

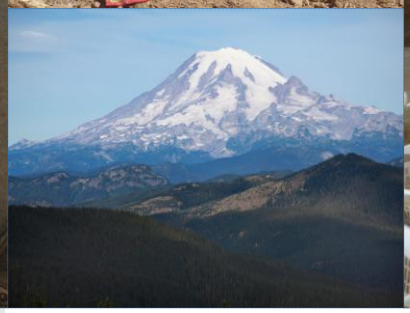


2009 Washington Statewide Waste Characterization Study

Washington State Department of Ecology

ECY Publication No. 10-07-023

June 25, 2010

DEPARTMENT OF ECOLOGY
State of Washington

CASCADIA CONSULTING GROUP

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Acknowledgments

We thank management and staff in the following counties and waste facilities who invited us into their workplaces and allowed us to carry out the fieldwork that made this study possible:

Clallam County	Port Angeles Transfer Station
Grays Harbor County	Aberdeen Central Transfer Station
Whatcom County	Regional Disposal Company
Clark County	West Van Material Recovery Center
Lewis County	Lewis County Central Transfer Station
Kitsap County	Olympic View Transfer Station
Grant County	Ephrata Landfill
Yakima County	Terrace Heights Landfill
Spokane County	Spokane Regional Waste to Energy Facility
Walla Walla County	Sudbury Road Landfill

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1. Introduction

The Washington State Department of Ecology (Ecology) commissioned Cascadia Consulting Group (Cascadia) to conduct a four-season municipal solid waste (MSW) characterization study during 2009–10. The purpose of this study was to support Ecology's Beyond Waste Initiative and conduct an in-depth examination of materials and resources currently disposed throughout the state.

This study incorporated three additional analysis tasks, specifically:

- A packaging versus product analysis which separated each of the 130 materials examined in this study—with an emphasis on paper, plastic, glass, and metal— into either packaging or product classes, when applicable, or one of six other material categories when packaging and product designations do not apply.
- Detailed composition results for each of the state's six waste generation areas (WGAs)—Central, East, Northwest, Puget Sound, Southwest, and West.
- A supplementary analysis which combines the 10 county statewide results with prior waste composition studies carried out in three additional Puget Sound Counties.

Ecology can use the data collected in this study to help municipalities as well as public and private solid waste managers design targeted recycling and diversion programs. These programs will move beyond material disposal to resource conservation and ultimately to a healthier Washington State.

As a preliminary look at the statewide data, Figure 1 through Figure 5 display the composition estimates by **Material Class** for the overall waste stream and each of the four studied waste sectors. Disposed **Organics** is considerably higher in the residential waste sector (41%) than in the commercial sector (24%) and makes up nearly 30% of Washington's overall disposed waste stream. **Paper** (combining products and packaging) and **Plastic** (combining products and packaging) occur in nearly equal proportions between the commercial and residential sectors.

Classes vs. Types

For the sake of clarity, broad categories such as **Paper Products**, **Glass**, and **Metal** are in bold and capitalized. Material types such as *newspaper*, *clear glass containers*, and *tin cans* are in italics.

Not surprisingly, **Construction Materials** and **Wood Debris** are found in the highest proportions in the self-hauled C&D waste sector. Among the waste hauled by contracted or municipal vehicles, C&D waste is found in much higher proportions in the commercial sector (13%) than in the residential sector (3%).

A comprehensive analysis of the overall waste stream and the commercial, residential, and self-hauled sectors is addressed below in Section 3: Statewide Characterization Results.

Figure 1: Overall Statewide Disposed Waste Stream Composition by Material Class, 2009

