



# Textile Recycling Roundtable: Unraveling the future of fabric recycling



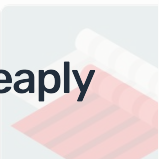
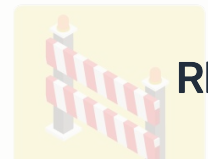
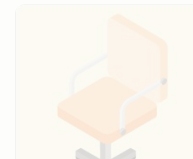
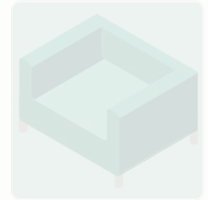
Date: February 26, 2025 | Time: 10 am EST



# Today's agenda

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- ✓ Intro to Rheaply and Michigan Materials Marketplace
- ✓ EGLE Welcome
- ✓ Speaker Presentations
- ✓ Breakout Sessions and Discussion



Rheaply

# Today's speakers



**Marissa Adler**  
Senior Consultant  
RRS (Resource Recycling Systems)



**Sydney Muñoz**  
Manager of Sustainability  
Goodwill Industries International



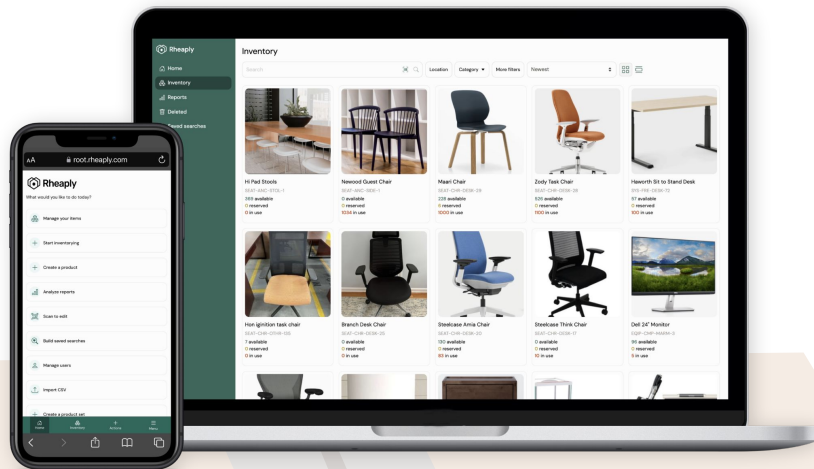
**Madeline Miller**  
CEO  
NexTiles



**Janay Brower**  
Founder and CEO  
Public Thread

# Hi, we're Rheaply

Since 2016, Rheaply has been on a mission to build a connected community with transformative technology and services where every workplace resource finds its next use.



## Transformative Technologies

Rheaply manages over **\$25 million** in asset value at any given time with inventory management and tracking, internal reuse and external reuse capabilities.



## Field services

The Rheaply team is stacked with circular economy solutions experts to meet you where you're at in your materials management journey.



