

SCS ENGINEERS

SolidWaste
Cedar Rapids • Linn County
Agency

2022 Iowa Statewide Material
Characterization Study
Summary Results Presentation

12/20/22

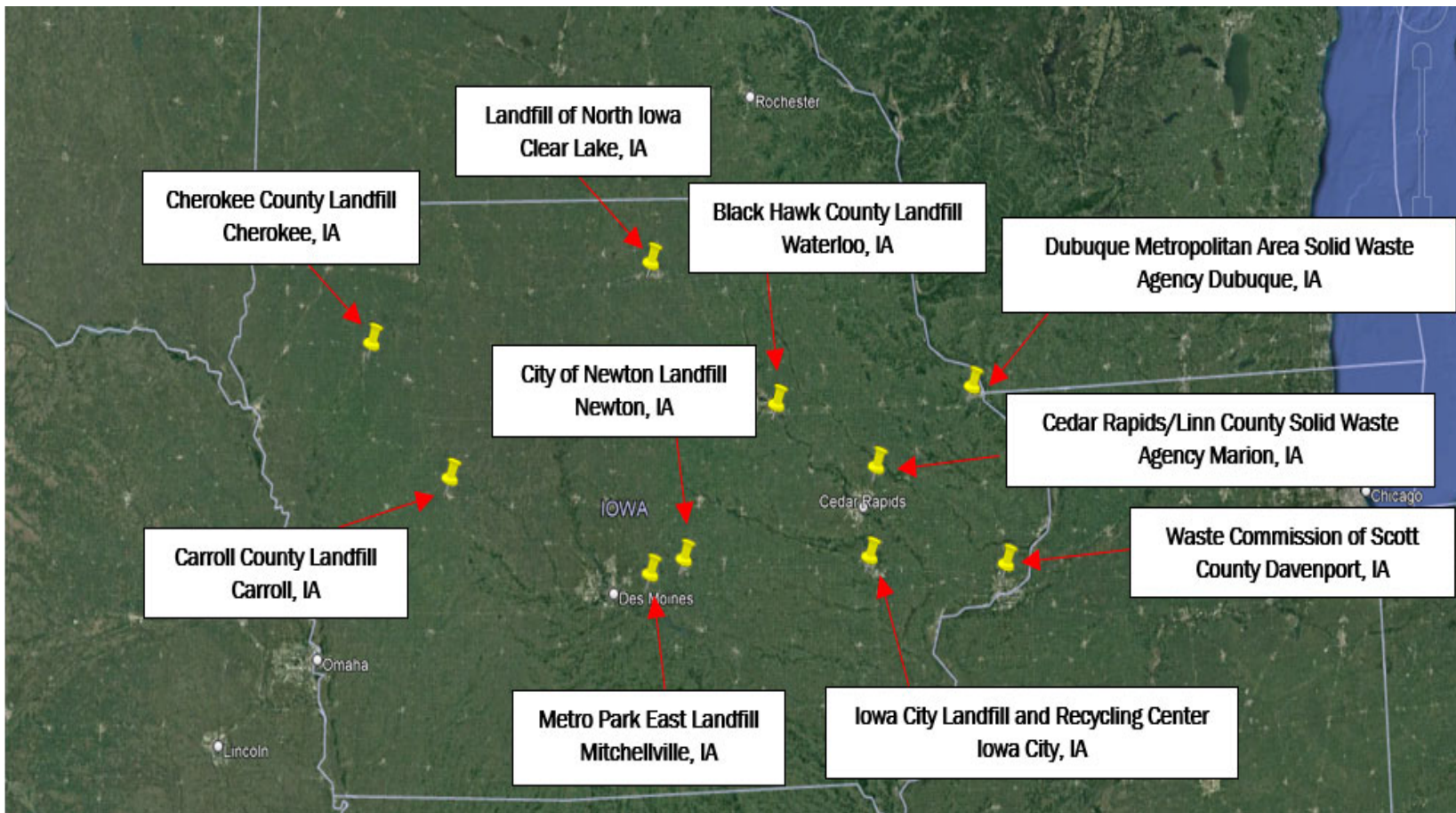
2022 Iowa Material Characterization Study

Why are material characterization studies important?