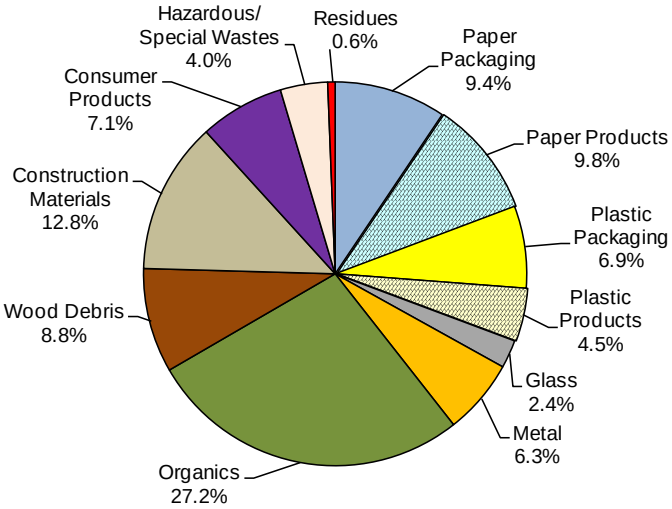


Figure 2: Commercial Waste Sector

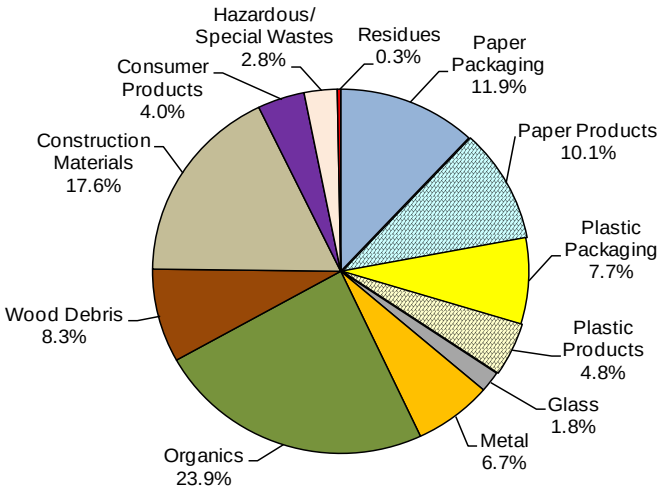


Figure 3: Residential Waste Sector

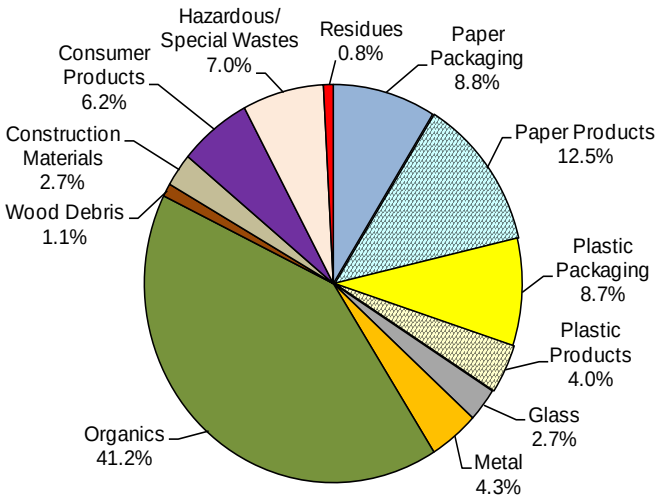


Figure 4: Self-hauled C&D Waste Sector

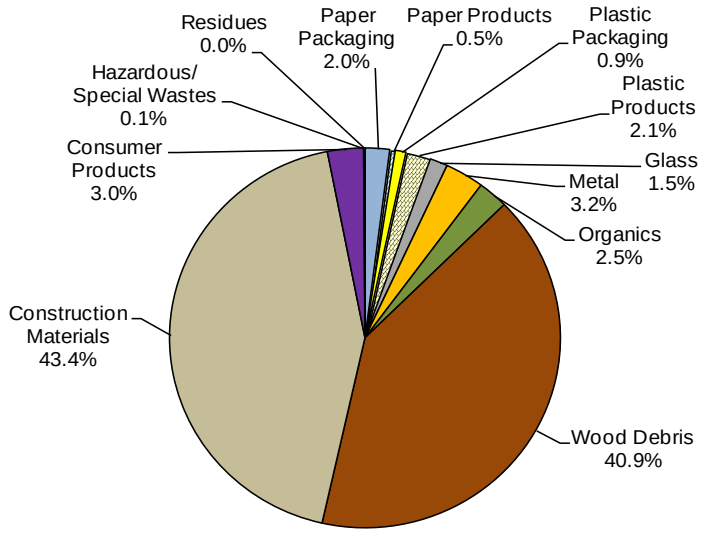
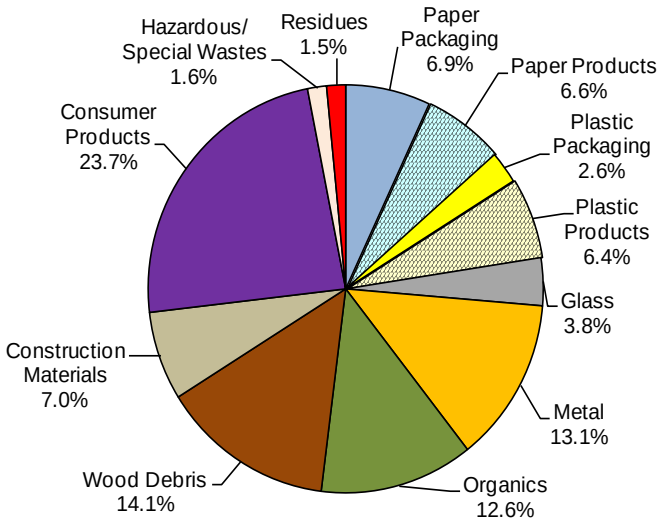


Figure 5: Self-hauled Other Waste Sector



2. Study Planning and Collection Approach

This section summarizes the planning and data collection approaches used in the 2009 statewide study. The goal of this section is to provide context for understanding and interpreting the statewide characterization results presented in the following section.

Ecology began this study by creating a plan that provided the framework for all subsequent data collection and analysis strategies. This planning stage included:

1. Selecting representative counties across the state to visit;
2. Scheduling solid waste disposal facilities statewide to survey and sample;
3. Defining the waste sectors to examine during the study; and
4. Creating the list of *material types* to examine throughout the study.

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

5. Determining composition of the waste stream through sampling and sorting; and
6. Quantifying the waste stream through vehicle and phone surveys.

Each of the six steps is expanded upon below. To gain a more detailed understanding of the methodology used for this study, see Appendix A: Detailed Methodology.

Selecting Representative Counties

Before any discussions of data collection began, Ecology first selected ten counties in which to collect and sort waste samples. These ten counties represent Washington's six WGAs: Central, East, Northwest, Puget Sound, Southwest, and West. The six WGAs combine similar regions and take into account the geographic and economic variation found throughout the state.

