



2020-2021 WASHINGTON STATEWIDE Waste Characterization Study

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Clark County	West Vancouver Transfer Station
Cowlitz County	Waste Control 3 rd Ave Transfer Station
Island County	Island County SW Complex
Jefferson County	Jefferson County Solid Waste Transfer Station
Kittitas County	Kittitas County Transfer Station
Mason County	Mason County Transfer Station
Okanogan County	Okanogan Central Landfill
	Twisp Transfer Station
Skamania County	Stevenson Transfer Station
Snohomish County	Southwest Recycling and Transfer Station
Spokane County	Spokane Regional Waste to Energy Facility
Whitman County	Carothers Rd SW Site Transfer Station
King County	
Pierce County	
City of Bellingham	
City of Seattle	

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Table of Contents

Acknowledgments.....	i
List of Tables.....	iii
List of Figures.....	v
Project Overview	1
Introduction	1
Impacts of COVID-19 Pandemic.....	1
Summary of Methodology.....	2
Sample Allocation and Schedule	6
Determining the Composition of the Statewide Waste Stream.....	9
Quantifying the Waste Stream	10
Interpreting the Results.....	13
Changes in the Methodology Since 2015-2016.....	14
Statewide Characterization Results.....	15
Overall Disposed Waste Stream	15
Commercial Waste.....	19
Residential Waste	23
Self-hauled Waste.....	27
Comparison to the 2015-2016 Study	31
Appendix A: List and Definitions of Material Types.....	39
Appendix B: Field Forms Used During the Study	59
Appendix C: Waste Generation Area Composition Results	65
Appendix D: Supplemental Composition Results	99

List of Tables

Table 1: WGAs and Counties Included in the 2020-2021 Statewide Study and Supplemental Analysis.....	3
Table 2: Counties and Facilities Visited for Sampling and Surveying	4
Table 3: Numbers of Waste Samples Characterized, by Sector	5
Table 4: Number of Material Types per Material Class.....	5
Table 5: The Eight Material Groupings Used for the Packaging and Product Analysis.....	6
Table 6: Facility Schedule 2020-2021, by Season.....	7
Table 7: Sample Goals vs Actuals 2020-2021, by County	8
Table 8: Sample Goals vs Actuals 2020-2021, by WGA	9
Table 9: Number of Vehicles Surveyed by County	11
Table 10: Estimated Tons of Disposed Waste by Sector	12
Table 11: Annual Disposed Tonnage by WGA.....	12
Table 12: Example Percent Composition and Error Range.....	13
Table 13: Overall Statewide Disposed Waste Stream Fifteen Most Prevalent Material Types, 2020-2021	17
Table 14: Overall Statewide Disposed Waste Stream, Detailed Composition, 2020-2021	18
Table 15: Commercial Disposed Waste Sector Fifteen Most Prevalent Material Types, 2020-2021	21
Table 16: Commercial Disposed Waste Sector, Detailed Composition, 2020-2021	22
Table 17: Residential Disposed Waste Sector Fifteen Most Prevalent Material Types, 2020-2021.....	25
Table 18: Residential Disposed Waste Sector, Detailed Composition, 2020-2021	26
Table 19: Self-hauled Disposed Waste Sector Fifteen Most Prevalent Material Types, 2020-2021.....	29
Table 20: Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021	30
Table 21: Waste Composition Changes and Trends, 2015-2016 vs. 2020-2021	38
Table 22: List of Material Types	40
Table 23: Material Types by Packaging and Products Material Groups	43
Table 24: Central WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021	70
Table 25: Central WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021	71
Table 26: Central WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021	72
Table 27: Central WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021	73
Table 28: East WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021	75
Table 29: East WGA Commercial Disposed Waste, Detailed Composition, 2020-2021	76
Table 30: East WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021	77
Table 31: East WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021.....	78
Table 32: Northwest WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021	80
Table 33: Northwest WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021	81
Table 34: Northwest WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021.....	82
Table 35: Northwest WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021.....	83
Table 36: Puget Sound WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021.....	85
Table 37: Puget Sound WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021	86
Table 38: Puget Sound WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021	87
Table 39: Puget Sound WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021	88
Table 40: Southwest WGA Overall Disposed Waste Sector, Detailed Composition, 2020-2021	90
Table 41: Southwest WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021	91
Table 42: Southwest WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021.....	92
Table 43: Southwest WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021.....	93
Table 44: West WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021	95
Table 45: West WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021.....	96
Table 46: West WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021.....	97
Table 47: West WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021.....	98

Table 48: Supplemental Statewide Results - Five-study Material Type Translation	100
Table 49: Supplemental Statewide Results—Overall Statewide Disposed Waste Stream, Ten Most Prevalent Material Types, 2020-2021	109
Table 50: Supplemental Statewide Results—Overall Statewide Disposed Waste Stream, Detailed Composition, 2020-2021	110
Table 51: Supplemental Statewide Results—Statewide Commercial Disposed Waste Sector, Ten Most Prevalent Material Types, 2020-2021	112
Table 52: Supplemental Statewide Results—Statewide Commercial Disposed Waste Sector, Detailed Composition, 2020-2021	113
Table 53: Supplemental Statewide Results—Statewide Residential Disposed Waste Sector, Ten Most Prevalent Material Types, 2020-2021	115
Table 54: Supplemental Statewide Results—Statewide Residential Disposed Waste Sector, Detailed Composition, 2020-2021	116
Table 55: Supplemental Statewide Results—Statewide Self-hauled Disposed Waste Sector, Ten Most Prevalent Material Types, 2020-2021	118
Table 56: Supplemental Statewide Results—Statewide Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021	119

List of Figures

Figure 1: Map of Waste Generation Areas	3
Figure 2: The 16-Cell Grid Applied to a Tipped Load	9
Figure 3: Overall Statewide Disposed Waste Stream Composition by Material Class, 2020-2021	15
Figure 4: Overall Statewide Disposed Waste Stream Composition by Material Class, Combined Packaging and Products, 2020-2021	16
Figure 5: Overall Statewide Disposed Waste Stream Packaging, Products, and Other Material Groups, 2020-2021	16
Figure 6: Commercial Disposed Waste Sector Composition by Material Class, 2020-2021	19
Figure 7: Commercial Disposed Waste Sector Composition by Material Class, Combined Packaging and Products, 2020-2021	20
Figure 8: Commercial Disposed Waste Sector Packaging, Products, and Other Material Groups, 2020-2021	20
Figure 9: Residential Disposed Waste Sector Composition by Material Class, 2020-2021	23
Figure 10: Residential Disposed Waste Sector Composition by Material Class, Combined Packaging and Products, 2020-2021	24
Figure 11: Residential Disposed Waste Sector Packaging, Products, and Other Material Groups, 2020-2021	24
Figure 12: Self-hauled Disposed Waste Sector Composition by Material Class, 2020-2021	27
Figure 13: Self-hauled Disposed Waste Sector Composition by Material Class, Combined Packaging and Products, 2020-2021	28
Figure 14: Self-hauled Disposed Waste Sector Packaging, Products, and Other Material Groups, 2020-2021	28
Figure 15: T-test Material Categories	32
Figure 16: Sample Vehicle Selection Sheet	59
Figure 17: Sample Placard	60
Figure 18: Sample Sorting and Characterization Form, Front	61
Figure 19: Sample Sorting and Characterization Form, Back	62
Figure 20: Vehicle Survey Form, Front	63
Figure 21: Vehicle Survey Form, Back	64
Figure 22: Central WGA	66
Figure 23: East WGA	66
Figure 24: Northwest WGA	67
Figure 25: Puget Sound WGA	67
Figure 26: Southwest WGA	68
Figure 27: West WGA	68
Figure 28: Supplemental Statewide Results—Overall Statewide Disposed Waste Stream	108
Figure 29: Supplemental Statewide Results—Statewide Commercial Disposed Waste Sector, Composition by Material Class, 2020-2021	111
Figure 30: Supplemental Statewide Results—Statewide Residential Disposed Waste Sector, Composition by Material Class, 2020-2021	114
Figure 31: Supplemental Statewide Results—Statewide Self-hauled Disposed Waste Sector, Composition by Material Class, 2020-2021	117

Project Overview

Introduction

To obtain data about the composition of disposed waste in the state of Washington, the Washington State Department of Ecology (Ecology) commissioned Cascadia Consulting Group (Cascadia) to conduct a four-season municipal solid waste (MSW) characterization study in 2020-2021. Ecology may use the findings from this study to assist municipalities as well as public and private solid waste managers to design targeted waste reduction, product stewardship, and material recovery programs, inform solid waste planning efforts, sustainable materials management efforts, and compare against previous studies. Cascadia conducted similar studies in 2009 and 2015-2016, and the 2020-2021 study protocol essentially replicates the protocol used in previous studies.

The results of this study include:

- ▶ A packaging versus product analysis which groups each of the 143 unique material types into packaging, products, or one of six other material groups.¹
- ▶ Detailed composition results for each of the state's six waste generation areas (WGAs)—Central, East, Northwest, Puget Sound, Southwest, and West.
- ▶ A comparison with the 2015-2016 Washington Statewide Waste Characterization Study.
- ▶ A supplementary analysis which combines the data collected during this study with four additional studies completed by other jurisdictions around the state.

The main body of this report includes an overview of the study including a summary of the study methodology, the overall composition results by sector from the 2020-2021 study, and a comparison to the previous study conducted in 2015-2016. Appendices include lists and definitions of material types, field forms used in this study, composition results by WGA, and supplemental composition results of the study data combined with additional studies in Washington.

Impacts of COVID-19 Pandemic

The 2020-2021 study occurred concurrently with the global COVID-19 pandemic. The pandemic posed unique challenges to completing field work according to the original study plan that would not be expected during a normal year. Logistical and scheduling challenges included limiting onsite visitors at facilities, restricted access to the scale house and restrooms for field staff, and unexpected facility staffing limitations due to employee medical leave and/or quarantine mandates. Cascadia augmented its health and safety protocol to include additional training for field staff prior to field work, additional personal protective equipment (PPE) requirements such as mandatory face masks, and portable hand washing stations. Field staff maintained six feet distance and respected safety protocols of each facility, which sometimes included a safety briefing prior to field work. The impacts of the COVID-19 pandemic to the data will be discussed in sections below.

¹ The project team originally agreed on 141 material types for the 2020-2021 study. To obtain additional detail, the field crew sorted the original *aseptic and polycoated packaging* material type into three distinct material types: *aseptic containers*, *gable top containers*, and *other polycoated packaging*.

Summary of Methodology

This section summarizes the planning and data collection approaches used in the 2020-2021 statewide study. The methods used in this study essentially replicate the methods used in the 2009 and 2015-2016 studies, with modifications noted. The 2020-2021 study uses statistical procedures equivalent to the previous 2015-2016 statewide study. The detailed study design created for the 2015-2016 study can be found in the Ecology publication [1607032.pdf \(wa.gov\)](#).

Ecology initially created a plan for the 2020-2021 study that provided the framework for all subsequent data collection and analysis strategies. This planning stage included:

1. Selecting representative counties to visit across the state
2. Scheduling solid waste disposal facilities, statewide, for surveying and sampling
3. Defining the waste sectors to include in the study
4. Creating the list of material types to measure in the study

Following the planning stage, Cascadia implemented the data collection and analysis strategies, which included:

1. Determining the composition of the waste stream through sampling and sorting
2. Quantifying the waste stream through vehicle surveys

Each of these steps in the planning phase is explained below.²

SELECTING REPRESENTATIVE COUNTIES

Ecology first selected ten counties in which to collect and sort waste samples. These ten counties represent Washington's six Waste Generation Areas (WGAs): Central, East, Northwest, Puget Sound, Southwest, and West. A WGA groups counties with similar geographies, demographics, and economies to reduce the complexity of the study.

In addition to the ten counties chosen as data collection sites, Ecology and Cascadia collaborated to select four additional recent studies for additional comparative analysis. As part of the analysis, Cascadia combined the existing composition data from the four selected studies with the 2020-2021 statewide data. The four selected studies include:

- ▶ 2019 King County Waste Characterization Study (excludes Seattle)
- ▶ 2020-2021 City of Seattle Waste Characterization Study
- ▶ 2019 City of Bellingham Waste Characterization Study
- ▶ 2015-2016 Pierce County Waste Characterization Study (excludes Tacoma)

Table 1 and Figure 1 below show the counties visited for sampling and the additional counties included in the supplemental analysis. Composition results for the six Washington WGAs are included in Appendix C: Waste

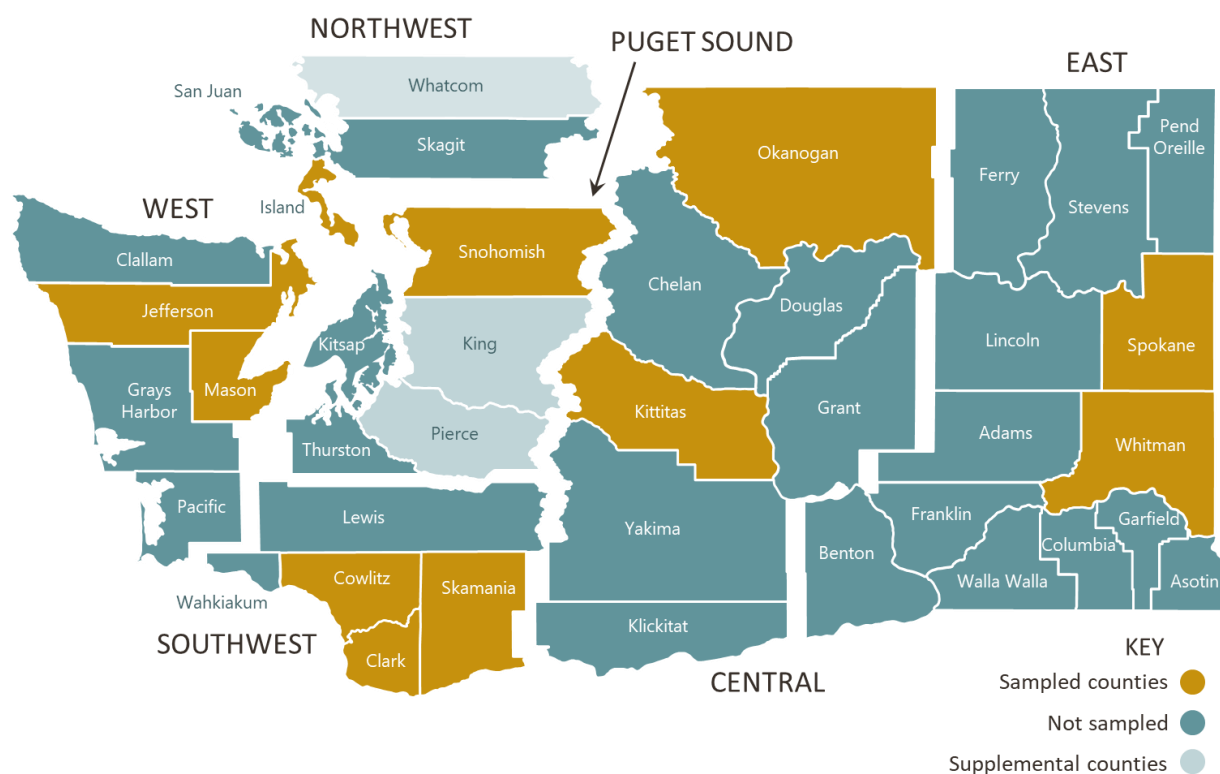
² Refer to the Ecology publication [1607032.pdf \(wa.gov\)](#) for a more detailed description of the 2015-2016 methodology that was replicated for the 2020-2021 study.

Generation Area Composition Results. The supplementary analysis of data from additional counties is included in Appendix D: Supplemental Composition Results.

Table 1: WGAs and Counties Included in the 2020-2021 Statewide Study and Supplemental Analysis

WASTE GENERATION AREA	COUNTIES VISITED FOR STATEWIDE STUDY	SUPPLEMENTAL COUNTIES ANALYZED
Central	Kittitas, Okanogan	
East	Spokane, Whitman	
Northwest	Island	Whatcom County (City of Bellingham)
Puget Sound	Snohomish	King County, Pierce County, City of Seattle
Southwest	Skamania, Clark, Cowlitz ³	
West	Jefferson, Mason	

Figure 1: Map of Waste Generation Areas



³ Cowlitz County was used as an alternative county in season two of field work due to staffing limitations at Stevenson Transfer Station in Skamania County.

SCHEDULING FACILITIES

After selecting the ten counties to visit, Ecology recruited one solid waste facility in each county where waste sampling, sorting, and surveying would occur. Table 2 lists the selected counties and corresponding facilities visited.

Table 2: Counties and Facilities Visited for Sampling and Surveying

COUNTY	FACILITY
Clark County	West Vancouver Transfer Station
Cowlitz County	Waste Control 3 rd Ave Transfer Station
Island County	Island County SW Complex
Jefferson County	Jefferson County Solid Waste Transfer Station
Kittitas County	Kittitas County Transfer Station
Mason County	Mason County Transfer Station
Okanogan County	Okanogan Central Landfill; Twisp Transfer Station ⁴
Skamania County	Stevenson Transfer Station ⁵
Snohomish County	Southwest Recycling and Transfer Station
Spokane County	Spokane Regional Waste to Energy Facility
Whitman County	Carothers Rd SW Site Transfer Station

DEFINING WASTE SECTORS

Waste sectors are defined according to the source, or generator, of the disposed waste (residential or commercial) and by how materials are delivered to disposal facilities (commercially collected or self-hauled). For the 2020-2021 study, Cascadia and Ecology divided Washington's waste stream into the following three waste sectors:

- ▶ **Commercial:** waste hauled by contracted or municipally operated vehicles in which 80 percent or more of the waste is from institutional, commercial, or industrial sources.
- ▶ **Residential:** waste hauled by contracted or municipally operated vehicles in which 80 percent or more of the waste is from single-family and/or multifamily residential sources.
- ▶ **Self-hauled:** waste hauled by vehicles not operated by a franchise or municipality, including waste that was generated as a result of construction or demolition activities.

⁴ Twisp Transfer Station was used as an alternative facility in season two of field work due to construction taking place at Okanogan Central Landfill at the time of the study.

⁵ During the final season of field work, the sort crew sampled at Stevenson Transfer Station in the morning and unexpectedly finished the day at West Vancouver Transfer Station due to a lack of incoming vehicles at Stevenson Transfer Station.

Cascadia characterized a total of 520 samples. Table 3 shows how many samples the field crew collected and sorted from each of the three waste sectors.

Table 3: Numbers of Waste Samples Characterized, by Sector

SECTOR	NUMBER OF SAMPLES
Commercial	240
Residential	120
Self-hauled	160
Total	520

CREATING THE LIST OF MATERIAL TYPES

Ecology and Cascadia created the list of 143 material types (based on the 2015-2016 study and updated needs for tracking specific materials) and organized them into 12 broad material classes. Table 4 shows the number of material types in each of the broad material classes. The definitions of each material type, and the organization by material class, can be found in Appendix A: List and Definitions of Material Types.

Table 4: Number of Material Types per Material Class

MATERIAL CLASSES	NUMBER OF MATERIAL TYPES WITHIN CLASS
Paper Packaging	8
Paper Products	8
Plastic Packaging	17
Plastic Products	12
Glass	6
Metal	9
Organics	10
Wood Debris	9
Construction Materials	12
Consumer Products	18
Hazardous and Special Wastes	29
Residuals	5
Total	143

Packaging and Product List

To align with the 2015-2016 study and conduct the packaging and product analysis, Cascadia also aggregated the 143 material types into eight material groupings, listed in Table 5 below. For example, all materials in both **Paper Packaging** and **Plastic Packaging** material classes are classified as **Packaging** for this analysis. The material group **Glass** is split and all glass containers are moved under **Packaging**, while *plate glass* and *non-glass ceramics* are under **Products**. The remaining glass material, *R/C glass*, is considered **Residues**.

Table 5: The Eight Material Groupings Used for the Packaging and Product Analysis

PACKAGING AND PRODUCT MATERIAL CLASSES	
Packaging	Wood Debris
Products	Construction Materials
Metal	Hazardous/Special Waste
Organics	Residues

For a thorough list of the classification of material types into packaging and product material groupings, see Appendix A: List and Definitions of Material Types.

Sample Allocation and Schedule

Cascadia collected a total of 520 samples of residential, commercial, and self-hauled disposed municipal solid waste⁶ from 11 different counties in Washington. In general, Cascadia conducted sampling and sorting at each facility one day per season for four seasons (summer, autumn, winter, and spring). The first season of field work began in August 2020, and the final season of field work was completed in April 2021. Below are the dates of field work for each season:

- ▶ Season 1: August 10 – 21, 2020
- ▶ Season 2: November 11 – 20; December 14 – 18, 2020
- ▶ Season 3: February 8 – 12; February 22 – 26, 2021
- ▶ Season 4: April 5 – 16, 2021

During the second season of field work, staffing limitations due to the COVID-19 pandemic and onsite construction prevented the field crew from sample collection at two facilities. The field crew sampled at Twisp Transfer Station in place of Okanogan Central Landfill in Okanogan County and at Waste Control 3rd Ave Transfer Station in Cowlitz County in place of Stevenson Transfer Station. During the fourth season of field work, the field crew sampled a half day at Stevenson Transfer Station and a day and a half at West Vancouver Transfer Station due to limited incoming loads at Stevenson Transfer Station in Skamania County. Table 6 shows the facility schedule for each season of field work.

⁶ Municipal solid waste (MSW) is defined as a subset of solid waste which includes unsegregated garbage, refuse and similar solid waste material discarded from residential, commercial, institutional, and industrial sources and community activities, including residue after recyclables have been separated (Chapter 173-350 WAC).

Table 6: Facility Schedule 2020-2021, by Season

	Season One: August 2020									
	8/10	8/11	8/12	8/13	8/14	8/17	8/18	8/19	8/20	8/21
Spokane Regional Waste to Energy Facility	X									
Carothers Rd SW Site Transfer Station		X								
Kittitas County Transfer Station			X							
Okanogan Central Landfill				X						
Island County SW Complex					X					
Southwest Recycling and Transfer Station						X				
Jefferson County Solid Waste Transfer Station							X			
Mason County Transfer Station								X		
Stevenson Transfer Station									X	
West Vancouver Transfer Station										X

	Season Two: November - December 2020									
	11/16	11/17	11/18	11/19	11/20	12/14	12/15	12/16	12/17	12/18
Spokane Regional Waste to Energy Facility	X									
Carothers Rd SW Site Transfer Station		X								
Kittitas County Transfer Station			X							
Twisp Transfer Station*				X						
Island County SW Complex					X					
Southwest Recycling and Transfer Station						X				
Jefferson County Solid Waste Transfer Station							X			
Mason County Transfer Station								X		
Waste Control 3rd Ave Transfer Station**									X	
West Vancouver Transfer Station										X

*Twisp Transfer Station was a substitute for Okanogan Central Landfill

**Waste Control 3rd Ave Transfer Station was a substitute for Stevenson Transfer Station

	Season Three: February 2021									
	2/8	2/9	2/10	2/11	2/12	2/22	2/23	2/24	2/25	2/26
Spokane Regional Waste to Energy Facility	X									
Carothers Rd SW Site Transfer Station		X								
Kittitas County Transfer Station			X							
Okanogan Central Landfill				X						
Island County SW Complex					X					
Southwest Recycling and Transfer Station						X				
Jefferson County Solid Waste Transfer Station							X			
Mason County Transfer Station								X		
Stevenson Transfer Station									X	
West Vancouver Transfer Station										X

	Season Four: April 2021									
	4/5	4/6	4/7	4/8	4/9	4/12	4/13	4/14	4/15	4/16
Spokane Regional Waste to Energy Facility	X									
Carothers Rd SW Site Transfer Station		X								
Kittitas County Transfer Station			X							
Okanogan Central Landfill				X						
Island County SW Complex					X					
Southwest Recycling and Transfer Station						X				
Jefferson County Solid Waste Transfer Station							X			
Mason County Transfer Station								X		
Stevenson Transfer Station									X	
West Vancouver Transfer Station									X	X

Table 7 below shows the sample goals and actual samples collected by county. Table 8 shows the sample goals and actual samples collected by WGA. Cascadia collected and sorted the total number of samples planned for each WGA even though the actual daily site and sample allocation deviated slightly from the original plan.

Table 7: Sample Goals vs Actuals 2020-2021, by County

COUNTY	WGA	RESIDENTIAL		COMMERCIAL		SELF-HAULED		TOTALS	
		Goal	Actual	Goal	Actual	Goal	Actual	Goal	Actual
Spokane	East	12	12	24	26	16	14	52	52
Whitman	East	12	12	24	22	16	18	52	52
Kittitas	Central	12	12	24	26	16	14	52	52
Okanogan	Central	12	12	24	22	16	18	52	52
Island	Northwest	12	12	24	24	16	16	52	52
Snohomish	Puget Sound	12	12	24	24	16	16	52	52
Jefferson	West	12	11	24	24	16	17	52	52
Mason	West	12	13	24	24	16	15	52	52
Skamania	Southwest	12	3	24	15	16	13	52	31
Cowlitz	Southwest	0	3	0	5	0	3	0	11
Clark	Southwest	12	18	24	28	16	16	52	62
Totals		120	120	240	240	160	160	520	520

Table 8: Sample Goals vs Actuals 2020-2021, by WGA

	RESIDENTIAL		COMMERCIAL		SELF-HAULED		TOTALS	
WGA	Goal	Actual	Goal	Actual	Goal	Actual	Goal	Actual
East	24	24	48	48	32	32	104	104
Central	24	24	48	48	32	32	104	104
Northwest	12	12	24	24	16	16	52	52
Puget Sound	12	12	24	24	16	16	52	52
West	24	24	48	48	32	32	104	104
Southwest	24	24	48	48	32	32	104	104
Totals:	120	120	240	240	160	160	520	520

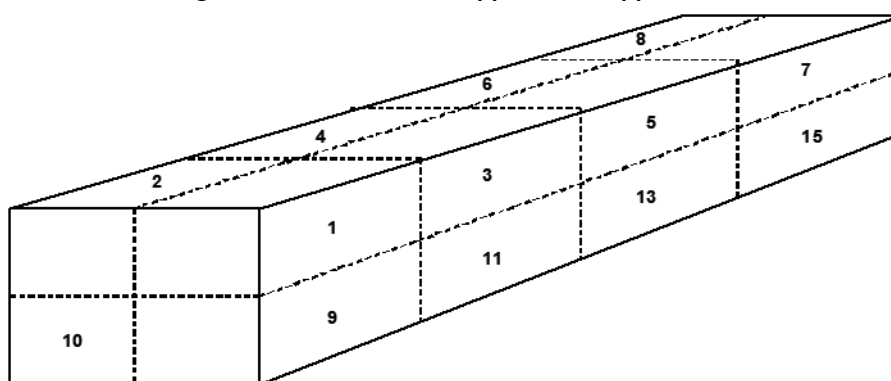
Determining the Composition of the Statewide Waste Stream

SELECTING SAMPLES

Cascadia used a systematic sampling protocol to ensure accurate representation of loads from each sector and provided the scale house attendant with detailed instructions for selecting loads to sample. When an eligible vehicle arrived at the scale house and was selected for sampling, the scale house attendant directed the vehicle to the tipping area where it was intercepted by the Sort Crew Manager.⁷

The Sort Crew Manager selected a sample from the load by superimposing an imaginary 16-cell grid (see below) over the dumped material. Then, with the assistance of a loader operator, they extracted a sample of waste weighing approximately 200 pounds from a randomly selected cell. Each sample was labeled with the identifying sample ID number and digitally photographed.

Figure 2: The 16-Cell Grid Applied to a Tipped Load



⁷ Due to staffing limitations, the Mason County Transfer Station was unable to provide scale house staff to assist with vehicle selection. An Ecology staff person assisted with vehicle selection during the third and fourth seasons of field work.

SORTING SAMPLES

To determine the statewide 2020-2021 composition—the percentage of each material present in the waste stream—the sort crew hand sorted each disposed waste sample into 143 material types. Hand sorting and weighing every material type found in a sample produces accurate measurements that can be reliably converted to percentages and then applied to tonnage figures to quantify the waste stream. The sorting protocol follows these five steps⁸:

- ▶ **Step 1: Review methodology and sorting categories with the crew.** Before the sorting begins, the sort crew reviewed the safety protocols, procedures, forms, and material definitions in detail.
- ▶ **Step 2: Photograph the sample.** The sort crew photographed the sample using a digital camera, ensuring that the *Sample Placard* identifying the sample was visible in each photo.
- ▶ **Step 3: Sort the sample.** Once the sample was placed on the sorting table, the sort crew sorted material by hand into the prescribed material categories in plastic baskets. Individual members of the sort crew typically specialized in groups of materials, such as papers or plastics. The Sort Crew Manager monitored the accuracy of sorting, re-sorting any materials that were improperly classified. The complete list of material types and definitions are included in Appendix A: List and Definitions of Material Types.
- ▶ **Step 4: Weigh the sample.** The sort crew verified the purity of each material as it was weighed using a pre-tared scale and records the data on the *Sample Sorting and Characterization Form*.
- ▶ **Step 5: Review Data.** At the conclusion of each field work day, the Sort Crew Manager conducted a quality control review of the data recorded.

Quantifying the Waste Stream

STATEWIDE DISPOSED TONS

The first step in quantifying Washington’s disposed waste stream was to determine the amount of solid waste disposed statewide. Ecology provided Cascadia with an annual disposed tonnage figure of 5,275,558 tons. The reported tonnage data is from 2017, the most recent year available.

SECTOR ALLOCATIONS OF WASTE DISPOSED

To calculate tonnages for each of the three waste sectors, Cascadia carried out a vehicle survey during the first season of the 2020-2021 study at the ten recruited sampling sites to determine how many tons of disposed waste were associated with each of the waste sectors. Cascadia recorded the net weight from each vehicle disposing waste at the facility and assigned these tons to the appropriate waste sector using the *Vehicle Survey Form*. Compiling data from the vehicle survey yielded the “sector splits,” or percent of total waste disposed, by weight and sector. Table 9 presents the number of vehicles surveyed by county.

What does R/C stand for?

Most of the Material Classes created for this study include a *material type* that begins with “R/C” such as *R/C glass*, *R/C metal*, and *R/C organics*. These initials stand for “remainder/composite” and define a material that either cannot be categorized in any other material type or where the material is a composite of more than one material.

Examples of items included in some of the R/C material types are insulated wire and cigarette butts.

⁸ A detailed description of sample selection and the hand sorting process from the 2015-2016 study (and used in the 2020-2021 study) can be found in the Ecology publication [1607032.pdf \(wa.gov\)](#).

Table 9: Number of Vehicles Surveyed by County

COUNTY	FACILITY	VEHICLES SURVEYED
Clark County	West Vancouver Transfer Station	175
Island County	Island County SW Complex	228
Jefferson County	Jefferson County Solid Waste Transfer Station	156
Kittitas County	Kittitas County Transfer Station	233
Mason County	Mason County Transfer Station	113
Okanogan County	Okanogan Central Landfill	81
Skamania County	Stevenson Transfer Station	60
Snohomish County	Southwest Recycling and Transfer Station	260
Spokane County	Spokane Regional Waste to Energy Facility	330
Whitman County	Carothers Rd SW Site Transfer Station	98
Total		1,734

ESTIMATING SECTOR TONNAGE

Combining the overall annual disposed tonnage data with the sector allocations yielded tonnage figures for each sector. Of the 5,275,558 tons disposed statewide in 2017 (per Ecology), 42.3 tons were from unspecified counties. The unspecified tons account for less than 0.001% of the statewide total so, for this report, those unspecified tons are excluded from the overall reported annual tonnage and analyses. Table 10 shows the estimated disposed tonnages and ratio of those tonnages from each sector of the overall waste stream.

The residential sector disposed the largest amount of waste, accounting for 44.6 percent of the state's waste stream and over 2.3 million tons. The commercial sector represents approximately 28.5 percent (1.5 million tons) of total waste, and the self-hauled sector represents the remaining 26.8 percent (1.4 million tons). Compared to the 2015-2016 study, the portion of commercial tonnage is approximately 15 percentage points less in 2020-2021 and the portions of residential and self-hauled tons are significantly greater (by approximately 10 percentage points, and by approximately 5 percentage points, respectively). The 2020-2021 study was completed during the COVID-19 pandemic and the impacts of mandatory shut-downs for businesses, paired with increased work-from-home practices, may explain this shift.

Table 10: Estimated Tons of Disposed Waste by Sector

SECTOR	EST. PERCENTAGE OF DISPOSED WASTE	EST. TONS DISPOSED STATEWIDE
Commercial	28.5%	1,507,196
Residential	44.6%	2,352,771
Self-hauled	26.8%	1,415,549
Totals	100.0%	5,275,515

ESTIMATING ANNUAL TONNAGE BY WGA

To estimate the annual tonnage by WGA, Cascadia aggregated the tonnage estimates for each type of waste at all participating facilities within a WGA. The aggregated proportions for each sector were applied to the total disposal tons disposed in 2017 for each WGA, as reported by Ecology. The total estimated annual disposed tonnage by WGA is presented in Table 11.

Table 11: Annual Disposed Tonnage by WGA

WASTE GENERATION AREAS	ANNUAL DISPOSED TONNAGE
Central WGA	590,822
East WGA	844,896
Northwest WGA	334,760
Puget Sound WGA	2,818,338
Southwest WGA	500,073
West WGA	186,626
Total	5,275,515

Interpreting the Results

HOW DATA ARE PRESENTED

The findings of this study present characterization results (by weight) as follows:

1. A pair of bar charts presents an overview of waste composition by material class and material groupings that combine packaging and products.
2. A third bar chart presents an overview of waste composition arranged into packaging, products, and other material groups. Refer to Appendix A: List and Definitions of Material Types, for a table illustrating how material types were grouped into packaging, products, and other material groups.
3. A table shows the 15 most prevalent material types, by weight.
4. A detailed table lists the full composition and quantity results for the 143 material types. Refer to Appendix A: List and Definitions of Material Types for detailed descriptions and definitions of the material types.

Material Designations

For the sake of clarity, Material Classes and Groupings such as **Paper Packaging**, **Glass**, and **Products** are capitalized and bolded. Material types such as *newspaper packaging* and *painted wood* are italicized.

The Statewide Characterization Results section presents the tables and figures listed above for each sector. The results by WGA are included in Appendix C: Waste Generation Area Composition Results.

MEANS AND ERROR RANGES

Cascadia conducted statistical analyses on the data from the material characterization process to provide two pieces of information for each material type:

1. The estimated percent composition of waste by weight.
2. The error range for the composition estimates at the 90 percent confidence level.

All error ranges (+/-) are calculated at the industry-standard 90 percent confidence level⁹.

The example in Table 12 illustrates how the results can be interpreted. The best estimate of the amount of *newspaper packaging* present in the overall waste stream is 10.4 percent. The 3.6 percent figure reflects the degree of precision of the estimate. When calculations are performed at the 90 percent confidence level, we are 90 percent certain that the true mean for *newspaper packaging* is between 10.4 percent plus 3.6 percent and 10.4 percent minus 3.6 percent. In other words, we are 90 percent certain that the true mean lies between 6.8 percent and 14.0 percent.

Table 12: Example Percent Composition and Error Range

MATERIAL	EST. %	+/-
<i>Newspaper packaging</i>	10.4%	3.6%

⁹ The equations used in these calculations appear in the Ecology publication [1607032.pdf \(wa.gov\)](#).

ROUNDING

When interpreting the results presented in the tables and figures in this report, it is important to consider the effect of rounding. To keep the waste composition tables and figures readable, estimated tonnages are rounded to the nearest ton, and estimated percentages are rounded to the nearest tenth of a percent. Due to rounding, the tonnages or percentages presented in the report, when added together, may not exactly match the subtotals and totals shown. Percentages less than 0.05 percent are shown as 0.0 percent even though there may be weights associated with the material.

Changes in the Methodology Since 2015-2016

The methods used in 2020-2021 study essentially replicate the methods used in the 2009 and 2015-2016 studies. The following summarizes the notable changes from the 2015-2016 methodology:

- Self-hauled C&D and Self-hauled Other sectors (2015-2016) were combined into a single Self-hauled sector in 2021 (defined in Defining Waste Sectors section).
- The list of recruited counties and facilities recruited for sampling was updated in 2020-2021 (Table 2).
- The map and list of recruited jurisdictions for the supplementary analysis were updated in 2020-2021 (Table 1 and Figure 1).
- The material types lists were based on lists in 2015-2016, with minor modifications for 2020-2021 (see Appendix A: List and Definitions of Material Types for details).
- The sample allocations in 2015-2016 were updated in 2020-2021 (Table 7 and Table 8).
- The sampling calendar from 2015-2016 was updated in 2020-2021 (Table 6).
- The annual disposed tonnages were updated for 2020-2021 using the most recently available data (Table 11).
- The number of vehicle surveys from 2015-2016 was updated for 2020-2021 (Table 9).
- Additional safety protocols due to the COVID-19 pandemic such as social distancing and mandatory facial masks.

Statewide Characterization Results

This section presents overall statewide composition results and the results by sector—commercial, residential, and self-hauled.

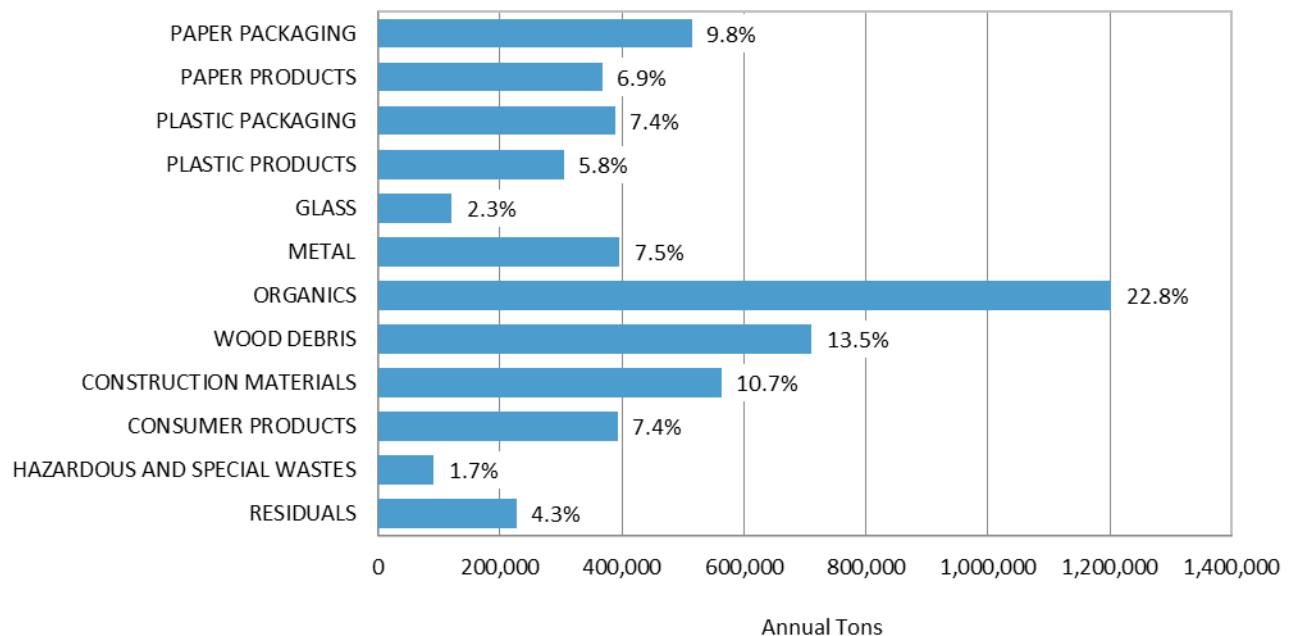
Overall Disposed Waste Stream

This section characterizes the overall disposed MSW stream for the entire state of Washington, combining samples from all three waste sectors and all six WGAs considered in this study. Composition and quantity estimates are generated from data collected from all counties visited during the 2020-2021 statewide study and presented using the material list of 143 material types.

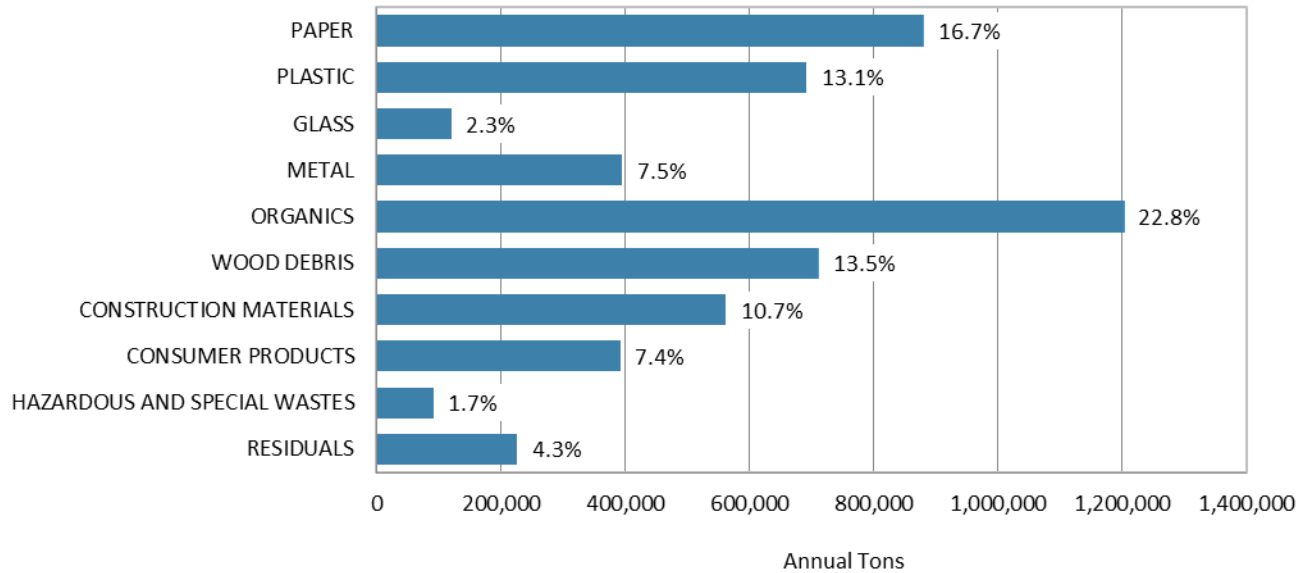
OVERVIEW BY MATERIAL CLASS

Figure 3 below presents the composition of the overall statewide disposed waste stream by material class. **Organics** accounts for nearly one quarter (22.8%) of the overall disposed waste, followed by **Wood Debris** (13.5%), and **Construction Materials** (10.7%). Figure 4 presents the composition by material groupings that combine packaging and product material types. Following the **Organics** material class, **Paper** is 16.7 percent, **Wood Debris** is 13.5 percent, and **Plastic** is 13.1 percent of the overall disposed waste stream.

**Figure 3: Overall Statewide Disposed Waste Stream
Composition by Material Class, 2020-2021**



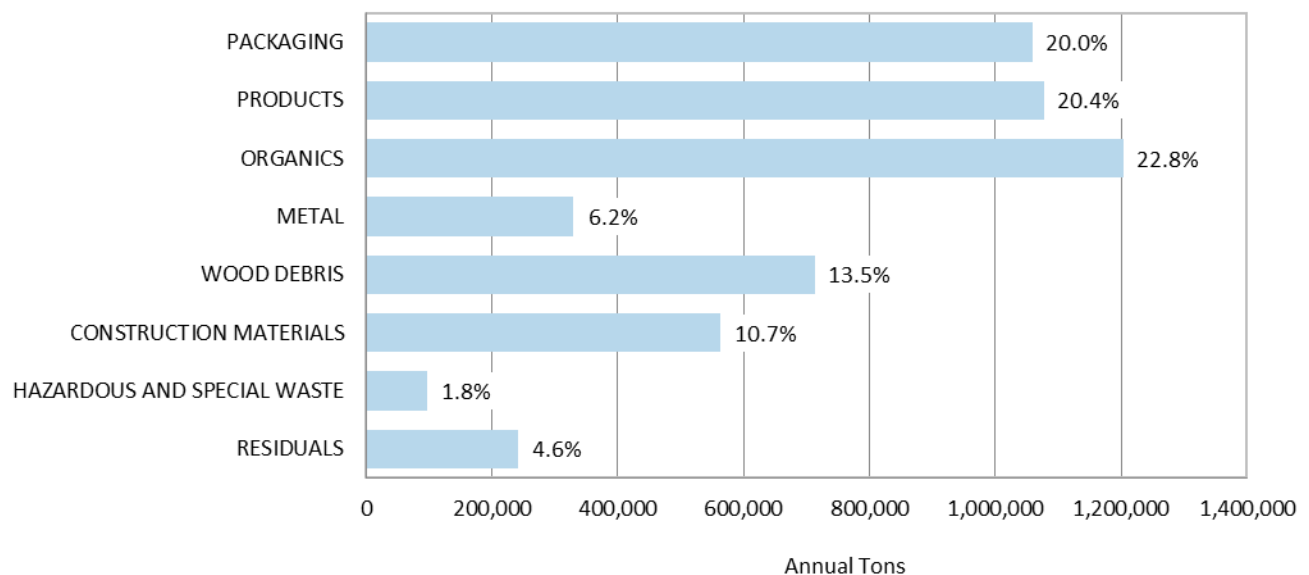
**Figure 4: Overall Statewide Disposed Waste Stream
Composition by Material Class, Combined Packaging and Products, 2020-2021**



OVERVIEW OF PACKAGING AND PRODUCT MATERIAL GROUPS

Figure 5 below shows that the **Products** and **Packaging** material groupings each account for one-fifth (approximately 20%) of the overall disposed waste stream. See Appendix A: List and Definitions of Material Types for a material list that shows the material types included in **Packaging** and **Product** materials groups.

**Figure 5: Overall Statewide Disposed Waste Stream
Packaging, Products, and Other Material Groups, 2020-2021**



FIFTEEN MOST PREVALENT MATERIALS

The fifteen most prevalent material types in the overall waste stream, as shown in Table 13, together make up over half (51.5%) of the waste stream. *Edible food waste- vegetative* (6.4%), and *cardboard and Kraft packaging* (5.2%) are the most prevalent material types.

**Table 13: Overall Statewide Disposed Waste Stream
Fifteen Most Prevalent Material Types, 2020-2021**

Material	Est. Percent	Est. Tons
Edible Food Waste- Vegetative	6.4%	336,564
Cardboard & Kraft Packaging	5.2%	276,196
Painted Wood	4.8%	253,958
Inedible Food Waste- Vegetative	4.8%	250,860
Animal Manure	4.8%	250,763
Compostable Paper Products	3.4%	180,366
Other Ferrous Metal	3.3%	174,364
Drywall	3.2%	167,785
R/C Metal	2.6%	139,654
Yard/Garden Waste- Leaves and Grass	2.5%	132,218
Packaging Film Plastic	2.4%	123,992
Engineered Wood	2.1%	112,899
Edible Food Waste- Meats/Fats/Oils	2.1%	109,571
Compostable Paper Packaging	2.0%	107,175
Bulky Rigid Plastic Products	1.9%	98,194
Total for Top Materials	51.5%	2,714,561

Percentages for material types may not total 100% due to rounding.

DETAILED COMPOSITION

Table 14 below shows the detailed composition results by material type in the overall disposed waste stream.