- How the landfilled waste stream has changed over time
 - Recycling program impacts
 - Citizen education/awareness impacts
- Provides data in support of:
 - Identifying efforts needed to meet state and local waste reduction and recycling goals
 - Improving program efficiencies
 - Citizen education and awareness efforts

2022 Iowa Material Characterization Study

Participating Landfills



Methods

Development of Sample Plan

- Obtained site-specific data
 - Residential
 - Institutional, commercial, and industrial (ICI)
 - C&D

50 – Physically Sorted MSW Samples

15 – Visually Characterized C&D Samples/Day

Methods

Sorting – Weighing – Data Recording



CRLCSWA Characterization Study

Site Specific Sampling Plan for CRLCSWA:



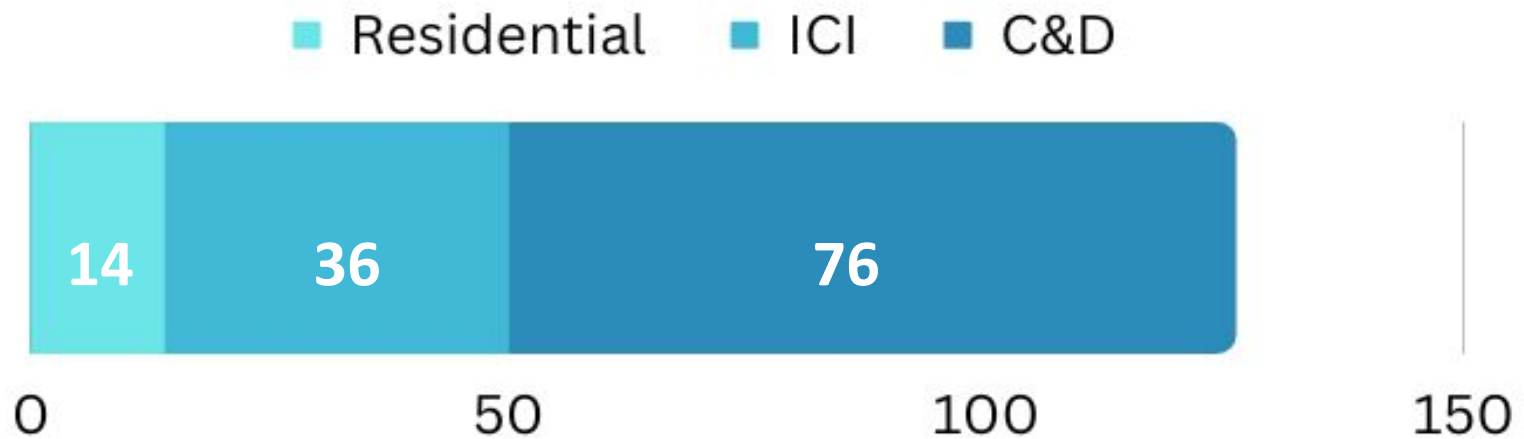
Residential



**Institutional,
commercial, and
industrial**

CRLCSWA Characterization Study

Number of Samples:



