



IOWA DEPARTMENT OF NATURAL RESOURCES

Leading Iowans in Caring For Our Natural Resources



Iowa Department of
Natural Resources

Recycling Facility Infrastructure Study

presented by:

SCS ENGINEERS

MAY
29
2024

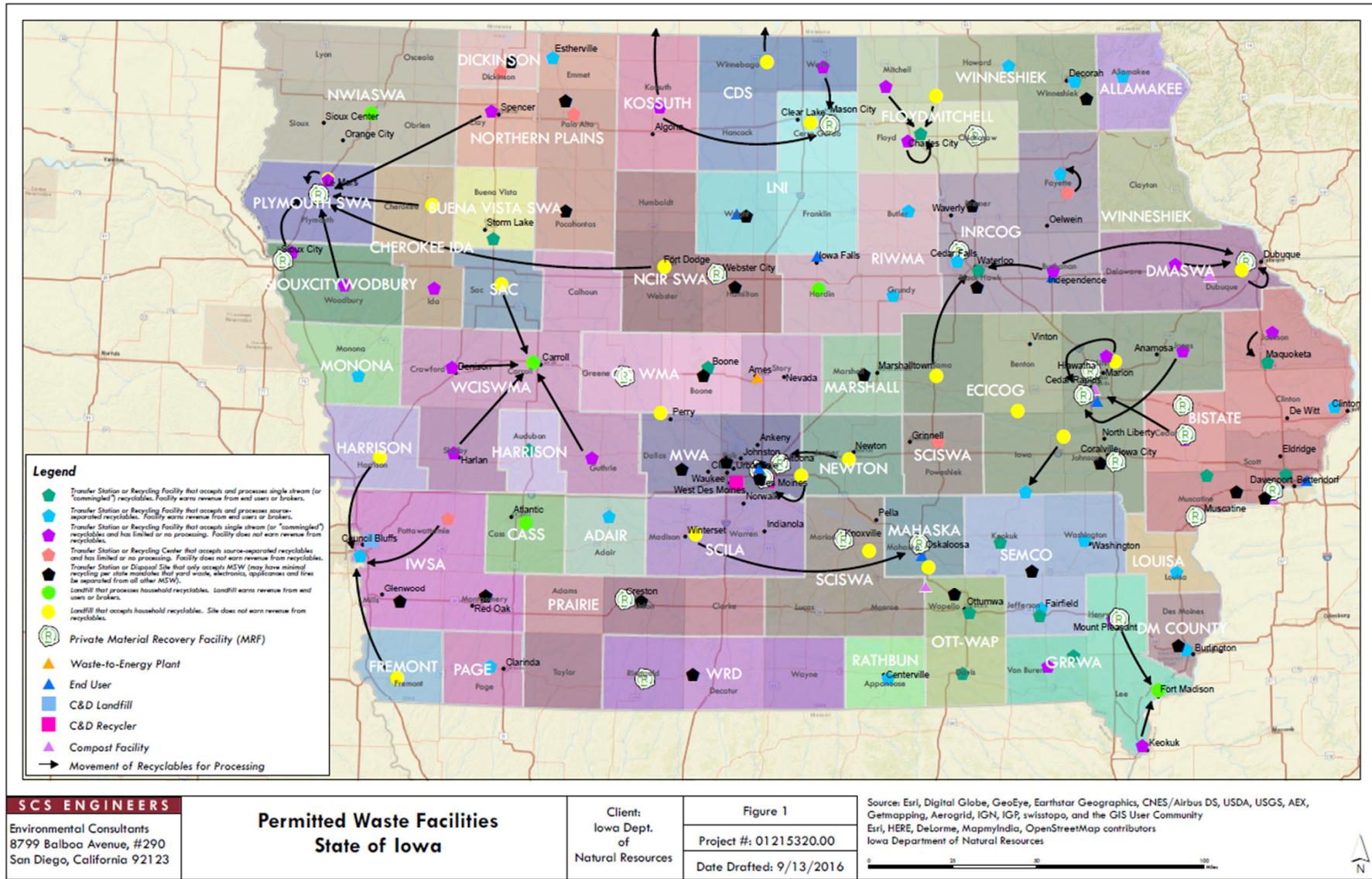
Agenda

- Background and Purpose
- Methodology
- Results
- Q&A

Background and Purpose

- Recycling Hub & Spoke Study in 2017 identified existing recycling operations within Iowa
 - Assessed feasibility of creating a hub and spoke system through rural partnerships
 - Found significant processing infrastructure in the state

Recycling Hub & Spoke - 2017



Project Background and Purpose

1. Identify accumulators and processors of traditional recyclables and obtain data
2. Determine the movement of traditional recyclables throughout Iowa
3. Research textile reuse and recycling
4. Update the 2017 Hub & Spoke to static and interactive maps

Methodology

Process



Survey and Audience Development

- Collaboration with the DNR and stakeholders to develop first drafts of two surveys:
 - **Planning Area Member Survey**
 - To identify facilities that accumulate and/or process traditional recyclables and/or textiles
 - **Recycling Facility Survey**
 - To obtain information regarding the accumulation or processing of traditional recyclables and/or textiles

Survey and Audience Development

- Engaged public and private stakeholders to review survey draft:
 - Review survey language
 - Scale back questions to avoid survey fatigue
 - Ensure data is tangible and accessible
 - Allow participation from both public and private entities

Recycling Facility Survey

Contact
Information

Type of Facility

Generator
Type

Percent by
Material

Material Types

Quantities

Revenue
Generated by
Recyclables

Methods of
Paying for
Program

Contamination
Rates

Collection
Method

Processes with
Materials

Locations
Material
Sent to

Survey and Audience Development

- Identify survey contacts for surveys:
 - **Planning Area Member Survey**
 - Comprehensive Planning Area Contacts
 - DNR provided contacts
 - **Recycling Facility Survey**
 - Previous contact list from 2017
 - DNR provided contacts
 - Facilities identified through Planning Area Member Survey
 - New contacts identified through survey results

Survey Collection

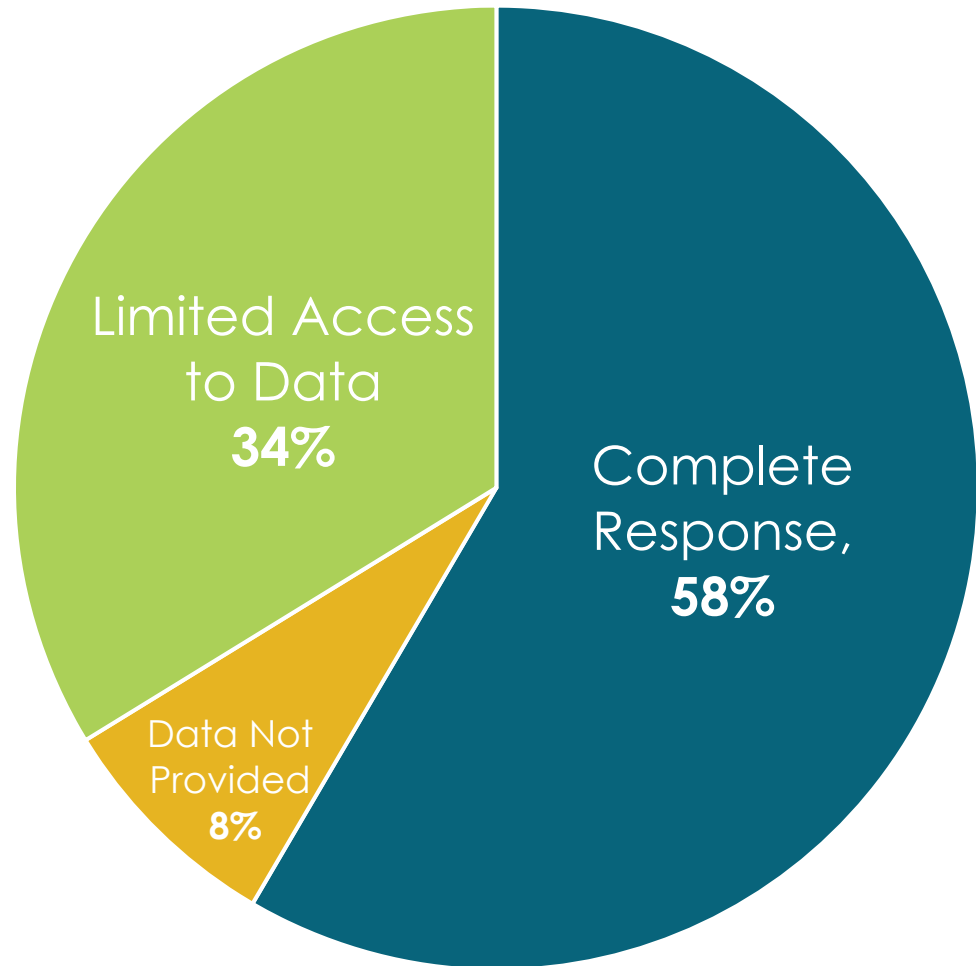
	Planning Area Member Survey	Recycling Facility Survey
Contacts	58	105
Emails	142	589
Phone calls	0	78
In-Person	0	12
Response Rate	48%	73%