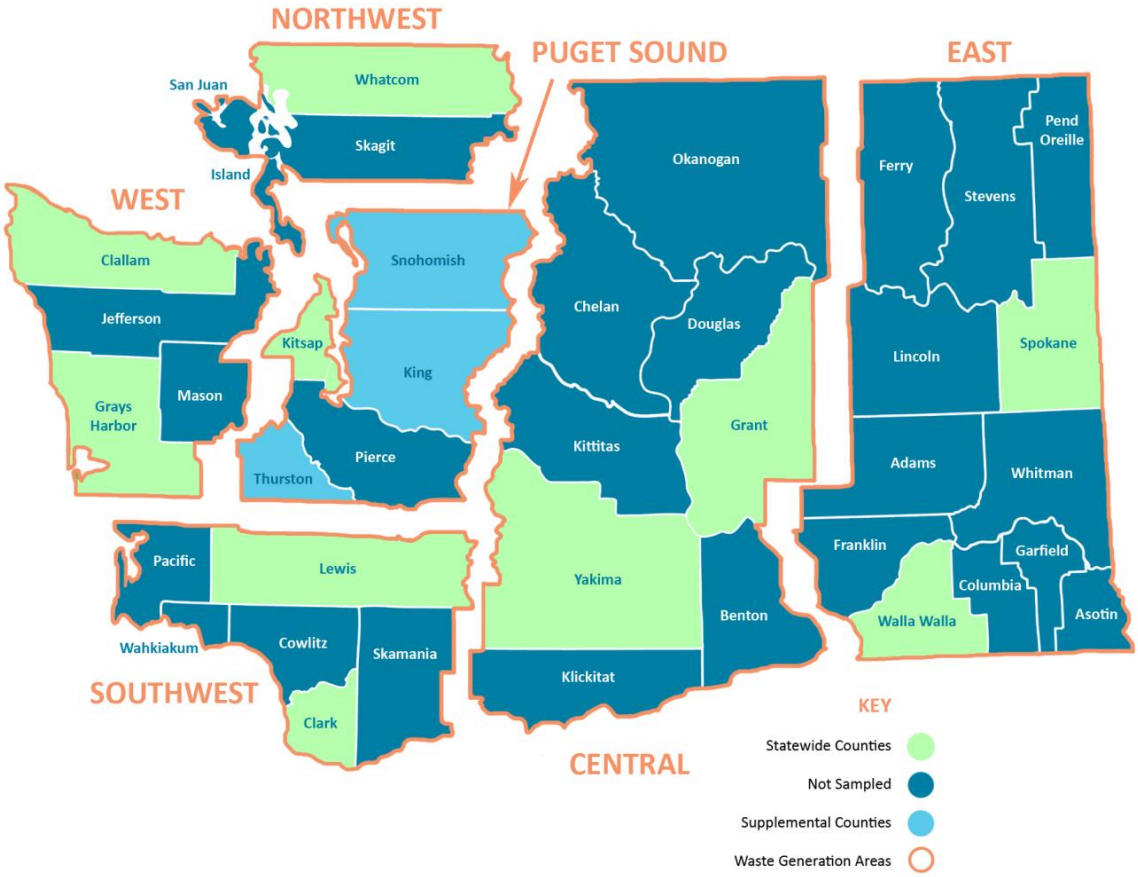
In addition to the ten counties chosen as data collection sites, Ecology planned to conduct a supplementary analysis, combining the 2009 statewide data with existing composition data from three additional Puget Sound counties: King, Snohomish, and Thurston. The ten counties visited and additional three counties analyzed are shown in Table 1 and Figure 6.

Composition results for the six Washington WGAs Results and the supplementary analysis are in Appendix D: Waste Generation Area Composition Results and Appendix E: Supplemental Composition Results.

Table 1: Waste Generation Areas and Counties Included in the 2009 Statewide Study and Supplemental Analysis

WASTE GENERATION AREA	COUNTIES VISITED FOR STATEWIDE STUDY	SUPPLEMENTAL COUNTIES ANALYZED[1]
Central	Grant, Yakima	
East	Spokane, Walla Walla	
Northwest	Whatcom	
Puget Sound	Kitsap	King, Snohomish, Thurston
Southwest	Clark, Lewis	
West	Clallam, Grays Harbor	

Figure 6: Map of Waste Generation Areas and Counties Included



[1] Composition results using the supplemental analysis are in Appendix E: Supplemental Composition Results.

Scheduling Surveying and Sampling Facilities

After selecting 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 facilities visited.

Table 2: Counties and Facilities Visited for Sampling and Surveying

COUNTY	FACILITY
Clallam	Port Angeles Transfer Station
Grays Harbor	Aberdeen Central Transfer Station
Whatcom	Regional Disposal Company
Clark	West Van Material Recovery Center
Lewis	Lewis County Central Transfer Station
Kitsap	Olympic View Transfer Station
Grant	Ephrata Landfill
Yakima	Terrace Heights Landfill
Spokane	Spokane Regional Waste to Energy Facility
Walla Walla	Sudbury Road Landfill

Cascadia conducted sampling and sorting at each facility once per season for four seasons, except the Spokane Regional Waste to Energy Facility, which was visited twice per season. The spring season began in March 2009 and the study ended with the winter season in January 2010. Seasons were defined as follows:

- Spring: March 24-April 8, 2009
- Summer: May 14-June 1, 2009
- Fall: August 31-September 4, 2009
- Winter: January 18-27, 2010

Cascadia carried out a vehicle survey to collect tonnage information (explained below) during the winter season only.

Defining Waste Sectors

Waste characterization data are often used for solid waste and recycling planning and targeting purposes. Therefore, in such studies the overall waste stream is typically separated into multiple subgroups called sectors. Cascadia and Ecology divided Washington's waste stream into the following four 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, and includes construction and demolition (C&D) materials.[2]
- **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 Construction and Demolition (C&D).** Waste hauled by vehicles not operated by a franchise or municipality and whose waste was generated as a result of construction or demolition activities.
- **Self-hauled Other.** Waste hauled by vehicles not operated by a franchise or municipality and whose waste was not generated as a result of construction or demolition activities.

Table 3 shows how the 530 total samples, determined by Ecology and collected during the 2009 study, were divided among the four sectors. See Appendix A: Detailed Methodology for a detailed list of planned versus actual samples by sector and WGA.