Table 14: Overall Statewide Disposed Waste Stream, Detailed Composition, 2020-2021

Material	Est.				Material	Est.			
	Percent	+ / -	Est. Tons	Tons + / -		Percent	+ / -	Est. Tons	Tons + / -
PAPER	16.7%	1.6%	879,891	84,230	WOOD DEBRIS	13.5%	2.5%	710,919	133,162
PAPER PACKAGING	9.8%	1.1%	514,406	59,716	Natural Wood	0.6%	0.6%	29,841	32,476
Newspaper Packaging	0.0%	0.0%	178	161	Treated Wood	0.5%	0.2%	28,646	10,906
Cardboard & Kraft Packaging	5.2%	0.9%	276,196	46,794	Painted Wood	4.8%	1.9%	253,958	97,705
Mixed/Low-grade Paper Packaging	1.5%	0.2%	78,166	12,642	Dimensional Lumber	1.7%	0.5%	91,010	28,067
Aseptic Containers	0.1%	0.0%	4,772	1,084	Engineered Wood	2.1%	0.6%	112,899	30,244
Gable Top Containers	0.2%	0.1%	9,494	4,680	Pallets & Crates	1.6%	0.5%	84,991	25,885
Other Polycoated Packaging	0.1%	0.0%	3,709	751	Other Untreated Wood	0.1%	0.0%	2,906	1,600
Compostable Paper Packaging	2.0%	0.5%	107,175	27,465	Wood By-products	0.2%	0.1%	11,579	5,578
R/C Paper Packaging	0.7%	0.2%	34,716	12,145	R/C Wood Debris	1.8%	0.7%	95,090	36,698
PAPER PRODUCTS	6.9%	0.8%	365,485	43,068	CONSTRUCTION MATERIALS	10.7%	2.8%	563,015	145,488
Newspaper Products	0.3%	0.1%	16,033	7,149	Plastic Lumber	0.6%	0.8%	31,587	40,139
Cardboard & Kraft Paper Products	0.1%	0.2%	5,952	9,160	Insulation	0.4%	0.3%	22,637	13,873
Magazines	0.2%	0.1%	11,102	4,397	Asphalt Paving	0.0%	0.0%	1,964	2,249
High-Grade Paper Products	0.2%	0.1%	11,664	3,700	Concrete	1.3%	0.7%	66,151	37,738
Other Groundwood Paper Products	0.0%	0.0%	1,162	971	Drywall	3.2%	2.1%	167,785	111,154
Mixed/Low-grade Paper Products	1.8%	0.4%	93,631	18,693	Carpet	1.0%	0.4%	51,912	22,314
Compostable Paper Products	3.4%	0.4%	180,366	22,004	Carpet Padding	0.3%	0.2%	14,336	8,833
R/C Paper Products	0.9%	0.3%	45,574	13,836	Soil, Rocks, & Sand	0.5%	0.2%	27,517	9,919
PLASTIC	13.1%	0.9%	692,798	45,145	Asphalt Roofing	1.7%	1.5%	92,083	78,493
PLASTIC PACKAGING	7.4%	0.6%	388,526	33,655	Plastic Floor Covering	0.0%	0.0%	563	566
#1 PETE Plastic Bottles	0.7%	0.1%	36,210	4,818	Ceramics & Brick	0.4%	0.2%	22,006	11,745
#1 PETE Plastic Non-bottles	0.4%	0.0%	19,792	2,027	R/C Construction Materials	1.2%	0.4%	64,474	21,547
#2 HDPE Plastic Natural Bottles	0.2%	0.0%	9,520	1,526	CONSUMER PRODUCTS	7.4%	1.3%	392,287	66,146
#2 HDPE Plastic Jars and Tubs	0.3%	0.1%	14,344	2,897	Televisions - LCD	0.2%	0.1%	8,003	6,136
#2 HDPE Plastic Colored Bottles	0.2%	0.0%	10,649	1,686	Televisions - CRT	0.1%	0.1%	7,624	6,459
#3 PVC Plastic Packaging	0.0%	0.0%	48	41	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	85	58	Computer Monitors - CRT	0.0%	0.0%	954	1,487
#5 PP Plastic Packaging	0.7%	0.1%	38,636	4,677	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	5,387	650	Computers	0.0%	0.0%	670	770
#7 Other/Unknown Plastic Packaging	0.7%	0.2%	36,326	12,573	Computer Peripherals	0.0%	0.0%	1,721	1,871
Expanded Polystyrene Packaging	0.6%	0.1%	29,835	5,137	Computer Printers	0.1%	0.0%	4,839	2,560
PLA Compostable Packaging	0.0%	0.0%	1,355	485	Audio Equipment	0.0%	0.0%	1,026	1,445
Plastic Merchandise Bags	0.4%	0.1%	21,902	4,015	Electronic Gaming Equipment	0.0%	0.1%	1,847	2,898
Packaging Film Plastic	2.4%	0.2%	123,992	12,869	Other Consumer Electronics	0.3%	0.2%	14,757	8,694
Transportation Packaging Film Plastic	0.5%	0.1%	25,730	5,851	Textiles- Organic	2.4%	0.7%	125,347	35,286
Flexible Plastic Packaging	0.1%	0.0%	5,124	1,316	Textiles- Synthetic/Mixed/Unknown	1.2%	0.3%	62,785	15,552
R/C Plastic Packaging	0.2%	0.2%	9,590	8,224	Shoes/Purses/Belts	0.3%	0.1%	14,240	4,522
PLASTIC PRODUCTS	5.8%	0.9%	304,271	45,757	Tires & Other Rubber	0.4%	0.2%	23,594	10,749
#1 PETE Plastic Products	0.0%	0.0%	59	65	Furniture	1.3%	0.4%	69,255	19,431
#2 HDPE Plastic Products:	0.0%	0.0%	244	244	Mattresses	1.0%	0.9%	50,403	48,318
#3 PVC Plastic Products	0.0%	0.0%	67	78	R/C Consumer Products	0.1%	0.1%	5,221	5,618
#4 LDPE Plastic Products	0.0%	0.0%	5	7	HAZARDOUS AND SPECIAL WASTES	1.7%	0.5%	91,302	26,126
#5 PP Plastic Products	0.0%	0.0%	98	61	Pesticides	0.0%	0.0%	112	131
#6 PS Plastic Products	0.0%	0.0%	840	215	HID/UV/Germicidal Lamps	0.0%	0.0%	257	352
#7 Other/Unknown Plastic Products	1.2%	0.2%	61,202	12,525	Compact Florescent Lamps	0.0%	0.0%	773	646
PLA Compostable Products	0.0%	0.0%	385	181	Florescent Tubes	0.0%	0.0%	166	231
Plastic Garbage Bags	1.3%	0.1%	67,626	7,671	Water-based Paint	0.1%	0.1%	4,997	4,276
Plastic Non-bag Film Products	0.4%	0.2%	22,663	9,127	Solvent-based Adhesives/Glues	0.0%	0.0%	382	275
Bulky Rigid Plastic Products	1.9%	0.7%	98,194	34,318	Water-based Adhesives/Glues	0.0%	0.0%	345	193
R/C Plastic Products	1.0%	0.3%	52,888	18,023	Oil-based Paint	0.1%	0.2%	5,535	8,185
GLASS	2.3%	0.5%	120,539	25,247	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	55	75
Clear Glass Containers	1.0%	0.2%	52,183	10,495	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.4%	0.2%	21,668	8,389	Primers/Sealings/Coatings	0.0%	0.0%	547	624
Brown/Other Colored Glass Containers	0.3%	0.1%	16,769	5,114	Water Repellents & Waterproofers	0.0%	0.0%	770	1,140
Plate Glass	0.1%	0.1%	7,408	5,253	Solvents	0.0%	0.1%	1,945	2,925
Non-glass Ceramics	0.2%	0.1%	8,837	7,225	Caustic Cleaners	0.0%	0.0%	612	646
R/C Glass	0.3%	0.2%	13,673	8,947	Dry-cell Batteries- Single Use	0.0%	0.0%	1,885	890
METAL	7.5%	1.2%	396,066	64,793	Dry-cell Batteries- Rechargeable	0.0%	0.0%	702	760
Aluminum Beverage Cans	0.4%	0.1%	19,429	2,951	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.2%	0.0%	10,337	1,904	Gasoline/Kerosene	0.0%	0.0%	42	68
Other Aluminum	0.1%	0.0%	3,359	2,110	Motor Oil	0.0%	0.0%	257	347
Other Non-ferrous Metal	0.2%	0.1%	12,053	6,277	Antifreeze	0.0%	0.0%	351	464
Food Cans - Tinned	0.4%	0.1%	22,388	2,879	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	881	296	Oil Filters	0.0%	0.0%	2,240	1,385
White Goods	0.3%	0.2%	13,601	9,267	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	3.3%	1.0%	174,364	50,779	Medical Wastes	0.9%	0.4%	45,872	22,696
R/C Metal	2.6%	0.6%	139,654	32,142	Sharps	0.0%	0.0%	159	187
ORGANICS	22.8%	3.2%	1,201,924	170,265	Pharmaceuticals & Vitamins	0.1%	0.1%	7,262	5,448
Edible Food Waste- Vegetative	6.4%	0.7%	336,564	37,473	Other Cleaners/Chemicals	0.0%	0.0%	1,130	1,286
Inedible Food Waste- Vegetative	4.8%	0.9%	250,860	45,202	Personal Care Products	0.2%	0.1%	11,758	6,153
Edible Food Waste- Meats/Fats/Oils	2.1%	0.4%	109,571	20,373	Other Potentially Hazardous Wastes	0.1%	0.0%	3,149	1,450
Inedible Food Waste- Meats/Fats/Oils	0.5%	0.1%	23,932	7,279	RESIDUALS	4.3%	1.2%	226,774	62,891
Yard/Garden Waste- Leaves and Grass	2.5%	1.6%	132,218	82,141	Disposable Diapers	3.1%	1.2%	161,101	61,990
Yard/Garden Waste- Prunings	1.1%	0.7%	57,110	35,401	Ash	0.0%	0.0%	1,574	2,075
Animal Manure	4.8%	1.6%	250,763	85,610	Dust	0.0%	0.0%	415	234
Animal Carcasses & Offal	0.0%	0.0%	2,224	2,451	Fines/Sorting Residues	1.0%	0.2%	53,953	10,746
Food Processing Wastes	0.2%	0.2%	11,854	11,169	Sludges & Other Special Industrial Wastes	0.2%	0.2%	9,731	11,004
R/C Organics	0.5%	0.2%	26,826	9,155					

* There are 42 tons with an unspecified origin that are not included in the detailed composition estimate calculations. The actual statewide disposal total is 5,275,558 tons.

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Estimated Origin Specified Disposed Tons*
Sample Count

5,275,514
520

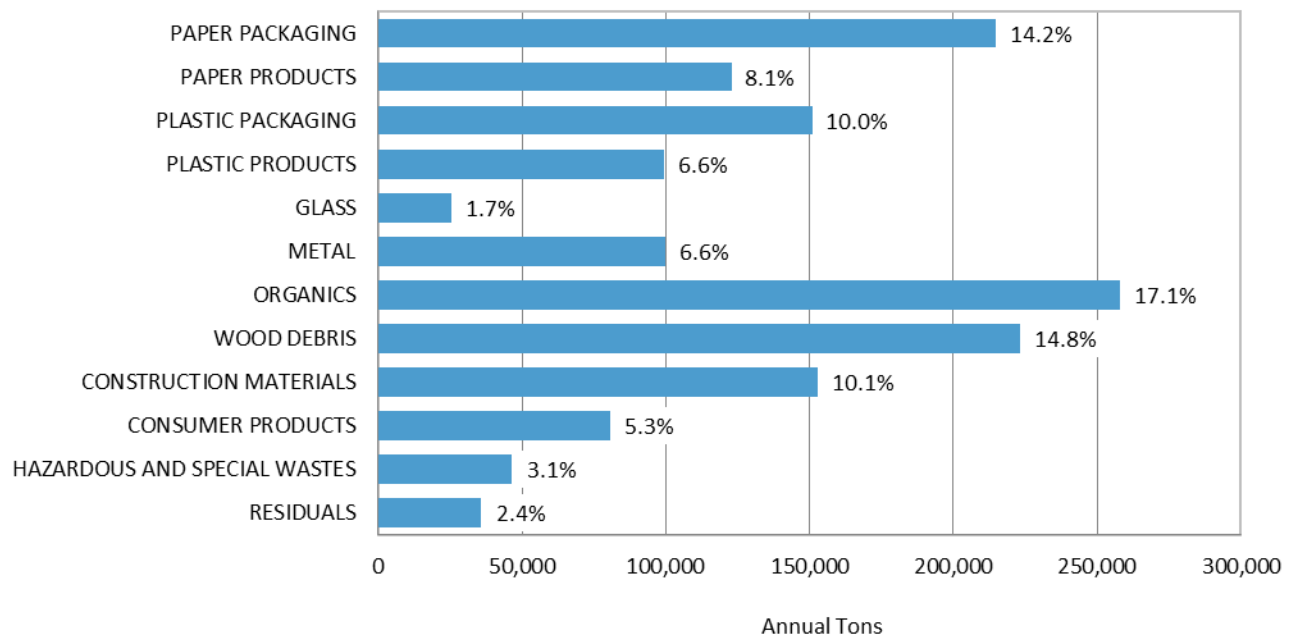
Commercial Waste

This section characterizes the disposed waste stream from the commercial sector for the entire state of Washington, combining commercial samples from all six WGAs considered in this study. Composition and quantity estimates are generated from data collected from all counties visited during the 2020-2021 statewide study and are presented using the material list of 143 material types.

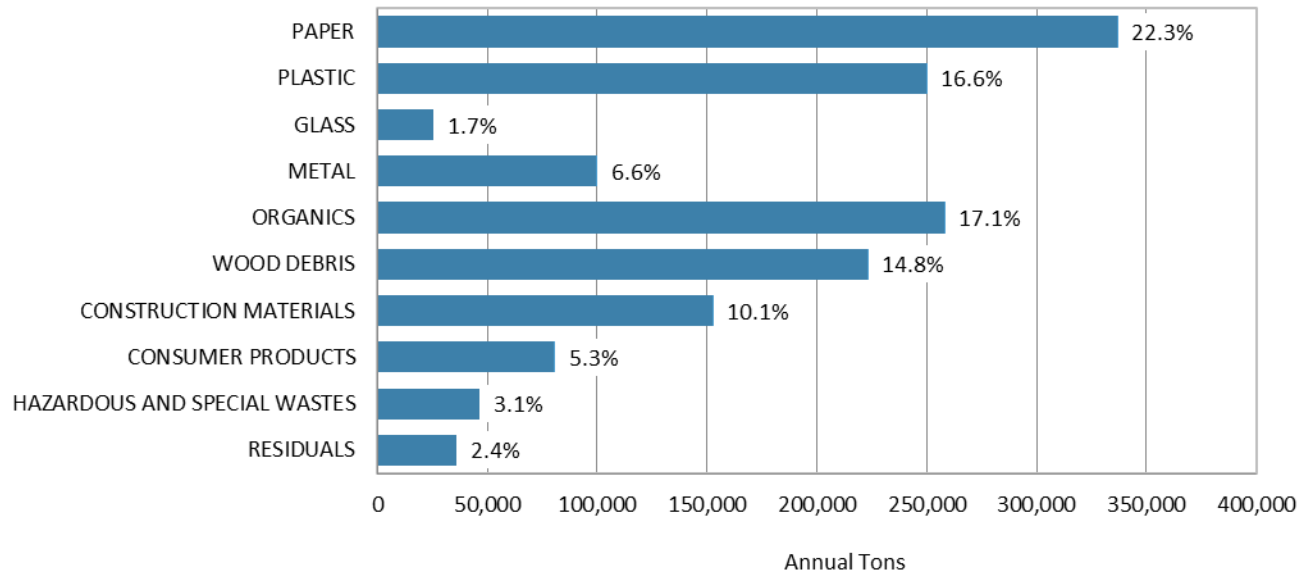
OVERVIEW BY MATERIAL CLASS

Figure 6 below presents the composition of the commercial disposed waste stream by material class. **Organics** accounts for 17.1 percent of the disposed waste, followed by **Wood Debris** (14.8%), and **Paper Packaging** (14.2%). Figure 7 presents the composition by material groupings that combine packaging and product material types. **Paper** accounts for 22.3 percent and **Plastic** is 16.6 percent of the commercial disposed waste stream.

**Figure 6: Commercial Disposed Waste Sector
Composition by Material Class, 2020-2021**



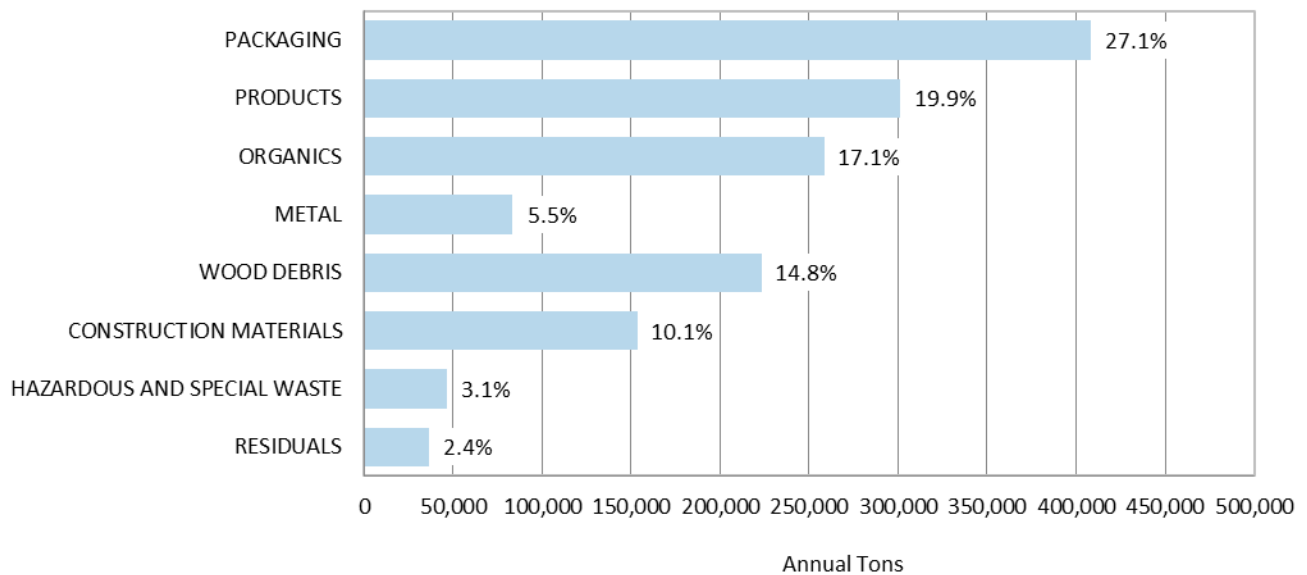
**Figure 7: Commercial Disposed Waste Sector
Composition by Material Class, Combined Packaging and Products, 2020-2021**



OVERVIEW OF PACKAGING AND PRODUCT MATERIAL GROUPS

Figure 8 below shows that **Packaging** materials account for 27.1 percent and **Products** account for 19.9 percent of the commercial disposed waste stream. See Appendix A: List and Definitions of Material Types for a material list that shows the material types included in **Packaging** and **Product** materials groups.

**Figure 8: Commercial Disposed Waste Sector
Packaging, Products, and Other Material Groups, 2020-2021**



FIFTEEN MOST PREVALENT MATERIALS

The fifteen most prevalent material types in the commercial waste stream, as shown in Table 15, together make up 52.1 percent. *Cardboard and Kraft paper* (7.7%), *edible food waste- vegetative* (7.1%), and *pallets and crates* (3.6%) are the most prevalent material types.

**Table 15: Commercial Disposed Waste Sector
Fifteen Most Prevalent Material Types, 2020-2021**

Material	Est. Percent	Est. Tons
Cardboard & Kraft Packaging	7.7%	115,957
Edible Food Waste- Vegetative	7.1%	107,297
Pallets & Crates	3.6%	54,093
Other Ferrous Metal	3.4%	50,519
Compostable Paper Products	3.2%	48,079
Compostable Paper Packaging	3.1%	47,238
Engineered Wood	3.0%	45,466
Edible Food Waste- Meats/Fats/Oils	2.9%	44,308
Inedible Food Waste- Vegetative	2.9%	43,988
Packaging Film Plastic	2.9%	43,724
Painted Wood	2.9%	43,104
Dimensional Lumber	2.8%	42,455
Bulky Rigid Plastic Products	2.2%	33,486
Concrete	2.2%	33,145
Drywall	2.1%	32,117
Total for Top Materials	52.1%	784,975

Percentages for material types may not total 100% due to rounding.

DETAILED COMPOSITION

Table 16 below shows the detailed composition results by material type in the commercial disposed waste stream.

Table 16: Commercial Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	22.3%	2.1%	336,761	31,095	WOOD DEBRIS	14.8%	2.4%	222,837	35,852
PAPER PACKAGING	14.2%	1.7%	214,313	25,765	Natural Wood	0.0%	0.0%	356	301
Newspaper Packaging	0.0%	0.0%	21	26	Treated Wood	0.2%	0.1%	3,747	2,097
Cardboard & Kraft Packaging	7.7%	1.3%	115,957	19,467	Painted Wood	2.9%	1.1%	43,104	17,260
Mixed/Low-grade Paper Packaging	1.8%	0.6%	26,876	9,185	Dimensional Lumber	2.8%	0.8%	42,455	12,482
Aseptic Containers	0.1%	0.0%	1,071	325	Engineered Wood	3.0%	0.8%	45,466	11,682
Gable Top Containers	0.3%	0.3%	4,532	4,498	Pallets & Crates	3.6%	1.1%	54,093	16,914
Other Polycoated Packaging	0.0%	0.0%	679	302	Other Untreated Wood	0.0%	0.0%	277	145
Compostable Paper Packaging	3.1%	0.7%	47,238	11,231	Wood By-products	0.6%	0.3%	8,334	5,104
R/C Paper Packaging	1.2%	0.7%	17,941	11,173	R/C Wood Debris	1.7%	0.6%	25,005	9,233
PAPER PRODUCTS	8.1%	1.1%	122,448	16,868	CONSTRUCTION MATERIALS	10.1%	2.3%	152,636	34,137
Newspaper Products	0.2%	0.1%	2,950	1,136	Plastic Lumber	0.2%	0.2%	3,600	3,433
Cardboard & Kraft Paper Products	0.4%	0.6%	5,837	9,159	Insulation	0.5%	0.6%	7,725	8,906
Magazines	0.2%	0.1%	2,968	2,156	Asphalt Paving	0.1%	0.1%	1,087	1,751
High-Grade Paper Products	0.5%	0.2%	6,804	3,427	Concrete	2.2%	1.2%	33,145	18,486
Other Groundwood Paper Products	0.0%	0.0%	607	612	Drywall	2.1%	1.2%	32,117	17,824
Mixed/Low-grade Paper Products	1.7%	0.4%	26,303	6,388	Carpet	1.1%	0.6%	17,068	9,737
Compostable Paper Products	3.2%	0.5%	48,079	7,530	Carpet Padding	0.5%	0.4%	7,598	6,597
R/C Paper Products	1.9%	0.6%	28,901	8,589	Soil, Rocks, & Sand	0.6%	0.3%	8,834	4,535
PLASTIC	16.6%	1.7%	249,724	25,315	Asphalt Roofing	0.3%	0.4%	4,736	5,758
PLASTIC PACKAGING	10.0%	1.3%	150,522	19,944	Plastic Floor Covering	0.0%	0.0%	269	309
#1 PETE Plastic Bottles	0.5%	0.1%	7,929	1,309	Ceramics & Brick	0.6%	0.4%	8,692	6,577
#1 PETE Plastic Non-bottles	0.3%	0.1%	5,143	999	R/C Construction Materials	1.8%	0.8%	27,766	11,763
#2 HDPE Plastic Natural Bottles	0.2%	0.0%	3,093	629	CONSUMER PRODUCTS	5.3%	1.3%	80,375	20,193
#2 HDPE Plastic Jars and Tubs	0.5%	0.1%	8,038	2,162	Televisions - LCD	0.1%	0.2%	2,122	3,425
#2 HDPE Plastic Colored Bottles	0.2%	0.0%	2,540	543	Televisions - CRT	0.1%	0.1%	1,575	1,801
#3 PVC Plastic Packaging	0.0%	0.0%	28	38	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	11	7	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.8%	0.2%	11,384	2,755	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	1,726	389	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	1.5%	0.8%	22,659	12,346	Computer Peripherals	0.0%	0.0%	436	704
Expanded Polystyrene Packaging	0.7%	0.2%	10,579	2,494	Computer Printers	0.0%	0.1%	466	760
PLA Compostable Packaging	0.0%	0.0%	324	138	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.2%	0.0%	3,112	498	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	2.9%	0.5%	43,724	7,198	Other Consumer Electronics	0.1%	0.1%	1,062	1,152
Transportation Packaging Film Plastic	1.3%	0.4%	19,882	5,588	Textiles- Organic	1.6%	0.5%	24,259	6,801
Flexible Plastic Packaging	0.1%	0.1%	1,565	1,173	Textiles- Synthetic/Mixed/Unknown	1.3%	0.6%	19,724	9,012
R/C Plastic Packaging	0.6%	0.5%	8,786	8,194	Shoes/Purses/Belts	0.1%	0.1%	2,063	1,191
PLASTIC PRODUCTS	6.6%	0.9%	99,202	13,669	Tires & Other Rubber	0.5%	0.2%	8,146	3,483
#1 PETE Plastic Products	0.0%	0.0%	7	9	Furniture	1.3%	0.9%	19,305	13,288
#2 HDPE Plastic Products:	0.0%	0.0%	179	222	Mattresses	0.1%	0.1%	1,217	1,956
#3 PVC Plastic Products	0.0%	0.0%	39	64	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	1	2	HAZARDOUS AND SPECIAL WASTES	3.1%	1.4%	46,364	21,071
#5 PP Plastic Products	0.0%	0.0%	66	56	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	329	112	HID/UV/Germicidal Lamps	0.0%	0.0%	253	352
#7 Other/Unknown Plastic Products	1.1%	0.3%	15,988	4,237	Compact Florescent Lamps	0.0%	0.0%	29	36
PLA Compostable Products	0.0%	0.0%	157	99	Florescent Tubes	0.0%	0.0%	141	230
Plastic Garbage Bags	1.6%	0.2%	24,287	3,520	Water-based Paint	0.1%	0.1%	2,021	2,161
Plastic Non-bag Film Products	0.8%	0.5%	11,828	7,581	Solvent-based Adhesives/Glues	0.0%	0.0%	293	258
Bulky Rigid Plastic Products	2.2%	0.6%	33,486	9,117	Water-based Adhesives/Glues	0.0%	0.0%	8	13
R/C Plastic Products	0.9%	0.3%	12,834	3,771	Oil-based Paint	0.0%	0.0%	0	0
GLASS	1.7%	0.5%	25,311	7,703	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	45	73
Clear Glass Containers	0.6%	0.2%	8,425	2,597	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.3%	0.1%	4,586	2,145	Primers/Sealings/Coatings	0.0%	0.0%	368	593
Brown/Other Colored Glass Containers	0.3%	0.1%	4,719	1,838	Water Repellents & Waterproofers	0.0%	0.1%	705	1,137
Plate Glass	0.4%	0.3%	5,808	5,112	Solvents	0.1%	0.2%	1,841	2,922
Non-glass Ceramics	0.1%	0.1%	1,461	1,390	Caustic Cleaners	0.0%	0.0%	53	82
R/C Glass	0.0%	0.0%	311	209	Dry-cell Batteries- Single Use	0.0%	0.0%	138	97
METAL	6.6%	1.0%	99,642	15,254	Dry-cell Batteries- Rechargeable	0.0%	0.0%	102	166
Aluminum Beverage Cans	0.3%	0.1%	5,016	909	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.1%	0.0%	2,042	524	Gasoline/Kerosene	0.0%	0.0%	42	68
Other Aluminum	0.1%	0.0%	875	654	Motor Oil	0.0%	0.0%	257	347
Other Non-ferrous Metal	0.1%	0.0%	1,113	460	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.5%	0.2%	7,030	2,446	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	151	117	Oil Filters	0.1%	0.1%	1,459	1,107
White Goods	0.1%	0.2%	2,239	3,640	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	3.4%	0.7%	50,519	10,546	Medical Wastes	2.3%	1.4%	33,978	20,463
R/C Metal	2.0%	0.5%	30,656	8,031	Sharps	0.0%	0.0%	9	7
ORGANICS	17.1%	2.1%	257,693	32,277	Pharmaceuticals & Vitamins	0.0%	0.0%	112	78
Edible Food Waste- Vegetative	7.1%	1.2%	107,297	17,978	Other Cleaners/Chemicals	0.0%	0.0%	113	133
Inedible Food Waste- Vegetative	2.9%	0.8%	43,988	12,574	Personal Care Products	0.2%	0.1%	2,286	1,304
Edible Food Waste- Meats/Fats/Oils	2.9%	0.8%	44,308	11,321	Other Potentially Hazardous Wastes	0.1%	0.1%	2,110	1,370
Inedible Food Waste- Meats/Fats/Oils	0.7%	0.3%	10,570	4,351	RESIDUALS	2.4%	0.9%	35,853	13,788
Yard/Garden Waste- Leaves and Grass	1.2%	0.5%	17,419	7,484	Disposable Diapers	1.0%	0.5%	15,252	7,942
Yard/Garden Waste- Prunings	0.5%	0.2%	7,560	3,606	Ash	0.0%	0.0%	208	239
Animal Manure	0.7%	0.3%	11,257	4,202	Dust	0.0%	0.0%	164	196
Animal Carcasses & Offal	0.0%	0.0%	101	158	Fines/Sorting Residues	0.7%	0.2%	10,498	2,398
Food Processing Wastes	0.8%	0.7%	11,854	11,169	Sludges & Other Special Industrial Wastes	0.6%	0.7%	9,731	11,004
R/C Organics	0.2%	0.1%	3,339	1,564					
Estimated Origin Specified Disposed Tons			1,507,195		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			240						

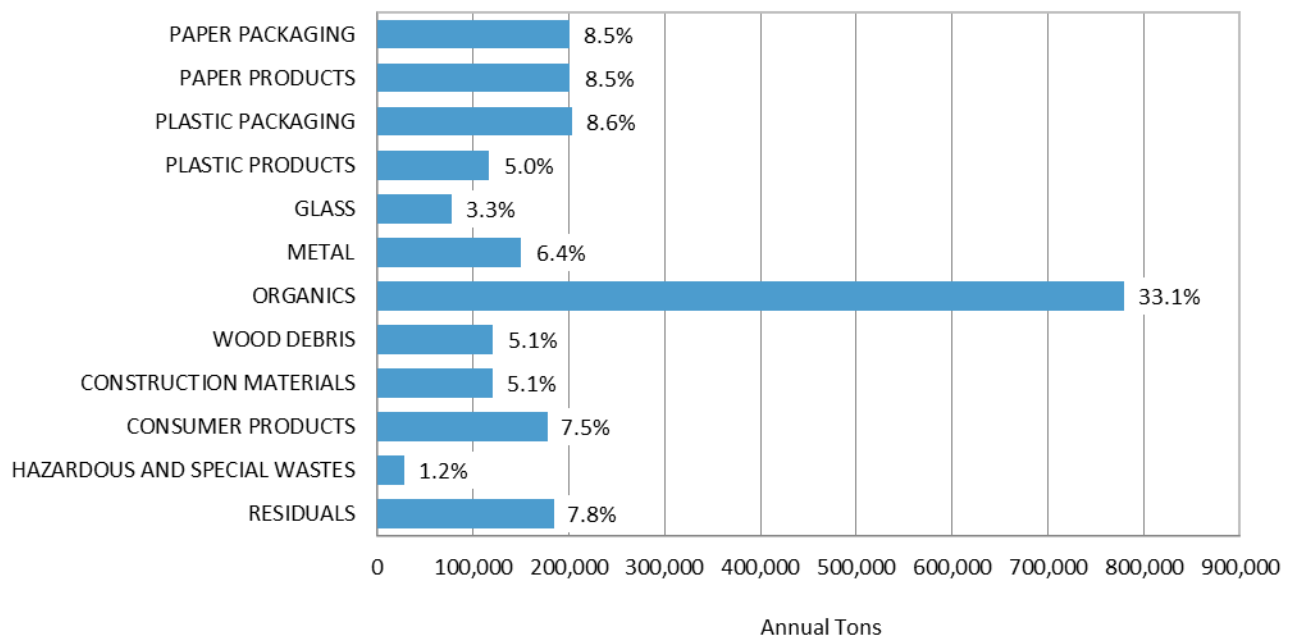
Residential Waste

This section characterizes the disposed waste stream from the residential sector for the entire state of Washington, combining residential samples from all six WGAs considered in this study. Composition and quantity estimates are generated from data collected from all counties visited during the 2020-2021 statewide study and use the material list of 143 material types.

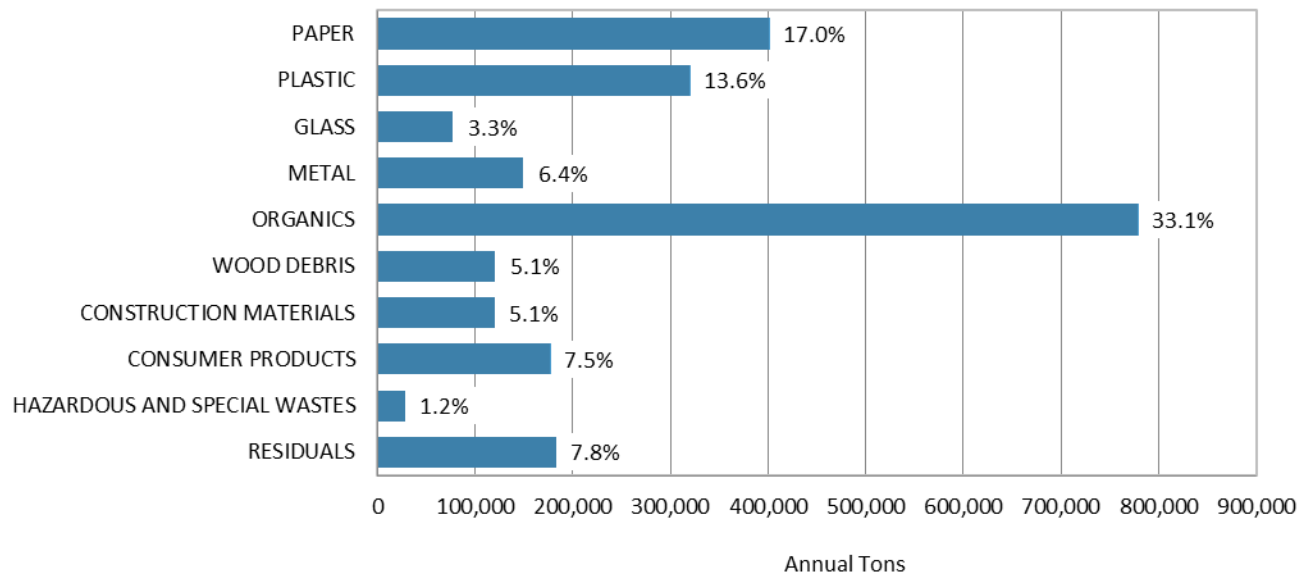
OVERVIEW BY MATERIAL CLASS

Figure 9 below presents the composition of the residential disposed waste stream by material class. **Organics** accounts for about one-third (33.1%) of the disposed waste. **Paper Packaging, Paper Products, and Plastic Packaging** each make up approximately 8.5 percent of the disposed waste. Figure 10 presents the composition by material groupings that combine packaging and product material types. **Paper** accounts for 17 percent and **Plastic** is 13.6 percent of the residential disposed waste stream.

**Figure 9: Residential Disposed Waste Sector
Composition by Material Class, 2020-2021**



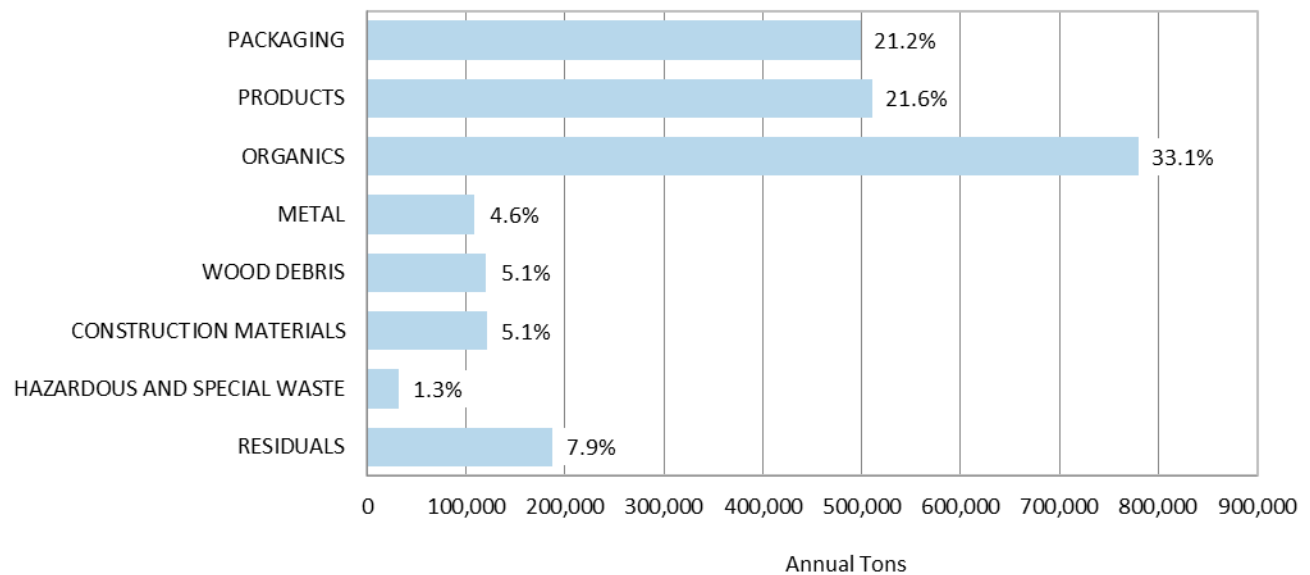
**Figure 10: Residential Disposed Waste Sector
Composition by Material Class, Combined Packaging and Products, 2020-2021**



OVERVIEW OF PACKAGING AND PRODUCT MATERIAL GROUPS

As shown in Figure 11, **Products** account for 21.6 percent and **Packaging** materials account for 21.2 percent of the commercial disposed waste stream. See Appendix A: List and Definitions of Material Types for a material list that shows the material types included in **Packaging** and **Product** materials groups.

**Figure 11: Residential Disposed Waste Sector
Packaging, Products, and Other Material Groups, 2020-2021**



FIFTEEN MOST PREVALENT MATERIALS

The fifteen most prevalent material types, as shown in Table 17, together make up 58.1 percent of the residential waste stream. *Animal manure* (9.7%), *edible food waste-vegetative* (8.2%), and *inedible food waste-vegetative* (7.6%) are the most prevalent material types.

**Table 17: Residential Disposed Waste Sector
Fifteen Most Prevalent Material Types, 2020-2021**

Material	Est. Percent	Est. Tons
Animal Manure	9.7%	229,270
Edible Food Waste- Vegetative	8.2%	193,984
Inedible Food Waste- Vegetative	7.6%	179,866
Compostable Paper Products	5.1%	121,120
Cardboard & Kraft Packaging	3.2%	74,829
Painted Wood	3.1%	73,931
Packaging Film Plastic	2.9%	68,306
Drywall	2.9%	67,141
Other Ferrous Metal	2.6%	61,914
Edible Food Waste- Meats/Fats/Oils	2.6%	60,303
Compostable Paper Packaging	2.4%	56,268
Mixed/Low-grade Paper Products	2.1%	48,296
Yard/Garden Waste- Leaves and Grass	2.0%	48,084
Mixed/Low-grade Paper Packaging	1.9%	43,568
R/C Metal	1.7%	40,607
Total for Top Materials	58.1%	1,367,487

Percentages for material types may not total 100% due to rounding.

DETAILED COMPOSITION

Table 18 below shows the detailed composition results by material type in the residential disposed waste stream.

Table 18: Residential Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	17.0%	2.5%	400,887	59,327	WOOD DEBRIS	5.1%	3.5%	120,314	83,340
PAPER PACKAGING	8.5%	1.5%	200,259	36,124	Natural Wood	0.3%	0.5%	7,883	10,852
Newspaper Packaging	0.0%	0.0%	149	158	Treated Wood	0.3%	0.2%	6,866	4,510
Cardboard & Kraft Packaging	3.2%	0.8%	74,829	17,973	Painted Wood	3.1%	2.6%	73,931	61,425
Mixed/Low-grade Paper Packaging	1.9%	0.3%	43,568	8,144	Dimensional Lumber	0.1%	0.0%	2,284	925
Aseptic Containers	0.1%	0.0%	3,456	1,012	Engineered Wood	0.5%	0.6%	12,389	14,004
Gable Top Containers	0.2%	0.1%	4,449	1,221	Pallets & Crates	0.0%	0.0%	237	285
Other Polycoated Packaging	0.1%	0.0%	2,772	676	Other Untreated Wood	0.1%	0.1%	1,528	1,311
Compostable Paper Packaging	2.4%	1.1%	56,268	25,015	Wood By-products	0.0%	0.1%	944	1,215
R/C Paper Packaging	0.6%	0.2%	14,767	4,706	R/C Wood Debris	0.6%	0.4%	14,253	8,892
PAPER PRODUCTS	8.5%	1.5%	200,628	35,988	CONSTRUCTION MATERIALS	5.1%	4.2%	120,030	99,728
Newspaper Products	0.5%	0.3%	12,063	7,025	Plastic Lumber	0.1%	0.1%	2,594	3,453
Cardboard & Kraft Paper Products	0.0%	0.0%	84	136	Insulation	0.0%	0.0%	672	595
Magazines	0.3%	0.2%	6,701	3,687	Asphalt Paving	0.0%	0.1%	877	1,410
High-Grade Paper Products	0.2%	0.1%	3,603	1,194	Concrete	0.5%	0.7%	12,065	16,001
Other Groundwood Paper Products	0.0%	0.0%	538	754	Drywall	2.9%	4.2%	67,141	98,416
Mixed/Low-grade Paper Products	2.1%	0.5%	48,296	12,734	Carpet	0.8%	0.7%	19,966	17,441
Compostable Paper Products	5.1%	0.8%	121,120	19,903	Carpet Padding	0.0%	0.0%	236	249
R/C Paper Products	0.3%	0.2%	8,221	4,278	Soil, Rocks, & Sand	0.3%	0.2%	8,203	5,638
PLASTIC	13.6%	1.0%	319,227	23,166	Asphalt Roofing	0.0%	0.0%	168	184
PLASTIC PACKAGING	8.6%	1.1%	202,388	25,942	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	1.1%	0.2%	24,945	4,536	Ceramics & Brick	0.1%	0.1%	2,267	2,458
#1 PETE Plastic Non-bottles	0.6%	0.1%	13,065	1,688	R/C Construction Materials	0.2%	0.4%	5,840	8,328
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	5,840	1,371	CONSUMER PRODUCTS	7.5%	2.2%	176,272	50,982
#2 HDPE Plastic Jars and Tubs	0.1%	0.0%	3,411	996	Televisions - LCD	0.2%	0.2%	4,236	4,685
#2 HDPE Plastic Colored Bottles	0.3%	0.1%	6,898	1,556	Televisions - CRT	0.2%	0.2%	3,593	5,777
#3 PVC Plastic Packaging	0.0%	0.0%	11	12	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	66	56	Computer Monitors - CRT	0.0%	0.1%	954	1,487
#5 PP Plastic Packaging	1.1%	0.2%	25,081	3,672	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	3,250	458	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.5%	0.1%	11,534	2,278	Computer Peripherals	0.0%	0.1%	1,121	1,715
Expanded Polystyrene Packaging	0.7%	0.2%	15,412	4,267	Computer Printers	0.1%	0.1%	3,183	2,237
PLA Compostable Packaging	0.0%	0.0%	896	416	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.7%	0.2%	17,574	3,963	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	2.9%	0.4%	68,306	9,484	Other Consumer Electronics	0.5%	0.4%	11,211	8,516
Transportation Packaging Film Plastic	0.1%	0.0%	2,654	985	Textiles - Organic	2.7%	0.7%	64,559	15,895
Flexible Plastic Packaging	0.1%	0.0%	3,128	576	Textiles - Synthetic/Mixed/Unknown	1.2%	0.5%	27,410	11,623
R/C Plastic Packaging	0.0%	0.0%	319	418	Shoes/Purses/Belts	0.3%	0.1%	7,238	2,666
PLASTIC PRODUCTS	5.0%	1.4%	116,839	32,457	Tires & Other Rubber	0.4%	0.4%	9,954	8,801
#1 PETE Plastic Products	0.0%	0.0%	46	64	Furniture	0.3%	0.3%	6,906	6,092
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	1.4%	2.0%	32,295	47,441
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.2%	0.2%	3,612	5,078
#4 LDPE Plastic Products	0.0%	0.0%	4	7	HAZARDOUS AND SPECIAL WASTES	1.2%	0.5%	27,999	12,455
#5 PP Plastic Products	0.0%	0.0%	12	11	Pesticides	0.0%	0.0%	14	21
#6 PS Plastic Products	0.0%	0.0%	453	178	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	1.2%	0.4%	27,476	8,489	Compact Florescent Lamps	0.0%	0.0%	718	644
PLA Compostable Products	0.0%	0.0%	189	139	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	1.6%	0.3%	37,779	6,676	Water-based Paint	0.0%	0.0%	405	383
Plastic Non-bag Film Products	0.1%	0.1%	2,717	1,886	Solvent-based Adhesives/Glues	0.0%	0.0%	37	46
Bulky Rigid Plastic Products	1.3%	1.3%	30,250	29,898	Water-based Adhesives/Glues	0.0%	0.0%	259	176
R/C Plastic Products	0.8%	0.3%	17,912	6,232	Oil-based Paint	0.2%	0.3%	5,210	8,169
GLASS	3.3%	1.0%	77,299	22,386	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	9	15
Clear Glass Containers	1.7%	0.4%	39,377	10,048	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.7%	0.3%	16,424	8,100	Primers/Sealings/Coatings	0.0%	0.0%	71	86
Brown/Other Colored Glass Containers	0.5%	0.2%	10,648	4,718	Water Repellents & Waterproofers	0.0%	0.0%	30	47
Plate Glass	0.0%	0.0%	301	430	Solvents	0.0%	0.0%	93	145
Non-glass Ceramics	0.3%	0.3%	6,480	7,069	Caustic Cleaners	0.0%	0.0%	543	641
R/C Glass	0.2%	0.1%	4,068	2,009	Dry-cell Batteries - Single Use	0.1%	0.0%	1,324	740
METAL	6.4%	1.8%	149,650	43,214	Dry-cell Batteries - Rechargeable	0.0%	0.0%	442	701
Aluminum Beverage Cans	0.6%	0.1%	13,037	2,757	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.3%	0.1%	7,635	1,811	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.1%	0.1%	1,604	1,960	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.2%	0.1%	4,614	2,943	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.6%	0.1%	13,936	1,430	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	694	268	Oil Filters	0.0%	0.0%	217	227
White Goods	0.2%	0.3%	5,611	7,400	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	2.6%	1.6%	61,914	37,064	Medical Wastes	0.5%	0.4%	11,533	9,815
R/C Metal	1.7%	0.7%	40,607	15,371	Sharps	0.0%	0.0%	148	187
ORGANICS	33.1%	5.9%	778,319	138,763	Pharmaceuticals & Vitamins	0.2%	0.2%	4,091	4,006
Edible Food Waste- Vegetative	8.2%	1.1%	193,984	26,228	Other Cleaners/Chemicals	0.0%	0.0%	72	85
Inedible Food Waste- Vegetative	7.6%	1.4%	179,866	32,398	Personal Care Products	0.1%	0.0%	2,167	1,010
Edible Food Waste- Meats/Fats/Oils	2.6%	0.7%	60,303	16,719	Other Potentially Hazardous Wastes	0.0%	0.0%	615	371
Inedible Food Waste- Meats/Fats/Oils	0.5%	0.2%	12,283	5,797	RESIDUALS	7.8%	2.6%	182,773	61,211
Yard/Garden Waste- Leaves and Grass	2.0%	1.5%	48,084	34,386	Disposable Diapers	6.0%	2.6%	141,555	61,419
Yard/Garden Waste- Prunings	1.3%	1.2%	31,684	28,899	Ash	0.1%	0.1%	1,279	2,057
Animal Manure	9.7%	3.6%	229,270	85,025	Dust	0.0%	0.0%	161	113
Animal Carcasses & Offal	0.1%	0.1%	1,403	2,249	Fines/Sorting Residues	1.7%	0.4%	39,779	10,054
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.9%	0.4%	21,442	8,857					
Estimated Origin Specified Disposed Tons			2,352,770		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			120						

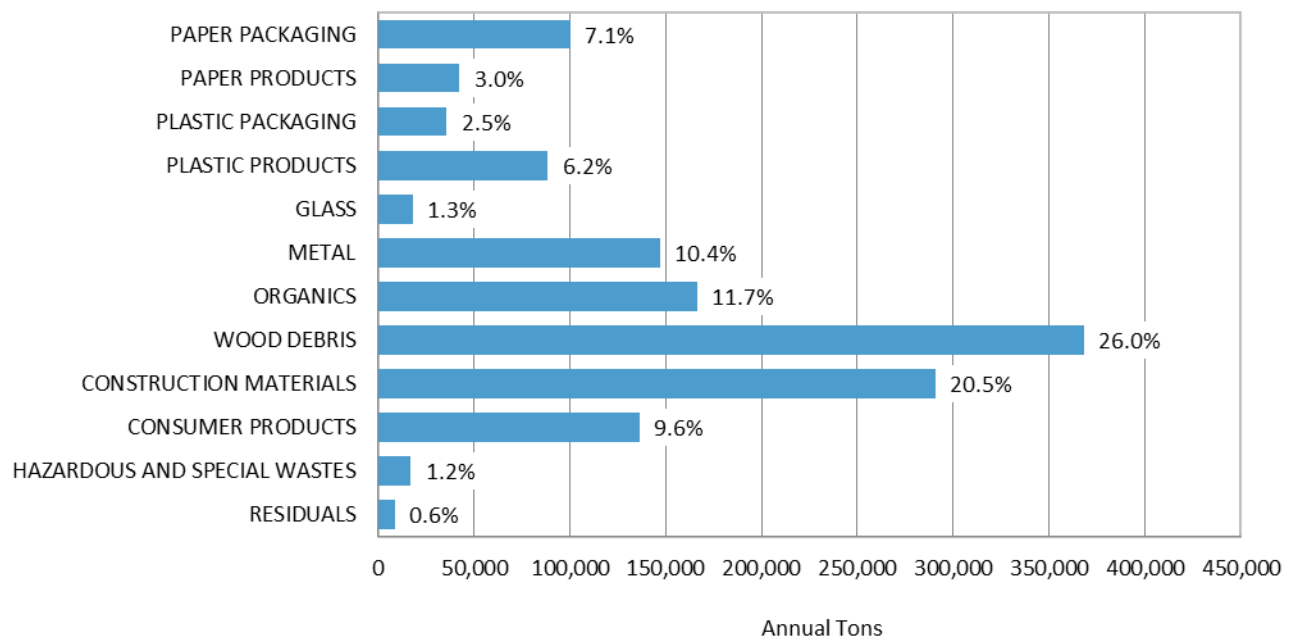
Self-hauled Waste

This section characterizes the disposed waste stream from the self-hauled sector for the entire state of Washington, combining self-hauled samples from all six WGAs considered in this study. Composition and quantity estimates are generated from data collected from all counties visited during the 2020-2021 statewide study and use the material list of 143 material types.

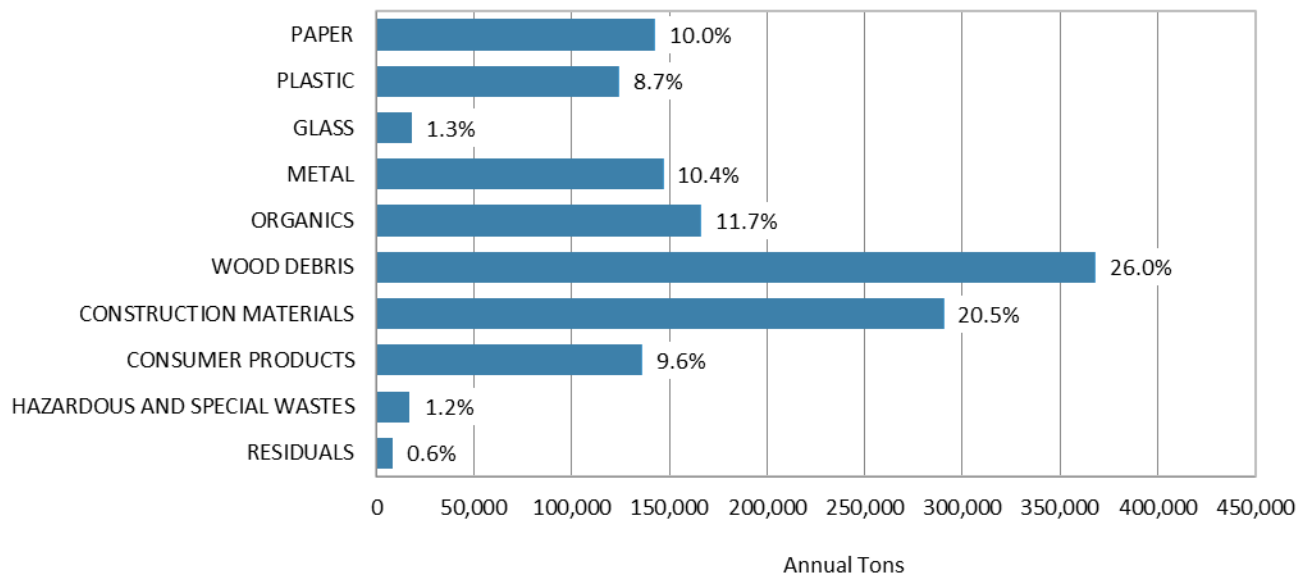
OVERVIEW BY MATERIAL CLASS

Figure 12 below presents the composition of the self-hauled disposed waste stream by material class. **Wood Debris** accounts for over one-quarter (26.0%), **Construction Materials** make up 20.5 percent, and **Organics** account of 11.7 percent of the disposed waste. Figure 13 presents the composition by material groupings that combine packaging and product material types. **Paper** accounts for 10 percent and **Plastic** is 8.7 percent of the self-hauled disposed waste stream.