Results

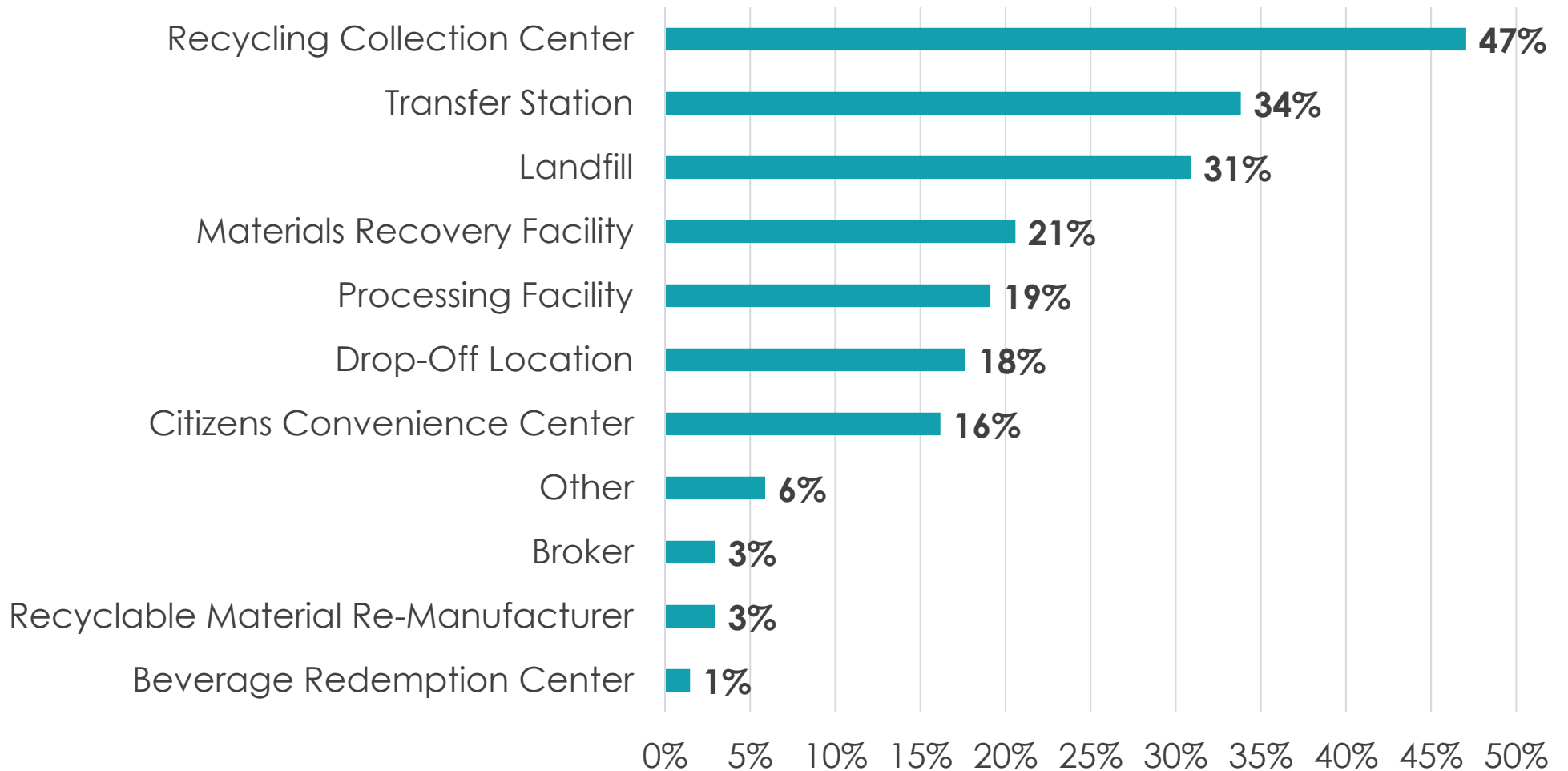
Results | Completion

Classifying Survey Responses

- Complete response
 - All information provided
- Limited Access to Data
 - Facilities/entities with limited data
- Data Not Provided
 - Various information not provided



Results - Classifications



Results | Recycled Tonnage Processed

	Plastic	Paper	Metal	Glass	Total
In-State	7,271	23,138	3,317	613	34,338
Out of State	4,109	27,245	1,836	4,953	38,143
Unknown	9,684	35,016	5,821	2,200	52,722
Total	21,064	85,399	10,957	10,974	125,203

Results | Accumulators and Processors

Accumulators

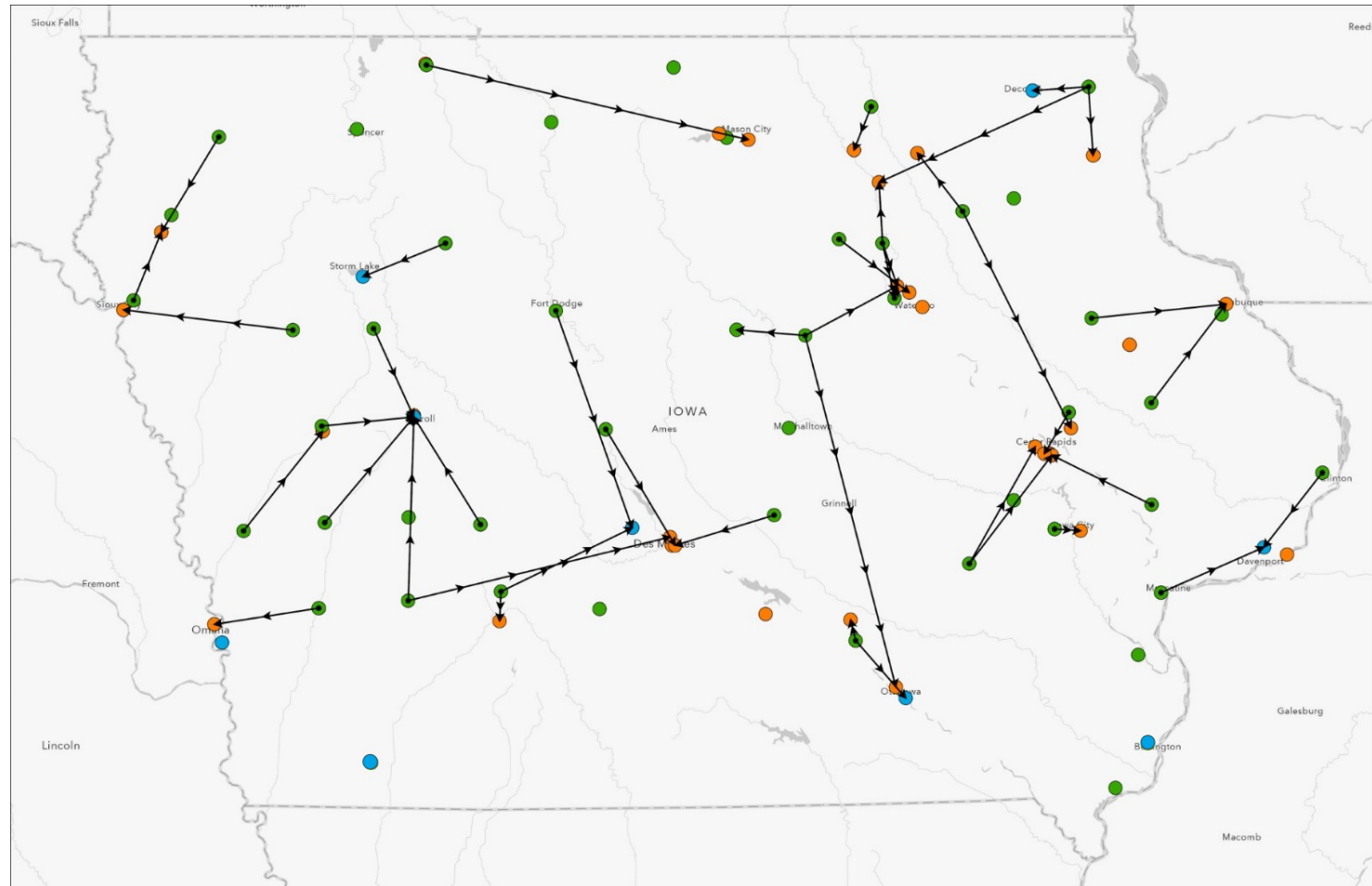
- Facilities who receive material from consumers/hauling and store material for transport to a processor.
 - May process few material categories (i.e. cardboard) on the side.
 - Examples: transfer station or drop-off location.

Processors

- Facilities who receive material from accumulators or consumers/hauling and sort, bale, clean, and prepare materials for remanufacturing.
 - Examples: material recovery facility or remanufacturer.