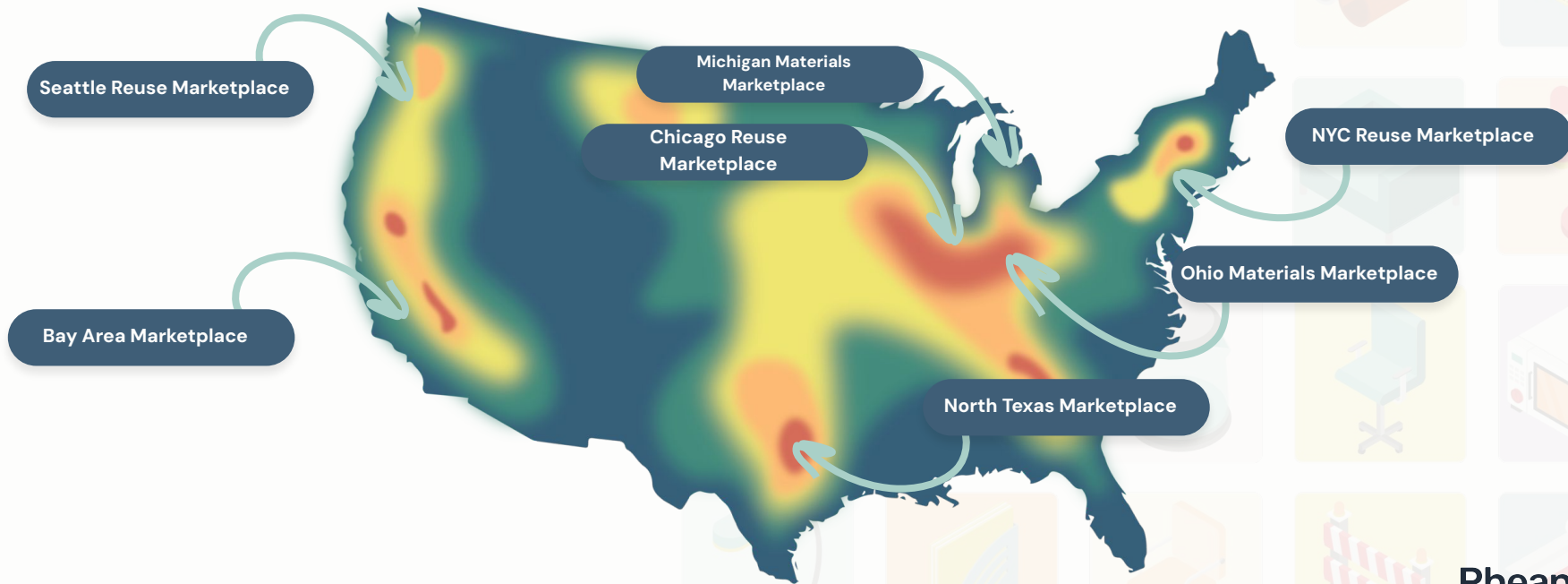
## Reuse Marketplaces

Rheaply has **over 4,000** ecosystem partners across North America representing manufacturers, enterprise, nonprofits, small businesses, and more.



# A Connected, Circular Community

Powered by Rheaply's Reuse Marketplace platform, our network of 3,500+ businesses and organizations span North America and represent all sides of the circular economy, including leading manufacturers, enterprise companies, nonprofits, small businesses, and circular economy entrepreneurs.



## Michigan Materials Marketplace

**The Michigan Materials Marketplace connects businesses and organizations to develop and scale new reuse and recycling market opportunities.**

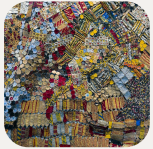


## The big picture

**Michigan's circular economy is a complex ecosystem with a diverse array of participants. Productive systems need a central nervous system; we think technology can help.**



# Today's linear economy for textile waste



Fabric Scraps



Fibers



Dyes & Finishes



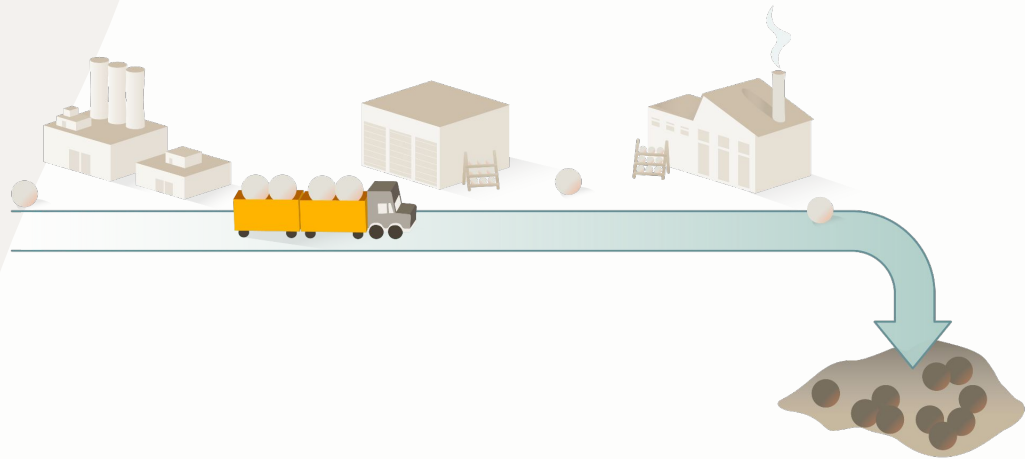
Apparel



Commercial/Geotextiles

# 271k tons

of textile waste through MSW, a total commodity value of \$26 million.



