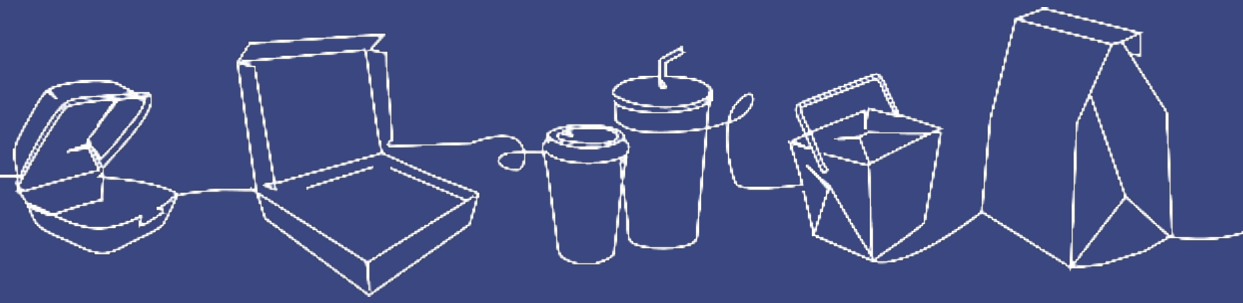
FOODSERVICE PACKAGING INSTITUTE®

Foodservice Packaging Recovery

WI MRF Stakeholder Meeting

October 24, 2022



Foodservice Packaging Institute

- Established in 1933
- Only industry trade association in North America solely focused on all single-use foodservice packaging products
- Members include:
  - Converters and their raw material and machinery suppliers (represents about 85% of the industry)
  - Foodservice distributors and operators

FPI's Recovery Groups

Paper Recovery Alliance (PRA)

Plastics Recovery Group (PRG)

Foam Recycling Coalition (FRC)

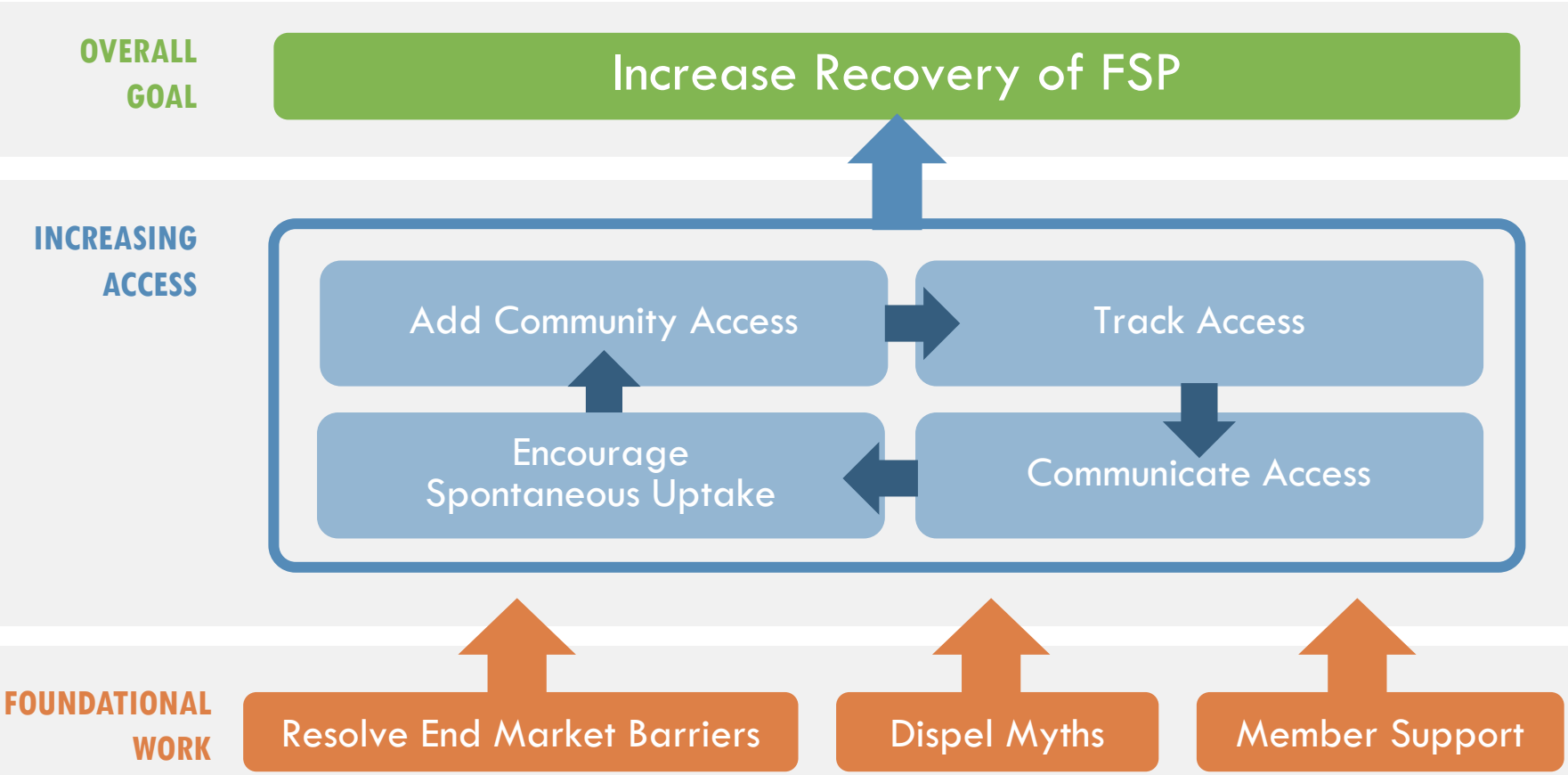
Paper Cup Alliance (PCA)