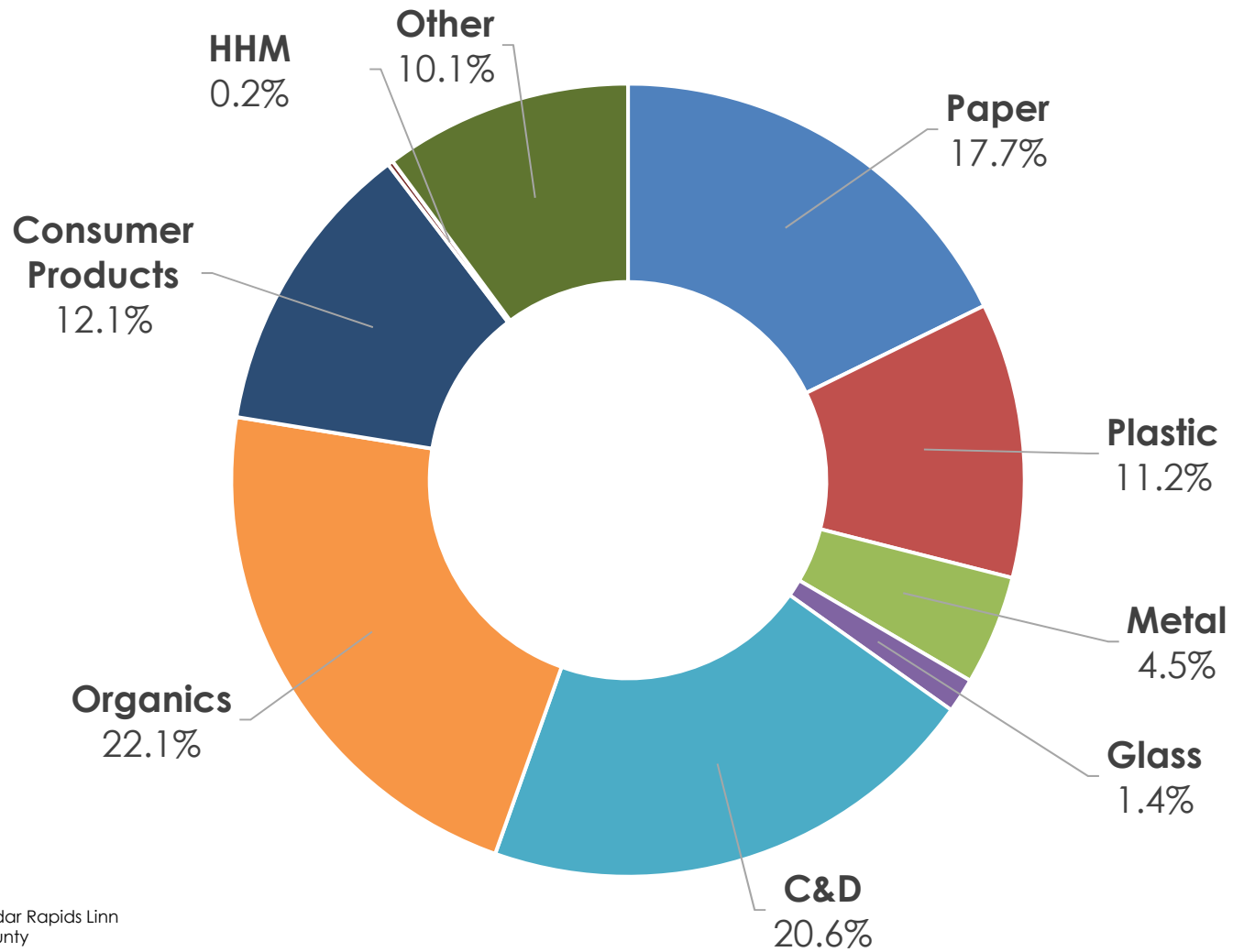
5 - Tons of MSW physically sorted

CRLCSWA Characterization Study

You never know what you will find....



