



2025 Nebraska Statewide Material Characterization Study

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Acknowledgements

The SCS Engineers (SCS) project team would like to thank the Nebraska Department of Water, Energy and Environment (DWEE) staff who have provided necessary information and collaboration to assist with this project. DWEE volunteers and host facility staff were essential in performing activities necessary to create this Report for the 2025 Nebraska Statewide Material Characterization Study (Study). Staff at these facilities provided detailed information on waste acceptance data, allowed access to their site and waste receipts, and made available equipment and staff resources to aid in obtaining and sorting samples.

SCS would also like to acknowledge the Nebraska Recycling Council (NRC) for their support in providing information on current diversion programs within Nebraska.

SCS acknowledges the support of the following sites and staff to help produce the results of this Study:

- Bluff Road Solid Waste Management Facility
- Hastings Sanitary Landfill
- Lexington Area Solid Waste Agency Landfill
- Norfolk Transfer Station
- Pheasant Point Landfill – Waste Management
- Sidney Area Solid Waste Agency Landfill
- Solid Waste Agency of Northwest Nebraska Transfer Station
- Valentine Area Solid Waste Agency Landfill

1.0 EXECUTIVE SUMMARY

The Nebraska Department of Water, Energy, and Environment (DWEE) contracted with SCS Engineers (SCS) in September 2024 to conduct a 2025 Nebraska Statewide Material Characterization Study (Study) at eight landfills and transfer stations across the state. Those facilities include Bluff Road Solid Waste Management Facility, Hastings Sanitary Landfill, Lexington Area Solid Waste Agency Landfill, Norfolk Transfer Station, Pheasant Point Landfill (Waste Management), Sidney Area Solid Waste Agency Landfill, Solid Waste Agency of Northwest Nebraska Transfer Station, and Valentine Area Solid Waste Agency Landfill. This Study was designed with a sound methodology to be replicated for future comparison and tracking of waste disposal trends. This Study provides meaningful data to help the State make program and policy decisions to expand waste diversion initiatives and improve existing program efficiencies. This Study will help the State measure their progress in obtaining waste reduction and recycling goals and may be the basis for implementing new programs and policies and enhancing existing efforts to further reduce and divert waste materials.

The overall objectives of the Study were as follows:

1. Collect material characterization data in a consistent, systematic, and repeatable manner from eight Municipal Solid Waste (MSW) landfills and transfer stations across Nebraska that accurately represent the waste stream;
2. Compare results between the 2025 and 2009 Studies; and
3. Review opportunities for waste diversion programs and policies.

This Study provides waste composition data for the following waste generating sectors:

- **C&D** – This references construction and demolition debris (C&D) materials generated from either construction or demolition projects.
- **Residential** – This encompasses waste generated from single family and multi-family (four units and under) residential properties.
- **ICI** – This includes waste generated at industrial, commercial, and institutional (ICI) facilities.
- **Mixed** – Specifically for the Valentine and SWANN host sites, these are samples with a mix of Residential and ICI MSW.
- **Overall** – This segment aggregates the waste composition data from residential, ICI, and Mixed MSW to reflect the overall composition of materials disposed of in the State.

Exhibit 1 (next page) provides a summary of the seven material categories that comprise the overall MSW stream for the eight facilities which were included in this Study.

Note: Due to rounding, aggregated data presented throughout this report may not equal exact total percentages.

Exhibit 1. Statewide MSW Material Composition - Overall

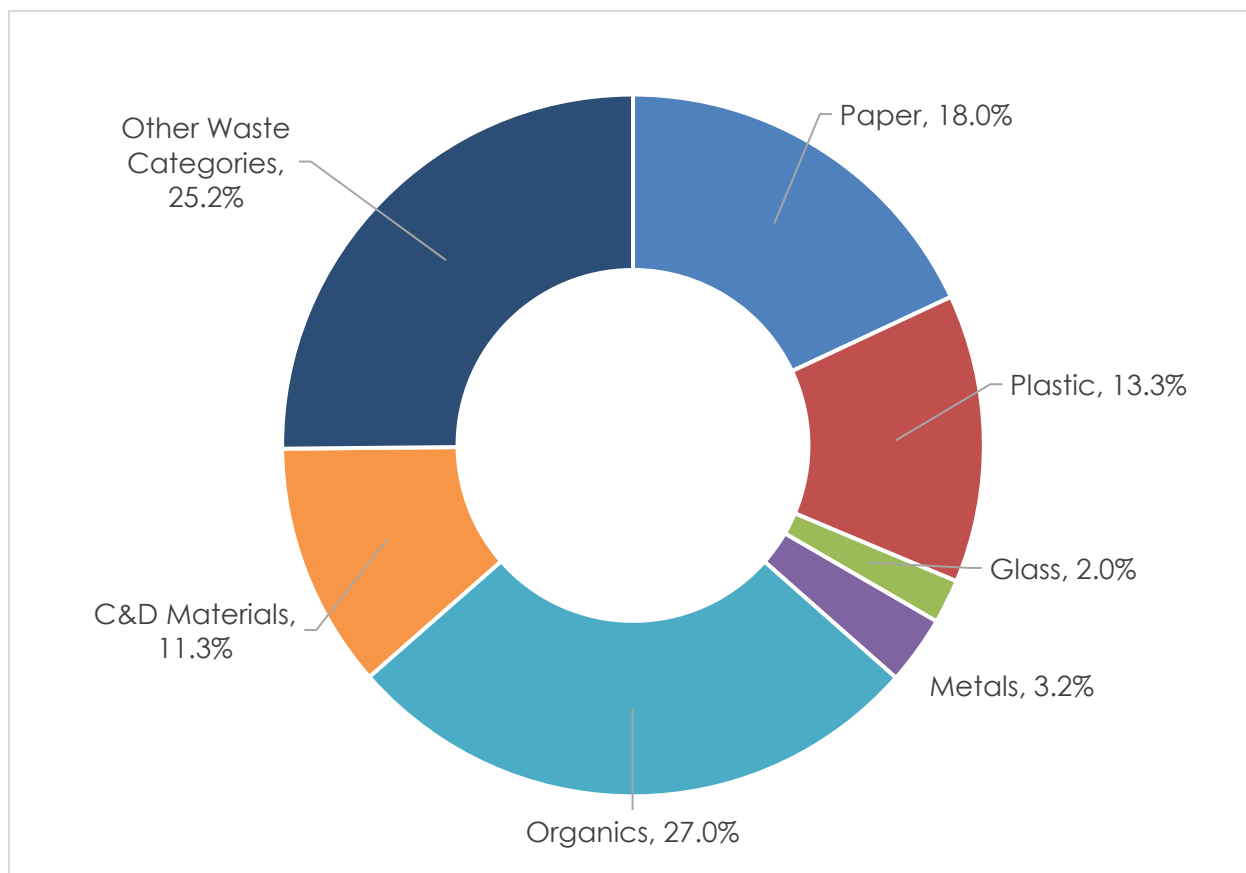


Exhibit 2 (next page) summarizes the MSW composition for the state as a whole as well as the residential, ICI, and mixed generating sectors. Detailed waste composition profiles for these generating sectors that include the percentage of all 65 material components are provided in **Appendix F**.

Exhibit 2. Statewide MSW Material Composition – Overall and by Generating Sector

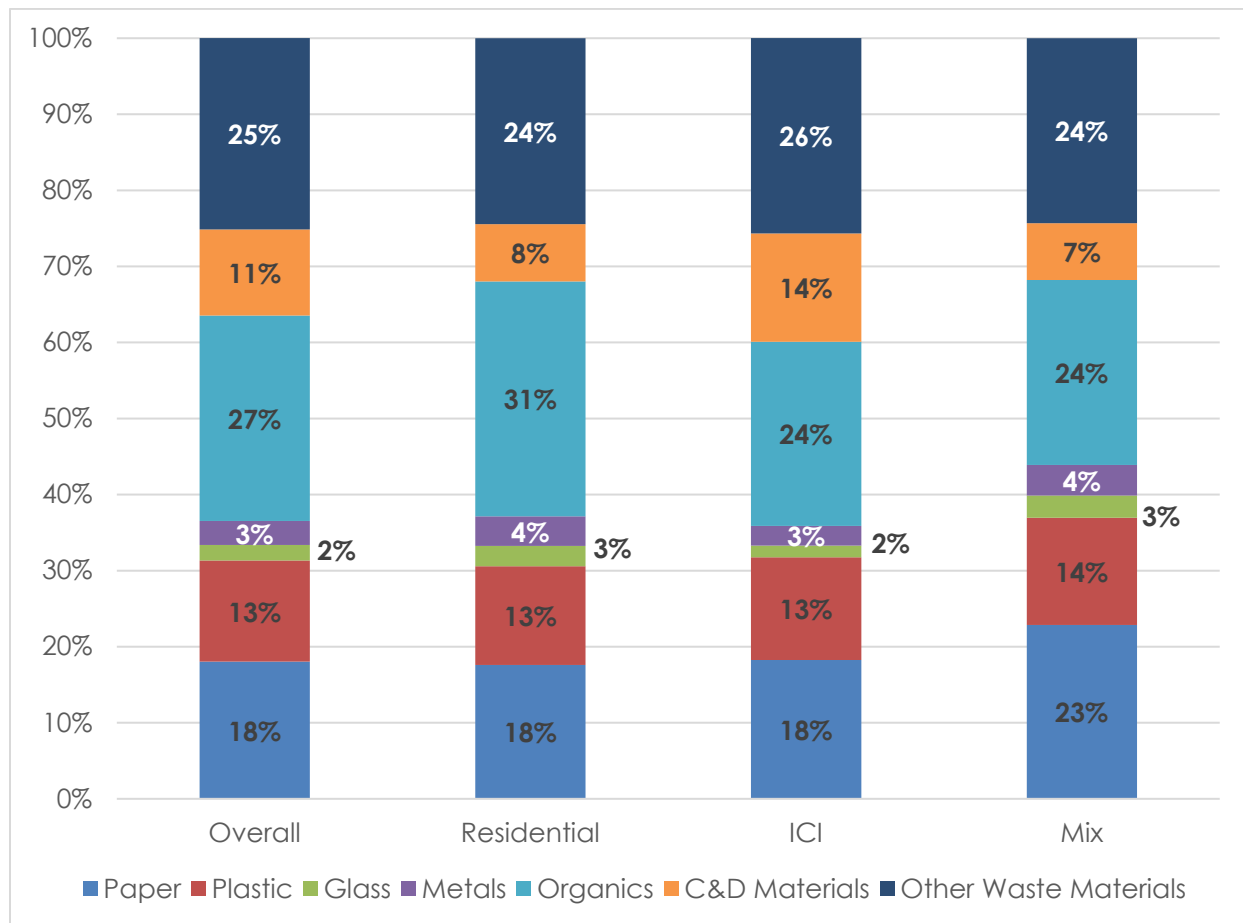


Table 1 (below) provides a detailed profile of the overall statewide MSW composition that includes the percentage of all 65 material components.

Table 1. Statewide MSW Material Composition – Detailed Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper	Corrugated Cardboard	5.3%	7.6%	4.9%	5.6%
	Office Paper	1.0%	1.7%	0.9%	1.0%
	Newsprint	0.3%	0.7%	0.2%	0.3%
	Magazines and Other Glossy Paper	0.8%	2.0%	0.7%	0.8%
	Paperboard/Liner Board	2.1%	3.3%	2.0%	2.3%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Other Paper/Non-Recyclable Paper	2.9%	4.9%	2.7%	3.1%
	Mixed Paper	3.8%	3.4%	3.5%	4.1%
	Compostable Paper	2.0%	3.2%	1.8%	2.1%
	Total Paper	18.0%	11.4%	16.8%	19.3%
Plastic					
	PET #1	0.7%	0.6%	0.7%	0.7%
	Natural HDPE #2	0.4%	0.5%	0.4%	0.4%
	Colored HDPE #2	0.4%	0.7%	0.4%	0.4%
	PP #5	0.8%	0.7%	0.7%	0.8%
	Expanded Polystyrene	0.7%	1.1%	0.6%	0.7%
	Other Numbered Plastics	0.7%	0.7%	0.7%	0.8%
	Film and Bags	6.0%	5.5%	5.6%	6.3%
	Retail Shopping Bags	0.7%	1.0%	0.7%	0.8%
	Other Plastics	1.9%	5.8%	1.8%	2.0%
	Plastic Items Containing Lithium Batteries	<0.1%	0.2%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.0%	0.8%	0.9%	1.1%
	Total Plastic	13.3%	9.1%	12.4%	14.2%
Glass					
	Clear Glass Containers	0.7%	1.2%	0.6%	0.7%
	Brown Glass Containers	<0.1%	0.3%	<0.1%	<0.1%
	Green Glass Containers	0.2%	0.6%	0.2%	0.2%
	Blue Glass Containers	<0.1%	0.2%	<0.1%	<0.1%
	Other Glass	0.4%	0.9%	0.4%	0.4%
	Glass Single-Use Beverage Containers	0.7%	1.3%	0.7%	0.7%
	Total Glass	2.0%	2.4%	1.9%	2.2%
Metal					
	Aluminum Containers	0.2%	0.4%	0.2%	0.2%
	Steel/Tin Containers	0.7%	0.8%	0.6%	0.7%
	Other Ferrous Scrap	1.0%	3.3%	1.0%	1.1%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Other Non-Ferrous Scrap	0.4%	1.9%	0.4%	0.4%
	Other Metals	<0.1%	0.6%	<0.1%	<0.1%
	Non-Recyclable Metal	<0.1%	0.6%	<0.1%	0.1%
	Metal Single-Use Beverage Containers	0.7%	0.7%	0.7%	0.8%
	Total Metals	3.2%	4.3%	2.9%	3.4%
Organics					
	Food Waste - Packaged	2.7%	8.3%	2.5%	2.9%
	Food Waste - Unpackaged	16.4%	12.7%	15.3%	17.5%
	Yard Waste	7.9%	12.4%	7.4%	8.4%
	Total Organics	27.0%	17.4%	25.2%	28.8%
C&D Materials					
	Linoleum	0.1%	3.4%	0.1%	0.1%
	Untreated Wood	2.8%	10.3%	2.6%	3.0%
	Treated Wood	3.7%	9.4%	3.5%	4.0%
	Roofing Materials	0.5%	5.1%	0.5%	0.6%
	Bricks and Porcelain	0.5%	2.5%	0.4%	0.5%
	Soil, Rock, Sand	1.6%	6.4%	1.5%	1.7%
	Concrete	0.5%	3.2%	0.5%	0.5%
	Misc. C/D Waste	1.6%	7.3%	1.5%	1.7%
	Total C&D Materials	11.3%	18.8%	10.6%	12.1%
Other Waste Categories					
	Diapers	2.8%	4.3%	2.7%	3.0%
	Textiles/Leather	4.9%	7.7%	4.6%	5.2%
	Rubber	0.9%	3.6%	0.8%	1.0%
	Household Hazardous Waste	0.7%	3.6%	0.7%	0.8%
	White Goods	<0.1%	1.1%	<0.1%	0.1%
	Electronic Waste	1.2%	3.7%	1.1%	1.3%
	Electronics Containing Lithium Batteries	<0.1%	0.3%	<0.1%	<0.1%
	Non-Distinct	4.1%	9.9%	3.8%	4.4%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Oil Filters	<0.1%	0.9%	<0.1%	<0.1%
	Waste Oil	<0.1%	0.6%	<0.1%	<0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.4%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.2%	0.4%	0.1%	0.2%
	Unclassifiable Fines	3.0%	3.4%	2.8%	3.2%
	Bulky Items	4.4%	10.0%	4.1%	4.7%
	Medical Waste	2.5%	10.5%	2.4%	2.7%
	Sharps	<0.1%	0.1%	<0.1%	<0.1%
	Total Other Waste Categories	25.2%	18.3%	23.5%	26.8%
	Total of Overall Waste	100%			

Table 2 (below) provides a listing of the top 10 most prevalent material components as calculated for the overall, residential, ICI, and mixed MSW composition. A listing of the top 10 most prevalent material components as calculated for the overall for each participating host facility is located in Appendix H.

Table 2. MSW Prevalent Materials – Generating Sector Comparison

	Nebraska Statewide (Residential, ICI, and Mixed)		Residential		ICI		Mixed	
	Material	Pct.	Material	Pct.	Material	Pct.	Material	Pct.
1	Food Waste - Unpackaged	16.4%	Food Waste - Unpackaged	15.9%	Food Waste - Unpackaged	16.8%	Food Waste - Unpackaged	14.1%
2	Yard Waste	7.9%	Yard Waste	12.6%	Film and Bags	6.5%	Corrugated Cardboard	8.3%
3	Film and Bags	6.0%	Textiles/Leather	5.9%	Corrugated Cardboard	6.5%	Yard Waste	7.4%
4	Corrugated Cardboard	5.3%	Film and Bags	5.2%	Bulky Items	4.9%	Film and Bags	6.0%
5	Textiles/Leather	4.9%	Mixed Paper	4.2%	Treated Wood	4.5%	Mixed Paper	5.1%
6	Bulky Items	4.4%	Non-Distinct	3.9%	Yard Waste	4.5%	Diapers	4.3%
7	Non-Distinct	4.1%	Bulky Items	3.8%	Non-Distinct	4.3%	Textiles/Leather	4.0%
8	Mixed Paper	3.8%	Unclassifiable Fines	3.6%	Textiles/Leather	4.2%	Bulky Items	4.0%
9	Treated Wood	3.7%	Diapers	3.6%	Medical Waste	4.1%	Unclassifiable Fines	3.9%
10	Unclassifiable Fines	3.0%	Corrugated Cardboard	3.5%	Untreated Wood	3.8%	Paperboard/Liner Board	3.2%
	Overall Cumulative Percent	59.4%	Residential Cumulative Percent	62.3%	ICI Cumulative Percent	60.0%	Mixed Cumulative Percent	60.3%

Table 3 (below) provides a comparison of the 2025 composition with the 2009 material characterization study. NA indicates either the materials were combined in 2009 or did not exist.

Table 3. Overall Statewide MSW Material Composition 2009 vs 2025 – Detailed Overall

Material Categories	Material Components	2025 Mean Composition (%)	2009 Mean Composition (%)
Paper			
	Cardboard	5.3%	8.0%
	Office Paper	1.0%	4.4%
	Newsprint	0.3%	5.0%
	Magazines	0.8%	3.9%
	Paperboard/Liner Board	2.1%	5.3%
	Mixed Paper	8.6%	14.6%
	Total Paper	18.0%	41.1%
Plastic			
	PET #1	1.7%	3.4%
	HDPE #2	0.8%	1.6%
	Other Numbered Containers	2.2%	2.7%
	Plastic Film/Wrap/Bags	6.7%	7.0%
	Other Plastics	1.9%	4.4%
	Total Plastic	13.3%	19.1%
Glass			
	Mixed Colored Glass Containers	1.6%	4.8%
	Other Glass	0.4%	0.2%
	Total Glass	2.0%	4.9%
Metal			
	Aluminum Containers	0.9%	1.2%
	Steel/Tin Containers	0.7%	1.6%
	Other Non-Ferrous Scrap	0.4%	0.3%
	Other Ferrous Scrap	1.0%	0.2%
	Other Mixed Metals	0.2%	0.3%
	Total Metals	3.2%	3.6%

Material Categories	Material Components	2025 Mean Composition (%)	2009 Mean Composition (%)
Organics			
	Food Waste	19.1%	16.6%
	Yard Waste	7.9%	2.8%
	Total Organics	27.0%	19.5%
C&D Materials			
	Wood	6.5%	0.5%
	Misc. C/D Waste	4.7%	0.2%
	Total C&D Materials	11.2%	0.7%
Other Waste Categories			
	Diapers	2.8%	4.0%
	Textiles/Leather/Rubber	5.8%	5.0%
	Household Hazardous Waste	0.7%	0.0%
	Electronic Waste	1.2%	0.4%
	Batteries	0.0%	0.1%
	Empty Aerosol Cans	0.2%	0.2%
	Bulky Items	4.4%	NA
	Medical Waste	2.5%	NA
	Sharps	0.0%	NA
	White Goods	0.1%	NA
	Lithium Batteries	0.0%	NA
	Total Other Waste Categories	17.9%	9.6%
Other Misc. Waste			
	Oil Filters	0.1%	NA
	Waste Oil	0.1%	NA
	Linoleum	0.1%	NA
	Thermometers	0.0%	NA
	Thermostats	0.0%	NA
	Raw Mercury	0.0%	NA
	Light-Up Shoes/Buttons	0.0%	NA
	Fluorescent Bulbs	0.0%	NA
	Total Other Misc. Waste	0.3%	0.3%

Material Categories	Material Components	2025 Mean Composition (%)	2009 Mean Composition (%)
Unclassifiable Wastes			
	Non-Distinct	7.1%	1.1%
	Total Unclassifiable Wastes	7.1%	1.1%
	Total of Overall Waste	100%	100%

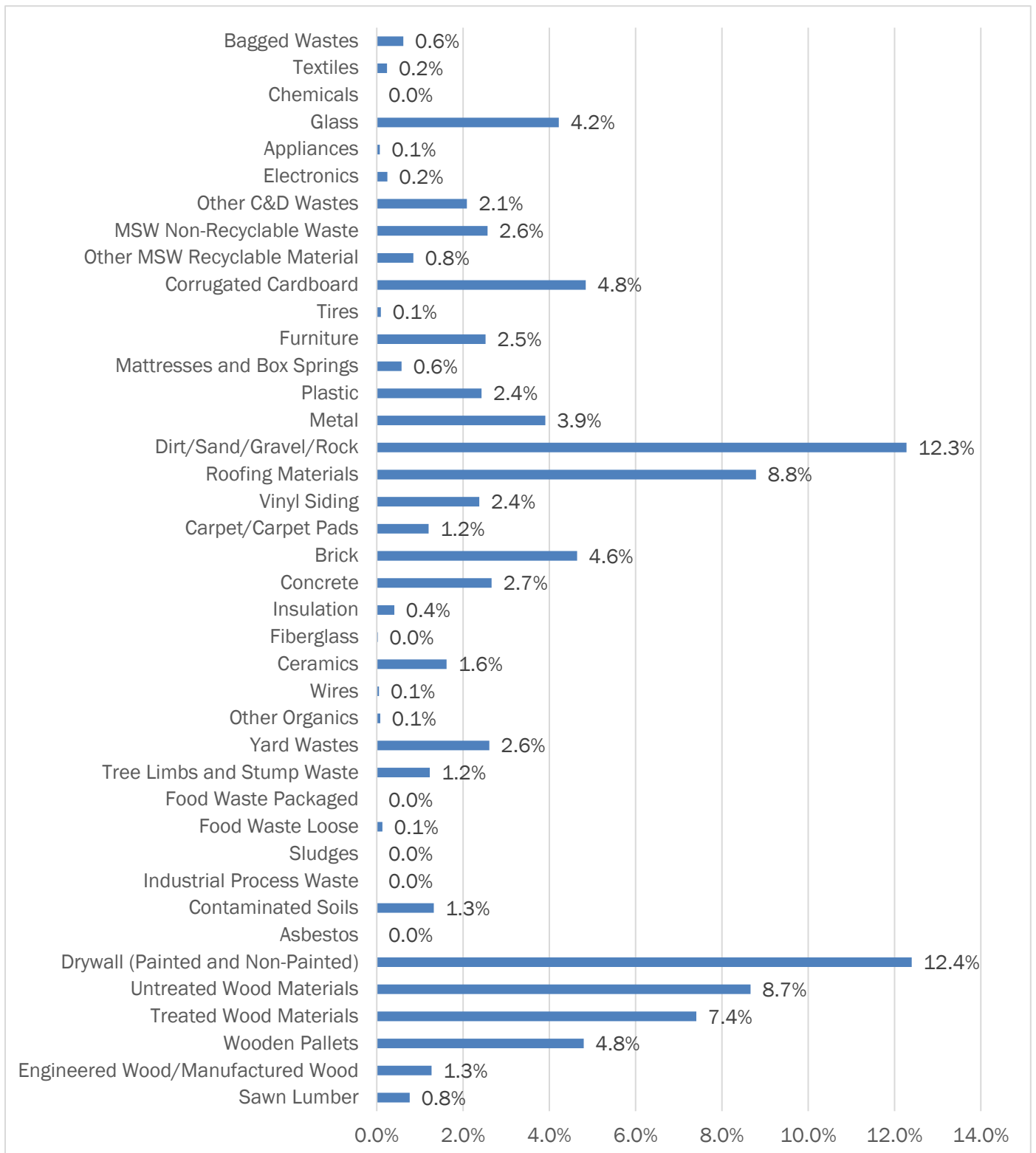
Table 4 (below) provides a compilation of specific item counts for the Study as a whole.

Table 4. Statewide Item Count Compilation

	Total Item Counts
Appliances, Tires, and Mattresses	72
Plastic Items with Lithium Batteries	88
Electronics with Lithium Batteries	24
Lithium Batteries	53
Plastic Single-Use Beverage Containers	26,893
Glass Single-Use Beverage Containers	2,283
Metal Single-Use Beverage Containers	26,618
Statewide (Total)	56,031

Exhibit 3 (next page) provides a summary of the material categories that comprise the statewide C&D delivered to seven host facilities. No C&D loads were able to be visually inspected at Pheasant Point Landfill due to safety concerns. Data is provided for each component as a percentage of the total estimated weight.

Exhibit 3. Statewide C&D Material Composition – Overall



2.0 INTRODUCTION

This report provides the results of the 2025 Nebraska Statewide Material Characterization Study (Study) performed at eight landfills and transfer stations throughout Nebraska as well as the methods used to obtain the data contained in this report. The report is organized in the following sections:

- **Executive Summary** – This brief section summarizes the key findings and results of the Study and relevant comparisons to the 2009 Study results.
- **Introduction** – The introduction describes the purpose of the Study, project objectives, and outline how the report is organized.
- **Background** – The background section includes Nebraska’s demographic, waste generation, and waste disposal data to extrapolate the results of this Study to develop a waste composition profile for the entire State and each host facility. It includes a discussion of the assumptions SCS uses to calculate and develop the waste composition profile.
- **Methodology** – This section provides a detailed discussion of the methods and protocols used to select and sort samples of waste for this Study. It also includes details of the project’s overall and site-specific sampling and sorting plans, the number of samples obtained overall and by facility from each generating sector, material categories and definitions for the waste streams, data collection, equipment and calibration, and analytical techniques used.
- **Results** – The section provides detailed results of the Study. Results are presented in narrative form as well as in charts, graphs, and tables. Waste composition profiles were generated for the four generating sectors (residential, ICI, mixed, and C&D). These waste characterization profiles were developed for each host facility and for the State as a whole. To calculate the overall statewide waste composition, data from all waste-generating sectors from each host facility was aggregated. Composition profiles from generating sectors are compared and notable differences are highlighted. Additionally, the result of this Study is compared to the 2009 Study results. The results section also includes all supporting documentation for the project, including the spreadsheet used to manage the data, make calculations, and perform statistical analysis of the data.
- **Impact of Current Recycling and Diversion Programs** – This section discusses current recycling and diversion programs operating in the state of Nebraska and presents the estimated total diverted tons. This section presents the sources of data and methodologies used to generate the tons estimated as diverted by material type, generator status, and diversion program (i.e., recycling, composting, other pathways, etc.).
- **Recommendations** – The recommendations section identifies materials in the waste stream that have the potential for diversion by implementing new or expanding existing diversion programs, or reduction through waste minimization or source reduction initiatives. As part of this section, SCS suggests programs and policies for the State’s consideration.
- **Conclusion** – This section provides a brief summary of the report results and provides conclusions for waste management in Nebraska based on the results of this Study.
- **Supporting Documents** – Documents used to support the report are included as attachments. These supporting documents may include the following:
 - Sample physical sort field results
 - Sample visual sort field results
 - Overall and individual sampling plans

3.0 BACKGROUND

In 1992, Nebraska legislature passed the Integrated Solid Waste Management Act. Not only did this legislation comply with the Subtitle D national requirements to replace open dumps with permitted regional landfills, but it also called for the creation of solid waste jurisdiction areas throughout the state. These jurisdictions would be required to create solid waste management plans to meet the State's recycling goals and 20-year management plans established by the legislature.

Population data and annual MSW disposal data are used to calculate the statewide per capita generation rate, which represents the average pounds of solid waste generated per person per day.

- The EPA determined that, in 2018, the national per capita MSW generation rate was 4.9 pounds. This figure includes materials that were disposed, recycled, and composted.
- In 2009, Nebraska's per capita MSW disposal rate was greater than the national average generation rate at 6.3 pounds. This figure only includes materials disposed.
- In 2025, Nebraska had a per capita MSW disposal rate of 7.5 pounds, which exceeded the national average and the 2009 datapoint. This figure only includes materials disposed.

Table 5 (below) displays the Nebraska per capita disposal rate in 2009 and 2025 compared to the national average generation rate. The EPA estimates an average MSW per capita generation rate that represents the amount of material generated by each person daily and does not necessarily reflect the amount of MSW landfilled on a per capita basis. In contrast, the Nebraska per capita figures presented below represent disposal rates based specifically on landfilled material. It is also important to note that not all MSW disposed of in Nebraska landfills is generated within the state; likewise, some MSW generated in Nebraska may be disposed of outside of the state.

Table 5. 2025 Statewide Per Capita Waste Disposal Rate Compared to 2009 and National Average Generation Rate (pounds)

Topic	2025	2009	US Average (2018)
Per Capita Daily Disposal Rate	7.5	6.3	4.9
Per Capita Annual Disposal Rate	2,744.0	2,301.7	1,788.5

Table 6 (next page) displays the 2025 per capita disposal rate by host facility compared to the 2009 per capita disposal rate. Based on this information, 75 percent of host facilities have increased the per capital disposal rate.

Table 6. 2025 Statewide Per Capita Waste Disposal Rate Compared to 2009 by Host Facility

	Bluff Road		Chadron		Hastings		Lexington		Norfolk		Pheasant Point		Sidney		Valentine	
	2025	2009	2025	2009	2025	2009	2025	2009	2025	2009	2025	2009	2025	2009	2025	2009
Per Capita Daily Disposal Rate	4.0	5.6	17.2	12.6	12.0	10.6	17.3	20.4	29.4	21.0	7.3	6.4	9.6	6.3	8.5	7.3
Per Capita Annual Disposal Rate	1,461	2,035	6,293	4,589	4,378	3,862	6,322	7,461	10,732	7,675	2,647	2,321	3,499	2,298	3,120	2,656

Table 7 (below) estimates the 2025 per capita disposal rate of MSW material categories. This information uses previously determined per capita disposal rates for Nebraska and the material composition study to determine the pounds disposed of per day and annually. The Organics category has the highest per capita generation rate, with the lowest being Glass materials.

Table 7. 2025 Statewide Per Capita Waste Disposal Rate by Major MSW Material Categories (pounds)

Topic	Paper	Plastic	Glass	Metals	Organics	C&D Materials	Other Waste Categories
Per Capita Daily Disposal Rate	1.4	1.0	0.2	0.2	2.0	0.9	1.9
Per Capita Annual Disposal Rate	495.2	364.6	55.8	86.6	741.4	310.6	690.2

4.0 METHODOLOGY

Developing a sound approach to complete this Study was critical for laying the foundation for a successful project that yielded reliable and statistically valid data. Careful planning went into identifying and screening waste streams, completing field activities, and analyzing data. This section describes the design of the Study.

4.1 HOST FACILITIES

For the purpose of this Study, the State selected eight solid waste facilities based on the location, demographic, and total tons disposed to create a proper depiction of Nebraska waste. Preference was given to host facilities that participated in the 2009 Study for data continuity. The facilities selected were the following:

- Bluff Road Solid Waste Management Facility
- Hastings Sanitary Landfill
- Lexington Area Solid Waste Agency Landfill
- Norfolk Transfer Station
- Pheasant Point Landfill – Waste Management
- Sidney Area Solid Waste Agency Landfill
- Solid Waste Agency of Northwest Nebraska Transfer Station
- Valentine Area Solid Waste Agency Landfill

These facilities are located in both rural and urban areas across the State. The disposal tons of these facilities range from 4,000 tons to over 650,000 tons per year. Combined, the eight facilities receive over 900,000 tons annually. Assuming each landfill serves at least the surrounding community of the facility, the host facilities serve a minimum of 43 percent of the population.

4.2 WASTE GENERATING SECTORS

Waste from the following generating sectors was sampled and characterized for this Study:

- **C&D** – This references C&D materials generated from either construction or demolition projects.
- **Residential** – This encompasses waste generated from single family and multi-family (four units and under) residential properties.
- **ICI** – This includes waste generated at industrial, commercial, and institutional (ICI) facilities.
- **Mixed** – Specifically for the Valentine and SWANN host sites, these are samples with a mix of Residential and ICI MSW.
- **Overall** – This segment aggregates the waste composition data from residential, ICI, and Mixed MSW to reflect the overall composition of materials disposed of in the State.

Waste samples were obtained and sorted based on the generating sectors above. SCS staff performed interviews with facility staff and scalehouse attendants to stratify incoming loads by hauler and generating sector.

4.3 MATERIAL CATEGORIES AND COMPONENTS

4.3.1 Physical Waste Sort (MSW)

The waste sort categories and components list for the Study included those that were in the 2009 Waste Characterization Study. The Study also included additional categories that will help capture more representative data of the materials in the waste stream which may help provide greater information for potential future integrated solid waste management (ISWM) program modifications.

SCS reviewed each material category and component with State staff prior to commencing field work to confirm a mutual understanding of how materials are classified. This was particularly important given continual changes in product packaging that bring new materials into the waste stream. Additionally, the review of materials was helpful to understand and obtain mutual agreement on how to sort composite materials and how to handle instances when food or liquids were contained in plastic, metal, and glass packaging. A total of 65 unique material components were identified for the physical sort. The list of material categories and components is included in **Table 8** (below). Detailed descriptions of each material are included in **Appendix A**.

Table 8. 2025 Physical Sort Material Categories and Components

Material Category: Paper			
No.	Material Component	No.	Material Component
1	Corrugated Cardboard	2	Office Paper
3	Newsprint	4	Magazines
5	Paperboard/Liner Board	6	Other Paper/Non-Recyclable Paper
7	Mixed Paper	8	Compostable Paper
Material Category: Plastic			
No.	Material Component	No.	Material Component
9	PET #1	10	Natural HDPE #2
11	Colored HDPE #2	12	PP #5
13	Expanded Polystyrene	14	Other Numbered Plastics
15	Film and Bags	16	Retail Shopping Bags
17	Other Plastics	18	Plastic Items Containing Lithium Batteries

19	Plastic Single-Use Beverage Containers		
Material Category: Glass			
No.	Material Component	No.	Material Component
20	Clear Glass Containers	21	Brown Glass Containers
22	Green Glass Containers	23	Blue Glass Containers
24	Other Glass	25	Glass Single-Use Beverage Containers
Material Category: Metal			
No.	Material Component	No.	Material Component
26	Aluminum Containers	27	Steel/Tin Containers
28	Other Ferrous Scrap	29	Other Non-Ferrous Scrap
30	Other Metals	31	Non-Recyclable Metal
32	Metal Single-Use Beverage Containers		
Material Category: Organics			
No.	Material Component	No.	Material Component
33	Food Waste – Packaged	34	Food Waste – Unpackaged
35	Yard Waste		
Material Category: C&D Materials			
No.	Material Component	No.	Material Component
36	Linoleum	37	Untreated Wood
38	Treated Wood	39	Roofing Materials
40	Bricks and Porcelain	41	Soil, Rock, Sand
42	Concrete	43	Misc. C&D Waste

Material Category: Other Waste Categories			
No.	Material Component	No.	Material Component
44	Diapers	45	Textiles/Leather
46	Rubber	47	Household Hazardous Waste
48	White Goods	49	Electronic Waste
50	Electronics Containing Lithium Batteries	51	Non-Distinct
52	Oil Filters	53	Waste Oil
54	Thermometers	55	Thermostats
56	Raw Mercury	57	Light-Up Shoes/Buttons
58	Fluorescent Bulbs	59	Lithium Batteries
60	Alkaline and Other Batteries	61	Empty Aerosol Cans
62	Unclassifiable Fines	63	Bulky Items
64	Medical Waste	65	Sharps

4.3.2 Visual Waste Sort (C&D)

Due to the nature of some of the material accepted at landfills in Nebraska, it is not viable to physically sort through the material. Therefore, SCS performed a visual evaluation of C&D materials.

Table 9 lists the full visual sort material component list. Detailed descriptions of each of these components are included in **Appendix B**.

Table 9. 2025 Visual Sort Material Components

No.	Material Component	No.	Material Component
1	Sawn Lumber	21	Brick
2	Engineered Wood/Manufactured Wood	22	Carpet/Carpet Pads
3	Wooden Pallets	23	Vinyl Siding
4	Treated Wood Materials	24	Roofing Materials

No.	Material Component	No.	Material Component
5	Untreated Wood Materials	25	Dirt/Sand/Gravel/Rock
6	Drywall Painted and Non-Painted	26	Metal
7	Asbestos	27	Plastic
8	Contaminated Soils	28	Mattresses and Box Springs
9	Industrial Process Wastes	29	Furniture
10	Sludges	30	Tires
11	Food Waste Loose	31	Corrugated Cardboard
12	Food Waste Packaged	32	Other MSW Recyclable Material
13	Tree Limbs and Stump Waste	33	MSW Non-Recyclable Waste
14	Yard Wastes	34	Other C&D Wastes
15	Other Organics	35	Electronics
16	Wires (i.e., composite metal, etc.)	36	Appliances
17	Ceramics	37	Glass
18	Fiberglass	38	Chemicals
19	Insulation	39	Textiles
20	Concrete	40	Bagged Waste

4.4 SAMPLING PLAN DEVELOPMENT

SCS developed detailed sampling plans for each field activity so that the Study accurately represented the material disposed of in Nebraska. Developing the sampling plans included interviewing the host facility staff to obtain information on the generating sectors and quantities received for disposal at their facility from the previous fiscal year (2024). Using this data, SCS stratified the waste receipts between residential, ICI, mixed, and C&D waste streams to provide a target number of samples from each generating sector. Further information was gathered about haulers that included the quantities and waste generating sectors each major hauler brings to the site. This allowed SCS to put together a sampling plan that specified the number of loads to be targeted by hauler in proportion to the quantity of residential, ICI, mixed, and C&D waste they deliver to the site. **Appendix E** shows the material characterization study sampling plan methodology.

As discussed in Section 4.2 of this report, SCS characterized specific waste generating sectors for this Study. Scalehouse staff were able to provide information on which haulers collect and haul mixed solid waste. If a load was mixed, SCS would interview the driver to determine if the waste was

appropriate for sampling. **Table 10**, **Table 11**, and **Table 12** provide a summary of the number of samples selected at each host facility.

Table 10. Overall Sample Selection by Season and Waste Generating Sector

Season	MSW Residential	MSW ICI	MSW Mixed	C&D	Total Sorts
Winter	77	83	0	90	250
Spring	70	70	0	52	192
Summer	74	64	24	98	260
Fall	65	59	20	75	219
Statewide (Total)	286	276	44	315	921

Table 11. Sample Selection by Host Facility Location and Waste Generating Sector

Host Facility	MSW Residential	MSW ICI	MSW Mixed	C&D	Four-Season Cumulative Total Sorts
Bluff Road	112	88	0	200	400
Hastings	17	23	0	40	80
Lexington	32	8	0	20	60
Norfolk	31	9	0	39	79
Pheasant Point	80	120	0	1	201
Sidney	12	28	0	2	42
SWANN	0	0	40	11	51
Valentine	2	0	4	2	8
Statewide (Total)	286	276	44	315	921

Table 12. Percentage of Samples per Waste Generating Sector

Generating Sector	Total Number Sorts	Percentage
MSW Residential	286	31%
MSW ICI	276	30%
MSW Mixed	44	5%
C&D	315	34%
Statewide (Total)	921	100%

SCS understands a portion of waste that arrived at disposal facilities in Nebraska is delivered via transfer trailers. Sampling and physically sorting this waste is challenging and was avoided if possible, for the following reasons:

- **Categorization** – Transferred waste is typically a mixture of material from all generating sectors, making it nearly impossible to categorize.
- **Composition** – Transferred waste typically has been processed in some way to facilitate loading into a transfer trailer. This processing alters the waste so that it is no longer in an “as-disposed” condition, which is an important criterion for completing this Study.
- **Safety** – The processing of waste that occurs before and during loading into transfer trailers compacts waste significantly. This makes physical separation and sorting difficult.

4.5 TIMING AND SCHEDULE

Fieldwork was completed at each facility for specific time periods for a specific number of days during normal facility operating hours. Fieldwork at each facility was scheduled to sample and sort waste for a typical week, and as such avoided special events or activities that could impact the normal waste received at a facility. **Table 13** below summarizes the field schedule for the Study.