Current PRA/PRG Members

FPI FOODSERVICE PACKAGING INSTITUTE

amhil north america best value company
Berry
CKF
CARTONCRAFT INCORPORATED
Chick-fil-A
CLEARWATER PAPER
COMMAND PACKAGING
DART
DOLCO PACKAGING
DOW
DUPONT
dunkin' brands
Genpak
GP Georgia-Pacific Professional
Graphic Packaging INTERNATIONAL
HUHTAMAKI
MICHELMAN
NaturTec® Sustainable Biobased Materials
NatureWorks
NOVOLEX
pactiv evergreen
PLASTIC INGENUITY
Ronpak Think Outside the Bag for Solutions
ROSES Southwest
sappi
Seda INTERNATIONAL PACKAGING GROUP
SUSTANA
tellus plant product planet
WestRock
White Castle

Overview of Approach



Foodservice Packaging

Single-use foodservice ware and packaging used by foodservice establishments

Specifically, our work focuses on:

- Cups (including sleeves)
- Containers
- Boxes
- Paper bags

Questions we've answered

FPI
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How much material is available? Estimated material generation

Who's recycling FSP? Conducted MRF Benchmarking Study

Are there end markets for FSP? Published end markets map

What are the access rates for FSP? Co-sponsored SPC Centralized Study on the Availability of Recycling

Where are domestic end markets for Paper FSP?
- Surveyed mills; 4 accepting paper FSP
- 16 markets at end of 2018
- 21 markets at end of 2019
- 30 confirmed markets at end of 2020
- 33 confirmed markets

Will the material flow to the right bale? Co-sponsored MRF Material Flow Study

How to expand end markets for FSP? Engaged in end market outreach, partnerships & development

Joint Declaration by 8 Mill Companies

Paper Cup Recycling white paper released

2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022

Where is the material available to be collected? Learned curbside had greatest volume for collection

Is food residue a problem?
- Food Residue Study (Boston)
- Food Residue Study (Delaware)

Found little to no difference between FSP versus other commonly recycled food packaging

How will FSP impact the bale? Estimated impact

How much FSP arises in bales?
- Analyzed mixed paper bales in Seattle and NYC
- Co-sponsored Rigid Plastics Bale Audit

What messaging is clearest for residents? Conducted National Resident Messaging Survey

How to add FSP to city's materials? Developed image library, flyers, ads, video, best practice language

Which cities and composters accept FSP? Co-sponsored BioCycle residential study and surveyed composters

How does compostable FSP contribute as a feedstock? Found compostable FSP provided the same benefit as traditional carbon / bulking materials

Where are North American end markets for Plastic FSP? Surveyed PET, PP, and PS end markets

How can plastic FSP be made more recyclable? Partnered with APR to develop Design Guide for Foodservice Plastics Recyclability

How can more PET be recycled? Spearheaded PET Thermoforms Collaboration

Best capture opportunities for paper cups? Paper cup flow studies (4 MRFs) corroborated 2015 results on % to container line

How much FSP arises in bales?
- Mixed paper bale audit (1 MRF) corroborated 2015 findings
- Mixed plastic bale audit corroborated 2015 findings

How much FSP arises in bales? Mixed paper bale audits from partner MRFs (pending)

What are current access rates? Co-sponsored cup access study with NextGen (pending)

Other studies planned / underway

FOODSERVICE PACKAGING INSTITUTE®

Paper Cup Recycling

Mill Commitment

We Want Your Paper Cups!

OUR COMMITMENT TO RECYCLING

We, the undersigned organizations, are committed to increasing paper cup recycling. With the ever-increasing need to accelerate the recovery of foodservice packaging, we have taken many foundational and intentional steps to increase the viability of paper cup recycling and ensure end market acceptance.

A HIGHLY DESIRABLE RECYCLED MATERIAL

Paper cups are made with long, bleached fiber that are highly desired by paper mills because it adds strength and quality to new products made with recycled fiber. To date, there are 29 paper mills across nine companies in North America that accept residential mixed paper bales with paper cups included. Additionally, there are 5 mills/facilities across three companies that accept paper cups into bales of aseptic and gable top cartons ("Grade 52" bales). Participating paper mills have performed pulpability testing and/or mill trials to determine their ability to successfully recover fiber from paper cups and use the fiber in their furnish.

MAKING NEW EVERYDAY PRODUCTS

To provide a liquid barrier to the fiber, paper cups have a coating either on the inside (for hot drink cups) or on both sides (for cold drink cups). The pulping systems in use at our mills can separate the coatings from the fiber and recover the fiber as a feedstock for new products. Yield from the cup is in the 70 to 90 percent range, depending on whether the cup has a single or double sided coating and the pulping system in use. These fiber products go on to be made into a variety of everyday items such as cereal boxes, facial tissues, corrugated boxes, and new paper cups!