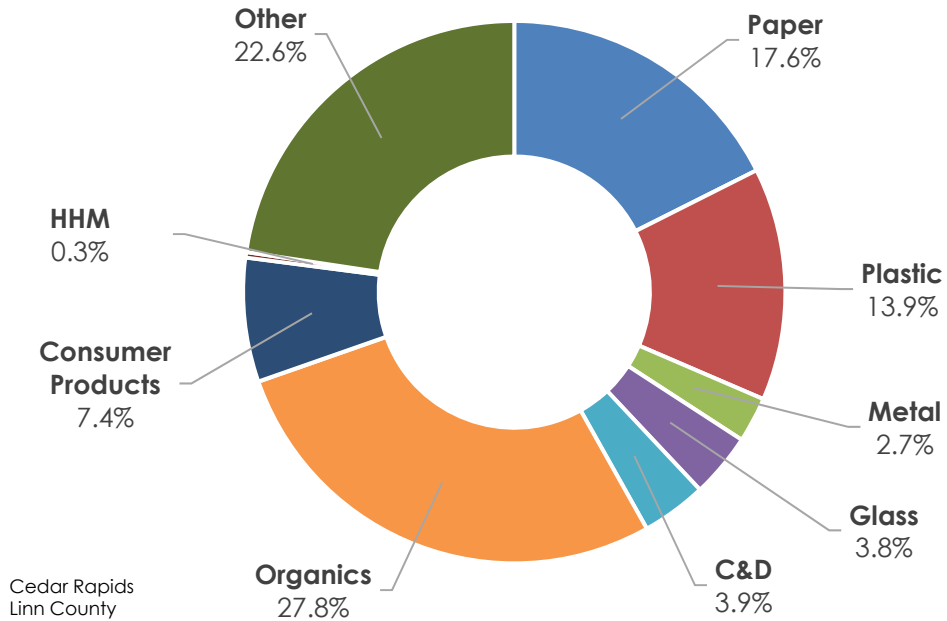
CRLCSWA - Overall



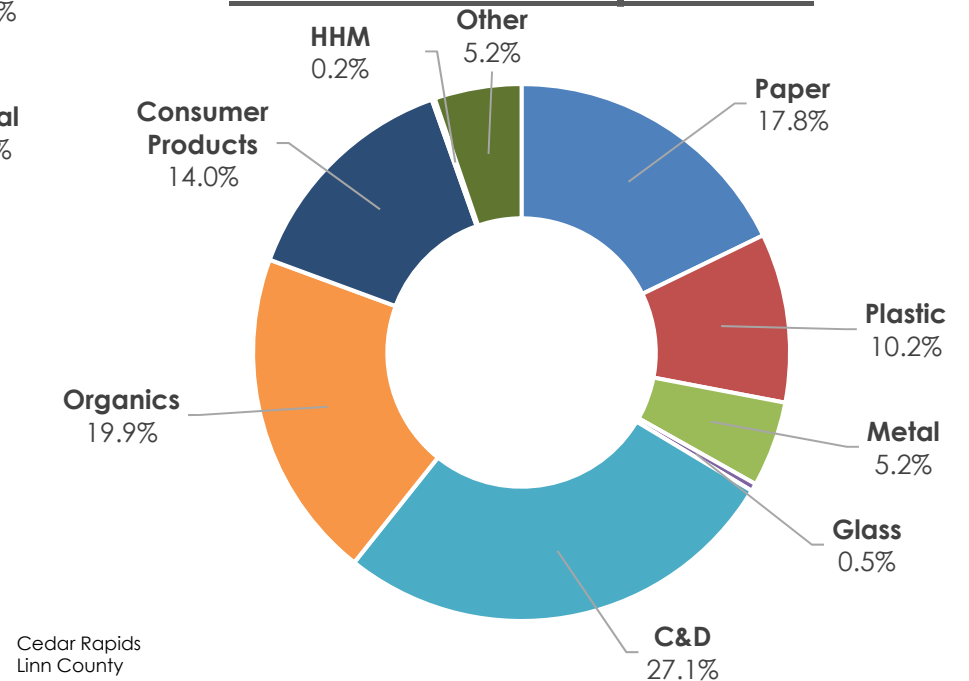
Cedar Rapids Linn
County

CRLCSWA - Residential & ICI