[\\*Michigan's 2024 Impact Potential and Characterization of Municipal Solid Waste](#)

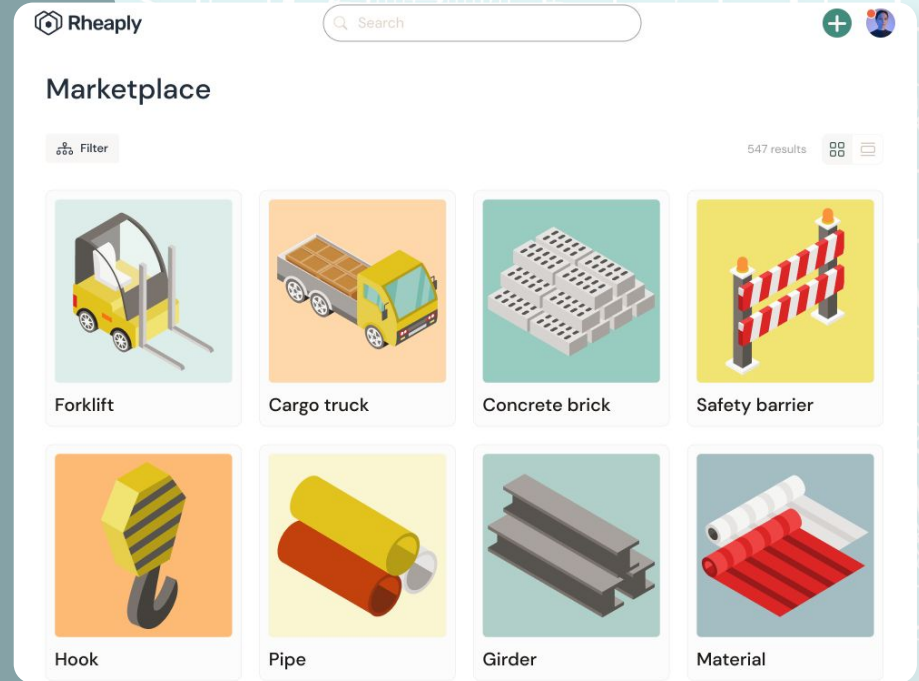
# A connected marketplace for professionals

- ✓ **Source, sell, or donate** surplus, by-product, or otherwise under-utilized materials
- ✓ **Connect with other businesses** and create new local, sustainable supply chain connections
- ✓ **Leverage data-driven insights** to embed circularity into your operations and decision making processes



# Who should join?

- ✓ Michigan businesses of all sizes
- ✓ Manufacturers
- ✓ Circular entrepreneurs
- ✓ Nonprofits
- ✓ Schools and universities
- ✓ Local governments





# Get connected

- ✓ Get set up on the platform
- ✓ Chat with our team
- ✓ Share with your network
- ✓ Post your first listings
- ✓ Move materials!

Join the **Michigan Materials Marketplace** today!





MICHIGAN DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY



## Setting the Stage

Matt Flechter

Recycling Market Development Specialist

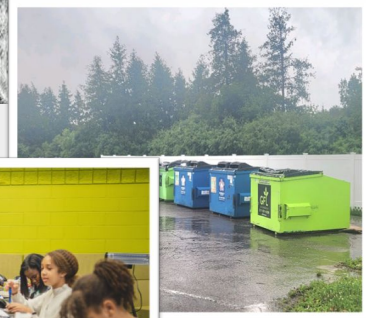
Materials Management Division, EGLE

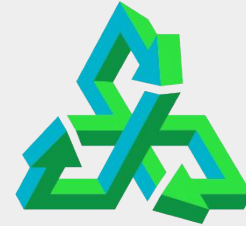
# Recycling In Michigan

Michigan has a long history of recycling  
And environmental protection  
And manufacturing.

EGLE works to deploy about \$15M/year  
directly to businesses and communities to  
grow the recycling system.

Economic Benefits to tripling recycling, reuse,  
and recovery in Michigan.





# NEXTCYCLE MICHIGAN

Accelerating a Circular Economy  
through Partnership and Innovation.

124 Accelerator Teams selected to date  
receiving technical support, coaching,  
and guidance on best practices.

Growing partner network and  
resources ... including resources like  
the Michigan Materials Marketplace!

**Let's Talk Textiles!**





# Textile Recycling Roundtable: Unraveling The Future Of Fabric Recycling

An introduction to textile waste in the U.S.