**Figure 12: Self-hauled Disposed Waste Sector
Composition by Material Class, 2020-2021**



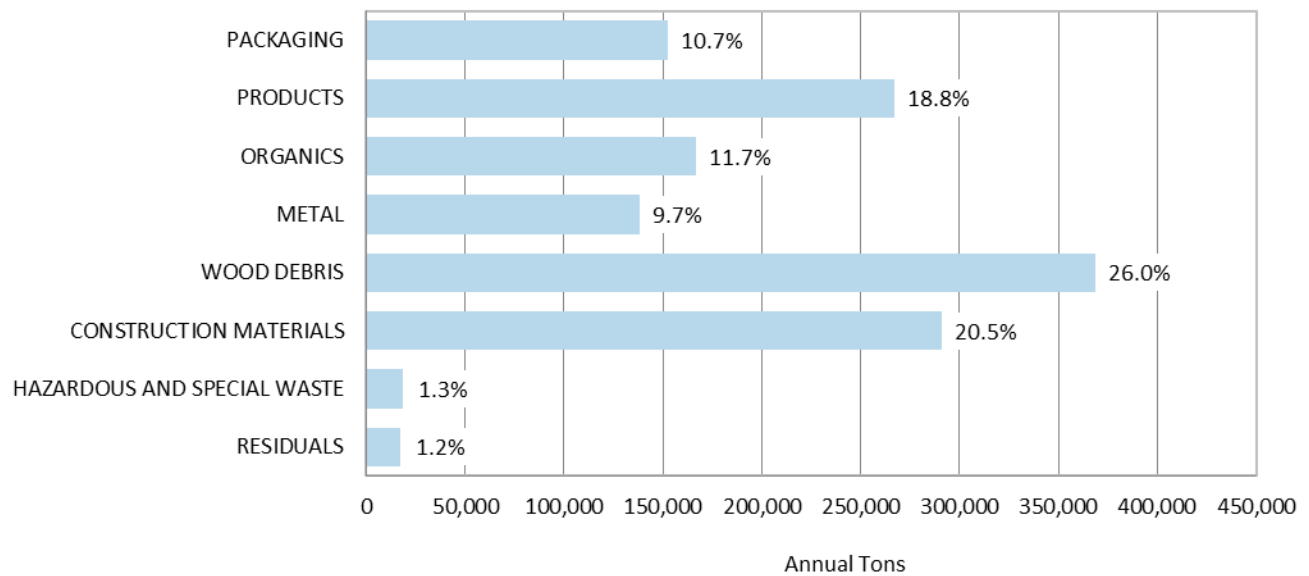
**Figure 13: Self-hauled Disposed Waste Sector
Composition by Material Class, Combined Packaging and Products, 2020-2021**



OVERVIEW OF PACKAGING AND PRODUCT MATERIAL GROUPS

As shown in Figure 14, **Products** account for 18.8 percent and **Packaging** materials account for 10.7 percent of the self-hauled disposed waste stream. See Appendix A: List and Definitions of Material Types for a material list that shows the material types included in **Packaging** and **Product** materials groups.

**Figure 14: Self-hauled Disposed Waste Sector
Packaging, Products, and Other Material Groups, 2020-2021**



FIFTEEN MOST PREVALENT MATERIALS

The fifteen most prevalent material types, as shown in Table 19, together make up nearly 63 percent of the self-hauled waste stream. *Painted wood* (9.7%), *asphalt roofing* (6.2%), and *cardboard and Kraft packaging* (6.0%) are the most prevalent material types.

**Table 19: Self-hauled Disposed Waste Sector
Fifteen Most Prevalent Material Types, 2020-2021**

Material	Est. Percent	Est. Tons
Painted Wood	9.7%	136,923
Asphalt Roofing	6.2%	87,179
Cardboard & Kraft Packaging	6.0%	85,410
Drywall	4.8%	68,528
R/C Metal	4.8%	68,391
Yard/Garden Waste- Leaves and Grass	4.7%	66,715
Other Ferrous Metal	4.4%	61,932
R/C Wood Debris	3.9%	55,831
Engineered Wood	3.9%	55,043
Dimensional Lumber	3.3%	46,271
Edible Food Waste- Vegetative	2.5%	35,283
Bulky Rigid Plastic Products	2.4%	34,458
R/C Construction Materials	2.2%	30,868
Pallets & Crates	2.2%	30,662
Inedible Food Waste- Vegetative	1.9%	27,006
Total for Top Materials	62.9%	890,500

Percentages for material types may not total 100% due to rounding.

DETAILED COMPOSITION

Table 20 below shows the detailed composition results by material type in the self-hauled disposed waste stream.

Table 20: Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	10.0%	3.6%	142,242	51,070	WOOD DEBRIS	26.0%	6.9%	367,769	97,475
PAPER PACKAGING	7.1%	2.8%	99,833	39,965	Natural Wood	1.5%	2.2%	21,602	30,607
Newspaper Packaging	0.0%	0.0%	9	14	Treated Wood	1.3%	0.7%	18,033	9,706
Cardboard & Kraft Packaging	6.0%	2.7%	85,410	38,571	Painted Wood	9.7%	5.2%	136,923	73,996
Mixed/Low-grade Paper Packaging	0.5%	0.2%	7,722	3,021	Dimensional Lumber	3.3%	1.8%	46,271	25,122
Aseptic Containers	0.0%	0.0%	245	214	Engineered Wood	3.9%	1.7%	55,043	24,127
Gable Top Containers	0.0%	0.0%	513	427	Pallets & Crates	2.2%	1.4%	30,662	19,592
Other Polycoated Packaging	0.0%	0.0%	258	125	Other Untreated Wood	0.1%	0.1%	1,102	906
Compostable Paper Packaging	0.3%	0.1%	3,668	1,575	Wood By-products	0.2%	0.1%	2,301	1,893
R/C Paper Packaging	0.1%	0.1%	2,008	728	R/C Wood Debris	3.9%	2.4%	55,831	34,387
PAPER PRODUCTS	3.0%	1.2%	42,409	16,588	CONSTRUCTION MATERIALS	20.5%	7.1%	290,350	100,278
Newspaper Products	0.1%	0.0%	1,020	689	Plastic Lumber	1.8%	2.8%	25,393	39,843
Cardboard & Kraft Paper Products	0.0%	0.0%	32	46	Insulation	1.0%	0.8%	14,240	10,621
Magazines	0.1%	0.1%	1,432	1,047	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.1%	0.1%	1,257	723	Concrete	1.5%	2.0%	20,941	28,747
Other Groundwood Paper Products	0.0%	0.0%	17	28	Drywall	4.8%	3.4%	68,528	48,496
Mixed/Low-grade Paper Products	1.3%	0.9%	19,032	12,102	Carpet	1.1%	0.7%	14,878	9,945
Compostable Paper Products	0.8%	0.4%	11,166	5,602	Carpet Padding	0.5%	0.4%	6,502	5,868
R/C Paper Products	0.6%	0.7%	8,453	9,968	Soil, Rocks, & Sand	0.7%	0.5%	10,480	6,786
PLASTIC	8.7%	2.1%	123,847	29,336	Asphalt Roofing	6.2%	5.5%	87,179	78,281
PLASTIC PACKAGING	2.5%	0.6%	35,617	7,872	Plastic Floor Covering	0.0%	0.0%	294	475
#1 PETE Plastic Bottles	0.2%	0.1%	3,337	961	Ceramics & Brick	0.8%	0.7%	11,047	9,416
#1 PETE Plastic Non-bottles	0.1%	0.0%	1,584	512	R/C Construction Materials	2.2%	1.1%	30,868	16,018
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	587	235	CONSUMER PRODUCTS	9.6%	2.6%	135,640	36,991
#2 HDPE Plastic Jars and Tubs	0.2%	0.1%	2,895	1,650	Televisions - LCD	0.1%	0.1%	1,645	1,993
#2 HDPE Plastic Colored Bottles	0.1%	0.0%	1,212	356	Televisions - CRT	0.2%	0.2%	2,457	2,258
#3 PVC Plastic Packaging	0.0%	0.0%	10	10	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	8	12	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.2%	0.1%	2,172	894	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.0%	0.0%	411	246	Computers	0.0%	0.1%	670	770
#7 Other/Unknown Plastic Packaging	0.2%	0.0%	2,133	694	Computer Peripherals	0.0%	0.0%	165	250
Expanded Polystyrene Packaging	0.3%	0.1%	3,844	1,398	Computer Printers	0.1%	0.1%	1,190	986
PLA Compostable Packaging	0.0%	0.0%	136	209	Audio Equipment	0.1%	0.1%	1,026	1,445
Plastic Merchandise Bags	0.1%	0.0%	1,216	409	Electronic Gaming Equipment	0.1%	0.2%	1,847	2,898
Packaging Film Plastic	0.8%	0.3%	11,963	4,883	Other Consumer Electronics	0.2%	0.1%	2,484	1,316
Transportation Packaging Film Plastic	0.2%	0.1%	3,193	1,428	Textiles- Organic	2.6%	2.2%	36,528	30,761
Flexible Plastic Packaging	0.0%	0.0%	431	161	Textiles- Synthetic/Mixed/Unknown	1.1%	0.4%	15,652	5,055
R/C Plastic Packaging	0.0%	0.0%	485	565	Shoes/Purses/Belts	0.3%	0.2%	4,939	3,453
PLASTIC PRODUCTS	6.2%	2.1%	88,231	29,212	Tires & Other Rubber	0.4%	0.4%	5,494	5,095
#1 PETE Plastic Products	0.0%	0.0%	6	8	Furniture	3.0%	0.9%	43,044	12,802
#2 HDPE Plastic Products:	0.0%	0.0%	65	103	Mattresses	1.2%	0.6%	16,890	8,954
#3 PVC Plastic Products	0.0%	0.0%	27	44	R/C Consumer Products	0.1%	0.2%	1,608	2,402
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	1.2%	0.6%	16,939	9,136
#5 PP Plastic Products	0.0%	0.0%	19	20	Pesticides	0.0%	0.0%	98	129
#6 PS Plastic Products	0.0%	0.0%	57	46	HID/UV/Germicidal Lamps	0.0%	0.0%	4	5
#7 Other/Unknown Plastic Products	1.3%	0.6%	17,738	8,176	Compact Florescent Lamps	0.0%	0.0%	25	18
PLA Compostable Products	0.0%	0.0%	40	61	Florescent Tubes	0.0%	0.0%	24	23
Plastic Garbage Bags	0.4%	0.1%	5,560	1,375	Water-based Paint	0.2%	0.3%	2,571	3,670
Plastic Non-bag Film Products	0.6%	0.3%	8,118	4,719	Solvent-based Adhesives/Glues	0.0%	0.0%	52	83
Bulky Rigid Plastic Products	2.4%	1.0%	34,458	14,169	Water-based Adhesives/Glues	0.0%	0.0%	79	79
R/C Plastic Products	1.6%	1.2%	22,143	16,486	Oil-based Paint	0.0%	0.0%	325	510
GLASS	1.3%	0.6%	17,930	8,771	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.3%	0.1%	4,381	1,567	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.0%	0.0%	658	409	Primers/Sealings/Coatings	0.0%	0.0%	108	174
Brown/Other Colored Glass Containers	0.1%	0.1%	1,402	715	Water Repellents & Waterproofers	0.0%	0.0%	35	57
Plate Glass	0.1%	0.1%	1,298	1,132	Solvents	0.0%	0.0%	11	18
Non-glass Ceramics	0.1%	0.0%	897	549	Caustic Cleaners	0.0%	0.0%	15	25
R/C Glass	0.7%	0.6%	9,294	8,716	Dry-cell Batteries- Single Use	0.0%	0.0%	422	484
METAL	10.4%	3.2%	146,774	45,805	Dry-cell Batteries- Rechargeable	0.0%	0.0%	157	244
Aluminum Beverage Cans	0.1%	0.0%	1,376	531	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.0%	0.0%	660	267	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.1%	0.0%	880	424	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.4%	0.4%	6,326	5,526	Antifreeze	0.0%	0.0%	351	464
Food Cans - Tinned	0.1%	0.0%	1,423	508	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	36	47	Oil Filters	0.0%	0.1%	565	801
White Goods	0.4%	0.3%	5,750	4,228	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	4.4%	2.3%	61,932	33,069	Medical Wastes	0.0%	0.0%	361	171
R/C Metal	4.8%	1.9%	68,391	27,062	Sharps	0.0%	0.0%	2	3
ORGANICS	11.7%	6.6%	165,912	93,238	Pharmaceuticals & Vitamins	0.2%	0.3%	3,059	3,691
Edible Food Waste- Vegetative	2.5%	1.4%	35,283	19,827	Other Cleaners/Chemicals	0.1%	0.1%	946	1,277
Inedible Food Waste- Vegetative	1.9%	2.0%	27,006	28,905	Personal Care Products	0.5%	0.4%	7,305	5,928
Edible Food Waste- Meats/Fats/Oils	0.4%	0.2%	4,961	2,709	Other Potentially Hazardous Wastes	0.0%	0.0%	423	297
Inedible Food Waste- Meats/Fats/Oils	0.1%	0.0%	1,079	662	RESIDUALS	0.6%	0.3%	8,147	4,289
Yard/Garden Waste- Leaves and Grass	4.7%	5.2%	66,715	74,221	Disposable Diapers	0.3%	0.2%	4,294	2,720
Yard/Garden Waste- Prunings	1.3%	1.4%	17,866	20,128	Ash	0.0%	0.0%	87	122
Animal Manure	0.7%	0.6%	10,237	9,063	Dust	0.0%	0.0%	90	63
Animal Carcasses & Offal	0.1%	0.1%	721	962	Fines/Sorting Residues	0.3%	0.2%	3,676	2,942
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.1%	0.1%	2,044	1,710					
Estimated Origin Specified Disposed Tons			1,415,549		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			160						

Comparison to the 2015-2016 Study

Comparing waste composition data collected during the previous statewide study with the current study allows for a useful examination of trends and changes in the waste stream over time. This section presents macro-level comparisons.

STATISTICAL COMPARISONS

This section presents findings from statistical comparisons between the 2020-2021 waste composition data and data from the previous study (2015-2016). The analysis examines statistical differences, using *t*-tests, between the two studies to determine if changes in the composition of Washington state's disposed waste stream are statistically significant. This report does not attempt an in-depth examination of potential causes of the changes in waste composition over time.

The year-to-year comparisons were made by examining the changes in the composition percentages for selected material groupings. The 2020-2021 analysis uses the same waste categories as the 2015-2016 analysis. The material groupings included:

- ▶ Recyclable Paper
- ▶ Recyclable Plastic
- ▶ Recyclable Metal
- ▶ Recyclable Glass
- ▶ Food
- ▶ Other Compostables
- ▶ Wood/Construction Debris
- ▶ E-Waste
- ▶ Hazardous and Special Waste
- ▶ Other Materials

Figure 15 presents how the material types from the 2020-2021 study were merged into the ten waste categories chosen for analysis.

Figure 15: T-test Material Categories

2020-2021 Statewide Study	2015-2016 Statewide Study	T-test Categories
Paper	Paper	
Newspaper Products	Newspaper Products	Recyclable Paper
Newspaper Packaging	Newspaper Packaging	
Cardboard/Kraft Products	Cardboard/Kraft Products	
Cardboard/Kraft Packaging	Cardboard/Kraft Packaging	
High-grade Paper Products	High-grade Papers	
Magazines	Magazines	
Mixed/Low Grade Paper Packaging	Mixed/Low Grade Packaging	
Mixed Low Grade Paper Products	Mixed Low Grade Paper Products	
Aseptic Containers	Aseptic and Polycoat Packaging	
Gable Top Containers	Groundwood Products	
Other Polycoated Packaging	Other Groundwood Packaging	
Other Groundwood Paper Products		
Compostable Paper Packaging	Compostable Paper Packaging	Other Compostables
Compostable Paper Products	Compostable Paper Products	
R/C Paper Products	R/C Paper Products	Other Materials
R/C Paper Packaging	R/C Paper Packaging	
	Paper Processing Sludge	
Plastic	Plastic	
#1 PETE Plastic Bottles	#1 PET Bottles	Recyclable Plastic
#2 HDPE Plastic Colored Bottles	#2 HDPE Colored Bottles	
#2 HDPE Plastic Natural Bottles	#2 HDPE Natural Bottles	

2020-2021 Statewide Study	2015-2016 Statewide Study	T-test Categories
Plastic	Plastic	
Plastic Garbage Bags	Plastic Garbage Bags	Other Materials
Plastic Merchandise Bags	Plastic Merchandise Bags	
Plastic Non-bag Film Products	Non-bag Plastic Film Products	
Flexible Plastic Packaging	Flexible Plastic Packaging	
Packaging Film Plastic	Industrial Plastic Packaging Film	
Transportation Packaging Film Plastic	Non-industrial Plastic Packaging Film	
R/C Plastic Packaging	R/C Plastic Packaging	
R/C Plastic Products	R/C Plastic Products	
Expanded Polystyrene Packaging	Expanded Polystyrene Packaging	
PLA/Compostable Products	PLA/Compostable Product	
PLA/Compostable Packaging	PLA/Compostable Packaging	
#1 PETE Plastic Products	#1 PET Product	
#2 HDPE Plastic Products	#2 HDPE Product	
#3 PVC Plastic Products	#3 PVC Product	
#4 LDPE Plastic Products	#4 LDPE Product	
#5 PP Plastic Products	#5 PP Product	
#6 PS Plastic Products	#6 PS Product	
#7 Other/Unknown Plastic Products	#7 Other Product	
Bulky Rigid Plastic Products	Bulky Rigid Plastic Products	
#1 PETE Plastic Non-bottles	#1 PET Non-bottles	
#2 HDPE Plastic Jars & Tubs	#2 HDPE Jars & Tubs	
#3 PVC Plastic Packaging	#3 PVC Packaging	
#4 LDPE Plastic Packaging	#4 LDPE Packaging	
#5 PP Plastic Packaging	#5 PP Packaging	
#6 PS Plastic Packaging	#6 PS Packaging	
#7 Other/Unknown Plastic Packaging	#7 Other Packaging	

2020-2021 Statewide Study	2015-2016 Statewide Study	T-test Categories
Glass	Glass	
Clear Glass Containers	Clear Glass Containers	Recyclable Glass
Green Glass Containers	Green Glass Containers	
Brown/Other Colored Glass Containers	Brown Glass Containers	
Plate Glass	Plate Glass	Other Materials
R/C Glass	R/C Glass	
Compact Fluorescent Lamps	Compact Fluorescent Lamps	
Fluorescent Tubes	Fluorescent Tubes	
Metal	Metal	
Aluminum Beverage Cans	Aluminum Beverage Cans	Recyclable Metal
Food Cans - Coated	Food Cans - Coated	
Food Cans - Tinned	Food Cans - Tinned	
Other Ferrous Metal	Other Ferrous Metal	
Other Non-ferrous Metal	Other Non-ferrous Metal	
Aluminum Foil/Containers	Aluminum Foil/Containers	
Other Aluminum	Other Aluminum	
R/C Metals	R/C Metal	Other Materials
White Goods	White Goods	
Organics	Organics	
Edible Food Waste - Meats/Fats/Oils	Edible Food - Meat, Fats, Oils	Food
Edible Food Waste - Vegetative	Edible Food - Vegetative	
Inedible Food Waste - Meats/Fats/Oils	Inedible Food - Meats, Fats, Oils	
Inedible Food Waste - Vegetative	Inedible Food - Vegetative	
Yard & Garden Waste- Leaves & Grass	Yard & Garden Waste, Leaves & Grass	Other Compostables
Yard & Garden Waste- Prunings	Yard & Garden Waste, Prunings	
Food Processing Wastes	Crop Residues	
	Fruit Waste	

2020-2021 Statewide Study	2015-2016 Statewide Study	T-test Categories
Wood Debris	Wood Debris	
Dimensional Lumber	Dimensional Lumber	Wood/Construction Debris
Engineered Wood	Engineered Wood	
Other Untreated Wood	Other Untreated Wood	
Pallets & Crates	Pallets & Crates	
R/C Wood Debris	R/C Wood	
Wood By-Products	Wood By-Products	
Painted Wood	Painted Wood	
Treated Wood	Treated Wood	
Construction Materials	Construction Materials	
Asphalt Roofing	Asphalt Roofing	Wood/Construction Debris
Drywall	Drywall	
Carpet	Carpet	
Carpet Padding	Carpet Padding	
Natural Wood	Natural Wood	
Asphalt Paving	Asphalt Paving	
Ceramics & Brick	Ceramics & Brick	
Concrete	Concrete	
Insulation	Insulation	
Plastic Floor Covering	Plastic Flooring	
Plastic Lumber	Plastic Lumber	
R/C Construction Materials	R/C Construction	
Non-glass Ceramics	Non-glass Ceramics	

2020-2021 Statewide Study	2015-2016 Statewide Study	T-test Categories
Other Materials	Other Materials	
Medical Wastes	Medical Wastes	Hazardous and Special Waste
Pharmaceuticals and Vitamins	Pharmaceuticals/ Vitamins	
Sharps	Sharps	
Dry-cell Batteries - Rechargeable	Dry-cell Batteries - Rechargeable	
Dry-cell Batteries - Single Use	Dry-cell Batteries - Single Use	
Gasoline/Kerosene	Gasoline/Kerosene	
Antifreeze	Antifreeze	
Motor Oil	Motor Oil	
Oil Filters	Oil Filters	
Oil-based Paint	Oil-based Clear Coatings	
Solvents	Oil-based Paint	
Solvent-based Adhesives/Glues	Solvents	
Water-based Adhesives/Glues	Solvent-based Glues	
Pesticides	Water Based Glues	
Caustic Cleaners	Fungicides	
Other Cleaners/Chemicals	Herbicides	
Explosives	Pesticides	
Field and Lawn Markings	Caustic Cleaners	
HID, UV, and Germicidal Lamps	Other Cleaners/Chemicals	
Lacquer, Varnish, Urethane Coatings, and Stains	Asbestos	
Other Potentially Hazardous Wastes	Concrete/Masonry/ Wood Waterproofers	
Other Vehicle Fluids	Deck Coatings/Floor Paint	
Personal Care Products	Explosives	
Primers, Sealings, and Coatings	Fertilizers	
Water-based Paint	Field/Lawn Markings	
Water Repellents and Waterproofers	HID Lamps	
Wet-cell Batteries	Lacquer	
	Other Potentially Hazardous Waste	
	Other Vehicle Fluids	
	Personal Care Products	
	Primers/Sealers	
	Rust Preventive Coatings	
	Stains	
	Urethane Coatings	
	UV/Germicidal Lamps	
	Varnish	
	Water Based Paints	
	Water Repellants	
	Wet-cell Batteries	

2020-2021 Statewide Study	2015-2016 Statewide Study	T-test Categories
Other Materials	Other Materials	
Television Peripherals	Television Peripherals	E-Waste
Televisions - CRT	Televisions - CRT	
Televisions - LCD	Televisions - LCD	
Audio Equipment	Audio Equipment	
Computer Monitors - CRT	Computer Monitors - CRT	
Computer Monitors - LCD	Computer Monitors - LCD	
Computer Peripherals	Computer Peripherals	
Computer Printers	Computer Printers	
Computers	Computers	
Electronic Gaming Equipment	Electronic Gaming Equipment	
Other Consumer Electronics	Other Consumer Electronics	
Shoes, Purses, and Belts	Shoes, Purses, Belts	Other Materials
Textiles - Organic	Textiles - Organic	
Textiles - Synthetic, Mixed, or Unknown	Textiles - Synthetic, Mixed, Unknown	
Tires and Other Rubber	Tires & Rubber	
Furniture	Furniture	
Mattresses	Mattresses	
Ash	Ash	
Dust	Dust	
Fines/Sorting Residues	Fines/Sorting Residue	
Sludges and Other Special Industrial Wastes	Sludge/Special Industrial	
Soil, Rocks, and Sand	Soil, Rocks, Sand	
R/C Consumer Products	R/C Consumer Products	
R/C Organics	R/C Organics	
Animal Carcasses	Animal Carcasses	
Disposable Diapers	Disposable Diapers	
Animal Manure	Animal Manure	

The differences in composition percentages of material groupings between studies can be divided into two categories:

- ▶ **Statistically significant.** These findings can be considered true differences because the probability of observing these results if there had been no actual year-to-year change is low.
- ▶ **Not statistically significant.** The statistical tests did not detect a significant change and the data do not otherwise suggest a noteworthy difference.

Because the waste composition results are expressed as percentages, rather than absolute tonnages, significant changes for one material may affect the percentages for other materials. For example, increases over time in materials recycled may alter the percentages for other materials remaining in the waste stream.

The t-statistic is calculated from the data: the larger the absolute value of the t-statistic, the less likely that the two populations have the same mean. The p-value describes the probability of observing the calculated t-statistic if there were no true difference between the population means.

For example, in Table 21 the proportion of **Recyclable Paper** in the overall statewide disposed waste stream increased from 7.6 percent to 10.3 percent across the study periods. The t-statistic is relatively large (4.5237) and the probability (p-value) of observing that t-statistic if there had been no true difference between years is less than 0.01%. This value is less than the study's pre-determined threshold for statistically significant results (alpha-level of 1.0%); thus, the increase in **Recyclable Paper** is considered to be a true difference. On the other hand, the p-value corresponding to the decrease in **Hazardous and Special Waste** is larger (p=0.0469). The chance of observing the 1.0 percent to 1.9 percent increase when the actual proportion had not changed is 4.69%—too high to be considered a true difference.

The proportion of disposal that is **Recyclable Paper** showed a statistically significant increase and the proportion of disposal that is **Wood/Construction Debris** showed a statistically significant decrease in the overall disposed waste stream. While the source of changes may be impossible to determine with certainty, it is possible to speculate on potential causes. The decrease of **Wood/Construction Debris** may be due to the impacts of the COVID-19 pandemic and a reduction of construction projects, while the increase in e-commerce stemming from restrictions of the COVID-19 pandemic may also contribute to the increase in **Recyclable Paper**. T-test results are shown in the table below.

Table 21: Waste Composition Changes and Trends, 2015-2016 vs. 2020-2021

Material Grouping	Composition [†]		Change in					p-Value	Strength of Results
	2015	2020	Change		Composition	t-Statistic			
Recyclable Paper	7.6%	10.3%	36.3%	▲	2.8%	▲	4.5237	0.0000 *	stat. significant
Recyclable Plastic	1.0%	1.0%	4.9%	▲	0.0%	▲	0.3620	0.7174	not significant
Recyclable Metal	3.3%	4.2%	29.5%	▲	1.0%	▲	2.3132	0.0209	not significant
Recyclable Glass	1.1%	1.5%	33.5%	▲	0.4%	▲	2.1344	0.0330	not significant
Food	11.3%	12.5%	11.3%	▲	1.3%	▲	1.3384	0.1810	not significant
Other Compostables	10.3%	8.0%	-22.0%	▼	-2.3%	▼	2.5715	0.0103	not significant
Wood/Construction Debris	31.7%	25.7%	-18.9%	▼	-6.0%	▼	2.8932	0.0039 *	stat. significant
E-Waste	0.8%	1.0%	22.8%	▲	0.2%	▲	0.7629	0.4457	not significant
Hazardous and Special Waste	1.0%	1.9%	84.6%	▲	0.9%	▲	1.9897	0.0469	not significant
Other Materials	32.0%	33.8%	5.6%	▲	1.8%	▲	1.2007	0.2301	not significant
Number of Samples	606	520							

[†]Composition data is unweighted for the t-test

*Statistically significant difference = 0.0100 or less

Appendix A: List and Definitions of Material Types

Introduction

This section includes the list and definitions of the material types used in this study. The field crew sorted materials into the 143 material types defined below. To be comparable to the 2015-2016 study, the list of material types is designed to be organized by material class, by packaging and product material groups, and “rolled up” into a condensed list used for presenting results of this study combined with the results from other waste characterization studies from around the state.

The complete list of materials developed for this study, as well as their organization into various levels of material groupings, is below, followed by detailed definitions for each material type. The rolled-up material list used for the supplemental study, with the corresponding materials from the four additional city and county studies, is shown in Appendix D: Supplemental Composition Results.

List of Material Types

For the 2020-2021 Statewide Waste Characterization Study, the field crew sorted solid waste into the 143 material types, and Cascadia calculated the composition percentages as well as quantities for each material type.

MATERIAL TYPES ORGANIZED BY MATERIAL CLASSES

Table 22 below shows the complete list of material classes and material types used in the study.

Table 22: List of Material Types

Material Class Material Type	Material Class Material Type
Paper Packaging	Paper Products
Newspaper Packaging	Newspaper Products
Cardboard and Kraft Packaging	Cardboard/Kraft Products
Mixed/Low Grade Paper Packaging	Magazines
Aseptic Containers	High-grade Paper Products
Gable Top Containers	Other Groundwood Products
Other Polycoated Packaging	Mixed/Low-Grade Paper Products
Compostable Paper Packaging	Compostable Paper Products
R/C Paper Packaging	R/C Paper Products
Plastic Packaging	Plastic Products
#1 PETE Plastic Bottles	#1 PETE Products
#1 PETE Plastic Non-bottles	#2 HDPE Products
#2 HDPE Plastic Natural Bottles	#3 PVC Products
#2 HDPE Plastic Colored Bottles	#4 LDPE Products
#2 HDPE Plastic Jars & Tubs	#5 PP Products
#3 PVC Plastic Packaging	#6 PS Products
#4 LDPE Plastic Packaging	#7 Other Products
#5 PP Plastic Packaging	PLA Compostable Products
#6 PS Plastic Packaging	Plastic Garbage Bags
#7 Other/Unknown Plastic Packaging	Plastic Non-bag Film Products
Expanded Polystyrene Packaging	Bulky Rigid Plastic Products
PLA Compostable Packaging	R/C Plastic Products
Plastic Merchandise Bags	
Packaging Film Plastic	Glass
Transportation Packaging Film Plastic	Clear Glass Containers
Flexible Plastic Packaging	Green Glass Containers
R/C Plastic Packaging	Brown/Other Glass Containers
	Plate Glass
Metal	Non-glass Ceramics
Aluminum Beverage Cans	R/C Glass
Aluminum Foil/Containers	
Other Aluminum	Organics
Other Non-ferrous Metal	Edible Food Waste - Vegetative
Food Cans - Tinned	Inedible Food Waste - Vegetative
Food Cans - Coated	Edible Food - Meat/Fats/Oils
White Goods	Inedible Food Waste - Meats/Fats/Oils
Other Ferrous Metal	Yard & Garden Waste (Leaves & Grass)
R/C Metal	Yard & Garden Waste (Prunings)
	Animal Manure
Wood Debris	Animal Carcasses & Ofal
Natural Wood	Food Processing Wastes
Treated Wood	R/C Organics
Painted Wood	
Dimensional Lumber	
Engineered Wood	
Pallets & Crates	
Other Untreated Wood	
Wood By-products	
R/C Wood Debris	

Table 22: List of Material Types, continued

Material Class Material Type	Material Class Material Type
Construction Materials	Hazardous and Special Waste
Plastic Lumber	Pesticides
Insulation	HID, UV & Germicidal Lamps
Asphalt Paving	Compact Fluorescent Lamps
Concrete	Fluorescent Tubes
Drywall	Water-based Paints
Carpet	Solvent-based Adhesives/Glues
Carpet Padding	Water-based Adhesives/Glues
Soil, Rocks & Sand	Oil-based Paint
Asphalt Roofing	Lacquer, Varnish, Urethane, & Stains
Plastic Floor Covering	Field & Lawn Markings
Ceramics & Brick	Primers, Sealers, & Coatings
R/C Construction Materials	Water Repellants and Waterproofers
Consumer Products	Solvents
Televisions - CRT	Caustic Cleaners
Televisions - LCD	Dry-cell Batteries - Single Use
Television Peripherals	Dry-cell Batteries - Rechargeable
Computer Monitors - CRT	Wet-cell Batteries
Computer Monitors - LCD	Gasoline/Kerosene
Computers	Motor Oil
Computer Peripherals	Antifreeze
Computer Printers	Other Vehicle Fluids
Audio Equipment	Oil Filters
Electronic Gaming Equipment	Explosives
Other Consumer Electronics	Medical Wastes
Textiles - Organic	Sharps
Textiles - Synthetic, Mixed, Unknown	Pharmaceuticals & Vitamins
Shoes, Purses, Belts	Other Cleaners/Chemicals
Tires & Other Rubber	Personal Care Products
Furniture	Other Potentially Hazardous Waste
Mattresses	Residuals
R/C Consumer Products	Disposable Diapers
	Ash
	Dust
	Fines/Sorting Residues
	Sludges & Other Special Industrial Wastes

MATERIAL TYPES ORGANIZED BY PACKAGING AND PRODUCTS MATERIAL GROUPS

Table 23 shows how each of the 143 material types were aggregated into the Packaging and Products analysis found in the statewide study analysis above.

Table 23: Material Types by Packaging and Products Material Groups

Material Group Material Type	Material Group Material Type
Packaging	Products
Newspaper Packaging	Newspaper Products
Cardboard & Kraft Packaging	Cardboard/Kraft Products
Mixed/Low Grade Paper Packaging	Magazines
Aseptic Containers	High-grade Paper Products
Gable Top Containers	Other Groundwood Products
Other Polycoated Packaging	Mixed/Low-Grade Paper Products
Compostable Paper Packaging	Compostable Paper Products
R/C Paper Packaging	R/C Paper Products
#1 PETE Plastic Bottles	#1 PETE Products
#1 PETE Plastic Non-bottles	#2 HDPE Products
#2 HDPE Plastic Natural Bottles	#3 PVC Products
#2 HDPE Plastic Colored Bottles	#4 LDPE Products
#2 HDPE Plastic Jars & Tubs	#5 PP Products
#3 PVC Plastic Packaging	#6 PS Products
#4 LDPE Plastic Packaging	#7 Other Products
#5 PP Plastic Packaging	PLA Compostable Products
#6 PS Plastic Packaging	Plastic Garbage Bags
#7 Other/Unknown Plastic Packaging	Plastic Non-bag Film Products
Expanded Polystyrene Packaging	Bulky Rigid Plastic Products
PLA Compostable Packaging	R/C Plastic Products
Plastic Merchandise Bags	Televisions - CRT
Packaging Film Plastic	Televisions - LCD
Transportation Packaging Film Plastic	Television Peripherals
Flexible Plastic Packaging	Computer Monitors - CRT
R/C Plastic Packaging	Computer Monitors - LCD
Clear Glass Containers	Computers
Green Glass Containers	Computer Peripherals
Brown/Other Glass Containers	Computer Printers
Aluminum Beverage Cans	Audio Equipment
Aluminum Foil/Containers	Electronic Gaming Equipment
Food Cans - Tinned	Other Consumer Electronics
Food Cans - Coated	Textiles - Organic
	Textiles - Synthetic, Mixed, Unknown
Organics	Shoes, Purses, Belts
Edible Food Waste - Vegetative	Tires & Other Rubber
Inedible Food Waste - Vegetative	Furniture
Edible Food - Meat/Fats/Oils	Mattresses
Inedible Food Waste - Meats/Fats/Oils	R/C Consumer Products
Yard & Garden Waste (Leaves & Grass)	Plate Glass
Yard & Garden Waste (Prunings)	Non-glass Ceramics
Animal Manure	White Goods
Animal Carcasses & Ofal	
Food Processing Wastes	
R/C Organics	

Table 23: Material Types by Packaging and Products Material Groups, continued

Material Class Material Type	Material Class Material Type
Metal	Hazardous and Special Waste
Other Aluminum	Pesticides
Other Non-ferrous Metal	HID, UV & Germicidal Lamps
Other Ferrous Metal	Compact Fluorescent Lamps
R/C Metal	Fluorescent Tubes
	Water-based Paints
Wood Debris	Solvent-based Adhesives/Glues
Natural Wood	Water-based Adhesives/Glues
Treated Wood	Oil-based Paint
Painted Wood	Lacquer, Varnish, Urethane & Stains
Dimensional Lumber	Field & Lawn Markings
Engineered Wood	Primers, Sealers, & Coatings
Pallets & Crates	Water Repellants and Waterproofers
Other Untreated Wood	Solvents
Wood By-products	Caustic Cleaners
R/C Wood Debris	Dry-cell Batteries - Single Use
	Dry-cell Batteries - Rechargeable
Construction Materials	Wet-cell Batteries
Plastic Lumber	Gasoline/Kerosene
Insulation	Motor Oil
Asphalt Paving	Antifreeze
Concrete	Other Vehicle Fluids
Drywall	Oil Filters
Carpet	Explosives
Carpet Padding	Medical Wastes
Soil, Rocks & Sand	Sharps
Asphalt Roofing	Pharmaceuticals & Vitamins
Plastic Floor Covering	Other Cleaners/Chemicals
Ceramics & Brick	Personal Care Products
R/C Construction Materials	Other Potentially Hazardous Waste
Residuals	
Disposable Diapers	
R/C Glass	
Ash	
Dust	
Fines/Sorting Residues	
Sludges & Other Special Industrial Wastes	

Definitions of Material Types

Paper Packaging

1. Newspaper Packaging: shredded newspaper packing material.
2. Cardboard and Kraft Packaging: unwaxed Kraft paper corrugated containers and boxes, unless poly- or foil-laminated. Includes cardboard boxes and brown Kraft paper bags and packaging paper.
3. Mixed/Low-Grade Paper Packaging: low-grade recyclable papers, including non-corrugated paperboard packaging, and other packaging made from groundwood paper. Includes egg cartons, and cereal and cracker boxes.
4. Aseptic Containers: multi-layer paper packaging designed to keep food and other putrescible contents fresh. Includes items like paper soup cartons and paper juice cartons.
5. Gable Top Containers: polycoated paper packaging often used for liquid products such as milk, plant-based beverages, and juice. Most are opened by pushing open with a screw top closure or the gables at the top back and pulling the top (spout) out.
6. Other Polycoated Packaging: other polycoated paper packaging. Includes ice cream cartons and frozen food boxes. Does not include aseptic and gable top containers.
7. Compostable Paper Packaging: packaging paper that may be composted such as pizza boxes, waxed cardboard boxes, and all cups/containers from fast food establishments.
8. Remainder/Composite Paper Packaging: non-recyclable and non-compostable types of papers such as paper packaging with metal or plastic parts (except aseptic packaging). Examples would include plastic lined or metal handled take-out food containers.

Paper Products

9. Newspaper Products: printed groundwood newsprint, including glossy ads and Sunday edition magazines that are delivered with the newspaper (unless these are found separately during sorting).
10. Cardboard and Kraft Paper Products: unwaxed Kraft paper and corrugated products, unless poly- or foil-laminated. Could include cat scratching pads.
11. Magazines: magazines, catalogs, and similar products with glossy paper. Includes Sunday edition news magazines, if found separate from the newspaper.
12. High-Grade Paper Products: high-grade white or light-colored bond and copy machine papers and envelopes, and continuous-feed computer printouts and forms of all types, except multiple copy carbonless paper.
13. Other Groundwood Paper Products: non-packing products made from groundwood paper, including phone books, some tablet paper, and paperback books.

14. Mixed/Low-Grade Paper Products: low-grade recyclable papers, including colored papers, notebook or other lined paper, envelopes with plastic windows, non-corrugated paperboard, carbonless copy paper, and junk mail. This includes shredded paper.
15. Compostable Paper Products: non-packaging papers that can be composted such as paper towels/napkins, paper cups, and plates (if purchased empty), and tissues.
16. Remainder Composite Paper Products: non-recyclable and non-compostable types of paper products such as carbon paper and hardcover books, and composite materials containing paper mixed with metal or plastic parts.

Plastic Packaging

17. #1 PETE (Polyethylene terephthalate) Plastic bottles: includes plastic bottles bearing the #1, such as carbonated drink bottles and water bottles. Lids and caps are left attached to containers when feasible.
18. #1 PETE (Polyethylene terephthalate) Plastic non-bottles: includes plastic non-bottle packaging bearing the #1, and would include oven-ready meal trays and other packaging. Also includes blow molded jars bearing the #1, such as those commonly used for peanut butter.
19. #2 HDPE (High-density polyethylene) Plastic Natural Bottles: includes milk jugs and water jugs and any natural bottle bearing the #2. Lids and caps are left attached to containers when feasible.
20. #2 HDPE (High-density polyethylene) Plastic Colored Bottles: includes detergent bottles, some personal care product bottles, and any opaque plastic bottle bearing the #2. Lids and caps are left attached to containers when feasible.
21. #2 HDPE (High-density polyethylene) Plastic Jars and Tubs: yogurt and margarine tubs and any packaging jar or tub bearing the #2. Lids and caps are left attached to containers when feasible. This category includes 5-gallon plastic pails (with or without handles) and lids.
22. #3 PVC (Polyvinyl chloride) Plastic Packaging: includes any plastic bottle or container marked with a # 3. Lids and caps are left attached to containers when feasible.
23. #4 LDPE (Low-density polyethylene) Plastic Packaging: includes any plastic bottle or container marked with the #4. Lids and caps are left attached to containers when feasible.
24. #5 PP (Polypropylene) Plastic Packaging: includes any plastic packaging marked with the #5 as well as plastic straws. Lids and caps are left attached to containers when feasible.
25. #6 PS (Polystyrene) Plastic Packaging: includes any plastic packaging marked with the #6 such as compact disc cases, some plastic to-go beverage cups, and any other rigid PS packaging. Lids and caps are left attached to containers when feasible.
26. #7 Other/Unknown Plastic Packaging: includes all non-numbered plastic packaging and any other plastic packaging product not listed in another category. Lids and caps are left attached to containers when feasible. This includes plastic strapping.

27. Expanded Polystyrene Packaging: includes packing peanuts, coolers, egg cartons, meat trays, take out containers, and other polystyrene foam packaging.
28. PLA (Polylactic Acid) Compostable Packaging: any compostable plastic packaging or food containers made from corn, potato, sugarcane, or any other compostable resin. Examples include fast food clamshell containers and beverage cups. Lids and caps are left attached to containers when feasible.
29. Plastic Merchandise Bags: will include all grocery, shopping, and merchandise bags.
30. Packaging Film Plastic: includes other types of packaging film such as cling wrap, bread and food bags, and plastic potato chip bags.
31. Transportation Packaging Film Plastic: includes bubble wrap and shrink wrap and any other packaging film used in a typically industrial manner.
32. Flexible Plastic Packaging: means plastic pouches made of thicker, multi-layer flexible material. May have a flat bottom so that package would stand up on its own, but not always. Material is thicker than potato chip bags and frozen vegetable bags. Includes plastic coffee bags; juice pouches; baby food pouches – may have plastic screw top; soup pouches; salad dressing pouches; wine pouches; backpacking meals in pouches; soap refill pouches; laundry detergent pouches; and other similar items. The following table and figures include examples of flexible plastic packaging.

INCLUDED – THICKER, MULTI-LAYER PACKAGING	EXCLUDED – THINNER, SINGLE LAYER PACKAGING
<ul style="list-style-type: none"> – Plastic coffee bags – Juice pouches – Baby food pouches – may have plastic screw top – Soup pouches – Salad dressing pouches – Wine pouches – Backpacking meals in pouches – Soap refill pouches – Laundry detergent pouches – Other similar items 	<ul style="list-style-type: none"> – Potato chip bags and similar – Candy wrappers – Tortilla bags – Frozen food bags (vegetables, berries) – Nut/snack bags – Shrink plastic wrappers (snack meat and cheese wrappers) – Plastic sandwich bags that you buy for single home use – Thin produce bags as used in grocery stores – Newspaper bags – Bread bags – Small (2 inch) pouches for condiments (mustard, relish, etc.) – Yogurt tubes – Mailing pouches, usually colored or white (not clear) (magazines, medication pouches) – 100% plastic mailing pouches with bubble wrap – Other similar items



33. Remainder/Composite Plastic Packaging: other types of packaging that are not one of the above materials and items that are composites of multiple plastics and plastics mixed with other materials. An example of this material type is some bathroom silicone sealant tubes designed to be used with an applicator gun. These tubes frequently have plastic bodies and tips but metal end caps.

Plastic Products

34. #1 PETE (Polyethylene terephthalate) Plastic Products: includes any PET product bearing the #1 and used in a non-packaging application.
35. #2 HDPE (High-density polyethylene) Plastic Products: includes any other non-packaging product bearing the #2.
36. #3 PVC (Polyvinyl chloride) Plastic Products: includes any non-packaging product bearing the #3 but also including plastic piping, and some toys.
37. #4 LDPE (Low-density polyethylene) Plastic Products: includes any other non-packaging product bearing the #4.
38. #5 PP (Polypropylene) Plastic Products: includes any plastic non-packaging product bearing the #5 but also includes some reusable food containers.
39. #6 PS (Polystyrene) Plastic Products: includes any plastic non-packaging product bearing the #6 but also includes plastic tableware.
40. #7 Other/Unknown Plastic Products: includes all non-packaging, non-numbered plastic product not listed in another category. Examples could include some toys, household products, disposable plastic

products (food utensils), durable plastic products (toothbrushes, dinnerware), and electronic media (CDs and DVDs).

41. PLA (Polylactic Acid) Compostable Products: any compostable plastic product made from corn, potato, sugarcane, or any other compostable resin. Examples include utensils and plates made of PLA.
42. Plastic Garbage Bags: includes all bags whose primary use is to hold trash or garbage.
43. Plastic Non-bag Film Products: includes plastic painter's sheeting for drop cloths, other plastic tarps, shower curtains, and any other film product not used for packaging purposes.
44. Bulky Rigid Plastic Products: Large (larger than a five-gallon bucket), wholly plastic products intended to be used multiple times over a long period. Examples include garbage cans, some large children's toys, and plastic furniture.
45. Remainder/Composite Plastic Products: includes all other types of non-packaging plastic that are not one of the above materials and items that are composites of multiple plastics and plastics mixed with other materials. This section also includes plastic sheeting and tarps that are contaminated with other materials such as paint or concrete residue. Examples would include plastic toys with metal attachments.

Glass

46. Clear Glass Containers: bottles and jars made from clear glass.
47. Green Glass Containers: bottles and jars made from green glass.
48. Brown/Other Colored Glass Containers: bottles and jars made from brown glass. Note that blue glass was included with brown glass.
49. Plate Glass: flat glass products such as windows, mirrors, and flat products.
50. Non-glass Ceramics: Ceramics not composed of true glass and not typically used as building materials. Examples include dishes and crockware.
51. Remainder/Composite Glass: other types of glass products and scrap that do not fit into the above materials, including light bulbs, glassware, oven-safe baking dishes such as Pyrex, and non-C&D fiberglass. Note that ceramics (plates and knickknacks) will not be included here but will be placed in "Non-Glass Ceramics" above.

Metal

52. Aluminum Beverage Cans: aluminum beverage cans.
53. Aluminum Foil/Containers: aluminum foil, food trays, and similar items.
54. Other Aluminum: aluminum scrap and products that do not fit into the above two materials.

55. Other Non-Ferrous Metal: metallic products and pieces that are not aluminum and not derived from iron (see “other ferrous”) and are not significantly contaminated with other metals or materials (see “remainder/composite”).
56. Food Cans-Tinned: including zinc or tin-coated steel food containers. This material includes bi-metal beverage cans, but not paint cans or other types of cans.
57. Food Cans-Coated: including many plastic-lined aluminum pet food containers.
58. White Goods: large household appliances or parts thereof. Special note should be taken if any of these are found still containing refrigerant.
59. Other Ferrous Metal: products and pieces made from metal to which a magnet will adhere (including stainless steel), and which are not significantly contaminated with other metals or materials (in the latter case, the item will instead be included under “remainder/composite”). This material will include paint and other non-food “tin cans”, as well as aerosol cans.
60. Remainder/Composite Metals: items made of a mixture of ferrous and non-ferrous or a mixture of metal and non-metallic materials (as long as these are primarily metal). Examples include small appliances, motors, and insulated wire.

Organics

61. Edible Food Waste-Vegetative: plant-based foods including the food container when the container weight is not appreciable compared to the food inside. The food appears to be edible or appears to have been edible when discarded. Foods with small blemishes should still be considered edible, but scraps of food already removed from the edible portion, such as fruit peelings, should not be counted. This includes edible breads, candies, and mostly full containers of soda, juice, etc.
62. Inedible Food Waste-Vegetative: plant-based foods including the food container when the container weight is not appreciable compared to the food inside. The food appears to be inedible or appears to have been inedible when discarded. Moldy foods or scraps of food already removed from the edible portion, such as fruit peelings, are included here. Includes coffee filters and tea bags. This includes inedible breads and candies.
63. Edible Food Waste-Meats/Fats/Oils: animal derived foods and oils including the food container when the container weight is not appreciable compared to the food inside. The food appears to be edible or appears to have been edible when discarded. Foods with small blemishes should still be considered edible, but scraps of food already removed from the edible portion, such as bones, should not be counted.
64. Inedible Food Waste-Meats/Fats/Oils: animal derived foods and oils including the food container when the container weight is not appreciable compared to the food inside. Moldy foods or scraps of food already removed from the edible portion, such as bones and eggshells, are included here.
65. Yard & Garden Waste (Leaves and Grass): grass clippings, leaves, and weeds.

- 66. Yard & Garden Waste (Prunings): materials including shrubs, trees, and prunings six inches or less in diameter (branches with leaves OK).
- 67. Animal Manure: all animal manures and soiled bedding and litter whether derived from an agricultural or residential origin. Includes kitty litter.
- 68. Animal Carcasses, Offal: carcasses and pieces of small and large animal, unless the item is the result of food preparation in a household or commercial setting. For instance, fish or chicken entrails from food preparation and raw, plucked chickens will typically be classified as food, not as an animal carcass, unless the material is from an agricultural or industrial source.
- 69. Food Processing Wastes: processing wastes that are left over from growing and processing fruit, vegetables, meat, seafood, or other foods and that are treated as a waste (for example, meat packing plant waste, fish processing waste). Does not include food residuals from restaurants or grocery stores or food purchased as groceries. Does not include food from home gardens, fishing, hunting, or other home food processing.
- 70. Remainder/Composite Organics: other organics that do not easily fit into the above materials. Includes crop residues. Examples includes hair, dryer lint, cigarette butts, and candles. Note the identity of anything that is not listed in the examples for this type or anything that is a large quantity.

Wood Debris

- 71. Natural Wood: wood that has not been processed, including stumps of trees and shrubs, with the adhering soil (if any), and other natural woods, such as logs and branches in excess of six inches in diameter.
- 72. Treated Wood: wood treated with preservatives such as creosote, chromated copper arsenate (CCA), and alkaline copper quaternary (ACQ). This includes dimensional lumber and posts if treated, but does not include painted or varnished wood. This material may also include some plywood (especially “marine plywood”), strand board, and other wood.
- 73. Painted Wood: wood that has been painted, varnished, or coated in similar ways.
- 74. Dimensional Lumber: wood commonly used in construction for framing and related uses, including 2 x 4’s, 2 x 6’s, and posts/headers (such as 4x8’s).
- 75. Engineered Wood: building materials that have been manufactured and that generally include adhesive as one or more layers. Examples include plywood (sheets of wood built up of two or more veneer sheets glued or cemented together under pressure), particle board (wood chips pressed together to form large sheets or boards), fiberboard (like particle board but with fibers), “glu-lam” beams and boards (built up from dimensional or smaller lumber), and similar products.
- 76. Pallets and Crates: partial or whole wood pallets, crates, and similar shipping containers.
- 77. Other Untreated Wood: other types of wood products and materials that do not fit into the above materials, excluding composite materials (See Remainder/Composites, below).