Residential Waste Composition



ICI Waste Composition

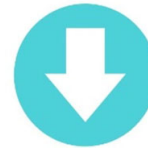


CRLCSWA Characterization Study

Material Category

2022 vs 2017

Paper



Metal



C&D



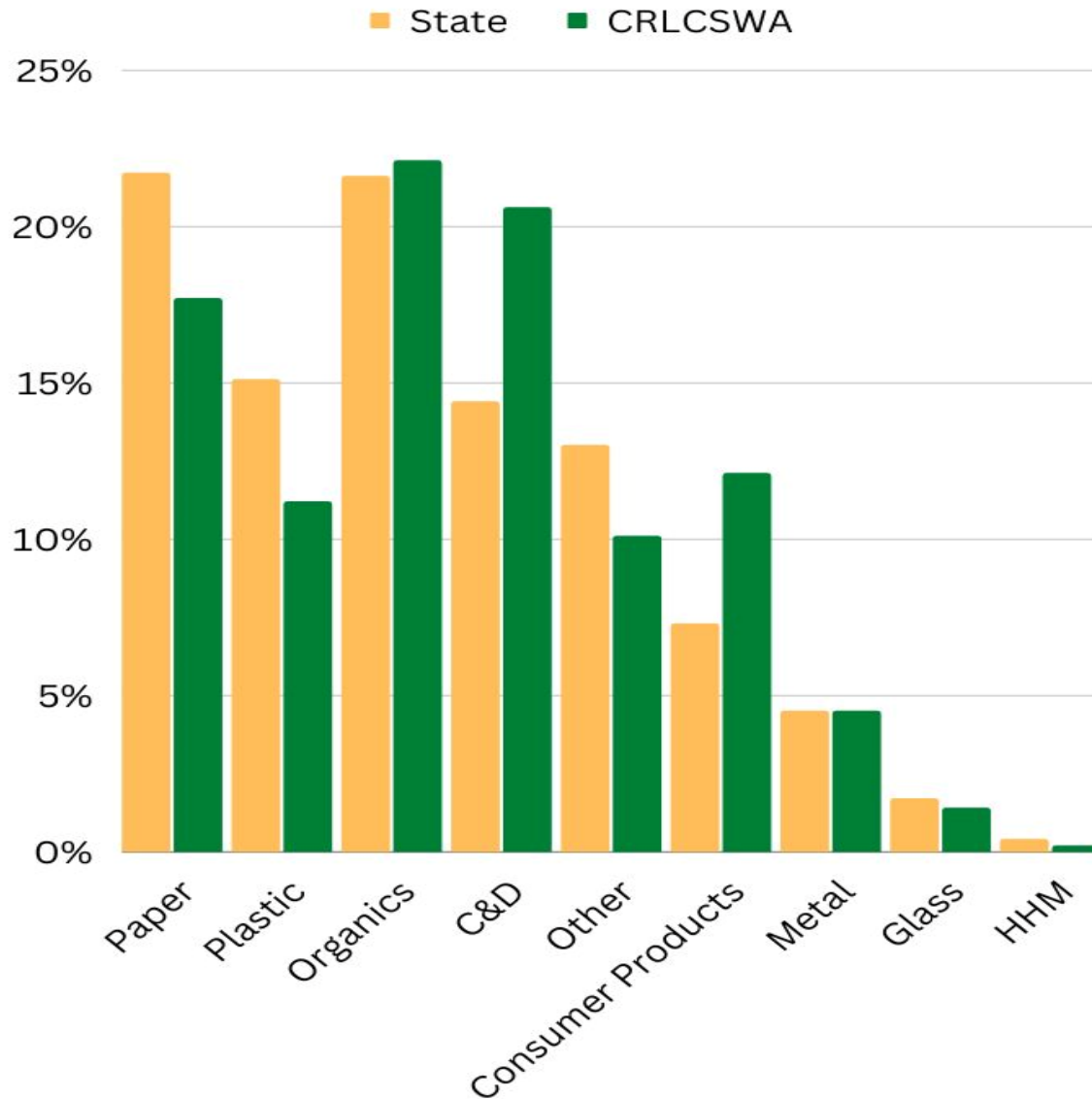
Plastic



HHM

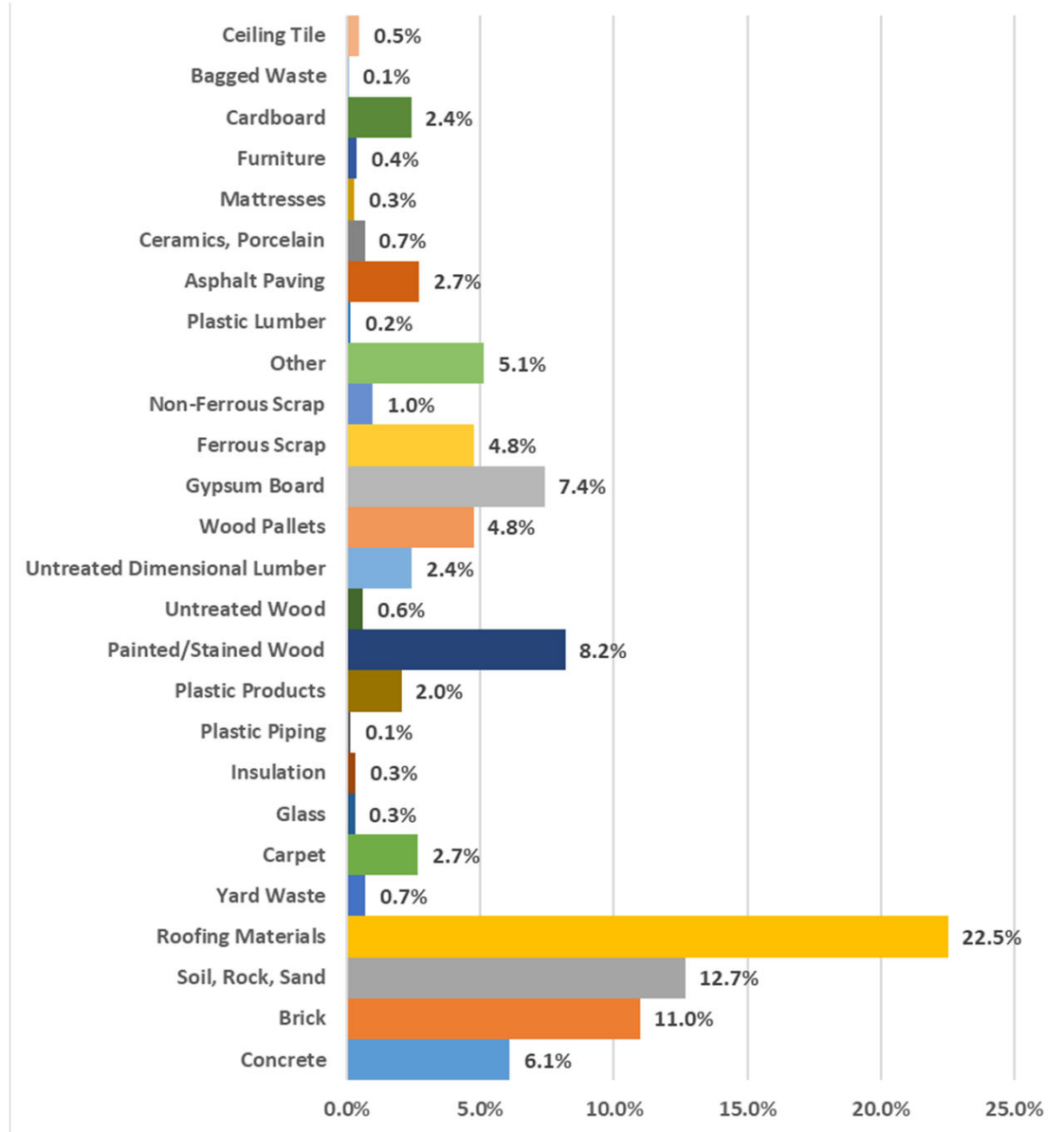


CRLCSWA - Overall Results Compared to State