ADDING PAPER CUP RECYCLING

Material recovery facilities (MRFs) can add paper cups to their accepted material list. Communities can advocate for the inclusion of paper cups in their recycling stream by working with their waste haulers and MRFs.

A list of mills that accept paper cups and a map are on the next page. You can also find them on an interactive map **here**.

JOIN THE PAPER CUP RECYCLING MOVEMENT

Many of us are members of the Foodservice Packaging Institute, which provides industry-funded grants to MRFs, waste haulers, and communities that expand paper cup recycling access, increase current recovery capabilities, and educate residents on new paper cup recycling programs. If you are interested in partnering with FPI to add paper cup recycling to your recycling program, visit **www.recyclefsp.org** or email **recyclefsp@fpi.org**.

Additional information about paper cup recycling may be found at: **www.recyclepapercups.org**.

Cascades

essity

Georgia-Pacific

Graphic Packaging International

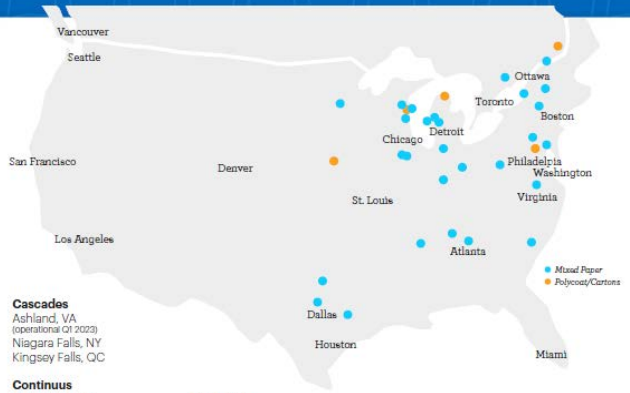
Great Lakes Tissue Company

ND PAPER

SUSTANA FIBER

WestRock

We Want Your Paper Cups!



Cascades
Ashland, VA
(operational Q1 2023)
Niagara Falls, NY
Kingsey Falls, QC

Continuus
Des Moines, IA
Philadelphia, PA

Essity
Barton, AL
Menasha, WI
Middletown, OH
South Glens Falls, NY

Georgia-Pacific
Green Bay, WI
Muskogee, OK

Graphic Packaging International
Battle Creek, MI
East Angus, QC
Middletown, OH
Kalamazoo, MI

Great Lakes Tissue
Cheboygan, MI

Green Bay Packaging
Green Bay, WI

ND Paper
Fairmont, WV

Pratt
Conyers, GA
Shreveport, LA
Staten Island, NY
Valparaiso, IN
Wapakoneta, OH

Sonoco
Hartsville, SC

Sustana
Levis, QC
DePere, WI

WestRock
Aurora, IL
Battle Creek, MI
Chattanooga, TN
Dallas, TX
Eaton, IN
Missisquoi, VT
St. Paul, MN
Stroudsburg, PA

THE MIXED PAPER MILLS ON THIS LIST REPRESENT:

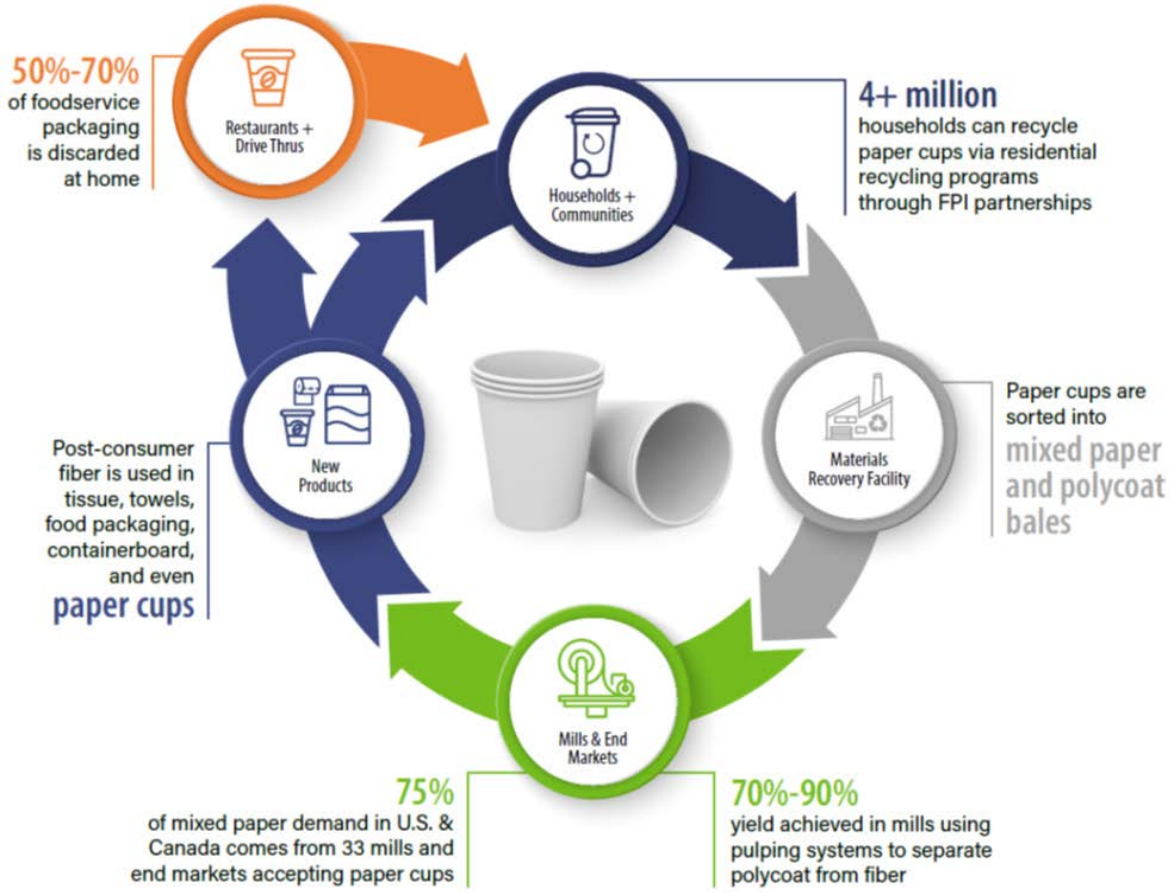
of the U.S./Canadian mixed paper demand
(% by quantity consumed)