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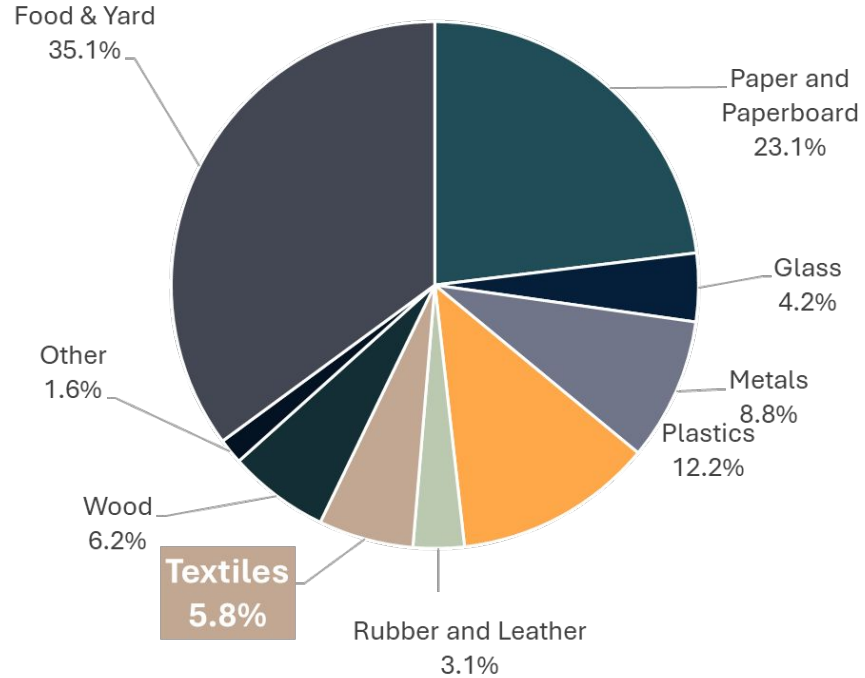
MICHIGAN MATERIALS MARKETPLACE  
WEDNESDAY, FEBRUARY 26, 2025



2018 US MSW: 17 MILLION TONS TEXTILE WASTE (OF 292 MILLION TONS TOTAL MSW)

# Textiles in Municipal Solid Waste

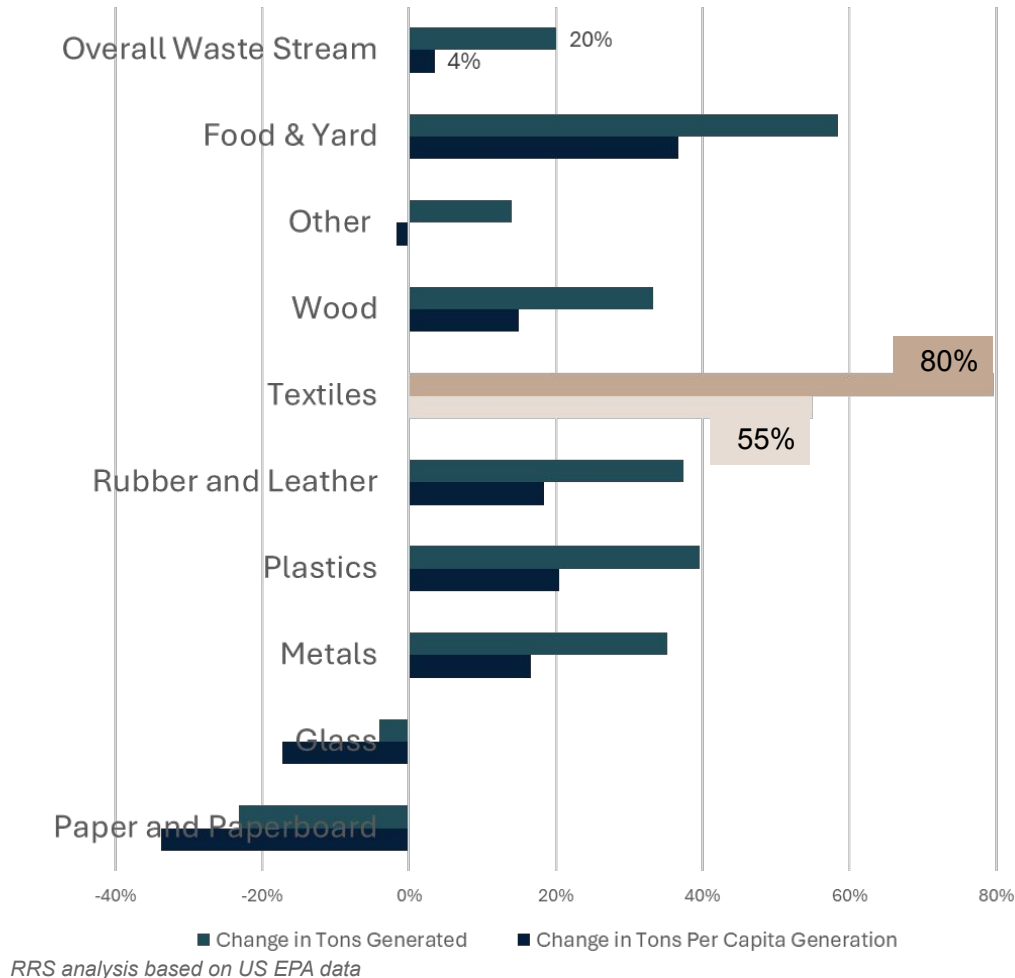
That's 17M Tons per Year  
= 104 lbs/person  
= 0.29 lbs/person/day  
= A hoodie every 2 days  
= A pair of pants every 3 days