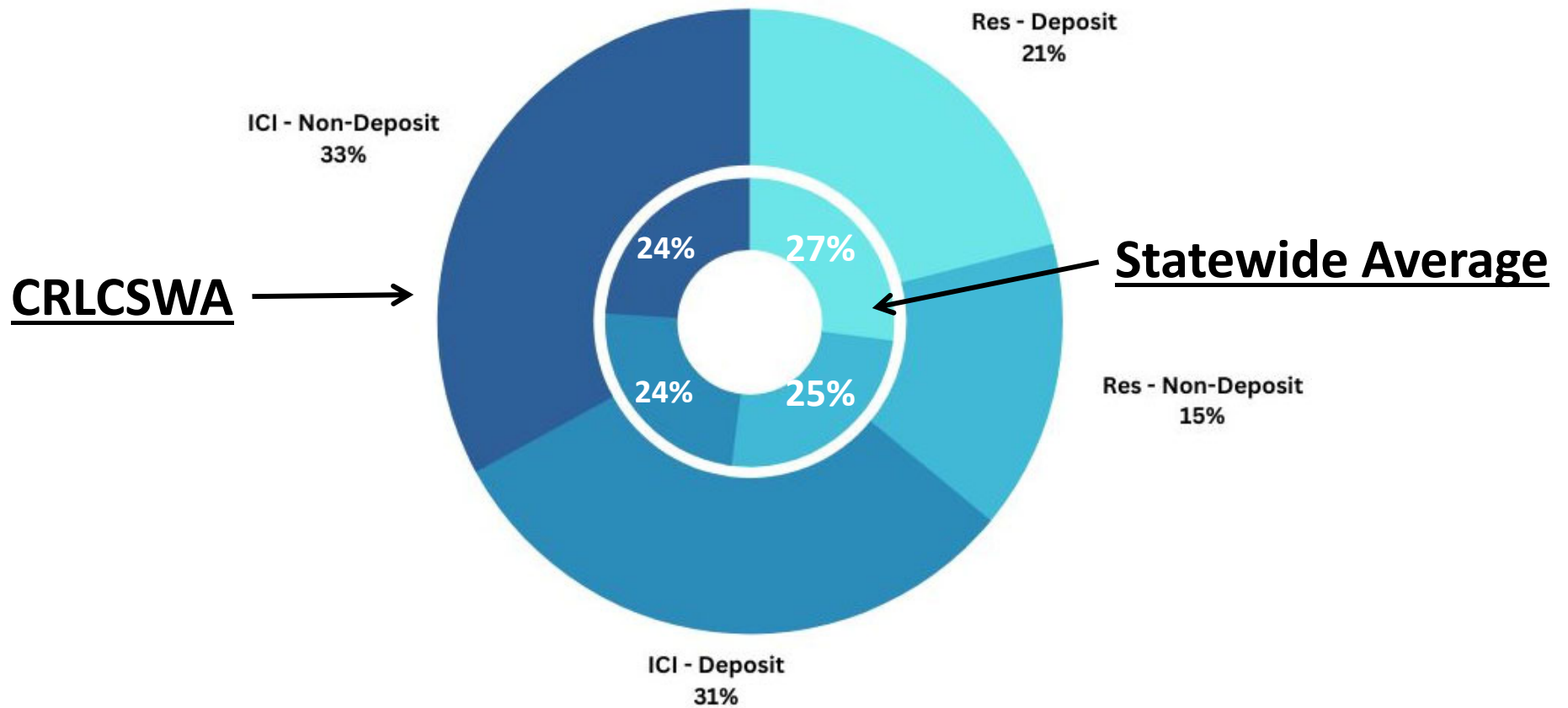
CRLCSWA Characterization Study

Visual
Characterization
Results
C&D
(% of total estimated
weights)