of the U.S./Canadian mills consuming mixed paper
(% by mill count)

Generators should contact end markets directly or via their broker to determine specifications and terms.
*as of 6/2022

Paper Cup Recycling

- Made with long, bleached fiber – highly desired by paper mills.
- Can be sorted into mixed paper (Grade 54) or polycoat (Grade 52) bales.
- Pulping systems can separate coatings from fiber with a 70%-90% yield.
- Fiber goes on to become cereal boxes, facial tissue, corrugated boxes, and new paper cups!



SOURCE: "The State of Paper Cup Recycling". Moore & Associates. 2022.

Paper Cups Accepted in 2 Commodities

5
mills/facilities

3
companies

accept cups in polycoat bales

29
mills

9
companies

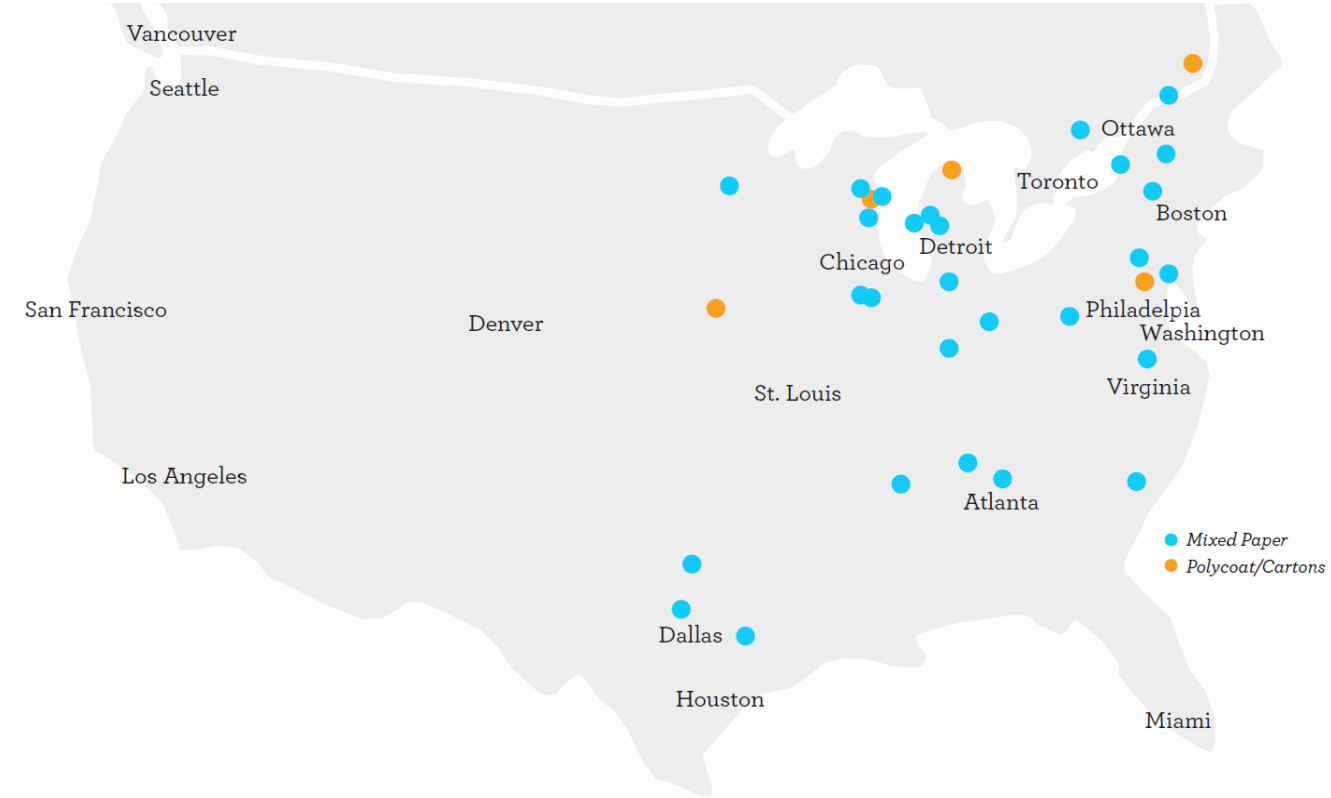
accept cups in mixed paper bales

representing

Of U.S./Canadian mixed paper demand (% by quantity consumed)