Table 3: Numbers of Waste Samples Characterized by Sector

SECTOR	NUMBER OF SAMPLES
Commercial	164
Residential	148
Self-hauled C&D	109
Self-hauled Other	109
Total	**530**

Creating the List of Material Types

Cascadia characterized a total of 530 samples during the four seasons, separating waste into one of 130 *material types*. Ecology created the list of 130 *material types* and organized them into 12 **Material Classes**. A detailed list of how materials were reapportioned into packaging and products is in Appendix B: List and Definitions of Material Types. Table 4 shows the number of *material types* in each of the broad **Material Classes**.

[2] While this study focused on municipal solid waste (MSW) and all facilities visited were MSW disposal facilities, many take C&D waste as accepted materials. Therefore, a commercial vehicle hauling C&D materials could have been randomly chosen for inclusion in the study.

Table 4: Number of Material Types per Material Class

MATERIAL CLASSES	NUMBER OF MATERIAL TYPES WITHIN CLASS
Paper Packaging	6
Paper Products	9
Plastic Packaging	15
Plastic Products	11
Glass	6
Metal	9
Organics	9
Wood Wastes	8
Construction Materials	12
Consumer Products	17
Hazardous Wastes	24
Residues	4
Total	**130**

Packaging and Product List

Organizing materials into **Material Classes** such as **Paper, Plastic, Glass, and Metal,** similar to those listed in Table 4, is standard from a waste characterization perspective. However, when considering waste reduction or product stewardship initiatives, planners will benefit from a more detailed breakdown of products versus packaging in the waste stream. For the purposes of a packaging and product analysis, the 130 *material types* were reapportioned to one of eight **Material Classes** as listed in Table 5. For example, all materials in both **Paper and Plastic Packaging** fall under **Packaging** for this analysis. The **Glass** class falls away as all *glass containers* are moved under **Packaging**, while *plate glass* and *stoneware* move to **Products**. The remaining **Glass** material, *R/C glass*, is moved to **Residues**.

This reapportioning allows planners to look at the 2009 waste composition results and consider disposed waste with a fresh perspective. Instead of asking how to reduce the amount of merchandise bags, polystyrene clamshells, and aluminum foil in the waste stream, planners can ask how to work with the packaging industry as a whole to reduce the amount of material disposed.

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

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

A detailed list of how materials were reapportioned into packaging and products is in Appendix B: List and Definitions of Material Types.

Determining Composition of the Statewide Waste Stream

Composition data from the statewide 2009 study—the percentage of each material found in the waste stream—were determined by sorting disposed waste samples into one of 130 *material types*. Samples of disposed waste from each of the sectors—commercial, residential, self-hauled C&D, and self-hauled other—were selected randomly at each facility and sorted by hand. Hand-sorting and weighing every *material type* found in a sample produces accurate measures that can be reliably converted to percentages and then applied to tonnage figures in order to quantify the waste stream.

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 metals*, 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 R/C products include Pyrex glassware, insulated wire, and cigarette butts.

Quantifying the Waste Stream

Statewide Disposed Tons

The first step in quantifying Washington's disposed waste stream was to determine the amount of MSW disposed statewide. Ecology provided an annual disposed tonnage figure of 4,978,496 tons. [3]

Sector Allocations of Waste Disposed

Once the total statewide tonnage figure was known, tonnage figures for each of the four waste sectors were calculated. Cascadia carried out a vehicle survey during the winter season at the ten sampling facilities to determine how many tons of disposed waste were associated with each waste sector. This process entailed collecting a load weight from each vehicle disposing waste at a facility, and apportioning those tons to one of the four waste sectors. To supplement the ten vehicle surveys, Cascadia also collected additional tonnage data via a phone survey from 36 more solid waste facilities throughout the state. Compiling the survey weights yielded the "sector split" or percent of total waste generated by weight and each sector. See Appendix A: Detailed Methodology for a detailed account of the surveying and quantification process.

Combining the Two

Combining the overall annual disposed tonnage data with the sector allocations yielded tonnage figures for each sector. Table 6 shows the estimated disposed tonnages and their ratio from each sector of the overall waste stream.

[3] All estimated tons used in this report are based on 2008 disposed waste tonnage figures provided by annual disposal reports from permitted facilities: http://www.ecy.wa.gov/programs/swfa/solidwastedata/.

Table 6: Estimated Tons of Disposed Waste by Sector

SECTOR	EST. PERCENTAGE OF DISPOSED WASTE SECTOR	EST. TONS DISPOSED STATEWIDE
Commercial	43.7%	2,174,075
Residential	36.7%	1,826,521
Self-hauled C&D	7.5%	374,386
Self-hauled	12.1%	603,514
Totals	**100.0%**	**4,978,496**

The commercial sector disposed the largest amount of waste, composing nearly 44 percent of the state's waste stream and a projected 2.2 million tons. The residential sector represents approximately 37 percent (1.8 million tons) of total waste, and the two self-hauled sectors represent the final 20 percent (980,000 tons). See Estimating in Appendix A: Detailed Methodology for a detailed account of the characterization process.

Interpreting the Results

The next section presents statewide characterization results for Washington's overall disposed waste stream as well as commercial, residential, self-hauled C&D, and self-hauled other sectors.

Data are presented in four ways for each sector:

1. A pie chart presents an overview of waste composition by **Material Class**.
2. A second pie chart presents an overview of waste composition arranged into packaging, products, and other material groups. Please see Appendix B: List and Definitions of Material Types for a table showing 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 130 original *material types*. Please see Appendix B: List and Definitions of Material Types for detailed descriptions and definitions of the original **Material Classes** and *material types*.

Packaging vs. Products?

Grouping material types under the headings of "packaging" or "products" as done in the sector analysis below gives planners another tool when targeting producers of waste and considering diversion strategies.

Means and Error Ranges

Cascadia statistically analyzed data from the sorting process to provide two pieces of information for each *material type*:

- The estimated percent-by-weight composition of waste represented by the samples examined in this study.
- The error ranges (+/-) of our composition estimates.