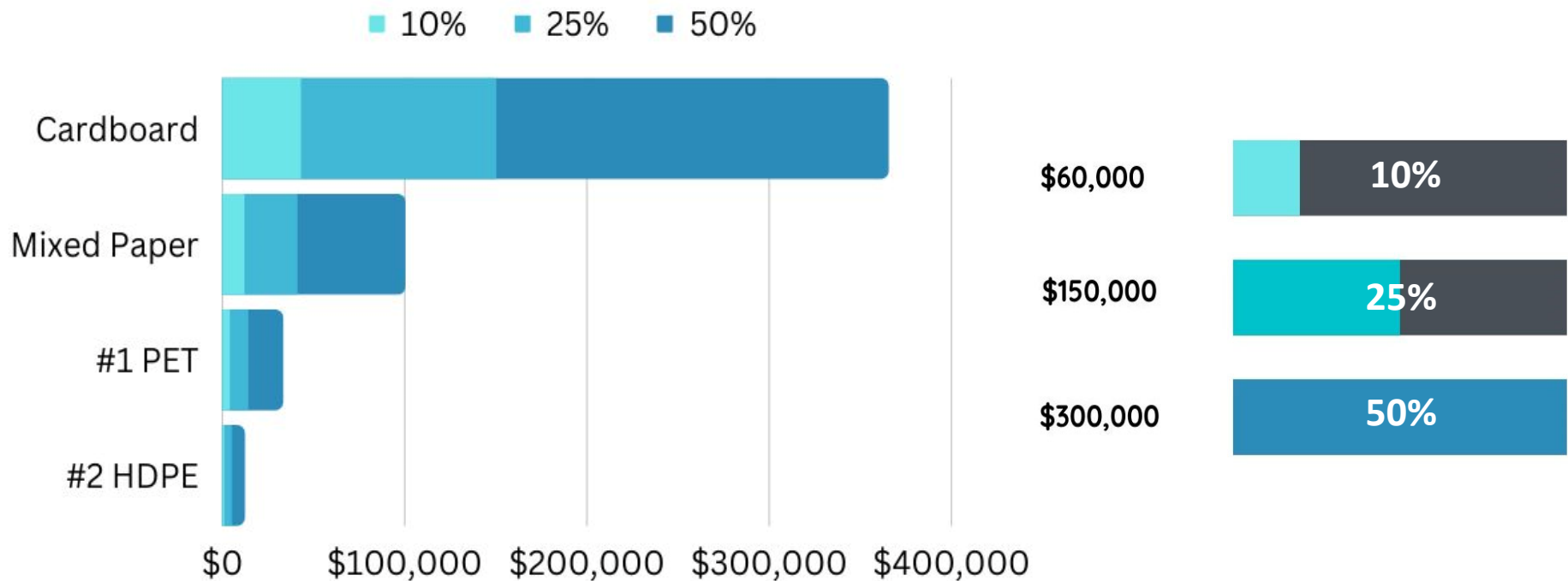
CRLCSWA Characterization Study

Deposit and Non-Deposit Container Counts:



CRLCSWA Characterization Study

Potential Value of Uncaptured Recyclables:



Top Ten Material Components Statewide Overall

2022		2017		2011		2005		1998	
Pct.	Material	Pct.	Material	Pct.	Material	Pct.	Material	Pct.	Material
19.2%	Food Waste ¹	20.0%	Food Waste ¹	13.3%	Food Waste	10.6%	Food Waste	10.7%	Food Waste
7.7%	Plastic Film ²	8.7%	Plastic Film ²	9.0%	OCC and Kraft Paper	8.5%	OCC and Kraft Paper	10.3%	Non-Rec. Paper
7.5%	OCC and Kraft Paper	7.6%	Compostable Paper	6.7%	Plastic Film ²	7.0%	Mixed Rec. Paper	8.5%	OCC and Kraft Paper
5.5%	Fines	6.1%	Mixed Rec. Paper	6.1%	Compostable Paper	6.6%	Plastic Film ²	7.5%	Other Plastic Products
5.0%	Textiles and Leather	4.8%	Fines	5.4%	Untreated Wood	6.5%	Compostable Paper	5.4%	Mixed Rec. Paper
5.0%	Compostable Paper	4.6%	OCC and Kraft Paper	5.4%	Construction/ Demolition ³	6.0%	Other Plastic Products	5.2%	Fines
4.9%	Wood - Treated	4.1%	Other Organic	5.3%	Other Plastic Products	5.5%	Construction/ Demolition ³	4.8%	Construction / Demolition ³
4.4%	Mixed Recyclable Paper	4.1%	Textiles and Leather	4.6%	Yard Waste	4.9%	Textiles and Leather	4.8%	Plastic Film
3.0%	Diapers	3.5%	Diapers	4.1%	Textiles and Leather	4.6%	Wood - Treated	4.2%	Textiles and Leather
2.9%	Other Ferrous Scrap Metals	3.1%	Other Plastic Products	3.8%	Wood - Treated	4.0%	Newsprint	3.6%	Wood - Treated
65.1%	2022 Cumulative Percent	66.6%	2017 Cumulative Percent	63.4%	2011 Cumulative Percent	64.2%	2005 Cumulative Percent	65.0%	1998 Cumulative Percent

THANK YOU!!!

- Host Facilities and Staff



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