Of U.S./Canadian mills consuming mixed paper (% by mill count)

North American Paper Cup Acceptance



Cascades

Great Lakes Tissue Company

essity

ND PAPER

Georgia-Pacific

SUSTANA FIBER

Graphic Packaging INTERNATIONAL

WestRock

End Markets for Post-Consumer Paper Cups

Mixed Paper Markets

Cascades, Ashland, VA (operational Q1 2023)

Cascades, Kingsey Falls, QC

Cascades, Niagara Falls, NY

Essity, Barton, AL

Essity, Menasha, WI

Essity, Middletown, OH

Essity, South Glens Falls, NY

Georgia-Pacific, Green Bay, WI

Georgia-Pacific, Muskogee, OK

Graphic Packaging International, Battle Creek, MI

Graphic Packaging International, East Angus, QC

Graphic Packaging International, Middletown, OH

Graphic Packaging International, Kalamazoo, MI

Green Bay Packaging, Green Bay, WI

ND Paper, Fairmont, WV

Pratt, Conyers, GA

Pratt, Shreveport, LA

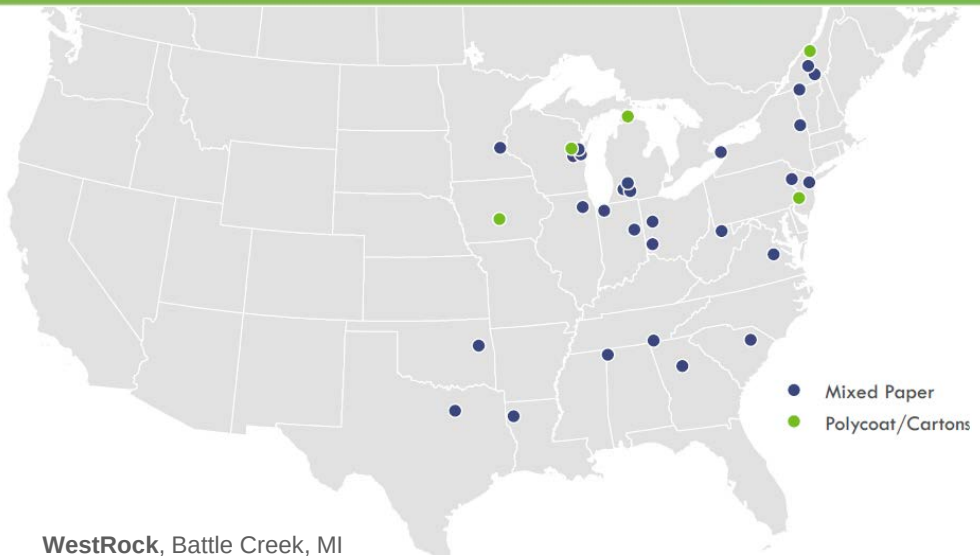
Pratt, Staten Island, NY

Pratt, Valparaiso, IN

Pratt, Wapakoneta, OH

Sonoco, Hartsville, SC

WestRock, Aurora, IL



WestRock, Battle Creek, MI

WestRock, Chattanooga, TN

WestRock, Dallas, TX

WestRock, Eaton, IN

WestRock, Missisquoi, VT

WestRock, St. Paul, MN

WestRock, Stroudsburg, PA

Polycoat / Carton Markets

Continuus, Des Moines, IA

Continuus, Philadelphia, PA

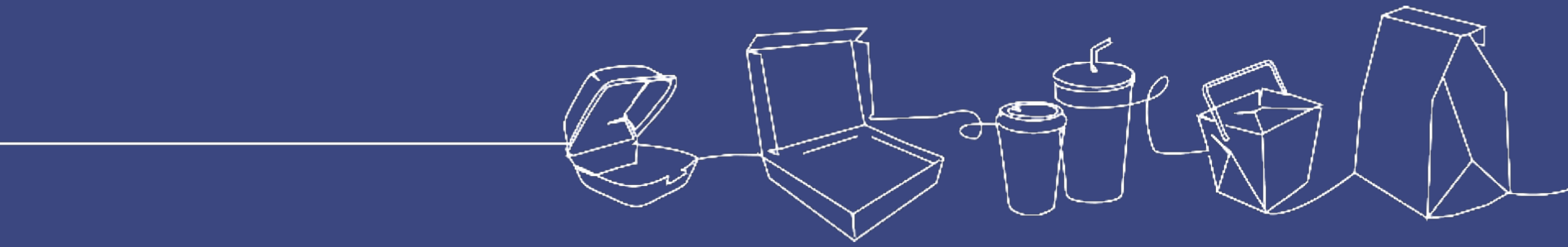
Great Lakes Tissue, Cheboygan, MI

Sustana (Breakey Fiber), Levis, QC