All error ranges (+/-) were calculated at the 90 percent confidence level. The equations for these calculations are in Appendix A: Detailed Methodology.

Table 7 shows how the results can be interpreted. The best estimate of the amount of *compostable paper packaging* present in the universe of waste sampled is 1.2 percent (see Table 7). The figure 0.4 percent reflects the precision of the estimate. When calculations are performed at the 90 percent confidence level, we are 90 percent certain the true mean for *compostable paper packaging* is between 1.2 percent + 0.4 percent and 1.2 percent - 0.4 percent. In other words, we are 90 percent sure the true mean is between 0.8 and 1.6 percent.

Error Range (+/-)

An error range is used to measure the spread of values in a collection of data. For instance, if the quantities of *newspaper* are nearly the same in each of the 530 samples collected for this study, this will result in a very narrow error range. By contrast, if some samples are 75% *newspaper* and others have 0% *newspaper,* there is a much broader error range.

Table 7: Example Percentage Composition and Error Range

MATERIAL	EST.PERCENT	+ / -
Compostable Paper Packaging	1.2%	0.4%

Rounding

When interpreting results 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. Estimated percentages are rounded to the nearest tenth of a percent. Due to rounding, when added together the tonnages may not exactly match the subtotals and totals shown. Similarly, when the percentages are added together, they may not exactly match the subtotals or totals. Also, percentages less than 0.05 percent are rounded to 0.0 percent even though there may be weights associated with the material.

3. Statewide Characterization Results

This section presents statewide composition results by sector—commercial, residential, self-hauled C&D, and self-hauled other—and the overall characterization results for the 4.98 million tons of disposed MSW statewide. [4]

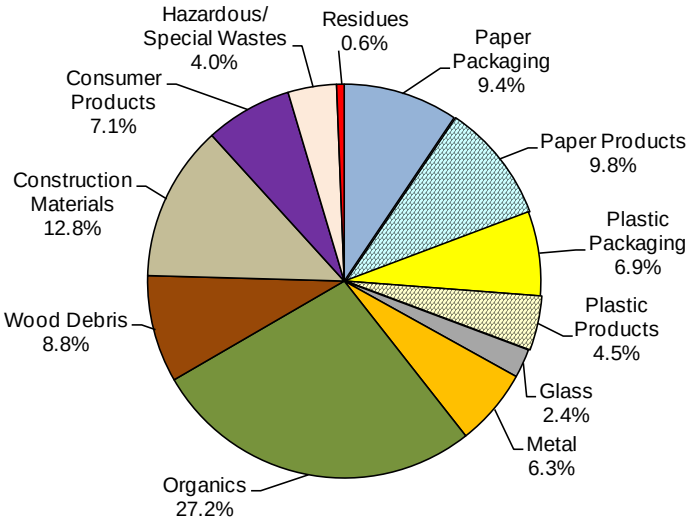
Overall Disposed Waste Stream

This section characterizes the overall disposed MSW stream for the entire state of Washington, combining samples from all four waste sectors and all six WGAs considered in this study. Composition and quantity data are generated from data collected from the ten counties visited during the 2009 statewide study and presented using the material list of 130 *material types*.

Overview by Material Class

Figure 7 shows composition estimates by **Material Class** for the overall statewide disposed waste stream. The largest **Material Class** in the overall waste stream is **Organics**, which accounts for approximately 27 percent of the waste stream by weight, followed by **Construction Materials** (13 percent) and **Paper Products** (10 percent). See Appendix B: List and Definitions of Material Types for a description of the *material type*s included in each **Material Class**.

Figure 7: Overall Statewide Disposed Waste Stream Composition by Material Class, 2009

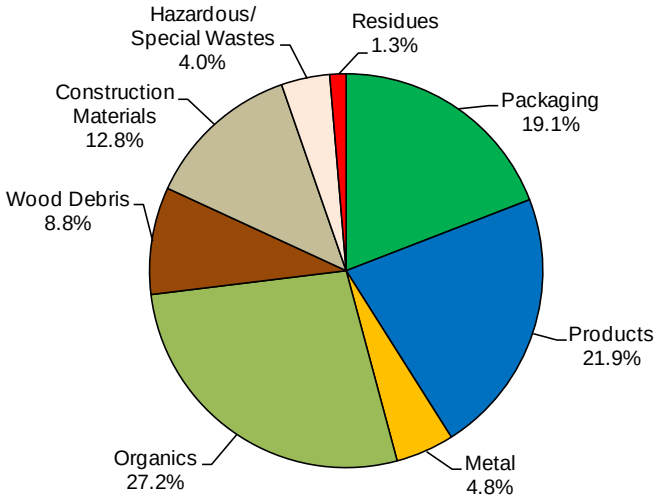


[4] All estimated tons used in this report are based on 2008 disposed waste tonnage figures provided by annual disposal reports from permitted facilities: http://www.ecy.wa.gov/programs/swfa/solidwastedata/.

Overview of Packaging and Product Material Groups

As shown in Figure 8, products account for approximately 22 percent of the waste stream, and packaging materials make up approximately 19 percent of the overall disposed waste. See Appendix B: List and Definitions of Material Types for a description of the *material type*s included in packaging, products, and the other *material type* groups shown.

Figure 8: Overall Statewide Disposed Waste Stream
Packaging, Products, and Other Material Groups, 2009



Fifteen Most Prevalent Materials

The 15 most prevalent *material type*s in the overall waste stream shown in Table 8 together account for approximately 55 percent of the waste stream. *Food-vegetative*, *food-non vegetative*, *leaves and grass*, and *compostable paper products* are the four most prevalent *material types*. These materials are all compostable and together account for more than one quarter (27 percent) of the waste stream by weight.