Table 13. 2025 Fieldwork Schedule

Winter Sort Dates	Sort Locations
January 13 th – January 17 th	Pheasant Point Landfill
January 27 th – January 31 st	Bluff Road Landfill
February 20 th – February 21 st	Norfolk Transfer Station
February 24 th – February 25 th	Sidney Landfill
February 27 th – February 28 th	Hastings Landfill
Spring Sort Dates	Sort Locations
April 7 th – April 11 th	Bluff Road
April 28 th – May 2 nd	Pheasant Point
May 12 th – May 13 th	Lexington
May 15 th – May 16 th	Sidney
Summer Sort Dates	Sort Locations
July 14 th – July 18 th	Bluff Road
July 21 st – July 25 th	Pheasant Point
August 11 th	Valentine
August 13 th – August 14 th	Lexington
August 18 th – August 19 th	Chadron
August 21 st – August 22 nd	Hastings
Fall Sort Dates	Sort Locations
September 8 th – September 9 th	Norfolk
September 11 th – September 12 th	Chadron
November 10 th – November 14 th	Bluff Road
November 17 th – November 21 st	Pheasant Point

4.6 FIELD WORK COLLECTION METHODS

Field work methods used to collect data for the Study were consistent across host facility locations.

4.6.1 Equipment

The equipment used to carry out the Study included:

- **Containers** – Approximately 65 containers were used to collect samples, sort waste components, and weigh sorted samples. Containers were a mix of 32-gallon trash cans, 18-gallon totes, and 5-gallon buckets. The tare weight for each container was captured at the beginning of each sorting event. A label with the material name, a unique container number, and the recorded tare-weight was placed onto each container with tape, ensuring the label was secure and waterproof prior to the start of field activities. **Figure 1** (below) depicts the containers used and an example of the typical physical sort layout.

Figure 1. Physical Sort Area Layout



- **Sort Table** – The sorting table was either a piece of plywood or a welding table that was impermeable and capable of supporting 150 pounds of waste materials. The table was placed on multiple 55-gallon drums or sawhorses. **Figure 2** (next page) displays an example of the sorting tables used.

Figure 2. Physical Sort Table



- **Scales** – CAS factory-calibrated scales were used to weigh samples and sorted waste components. Scales recorded weight to the nearest tenth of a pound.
- **Personal Protective Equipment (PPE)** – Protecting the health and safety of all project staff was the number one priority of the project. Field staff were required to wear steel/composite toe shoes or boots, safety glasses, reflective safety vests, and nitrile and puncture-resistant gloves at all times when participating in fieldwork.
- **Data Forms** – SCS created a separate data collection form for each waste sample sorted during the project. This form contained fields to capture information on the waste sample, including generating sector and hauler information. For MSW samples, this form was used to record material component weights. For C&D samples, this form was used to document the approximate dimensions and estimate the proportions of material components.

4.6.2 MSW Manual Sorting Process

Data quality assurance of this project began with selecting the appropriate samples for sorting. SCS employed several procedures and quality control measures to confirm that the samples obtained for sorting were representative of residential, ICI, or C&D waste streams disposed of in Nebraska.

SCS created site-specific Health & Safety Plans for each host facility as safety is the top priority during sample collection and sorting activities. The details were discussed with the SCS Sort Crew every morning before commencing field activities.

4.6.2.1 Sample Selection

SCS appointed a Sampling Manager (from SCS staff) to oversee selection and collection of each waste sample. This individual utilized the site-specific sampling plan to identify which trucks to stop for further waste screening. The Sampling Manager monitored trucks entering each facility. Based on the sampling plan, the Sampling Manager stopped trucks and interviewed the driver to obtain details on the waste contained in the vehicle. The driver was asked whether the waste contained in the truck was residential, ICI, or C&D. If the driver indicated that the waste in the truck was a mixed load, follow-up questions were asked to estimate the percentage of waste from residential vs. ICI waste sources. Mixed loads of 75 percent or more of a generating sector were counted towards that majority generating sector. Mixed loads of less than 75 percent of either residential or commercial were categorized as mixed.

The Sampling Manager directed the driver of a truck selected for sampling to a designated area where the waste load would be discharged. The SCS Sampling Manager then visually inspected the waste to confirm the waste load should be sampled.

4.6.2.2 Sample Gathering

At the direction of the Sampling Manager, a host facility heavy equipment operator obtained a sample of waste from a randomly selected section of the waste pile. The operator scooped up a sample of the waste and transported it over to the designated sorting area. The bucket of from heavy equipment containing the waste was lowered and tilted to the desired position for the sample to be put into tared 32-gallon trash containers. The sample weight was then documented. Consistent with the ASTM International Standard Test Method for Determination of the Composition of Unprocessed Municipal Solid Waste (ASTM D5231-92, Revised 2024), each sample was weighed until approximately 200 to 220 pounds of waste was obtained. Each waste sample was labeled and organized for identification.

4.6.2.3 Physical Sorting Process

The manual sorting of MSW followed a five-step process that is summarized below. Waste materials were sorted into 65 material components previously summarized previously. A sample physical sort field form is included in **Appendix C**.

This five-step process was repeated until all the samples were characterized. Waste samples were maintained in as-disposed conditions, or as close to this as possible, until the actual sorting began. Factors that might affect the conditions of the waste materials, such as compaction or rainfall, were mitigated so that the composition or condition of the sample did not change.

Step	Action
1.	A sample of waste was transferred from containers to a sort table and photographed; large or heavy items, such as wood panels or bulky waste, were placed directly into the appropriate container for subsequent weighing.
2.	Plastic bags containing materials were opened and contents were manually sorted according to the agreed-upon list of materials; separated materials were placed in a unique container and this process continued until the sample had been completely sorted; the SCS Sorting Manager observed operations and provided continual quality control of the sorted waste categories.
3.	Sorting of materials continued until the sample has been characterized down to small indistinguishable particle size of 2 inches or less; a photograph of these materials was taken, and materials were removed from the sort table and placed in a separate container for weighing as "unclassifiable fines."
4.	Containers with the sorted materials were individually weighed by the SCS Sorting Manager who also performed additional quality control measures to confirm the purity of each sorted material category and document the number of containers per material category; tare weights of the empty containers and containers with the sorted materials were recorded on a sample data sheet which was unique for every sample; measurements were made to the nearest tenth of a pound. During this step, the volume consumed by the material in the container was recorded. SCS used consistent containers for the materials that have known volumes. SCS counted and documented the number of plastic, glass, and metal beverage containers identified in each sample. Additionally, SCS counted bulky items in the waste load and lithium-ion batteries (with or without casing) in each sample.
5.	Upon completion of weighing sorted materials and recording the data for each sample, the materials were placed in a container for disposal and hazardous or dangerous materials (i.e., needles, lithium batteries, etc.) were placed in a separate container for diversion (if provided by a host facility); containers were then emptied as appropriate by the host facility.

4.6.3 C&D Visual Characterization Process

Bulky waste materials such as furniture and C&D wastes are not conducive to manual sorting and obtaining a 220-pound sample of this waste material would skew the waste characterization results due to the size and weight of much of this material. As a result, this material was visually characterized.

4.6.3.1 Sample Selection

As a part of each host facility's sampling plan, the number of waste samples needed for C&D visuals by hauler was determined in advance. The SCS Sampling Manager selected loads and conducted interviews with the truck drivers using the same protocol as used for the physical sort samples.

4.6.3.2 Sample Gathering (Data Collection)

When a waste load was identified for sampling, the driver was directed to a separate area near the working face to discharge the entire waste load. The driver was directed to spread the load out as much as possible so a complete and comprehensive visual inspection could be performed.

The SCS Sampling Manager walked around the entire discharged waste load and made notes on the materials present in the sample. Based on each material's volume, the SCS Sampling Manager estimated the percent composition of each of the material components in the load.

The following are the action steps taken by the Sampling Manager to successfully characterize C&D waste materials. A sample visual characterization field form is included in **Appendix D**.

Step	Action
1.	As described above, the screening protocol for truck selection, driver interviews, visual inspection, and data recording was completed for each load of C&D visually characterized to confirm only representative waste samples were obtained.
2.	The load was tipped in a designated location and, if necessary, SCS personnel worked with the host facility to request a loader operator to spread the contents of the load. However, typically the waste vehicle driver tipped the load in a manner such that a visual characterization of C&D waste was adequately performed without needing to spread the pile out. At this step, SCS photographed the sample.
3.	The SCS C&D Characterization Manager observed the entire load of materials, noted the major material components in the load, and estimated the percent of the load that comprises each major material type.
4.	The SCS C&D Characterization Manager made a second pass around the entire load, noted the secondary (smaller quantity) material components in the load, and estimated the percentage of the load that comprises each material type.
5.	All data was recorded on a data collection form unique to each C&D sample visually characterized. SCS personnel confirmed that the sum of the estimated percentages equaled 100.

4.7 DATA RECORDING

The SCS Field Manager was responsible for recording all data related to this project. Each waste sample analyzed as a part of this Study had its own unique waste sample form where all information and data about the sample was recorded. Sample information and weight data were recorded immediately after it was obtained, and the physical waste components were weighed. In addition, a separate waste sample tracker document was maintained by SCS the Field Manager to serve as an additional check on the number and source of samples obtained and sorted. At the end of each day of fieldwork, the SCS Sorting Manager reviewed all the data and matched the individual data sheets to the waste sample tracker document to confirm accurate and consistent tracking of the data.

4.8 STATISTICAL METHODS

SCS utilized specific statistical methods for data analysis as detailed below.

4.8.1 MSW Physical Sorts

Using standard statistical procedures, SCS developed detailed estimates of mean composition and standard deviations for each of the 65 material components evaluated for this Study. The composition was developed for the residential, ICI, and mixed waste generating sectors. Data from generating sectors was aggregated to develop the overall Nebraska Statewide waste composition with a 90 percent confidence interval calculated for each material component.

4.8.2 C&D Visual Characterizations

Due to the nature of data gathering for C&D visual characterizations, SCS does not use standard deviation or confidence intervals.

5.0 RESULTS

This section provides the detailed results of the Study. From January 2025 through November 2025, SCS sorted over 140,000 pounds of MSW through 606 samples at eight solid waste management facilities.

The results presented in this section include waste composition and comparisons by varying generating sectors, season, and facility. Detailed results are provided in the following appendices:

- Appendix F – Detailed MSW Composition Tables Overall and by Waste Generating Sector
- Appendix G – Detailed MSW Composition Tables by Season
- Appendix H – Detailed MSW Composition Tables by Host Facility
- Appendix I – 2009 vs 2025 Category & Component Combination Methodology
- Appendix J – 2009 vs 2025 Study Detailed MSW Composition Tables Overall and by Waste Generating Sector
- Appendix K – Detailed C&D Composition Tables by Season and Host Facility

Note: Due to rounding, aggregated data presented throughout this report may not equal exact total percentages.

5.1 OVERALL STATEWIDE MSW COMPOSITION RESULTS

This section displays the results of the statewide MSW composition as overall results (combining residential, ICI and mixed), statewide MSW residential, statewide MSW ICI, and statewide mixed based on sampling events at the eight host facilities.

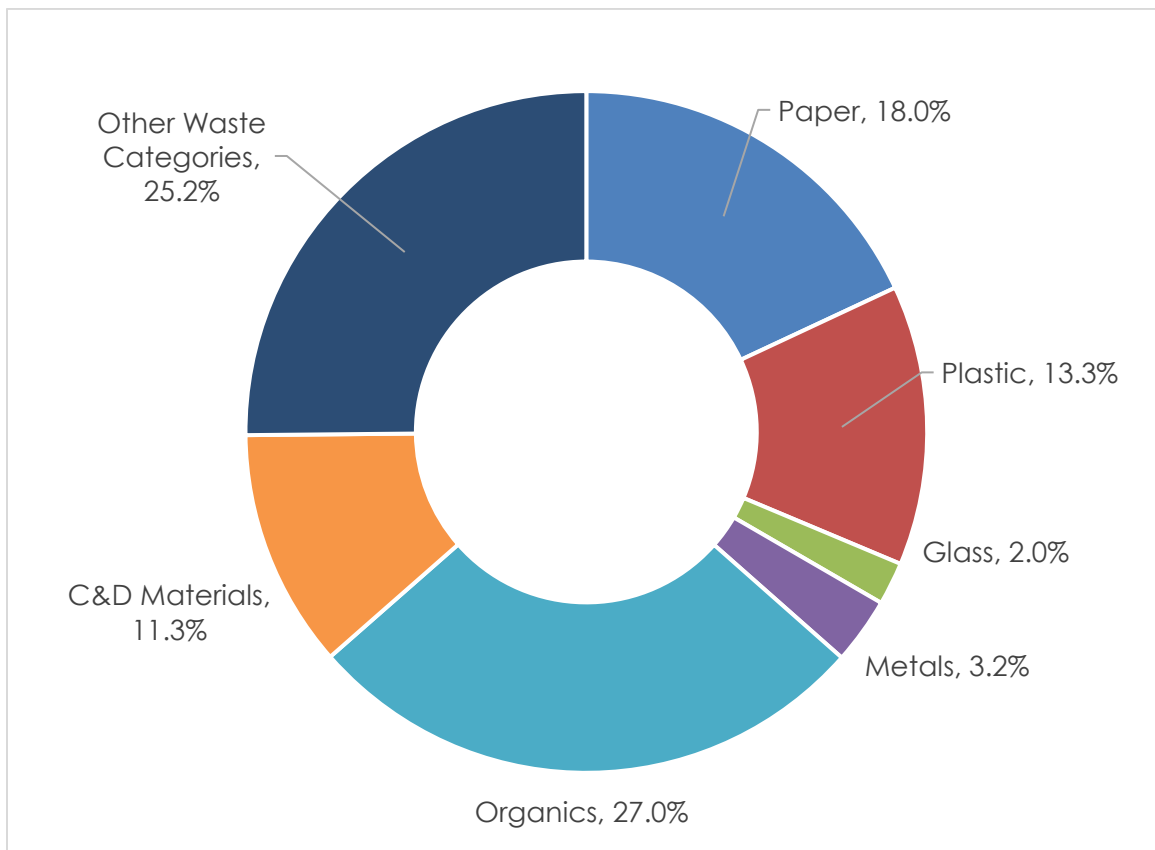
5.1.1 Statewide MSW Overall Composition

Exhibit 4 (next page) provides a summary of the seven MSW material categories for Nebraska as a whole. Data is provided for each category as a percentage of the total. Note that the overall waste composition includes all eight host facilities combined. Overall, the MSW material categories with the highest percentages are as follows:

- **Organics:** This category accounts for 27.0 percent of the overall waste stream. Food Waste – Unpackaged is the material component that contributes the most to this percentage at 16.4 percent. The second largest component is Yard Waste with 7.9 percent.
- **Other Waste Categories:** 25.2 percent of MSW is categorized as Other Waste Categories. Textiles/Leather (4.9 percent), Bulky Items (4.4 percent), and Non-Distinct (4.1 percent), and are the three largest components within this waste category.
- **Paper:** This category constitutes 18.0 percent of the overall waste composition. The materials with the highest percentages in this category are Corrugated Cardboard (5.3 percent), Mixed Paper (3.8 percent), and Other Paper/Non-Recyclable Paper (2.9 percent).

Appendix F provides a detailed profile of the overall MSW composition that includes the percentage of all 65 material components. For each material component, the mean percent, standard deviation, and 90 percent confidence intervals are included. The sum of the individual material components for a particular category equals the percentage shown for that category.

Exhibit 4. Statewide MSW Material Composition - Overall



5.1.2 Statewide MSW Residential Composition

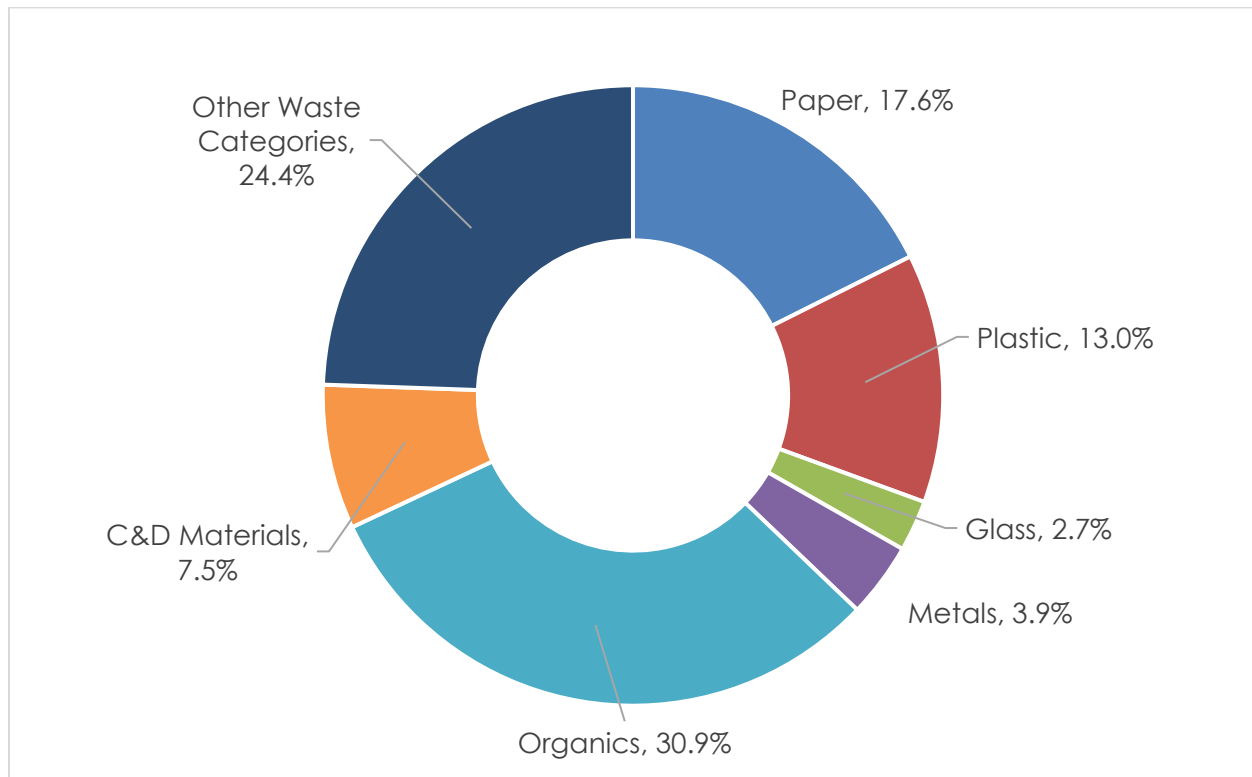
Exhibit 5 (next page) provides a summary of the seven MSW material categories for residential waste in Nebraska. Data is provided for each category as a percentage of the total. Note that the residential waste composition includes all eight host facilities combined. Overall, the residential MSW material categories with the highest percentages are as follows:

- **Organics:** This category accounts for 30.9 percent of the residential waste stream. Food Waste – Unpackaged is the material component that contributes the most to this percentage at 15.9 percent. Yard Waste (12.6 percent) and Food Waste – Packaged (2.4 percent) comprise the remaining weight.
- **Other Waste Categories:** 24.4 percent of residential MSW is categorized as Other Waste Categories. The three largest components are Textiles/Leather (5.9 percent), Non-Distinct (3.9 percent), and Bulky Items (3.8 percent).
- **Paper:** This category constitutes 17.6 percent of the overall waste composition. The largest material component within this category is Mixed Paper with 4.2 percent, followed by Corrugated Cardboard with 3.5 percent.

Appendix F provides a detailed profile of the residential MSW composition that includes the percentage of all 60 material components. For each material component, the mean percent,

standard deviation, and 90 percent confidence intervals are included. The sum of the individual material components for a particular category equals the percentage shown for that category.

Exhibit 5. Statewide MSW Material Composition - Residential



5.1.3 Statewide MSW ICI Composition

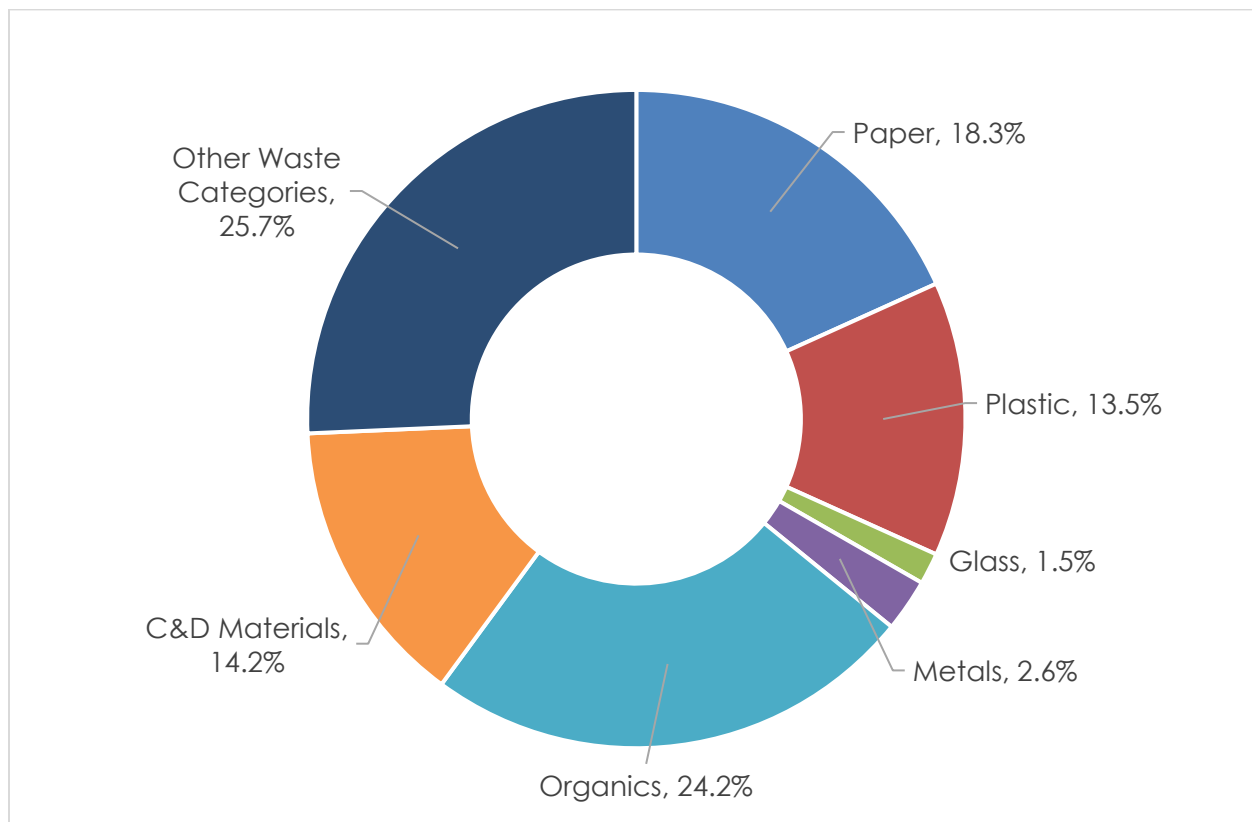
Exhibit 6 (next page) provides a summary of the seven MSW material categories for ICI waste in Nebraska. Data is provided for each category as a percentage of the total. Note that the ICI waste composition includes all eight host facilities combined. Overall, the ICI MSW material categories with the highest percentages are as follows:

- **Other Waste Categories:** This category accounts for 25.7 percent of the ICI waste stream. The largest material components in this category are Bulky Items (4.9 percent), Non-Distinct (4.3 percent), and Textiles/Leather (4.2 percent).
- **Organics:** 24.2 percent of ICI MSW is categorized as Organics. Food Waste – Unpackaged is the largest material component within this category at 16.8 percent. The 2 remaining organic components have less than 5 percent each: Food Waste – Packaged and Yard Waste.
- **Paper:** This category constitutes 18.3 percent of the ICI waste composition. The largest material component within this category is Corrugated Cardboard with 6.5 percent, followed by Mixed Paper with 3.5 percent.

Appendix F provides a detailed profile of the ICI MSW composition that includes the percentage of all 65 material components. For each material component, the mean percent, standard deviation, and

90 percent confidence intervals are included. The sum of the individual material components for a particular category equals the percentage shown for that category.

Exhibit 6. Statewide MSW Material Composition – ICI



5.1.4 Statewide MSW Mixed Composition

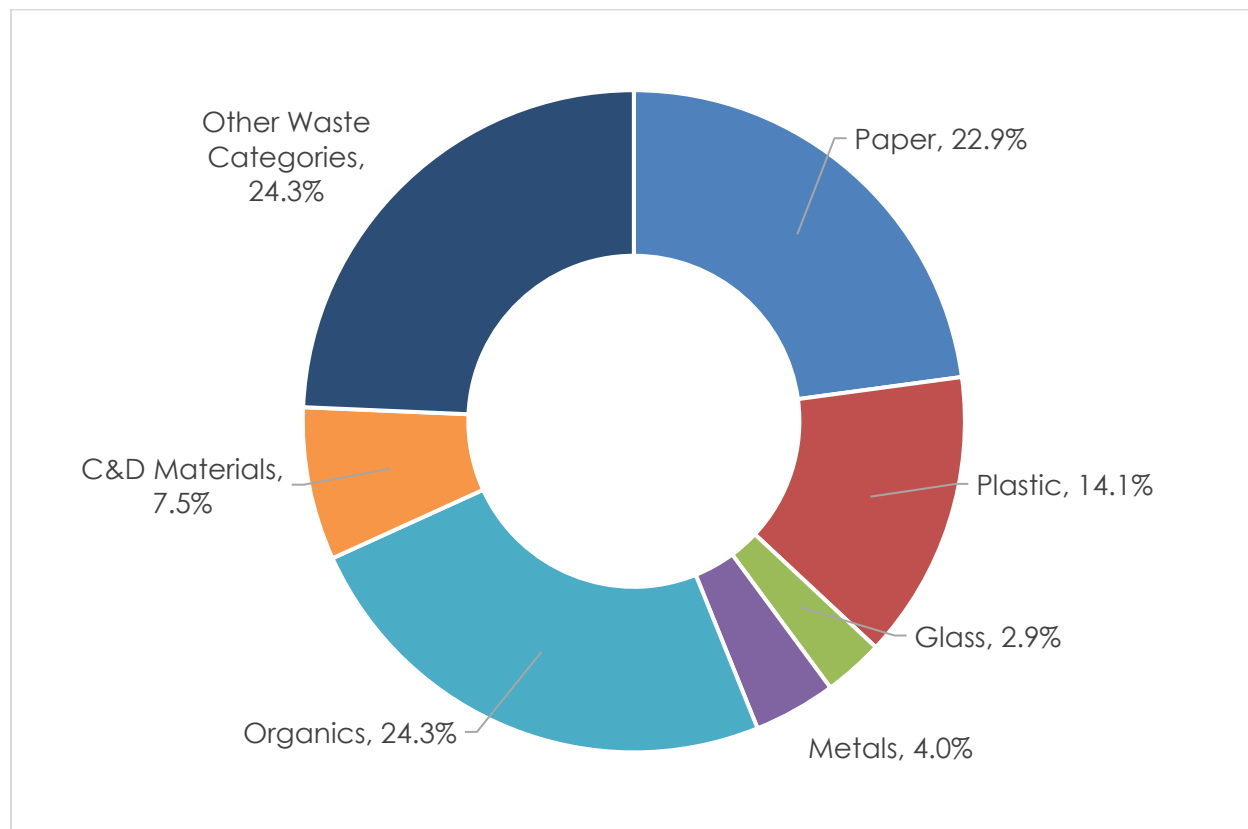
Exhibit 7 (next page) provides a summary of the seven MSW material categories for mixed waste in Nebraska. Data is provided for each category as a percentage of the total. Note that the mixed waste composition includes all eight host facilities combined. Overall, the MSW material categories with the highest percentages are as follows:

- **Other Waste Categories:** 24.3 percent of mixed MSW is categorized as Other Waste Categories. Diapers (4.3 percent) is the largest component, followed by a tie at 4.0 percent for second place between Bulky Items and Textiles/Leather.
- **Organics:** This category is tied with Other Waste Categories with 24.3 percent of mixed waste. Food Waste – Unpackaged highest with 14.1 percent. The 2 remaining organic components are Yard Waste with 7.4 percent and Food Waste – Packaged with 2.8 percent.
- **Paper:** This category constitutes 22.9 percent of the mixed waste composition. The largest material component within this category is Corrugated Cardboard with 8.3 percent, followed by Mixed Paper with 5.1 percent.

Appendix F provides a detailed profile of the mixed MSW composition that includes the percentage of all 65 material components. For each material component, the mean percent, standard deviation,

and 90 percent confidence intervals are included. The sum of the individual material components for a particular category equals the percentage shown for that category.

Exhibit 7. Statewide MSW Material Composition – Mixed



5.1.5 Statewide MSW Most Prevalent Materials

Table 14 (next page) provides a listing of the top 10 most prevalent material components as calculated for the overall, residential, ICI, and mixed MSW composition. Of the top 10 prevalent material components, 9 are present in the residential list (excluding Diapers), 8 are present in the ICI list (excluding Medical Waste and Untreated Wood) and 8 are present in the mixed list (excluding Diapers and Paperboard/Linerboard). A listing of the top 10 most prevalent material components as calculated for the overall for each participating host facility is located in Appendix H.

Table 14. Statewide MSW Material Composition – Prevalent Materials Overall and by Generating Sector

	Nebraska Statewide (Residential, ICI, and Mixed)		Residential		ICI		Mixed	
	Material	Pct.	Material	Pct.	Material	Pct.	Material	Pct.
1	Food Waste - Unpackaged	16.4%	Food Waste - Unpackaged	15.9%	Food Waste - Unpackaged	16.8%	Food Waste - Unpackaged	14.1%
2	Yard Waste	7.9%	Yard Waste	12.6%	Film and Bags	6.5%	Corrugated Cardboard	8.3%
3	Film and Bags	6.0%	Textiles/Leather	5.9%	Corrugated Cardboard	6.5%	Yard Waste	7.4%
4	Corrugated Cardboard	5.3%	Film and Bags	5.2%	Bulky Items	4.9%	Film and Bags	6.0%
5	Textiles/Leather	4.9%	Mixed Paper	4.2%	Treated Wood	4.5%	Mixed Paper	5.1%
6	Bulky Items	4.4%	Non-Distinct	3.9%	Yard Waste	4.5%	Diapers	4.3%
7	Non-Distinct	4.1%	Bulky Items	3.8%	Non-Distinct	4.3%	Textiles/Leather	4.0%
8	Mixed Paper	3.8%	Unclassifiable Fines	3.6%	Textiles/Leather	4.2%	Bulky Items	4.0%
9	Treated Wood	3.7%	Diapers	3.6%	Medical Waste	4.1%	Unclassifiable Fines	3.9%
10	Unclassifiable Fines	3.0%	Corrugated Cardboard	3.5%	Untreated Wood	3.8%	Paperboard/Liner Board	3.2%
	Overall Cumulative Percent	59.4%	Residential Cumulative Percent	62.3%	ICI Cumulative Percent	60.0%	Mixed Cumulative Percent	60.3%

5.1.6 Overall Statewide Item Counts

During sampling events, specific items were recorded, counted, and/or weighed: Appliances, Tires, & Mattresses, Plastic Items with Lithium Batteries, Electronics with Lithium Batteries, Lithium Batteries, Plastic Single-Use Beverage Containers, Glass Single-Use Beverage Containers, and Metal Single-Use Beverage Containers.

When possible, a visual scan was completed of the entire MSW load delivery. Appliances, Tires, and Mattresses were noted, regardless of if that material was within the randomly selected area for the sample. The majority of items seen were mattresses. **Table 15** (next page) indicates that 72 of these select items were recorded during sampling activities.

Table 15. Statewide MSW Specific Item Counts – Appliances, Tires, and Mattresses in Sample Load

	Total Item Counts
Appliances, Tires, and Mattresses	72
Statewide (Total)	72

Table 16 below shows the quantities of lithium batteries discovered during sorting events. A total of 165 lithium batteries (or items containing lithium batteries) were found during sorting events. Vaping devices were the most common item with a lithium battery.

Table 16. Statewide MSW Specific Item Counts – Vaping Devices & Lithium-Ion Batteries

	Total Item Counts
Plastic Items with Lithium Batteries	88
Electronics with Lithium Batteries	24
Lithium Batteries	53
Statewide (Total)	165

The 10 states with beverage container deposit laws divert approximately between 60 and 90 percent, which is more than double or even triple the rates in states without them. Since Nebraska does not have a “bottle bill,” a count of single-use beverage containers was recording during sorting events. As shown in **Table 17** below, nearly 56,000 containers were discovered in the 606 MSW samples.

Table 17. Statewide MSW Specific Item Counts – Deposit Beverage Containers

	Total Item Counts
Plastic Single-Use Beverage Containers	26,893
Glass Single-Use Beverage Containers	2,283
Metal Single-Use Beverage Containers	26,618
Statewide (Total)	55,794

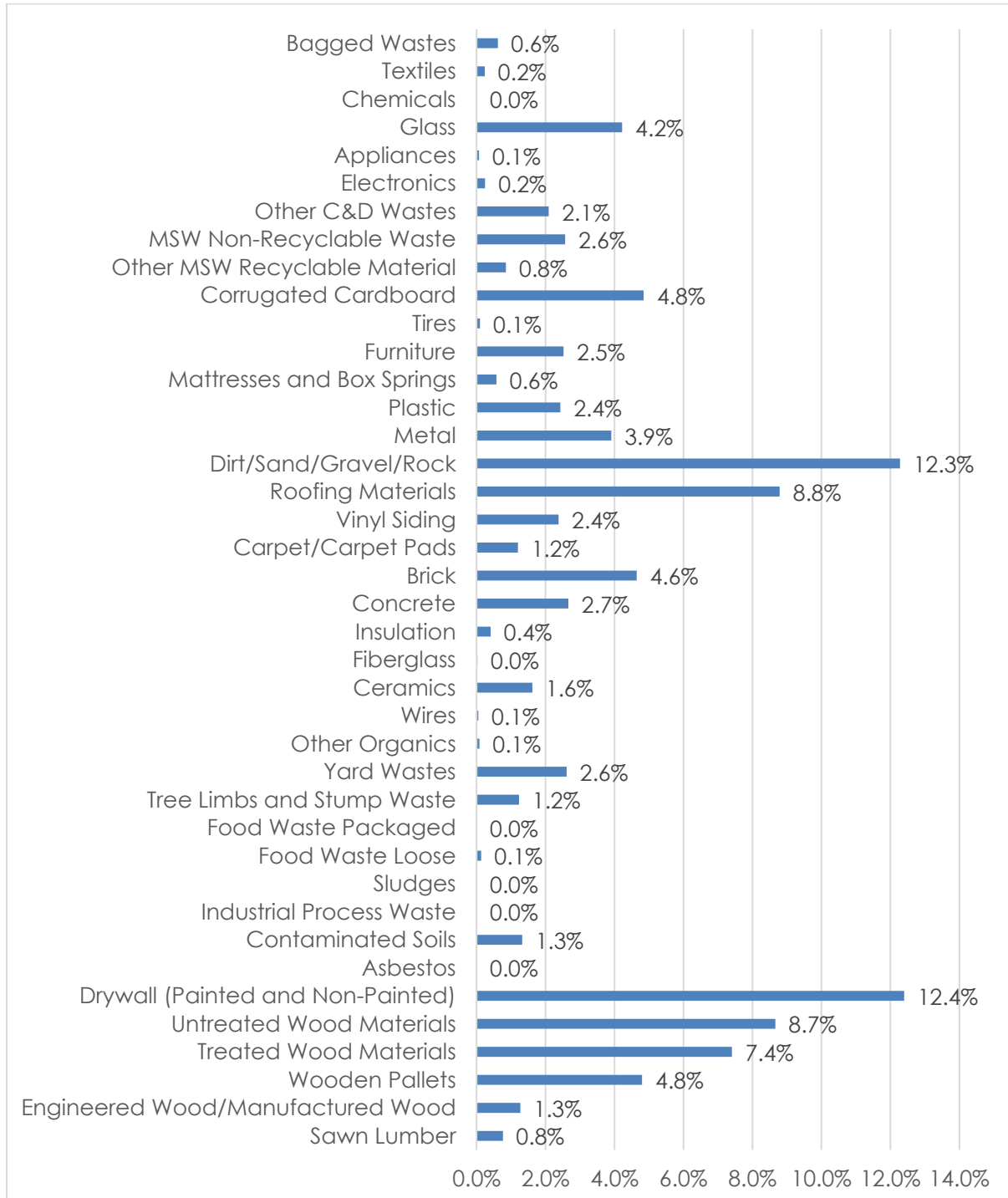
5.1.7 Overall Statewide C&D Composition

Exhibit 8 (next page) provides a summary of the material categories that comprise the statewide C&D delivered to the seven host facilities. No C&D loads were able to be visually inspected at Pheasant Point Landfill due to safety concerns. Data is provided for each component as a percentage of the total estimated weight.

The three most prevalent material components account for over 30 percent and are noted below:

- Drywall (Painted and Non-Painted) – 12.4 percent
- Dirt/Sand/Gravel/Rock – 12.3 percent
- Roofing Materials – 8.8 percent

Exhibit 8. Statewide C&D Material Composition - Overall



5.2 OVERALL STATEWIDE MSW COMPOSITION BY GENERATING SECTOR

Exhibit 9 below and Table 18 (next page) present the mean percentage of material category overall and by generating sector. A few notables:

- Residential MSW has the most Organics waste at 31 percent.
- ICI MSW has the highest amount of C&D materials at 14 percent.
- Mixed MSW has a higher amount of paper than other generating sectors at 23 percent.