Sustana (Fox River Fiber), DePere, WI

Interactive map at: https://www.recyclefsp.org/end-markets-map

Community Partnerships



Community Partnership

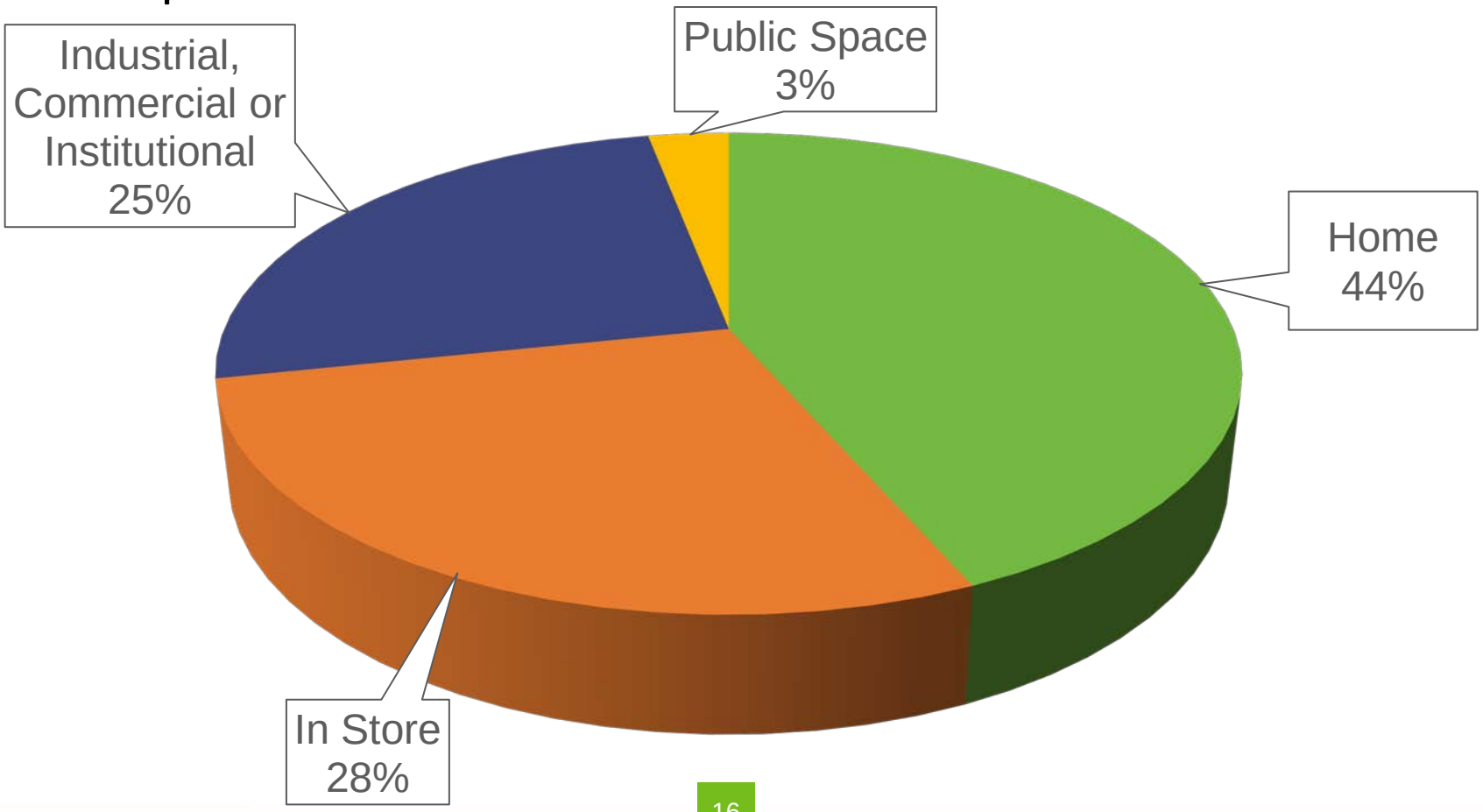
GOALS

FPI's overall goal is to develop and promote economically viable and sustainable recovery solutions for foodservice packaging.

The purpose of FPI's Community Partnership program is to add a suite of foodservice packaging to **curbside recycling programs.**

Why Focus on Curbside Collection?

Most foodservice packaging is discarded at home or in the workplace



Overview of Community Partnerships

If all stakeholders agree, FPI and partners work together in these areas:

Contracting Define obligations of community and aspects of FPI support	**Operations Plan** How big? Any process changes? What is sorted where?	**Communications Plan** Education and outreach planning, adding new material (language, images, integration into existing media)	**Community Kick-off Event** PR and publicity kickoff event	**Measurement & Benchmarking** tonnage, residue, bale audit – what and how much? Before snapshot and again 6-9 months after kickoff.

What FPI Can Provide

- Information, research data
- Technical assistance, e.g. on operational questions, as needed
- Support in end market dialogues, as needed
- Communications planning
- Assistance in developing educational materials for residents (flyers, templates, graphics, etc.)