Source: US EPA

# Textile waste is growing faster than any other material in the US waste stream

PERCENT CHANGE IN ABSOLUTE TONS AND TONS PER CAPITA WASTE GENERATION 2000-2018



# Downstream Textile Pathways

Only 15% of textiles generated as waste are collected for reuse & recycling.

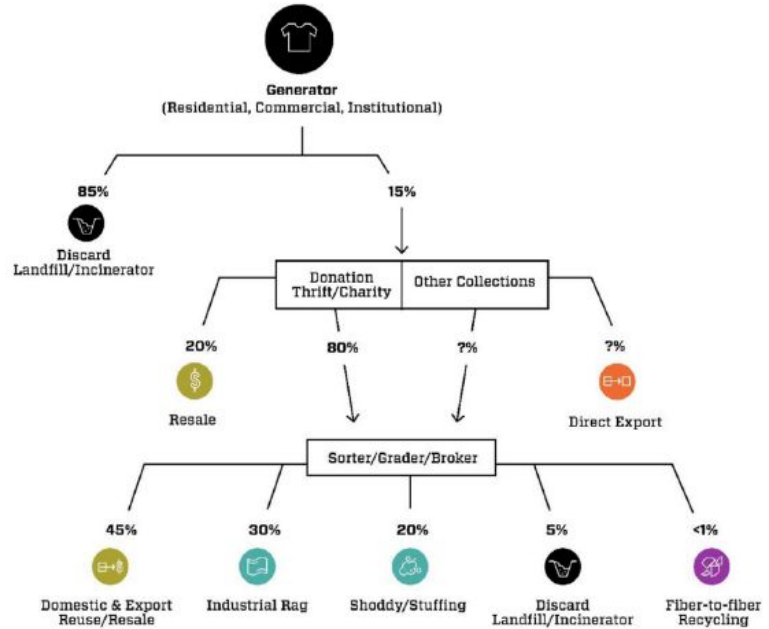


FIGURE 4

Current fate of used textiles in the United States. Question marks indicate flows for which reliable data are unavailable. Shoddy is made from shredded fibers and used for insulation and stuffing. Based on data from [Adler \(2021\)](#), [US EPA \(2021b\)](#), [Magruder \(2022\)](#).