Exhibit 9. Statewide MSW Material Composition – Overall and by Generating Sector

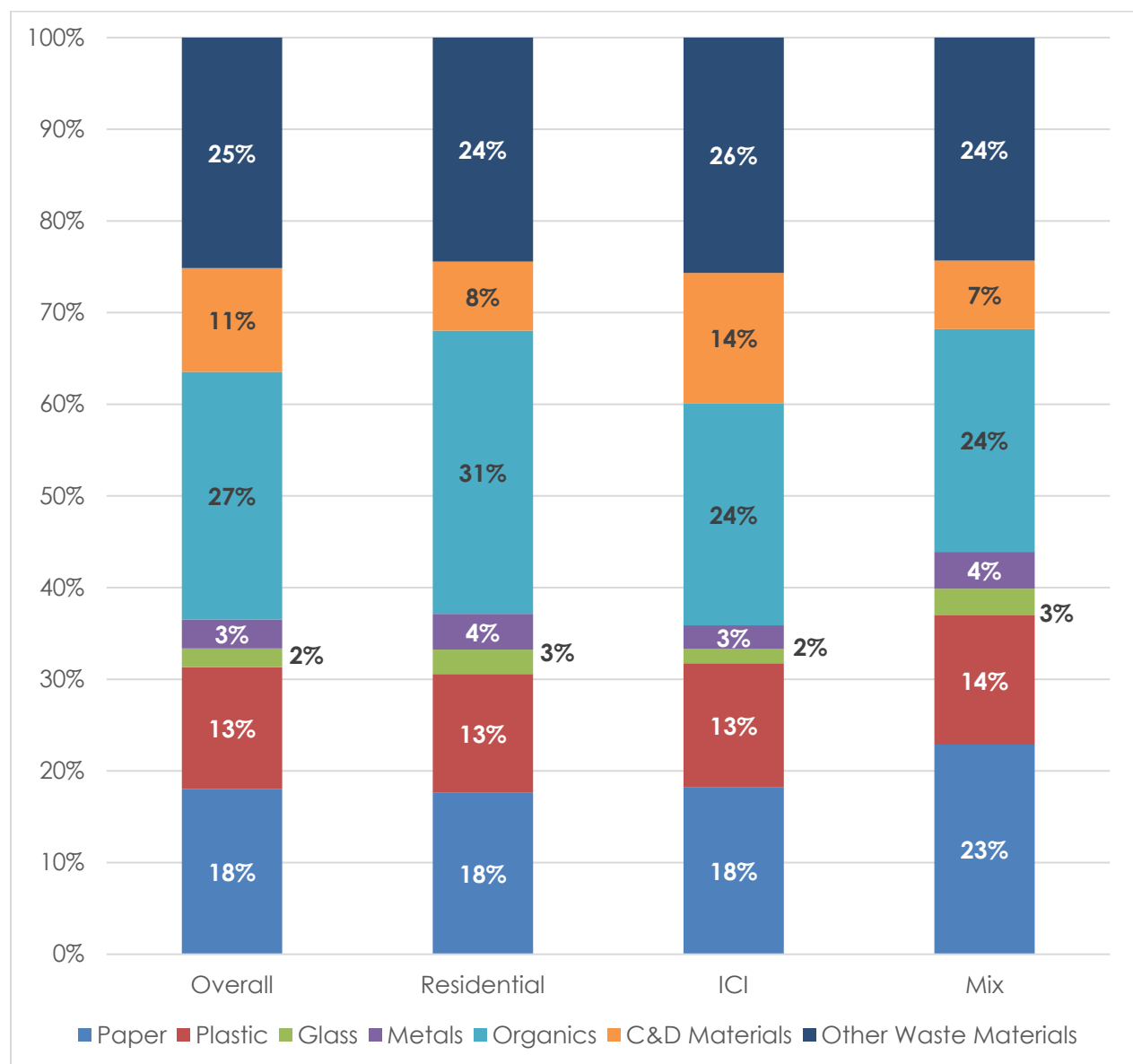


Table 18. Statewide MSW Material Composition – Prevalent Materials Overall and by Generating Sector

Material Categories	Material Components	Overall	Residential	ICI	Mix
Paper					
	Corrugated Cardboard	5.3%	3.5%	6.5%	8.3%
	Office Paper	1.0%	1.1%	0.8%	1.5%
	Newsprint	0.3%	0.4%	0.1%	0.4%
	Magazines and Other Glossy Paper	0.8%	1.0%	0.6%	0.9%
	Paperboard/Liner Board	2.1%	2.3%	2.0%	3.2%
	Other Paper/Non-Recyclable Paper	2.9%	2.7%	3.0%	3.2%
	Mixed Paper	3.8%	4.2%	3.5%	5.1%
	Compostable Paper	2.0%	2.2%	1.8%	0.2%
	Total Paper	18.0%	17.6%	18.3%	22.9%
Plastic					
	PET #1	0.7%	0.8%	0.6%	0.7%
	Natural HDPE #2	0.4%	0.4%	0.4%	0.5%
	Colored HDPE #2	0.4%	0.5%	0.3%	0.8%
	PP #5	0.8%	0.8%	0.7%	0.8%
	Expanded Polystyrene	0.7%	0.6%	0.7%	0.7%
	Other Numbered Plastics	0.7%	0.9%	0.7%	0.7%
	Film and Bags	6.0%	5.2%	6.5%	6.0%
	Retail Shopping Bags	0.7%	0.8%	0.7%	0.7%
	Other Plastics	1.9%	1.7%	2.0%	1.8%
	Plastic Items Containing Lithium Batteries	0.0%	0.0%	0.0%	0.0%
	Plastic Single-Use Beverage Containers	1.0%	1.1%	0.9%	1.5%
	Total Plastic	13.3%	13.0%	13.5%	14.1%
Glass					
	Clear Glass Containers	0.7%	0.9%	0.5%	0.8%
	Brown Glass Containers	0.1%	0.1%	0.0%	0.1%
	Green Glass Containers	0.2%	0.2%	0.1%	0.1%

Material Categories	Material Components	Overall	Residential	ICI	Mix
	Blue Glass Containers	0.0%	0.0%	0.0%	0.0%
	Other Glass	0.4%	0.5%	0.3%	0.4%
	Glass Single-Use Beverage Containers	0.7%	0.8%	0.6%	1.6%
	Total Glass	2.0%	2.7%	1.5%	2.9%
Metal					
	Aluminum Containers	0.2%	0.2%	0.1%	0.3%
	Steel/Tin Containers	0.7%	0.8%	0.5%	0.9%
	Other Ferrous Scrap	1.0%	1.2%	0.9%	1.1%
	Other Non-Ferrous Scrap	0.4%	0.5%	0.3%	0.2%
	Other Metals	0.1%	0.1%	0.1%	0.0%
	Non-Recyclable Metal	0.1%	0.2%	0.1%	0.0%
	Metal Single-Use Beverage Containers	0.7%	0.9%	0.6%	1.4%
	Total Metals	3.2%	3.9%	2.6%	4.0%
Organics					
	Food Waste - Packaged	2.7%	2.4%	2.9%	2.8%
	Food Waste - Unpackaged	16.4%	15.9%	16.8%	14.1%
	Yard Waste	7.9%	12.6%	4.5%	7.4%
	Total Organics	27.0%	30.9%	24.2%	24.3%
C&D Materials					
	Linoleum	0.1%	0.1%	0.1%	1.5%
	Untreated Wood	2.8%	1.5%	3.8%	2.2%
	Treated Wood	3.7%	2.7%	4.5%	1.9%
	Roofing Materials	0.5%	0.1%	0.9%	0.0%
	Bricks and Porcelain	0.5%	0.5%	0.4%	0.1%
	Soil, Rock, Sand	1.6%	0.9%	2.1%	0.1%
	Concrete	0.5%	0.2%	0.7%	0.2%
	Misc. C/D Waste	1.6%	1.5%	1.7%	1.4%
	Total C&D Materials	11.3%	7.5%	14.2%	7.5%

Material Categories	Material Components	Overall	Residential	ICI	Mix
Other Waste Categories					
	Diapers	2.8%	3.6%	2.2%	4.3%
	Textiles/Leather	4.9%	5.9%	4.2%	4.0%
	Rubber	0.9%	0.9%	0.9%	1.0%
	Household Hazardous Waste	0.7%	0.3%	1.0%	0.5%
	White Goods	0.1%	0.1%	0.1%	0.0%
	Electronic Waste	1.2%	1.3%	1.1%	1.8%
	Electronics Containing Lithium Batteries	0.0%	0.0%	0.0%	0.1%
	Non-Distinct	4.1%	3.9%	4.3%	3.1%
	Oil Filters	0.1%	0.0%	0.1%	0.3%
	Waste Oil	0.1%	0.1%	0.0%	0.1%
	Thermometers	0.0%	0.0%	0.0%	0.0%
	Thermostats	0.0%	0.0%	0.0%	0.0%
	Raw Mercury	0.0%	0.0%	0.0%	0.0%
	Light-Up Shoes/Buttons	0.0%	0.0%	0.0%	0.0%
	Fluorescent Bulbs	0.0%	0.0%	0.0%	0.0%
	Lithium Batteries	0.0%	0.1%	0.0%	0.0%
	Alkaline and Other Batteries	0.0%	0.1%	0.0%	0.1%
	Empty Aerosol Cans	0.2%	0.2%	0.1%	0.3%
	Unclassifiable Fines	3.0%	3.6%	2.5%	3.9%
	Bulky Items	4.4%	3.8%	4.9%	4.0%
	Medical Waste	2.5%	0.4%	4.1%	1.0%
	Sharps	0.0%	0.0%	0.0%	0.0%
	Total Other Waste Categories	25.2%	24.4%	25.7%	24.3%
	Total of Overall Waste	100%	100%	100%	100%

5.3 OVERALL STATEWIDE MSW COMPOSITION BY SEASON

Exhibit 10 below and Table 19 (next page) present the mean percentage of material category by season. A few notables:

- Summer has the highest percentage of Paper and Other Waste Materials (19.7 percent and 29.1 percent respectively).
- Fall has the highest percentage of Organics at 36.3 percent, an 11 percent increase over other seasons most likely due to seasonal yard waste materials.
- Winter has the highest percentage of C&D Materials with 21.1 percent, doubling or even tripling C&D material percentages in other seasons.

Exhibit 10. Overall Statewide MSW Composition by Season

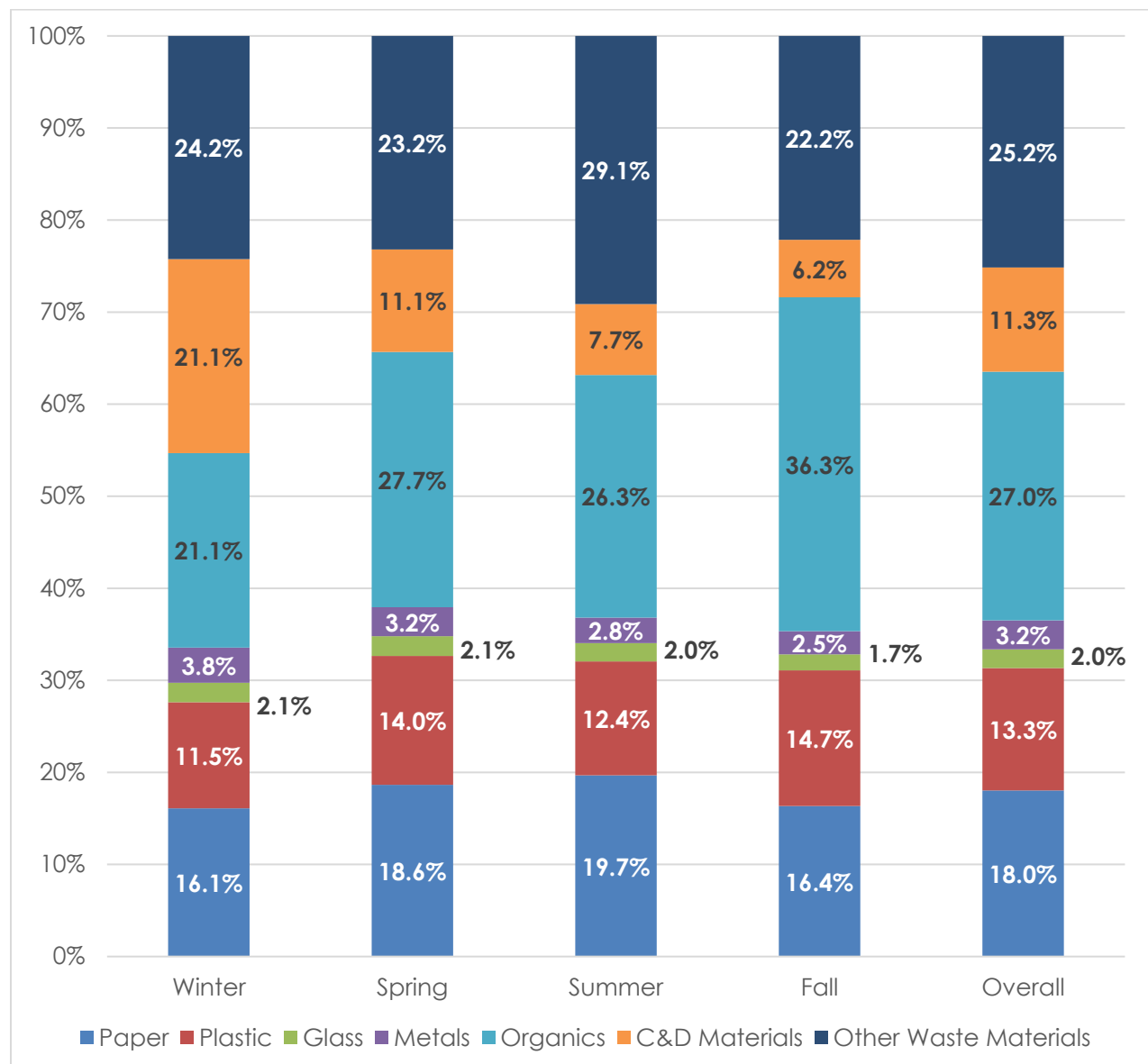


Table 19. Overall Statewide MSW Composition by Season

Material Category	Winter	Spring	Summer	Fall	Overall
Paper	16.1%	18.6%	19.7%	16.4%	18.0%
Plastic	11.5%	14.0%	12.4%	14.7%	13.3%
Glass	2.1%	2.1%	2.0%	1.7%	2.0%
Metals	3.8%	3.2%	2.8%	2.5%	3.2%
Organics	21.1%	27.7%	26.3%	36.3%	27.0%
C&D Materials	21.1%	11.1%	7.7%	6.2%	11.3%
Other Waste Materials	24.2%	23.2%	29.1%	22.2%	25.2%
Total	100%	100%	100%	100%	100%

5.4 OVERALL STATEWIDE MSW COMPOSITION BY HOST FACILITY

Exhibit 11 next page and **Table 20** (page 43) present the mean percentage of material category by host facility. A side-by-side comparison of most prevalent materials for each host facility can be found in Appendix H. A few notables:

- There is less than 5 percent variance between Plastic, Glass, and Metals across the eight facilities.
- Hastings Sanitary Landfill has the highest amount of Other Waste Materials with 39 percent. This is most likely due to animal carcasses from Hastings Hide, which accounted for 10 percent of the landfill's waste stream.

Exhibit 11. Overall Statewide MSW Composition by Host Facility

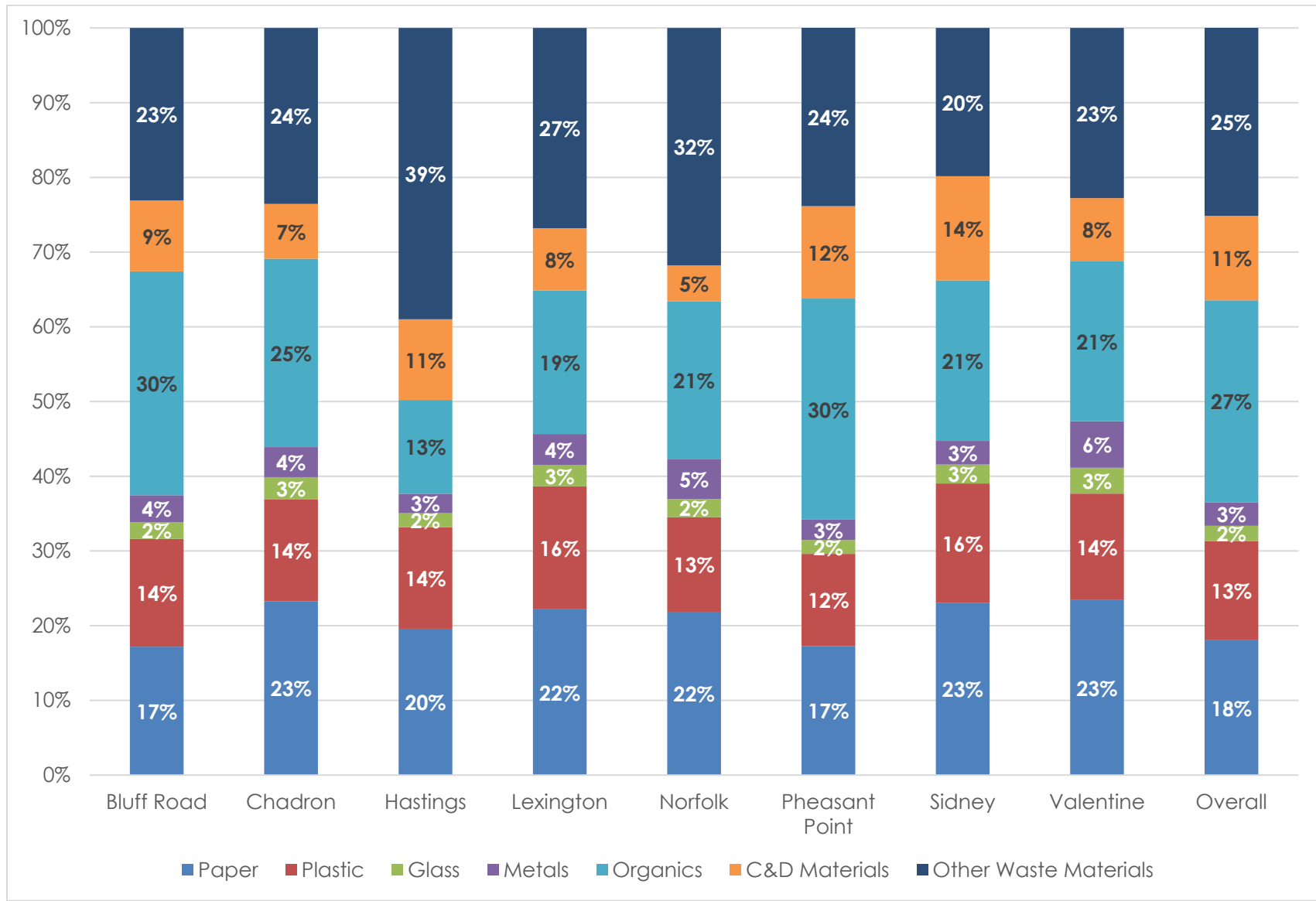


Table 20. Overall Statewide MSW Comparison by Host Facility

Material Category	Bluff Road	Chadron	Hastings	Lexington	Norfolk	Pheasant Point	Sidney	Valentine	Overall
Paper	17.2%	23.2%	19.6%	22.2%	21.9%	17.3%	23.1%	23.4%	18.0%
Plastic	14.4%	13.7%	13.6%	16.5%	12.7%	12.4%	15.9%	14.2%	13.3%
Glass	2.3%	2.9%	1.9%	2.8%	2.4%	1.8%	2.5%	3.5%	2.0%
Metals	3.6%	4.0%	2.6%	4.2%	5.3%	2.7%	3.2%	6.2%	3.2%
Organics	30.0%	25.2%	12.5%	19.2%	21.1%	29.6%	21.5%	21.5%	27.0%
C&D Materials	9.5%	7.3%	10.8%	8.4%	4.8%	12.4%	13.9%	8.4%	11.3%
Other Waste Materials	23.1%	23.6%	39.0%	26.8%	31.8%	23.9%	19.8%	22.8%	25.2%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

5.5 OVERALL STATEWIDE MSW COMPOSITION COMPARISON TO 2009 STUDY

As stated above, one of the important guiding principles for this Study was to mirror the 2009 Study to facilitate the comparison of results and to track trends in Nebraska's waste stream. This section summarizes the similarities and differences between this Study and methods of conducting fieldwork used in the 2009 Study. **Table 21** below highlights various aspects of both the 2009 and 2025 material characterization studies. Both sampled during four seasons from the same eight host facilities. The methodology used to combine the two studies is included in **Appendix I**.

Table 21. 2009 Study versus 2025 Study Comparison

	2009 MCS	2025 MCS
Seasons	4	4
Host Sites	8	8
Total Number of Sort Days	80	61
Material Categories	5	7
Material Components	40	65
Residential MSW Samples	284	286
ICI MSW Samples	231	276
Mixed MSW Samples	109	44
Total MSW Samples	624	606

Total Pounds Sorted	143,113	141,559
Samples for Volume Calculation	158	550
Total C&D Samples	0	315
Total Combined Samples	624	921

The following two sections provide a more detailed look at the similarities and differences between the 2009 Study and 2025 Study.

5.5.1 Similarities

- **Waste Generating Sectors** – As in the 2009 Study, this Study separately analyzed the composition of residential, ICI, and mixed wastes. The data was aggregated to calculate an overall material characterization profile for each host facility and the state as a whole.
- **In-State Wastes** – The 2009 and 2025 Studies targeted materials that were both generated and disposed of at facilities in Nebraska. Wastes that were imported or exported out of the State were not included.
- **Development of Site-Specific Sampling Plans** – For sampling and sorting events at each host facility, SCS obtained waste disposal data from facility staff. This data was used to develop a sampling plan specific to each facility that proportioned the number of residential, ICI, and mixed samples based on the amount of each waste type received at the facility.
- **Seasonal Sampling and Sorting Events** – The 2025 fieldwork mirrored the 2009 fieldwork for three seasons: January & February for winter, April & May for spring, and July & August for Summer. For the fall, 2009 fieldwork occurred in September & October, while the 2025 fieldwork took place in September & November.

5.5.2 Differences

- **Waste Generating Sectors** – In addition to residential, ICI, and mixed MSW, the 2025 Study also includes visual sorts for C&D waste.
- **Host Facility Sort Duration** – During each season, fieldwork for the 2009 Study completed one-week sampling events at each of the eight host facilities with a target of 50 physical samples at each site. The 2025 Study determined the number of sort days and samples based on weighted averages of each host facility's contribution to the total weight of all eight host facilities combined. This resulted in five-day sorts for all four seasons at the two largest facilities: Bluff Road Solid Waste Management Facility and Pheasant Point Landfill. The five middle-sized facilities were sampled for two days each during two seasons: Hastings Sanitary Landfill, Lexington Area Solid Waste Agency Landfill, Norfolk Transfer Station, Sidney Area Solid Waste Agency Landfill, and SWANN. The smallest of the eight host facilities was sampled for one day in one season: Valentine Area Solid Waste Agency Landfill.
- **Material Categories and Components** – Care was taken that MSW material categories and components sorted as part of this Study were as close to the 2009 Study as possible. Some changes were made to account for newer waste materials and better side-by-side

comparison of the Studies' results. Any modification made was done such that the data could still be compared to historical results (when possible). These modifications are identified below for each material category and component:

- **Paper**
 - Separated 'Mixed Paper' into 'Mixed Paper,' 'Compostable Paper,' and 'Other Paper/Non-Recyclable Paper'
- **Plastic**
 - Separated 'PET #1' into 'PET #1' and 'Plastic Single-Use Beverage Containers'
 - Separated 'HDPE #2' into 'Natural HDPE #2' and 'Colored HDPE #2'
 - Separated 'Other Numbered Containers' into 'PP #5,' 'Expanded Polystyrene,' and 'Other Numbered Plastics'
 - Separated 'Plastic Film/Wrap/Bags' into 'Film and Bags' and 'Retail Shopping Bags'
 - Separated 'Other Plastics' into 'Other Plastics' and 'Plastic Items Containing Lithium Batteries'
- **Glass**
 - Added 'Single-Use Glass Beverage Containers'
 - For data analysis and comparison, the four colored glass categories in both the 2009 and 2025 Studies were combined into one new category 'Mixed Colored Glass Containers' (although the separate color categories still existed and were used, separating out deposit containers resulted in the loss of color-to-color comparisons)
- **Metal**
 - Changed 'Aluminum Cans' to 'Aluminum Containers'
 - Separated 'Aluminum Containers' into 'Aluminum Containers' and 'Metal Single-Use Beverage Containers'
 - Changed 'Tin Cans' to 'Steel/Tin Containers'
 - Changed 'Other Aluminum' to 'Other Non-Ferrous Scrap'
 - Changed 'Other Tin' to 'Other Ferrous Scrap'
 - Separated 'Other Mixed Metals' into 'Other Metals' and 'Non-Recyclable Metals'
- **Remaining Material Components**
 - Separated 'Food' into 'Food Waste – Packaged' and 'Food Waste – Unpackaged'
 - Changed 'Diapers' to 'Diapers & Sanitary Products'
 - Separated 'Textiles/Rubber/Leather' into 'Textiles/Leather' and 'Rubber'
 - Separated 'Electronic Waste' into 'Electronic Waste' and 'Electronics Containing Lithium Batteries'
 - Separated 'Dry-Cell Batteries' into 'Alkaline and Other Batteries' and 'Lithium Batteries'
 - Separated 'Misc. C/D Waste' into 'Roofing Materials,' 'Bricks and Porcelain,' 'Soil, Rock, Sand,' 'Concrete,' and 'Misc. C/D Waste'
 - Separated 'Wood' into 'Treated Wood' and 'Untreated Wood'
 - Added five new 2025 components into 'Other Waste Categories:' 'Bulky Items,' 'Medical Waste,' 'Sharps,' 'White Goods,' and 'Lithium Batteries'
- **Material Categories**

- Expanded the number of 2009 material categories to improve comparison between the two Studies:
 - ‘Organics’ includes ‘Food Waste’ and ‘Yard Waste’
 - ‘C&D Materials’ includes ‘Wood’ and ‘Misc. C/D Waste’
 - ‘Other Waste Categories’ includes ‘Diapers & Sanitary Products,’ ‘Textiles/Leather/Rubber,’ ‘Household Hazardous Waste,’ ‘Electronic Waste,’ ‘Dry-Cell Batteries,’ and ‘Empty Aerosol Cans’
 - ‘Other Misc. Waste’ includes ‘Oil Filters,’ ‘Waste Oil,’ ‘Linoleum,’ ‘Thermometers,’ ‘Thermostats,’ ‘Raw Mercury,’ ‘Light-Up Shoes/Buttons,’ and ‘Fluorescent Bulbs’
 - ‘Unclassifiable Wastes’ includes ‘Non-Distinct’ and ‘Unclassifiable Fines’ (new in 2025)
- **Number of Samples** – The 2009 Study had a total of 624 MSW samples, while the 2025 Study had 606 samples. The total residential MSW samples were nearly identical with 284 in 2009 and 286 in 2025. The 2025 Study had approximately 40 more ICI sorts than 2009 (276 to 231, respectively). While the 2025 Study had slightly more samples of residential and ICI wastes, it had less than half of the 2009 mixed waste samples, 109 samples in 2009 compared to 44 samples in 2025.
- **Weight-to-Volume Calculation Determination** – In the 2009 Study, volume calculation was determined using the 158 samples collected during the fall season, and those calculations were used to estimate volume for the remaining three seasons. During the 2025 Study, SCS recorded volume using all four seasons of sampling events.
- **Visual Characterization of Construction Demolition Debris (C&D) Wastes** – C&D samples were visually evaluated and characterized as part of this Study, adding another 315 samples the 2025 Study. As this was not performed during previous studies, the work plan was to perform 10 visuals per day, equaling from 20 to 50 visuals per host facility per sort season.
- **Deposit and Non-Deposit** – The 2025 Study separated potential deposit from non-deposit containers utilizing three new categories: ‘Plastic Single-Use Beverage Containers,’ ‘Glass Single-Use Beverage Containers,’ and ‘Metal Single-Use Beverage Containers.’ These deposit containers were also counted and recorded throughout all four seasons.
- **Appliance, Tire, and Mattress Counts** – For each MSW physical sample, the sample selector visually determined the number of appliances, tires, and mattresses in the tipped load, not necessarily in the randomly-chosen segment for the sample.

5.5.3 Results

This comparisons section displays trends in data from 2009 to 2025 for the following items:

- Overall Statewide MSW by season (2009 vs 2025)
- Residential MSW (2009 vs 2025)
- ICI MSW (2009 vs 2025)
- Mixed MSW (2009 vs 2025)

Overall Statewide MSW by Season (2009 vs 2025)

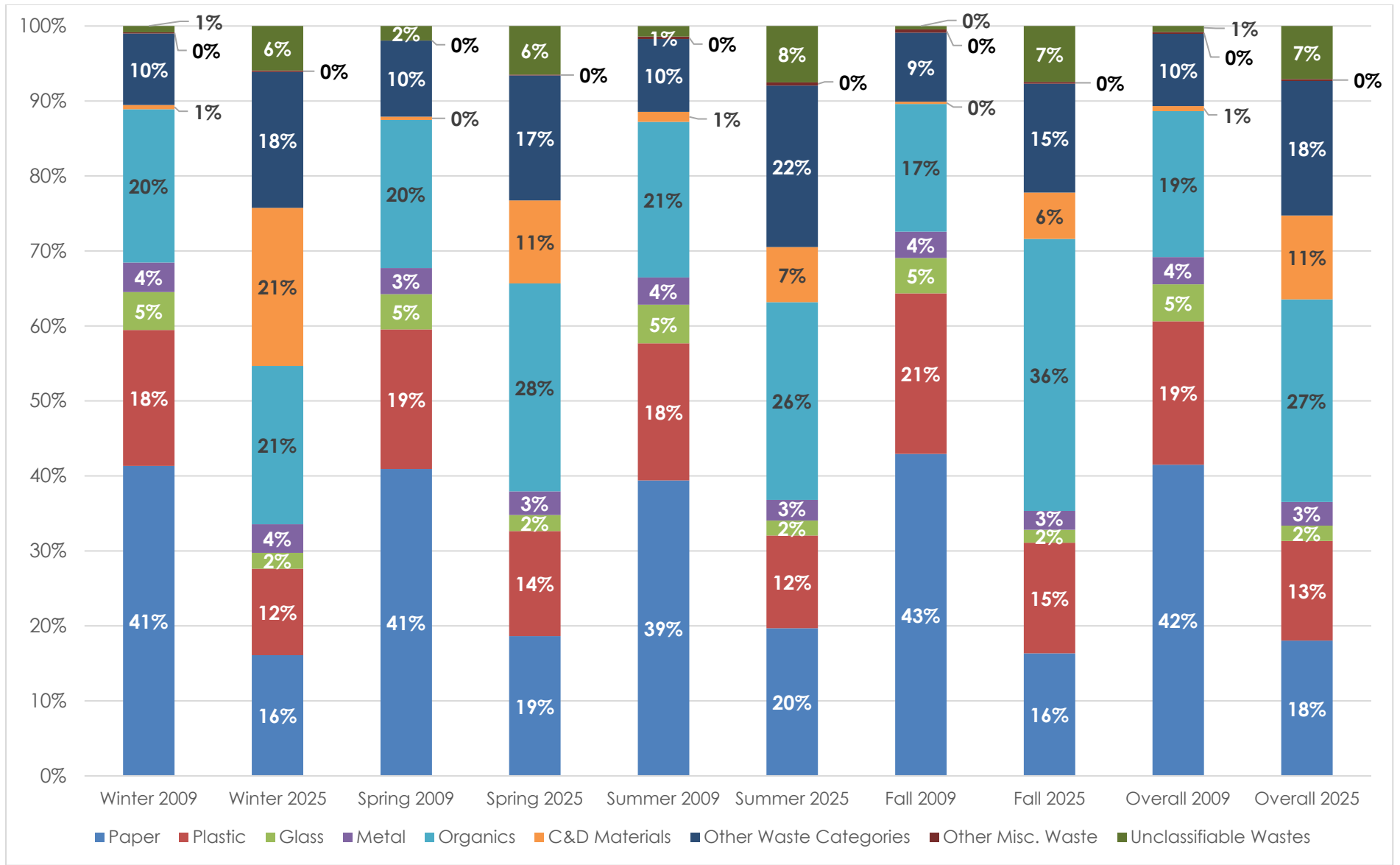
Table 22 below and **Exhibit 12** (next page) provides a side-by-side 2009 and 2025 statewide composition comparison for overall MSW by season. A few notables:

- The amount of Paper in the MSW decreased over 50 percent from 41.5 percent in 2009 to 18.0 percent in 2025.
- Organic materials have increased by nearly 10 percent since 2009.
- C&D Materials increased by nearly 16 times since 2009, with a difference in percent of 10.5 percent.

Table 22. 2025 Overall Statewide MSW Comparison to 2009 Study by Season

Material Category	Winter		Spring		Summer		Fall		Overall	
	2009	2025	2009	2025	2009	2025	2009	2025	2009	2025
Paper	41.3%	16.1%	40.9%	18.6%	39.4%	19.7%	42.9%	16.4%	41.5%	18.0%
Plastic	18.1%	11.5%	18.6%	14.0%	18.3%	12.4%	21.4%	14.7%	19.1%	13.3%
Glass	5.1%	2.1%	4.7%	2.1%	5.2%	2.0%	4.7%	1.7%	4.9%	2.0%
Metals	3.9%	3.8%	3.5%	3.2%	3.6%	2.8%	3.5%	2.5%	3.6%	3.2%
Organics	20.4%	21.1%	19.7%	27.7%	20.8%	26.3%	17.0%	36.3%	19.5%	27.0%
C&D Materials	0.6%	21.1%	0.5%	11.1%	1.3%	7.4%	0.3%	6.2%	0.7%	11.2%
Other Waste Materials	9.5%	18.1%	10.1%	16.7%	9.7%	21.5%	9.2%	14.5%	9.6%	17.9%
Other Misc. Waste	0.2%	0.2%	0.0%	0.1%	0.3%	0.4%	0.4%	0.2%	0.3%	0.3%
Unclassifiable Fines	0.8%	5.9%	1.9%	6.5%	1.4%	7.5%	0.5%	7.5%	1.1%	7.1%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Exhibit 12. 2025 Statewide MSW Comparison to 2009 Study by Season - Overall

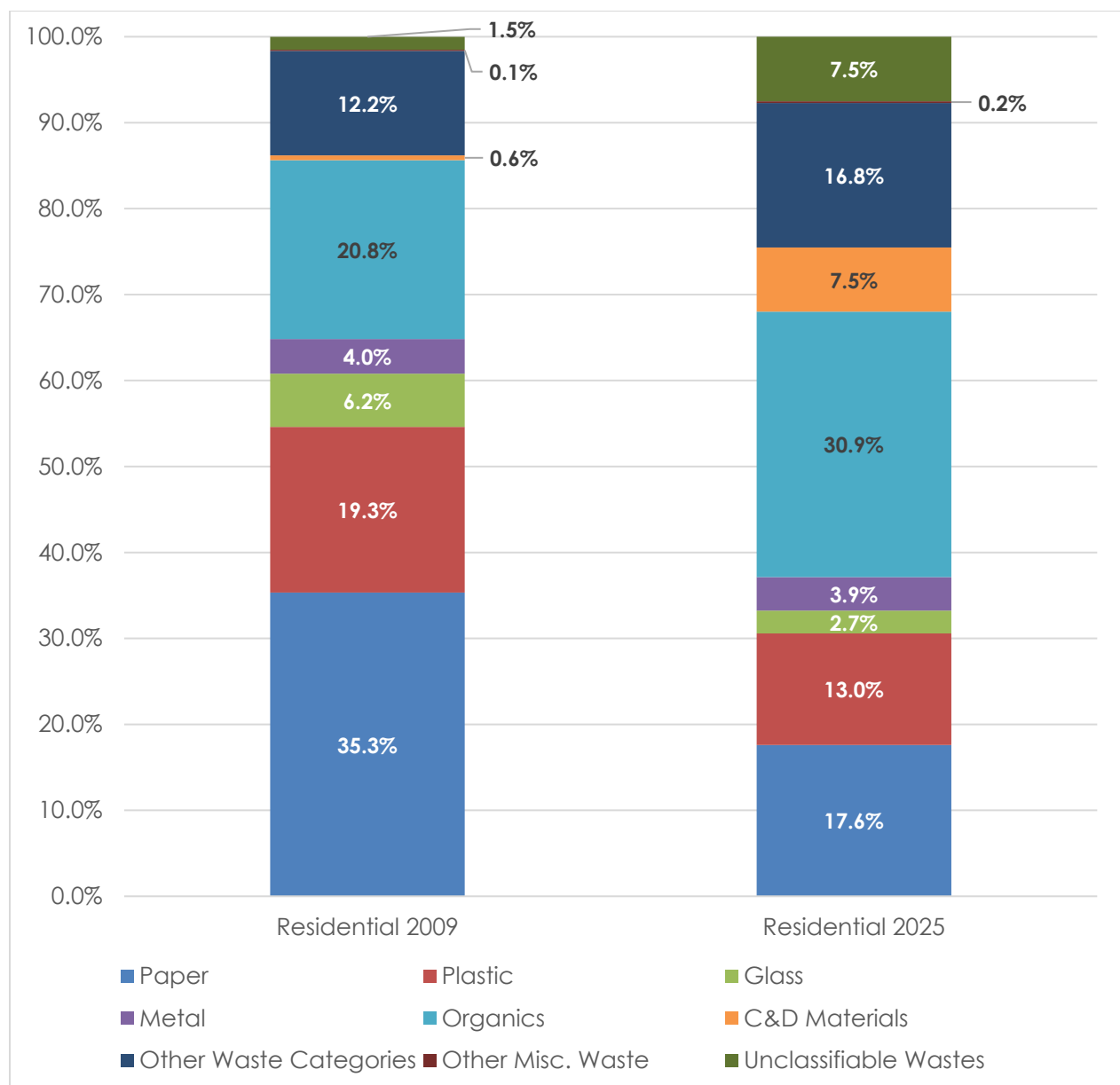


Residential MSW (2009 vs 2025)

Exhibit 13 provides comparison of 2009 and 2025 statewide composition for the residential generating sector. A few notables:

- The amount of Paper has decreased by nearly half from 35.3 percent in 2009 to 17.6 percent in 2025.
- Plastic composition has decreased since 2009 by 6.3 percent.
- The percentage of Organics in the waste stream has increased by nearly 10 percent.

Exhibit 13. 2025 Statewide MSW Comparison to 2009 Study - Residential

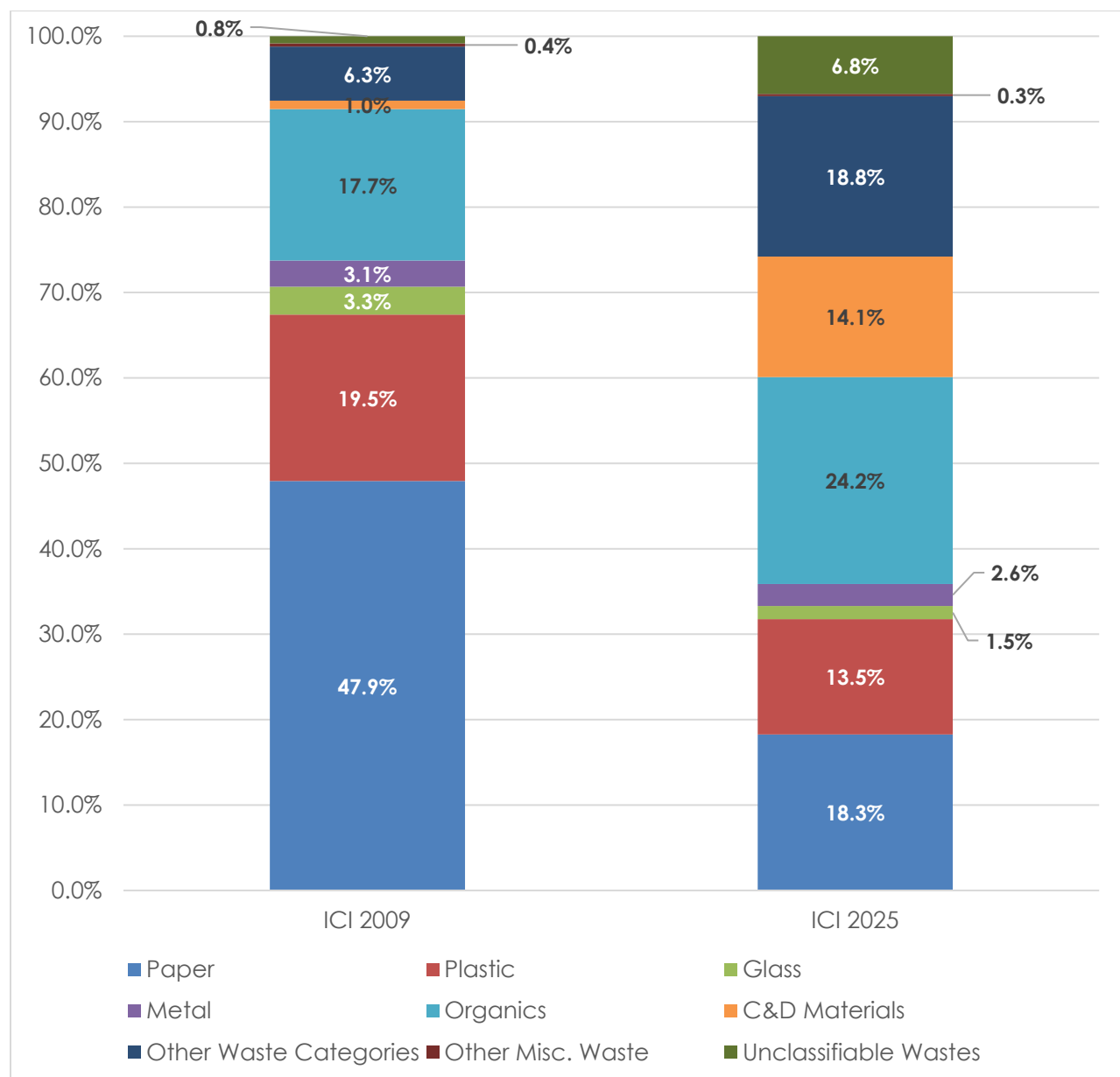


ICI MSW (2009 vs 2025)

Exhibit 14 provides comparison of 2009 and 2025 statewide composition for the ICI generating sector. A few notables:

- The amount of Paper has decreased by over half from 35.3 percent in 2009 to 17.6 percent in 2025.
- The composition of C&D Materials has increased by over 13 percent from 2009 to 2025.
- Plastic composition has decreased since 2009 by 6.3 percent.