Table 8: Overall Statewide Disposed Waste Stream
Fifteen Most Prevalent Material Types, 2009

Material	Est. Percent	Cum. Percent	Est. Tons
Food - Vegetative	13.1%	13.1%	654,458
Food - Non-vegetative	5.2%	18.3%	258,823
Leaves & Grass	4.1%	22.4%	203,909
Compostable Paper Products	4.1%	26.5%	201,801
Cardboard/Kraft Paper Packaging	3.7%	30.2%	185,311
Animal Manure	3.2%	33.4%	159,888
Carpet	2.9%	36.3%	145,282
Other Ferrous Metal	2.9%	39.3%	145,220
Disposable Diapers	2.8%	42.1%	140,020
Drywall	2.6%	44.7%	131,475
Mixed/Low Grade Paper Packaging	2.6%	47.3%	130,662
Non-industrial Packaging Film Plastic	2.0%	49.4%	101,092
Furniture	2.0%	51.3%	97,620
Painted Wood	1.9%	53.3%	96,883
Textiles - Organic	1.8%	55.0%	87,471
Total	**55.0%**		**2,739,915**

Detailed Composition

Table 9 lists the composition percentages by weight for each *material type* in Washington's overall disposed waste stream. Total tons of disposed waste are based on 2008 figures from annual reports permitted disposal facilities provided to Ecology.

Table 9: Overall Statewide Disposed Waste Stream Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**9.4%**		**469,574**
Newspaper Packaging	0.2%	0.3%	12,088
Cardboard/Kraft Paper Packaging	3.7%	0.8%	185,311
Other Groundwood Paper Packaging	0.1%	0.1%	7,344
Mixed/Low Grade Paper Packaging	2.6%	0.4%	130,662
Compostable Paper Packaging	1.2%	0.4%	58,191
R/C Paper Packaging	1.5%	0.5%	75,979
Plastic Packaging	**6.9%**		**345,235**
#1 PETE Plastic Bottles	0.7%	0.1%	33,344
#1 PETE Plastic Non-bottles	0.3%	0.1%	14,563
#2 HDPE Plastic Natural Bottles	0.3%	0.0%	12,547
#2 HDPE Plastic Colored Bottles	0.3%	0.0%	17,017
#2 HDPE Plastic Jars & Tubs	0.4%	0.4%	20,020
#3 PVC Plastic Packaging	0.0%	0.0%	710
#4 LDPE Plastic Packaging	0.0%	0.0%	329
#5 PP Plastic Packaging	0.3%	0.0%	16,732
#6 PS Plastic Packaging	0.5%	0.1%	22,579
#7 Other Plastic Packaging	0.5%	0.1%	26,282
PLA Packaging	0.0%	0.0%	312
Plastic Merchandise Bags	0.5%	0.1%	24,139
Non-industrial Packaging Film Plastic	2.0%	0.3%	101,092
Industrial Packaging Film Plastic	0.4%	0.2%	21,911
R/C Plastic Packaging	0.7%	0.8%	33,657
Glass	**2.4%**		**117,970**
Clear Glass Containers	0.9%	0.2%	42,353
Green Glass Containers	0.2%	0.0%	8,592
Brown Glass Containers	0.4%	0.1%	17,490
Plate Glass	0.1%	0.1%	5,082
Stoneware/Kitchen Ceramics/Glassware	0.2%	0.1%	8,893
R/C Glass	0.7%	0.6%	35,560
Metal	**6.3%**		**315,715**
Aluminum Beverage Cans	0.5%	0.1%	23,031
Aluminum Foil/Containers	0.1%	0.0%	5,426
Other Aluminum	0.1%	0.1%	5,166
Other Nonferrous	0.1%	0.1%	5,854
Food Cans - Tinned	0.7%	0.3%	35,772
Food Cans - Coated	0.1%	0.0%	5,054
White Goods	0.1%	0.1%	7,365
Other Ferrous Metal	2.9%	1.3%	145,220
R/C Metals	1.7%	0.7%	82,826
Organics	**27.2%**		**1,356,253**
Food - Vegetative	13.1%	2.6%	654,458
Food - Non-vegetative	5.2%	1.6%	258,823
Leaves & Grass	4.1%	1.5%	203,909
Prunings	0.5%	0.2%	26,941
Animal Manure	3.2%	1.1%	159,888
Animal Carcasses	0.3%	0.4%	12,598
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.1%	0.2%	7,395
R/C Organics	0.6%	0.2%	32,241
Wood Debris	**8.8%**		**438,174**
Treated Wood	1.1%	0.7%	56,145
Painted Wood	1.9%	0.7%	96,883
Dimensional Lumber	1.0%	0.4%	51,929
Engineered Wood	1.1%	0.5%	54,324
Pallets & Crates	1.7%	1.0%	86,705
Other Untreated Wood	0.5%	0.5%	26,916
Wood By-Products	0.3%	0.1%	12,574
R/C Wood Wastes	1.1%	0.4%	52,698
Construction Materials	**12.8%**		**637,619**
Natural Wood	0.1%	0.1%	5,147
Insulation	0.4%	0.4%	22,379
Asphalt Paving	0.2%	0.2%	9,676
Concrete	0.2%	0.1%	10,917
Drywall	2.6%	2.0%	131,475
Carpet	2.9%	1.8%	145,282
Carpet Padding	0.7%	0.8%	33,211
Soil, Rocks, Sand	1.2%	0.6%	58,009
Asphalt Roofing	1.2%	0.7%	62,215
Plastic Flooring	0.2%	0.2%	10,054
Ceramics & Brick	1.4%	1.5%	69,617
R/C Construction Materials	1.6%	0.7%	79,639