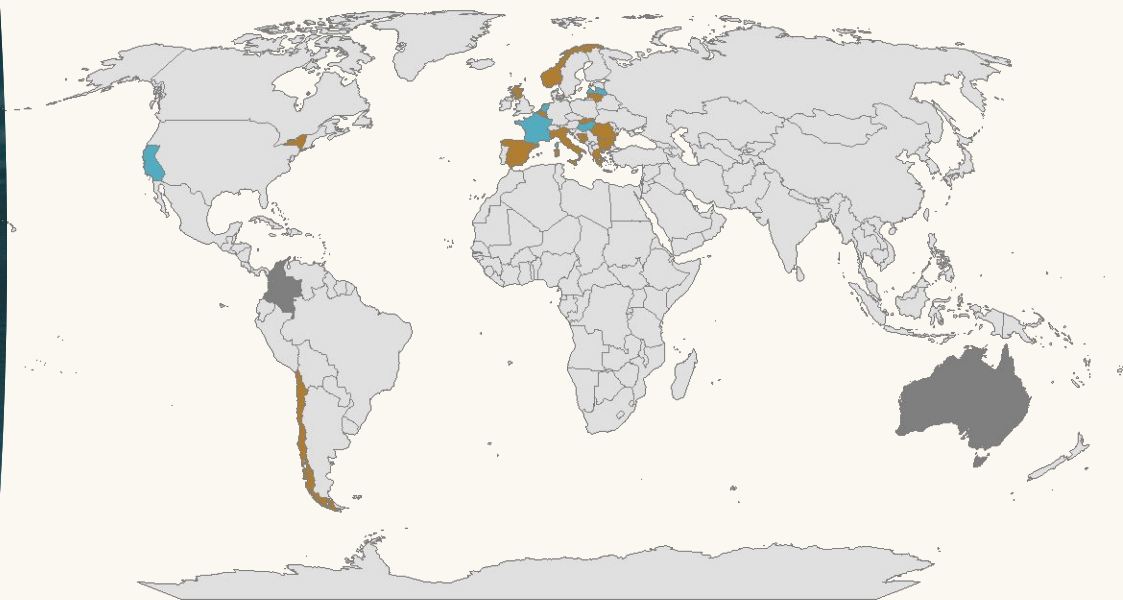
# EPR for Textiles is a Growing Trend

## Objectives:

- Increase recovery rates
- Spur end market development
- Incentivize reuse and recycling
- Foster supply chain transparency
- Conserve natural resources
- Reduce government costs

## Textile EPR Worldwide

■ Voluntary ■ Proposed ■ Enacted







# Thank you.

MARISA ADLER  
TEXTILE PRACTICE LEAD, RRS  
MADLER@RECYCLE.COM





# Goodwill Industries International

## Textile Circularity & Recycling

Textile Recycling Roundtable | February 26, 2025





# Goodwill's Operating Model



# Goodwill's Impact

**140K+**

Jobs secured through Goodwill services in 2023

**80%+**

of Americans live <10 miles from a Goodwill store

**4B+**

Pounds of donated goods diverted from landfills annually

**100+**

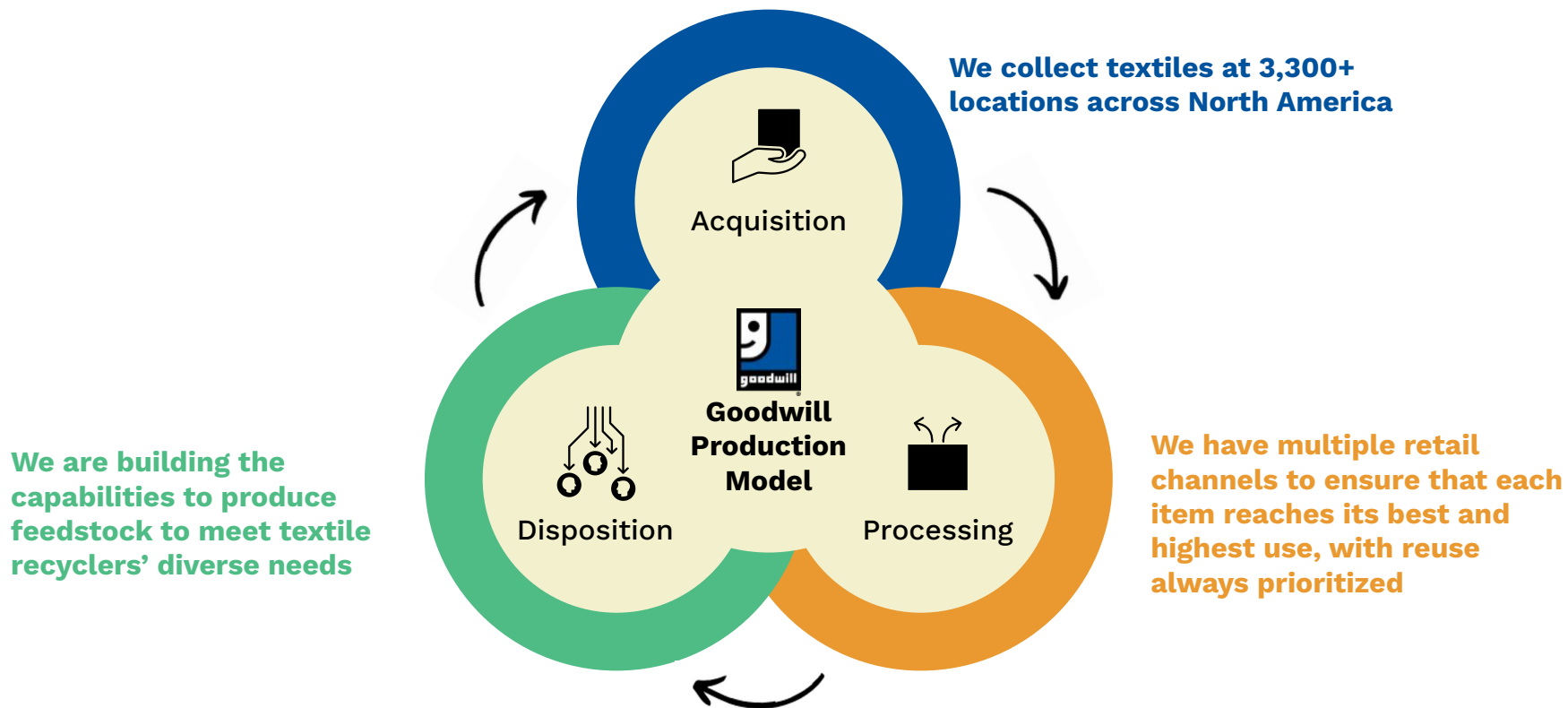
Years of experience collecting & processing mixed textiles