Exhibit 14. 2025 Statewide MSW Comparison to 2009 Study - ICI

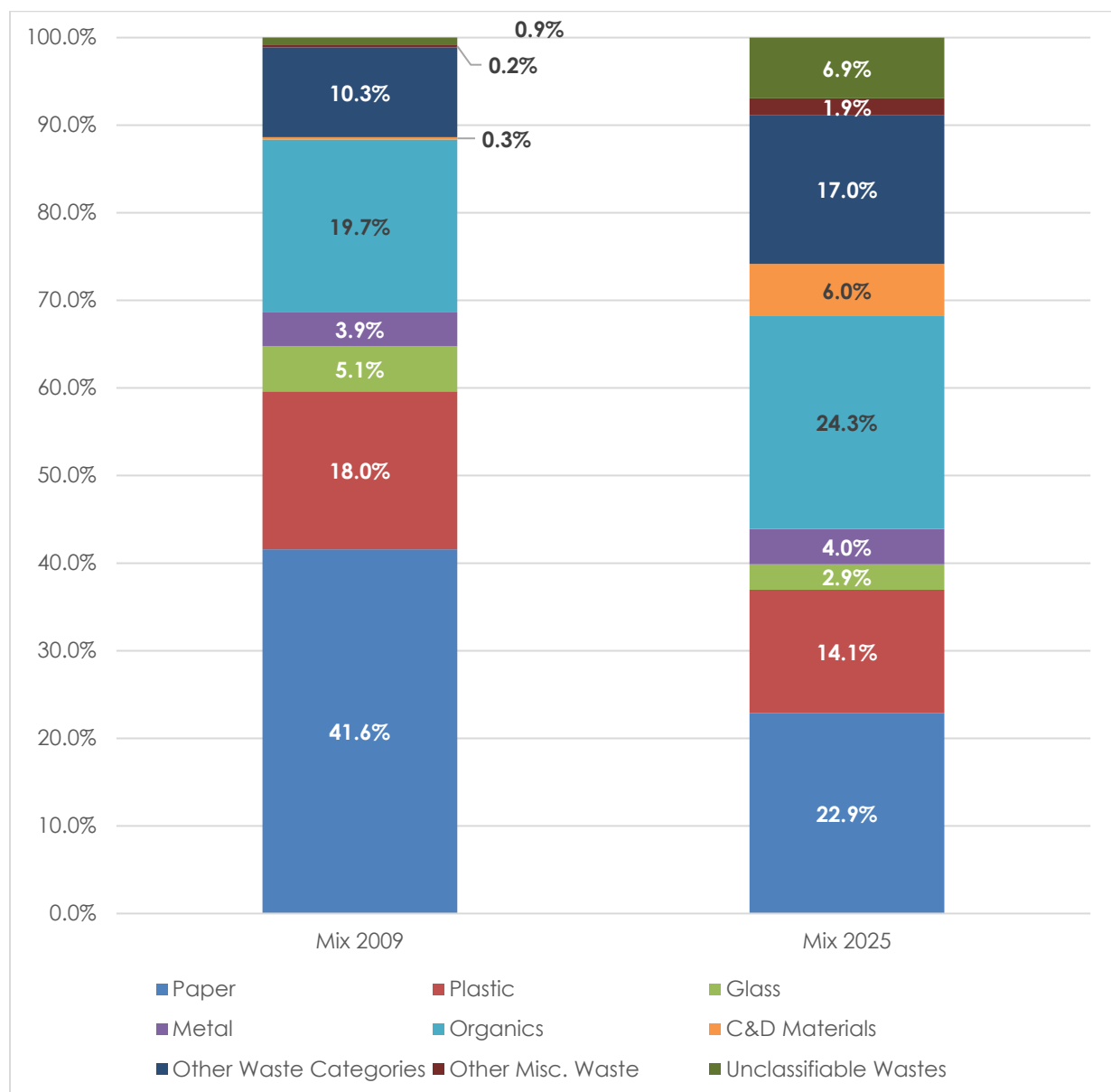


Mixed MSW (2009 vs 2025)

Exhibit 15 provides comparison of 2009 and 2025 statewide composition for the mixed generating sector. A few notables:

- The amount of Paper has decreased by nearly half from 41.6 percent in 2009 to 22.9 percent in 2025.
- The composition of Organics has increased from 19.7 percent from 2009 to 24.3 percent in 2025.
- Plastic composition has decreased since 2009 by 6.3 percent.

Exhibit 15. 2025 Statewide MSW Comparison to 2009 Study - Mixed



5.6 OVERALL STATEWIDE MSW VOLUME

Table 23 below displays an overall and seasonal volume for each of the 65 MSW material components. Exhibit 16 (page 56) reports the seasonal changes for the state's top 5 most prevalent materials. These results are reported as average density of pounds per cubic foot.

Table 23. Overall Statewide MSW Volume by Season (Pounds per Cubic Foot)

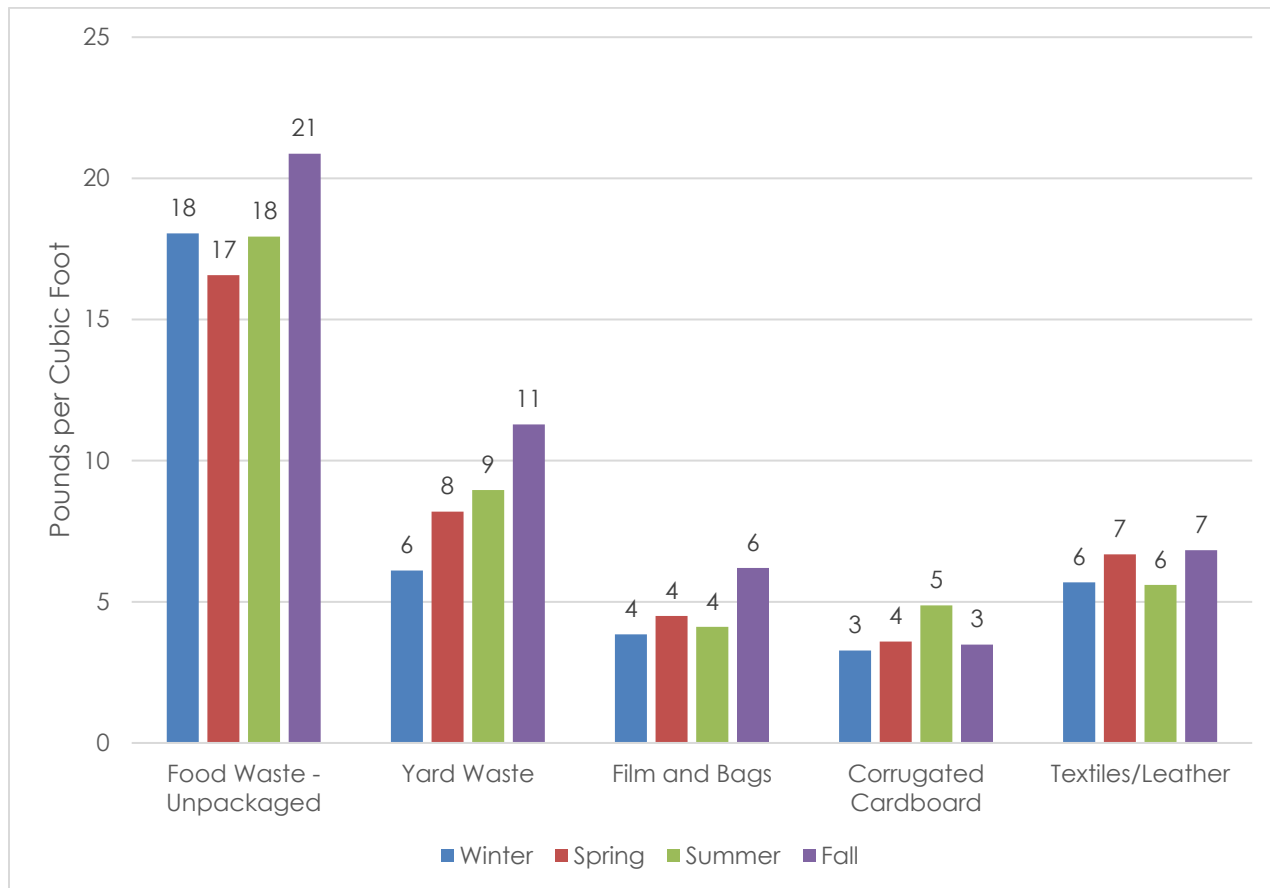
Material Categories	Material Components	Winter	Spring	Summer	Fall	Overall
Paper						
	Corrugated Cardboard	3.28	3.59	4.87	3.48	3.77
	Office Paper	3.83	3.57	5.07	5.56	4.47
	Newsprint	3.67	3.29	4.58	4.48	3.99
	Magazines and Other Glossy Paper	10.08	6.98	8.44	7.55	8.37
	Paperboard/Liner Board	3.26	2.79	3.22	3.86	3.28
	Other Paper/Non-Recyclable Paper	3.92	3.87	7.08	6.81	5.33
	Mixed Paper	4.05	3.64	5.00	5.50	4.52
	Compostable Paper	6.53	6.16	3.08	3.05	4.81
Plastic						
	PET #1	3.06	3.15	3.56	3.25	3.24
	Natural HDPE #2	3.36	2.59	2.59	3.00	2.91
	Colored HDPE #2	4.24	4.12	3.86	4.22	4.12
	PP #5	2.57	2.59	2.34	5.08	3.11
	Expanded Polystyrene	1.22	1.18	1.55	1.81	1.43
	Other Numbered Plastics	3.80	3.61	3.10	3.36	3.48
	Film and Bags	3.85	4.50	4.11	6.20	4.62
	Retail Shopping Bags	0.83	1.10	1.39	1.86	1.27
	Other Plastics	7.37	5.83	5.35	6.25	6.27
	Plastic Items Containing Lithium Batteries	6.40	0.30	NA*	0.12	3.31
	Plastic Single-Use Beverage Containers	3.67	2.83	2.91	3.45	3.24
Glass						
	Clear Glass Containers	25.11	19.01	17.77	18.37	20.36
	Brown Glass Containers	18.16	12.60	35.71	15.68	19.44
	Green Glass Containers	25.21	16.69	18.37	20.89	20.58
	Blue Glass Containers	14.21	44.40	16.46	7.85	23.59

Material Categories	Material Components	Winter	Spring	Summer	Fall	Overall
	Other Glass	14.41	15.50	20.82	18.70	17.19
	Glass Single-Use Beverage Containers	20.83	16.18	14.43	12.68	16.31
Metal						
	Aluminum Containers	4.62	6.11	4.59	4.23	4.87
	Steel/Tin Containers	12.20	9.49	8.74	8.90	9.97
	Other Ferrous Scrap	25.32	12.85	12.47	10.01	15.76
	Other Non-Ferrous Scrap	7.47	12.06	11.45	18.59	12.10
	Other Metals	5.56	10.81	1.45	24.62	13.51
	Non-Recyclable Metal	35.08	11.52	3.58	NA	18.37
	Metal Single-Use Beverage Containers	3.44	5.38	2.97	3.10	3.71
Organics						
	Food Waste - Packaged	17.65	12.38	15.24	12.05	14.52
	Food Waste - Unpackaged	18.05	16.57	17.94	20.87	18.34
	Yard Waste	6.11	8.19	8.96	11.28	8.49
C&D Materials						
	Linoleum	NA	6.63	16.21	4.78	9.00
	Untreated Wood	7.27	8.35	6.40	8.53	7.62
	Treated Wood	10.27	6.44	7.44	8.17	8.21
	Roofing Materials	22.07	12.31	19.64	8.73	16.13
	Bricks and Porcelain	12.26	32.26	21.29	17.59	20.34
	Soil, Rock, Sand	21.47	55.01	23.43	39.56	34.44
	Concrete	47.35	40.01	NA	29.86	39.07
	Misc. C/D Waste	13.97	15.15	7.04	12.99	12.29
Other Waste Categories						
	Diapers	9.29	9.30	10.27	10.42	9.79
	Textiles/Leather	5.69	6.68	5.60	6.83	6.17
	Rubber	6.16	6.54	5.08	5.96	5.95
	Household Hazardous Waste	15.11	10.71	11.02	13.83	12.81
	White Goods	7.55	49.87	NA	NA	28.71
	Electronic Waste	12.02	13.73	16.82	16.50	14.61
	Electronics Containing Lithium Batteries	8.45	21.61	7.58	36.36	14.07
	Non-Distinct	13.88	13.18	15.66	14.30	14.23

Material Categories	Material Components	Winter	Spring	Summer	Fall	Overall
	Oil Filters	42.54	19.34	19.41	23.32	26.61
	Waste Oil	5.23	5.97	5.37	9.31	6.22
	Thermometers	2.99	NA	NA	NA	2.99
	Thermostats	NA	NA	NA	NA	NA
	Raw Mercury	NA	NA	NA	NA	NA
	Light-Up Shoes/Buttons	NA	NA	NA	NA	NA
	Fluorescent Bulbs	9.71	5.98	4.74	6.82	7.06
	Lithium Batteries	42.66	19.75	10.22	24.65	26.11
	Alkaline and Other Batteries	14.28	14.91	14.99	11.22	13.88
	Empty Aerosol Cans	12.28	9.24	16.76	11.56	12.45
	Unclassifiable Fines	16.25	21.51	17.33	19.71	18.56
	Bulky Items	11.59	3.48	10.72	6.67	8.42
	Medical Waste	3.95	3.75	4.34	4.32	4.08
	Sharps	8.60	7.86	8.93	5.86	7.86

**NA indicates materials were never weighed in a container because they were not found, the material would not fit in a container, or there was not enough material found to capture its weight in a container and, as such, a volume could not be calculated.*

Exhibit 16. Overall Statewide MSW Volume – Top 5 Most Prevalent Components Comparison by Season



5.7 OVERALL STATEWIDE C&D COMPOSITION BY SEASON

Exhibit 17 (next page) presents the overall statewide C&D prevalent materials by season and Table 24 (next page) presents the mean percentage of all C&D materials by season. A few notables:

- Fall has the most wood waste at 30.0 percent. Dirt/Sand/Gravel/Rock is the most common at 9.7 percent. Two components are tied at 9.3 percent for being the most next prevalent wood waste: Wooden Pallets and Untreated Wood Materials.
- Summer has the highest percentage of Other Listed Materials at 63.7 percent. Roofing Materials and Brick are the largest components at 15.3 percent and 12.1 percent respectively.
- Gypsum was most prevalent during spring (24.9 percent), with the remaining seasons ranging from 6.0 percent in fall to 15.4 percent in winter.

Exhibit 17. Overall Statewide C&D Prevalent Materials Composition by Season

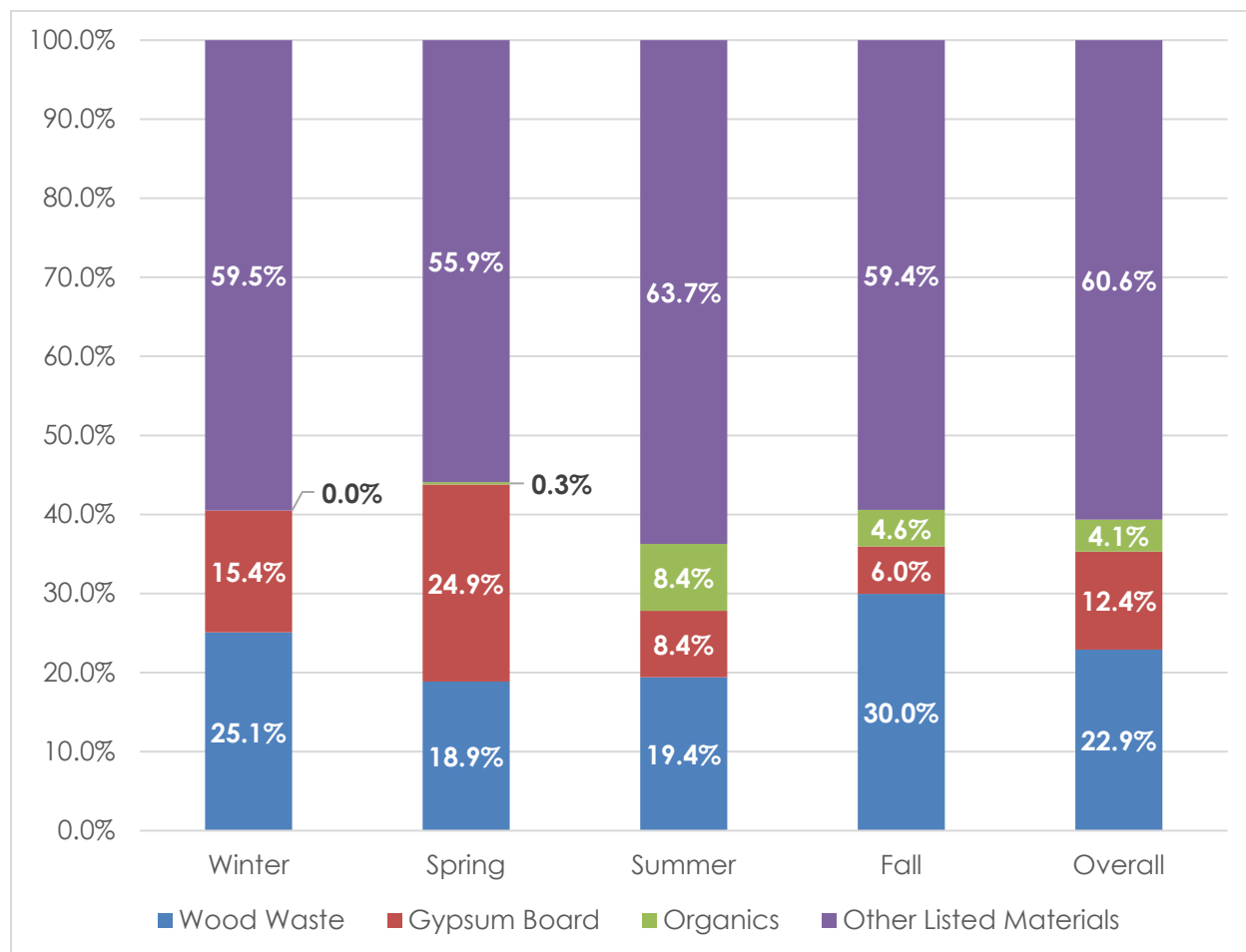


Table 24. Overall Statewide C&D Composition by Season

	Material Category	Winter	Spring	Summer	Fall	Overall
Wood Waste	Sawn Lumber	<0.1%	<0.1%	0.3%	3.9%	0.8%
	Engineered Wood/Manufactured Wood	1.6%	0.2%	0.7%	2.7%	1.3%
	Wooden Pallets	5.0%	2.8%	3.3%	9.3%	4.8%
	Treated Wood Materials	9.1%	6.5%	7.5%	4.7%	7.4%
	Untreated Wood Materials	9.3%	9.4%	7.6%	9.3%	8.7%
	Total Wood Waste	25.1%	18.9%	19.4%	30.0%	22.9%

	Material Category	Winter	Spring	Summer	Fall	Overall
Gypsum Board	Drywall (Painted and Non-Painted)	15.4%	24.9%	8.4%	6.0%	12.4%
	Total Gypsum Board	15.4%	24.9%	8.4%	6.0%	12.4%
Organics	Food Waste Loose	<0.1%	<0.1%	0.3%	<0.1%	0.1%
	Food Waste Packaged	NF	NF	NF	NF	NF
	Tree Limbs and Stump Waste	<0.1%	<0.1%	3.2%	<0.1%	1.2%
	Yard Wastes	<0.1%	0.3%	4.8%	4.4%	2.6%
	Other Organics	<0.1%	<0.1%	0.2%	<0.1%	0.1%
	Total Organics	0.0%	0.3%	8.4%	4.4%	4.1%
Other Listed Materials	Asbestos	NF	NF	NF	NF	NF
	Contaminated Soils	<0.1%	<0.1%	<0.1%	8.0%	1.3%
	Industrial Process Waste	NF	NF	NF	NF	NF
	Sludges	NF	NF	NF	NF	NF
	Wires	<0.1%	<0.1%	<0.1%	<0.1%	0.1%
	Ceramics	<0.1%	6.5%	2.0%	<0.1%	1.6%
	Fiberglass	<0.1%	<0.1%	<0.1%	<0.1%	0.0%
	Insulation	0.3%	0.1%	0.6%	0.3%	0.4%
	Concrete	4.4%	9.1%	0.1%	0.2%	2.7%
	Brick	<0.1%	<0.1%	12.1%	<0.1%	4.6%
	Carpet/Carpet Pads	0.7%	2.3%	1.3%	1.1%	1.2%
	Vinyl Siding	4.1%	6.0%	0.8%	<0.1%	2.4%
	Roofing Materials	3.4%	5.0%	15.3%	7.1%	8.8%
	Dirt/Sand/Gravel/Rock	21.7%	2.8%	8.7%	9.7%	12.3%
	Metal	4.3%	2.0%	4.1%	4.2%	3.9%
	Plastic	2.9%	1.5%	1.9%	3.5%	2.4%

	Material Category	Winter	Spring	Summer	Fall	Overall
	Mattresses and Box Springs	<0.1%	0.3%	1.3%	0.1%	0.6%
	Furniture	1.0%	1.3%	3.7%	3.6%	2.5%
	Tires	<0.1%	<0.1%	<0.1%	0.5%	0.1%
	Corrugated Cardboard	7.9%	4.5%	1.5%	7.0%	4.8%
	Other MSW Recyclable Material	1.8%	<0.1%	0.6%	0.3%	0.8%
	MSW Non-Recyclable Waste	2.6%	2.0%	3.7%	0.4%	2.6%
	Other C&D Wastes	3.1%	1.2%	1.6%	2.0%	2.1%
	Electronics	0.1%	<0.1%	0.3%	0.5%	0.2%
	Appliances	<0.1%	<0.1%	<0.1%	0.3%	0.1%
	Glass	0.5%	10.7%	2.9%	9.3%	4.2%
	Chemicals	<0.1%	<0.1%	<0.1%	<0.1%	0.0%
	Textiles	<0.1%	<0.1%	0.4%	0.5%	0.2%
	Bagged Wastes	0.7%	0.5%	0.6%	0.6%	0.6%
	Total	100%	100%	100%	100%	100%

Table 25 (next page) highlights the most prevalent C&D materials overall and by season. Of the 10 most prevalent C&D materials, winter contains eight (excluding Concrete and Vinyl Siding), spring contains seven (excluding Concrete, Ceramics, and Vinyl Siding), summer contains seven (excluding Yard Wastes, Furniture, and MSW Non-Recyclable Waste), and fall contains eight (excluding Contaminated Soils and Yard Wastes).

Table 25. C&D Most Prevalent Materials Overall and by Season

	Overall		Winter		Spring		Summer		Fall	
	Material	Pct.	Material	Pct.	Material	Pct.	Material	Pct.	Material	Pct.
1	Drywall (Painted and Non-Painted)	12.4%	Dirt/Sand/Gravel/Rock	21.7%	Drywall (Painted and Non-Painted)	24.9%	Roofing Materials	15.3%	Dirt/Sand/Gravel/Rock	9.7%
2	Dirt/Sand/Gravel/Rock	12.3%	Drywall (Painted and Non-Painted)	15.4%	Glass	10.7%	Brick	12.1%	Wooden Pallets	9.3%
3	Roofing Materials	8.8%	Untreated Wood Materials	9.3%	Untreated Wood Materials	9.4%	Dirt/Sand/Gravel/Rock	8.7%	Untreated Wood Materials	9.3%
4	Untreated Wood Materials	8.7%	Treated Wood Materials	9.1%	Concrete	9.1%	Drywall (Painted and Non-Painted)	8.4%	Glass	9.3%
5	Treated Wood Materials	7.4%	Corrugated Cardboard	7.9%	Treated Wood Materials	6.5%	Untreated Wood Materials	7.6%	Contaminated Soils	8.0%
6	Corrugated Cardboard	4.8%	Wooden Pallets	5.0%	Ceramics	6.5%	Treated Wood Materials	7.5%	Roofing Materials	7.1%
7	Wooden Pallets	4.8%	Concrete	4.4%	Vinyl Siding	6.0%	Yard Wastes	4.8%	Corrugated Cardboard	7.0%
8	Brick	4.6%	Metal	4.3%	Roofing Materials	5.0%	Metal	4.1%	Drywall (Painted and Non-Painted)	6.0%
9	Glass	4.2%	Vinyl Siding	4.1%	Corrugated Cardboard	4.5%	Furniture	3.7%	Treated Wood Materials	4.7%
10	Metal	3.9%	Roofing Materials	3.4%	Dirt/Sand/Gravel/Rock	2.8%	MSW Non-Recyclable Waste	3.7%	Yard Wastes	4.4%
	Overall Cumulative Percent	72.0%	Winter Cumulative Percent	84.6%	Spring Cumulative Percent	85.5%	Summer Cumulative Percent	75.9%	Fall Cumulative Percent	74.8%

6.0 IMPACT OF CURRENT RECYCLING AND DIVERSION PROGRAMS

This section discusses current recycling and diversions programs operating in the state of Nebraska and estimates the amount of material diverted through these programs. This section provides the sources of data and methodologies used to generate the tons estimated as diverted by material type, generator status, and diversion program.

6.1 RECYCLING

Recycling in Nebraska is not consistently reported or tracked on an annual basis, with the exception of the Nebraska Recycling Council (NRC), a nonprofit organization that surveys communities to assess recycling programs and document the accessibility of these programs. Total tons recycled in Nebraska are not tracked; however, this section estimates the types and quantities of materials recycled by households. Institutional, commercial, and industrial (ICI) recycling estimates are unclear because recycling is not required for ICI generators in Nebraska, and there is limited research to support generation rates for these entities. Accordingly, this section focuses on residential, single-family home recycling of traditional recyclable materials such as paper, plastic, metal, and glass.

6.1.1 Access and Participation

Access to recycling programs is measured using feedback NRC receives through a voluntary annual survey which has been conducted for several years. The survey is sent to communities within the state to report the availability of and program type for recycling throughout Nebraska. In this section, the most complete information from surveys conducted from 2023 to 2025 was used. As defined by the U.S. Census Bureau, Nebraska has 583 places in the state. The number of respondents was divided by 583 to calculate the statewide response rate. This information is displayed in **Table 26** below.

Table 26. Annual NRC Survey Participation

	# Respondents	Response Rate
2024 Mailed Survey	327	56%
2024 Mailed Survey + 2025 Survey Calls	524	90%

From the combined 2024 and 2025 survey responses, 56 percent of respondents indicated that they have access to a recycling program as shown in **Table 27** (next page). While this percentage may seem low, when the population for communities which indicated access to recycling is available, 93 percent of Nebraska residents are estimated to have access to recycling programs.

Table 27. Nebraska Statewide Access to Recycling Programs

	Percentage
Survey Respondents	56%
Corresponding Population	93%

The recycling survey also asked what type(s) of recycling programs were available in respondents' communities. **Table 28** (below) shows the availability of drop-off locations or trailers, curbside collection, and recycling center/transfer station for residential recycling. Some communities have access to more than one program type, especially in larger metropolitan areas.

Nearly half of survey respondents indicated they have access to drop-off locations or a trailer, corresponding to 79 percent of the state's population. Less than a quarter of survey respondents have access to curbside collection, yet 78 percent of the population has access to such programs. Only 16 percent of survey respondents indicated they can recycle directly at a recycling center and/or transfer station, which represents about 40 percent of the population.

Table 28. Nebraska Statewide Access to Recycling Programs – by Type

Program Type	Survey Respondents	Corresponding Population
Drop-Off Location or Trailer	48%	79%
Curbside Collection	20%	78%
Recycling Center/Transfer Station	16%	41%

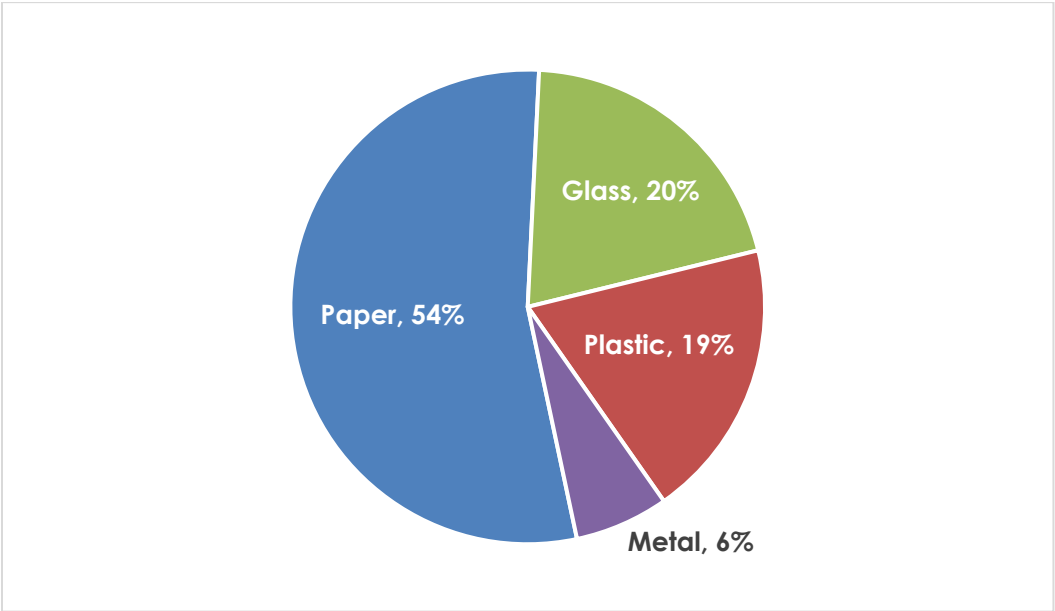
Although participation is not currently measured through NRC surveys, the Recycling Partnership (2020) estimates a participation rate of 61.5 percent of single-family households in curbside collection programs which will be the assumed participation rate for all recycling programs for the purpose of estimating recycling amounts.

6.1.2 Composition and Capture Rates

The Recycling Partnership (2020) reviewed the composition of recyclable materials and results can be seen in **Exhibit 18** (next page). The largest percentage of recyclable materials is paper, equaling over 50 percent of materials recycled at a household level.

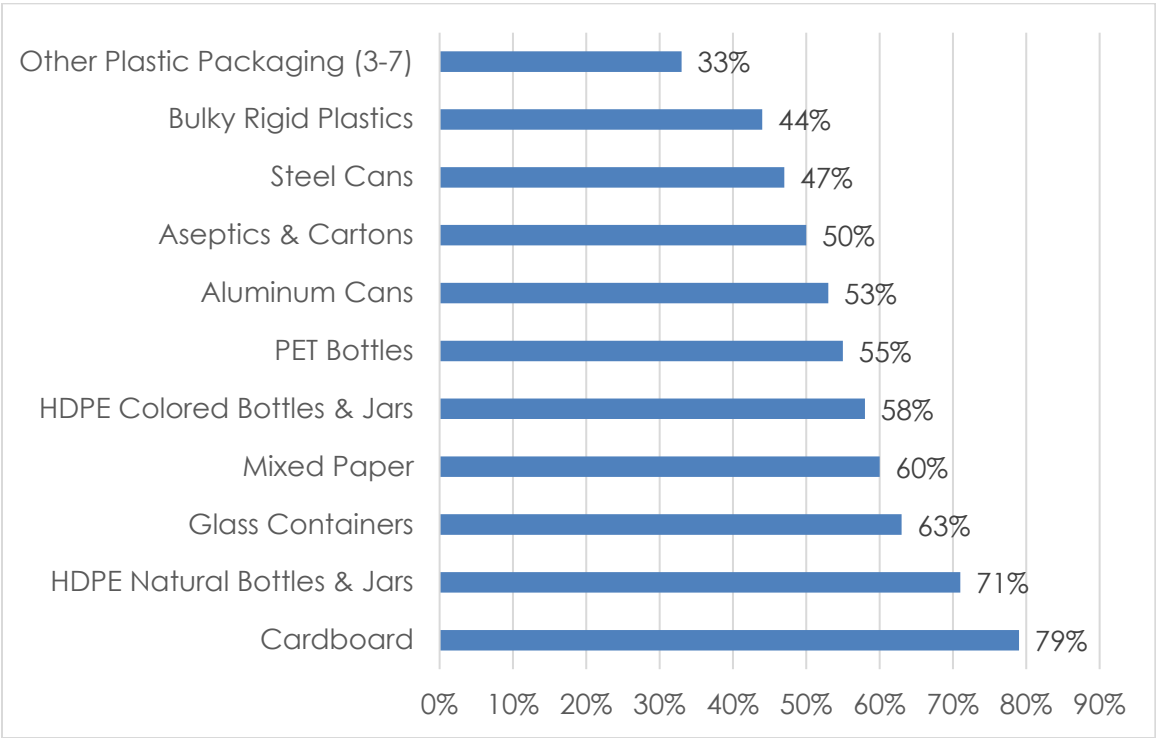
Not all recyclable materials generated at a household are recycled. Recycling or capture rates are dependent on access, participation, and quality of materials. **Exhibit 19** (next page) displays the capture rate in Nebraska for various recycling commodities from the residential generating sector compared to the national average.

Exhibit 18. Composition of Generated Curbside Recyclables



Source: The Recycling Partnership, 2020 State of Curbside Recycling Report

Exhibit 19. Single-Family Recyclable Material Capture Rates

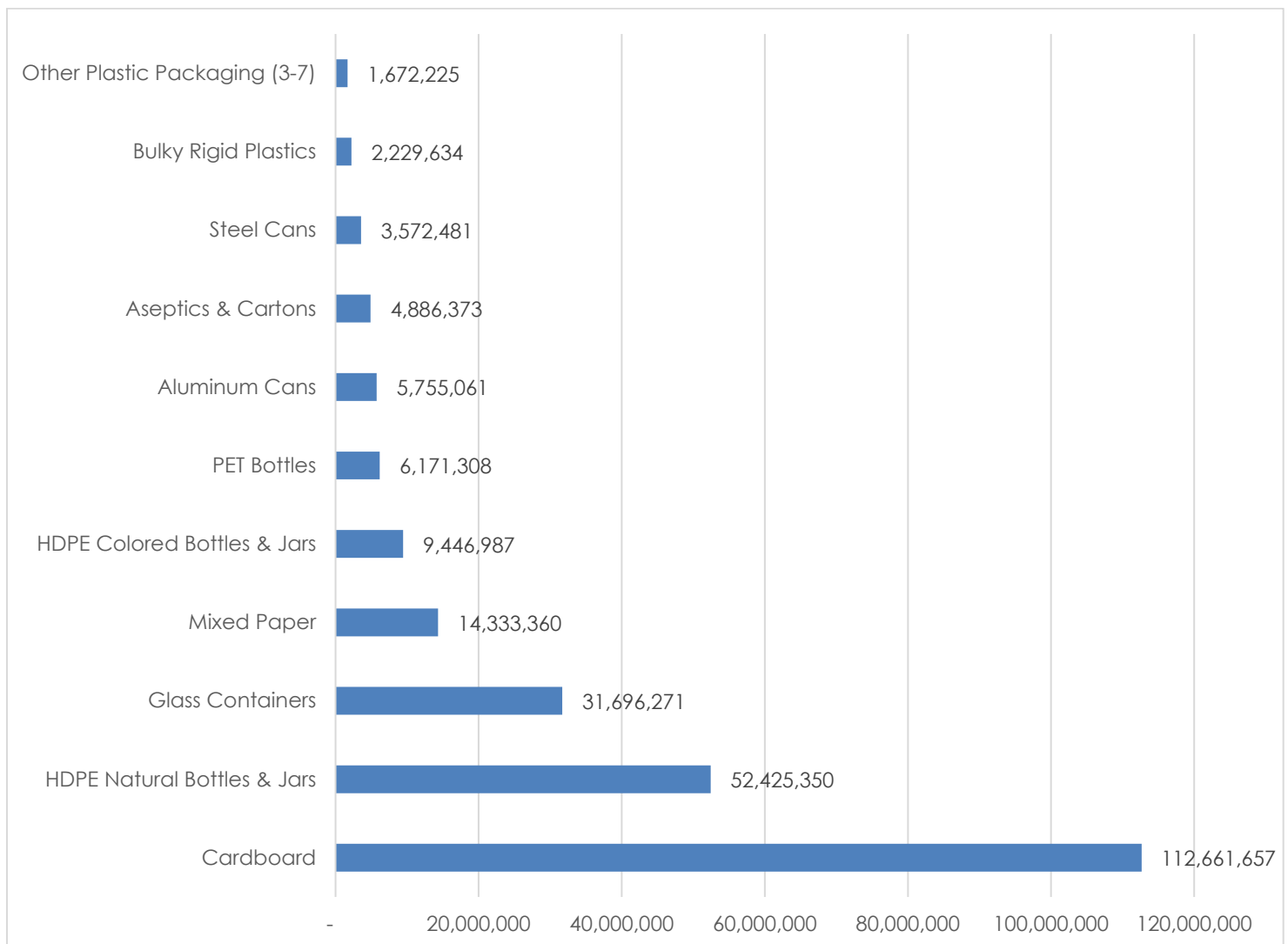


Source: The Recycling Partnership, 2020 State of Curbside Recycling Report

6.1.3 Recyclables Estimation

The U.S. Census Bureau estimates the number of occupied households located within the state of Nebraska as 824,012 with an average of 2.57 people per household. Each single-family household is assumed to generate approximately 768 pounds of recyclable material per year (The Recycling Partnership, 2020). It is understood that 93 percent of Nebraska's population has access to recycling programs. Combining this information with participation and capture rates of recyclable materials, the state of Nebraska is estimated to recycle over 360 million pounds or over 180 thousand tons of recyclables each year from single-family households. **Exhibit 20** below displays the total pounds of recyclables by recycling commodity.

Exhibit 20. Single-Family Recycling Pounds per Year



6.2 COMPOST PROGRAMS

For this Report, compost program availability is specific to food waste at a household level, though compost programs can also include yard waste, animal manure, and raw/treated sewage sludge. In Nebraska, yard waste is banned from most landfills for at least part of the year, usually during the times when most yard waste is produced. For example, Omaha bans yard waste from landfills during spring (May – June) and fall (October – December), while Lincoln’s landfill bans on yard waste occur from April 1 to November 30. Similar to recycling, food waste and general composting performed on the ICI level are not reported or tracked consistently to estimate the amount of material generated. This section will estimate the amount of material generated at a household level that could be diverted through composting programs.

6.2.1 Access

Accessibility to food waste composting programs has become more commonplace, especially through curbside collection by private haulers. **Table 29** below indicates that 43 percent of NRC survey respondents have access to food waste compost programs, which corresponds to nearly 75 percent of the state’s population.

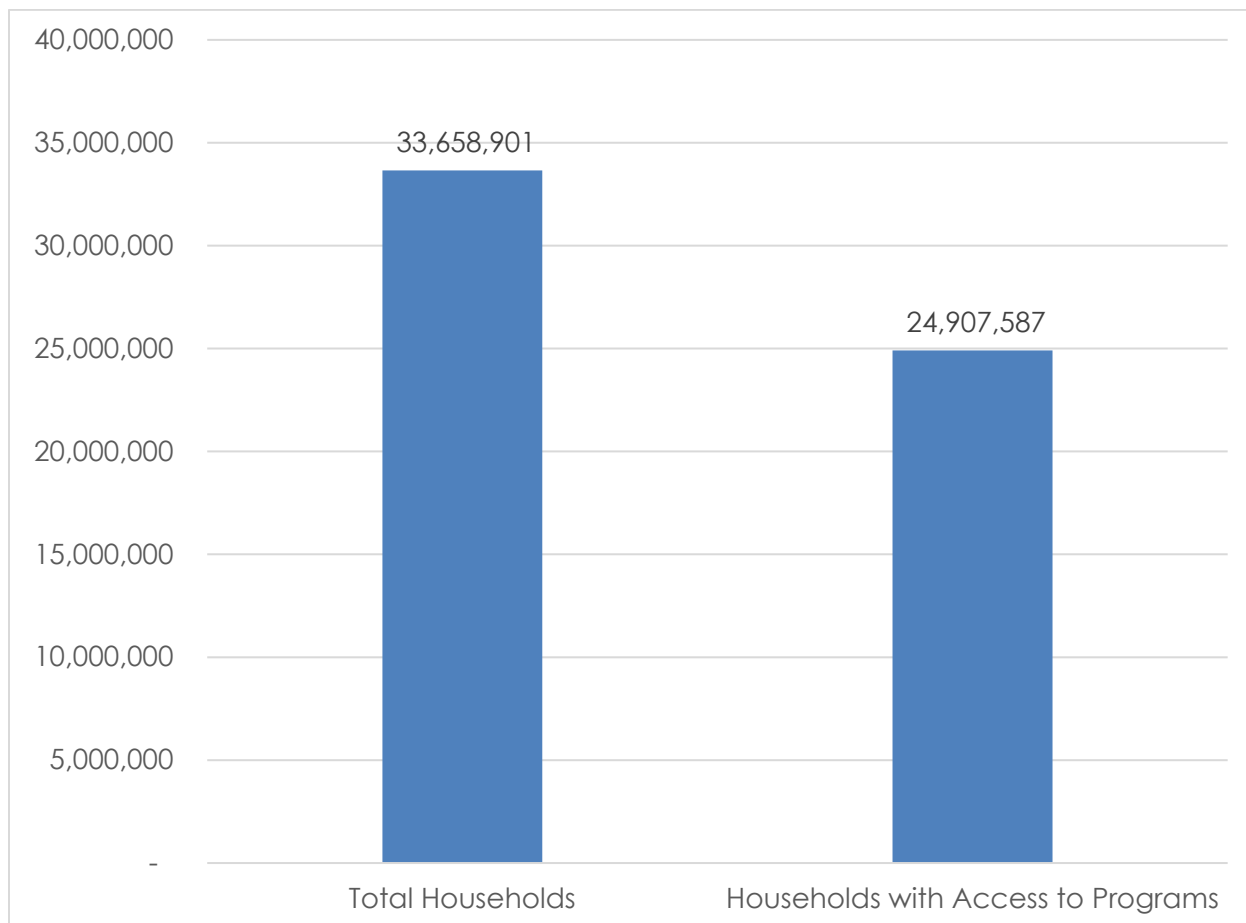
Table 29. Nebraska Statewide Access to Food Waste Compost Programs

Program Type	Survey Respondents	Corresponding Population
Food Waste Compost Programs	43%	74%

6.2.2 Compost Estimation

The estimation of compost materials generated in the state of Nebraska is reliant on the EPA’s generation calculation per person of food waste compost material. The EPA estimates a person generates 16 pounds per year of food waste compost. **Exhibit 21** (next page) displays the total pounds that are generated per household in Nebraska versus the amount of material that could be collected based on population and has access to food waste composting programs.

Exhibit 21. Estimated Total Pounds of Food Waste Compost Generated by Total Households and Households with Access to Food Waste Compost Services



6.3 OTHER DIVERSION PROGRAMS

Excluding recycling and composting, many programs exist within Nebraska to divert hard to recycle or hazardous materials from entering landfills. These programs have formed either through statewide initiatives and funding or through nonprofit organizations.