78. Wood By-products: sawdust and shavings, not otherwise identifiable.
79. Remainder/Composite Wood Debris: items that consist primarily of wood but that do not fit into the above materials, including composite materials that consist primarily (over 50 percent) of wood. Examples of composites include wood with sheetrock nailed to it or with tiles glued to it (such that the materials cannot be easily separated).

Construction Materials

80. Plastic lumber: dimensional or sheet lumber made from plastic and resin composites. Includes plastic pallets.
81. Insulation: include all pad, roll, or blown-in types of insulation.
82. Asphalt Paving: asphalt paving material.
83. Concrete: cement (mixed or unmixed), concrete blocks, and similar wastes.
84. Drywall: used or new gypsum wallboard, sheetrock, or drywall present in recoverable amounts or pieces (generally, any piece larger than two inches square will be recovered from the sample).
85. Carpet: pieces of carpet and rugs made of similar material.
86. Carpet Padding: foam rubber and other materials used as padding under carpets.
87. Soil, Rocks, and Sand: rock, gravel, soil, sand, and similar naturally occurring materials.
88. Asphalt Roofing: asphalt and fiberglass shingles, tar paper, and similar wastes from demolition or installation of roofs. Does not include wooden shingle or shakes.
89. Plastic Floor Covering: such as plastic tile, vinyl flooring, and linoleum.
90. Ceramics and Bricks: includes clay, porcelain bricks, and tiles, such as used toilets, sinks, and bricks of various types and sizes.
91. Remainder/Composite Construction Materials: other construction and demolition materials that do not fit easily into the above materials or that are composites made up of two or more different materials. Includes asbestos.

Consumer Products

92. Televisions-CRT: television sets containing a cathode ray tube (CRT).
93. Televisions-LCD: LCD or plasma.
94. Television Peripherals: DVRs, VCRs, DVD players, and other devices.
95. Computer Monitors-CRT: computer monitors containing a cathode ray tube (CRT).

96. Computer Monitors-LCD: LCD computer monitors.
97. Computers: towers, laptops, and portable computers
98. Computer Peripherals: keyboard, mice and mouse pads, disk drives, and other devices.
99. Computer Printers: all types of computer printers including printers combined with scanners, fax machines, or other peripherals.
100. Audio Equipment: examples include stereo equipment, receivers, speakers, radios, tape players, CD players, and turntables.
101. Electronic Gaming Equipment: such as Nintendo, Play Stations, and joysticks.
102. Other Consumer Electronics: small electric appliances such as toasters, mixers, microwave ovens, power tools, curling irons, cell phones, and anything else that runs with a plug or battery.
103. Textiles-Organic: cloth, clothing, and rope made of 100 percent cotton, leather, wool, or other naturally occurring fibers. Composites of several different naturally occurring fibers (such as a wool jacket with a cotton liner) can be included in this material, as can organic textiles with buttons and zippers.
104. Textiles-Synthetic, Mixed or Unknown: cloth, clothing, and rope made of unknown fibers, synthetic fibers, or made from a mixture of synthetic and natural materials. This includes dryer sheets and cleaning wipes.
105. Shoes, Purses, and Belts: all shoes and boots, purses, and belts whether made of leather, rubber, other materials, or a combination thereof.
106. Tires and Other Rubber: vehicle tires of all types, including bicycle tires and including the rims if present, and finished products and scrap materials made of rubber, such as bathmats, inner tubes, rubber hose, and foam rubber (except carpet padding, see Construction Materials).
107. Furniture: mixed-material furniture such as upholstered chairs or a metal desk with a wood writing surface. Furniture made primarily of a single material (a wood desk with metal drawer pulls, for example) would be classified with that material category.
108. Mattresses: mattresses made of various materials and in any condition.
109. Remainder/Composite Consumer Products: this is a catch-all material for objects consisting of more than one material.

Hazardous and Special Wastes

110. Pesticides: includes a variety of chemical compounds whose purpose is to discourage or kill pests and microorganisms, including herbicides and fungicides. Multipurpose agricultural compounds (Three-in-one pesticides/herbicide/fungicides, for example) are included in this category.
111. High-Intensity Discharge Lamps (HID), UV, and Germicidal Lamps: includes high pressure sodium, metal halide, and mercury vapor. Includes lamps of all shapes and sizes (pin type or screw in) intended to

inhibit bacterial or viral growth. If the type of lamp cannot be determined it will be included in the most appropriate category based on information available to the sort crew.




112. Compact Fluorescent Lamps (CFL)

113. Fluorescent Tubes: includes linear, u-shaped, and circular.



LightRecycle Washington - Accepted and Not-Accepted Products List

The program includes all mercury-containing lights including:

Accepted Products	
Fluorescent Tubes - Straight/Linear	
Includes all diameters and light outputs in a straight/linear configuration. Can range in size from under 2 feet in length to 8 feet in length.	
	
Fluorescent Tubes - Curved/Circular	
Includes all diameters and light outputs in a curved/circular configuration (curved, square, U, etc.).	
	
UV and Germicidal Lamps	
UV or germicidal lamps of all shapes and sizes. All base types including pin-type, screw-in, etc.	
	



Accepted Products	
Compact Fluorescent Lamps (CFLs)	
Fluorescent bulbs that are typically similar in size and intended to replace an incandescent (traditional) light bulb.	
	
High Intensity Discharge (HID) and Other	
Includes these HID types: high pressure sodium, mercury vapour and metal halide. These lamps vary in size but are much larger than a typical bulb. In some cases, they can be as big, or bigger, than a football.	
	

Pictures are shown as illustrative examples only and should not be considered an endorsement of any brand or supplier

114. Water-based Paints: includes latex and other water-based paints and similar products.
115. Solvent-based Adhesives/Glues: oil/resin/volatile solvent-based glues and adhesives, including epoxy, rubber cement, two-part glues and sealers, and auto body fillers.
116. Water-based Adhesives/Glues: water-based glues, caulking compounds, grouts, and spackle.
117. Oil-based Paint: includes alkyd and enamel paints. Multipurpose products (like primer/rust inhibitor combinations) will be sorted according to the purpose listed first on the product label. Products with an indeterminate purpose will sorted based on the field crew's best judgement.
118. Lacquer, Varnish, Urethane Coatings, and Stains: multipurpose products (like primer/rust inhibitor combinations) will be sorted according to the purpose listed first on the product label. Products with an indeterminate purpose will sorted based on the field crew's best judgement.
119. Field and Lawn Markings: multipurpose products (like primer/rust inhibitor combinations) will be sorted according to the purpose listed first on the product label. Products with an indeterminate purpose will sorted based on the field crew's best judgement.
120. Primers, Sealers, and Coatings: includes undercoats, oil based clear coatings, rust preventative coatings, deck coatings, and floor paint. Multipurpose products (like primer/rust inhibitor combinations) will be sorted according to the purpose listed first on the product label. Products with an indeterminate purpose will sorted based on the field crew's best judgement.
121. Water Repellants and Waterproofers: includes waterproofers for concrete and masonry. This does not include tar or bitumen-based repellants. Multipurpose products (like primer/rust inhibitor

combinations) will be sorted according to the purpose listed first on the product label. Products with an indeterminate purpose will be sorted based on the field crew's best judgement.

122. Solvents: includes chlorinated and flammable solvents, paint strippers, solvents contaminated with other products such as paints, degreasers, and some other cleaners if the primary ingredient is (or was) a solvent or alcohol such as methanol and isopropanol. Multipurpose products (like primer/rust inhibitor combinations) will be sorted according to the purpose listed first on the product label. Products with an indeterminate purpose will be sorted based on the field crew's best judgement.
123. Caustic Cleaners: caustic acids and bases whose primary purpose is to clean surfaces, unclog drains, or perform other actions.
124. Dry-Cell Batteries, Single Use: dry-cell batteries of various sizes and types as commonly used in households. These are not intended to be recharged. Includes cell phone and button cell batteries. Batteries are not removed from items containing batteries.
125. Dry-Cell Batteries, Rechargeable: dry-cell batteries of various sizes and types as commonly used in households. Includes cell phone and button cell batteries. Batteries are not removed from items containing batteries.
126. Wet-Cell Batteries: wet-cell batteries of various sizes and types as commonly used in automobiles.
127. Gasoline/Kerosene: gasoline, diesel fuel, and fuel oils.
128. Motor Oil: lubricating oils, primarily used in vehicles but including other types with similar characteristics.
129. Antifreeze: automobile and other antifreeze mixtures based on ethylene or propylene glycol.
130. Other Vehicle Fluids: includes brake, power steering, and hydraulic, and transmission fluid.
131. Oil Filters: used oil filters, primarily those used in cars but possibly including similar filters from other types of vehicles and other applications.
132. Explosives: gunpowder, unspent ammunition, picric acid, and other potentially explosive chemicals.
133. Medical Wastes: materials typically discarded in a health care setting such as I.V. tubing and patient drapes, specimen containers, and Petri dishes. Medical wastes that could be considered a biohazard are weighed, but not further sorted. Includes personal protective equipment (PPE). Mixed bags of MSW and medical waste will be treated as medical waste and not be further sorted.
134. Sharps: needles, syringes, and diabetic testing strips with a finger prick.
135. Pharmaceuticals and Vitamins: not including the container (classify the container according to the material type). Examples include solid, liquid, cream, and gel medicines, inhalers, anti-bacterial creams, rubbing alcohol, and anti-bacterial spray.
136. Other Cleaners/Chemicals: non-caustic cleaners and other household chemicals such as window cleaner, toilet bowl cleaner, and carpet shampoo.

137. Personal Care Products: soaps, cosmetics, shampoos, nail polish, nail polish remover, and other items.
138. Other Potentially Hazardous Wastes: other chemicals, harmful or potentially harmful wastes that do not fit into the above categories, including unidentifiable materials and problem wastes. Includes fertilizers and cigarette lighters.

Residuals

139. Disposable Diapers: disposable baby diapers and protective undergarments for adults (including feminine hygiene products).
140. Ash: fireplace, burn barrel or firepit ash, as well as boiler and ash from industrial sources.
141. Dust: baghouse and other dusts from industrial sources, as well as bags of vacuum cleaner dust.
142. Fines/Sorting Residues: mixed waste that remains on the sorting table after all the materials that can practicably be removed have been sorted out. This material will consist primarily of small pieces of various types of paper and plastic, but will also contain small pieces of broken glass and other materials. May also include material less than one-half inch in diameter that falls through a bottom screen during sorting, for those using sorting boxes with screens, and if the material cannot otherwise be identified.
143. Sludges and Other Special Industrial Wastes: sludges and other wastes from industrial sources that cannot easily be fit into any of the above materials. Includes paper processing sludges. Can include liquids and semi-solids but only if these materials are treated as a solid waste.

Appendix B: Field Forms Used During the Study

Figure 16: Sample Vehicle Selection Sheet

Washington Statewide Waste Characterization Vehicle Selection Form	
Site:	<u>Stevenson (Skamania)</u>
Date:	<u>Thursday, April 15, 2021</u>
<p>Cross off one number for each type of vehicle entering the station.</p> <p>When you reach the number circled, this vehicle should be asked to go to the sorting area to dump its load for sampling.</p> <p>Continue for each block, beginning at #1, on the next line until the required number of vehicles is sampled.</p>	
FRANCHISED RESIDENTIAL:	NEED <u>4</u> TOTAL - SAMPLE EVERY VEHICLE
<div style="display: flex; flex-direction: column; align-items: center;"> <div>1</div> <div>1</div> <div>1</div> <div>1</div> </div>	<p>waste hauled by contracted or municipally operated vehicles in which 80 percent or more of the waste is from <u>single-family and/or multifamily</u> residential sources.</p> <p>May need to double or triple sample residential vehicle(s) to get 3 samples.</p>
FRANCHISED NON-RESIDENTIAL	NEED <u>5</u> TOTAL - SAMPLE EVERY VEHICLE
<div style="display: flex; flex-direction: column; align-items: center;"> <div>1</div> <div>1</div> <div>1</div> <div>1</div> <div>1</div> </div>	<p>waste hauled by contracted or municipally operated vehicles (e.g. Recology, Waste Management) 80 percent or more of the waste is from <u>institutional, commercial, or industrial</u> sources. This includes loads of municipal solid waste (MSW) as well as construction and demolition (C&D) materials.</p> <p>May need to double or triple sample non-residential vehicles to get 6 samples.</p>
SELF-HAUL	NEED <u>4</u> TOTAL - SAMPLE EVERY 10TH VEHICLE
<div style="display: flex; flex-direction: column; align-items: center;"> <div>1 2 3 4 5 6 7 8 9 10</div> <div>1 2 3 4 5 6 7 8 9 10</div> <div>1 2 3 4 5 6 7 8 9 10</div> <div>1 2 3 4 5 6 7 8 9 10</div> </div>	<p>Waste hauled by vehicles NOT contracted or municipally operated. Includes self-hauled waste by residents or small hauling companies (1-800-Got-Junk), city parks departments, road cleanup crews, wastewater treatment departments, school districts/universities hauling their own waste.</p>

Figure 17: Sample Placard

WA Statewide WCS 2020

Sample ID:

Com-1

Date: 4/5/2021

Facility: Spokane Regional WTE Facility

County: Spokane

Cell #: 7

Figure 18: Sample Sorting and Characterization Form, Front

2020 Washington DOE Waste Composition Study

Tally Sheet - Page 1 of 2

Sample ID		Date		
Facility		<input type="checkbox"/> Photo?		
Paper Packaging	New spaper Packaging			
	Cardboard/Kraft Packaging			
	Mixed/Low Grade Packaging			
	Aseptic Containers			
	Gable Top Containers			
	Other Polycoat Containers			
	Compostable Packaging			
	R/C Paper Packaging			
	Paper Products	New spaper Products		
		Cardboard/Kraft Products		
Magazines				
High-Grade Papers				
Groundwood Products				
Mixed Low Grade Paper Products				
Compostable Products				
Glass	R/C Paper Products			
	Clear Containers			
	Green Containers			
	Brown Containers			
	Plate Glass			
	Non-glass Ceramics			
	R/C Glass			
Organics	Edible Food - Vegetative			
	Inedible Food - Vegetative			
	Edible Food - Meat, Fats, Oils			
	Inedible Food - Meats, Fats, Oils			
	Leaves & Grass			
	Prunings			
	Animal Manure			
	Animal Carcasses			
	Food Processing Waste			
	R/C Organics (note items below)			
R/C includes:				
Plastic Packaging	#1 PET Bottles			
	#1 PET Non-bottles			
	#2 HDPE Natural Bottles			
	#2 HDPE Colored Bottles			
	#2 HDPE Jars & Tubs			
	#3 PVC Packaging			
	#4 LDPE Packaging			
	#5 PP Packaging			
	#6 PS Packaging			
	#7 Other Packaging			
	Polystyrene Packaging			
	PLA/Compostable Packaging			
	Merchandise Bags			
	Other Packaging Film			
	Transportation Packaging Film			
Plastic Products	Flexible Plastic Packaging			
	R/C Packaging			
	#1 PET Product			
	#2 HDPE Product			
	#3 PVC Product			
	#4 LDPE Product			
	#5 PP Product			
	#6 PS Product			
	#7 Other Product			
	PLA/Compostable Product			
	Garbage Bags			
	Non-bag Film Products			
	Bulky Rigid Plastic Products			
	R/C Products			
	Metal	Alum. Beverage Cans		
Alum. Foil/Containers				
Other Aluminum				
Other Nonferrous				
Food Cans - Tinned				
Food Cans - Coated				
White Goods				
Other Ferrous				
R/C Metals				

Figure 19: Sample Sorting and Characterization Form, Back

2020 Washington DOE Waste Composition Study

Tally Sheet - Page 2 of 2

Wood Wastes	Natural Wood					
	Treated Wood					
	Painted Wood					
	Dimensional Lumber					
	Engineered Wood					
	Pallets & Crates					
	Other Untreated Wood					
	Wood By-Products					
	R/C Wood					
	Construction Materials	Plastic Lumber				
		Insulation				
		Asphalt Paving				
		Concrete				
		Drywall				
		Carpet				
		Carpet Padding				
		Soil, Rocks, Sand				
		Asphalt Roofing				
		Plastic Flooring				
		Ceramics & Brick				
		R/C Construction				
		Consumer Products	Televisions - CRT			
	Televisions - LCD					
	VCR's, DVD's, DVR's					
	Computer Monitors - CRT					
	Computer Monitors - LCD					
	Computers					
	Computer Peripherals					
	Computer Printers					
	Audio Equipment					
	Gaming Equipment					
	Other Consumer Electronics					
	Textiles - Organic					
	Textiles - Synthetic					
	Shoes, Purses, Belts					
	Tires & Rubber					
	Furniture					
	Mattresses					
	R/C Consumer					
	Hazardous and Special Waste	Pesticides				
		HID Lamps				
		Compact Fluorescents				
		Fluorescent Tubes				
		Water Based Paints				
Solvent-based Glues						
Water Based Glues						
Oil-based Paint						
Lacquer, Varnish, Urethane Coatings, Stains						
Field/Lawn Markings						
Primers/Sealers/Coatings						
Water Repellants/Waterproofers						
Solvents						
Caustic Cleaners						
Dry-cell Batteries-Single Use						
Dry-cell Batteries-Rechargeable						
Wet-cell Batteries						
Gasoline/Kerosene						
Motor Oil						
Antifreeze						
Other Vehicle Fluids						
Oil Filters						
Explosives						
Medical Wastes						
Sharps						
Pharmaceuticals/Vitamins						
Other Cleaners/Chemicals						
Personal Care Products						
Other Potentially Hazardous						
Residues	Disposable Diapers					
	Ash					
	Dust					
	Fines/Sorting Residue					
	Sludge/Special Industrial					

[illegible]

Figure 21: Vehicle Survey Form, Back

GENERAL INSTRUCTIONS									
Make entries neatly in pencil.									
Enter the information at the top of each page. Enter total # of pages on each page at the end of the day.									
Enter the net weight of the load. If the operator measures self-haul loads by volume, record the volume and indicate that the unit is "yds".									
STEP-BY-STEP INSTRUCTIONS									
CHECK IN WITH GATEHOUSE STAFF									
Confirm the method for getting net weights.									
AS THE VEHICLE ARRIVES RECORD THE TYPE OF VEHICLE ON THE SURVEY SHEET									
WHEN A VEHICLE ARRIVES, STOP THE VEHICLE, THEN BEGIN QUESTIONS:									
ALL DRIVERS:									
Introduction: "Hello, the Washington DOE is conducting a survey today."									
Ask the driver what kind of material they're bringing (garbage, construction debris, yard waste, or a combination of things).									
only continue surveying drivers that are bringing materials for disposal (for example, if the facility has a recycling area and that is where they're heading then end the survey)									
Ask the driver what county the load is from (if they don't know the county ask for the city)									
Ask the driver what <u>sector</u> generated the load									
If they report more than one sector, be sure to ask the driver for the estimated % of each.									
Commercially collected residential: Single-family (SF) waste from a certified or franchised hauler collected at single family residences									
Commercially collected residential: Multifamily (MF) waste from a certified or franchised hauler collected at multifamily residences									
Commercially collected commercial (COM) waste from a certified or franchised hauler collected from non-residential sources (businesses, churches, parks, jails, etc.)									
Self-haul residential waste hauled by anyone who is not a certified hauler that was collected at a residence (SF or MF)									
Self-haul nonresidential waste hauled by anyone who is not a certified hauler that was not collected at a residence (collected from a business, church, park, jail, etc.)									
Ask the driver what kind of material they're bringing (garbage, construction debris, yard waste, or a combination of things).									
RECORD NET WEIGHTS									
Circle the units used, if the same units are used all day just circle the units on the first row. If not circle the units on every row.									
If the site has a minimum weight note it on the front page and every time a survey vehicle pays the minimum check it in the appropriate column.									

Appendix C: Waste Generation Area Composition Results

This section first presents overall waste composition results by material class for each of Washington's six WGAs:

- ▶ Central
- ▶ East
- ▶ Northwest
- ▶ Puget Sound
- ▶ Southwest
- ▶ West

Each subsequent WGA section presents detailed composition tables for the following sectors:

- ▶ Overall
- ▶ Commercial
- ▶ Residential
- ▶ Self-hauled

Overall Composition by Material Class

Figure 22: Central WGA

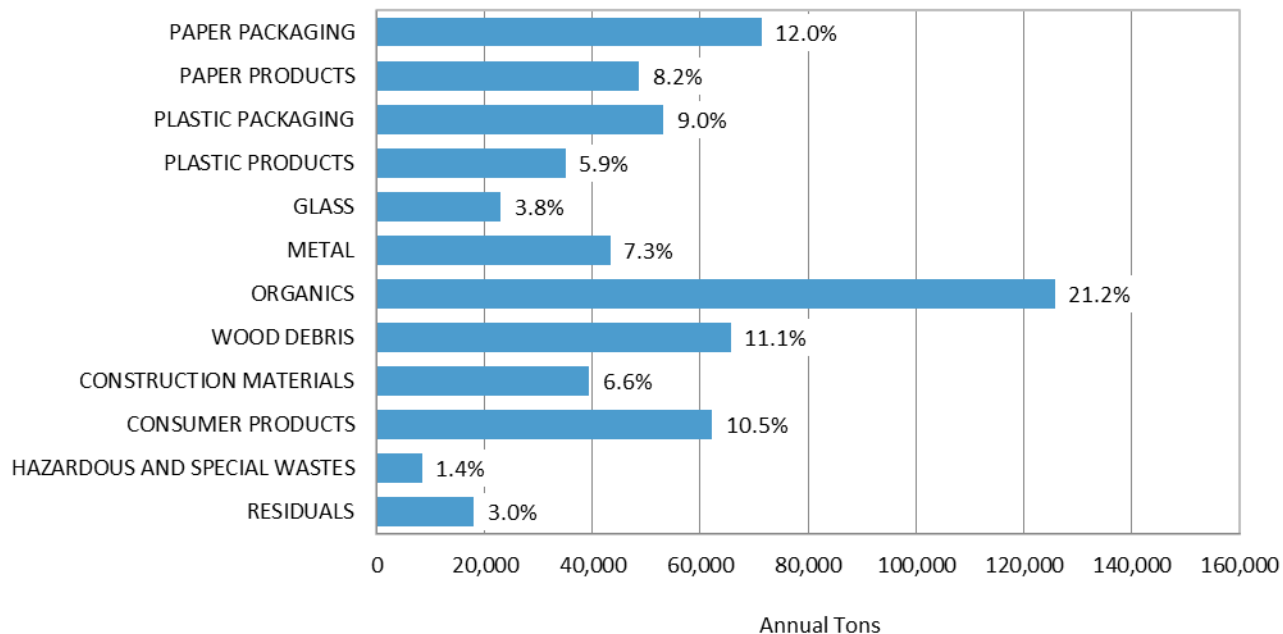


Figure 23: East WGA

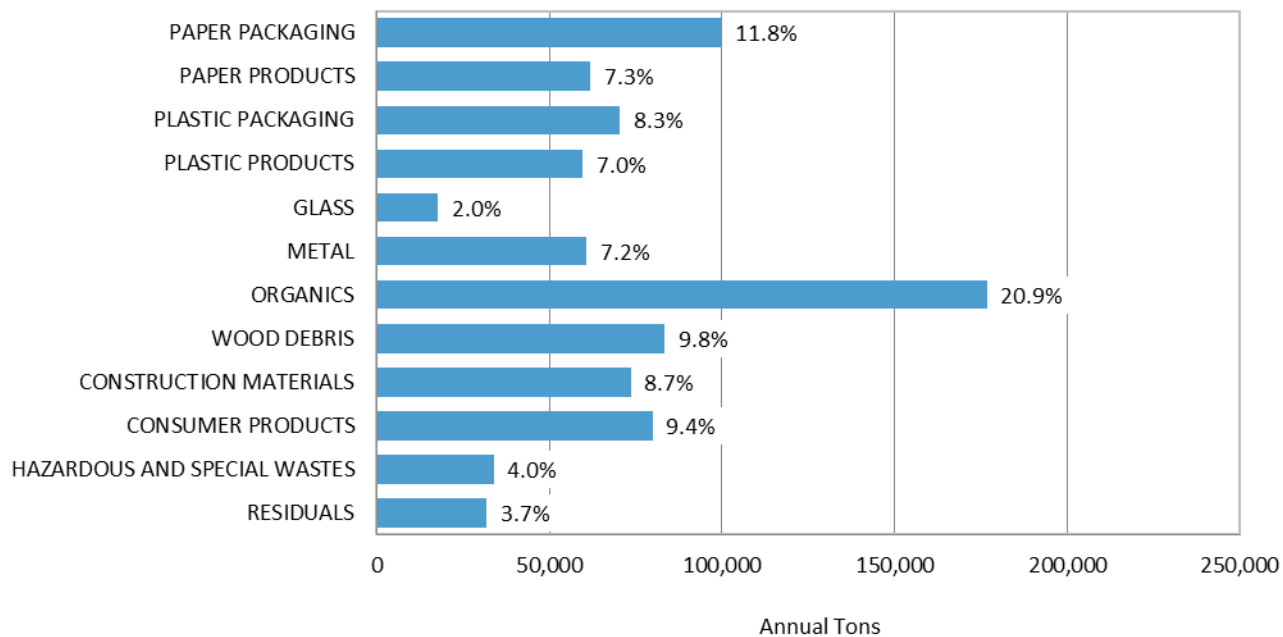


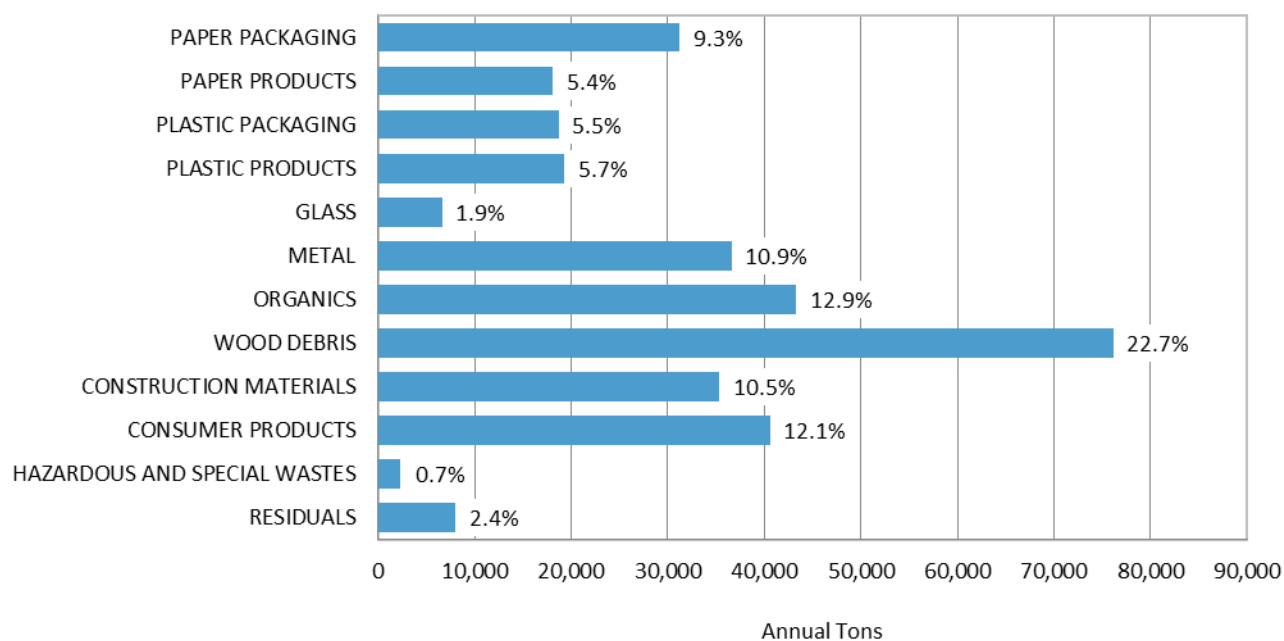
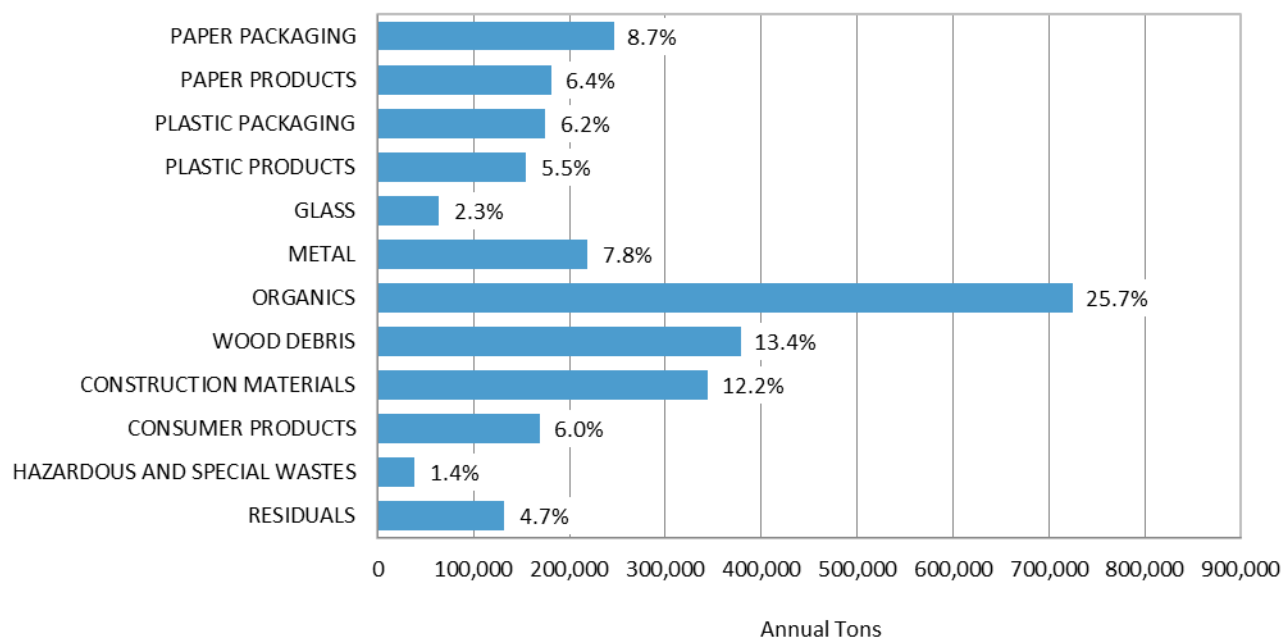
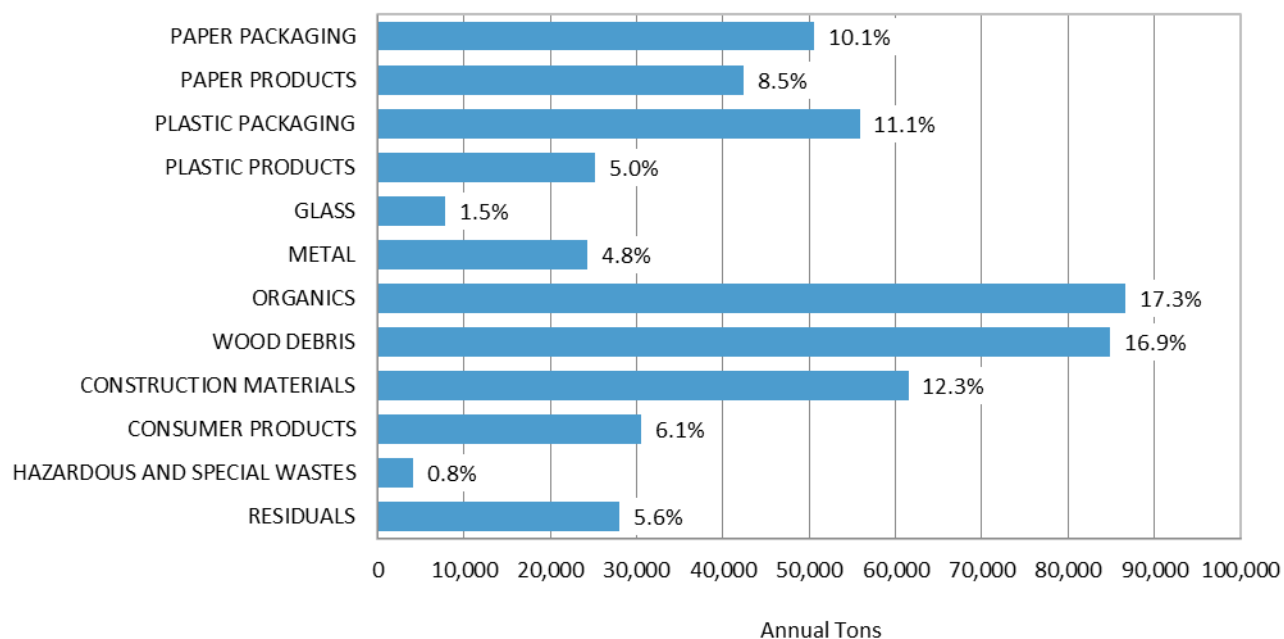
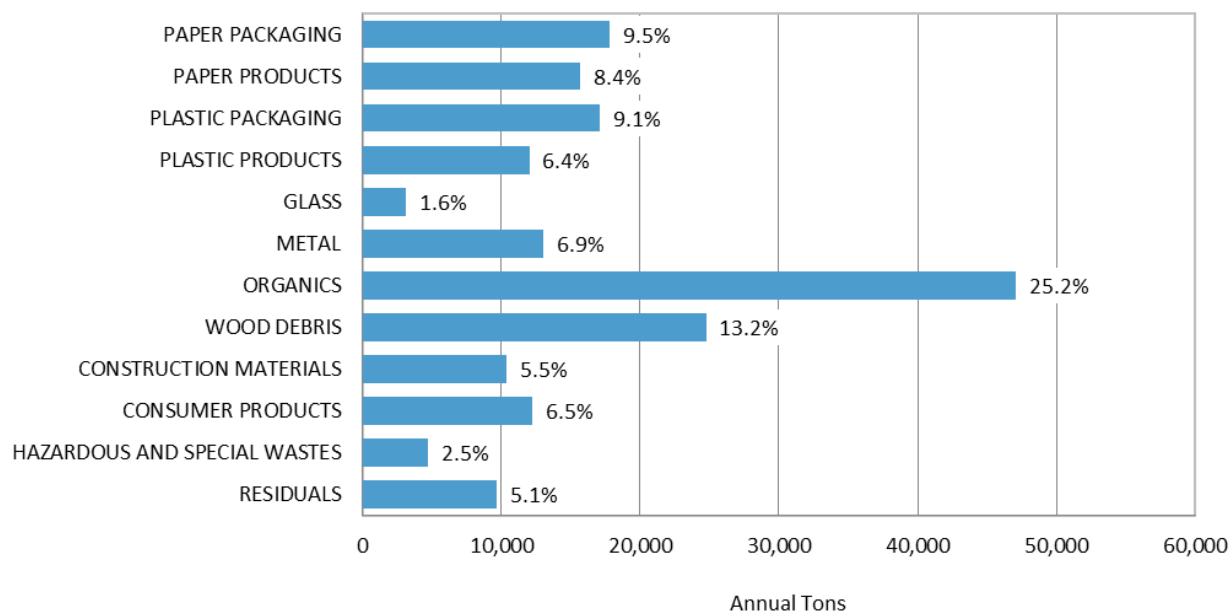
Figure 24: Northwest WGA**Figure 25: Puget Sound WGA**

Figure 26: Southwest WGA**Figure 27: West WGA**



Central Waste Generation Area Composition Tables

Table 24: Central WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	20.2%	2.2%	119,478	13,144	WOOD DEBRIS	11.1%	3.0%	65,389	17,848
PAPER PACKAGING	12.0%	1.8%	71,053	10,353	Natural Wood	0.1%	0.1%	535	569
Newspaper Packaging	0.0%	0.0%	6	10	Treated Wood	0.6%	0.7%	3,370	4,311
Cardboard & Kraft Packaging	6.6%	1.3%	39,287	7,774	Painted Wood	0.9%	0.4%	5,415	2,356
Mixed/Low-grade Paper Packaging	2.1%	0.4%	12,157	2,472	Dimensional Lumber	2.7%	1.5%	16,168	8,756
Aseptic Containers	0.1%	0.0%	467	120	Engineered Wood	2.4%	1.1%	14,241	6,668
Gable Top Containers	0.6%	0.8%	3,553	4,438	Pallets & Crates	3.2%	1.7%	18,953	9,916
Other Polycoated Packaging	0.2%	0.0%	1,006	253	Other Untreated Wood	0.0%	0.0%	166	94
Compostable Paper Packaging	1.9%	0.4%	11,442	2,602	Wood By-products	0.3%	0.3%	1,812	1,900
R/C Paper Packaging	0.5%	0.2%	3,134	902	R/C Wood Debris	0.8%	0.4%	4,730	2,401
PAPER PRODUCTS	8.2%	1.3%	48,425	7,896	CONSTRUCTION MATERIALS	6.6%	2.1%	39,165	12,402
Newspaper Products	0.3%	0.1%	1,522	334	Plastic Lumber	0.1%	0.1%	375	362
Cardboard & Kraft Paper Products	0.0%	0.0%	29	46	Insulation	0.4%	0.3%	2,236	1,643
Magazines	0.6%	0.4%	3,693	2,238	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.3%	0.1%	1,863	859	Concrete	0.1%	0.1%	477	682
Other Groundwood Paper Products	0.1%	0.1%	461	744	Drywall	1.8%	1.4%	10,802	8,299
Mixed/Low-grade Paper Products	2.7%	0.8%	15,779	4,689	Carpet	0.8%	0.5%	4,745	2,836
Compostable Paper Products	3.4%	0.5%	19,856	2,829	Carpet Padding	0.0%	0.0%	0	0
R/C Paper Products	0.9%	0.4%	5,222	2,462	Soil, Rocks, & Sand	0.8%	0.6%	4,444	3,588
PLASTIC	14.8%	1.6%	87,713	9,356	Asphalt Roofing	0.6%	0.6%	3,745	3,572
PLASTIC PACKAGING	9.0%	1.0%	52,962	5,927	Plastic Floor Covering	0.0%	0.0%	128	208
#1 PETE Plastic Bottles	1.1%	0.2%	6,226	1,000	Ceramics & Brick	0.4%	0.5%	2,556	2,863
#1 PETE Plastic Non-bottles	0.5%	0.1%	2,790	399	R/C Construction Materials	1.6%	0.9%	9,657	5,177
#2 HDPE Plastic Natural Bottles	0.3%	0.1%	1,783	412	CONSUMER PRODUCTS	10.5%	2.5%	61,917	14,695
#2 HDPE Plastic Jars and Tubs	0.6%	0.3%	3,435	1,539	Televisions - LCD	0.4%	0.5%	2,388	2,732
#2 HDPE Plastic Colored Bottles	0.3%	0.1%	1,780	359	Televisions - CRT	0.6%	0.4%	3,291	2,627
#3 PVC Plastic Packaging	0.0%	0.0%	8	8	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	8	7	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.8%	0.1%	4,518	878	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	703	204	Computers	0.1%	0.1%	362	588
#7 Other/Unknown Plastic Packaging	0.5%	0.3%	3,157	1,689	Computer Peripherals	0.0%	0.0%	153	249
Expanded Polystyrene Packaging	0.6%	0.2%	3,450	1,162	Computer Printers	0.1%	0.1%	676	776
PLA Compostable Packaging	0.0%	0.0%	94	59	Audio Equipment	0.2%	0.2%	1,026	1,445
Plastic Merchandise Bags	0.3%	0.1%	1,966	351	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	3.1%	0.7%	18,344	4,184	Other Consumer Electronics	0.2%	0.2%	1,322	1,004
Transportation Packaging Film Plastic	0.6%	0.3%	3,671	1,573	Textiles- Organic	2.7%	0.7%	15,659	4,235
Flexible Plastic Packaging	0.1%	0.1%	712	384	Textiles- Synthetic/Mixed/Unknown	1.3%	0.4%	7,697	2,333
R/C Plastic Packaging	0.1%	0.1%	318	385	Shoes/Purses/Belts	0.3%	0.2%	1,641	1,005
PLASTIC PRODUCTS	5.9%	1.1%	34,751	6,523	Tires & Other Rubber	0.4%	0.2%	2,324	1,283
#1 PETE Plastic Products	0.0%	0.0%	1	2	Furniture	3.4%	1.7%	20,251	10,093
#2 HDPE Plastic Products:	0.0%	0.0%	126	204	Mattresses	0.9%	1.0%	5,127	6,113
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	4	7	HAZARDOUS AND SPECIAL WASTES	1.4%	0.6%	8,128	3,618
#5 PP Plastic Products	0.0%	0.0%	13	14	Pesticides	0.0%	0.0%	21	34
#6 PS Plastic Products	0.0%	0.0%	172	69	HID/UV/Germicidal Lamps	0.0%	0.0%	38	60
#7 Other/Unknown Plastic Products	1.1%	0.3%	6,485	1,598	Compact Florescent Lamps	0.0%	0.0%	76	71
PLA Compostable Products	0.0%	0.0%	61	62	Florescent Tubes	0.0%	0.0%	157	231
Plastic Garbage Bags	1.2%	0.2%	7,242	1,192	Water-based Paint	0.0%	0.0%	192	250
Plastic Non-bag Film Products	0.7%	0.6%	4,021	3,476	Solvent-based Adhesives/Glues	0.0%	0.0%	80	96
Bulky Rigid Plastic Products	2.0%	0.7%	11,951	3,924	Water-based Adhesives/Glues	0.0%	0.0%	34	39
R/C Plastic Products	0.8%	0.2%	4,676	1,461	Oil-based Paint	0.0%	0.0%	0	0
GLASS	3.8%	0.9%	22,649	5,099	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	1.6%	0.3%	9,484	1,935	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.7%	0.2%	3,849	1,238	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.8%	0.3%	4,530	1,690	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.6%	0.7%	3,606	4,162	Solvents	0.0%	0.0%	59	79
Non-glass Ceramics	0.1%	0.1%	536	317	Caustic Cleaners	0.0%	0.0%	38	61
R/C Glass	0.1%	0.1%	644	387	Dry-cell Batteries- Single Use	0.0%	0.0%	223	108
METAL	7.3%	1.6%	43,048	9,221	Dry-cell Batteries- Rechargeable	0.0%	0.0%	260	295
Aluminum Beverage Cans	0.6%	0.1%	3,647	852	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.2%	0.1%	1,477	363	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.1%	0.1%	568	521	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.0%	0.0%	230	177	Antifreeze	0.0%	0.0%	65	105
Food Cans - Tinned	0.9%	0.2%	5,203	1,164	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	264	176	Oil Filters	0.0%	0.0%	232	219
White Goods	0.4%	0.6%	2,239	3,640	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	2.6%	0.9%	15,488	5,161	Medical Wastes	0.7%	0.6%	4,096	3,396
R/C Metal	2.4%	1.1%	13,931	6,468	Sharps	0.0%	0.0%	1	1
ORGANICS	21.2%	2.6%	125,510	15,526	Pharmaceuticals & Vitamins	0.0%	0.0%	189	102
Edible Food Waste- Vegetative	9.5%	1.9%	56,400	11,060	Other Cleaners/Chemicals	0.0%	0.0%	9	15
Inedible Food Waste- Vegetative	3.6%	0.7%	21,406	4,393	Personal Care Products	0.0%	0.0%	268	169
Edible Food Waste- Meats/Fats/Oils	3.2%	0.8%	18,988	4,832	Other Potentially Hazardous Wastes	0.4%	0.2%	2,092	1,333
Inedible Food Waste- Meats/Fats/Oils	0.5%	0.2%	2,782	956	RESIDUALS	3.0%	0.5%	17,824	3,156
Yard/Garden Waste- Leaves and Grass	1.7%	0.6%	9,916	3,798	Disposable Diapers	2.0%	0.5%	11,891	3,018
Yard/Garden Waste- Prunings	0.2%	0.1%	1,387	764	Ash	0.0%	0.0%	87	122
Animal Manure	2.1%	0.7%	12,455	4,389	Dust	0.0%	0.0%	144	95
Animal Carcasses & Offal	0.0%	0.0%	10	14	Fines/Sorting Residues	1.0%	0.3%	5,685	1,748
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	17	28
R/C Organics	0.4%	0.2%	2,166	1,169					
Estimated Origin Specified Disposed Tons			590,822		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			104						

Table 25: Central WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	23.3%	4.3%	57,997	10,633	WOOD DEBRIS	16.8%	6.1%	41,881	15,241
PAPER PACKAGING	15.8%	3.2%	39,486	8,071	Natural Wood	0.0%	0.0%	105	121
Newspaper Packaging	0.0%	0.0%	6	10	Treated Wood	0.3%	0.4%	732	1,060
Cardboard & Kraft Packaging	10.0%	2.5%	24,842	6,286	Painted Wood	1.1%	0.8%	2,708	1,904
Mixed/Low-grade Paper Packaging	1.4%	0.5%	3,553	1,135	Dimensional Lumber	4.8%	3.2%	12,091	7,924
Aseptic Containers	0.0%	0.0%	103	69	Engineered Wood	5.0%	2.6%	12,396	6,556
Gable Top Containers	1.2%	1.8%	2,871	4,436	Pallets & Crates	4.0%	2.5%	10,070	6,172
Other Polycoated Packaging	0.1%	0.1%	174	202	Other Untreated Wood	0.0%	0.0%	67	65
Compostable Paper Packaging	2.7%	1.0%	6,791	2,384	Wood By-products	0.3%	0.4%	755	1,081
R/C Paper Packaging	0.5%	0.3%	1,144	814	R/C Wood Debris	1.2%	0.8%	2,957	2,050
PAPER PRODUCTS	7.4%	2.6%	18,512	6,432	CONSTRUCTION MATERIALS	5.8%	2.8%	14,584	6,895
Newspaper Products	0.1%	0.1%	293	202	Plastic Lumber	0.1%	0.1%	211	249
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.4%	0.4%	889	997
Magazines	0.6%	0.8%	1,506	2,027	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.4%	0.2%	1,026	589	Concrete	0.0%	0.0%	0	0
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	0.8%	1.0%	2,119	2,405
Mixed/Low-grade Paper Products	2.5%	1.6%	6,130	3,874	Carpet	0.3%	0.4%	821	874
Compostable Paper Products	2.3%	0.8%	5,776	1,976	Carpet Padding	0.0%	0.0%	0	0
R/C Paper Products	1.5%	1.0%	3,780	2,378	Soil, Rocks, & Sand	0.3%	0.3%	764	823
PLASTIC	15.3%	2.9%	38,204	7,161	Asphalt Roofing	0.2%	0.3%	594	786
PLASTIC PACKAGING	7.7%	1.7%	19,240	4,306	Plastic Floor Covering	0.1%	0.1%	128	208
#1 PETE Plastic Bottles	0.7%	0.3%	1,818	661	Ceramics & Brick	1.0%	1.1%	2,515	2,862
#1 PETE Plastic Non-bottles	0.3%	0.1%	796	218	R/C Construction Materials	2.6%	1.5%	6,544	3,709
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	572	226	CONSUMER PRODUCTS	6.2%	2.3%	15,511	5,688
#2 HDPE Plastic Jars and Tubs	1.0%	0.6%	2,392	1,434	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	616	282	Televisions - CRT	0.6%	0.7%	1,575	1,801
#3 PVC Plastic Packaging	0.0%	0.0%	2	4	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	2	2	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.5%	0.2%	1,251	511	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.1%	271	180	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.2%	0.1%	536	161	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.6%	0.3%	1,471	727	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	60	49	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.2%	0.1%	405	135	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	2.5%	1.0%	6,131	2,429	Other Consumer Electronics	0.2%	0.2%	421	613
Transportation Packaging Film Plastic	1.0%	0.6%	2,388	1,451	Textiles - Organic	1.9%	1.0%	4,853	2,422
Flexible Plastic Packaging	0.1%	0.1%	304	363	Textiles - Synthetic/Mixed/Unknown	1.1%	0.6%	2,838	1,600
R/C Plastic Packaging	0.1%	0.1%	226	366	Shoes/Purses/Belts	0.1%	0.1%	223	251
PLASTIC PRODUCTS	7.6%	2.2%	18,963	5,517	Tires & Other Rubber	0.4%	0.3%	1,105	787
#1 PETE Plastic Products	0.0%	0.0%	1	2	Furniture	1.8%	1.6%	4,496	3,951
#2 HDPE Plastic Products:	0.1%	0.1%	126	204	Mattresses	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	2.4%	1.4%	5,877	3,534
#5 PP Plastic Products	0.0%	0.0%	1	2	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	78	47	HID/UV/Germicidal Lamps	0.0%	0.0%	37	60
#7 Other/Unknown Plastic Products	1.3%	0.5%	3,158	1,367	Compact Florescent Lamps	0.0%	0.0%	0	0
PLA Compostable Products	0.0%	0.0%	56	62	Florescent Tubes	0.1%	0.1%	141	230
Plastic Garbage Bags	1.3%	0.3%	3,126	812	Water-based Paint	0.0%	0.0%	22	36
Plastic Non-bag Film Products	1.3%	1.4%	3,255	3,416	Solvent-based Adhesives/Glues	0.0%	0.0%	52	85
Bulky Rigid Plastic Products	2.6%	1.3%	6,433	3,138	Water-based Adhesives/Glues	0.0%	0.0%	0	0
R/C Plastic Products	1.1%	0.5%	2,729	1,270	Oil-based Paint	0.0%	0.0%	0	0
GLASS	2.2%	1.6%	5,533	4,008	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.8%	0.3%	1,927	682	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.1%	0.1%	344	258	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.2%	0.1%	590	288	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	1.0%	1.6%	2,607	4,012	Solvents	0.0%	0.0%	48	77
Non-glass Ceramics	0.0%	0.0%	41	68	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.0%	0.0%	24	28	Dry-cell Batteries- Single Use	0.0%	0.0%	51	83
METAL	8.0%	2.7%	19,963	6,830	Dry-cell Batteries- Rechargeable	0.0%	0.1%	102	166
Aluminum Beverage Cans	0.4%	0.2%	973	382	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.3%	0.1%	655	326	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.2%	0.2%	398	481	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.0%	0.1%	124	128	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.6%	0.4%	1,484	951	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	79	96	Oil Filters	0.0%	0.0%	55	72
White Goods	0.9%	1.5%	2,239	3,640	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	3.4%	1.6%	8,398	3,894	Medical Wastes	1.5%	1.4%	3,776	3,391
R/C Metal	2.3%	1.3%	5,611	3,167	Sharps	0.0%	0.0%	0	0
ORGANICS	18.7%	5.0%	46,645	12,573	Pharmaceuticals & Vitamins	0.0%	0.0%	20	25
Edible Food Waste- Vegetative	10.1%	4.1%	25,073	10,234	Other Cleaners/Chemicals	0.0%	0.0%	0	0
Inedible Food Waste- Vegetative	1.9%	1.0%	4,812	2,557	Personal Care Products	0.0%	0.0%	59	70
Edible Food Waste- Meats/Fats/Oils	3.8%	1.7%	9,574	4,216	Other Potentially Hazardous Wastes	0.6%	0.5%	1,515	1,281
Inedible Food Waste- Meats/Fats/Oils	0.4%	0.3%	1,071	768	RESIDUALS	1.3%	0.5%	3,132	1,312
Yard/Garden Waste- Leaves and Grass	1.0%	0.6%	2,599	1,432	Disposable Diapers	0.6%	0.3%	1,399	867
Yard/Garden Waste- Prunings	0.1%	0.1%	168	190	Ash	0.0%	0.0%	0	0
Animal Manure	1.2%	1.1%	3,104	2,730	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.0%	0.0%	1	2	Fines/Sorting Residues	0.7%	0.4%	1,716	910
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	17	28
R/C Organics	0.1%	0.1%	243	160					
Estimated Origin Specified Disposed Tons			249,328		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			48						