Goodwill is the **largest player in the secondhand market** in North America

All Goodwill activities support our mission, which involves **helping people in need reach their full potential through learning and the power of work**

# Goodwill's Production Model



# Textile Circularity & Recycling Work



Exploring new ways to divert volume from the waste stream



Testing sortation technologies to facilitate recycling



Expanding knowledge on textile circularity through university partnerships



Connecting with recyclers to develop US textile recycling infrastructure



Socializing efforts at national forums to galvanize industry action



Proving out national partnership models to facilitate collaboration

# Thank you!



**Sydney Muñoz**

Manager of Sustainability

Goodwill Industries  
International

[sydney.munoz@goodwill.org](mailto:sydney.munoz@goodwill.org)





**NEXTILES**  
THE FUTURE OF FABRIC



**Textile Circularity & Recycling**  
**February 26, 2025**





# Our Values

## NexTiles cares about...

- Landfill diversion & avoided emissions
- Ethical material sourcing
- Environmentally friendly manufacturing practices that minimize airborne pollutants
- Products that reduce GHG emissions and address the energy burden



# Our Approach

1



## Waste Recovery

We pick up your waste, or you bring it to us.

2



## Sorting

We sort your waste according to fiber type, color, or other characteristics.

3



## Processing

We granulate or manipulate waste to become shoddy, which can be used for various applications.



# Our Products

We convert textile waste to shoddy that can be used for new products and applications.







# Our Impact



1,000,000+  
lbs of cotton &  
polyester  
diverted from  
landfill in 2024

50,000+ lbs of  
leather  
diverted from  
landfill in 2025

Jobs,  
internships,  
and  
community  
engagement



# NEXTILES

THE FUTURE OF FABRIC

Madeline W. Miller

Founder

[Madeline@nextiles.org](mailto:Madeline@nextiles.org)

[www.nextiles.org](http://www.nextiles.org)

313.731.2266



**Thank you!**





# PUBLIC THREAD

TEXTILES. CIRCULARITY. LEARNING LAB

# ELEMENTS OF THE PROBLEM

- Waste/surplus is not valued in our current system.
- Landfilling textiles is cheap.
- Lack of policy or regulations to create alternate solutions.
- Upcycling and re-use is more labor intensive and requires backwards design skills.
- Funding for domestic manufacturing infrastructure is critically needed.
- Artificially low labor costs globally have deflated the value of textiles and sewing/sewn trades.
- U.S. consumers are largely disconnected from what it takes to make sewn products & waste.

# ABOUT US

- **NON-PROFIT, SOCIAL ENTERPRISE**
- **ROOTED IN SEWING AS A SKILLED TRADE**
- **INTEGRATED CIRCULARITY**
- **SPACE FOR LEARNING, PRACTICE & IMPACT**
- **TRIPLE BOTTOM LINE ECONOMIC MODEL**



# CORE VALUES

- All of us, and our labor are valued.
- Our planet needs us.
- If we want better, it is up to us.
- We start with what we already have.