Results | GIS Map

- DNR will be finalizing a similar interactive map to be posted on the website
- Provides data of facilities and total tonnages for the state



Title | Subtitle

Iowa Recycling Facilities

data being displayed is as voluntarily reported by facilities at time of survey

Find an Accumulator
Select to Highlight

Find a Processor
Select to Highlight

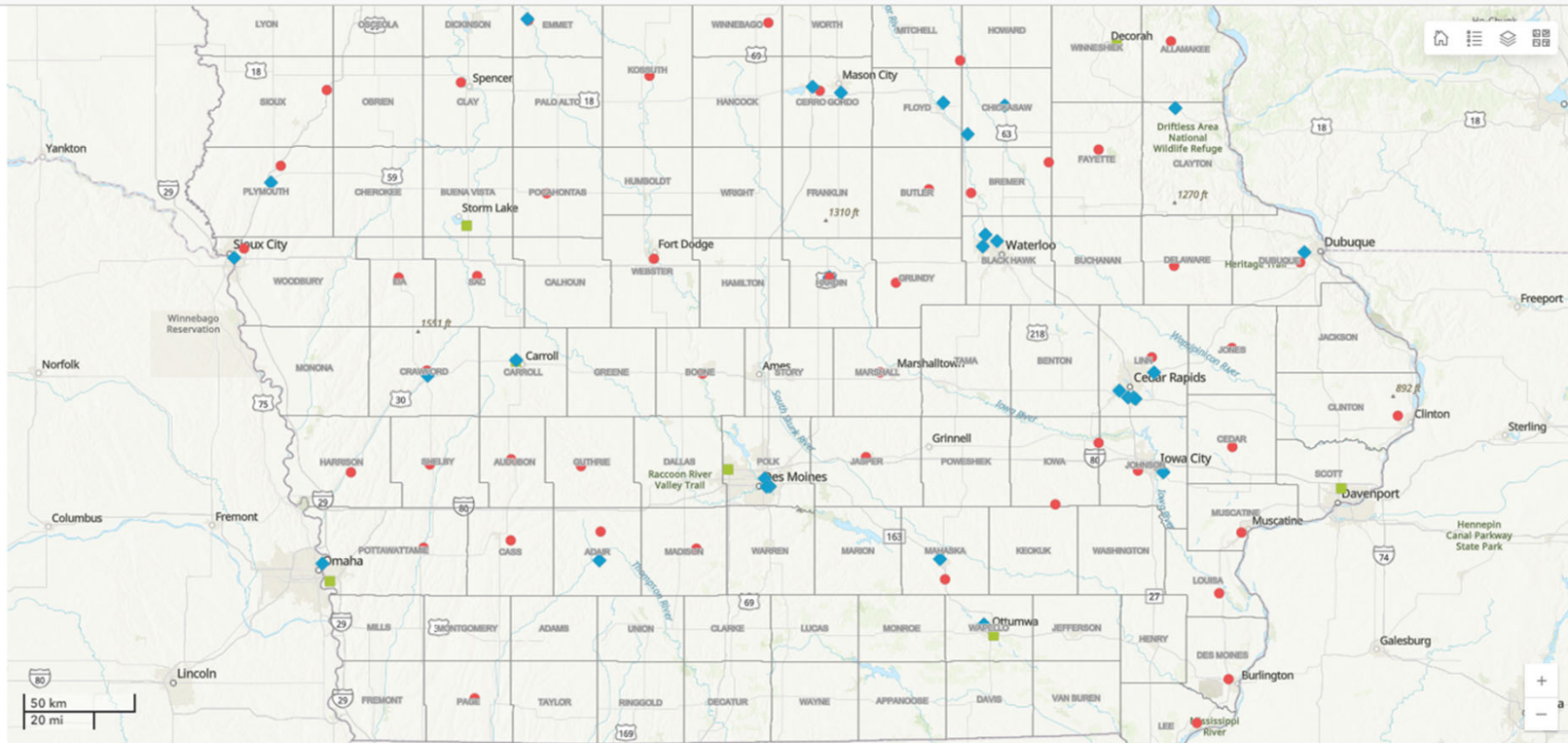
Estimated Tons Recycled

81.8k

per year

	Glass	Metal	Paper	Plastic
Destination Unknown	204 Tons	319 Tons	3.2k Tons	1.5k Tons
Destination Out of State	776 Tons	447 Tons	5.3k Tons	1.1k Tons
Destination In-State	620 Tons	2.6k Tons	16k Tons	5.4k Tons

select a red or green point on the map
to view recycling details



Esri, USGS | County of Story, Iowa DNR, Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS
data collection conducted by SCS Engineers.

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Select to Highlight

Find a Processor
Select to Highlight

Estimated Tons Recycled

435

per year

	Glass	Metal	Paper	Plastic
Destination Unknown	--	--	--	--
Destination Out of State	--	--	--	--
Destination In-State	--	39 Tons	357 Tons	39 Tons

Cass County Transfer Station

65928 Jackson Road
Atlantic, IA 50022

Estimated Recycled Tons/Year: 435 Tons

- 0% Glass

1. Destination Unknown: --
2. Destination Out of State: --
3. Destination In-State: --

- 10% Metal

1. Destination Unknown: --
2. Destination Out of State: --
3. Destination In-State: 39 Tons

In-State Processor:
Quandt Auto Salvage, Inc.

- 82% Paper

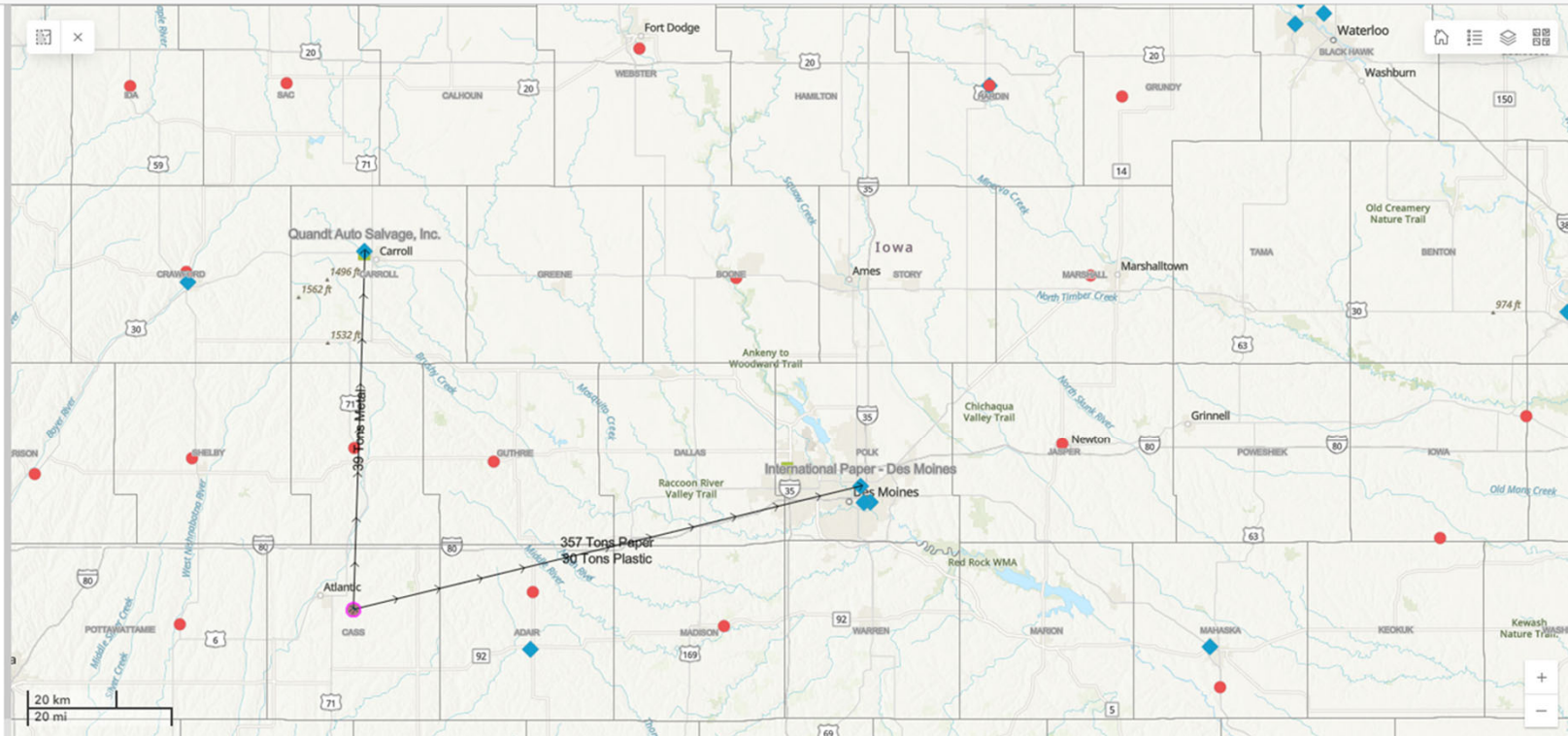
1. Destination Unknown: --
2. Destination Out of State: --
3. Destination In-State: 357 Tons