Diversion programs within the state exist to divert materials from landfilling that do not have documented reports or tonnages. Examples of materials diverted through programs that do not have property reporting include:

- Household Hazardous Materials
- Electronics
- Lead-Acid Batteries

6.3.1 Donation and Reuse

Goodwill Industries of Greater Nebraska, Inc. (Goodwill) produced a 2024-2025 Community Impact Report detailing the number of products donated and recycled in Nebraska. The report indicates that

a total of 9,437,450 pounds of donated goods were collected during the year which includes items such as clothing, household items, furniture, electronics, etc. Calculating this on a per-household basis, this would average over 11 pounds of donated materials to Goodwill within a year.

NRC hosted four durable medical equipment reuse events between July 2024 and April 2025 (Rescue & Reuse Results 2025). These events allowed individuals to donate used medical equipment such as wheelchairs, power wheelchairs, walkers, etc. During these events, a total of 184 individual donors of equipment contributed to 313 items being rehomed to those in need. It was estimated that a total of 12,630 pounds of sheet iron and 492 pounds of steel case batteries were diverted from landfill disposal.

6.3.2 Waste Tire Recycling

Per Title 132 regulations, waste tire haulers are required to obtain individual permits annually and provide post financial assurance for illegal tire dumping cleanups. Waste tire processors are exempt from annual individual permits, and instead, adhere to beneficial uses of waste tires as outlined in Title 132. DWEE works closely with the 22 permitted haulers as well as the public to provide compliance assistance through guidance documents, inquiry responses, technical assistance, site visits, complaint investigations, and enforcement actions.

The Waste Reduction and Recycling Incentives Grant program provides financial assistance for political subdivisions and public, private, and non-profit entities and organizations. Grants are funded by the Scrap Tire Fee, a \$1 fee collected on the sale of new tires, which generates \$1,000,000 annually. Applicants can apply for funding for the following activities:

1. Partial payment for purchase of tire-derived products and/or crumb rubber
2. Cost sharing for manufacturing, processing, and civil engineering applications
3. Collection site cleanups for political subdivisions
4. Capital and startup costs for processing, manufacturing, collecting, and transporting

The DWEE (2017) documented a five-year average (from 2012 to 2016) of 10,710 tons of scrap tires moved by Nebraska's scrap tire haulers. 34 percent of these tires were taken out of state to be processed and recycled at the time due to no tire processor being located in Nebraska.

7.0 RECOMMENDATIONS

This section identifies materials in the statewide composition that have the potential for diversion by implementing new or expanding existing diversion programs, or reduction through waste minimization or source reduction initiatives. Recommendations include programs and policies for DWEE's consideration.

Lithium Battery Diversion – SCS Engineers documented each lithium battery and item containing lithium batteries throughout the entirety of the characterization study. The Study found 165 total items containing lithium batteries or loose lithium batteries, the most common being vaping devices. Continued inclusion of this material category in future characterization studies will be important to help measure the impact of state legislation focused on lithium battery diversion.

Figure 3. Lithium Battery-Containing Items



Tracking and Reporting – The State currently tracks waste disposed of in Nebraska through the solid waste fee. Requiring facilities to report quantities of municipal solid waste, construction and demolition debris, and other materials by generating sector and whether they originate in or out of state would give the State critical data to support program planning, capacity development, and financial planning.

Continue Performing Statewide Material Characterization Studies – A continuation of material characterization studies can provide the State with valuable information on the waste stream. Characterization studies can display disposal trends over time, differences between seasons, or could show the impact of various diversion programs. These studies allow the State and local governments to make decisions on the programs and policies needed to create diversion strategies, reduce disposal, and recover resources. The State may consider increments of 5 years to measure disposal trends through material characterization studies.

Beverage Containers – Counts of metal, plastic, and glass beverage containers were collected throughout the Study to estimate the number of containers that could be captured through a Bottle Bill program. The State may wish to conduct a more comprehensive analysis, using purchasing data, to estimate the total number of beverage containers generated statewide. This analysis may highlight opportunities for growth of new recycling processors or reveal accessibility gaps in recycling programs across the State for multifamily units and rural areas.

Education Campaign – As counties, cities, and the State continue to implement programs to divert materials from the landfill, the State may consider an education campaign to encourage proper participation of programs. This may include creating educational materials that can be customizable to a particular facility or region. Materials that have similar imagery and language easily translate across the state to create a consistent message to the resident. Materials can be customized by inserting types of materials that are recyclable or adding agency names. These materials may include pamphlets, stickers, signs, etc.

Support and Documentation of Reuse Programs and Policies – Reusing or repurposing items before recycling is an effective way to divert materials from final disposal. Programs such as reuse initiatives, home restoration centers, lending libraries, and donation networks help keep materials in use in their original form and maximize their value. The State may also benefit from documenting reuse programs across Nebraska and tracking the flow of materials through these programs to better understand overall materials management statewide.

- Potentially impacted material categories and components:
 - Textiles/Leather: 4.9 percent of overall MSW composition
 - Electronic Waste: 1.2 percent of overall MSW composition
 - Bulky Items: 4.4 percent of overall MSW composition

Disposal Bans and Fees – Bans have been shown to be effective in some cases to mitigate the disposal of readily recyclable and compostable materials. The State may consider implementing a disposal ban on readily recoverable material such as *Corrugated Cardboard*. These potential disposal bans could encourage haulers, residents, and companies to partake in diversion efforts to avoid associated fees.

- Potentially impacted material categories and components:
 - Corrugated Cardboard: 5.3 percent of overall MSW composition

Figure 4. Corrugated Cardboard



Composting and Digestion Infrastructure and Capacity Analysis – Food waste accounts for approximately 19 percent of the statewide overall MSW composition. In Nebraska, infrastructure may already exist that processes food waste such as composting facilities or wastewater treatment plants. It may be advantageous to identify composting and digestion infrastructure in Nebraska and inquire about capacity/needs of these facilities with intention of expanding processing and acceptance of food waste.

- Potentially impacted material categories and components:
 - Food Waste - Unpackaged: 16.4 percent of overall MSW composition
 - Food Waste - Packaged: 2.7 percent of overall MSW composition

Figure 5. Food Waste – Packaged



Textiles Collection, Processing, and Recycling Infrastructure and Capacity Analysis – Textiles/Leather is the fifth most prevalent material component for statewide overall MSW. To divert this material from landfill disposal, the State may consider an infrastructure and capacity analysis to determine current businesses accepting and processing textile materials. Future programs for textile collection and recycling could complement the current infrastructure or systems in place. Additionally, if the analysis finds there is a need for textile recycling infrastructure and processing capacity, this would help the State incentivize businesses to move into Nebraska to support the greater economy.

- Potentially impacted material categories and components:
 - Textiles/Leather: 4.9 percent of overall MSW composition
 - Carpet/Carpet Pads: 0.7 percent of overall C&D composition

Figure 6. Scrap Carpet Materials



Recycling Infrastructure and Capacity Analysis – Many of the materials identified throughout the Study may be captured through recycling processes. Although this report sought to capture an overview of data and impacts of recycling programs within Nebraska, the State may consider a recycling infrastructure and capacity analysis to identify recycling programs, facilities that collect or process materials, and the capacity of these facilities to leverage current infrastructure. This analysis may highlight opportunities for growth of new recycling processors or reveal accessibility gaps in recycling programs across the State for multifamily units and rural areas.

Life Cycle Analysis – A Life Cycle Analysis (LCA) can provide data to support the decision-making process and policy development to focus on specific material types. Through LCAs, one can follow a specific material from cradle (manufacturing) to grave (disposal) and examine greenhouse gas emissions, water impacts, and energy needs. LCAs can also develop alternative scenarios for disposal of materials that can determine the most effective path for reuse or recycling and ultimately lead toward a circular economy.

Alternative C&D Material Processing – A variety of items captured in the visual C&D characterization may be diverted through other processes. The following are suggestions to promote reuse of materials or extend the life of C&D materials.

- **Mulching** – Various types of untreated wood materials, either through C&D processes or in MSW, can be chipped or mulched to create new products, furthering the life of the material. Mulch generated from these programs could be used on site at landfill facilities to aid roads during inclement weather or could be used throughout cities in landscaping.
 - Potentially impacted material categories and components:
 - Untreated Wood: 2.8 percent of overall MSW composition
 - Untreated Wood: 8.7 percent of overall C&D composition
 - Wooden Pallets: 4.8 percent of overall C&D composition

- Engineered Wood/Manufactured Wood: 1.3 percent of overall C&D composition
- Sawn Lumber: 0.8 percent of overall C&D composition

Figure 7. Wood Materials



- *Restore* – Every day, usable items like furniture and construction goods are often landfilled. These items could be made available to community members using a “Habitat ReStore” model used by Habitat for Humanity. Habitat ReStores allow individuals and businesses to donate surplus or unwanted building materials or household goods. Items are offered for resale, often at discounted prices compared to traditional retail outlets.
 - Potentially impacted material categories and components:
 - Untreated Wood: 2.8 percent of overall MSW composition
 - Untreated Wood: 8.7 percent of overall C&D composition
 - Wooden Pallets: 4.8 percent of overall C&D composition
 - Engineered Wood/Manufactured Wood: 1.3 percent of overall C&D composition
 - Furniture: 2.5 percent of overall C&D composition

Figure 8. Wooden Pallets



- *Metal Recycling Program* – Metal is one of the more valuable and easily recycled material types. The State may consider implementing a recycling program for metal as *Ferrous Scrap* composes 3.9 percent of the statewide C&D composition. A recycling program to collect, shred/process, and remanufacture materials within the State may be beneficial. This metal recycling program could be further expanded to include MSW as well.
 - Potentially impacted material categories and components:
 - Metal: 3.9 percent of overall C&D composition
- *Asphalt Shingle Recycling Program* – Roofing Materials comprise 8.8 percent of the statewide C&D composition. In an effort to divert this material from landfill disposal, the State may consider an asphalt shingle recycling program. During this process, shingles are ground up and are either used in asphalt paving for roads or driveways or are then put through an energy recovery process to create oil. This oil could then be sold commercially as a renewable resource alternative to other products.
 - Potentially impacted material categories and components:
 - Roofing Materials: 8.8 percent of overall C&D composition
- *Incentives for Clean and Reuseable Materials* – Materials that are source-separated for diversion allow for less time to be spent during the diversion process for these materials. Items such as concrete or brick that are delivered to a facility for final disposal in a pre-sorted method could be used in C&D recycling programs or used at the landfill to build structures or support current infrastructure. Customers that separate materials may be offered a discounted price on the disposal of materials to further encourage this practice.
 - Potentially impacted material categories and components:
 - Dirt/Gravel/Sand/Rock: 12.3 percent of overall C&D composition
 - Brick: 12.3 percent of overall C&D composition
 - Drywall (Painted and Non-Painted): 12.4 percent of statewide C&D composition

8.0 CONCLUSION

This section summarizes some conclusions that can be drawn from the 2025 Nebraska Statewide Material Composition Study:

- **Comparability** – This Study was designed to be mirrored in future characterization studies while having the ability to be modified through future goals and parameters.
- **Comprehensiveness** – This Study successfully characterized 606 MSW samples and 315 C&D samples at eight host facilities throughout the state of Nebraska. Of these MSW samples, 286 were residential, 276 were ICI, and 44 were mixed. These eight host facilities were geographically diverse in their location ensuring the completed Study provides a comprehensive picture of MSW and C&D disposed of in the state of Nebraska.

9.0 SUPPORTING DOCUMENTS

The following appendices list the documents used to support the Study.

Appendix A

2025 MSW Material Categories & Components Descriptions

Appendix B

2025 C&D Material Categories and Components Descriptions

Appendix C

Sample MSW Physical Sort Field Form

Appendix D

Sample C&D Visual Characterization Field Form

Appendix E

MCS Sampling Plan Methodology

Appendix F

Detailed MSW Composition Tables Overall and by Waste Generating Sector

Appendix G

Detailed MSW Composition Tables by Season

Appendix H

Detailed MSW Composition Tables by Host Facility

Appendix I

2009 vs 2025 Category & Component Combination Methodology

Appendix J

2009 vs 2025 Study Detailed MSW Composition Tables Overall and by Waste Generating Sector

Appendix K

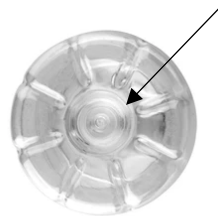
Detailed C&D Composition Tables by Season and Host Facility



Appendix A

2025 MSW Material Categories and Components Descriptions

2025 MSW Material Categories and Components				
Paper				
	2025 Component	2025 Definition	Spanish	Notes
1	Corrugated Cardboard Carton corrugado	Cartons and boxes made of corrugated paper	Cartones y cajas echos de papel corrugado	Tip: Has a waffle-like texture.
2	Office Paper Papel de Oficina	High-grade paper, printing and writing papers including ground-wood and thermos-chemical pulps	Papel de alta calidad para imprimir y escribir. También incluye papeles echos de pastas de madera molida y termoquímicas. (papel pergamino)	
3	Newsprint Papel de periódico	Printed ground-wood newsprint and other minimally bleached ground wood	Papel de prensa impreso de madera molida y otra madera molida mínimamente blanqueada	
4	Magazines Revistas	Glossy papers and inserts including catalogs, magazines, and mailings	Papeles brillantes e insertos, como catálogos, revistas y envíos	
5	Paperboard/Liner Board Papel de carton/Papel kraft	Heavyweight liner board, cereal boxes, and forms. Includes Kraft paper	Cartón grueso, cajas de cereales y formularios. Incluye papel Kraft	Example: Non-contaminated Kraft paper food bags.
6	Other Paper/Non-Recyclable Paper Otro papel/Papel no reciclable	Paper not included above or that is not easily recycled including foil-lined paper, laminated papers, contaminated paper, food-contaminated recyclable paper, deep-toned or	Todo el demas papel que no fue incluido arriba o que no se puede reciclar fácilmente, como papel con revestimiento de aluminio, papeles laminados, papeles contaminados, papeles reciclables contaminados con	Example: Air filters, aseptic, tetrapak, pringles containers, foil/plastic lined paper cups.

		fluorescent dyed paper, construction paper, and waxed-coated papers (i.e. milk and juice cartons)	comida, papeles teñidos de colores fuertes o fluorescentes, papel de construcción y papeles con capa de cera (por ejemplo, cajas de leche y jugo)	
7	Mixed Paper Papel Mixto	Examples include manila folders, manila envelopes, index cards, notebook paper, carbonless forms, junk mail, phone directories, non glossy catalogs, and books.	Ejemplos van a incluir: carpetas manila, sobres manila, tarjetas índice, papel de cuaderno, formularios sin carbono, correo no deseado, directorios telefónicos, catálogos no brillantes y libros.	
8	Compostable Paper Papel Compostable	Low grade paper that could be composted; examples include uncoated paper towels, paper plate, napkins, and tissues.	Papel de baja calidad que se puede compostar; ejemplos incluyen toallas de papel sin revestir, platos de papel, servilletas y pañuelos	
Plastic				
	Component	Definition	Spanish	Notes
9	PET #1 Plastico PET #1	Soft drink, water, or mouthwash bottles and similar containers with PET or #1 inscribed on the container. Includes beverage containers not intended for single-use.	Botellas de enjuague bucal y contenedores similares con PET o #1 grabado en el envase.	Tip: A “bellybutton” on the bottom of the container can identify the material as PET.  shutterstock.com · 1292929540 Tip: Extremely clear/translucent plastic containers that are pliable.

				Examples: Water bottles, salad containers, fruit containers, condiment bottles, green olive oil bottles. Tip: Does NOT include bottles with liquid where the liquid is heavier than the bottle.
10	Natural HDPE #2 Plastico HDPE #2	Plastic is usually cloudy white allowing light to pass through it with HDPE or #2 inscribed on the container. Includes milk cartons.	Plástico que normalmente es blanco opaco, dejando pasar la luz, con HDPE o #2 grabado en el envase. Incluye los cartones de leche	Tip: A seam on the bottom of the container can identify the material as an HDPE container.
11	Colored HDPE #2 Plastico HDPE #2 de color	This plastic is a solid color, preventing light from passing through it with HDPE or #2 inscribed on the container. Includes detergent bottles.	Este plástico es de un solo color, que no deja la luz que pase a través de él, con HDPE o #2 escrito en el contenedor. Incluye botellas de detergente	Examples: Toothpaste containers.
12	PP #5 Plastico PP #5	Examples include bottles, rigid containers, and packaging - polypropylene tubs, cups, clamshells and trays that are > 2" and <2 gallons. Includes	Ejemplos van a incluir botellas, envases rígidos y empaques: tinas de polipropileno, vasos, envases tipo concha y bandejas que son mayores de 2" y menores de 2 galones	Examples: prescription medicine bottles, plastic food storage containers, etc.
13	Expanded Polystyrene Poliestireno expandido	"Styrofoam" products include food packaging and finished products made of expanded	Los productos de 'Styrofoam' incluyen empaques de alimentos y productos	

		polystyrene including cups, plates, trays, clamshells, packaging products, including packing peanuts and other packaging materials.	terminados hechos de poliestireno expandido, como vasos, platos, bandejas, envases tipo concha, productos de empaque, incluyendo bolitas de plástico para embalaje y otros materiales de empaque.	
14	Other Numbered Plastics Otros plásticos numerados (#3, #4, #6, #7)	Squeezable bottles, compact disc jackets, and similar materials with #3, #4, #6 (non-foam) or #7 inscribed on the container	Botellas que se pueden apretar, fundas de discos compactos y materiales similares con #3, #4, #6 (no espumoso) o #7 escrito en el contenedor	Examples: Solo cups, squeezable pouches with numbers.
15	Film and Bags Bolsas de plástico y filmes	Plastic bags and film including dry cleaning bags, bread bags, trash bags, plastic wrap, plastic wrappers, and bubble wrap	Bolsas de plástico y filmes, incluyendo bolsas de tintorería, bolsas de pan, bolsas de basura, envolturas de plástico, envoltorios plásticos y plástico burbuja.	Tip: Anything that “crinkles” <u>excluding</u> retail shopping bags.
16	Retail Shopping Bags Bolsa de compra	Single-use plastic bags used to carry purchased products.	Bolsas de plástico de un solo uso para cargar productos	
17	Other Plastics Otros plásticos	All other plastics including compact discs, hard plastic toys and similar materials that do not have a number inscribed on them	Todos los demás plásticos, incluyendo discos compactos, juguetes de plástico duro y materiales similares que no tienen un número grabado en ellos.	

18	Plastic Items Containing Lithium Batteries Objetos de plástico que contienen baterías de litio	Rechargeable plastic items or plastic items containing lithium batteries. Includes various plastic toys or plastic instruments.	Todo los a Artículos de plástico que son recargables o artículos de plástico que contengan baterías de litio. Incluye varios juguetes de plástico o instrumentos de plástico.	
19	Plastic Single-Use Beverage Containers	Plastic beverage containers intended for single use. Soft drink or water bottles with PET or #1 inscribed on the container.		Tip: Does NOT include bottles with liquid where the liquid is heavier than the bottle.
Glass				
	Component	Definition	Spanish	Notes
20	Clear Glass Containers Contenedores de vidrio transparente	Clear glass bottles and jars	Botellas y frascos de vidrio transparente	
21	Brown Glass Containers Contenedores de vidrio cafes	Brown glass bottles and jars	Botellas y frascos de vidrio marrón	
22	Green Glass Containers Contenedores de vidrio verde	Green glass bottles and jars	Botellas y frascos de vidrio verde	
23	Blue Glass Containers Contenedores de vidrio azul	Blue glass bottles with jars	Botellas y frascos de vidrio azul	
24	Other Glass Otros vidrios	Window glass, mirrors, light bulbs, ceramics	Vidrio de ventanas, espejos, focos de luz, cerámica	Example: Incandescent bulbs.
25	Glass Single-Use Beverage Containers	Glass beverage containers intended for single use.		

		Includes soda bottles.		
Metal				
	Component	Definition	Spanish	Notes
26	Aluminum Containers Contenedores de aluminio	Cans made of non-ferrous metal	Latas de bebidas hechas de metal no ferroso	
27	Steel/Tin Containers Contenedores de acero/lata	Empty ferrous metal containers including tin cans, steel cans and metal containers to which a magnet adheres	Contenedores vacíos de metal ferroso, como latas de estaño, latas de acero y contenedores metálicos que son magneticos	
28	Other Ferrous Scrap Otras residuos ferrosas	Ferrous metal pieces that are not containers and to which a magnet adheres	Metal ferroso que no son contenedores, y que no son magneticos	
29	Other Non-Ferrous Scrap Otras residuos no ferrosas	Non-ferrous metals that are not containers including cookware, clean foils, take-out containers, and metals to which a magnet does not adhere	Metales no ferrosos que no son contenedores. como utensilios de cocina, papel de aluminio limpio, contenedores para llevar y metales a los que no son magneticos.	
30	Other Metals Otros Metales	Items that contain both ferrous and non-ferrous materials	Artículos que contienen materiales ferrosos y no ferrosos.	
31	Non-Recyclable Metal Metal no reciclable	Mixed materials or contaminated metal. Includes contaminated foil and foil containers.	Materiales mezclados o metal contaminado. Incluye papel de aluminio y envases de aluminio contaminados	Example: Bike, umbrella, chair with cushion. (must have additional material types other than metal).
32	Metal Single-Use Beverage Containers	Metal beverage containers intended for single use. Includes soda cans.		
Organics				

	Components	Definition	Spanish	Notes
33	Food Waste – Packaged Desperdicio de comida - Empacado	Food material still in the original packaging; includes material from industrial, commercial, or residential sources. Examples include unopened food packaging or food not processed or consumed.	Material de comida toda via en su empaque original; incluye material de lugares industriales, comerciales o residenciales. Ejemplos incluyen empaques de comida sin abrir o comida no procesada ni consumida.	Examples: sauce packets, candy, whole produce.
34	Food Waste – Unpackaged Desperdicio de comida – Sin paquete	Food material resulting from the processing, storage, preparation, cooking, handling, or consumption of food; includes material from industrial, commercial, or residential sources; examples include discarded meat scraps, dairy products, eggshells, fruit or vegetable peels, and other food items from homes, stores and restaurants. Includes food in packages if it has been opened or consumed in some capacity.	Material de comida que viene del procesamiento, almacenamiento, preparación, cocción, manejo o consumo de alimentos. Esto incluye material de fuentes industriales, comerciales o residenciales. Ejemplos incluyen restos de carne, productos lácteos, cáscaras de huevo, cáscaras de frutas o verduras y otros restos de comida de hogares, tiendas y restaurantes. También comida en contenedores que si ha sido abierta o consumida de alguna manera.	Examples: Half full bottles of Gatorade/water.
35	Yard Waste Basura de jardín	Leaves, grass clippings, garden waste, brush,	Hojas, Zacate cortado, ramas, mantillo, troncos y	

		mulch, logs, and tree stumps	tocones de árboles.	
C&D Materials				
	Components	Definition	Spanish	Notes
36	Linoleum Linóleo (de piso)	Floor covering with a canvas back and a surface of hardened linseed oil and a filler	Cobertura para el piso con respaldo de lona y una superficie de aceite de linaza endurecido con relleno.	
37	Untreated Wood Madera no tratada	Refers to any wood which does not contain an adhesive, paint, stain, fire retardant, pesticide or preservative; includes such items as pallets, skids, spools, packaging materials, bulky wood waste or scraps from newly built wood products and wood pallets; does not include land clearing debris or yard waste pruning and trimmings.	Se refiere a toda la madera que no contenga adhesivos, pintura, tinte, retardante de fuego, pesticidas o preservativos; incluye elementos como palets, tarimas, bobinas, materiales de empaque, desechos de madera grandes o restos de productos de madera recién fabricados y palets de madera; no incluye escombros de limpieza de terrenos ni residuos de jardín como podas y recortes.	
38	Treated Wood Madera tratada	Wood that contains an adhesive, paint, stain, fire retardant, pesticide or preservative; includes all engineered wood.	Madera que contiene adhesivo, pintura, tinte, retardante de fuego, pesticida o preservativo; incluye toda la madera tratada	
39	Roofing Materials Materiales de techos	Composite shingles and other roofing material made	Tejas compuestas y otros materiales para techos hechos con	

		with asphalt; examples include asphalt shingles and attached roofing tar and tar paper.	asfalto; ejemplos son tejas de asfalto y papel de techo con alquitrán	
40	Bricks and Porcelain Ladrillos y porcelana	Includes masonry brick, landscaping or walkway brick, porcelain household fixtures such as toilets, tiling, and sinks.	incluye ladrillos de construcción, ladrillos para jardines o caminos, y artículos de porcelana para el hogar como inodoros, azulejos y lavamanos.	
41	Soil, Rock, Sand Tierra, roca, arena	Includes soil and clay, solid minerals, and loose granular substances.	Incluye tierra y arcilla, minerales sólidos y sustancias granuladas sueltas	
42	Concrete Concreto	Includes pieces of building foundations, concrete paving, and cinder blocks.	Incluye trozos de cimientos de edificios, pavimento de concreto y bloques de cemento	
43	Misc. C/D Waste Residuos de construcción y demolición misceláneos	Drywall, plumbing fixtures, ceiling tile, HVAC and similar pieces of materials used in construction.	Paredes de yeso, accesorios de plomería, baldosas de techo, sistemas de calefacción y aire acondicionado, y otros materiales usados en la construcción	Example: Insulation, plaster board, caulk.
Other Waste Categories				
	Components	Definition	Spanish	Notes
44	Diapers Panales	Plastic disposable diapers, pee pads, cloth diapers, and sanitary products	Pañales desechables de plástico, pañales para orina, pañales de tela y productos sanitarios	
45	Textiles/ Leather Textiles/Piel	Clothing, shoes, cushions, curtains, rugs,	ropa, zapatos, cojines, cortinas, alfombras y	Examples: Carpet/carpet padding, reusable bags.

		and similar products	productos similares	
46	Rubber Goma	Natural or manmade rubber products such as hoses; foam rubber; latex or nitrile gloves; rubber bands and solid or pneumatic tires intended for use on any type of vehicle (including bicycles), or trailer to be used in tandem with any type vehicle.	Productos de goma natural o artificial, como mangueras, goma espuma, guantes de látex o nitrilo, ligas y llantas para vehículos (incluyendo bicicletas) o remolques	Examples: Clean medical gloves. (IF dirty, put in medical waste).
47	Household Hazardous Waste Basura peligrosa del hogar	Paint, pesticides, cleaners, solvents, antifreeze, etc. and containers with any unused portion of these products	Pintura, pesticidas, limpiadores, solventes, anticongelante, etc. y envases con cualquier parte no usada de estos productos	
48	White Goods Electrodomésticos grandes	Goods that have mechanical components. Refrigerators, air conditioners, washing machines, etc.	Artículos que tienen partes mecánicas. Refrigeradores, aires acondicionados, lavadoras, etc.	
49	Electronic Waste Basura electronica	Computer parts and peripherals, small appliances, cameras, televisions, audio and stereo equipment, video cassette recorders, telephones, fax machines, copy machines, video game consoles, wire and cable insulation, and similar products.	Partes de computadoras y accesorios, electrodomésticos pequeños, cámaras, televisores, equipos de sonido, grabadoras de video, teléfonos, faxes, fotocopadoras, consolas de videojuegos, cables y productos similares.	

50	Electronics Containing Lithium Batteries Electronica que contiene baterías de litio	Rechargeable electronics such as iPads, phones, Kindles, etc.	Electrónicos recargables como iPads, teléfonos, Kindles, etc	
51	Non-Distinct Objetos No Distinto	Miscellaneous materials, kitty litter, wax, soap, etc. and those items made of mixed materials	Materiales de varios, arena para gatos, cera, jabón, etc., y aquellos artículos hechos de materiales mixtos	Examples: roadkill, Clorox wipes, dryer sheets, toothpaste, soaps.
52	Oil Filters Filtros de aceite	Filters that treat oil in automobiles, trucks, and other machinery	Filtros que tratan el aceite en automóviles, camiones y otras máquinas	
53	Waste Oil Aceite usado	Oil used in automobiles, trucks, and other equipment	Aceite usado en automóviles, camiones y otros equipos	
54	Thermometers Termómetros	Instruments used for measuring temperature including digital read-out devices and those that measure by the rise or fall of mercury in a thin glass tube	Instrumentos utilizados para medir la temperatura, incluyendo dispositivos digitales y aquellos que miden por el aumento o descenso del mercurio en un tubo de vidrio delgado.	
55	Thermostats Termostatos	Devices that automatically control temperature	Dispositivos que automaticamente controlan la temperatura	
56	Raw Mercury Mercurio crudo	Heavy silver- white metallic chemical element used in scientific instruments	Elemento químico metálico-blanco plateado pesado utilizado en instrumentos científicos	
57	Light-Up Shoes/Buttons	Shoes or buttons that produce a	Zapatos o botones que producen una	

	Zapatos/botones con luces	small intense light when a specific area is depressed	pequeña luz intensa cuando se presiona una área específica.	
58	Florescent Bulbs focos fluorescentes	Lights that utilize a ballast and are designed to function with a filament	Luces que utilizan un balasto y están diseñadas para funcionar con un filamento	
59	Lithium Batteries Baterías de litio	Lithium batteries	Baterías de litio	
60	Alkaline and Other Batteries Baterías alcalinas y otras baterías	Alkaline and other non-rechargeable batteries	Alcalino y otros baterías non recargables	
61	Empty Aerosol Cans Latas de aerosol vacías	Pressurized containers that dispense a substance as an aerosol	Envases a presión que dispensan una sustancia en forma de aerosol.	
62	Unclassifiable Fines Fragmentos pequeños no clasificables	Un-sortable small fragments (generally less than 1/2 inch in diameter); mainly composed of organic material and miscellaneous fines and dirt.	Fragmentos pequeños no clasificables (generalmente menos de 1/2 pulgada de diámetro); compuestos principalmente de material orgánico y polvo y tierra de variedad	
63	Bulky Items Artículos grandes	Items large in nature, hard to manage, potentially made of multiple material types. Includes furniture and mattresses.	Artículos grandes, difíciles de manejar, que pueden estar hechos de varios tipos de materiales. Incluye muebles y colchones.	
64	Medical Waste	Medical related items that may present an exposure or	Artículos médicos que pueden presentar un riesgo de	

	Desechos medicos/ Basura Medico	biohazard (i.e., bloody gowns, gloves, surgical equipment, medicine, plasma, etc.). Medicine includes items such as Tylenol, inhalers, and prescription/non- prescription items. This does not include vitamins or supplements.	exposición o biohazard (es decir, batas con sangre, guantes, equipo quirúrgico, medicina, plasma, etc.). La medicina incluye artículos como Tylenol, inhaladores y productos con o sin receta. Esto no incluye vitaminas o suplementos	
65	Sharps Objetos filosos	Discarded needles that have been used in animal or human patient care or treatment or in medical research or laboratories.	Agujas descartadas que han sido usadas hacia el tratamiento de pacientes humanos o animales, o en investigaciones o laboratorios medicos.	



Appendix B

2025 C&D Material Categories and Components Descriptions

Visual Characterization Groups and Categories Descriptions

Material Category	Material Component	Definitions
WOOD WASTE	Sawn Lumber	Clean dimensional lumber, suitable for composting or mulching.
	Engineered wood/manufactured wood	Treated wood, plywood, composite wood flooring, corkboard, painted lumber, stained/varnished tables, etc.
	Wooden pallets	Wood pallets and crating materials commonly used for industrial and commercial packaging and shipping.
	Treated wood materials	Wood containing an adhesive, paint, stain, fire retardant, pesticide, or preservative; includes such items as skids, spools, packaging materials, bulky wood waste, or scraps from newly built wood products; does not include land clearing debris or yard waste pruning and trimmings.
	Untreated wood materials	Refers to any wood which does not contain an adhesive, paint, stain, fire retardant, pesticide or preservative; includes such items as skids, spools, packaging materials, bulky wood waste or scraps from newly built wood products; does not include land clearing debris or yard waste pruning and trimmings.
GYPSUM BOARD	Drywall painted and non-painted	Painted or unpainted interior wall covering made of a sheet of gypsum sandwiched between paper layers; examples include used or unused, broken or whole sheets of sheetrock, drywall, gypsum board, plasterboard, gypsum board, and wallboard.
SPECIAL WASTES	Asbestos	A mineral fiber added to a variety of products to strengthen them and to provide heat insulation and fire resistance.
	Contaminated soils	Soil containing chemicals.
	Industrial process wastes	Acetone, chlorobenzene, glazes, chloride, paint, petroleum distillates, pigments, solvents, stripping compounds, toluene, and wastewater.
	Sludges	Thick, soft, wet mud or a similar viscous mixture of liquid and solid components, esp. the product of an industrial or refining process.
ORGANICS	Food waste loose	Food material resulting from the processing, storage, preparation, cooking, handling, or consumption of food; includes material from industrial, commercial, or residential sources; examples include discarded meat scraps, dairy products, eggshells, fruit or vegetable peels, and other food items from homes, stores and restaurants. Includes apple pomace and other processed residues or material from canneries, wineries or other industrial sources; does not include food discarded in its original store-bought or manufacturing packaging.
	Food waste packaged	Food material still in the original packaging, including material from industrial, commercial, or residential sources. Examples include discarded meat scraps. Also includes liquids drained from PET #1, HDPE #2, metal, or glass containers discarded as waste such as unconsumed soft drinks, water, milk, pickle juice, etc.; it excludes any liquid not meant for human consumption.

Material Category	Material Component	Definitions
	Tree limbs and Stump waste	Tree limbs, stumps, and branches.
	Yard wastes	Debris such as grass clippings, leaves, garden waste, and brush.
	Other organics	Organic material that cannot be put in any other type or subtype. This type includes items made primarily of organic materials but combined with other materials. Examples include cork, hemp rope, hair, cigarette butts, full vacuum bags, sawdust, wax, sponges, and animal feces from residential dwellings.
OTHER LISTED MATERIALS	Wires (i.e., composite metal, etc.)	Metal drawn out into the form of a thin, flexible thread or rod.
	Ceramics	Finished ceramic or porcelain household fixtures such as toilets, tiling, and sinks.
	Fiberglass	Strong, lightweight material consists of thin glass fibers that can be transformed into a woven layer or used as reinforcement—commonly used in aircraft, boats, automobiles, swimming pools, storage tanks, roofing, pipes, cladding and casts.
	Insulation	Refers to any material used to reduce heat loss or heat gain by providing a barrier between the inside of your home and the significantly different temperature outside. Includes fiberglass, mineral wool, cellulose, natural fibers, polystyrene, polyisocyanurate, polyurethane and perlite.
	Concrete	Includes pieces of building foundations, concrete paving, and cinder blocks.
	Brick	Includes masonry brick, landscaping or walkway brick.
	Carpet/carpet pads	Flooring applications consist of various natural or synthetic fibers which may be bonded to some backing material and plastic, foam, felt, or other material used under the carpet to provide insulation and padding.
	Vinyl siding	Exterior cladding for homes and commercial buildings made of polyvinyl chloride (PVC) and other chemicals
	Roofing materials	Underlayment felt, shingles (asphalt, slate, wood, metal, clay), shingle packaging.
	Dirt/sand/gravel/rock	Includes soil and clay, solid minerals, and loose granular substances.
	Metal	Ferrous and non-ferrous metal items.
	Plastic	Includes rigid plastic and plastic film materials.
	Mattresses and box springs	Includes all fabric cases filled with a deformable or resilient material used for sleeping.
	Furniture	Includes items such as tables and chairs.
	Tires	Any size, rim to be attributed to metal.
	Corrugated cardboard	Corrugated cardboard has a wavy center layer and is sandwiched between the two outer layers; examples include entire cardboard containers, such as shipping and moving

Material Category	Material Component	Definitions
		boxes, computer packaging cartons, and sheets and pieces of boxes and cartons.
	Other MSW recyclable material	Household plastics (pop bottles, food containers, etc.), newspaper, office paper, aluminum, and steel cans, and glass.
	MSW non-recyclable waste	Refuse materials not elsewhere classified.
	Other C&D wastes	Wastes generated from construction or demolition activities not elsewhere classified.
	Electronics	TVs, VCRs, DVD/Blu Ray Players, Computers, Tablets, Stereos, Remotes, Associated power cords, etc.
	Appliances	Microwaves, toasters, coffee makers, washers, dryers, other household appliances, etc.
	Glass	Glass from windows, doors, etc.
	Chemicals	Containers 5 gallons and greater confirmed to have any amount of residue.
	Textiles	Clothing, bedding, plush toys.
	Bagged wastes	Includes all plastic bags filled with unknown materials.



Appendix C

Sample MSW Physical Sort Field Form

2025 NEBRASKA STATEWIDE MATERIAL CHARACTERIZATION STUDY

SAMPLE INFORMATION:		SAMPLE WEIGHT:		A _____	B _____	C _____
FACILITY:		D _____	E _____	F _____	G _____	
SAMPLE #:		H _____	I _____	J _____	K _____	
VEHICLE INFORMATION:		DATE _____ TIME _____		WEATHER: SUNNY RAINY CLOUDY WINDY		
HAULER _____		VEHICLE TYPE FRONT SIDE TNSFR TRAILER OTHER _____		TRUCK NUMBER _____		
WASTE TYPE: RES COM OTHER		APPLIANCE/TIRE/MATTRESS COUNT:			SEGMENT:	

SORT DATA		
WASTE COMPONENTS	GROSS WEIGHTS/VOLUME PERCENT	COMMENTS
PAPER FIBERS		
1 Corrugated cardboard		
2 Office paper		
3 Newsprint		
4 Magazines		
5 Paperboard/liner board		
6 Other paper/non-recyclable paper		
7 Mixed paper		
8 Compostable paper		
PLASTICS		
9 PET #1		
10 Natural HDPE #2		
11 Colored HDPE #2		
12 PP #5		
13 Expanded polystyrene		
14 Other numbered plastics		
15 Film and bags		
16 Retail shopping bags		
17 Other plastics		
18 Plastic items containing lithium batteries		
19 Plastic single-use beverage containers		
GLASS		
20 Clear glass containers		
21 Brown glass containers		
22 Green glass containers		
23 Blue glass containers		
24 Other glass		
25 Glass single-use beverage containers		
METALS		
26 Aluminum containers		
27 Steel/tin containers		
28 Other ferrous scrap		
29 Other non-ferrous scrap		

METALS (CONT.)