Table 26: Central WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	20.6%	2.3%	43,452	4,925	WOOD DEBRIS	0.9%	0.4%	1,998	840
PAPER PACKAGING	9.2%	1.5%	19,309	3,132	Natural Wood	0.0%	0.0%	61	70
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.0%	0.0%	0	0
Cardboard & Kraft Packaging	2.8%	0.7%	5,965	1,570	Painted Wood	0.2%	0.1%	518	311
Mixed/Low-grade Paper Packaging	2.9%	0.6%	6,106	1,340	Dimensional Lumber	0.1%	0.1%	256	268
Aseptic Containers	0.2%	0.0%	347	98	Engineered Wood	0.2%	0.2%	424	388
Gable Top Containers	0.3%	0.1%	568	130	Pallets & Crates	0.0%	0.0%	0	0
Other Polycoated Packaging	0.4%	0.1%	755	147	Other Untreated Wood	0.0%	0.0%	2	3
Compostable Paper Packaging	1.9%	0.5%	4,024	1,009	Wood By-products	0.0%	0.0%	50	81
R/C Paper Packaging	0.7%	0.1%	1,545	309	R/C Wood Debris	0.3%	0.3%	688	722
PAPER PRODUCTS	11.4%	1.9%	24,143	4,106	CONSTRUCTION MATERIALS	2.1%	2.3%	4,502	4,747
Newspaper Products	0.5%	0.1%	1,103	249	Plastic Lumber	0.1%	0.1%	164	263
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.2%	0.2%	363	373
Magazines	0.9%	0.4%	1,960	937	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.1%	0.1%	291	116	Concrete	0.0%	0.0%	0	0
Other Groundwood Paper Products	0.2%	0.4%	461	744	Drywall	1.2%	1.9%	2,617	4,073
Mixed/Low-grade Paper Products	3.5%	1.1%	7,416	2,317	Carpet	0.6%	0.7%	1,210	1,376
Compostable Paper Products	5.8%	0.9%	12,203	1,826	Carpet Padding	0.0%	0.0%	0	0
R/C Paper Products	0.3%	0.2%	707	358	Soil, Rocks, & Sand	0.0%	0.1%	75	122
PLASTIC	15.1%	1.7%	31,830	3,652	Asphalt Roofing	0.0%	0.0%	13	20
PLASTIC PACKAGING	11.2%	1.1%	23,547	2,283	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	1.7%	0.3%	3,514	614	Ceramics & Brick	0.0%	0.0%	0	0
#1 PETE Plastic Non-bottles	0.8%	0.2%	1,713	318	R/C Construction Materials	0.0%	0.0%	61	98
#2 HDPE Plastic Natural Bottles	0.5%	0.2%	1,080	337	CONSUMER PRODUCTS	9.3%	4.2%	19,698	8,898
#2 HDPE Plastic Jars and Tubs	0.1%	0.1%	303	133	Televisions - LCD	0.6%	1.0%	1,279	2,060
#2 HDPE Plastic Colored Bottles	0.4%	0.1%	927	202	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	2	3	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	6	7	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.3%	0.3%	2,713	625	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.2%	0.0%	375	93	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	1.0%	0.8%	2,172	1,668	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.4%	0.1%	937	281	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	33	34	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.6%	0.1%	1,269	286	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	3.7%	0.5%	7,842	1,091	Other Consumer Electronics	0.0%	0.0%	17	27
Transportation Packaging Film Plastic	0.2%	0.1%	365	276	Textiles - Organic	4.0%	1.6%	8,486	3,287
Flexible Plastic Packaging	0.1%	0.0%	275	95	Textiles - Synthetic/Mixed/Unknown	1.4%	0.6%	3,009	1,370
R/C Plastic Packaging	0.0%	0.0%	21	34	Shoes/Purses/Belts	0.6%	0.5%	1,237	957
PLASTIC PRODUCTS	3.9%	0.7%	8,283	1,462	Tires & Other Rubber	0.3%	0.4%	633	774
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	2.4%	2.7%	5,036	5,677
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	4	7	HAZARDOUS AND SPECIAL WASTES	0.6%	0.2%	1,276	482
#5 PP Plastic Products	0.0%	0.0%	4	7	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	60	30	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	0.9%	0.2%	1,898	521	Compact Fluorescent Lamps	0.0%	0.0%	67	70
PLA Compostable Products	0.0%	0.0%	4	7	Fluorescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	1.7%	0.4%	3,611	858	Water-based Paint	0.1%	0.1%	153	246
Plastic Non-bag Film Products	0.0%	0.0%	48	78	Solvent-based Adhesives/Glues	0.0%	0.0%	27	44
Bulky Rigid Plastic Products	0.8%	0.4%	1,780	841	Water-based Adhesives/Glues	0.0%	0.0%	34	39
R/C Plastic Products	0.4%	0.2%	874	406	Oil-based Paint	0.0%	0.0%	0	0
GLASS	6.2%	1.2%	13,144	2,498	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	2.7%	0.6%	5,785	1,364	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	1.5%	0.6%	3,173	1,166	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	1.7%	0.8%	3,504	1,637	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.0%	0.0%	0	0	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.2%	0.1%	432	304	Caustic Cleaners	0.0%	0.0%	38	61
R/C Glass	0.1%	0.1%	251	159	Dry-cell Batteries - Single Use	0.1%	0.0%	130	58
METAL	6.2%	2.1%	13,136	4,374	Dry-cell Batteries - Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	1.1%	0.3%	2,233	734	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.3%	0.1%	694	154	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	6	10	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.0%	0.1%	99	122	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	1.5%	0.3%	3,256	643	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.1%	0.1%	182	147	Oil Filters	0.1%	0.1%	107	173
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	1.1%	0.6%	2,363	1,218	Medical Wastes	0.1%	0.1%	265	184
R/C Metal	2.0%	2.1%	4,303	4,475	Sharps	0.0%	0.0%	1	1
ORGANICS	32.7%	3.9%	68,970	8,249	Pharmaceuticals & Vitamins	0.1%	0.0%	109	68
Edible Food Waste- Vegetative	13.1%	1.9%	27,562	3,906	Other Cleaners/Chemicals	0.0%	0.0%	0	0
Inedible Food Waste- Vegetative	7.4%	1.7%	15,504	3,518	Personal Care Products	0.1%	0.1%	143	144
Edible Food Waste- Meats/Fats/Oils	3.8%	1.0%	8,029	2,180	Other Potentially Hazardous Wastes	0.1%	0.1%	203	223
Inedible Food Waste- Meats/Fats/Oils	0.6%	0.2%	1,369	504	RESIDUALS	6.1%	1.2%	12,862	2,567
Yard/Garden Waste- Leaves and Grass	2.7%	1.5%	5,752	3,210	Disposable Diapers	4.4%	1.2%	9,383	2,607
Yard/Garden Waste- Prunings	0.2%	0.2%	442	338	Ash	0.0%	0.0%	0	0
Animal Manure	4.1%	1.6%	8,660	3,391	Dust	0.0%	0.0%	94	84
Animal Carcasses & Offal	0.0%	0.0%	8	14	Fines/Sorting Residues	1.6%	0.7%	3,384	1,470
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.8%	0.5%	1,644	1,150					
Estimated Origin Specified Disposed Tons			210,869		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			24						

Table 27: Central WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	13.8%	4.6%	18,029	5,954	WOOD DEBRIS	16.5%	7.1%	21,509	9,249
PAPER PACKAGING	9.4%	4.3%	12,258	5,676	Natural Wood	0.3%	0.4%	369	551
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	2.0%	3.2%	2,638	4,178
Cardboard & Kraft Packaging	6.5%	3.3%	8,480	4,295	Painted Wood	1.7%	1.0%	2,189	1,352
Mixed/Low-grade Paper Packaging	1.9%	1.3%	2,498	1,739	Dimensional Lumber	2.9%	2.8%	3,821	3,717
Aseptic Containers	0.0%	0.0%	18	16	Engineered Wood	1.1%	0.9%	1,421	1,155
Gable Top Containers	0.1%	0.0%	114	57	Pallets & Crates	6.8%	5.9%	8,883	7,761
Other Polycoated Packaging	0.1%	0.0%	77	41	Other Untreated Wood	0.1%	0.1%	97	67
Compostable Paper Packaging	0.5%	0.2%	627	262	Wood By-products	0.8%	1.2%	1,007	1,560
R/C Paper Packaging	0.3%	0.2%	445	235	R/C Wood Debris	0.8%	0.8%	1,085	1,019
PAPER PRODUCTS	4.4%	1.6%	5,771	2,031	CONSTRUCTION MATERIALS	15.4%	7.0%	20,079	9,151
Newspaper Products	0.1%	0.1%	126	93	Plastic Lumber	0.0%	0.0%	0	0
Cardboard & Kraft Paper Products	0.0%	0.0%	29	46	Insulation	0.8%	1.0%	984	1,252
Magazines	0.2%	0.1%	227	149	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.4%	0.5%	545	613	Concrete	0.4%	0.5%	477	682
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	4.6%	5.2%	6,067	6,819
Mixed/Low-grade Paper Products	1.7%	1.0%	2,233	1,270	Carpet	2.1%	1.8%	2,714	2,321
Compostable Paper Products	1.4%	0.7%	1,877	873	Carpet Padding	0.0%	0.0%	0	0
R/C Paper Products	0.6%	0.4%	735	525	Soil, Rocks, & Sand	2.8%	2.7%	3,605	3,490
PLASTIC	13.5%	3.7%	17,679	4,786	Asphalt Roofing	2.4%	2.7%	3,139	3,484
PLASTIC PACKAGING	7.8%	2.6%	10,175	3,373	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.7%	0.3%	894	432	Ceramics & Brick	0.0%	0.1%	41	65
#1 PETE Plastic Non-bottles	0.2%	0.1%	281	105	R/C Construction Materials	2.3%	2.8%	3,053	3,610
#2 HDPE Plastic Natural Bottles	0.1%	0.1%	131	73	CONSUMER PRODUCTS	20.4%	7.8%	26,708	10,218
#2 HDPE Plastic Jars and Tubs	0.6%	0.4%	740	544	Televisions - LCD	0.8%	1.4%	1,109	1,795
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	237	92	Televisions - CRT	1.3%	1.5%	1,716	1,913
#3 PVC Plastic Packaging	0.0%	0.0%	4	6	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.4%	0.3%	554	345	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.0%	0.0%	57	30	Computers	0.3%	0.5%	362	588
#7 Other/Unknown Plastic Packaging	0.3%	0.2%	448	215	Computer Peripherals	0.1%	0.2%	153	249
Expanded Polystyrene Packaging	0.8%	0.7%	1,042	861	Computer Printers	0.5%	0.6%	676	776
PLA Compostable Packaging	0.0%	0.0%	1	1	Audio Equipment	0.8%	1.1%	1,026	1,445
Plastic Merchandise Bags	0.2%	0.1%	293	152	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	3.3%	2.5%	4,371	3,227	Other Consumer Electronics	0.7%	0.6%	885	795
Transportation Packaging Film Plastic	0.7%	0.4%	917	540	Textiles - Organic	1.8%	0.9%	2,319	1,128
Flexible Plastic Packaging	0.1%	0.1%	134	81	Textiles - Synthetic/Mixed/Unknown	1.4%	0.8%	1,850	1,001
R/C Plastic Packaging	0.1%	0.1%	71	115	Shoes/Purses/Belts	0.1%	0.1%	180	179
PLASTIC PRODUCTS	5.7%	2.4%	7,504	3,158	Tires & Other Rubber	0.4%	0.5%	585	653
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	8.2%	5.6%	10,718	7,350
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	3.9%	4.7%	5,127	6,113
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.7%	0.5%	975	603
#5 PP Plastic Products	0.0%	0.0%	7	12	Pesticides	0.0%	0.0%	21	34
#6 PS Plastic Products	0.0%	0.0%	35	42	HID/UV/Germicidal Lamps	0.0%	0.0%	2	3
#7 Other/Unknown Plastic Products	1.1%	0.5%	1,429	642	Compact Florescent Lamps	0.0%	0.0%	9	9
PLA Compostable Products	0.0%	0.0%	0	0	Florescent Tubes	0.0%	0.0%	16	18
Plastic Garbage Bags	0.4%	0.1%	505	164	Water-based Paint	0.0%	0.0%	17	27
Plastic Non-bag Film Products	0.5%	0.5%	717	643	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	2.9%	1.7%	3,738	2,201	Water-based Adhesives/Glues	0.0%	0.0%	0	0
R/C Plastic Products	0.8%	0.5%	1,072	597	Oil-based Paint	0.0%	0.0%	0	0
GLASS	3.0%	1.5%	3,971	1,921	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	1.4%	0.9%	1,771	1,191	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.3%	0.2%	332	326	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.3%	0.2%	436	305	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.8%	0.9%	999	1,110	Solvents	0.0%	0.0%	11	18
Non-glass Ceramics	0.0%	0.0%	63	55	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.3%	0.3%	369	351	Dry-cell Batteries- Single Use	0.0%	0.0%	42	37
METAL	7.6%	3.4%	9,949	4,387	Dry-cell Batteries- Rechargeable	0.1%	0.2%	157	244
Aluminum Beverage Cans	0.3%	0.2%	441	202	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.1%	0.0%	128	50	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.1%	0.2%	165	201	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.0%	0.0%	7	12	Antifreeze	0.0%	0.1%	65	105
Food Cans - Tinned	0.4%	0.1%	462	194	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	3	4	Oil Filters	0.1%	0.1%	70	114
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	3.6%	2.4%	4,726	3,161	Medical Wastes	0.0%	0.0%	56	32
R/C Metal	3.1%	2.6%	4,017	3,433	Sharps	0.0%	0.0%	0	0
ORGANICS	7.6%	3.0%	9,895	3,863	Pharmaceuticals & Vitamins	0.0%	0.1%	60	71
Edible Food Waste- Vegetative	2.9%	1.2%	3,765	1,531	Other Cleaners/Chemicals	0.0%	0.0%	9	15
Inedible Food Waste- Vegetative	0.8%	0.5%	1,091	622	Personal Care Products	0.1%	0.0%	67	55
Edible Food Waste- Meats/Fats/Oils	1.1%	0.7%	1,386	906	Other Potentially Hazardous Wastes	0.3%	0.2%	374	295
Inedible Food Waste- Meats/Fats/Oils	0.3%	0.2%	342	265	RESIDUALS	1.4%	1.0%	1,830	1,284
Yard/Garden Waste- Leaves and Grass	1.2%	1.1%	1,565	1,438	Disposable Diapers	0.8%	1.0%	1,109	1,251
Yard/Garden Waste- Prunings	0.6%	0.5%	777	658	Ash	0.1%	0.1%	87	122
Animal Manure	0.5%	0.4%	691	555	Dust	0.0%	0.0%	50	44
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	0.4%	0.2%	584	259
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.2%	0.1%	279	135					
Estimated Origin Specified Disposed Tons			130,624		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			32						



East Waste Generation Area Composition Tables

Table 28: East WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	19.0%	2.2%	160,811	18,752	WOOD DEBRIS	9.8%	2.6%	83,099	22,043
PAPER PACKAGING	11.8%	1.7%	99,323	14,263	Natural Wood	0.2%	0.3%	1,829	2,353
Newspaper Packaging	0.0%	0.0%	168	161	Treated Wood	0.4%	0.3%	3,320	2,741
Cardboard & Kraft Packaging	6.0%	1.1%	51,026	9,073	Painted Wood	3.8%	1.8%	32,017	15,233
Mixed/Low-grade Paper Packaging	1.8%	0.3%	14,996	2,709	Dimensional Lumber	0.8%	0.3%	6,587	2,926
Aseptic Containers	0.1%	0.0%	954	340	Engineered Wood	0.9%	0.4%	7,552	3,027
Gable Top Containers	0.2%	0.1%	1,981	745	Pallets & Crates	2.6%	1.4%	22,061	11,928
Other Polycoated Packaging	0.1%	0.0%	1,015	366	Other Untreated Wood	0.0%	0.0%	185	152
Compostable Paper Packaging	1.7%	0.4%	14,396	3,155	Wood By-products	0.2%	0.2%	1,783	1,780
R/C Paper Packaging	1.8%	1.3%	14,787	10,982	R/C Wood Debris	0.9%	0.5%	7,765	4,413
PAPER PRODUCTS	7.3%	1.0%	61,489	8,812	CONSTRUCTION MATERIALS	8.7%	2.8%	73,219	23,685
Newspaper Products	0.4%	0.1%	3,052	1,168	Plastic Lumber	0.2%	0.3%	2,043	2,686
Cardboard & Kraft Paper Products	0.0%	0.0%	186	302	Insulation	0.8%	0.5%	6,426	4,478
Magazines	0.2%	0.1%	1,630	1,118	Asphalt Paving	0.1%	0.2%	877	1,410
High-Grade Paper Products	0.2%	0.1%	1,883	761	Concrete	2.5%	1.9%	21,110	16,352
Other Groundwood Paper Products	0.0%	0.1%	401	508	Drywall	1.1%	1.0%	9,283	8,556
Mixed/Low-grade Paper Products	1.7%	0.4%	14,736	3,668	Carpet	1.0%	0.8%	8,546	6,555
Compostable Paper Products	3.4%	0.6%	29,103	5,337	Carpet Padding	0.7%	0.8%	6,328	6,655
R/C Paper Products	1.2%	0.7%	10,498	5,925	Soil, Rocks, & Sand	0.7%	0.6%	6,310	4,700
PLASTIC	15.3%	2.2%	129,137	18,304	Asphalt Roofing	0.8%	0.9%	6,776	7,447
PLASTIC PACKAGING	8.3%	1.1%	69,948	9,546	Plastic Floor Covering	0.0%	0.0%	141	228
#1 PETE Plastic Bottles	1.0%	0.2%	8,209	1,527	Ceramics & Brick	0.0%	0.0%	344	319
#1 PETE Plastic Non-bottles	0.4%	0.1%	3,348	868	R/C Construction Materials	0.6%	0.8%	5,036	7,152
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	2,031	523	CONSUMER PRODUCTS	9.4%	1.8%	79,497	15,197
#2 HDPE Plastic Jars and Tubs	0.4%	0.1%	2,966	1,114	Televisions - LCD	0.3%	0.5%	2,614	4,171
#2 HDPE Plastic Colored Bottles	0.3%	0.1%	2,250	688	Televisions - CRT	0.5%	0.7%	4,333	5,900
#3 PVC Plastic Packaging	0.0%	0.0%	29	39	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.0%	0.3%	8,040	2,619	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	1,186	235	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.9%	0.9%	7,659	7,236	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.6%	0.2%	5,483	1,751	Computer Printers	0.2%	0.2%	1,628	1,887
PLA Compostable Packaging	0.0%	0.0%	252	162	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.4%	0.1%	3,640	544	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	2.3%	0.4%	19,695	3,258	Other Consumer Electronics	0.7%	0.5%	5,703	4,290
Transportation Packaging Film Plastic	0.5%	0.2%	4,553	1,493	Textiles- Organic	2.5%	0.5%	20,732	4,115
Flexible Plastic Packaging	0.1%	0.0%	520	168	Textiles- Synthetic/Mixed/Unknown	0.8%	0.4%	7,155	3,004
R/C Plastic Packaging	0.0%	0.0%	86	124	Shoes/Purses/Belts	0.3%	0.2%	2,124	1,332
PLASTIC PRODUCTS	7.0%	1.7%	59,189	14,037	Tires & Other Rubber	0.4%	0.2%	3,776	1,789
#1 PETE Plastic Products	0.0%	0.0%	46	64	Furniture	2.5%	1.1%	21,035	9,053
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	0.6%	0.5%	5,177	3,996
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.6%	0.7%	5,221	5,618
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	4.0%	2.4%	33,448	20,373
#5 PP Plastic Products	0.0%	0.0%	22	32	Pesticides	0.0%	0.0%	76	124
#6 PS Plastic Products	0.0%	0.0%	233	139	HID/UV/Germicidal Lamps	0.0%	0.0%	213	347
#7 Other/Unknown Plastic Products	1.0%	0.3%	8,476	2,338	Compact Florescent Lamps	0.0%	0.0%	0	0
PLA Compostable Products	0.0%	0.0%	71	75	Florescent Tubes	0.0%	0.0%	9	14
Plastic Garbage Bags	1.5%	0.3%	13,000	2,379	Water-based Paint	0.1%	0.1%	857	1,022
Plastic Non-bag Film Products	0.7%	0.7%	6,199	5,705	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	2.8%	1.3%	23,700	10,795	Water-based Adhesives/Glues	0.0%	0.0%	115	110
R/C Plastic Products	0.9%	0.4%	7,442	3,465	Oil-based Paint	0.0%	0.0%	0	0
GLASS	2.0%	0.7%	17,277	5,621	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	1.2%	0.3%	9,752	2,800	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.4%	0.2%	3,620	1,884	Primers/Sealings/Coatings	0.0%	0.0%	108	174
Brown/Other Colored Glass Containers	0.3%	0.2%	2,224	1,299	Water Repellents & Waterproofers	0.0%	0.0%	35	57
Plate Glass	0.0%	0.1%	341	442	Solvents	0.2%	0.3%	1,793	2,921
Non-glass Ceramics	0.1%	0.1%	864	599	Caustic Cleaners	0.0%	0.0%	50	82
R/C Glass	0.1%	0.0%	476	394	Dry-cell Batteries- Single Use	0.0%	0.0%	185	79
METAL	7.2%	1.6%	60,516	13,252	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.5%	0.1%	4,049	1,027	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.2%	0.0%	1,598	322	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	87	127	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.1%	0.0%	542	230	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.5%	0.1%	4,311	1,241	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	224	116	Oil Filters	0.1%	0.1%	469	562
White Goods	0.8%	0.9%	6,403	7,491	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	2.9%	0.8%	24,436	6,858	Medical Wastes	3.1%	2.4%	26,490	19,912
R/C Metal	2.2%	0.9%	18,866	7,197	Sharps	0.0%	0.0%	7	7
ORGANICS	20.9%	2.7%	176,398	23,011	Pharmaceuticals & Vitamins	0.0%	0.0%	131	97
Edible Food Waste- Vegetative	7.7%	1.4%	65,417	12,070	Other Cleaners/Chemicals	0.0%	0.0%	89	103
Inedible Food Waste- Vegetative	3.3%	0.7%	27,713	6,247	Personal Care Products	0.3%	0.2%	2,677	1,323
Edible Food Waste- Meats/Fats/Oils	2.7%	0.9%	22,757	7,375	Other Potentially Hazardous Wastes	0.0%	0.0%	142	158
Inedible Food Waste- Meats/Fats/Oils	0.5%	0.2%	4,163	1,892	RESIDUALS	3.7%	1.0%	31,495	8,854
Yard/Garden Waste- Leaves and Grass	2.3%	1.0%	19,699	8,613	Disposable Diapers	1.7%	0.9%	14,512	7,569
Yard/Garden Waste- Prunings	0.5%	0.3%	3,948	2,323	Ash	0.2%	0.2%	1,279	2,057
Animal Manure	3.4%	1.5%	28,343	12,951	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.2%	0.3%	1,430	2,250	Fines/Sorting Residues	1.9%	0.5%	15,704	4,216
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.3%	0.1%	2,927	1,173					
Estimated Origin Specified Disposed Tons			844,896		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			104						

Table 29: East WGA Commercial Disposed Waste, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	23.1%	4.4%	85,822	16,357	WOOD DEBRIS	13.1%	5.4%	48,573	19,931
PAPER PACKAGING	15.2%	3.4%	56,359	12,567	Natural Wood	0.0%	0.0%	32	53
Newspaper Packaging	0.0%	0.0%	14	23	Treated Wood	0.2%	0.3%	743	1,210
Cardboard & Kraft Packaging	8.4%	2.1%	30,982	7,739	Painted Wood	4.1%	3.7%	15,221	13,662
Mixed/Low-grade Paper Packaging	1.4%	0.5%	5,224	1,891	Dimensional Lumber	0.8%	0.5%	2,823	1,925
Aseptic Containers	0.1%	0.1%	465	265	Engineered Wood	0.8%	0.5%	2,903	1,982
Gable Top Containers	0.3%	0.2%	972	693	Pallets & Crates	5.8%	3.2%	21,337	11,870
Other Polycoated Packaging	0.1%	0.1%	282	199	Other Untreated Wood	0.0%	0.0%	94	104
Compostable Paper Packaging	1.9%	0.8%	7,137	2,798	Wood By-products	0.3%	0.4%	1,227	1,622
R/C Paper Packaging	3.0%	2.9%	11,283	10,904	R/C Wood Debris	1.1%	1.1%	4,192	4,069
PAPER PRODUCTS	7.9%	2.0%	29,463	7,564	CONSTRUCTION MATERIALS	11.3%	5.7%	41,946	21,149
Newspaper Products	0.3%	0.2%	1,108	775	Plastic Lumber	0.4%	0.7%	1,583	2,580
Cardboard & Kraft Paper Products	0.1%	0.1%	186	302	Insulation	0.1%	0.1%	442	508
Magazines	0.1%	0.1%	447	347	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.3%	0.2%	1,150	676	Concrete	5.3%	4.4%	19,495	16,224
Other Groundwood Paper Products	0.1%	0.1%	384	507	Drywall	1.6%	2.2%	5,892	8,098
Mixed/Low-grade Paper Products	1.8%	0.9%	6,500	3,192	Carpet	1.3%	1.6%	4,839	5,967
Compostable Paper Products	2.8%	0.9%	10,360	3,394	Carpet Padding	0.9%	1.4%	3,266	5,302
R/C Paper Products	2.5%	1.6%	9,328	5,872	Soil, Rocks, & Sand	0.4%	0.6%	1,391	2,119
PLASTIC	16.3%	3.7%	60,423	13,578	Asphalt Roofing	0.0%	0.0%	0	0
PLASTIC PACKAGING	8.3%	2.2%	30,959	8,327	Plastic Floor Covering	0.0%	0.1%	141	228
#1 PETE Plastic Bottles	0.6%	0.2%	2,094	812	Ceramics & Brick	0.1%	0.1%	236	283
#1 PETE Plastic Non-bottles	0.2%	0.1%	822	352	R/C Construction Materials	1.3%	1.9%	4,661	7,136
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	618	204	CONSUMER PRODUCTS	4.2%	1.7%	15,695	6,376
#2 HDPE Plastic Jars and Tubs	0.5%	0.3%	1,714	930	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	830	371	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	23	38	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.0%	0.7%	3,713	2,452	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	502	180	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	1.6%	1.9%	5,828	7,228	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.8%	0.4%	3,073	1,630	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	91	72	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.2%	0.1%	743	269	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	2.0%	0.7%	7,585	2,621	Other Consumer Electronics	0.0%	0.0%	34	45
Transportation Packaging Film Plastic	0.9%	0.3%	3,219	1,269	Textiles- Organic	1.5%	0.7%	5,559	2,608
Flexible Plastic Packaging	0.0%	0.0%	91	42	Textiles- Synthetic/Mixed/Unknown	0.8%	0.6%	2,828	2,401
R/C Plastic Packaging	0.0%	0.0%	11	18	Shoes/Purses/Belts	0.1%	0.1%	195	211
PLASTIC PRODUCTS	7.9%	2.4%	29,464	8,866	Tires & Other Rubber	0.7%	0.4%	2,507	1,634
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	1.2%	1.1%	4,573	4,256
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	7.9%	5.5%	29,384	20,314
#5 PP Plastic Products	0.0%	0.0%	22	32	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	61	60	HID/UV/Germicidal Lamps	0.1%	0.1%	213	347
#7 Other/Unknown Plastic Products	1.1%	0.5%	4,039	1,802	Compact Fluorescent Lamps	0.0%	0.0%	0	0
PLA Compostable Products	0.0%	0.0%	56	74	Fluorescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	1.9%	0.6%	6,862	2,185	Water-based Paint	0.2%	0.3%	627	962
Plastic Non-bag Film Products	0.8%	1.3%	3,068	4,731	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	3.2%	1.7%	11,964	6,366	Water-based Adhesives/Glues	0.0%	0.0%	0	0
R/C Plastic Products	0.9%	0.5%	3,392	1,842	Oil-based Paint	0.0%	0.0%	0	0
GLASS	1.4%	1.3%	5,025	4,974	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.7%	0.6%	2,487	2,194	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.4%	0.5%	1,424	1,697	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.3%	0.3%	972	1,143	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.0%	0.0%	0	0	Solvents	0.5%	0.8%	1,793	2,921
Non-glass Ceramics	0.0%	0.0%	135	156	Caustic Cleaners	0.0%	0.0%	50	82
R/C Glass	0.0%	0.0%	7	12	Dry-cell Batteries- Single Use	0.0%	0.0%	14	18
METAL	7.6%	2.5%	28,137	9,174	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.3%	0.1%	1,257	489	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.1%	0.1%	365	248	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	0	0	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.0%	0.0%	171	140	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.4%	0.3%	1,413	1,107	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	32	53	Oil Filters	0.1%	0.1%	380	543
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	3.8%	1.5%	14,183	5,386	Medical Wastes	6.6%	5.4%	24,446	19,860
R/C Metal	2.9%	1.7%	10,715	6,289	Sharps	0.0%	0.0%	2	3
ORGANICS	12.6%	3.6%	46,670	13,536	Pharmaceuticals & Vitamins	0.0%	0.0%	56	57
Edible Food Waste- Vegetative	6.2%	2.4%	22,871	8,764	Other Cleaners/Chemicals	0.0%	0.0%	43	71
Inedible Food Waste- Vegetative	1.9%	0.8%	7,038	2,862	Personal Care Products	0.5%	0.3%	1,730	1,251
Edible Food Waste- Meats/Fats/Oils	1.7%	1.0%	6,148	3,686	Other Potentially Hazardous Wastes	0.0%	0.0%	28	44
Inedible Food Waste- Meats/Fats/Oils	0.4%	0.3%	1,453	1,259	RESIDUALS	2.5%	2.0%	9,185	7,240
Yard/Garden Waste- Leaves and Grass	2.0%	1.6%	7,459	5,938	Disposable Diapers	1.8%	1.9%	6,629	7,216
Yard/Garden Waste- Prunings	0.1%	0.2%	523	628	Ash	0.0%	0.0%	0	0
Animal Manure	0.2%	0.2%	892	821	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	0.7%	0.3%	2,555	1,224
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.1%	0.1%	287	212					
Estimated Origin Specified Disposed Tons			370,859		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			48						

Table 30: East WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	18.5%	2.3%	62,032	7,812	WOOD DEBRIS	2.6%	1.5%	8,811	5,127
PAPER PACKAGING	10.5%	1.6%	35,025	5,514	Natural Wood	0.1%	0.1%	359	405
Newspaper Packaging	0.0%	0.0%	145	158	Treated Wood	0.4%	0.7%	1,365	2,201
Cardboard & Kraft Packaging	4.1%	1.0%	13,855	3,189	Painted Wood	1.3%	1.4%	4,512	4,593
Mixed/Low-grade Paper Packaging	2.7%	0.6%	9,051	1,893	Dimensional Lumber	0.2%	0.1%	573	501
Aseptic Containers	0.1%	0.1%	451	209	Engineered Wood	0.3%	0.3%	1,078	967
Gable Top Containers	0.3%	0.1%	930	265	Pallets & Crates	0.0%	0.0%	0	0
Other Polycoated Packaging	0.2%	0.1%	692	305	Other Untreated Wood	0.0%	0.0%	70	106
Compostable Paper Packaging	2.0%	0.4%	6,790	1,420	Wood By-products	0.0%	0.0%	109	115
R/C Paper Packaging	0.9%	0.4%	3,111	1,232	R/C Wood Debris	0.2%	0.2%	745	758
PAPER PRODUCTS	8.1%	1.2%	27,007	3,922	CONSTRUCTION MATERIALS	2.2%	1.3%	7,329	4,219
Newspaper Products	0.4%	0.2%	1,374	591	Plastic Lumber	0.0%	0.0%	0	0
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.1%	0.1%	287	463
Magazines	0.3%	0.3%	1,038	1,039	Asphalt Paving	0.3%	0.4%	877	1,410
High-Grade Paper Products	0.2%	0.1%	643	333	Concrete	0.1%	0.2%	415	637
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	0.2%	0.3%	738	901
Mixed/Low-grade Paper Products	2.1%	0.5%	6,866	1,639	Carpet	0.1%	0.1%	224	358
Compostable Paper Products	4.9%	1.2%	16,559	3,852	Carpet Padding	0.0%	0.0%	20	32
R/C Paper Products	0.2%	0.1%	527	388	Soil, Rocks, & Sand	1.4%	1.2%	4,624	4,177
PLASTIC	16.4%	3.3%	55,039	10,937	Asphalt Roofing	0.0%	0.1%	109	175
PLASTIC PACKAGING	10.4%	1.3%	34,861	4,371	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	1.7%	0.4%	5,656	1,213	Ceramics & Brick	0.0%	0.0%	0	0
#1 PETE Plastic Non-bottles	0.7%	0.2%	2,371	788	R/C Construction Materials	0.0%	0.0%	35	41
#2 HDPE Plastic Natural Bottles	0.4%	0.1%	1,361	480	CONSUMER PRODUCTS	9.9%	3.4%	33,142	11,256
#2 HDPE Plastic Jars and Tubs	0.3%	0.2%	1,127	606	Televisions - LCD	0.8%	1.2%	2,614	4,171
#2 HDPE Plastic Colored Bottles	0.4%	0.2%	1,252	568	Televisions - CRT	1.1%	1.7%	3,593	5,777
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.2%	0.3%	4,103	913	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.2%	0.0%	649	150	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.5%	0.1%	1,641	324	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.5%	0.1%	1,833	471	Computer Printers	0.5%	0.6%	1,628	1,887
PLA Compostable Packaging	0.0%	0.0%	161	145	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.8%	0.1%	2,713	461	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	3.3%	0.6%	11,171	1,858	Other Consumer Electronics	1.4%	1.3%	4,726	4,189
Transportation Packaging Film Plastic	0.2%	0.1%	511	289	Textiles - Organic	3.5%	0.8%	11,826	2,615
Flexible Plastic Packaging	0.1%	0.0%	311	130	Textiles - Synthetic/Mixed/Unknown	0.8%	0.5%	2,769	1,517
R/C Plastic Packaging	0.0%	0.0%	0	0	Shoes/Purses/Belts	0.3%	0.2%	870	611
PLASTIC PRODUCTS	6.0%	2.9%	20,177	9,650	Tires & Other Rubber	0.3%	0.2%	893	650
#1 PETE Plastic Products	0.0%	0.0%	46	64	Furniture	0.2%	0.3%	610	984
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	1.1%	1.5%	3,612	5,078
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.9%	0.4%	3,117	1,442
#5 PP Plastic Products	0.0%	0.0%	0	0	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	163	125	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	1.0%	0.4%	3,312	1,393	Compact Fluorescent Lamps	0.0%	0.0%	0	0
PLA Compostable Products	0.0%	0.0%	14	9	Fluorescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	1.6%	0.3%	5,241	865	Water-based Paint	0.0%	0.0%	0	0
Plastic Non-bag Film Products	0.3%	0.3%	999	1,001	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	2.2%	2.5%	7,413	8,224	Water-based Adhesives/Glues	0.0%	0.0%	92	106
R/C Plastic Products	0.9%	0.8%	2,990	2,771	Oil-based Paint	0.0%	0.0%	0	0
GLASS	3.3%	0.8%	11,177	2,550	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	2.1%	0.5%	6,955	1,729	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.6%	0.2%	2,123	814	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.3%	0.2%	1,048	587	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.1%	0.1%	267	429	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.2%	0.2%	643	565	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.0%	0.0%	142	125	Dry-cell Batteries- Single Use	0.0%	0.0%	130	67
METAL	7.4%	2.8%	24,603	9,235	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.8%	0.3%	2,647	891	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.3%	0.1%	1,142	195	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	79	126	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.1%	0.0%	277	156	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.8%	0.1%	2,571	496	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	158	93	Oil Filters	0.0%	0.0%	89	144
White Goods	1.3%	2.1%	4,450	7,171	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	2.2%	1.2%	7,301	3,941	Medical Wastes	0.6%	0.4%	1,956	1,434
R/C Metal	1.8%	1.0%	5,979	3,385	Sharps	0.0%	0.0%	3	5
ORGANICS	32.4%	4.7%	108,275	15,702	Pharmaceuticals & Vitamins	0.0%	0.0%	40	53
Edible Food Waste- Vegetative	11.5%	2.4%	38,554	7,992	Other Cleaners/Chemicals	0.0%	0.0%	46	74
Inedible Food Waste- Vegetative	5.3%	1.5%	17,867	5,092	Personal Care Products	0.2%	0.1%	669	320
Edible Food Waste- Meats/Fats/Oils	4.2%	1.8%	14,167	5,911	Other Potentially Hazardous Wastes	0.0%	0.0%	92	147
Inedible Food Waste- Meats/Fats/Oils	0.7%	0.4%	2,338	1,300	RESIDUALS	6.3%	1.5%	21,078	5,056
Yard/Garden Waste- Leaves and Grass	2.8%	1.6%	9,321	5,336	Disposable Diapers	2.2%	0.7%	7,496	2,260
Yard/Garden Waste- Prunings	1.0%	0.7%	3,260	2,229	Ash	0.4%	0.6%	1,279	2,057
Animal Manure	5.7%	2.8%	18,912	9,263	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.4%	0.7%	1,394	2,249	Fines/Sorting Residues	3.7%	1.2%	12,304	4,003
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.7%	0.3%	2,463	1,143					
Estimated Origin Specified Disposed Tons			334,603		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count				24					

Table 31: East WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	9.3%	3.4%	12,958	4,803	WOOD DEBRIS	18.4%	5.7%	25,715	7,896
PAPER PACKAGING	5.7%	2.8%	7,939	3,887	Natural Wood	1.0%	1.7%	1,437	2,317
Newspaper Packaging	0.0%	0.0%	9	14	Treated Wood	0.9%	0.8%	1,213	1,097
Cardboard & Kraft Packaging	4.4%	2.5%	6,190	3,503	Painted Wood	8.8%	3.5%	12,283	4,928
Mixed/Low-grade Paper Packaging	0.5%	0.3%	720	425	Dimensional Lumber	2.3%	1.5%	3,191	2,146
Aseptic Containers	0.0%	0.0%	39	38	Engineered Wood	2.6%	1.5%	3,571	2,073
Gable Top Containers	0.1%	0.0%	79	62	Pallets & Crates	0.5%	0.8%	724	1,169
Other Polycoated Packaging	0.0%	0.0%	40	36	Other Untreated Wood	0.0%	0.0%	21	29
Compostable Paper Packaging	0.3%	0.2%	469	332	Wood By-products	0.3%	0.5%	446	725
R/C Paper Packaging	0.3%	0.3%	393	428	R/C Wood Debris	2.0%	1.1%	2,828	1,533
PAPER PRODUCTS	3.6%	1.6%	5,019	2,248	CONSTRUCTION MATERIALS	17.2%	7.0%	23,944	9,792
Newspaper Products	0.4%	0.5%	570	643	Plastic Lumber	0.3%	0.5%	461	749
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	4.1%	3.2%	5,698	4,425
Magazines	0.1%	0.2%	144	222	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.1%	0.1%	90	107	Concrete	0.9%	1.4%	1,199	1,942
Other Groundwood Paper Products	0.0%	0.0%	17	28	Drywall	1.9%	1.9%	2,653	2,611
Mixed/Low-grade Paper Products	1.0%	0.5%	1,371	762	Carpet	2.5%	1.9%	3,482	2,690
Compostable Paper Products	1.6%	1.0%	2,184	1,458	Carpet Padding	2.2%	2.9%	3,042	4,022
R/C Paper Products	0.5%	0.5%	643	684	Soil, Rocks, & Sand	0.2%	0.3%	294	392
PLASTIC	9.8%	4.0%	13,676	5,573	Asphalt Roofing	4.8%	5.3%	6,668	7,445
PLASTIC PACKAGING	3.0%	1.2%	4,128	1,636	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.3%	0.3%	459	448	Ceramics & Brick	0.1%	0.1%	108	146
#1 PETE Plastic Non-bottles	0.1%	0.1%	155	93	R/C Construction Materials	0.2%	0.3%	339	472
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	51	35	CONSUMER PRODUCTS	22.0%	5.7%	30,660	7,974
#2 HDPE Plastic Jars and Tubs	0.1%	0.1%	124	92	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.1%	0.1%	168	113	Televisions - CRT	0.5%	0.9%	741	1,200
#3 PVC Plastic Packaging	0.0%	0.0%	6	8	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.2%	0.1%	223	118	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.0%	0.0%	35	21	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.1%	0.1%	190	109	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.4%	0.3%	578	435	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	1	2	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.1%	0.1%	184	104	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	0.7%	0.4%	938	544	Other Consumer Electronics	0.7%	0.7%	942	928
Transportation Packaging Film Plastic	0.6%	0.5%	823	732	Textiles- Organic	2.4%	1.3%	3,348	1,814
Flexible Plastic Packaging	0.1%	0.1%	117	98	Textiles- Synthetic/Mixed/Unknown	1.1%	0.7%	1,558	978
R/C Plastic Packaging	0.1%	0.1%	75	123	Shoes/Purses/Belts	0.8%	0.8%	1,059	1,164
PLASTIC PRODUCTS	6.8%	3.6%	9,548	5,030	Tires & Other Rubber	0.3%	0.2%	376	330
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	11.4%	5.7%	15,852	7,929
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	3.7%	2.9%	5,177	3,996
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	1.2%	1.7%	1,608	2,402
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.7%	0.4%	946	565
#5 PP Plastic Products	0.0%	0.0%	0	0	Pesticides	0.1%	0.1%	76	124
#6 PS Plastic Products	0.0%	0.0%	10	16	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	0.8%	0.4%	1,124	528	Compact Florescent Lamps	0.0%	0.0%	0	0
PLA Compostable Products	0.0%	0.0%	1	2	Florescent Tubes	0.0%	0.0%	9	14
Plastic Garbage Bags	0.6%	0.3%	897	370	Water-based Paint	0.2%	0.2%	229	344
Plastic Non-bag Film Products	1.5%	2.2%	2,133	3,026	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	3.1%	2.1%	4,322	2,894	Water-based Adhesives/Glues	0.0%	0.0%	23	31
R/C Plastic Products	0.8%	0.7%	1,061	965	Oil-based Paint	0.0%	0.0%	0	0
GLASS	0.8%	0.4%	1,075	593	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.2%	0.1%	311	202	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.1%	0.1%	74	96	Primers/Sealings/Coatings	0.1%	0.1%	108	174
Brown/Other Colored Glass Containers	0.1%	0.1%	204	190	Water Repellents & Waterproofers	0.0%	0.0%	35	57
Plate Glass	0.1%	0.1%	74	106	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.1%	0.1%	86	124	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.2%	0.3%	327	373	Dry-cell Batteries- Single Use	0.0%	0.0%	41	36
METAL	5.6%	1.8%	7,776	2,486	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.1%	0.1%	145	152	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.1%	0.0%	91	64	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	8	12	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.1%	0.1%	94	96	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.2%	0.2%	327	262	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	34	47	Oil Filters	0.0%	0.0%	0	0
White Goods	1.4%	1.6%	1,953	2,166	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	2.1%	1.1%	2,952	1,575	Medical Wastes	0.1%	0.1%	88	104
R/C Metal	1.6%	0.6%	2,172	889	Sharps	0.0%	0.0%	2	3
ORGANICS	15.4%	7.2%	21,453	9,988	Pharmaceuticals & Vitamins	0.0%	0.0%	35	57
Edible Food Waste- Vegetative	2.9%	1.6%	3,993	2,239	Other Cleaners/Chemicals	0.0%	0.0%	0	0
Inedible Food Waste- Vegetative	2.0%	1.6%	2,808	2,215	Personal Care Products	0.2%	0.2%	278	289
Edible Food Waste- Meats/Fats/Oils	1.8%	1.7%	2,443	2,420	Other Potentially Hazardous Wastes	0.0%	0.0%	21	34
Inedible Food Waste- Meats/Fats/Oils	0.3%	0.4%	373	553	RESIDUALS	0.9%	0.5%	1,232	645
Yard/Garden Waste- Leaves and Grass	2.1%	2.3%	2,920	3,233	Disposable Diapers	0.3%	0.2%	387	347
Yard/Garden Waste- Prunings	0.1%	0.1%	165	187	Ash	0.0%	0.0%	0	0
Animal Manure	6.1%	6.5%	8,539	9,014	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.0%	0.0%	35	57	Fines/Sorting Residues	0.6%	0.4%	845	505
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.1%	0.1%	178	157					
Estimated Origin Specified Disposed Tons			139,435		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			32						



Northwest Waste Generation Area Composition Tables

Table 32: Northwest WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	14.7%	3.0%	49,075	9,895	WOOD DEBRIS	22.7%	4.9%	75,986	16,518
PAPER PACKAGING	9.3%	2.2%	31,144	7,495	Natural Wood	0.1%	0.2%	454	725
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.9%	0.5%	2,923	1,822
Cardboard & Kraft Packaging	4.4%	1.2%	14,585	4,029	Painted Wood	5.5%	2.0%	18,503	6,620
Mixed/Low-grade Paper Packaging	1.0%	0.3%	3,405	1,060	Dimensional Lumber	4.1%	2.0%	13,582	6,760
Aseptic Containers	0.0%	0.0%	100	48	Engineered Wood	6.9%	2.8%	23,054	9,224
Gable Top Containers	0.1%	0.0%	191	116	Pallets & Crates	1.0%	0.9%	3,473	3,161
Other Polycoated Packaging	0.0%	0.0%	79	55	Other Untreated Wood	0.1%	0.2%	434	601
Compostable Paper Packaging	3.4%	1.5%	11,534	4,931	Wood By-products	0.3%	0.4%	969	1,221
R/C Paper Packaging	0.4%	0.1%	1,251	467	R/C Wood Debris	3.8%	1.7%	12,593	5,784
PAPER PRODUCTS	5.4%	1.6%	17,931	5,288	CONSTRUCTION MATERIALS	10.5%	3.6%	35,229	12,089
Newspaper Products	0.2%	0.1%	549	351	Plastic Lumber	0.5%	0.7%	1,585	2,189
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.1%	0.1%	430	499
Magazines	0.2%	0.2%	569	590	Asphalt Paving	0.3%	0.5%	1,087	1,751
High-Grade Paper Products	0.1%	0.1%	497	253	Concrete	0.1%	0.2%	451	726
Other Groundwood Paper Products	0.0%	0.0%	77	121	Drywall	0.4%	0.4%	1,419	1,436
Mixed/Low-grade Paper Products	1.3%	0.6%	4,445	2,103	Carpet	1.4%	1.4%	4,750	4,551
Compostable Paper Products	2.5%	0.9%	8,421	3,052	Carpet Padding	0.4%	0.7%	1,498	2,408
R/C Paper Products	1.0%	1.0%	3,373	3,184	Soil, Rocks, & Sand	2.2%	1.6%	7,321	5,362
PLASTIC	11.2%	1.5%	37,651	5,148	Asphalt Roofing	0.3%	0.3%	954	940
PLASTIC PACKAGING	5.5%	1.3%	18,544	4,226	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.3%	0.1%	1,134	357	Ceramics & Brick	1.9%	1.7%	6,516	5,832
#1 PETE Plastic Non-bottles	0.4%	0.2%	1,196	699	R/C Construction Materials	2.8%	2.0%	9,217	6,624
#2 HDPE Plastic Natural Bottles	0.1%	0.1%	410	186	CONSUMER PRODUCTS	12.1%	2.6%	40,479	8,544
#2 HDPE Plastic Jars and Tubs	0.5%	0.2%	1,515	805	Televisions - LCD	0.6%	1.0%	2,122	3,425
#2 HDPE Plastic Colored Bottles	0.1%	0.0%	394	156	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	1	2	Computer Monitors - CRT	0.3%	0.4%	954	1,487
#5 PP Plastic Packaging	0.6%	0.3%	2,035	943	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.1%	415	189	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.4%	0.2%	1,234	502	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.3%	0.1%	947	253	Computer Printers	0.6%	0.4%	1,889	1,315
PLA Compostable Packaging	0.0%	0.0%	5	4	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.2%	0.1%	593	184	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	1.8%	0.5%	6,053	1,718	Other Consumer Electronics	0.5%	0.5%	1,591	1,817
Transportation Packaging Film Plastic	0.3%	0.2%	1,063	604	Textiles - Organic	3.2%	1.1%	10,612	3,634
Flexible Plastic Packaging	0.1%	0.1%	340	264	Textiles - Synthetic/Mixed/Unknown	1.6%	0.6%	5,233	2,072
R/C Plastic Packaging	0.4%	0.5%	1,208	1,786	Shoes/Purses/Belts	0.5%	0.3%	1,601	1,103
PLASTIC PRODUCTS	5.7%	1.1%	19,107	3,518	Tires & Other Rubber	1.3%	1.0%	4,291	3,458
#1 PETE Plastic Products	0.0%	0.0%	5	7	Furniture	1.7%	1.1%	5,700	3,696
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	1.9%	1.6%	6,486	5,333
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.7%	0.4%	2,345	1,180
#5 PP Plastic Products	0.0%	0.0%	0	0	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	49	42	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	1.0%	0.3%	3,332	860	Compact Florescent Lamps	0.0%	0.0%	22	35
PLA Compostable Products	0.0%	0.0%	4	3	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	0.9%	0.2%	3,098	767	Water-based Paint	0.0%	0.0%	17	27
Plastic Non-bag Film Products	0.4%	0.3%	1,231	1,122	Solvent-based Adhesives/Glues	0.0%	0.0%	9	15
Bulky Rigid Plastic Products	2.5%	0.7%	8,488	2,250	Water-based Adhesives/Glues	0.0%	0.0%	132	145
R/C Plastic Products	0.9%	0.5%	2,902	1,543	Oil-based Paint	0.0%	0.0%	49	76
GLASS	1.9%	0.7%	6,489	2,221	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	55	75
Clear Glass Containers	0.6%	0.3%	2,006	846	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.4%	0.2%	1,260	824	Primers/Sealings/Coatings	0.1%	0.2%	368	593
Brown/Other Colored Glass Containers	0.2%	0.1%	799	413	Water Repellents & Waterproofers	0.0%	0.0%	30	47
Plate Glass	0.4%	0.4%	1,328	1,480	Solvents	0.0%	0.0%	93	145
Non-glass Ceramics	0.2%	0.2%	510	502	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.2%	0.2%	587	557	Dry-cell Batteries - Single Use	0.0%	0.0%	52	47
METAL	10.9%	2.5%	36,457	8,456	Dry-cell Batteries - Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.3%	0.1%	920	461	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.1%	0.0%	470	161	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	154	160	Motor Oil	0.1%	0.1%	210	338
Other Non-ferrous Metal	0.2%	0.3%	631	838	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.4%	0.2%	1,450	694	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	107	130	Oil Filters	0.1%	0.2%	483	774
White Goods	1.0%	1.1%	3,260	3,811	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	5.5%	1.5%	18,571	4,909	Medical Wastes	0.1%	0.1%	285	194
R/C Metal	3.3%	1.1%	10,895	3,838	Sharps	0.0%	0.0%	0	1
ORGANICS	12.9%	3.4%	43,155	11,288	Pharmaceuticals & Vitamins	0.0%	0.0%	18	15
Edible Food Waste- Vegetative	4.7%	1.4%	15,796	4,607	Other Cleaners/Chemicals	0.0%	0.1%	156	249
Inedible Food Waste- Vegetative	2.1%	0.9%	6,938	3,119	Personal Care Products	0.1%	0.1%	268	233
Edible Food Waste- Meats/Fats/Oils	2.3%	1.5%	7,628	5,102	Other Potentially Hazardous Wastes	0.0%	0.0%	99	114
Inedible Food Waste- Meats/Fats/Oils	0.6%	0.6%	1,985	1,879	RESIDUALS	2.4%	0.8%	7,894	2,807
Yard/Garden Waste- Leaves and Grass	1.7%	1.1%	5,708	3,751	Disposable Diapers	2.0%	0.8%	6,570	2,635
Yard/Garden Waste- Prunings	0.3%	0.2%	980	791	Ash	0.0%	0.1%	113	182
Animal Manure	0.5%	0.3%	1,659	934	Dust	0.0%	0.0%	45	71
Animal Carcasses & Offal	0.2%	0.3%	784	973	Fines/Sorting Residues	0.3%	0.1%	1,166	390
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.5%	0.4%	1,677	1,450					
Estimated Origin Specified Disposed Tons			334,760		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			52						