What Partners Provide

- Points of contact for operations, communications
- "In-kind" assistance, such as:
  - Piggybacking on planned education and outreach activities
  - Sharing contacts and connections who can help the roll-out
  - Assistance with some data collection (e.g. residue audits) and reporting
- Willingness to be cited as reference, case study, etc.

Information Resources

- MRF information sheets on paper and plastic foodservice packaging
- Model resident education materials
- RecycleFSP.org

RECYCLING DETAILS FOR PAPER & PLASTIC FOODSERVICE PACKAGING

Resources for MRFs

RECYCLING FOODSERVICE PACKAGING IN YOUR COMMUNITY

BACKGROUND

The foodservice packaging industry is committed to increasing the recovery of its products. While there is some recycling and composting of foodservice packaging (FSP) already underway, there is much room to grow. The industry recognized that a systems-based approach was needed to address this complex challenge, and that it needed strong collaboration with value chain partners. The industry's trade association – the Foodservice Packaging Institute (FPI) – is spearheading these efforts.

GOALS

FPI's overall goal is to develop and promote economically viable and sustainable recovery solutions for foodservice packaging.

Because research indicates roughly half of all FSP ends up back at the home, one major pathway for recovery is the existing curbside recycling infrastructure. The goal of FPI's Community Partnership program is to add a suite of foodservice packaging to curbside recycling programs.

ABOUT FOODSERVICE PACKAGING

While foodservice packaging encompasses many different products and materials, the target list for the community partnership includes cups, containers, boxes and bags. These items generate the most volume, with good flow potential in recycling facilities, and available end markets. Here are examples of the targeted materials:

Aluminum foil food containers		Paper cups	
Paper take-out containers		Paper bags	
Molded fiber beverage carriers, take-out containers and egg cartons		PP beverage cups	
PET beverage cups		PET take-out containers	

Resident Education Kit

FPI
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HOME | ABOUT FPI | FOODSERVICE OPERATORS | COMMUNITIES | MATERIALS RECOVERY FACILITIES | END MARKETS | COMPOSTING & AD FACILITIES | FAQs

Resident Education Kit

FPI is committed to making resident outreach of recycling foodservice packaging (FSP) simple and successful. We have resources to add to your current educational material or if you're starting from scratch. Click on the buttons below to access the resources in the kit.

Personalize Your Flyer

Download FSP Images

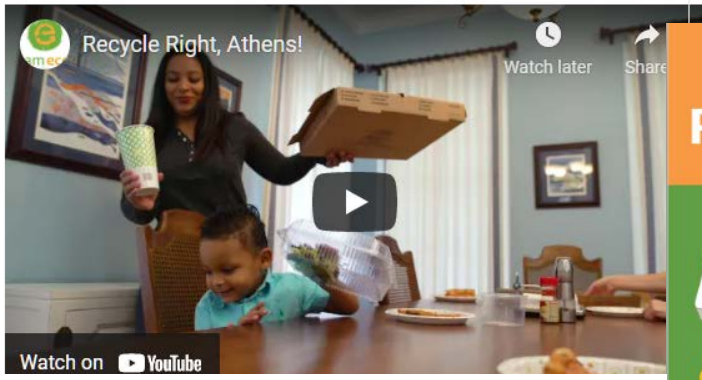
View Survey Results

Best Practices

Sample Educational Flyer

Customizable Video

Athens-Clarke County, GA



Athens-Clarke County, GA

Paper cups now recyclable in Athens

Martina Essert | Contributor
Jan 21, 2021

Paper cups are now recyclable in Athens, Georgia. (Photo/Sherry Liang)

Athens residents have previously been asked not to include paper cups with their other recycling, but that is no longer the case.

"There's a little layer of plastic in a paper cup. What changed is the willingness of the paper mills and the industry at large to accept that material in the paper mill. They want the paper badly enough that they're willing to put up with a little bit of plastic," Joe Dunlop,

ACC Recycling celebrates becoming the first county to accept paper cups

7 PHOTOS
10:10 a.m. EST Jan. 22, 2021

Atlanta, GA

RECYCLE
THANK YOU FOR RECYCLING THESE:
Glass
Metal
Paper
Plastic
Cheerios
Bottles and Jars
empty and dry
Aluminum and Steel Cans
empty and dry
Cartons, Mixed Paper, Cardboard, Newspaper, and Magazines
flatten cardboard
Bottles and Containers
empty and replace cap
NO!
YUCK
Do Not Bag Recyclables
no garbage
No Plastic Bags
return to retail
No Textiles or Clothing
No Tanglers, Cords, Hoses or Chains
No Food or Liquid
empty all containers
www.atlantaga.gov/recycling
Need a cart? You may be eligible for a replacement at no extra charge.
CONTACT
ATL 311
Funded in part by
THE RECYCLING PARTNERSHIP
THE Coca-Cola FOUNDATION

Recycling Information
RECYCLE MORE!
Empty, clean, and loose in your cart
Calendar
Wizard
Bulk Collection
Need help?
Please type your home address:
Search
Google Play
App Store