30	Other metals	
31	Non-recyclable metal	
32	Metal single-use beverage containers	
ORGANICS		
33	Food waste - packaged	
34	Food waste - unpackaged	
35	Yard waste	
C&D MATERIALS		
36	Linoleum	
37	Untreated wood	
38	Treated wood	
39	Roofing materials	
40	Bricks and porcelain	
41	Soil, rock, sand	
42	Concrete	
43	Misc. C/D waste	
OTHER WASTE CATEGORIES		
44	Diapers	
45	Textiles/leather	
46	Rubber	
47	Household hazardous waste	
48	White goods	
49	Electronic waste	
50	Electronics containing lithium batteries	
51	Non-distinct	
52	Oil filters	
53	Waste oil	
54	Thermometers	
55	Thermostats	
56	Raw mercury	
57	Light-up shoes/buttons	
58	Florescent bulbs	
59	Lithium batteries	
60	Alkaline and other batteries	
61	Empty aerosol cans	
62	Unclassifiable fines	
63	Bulky items	
64	Medical waste	
65	Sharps	

SAMPLE #:**COMMENTS:**



Appendix D

Sample C&D Visual Characterization Field Form

SAMPLE SHEET - C&D VISUAL ESTIMATION

SCS ENGINEERS

2025 NEBRASKA STATEWIDE MATERIAL CHARACTERIZATION STUDY

SAMPLE INFORMATION:			
FACILITY: _____		SAMPLE #: _____	
VEHICLE INFORMATION:			
DATE _____	TIME _____	WEATHER: SUNNY RAINY CLOUDY WINDY	
HAULER _____		VEHICLE TYPE ROLL-OFF TRAILER OTHER _____	
SOURCE RES COM OTHER _____		DIMENSIONS _____ X _____ X _____	

SORT DATA		
WASTE COMPONENTS	% OF VOLUME	COMMENTS
C&D Waste		
1 Sawn lumber		
2 Engineered wood/manufactured wood		
3 Wooden pallets		
4 Treated wood materials		
5 Untreated wood materials		
6 Drywall (painted and non-painted)		
7 Asbestos		
8 Contaminated soils		
9 Industrial process waste		
10 Sludges		
11 Food waste loose		
12 Food waste packaged		
13 Tree limbs and stump waste		
14 Yard wastes		
15 Other organics		
16 Wires (i.e., composite metal, etc.)		
17 Ceramics		
18 Fiberglass		
19 Insulation		
20 Concrete		
21 Brick		
22 Carpet/carpet pads		
23 Vinyl siding		
24 Roofing materials		
25 Dirt/sand/gravel/rock		
26 Metal		
27 Plastic		
28 Mattresses and box springs		
29 Furniture		
30 Tires		
31 Corrugated cardboard		
32 Other MSW recyclable material		
33 MSW non-recyclable waste		
34 Other C&D wastes		
35 Electronics		
36 Appliances		
37 Glass		
38 Chemicals		
39 Textiles		
40 Bagged wastes		

COMMENTS/OBSERVATIONS:



Appendix E

MCS Sampling Plan Methodology

WINTER: Host Facility Reported Waste Disposal (in tons)			
Host Facility	Waste Disposal by Sector (tons)		
	MSW		Total
	Res	ICI	
Bluff Road	139,886	112,159	252,045
Hastings	17,976	29,040	47,016
Norfolk	27,497	10,417	37,914
Pheasant Point	149,562	343,704	493,265
Sidney	1,980	4,969	6,949
TOTAL TONS	336,901	500,289	837,190
PERCENTAGE	40.2%	59.8%	100%

WINTER: Percent Contribution of Host Facility		
Host Facility	Waste Disposed by Generating Sector	
	MSW	
	Res	ICI
Bluff Road	41.5%	22.4%
Hastings	5.3%	5.8%
Norfolk	8.2%	2.1%
Pheasant Point	44.4%	68.7%
Sidney	0.6%	1.0%
	100.0%	100.0%

SPRING: Host Facility Reported Waste Disposal (in tons)			
Host Facility	Waste Disposal by Sector (tons)		
	MSW		Total
	Res	ICI	
Bluff Road	139,886	112,159	252,045
Lexington	40,544	10,136	50,680
Pheasant Point	149,562	343,704	493,265
Sidney	1,980	4,969	6,949
TOTAL TONS	331,972	470,968	802,940
PERCENTAGE	41.3%	58.7%	100%

SPRING: Percent Contribution of Host Facility		
Host Facility	Waste Disposed by Generating Sector	
	MSW	
	Res	ICI
Bluff Road	42.1%	23.8%
Lexington	12.2%	2.2%
Pheasant Point	45.1%	73.0%
Sidney	0.6%	1.1%
	100.0%	100.0%

SUMMER: Host Facility Reported Waste Disposal (in tons)				
Host Facility	Waste Disposal by Sector (tons)			
	MSW			Total
	Res	ICI	Mix	
Bluff Road	139,886	112,159		252,045
Lexington	40,544	10,136		50,680
Pheasant Point	149,562	343,704		493,265
Hastings	17,976	29,040		47,016
Valentine	1,692	-	2,336	4,028
Chadron			10,192	10,192
TOTAL TONS	349,659	495,039	12,528	857,227
PERCENTAGE	40.8%	57.7%	1.5%	100%

SUMMER: Percent Contribution of Host Facility			
Host Facility	Waste Disposed by Generating Sector		
	MSW		
	Res	ICI	Mix
Bluff Road	40.0%	22.7%	0.0%
Lexington	11.6%	2.0%	0.0%
Pheasant Point	42.8%	69.4%	0.0%
Hastings	5.1%	5.9%	0.0%
Valentine	0.5%	0.0%	18.6%
Chadron	0.0%	0.0%	81.4%
	100.0%	100.0%	100.0%

FALL: Host Facility Reported Waste Disposal (in tons)				
Host Facility	Waste Disposal by Sector (tons)			Total
	Res	MSW ICI	Mix	
Bluff Road	139,886	112,159		252,045
Pheasant Point	149,562	343,704		493,265
Norfolk	27,497	10,417		37,914
Chadron			10,192	10,192
TOTAL TONS	316,945	466,279	10,192	793,417
PERCENTAGE	39.9%	58.8%	1.3%	100%

FALL: Percent Contribution of Host Facility			
Host Facility	Waste Disposed by Generating Sector		
	Res	MSW ICI	Mix
Bluff Road	44.1%	24.1%	0.0%
Pheasant Point	47.2%	73.7%	0.0%
Norfolk	8.7%	2.2%	0.0%
Chadron	0.0%	0.0%	100.0%
	100.0%	100.0%	100.0%

OVERALL: Host Facility Reported Waste Disposal (in tons)				
Host Facility	Waste Disposal by Sector (tons)			Total
	Res	MSW ICI	Mix	
Bluff Road	139,886	112,159		252,045
Chadron			10,192	10,192
Hastings	17,976	29,040		47,016
Lexington	40,544	10,136		50,680
Norfolk	27,497	10,417		37,914
Pheasant Point	149,562	343,704		493,265
Sidney	1,980	4,969		6,949
Valentine	1,692		2,336	4,028
TOTAL TONS	379,137	510,425	12,528	902,090
PERCENTAGE	42.0%	56.6%	1.4%	100%

OVERALL: Percent Contribution of Host Facility			
Host Facility	Waste Disposed by Generating Sector		
	Res	MSW ICI	Mix
Bluff Road	36.9%	22.0%	0.0%
Chadron	0.0%	0.0%	81.4%
Hastings	4.7%	5.7%	0.0%
Lexington	10.7%	2.0%	0.0%
Norfolk	7.3%	2.0%	0.0%
Pheasant Point	39.4%	67.3%	0.0%
Sidney	0.5%	1.0%	0.0%
Valentine	0.4%	0.0%	18.6%
	100.0%	100.0%	100.0%



Appendix F

Detailed MSW Composition Tables Overall and by Waste Generating Sector

Statewide MSW Material Composition – Detailed Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	5.3%	7.6%	4.9%	5.6%
	Office Paper	1.0%	1.7%	0.9%	1.0%
	Newsprint	0.3%	0.7%	0.2%	0.3%
	Magazines and Other Glossy Paper	0.8%	2.0%	0.7%	0.8%
	Paperboard/Liner Board	2.1%	3.3%	2.0%	2.3%
	Other Paper/Non-Recyclable Paper	2.9%	4.9%	2.7%	3.1%
	Mixed Paper	3.8%	3.4%	3.5%	4.1%
	Compostable Paper	2.0%	3.2%	1.8%	2.1%
	Total Paper	18.0%	11.4%	16.8%	19.3%
Plastic					
	PET #1	0.7%	0.6%	0.7%	0.7%
	Natural HDPE #2	0.4%	0.5%	0.4%	0.4%
	Colored HDPE #2	0.4%	0.7%	0.4%	0.4%
	PP #5	0.8%	0.7%	0.7%	0.8%
	Expanded Polystyrene	0.7%	1.1%	0.6%	0.7%
	Other Numbered Plastics	0.7%	0.7%	0.7%	0.8%
	Film and Bags	6.0%	5.5%	5.6%	6.3%
	Retail Shopping Bags	0.7%	1.0%	0.7%	0.8%
	Other Plastics	1.9%	5.8%	1.8%	2.0%
	Plastic Items Containing Lithium Batteries	<0.1%	0.2%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.0%	0.8%	0.9%	1.1%
	Total Plastic	13.3%	9.1%	12.4%	14.2%
Glass					
	Clear Glass Containers	0.7%	1.2%	0.6%	0.7%
	Brown Glass Containers	<0.1%	0.3%	<0.1%	<0.1%
	Green Glass Containers	0.2%	0.6%	0.2%	0.2%
	Blue Glass Containers	<0.1%	0.2%	<0.1%	<0.1%
	Other Glass	0.4%	0.9%	0.4%	0.4%
	Glass Single-Use Beverage Containers	0.7%	1.3%	0.7%	0.7%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Total Glass	2.0%	2.4%	1.9%	2.2%
Metal					
	Aluminum Containers	0.2%	0.4%	0.2%	0.2%
	Steel/Tin Containers	0.7%	0.8%	0.6%	0.7%
	Other Ferrous Scrap	1.0%	3.3%	1.0%	1.1%
	Other Non-Ferrous Scrap	0.4%	1.9%	0.4%	0.4%
	Other Metals	<0.1%	0.6%	<0.1%	<0.1%
	Non-Recyclable Metal	<0.1%	0.6%	<0.1%	0.1%
	Metal Single-Use Beverage Containers	0.7%	0.7%	0.7%	0.8%
	Total Metals	3.2%	4.3%	2.9%	3.4%
Organics					
	Food Waste - Packaged	2.7%	8.3%	2.5%	2.9%
	Food Waste - Unpackaged	16.4%	12.7%	15.3%	17.5%
	Yard Waste	7.9%	12.4%	7.4%	8.4%
	Total Organics	27.0%	17.4%	25.2%	28.8%
C&D Materials					
	Linoleum	0.1%	3.4%	0.1%	0.1%
	Untreated Wood	2.8%	10.3%	2.6%	3.0%
	Treated Wood	3.7%	9.4%	3.5%	4.0%
	Roofing Materials	0.5%	5.1%	0.5%	0.6%
	Bricks and Porcelain	0.5%	2.5%	0.4%	0.5%
	Soil, Rock, Sand	1.6%	6.4%	1.5%	1.7%
	Concrete	0.5%	3.2%	0.5%	0.5%
	Misc. C/D Waste	1.6%	7.3%	1.5%	1.7%
	Total C&D Materials	11.3%	18.8%	10.6%	12.1%
Other Waste Categories					
	Diapers	2.8%	4.3%	2.7%	3.0%
	Textiles/Leather	4.9%	7.7%	4.6%	5.2%
	Rubber	0.9%	3.6%	0.8%	1.0%
	Household Hazardous Waste	0.7%	3.6%	0.7%	0.8%
	White Goods	<0.1%	1.1%	<0.1%	0.1%
	Electronic Waste	1.2%	3.7%	1.1%	1.3%
	Electronics Containing Lithium Batteries	<0.1%	0.3%	<0.1%	<0.1%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Non-Distinct	4.1%	9.9%	3.8%	4.4%
	Oil Filters	<0.1%	0.9%	<0.1%	<0.1%
	Waste Oil	<0.1%	0.6%	<0.1%	<0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.4%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.2%	0.4%	0.1%	0.2%
	Unclassifiable Fines	3.0%	3.4%	2.8%	3.2%
	Bulky Items	4.4%	10.0%	4.1%	4.7%
	Medical Waste	2.5%	10.5%	2.4%	2.7%
	Sharps	<0.1%	0.1%	<0.1%	<0.1%
	Total Other Waste Categories	25.2%	18.3%	23.5%	26.8%
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Residential Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	3.5%	5.6%	3.0%	4.1%
	Office Paper	1.1%	1.8%	1.0%	1.3%
	Newsprint	0.4%	1.0%	0.3%	0.5%
	Magazines and Other Glossy Paper	1.0%	1.8%	0.8%	1.2%
	Paperboard/Liner Board	2.3%	1.5%	2.2%	2.5%
	Other Paper/Non-Recyclable Paper	2.7%	2.0%	2.6%	2.9%
	Mixed Paper	4.2%	2.8%	3.9%	4.5%
	Compostable Paper	2.2%	2.8%	1.9%	2.5%
	Total Paper	17.6%	7.9%	16.8%	18.4%
Plastic					
	PET #1	0.8%	0.5%	0.8%	0.9%
	Natural HDPE #2	0.4%	0.4%	0.4%	0.5%
	Colored HDPE #2	0.5%	0.6%	0.5%	0.6%
	PP #5	0.8%	0.6%	0.7%	0.9%
	Expanded Polystyrene	0.6%	0.9%	0.5%	0.7%
	Other Numbered Plastics	0.9%	0.7%	0.8%	0.9%
	Film and Bags	5.2%	2.5%	5.0%	5.5%
	Retail Shopping Bags	0.8%	0.7%	0.8%	0.9%
	Other Plastics	1.7%	2.6%	1.5%	2.0%
	Plastic Items Containing Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.1%	0.7%	1.0%	1.1%
	Total Plastic	13.0%	5.1%	12.5%	13.5%
Glass					
	Clear Glass Containers	0.9%	1.2%	0.8%	1.1%
	Brown Glass Containers	<0.1%	0.3%	<0.1%	<0.1%
	Green Glass Containers	0.2%	0.6%	0.2%	0.3%
	Blue Glass Containers	<0.1%	0.1%	<0.1%	<0.1%
	Other Glass	0.5%	1.1%	0.4%	0.6%
	Glass Single-Use Beverage Containers	0.8%	1.3%	0.7%	1.0%
	Total Glass	2.7%	2.4%	2.4%	2.9%
Metal					

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Aluminum Containers	0.2%	0.3%	0.2%	0.3%
	Steel/Tin Containers	0.8%	0.8%	0.7%	0.9%
	Other Ferrous Scrap	1.2%	3.1%	0.9%	1.5%
	Other Non-Ferrous Scrap	0.5%	2.3%	0.2%	0.7%
	Other Metals	0.1%	0.5%	<0.1%	0.2%
	Non-Recyclable Metal	0.2%	0.9%	<0.1%	0.2%
	Metal Single-Use Beverage Containers	0.9%	0.7%	0.9%	1.0%
	Total Metals	3.9%	4.1%	3.5%	4.3%
Organics					
	Food Waste - Packaged	2.4%	3.5%	2.1%	2.8%
	Food Waste - Unpackaged	15.9%	9.6%	15.0%	16.8%
	Yard Waste	12.6%	14.5%	11.1%	14.0%
	Total Organics	30.9%	14.4%	29.5%	32.3%
C&D Materials					
	Linoleum	<0.1%	0.7%	<0.1%	<0.1%
	Untreated Wood	1.5%	4.0%	1.1%	1.9%
	Treated Wood	2.7%	6.8%	2.0%	3.4%
	Roofing Materials	0.1%	1.3%	<0.1%	0.2%
	Bricks and Porcelain	0.5%	1.7%	0.3%	0.7%
	Soil, Rock, Sand	0.9%	4.3%	0.5%	1.3%
	Concrete	0.2%	1.1%	0.1%	0.3%
	Misc. C/D Waste	1.5%	6.9%	0.8%	2.1%
	Total C&D Materials	7.5%	12.0%	6.4%	8.7%
Other Waste Categories					
	Diapers	3.6%	3.5%	3.3%	4.0%
	Textiles/Leather	5.9%	7.8%	5.1%	6.6%
	Rubber	0.9%	4.6%	0.5%	1.4%
	Household Hazardous Waste	0.3%	1.6%	0.2%	0.5%
	White Goods	<0.1%	1.2%	<0.1%	0.2%
	Electronic Waste	1.3%	2.7%	1.0%	1.5%
	Electronics Containing Lithium Batteries	<0.1%	0.3%	<0.1%	<0.1%
	Non-Distinct	3.9%	5.9%	3.3%	4.4%
	Oil Filters	<0.1%	0.2%	<0.1%	<0.1%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Waste Oil	<0.1%	0.8%	<0.1%	0.2%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.6%	<0.1%	0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.2%	0.4%	0.1%	0.2%
	Unclassifiable Fines	3.6%	3.4%	3.3%	4.0%
	Bulky Items	3.8%	9.5%	2.9%	4.8%
	Medical Waste	0.4%	1.9%	0.3%	0.6%
	Sharps	<0.1%	0.1%	<0.1%	<0.1%
	Total Other Waste Categories	24.4%	12.6%	23.2%	25.7%
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed ICI Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	6.5%	9.3%	5.5%	7.4%
	Office Paper	0.8%	1.6%	0.7%	1.0%
	Newsprint	0.1%	0.3%	<0.1%	0.2%
	Magazines and Other Glossy Paper	0.6%	2.3%	0.3%	0.8%
	Paperboard/Liner Board	2.0%	4.4%	1.5%	2.4%
	Other Paper/Non-Recyclable Paper	3.0%	6.9%	2.3%	3.6%
	Mixed Paper	3.5%	4.0%	3.1%	3.9%
	Compostable Paper	1.8%	3.6%	1.5%	2.2%
	Total Paper	18.3%	14.4%	16.8%	19.7%
Plastic					
	PET #1	0.6%	0.8%	0.5%	0.7%
	Natural HDPE #2	0.4%	0.7%	0.3%	0.4%
	Colored HDPE #2	0.3%	0.7%	0.3%	0.4%
	PP #5	0.7%	0.8%	0.7%	0.8%
	Expanded Polystyrene	0.7%	1.4%	0.6%	0.8%
	Other Numbered Plastics	0.7%	0.8%	0.6%	0.7%
	Film and Bags	6.5%	7.6%	5.7%	7.2%
	Retail Shopping Bags	0.7%	1.3%	0.5%	0.8%
	Other Plastics	2.0%	8.1%	1.2%	2.8%
	Plastic Items Containing Lithium Batteries	<0.1%	0.3%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	0.9%	0.9%	0.8%	1.0%
	Total Plastic	13.5%	12.1%	12.3%	14.7%
Glass					
	Clear Glass Containers	0.5%	1.1%	0.4%	0.6%
	Brown Glass Containers	<0.1%	0.3%	<0.1%	<0.1%
	Green Glass Containers	0.1%	0.7%	<0.1%	0.2%
	Blue Glass Containers	<0.1%	0.2%	<0.1%	<0.1%
	Other Glass	0.3%	0.7%	0.2%	0.4%
	Glass Single-Use Beverage Containers	0.6%	1.2%	0.5%	0.7%
	Total Glass	1.5%	2.4%	1.3%	1.8%
Metal					

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Aluminum Containers	0.1%	0.3%	0.1%	0.2%
	Steel/Tin Containers	0.5%	0.8%	0.5%	0.6%
	Other Ferrous Scrap	0.9%	3.6%	0.5%	1.2%
	Other Non-Ferrous Scrap	0.3%	1.4%	0.2%	0.5%
	Other Metals	<0.1%	0.6%	<0.1%	<0.1%
	Non-Recyclable Metal	<0.1%	0.4%	<0.1%	<0.1%
	Metal Single-Use Beverage Containers	0.6%	0.6%	0.5%	0.6%
	Total Metals	2.6%	4.6%	2.1%	3.0%
Organics					
	Food Waste - Packaged	2.9%	11.5%	1.8%	4.1%
	Food Waste - Unpackaged	16.8%	15.4%	15.3%	18.3%
	Yard Waste	4.5%	9.5%	3.5%	5.4%
	Total Organics	24.2%	20.1%	22.2%	26.2%
C&D Materials					
	Linoleum	0.1%	1.3%	<0.1%	0.3%
	Untreated Wood	3.8%	14.4%	2.3%	5.2%
	Treated Wood	4.5%	11.9%	3.3%	5.7%
	Roofing Materials	0.9%	7.3%	0.1%	1.6%
	Bricks and Porcelain	0.4%	3.1%	0.1%	0.8%
	Soil, Rock, Sand	2.1%	8.4%	1.3%	2.9%
	Concrete	0.7%	4.5%	0.3%	1.2%
	Misc. C/D Waste	1.7%	7.9%	0.9%	2.5%
	Total C&D Materials	14.2%	24.0%	11.8%	16.6%
Other Waste Categories					
	Diapers	2.2%	4.5%	1.8%	2.7%
	Textiles/Leather	4.2%	8.1%	3.4%	5.0%
	Rubber	0.9%	2.4%	0.6%	1.1%
	Household Hazardous Waste	1.0%	5.0%	0.5%	1.5%
	White Goods	0.1%	1.1%	<0.1%	0.2%
	Electronic Waste	1.1%	4.4%	0.7%	1.6%
	Electronics Containing Lithium Batteries	<0.1%	0.3%	<0.1%	<0.1%
	Non-Distinct	4.3%	13.2%	3.0%	5.6%
	Oil Filters	<0.1%	1.2%	<0.1%	0.2%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Waste Oil	<0.1%	0.2%	<0.1%	<0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.1%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.2%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.1%	0.2%	0.1%	0.2%
	Unclassifiable Fines	2.5%	3.5%	2.1%	2.8%
	Bulky Items	4.9%	10.6%	3.8%	5.9%
	Medical Waste	4.1%	15.3%	2.6%	5.6%
	Sharps	<0.1%	0.2%	<0.1%	<0.1%
	Total Other Waste Categories	25.7%	23.0%	23.4%	28.0%
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Mixed Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	8.3%	6.5%	6.7%	9.9%
	Office Paper	1.5%	1.7%	1.1%	1.9%
	Newsprint	0.4%	0.6%	0.2%	0.5%
	Magazines and Other Glossy Paper	0.9%	1.1%	0.6%	1.1%
	Paperboard/Liner Board	3.2%	2.6%	2.6%	3.9%
	Other Paper/Non-Recyclable Paper	3.2%	2.5%	2.6%	3.8%
	Mixed Paper	5.1%	2.6%	4.5%	5.8%
	Compostable Paper	0.2%	0.3%	0.2%	0.3%
	Total Paper	22.9%	8.2%	20.8%	24.9%
Plastic					
	PET #1	0.7%	0.5%	0.5%	0.8%
	Natural HDPE #2	0.5%	0.4%	0.4%	0.6%
	Colored HDPE #2	0.8%	1.0%	0.5%	1.0%
	PP #5	0.8%	0.5%	0.7%	0.9%
	Expanded Polystyrene	0.7%	0.6%	0.6%	0.9%
	Other Numbered Plastics	0.7%	0.5%	0.5%	0.8%
	Film and Bags	6.0%	2.8%	5.3%	6.7%
	Retail Shopping Bags	0.7%	0.6%	0.5%	0.8%
	Other Plastics	1.8%	1.9%	1.3%	2.3%
	Plastic Items Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.5%	1.0%	1.3%	1.8%
	Total Plastic	14.1%	5.5%	12.7%	15.5%
Glass					
	Clear Glass Containers	0.8%	1.2%	0.5%	1.1%
	Brown Glass Containers	<0.1%	0.2%	<0.1%	<0.1%
	Green Glass Containers	0.1%	0.5%	<0.1%	0.2%
	Blue Glass Containers	<0.1%	0.1%	<0.1%	<0.1%
	Other Glass	0.4%	0.9%	0.2%	0.7%
	Glass Single-Use Beverage Containers	1.6%	1.7%	1.1%	2.0%
	Total Glass	2.9%	2.5%	2.3%	3.6%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Metal					
	Aluminum Containers	0.3%	0.6%	0.2%	0.4%
	Steel/Tin Containers	0.9%	0.8%	0.7%	1.1%
	Other Ferrous Scrap	1.1%	2.0%	0.6%	1.6%
	Other Non-Ferrous Scrap	0.2%	0.6%	<0.1%	0.3%
	Other Metals	<0.1%	0.1%	<0.1%	<0.1%
	Non-Recyclable Metal	<0.1%	0.0%	<0.1%	<0.1%
	Metal Single-Use Beverage Containers	1.4%	1.3%	1.1%	1.8%
	Total Metals	4.0%	2.9%	3.3%	4.7%
Organics					
	Food Waste - Packaged	2.8%	5.4%	1.5%	4.2%
	Food Waste - Unpackaged	14.1%	9.6%	11.7%	16.5%
	Yard Waste	7.4%	12.8%	4.2%	10.5%
	Total Organics	24.3%	15.5%	20.4%	28.2%
C&D Materials					
	Linoleum	1.5%	12.2%	<0.1%	4.6%
	Untreated Wood	2.2%	4.2%	1.1%	3.2%
	Treated Wood	1.9%	4.7%	0.8%	3.1%
	Roofing Materials	<0.1%	0.0%	<0.1%	<0.1%
	Bricks and Porcelain	<0.1%	0.3%	<0.1%	<0.1%
	Soil, Rock, Sand	0.1%	0.4%	<0.1%	0.2%
	Concrete	0.2%	1.4%	<0.1%	0.6%
	Misc. C/D Waste	1.4%	4.4%	0.3%	2.5%
	Total C&D Materials	7.5%	15.0%	3.8%	11.2%
Other Waste Categories					
	Diapers	4.3%	6.7%	2.6%	5.9%
	Textiles/Leather	4.0%	4.3%	2.9%	5.0%
	Rubber	1.0%	2.8%	0.3%	1.7%
	Household Hazardous Waste	0.5%	2.5%	<0.1%	1.2%
	White Goods	<0.1%	0.4%	<0.1%	0.1%
	Electronic Waste	1.8%	3.6%	0.9%	2.7%
	Electronics Containing Lithium Batteries	<0.1%	0.5%	<0.1%	0.2%
	Non-Distinct	3.1%	3.0%	2.3%	3.8%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Oil Filters	0.3%	1.5%	<0.1%	0.6%
	Waste Oil	<0.1%	0.5%	<0.1%	0.2%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.1%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.3%	0.5%	0.2%	0.4%
	Unclassifiable Fines	3.9%	3.4%	3.0%	4.7%
	Bulky Items	4.0%	7.5%	2.1%	5.8%
	Medical Waste	1.0%	5.2%	<0.1%	2.3%
	Sharps	<0.1%	0.0%	<0.1%	<0.1%
	Total Other Waste Categories	24.3%	14.5%	20.7%	27.9%
	Total of Overall Waste	100.0%			

Appendix G

Detailed MSW Composition Tables by Season

Statewide MSW Material Composition – Detailed Winter Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	4.0%	9.2%	3.5%	4.5%
	Office Paper	0.3%	0.8%	0.3%	0.3%
	Newsprint	0.2%	0.4%	0.2%	0.2%
	Magazines and Other Glossy Paper	0.7%	1.1%	0.6%	0.7%
	Paperboard/Liner Board	2.0%	7.6%	1.7%	2.3%
	Other Paper/Non-Recyclable Paper	2.1%	11.5%	1.9%	2.4%
	Mixed Paper	3.9%	3.3%	3.4%	4.4%
	Compostable Paper	3.0%	4.5%	2.6%	3.4%
	Total Paper	16.1%	17.8%	14.0%	18.2%
Plastic					
	PET #1	0.6%	0.8%	0.5%	0.6%
	Natural HDPE #2	0.4%	0.9%	0.4%	0.5%
	Colored HDPE #2	0.3%	0.9%	0.3%	0.4%
	PP #5	0.3%	0.7%	0.3%	0.4%
	Expanded Polystyrene	0.6%	1.4%	0.5%	0.7%
	Other Numbered Plastics	0.9%	0.9%	0.8%	1.0%
	Film and Bags	5.1%	8.8%	4.5%	5.8%
	Retail Shopping Bags	0.5%	0.4%	0.4%	0.6%
	Other Plastics	1.8%	11.8%	1.6%	2.1%
	Plastic Items Containing Lithium Batteries	<0.1%	0.5%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	0.9%	0.9%	0.7%	1.0%
	Total Plastic	11.5%	15.3%	10.0%	13.0%
Glass					
	Clear Glass Containers	1.0%	1.2%	0.9%	1.1%
	Brown Glass Containers	<0.1%	0.1%	<0.1%	<0.1%
	Green Glass Containers	0.1%	0.2%	0.1%	0.1%
	Blue Glass Containers	<0.1%	0.0%	<0.1%	<0.1%
	Other Glass	0.2%	0.8%	0.2%	0.2%
	Glass Single-Use Beverage Containers	0.8%	1.1%	0.7%	0.8%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Total Glass	2.1%	2.2%	1.8%	2.4%
Metal					
	Aluminum Containers	<0.1%	0.3%	<0.1%	<0.1%
	Steel/Tin Containers	0.7%	1.0%	0.6%	0.8%
	Other Ferrous Scrap	1.3%	5.6%	1.2%	1.5%
	Other Non-Ferrous Scrap	0.8%	2.0%	0.7%	0.9%
	Other Metals	<0.1%	0.0%	<0.1%	<0.1%
	Non-Recyclable Metal	0.2%	0.6%	0.2%	0.2%
	Metal Single-Use Beverage Containers	0.7%	0.6%	0.6%	0.8%
	Total Metals	3.8%	6.8%	3.3%	4.3%
Organics					
	Food Waste - Packaged	2.9%	16.1%	2.5%	3.2%
	Food Waste - Unpackaged	15.7%	12.3%	13.7%	17.8%
	Yard Waste	2.5%	5.5%	2.2%	2.8%
	Total Organics	21.1%	20.6%	18.4%	23.9%
C&D Materials					
	Linoleum	<0.1%	0.6%	<0.1%	<0.1%
	Untreated Wood	5.1%	23.8%	4.4%	5.8%
	Treated Wood	6.5%	17.7%	5.6%	7.3%
	Roofing Materials	1.3%	10.7%	1.1%	1.5%
	Bricks and Porcelain	0.5%	5.0%	0.4%	0.5%
	Soil, Rock, Sand	2.8%	11.9%	2.5%	3.2%
	Concrete	0.7%	4.8%	0.6%	0.8%
	Misc. C/D Waste	4.2%	12.3%	3.6%	4.7%
	Total C&D Materials	21.1%	33.6%	18.3%	23.8%
Other Waste Categories					
	Diapers	3.1%	4.4%	2.7%	3.5%
	Textiles/Leather	6.2%	10.8%	5.4%	7.0%
	Rubber	0.6%	1.7%	0.6%	0.7%
	Household Hazardous Waste	0.9%	3.9%	0.8%	1.1%
	White Goods	<0.1%	0.0%	<0.1%	<0.1%
	Electronic Waste	1.6%	6.6%	1.4%	1.8%
	Electronics Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Non-Distinct	3.5%	15.5%	3.1%	4.0%
	Oil Filters	0.1%	2.1%	<0.1%	0.1%
	Waste Oil	<0.1%	0.3%	<0.1%	<0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.2%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.1%	0.2%	0.1%	0.1%
	Unclassifiable Fines	2.4%	3.5%	2.1%	2.7%
	Bulky Items	3.2%	8.4%	2.8%	3.6%
	Medical Waste	2.2%	16.1%	1.9%	2.5%
	Sharps	<0.1%	0.1%	<0.1%	<0.1%
	Total Other Waste Categories	24.2%	26.1%	21.1%	27.4%
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Spring Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	5.9%	6.5%	5.1%	6.7%
	Office Paper	1.3%	2.4%	1.1%	1.5%
	Newsprint	0.3%	0.5%	0.2%	0.3%
	Magazines and Other Glossy Paper	0.8%	2.1%	0.7%	0.9%
	Paperboard/Liner Board	2.1%	1.5%	1.8%	2.4%
	Other Paper/Non-Recyclable Paper	2.8%	2.8%	2.4%	3.2%
	Mixed Paper	1.6%	2.7%	1.4%	1.9%
	Compostable Paper	3.9%	2.9%	3.3%	4.4%
	Total Paper	18.6%	9.5%	16.1%	21.2%
Plastic					
	PET #1	0.6%	0.5%	0.5%	0.7%
	Natural HDPE #2	0.3%	0.5%	0.3%	0.4%
	Colored HDPE #2	0.3%	0.6%	0.3%	0.3%
	PP #5	1.1%	0.7%	0.9%	1.2%
	Expanded Polystyrene	0.8%	1.1%	0.7%	0.9%
	Other Numbered Plastics	0.7%	0.8%	0.6%	0.8%
	Film and Bags	6.3%	6.1%	5.4%	7.2%
	Retail Shopping Bags	0.7%	0.6%	0.6%	0.8%
	Other Plastics	2.1%	5.2%	1.8%	2.4%
	Plastic Items Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.1%	0.8%	1.0%	1.3%
	Total Plastic	14.0%	9.4%	12.1%	16.0%
Glass					
	Clear Glass Containers	0.7%	1.3%	0.6%	0.7%
	Brown Glass Containers	0.1%	0.4%	<0.1%	0.1%
	Green Glass Containers	0.2%	0.6%	0.2%	0.3%
	Blue Glass Containers	<0.1%	0.3%	<0.1%	<0.1%
	Other Glass	0.3%	0.6%	0.2%	0.3%
	Glass Single-Use Beverage Containers	0.8%	1.4%	0.7%	0.9%
	Total Glass	2.1%	2.6%	1.8%	2.4%
Metal					

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Aluminum Containers	0.2%	0.3%	0.2%	0.3%
	Steel/Tin Containers	0.6%	0.6%	0.5%	0.7%
	Other Ferrous Scrap	1.2%	3.3%	1.0%	1.3%
	Other Non-Ferrous Scrap	0.2%	1.4%	0.2%	0.3%
	Other Metals	<0.1%	0.1%	<0.1%	<0.1%
	Non-Recyclable Metal	0.1%	0.7%	<0.1%	0.1%
	Metal Single-Use Beverage Containers	0.8%	0.7%	0.7%	0.9%
	Total Metals	3.2%	4.2%	2.7%	3.6%
Organics					
	Food Waste - Packaged	3.2%	7.1%	2.8%	3.7%
	Food Waste - Unpackaged	15.5%	13.2%	13.4%	17.7%
	Yard Waste	9.0%	12.7%	7.7%	10.3%
	Total Organics	27.7%	18.0%	23.9%	31.6%
C&D Materials					
	Linoleum	<0.1%	0.7%	<0.1%	<0.1%
	Untreated Wood	3.3%	7.6%	2.8%	3.7%
	Treated Wood	2.9%	7.5%	2.5%	3.4%
	Roofing Materials	<0.1%	0.6%	<0.1%	<0.1%
	Bricks and Porcelain	0.6%	2.1%	0.5%	0.6%
	Soil, Rock, Sand	2.6%	7.5%	2.3%	3.0%
	Concrete	0.4%	2.2%	0.3%	0.4%
	Misc. C/D Waste	1.2%	7.3%	1.0%	1.4%
	Total C&D Materials	11.1%	15.7%	9.6%	12.7%
Other Waste Categories					
	Diapers	2.2%	2.6%	1.9%	2.5%
	Textiles/Leather	4.8%	4.2%	4.1%	5.4%
	Rubber	1.0%	2.0%	0.9%	1.1%
	Household Hazardous Waste	1.0%	8.0%	0.8%	1.1%
	White Goods	0.3%	2.3%	0.2%	0.3%
	Electronic Waste	1.0%	2.8%	0.9%	1.2%
	Electronics Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Non-Distinct	3.4%	10.6%	3.0%	3.9%
	Oil Filters	<0.1%	0.1%	<0.1%	<0.1%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Waste Oil	<0.1%	0.2%	<0.1%	<0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.1%	0.2%	0.1%	0.1%
	Unclassifiable Fines	3.0%	3.1%	2.6%	3.5%
	Bulky Items	5.5%	13.1%	4.7%	6.3%
	Medical Waste	0.7%	4.0%	0.6%	0.8%
	Sharps	<0.1%	0.0%	<0.1%	<0.1%
	Total Other Waste Categories	23.2%	19.9%	20.0%	26.4%
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Summer Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	6.1%	10.6%	5.3%	6.9%
	Office Paper	1.2%	2.0%	1.0%	1.3%
	Newsprint	0.3%	0.7%	0.2%	0.3%
	Magazines and Other Glossy Paper	0.8%	3.0%	0.7%	0.9%
	Paperboard/Liner Board	2.3%	2.7%	2.0%	2.6%
	Other Paper/Non-Recyclable Paper	3.6%	3.6%	3.1%	4.1%
	Mixed Paper	4.8%	3.7%	4.2%	5.5%
	Compostable Paper	0.6%	1.8%	0.5%	0.6%
	Total Paper	19.7%	13.3%	17.1%	22.2%
Plastic					
	PET #1	0.6%	0.6%	0.5%	0.7%
	Natural HDPE #2	0.4%	0.5%	0.4%	0.5%
	Colored HDPE #2	0.4%	0.5%	0.4%	0.5%
	PP #5	0.7%	0.6%	0.6%	0.8%
	Expanded Polystyrene	0.6%	1.0%	0.6%	0.7%
	Other Numbered Plastics	1.0%	0.7%	0.9%	1.1%
	Film and Bags	5.4%	5.3%	4.7%	6.1%
	Retail Shopping Bags	0.6%	0.5%	0.5%	0.7%
	Other Plastics	1.6%	5.5%	1.4%	1.8%
	Plastic Items Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.1%	0.9%	0.9%	1.2%
	Total Plastic	12.4%	8.0%	10.8%	14.0%
Glass					
	Clear Glass Containers	0.6%	1.2%	0.5%	0.7%
	Brown Glass Containers	0.1%	0.4%	<0.1%	0.1%
	Green Glass Containers	0.3%	1.1%	0.2%	0.3%
	Blue Glass Containers	<0.1%	0.0%	<0.1%	<0.1%
	Other Glass	0.4%	0.8%	0.4%	0.5%
	Glass Single-Use Beverage Containers	0.6%	1.4%	0.5%	0.7%
	Total Glass	2.0%	2.5%	1.7%	2.3%
Metal					

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Aluminum Containers	0.1%	0.4%	<0.1%	0.1%
	Steel/Tin Containers	0.5%	0.6%	0.5%	0.6%
	Other Ferrous Scrap	1.0%	3.3%	0.9%	1.2%
	Other Non-Ferrous Scrap	0.2%	0.5%	0.1%	0.2%
	Other Metals	<0.1%	0.2%	<0.1%	<0.1%
	Non-Recyclable Metal	0.1%	0.3%	0.1%	0.2%
	Metal Single-Use Beverage Containers	0.8%	1.0%	0.7%	0.9%
	Total Metals	2.8%	3.0%	2.4%	3.1%
Organics					
	Food Waste - Packaged	2.3%	5.2%	2.0%	2.6%
	Food Waste - Unpackaged	13.8%	12.1%	12.0%	15.5%
	Yard Waste	10.3%	14.1%	9.0%	11.6%
	Total Organics	26.3%	17.9%	22.9%	29.8%
C&D Materials					
	Linoleum	0.4%	7.5%	0.3%	0.4%
	Untreated Wood	1.8%	5.9%	1.5%	2.0%
	Treated Wood	2.7%	10.3%	2.4%	3.1%
	Roofing Materials	0.9%	6.8%	0.8%	1.0%
	Bricks and Porcelain	0.4%	1.8%	0.3%	0.5%
	Soil, Rock, Sand	1.0%	4.3%	0.9%	1.1%
	Concrete	0.2%	3.2%	0.2%	0.3%
	Misc. C/D Waste	0.4%	3.3%	0.3%	0.4%
	Total C&D Materials	7.7%	17.2%	6.7%	8.7%
Other Waste Categories					
	Diapers	3.3%	5.4%	2.9%	3.7%
	Textiles/Leather	4.8%	8.6%	4.2%	5.4%
	Rubber	1.0%	3.2%	0.8%	1.1%
	Household Hazardous Waste	0.7%	2.4%	0.6%	0.8%
	White Goods	<0.1%	1.2%	<0.1%	<0.1%
	Electronic Waste	0.8%	2.7%	0.7%	0.9%
	Electronics Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Non-Distinct	4.1%	11.2%	3.6%	4.6%
	Oil Filters	<0.1%	0.1%	<0.1%	<0.1%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Waste Oil	<0.1%	0.1%	<0.1%	<0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.1%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.6%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.2%	0.6%	0.2%	0.2%
	Unclassifiable Fines	3.4%	3.9%	3.0%	3.9%
	Bulky Items	6.3%	12.9%	5.5%	7.1%
	Medical Waste	4.3%	15.6%	3.7%	4.9%
	Sharps	<0.1%	0.1%	<0.1%	<0.1%
	Total Other Waste Categories	29.1%	20.1%	25.4%	32.9%
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Fall Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	3.8%	6.3%	3.3%	4.3%
	Office Paper	1.1%	1.3%	0.9%	1.2%
	Newsprint	0.3%	1.2%	0.3%	0.3%
	Magazines and Other Glossy Paper	0.7%	1.8%	0.6%	0.8%
	Paperboard/Liner Board	2.0%	1.4%	1.8%	2.3%
	Other Paper/Non-Recyclable Paper	2.8%	2.2%	2.4%	3.2%
	Mixed Paper	5.2%	3.7%	4.5%	5.9%
	Compostable Paper	0.5%	1.0%	0.4%	0.5%
	Total Paper	16.4%	8.8%	14.1%	18.6%
Plastic					
	PET #1	1.0%	0.8%	0.9%	1.2%
	Natural HDPE #2	0.4%	0.5%	0.4%	0.5%
	Colored HDPE #2	0.6%	0.8%	0.5%	0.7%
	PP #5	1.0%	0.9%	0.9%	1.2%
	Expanded Polystyrene	0.6%	1.0%	0.5%	0.7%
	Other Numbered Plastics	0.5%	0.7%	0.4%	0.5%
	Film and Bags	6.9%	3.6%	6.0%	7.9%
	Retail Shopping Bags	1.2%	1.9%	1.1%	1.4%
	Other Plastics	1.6%	3.9%	1.4%	1.8%
	Plastic Items Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	0.9%	0.9%	0.7%	1.0%
	Total Plastic	14.7%	6.3%	12.7%	16.8%
Glass					
	Clear Glass Containers	0.5%	1.0%	0.4%	0.5%
	Brown Glass Containers	<0.1%	0.2%	<0.1%	<0.1%
	Green Glass Containers	0.1%	0.5%	0.1%	0.2%
	Blue Glass Containers	<0.1%	0.0%	<0.1%	<0.1%
	Other Glass	0.6%	1.5%	0.5%	0.7%
	Glass Single-Use Beverage Containers	0.5%	1.3%	0.4%	0.5%
	Total Glass	1.7%	2.3%	1.5%	2.0%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Metal					
	Aluminum Containers	0.3%	0.5%	0.2%	0.3%
	Steel/Tin Containers	0.7%	0.9%	0.6%	0.8%
	Other Ferrous Scrap	0.3%	1.2%	0.2%	0.3%
	Other Non-Ferrous Scrap	0.3%	3.0%	0.3%	0.4%
	Other Metals	0.3%	1.2%	0.3%	0.4%
	Non-Recyclable Metal	<0.1%	0.0%	<0.1%	<0.1%
	Metal Single-Use Beverage Containers	0.6%	0.7%	0.6%	0.7%
	Total Metals	2.5%	4.1%	2.2%	2.9%
Organics					
	Food Waste - Packaged	2.8%	8.5%	2.4%	3.2%
	Food Waste - Unpackaged	21.7%	14.6%	18.7%	24.7%
	Yard Waste	11.8%	15.0%	10.2%	13.4%
	Total Organics	36.3%	17.9%	31.3%	41.2%
C&D Materials					
	Linoleum	<0.1%	0.8%	<0.1%	<0.1%
	Untreated Wood	1.5%	5.0%	1.3%	1.7%
	Treated Wood	2.5%	6.5%	2.2%	2.9%
	Roofing Materials	<0.1%	0.3%	<0.1%	<0.1%
	Bricks and Porcelain	0.4%	1.7%	0.3%	0.4%
	Soil, Rock, Sand	0.2%	2.0%	0.1%	0.2%
	Concrete	0.8%	4.2%	0.7%	0.9%
	Misc. C/D Waste	0.9%	4.5%	0.8%	1.0%
	Total C&D Materials	6.2%	10.8%	5.4%	7.1%
Other Waste Categories					
	Diapers	2.8%	5.4%	2.5%	3.2%
	Textiles/Leather	3.7%	8.3%	3.2%	4.2%
	Rubber	0.7%	2.7%	0.6%	0.8%
	Household Hazardous Waste	0.5%	3.3%	0.4%	0.5%
	White Goods	<0.1%	0.3%	<0.1%	<0.1%
	Electronic Waste	1.3%	4.1%	1.1%	1.4%
	Electronics Containing Lithium Batteries	<0.1%	0.6%	<0.1%	<0.1%
	Non-Distinct	4.3%	8.0%	3.7%	4.9%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Oil Filters	<0.1%	1.1%	<0.1%	<0.1%
	Waste Oil	<0.1%	1.3%	<0.1%	0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.1%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.6%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.2%	0.3%	0.1%	0.2%
	Unclassifiable Fines	3.1%	4.1%	2.7%	3.6%
	Bulky Items	2.9%	9.4%	2.5%	3.3%
	Medical Waste	2.3%	9.5%	2.0%	2.7%
	Sharps	<0.1%	0.2%	<0.1%	<0.1%
	Total Other Waste Categories	22.2%	17.4%	19.1%	25.2%
	Total of Overall Waste	100.0%			