Table 33: Northwest WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	18.5%	5.2%	29,559	8,251	WOOD DEBRIS	23.0%	8.1%	36,683	12,952
PAPER PACKAGING	13.7%	4.4%	21,825	7,033	Natural Wood	0.0%	0.0%	0	0
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.2%	0.3%	293	472
Cardboard & Kraft Packaging	5.9%	2.1%	9,424	3,299	Painted Wood	3.6%	2.5%	5,784	3,969
Mixed/Low-grade Paper Packaging	1.3%	0.6%	2,006	964	Dimensional Lumber	5.8%	3.8%	9,219	6,053
Aseptic Containers	0.0%	0.0%	18	21	Engineered Wood	9.7%	4.5%	15,545	7,256
Gable Top Containers	0.0%	0.0%	15	18	Pallets & Crates	1.9%	1.9%	3,076	3,097
Other Polycoated Packaging	0.0%	0.0%	27	26	Other Untreated Wood	0.0%	0.0%	47	54
Compostable Paper Packaging	6.0%	3.0%	9,510	4,789	Wood By-products	0.0%	0.0%	44	71
R/C Paper Packaging	0.5%	0.3%	826	440	R/C Wood Debris	1.7%	1.5%	2,676	2,336
PAPER PRODUCTS	4.8%	1.7%	7,734	2,727	CONSTRUCTION MATERIALS	11.3%	5.2%	18,033	8,248
Newspaper Products	0.2%	0.2%	288	326	Plastic Lumber	0.9%	1.4%	1,396	2,169
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.3%	0.3%	430	499
Magazines	0.2%	0.3%	283	433	Asphalt Paving	0.7%	1.1%	1,087	1,751
High-Grade Paper Products	0.1%	0.1%	172	92	Concrete	0.3%	0.5%	451	726
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	0.0%	0.0%	0	0
Mixed/Low-grade Paper Products	1.1%	0.9%	1,738	1,414	Carpet	1.2%	1.5%	1,982	2,319
Compostable Paper Products	2.6%	1.7%	4,134	2,710	Carpet Padding	0.9%	1.5%	1,498	2,408
R/C Paper Products	0.7%	0.6%	1,119	965	Soil, Rocks, & Sand	2.7%	1.9%	4,243	3,057
PLASTIC	12.5%	2.9%	19,900	4,603	Asphalt Roofing	0.3%	0.4%	513	661
PLASTIC PACKAGING	6.6%	2.2%	10,598	3,580	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.3%	0.1%	444	217	Ceramics & Brick	2.0%	3.2%	3,151	5,067
#1 PETE Plastic Non-bottles	0.5%	0.4%	767	684	R/C Construction Materials	2.1%	2.1%	3,281	3,382
#2 HDPE Plastic Natural Bottles	0.1%	0.1%	138	161	CONSUMER PRODUCTS	9.1%	3.8%	14,491	6,030
#2 HDPE Plastic Jars and Tubs	0.8%	0.5%	1,203	746	Televisions - LCD	1.3%	2.1%	2,122	3,425
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	32	22	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	1	2	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.4%	0.3%	706	432	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.1%	215	173	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.5%	0.3%	843	486	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.2%	0.1%	282	138	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	3	4	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.1%	0.1%	157	98	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	2.2%	0.9%	3,517	1,468	Other Consumer Electronics	0.4%	0.6%	604	974
Transportation Packaging Film Plastic	0.6%	0.4%	956	599	Textiles- Organic	2.2%	1.3%	3,541	2,022
Flexible Plastic Packaging	0.1%	0.1%	138	217	Textiles- Synthetic/Mixed/Unknown	1.5%	1.0%	2,394	1,520
R/C Plastic Packaging	0.8%	1.1%	1,197	1,786	Shoes/Purses/Belts	0.3%	0.3%	441	442
PLASTIC PRODUCTS	5.8%	1.8%	9,302	2,886	Tires & Other Rubber	1.1%	1.1%	1,682	1,734
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	1.6%	1.3%	2,489	2,117
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	0.8%	1.2%	1,217	1,956
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.9%	0.6%	1,401	1,031
#5 PP Plastic Products	0.0%	0.0%	0	0	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	38	40	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	0.6%	0.2%	947	303	Compact Fluorescent Lamps	0.0%	0.0%	22	35
PLA Compostable Products	0.0%	0.0%	1	1	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	1.0%	0.4%	1,641	608	Water-based Paint	0.0%	0.0%	0	0
Plastic Non-bag Film Products	0.0%	0.0%	0	0	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	3.1%	1.2%	4,881	1,844	Water-based Adhesives/Glues	0.0%	0.0%	0	0
R/C Plastic Products	1.1%	0.9%	1,794	1,420	Oil-based Paint	0.0%	0.0%	0	0
GLASS	1.7%	1.1%	2,696	1,695	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	45	73
Clear Glass Containers	0.2%	0.2%	324	281	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.4%	0.5%	681	760	Primers/Sealings/Coatings	0.2%	0.4%	368	593
Brown/Other Colored Glass Containers	0.2%	0.2%	288	245	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.8%	0.9%	1,302	1,480	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.0%	0.0%	19	30	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.1%	0.1%	83	134	Dry-cell Batteries- Single Use	0.0%	0.0%	3	3
METAL	9.8%	3.0%	15,681	4,787	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.2%	0.1%	289	145	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.1%	0.1%	180	110	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	0	0	Motor Oil	0.1%	0.2%	210	338
Other Non-ferrous Metal	0.0%	0.1%	64	101	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.5%	0.4%	768	636	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	0	0	Oil Filters	0.3%	0.5%	483	774
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	5.5%	2.1%	8,712	3,354	Medical Wastes	0.1%	0.1%	133	171
R/C Metal	3.6%	1.3%	5,667	2,109	Sharps	0.0%	0.0%	0	0
ORGANICS	12.1%	5.6%	19,334	8,857	Pharmaceuticals & Vitamins	0.0%	0.0%	0	0
Edible Food Waste- Vegetative	3.4%	1.3%	5,470	2,138	Other Cleaners/Chemicals	0.0%	0.0%	0	0
Inedible Food Waste- Vegetative	1.5%	1.3%	2,316	2,149	Personal Care Products	0.0%	0.0%	39	36
Edible Food Waste- Meats/Fats/Oils	3.5%	3.1%	5,641	4,969	Other Potentially Hazardous Wastes	0.1%	0.1%	97	114
Inedible Food Waste- Meats/Fats/Oils	0.9%	1.2%	1,506	1,870	RESIDUALS	1.1%	0.6%	1,723	1,002
Yard/Garden Waste- Leaves and Grass	1.6%	1.7%	2,593	2,710	Disposable Diapers	0.6%	0.5%	1,012	812
Yard/Garden Waste- Prunings	0.1%	0.2%	217	351	Ash	0.1%	0.1%	113	182
Animal Manure	0.2%	0.2%	352	314	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.1%	0.1%	99	158	Fines/Sorting Residues	0.4%	0.2%	598	267
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.7%	0.9%	1,141	1,404					
Estimated Origin Specified Disposed Tons			159,500		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			24						

Table 34: Northwest WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	14.9%	5.2%	14,258	4,947	WOOD DEBRIS	10.0%	6.3%	9,617	6,026
PAPER PACKAGING	5.2%	1.3%	4,956	1,216	Natural Wood	0.0%	0.0%	0	0
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.6%	0.6%	609	598
Cardboard & Kraft Packaging	1.9%	0.6%	1,812	572	Painted Wood	3.1%	2.1%	2,955	2,039
Mixed/Low-grade Paper Packaging	1.4%	0.5%	1,302	434	Dimensional Lumber	0.5%	0.3%	526	326
Aseptic Containers	0.1%	0.0%	60	31	Engineered Wood	0.2%	0.4%	240	379
Gable Top Containers	0.2%	0.1%	163	113	Pallets & Crates	0.0%	0.0%	0	0
Other Polycoated Packaging	0.0%	0.0%	37	45	Other Untreated Wood	0.0%	0.0%	7	9
Compostable Paper Packaging	1.3%	0.4%	1,235	381	Wood By-products	0.8%	1.3%	778	1,207
R/C Paper Packaging	0.4%	0.1%	347	129	R/C Wood Debris	4.7%	4.4%	4,502	4,209
PAPER PRODUCTS	9.7%	4.7%	9,302	4,482	CONSTRUCTION MATERIALS	4.9%	4.2%	4,671	3,995
Newspaper Products	0.2%	0.1%	240	127	Plastic Lumber	0.2%	0.3%	189	295
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.0%	0.0%	0	0
Magazines	0.0%	0.0%	13	20	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.3%	0.2%	300	233	Concrete	0.0%	0.0%	0	0
Other Groundwood Paper Products	0.1%	0.1%	77	121	Drywall	0.8%	1.0%	723	917
Mixed/Low-grade Paper Products	2.6%	1.6%	2,492	1,543	Carpet	2.6%	4.0%	2,454	3,884
Compostable Paper Products	4.1%	1.4%	3,934	1,352	Carpet Padding	0.0%	0.0%	0	0
R/C Paper Products	2.3%	3.2%	2,246	3,035	Soil, Rocks, & Sand	0.2%	0.2%	157	183
PLASTIC	12.2%	1.8%	11,661	1,687	Asphalt Roofing	0.0%	0.0%	22	36
PLASTIC PACKAGING	7.1%	2.1%	6,779	2,044	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.6%	0.2%	541	203	Ceramics & Brick	1.2%	1.8%	1,124	1,745
#1 PETE Plastic Non-bottles	0.4%	0.1%	367	121	R/C Construction Materials	0.0%	0.0%	0	0
#2 HDPE Plastic Natural Bottles	0.3%	0.1%	249	86	CONSUMER PRODUCTS	18.3%	4.1%	17,565	3,968
#2 HDPE Plastic Jars and Tubs	0.1%	0.1%	77	72	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.3%	0.2%	324	150	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0	Computer Monitors - CRT	1.0%	1.6%	954	1,487
#5 PP Plastic Packaging	1.3%	0.9%	1,231	831	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.2%	0.1%	191	75	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.4%	0.1%	343	123	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.6%	0.2%	568	193	Computer Printers	1.6%	1.3%	1,555	1,202
PLA Compostable Packaging	0.0%	0.0%	1	2	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.4%	0.2%	378	150	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	2.3%	0.9%	2,230	852	Other Consumer Electronics	1.0%	1.6%	987	1,533
Transportation Packaging Film Plastic	0.1%	0.1%	73	64	Textiles- Organic	6.6%	3.1%	6,326	2,987
Flexible Plastic Packaging	0.2%	0.2%	194	150	Textiles- Synthetic/Mixed/Unknown	1.8%	1.2%	1,705	1,170
R/C Plastic Packaging	0.0%	0.0%	11	15	Shoes/Purses/Belts	1.2%	1.1%	1,160	1,011
PLASTIC PRODUCTS	5.1%	1.5%	4,882	1,448	Tires & Other Rubber	2.4%	3.1%	2,293	2,957
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	1.3%	2.1%	1,259	1,977
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	1.4%	2.1%	1,326	2,060
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.8%	0.5%	738	477
#5 PP Plastic Products	0.0%	0.0%	0	0	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	5	6	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	1.3%	0.5%	1,282	508	Compact Florescent Lamps	0.0%	0.0%	0	0
PLA Compostable Products	0.0%	0.0%	3	3	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	1.2%	0.4%	1,121	411	Water-based Paint	0.0%	0.0%	17	27
Plastic Non-bag Film Products	0.7%	1.1%	714	1,028	Solvent-based Adhesives/Glues	0.0%	0.0%	9	15
Bulky Rigid Plastic Products	1.3%	0.8%	1,227	800	Water-based Adhesives/Glues	0.1%	0.1%	88	128
R/C Plastic Products	0.6%	0.3%	530	273	Oil-based Paint	0.1%	0.1%	49	76
GLASS	2.9%	1.1%	2,814	1,075	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	9	15
Clear Glass Containers	1.7%	0.8%	1,587	795	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.6%	0.3%	579	318	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.5%	0.3%	502	332	Water Repellents & Waterproofers	0.0%	0.0%	30	47
Plate Glass	0.0%	0.0%	26	29	Solvents	0.1%	0.2%	93	145
Non-glass Ceramics	0.0%	0.0%	0	0	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.1%	0.2%	120	177	Dry-cell Batteries- Single Use	0.1%	0.0%	49	47
METAL	7.9%	3.4%	7,547	3,256	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.4%	0.2%	373	192	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.3%	0.1%	255	111	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	0	0	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.6%	0.9%	540	831	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.6%	0.2%	545	191	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.1%	0.1%	107	130	Oil Filters	0.0%	0.0%	0	0
White Goods	1.2%	1.9%	1,162	1,826	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	3.7%	2.2%	3,524	2,074	Medical Wastes	0.2%	0.1%	150	92
R/C Metal	1.1%	0.9%	1,042	845	Sharps	0.0%	0.0%	0	1
ORGANICS	22.2%	7.0%	21,273	6,673	Pharmaceuticals & Vitamins	0.0%	0.0%	13	13
Edible Food Waste- Vegetative	10.1%	4.2%	9,688	4,007	Other Cleaners/Chemicals	0.0%	0.0%	0	0
Inedible Food Waste- Vegetative	4.5%	2.3%	4,343	2,249	Personal Care Products	0.2%	0.2%	229	231
Edible Food Waste- Meats/Fats/Oils	2.1%	1.2%	1,987	1,160	Other Potentially Hazardous Wastes	0.0%	0.0%	2	3
Inedible Food Waste- Meats/Fats/Oils	0.5%	0.2%	466	183	RESIDUALS	6.0%	2.7%	5,786	2,560
Yard/Garden Waste- Leaves and Grass	3.0%	2.7%	2,870	2,564	Disposable Diapers	5.4%	2.6%	5,218	2,447
Yard/Garden Waste- Prunings	0.7%	0.7%	656	701	Ash	0.0%	0.0%	0	0
Animal Manure	1.0%	0.8%	939	758	Dust	0.0%	0.1%	45	71
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	0.5%	0.3%	523	281
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.3%	0.2%	324	168					
Estimated Origin Specified Disposed Tons			95,930		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			12						

Table 35: Northwest WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	6.6%	2.9%	5,258	2,311	WOOD DEBRIS	37.4%	10.5%	29,686	8,294
PAPER PACKAGING	5.5%	2.9%	4,363	2,287	Natural Wood	0.6%	0.9%	454	725
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	2.5%	2.1%	2,022	1,655
Cardboard & Kraft Packaging	4.2%	2.8%	3,349	2,241	Painted Wood	12.3%	6.2%	9,764	4,890
Mixed/Low-grade Paper Packaging	0.1%	0.1%	97	73	Dimensional Lumber	4.8%	3.8%	3,837	2,992
Aseptic Containers	0.0%	0.0%	22	31	Engineered Wood	9.2%	7.2%	7,270	5,682
Gable Top Containers	0.0%	0.0%	13	20	Pallets & Crates	0.5%	0.8%	397	633
Other Polycoated Packaging	0.0%	0.0%	15	18	Other Untreated Wood	0.5%	0.8%	380	598
Compostable Paper Packaging	1.0%	1.4%	790	1,110	Wood By-products	0.2%	0.2%	148	172
R/C Paper Packaging	0.1%	0.1%	79	88	R/C Wood Debris	6.8%	4.0%	5,416	3,207
PAPER PRODUCTS	1.1%	0.8%	895	667	CONSTRUCTION MATERIALS	15.8%	9.9%	12,525	7,884
Newspaper Products	0.0%	0.0%	22	26	Plastic Lumber	0.0%	0.0%	0	0
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.0%	0.0%	0	0
Magazines	0.3%	0.5%	273	400	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.0%	0.0%	25	36	Concrete	0.0%	0.0%	0	0
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	0.9%	1.4%	696	1,106
Mixed/Low-grade Paper Products	0.3%	0.3%	214	203	Carpet	0.4%	0.6%	313	495
Compostable Paper Products	0.4%	0.5%	353	377	Carpet Padding	0.0%	0.0%	0	0
R/C Paper Products	0.0%	0.0%	8	8	Soil, Rocks, & Sand	3.7%	5.5%	2,921	4,401
PLASTIC	7.7%	2.0%	6,090	1,569	Asphalt Roofing	0.5%	0.8%	419	668
PLASTIC PACKAGING	1.5%	1.2%	1,166	932	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.2%	0.2%	149	197	Ceramics & Brick	2.8%	2.9%	2,241	2,299
#1 PETE Plastic Non-bottles	0.1%	0.1%	62	73	R/C Construction Materials	7.5%	7.2%	5,936	5,696
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	23	37	CONSUMER PRODUCTS	10.6%	5.8%	8,422	4,571
#2 HDPE Plastic Jars and Tubs	0.3%	0.4%	235	292	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	38	37	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.1%	0.1%	99	106	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.0%	0.0%	9	11	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.1%	0.0%	48	32	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.1%	0.1%	98	88	Computer Printers	0.4%	0.7%	334	534
PLA Compostable Packaging	0.0%	0.0%	1	1	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.1%	0.1%	57	42	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	0.4%	0.3%	306	266	Other Consumer Electronics	0.0%	0.0%	0	0
Transportation Packaging Film Plastic	0.0%	0.0%	34	31	Textiles- Organic	0.9%	0.6%	745	444
Flexible Plastic Packaging	0.0%	0.0%	8	11	Textiles- Synthetic/Mixed/Unknown	1.4%	1.0%	1,134	783
R/C Plastic Packaging	0.0%	0.0%	0	0	Shoes/Purses/Belts	0.0%	0.0%	0	0
PLASTIC PRODUCTS	6.2%	1.8%	4,923	1,398	Tires & Other Rubber	0.4%	0.6%	315	456
#1 PETE Plastic Products	0.0%	0.0%	5	7	Furniture	2.5%	2.9%	1,952	2,295
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	5.0%	5.7%	3,942	4,514
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.3%	0.4%	206	318
#5 PP Plastic Products	0.0%	0.0%	0	0	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	6	9	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	1.4%	0.8%	1,103	625	Compact Florescent Lamps	0.0%	0.0%	0	0
PLA Compostable Products	0.0%	0.0%	0	0	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	0.4%	0.3%	336	225	Water-based Paint	0.0%	0.0%	0	0
Plastic Non-bag Film Products	0.7%	0.6%	517	448	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	3.0%	1.3%	2,379	1,011	Water-based Adhesives/Glues	0.1%	0.1%	44	69
R/C Plastic Products	0.7%	0.7%	577	537	Oil-based Paint	0.0%	0.0%	0	0
GLASS	1.2%	1.2%	979	951	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.1%	0.1%	95	68	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.0%	0.0%	0	0	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.0%	0.0%	9	15	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.0%	0.0%	0	0	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.6%	0.6%	491	501	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.5%	0.6%	384	511	Dry-cell Batteries- Single Use	0.0%	0.0%	0	0
METAL	16.7%	7.8%	13,229	6,164	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.3%	0.5%	258	393	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.0%	0.0%	36	40	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.2%	0.2%	154	160	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.0%	0.1%	28	44	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.2%	0.3%	136	204	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	0	0	Oil Filters	0.0%	0.0%	0	0
White Goods	2.6%	4.2%	2,098	3,344	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	8.0%	3.7%	6,334	2,924	Medical Wastes	0.0%	0.0%	2	4
R/C Metal	5.3%	3.9%	4,185	3,093	Sharps	0.0%	0.0%	0	0
ORGANICS	3.2%	2.7%	2,548	2,111	Pharmaceuticals & Vitamins	0.0%	0.0%	5	7
Edible Food Waste- Vegetative	0.8%	1.0%	638	776	Other Cleaners/Chemicals	0.2%	0.3%	156	249
Inedible Food Waste- Vegetative	0.4%	0.3%	280	237	Personal Care Products	0.0%	0.0%	0	0
Edible Food Waste- Meats/Fats/Oils	0.0%	0.0%	0	0	Other Potentially Hazardous Wastes	0.0%	0.0%	0	0
Inedible Food Waste- Meats/Fats/Oils	0.0%	0.0%	13	20	RESIDUALS	0.5%	0.7%	385	565
Yard/Garden Waste- Leaves and Grass	0.3%	0.5%	245	390	Disposable Diapers	0.4%	0.7%	339	542
Yard/Garden Waste- Prunings	0.1%	0.1%	107	109	Ash	0.0%	0.0%	0	0
Animal Manure	0.5%	0.6%	368	447	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.9%	1.2%	686	960	Fines/Sorting Residues	0.1%	0.1%	46	43
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.3%	0.4%	212	323					
Estimated Origin Specified Disposed Tons			79,330		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			16						



Puget Sound Waste Generation Area Composition Tables

Table 36: Puget Sound WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	15.1%	2.8%	424,457	78,886	WOOD DEBRIS	13.4%	4.5%	377,029	127,964
PAPER PACKAGING	8.7%	2.0%	244,709	55,561	Natural Wood	0.9%	1.1%	26,434	32,374
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.5%	0.3%	14,679	9,210
Cardboard & Kraft Packaging	5.0%	1.6%	140,561	44,765	Painted Wood	5.9%	3.4%	166,913	95,801
Mixed/Low-grade Paper Packaging	1.1%	0.3%	30,678	8,175	Dimensional Lumber	1.2%	0.9%	33,845	24,773
Aseptic Containers	0.1%	0.0%	2,433	1,004	Engineered Wood	1.8%	1.0%	52,046	27,391
Gable Top Containers	0.1%	0.0%	2,649	1,245	Pallets & Crates	0.8%	0.7%	22,098	18,538
Other Polycoated Packaging	0.0%	0.0%	1,355	595	Other Untreated Wood	0.1%	0.1%	1,941	1,467
Compostable Paper Packaging	1.9%	0.9%	54,734	26,421	Wood By-products	0.0%	0.0%	38	51
R/C Paper Packaging	0.4%	0.2%	12,299	5,051	R/C Wood Debris	2.1%	1.3%	59,035	35,644
PAPER PRODUCTS	6.4%	1.4%	179,748	39,714	CONSTRUCTION MATERIALS	12.2%	5.0%	343,768	141,407
Newspaper Products	0.3%	0.2%	8,933	7,011	Plastic Lumber	1.0%	1.4%	27,485	39,987
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.3%	0.3%	7,717	9,588
Magazines	0.1%	0.1%	3,912	3,524	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.2%	0.1%	5,723	3,458	Concrete	1.2%	1.2%	33,127	33,310
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	4.6%	3.9%	129,660	110,057
Mixed/Low-grade Paper Products	1.6%	0.6%	46,179	17,367	Carpet	0.9%	0.7%	26,534	20,246
Compostable Paper Products	3.4%	0.7%	95,951	20,608	Carpet Padding	0.1%	0.2%	4,011	4,364
R/C Paper Products	0.7%	0.4%	19,050	11,120	Soil, Rocks, & Sand	0.1%	0.1%	2,827	3,739
PLASTIC	11.7%	1.3%	328,658	37,053	Asphalt Roofing	2.7%	2.8%	75,686	77,912
PLASTIC PACKAGING	6.2%	1.0%	174,375	28,558	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.6%	0.2%	16,649	4,405	Ceramics & Brick	0.4%	0.3%	9,886	9,666
#1 PETE Plastic Non-bottles	0.3%	0.1%	9,257	1,584	R/C Construction Materials	1.0%	0.6%	26,836	17,163
#2 HDPE Plastic Natural Bottles	0.1%	0.0%	3,901	1,323	CONSUMER PRODUCTS	6.0%	2.2%	167,840	61,591
#2 HDPE Plastic Jars and Tubs	0.2%	0.1%	4,287	1,633	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	5,188	1,480	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	64	57	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.7%	0.1%	18,501	3,566	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	2,194	489	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.4%	0.2%	11,487	4,443	Computer Peripherals	0.1%	0.1%	1,557	1,854
Expanded Polystyrene Packaging	0.5%	0.2%	14,609	4,521	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	912	451	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.5%	0.1%	13,244	3,950	Electronic Gaming Equipment	0.1%	0.1%	1,847	2,898
Packaging Film Plastic	2.2%	0.4%	61,918	11,239	Other Consumer Electronics	0.2%	0.3%	5,771	7,264
Transportation Packaging Film Plastic	0.3%	0.1%	8,227	3,975	Textiles- Organic	2.3%	1.2%	65,776	34,514
Flexible Plastic Packaging	0.1%	0.0%	2,946	1,212	Textiles- Synthetic/Mixed/Unknown	1.3%	0.5%	36,842	14,859
R/C Plastic Packaging	0.0%	0.0%	990	862	Shoes/Purses/Belts	0.3%	0.1%	8,020	4,040
PLASTIC PRODUCTS	5.5%	1.5%	154,284	42,427	Tires & Other Rubber	0.3%	0.3%	9,699	9,618
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	0.3%	0.4%	7,359	11,753
#2 HDPE Plastic Products:	0.0%	0.0%	65	103	Mattresses	1.1%	1.7%	30,969	47,396
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	1.4%	0.5%	38,736	15,384
#5 PP Plastic Products	0.0%	0.0%	0	0	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	202	131	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	1.2%	0.4%	34,409	11,740	Compact Florescent Lamps	0.0%	0.0%	649	641
PLA Compostable Products	0.0%	0.0%	210	151	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	1.3%	0.2%	35,232	7,043	Water-based Paint	0.1%	0.1%	2,453	3,664
Plastic Non-bag Film Products	0.2%	0.1%	4,791	3,446	Solvent-based Adhesives/Glues	0.0%	0.0%	293	257
Bulky Rigid Plastic Products	1.7%	1.1%	47,637	32,201	Water-based Adhesives/Glues	0.0%	0.0%	0	0
R/C Plastic Products	1.1%	0.6%	31,736	17,386	Oil-based Paint	0.2%	0.3%	5,487	8,185
GLASS	2.3%	0.8%	63,451	23,857	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.9%	0.3%	26,045	9,839	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.4%	0.3%	10,943	7,990	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.3%	0.2%	7,420	4,570	Water Repellents & Waterproofers	0.0%	0.0%	705	1,137
Plate Glass	0.1%	0.1%	1,883	2,801	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.2%	0.3%	5,887	7,150	Caustic Cleaners	0.0%	0.0%	413	632
R/C Glass	0.4%	0.3%	11,273	8,905	Dry-cell Batteries- Single Use	0.0%	0.0%	1,264	876
METAL	7.8%	2.2%	218,951	61,839	Dry-cell Batteries- Rechargeable	0.0%	0.0%	442	701
Aluminum Beverage Cans	0.3%	0.1%	8,181	2,513	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.2%	0.1%	5,472	1,806	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.1%	0.1%	1,671	1,977	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.3%	0.2%	9,725	6,200	Antifreeze	0.0%	0.0%	286	452
Food Cans - Tinned	0.3%	0.1%	8,485	2,161	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	52	52	Oil Filters	0.0%	0.0%	690	853
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	3.6%	1.8%	101,545	49,622	Medical Wastes	0.4%	0.3%	10,099	9,720
R/C Metal	3.0%	1.1%	83,821	30,153	Sharps	0.0%	0.0%	128	186
ORGANICS	25.7%	5.9%	723,313	166,942	Pharmaceuticals & Vitamins	0.2%	0.2%	6,726	5,443
Edible Food Waste- Vegetative	5.5%	1.2%	153,636	32,419	Other Cleaners/Chemicals	0.0%	0.0%	780	1,252
Inedible Food Waste- Vegetative	6.0%	1.6%	169,443	44,304	Personal Care Products	0.3%	0.2%	8,019	5,997
Edible Food Waste- Meats/Fats/Oils	1.7%	0.6%	46,676	17,167	Other Potentially Hazardous Wastes	0.0%	0.0%	302	264
Inedible Food Waste- Meats/Fats/Oils	0.4%	0.2%	12,286	6,571	RESIDUALS	4.7%	2.2%	132,134	61,017
Yard/Garden Waste- Leaves and Grass	3.2%	2.9%	91,136	81,474	Disposable Diapers	3.8%	2.2%	107,514	61,250
Yard/Garden Waste- Prunings	1.5%	1.2%	42,601	35,083	Ash	0.0%	0.0%	0	0
Animal Manure	6.7%	3.0%	189,839	84,405	Dust	0.0%	0.0%	164	196
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	0.9%	0.3%	24,456	9,624
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.6%	0.3%	17,695	8,850					
Estimated Origin Specified Disposed Tons			2,818,338		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			52						

Table 37: Puget Sound WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	24.7%	4.6%	90,278	16,837	WOOD DEBRIS	10.0%	4.5%	36,712	16,615
PAPER PACKAGING	14.8%	4.6%	54,175	16,893	Natural Wood	0.0%	0.0%	0	0
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.1%	0.2%	429	693
Cardboard & Kraft Packaging	8.4%	4.3%	30,650	15,691	Painted Wood	1.6%	1.5%	5,692	5,389
Mixed/Low-grade Paper Packaging	1.4%	0.2%	5,019	837	Dimensional Lumber	1.7%	1.4%	6,254	4,951
Aseptic Containers	0.1%	0.0%	274	152	Engineered Wood	1.9%	1.4%	7,003	4,987
Gable Top Containers	0.1%	0.0%	224	100	Pallets & Crates	1.3%	1.6%	4,890	5,918
Other Polycoated Packaging	0.0%	0.0%	153	91	Other Untreated Wood	0.0%	0.0%	59	54
Compostable Paper Packaging	4.0%	2.4%	14,559	8,677	Wood By-products	0.0%	0.0%	38	51
R/C Paper Packaging	0.9%	0.6%	3,296	2,203	R/C Wood Debris	3.4%	2.0%	12,347	7,344
PAPER PRODUCTS	9.9%	2.4%	36,103	8,745	CONSTRUCTION MATERIALS	7.7%	5.0%	28,104	18,353
Newspaper Products	0.3%	0.2%	980	725	Plastic Lumber	0.1%	0.2%	373	602
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.1%	0.2%	432	585
Magazines	0.0%	0.0%	58	93	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.9%	0.9%	3,184	3,255	Concrete	1.0%	1.6%	3,592	5,770
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	2.6%	3.4%	9,396	12,371
Mixed/Low-grade Paper Products	1.6%	0.7%	5,873	2,689	Carpet	1.4%	1.7%	5,019	6,285
Compostable Paper Products	4.9%	1.3%	17,882	4,857	Carpet Padding	0.2%	0.2%	551	890
R/C Paper Products	2.2%	1.1%	8,126	4,039	Soil, Rocks, & Sand	0.1%	0.2%	527	849
PLASTIC	18.2%	3.7%	66,711	13,398	Asphalt Roofing	1.0%	1.5%	3,509	5,665
PLASTIC PACKAGING	12.3%	3.1%	44,973	11,316	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.6%	0.2%	2,134	606	Ceramics & Brick	0.5%	0.8%	1,849	2,887
#1 PETE Plastic Non-bottles	0.5%	0.1%	1,768	519	R/C Construction Materials	0.8%	1.3%	2,856	4,588
#2 HDPE Plastic Natural Bottles	0.3%	0.1%	1,249	476	CONSUMER PRODUCTS	6.5%	4.6%	23,822	16,998
#2 HDPE Plastic Jars and Tubs	0.5%	0.3%	1,852	1,007	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	782	266	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	3	6	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.0%	0.2%	3,718	882	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	340	123	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	1.1%	1.1%	4,011	4,133	Computer Peripherals	0.1%	0.2%	436	704
Expanded Polystyrene Packaging	0.8%	0.4%	2,927	1,378	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	104	97	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.3%	0.1%	1,207	352	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	4.9%	1.5%	17,774	5,418	Other Consumer Electronics	0.0%	0.0%	0	0
Transportation Packaging Film Plastic	1.6%	1.0%	5,884	3,765	Textiles- Organic	1.5%	1.4%	5,508	5,174
Flexible Plastic Packaging	0.2%	0.3%	835	1,088	Textiles- Synthetic/Mixed/Unknown	2.5%	2.3%	9,298	8,324
R/C Plastic Packaging	0.1%	0.1%	386	529	Shoes/Purses/Belts	0.3%	0.3%	963	1,038
PLASTIC PRODUCTS	5.9%	1.6%	21,738	5,982	Tires & Other Rubber	0.1%	0.0%	258	135
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	2.0%	3.2%	7,359	11,753
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.7%	0.3%	2,680	1,243
#5 PP Plastic Products	0.0%	0.0%	0	0	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	54	56	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	0.7%	0.5%	2,597	1,704	Compact Florescent Lamps	0.0%	0.0%	0	0
PLA Compostable Products	0.0%	0.0%	16	13	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	2.4%	0.6%	8,744	2,318	Water-based Paint	0.0%	0.0%	0	0
Plastic Non-bag Film Products	0.1%	0.2%	513	828	Solvent-based Adhesives/Glues	0.1%	0.1%	241	243
Bulky Rigid Plastic Products	2.2%	1.4%	8,119	5,284	Water-based Adhesives/Glues	0.0%	0.0%	0	0
R/C Plastic Products	0.5%	0.4%	1,694	1,472	Oil-based Paint	0.0%	0.0%	0	0
GLASS	2.1%	0.9%	7,833	3,362	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.5%	0.2%	1,925	842	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.3%	0.2%	1,064	677	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.5%	0.3%	1,821	1,211	Water Repellents & Waterproofers	0.2%	0.3%	705	1,137
Plate Glass	0.5%	0.8%	1,883	2,801	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.3%	0.4%	1,109	1,373	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.0%	0.0%	31	51	Dry-cell Batteries- Single Use	0.0%	0.0%	24	34
METAL	4.9%	2.0%	18,048	7,223	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.3%	0.1%	1,105	286	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.1%	0.0%	352	133	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	14	22	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.1%	0.1%	366	266	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.7%	0.5%	2,665	1,839	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	31	40	Oil Filters	0.1%	0.1%	195	314
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	2.7%	1.7%	9,745	6,255	Medical Wastes	0.3%	0.1%	1,026	480
R/C Metal	1.0%	0.6%	3,770	2,148	Sharps	0.0%	0.0%	4	6
ORGANICS	23.6%	5.7%	86,444	20,772	Pharmaceuticals & Vitamins	0.0%	0.0%	28	45
Edible Food Waste- Vegetative	9.3%	2.5%	33,981	9,102	Other Cleaners/Chemicals	0.0%	0.0%	0	0
Inedible Food Waste- Vegetative	6.5%	3.2%	23,636	11,537	Personal Care Products	0.1%	0.1%	342	316
Edible Food Waste- Meats/Fats/Oils	4.1%	2.1%	15,154	7,548	Other Potentially Hazardous Wastes	0.0%	0.0%	115	130
Inedible Food Waste- Meats/Fats/Oils	1.4%	0.9%	5,134	3,402	RESIDUALS	1.5%	0.7%	5,601	2,728
Yard/Garden Waste- Leaves and Grass	0.8%	0.8%	2,836	3,049	Disposable Diapers	0.6%	0.4%	2,117	1,359
Yard/Garden Waste- Prunings	0.3%	0.3%	1,249	1,006	Ash	0.0%	0.0%	0	0
Animal Manure	0.9%	0.7%	3,394	2,450	Dust	0.0%	0.1%	164	196
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	0.9%	0.5%	3,320	1,686
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.3%	0.1%	1,060	543					
Estimated Origin Specified Disposed Tons			366,233		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			24						

Table 38: Puget Sound WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	15.6%	3.9%	236,604	58,314	WOOD DEBRIS	6.3%	5.5%	95,708	82,945
PAPER PACKAGING	8.0%	2.3%	120,996	35,496	Natural Wood	0.5%	0.7%	7,197	10,840
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.3%	0.3%	4,690	3,881
Cardboard & Kraft Packaging	3.1%	1.2%	46,748	17,550	Painted Wood	4.3%	4.0%	64,356	61,206
Mixed/Low-grade Paper Packaging	1.4%	0.5%	21,796	7,765	Dimensional Lumber	0.0%	0.0%	354	560
Aseptic Containers	0.1%	0.1%	2,029	971	Engineered Wood	0.7%	0.9%	9,910	13,951
Gable Top Containers	0.1%	0.1%	2,165	1,168	Pallets & Crates	0.0%	0.0%	0	0
Other Polycoated Packaging	0.1%	0.0%	1,097	578	Other Untreated Wood	0.1%	0.1%	1,327	1,302
Compostable Paper Packaging	2.6%	1.6%	38,785	24,935	Wood By-products	0.0%	0.0%	0	0
R/C Paper Packaging	0.6%	0.3%	8,376	4,524	R/C Wood Debris	0.5%	0.5%	7,875	7,758
PAPER PRODUCTS	7.6%	2.3%	115,608	35,168	CONSTRUCTION MATERIALS	6.7%	6.6%	101,253	99,437
Newspaper Products	0.5%	0.5%	7,727	6,970	Plastic Lumber	0.1%	0.2%	2,242	3,431
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.0%	0.0%	0	0
Magazines	0.2%	0.2%	3,126	3,398	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.1%	0.1%	2,006	1,111	Concrete	0.8%	1.1%	11,650	15,988
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	4.2%	6.5%	63,058	98,323
Mixed/Low-grade Paper Products	1.7%	0.8%	25,984	12,272	Carpet	1.0%	1.1%	15,337	16,919
Compostable Paper Products	4.8%	1.3%	72,526	19,319	Carpet Padding	0.0%	0.0%	0	0
R/C Paper Products	0.3%	0.2%	4,238	2,958	Soil, Rocks, & Sand	0.2%	0.2%	2,301	3,642
PLASTIC	12.4%	1.3%	186,800	19,928	Asphalt Roofing	0.0%	0.0%	0	0
PLASTIC PACKAGING	7.5%	1.7%	113,210	25,348	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.9%	0.3%	12,889	4,307	Ceramics & Brick	0.1%	0.1%	1,091	1,728
#1 PETE Plastic Non-bottles	0.4%	0.1%	6,607	1,419	R/C Construction Materials	0.4%	0.6%	5,574	8,325
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	2,439	1,227	CONSUMER PRODUCTS	6.4%	3.2%	96,670	48,723
#2 HDPE Plastic Jars and Tubs	0.1%	0.1%	1,569	762	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	3,716	1,420	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	53	55	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.9%	0.2%	13,685	3,360	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	1,563	406	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.4%	0.1%	6,126	1,497	Computer Peripherals	0.1%	0.1%	1,121	1,715
Expanded Polystyrene Packaging	0.7%	0.3%	10,264	4,204	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	678	388	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.8%	0.3%	11,473	3,918	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	2.5%	0.6%	38,460	9,165	Other Consumer Electronics	0.4%	0.5%	5,368	7,252
Transportation Packaging Film Plastic	0.1%	0.1%	1,445	889	Textiles- Organic	2.1%	1.0%	31,783	14,949
Flexible Plastic Packaging	0.1%	0.0%	1,976	525	Textiles- Synthetic/Mixed/Unknown	1.2%	0.8%	18,257	11,361
R/C Plastic Packaging	0.0%	0.0%	265	415	Shoes/Purses/Belts	0.2%	0.1%	3,480	2,172
PLASTIC PRODUCTS	4.9%	2.0%	73,591	30,894	Tires & Other Rubber	0.4%	0.5%	5,692	8,224
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	2.0%	3.1%	30,969	47,396
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	1.4%	0.8%	21,510	12,348
#5 PP Plastic Products	0.0%	0.0%	0	0	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	147	118	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	1.2%	0.6%	18,316	8,320	Compact Florescent Lamps	0.0%	0.0%	649	641
PLA Compostable Products	0.0%	0.0%	156	138	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	1.5%	0.4%	23,094	6,526	Water-based Paint	0.0%	0.0%	177	280
Plastic Non-bag Film Products	0.1%	0.1%	767	1,209	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	1.2%	1.9%	18,758	28,708	Water-based Adhesives/Glues	0.0%	0.0%	0	0
R/C Plastic Products	0.8%	0.4%	12,352	5,547	Oil-based Paint	0.3%	0.5%	5,161	8,169
GLASS	3.0%	1.5%	45,303	22,052	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	1.5%	0.6%	22,415	9,758	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.6%	0.5%	9,763	7,959	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.3%	0.3%	5,014	4,366	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.0%	0.0%	0	0	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.3%	0.5%	4,778	7,017	Caustic Cleaners	0.0%	0.0%	413	632
R/C Glass	0.2%	0.1%	3,333	1,985	Dry-cell Batteries- Single Use	0.1%	0.0%	941	732
METAL	6.3%	2.8%	95,867	41,849	Dry-cell Batteries- Rechargeable	0.0%	0.0%	442	701
Aluminum Beverage Cans	0.4%	0.2%	6,775	2,487	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.3%	0.1%	4,808	1,785	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.1%	0.1%	1,475	1,956	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.2%	0.2%	3,362	2,803	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.4%	0.1%	5,456	1,088	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	21	33	Oil Filters	0.0%	0.0%	0	0
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	3.1%	2.4%	46,483	36,771	Medical Wastes	0.6%	0.6%	8,878	9,707
R/C Metal	1.8%	0.9%	27,488	14,273	Sharps	0.0%	0.0%	124	186
ORGANICS	33.7%	9.1%	509,981	137,369	Pharmaceuticals & Vitamins	0.2%	0.3%	3,746	4,001
Edible Food Waste- Vegetative	6.2%	1.6%	94,499	24,172	Other Cleaners/Chemicals	0.0%	0.0%	0	0
Inedible Food Waste- Vegetative	8.2%	2.1%	124,553	31,629	Personal Care Products	0.1%	0.1%	796	907
Edible Food Waste- Meats/Fats/Oils	2.1%	1.0%	31,028	15,405	Other Potentially Hazardous Wastes	0.0%	0.0%	183	230
Inedible Food Waste- Meats/Fats/Oils	0.5%	0.4%	6,931	5,617	RESIDUALS	8.1%	4.0%	122,813	60,827
Yard/Garden Waste- Leaves and Grass	1.8%	2.2%	26,722	33,657	Disposable Diapers	6.8%	4.0%	103,524	61,193
Yard/Garden Waste- Prunings	1.6%	1.9%	24,716	28,727	Ash	0.0%	0.0%	0	0
Animal Manure	12.3%	5.6%	186,107	84,368	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	1.3%	0.6%	19,289	9,027
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	1.0%	0.6%	15,425	8,676					
Estimated Origin Specified Disposed Tons			1,512,509	<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>					
Sample Count			12						

Table 39: Puget Sound WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	10.4%	5.4%	97,575	50,388	WOOD DEBRIS	26.0%	10.2%	244,609	96,014
PAPER PACKAGING	7.4%	4.2%	69,538	39,265	Natural Wood	2.0%	3.2%	19,238	30,505
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	1.0%	0.9%	9,560	8,324
Cardboard & Kraft Packaging	6.7%	4.1%	63,163	38,076	Painted Wood	10.3%	7.8%	96,865	73,503
Mixed/Low-grade Paper Packaging	0.4%	0.3%	3,863	2,414	Dimensional Lumber	2.9%	2.6%	27,237	24,267
Aseptic Containers	0.0%	0.0%	130	206	Engineered Wood	3.7%	2.5%	35,133	23,038
Gable Top Containers	0.0%	0.0%	260	417	Pallets & Crates	1.8%	1.9%	17,209	17,568
Other Polycoated Packaging	0.0%	0.0%	104	109	Other Untreated Wood	0.1%	0.1%	554	673
Compostable Paper Packaging	0.1%	0.1%	1,390	986	Wood By-products	0.0%	0.0%	0	0
R/C Paper Packaging	0.1%	0.0%	627	438	R/C Wood Debris	4.1%	3.6%	38,814	34,005
PAPER PRODUCTS	3.0%	1.7%	28,037	16,247	CONSTRUCTION MATERIALS	22.8%	10.5%	214,411	98,850
Newspaper Products	0.0%	0.0%	225	217	Plastic Lumber	2.6%	4.2%	24,870	39,835
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.8%	1.0%	7,284	9,570
Magazines	0.1%	0.1%	728	929	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.1%	0.0%	533	360	Concrete	1.9%	3.0%	17,885	28,647
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	6.1%	5.1%	57,206	47,874
Mixed/Low-grade Paper Products	1.5%	1.3%	14,321	11,991	Carpet	0.7%	1.0%	6,178	9,173
Compostable Paper Products	0.6%	0.6%	5,544	5,280	Carpet Padding	0.4%	0.5%	3,460	4,272
R/C Paper Products	0.7%	1.1%	6,686	9,929	Soil, Rocks, & Sand	0.0%	0.0%	0	0
PLASTIC	8.0%	3.0%	75,147	28,218	Asphalt Roofing	7.7%	8.3%	72,177	77,706
PLASTIC PACKAGING	1.7%	0.7%	16,191	6,705	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.2%	0.1%	1,626	697	Ceramics & Brick	0.7%	1.0%	6,946	9,062
#1 PETE Plastic Non-bottles	0.1%	0.1%	882	476	R/C Construction Materials	2.0%	1.5%	18,405	14,291
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	213	131	CONSUMER PRODUCTS	5.0%	3.6%	47,349	33,624
#2 HDPE Plastic Jars and Tubs	0.1%	0.1%	866	1,035	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.1%	0.0%	689	320	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	8	12	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.1%	0.1%	1,098	806	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.0%	0.0%	291	243	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.1%	0.1%	1,350	649	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.2%	0.1%	1,418	934	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	130	209	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.1%	0.0%	565	359	Electronic Gaming Equipment	0.2%	0.3%	1,847	2,898
Packaging Film Plastic	0.6%	0.4%	5,684	3,603	Other Consumer Electronics	0.0%	0.0%	403	421
Transportation Packaging Film Plastic	0.1%	0.1%	897	915	Textiles - Organic	3.0%	3.3%	28,486	30,675
Flexible Plastic Packaging	0.0%	0.0%	135	96	Textiles - Synthetic/Mixed/Unknown	1.0%	0.5%	9,287	4,737
R/C Plastic Packaging	0.0%	0.1%	338	540	Shoes/Purses/Belts	0.4%	0.3%	3,577	3,245
PLASTIC PRODUCTS	6.3%	3.0%	58,955	28,457	Tires & Other Rubber	0.4%	0.5%	3,749	4,987
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	65	103	Mattresses	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	1.5%	1.0%	14,546	9,091
#5 PP Plastic Products	0.0%	0.0%	0	0	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	0	0	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	1.4%	0.9%	13,496	8,106	Compact Florescent Lamps	0.0%	0.0%	0	0
PLA Compostable Products	0.0%	0.0%	38	61	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	0.4%	0.1%	3,395	1,280	Water-based Paint	0.2%	0.4%	2,276	3,653
Plastic Non-bag Film Products	0.4%	0.3%	3,512	3,118	Solvent-based Adhesives/Glues	0.0%	0.0%	52	83
Bulky Rigid Plastic Products	2.2%	1.4%	20,760	13,595	Water-based Adhesives/Glues	0.0%	0.0%	0	0
R/C Plastic Products	1.9%	1.7%	17,690	16,412	Oil-based Paint	0.0%	0.1%	325	510
GLASS	1.1%	0.9%	10,315	8,460	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.2%	0.1%	1,704	940	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.0%	0.0%	117	185	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.1%	0.1%	585	599	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.0%	0.0%	0	0	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.0%	0.0%	0	0	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.8%	0.9%	7,908	8,681	Dry-cell Batteries - Single Use	0.0%	0.1%	299	480
METAL	11.2%	4.8%	105,036	44,951	Dry-cell Batteries - Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.0%	0.0%	302	214	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.0%	0.0%	312	244	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	182	286	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.6%	0.6%	5,996	5,523	Antifreeze	0.0%	0.0%	286	452
Food Cans - Tinned	0.0%	0.0%	364	325	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	0	0	Oil Filters	0.1%	0.1%	494	793
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	4.8%	3.5%	45,317	32,728	Medical Wastes	0.0%	0.0%	195	131
R/C Metal	5.6%	2.8%	52,562	26,474	Sharps	0.0%	0.0%	0	0
ORGANICS	13.5%	9.9%	126,888	92,563	Pharmaceuticals & Vitamins	0.3%	0.4%	2,953	3,690
Edible Food Waste- Vegetative	2.7%	2.1%	25,156	19,591	Other Cleaners/Chemicals	0.1%	0.1%	780	1,252
Inedible Food Waste- Vegetative	2.3%	3.1%	21,254	28,798	Personal Care Products	0.7%	0.6%	6,881	5,920
Edible Food Waste- Meats/Fats/Oils	0.1%	0.1%	494	639	Other Potentially Hazardous Wastes	0.0%	0.0%	4	6
Inedible Food Waste- Meats/Fats/Oils	0.0%	0.0%	221	225	RESIDUALS	0.4%	0.4%	3,720	3,965
Yard/Garden Waste- Leaves and Grass	6.6%	7.9%	61,579	74,135	Disposable Diapers	0.2%	0.2%	1,873	2,289
Yard/Garden Waste- Prunings	1.8%	2.1%	16,636	20,115	Ash	0.0%	0.0%	0	0
Animal Manure	0.0%	0.1%	338	542	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	0.2%	0.3%	1,847	2,879
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.1%	0.2%	1,210	1,659					
Estimated Origin Specified Disposed Tons			939,596		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			16						