In-State Processor:
International Paper - Des Moines

- 8% Plastic

1. Destination Unknown: --
2. Destination Out of State: --
3. Destination In-State: 39 Tons

In-State Processor:
International Paper - Des Moines

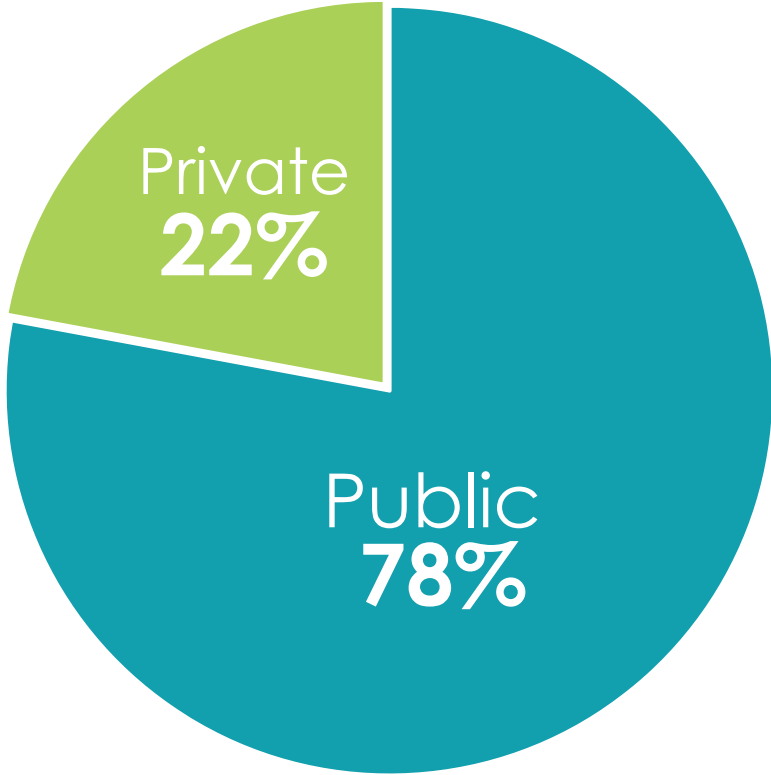


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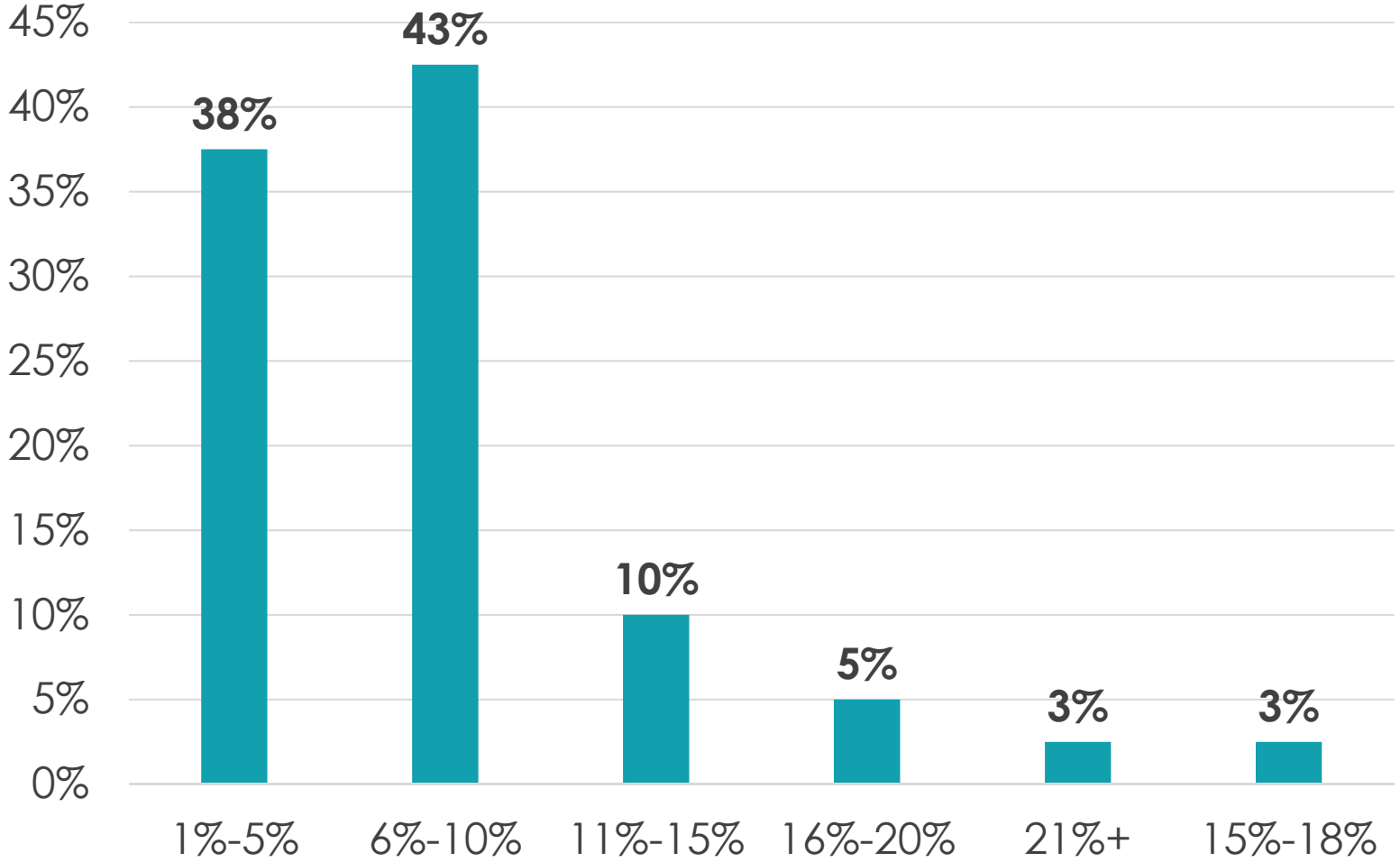
Results | General Information