Appendix H

Detailed MSW Composition Tables by Host Facility

	Nebraska Statewide		Bluff Road		Chadron		Hastings		Lexington		Norfolk		Pheasant Point		Sidney		Valentine	
	Material	Pct.	Material	Pct.	Material	Pct.	Material	Pct.	Material	Pct.	Material	Pct.	Material	Pct.	Material	Pct.	Material	Pct.
1	Food Waste - Unpkg	16.4%	Food Waste - Unpkg	19.1%	Food Waste - Unpkg	14.2%	Non-Distinct	10.3%	Food Waste - Unpkg	14.5%	Food Waste - Unpkg	14.3%	Food Waste - Unpkg	16.0%	Food Waste - Unpkg	12.7%	Food Waste - Unpkg	15.5%
2	Yard Waste	7.9%	Yard Waste	7.0%	Corrugated Cardboard	8.5%	Food Waste - Unpkg	9.0%	Film and Bags	8.9%	Corrugated Cardboard	11.2%	Yard Waste	11.3%	Untreated Wood	9.5%	Bulky Items	8.4%
3	Film and Bags	6.0%	Film and Bags	6.5%	Yard Waste	7.7%	Medical Waste	8.7%	Corrugated Cardboard	7.9%	Non-Distinct	6.7%	Film and Bags	5.6%	Corrugated Cardboard	7.6%	Corrugated Cardboard	7.2%
4	Corrugated Cardboard	5.3%	Mixed Paper	5.1%	Film and Bags	5.6%	Bulky Items	8.1%	Textiles/Leather	7.1%	Bulky Items	6.4%	Textiles/Leather	4.9%	Film and Bags	7.4%	Film and Bags	6.8%
5	Textiles/Leather	4.9%	Textiles/Leather	4.7%	Mixed Paper	5.0%	Corrugated Cardboard	7.7%	Non-Distinct	5.0%	Textiles/Leather	6.2%	Corrugated Cardboard	4.9%	Food Waste - Pkg	7.2%	Mixed Paper	5.8%
6	Bulky Items	4.4%	Bulky Items	4.3%	Diapers	4.6%	Treated Wood	6.0%	Treated Wood	3.9%	Film and Bags	4.0%	Bulky Items	4.0%	Compostable Paper	6.4%	Yard Waste	4.6%
7	Non-Distinct	4.1%	Food Waste - Pkg	3.8%	Textiles/Leather	4.3%	Other Plastics	5.1%	Rubber	3.7%	Food Waste - Pkg	3.6%	Mixed Paper	3.6%	Non-Distinct	4.7%	Non-Distinct	3.9%
8	Mixed Paper	3.8%	Non-Distinct	3.8%	Unclassifiable Fines	4.1%	Other Paper/Non-Recy	4.9%	Yard Waste	3.6%	Medical Waste	3.3%	Treated Wood	3.5%	Textiles/Leather	4.0%	Office Paper	3.1%
9	Treated Wood	3.7%	Treated Wood	3.3%	Paperboard/Liner Board	3.5%	Textiles/Leather	4.2%	Unclassifiable Fines	3.4%	Unclassifiable Fines	3.3%	Unclassifiable Fines	3.5%	Paperboard/Liner Board	3.0%	Textiles/Leather	2.9%
10	Unclassifiable Fines	3.0%	Other Paper/Non-Recy	3.2%	Other Paper/Non-Recy	3.3%	Film and Bags	4.0%	Paperboard/Liner Board	3.0%	Diapers	3.2%	Non-Distinct	3.4%	Electronic Waste	2.9%	Diapers	2.9%
	Overall Total	59.4%	Bluff Road Total	60.9%	Chadron Total	60.7%	Hastings Total	67.9%	Lexington Total	61.0%	Norfolk Total	62.1%	Pheasant Point Total	60.7%	Sidney Total	65.3%	Valentine Total	61.1%

Statewide MSW Material Composition – Detailed Bluff Road Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	3.1%	4.4%	2.6%	3.6%
	Office Paper	1.0%	2.0%	0.8%	1.3%
	Newsprint	0.4%	0.6%	0.3%	0.4%
	Magazines and Other Glossy Paper	0.7%	2.4%	0.4%	1.0%
	Paperboard/Liner Board	2.2%	4.9%	1.6%	2.8%
	Other Paper/Non-Recyclable Paper	3.2%	3.4%	2.8%	3.6%
	Mixed Paper	5.1%	3.8%	4.6%	5.5%
	Compostable Paper	1.5%	3.3%	1.1%	1.9%
	Total Paper	17.2%	10.1%		
Plastic					
	PET #1	0.8%	0.7%	0.7%	0.9%
	Natural HDPE #2	0.4%	0.6%	0.3%	0.5%
	Colored HDPE #2	0.4%	0.4%	0.4%	0.5%
	PP #5	0.7%	0.6%	0.6%	0.8%
	Expanded Polystyrene	0.8%	1.1%	0.6%	0.9%
	Other Numbered Plastics	1.0%	0.9%	0.9%	1.1%
	Film and Bags	6.5%	6.5%	5.7%	7.3%
	Retail Shopping Bags	0.7%	0.8%	0.6%	0.8%
	Other Plastics	2.2%	4.5%	1.7%	2.7%
	Plastic Items Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.0%	0.8%	0.9%	1.1%
	Total Plastic	14.4%	9.2%		
Glass					
	Clear Glass Containers	0.9%	1.2%	0.7%	1.0%
	Brown Glass Containers	<0.1%	0.2%	<0.1%	<0.1%
	Green Glass Containers	0.2%	0.9%	0.1%	0.3%
	Blue Glass Containers	<0.1%	0.1%	<0.1%	<0.1%
	Other Glass	0.5%	1.2%	0.3%	0.6%
	Glass Single-Use Beverage Containers	0.7%	1.1%	0.5%	0.8%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Total Glass	2.3%	2.4%		
Metal					
	Aluminum Containers	0.2%	0.4%	0.2%	0.3%
	Steel/Tin Containers	0.6%	0.6%	0.5%	0.6%
	Other Ferrous Scrap	1.1%	3.3%	0.7%	1.5%
	Other Non-Ferrous Scrap	0.6%	2.7%	0.3%	0.9%
	Other Metals	0.1%	0.6%	<0.1%	0.2%
	Non-Recyclable Metal	0.2%	1.0%	<0.1%	0.3%
	Metal Single-Use Beverage Containers	0.8%	0.7%	0.7%	0.9%
	Total Metals	3.6%	5.0%		
Organics					
	Food Waste - Packaged	3.8%	7.9%	2.9%	4.8%
	Food Waste - Unpackaged	19.1%	13.6%	17.5%	20.7%
	Yard Waste	7.0%	12.4%	5.6%	8.4%
	Total Organics	30.0%	18.2%		
C&D Materials					
	Linoleum	<0.1%	0.6%	<0.1%	<0.1%
	Untreated Wood	2.5%	6.1%	1.8%	3.2%
	Treated Wood	3.3%	8.4%	2.4%	4.3%
	Roofing Materials	0.5%	5.4%	<0.1%	1.1%
	Bricks and Porcelain	0.5%	1.9%	0.3%	0.7%
	Soil, Rock, Sand	0.6%	2.9%	0.3%	0.9%
	Concrete	0.3%	2.8%	<0.1%	0.6%
	Misc. C/D Waste	1.7%	7.0%	0.9%	2.5%
	Total C&D Materials	9.5%	15.2%		
Other Waste Categories					
	Diapers	2.6%	3.2%	2.2%	3.0%
	Textiles/Leather	4.7%	6.7%	3.9%	5.5%
	Rubber	0.8%	1.9%	0.6%	1.0%
	Household Hazardous Waste	0.8%	4.8%	0.2%	1.3%
	White Goods	<0.1%	1.0%	<0.1%	0.2%
	Electronic Waste	1.0%	2.2%	0.7%	1.2%
	Electronics Containing Lithium Batteries	<0.1%	0.4%	<0.1%	0.1%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Non-Distinct	3.8%	7.4%	3.0%	4.7%
	Oil Filters	<0.1%	0.4%	<0.1%	0.1%
	Waste Oil	0.1%	1.0%	<0.1%	0.2%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.2%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.1%	0.2%	<0.1%	0.1%
	Unclassifiable Fines	2.4%	2.8%	2.1%	2.7%
	Bulky Items	4.3%	10.0%	3.1%	5.5%
	Medical Waste	2.2%	10.7%	1.0%	3.5%
	Sharps	<0.1%	0.0%	<0.1%	<0.1%
	Total Other Waste Categories	23.1%	16.9%		
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Hastings Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	7.7%	10.2%	5.1%	10.3%
	Office Paper	0.7%	1.0%	0.4%	0.9%
	Newsprint	0.3%	0.5%	0.2%	0.4%
	Magazines and Other Glossy Paper	0.4%	0.6%	0.3%	0.6%
	Paperboard/Liner Board	1.8%	1.5%	1.4%	2.2%
	Other Paper/Non-Recyclable Paper	4.9%	15.7%	0.8%	9.0%
	Mixed Paper	1.9%	2.0%	1.4%	2.5%
	Compostable Paper	1.9%	2.7%	1.2%	2.6%
	Total Paper	19.6%	18.1%		
Plastic					
	PET #1	0.5%	0.5%	0.4%	0.7%
	Natural HDPE #2	0.4%	0.4%	0.3%	0.5%
	Colored HDPE #2	0.4%	0.6%	0.2%	0.5%
	PP #5	0.4%	0.4%	0.3%	0.6%
	Expanded Polystyrene	1.2%	2.8%	0.5%	1.9%
	Other Numbered Plastics	0.4%	0.4%	0.3%	0.5%
	Film and Bags	4.0%	3.5%	3.1%	4.9%
	Retail Shopping Bags	0.4%	0.4%	0.3%	0.5%
	Other Plastics	5.1%	18.1%	0.4%	9.8%
	Plastic Items Containing Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	0.8%	0.7%	0.6%	0.9%
	Total Plastic	13.6%	17.6%		
Glass					
	Clear Glass Containers	0.7%	1.3%	0.4%	1.1%
	Brown Glass Containers	<0.1%	0.1%	<0.1%	<0.1%
	Green Glass Containers	<0.1%	0.3%	<0.1%	<0.1%
	Blue Glass Containers	<0.1%	0.0%	<0.1%	<0.1%
	Other Glass	0.2%	0.5%	<0.1%	0.3%
	Glass Single-Use Beverage Containers	0.8%	2.1%	0.3%	1.4%
	Total Glass	1.9%	3.7%		

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Metal					
	Aluminum Containers	0.1%	0.2%	<0.1%	0.2%
	Steel/Tin Containers	0.9%	1.2%	0.6%	1.2%
	Other Ferrous Scrap	1.0%	3.8%	<0.1%	2.0%
	Other Non-Ferrous Scrap	<0.1%	0.2%	<0.1%	<0.1%
	Other Metals	<0.1%	0.0%	<0.1%	<0.1%
	Non-Recyclable Metal	<0.1%	0.0%	<0.1%	<0.1%
	Metal Single-Use Beverage Containers	0.6%	0.6%	0.4%	0.8%
	Total Metals	2.6%	3.8%		
Organics					
	Food Waste - Packaged	1.3%	1.6%	0.8%	1.7%
	Food Waste - Unpackaged	9.0%	8.3%	6.8%	11.2%
	Yard Waste	2.3%	7.0%	0.5%	4.1%
	Total Organics	12.5%	12.3%		
C&D Materials					
	Linoleum	<0.1%	0.3%	<0.1%	<0.1%
	Untreated Wood	1.8%	4.8%	0.5%	3.0%
	Treated Wood	6.0%	18.4%	1.2%	10.8%
	Roofing Materials	0.6%	3.6%	<0.1%	1.5%
	Bricks and Porcelain	1.4%	6.8%	<0.1%	3.1%
	Soil, Rock, Sand	<0.1%	0.0%	<0.1%	<0.1%
	Concrete	<0.1%	0.0%	<0.1%	<0.1%
	Misc. C/D Waste	1.0%	5.2%	<0.1%	2.4%
	Total C&D Materials	10.8%	21.9%		
Other Waste Categories					
	Diapers	2.2%	2.8%	1.5%	2.9%
	Textiles/Leather	4.2%	7.6%	2.2%	6.2%
	Rubber	1.3%	4.3%	0.1%	2.4%
	Household Hazardous Waste	0.1%	0.4%	<0.1%	0.2%
	White Goods	0.4%	2.4%	<0.1%	1.0%
	Electronic Waste	1.0%	2.3%	0.4%	1.6%
	Electronics Containing Lithium Batteries	<0.1%	0.2%	<0.1%	<0.1%
	Non-Distinct	10.3%	26.2%	3.5%	17.1%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Oil Filters	0.5%	3.0%	<0.1%	1.3%
	Waste Oil	<0.1%	0.0%	<0.1%	<0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.2%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.1%	0.2%	<0.1%	0.2%
	Unclassifiable Fines	2.0%	2.4%	1.4%	2.7%
	Bulky Items	8.1%	14.0%	4.4%	11.7%
	Medical Waste	8.7%	22.5%	2.9%	14.5%
	Sharps	<0.1%	0.1%	<0.1%	<0.1%
	Total Other Waste Categories	39.0%	28.8%		
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Lexington Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	7.9%	11.5%	5.0%	10.9%
	Office Paper	1.3%	1.8%	0.9%	1.8%
	Newsprint	0.3%	0.5%	0.1%	0.4%
	Magazines and Other Glossy Paper	1.5%	2.6%	0.9%	2.2%
	Paperboard/Liner Board	3.0%	1.9%	2.5%	3.5%
	Other Paper/Non-Recyclable Paper	2.6%	1.6%	2.2%	3.1%
	Mixed Paper	2.8%	2.7%	2.1%	3.5%
	Compostable Paper	2.7%	3.0%	1.9%	3.4%
	Total Paper	22.2%	10.4%		
Plastic					
	PET #1	0.8%	0.6%	0.6%	1.0%
	Natural HDPE #2	0.6%	0.5%	0.4%	0.7%
	Colored HDPE #2	0.7%	0.6%	0.5%	0.8%
	PP #5	0.8%	0.7%	0.6%	1.0%
	Expanded Polystyrene	0.6%	0.5%	0.5%	0.7%
	Other Numbered Plastics	0.6%	0.5%	0.5%	0.7%
	Film and Bags	8.9%	11.7%	5.8%	11.9%
	Retail Shopping Bags	0.8%	0.6%	0.6%	0.9%
	Other Plastics	1.6%	1.2%	1.3%	1.9%
	Plastic Items Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.2%	0.7%	1.1%	1.4%
	Total Plastic	16.5%	10.6%		
Glass					
	Clear Glass Containers	0.7%	0.9%	0.5%	1.0%
	Brown Glass Containers	<0.1%	0.1%	<0.1%	<0.1%
	Green Glass Containers	0.2%	0.5%	<0.1%	0.3%
	Blue Glass Containers	<0.1%	0.0%	<0.1%	<0.1%
	Other Glass	0.5%	0.6%	0.3%	0.6%
	Glass Single-Use Beverage Containers	1.4%	1.7%	0.9%	1.8%
	Total Glass	2.8%	2.5%		

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Metal					
	Aluminum Containers	0.3%	0.3%	0.2%	0.3%
	Steel/Tin Containers	0.8%	0.7%	0.6%	0.9%
	Other Ferrous Scrap	2.0%	4.4%	0.9%	3.1%
	Other Non-Ferrous Scrap	0.2%	0.4%	<0.1%	0.3%
	Other Metals	<0.1%	0.4%	<0.1%	<0.1%
	Non-Recyclable Metal	<0.1%	0.2%	<0.1%	<0.1%
	Metal Single-Use Beverage Containers	0.9%	0.6%	0.7%	1.0%
	Total Metals	4.2%	4.2%		
Organics					
	Food Waste - Packaged	1.1%	1.4%	0.8%	1.5%
	Food Waste - Unpackaged	14.5%	9.2%	12.1%	16.9%
	Yard Waste	3.6%	7.0%	1.8%	5.4%
	Total Organics	19.2%	11.8%		
C&D Materials					
	Linoleum	<0.1%	0.2%	<0.1%	<0.1%
	Untreated Wood	1.1%	3.3%	0.3%	2.0%
	Treated Wood	3.9%	9.3%	1.5%	6.3%
	Roofing Materials	0.2%	0.9%	<0.1%	0.4%
	Bricks and Porcelain	<0.1%	0.3%	<0.1%	<0.1%
	Soil, Rock, Sand	2.5%	6.8%	0.8%	4.3%
	Concrete	<0.1%	0.0%	<0.1%	<0.1%
	Misc. C/D Waste	0.5%	1.5%	0.2%	0.9%
	Total C&D Materials	8.4%	11.4%		
Other Waste Categories					
	Diapers	2.9%	2.7%	2.2%	3.6%
	Textiles/Leather	7.1%	8.5%	4.9%	9.3%
	Rubber	3.7%	11.5%	0.7%	6.7%
	Household Hazardous Waste	0.1%	0.6%	<0.1%	0.3%
	White Goods	<0.1%	0.0%	<0.1%	<0.1%
	Electronic Waste	1.9%	4.2%	0.8%	3.0%
	Electronics Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Non-Distinct	5.0%	10.2%	2.4%	7.7%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Oil Filters	<0.1%	0.1%	<0.1%	<0.1%
	Waste Oil	<0.1%	0.1%	<0.1%	<0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.3%	1.0%	<0.1%	0.6%
	Unclassifiable Fines	3.4%	2.5%	2.8%	4.1%
	Bulky Items	1.0%	3.9%	<0.1%	2.0%
	Medical Waste	1.1%	2.6%	0.4%	1.8%
	Sharps	<0.1%	0.0%	<0.1%	<0.1%
	Total Other Waste Categories	26.8%	14.5%		
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Norfolk Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	11.2%	12.2%	8.0%	14.3%
	Office Paper	0.9%	1.0%	0.7%	1.2%
	Newsprint	0.6%	0.6%	0.4%	0.7%
	Magazines and Other Glossy Paper	0.7%	1.1%	0.4%	1.0%
	Paperboard/Liner Board	2.3%	1.4%	2.0%	2.7%
	Other Paper/Non-Recyclable Paper	2.1%	2.0%	1.6%	2.6%
	Mixed Paper	2.2%	2.1%	1.7%	2.7%
	Compostable Paper	1.9%	2.7%	1.2%	2.6%
	Total Paper	21.9%	12.4%		
Plastic					
	PET #1	0.9%	0.9%	0.6%	1.1%
	Natural HDPE #2	0.5%	0.6%	0.3%	0.7%
	Colored HDPE #2	0.5%	1.0%	0.3%	0.8%
	PP #5	0.8%	0.7%	0.6%	1.0%
	Expanded Polystyrene	0.4%	0.4%	0.3%	0.5%
	Other Numbered Plastics	0.5%	0.8%	0.3%	0.7%
	Film and Bags	4.0%	3.3%	3.2%	4.9%
	Retail Shopping Bags	0.6%	0.6%	0.5%	0.8%
	Other Plastics	3.2%	5.7%	1.7%	4.7%
	Plastic Items Containing Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.3%	1.2%	1.0%	1.6%
	Total Plastic	12.7%	8.1%		
Glass					
	Clear Glass Containers	0.8%	1.3%	0.5%	1.2%
	Brown Glass Containers	<0.1%	0.3%	<0.1%	<0.1%
	Green Glass Containers	0.1%	0.3%	<0.1%	0.2%
	Blue Glass Containers	<0.1%	0.0%	<0.1%	<0.1%
	Other Glass	0.4%	0.7%	0.2%	0.6%
	Glass Single-Use Beverage Containers	1.0%	1.3%	0.7%	1.3%
	Total Glass	2.4%	2.1%		
Metal					

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Aluminum Containers	0.3%	0.4%	0.1%	0.4%
	Steel/Tin Containers	1.1%	1.6%	0.7%	1.5%
	Other Ferrous Scrap	2.1%	6.6%	0.3%	3.8%
	Other Non-Ferrous Scrap	0.9%	3.0%	0.1%	1.7%
	Other Metals	<0.1%	0.6%	<0.1%	<0.1%
	Non-Recyclable Metal	<0.1%	0.0%	<0.1%	<0.1%
	Metal Single-Use Beverage Containers	0.9%	0.7%	0.7%	1.1%
	Total Metals	5.3%	8.2%		
Organics					
	Food Waste - Packaged	3.6%	8.3%	1.5%	5.8%
	Food Waste - Unpackaged	14.3%	12.2%	11.2%	17.5%
	Yard Waste	3.2%	7.9%	1.1%	5.2%
	Total Organics	21.1%	15.3%		
C&D Materials					
	Linoleum	0.2%	1.3%	<0.1%	0.5%
	Untreated Wood	1.0%	3.3%	0.2%	1.9%
	Treated Wood	2.5%	4.5%	1.3%	3.6%
	Roofing Materials	<0.1%	0.4%	<0.1%	<0.1%
	Bricks and Porcelain	<0.1%	0.2%	<0.1%	<0.1%
	Soil, Rock, Sand	0.5%	3.2%	<0.1%	1.3%
	Concrete	<0.1%	0.0%	<0.1%	<0.1%
	Misc. C/D Waste	0.5%	2.3%	<0.1%	1.1%
	Total C&D Materials	4.8%	7.5%		
Other Waste Categories					
	Diapers	3.2%	3.8%	2.2%	4.2%
	Textiles/Leather	6.2%	12.8%	2.8%	9.5%
	Rubber	0.5%	0.7%	0.3%	0.7%
	Household Hazardous Waste	0.6%	1.7%	0.2%	1.0%
	White Goods	<0.1%	0.0%	<0.1%	<0.1%
	Electronic Waste	1.2%	3.3%	0.4%	2.1%
	Electronics Containing Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Non-Distinct	6.7%	12.7%	3.4%	10.0%
	Oil Filters	<0.1%	0.2%	<0.1%	<0.1%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Waste Oil	0.1%	0.4%	<0.1%	0.2%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.1%	<0.1%	<0.1%
	Lithium Batteries	0.1%	0.8%	<0.1%	0.4%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.2%	0.3%	<0.1%	0.2%
	Unclassifiable Fines	3.3%	4.1%	2.2%	4.3%
	Bulky Items	6.4%	14.1%	2.7%	10.1%
	Medical Waste	3.3%	15.6%	<0.1%	7.3%
	Sharps	<0.1%	0.0%	<0.1%	<0.1%
	Total Other Waste Categories	31.8%	20.8%		
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Pheasant Point Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	4.9%	8.6%	3.9%	5.9%
	Office Paper	0.9%	1.6%	0.7%	1.1%
	Newsprint	0.2%	0.9%	<0.1%	0.3%
	Magazines and Other Glossy Paper	0.8%	2.0%	0.6%	1.0%
	Paperboard/Liner Board	2.1%	1.8%	1.9%	2.3%
	Other Paper/Non-Recyclable Paper	2.6%	2.6%	2.3%	2.9%
	Mixed Paper	3.6%	3.5%	3.2%	4.0%
	Compostable Paper	2.2%	3.2%	1.8%	2.6%
	Total Paper	17.3%	11.2%		
Plastic					
	PET #1	0.7%	0.5%	0.6%	0.7%
	Natural HDPE #2	0.4%	0.5%	0.3%	0.4%
	Colored HDPE #2	0.4%	0.5%	0.3%	0.5%
	PP #5	0.8%	0.8%	0.7%	0.9%
	Expanded Polystyrene	0.6%	1.0%	0.5%	0.7%
	Other Numbered Plastics	0.7%	0.7%	0.6%	0.8%
	Film and Bags	5.6%	3.8%	5.2%	6.1%
	Retail Shopping Bags	0.8%	1.4%	0.7%	1.0%
	Other Plastics	1.4%	2.4%	1.1%	1.7%
	Plastic Items Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.0%	0.8%	0.9%	1.1%
	Total Plastic	12.4%	6.8%		
Glass					
	Clear Glass Containers	0.6%	1.2%	0.5%	0.7%
	Brown Glass Containers	<0.1%	0.4%	<0.1%	<0.1%
	Green Glass Containers	0.2%	0.5%	0.1%	0.2%
	Blue Glass Containers	<0.1%	0.2%	<0.1%	<0.1%
	Other Glass	0.4%	0.7%	0.3%	0.5%
	Glass Single-Use Beverage Containers	0.6%	0.9%	0.5%	0.7%
	Total Glass	1.8%	2.3%		
Metal					

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Aluminum Containers	0.2%	0.3%	0.1%	0.2%
	Steel/Tin Containers	0.6%	0.7%	0.6%	0.7%
	Other Ferrous Scrap	0.8%	2.0%	0.5%	1.0%
	Other Non-Ferrous Scrap	0.3%	1.0%	0.2%	0.4%
	Other Metals	<0.1%	0.7%	<0.1%	<0.1%
	Non-Recyclable Metal	<0.1%	0.3%	<0.1%	<0.1%
	Metal Single-Use Beverage Containers	0.7%	0.6%	0.6%	0.8%
	Total Metals	2.7%	2.6%		
Organics					
	Food Waste - Packaged	2.3%	6.2%	1.6%	3.0%
	Food Waste - Unpackaged	16.0%	13.7%	14.4%	17.5%
	Yard Waste	11.3%	17.0%	9.4%	13.3%
	Total Organics	29.6%	19.0%		
C&D Materials					
	Linoleum	0.1%	1.4%	<0.1%	0.3%
	Untreated Wood	3.0%	11.0%	1.7%	4.3%
	Treated Wood	3.5%	9.7%	2.4%	4.6%
	Roofing Materials	0.6%	6.5%	<0.1%	1.3%
	Bricks and Porcelain	0.4%	1.8%	0.2%	0.6%
	Soil, Rock, Sand	2.2%	10.0%	1.0%	3.3%
	Concrete	0.7%	4.3%	0.2%	1.2%
	Misc. C/D Waste	1.9%	9.7%	0.7%	3.0%
	Total C&D Materials	12.4%	22.4%		
Other Waste Categories					
	Diapers	3.1%	5.4%	2.5%	3.7%
	Textiles/Leather	4.9%	8.6%	3.9%	5.9%
	Rubber	0.6%	1.6%	0.5%	0.8%
	Household Hazardous Waste	0.7%	3.6%	0.3%	1.2%
	White Goods	<0.1%	1.3%	<0.1%	0.2%
	Electronic Waste	1.2%	4.0%	0.7%	1.7%
	Electronics Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Non-Distinct	3.4%	6.6%	2.6%	4.1%
	Oil Filters	<0.1%	0.2%	<0.1%	<0.1%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Waste Oil	<0.1%	0.1%	<0.1%	<0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.1%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.6%	<0.1%	0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.2%	0.3%	0.1%	0.2%
	Unclassifiable Fines	3.5%	4.4%	3.0%	4.0%
	Bulky Items	4.0%	10.0%	2.9%	5.2%
	Medical Waste	1.9%	8.6%	0.9%	2.9%
	Sharps	<0.1%	0.2%	<0.1%	<0.1%
	Total Other Waste Categories	23.9%	18.4%		
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Sidney Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	7.6%	6.3%	5.9%	9.2%
	Office Paper	0.6%	0.7%	0.4%	0.8%
	Newsprint	0.2%	0.7%	<0.1%	0.4%
	Magazines and Other Glossy Paper	0.8%	1.3%	0.5%	1.1%
	Paperboard/Liner Board	3.0%	1.9%	2.5%	3.5%
	Other Paper/Non-Recyclable Paper	2.7%	2.5%	2.0%	3.3%
	Mixed Paper	1.9%	3.9%	0.9%	2.9%
	Compostable Paper	6.4%	4.1%	5.3%	7.4%
	Total Paper	23.1%	11.5%		
Plastic					
	PET #1	1.1%	0.7%	0.9%	1.2%
	Natural HDPE #2	0.5%	0.5%	0.4%	0.7%
	Colored HDPE #2	0.9%	1.3%	0.5%	1.2%
	PP #5	0.8%	0.8%	0.6%	1.0%
	Expanded Polystyrene	0.4%	0.4%	0.3%	0.5%
	Other Numbered Plastics	0.6%	0.5%	0.5%	0.8%
	Film and Bags	7.4%	6.5%	5.7%	9.1%
	Retail Shopping Bags	0.6%	0.5%	0.5%	0.7%
	Other Plastics	2.0%	3.0%	1.3%	2.8%
	Plastic Items Containing Lithium Batteries	0.1%	0.6%	<0.1%	0.3%
	Plastic Single-Use Beverage Containers	1.5%	1.0%	1.3%	1.8%
	Total Plastic	15.9%	8.1%		
Glass					
	Clear Glass Containers	0.8%	1.0%	0.6%	1.1%
	Brown Glass Containers	<0.1%	0.1%	<0.1%	<0.1%
	Green Glass Containers	0.1%	0.3%	<0.1%	0.2%
	Blue Glass Containers	<0.1%	0.0%	<0.1%	<0.1%
	Other Glass	0.4%	0.6%	0.2%	0.6%
	Glass Single-Use Beverage Containers	1.1%	1.4%	0.7%	1.5%
	Total Glass	2.5%	2.1%		
Metal					

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Aluminum Containers	0.3%	0.3%	0.2%	0.4%
	Steel/Tin Containers	0.8%	0.8%	0.6%	1.1%
	Other Ferrous Scrap	0.7%	1.0%	0.4%	1.0%
	Other Non-Ferrous Scrap	0.3%	0.7%	0.1%	0.5%
	Other Metals	<0.1%	0.0%	<0.1%	<0.1%
	Non-Recyclable Metal	<0.1%	0.6%	<0.1%	<0.1%
	Metal Single-Use Beverage Containers	1.0%	0.8%	0.8%	1.2%
	Total Metals	3.2%	2.2%		
Organics					
	Food Waste - Packaged	7.2%	20.5%	1.8%	12.5%
	Food Waste - Unpackaged	12.7%	9.4%	10.2%	15.1%
	Yard Waste	1.6%	5.7%	0.2%	3.1%
	Total Organics	21.5%	19.8%		
C&D Materials					
	Linoleum	0.2%	0.8%	<0.1%	0.4%
	Untreated Wood	9.5%	27.0%	2.5%	16.5%
	Treated Wood	2.4%	6.4%	0.8%	4.1%
	Roofing Materials	<0.1%	0.1%	<0.1%	<0.1%
	Bricks and Porcelain	0.5%	2.4%	<0.1%	1.1%
	Soil, Rock, Sand	<0.1%	0.5%	<0.1%	<0.1%
	Concrete	0.8%	3.7%	<0.1%	1.7%
	Misc. C/D Waste	0.5%	1.7%	<0.1%	0.9%
	Total C&D Materials	13.9%	27.2%		
Other Waste Categories					
	Diapers	2.5%	2.7%	1.8%	3.2%
	Textiles/Leather	4.0%	3.8%	3.0%	5.0%
	Rubber	1.4%	2.4%	0.8%	2.0%
	Household Hazardous Waste	0.4%	1.1%	0.1%	0.7%
	White Goods	<0.1%	0.2%	<0.1%	<0.1%
	Electronic Waste	2.9%	6.7%	1.2%	4.7%
	Electronics Containing Lithium Batteries	0.1%	0.5%	<0.1%	0.2%
	Non-Distinct	4.7%	5.4%	3.4%	6.1%
	Oil Filters	<0.1%	0.3%	<0.1%	0.2%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Waste Oil	<0.1%	0.2%	<0.1%	0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.2%	0.2%	0.1%	0.2%
	Unclassifiable Fines	2.1%	2.0%	1.6%	2.7%
	Bulky Items	0.7%	2.6%	<0.1%	1.3%
	Medical Waste	0.4%	1.6%	<0.1%	0.8%
	Sharps	<0.1%	0.2%	<0.1%	<0.1%
	Total Other Waste Categories	19.8%	13.2%		
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Solid Waste Agency of Northwest Nebraska Transfer Station
(Chadron) Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	8.5%	5.9%	6.9%	10.0%
	Office Paper	1.4%	1.5%	1.0%	1.8%
	Newsprint	0.4%	0.6%	0.2%	0.5%
	Magazines and Other Glossy Paper	0.9%	1.0%	0.7%	1.2%
	Paperboard/Liner Board	3.5%	2.4%	2.8%	4.1%
	Other Paper/Non-Recyclable Paper	3.3%	2.2%	2.8%	3.9%
	Mixed Paper	5.0%	2.3%	4.4%	5.6%
	Compostable Paper	0.3%	0.3%	0.2%	0.4%
	Total Paper	23.2%	7.2%		
Plastic					
	PET #1	0.6%	0.4%	0.5%	0.8%
	Natural HDPE #2	0.5%	0.4%	0.4%	0.7%
	Colored HDPE #2	0.9%	0.9%	0.6%	1.1%
	PP #5	0.7%	0.4%	0.6%	0.8%
	Expanded Polystyrene	0.7%	0.5%	0.6%	0.8%
	Other Numbered Plastics	0.6%	0.5%	0.5%	0.8%
	Film and Bags	5.6%	2.2%	5.0%	6.2%
	Retail Shopping Bags	0.7%	0.6%	0.6%	0.9%
	Other Plastics	1.8%	1.8%	1.4%	2.3%
	Plastic Items Containing Lithium Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.4%	0.9%	1.2%	1.6%
	Total Plastic	13.7%	4.6%		
Glass					
	Clear Glass Containers	0.8%	1.1%	0.6%	1.1%
	Brown Glass Containers	<0.1%	0.2%	<0.1%	<0.1%
	Green Glass Containers	0.1%	0.5%	<0.1%	0.2%
	Blue Glass Containers	<0.1%	0.1%	<0.1%	<0.1%
	Other Glass	0.5%	0.8%	0.3%	0.7%
	Glass Single-Use Beverage Containers	1.4%	1.5%	1.0%	1.8%
	Total Glass	2.9%	2.3%		

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Metal					
	Aluminum Containers	0.3%	0.5%	0.1%	0.4%
	Steel/Tin Containers	1.0%	0.8%	0.8%	1.2%
	Other Ferrous Scrap	1.3%	1.9%	0.8%	1.8%
	Other Non-Ferrous Scrap	0.2%	0.5%	<0.1%	0.4%
	Other Metals	<0.1%	0.0%	<0.1%	<0.1%
	Non-Recyclable Metal	<0.1%	0.0%	<0.1%	<0.1%
	Metal Single-Use Beverage Containers	1.3%	1.1%	1.0%	1.5%
	Total Metals	4.0%	2.6%		
Organics					
	Food Waste - Packaged	3.3%	5.0%	2.0%	4.6%
	Food Waste - Unpackaged	14.2%	8.7%	12.0%	16.5%
	Yard Waste	7.7%	11.6%	4.7%	10.7%
	Total Organics	25.2%	14.0%		
C&D Materials					
	Linoleum	1.9%	11.4%	<0.1%	4.8%
	Untreated Wood	2.2%	3.8%	1.2%	3.1%
	Treated Wood	1.9%	4.4%	0.8%	3.1%
	Roofing Materials	<0.1%	0.0%	<0.1%	<0.1%
	Bricks and Porcelain	<0.1%	0.3%	<0.1%	<0.1%
	Soil, Rock, Sand	<0.1%	0.1%	<0.1%	<0.1%
	Concrete	0.3%	1.3%	<0.1%	0.6%
	Misc. C/D Waste	1.0%	3.7%	<0.1%	1.9%
	Total C&D Materials	7.3%	13.8%		
Other Waste Categories					
	Diapers	4.6%	6.2%	3.0%	6.2%
	Textiles/Leather	4.3%	3.9%	3.2%	5.3%
	Rubber	1.2%	2.7%	0.5%	1.9%
	Household Hazardous Waste	0.7%	2.3%	<0.1%	1.3%
	White Goods	<0.1%	0.4%	<0.1%	0.2%
	Electronic Waste	1.9%	3.4%	1.1%	2.8%
	Electronics Containing Lithium Batteries	<0.1%	0.4%	<0.1%	0.2%
	Non-Distinct	2.7%	2.6%	2.0%	3.4%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Oil Filters	0.3%	1.4%	<0.1%	0.7%
	Waste Oil	0.1%	0.5%	<0.1%	0.2%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.1%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.1%	<0.1%	<0.1%
	Empty Aerosol Cans	0.3%	0.5%	0.2%	0.4%
	Unclassifiable Fines	4.1%	3.1%	3.2%	4.9%
	Bulky Items	2.0%	4.7%	0.8%	3.2%
	Medical Waste	1.1%	4.8%	<0.1%	2.4%
	Sharps	<0.1%	0.0%	<0.1%	<0.1%
	Total Other Waste Categories	23.6%	11.9%		
	Total of Overall Waste	100.0%			

Statewide MSW Material Composition – Detailed Valentine Overall

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
Paper					
	Corrugated Cardboard	7.2%	3.2%	5.0%	9.4%
	Office Paper	3.1%	3.8%	0.6%	5.6%
	Newsprint	0.2%	0.4%	<0.1%	0.4%
	Magazines and Other Glossy Paper	1.6%	2.8%	<0.1%	3.4%
	Paperboard/Liner Board	2.7%	1.2%	1.9%	3.5%
	Other Paper/Non-Recyclable Paper	2.7%	2.1%	1.3%	4.2%
	Mixed Paper	5.8%	2.8%	3.9%	7.7%
	Compostable Paper	0.1%	0.1%	<0.1%	0.2%
	Total Paper	23.4%	8.2%		
Plastic					
	PET #1	0.7%	0.6%	0.4%	1.1%
	Natural HDPE #2	0.3%	0.2%	0.2%	0.5%
	Colored HDPE #2	0.4%	0.3%	0.2%	0.6%
	PP #5	1.0%	0.7%	0.5%	1.4%
	Expanded Polystyrene	0.8%	0.3%	0.5%	1.0%
	Other Numbered Plastics	0.9%	0.5%	0.5%	1.2%
	Film and Bags	6.8%	3.7%	4.3%	9.3%
	Retail Shopping Bags	0.4%	0.2%	0.3%	0.6%
	Other Plastics	1.3%	1.1%	0.5%	2.0%
	Plastic Items Containing Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Plastic Single-Use Beverage Containers	1.6%	1.0%	1.0%	2.3%
	Total Plastic	14.2%	7.0%		
Glass					
	Clear Glass Containers	0.3%	0.3%	0.1%	0.5%
	Brown Glass Containers	<0.1%	0.0%	<0.1%	<0.1%
	Green Glass Containers	<0.1%	0.0%	<0.1%	<0.1%
	Blue Glass Containers	<0.1%	0.0%	<0.1%	<0.1%
	Other Glass	0.4%	0.6%	<0.1%	0.8%
	Glass Single-Use Beverage Containers	2.8%	1.8%	1.6%	4.0%
	Total Glass	3.5%	2.1%		
Metal					