Southwest Waste Generation Area Composition Tables

Table 40: Southwest WGA Overall Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	18.5%	3.1%	92,721	15,428	WOOD DEBRIS	16.9%	3.1%	84,737	15,751
PAPER PACKAGING	10.1%	2.1%	50,451	10,276	Natural Wood	0.1%	0.1%	307	335
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.3%	0.2%	1,672	1,065
Cardboard & Kraft Packaging	4.4%	0.9%	22,215	4,626	Painted Wood	4.9%	1.8%	24,611	8,925
Mixed/Low-grade Paper Packaging	2.8%	1.8%	14,139	8,841	Dimensional Lumber	3.3%	1.3%	16,546	6,352
Aseptic Containers	0.1%	0.0%	428	131	Engineered Wood	2.7%	1.0%	13,300	4,921
Gable Top Containers	0.1%	0.1%	642	264	Pallets & Crates	3.0%	1.7%	15,141	8,425
Other Polycoated Packaging	0.0%	0.0%	190	90	Other Untreated Wood	0.0%	0.0%	156	122
Compostable Paper Packaging	2.1%	0.7%	10,607	3,749	Wood By-products	0.8%	0.8%	3,805	3,779
R/C Paper Packaging	0.4%	0.1%	2,230	570	R/C Wood Debris	1.8%	0.8%	9,199	4,116
PAPER PRODUCTS	8.5%	2.1%	42,270	10,258	CONSTRUCTION MATERIALS	12.3%	3.4%	61,357	17,158
Newspaper Products	0.2%	0.1%	1,239	375	Plastic Lumber	0.0%	0.0%	90	77
Cardboard & Kraft Paper Products	1.1%	1.8%	5,738	9,155	Insulation	1.1%	1.8%	5,722	8,805
Magazines	0.1%	0.1%	716	435	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.2%	0.1%	1,136	545	Concrete	2.0%	1.3%	10,017	6,723
Other Groundwood Paper Products	0.0%	0.1%	209	342	Drywall	3.0%	1.9%	15,034	9,684
Mixed/Low-grade Paper Products	1.7%	0.5%	8,737	2,636	Carpet	1.0%	0.8%	5,052	3,759
Compostable Paper Products	3.7%	0.7%	18,591	3,482	Carpet Padding	0.4%	0.6%	1,890	2,850
R/C Paper Products	1.2%	0.8%	5,903	4,027	Soil, Rocks, & Sand	1.3%	0.9%	6,265	4,545
PLASTIC	16.1%	2.8%	80,705	14,188	Asphalt Roofing	0.6%	0.8%	2,968	4,120
PLASTIC PACKAGING	11.1%	2.6%	55,703	12,952	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.6%	0.1%	2,758	555	Ceramics & Brick	0.2%	0.2%	1,210	1,033
#1 PETE Plastic Non-bottles	0.4%	0.1%	2,046	397	R/C Construction Materials	2.6%	1.4%	13,108	6,902
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	927	253	CONSUMER PRODUCTS	6.1%	1.5%	30,394	7,363
#2 HDPE Plastic Jars and Tubs	0.3%	0.2%	1,735	1,206	Televisions - LCD	0.2%	0.2%	879	1,028
#2 HDPE Plastic Colored Bottles	0.1%	0.0%	614	128	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	9	12	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	8	9	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.7%	0.1%	3,502	670	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	681	219	Computers	0.1%	0.1%	307	497
#7 Other/Unknown Plastic Packaging	2.4%	1.8%	11,899	9,099	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.9%	0.2%	4,516	1,199	Computer Printers	0.1%	0.2%	646	814
PLA Compostable Packaging	0.0%	0.0%	45	46	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.3%	0.0%	1,730	219	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	2.4%	0.5%	12,227	2,693	Other Consumer Electronics	0.0%	0.0%	0	0
Transportation Packaging Film Plastic	1.2%	0.6%	5,758	3,094	Textiles - Organic	1.5%	0.4%	7,607	1,916
Flexible Plastic Packaging	0.1%	0.0%	342	87	Textiles - Synthetic/Mixed/Unknown	0.7%	0.3%	3,719	1,334
R/C Plastic Packaging	1.4%	1.6%	6,907	7,971	Shoes/Purses/Belts	0.1%	0.1%	509	316
PLASTIC PRODUCTS	5.0%	1.1%	25,002	5,500	Tires & Other Rubber	0.4%	0.5%	2,216	2,306
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	2.5%	1.2%	12,640	6,178
#2 HDPE Plastic Products:	0.0%	0.0%	54	88	Mattresses	0.4%	0.5%	1,870	2,385
#3 PVC Plastic Products	0.0%	0.0%	39	64	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.8%	0.4%	4,013	2,072
#5 PP Plastic Products	0.0%	0.0%	49	49	Pesticides	0.0%	0.0%	1	2
#6 PS Plastic Products	0.0%	0.0%	103	47	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	0.9%	0.3%	4,612	1,371	Compact Florescent Lamps	0.0%	0.0%	16	17
PLA Compostable Products	0.0%	0.0%	25	19	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	1.2%	0.2%	5,949	1,155	Water-based Paint	0.3%	0.4%	1,311	1,933
Plastic Non-bag Film Products	0.9%	0.9%	4,574	4,730	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	1.0%	0.4%	4,993	1,865	Water-based Adhesives/Glues	0.0%	0.0%	48	46
R/C Plastic Products	0.9%	0.5%	4,604	2,392	Oil-based Paint	0.0%	0.0%	0	0
GLASS	1.5%	0.5%	7,645	2,252	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.7%	0.2%	3,599	948	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.4%	0.2%	1,764	879	Primers/Sealings/Coatings	0.0%	0.0%	48	78
Brown/Other Colored Glass Containers	0.2%	0.1%	1,105	669	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.0%	0.0%	158	164	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.1%	0.1%	611	534	Caustic Cleaners	0.0%	0.0%	69	64
R/C Glass	0.1%	0.1%	408	313	Dry-cell Batteries- Single Use	0.0%	0.0%	106	57
METAL	4.8%	1.1%	24,150	5,451	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.4%	0.1%	1,908	608	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.2%	0.1%	890	301	Gasoline/Kerosene	0.0%	0.0%	42	68
Other Aluminum	0.1%	0.1%	611	303	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.1%	0.1%	617	385	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.4%	0.1%	1,971	440	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	201	153	Oil Filters	0.1%	0.1%	313	474
White Goods	0.2%	0.2%	1,051	1,166	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	2.0%	0.8%	10,042	4,103	Medical Wastes	0.2%	0.1%	1,155	737
R/C Metal	1.4%	0.6%	6,860	2,992	Sharps	0.0%	0.0%	10	10
ORGANICS	17.3%	2.8%	86,526	13,782	Pharmaceuticals & Vitamins	0.0%	0.0%	124	150
Edible Food Waste- Vegetative	6.0%	1.5%	29,909	7,443	Other Cleaners/Chemicals	0.0%	0.0%	69	113
Inedible Food Waste- Vegetative	3.4%	0.6%	17,032	3,247	Personal Care Products	0.1%	0.0%	314	142
Edible Food Waste- Meats/Fats/Oils	1.4%	0.6%	7,133	2,879	Other Potentially Hazardous Wastes	0.1%	0.1%	387	454
Inedible Food Waste- Meats/Fats/Oils	0.4%	0.3%	2,207	1,329	RESIDUALS	5.6%	2.3%	27,825	11,294
Yard/Garden Waste- Leaves and Grass	0.5%	0.4%	2,343	2,055	Disposable Diapers	2.6%	0.6%	12,990	3,107
Yard/Garden Waste- Prunings	0.7%	0.4%	3,302	2,247	Ash	0.0%	0.0%	0	0
Animal Manure	2.2%	0.6%	10,801	3,037	Dust	0.0%	0.0%	40	45
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	1.0%	0.3%	5,081	1,262
Food Processing Wastes	2.4%	2.2%	11,854	11,169	Sludges & Other Special Industrial Wastes	1.9%	2.2%	9,714	11,004
R/C Organics	0.4%	0.2%	1,946	794					
Estimated Origin Specified Disposed Tons			500,073		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			104						

Table 41: Southwest WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	19.8%	5.5%	54,283	15,050	WOOD DEBRIS	18.1%	5.1%	49,462	13,935
PAPER PACKAGING	11.4%	3.7%	31,294	10,055	Natural Wood	0.1%	0.1%	165	257
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.4%	0.3%	1,047	898
Cardboard & Kraft Packaging	5.2%	1.6%	14,355	4,264	Painted Wood	4.6%	2.9%	12,474	7,824
Mixed/Low-grade Paper Packaging	3.5%	3.2%	9,587	8,816	Dimensional Lumber	3.8%	1.9%	10,528	5,140
Aseptic Containers	0.0%	0.0%	85	67	Engineered Wood	2.3%	1.2%	6,297	3,322
Gable Top Containers	0.1%	0.1%	275	240	Pallets & Crates	4.6%	2.8%	12,558	7,733
Other Polycoated Packaging	0.0%	0.0%	26	43	Other Untreated Wood	0.0%	0.0%	0	0
Compostable Paper Packaging	2.2%	1.3%	6,031	3,636	Wood By-products	1.4%	1.4%	3,805	3,779
R/C Paper Packaging	0.3%	0.2%	936	446	R/C Wood Debris	0.9%	0.8%	2,588	2,255
PAPER PRODUCTS	8.4%	3.6%	22,989	9,952	CONSTRUCTION MATERIALS	17.5%	5.9%	47,904	16,156
Newspaper Products	0.0%	0.0%	119	92	Plastic Lumber	0.0%	0.0%	27	45
Cardboard & Kraft Paper Products	2.1%	3.3%	5,651	9,154	Insulation	2.0%	3.2%	5,532	8,802
Magazines	0.1%	0.1%	361	376	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.3%	0.2%	881	535	Concrete	3.5%	2.4%	9,583	6,686
Other Groundwood Paper Products	0.1%	0.1%	209	342	Drywall	5.3%	3.5%	14,523	9,655
Mixed/Low-grade Paper Products	1.6%	0.9%	4,484	2,417	Carpet	1.3%	1.3%	3,644	3,577
Compostable Paper Products	2.1%	1.1%	5,754	3,007	Carpet Padding	0.6%	1.0%	1,749	2,841
R/C Paper Products	2.0%	1.5%	5,529	4,024	Soil, Rocks, & Sand	0.7%	0.8%	1,790	2,306
PLASTIC	17.9%	5.1%	49,110	13,912	Asphalt Roofing	0.0%	0.0%	109	111
PLASTIC PACKAGING	12.8%	4.7%	35,158	12,822	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.3%	0.2%	852	419	Ceramics & Brick	0.3%	0.4%	865	978
#1 PETE Plastic Non-bottles	0.2%	0.1%	502	253	R/C Construction Materials	3.7%	2.3%	10,083	6,403
#2 HDPE Plastic Natural Bottles	0.1%	0.1%	305	211	CONSUMER PRODUCTS	2.7%	1.0%	7,510	2,782
#2 HDPE Plastic Jars and Tubs	0.2%	0.2%	650	421	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	101	63	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	3	3	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.3%	0.2%	804	428	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.1%	287	200	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	4.0%	3.3%	10,945	9,097	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.9%	0.4%	2,510	1,054	Computer Printers	0.2%	0.3%	466	760
PLA Compostable Packaging	0.0%	0.0%	33	45	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.1%	0.0%	332	122	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	2.1%	0.9%	5,653	2,592	Other Consumer Electronics	0.0%	0.0%	0	0
Transportation Packaging Film Plastic	1.9%	1.1%	5,214	3,033	Textiles- Organic	1.4%	0.6%	3,697	1,580
Flexible Plastic Packaging	0.0%	0.0%	61	34	Textiles- Synthetic/Mixed/Unknown	0.6%	0.4%	1,553	1,040
R/C Plastic Packaging	2.5%	2.9%	6,906	7,971	Shoes/Purses/Belts	0.1%	0.1%	181	180
PLASTIC PRODUCTS	5.1%	1.8%	13,952	5,040	Tires & Other Rubber	0.6%	0.8%	1,613	2,224
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	54	88	Mattresses	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	39	64	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	1.1%	0.8%	3,036	2,058
#5 PP Plastic Products	0.0%	0.0%	39	46	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	43	38	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	1.0%	0.5%	2,611	1,288	Compact Florescent Lamps	0.0%	0.0%	4	6
PLA Compostable Products	0.0%	0.0%	18	17	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	0.9%	0.4%	2,524	1,040	Water-based Paint	0.5%	0.7%	1,311	1,933
Plastic Non-bag Film Products	1.6%	1.7%	4,338	4,726	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	0.5%	0.4%	1,370	1,087	Water-based Adhesives/Glues	0.0%	0.0%	8	13
R/C Plastic Products	1.1%	0.8%	2,917	2,223	Oil-based Paint	0.0%	0.0%	0	0
GLASS	1.1%	0.7%	3,052	2,023	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.5%	0.3%	1,322	793	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.3%	0.3%	924	785	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.3%	0.2%	697	637	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.0%	0.0%	0	0	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.0%	0.0%	46	75	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.0%	0.0%	63	57	Dry-cell Batteries- Single Use	0.0%	0.0%	23	27
METAL	4.4%	1.6%	12,168	4,479	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.4%	0.2%	970	561	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.1%	0.1%	355	273	Gasoline/Kerosene	0.0%	0.0%	42	68
Other Aluminum	0.1%	0.1%	234	244	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.1%	0.1%	329	305	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.1%	0.1%	302	185	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	8	9	Oil Filters	0.1%	0.2%	292	473
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	2.7%	1.4%	7,515	3,967	Medical Wastes	0.3%	0.3%	956	735
R/C Metal	0.9%	0.7%	2,456	1,836	Sharps	0.0%	0.0%	2	2
ORGANICS	12.8%	4.7%	35,096	12,990	Pharmaceuticals & Vitamins	0.0%	0.0%	5	9
Edible Food Waste- Vegetative	4.0%	2.5%	10,928	6,881	Other Cleaners/Chemicals	0.0%	0.0%	69	113
Inedible Food Waste- Vegetative	1.3%	0.8%	3,482	2,237	Personal Care Products	0.0%	0.0%	7	9
Edible Food Waste- Meats/Fats/Oils	1.1%	1.0%	3,136	2,672	Other Potentially Hazardous Wastes	0.1%	0.2%	317	451
Inedible Food Waste- Meats/Fats/Oils	0.5%	0.5%	1,294	1,299	RESIDUALS	4.4%	4.0%	12,147	10,966
Yard/Garden Waste- Leaves and Grass	0.3%	0.5%	937	1,244	Disposable Diapers	0.3%	0.3%	871	813
Yard/Garden Waste- Prunings	0.4%	0.3%	1,105	957	Ash	0.0%	0.0%	0	0
Animal Manure	0.7%	0.5%	1,970	1,392	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	0.6%	0.2%	1,562	583
Food Processing Wastes	4.3%	4.1%	11,854	11,169	Sludges & Other Special Industrial Wastes	3.5%	4.0%	9,714	11,004
R/C Organics	0.1%	0.1%	390	313					
Estimated Origin Specified Disposed Tons			273,767		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			48						

Table 42: Southwest WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	23.3%	1.9%	32,663	2,687	WOOD DEBRIS	2.2%	1.0%	3,134	1,440
PAPER PACKAGING	10.8%	1.1%	15,208	1,547	Natural Wood	0.1%	0.2%	134	215
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.1%	0.2%	175	271
Cardboard & Kraft Packaging	3.5%	0.9%	4,968	1,313	Painted Wood	1.0%	0.9%	1,464	1,234
Mixed/Low-grade Paper Packaging	3.0%	0.4%	4,152	610	Dimensional Lumber	0.3%	0.2%	483	314
Aseptic Containers	0.2%	0.1%	307	109	Engineered Wood	0.4%	0.3%	530	450
Gable Top Containers	0.2%	0.1%	345	106	Pallets & Crates	0.1%	0.2%	158	255
Other Polycoated Packaging	0.1%	0.1%	157	79	Other Untreated Wood	0.1%	0.1%	113	102
Compostable Paper Packaging	3.1%	0.6%	4,320	864	Wood By-products	0.0%	0.0%	0	0
R/C Paper Packaging	0.7%	0.1%	959	202	R/C Wood Debris	0.1%	0.0%	77	47
PAPER PRODUCTS	12.4%	1.5%	17,456	2,172	CONSTRUCTION MATERIALS	1.4%	0.9%	1,913	1,299
Newspaper Products	0.8%	0.3%	1,067	359	Plastic Lumber	0.0%	0.0%	0	0
Cardboard & Kraft Paper Products	0.1%	0.1%	84	136	Insulation	0.0%	0.0%	17	27
Magazines	0.2%	0.2%	317	216	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.1%	0.1%	198	82	Concrete	0.0%	0.0%	0	0
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	0.0%	0.0%	0	0
Mixed/Low-grade Paper Products	2.5%	0.6%	3,493	816	Carpet	0.4%	0.6%	551	887
Compostable Paper Products	8.6%	1.2%	11,999	1,627	Carpet Padding	0.1%	0.2%	140	227
R/C Paper Products	0.2%	0.1%	297	161	Soil, Rocks, & Sand	0.7%	0.7%	1,029	1,013
PLASTIC	17.2%	1.2%	24,177	1,644	Asphalt Roofing	0.0%	0.0%	0	0
PLASTIC PACKAGING	12.6%	0.9%	17,721	1,232	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	1.3%	0.2%	1,760	350	Ceramics & Brick	0.0%	0.1%	50	80
#1 PETE Plastic Non-bottles	1.0%	0.2%	1,407	290	R/C Construction Materials	0.1%	0.1%	127	204
#2 HDPE Plastic Natural Bottles	0.4%	0.1%	572	131	CONSUMER PRODUCTS	3.8%	1.0%	5,394	1,348
#2 HDPE Plastic Jars and Tubs	0.2%	0.1%	230	137	Televisions - LCD	0.2%	0.4%	343	551
#2 HDPE Plastic Colored Bottles	0.3%	0.1%	463	106	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	9	12	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	6	9	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.8%	0.4%	2,591	512	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.3%	0.1%	381	88	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.6%	0.1%	898	210	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	1.1%	0.3%	1,502	440	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	9	7	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.9%	0.1%	1,330	178	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	4.4%	0.5%	6,240	697	Other Consumer Electronics	0.0%	0.0%	0	0
Transportation Packaging Film Plastic	0.0%	0.0%	64	37	Textiles- Organic	2.4%	0.7%	3,378	1,051
Flexible Plastic Packaging	0.2%	0.1%	258	77	Textiles- Synthetic/Mixed/Unknown	0.8%	0.4%	1,150	578
R/C Plastic Packaging	0.0%	0.0%	1	2	Shoes/Purses/Belts	0.2%	0.2%	291	257
PLASTIC PRODUCTS	4.6%	0.8%	6,455	1,099	Tires & Other Rubber	0.2%	0.1%	233	205
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.6%	0.2%	870	236
#5 PP Plastic Products	0.0%	0.0%	0	0	Pesticides	0.0%	0.0%	1	2
#6 PS Plastic Products	0.0%	0.0%	55	25	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	1.1%	0.3%	1,599	401	Compact Florescent Lamps	0.0%	0.0%	2	4
PLA Compostable Products	0.0%	0.0%	7	9	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	2.3%	0.3%	3,186	480	Water-based Paint	0.0%	0.0%	0	0
Plastic Non-bag Film Products	0.1%	0.1%	182	170	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	0.7%	0.6%	960	838	Water-based Adhesives/Glues	0.0%	0.0%	28	40
R/C Plastic Products	0.3%	0.1%	467	176	Oil-based Paint	0.0%	0.0%	0	0
GLASS	2.4%	0.6%	3,390	786	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	1.4%	0.3%	1,930	412	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.5%	0.3%	704	373	Primers/Sealings/Coatings	0.0%	0.1%	48	78
Brown/Other Colored Glass Containers	0.2%	0.1%	271	134	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.0%	0.0%	0	0	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.3%	0.4%	408	516	Caustic Cleaners	0.0%	0.0%	54	59
R/C Glass	0.1%	0.1%	77	78	Dry-cell Batteries- Single Use	0.0%	0.0%	47	30
METAL	3.7%	0.5%	5,143	722	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.5%	0.1%	769	198	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.3%	0.1%	467	114	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	37	41	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.1%	0.2%	198	222	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	1.1%	0.3%	1,612	397	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.1%	0.1%	193	152	Oil Filters	0.0%	0.0%	21	33
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	0.8%	0.3%	1,117	410	Medical Wastes	0.1%	0.0%	192	47
R/C Metal	0.5%	0.3%	750	464	Sharps	0.0%	0.0%	8	10
ORGANICS	34.5%	2.9%	48,338	4,017	Pharmaceuticals & Vitamins	0.1%	0.1%	113	150
Edible Food Waste- Vegetative	13.0%	1.9%	18,267	2,721	Other Cleaners/Chemicals	0.0%	0.0%	0	0
Inedible Food Waste- Vegetative	8.8%	1.6%	12,372	2,182	Personal Care Products	0.2%	0.1%	290	139
Edible Food Waste- Meats/Fats/Oils	2.5%	0.7%	3,510	955	Other Potentially Hazardous Wastes	0.0%	0.0%	66	52
Inedible Food Waste- Meats/Fats/Oils	0.6%	0.2%	817	261	RESIDUALS	10.9%	1.9%	15,224	2,678
Yard/Garden Waste- Leaves and Grass	0.8%	1.2%	1,155	1,613	Disposable Diapers	8.5%	2.1%	11,964	2,994
Yard/Garden Waste- Prunings	1.5%	1.4%	2,147	2,033	Ash	0.0%	0.0%	0	0
Animal Manure	6.2%	1.9%	8,647	2,687	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	2.3%	0.8%	3,259	1,102
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	1.0%	0.5%	1,424	713					
Estimated Origin Specified Disposed Tons			140,246		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			24						

Table 43: Southwest WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	6.7%	2.4%	5,774	2,075	WOOD DEBRIS	37.3%	8.4%	32,141	7,199
PAPER PACKAGING	4.6%	1.7%	3,950	1,447	Natural Wood	0.0%	0.0%	9	14
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.5%	0.6%	450	504
Cardboard & Kraft Packaging	3.4%	1.4%	2,892	1,222	Painted Wood	12.4%	4.8%	10,673	4,113
Mixed/Low-grade Paper Packaging	0.5%	0.3%	401	277	Dimensional Lumber	6.4%	4.3%	5,534	3,718
Aseptic Containers	0.0%	0.0%	36	29	Engineered Wood	7.5%	4.2%	6,473	3,602
Gable Top Containers	0.0%	0.0%	23	25	Pallets & Crates	2.8%	3.9%	2,425	3,334
Other Polycoated Packaging	0.0%	0.0%	7	11	Other Untreated Wood	0.1%	0.1%	43	66
Compostable Paper Packaging	0.3%	0.3%	257	297	Wood By-products	0.0%	0.0%	0	0
R/C Paper Packaging	0.4%	0.3%	334	291	R/C Wood Debris	7.6%	4.0%	6,533	3,443
PAPER PRODUCTS	2.1%	1.4%	1,825	1,216	CONSTRUCTION MATERIALS	13.4%	6.5%	11,540	5,629
Newspaper Products	0.1%	0.1%	53	58	Plastic Lumber	0.1%	0.1%	62	63
Cardboard & Kraft Paper Products	0.0%	0.0%	3	5	Insulation	0.2%	0.3%	174	230
Magazines	0.0%	0.0%	38	31	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.1%	0.1%	56	64	Concrete	0.5%	0.8%	435	705
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	0.6%	0.9%	512	748
Mixed/Low-grade Paper Products	0.9%	0.8%	760	664	Carpet	1.0%	0.9%	858	739
Compostable Paper Products	1.0%	0.8%	838	660	Carpet Padding	0.0%	0.0%	0	0
R/C Paper Products	0.1%	0.1%	77	67	Soil, Rocks, & Sand	4.0%	4.4%	3,446	3,784
PLASTIC	8.6%	2.6%	7,418	2,254	Asphalt Roofing	3.3%	4.8%	2,860	4,119
PLASTIC PACKAGING	3.3%	1.6%	2,825	1,357	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.2%	0.1%	146	100	Ceramics & Brick	0.3%	0.4%	295	321
#1 PETE Plastic Non-bottles	0.2%	0.1%	137	99	R/C Construction Materials	0.4%	3.0%	2,899	2,569
#2 HDPE Plastic Natural Bottles	0.1%	0.1%	51	49	CONSUMER PRODUCTS	20.3%	7.8%	17,490	6,683
#2 HDPE Plastic Jars and Tubs	1.0%	1.3%	856	1,121	Televisions - LCD	0.6%	1.0%	536	867
#2 HDPE Plastic Colored Bottles	0.1%	0.0%	50	34	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.1%	0.1%	107	65	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.0%	0.0%	13	7	Computers	0.4%	0.6%	307	497
#7 Other/Unknown Plastic Packaging	0.1%	0.0%	56	30	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.6%	0.4%	504	362	Computer Printers	0.2%	0.3%	180	292
PLA Compostable Packaging	0.0%	0.0%	3	4	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.1%	0.0%	67	39	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	0.4%	0.2%	333	210	Other Consumer Electronics	0.0%	0.0%	0	0
Transportation Packaging Film Plastic	0.6%	0.7%	480	609	Textiles- Organic	0.6%	0.3%	532	259
Flexible Plastic Packaging	0.0%	0.0%	22	18	Textiles- Synthetic/Mixed/Unknown	1.2%	0.7%	1,017	602
R/C Plastic Packaging	0.0%	0.0%	0	0	Shoes/Purses/Belts	0.0%	0.0%	38	39
PLASTIC PRODUCTS	5.3%	2.2%	4,594	1,909	Tires & Other Rubber	0.4%	0.7%	370	574
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	14.7%	7.2%	12,640	6,178
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	2.2%	2.8%	1,870	2,385
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.1%	0.1%	107	63
#5 PP Plastic Products	0.0%	0.0%	10	16	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	5	7	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	0.5%	0.3%	403	245	Compact Florescent Lamps	0.0%	0.0%	9	15
PLA Compostable Products	0.0%	0.0%	1	1	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	0.3%	0.2%	238	151	Water-based Paint	0.0%	0.0%	0	0
Plastic Non-bag Film Products	0.1%	0.1%	55	61	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	3.1%	1.5%	2,663	1,263	Water-based Adhesives/Glues	0.0%	0.0%	12	20
R/C Plastic Products	1.4%	1.0%	1,219	867	Oil-based Paint	0.0%	0.0%	0	0
GLASS	1.4%	0.7%	1,203	599	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.4%	0.4%	346	316	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.2%	0.2%	136	133	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.2%	0.2%	137	153	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.2%	0.2%	158	164	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.2%	0.1%	157	114	Caustic Cleaners	0.0%	0.0%	15	25
R/C Glass	0.3%	0.3%	268	297	Dry-cell Batteries- Single Use	0.0%	0.0%	36	40
METAL	7.9%	3.5%	6,839	3,022	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.2%	0.1%	170	123	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.1%	0.1%	68	56	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.4%	0.2%	340	175	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.1%	0.1%	90	78	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.1%	0.0%	57	38	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	0	0	Oil Filters	0.0%	0.0%	0	0
White Goods	1.2%	1.4%	1,051	1,166	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	1.6%	1.1%	1,411	965	Medical Wastes	0.0%	0.0%	6	8
R/C Metal	4.2%	2.7%	3,654	2,317	Sharps	0.0%	0.0%	0	0
ORGANICS	3.6%	2.6%	3,092	2,254	Pharmaceuticals & Vitamins	0.0%	0.0%	6	5
Edible Food Waste- Vegetative	0.8%	0.9%	714	810	Other Cleaners/Chemicals	0.0%	0.0%	0	0
Inedible Food Waste- Vegetative	1.4%	1.0%	1,178	885	Personal Care Products	0.0%	0.0%	18	29
Edible Food Waste- Meats/Fats/Oils	0.6%	0.6%	487	489	Other Potentially Hazardous Wastes	0.0%	0.0%	4	4
Inedible Food Waste- Meats/Fats/Oils	0.1%	0.1%	97	101	RESIDUALS	0.5%	0.4%	454	341
Yard/Garden Waste- Leaves and Grass	0.3%	0.3%	251	267	Disposable Diapers	0.2%	0.2%	154	160
Yard/Garden Waste- Prunings	0.1%	0.1%	50	53	Ash	0.0%	0.0%	0	0
Animal Manure	0.2%	0.3%	183	252	Dust	0.0%	0.1%	40	45
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	0.3%	0.2%	260	193
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.2%	0.2%	132	155					
Estimated Origin Specified Disposed Tons			86,059		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			32						



West Waste Generation Area Composition Tables

Table 44: West WGA Overall Disposed Waste Stream, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	17.9%	1.8%	33,348	3,371	WOOD DEBRIS	13.2%	3.0%	24,680	5,670
PAPER PACKAGING	9.5%	1.4%	17,726	2,550	Natural Wood	0.2%	0.1%	282	276
Newspaper Packaging	0.0%	0.0%	4	6	Treated Wood	1.4%	1.0%	2,682	1,883
Cardboard & Kraft Packaging	4.6%	1.2%	8,521	2,320	Painted Wood	3.5%	1.5%	6,500	2,706
Mixed/Low-grade Paper Packaging	1.5%	0.3%	2,791	497	Dimensional Lumber	2.3%	0.9%	4,282	1,671
Aseptic Containers	0.2%	0.1%	390	133	Engineered Wood	1.4%	0.7%	2,706	1,247
Gable Top Containers	0.3%	0.1%	478	144	Pallets & Crates	1.7%	1.2%	3,265	2,192
Other Polycoated Packaging	0.0%	0.0%	65	30	Other Untreated Wood	0.0%	0.0%	24	17
Compostable Paper Packaging	2.4%	0.6%	4,463	1,105	Wood By-products	1.7%	1.6%	3,171	2,925
R/C Paper Packaging	0.5%	0.1%	1,014	189	R/C Wood Debris	0.9%	0.4%	1,767	797
PAPER PRODUCTS	8.4%	1.1%	15,622	2,114	CONSTRUCTION MATERIALS	5.5%	2.1%	10,276	3,949
Newspaper Products	0.4%	0.3%	737	471	Plastic Lumber	0.0%	0.0%	10	11
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.1%	0.1%	106	138
Magazines	0.3%	0.2%	581	352	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.3%	0.1%	564	240	Concrete	0.0%	0.5%	969	979
Other Groundwood Paper Products	0.0%	0.0%	13	22	Drywall	0.8%	1.2%	1,586	2,212
Mixed/Low-grade Paper Products	2.0%	0.5%	3,755	1,003	Carpet	1.2%	0.8%	2,284	1,466
Compostable Paper Products	4.5%	0.7%	8,443	1,258	Carpet Padding	0.3%	0.5%	609	872
R/C Paper Products	0.8%	0.3%	1,528	522	Soil, Rocks, & Sand	0.2%	0.1%	350	195
PLASTIC	15.5%	2.1%	28,933	3,842	Asphalt Roofing	1.0%	1.2%	1,952	2,185
PLASTIC PACKAGING	9.1%	1.2%	16,994	2,299	Plastic Floor Covering	0.2%	0.3%	294	475
#1 PETE Plastic Bottles	0.7%	0.1%	1,234	202	Ceramics & Brick	0.8%	0.6%	1,494	1,064
#1 PETE Plastic Non-bottles	0.6%	0.1%	1,155	205	R/C Construction Materials	0.3%	0.3%	619	485
#2 HDPE Plastic Natural Bottles	0.3%	0.1%	468	194	CONSUMER PRODUCTS	6.5%	1.5%	12,160	2,794
#2 HDPE Plastic Jars and Tubs	0.2%	0.1%	406	116	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	424	105	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	2	3	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	2	2	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.1%	0.2%	2,040	437	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	208	50	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.5%	0.2%	890	293	Computer Peripherals	0.0%	0.0%	11	18
Expanded Polystyrene Packaging	0.4%	0.1%	830	162	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	48	21	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.4%	0.1%	729	128	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	3.1%	0.5%	5,756	977	Other Consumer Electronics	0.2%	0.2%	370	305
Transportation Packaging Film Plastic	1.3%	1.0%	2,457	1,948	Textiles- Organic	2.7%	0.8%	4,960	1,471
Flexible Plastic Packaging	0.1%	0.1%	265	99	Textiles- Synthetic/Mixed/Unknown	1.1%	0.4%	2,139	730
R/C Plastic Packaging	0.0%	0.0%	80	76	Shoes/Purses/Belts	0.2%	0.1%	346	163
PLASTIC PRODUCTS	6.4%	1.8%	11,939	3,384	Tires & Other Rubber	0.7%	0.5%	1,289	956
#1 PETE Plastic Products	0.0%	0.0%	7	9	Furniture	1.2%	1.0%	2,271	1,948
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	0.4%	0.5%	774	883
#3 PVC Plastic Products	0.0%	0.0%	27	44	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	1	2	HAZARDOUS AND SPECIAL WASTES	2.5%	1.9%	4,632	3,474
#5 PP Plastic Products	0.0%	0.0%	15	10	Pesticides	0.0%	0.0%	13	20
#6 PS Plastic Products	0.0%	0.0%	81	30	HID/UV/Germicidal Lamps	0.0%	0.0%	6	7
#7 Other/Unknown Plastic Products	2.1%	1.6%	3,888	2,899	Compact Florescent Lamps	0.0%	0.0%	10	9
PLA Compostable Products	0.0%	0.0%	14	11	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	1.7%	0.3%	3,105	494	Water-based Paint	0.1%	0.1%	168	133
Plastic Non-bag Film Products	1.0%	1.0%	1,846	1,781	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	0.8%	0.3%	1,426	604	Water-based Adhesives/Glues	0.0%	0.0%	17	19
R/C Plastic Products	0.8%	0.3%	1,529	560	Oil-based Paint	0.0%	0.0%	0	0
GLASS	1.6%	0.4%	3,028	811	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.7%	0.2%	1,297	379	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.1%	0.1%	233	106	Primers/Sealings/Coatings	0.0%	0.0%	23	37
Brown/Other Colored Glass Containers	0.4%	0.2%	691	330	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.0%	0.1%	92	106	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.2%	0.2%	430	291	Caustic Cleaners	0.0%	0.0%	42	63
R/C Glass	0.2%	0.1%	285	196	Dry-cell Batteries- Single Use	0.0%	0.0%	54	31
METAL	6.9%	1.9%	12,944	3,496	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.4%	0.1%	724	175	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.2%	0.1%	431	106	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.1%	0.2%	268	371	Motor Oil	0.0%	0.0%	47	77
Other Non-ferrous Metal	0.2%	0.1%	308	189	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.5%	0.1%	968	221	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	33	22	Oil Filters	0.0%	0.0%	53	57
White Goods	0.3%	0.4%	648	801	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	2.3%	0.7%	4,284	1,256	Medical Wastes	2.0%	1.9%	3,747	3,469
R/C Metal	2.8%	1.4%	5,281	2,568	Sharps	0.0%	0.0%	12	17
ORGANICS	25.2%	3.1%	47,022	5,714	Pharmaceuticals & Vitamins	0.0%	0.0%	75	60
Edible Food Waste- Vegetative	8.3%	1.6%	15,407	2,932	Other Cleaners/Chemicals	0.0%	0.0%	26	42
Inedible Food Waste- Vegetative	4.5%	0.7%	8,327	1,358	Personal Care Products	0.1%	0.1%	212	195
Edible Food Waste- Meats/Fats/Oils	3.4%	1.5%	6,389	2,878	Other Potentially Hazardous Wastes	0.1%	0.1%	127	107
Inedible Food Waste- Meats/Fats/Oils	0.3%	0.1%	509	131	RESIDUALS	5.1%	1.6%	9,602	2,894
Yard/Garden Waste- Leaves and Grass	1.8%	0.8%	3,415	1,475	Disposable Diapers	4.1%	1.5%	7,625	2,843
Yard/Garden Waste- Prunings	2.6%	1.8%	4,893	3,281	Ash	0.1%	0.1%	96	156
Animal Manure	4.1%	1.5%	7,667	2,781	Dust	0.0%	0.0%	21	24
Animal Carcasses & Offal	0.0%	0.0%	1	1	Fines/Sorting Residues	1.0%	0.3%	1,860	532
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.2%	0.1%	414	125					
Estimated Origin Specified Disposed Tons			186,626		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			104						

Table 45: West WGA Commercial Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	21.5%	3.3%	18,822	2,869	WOOD DEBRIS	10.9%	4.8%	9,527	4,216
PAPER PACKAGING	12.8%	2.5%	11,175	2,192	Natural Wood	0.1%	0.1%	54	86
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	0.6%	0.6%	503	545
Cardboard & Kraft Packaging	6.5%	2.4%	5,704	2,067	Painted Wood	1.4%	1.4%	1,224	1,263
Mixed/Low-grade Paper Packaging	1.7%	0.5%	1,486	396	Dimensional Lumber	1.8%	1.5%	1,540	1,316
Aseptic Containers	0.1%	0.1%	126	54	Engineered Wood	1.5%	1.1%	1,323	1,003
Gable Top Containers	0.2%	0.1%	176	81	Pallets & Crates	2.5%	1.9%	2,162	1,640
Other Polycoated Packaging	0.0%	0.0%	16	12	Other Untreated Wood	0.0%	0.0%	10	8
Compostable Paper Packaging	3.7%	1.2%	3,211	1,086	Wood By-products	2.8%	3.2%	2,465	2,822
R/C Paper Packaging	0.5%	0.2%	456	145	R/C Wood Debris	0.3%	0.2%	246	161
PAPER PRODUCTS	8.7%	2.0%	7,647	1,736	CONSTRUCTION MATERIALS	2.4%	2.5%	2,064	2,153
Newspaper Products	0.2%	0.1%	162	84	Plastic Lumber	0.0%	0.0%	10	11
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.0%	0.0%	0	0
Magazines	0.4%	0.3%	313	285	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.4%	0.3%	390	226	Concrete	0.0%	0.0%	24	39
Other Groundwood Paper Products	0.0%	0.0%	13	22	Drywall	0.2%	0.3%	187	300
Mixed/Low-grade Paper Products	1.8%	0.8%	1,578	740	Carpet	0.9%	1.0%	762	875
Compostable Paper Products	4.8%	1.3%	4,173	1,138	Carpet Padding	0.6%	1.0%	533	866
R/C Paper Products	1.2%	0.5%	1,018	451	Soil, Rocks, & Sand	0.1%	0.1%	119	101
PLASTIC	17.6%	3.8%	15,377	3,311	Asphalt Roofing	0.0%	0.0%	12	19
PLASTIC PACKAGING	11.0%	2.5%	9,593	2,146	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	0.7%	0.2%	585	166	Ceramics & Brick	0.1%	0.1%	75	92
#1 PETE Plastic Non-bottles	0.6%	0.2%	488	160	R/C Construction Materials	0.4%	0.5%	340	438
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	211	74	CONSUMER PRODUCTS	3.8%	1.5%	3,346	1,323
#2 HDPE Plastic Jars and Tubs	0.3%	0.1%	227	87	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	179	55	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	2	3	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	1	2	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.4%	0.5%	1,192	410	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.1%	0.0%	112	42	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.6%	0.3%	496	285	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.4%	0.1%	317	98	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	34	18	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.3%	0.1%	268	91	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	3.5%	1.0%	3,063	906	Other Consumer Electronics	0.0%	0.0%	4	6
Transportation Packaging Film Plastic	2.5%	2.2%	2,221	1,944	Textiles- Organic	1.3%	0.5%	1,101	478
Flexible Plastic Packaging	0.2%	0.1%	136	92	Textiles- Synthetic/Mixed/Unknown	0.9%	0.5%	812	474
R/C Plastic Packaging	0.1%	0.1%	60	69	Shoes/Purses/Belts	0.1%	0.1%	61	72
PLASTIC PRODUCTS	6.6%	3.3%	5,783	2,878	Tires & Other Rubber	1.1%	1.1%	981	931
#1 PETE Plastic Products	0.0%	0.0%	5	9	Furniture	0.4%	0.6%	388	492
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	1	2	HAZARDOUS AND SPECIAL WASTES	4.6%	4.0%	3,986	3,461
#5 PP Plastic Products	0.0%	0.0%	5	5	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.1%	0.0%	55	24	HID/UV/Germicidal Lamps	0.0%	0.0%	4	6
#7 Other/Unknown Plastic Products	3.0%	3.3%	2,637	2,861	Compact Fluorescent Lamps	0.0%	0.0%	3	5
PLA Compostable Products	0.0%	0.0%	10	8	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	1.6%	0.4%	1,389	365	Water-based Paint	0.1%	0.1%	61	83
Plastic Non-bag Film Products	0.7%	0.7%	655	632	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	0.8%	0.6%	719	500	Water-based Adhesives/Glues	0.0%	0.0%	0	0
R/C Plastic Products	0.4%	0.3%	308	295	Oil-based Paint	0.0%	0.0%	0	0
GLASS	1.3%	0.6%	1,171	512	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.5%	0.2%	439	216	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.2%	0.1%	150	82	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.4%	0.3%	352	236	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.0%	0.0%	17	27	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.1%	0.1%	110	110	Caustic Cleaners	0.0%	0.0%	2	4
R/C Glass	0.1%	0.2%	103	138	Dry-cell Batteries- Single Use	0.0%	0.0%	22	15
METAL	6.5%	3.0%	5,646	2,597	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.5%	0.2%	423	153	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.2%	0.1%	136	54	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.3%	0.4%	229	370	Motor Oil	0.1%	0.1%	47	77
Other Non-ferrous Metal	0.1%	0.0%	59	40	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.5%	0.2%	398	194	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	0	0	Oil Filters	0.1%	0.1%	53	57
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	2.2%	1.1%	1,966	968	Medical Wastes	4.2%	4.0%	3,641	3,469
R/C Metal	2.8%	1.8%	2,436	1,575	Sharps	0.0%	0.0%	1	2
ORGANICS	26.9%	5.3%	23,505	4,671	Pharmaceuticals & Vitamins	0.0%	0.0%	3	5
Edible Food Waste- Vegetative	10.3%	3.0%	8,975	2,630	Other Cleaners/Chemicals	0.0%	0.0%	0	0
Inedible Food Waste- Vegetative	3.1%	0.9%	2,704	816	Personal Care Products	0.1%	0.2%	110	166
Edible Food Waste- Meats/Fats/Oils	5.3%	3.2%	4,656	2,831	Other Potentially Hazardous Wastes	0.0%	0.0%	37	31
Inedible Food Waste- Meats/Fats/Oils	0.1%	0.1%	112	47	RESIDUALS	4.6%	3.1%	4,066	2,698
Yard/Garden Waste- Leaves and Grass	1.1%	0.8%	996	711	Disposable Diapers	3.7%	3.0%	3,224	2,662
Yard/Garden Waste- Prunings	4.9%	3.7%	4,298	3,244	Ash	0.1%	0.2%	96	156
Animal Manure	1.8%	1.4%	1,544	1,223	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.0%	0.0%	1	1	Fines/Sorting Residues	0.9%	0.5%	746	417
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.2%	0.1%	219	114					
Estimated Origin Specified Disposed Tons			87,508		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			48						

Table 46: West WGA Residential Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	20.3%	2.5%	11,878	1,463	WOOD DEBRIS	1.8%	0.9%	1,046	501
PAPER PACKAGING	8.1%	1.6%	4,766	946	Natural Wood	0.2%	0.4%	133	214
Newspaper Packaging	0.0%	0.0%	4	6	Treated Wood	0.0%	0.1%	28	31
Cardboard & Kraft Packaging	2.5%	1.0%	1,481	587	Painted Wood	0.2%	0.3%	126	171
Mixed/Low-grade Paper Packaging	2.0%	0.5%	1,162	288	Dimensional Lumber	0.2%	0.2%	91	117
Aseptic Containers	0.4%	0.2%	263	122	Engineered Wood	0.4%	0.4%	208	229
Gable Top Containers	0.5%	0.2%	278	117	Pallets & Crates	0.1%	0.2%	79	127
Other Polycoated Packaging	0.1%	0.0%	33	15	Other Untreated Wood	0.0%	0.0%	8	10
Compostable Paper Packaging	1.9%	0.3%	1,116	183	Wood By-products	0.0%	0.0%	7	10
R/C Paper Packaging	0.7%	0.2%	428	91	R/C Wood Debris	0.6%	0.4%	366	258
PAPER PRODUCTS	12.1%	2.0%	7,113	1,167	CONSTRUCTION MATERIALS	0.6%	0.4%	363	230
Newspaper Products	0.9%	0.8%	551	464	Plastic Lumber	0.0%	0.0%	0	0
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.0%	0.0%	6	9
Magazines	0.4%	0.3%	247	203	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.3%	0.1%	166	79	Concrete	0.0%	0.0%	0	0
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	0.0%	0.0%	5	7
Mixed/Low-grade Paper Products	3.5%	1.1%	2,045	673	Carpet	0.3%	0.4%	190	223
Compostable Paper Products	6.7%	0.9%	3,899	501	Carpet Padding	0.1%	0.2%	76	99
R/C Paper Products	0.4%	0.3%	205	184	Soil, Rocks, & Sand	0.0%	0.0%	17	28
PLASTIC	16.6%	1.7%	9,719	1,002	Asphalt Roofing	0.0%	0.1%	24	39
PLASTIC PACKAGING	10.7%	1.1%	6,269	657	Plastic Floor Covering	0.0%	0.0%	0	0
#1 PETE Plastic Bottles	1.0%	0.2%	585	108	Ceramics & Brick	0.0%	0.0%	2	4
#1 PETE Plastic Non-bottles	1.0%	0.2%	600	125	R/C Construction Materials	0.1%	0.1%	43	59
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	139	68	CONSUMER PRODUCTS	6.5%	2.3%	3,803	1,351
#2 HDPE Plastic Jars and Tubs	0.2%	0.1%	105	59	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.4%	0.2%	216	88	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	1	1	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	1.3%	0.2%	756	141	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.2%	0.0%	89	27	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.6%	0.1%	354	68	Computer Peripherals	0.0%	0.0%	0	0
Expanded Polystyrene Packaging	0.5%	0.1%	309	71	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	13	10	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.7%	0.1%	411	85	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	4.0%	0.5%	2,362	312	Other Consumer Electronics	0.2%	0.3%	113	182
Transportation Packaging Film Plastic	0.3%	0.2%	195	122	Textiles- Organic	4.7%	2.1%	2,761	1,234
Flexible Plastic Packaging	0.2%	0.1%	114	34	Textiles- Synthetic/Mixed/Unknown	0.9%	0.6%	521	353
R/C Plastic Packaging	0.0%	0.1%	20	32	Shoes/Purses/Belts	0.3%	0.2%	201	123
PLASTIC PRODUCTS	5.9%	1.2%	3,450	697	Tires & Other Rubber	0.4%	0.3%	209	156
#1 PETE Plastic Products	0.0%	0.0%	0	0	Furniture	0.0%	0.0%	0	0
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	0.0%	0.0%	0	0
#3 PVC Plastic Products	0.0%	0.0%	0	0	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.8%	0.4%	487	249
#5 PP Plastic Products	0.0%	0.0%	8	8	Pesticides	0.0%	0.0%	13	20
#6 PS Plastic Products	0.0%	0.0%	23	19	HID/UV/Germicidal Lamps	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Products	1.8%	0.8%	1,069	462	Compact Florescent Lamps	0.0%	0.0%	0	0
PLA Compostable Products	0.0%	0.0%	5	7	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	2.6%	0.5%	1,527	314	Water-based Paint	0.1%	0.1%	58	81
Plastic Non-bag Film Products	0.0%	0.0%	8	13	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	0.2%	0.2%	112	130	Water-based Adhesives/Glues	0.0%	0.0%	17	19
R/C Plastic Products	1.2%	0.6%	698	348	Oil-based Paint	0.0%	0.0%	0	0
GLASS	2.5%	1.0%	1,471	580	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	1.2%	0.5%	705	296	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.1%	0.1%	83	68	Primers/Sealings/Coatings	0.0%	0.1%	23	37
Brown/Other Colored Glass Containers	0.5%	0.4%	309	229	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.0%	0.0%	8	13	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.4%	0.4%	220	233	Caustic Cleaners	0.1%	0.1%	39	63
R/C Glass	0.2%	0.2%	146	136	Dry-cell Batteries- Single Use	0.0%	0.0%	28	27
METAL	5.7%	1.3%	3,354	735	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.4%	0.1%	241	69	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.5%	0.2%	269	90	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.0%	0.0%	7	11	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.2%	0.3%	138	150	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.8%	0.2%	494	92	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.1%	0.0%	33	22	Oil Filters	0.0%	0.0%	0	0
White Goods	0.0%	0.0%	0	0	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	1.9%	0.7%	1,127	421	Medical Wastes	0.2%	0.1%	93	45
R/C Metal	1.8%	0.6%	1,045	380	Sharps	0.0%	0.0%	11	17
ORGANICS	36.6%	5.3%	21,481	3,100	Pharmaceuticals & Vitamins	0.1%	0.1%	71	60
Edible Food Waste- Vegetative	9.2%	1.7%	5,414	999	Other Cleaners/Chemicals	0.0%	0.1%	26	42
Inedible Food Waste- Vegetative	8.9%	1.8%	5,227	1,051	Personal Care Products	0.1%	0.0%	40	26
Edible Food Waste- Meats/Fats/Oils	2.7%	0.9%	1,582	509	Other Potentially Hazardous Wastes	0.1%	0.2%	69	101
Inedible Food Waste- Meats/Fats/Oils	0.6%	0.2%	363	116	RESIDUALS	8.5%	1.6%	5,010	958
Yard/Garden Waste- Leaves and Grass	3.9%	2.2%	2,264	1,278	Disposable Diapers	6.8%	1.6%	3,969	918
Yard/Garden Waste- Prunings	0.8%	0.8%	464	470	Ash	0.0%	0.0%	0	0
Animal Manure	10.2%	4.3%	6,005	2,494	Dust	0.0%	0.0%	21	24
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	1.7%	0.6%	1,020	327
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.3%	0.1%	162	46					
Estimated Origin Specified Disposed Tons			58,613		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			24						