RECYCLE
MORE!
OUTFRONT

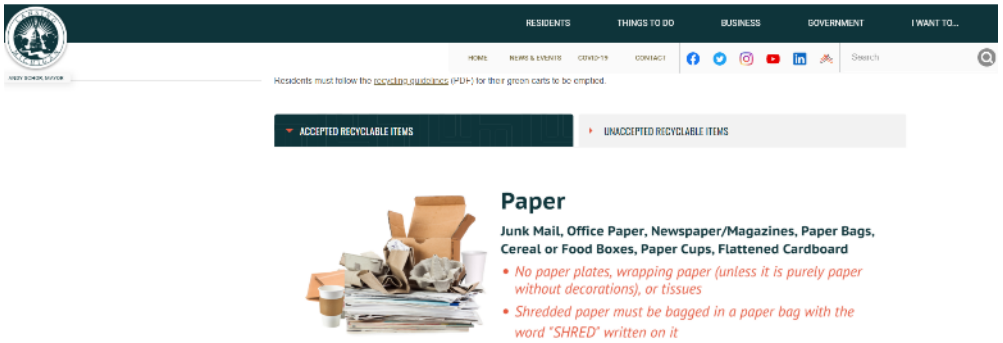
Madison, WI

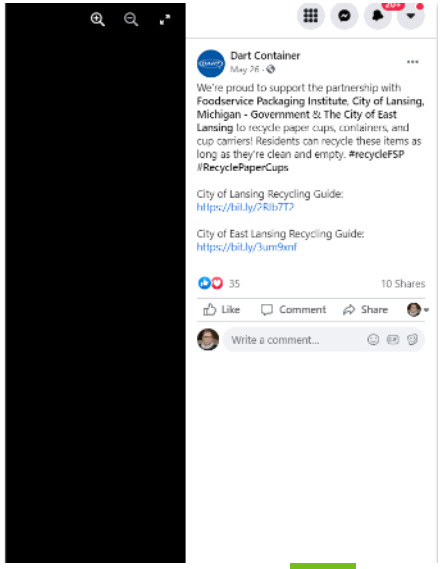
CONFIDENTIAL | MEMBERS ONLY

Detroit, MI: GFL & RRRASOC

Kent County, MI

Lansing & East Lansing, MI





Denver, CO Campaign Launch

Waste 360

Partnership Allows Two Million Residents to Recycle Paper Cups

Denver Joins Chattanooga, Tenn.; Washington, D.C.; and Louisville, Ky as FPI community partner.

Waste360 Staff | Dec 05, 2018

NEWS > ENVIRONMENT

Denver can now recycle paper coffee cups

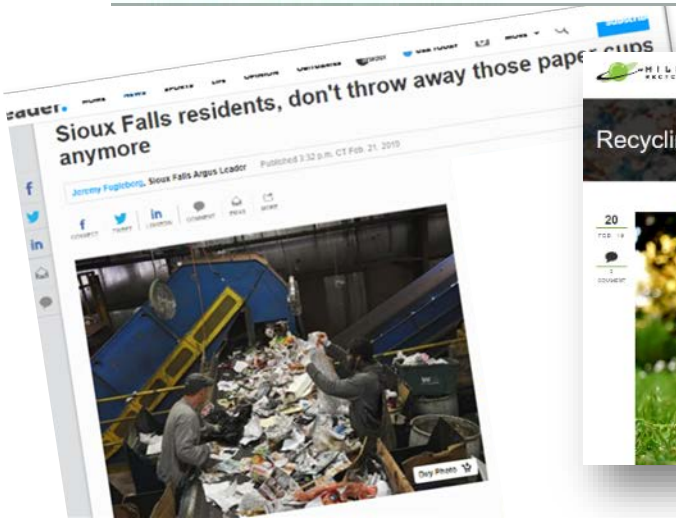
The city aims to improve its below-average recycling rate

By **SAM TABACHNIK** | stabachnik@denverpost.com | The Denver Post
PUBLISHED: November 30, 2018 at 4:24 pm | UPDATED: November 30, 2018 at 5:10 pm

Massive stacks of recycled trash inside Alpine Waste and Recycling towered behind Denver City Councilwoman Kendra Black as she posed a question nearly every coffee drinker has asked: What are we supposed to do with those paper cups?

Millennium Recycling Launch (Sioux Falls, SD)

Millennium MRF adds paper cups and takeout containers



Kent County, MI
Community Partner Launch Oct 2019

Before

After

Sample Communications Materials

Reporting from Current CPs: *Refresh Campaigns*

Community Partnerships Success

	Chattanooga, TN	Louisville, KY	Washington, DC
MRF Audits	• Contamination decreased from 14% to 8% • Increase in proportion of fiber collected from 62% to 73%	• Contamination decreased from 17% to 5-8% • Fiber (cardboard, mixed paper, newspaper) increased from 61% to 65%	• Contamination decreased from 33.2% to 25.8%. • Mixed paper increased from 9.4% to 19.9%.
Engagement	• 116% increase, to recycling webpage post-launch • 46% increase in cart or bin requests	• Increased web traffic by 45% • Increased cart requests by 33% • Social media engagements increased by 234%	• 140k more views of "How to Prepare Recyclables Video" than expected. • 8.7 to 10 million impressions using Bus/Rail Ads

RecycleFSP.org

Visit RecycleFSP.org for more info:

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