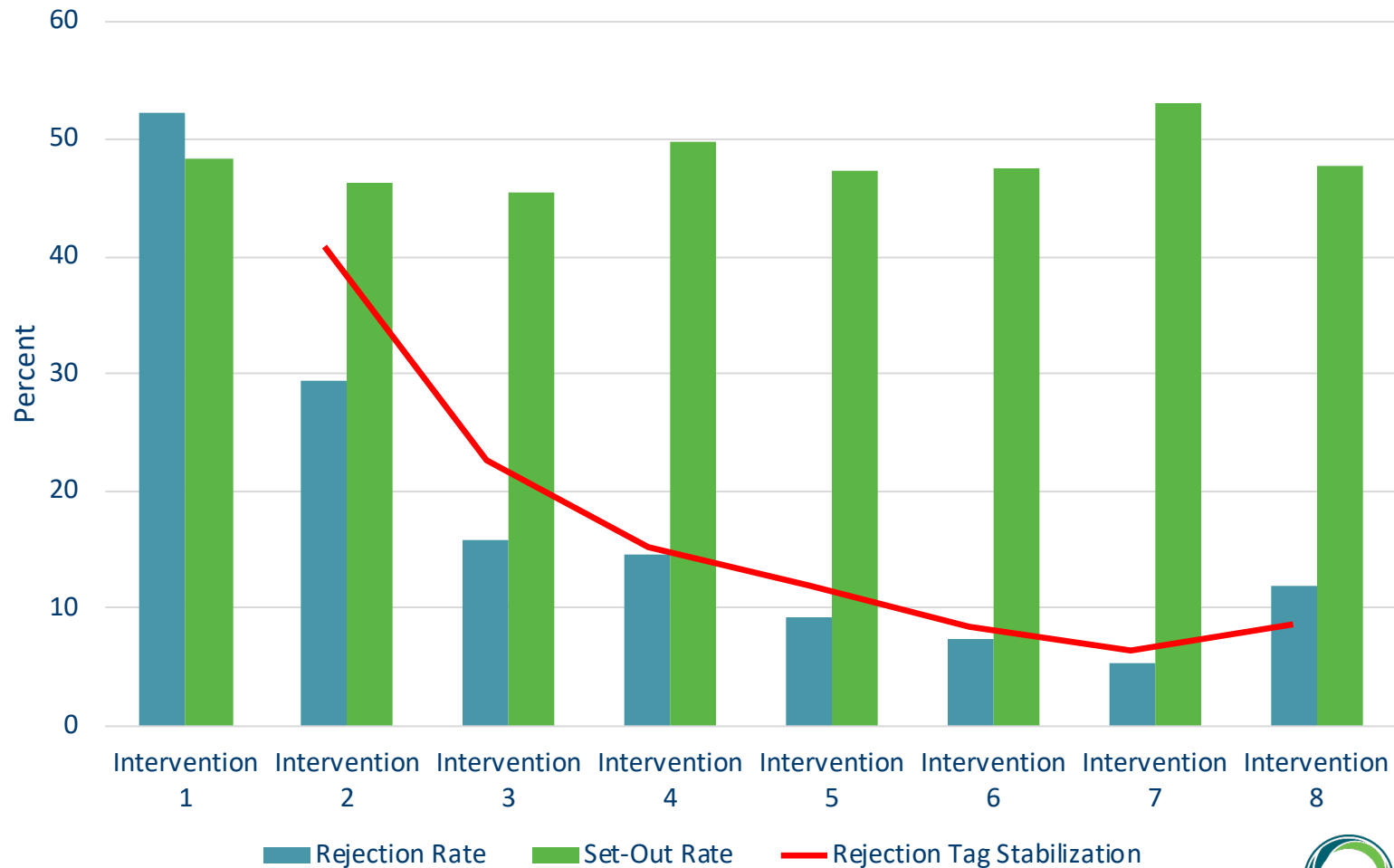


22%

tagging decrease
in New Bedford

Learned from State of Massachusetts

Rejection and Set-out Rates for Lowell, MA Pilot



EGLE RECYCLING QUALITY IMPROVEMENT GRANT

Grant Highlights

Who's eligible to apply?

- Drop off and Curbside Recycling Programs
- Rural and Urban communities
- Individual Municipalities and Regional Authorities

How much money is available?

- Funding available for 10-20 grantees to conduct a recycling quality improvement program
- Grant Budget - \$3.00/HH
- Maximum \$150,000 per grant application

What does the grant pay for?

- Staff for tagging carts or auditing drop-off locations (temporary staff)
- Printing tags
- Printing and mailing direct mail pieces
- Social media
- Community signage
- Drop-off site anti-contamination security solutions (i.e. fencing, cameras, etc.)
- One-year subscription to an online recycling digital communication platform
- Other innovative contamination reduction strategies

Grant Highlights

What are the key grant selection criteria for funding?