Table 47: West WGA Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -	Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	6.5%	2.5%	2,648	994	WOOD DEBRIS	34.8%	9.3%	14,107	3,758
PAPER PACKAGING	4.4%	2.2%	1,786	897	Natural Wood	0.2%	0.4%	96	152
Newspaper Packaging	0.0%	0.0%	0	0	Treated Wood	5.3%	4.4%	2,151	1,802
Cardboard & Kraft Packaging	3.3%	2.2%	1,336	875	Painted Wood	12.7%	5.9%	5,149	2,388
Mixed/Low-grade Paper Packaging	0.4%	0.2%	143	84	Dimensional Lumber	6.5%	2.5%	2,651	1,024
Aseptic Containers	0.0%	0.0%	1	2	Engineered Wood	2.9%	1.7%	1,175	704
Gable Top Containers	0.1%	0.0%	24	18	Pallets & Crates	2.5%	3.6%	1,024	1,449
Other Polycoated Packaging	0.0%	0.1%	15	22	Other Untreated Wood	0.0%	0.0%	7	11
Compostable Paper Packaging	0.3%	0.2%	135	84	Wood By-products	1.7%	1.9%	700	771
R/C Paper Packaging	0.3%	0.2%	130	80	R/C Wood Debris	2.9%	1.8%	1,156	737
PAPER PRODUCTS	2.1%	0.8%	862	304	CONSTRUCTION MATERIALS	19.4%	8.2%	7,850	3,302
Newspaper Products	0.1%	0.0%	24	16	Plastic Lumber	0.0%	0.0%	0	0
Cardboard & Kraft Paper Products	0.0%	0.0%	0	0	Insulation	0.2%	0.3%	101	138
Magazines	0.1%	0.1%	22	32	Asphalt Paving	0.0%	0.0%	0	0
High-Grade Paper Products	0.0%	0.0%	8	10	Concrete	2.3%	2.4%	945	978
Other Groundwood Paper Products	0.0%	0.0%	0	0	Drywall	3.4%	5.4%	1,394	2,191
Mixed/Low-grade Paper Products	0.3%	0.2%	133	71	Carpet	3.3%	2.9%	1,332	1,156
Compostable Paper Products	0.9%	0.5%	371	188	Carpet Padding	0.0%	0.0%	0	0
R/C Paper Products	0.8%	0.5%	305	189	Soil, Rocks, & Sand	0.5%	0.4%	214	165
PLASTIC	9.5%	4.1%	3,837	1,672	Asphalt Roofing	4.7%	5.4%	1,917	2,184
PLASTIC PACKAGING	2.8%	1.2%	1,132	498	Plastic Floor Covering	0.7%	1.2%	294	475
#1 PETE Plastic Bottles	0.2%	0.1%	64	38	Ceramics & Brick	3.5%	2.6%	1,417	1,060
#1 PETE Plastic Non-bottles	0.2%	0.1%	67	32	R/C Construction Materials	0.6%	0.5%	236	199
#2 HDPE Plastic Natural Bottles	0.3%	0.4%	118	166	CONSUMER PRODUCTS	12.4%	5.1%	5,011	2,057
#2 HDPE Plastic Jars and Tubs	0.2%	0.1%	74	49	Televisions - LCD	0.0%	0.0%	0	0
#2 HDPE Plastic Colored Bottles	0.1%	0.0%	29	16	Televisions - CRT	0.0%	0.0%	0	0
#3 PVC Plastic Packaging	0.0%	0.0%	0	0	Television Peripherals	0.0%	0.0%	0	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0	0	Computer Monitors - CRT	0.0%	0.0%	0	0
#5 PP Plastic Packaging	0.2%	0.1%	91	51	Computer Monitors - LCD	0.0%	0.0%	0	0
#6 PS Plastic Packaging	0.0%	0.0%	6	4	Computers	0.0%	0.0%	0	0
#7 Other/Unknown Plastic Packaging	0.1%	0.0%	40	19	Computer Peripherals	0.0%	0.0%	11	18
Expanded Polystyrene Packaging	0.5%	0.3%	205	107	Computer Printers	0.0%	0.0%	0	0
PLA Compostable Packaging	0.0%	0.0%	0	0	Audio Equipment	0.0%	0.0%	0	0
Plastic Merchandise Bags	0.1%	0.1%	50	32	Electronic Gaming Equipment	0.0%	0.0%	0	0
Packaging Film Plastic	0.8%	0.5%	331	188	Other Consumer Electronics	0.6%	0.6%	253	245
Transportation Packaging Film Plastic	0.1%	0.1%	41	37	Textiles- Organic	2.7%	1.6%	1,099	642
Flexible Plastic Packaging	0.0%	0.0%	15	8	Textiles- Synthetic/Mixed/Unknown	2.0%	1.1%	806	429
R/C Plastic Packaging	0.0%	0.0%	0	0	Shoes/Purses/Belts	0.2%	0.2%	85	79
PLASTIC PRODUCTS	6.7%	4.0%	2,705	1,637	Tires & Other Rubber	0.2%	0.4%	100	147
#1 PETE Plastic Products	0.0%	0.0%	2	2	Furniture	4.6%	4.7%	1,883	1,885
#2 HDPE Plastic Products:	0.0%	0.0%	0	0	Mattresses	1.9%	2.2%	774	883
#3 PVC Plastic Products	0.1%	0.1%	27	44	R/C Consumer Products	0.0%	0.0%	0	0
#4 LDPE Plastic Products	0.0%	0.0%	0	0	HAZARDOUS AND SPECIAL WASTES	0.4%	0.4%	159	162
#5 PP Plastic Products	0.0%	0.0%	2	2	Pesticides	0.0%	0.0%	0	0
#6 PS Plastic Products	0.0%	0.0%	2	2	HID/UV/Germicidal Lamps	0.0%	0.0%	2	4
#7 Other/Unknown Plastic Products	0.5%	0.2%	183	80	Compact Florescent Lamps	0.0%	0.0%	7	7
PLA Compostable Products	0.0%	0.0%	0	0	Florescent Tubes	0.0%	0.0%	0	0
Plastic Garbage Bags	0.5%	0.3%	189	113	Water-based Paint	0.1%	0.2%	49	65
Plastic Non-bag Film Products	2.9%	4.1%	1,183	1,665	Solvent-based Adhesives/Glues	0.0%	0.0%	0	0
Bulky Rigid Plastic Products	1.5%	0.8%	595	314	Water-based Adhesives/Glues	0.0%	0.0%	0	0
R/C Plastic Products	1.3%	0.8%	523	325	Oil-based Paint	0.0%	0.0%	0	0
GLASS	1.0%	0.6%	386	243	Lacquer/Varnish/Urethane Coatings/Stains	0.0%	0.0%	0	0
Clear Glass Containers	0.4%	0.2%	153	97	Field & Lawn Markings	0.0%	0.0%	0	0
Green Glass Containers	0.0%	0.0%	0	0	Primers/Sealings/Coatings	0.0%	0.0%	0	0
Brown/Other Colored Glass Containers	0.1%	0.1%	30	21	Water Repellents & Waterproofers	0.0%	0.0%	0	0
Plate Glass	0.2%	0.3%	67	102	Solvents	0.0%	0.0%	0	0
Non-glass Ceramics	0.2%	0.3%	100	135	Caustic Cleaners	0.0%	0.0%	0	0
R/C Glass	0.1%	0.1%	37	27	Dry-cell Batteries- Single Use	0.0%	0.0%	4	5
METAL	9.7%	5.5%	3,945	2,222	Dry-cell Batteries- Rechargeable	0.0%	0.0%	0	0
Aluminum Beverage Cans	0.1%	0.1%	60	48	Wet-cell Batteries	0.0%	0.0%	0	0
Aluminum Foil/Containers	0.1%	0.0%	26	19	Gasoline/Kerosene	0.0%	0.0%	0	0
Other Aluminum	0.1%	0.1%	32	35	Motor Oil	0.0%	0.0%	0	0
Other Non-ferrous Metal	0.3%	0.3%	111	108	Antifreeze	0.0%	0.0%	0	0
Food Cans - Tinned	0.2%	0.1%	76	53	Other Vehicle Fluids	0.0%	0.0%	0	0
Food Cans - Coated	0.0%	0.0%	0	0	Oil Filters	0.0%	0.0%	0	0
White Goods	1.6%	2.0%	648	801	Explosives	0.0%	0.0%	0	0
Other Ferrous Metal	2.9%	1.7%	1,191	681	Medical Wastes	0.0%	0.0%	13	10
R/C Metal	4.4%	4.9%	1,800	1,992	Sharps	0.0%	0.0%	0	0
ORGANICS	5.0%	2.7%	2,036	1,102	Pharmaceuticals & Vitamins	0.0%	0.0%	1	1
Edible Food Waste- Vegetative	2.5%	2.0%	1,018	824	Other Cleaners/Chemicals	0.0%	0.0%	0	0
Inedible Food Waste- Vegetative	1.0%	0.7%	396	272	Personal Care Products	0.2%	0.2%	62	99
Edible Food Waste- Meats/Fats/Oils	0.4%	0.3%	151	113	Other Potentially Hazardous Wastes	0.1%	0.0%	21	16
Inedible Food Waste- Meats/Fats/Oils	0.1%	0.1%	34	37	RESIDUALS	1.3%	1.0%	526	420
Yard/Garden Waste- Leaves and Grass	0.4%	0.5%	155	199	Disposable Diapers	1.1%	1.0%	432	394
Yard/Garden Waste- Prunings	0.3%	0.3%	131	142	Ash	0.0%	0.0%	0	0
Animal Manure	0.3%	0.3%	118	116	Dust	0.0%	0.0%	0	0
Animal Carcasses & Offal	0.0%	0.0%	0	0	Fines/Sorting Residues	0.2%	0.1%	95	52
Food Processing Wastes	0.0%	0.0%	0	0	Sludges & Other Special Industrial Wastes	0.0%	0.0%	0	0
R/C Organics	0.1%	0.1%	34	23					
Estimated Origin Specified Disposed Tons			40,505		<i>Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.</i>				
Sample Count			32						

Appendix D: Supplemental Composition Results

This section presents waste composition results for the supplemental statewide analysis. The supplemental analysis generated statewide findings that incorporated recent studies conducted by Pierce County, King County, and the Cities of Bellingham and Seattle with data collected in the 2020-2021 statewide study. Statewide data are presented for the state overall and for each waste sector (commercial, residential, and self-hauled) in three ways:

1. A bar chart presents an overview of waste composition by material class.
2. A table shows the ten most prevalent material types, by weight.
3. A detailed table lists the full composition and quantity results for the 19 material types. Because each study used a different list of material types for sorting—and none of the four used the same list as the 2020-2021 statewide study—the list of 143 original material types was merged into a list of 19 materials compatible with all studies.

The supplemental analysis combines data from the following studies with the 2020-2021 statewide study:

- ▶ 2019 King County Waste Characterization Study (excludes Seattle)
- ▶ 2020-2021 City of Seattle Waste Characterization Study
- ▶ 2020 City of Bellingham Waste Characterization Study
- ▶ 2015-2016 Pierce County Waste Characterization Study (excludes Tacoma)

To combine the existing composition data from the studies listed above with data collected in the statewide sampled counties, Cascadia merged, or “rolled-up,” five different material lists. Each study originally used a unique list of materials and grouped individual materials differently, so many materials had to be merged into broader categories.

The first column of Table 5 shows merged material types. The remaining columns show the relationships between the material list used in the supplemental analysis list (19 material types total), the material lists used in the statewide study (143 materials), and the material lists used in the supplemental studies.

For example, the level of detail for the *food waste* material types—five material types in the statewide and Pierce County studies, four in the City of Seattle study, seven in the King County study, and a single category for the City of Bellingham—found in the five studies vary enough that the detailed material types had to be merged until a comparison between studies was possible. In this example, the only level of detail contained in all five studies was *food waste*.

Table 48: Supplemental Statewide Results - Five-study Material Type Translation

	Supplemental Analysis (rolled-up)	Statewide Study 2020-2021	City of Bellingham 2019	Pierce County 2015-2016	City of Seattle 2020-2021	
Paper						
1	Newspaper	Newspaper Packaging	Newspaper	Newspaper	Newspaper	Old Newspaper (ONP)
		Newspaper Products				
2	Cardboard and Mixed Recyclable Paper	Cardboard and Kraft Packaging	Cardboard	Cardboard & Kraft Paper	Plain OCC/Kraft Paper	Low-Grade Recyclable Paper
		Cardboard and Kraft Paper Products	Recyclable Paper	Mixed Recyclable Paper		High-Grade Paper
		Mixed/Low-grade Paper Packaging		Paperboard	Grocery/Shopping Bags	Plain Corrugated Cardboard (OCC/Kraft Bags)
		High-grade Paper Products		Magazine/Catalogs	Paper Packaging	
		Mixed/Low-grade Paper Products		Cartons & Coated Paperboard	Paper Products	
		Magazines			Other Polycoated Containers	
		Other Groundwood Paper Products				
		Other Polycoated Packaging				
3	Compostable Food-Soiled Paper Products	Compostable Paper Packaging	Compostable Food-Soiled Products	Contaminated Paper	Waxed OCC	Waxed Corrugated Cardboard
		Compostable Paper Products			Compostable/Soiled Paper Products	Other Compostable Paper
					Compostable Single-Use Food Service Paper Packaging	Single-use Food Service Compostable Paper
4	Other Paper	Gable Top Containers	Non-Recyclable Paper	Other Non-Recyclable Paper	Shredded Paper	Other Paper
		Aseptic Containers		Aseptic Packages	Mixed/Other Paper	
		R/C Paper Products			Non-Compostable Single-Use Food Service Paper Packaging	
		R/C Paper Packaging			Aseptic Containers	
					Gable Top Containers	

	Supplemental Analysis (rolled-up)	Statewide Study 2020-2021	City of Bellingham 2019	Pierce County 2015-2016	City of Seattle 2020-2021	King County 2020
Plastic						
5	Plastics Containers & Other Non-film Recyclable Plastic	#1 PETE Plastic Bottles	Recyclable Plastic Containers	Pop & Water Bottles	#1 PET Bottles and Jars	PET Bottles
		#2 HDPE Plastic Colored Bottles	Bulky and Rigid Plastic	All Other Bottles & Jugs	#2 HDPE Natural Bottles and Jars	Other PET Containers
		#2 HDPE Plastic Natural Bottles		Compatible Plastic Containers	#2 HDPE Colored Bottles and Jars	HDPE Bottles
		#1 PETE Plastic non-bottles			#5 PP Bottles and Jars	Other HDPE Containers
		#2 HDPE Plastic Jars and Tubs			Other Plastic Bottles and Jars	#3 Packaging*
		#3 PVC Plastic Packaging			#1 PET Non-Bottle Packaging	#4 Packaging*
		#4 LDPE Plastic Packaging			#2 HDPE Non-Bottle Packaging	#5 Packaging*
		#5 PP Plastic Packaging			#5 Non-Bottle Packaging	Other #6 Packaging*
		#6 PS Plastic Packaging			Large Durable Plastic Products (>2 gallons)	Other Non-Compostable/Non-PLA #7 Packaging*
		#7 Other/Unknown Plastic Packaging			Non-Compostable Single-Use Food Service Plastic Packaging	Other Plastic Packaging
		Bulky Rigid Plastic Products			Other Non-Bottle Packaging	
6	Film Plastic	Plastic Garbage Bags	Film Plastic	Plastic Shopping Bags	Garbage Bags	Recyclable Plastic Bags
		Plastic Merchandise Bags		Plastic Film	Other Film	Non-industrial Packaging Film Plastic
		Plastic Non-bag Film Products			Stretch Wrap	Industrial Packaging Film Plastic
		Flexible Plastic Packaging			Other Clean Polyethylene Film	Plastic Garbage Bags
		Packaging Film Plastic			Takeout and Retail Bags	Plastic Film Products
		Transportation Packaging Film Plastic			Plastic Pouches	
					Compostable Plastic Bags	

	Supplemental Analysis (rolled-up)	Statewide Study 2020-2021	City of Bellingham 2019	Pierce County 2015-2016	City of Seattle 2020-2021	King County 2020
Plastic						
7	Other Plastic	#1 PETE Plastic Products	Non-Recyclable Plastic	Styrofoam	Plastic Mailers	Compostable Plastics
		#2 HDPE Plastic Products		Non-Compatible Plastics	Plastic/Other Materials	Expanded Polystyrene Single Serve Food Packaging
		#3 PVC Plastic Products			Compostable Single-Use Food Service Plastic Utensils	Other Expanded Polystyrene Packaging
		#4 LDPE Plastic Products			Compostable Single-Use Food Service Plastic Packaging	Expanded Polystyrene Products
		#5 PP Plastic Products			Non-Compostable Single-Use Food Service Plastic Utensils	Single Resin Plastic Products
		#6 PS Plastic Products			Small Durable Plastic Products (<2 gallons, >2")	Mixed Resin Plastic Products
		#7 Other/Unknown Plastic Products			Expanded Polystyrene Food-Grade	Plastic and Other Materials
		R/C Plastic Packaging			Expanded Polystyrene Non-Food Grade	
		R/C Plastic Products			Rigid Polystyrene Foam Insulation	
		Expanded Polystyrene Packaging				
		PLA Compostable Products				
		PLA Compostable Packaging				
Glass						
8	Glass Containers	Clear Glass Containers	Recyclable Glass	Clear Glass Containers	Clear Beverage Glass	Clear Glass Containers
		Green Glass Containers		Brown Glass Containers	Green Beverage Glass	Green Glass Containers
		Brown/Other Colored Glass Containers		Green Glass Containers	Brown Beverage Glass	Brown Glass Containers
					Container Glass	

	Supplemental Analysis (rolled-up)	Statewide Study 2020-2021	City of Bellingham 2019	Pierce County 2015-2016	City of Seattle 2020-2021	King County 2020
Glass						
9	Other Glass	Plate Glass	Non-Recyclable Glass	Other Glass	Other Glass	Other Glass
		R/C Glass		Fluorescent Light Tubes & Compacts	Mixed Cullet	Kitchenware/Ceramics
		Compact Florescent Lamps			Ceramics	Compact Fluorescent Bulbs
		Florescent Tubes			Fluorescent Tubes and Compact Fluorescent Lights (CFL)	Other Fluorescent Bulbs and Tubes
		Non-glass Ceramics				
Metal						
10	Metal	Aluminum Beverage Cans	Recyclable Metal	Steel Food and Beverage Cans	Aluminum Cans	Aluminum Cans
		Food Cans - Coated	Scrap Metal	Aluminum Cans	Steel Food Cans	Tinned Food Cans
		Food Cans - Tinned		Aerosol Cans	Empty Aerosol Cans	Other Aluminum
		Other Ferrous Metal		Other Ferrous Metals	Aluminum Foil/Containers	Other Ferrous
		Other Non-ferrous Metal		Other Non-Ferrous Metals	Other Ferrous	Other Non-Ferrous
		Aluminum Foil/Containers			Other Aluminum	Mixed Metals
		Other Aluminum			Other Nonferrous	
Organics						
11	Food Waste	Food Processing Wastes	Food Scraps	Food Waste: Edible/Program Compatible	Edible Food Scraps – Packaged	Fruits and Vegetables, Edible*
		Edible Food Waste - Meats/Fats/Oils		Food Waste: Edible/Non-Compatible	Edible Food Scraps – Non-Packaged	Fruits and Vegetables, Non-edible*
		Edible Food Waste - Vegetative		Food Waste: Inedible/Compatible	Non-Edible Food Scraps	Homegrown Fruits and Vegetables*
		Inedible Food Waste - Meats/Fats/Oils		Food Waste: Inedible/Non-Compatible	Fats, Oils, and Grease	Meat, Edible*
		Inedible Food Waste - Vegetative		K-Cups		Meat, Non-edible*
						Mixed/Other Food Waste, Edible*
						Mixed/Other Food Waste, Non-edible*

	Supplemental Analysis (rolled-up)	Statewide Study 2020-2021	City of Bellingham 2019	Pierce County 2015-2016	City of Seattle 2020-2021	King County 2020
Organics						
12	Yard Waste	Yard/Garden Waste - Leaves and Grass	Yard Debris	Yard Waste	Leaves and Grass	Stumps
		Yard/Garden Waste - Prunings		Land Clearing Debris	Prunings	Large Prunings
		Natural Wood				Yard Wastes
Construction Materials						
13	Construction Materials	R/C Wood Debris	Construction and Demolition Debris	Gypsum Wallboard	Pallets and Crates	Carpet Padding
		Wood By-products		Concrete	Other Untreated Wood	Dimensional Lumber/Engineered Wood
		Dimensional Lumber		Insulation	New Painted Wood	Treated Wood
		Engineered Wood		Carpet	Old Painted Wood	Contaminated Wood
		Other Untreated Wood		Untreated Lumber	Creosote-Treated Wood	Roofing and Siding Wood
		Pallets and Crates		Treated Wood Waste	Other Treated Wood	Carpet
		Painted Wood		Asphalt Roofing	Contaminated Wood	Gypsum Wallboard
		Treated Wood		Pallets	New Gypsum Scrap	Construction/Demolition Waste (except wood)
		Asphalt Roofing		Other Construction Debris	Demo Gypsum Scrap	Asphalt Shingles
		Drywall		Asphalt	Carpet	
		Carpet			Felt Carpet Pad	
		Carpet Padding			Fiberglass Insulation	
		Asphalt Paving			Rock, Concrete, Brick, And Other Aggregates	
		Ceramics and Brick			Asphaltic Roofing	
		Concrete			Other Construction Debris	
		Insulation			Clean Dimension Lumber	
		Plastic Floor Covering			Clean Engineered Wood	
		Plastic Lumber				
		R/C Construction Materials				

	Supplemental Analysis (rolled-up)	Statewide Study 2020-2021	City of Bellingham 2019	Pierce County 2015-2016	City of Seattle 2020-2021	King County 2020
Consumer Products						
14	E-Waste	Television Peripherals	Electronics and Small Appliances	E-Cycle Products	Small Appliances	Small Household Appliances
		Televisions - CRT		All Other E-Waste	Electronics accepted through E-Cycle WA	Audio/Visual Equipment
		Televisions - LCD		Small Appliances	Electronics not accepted through E-Cycle WA	Printers/Copiers/Fax Machines
		Audio Equipment				Central Processing Units (CPUs)
		Computer Monitors - CRT				Computer Peripherals
		Computer Monitors - LCD				CRT Computer Monitors and Televisions
		Computer Peripherals				Other Computer Monitors and Televisions
		Computer Printers				Laptops
		Computers				Cell Phones
		Electronic Gaming Equipment				Tablets
		Other Consumer Electronics				Other Electronics
15	Diapers	Disposable Diapers	Diapers	Diapers	Disposable Diapers	Disposable Diapers
16	Textiles and Shoes	Shoes, Purses, and Belts	Textiles and Shoes	Textiles and Leather	Textiles	Textiles: Clothes & Other Recyclables
		Textiles - Organic			Mixed Textiles	Other Textiles
		Textiles - Synthetic, Mixed, or Unknown				
17	Vehicle Batteries	Wet-cell Batteries	Lead Batteries	Car Batteries	Wet-Cell Batteries	Vehicle Batteries

	Supplemental Analysis (rolled-up)	Statewide Study 2020-2021	City of Bellingham 2019	Pierce County 2015-2016	City of Seattle 2020-2021	King County 2020
Other Materials						
18	Other Hazardous / Special Waste	Motor Oil	Used Motor Oil	Paints/Adhesives	Liquid Latex Paints	Used Oil
		Gasoline/Kerosene	Other Hazardous / Special Waste	Cleaners	Oil-Based Paints Accepted by PaintCare	Latex Paint
		Antifreeze		Pesticides/Herbicides	Medical Wastes	Oil-Based Paint
		Oil Filters		Vehicle & Equipment Fluids	Non-Caustic Cleaners/Chemicals	Solvents and Thinners
		Oil-based Paint		Gasoline	Pharmaceuticals and Medications	Adhesives and Glue
		Solvents		Explosives	Vitamins and Supplements	Cleaners and Corrosives
		Solvent-based Adhesives/Glues		Medical Waste	Other Potentially Harmful Wastes	Pesticides and Herbicides
		Water-based Adhesives/Glues		Medicine	Oil Filters	Gasoline and Fuel Oil
		Pesticides		Other Hazardous Wastes	LED Lighting	Antifreeze/Brake Fluid
		Caustic Cleaners			Animal By-Products	Medical Waste
		Other Cleaners/Chemicals			Personal Care/Cosmetics	Pharmaceuticals and Vitamins
		Explosives				Other Hazardous Waste
		HID, UV, and Germicidal Lamps				Animal Carcasses
		Lacquer, Varnish, Urethane Coatings, and Stains				
		Other Potentially Hazardous Wastes				
		Other Vehicle Fluids				
		Personal Care Products				
		Primers, Sealings, and Coatings				
		Water-based Paint				
		Water Repellents and Waterproofers				
		Medical Wastes				
		Pharmaceuticals and Vitamins				
		Sharps				
		Sludges and Other Special Industrial Wastes				
		Animal Carcasses and Offal				

	Supplemental Analysis (rolled-up)	Statewide Study 2020-2021	City of Bellingham 2019	Pierce County 2015-2016	City of Seattle 2020-2021	King County 2020
Other Materials						
19	Other Material	Dry-cell Batteries - Rechargeable	Rechargeable Batteries	Alkaline Batteries	Other Dry-Cell Batteries	Animal Feces
		Dry-cell Batteries - Single Use	Other Material	Other Batteries	Rechargeable Batteries	Other Mixed Metals
		Animal Manure	Non-Recyclable Metal	All Other Waste	Mixed Metals/Materials	Compressed Gas Cylinders
		R/C Metal	Cords and Holiday Lights	Other Organic Waste	Personal Protective Equipment (PPE)	Other Compostables*
		Field and Lawn Markings		Large Appliances	Other Compostable Organics	Household Batteries
		White Goods		Tires	Rubber Products	Foam Rubber and Padding
		Tires Other Rubber		Mattresses/Box Springs	Tires	Other Wood
		Furniture		Furniture/Bulky	Furniture	Furniture
		Mattresses		Liquids: Any liquid that cannot be identified by the container	Mattresses	Mattresses
		Ash		Fines	Sand/Soil/Dirt	Miscellaneous Organics
		Dust			Nondistinct Fines	Rubber Products
		Fines/Sorting Residues			Miscellaneous Organics	Tires
		Soil, Rocks, and Sand			Miscellaneous Inorganics	Miscellaneous Inorganics
		R/C Consumer Products				Ash
		R/C Organics				Non-distinct Fines

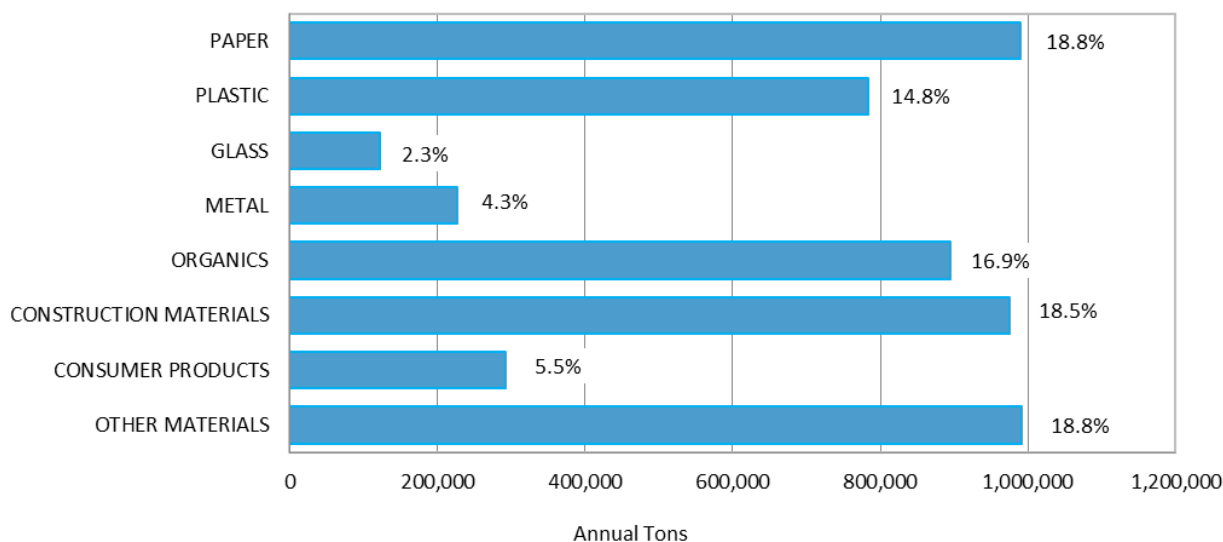
Supplemental Statewide Results—Overall Disposed Waste Stream

This section characterizes the overall disposed MSW stream for the entire state of Washington by combining all three of the sectors, all six WGAs considered in this study, and supplemental data from four other city and county studies. Characterization results are presented for the 19 *material types* that resulted from the process of combining material lists from these five analyses.

OVERVIEW BY MATERIAL CLASS

Composition estimates by material class for the overall statewide disposed waste stream are illustrated in Figure 28. The largest material classes in the overall waste stream are **Paper** (18.8%), **Other Materials** (18.8%), and **Construction Materials** (18.5%) which together account for over one half (56.1%) of the waste stream by weight, followed by **Organics** (16.9%) and **Plastic** (14.8%).

Figure 28: Supplemental Statewide Results—Overall Statewide Disposed Waste Stream, Composition by Material Class, 2020-2021



TEN MOST PREVALENT MATERIALS

When combined, the ten most prevalent material types in the overall waste stream account for most of the waste stream (84.6%), as shown in Table 49. *Construction and demolition debris* (18.5%), *food waste* (13.1%), and *other material* (13.0%) are the most prevalent material types, together accounting for nearly half of the overall waste stream.

Table 49: Supplemental Statewide Results—Overall Statewide Disposed Waste Stream, Ten Most Prevalent Material Types, 2020-2021

Material	Est. Percent	Est. Tons
Construction and Demolition Debris	18.5%	975,406
Food Waste	13.1%	693,080
Other Material	13.0%	683,408
Cardboard & Mixed Recyclable Paper	10.3%	542,122
Film Plastic	6.2%	326,578
Compostable Food-Soiled Paper Products	6.1%	321,612
Plastic Containers & Other Non-film Recyclable Plastic	4.6%	240,981
Textiles and Shoes	4.5%	237,567
Metal	4.3%	226,933
Other Plastic	4.1%	215,516
Total for Top Materials	84.6%	4,463,203

Percentages for material types may not total 100% due to rounding.

DETAILED COMPOSITION

The composition percentages by weight, based on the supplemental analysis, for each material type in Washington's overall disposed waste stream are listed in Table 50.

Table 50: Supplemental Statewide Results—Overall Statewide Disposed Waste Stream, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	18.8%	0.7%	989,908	36,925
Newspaper	0.4%	0.0%	23,340	2,445
Cardboard & Mixed Recyclable Paper	10.3%	0.5%	542,122	26,619
Compostable Food-Soiled Paper Products	6.1%	0.3%	321,612	17,970
Other Paper	1.9%	0.3%	102,834	17,004
PLASTIC	14.8%	0.6%	783,074	31,615
Plastic Containers & Other Non-film Recyclable Plastic	4.6%	0.4%	240,981	19,906
Film Plastic	6.2%	0.3%	326,578	16,881
Other Plastic	4.1%	0.3%	215,516	15,536
GLASS	2.3%	0.2%	122,364	12,669
Glass Containers	1.6%	0.1%	83,996	7,655
Other Glass	0.7%	0.2%	38,368	10,122
METAL	4.3%	0.3%	226,933	17,421
Metal	4.3%	0.3%	226,933	17,421
ORGANICS	16.9%	0.8%	894,081	40,254
Food Waste	13.1%	0.7%	693,080	35,794
Yard Waste	3.8%	0.4%	201,001	21,098
CONSTRUCTION MATERIALS	18.5%	1.3%	975,406	66,871
Construction and Demolition Debris	18.5%	1.3%	975,406	66,871
CONSUMER PRODUCTS	5.5%	0.4%	291,990	20,248
E-Waste	1.0%	0.2%	54,422	12,103
Textiles and Shoes	4.5%	0.3%	237,567	16,237
OTHER MATERIALS	18.8%	1.0%	991,759	50,963
Diapers	3.5%	0.2%	183,667	13,131
Vehicle Batteries	0.0%	0.0%	2,464	1,847
Other Hazardous / Special Waste	2.3%	0.5%	122,220	26,719
Other Material	13.0%	0.8%	683,408	43,142
Estimated Total*			5,275,515	
Sample Count			1372	

* There are 42 tons with an unspecified origin that are not included in the detailed composition estimate calculations. The actual statewide disposal total is 5,275,558 tons.

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

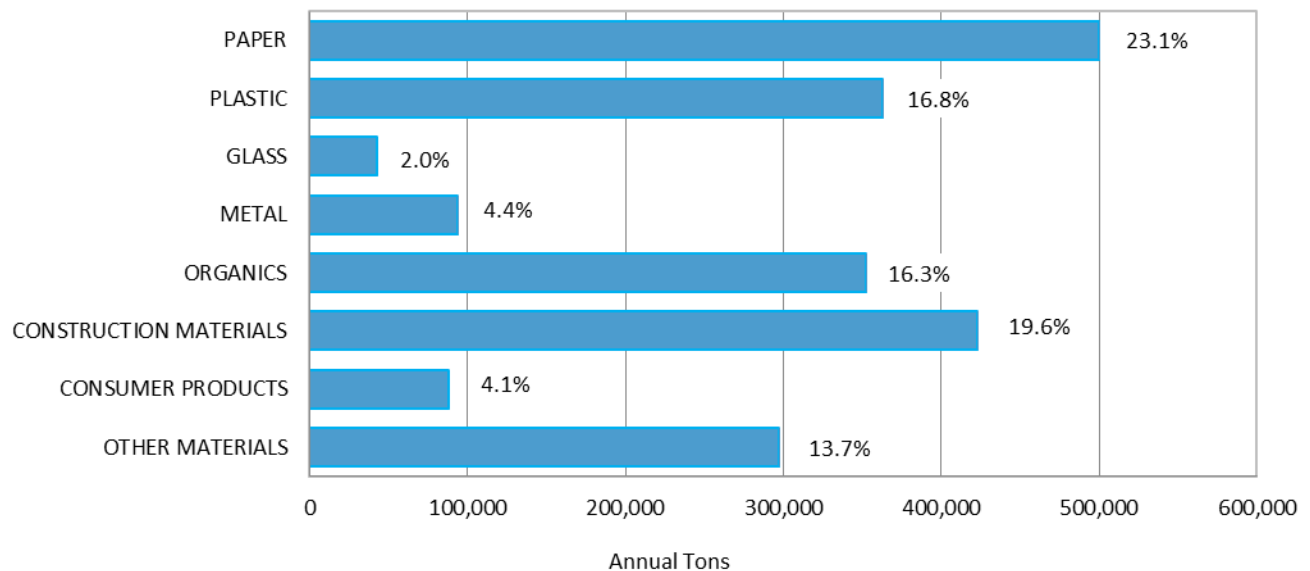
Supplemental Statewide Results—Commercial Waste

This section characterizes the MSW disposed by the commercial sector from the entire state of Washington by combining data from all six WGAs considered in this study and supplemental data from four other city and county studies. Characterization results are presented for the 19 material types that resulted from the process of combining material lists from these five studies.

OVERVIEW BY MATERIAL CLASS

Composition estimates by material class for the statewide commercial disposed waste sector are illustrated in Figure 29. The largest material class in this waste sector is **Paper** (23.1%), followed by **Construction Materials** (19.6%), **Plastic** (16.8%), and **Organics** (16.3%).

Figure 29: Supplemental Statewide Results—Statewide Commercial Disposed Waste Sector, Composition by Material Class, 2020-2021



TEN MOST PREVALENT MATERIALS

The ten most prevalent material types in the commercial waste sector, as shown in Table 51, account for most (86.9%) of the commercial waste stream by weight. *Construction and demolition debris* (19.6%), *food waste* (14.3%), and *cardboard & mixed recyclable paper* (12.3%) are the most prevalent material types in the commercial waste sector.

Table 51: Supplemental Statewide Results—Statewide Commercial Disposed Waste Sector, Ten Most Prevalent Material Types, 2020-2021

Material	Est. Percent	Est. Tons
Construction and Demolition Debris	19.6%	423,250
Food Waste	14.3%	308,725
Cardboard & Mixed Recyclable Paper	12.3%	266,389
Other Material	8.3%	179,983
Compostable Food-Soiled Paper Products	7.6%	164,259
Film Plastic	7.5%	161,791
Plastic Containers & Other Non-film Recyclable Plastic	4.9%	105,815
Other Plastic	4.4%	94,902
Metal	4.4%	94,116
Textiles and Shoes	3.6%	77,582
Total for Top Materials	86.9%	1,876,811

Percentages for material types may not total 100% due to rounding.

DETAILED COMPOSITION

The composition percentages by weight, based on the supplemental analysis, for each material type in Washington's commercial disposed waste sector are listed in Table 52.

Table 52: Supplemental Statewide Results—Statewide Commercial Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	23.1%	1.5%	499,851	32,331
Newspaper	0.2%	0.1%	4,299	1,223
Cardboard & Mixed Recyclable Paper	12.3%	1.0%	266,389	22,532
Compostable Food-Soiled Paper Products	7.6%	0.7%	164,259	15,715
Other Paper	3.0%	0.8%	64,904	16,597
PLASTIC	16.8%	1.2%	362,508	25,875
Plastic Containers & Other Non-film Recyclable Plastic	4.9%	0.8%	105,815	16,422
Film Plastic	7.5%	0.7%	161,791	14,582
Other Plastic	4.4%	0.6%	94,902	12,575
GLASS	2.0%	0.5%	42,916	10,235
Glass Containers	1.2%	0.3%	26,515	6,016
Other Glass	0.8%	0.4%	16,401	8,374
METAL	4.4%	0.5%	94,116	11,754
Metal	4.4%	0.5%	94,116	11,754
ORGANICS	16.3%	1.5%	352,620	32,656
Food Waste	14.3%	1.4%	308,725	30,847
Yard Waste	2.0%	0.6%	43,895	12,223
CONSTRUCTION MATERIALS	19.6%	2.4%	423,250	52,113
Construction and Demolition Debris	19.6%	2.4%	423,250	52,113
CONSUMER PRODUCTS	4.1%	0.6%	88,388	13,747
E-Waste	0.5%	0.2%	10,805	4,705
Textiles and Shoes	3.6%	0.6%	77,582	12,310
OTHER MATERIALS	13.7%	1.6%	296,826	35,134
Diapers	2.0%	0.5%	44,249	10,096
Vehicle Batteries	0.0%	0.0%	73	117
Other Hazardous / Special Waste	3.4%	1.2%	72,520	26,140
Other Material	8.3%	1.1%	179,983	22,790
Estimated Total			2,160,474	
Sample Count				441

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

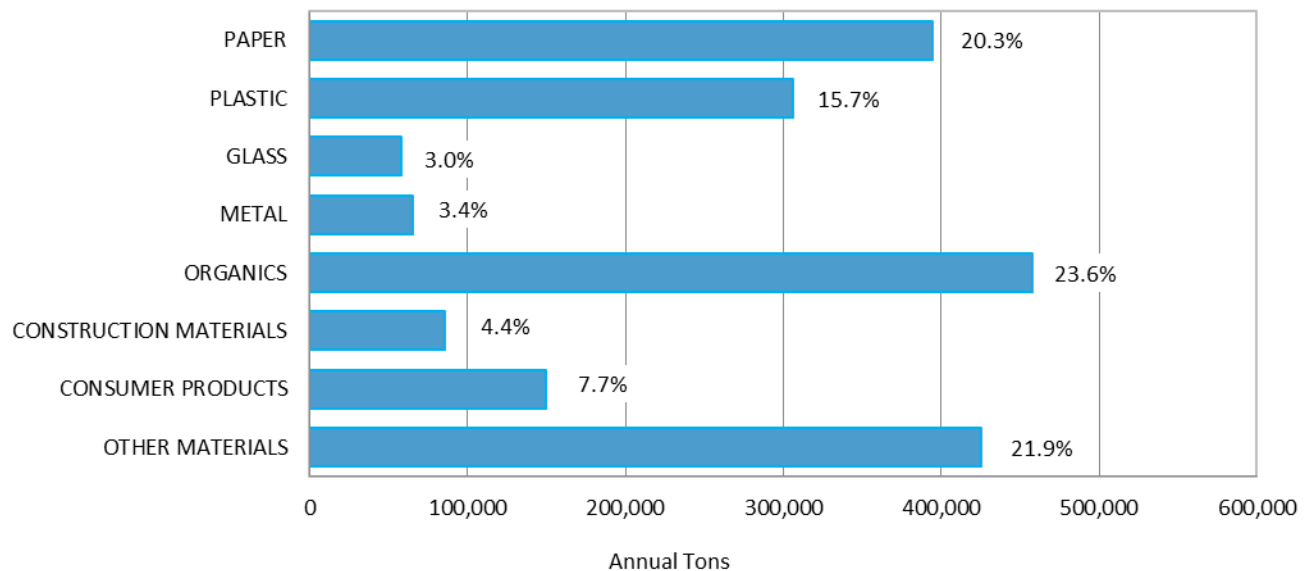
Supplemental Statewide Results—Residential Waste

This section characterizes the MSW disposed by the residential sector from the entire state of Washington by combining data from all six WGAs considered in this study and supplemental data from four other city and county studies. Characterization results are presented for the 19 material types that resulted from the process of combining material lists from these five studies.

OVERVIEW BY MATERIAL CLASS

Composition estimates by material class for the statewide residential disposed waste sector are shown in Figure 30. The largest material class in this waste sector is **Organics**, which account for approximately one quarter (23.6%) of the waste sector by weight, followed by **Other Materials** (21.9%) and **Paper** (20.3%).

Figure 30: Supplemental Statewide Results—Statewide Residential Disposed Waste Sector, Composition by Material Class, 2020-2021



TEN MOST PREVALENT MATERIALS

In total, 83.9 percent of residential waste is composed of the ten most prevalent material types shown in Table 53. *Food waste* is the most prevalent material type in the residential disposed waste sector, making up 17.6 percent of the waste stream. *Other material* (12.8%), *cardboard & mixed recyclable paper* (10.6%), and *compostable food-soiled paper products* (7.3%) are the next most prevalent material types.

Table 53: Supplemental Statewide Results—Statewide Residential Disposed Waste Sector, Ten Most Prevalent Material Types, 2020-2021

Material	Est. Percent	Est. Tons
Food Waste	17.6%	341,925
Other Material	12.8%	248,455
Cardboard & Mixed Recyclable Paper	10.6%	205,244
Compostable Food-Soiled Paper Products	7.3%	142,650
Diapers	6.9%	134,128
Film Plastic	6.6%	127,954
Textiles and Shoes	6.4%	124,948
Yard Waste	6.0%	115,642
Plastic Containers & Other Non-film Recyclable Plastic	5.4%	104,042
Construction and Demolition Debris	4.4%	85,250
Total for Top Materials	83.9%	1,630,239

Percentages for material types may not total 100% due to rounding.

DETAILED COMPOSITION

The composition percentages by weight, based on the supplemental analysis, for each material type in Washington's residential disposed waste sector are listed in Table 54.

Table 54: Supplemental Statewide Results—Statewide Residential Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	20.3%	0.6%	394,867	12,052
Newspaper	0.9%	0.1%	17,359	1,946
Cardboard & Mixed Recyclable Paper	10.6%	0.4%	205,244	8,297
Compostable Food-Soiled Paper Products	7.3%	0.4%	142,650	7,904
Other Paper	1.5%	0.1%	29,613	2,853
PLASTIC	15.7%	0.6%	305,933	12,565
Plastic Containers & Other Non-film Recyclable Plastic	5.4%	0.5%	104,042	9,690
Film Plastic	6.6%	0.2%	127,954	4,612
Other Plastic	3.8%	0.2%	73,937	4,327
GLASS	3.0%	0.2%	58,397	4,318
Glass Containers	2.6%	0.2%	49,569	3,971
Other Glass	0.5%	0.1%	8,828	1,489
METAL	3.4%	0.3%	65,586	5,766
Metal	3.4%	0.3%	65,586	5,766
ORGANICS	23.6%	0.9%	457,568	16,520
Food Waste	17.6%	0.8%	341,925	14,835
Yard Waste	6.0%	0.5%	115,642	10,639
CONSTRUCTION MATERIALS	4.4%	0.6%	85,250	12,269
Construction and Demolition Debris	4.4%	0.6%	85,250	12,269
CONSUMER PRODUCTS	7.7%	0.6%	149,943	12,085
E-Waste	1.3%	0.5%	24,995	9,894
Textiles and Shoes	6.4%	0.4%	124,948	8,298
OTHER MATERIALS	21.9%	1.0%	425,293	19,455
Diapers	6.9%	0.4%	134,128	8,059
Vehicle Batteries	0.1%	0.1%	1,609	1,674
Other Hazardous / Special Waste	2.1%	0.2%	41,101	4,777
Other Material	12.8%	1.0%	248,455	18,710
Estimated Total			1,942,837	
Sample Count				602

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

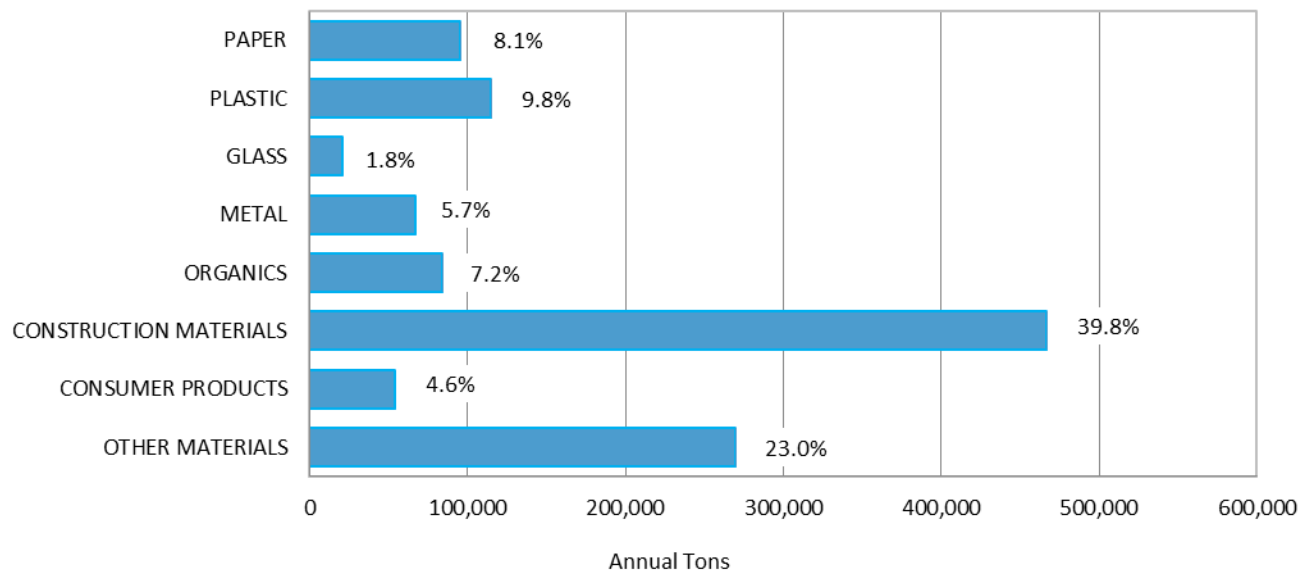
Supplemental Statewide Results—Self-hauled Waste

This section characterizes the MSW disposed by the self-hauled sector from the entire state of Washington by combining data from all six WGAs considered in this study and supplemental data from four other city and county studies. Characterization results are presented for the 19 material types that resulted from the process of combining material lists from these five studies.

OVERVIEW BY MATERIAL CLASS

Composition estimates by material class for statewide self-hauled disposed waste are illustrated in Figure 31. The largest material class in this waste sector is **Construction Materials**, which accounts for nearly 40 percent of the waste sector by weight, followed by **Other Materials** (23.0%).

Figure 31: Supplemental Statewide Results—Statewide Self-hauled Disposed Waste Sector, Composition by Material Class, 2020-2021



TEN MOST PREVALENT MATERIALS

When combined, the ten most prevalent material types in the self-hauled disposed waste sector account for nearly all (93.3%) of the waste sector, as shown in Table 55. *Construction and demolition debris* accounts for over one third of the self-hauled sector (39.8%), followed by *other material* (21.8%).

Table 55: Supplemental Statewide Results—Statewide Self-hauled Disposed Waste Sector, Ten Most Prevalent Material Types, 2020-2021

Material	Est. Percent	Est. Tons
Construction and Demolition Debris	39.8%	466,906
Other Material	21.8%	254,970
Cardboard & Mixed Recyclable Paper	6.0%	70,489
Metal	5.7%	67,231
Other Plastic	4.0%	46,677
Food Waste	3.6%	42,429
Yard Waste	3.5%	41,464
Film Plastic	3.1%	36,832
Textiles and Shoes	3.0%	35,038
Plastic Containers & Other Non-film Recyclable Plastic	2.7%	31,124
Total for Top Materials	93.3%	1,093,160

Percentages for material types may not total 100% due to rounding.

DETAILED COMPOSITION

The composition percentages by weight, based on the supplemental analysis, for each material type in Washington's self-hauled disposed waste sector are listed in Table 56.

Table 56: Supplemental Statewide Results—Statewide Self-hauled Disposed Waste Sector, Detailed Composition, 2020-2021

Material	Est. Percent	+ / -	Est. Tons	Tons + / -
PAPER	8.1%	1.1%	95,191	13,150
Newspaper	0.1%	0.1%	1,681	833
Cardboard & Mixed Recyclable Paper	6.0%	1.0%	70,489	11,491
Compostable Food-Soiled Paper Products	1.3%	0.3%	14,704	3,672
Other Paper	0.7%	0.2%	8,317	2,355
PLASTIC	9.8%	1.1%	114,633	13,118
Plastic Containers & Other Non-film Recyclable Plastic	2.7%	0.5%	31,124	5,717
Film Plastic	3.1%	0.6%	36,832	7,146
Other Plastic	4.0%	0.7%	46,677	8,033
GLASS	1.8%	0.5%	21,051	6,091
Glass Containers	0.7%	0.2%	7,912	2,577
Other Glass	1.1%	0.5%	13,139	5,487
METAL	5.7%	1.0%	67,231	11,493
Metal	5.7%	1.0%	67,231	11,493
ORGANICS	7.2%	1.4%	83,893	16,766
Food Waste	3.6%	0.9%	42,429	10,470
Yard Waste	3.5%	1.2%	41,464	13,511
CONSTRUCTION MATERIALS	39.8%	3.4%	466,906	40,069
Construction and Demolition Debris	39.8%	3.4%	466,906	40,069
CONSUMER PRODUCTS	4.6%	0.7%	53,659	8,659
E-Waste	1.6%	0.4%	18,621	5,145
Textiles and Shoes	3.0%	0.6%	35,038	6,577
OTHER MATERIALS	23.0%	2.7%	269,640	31,374
Diapers	0.5%	0.2%	5,290	2,357
Vehicle Batteries	0.1%	0.1%	782	770
Other Hazardous / Special Waste	0.7%	0.2%	8,599	2,789
Other Material	21.8%	2.7%	254,970	31,492
Estimated Total			1,172,204	
Sample Count				329

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.