Public/Private Responses



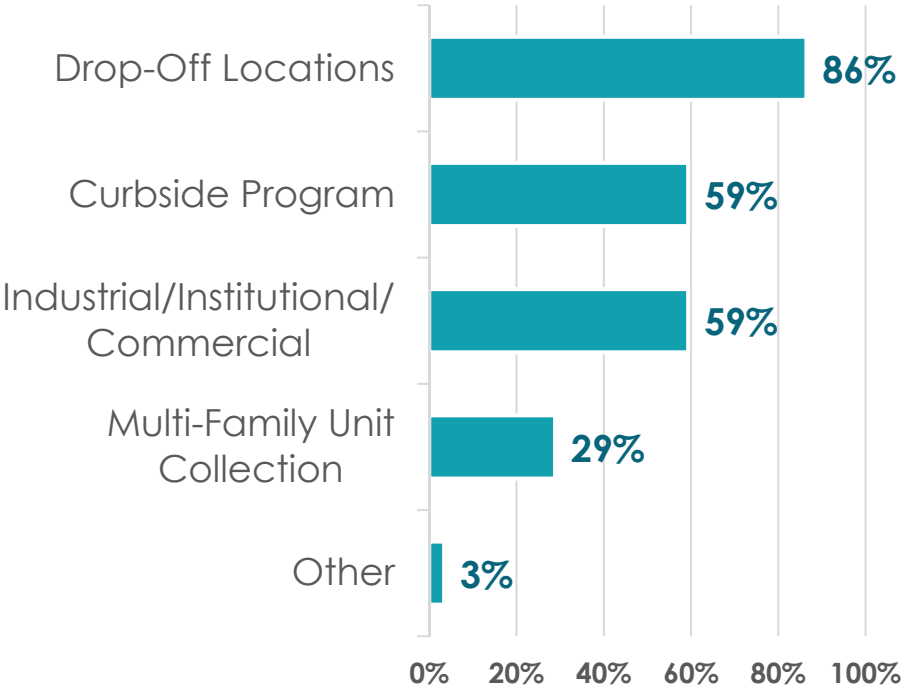
Results | Residuals

- Average residual is 8%
- Estimated 10,818 tons

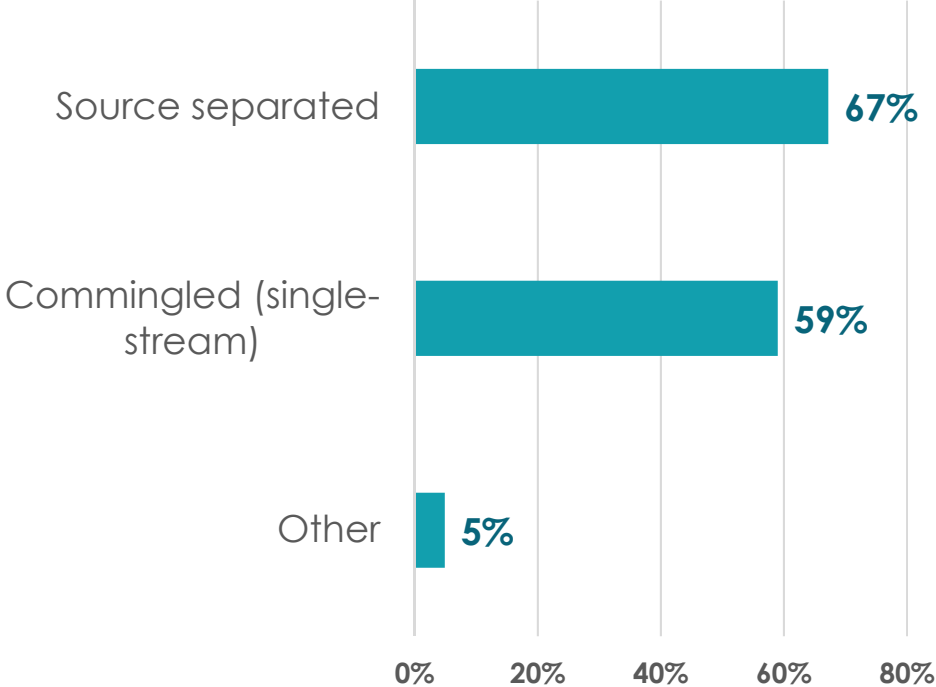


Results | General Information

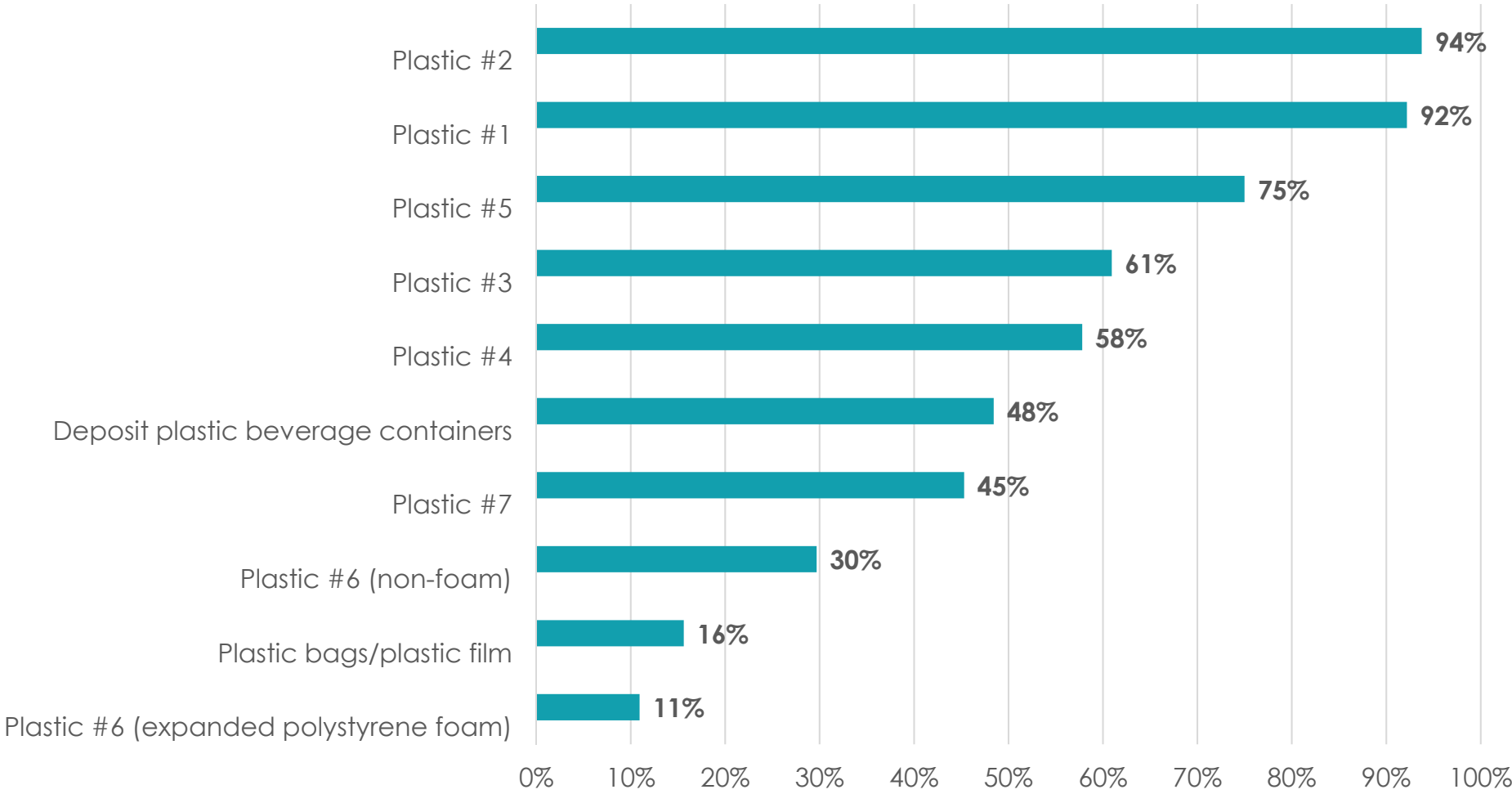
Programs Material is Collected Through



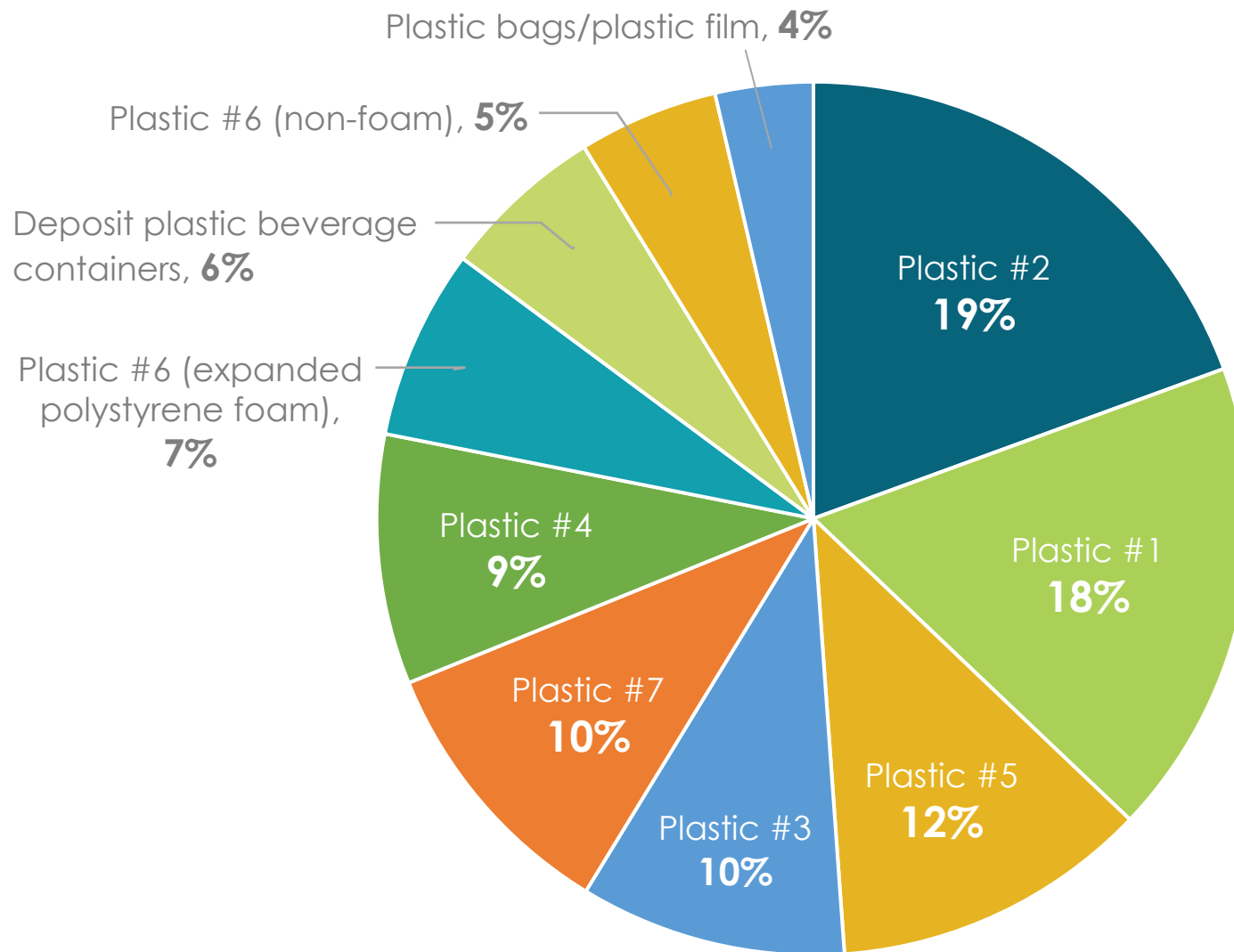