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**9.8%**		**490,049**
Newspaper	1.4%	0.4%	70,594
Cardboard/Kraft Paper Products	0.1%	0.0%	3,894
Magazines	0.9%	0.3%	46,149
High-Grade Paper Products	1.0%	0.3%	49,667
Other Groundwood Paper Products	0.3%	0.2%	13,874
Mixed Low Grade Paper Products	1.6%	0.3%	81,068
Compostable Paper Products	4.1%	0.9%	201,801
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.5%	0.3%	23,003
Plastic Products	**4.5%**		**222,910**
#1 PETE Plastic Products	0.0%	0.0%	172
#2 HDPE Plastic Products	0.0%	0.0%	1,883
#3 PVC Plastic Products	0.0%	0.0%	1,109
#4 LDPE Plastic Products	0.0%	0.0%	116
#5 PP Plastic Products	0.1%	0.1%	3,574
#6 PS Plastic Products	0.1%	0.0%	6,068
#7 Other Plastic Products	1.3%	0.3%	63,916
PLA Products	0.0%	0.0%	53
Plastic Garbage Bags	1.3%	0.2%	64,784
Plastic Film Products	0.3%	0.1%	13,465
R/C Plastic Products	1.4%	0.6%	67,771
Consumer Products	**7.1%**		**355,387**
Televisions - CRT	0.6%	0.6%	29,012
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	1,646
Computer Monitors - CRT	0.0%	0.0%	1,476
Computer Monitors - LCD	0.0%	0.0%	322
Computers	0.0%	0.0%	1,292
Computer Peripherals	0.1%	0.1%	3,674
Audio Equipment	0.1%	0.0%	4,109
Gaming Equipment	0.0%	0.0%	742
Other Consumer Electronics	0.6%	0.3%	30,031
Textiles - Organic	1.8%	0.4%	87,471
Textiles - Synthetic	1.0%	0.2%	48,869
Shoes, Purses, Belts	0.4%	0.1%	17,931
Tires & Rubber	0.3%	0.1%	15,216
Furniture	2.0%	1.1%	97,620
Mattresses	0.1%	0.1%	5,660
R/C Consumer Products	0.2%	0.1%	10,317
Hazardous/Special Wastes	**4.0%**		**198,588**
Pesticides/Herbicides	0.0%	0.0%	253
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	184
Fluorescent Tubes	0.0%	0.0%	64
Asbestos	0.0%	0.0%	0
Latex Paint	0.1%	0.1%	6,213
Solvent-based Glues	0.2%	0.2%	7,990
Latex-based Glues	0.0%	0.0%	242
Oil-based Paint & Solvent	0.0%	0.0%	2,086
Caustic Cleaners	0.0%	0.0%	800
Dry-cell Batteries	0.0%	0.0%	1,465
Wet-cell Batteries	0.0%	0.0%	207
Gasoline/Kerosene	0.0%	0.0%	1,317
Motor Oil	0.0%	0.0%	513
Antifreeze	0.0%	0.0%	3
Other Vehicle Fluids	0.0%	0.0%	77
Oil Filters	0.0%	0.0%	1,545
Explosives	0.0%	0.0%	24
Medical Wastes	0.5%	0.3%	25,067
Pharmaceuticals/Vitamins	0.0%	0.0%	1,343
Disposable Diapers	2.8%	0.6%	140,020
Other Cleaners & Soaps	0.1%	0.1%	6,150
Other Hazardous	0.0%	0.0%	1,549
Other Non-hazardous	0.0%	0.0%	1,473
Residues	**0.6%**		**31,022**
Ash	0.2%	0.2%	7,889
Dust	0.1%	0.0%	4,060
Fines	0.3%	0.1%	15,590
Sludge/Special Industrial	0.1%	0.1%	3,483
Totals	**100.0%**		**4,978,496**
Sample Count	**530**		

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

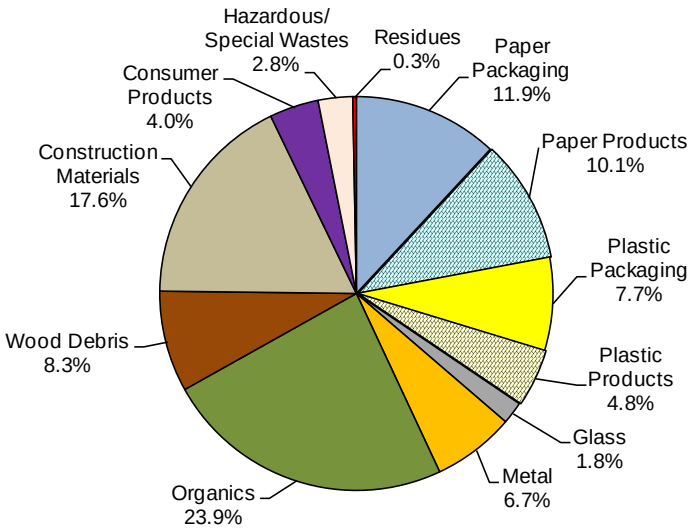
Commercial Waste

This section characterizes disposed MSW from the commercial sector for the entire state of Washington, combining commercial samples from all six WGAs considered in this study. Composition and quantity data are generated from data collected from the ten counties visited during the 2009 statewide study and presented using the material list of 130 material types.

Overview by Material Class

Composition estimates by **Material Class** for the statewide commercial disposed waste sector are illustrated in Figure 9. The largest **Material Class** in this waste sector is **Organics**, which accounts for approximately 24 percent of the waste sector by weight, followed by **Construction Materials** (18 percent) and **Paper Packaging** (12 percent). See Appendix B: List and Definitions of Material Types for a description of the *material type*s included in each **Material Class**.