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Aluminum Containers	0.3%	0.4%	<0.1%	0.6%
	Steel/Tin Containers	1.0%	0.9%	0.4%	1.6%
	Other Ferrous Scrap	2.8%	5.8%	<0.1%	6.7%
	Other Non-Ferrous Scrap	<0.1%	0.0%	<0.1%	<0.1%
	Other Metals	0.1%	0.3%	<0.1%	0.4%
	Non-Recyclable Metal	<0.1%	0.0%	<0.1%	<0.1%
	Metal Single-Use Beverage Containers	2.0%	1.7%	0.8%	3.1%
	Total Metals	6.2%	5.2%		
Organics					
	Food Waste - Packaged	1.4%	1.2%	0.6%	2.2%
	Food Waste - Unpackaged	15.5%	7.8%	10.3%	20.7%
	Yard Waste	4.6%	8.9%	<0.1%	10.5%
	Total Organics	21.5%	11.5%		
C&D Materials					
	Linoleum	<0.1%	0.0%	<0.1%	<0.1%
	Untreated Wood	1.4%	3.5%	<0.1%	3.7%
	Treated Wood	1.9%	1.5%	0.9%	2.9%
	Roofing Materials	<0.1%	0.0%	<0.1%	<0.1%
	Bricks and Porcelain	2.2%	5.5%	<0.1%	5.9%
	Soil, Rock, Sand	0.4%	1.0%	<0.1%	1.1%
	Concrete	<0.1%	0.0%	<0.1%	<0.1%
	Misc. C/D Waste	2.4%	5.4%	<0.1%	6.0%
	Total C&D Materials	8.4%	8.2%		
Other Waste Categories					
	Diapers	2.9%	2.6%	1.1%	4.7%
	Textiles/Leather	2.9%	2.4%	1.3%	4.5%
	Rubber	0.2%	0.2%	<0.1%	0.3%
	Household Hazardous Waste	<0.1%	0.0%	<0.1%	<0.1%
	White Goods	<0.1%	0.0%	<0.1%	<0.1%
	Electronic Waste	1.3%	1.0%	0.7%	2.0%
	Electronics Containing Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Non-Distinct	3.9%	3.7%	1.4%	6.4%
	Oil Filters	<0.1%	0.0%	<0.1%	<0.1%

Material Categories	Material Components	Mean Composition (%)	Standard Deviation (%)	90% Confidence Limits	
				Lower	Upper
	Waste Oil	<0.1%	0.0%	<0.1%	<0.1%
	Thermometers	<0.1%	0.0%	<0.1%	<0.1%
	Thermostats	<0.1%	0.0%	<0.1%	<0.1%
	Raw Mercury	<0.1%	0.0%	<0.1%	<0.1%
	Light-Up Shoes/Buttons	<0.1%	0.0%	<0.1%	<0.1%
	Fluorescent Bulbs	<0.1%	0.0%	<0.1%	<0.1%
	Lithium Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Alkaline and Other Batteries	<0.1%	0.0%	<0.1%	<0.1%
	Empty Aerosol Cans	0.2%	0.2%	<0.1%	0.3%
	Unclassifiable Fines	2.7%	1.3%	1.8%	3.5%
	Bulky Items	8.4%	15.8%	<0.1%	19.0%
	Medical Waste	0.2%	0.3%	<0.1%	0.4%
	Sharps	<0.1%	0.1%	<0.1%	0.1%
	Total Other Waste Categories	22.8%	19.4%		
	Total of Overall Waste	100.0%			



Appendix I

2009 vs 2025 Category & Component Combination Methodology

2009 vs. 2025 Material Component Comparison

Combined Material Categories	Combined Material Components	2009 Material Components	2025 Material Components
Paper			
	Cardboard	Cardboard	Corrugated Cardboard
	Office Paper	Office Paper	Office Paper
	Newsprint	Newsprint	Newsprint
	Magazines	Magazines	Magazines
	Paperboard/Liner Board	Paperboard/Liner Board	Paperboard/Linerboard
	Mixed Paper	Mixed Paper	Mixed Paper, Compostable Paper, Other Paper/Non-Recyclable Paper
Plastic			
	PET #1	PET #1	PET #1, Plastic Single-Use Beverage Containers
	HDPE #2	HDPE #2	Natural HDPE #2, Colored HDPE #2
	Other Numbered Containers	Other Numbered Containers	PP#5, Expanded Polystyrene, Other Numbered Plastics
	Plastic Film/Wrap/Bags	Plastic Film/Wrap/Bags	Film and Bags, Retail Shopping Bags
	Other Plastics	Other Plastics	Other Plastics, Plastic Items Containing Lithium Batteries
Glass			
	Mixed Colored Glass Containers	Clear, Brown, Green, Blue Glass Containers	Clear, Brown, Green, Blue, and Single-Use Glass Beverage Containers
	Other Glass	Other Glass	Other Glass
Metal			
	Aluminum Containers	Aluminum Cans	Aluminum Containers, Metal Single-Use Beverage Containers
	Steel/Tin Containers	Tin Can	Steel/Tin Containers
	Other Non-Ferrous Scrap	Other Aluminum	Other Non-Ferrous Scrap
	Other Ferrous Scrap	Other Tin	Other Ferrous Scrap
	Other Mixed Metals	Other Mixed Metals	Other Metals, Non-Recyclable Metals
Organics			
	Food Waste	Food	Food Waste - Packaged, Food Waste - Unpackaged
	Yard Waste	Yard Waste	Yard Waste

2009 vs. 2025 Material Component Comparison (continued)

Combined Material Categories	Combined Material Components	2009 Material Components	2025 Material Components
C&D Materials			
	Wood	Wood	Treated Wood, Untreated Wood
	Misc. C/D Waste	Misc. C/D Waste	Misc. C/D Waste, Roofing Materials, Bricks & Porcelain, Soil, Rock, Sand, Concrete
Other Waste Categories			
	Diapers	Diapers	Diapers & Sanitary Products
	Textiles/Leather/Rubber	Textiles/Leather/Rubber	Textiles/Leather, Rubber
	Household Hazardous Waste	Household Hazardous Waste	Household Hazardous Waste
	Electronic Waste	Electronic Waste	Electronic Waste, Electronics Containing Lithium Batteries
	Alkaline and Other Batteries	Dry-Cell Batteries	Alkaline and Other Batteries
	Empty Aerosol Cans	Empty Aerosol Cans	Empty Aerosol Cans
	Bulky Items	NA	Bulky Items
	Medical Waste	NA	Medical Waste
	Sharps	NA	Sharps
	White Goods	NA	White Goods
	Lithium Batteries	NA	Lithium Batteries
Other Misc. Waste			
	Oil Filters	Oil Filters	Oil Filters
	Waste Oil	Waste Oil	Waste Oil
	Linoleum	Linoleum	Linoleum
	Thermometers	Thermometers	Thermometers
	Thermostats	Thermostats	Thermostats
	Raw Mercury	Raw Mercury	Raw Mercury
	Light-Up Shoes/Buttons	Light-Up Shoes/Buttons	Light-Up Shoes/Buttons
	Fluorescent Bulbs	Fluorescent Bulbs	Fluorescent Bulbs
Unclassifiable Wastes			
	Non-Distinct	Non-Distinct	Non-Distinct, Unclassifiable Fines

2009 vs. 2025 Material Category Comparison

Combined Material Categories	Combined Material Components	2009 Material Components	2009 Material Categories	2025 Material Categories	2025 Material Components
Paper					
	Cardboard	Cardboard	Paper	Paper	Corrugated Cardboard
	Office Paper	Office Paper	Paper	Paper	Office Paper
	Newsprint	Newsprint	Paper	Paper	Newsprint
	Magazines	Magazines	Paper	Paper	Magazines
	Paperboard/Liner Board	Paperboard/Liner Board	Paper	Paper	Paperboard/Linerboard
	Mixed Paper	Mixed Paper	Paper	Paper	Mixed Paper
			NA	Paper	Compostable Paper
			NA	Paper	Other Paper/Non-Recyclable Paper
Plastic					
	PET #1	PET #1	Plastic	Plastic	PET #1
			NA	Plastic	Plastic Single-Use Beverage Containers
	HDPE #2	HDPE #2	Plastic	Plastic	Natural HDPE #2
			NA	Plastic	Colored HDPE #2
			NA	Plastic	PP#5
			NA	Plastic	Expanded Polystyrene
	Other Numbered Containers	Other Numbered Containers	Plastic	Plastic	Other Numbered Plastics
	Plastic Film/Wrap/Bags	Plastic Film/Wrap/Bags	Plastic	Plastic	Film and Bags
			NA	Plastic	Retail Shopping Bags
	Other Plastics	Other Plastics	Plastic	Plastic	Other Plastics
			NA	Plastic	Plastic Items Containing Lithium Batteries
Glass					
	Mixed Colored Glass Containers	Clean Glass Containers	Glass	Glass	Clear Glass Containers
		Brown Glass Containers	Glass	Glass	Brown Glass Containers
		Green Glass Containers	Glass	Glass	Green Glass Containers
		Blue Glass Containers	Glass	Glass	Blue Glass Containers
			NA	Glass	Glass Single-Use Beverage Containers
	Other Glass	Other Glass	Glass	Glass	Other Glass

2009 vs. 2025 Material Category Comparison (continued)

Combined Material Categories	Combined Material Components	2009 Material Components	2009 Material Categories	2025 Material Categories	2025 Material Components
Metal					
	Aluminum Containers	Aluminum Cans	Metal	Metals	Aluminum Containers
			NA	Metals	Metal Single-Use Beverage Containers
	Steel/Tin Containers	Tin Cans	Metal	Metals	Steel/Tin Containers
	Other Non-Ferrous Scrap	Other Aluminum	Metal	Metals	Other Non-Ferrous Scrap
	Other Ferrous Scrap	Other Tin	Metal	Metals	Other Ferrous Scrap
	Other Mixed Metals	Other Mixed Metals	Metal	Metals	Other Metals
			NA	Metals	Non-Recyclable Metals
Organics					
	Food Waste	Food	None	Organics	Food Waste - Packaged
			NA	Organics	Food Waste - Unpackaged
	Yard Waste	Yard Waste	None	Organics	Yard Waste
C&D Materials					
	Wood	Wood	None	C&D Materials	Treated Wood
			NA	C&D Materials	Untreated Wood
	Misc. C/D Waste	Misc. C/D Waste	None	C&D Materials	Misc. C/D Waste
			NA	C&D Materials	Roofing Materials
			NA	C&D Materials	Bricks & Porcelain
			NA	C&D Materials	Soil, Rock, Sand
			NA	C&D Materials	Concrete
Other Waste Categories					
	Diapers	Diapers	None	Other Waste Categories	Diapers & Sanitary Products
	Textiles/Leather/Rubber	Textiles/Leather/Rubber	None	Other Waste Categories	Textiles/Leather
			NA	Other Waste Categories	Rubber
	Household Hazardous Waste	Household Hazardous Waste	None	Other Waste Categories	Household Hazardous Waste
	Electronic Waste	Electronic Waste	None	Other Waste Categories	Electronic Waste
			NA	Other Waste Categories	Electronics Containing Lithium Batteries
	Alkaline and Other Batteries	Dry-Cell Batteries	None	Other Waste Categories	Alkaline and Other Batteries
	Empty Aerosol Cans	Empty Aerosol Cans	None	Other Waste Categories	Empty Aerosol Cans
	Bulky Items		NA	Other Waste Categories	Bulky Items
	Medical Waste		NA	Other Waste Categories	Medical Waste
	Sharps		NA	Other Waste Categories	Sharps
	White Goods		NA	Other Waste Categories	White Goods
	Lithium Batteries		NA	Other Waste Categories	Lithium Batteries

2009 vs. 2025 Material Category Comparison (continued)

Combined Material Categories	Combined Material Components	2009 Material Components	2009 Material Categories	2025 Material Categories	2025 Material Components
Other Misc. Waste					
	Oil Filters	Oil Filters	Other Misc. Wastes	Other Waste Categories	Oil Filters
	Waste Oil	Waste Oil	Other Misc. Wastes	Other Waste Categories	Waste Oil
	Linoleum	Linoleum	Other Misc. Wastes	C&D Materials	Linoleum
	Thermometers	Thermometers	Other Misc. Wastes	Other Waste Categories	Thermometers
	Thermostats	Thermostats	Other Misc. Wastes	Other Waste Categories	Thermostats
	Raw Mercury	Raw Mercury	Other Misc. Wastes	Other Waste Categories	Raw Mercury
	Light-Up Shoes/Buttons	Light-Up Shoes/Buttons	Other Misc. Wastes	Other Waste Categories	Light-Up Shoes/Buttons
	Fluorescent Bulbs	Fluorescent Bulbs	Other Misc. Wastes	Other Waste Categories	Fluorescent Bulbs
Unclassifiable Wastes					
	Non-Distinct	Non-Distinct	None	Other Waste Categories	Non-Distinct
			NA	Other Waste Categories	Unclassifiable Fines



Appendix J

2009 vs 2025 Study Detailed MSW Composition Tables Overall and by Waste
Generating Sector

2009 vs 2025 Statewide MSW Composition Comparison – Overall

Material Categories	Material Components	2009 Mean Composition (%)	2025 Mean Composition (%)
Paper			
	Cardboard	8.0%	5.3%
	Office Paper	4.4%	1.0%
	Newsprint	5.0%	0.3%
	Magazines	3.9%	0.8%
	Paperboard/Liner Board	5.3%	2.1%
	Mixed Paper	14.6%	8.6%
	Total Paper	41.1%	18.0%
Plastic			
	PET #1	3.4%	1.7%
	HDPE #2	1.6%	0.8%
	Other Numbered Containers	2.7%	2.2%
	Plastic Film/Wrap/Bags	7.0%	6.7%
	Other Plastics	4.4%	1.9%
	Total Plastic	19.1%	13.3%
Glass			
	Mixed Colored Glass Containers	4.8%	1.6%
	Other Glass	0.2%	0.4%
	Total Glass	4.9%	2.0%
Metal			
	Aluminum Containers	1.2%	0.9%
	Steel/Tin Containers	1.6%	0.7%
	Other Non-Ferrous Scrap	0.3%	0.4%
	Other Ferrous Scrap	0.2%	1.0%
	Other Mixed Metals	0.3%	0.2%
	Total Metals	3.6%	3.2%
Organics			
	Food Waste	16.6%	19.1%
	Yard Waste	2.8%	7.9%
	Total Organics	19.5%	27.0%
C&D Materials			
	Wood	0.5%	6.5%

Material Categories	Material Components	2009 Mean Composition (%)	2025 Mean Composition (%)
	Misc. C/D Waste	0.2%	4.7%
	Total C&D Materials	0.7%	11.2%
Other Waste Categories			
	Diapers	4.0%	2.8%
	Textiles/Leather/Rubber	5.0%	5.8%
	Household Hazardous Waste	0.0%	0.7%
	Electronic Waste	0.4%	1.2%
	Alkaline and Other Batteries	0.1%	0.0%
	Empty Aerosol Cans	0.2%	0.2%
	Bulky Items	NA	4.4%
	Medical Waste	NA	2.5%
	Sharps	NA	0.0%
	White Goods	NA	0.1%
	Lithium Batteries	NA	0.0%
	Total Other Waste Categories	9.6%	17.9%
Other Misc. Waste			
	Oil Filters	NA	0.1%
	Waste Oil	NA	0.1%
	Linoleum	NA	0.1%
	Thermometers	NA	0.0%
	Thermostats	NA	0.0%
	Raw Mercury	NA	0.0%
	Light-Up Shoes/Buttons	NA	0.0%
	Fluorescent Bulbs	NA	0.0%
	Total Other Misc. Waste	0.3%	0.3%
Unclassifiable Wastes			
	Non-Distinct	1.1%	7.1%
	Total Unclassifiable Wastes	1.1%	7.1%
	Total of Overall Waste	100%	100%

2009 vs 2025 Statewide MSW Composition Comparison – Residential

Material Categories	Material Components	2009 Mean Composition (%)	2025 Mean Composition (%)
Paper			
	Cardboard	2.0%	3.5%
	Office Paper	3.2%	1.1%
	Newsprint	6.1%	0.4%
	Magazines	4.5%	1.0%
	Paperboard/Liner Board	6.0%	2.3%
	Mixed Paper	13.6%	9.1%
	Total Paper	35.3%	17.6%
Plastic			
	PET #1	3.2%	1.9%
	HDPE #2	1.9%	1.0%
	Other Numbered Containers	2.4%	2.3%
	Plastic Film/Wrap/Bags	6.9%	6.1%
	Other Plastics	4.9%	1.7%
	Total Plastic	19.3%	13.0%
Glass			
	Mixed Colored Glass Containers	6.0%	2.1%
	Other Glass	0.2%	0.5%
	Total Glass	6.2%	2.7%
Metal			
	Aluminum Containers	1.3%	1.1%
	Steel/Tin Containers	1.9%	0.8%
	Other Non-Ferrous Scrap	0.4%	0.5%
	Other Ferrous Scrap	0.2%	1.2%
	Other Mixed Metals	0.3%	0.3%
	Total Metals	4.0%	3.9%
Organics			
	Food Waste	17.2%	18.3%
	Yard Waste	3.6%	12.6%
	Total Organics	20.8%	30.9%
C&D Materials			
	Wood	0.4%	4.2%
	Misc. C/D Waste	0.2%	3.2%
	Total C&D Materials	0.6%	7.5%

Material Categories	Material Components	2009 Mean Composition (%)	2025 Mean Composition (%)
Other Waste Categories			
	Diapers	5.1%	3.6%
	Textiles/Leather/Rubber	6.3%	6.8%
	Household Hazardous Waste	0.0%	0.3%
	Electronic Waste	0.3%	1.3%
	Alkaline and Other Batteries	0.1%	0.1%
	Empty Aerosol Cans	0.3%	0.2%
	Bulky Items	NA	3.8%
	Medical Waste	NA	0.4%
	Sharps	NA	0.0%
	White Goods	NA	0.1%
	Lithium Batteries	NA	0.1%
	Total Other Waste Categories	12.2%	16.8%
Other Misc. Waste			
	Oil Filters	NA	0.0%
	Waste Oil	NA	0.1%
	Linoleum	NA	0.1%
	Thermometers	NA	0.0%
	Thermostats	NA	0.0%
	Raw Mercury	NA	0.0%
	Light-Up Shoes/Buttons	NA	0.0%
	Fluorescent Bulbs	NA	0.0%
	Total Other Misc. Waste	0.1%	0.2%
Unclassifiable Wastes			
	Non-Distinct	1.5%	7.5%
	Total Unclassifiable Wastes	1.5%	7.5%
	Total of Overall Waste	100%	100%

2009 vs 2025 Statewide MSW Composition Comparison – ICI

Material Categories	Material Components	2009 Mean Composition (%)	2025 Mean Composition (%)
Paper			
	Cardboard	14.4%	6.5%
	Office Paper	6.0%	0.8%
	Newsprint	3.8%	0.1%
	Magazines	3.0%	0.6%
	Paperboard/Liner Board	4.3%	2.0%
	Mixed Paper	16.5%	8.3%
	Total Paper	47.9%	18.3%
Plastic			
	PET #1	3.4%	1.5%
	HDPE #2	1.3%	0.7%
	Other Numbered Containers	3.0%	2.1%
	Plastic Film/Wrap/Bags	7.5%	7.2%
	Other Plastics	4.3%	2.0%
	Total Plastic	19.5%	13.5%
Glass			
	Mixed Colored Glass Containers	3.2%	1.3%
	Other Glass	0.1%	0.3%
	Total Glass	3.3%	1.5%
Metal			
	Aluminum Containers	1.0%	0.7%
	Steel/Tin Containers	1.2%	0.5%
	Other Non-Ferrous Scrap	0.3%	0.3%
	Other Ferrous Scrap	0.2%	0.9%
	Other Mixed Metals	0.4%	0.1%
	Total Metals	3.1%	2.6%
Organics			
	Food Waste	15.9%	19.7%
	Yard Waste	1.9%	4.5%
	Total Organics	17.7%	24.2%
C&D Materials			
	Wood	0.6%	8.3%
	Misc. C/D Waste	0.4%	5.8%
	Total C&D Materials	1.0%	14.1%

Material Categories	Material Components	2009 Mean Composition (%)	2025 Mean Composition (%)
Other Waste Categories			
	Diapers	2.2%	2.2%
	Textiles/Leather/Rubber	3.5%	5.1%
	Household Hazardous Waste	0.0%	1.0%
	Electronic Waste	0.4%	1.2%
	Alkaline and Other Batteries	0.1%	0.0%
	Empty Aerosol Cans	0.2%	0.1%
	Bulky Items	NA	4.9%
	Medical Waste	NA	4.1%
	Sharps	NA	0.0%
	White Goods	NA	0.1%
	Lithium Batteries	NA	0.0%
	Total Other Waste Categories	6.3%	18.8%
Other Misc. Waste			
	Oil Filters	NA	0.1%
	Waste Oil	NA	0.0%
	Linoleum	NA	0.1%
	Thermometers	NA	0.0%
	Thermostats	NA	0.0%
	Raw Mercury	NA	0.0%
	Light-Up Shoes/Buttons	NA	0.0%
	Fluorescent Bulbs	NA	0.0%
	Total Other Misc. Waste	0.4%	0.3%
Unclassifiable Wastes			
	Non-Distinct	0.8%	6.8%
	Total Unclassifiable Wastes	0.8%	6.8%
	Total of Overall Waste	100%	100%

2009 vs 2025 Statewide MSW Composition Comparison – Mixed

Material Categories	Material Components	2009 Mean Composition (%)	2025 Mean Composition (%)
Paper			
	Cardboard	9.8%	8.3%
	Office Paper	4.1%	1.5%
	Newsprint	4.5%	0.4%
	Magazines	4.2%	0.9%
	Paperboard/Liner Board	5.7%	3.2%
	Mixed Paper	13.3%	8.6%
	Total Paper	41.6%	22.9%
Plastic			
	PET #1	4.1%	2.2%
	HDPE #2	1.7%	1.3%
	Other Numbered Containers	2.7%	2.2%
	Plastic Film/Wrap/Bags	6.0%	6.7%
	Other Plastics	3.6%	1.8%
	Total Plastic	18.0%	14.1%
Glass			
	Mixed Colored Glass Containers	6.0%	2.5%
	Other Glass	0.2%	0.4%
	Total Glass	5.1%	2.9%
Metal			
	Aluminum Containers	1.3%	1.7%
	Steel/Tin Containers	2.0%	0.9%
	Other Non-Ferrous Scrap	0.3%	0.2%
	Other Ferrous Scrap	0.1%	1.1%
	Other Mixed Metals	0.2%	0.0%
	Total Metals	3.9%	4.0%
Organics			
	Food Waste	16.8%	17.0%
	Yard Waste	2.9%	7.4%
	Total Organics	19.7%	24.3%
C&D Materials			
	Wood	0.2%	4.1%
	Misc. C/D Waste	0.1%	1.9%
	Total C&D Materials	0.3%	6.0%

Material Categories	Material Components	2009 Mean Composition (%)	2025 Mean Composition (%)
Other Waste Categories			
	Diapers	4.7%	4.3%
	Textiles/Leather/Rubber	4.9%	5.0%
	Household Hazardous Waste	0.1%	0.5%
	Electronic Waste	0.3%	1.8%
	Alkaline and Other Batteries	0.1%	0.1%
	Empty Aerosol Cans	0.2%	0.3%
	Bulky Items	NA	4.0%
	Medical Waste	NA	1.0%
	Sharps	NA	0.0%
	White Goods	NA	0.0%
	Lithium Batteries	NA	0.0%
	Total Other Waste Categories	10.3%	17.0%
Other Misc. Waste			
	Oil Filters	NA	0.3%
	Waste Oil	NA	0.1%
	Linoleum	NA	1.5%
	Thermometers	NA	0.0%
	Thermostats	NA	0.0%
	Raw Mercury	NA	0.0%
	Light-Up Shoes/Buttons	NA	0.0%
	Fluorescent Bulbs	NA	0.0%
	Total Other Misc. Waste	0.2%	1.9%
Unclassifiable Wastes			
	Non-Distinct	0.9%	6.9%
	Total Unclassifiable Wastes	0.9%	6.9%
	Total of Overall Waste	100%	100%

Appendix K

Detailed C&D Composition Tables by Season and Host Facility

Overall Statewide C&D Composition by Season – Bluff Road Solid Waste Management Facility

Material Category	Winter	Spring	Summer	Fall	Overall
Sawn Lumber	0.0%	0.0%	0.0%	0.7%	0.1%
Engineered Wood/Manufactured Wood	2.6%	0.0%	0.1%	1.2%	1.0%
Wooden Pallets	3.1%	2.5%	4.4%	9.7%	4.5%
Treated Wood Materials	6.7%	6.5%	6.8%	6.7%	6.7%
Untreated Wood Materials	13.7%	9.5%	10.7%	4.2%	10.3%
Drywall (Painted and Non-Painted)	18.6%	25.4%	10.1%	7.9%	15.1%
Asbestos	0.0%	0.0%	0.0%	0.0%	0.0%
Contaminated Soils	0.0%	0.0%	0.0%	12.0%	2.0%
Industrial Process Waste	0.0%	0.0%	0.0%	0.0%	0.0%
Sludges	0.0%	0.0%	0.0%	0.0%	0.0%
Food Waste Loose	0.0%	0.0%	0.0%	0.0%	0.0%
Food Waste Packaged	0.0%	0.0%	0.0%	0.0%	0.0%
Tree Limbs and Stump Waste	0.0%	0.0%	0.3%	0.1%	0.1%
Yard Wastes	0.0%	0.3%	7.2%	2.9%	3.1%
Other Organics	0.0%	0.0%	0.0%	0.1%	0.0%
Wires	0.0%	0.0%	0.0%	0.1%	0.0%
Ceramics	0.0%	6.3%	0.0%	0.0%	1.2%
Fiberglass	0.1%	0.0%	0.0%	0.1%	0.0%
Insulation	0.2%	0.1%	0.9%	0.3%	0.5%
Concrete	7.3%	9.3%	0.0%	0.3%	3.9%
Brick	0.0%	0.0%	18.3%	0.0%	6.6%
Carpet/Carpet Pads	0.6%	1.7%	1.9%	1.1%	1.4%
Vinyl Siding	2.2%	6.1%	0.0%	0.0%	1.8%
Roofing Materials	1.9%	5.1%	14.8%	10.4%	8.6%
Dirt/Sand/Gravel/Rock	18.2%	2.9%	1.8%	14.7%	8.8%
Metal	5.6%	2.0%	4.3%	4.0%	4.2%

Material Category	Winter	Spring	Summer	Fall	Overall
Plastic	1.8%	1.5%	2.5%	2.2%	2.0%
Mattresses and Box Springs	0.0%	0.3%	1.9%	0.1%	0.8%
Furniture	0.9%	1.4%	2.6%	4.6%	2.2%
Tires	0.0%	0.0%	0.0%	0.8%	0.1%
Corrugated Cardboard	6.0%	4.5%	1.8%	5.9%	4.2%
Other MSW Recyclable Material	1.9%	0.0%	0.7%	0.5%	0.8%
MSW Non-Recyclable Waste	2.4%	2.0%	5.2%	0.5%	3.0%
Other C&D Wastes	4.9%	1.2%	0.0%	1.1%	1.8%
Electronics	0.2%	0.0%	0.0%	0.7%	0.2%
Appliances	0.0%	0.0%	0.0%	0.4%	0.1%
Glass	0.8%	10.9%	2.6%	5.7%	4.2%
Chemicals	0.0%	0.0%	0.0%	0.0%	0.0%
Textiles	0.0%	0.0%	0.4%	0.5%	0.3%
Bagged Wastes	0.5%	0.5%	0.6%	0.4%	0.5%
Total	100%	100%	100%	100%	100%

Overall Statewide C&D Composition by Season – Hastings Sanitary Landfill

Material Category	Winter	Spring	Summer	Fall	Overall
Sawn Lumber	0.0%		1.6%		0.7%
Engineered Wood/Manufactured Wood	0.0%		3.6%		1.7%
Wooden Pallets	3.5%		0.8%		2.2%
Treated Wood Materials	13.0%		4.1%		8.9%
Untreated Wood Materials	2.7%		3.8%		3.2%
Drywall (Painted and Non-Painted)	3.5%		8.9%		6.0%
Asbestos	0.0%		0.0%		0.0%
Contaminated Soils	0.0%		0.0%		0.0%
Industrial Process Waste	0.0%		0.0%		0.0%
Sludges	0.0%		0.0%		0.0%
Food Waste Loose	0.0%		1.7%		0.8%
Food Waste Packaged	0.0%		0.0%		0.0%
Tree Limbs and Stump Waste	0.0%		0.1%		0.1%
Yard Wastes	0.0%		1.3%		0.6%
Other Organics	0.0%		1.1%		0.5%
Wires	0.0%		0.0%		0.0%
Ceramics	0.0%		8.9%		4.2%
Fiberglass	0.0%		0.0%		0.0%
Insulation	0.4%		0.2%		0.3%
Concrete	0.0%		0.0%		0.0%
Brick	0.0%		3.1%		1.4%
Carpet/Carpet Pads	0.9%		0.1%		0.6%
Vinyl Siding	5.5%		0.9%		3.4%
Roofing Materials	7.2%		12.6%		9.7%
Dirt/Sand/Gravel/Rock	45.2%		12.8%		30.0%
Metal	1.5%		5.6%		3.4%

Material Category	Winter	Spring	Summer	Fall	Overall
Plastic	2.7%		1.5%		2.1%
Mattresses and Box Springs	0.0%		0.6%		0.3%
Furniture	0.0%		7.7%		3.6%
Tires	0.0%		0.0%		0.0%
Corrugated Cardboard	7.8%		1.7%		4.9%
Other MSW Recyclable Material	2.2%		0.9%		1.6%
MSW Non-Recyclable Waste	3.1%		1.7%		2.5%
Other C&D Wastes	0.0%		9.9%		4.7%
Electronics	0.0%		1.0%		0.5%
Appliances	0.0%		0.1%		0.0%
Glass	0.0%		2.0%		0.9%
Chemicals	0.0%		0.0%		0.0%
Textiles	0.0%		0.4%		0.2%
Bagged Wastes	0.9%		1.0%		0.9%
Total	100%		100%		100%

Overall Statewide C&D Composition by Season – Lexington Area Solid Waste Agency Landfill

Material Category	Winter	Spring	Summer	Fall	Overall
Sawn Lumber		0.0%	0.2%		0.1%
Engineered Wood/Manufactured Wood		1.0%	0.6%		0.8%
Wooden Pallets		3.1%	0.7%		1.8%
Treated Wood Materials		8.2%	12.8%		10.8%
Untreated Wood Materials		12.6%	0.0%		5.6%
Drywall (Painted and Non-Painted)		1.1%	0.5%		0.8%
Asbestos		0.0%	0.0%		0.0%
Contaminated Soils		0.0%	0.0%		0.0%
Industrial Process Waste		0.0%	0.0%		0.0%
Sludges		0.0%	0.0%		0.0%
Food Waste Loose		0.0%	0.3%		0.1%
Food Waste Packaged		0.0%	0.0%		0.0%
Tree Limbs and Stump Waste		0.0%	17.9%		10.0%
Yard Wastes		9.8%	0.0%		4.3%
Other Organics		0.0%	0.0%		0.0%
Wires		0.0%	0.0%		0.0%
Ceramics		0.0%	1.0%		0.5%
Fiberglass		0.0%	0.0%		0.0%
Insulation		0.0%	0.0%		0.0%
Concrete		3.2%	0.0%		1.4%
Brick		0.0%	0.0%		0.0%
Carpet/Carpet Pads		0.9%	0.0%		0.4%
Vinyl Siding		6.5%	3.5%		4.8%
Roofing Materials		44.2%	23.7%		32.8%
Dirt/Sand/Gravel/Rock		0.0%	33.4%		18.6%
Metal		2.9%	2.2%		2.5%

Material Category	Winter	Spring	Summer	Fall	Overall
Plastic		1.2%	0.3%		0.7%
Mattresses and Box Springs		0.2%	0.0%		0.1%
Furniture		0.6%	0.0%		0.3%
Tires		0.0%	0.0%		0.0%
Corrugated Cardboard		0.6%	0.4%		0.5%
Other MSW Recyclable Material		0.0%	0.4%		0.2%
MSW Non-Recyclable Waste		0.0%	0.1%		0.1%
Other C&D Wastes		0.0%	0.0%		0.0%
Electronics		0.0%	0.3%		0.2%
Appliances		0.2%	0.0%		0.1%
Glass		3.5%	1.8%		2.5%
Chemicals		0.0%	0.0%		0.0%
Textiles		0.0%	0.0%		0.0%
Bagged Wastes		0.2%	0.1%		0.1%
Total		100%	100%		100%

Overall Statewide C&D Composition by Season – Norfolk Transfer Station

Material Category	Winter	Spring	Summer	Fall	Overall
Sawn Lumber	0.0%			13.9%	5.8%
Engineered Wood/Manufactured Wood	0.0%			7.5%	3.2%
Wooden Pallets	13.8%			10.3%	12.3%
Treated Wood Materials	13.3%			0.0%	7.7%
Untreated Wood Materials	3.1%			0.0%	1.8%
Drywall (Painted and Non-Painted)	20.0%			3.0%	12.8%
Asbestos	0.0%			0.0%	0.0%
Contaminated Soils	0.0%			0.0%	0.0%
Industrial Process Waste	0.0%			0.0%	0.0%
Sludges	0.0%			0.0%	0.0%
Food Waste Loose	0.0%			0.3%	0.1%
Food Waste Packaged	0.0%			0.0%	0.0%
Tree Limbs and Stump Waste	0.0%			0.0%	0.0%
Yard Wastes	0.0%			9.3%	3.9%
Other Organics	0.0%			0.0%	0.0%
Wires	0.0%			0.0%	0.0%
Ceramics	0.0%			0.0%	0.0%
Fiberglass	0.0%			0.0%	0.0%
Insulation	0.7%			0.4%	0.6%
Concrete	0.0%			0.0%	0.0%
Brick	0.0%			0.0%	0.0%
Carpet/Carpet Pads	0.8%			1.5%	1.1%
Vinyl Siding	9.0%			0.0%	5.2%
Roofing Materials	3.8%			0.9%	2.6%
Dirt/Sand/Gravel/Rock	6.6%			0.0%	3.8%
Metal	2.9%			5.6%	4.0%

Material Category	Winter	Spring	Summer	Fall	Overall
Plastic	6.8%			4.0%	5.6%
Mattresses and Box Springs	0.0%			0.2%	0.1%
Furniture	0.0%			2.2%	0.9%
Tires	0.0%			0.0%	0.0%
Corrugated Cardboard	14.7%			11.4%	13.3%
Other MSW Recyclable Material	1.0%			0.0%	0.6%
MSW Non-Recyclable Waste	2.8%			0.1%	1.7%
Other C&D Wastes	0.0%			5.1%	2.2%
Electronics	0.2%			0.0%	0.1%
Appliances	0.0%			0.2%	0.1%
Glass	0.0%			22.3%	9.4%
Chemicals	0.0%			0.0%	0.0%
Textiles	0.0%			0.5%	0.2%
Bagged Wastes	0.6%			1.2%	0.9%
Total	100%			100%	100%

Overall Statewide C&D Composition by Season – Sidney Area Solid Waste Agency Landfill

Material Category	Winter	Spring	Summer	Fall	Overall
Sawn Lumber		0.0%			0.0%
Engineered Wood/Manufactured Wood		11.8%			11.8%
Wooden Pallets		15.2%			15.2%
Treated Wood Materials		10.1%			10.1%
Untreated Wood Materials		0.0%			0.0%
Drywall (Painted and Non-Painted)		0.0%			0.0%
Asbestos		0.0%			0.0%
Contaminated Soils		0.0%			0.0%
Industrial Process Waste		0.0%			0.0%
Sludges		0.0%			0.0%
Food Waste Loose		0.0%			0.0%
Food Waste Packaged		0.0%			0.0%
Tree Limbs and Stump Waste		0.0%			0.0%
Yard Wastes		0.0%			0.0%
Other Organics		0.0%			0.0%
Wires		0.0%			0.0%
Ceramics		18.6%			18.6%
Fiberglass		0.0%			0.0%
Insulation		0.0%			0.0%
Concrete		0.0%			0.0%
Brick		0.0%			0.0%
Carpet/Carpet Pads		35.3%			35.3%
Vinyl Siding		0.0%			0.0%
Roofing Materials		0.0%			0.0%
Dirt/Sand/Gravel/Rock		0.0%			0.0%
Metal		0.0%			0.0%

Material Category	Winter	Spring	Summer	Fall	Overall
Plastic		1.2%			1.2%
Mattresses and Box Springs		2.2%			2.2%
Furniture		0.0%			0.0%
Tires		0.0%			0.0%
Corrugated Cardboard		4.2%			4.2%
Other MSW Recyclable Material		0.0%			0.0%
MSW Non-Recyclable Waste		0.0%			0.0%
Other C&D Wastes		0.0%			0.0%
Electronics		0.0%			0.0%
Appliances		0.0%			0.0%
Glass		0.0%			0.0%
Chemicals		0.0%			0.0%
Textiles		0.0%			0.0%
Bagged Wastes		1.4%			1.4%
Total		100%			100%

Overall Statewide C&D Composition by Season – Solid Waste Agency of Northwest Nebraska Transfer Station
(Chadron)

Material Category	Winter	Spring	Summer	Fall	Overall
Sawn Lumber			0.0%	0.0%	0.0%
Engineered Wood/Manufactured Wood			0.0%	0.0%	0.0%
Wooden Pallets			5.0%	3.9%	4.4%
Treated Wood Materials			7.9%	2.8%	5.1%
Untreated Wood Materials			1.6%	73.9%	41.5%
Drywall (Painted and Non-Painted)			12.0%	0.0%	5.4%
Asbestos			0.0%	0.0%	0.0%
Contaminated Soils			0.0%	0.0%	0.0%
Industrial Process Waste			0.0%	0.0%	0.0%
Sludges			0.0%	0.0%	0.0%
Food Waste Loose			0.0%	0.0%	0.0%
Food Waste Packaged			0.0%	0.0%	0.0%
Tree Limbs and Stump Waste			0.0%	0.0%	0.0%
Yard Wastes			0.0%	2.1%	1.2%
Other Organics			0.0%	0.0%	0.0%
Wires			1.3%	0.0%	0.6%
Ceramics			8.8%	0.0%	3.9%
Fiberglass			0.0%	0.0%	0.0%
Insulation			0.1%	0.0%	0.0%
Concrete			0.0%	0.0%	0.0%
Brick			0.0%	0.0%	0.0%
Carpet/Carpet Pads			0.0%	0.0%	0.0%
Vinyl Siding			0.0%	0.0%	0.0%
Roofing Materials			0.0%	0.0%	0.0%
Dirt/Sand/Gravel/Rock			0.0%	0.0%	0.0%

Material Category	Winter	Spring	Summer	Fall	Overall
Metal			2.2%	1.8%	2.0%
Plastic			1.4%	12.3%	7.4%
Mattresses and Box Springs			0.0%	0.0%	0.0%
Furniture			28.3%	0.0%	12.7%
Tires			0.0%	0.4%	0.2%
Corrugated Cardboard			0.2%	2.2%	1.3%
Other MSW Recyclable Material			0.0%	0.0%	0.0%
MSW Non-Recyclable Waste			2.6%	0.0%	1.2%
Other C&D Wastes			0.0%	0.0%	0.0%
Electronics			4.1%	0.0%	1.8%
Appliances			1.4%	0.0%	0.6%
Glass			22.8%	0.0%	10.2%
Chemicals			0.0%	0.0%	0.0%
Textiles			0.0%	0.3%	0.1%
Bagged Wastes			0.3%	0.4%	0.4%
Total			100%	100%	100%

Overall Statewide C&D Composition by Season – Valentine Area Solid Waste Agency Landfill

Material Category	Winter	Spring	Summer	Fall	Overall
Sawn Lumber			1.0%		1.0%
Engineered Wood/Manufactured Wood			0.0%		0.0%
Wooden Pallets			11.1%		11.1%
Treated Wood Materials			11.2%		11.2%
Untreated Wood Materials			12.2%		12.2%
Drywall (Painted and Non-Painted)			12.9%		12.9%
Asbestos			0.0%		0.0%
Contaminated Soils			0.0%		0.0%
Industrial Process Waste			0.0%		0.0%
Sludges			0.0%		0.0%
Food Waste Loose			0.0%		0.0%
Food Waste Packaged			0.0%		0.0%
Tree Limbs and Stump Waste			0.0%		0.0%
Yard Wastes			0.0%		0.0%
Other Organics			0.0%		0.0%
Wires			4.7%		4.7%
Ceramics			15.3%		15.3%
Fiberglass			0.0%		0.0%
Insulation			0.2%		0.2%
Concrete			10.5%		10.5%
Brick			0.0%		0.0%
Carpet/Carpet Pads			7.3%		7.3%
Vinyl Siding			2.8%		2.8%
Roofing Materials			0.0%		0.0%
Dirt/Sand/Gravel/Rock			0.0%		0.0%
Metal			3.8%		3.8%

Material Category	Winter	Spring	Summer	Fall	Overall
Plastic			0.3%		0.3%
Mattresses and Box Springs			0.0%		0.0%
Furniture			3.0%		3.0%
Tires			1.2%		1.2%
Corrugated Cardboard			0.6%		0.6%
Other MSW Recyclable Material			0.0%		0.0%
MSW Non-Recyclable Waste			1.6%		1.6%
Other C&D Wastes			0.0%		0.0%
Electronics			0.0%		0.0%
Appliances			0.0%		0.0%
Glass			0.0%		0.0%
Chemicals			0.0%		0.0%
Textiles			0.0%		0.0%
Bagged Wastes			0.2%		0.2%
Total			100%		100%