Method of Materials Collected



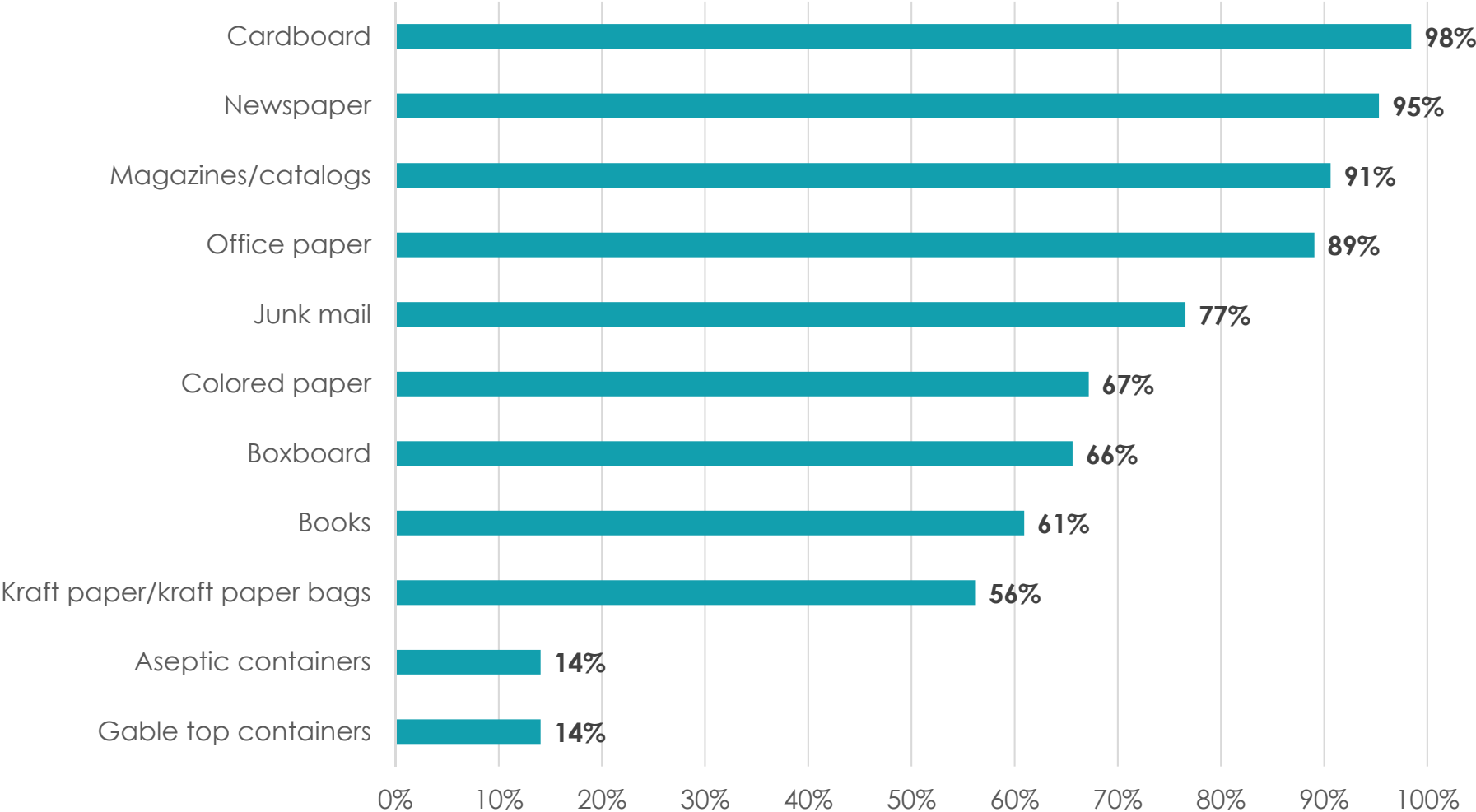
Results | Facilities Accepting Plastic



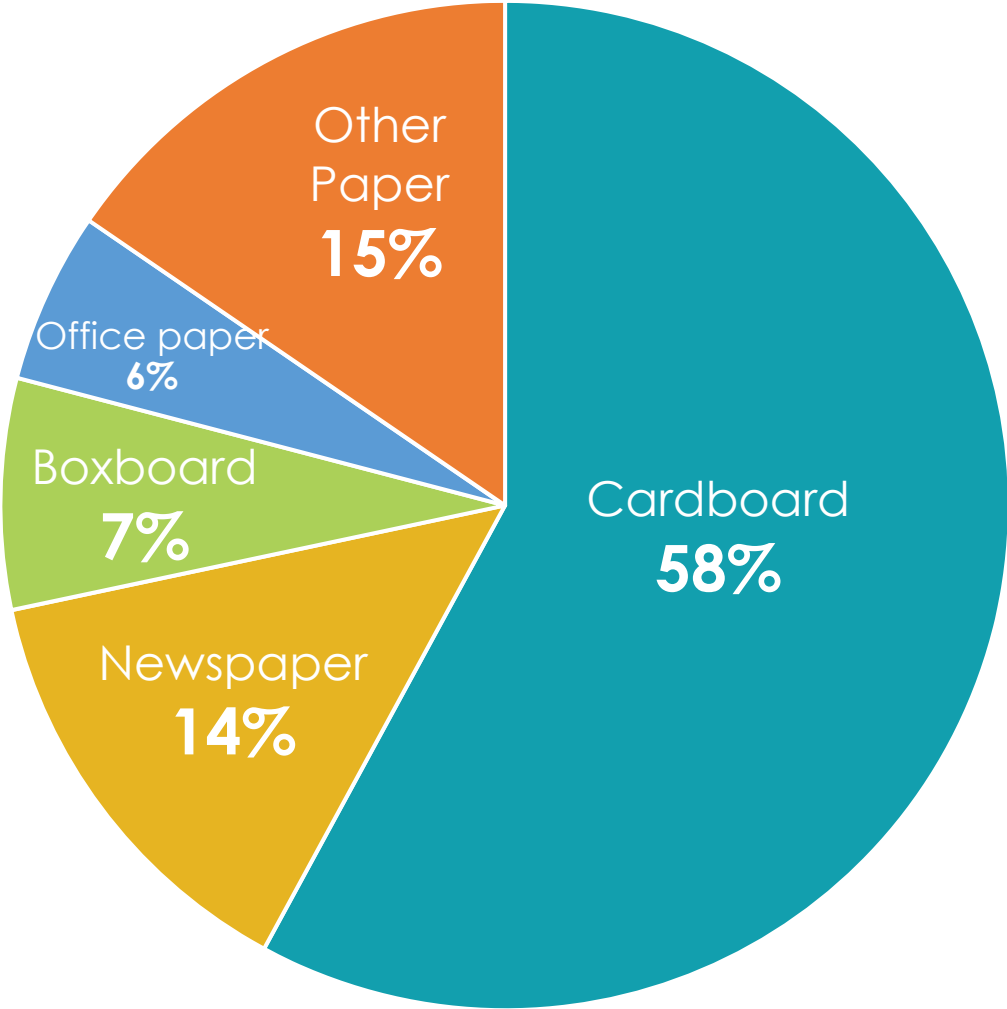
Results | Plastic Recycling Stream



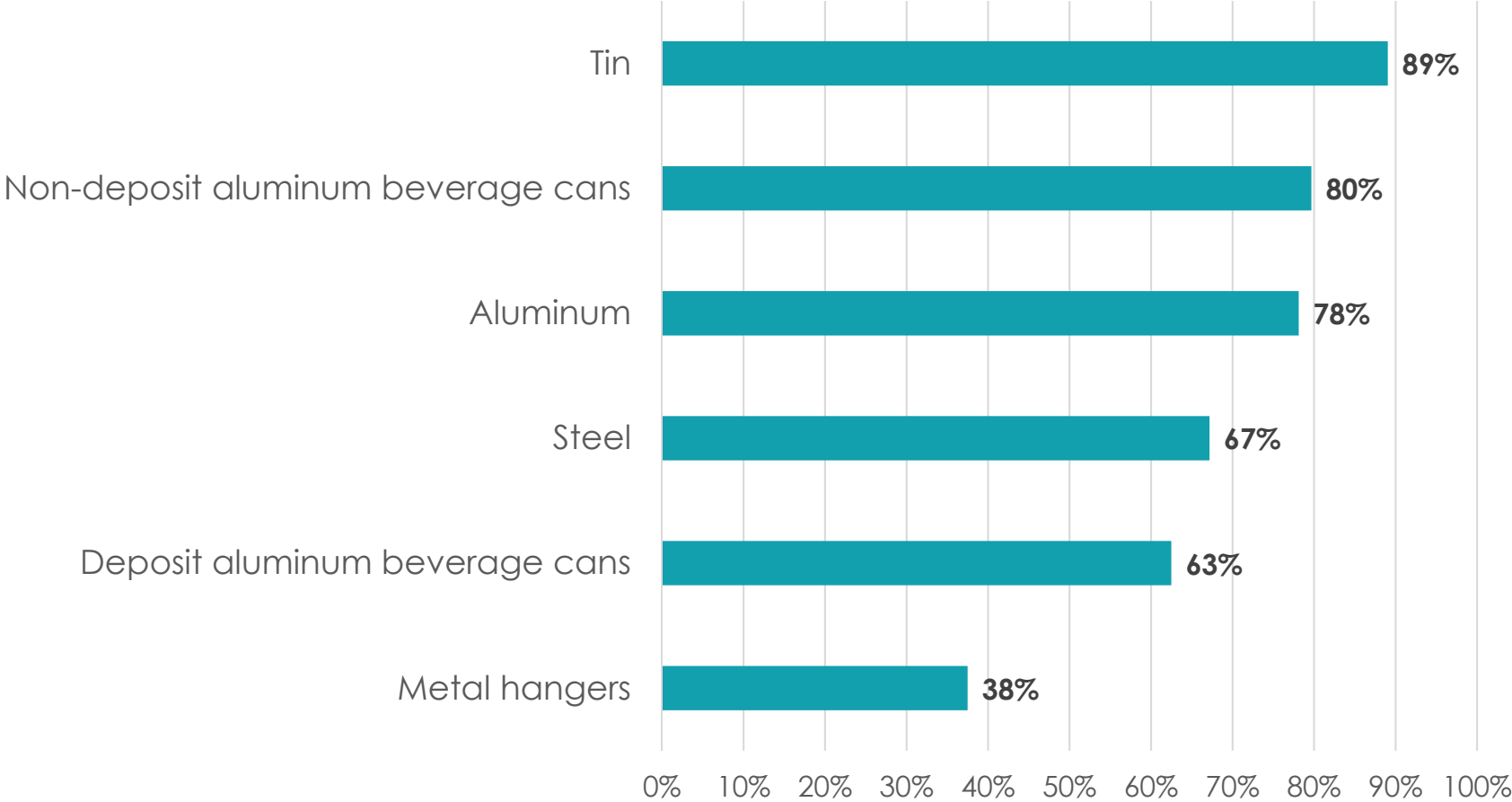
Results | Facilities Accepting Paper



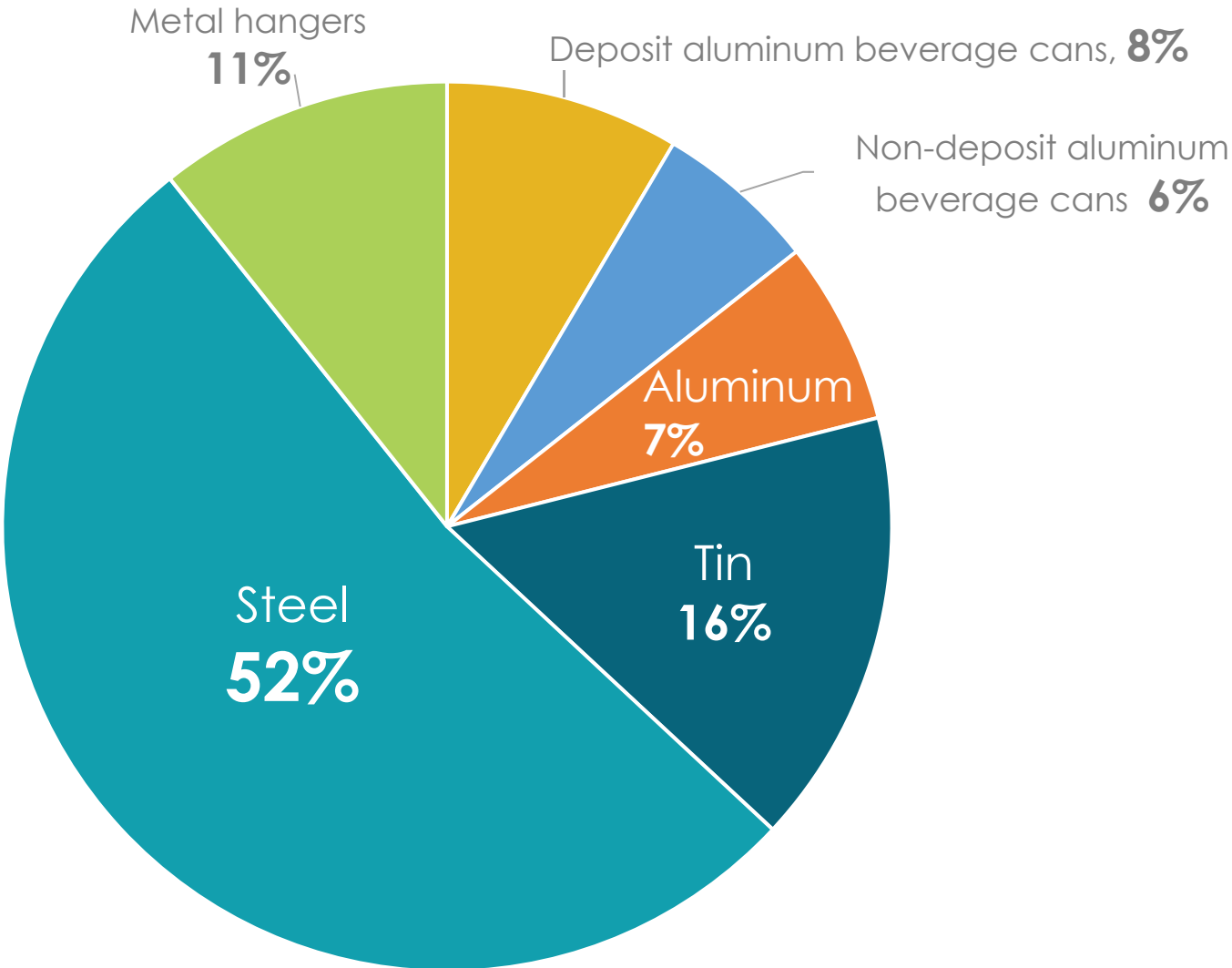
Results | Paper Recycling Stream