Public Thread is a  
circular design,  
education &  
manufacturing lab.



# OUR COMMUNITY'S WASTE

SIGN/BANNER  
(ARTPRIZE)

VINYL  
(STEELCASE)



**TRANSFORMED**



MADE IN MI



CHACO STRAP  
(WWW)

SYSTEMS CHANGE

## For the next 5 years we are working to advance:

- **Textile waste diversion** (post-manufacturing & post-consumer) at community scale.
- **Build industry** for cut & sew manufacturing, upcycling & circular design.
- **Offer training & education** for youth & the community on sewing and textile re-use.
- **Build an economic model** that supports people, planet & purpose

## IDEAS

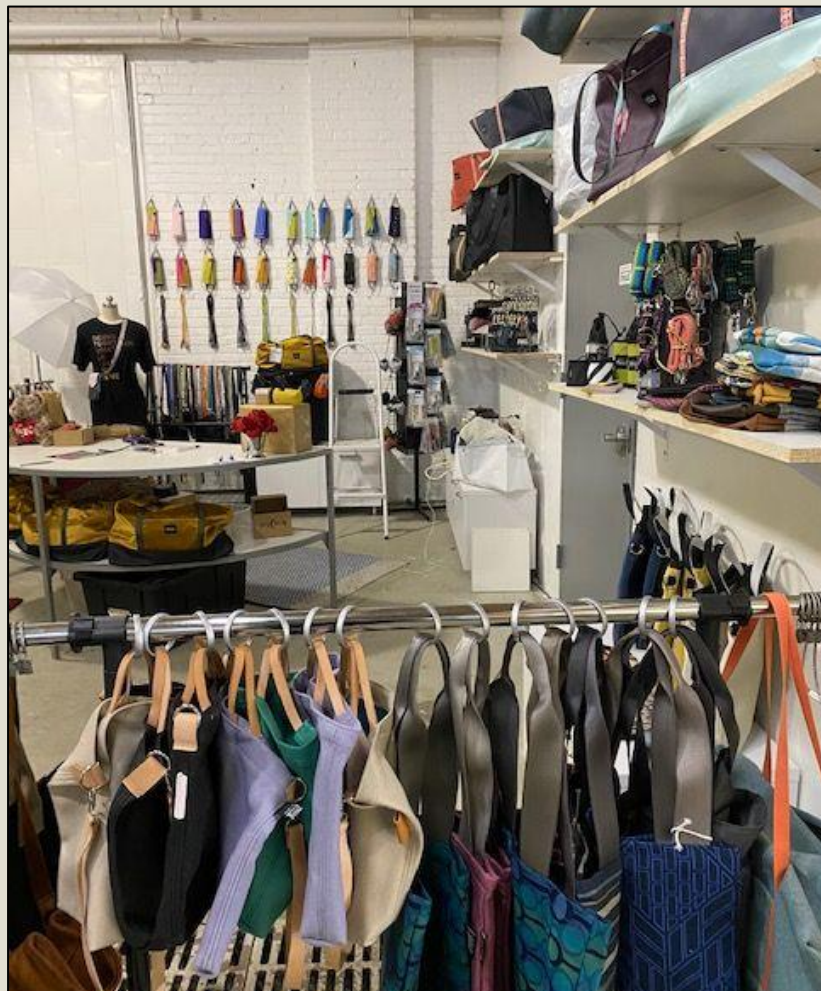
- Enact policy to incentivize waste diversion, re-use and recycling.
- Increase costs for landfilling all waste/surplus including textiles.
- Upcycle/repurpose textiles in the community where they already are.
- Shop your values.





# THANK YOU

Manufacturing justice.



# Breakout Discussion





# Questions

- How do we close the gap between textile waste and recovery solutions?
- What are you needing at a local level
- What infrastructure and barriers still exist at a systems level?
- Where do businesses, governments, and communities need to work together?
- What policy shifts or incentives could accelerate textile circularity?

## Whats Next?

Continue discussions!

Sign up for the Marketplace and share with your network.



Explore NextCycle Michigan Opportunities:

- Applications currently open for 2025 Accelerator Program – Due Mar 31

# Thank you!