- Ability and readiness of applicant to conduct all of the required elements of the grant program
- Community has support from MRF and hauler
- Number of households in proposed project area
- Willingness to reject contaminated carts at the curb or inspect materials being delivered to drop off locations
- Leverage of additional resources, including local, state, or other non-profit funding



Roles/Responsibilities

EGLE

- Funder
- Partner
- Advisor/resource
- Share results

The Recycling Partnership

- Contractor/Consultant
- Evaluation Team
- Facilitator/Coach/Trainer
- Share results

Grantee

- Submit grant
- Conduct initial program/project
- Sustain program
- Gather data
- Report out results

Roles/Responsibilities

Hauler

- Sponsor/support grant recipient
- Potential funder
- Driver meetings, engagement and buy-in
- Record data
- Provide address list
- Coordinate routing

Processor/MRF

- Sponsor/support grant recipient
- Potential funder
- Conduct audit sorts and capture data

Funding

Reimbursement

- Grantee submits invoice(s) and all required documentation.
- TRP issues payment within thirty (30) days of invoice.
- Total grant distributions will not exceed 90 percent of reimbursable costs until grantee submits final project report
- Funds not expended by end of grant contract term will be forfeited.
- Any funds expended prior to start of grant period will not be reimbursed.

Funding Responsibilities

- Quality Improvement Program (up to \$3/HH) – Grantee thru grant
- Optional components of the program – Grantee thru additional funds beyond grant (e.g. >50,000 Households)
- MRF Audit Training – TRP
- Grantee Onboarding (MRC workshop) – TRP

Measurement


Performance Metrics Needed for Application

- Number of Households (HH) served

Performance Metrics Desired for Reporting


- Tons collected
- Pounds per HH served
- Set Out Rate
- Participation Rate
- In-bound Contamination Rate
- Residual Rate

Reporting

Karen Bandhauer Messages Help Log Out

DASHBOARD PROGRAMS DIRECTORIES TOOLKIT MY PROFILES COMMUNITY

The Recycling Partnership Community Reporting




Program Details











Account Information:
▶ Status
Reports
% Change Report
Monthly Trend Report
Host:
The Recycling Partnership
Website:
<http://therecyclingpartnership.org>
Program Manager
Karen Bandhauer
kbandhauer@recyclecurbside.org
970-682-1662

THE RECYCLING PARTNERSHIP COMMUNITY REPORTING STATUS

Member: **ANYTOWN, USA** Legend

Please use the forms below to submit your initial community information and baseline data, your quarterly report information / monthly data, and your final report. When you first set up your Re-TRAC account, we ask that you input your general program data, which includes your baseline tonnage (pre cart rollout). Then, on a quarterly basis, please submit your quarterly report information below. You will open the fields for the appropriate quarter by clicking on the corresponding plus sign. After inputting that information, you will enter the monthly tonnage data for the three corresponding months from that quarter. The monthly tonnage data is ONLY entered after recycling carts are fully deployed at every household, leave monthly tonnage data blank before cart rollout starts. The plus signs will turn green when you have entered your data. If you haven't done so already, please set up a time to discuss data tracking and reporting with Cody Marshall before you enter your baseline or monthly data. Thank you and please let us know if you have any questions.
Your Recycling Partnership Team

To begin, please click on the blue plus sign  corresponding to the applicable reporting form.

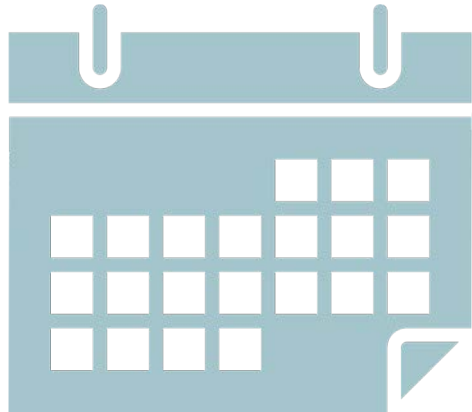
General Information and Baseline			
Final Report			
	2016	2015	
- Quarterly Data			
Quarter 1			
Quarter 2			
Quarter 3			
Quarter 4			
- Monthly Tonnage			

Application

Application

- Review complete application instructions available in the RFP
- Gain letters of support from MRF and hauler(s)
- Fill out the Municipal Measurement Program (if individual municipality) online at **www.municipalmeasurement.com**.

EGLE Grant Timeline



January 6	RFP Release
February 28	Application Due Date
April	Award Grantees
May	Onboarding Workshop
June/TBD	Project Kickoff



Questions

Discussion



Jill Martin

Director of Community Programs
jmartin@recyclingpartnership.org
920-540-0179

Cassandra Ford

Community Program Coordinator
cford@recyclingpartnership.org
785-840-4048