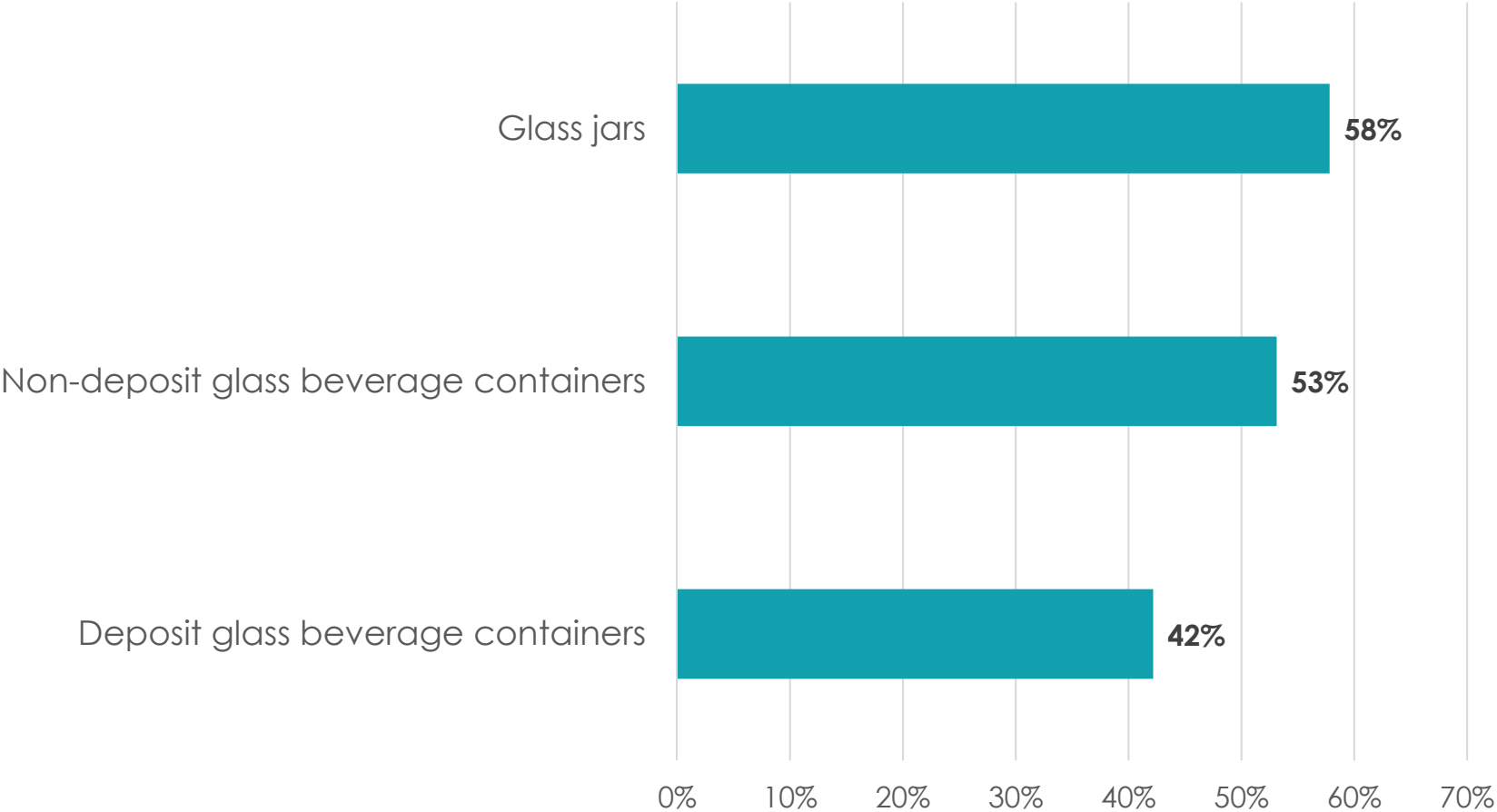
Results | Facilities Accepting Metal



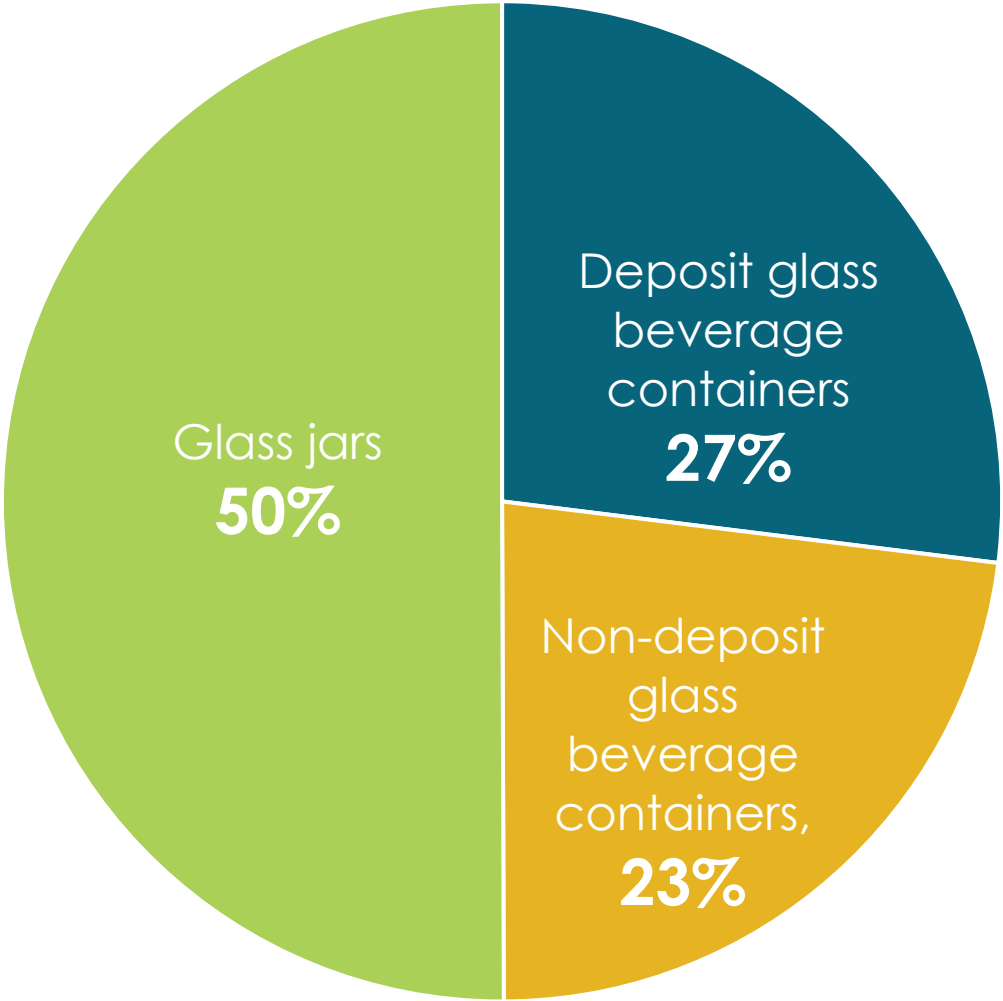
Results | Metal Recycling Stream



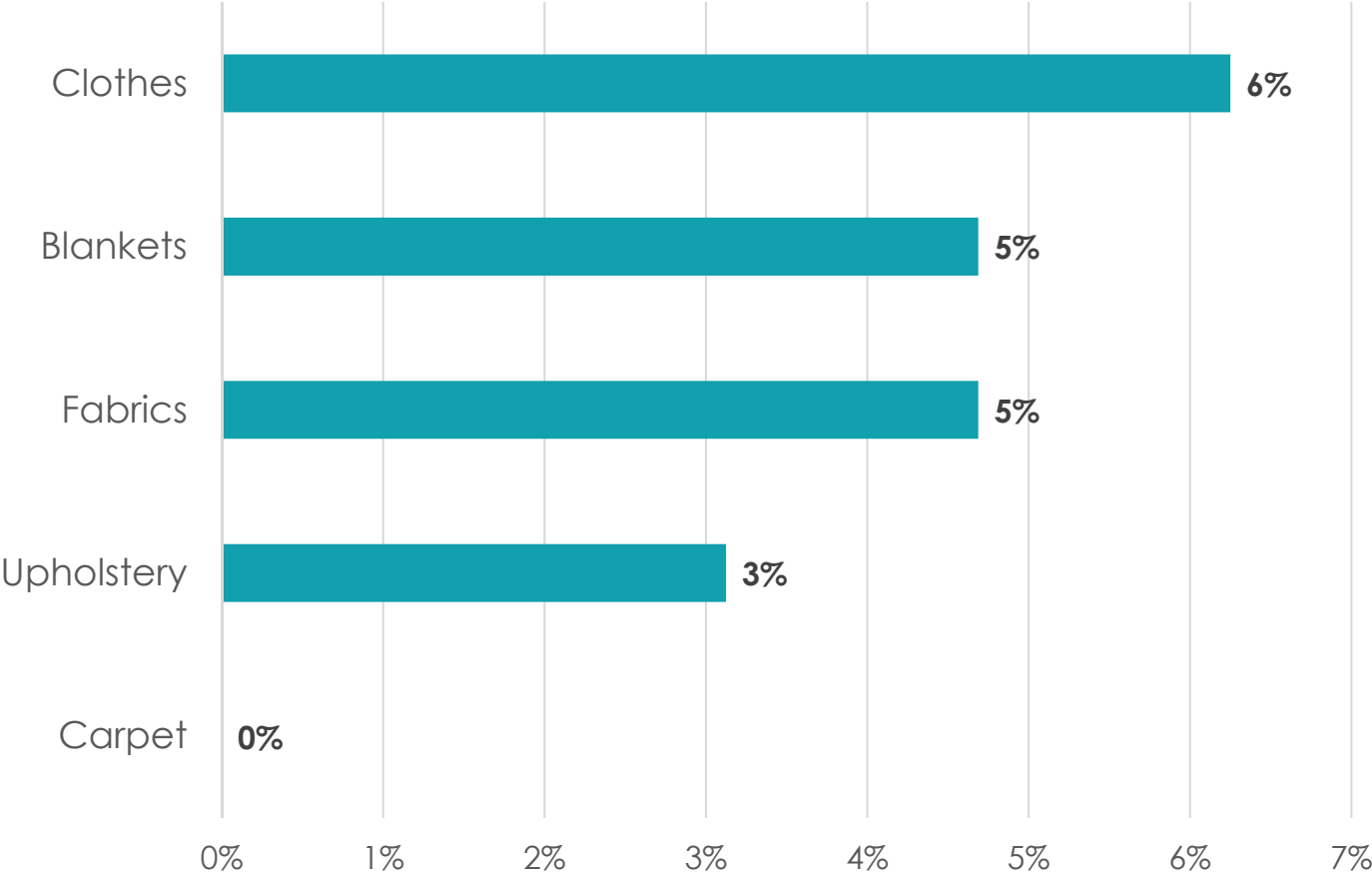
Results | Facilities Accepting Glass



Results | Glass Recycling Stream



Results | Facilities Accepting Textiles



Thank You

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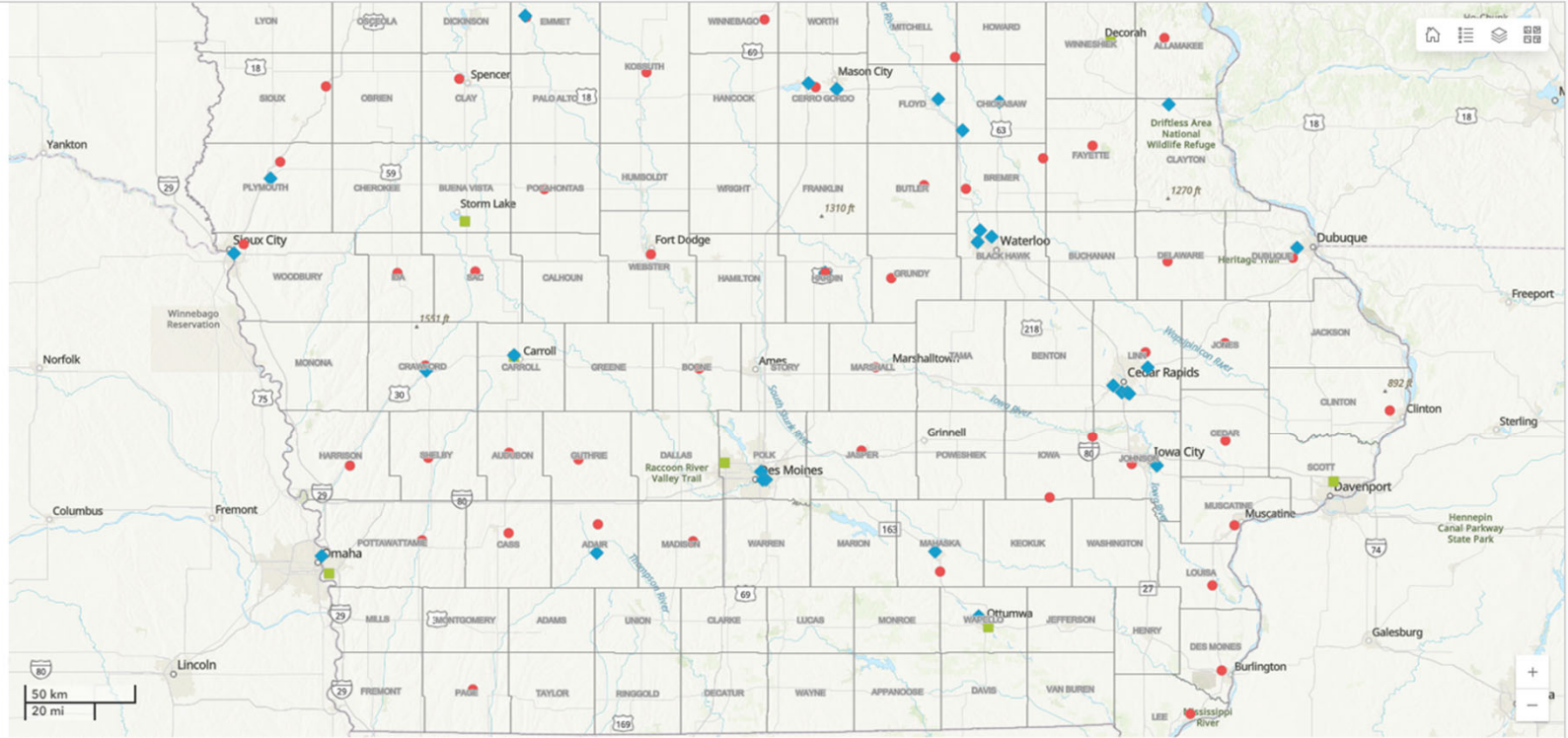
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Thank You

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Resources

- **Sustainable Materials Management (SMM) webpage**
<https://www.iowadnr.gov/Environmental-Protection/Land-Quality/Waste-Planning-Recycling/Sustainable-Materials-Management>