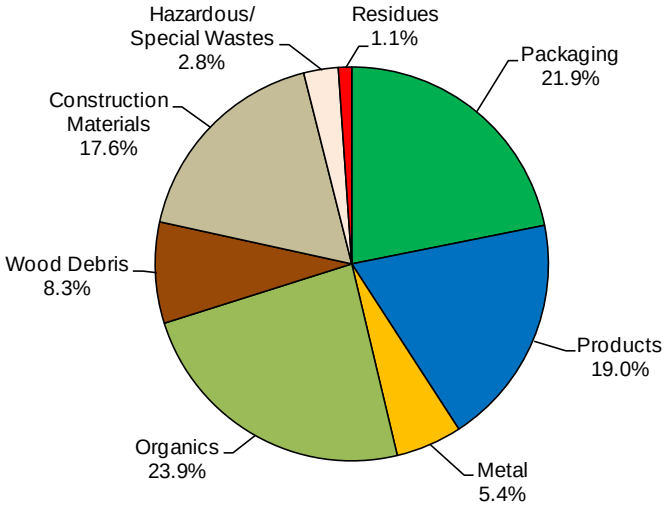
Figure 9: Commercial Disposed Waste Sector Composition by Material Class, 2009



Overview of Packaging and Product Material Groups

As shown in Figure 10, packaging materials account for approximately 22 percent of the commercial waste sector, and products for approximately 19 percent of commercial disposed waste. See Appendix B: List and Definitions of Material Types for a description of the *material type*s included in packaging, products, and the other *material type* groups shown.

Figure 10: Commercial Disposed Waste Sector
Packaging, Products, and Other Material Groups, 2009



Fifteen Most Prevalent Materials

As shown in Table 10, the 15 most prevalent *material types* in the commercial waste sector combined account for nearly two thirds (60 percent) of the waste sector. As with the overall waste stream, *food-vegetative* and *food-non vegetative* are the most prevalent *material types* and typically compostable. Together they account for nearly one quarter (22 percent) of the waste sector by weight.

Table 10: Commercial Disposed Waste Sector
Fifteen Most Prevalent Material Types, 2009

Material	Est. Percent	Cum. Percent	Est. Tons
Food - Vegetative	15.1%	15.1%	327,826
Food - Non-vegetative	6.9%	21.9%	149,300
Compostable Paper Products	4.9%	26.8%	105,861
Cardboard/Kraft Paper Packaging	4.6%	31.5%	100,977
Carpet	4.0%	35.5%	87,897
Drywall	3.9%	39.4%	84,346
Other Ferrous Metal	3.0%	42.4%	65,627
Ceramics & Brick	2.8%	45.2%	60,306
Mixed/Low Grade Paper Packaging	2.6%	47.8%	56,570
Non-industrial Packaging Film Plastic	2.4%	50.2%	52,169
R/C Paper Packaging	2.3%	52.5%	50,898
R/C Metals	2.1%	54.6%	44,860
R/C Construction Materials	2.0%	56.6%	43,527
Treated Wood	1.9%	58.5%	42,336
Compostable Paper Packaging	1.8%	60.3%	38,184
Total	**60.3%**		**1,310,684**

Detailed Composition

The composition percentages by weight for each *material type* in Washington's commercial disposed waste sector are listed in Table 11.

Table 11: Commercial Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**11.9%**		**259,125**
Newspaper Packaging	0.4%	0.6%	9,532
Cardboard/Kraft Paper Packaging	4.6%	1.4%	100,977
Other Groundwood Paper Packaging	0.1%	0.1%	2,964
Mixed/Low Grade Paper Packaging	2.6%	0.9%	56,570
Compostable Paper Packaging	1.8%	1.0%	38,184
R/C Paper Packaging	2.3%	1.2%	50,898
Plastic Packaging	**7.7%**		**166,679**
#1 PETE Plastic Bottles	0.5%	0.1%	10,880
#1 PETE Plastic Non-bottles	0.3%	0.1%	5,727
#2 HDPE Plastic Natural Bottles	0.2%	0.0%	3,761
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	3,723
#2 HDPE Plastic Jars & Tubs	0.7%	0.8%	16,189
#3 PVC Plastic Packaging	0.0%	0.0%	39
#4 LDPE Plastic Packaging	0.0%	0.0%	86
#5 PP Plastic Packaging	0.3%	0.1%	5,584
#6 PS Plastic Packaging	0.4%	0.1%	8,813
#7 Other Plastic Packaging	0.4%	0.1%	8,614
PLA Packaging	0.0%	0.0%	196
Plastic Merchandise Bags	0.2%	0.1%	5,305
Non-industrial Packaging Film Plastic	2.4%	0.7%	52,169
Industrial Packaging Film Plastic	0.8%	0.4%	16,376
R/C Plastic Packaging	1.3%	1.8%	29,215
Glass	**1.8%**		**39,933**
Clear Glass Containers	0.6%	0.2%	12,500
Green Glass Containers	0.1%	0.1%	3,212
Brown Glass Containers	0.2%	0.1%	5,388
Plate Glass	0.0%	0.0%	566
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	832
R/C Glass	0.8%	1.2%	17,436
Metal	**6.7%**		**146,617**
Aluminum Beverage Cans	0.4%	0.3%	9,608
Aluminum Foil/Containers	0.1%	0.1%	1,996
Other Aluminum	0.2%	0.2%	3,848
Other Nonferrous	0.2%	0.1%	3,933
Food Cans - Tinned	0.7%	0.7%	16,266
Food Cans - Coated	0.0%	0.0%	456
White Goods	0.0%	0.0%	22
Other Ferrous Metal	3.0%	2.2%	65,627
R/C Metals	2.1%	1.6%	44,860
Organics	**23.9%**		**518,592**
Food - Vegetative	15.1%	5.8%	327,826
Food - Non-vegetative	6.9%	3.6%	149,300
Leaves & Grass	0.8%	0.4%	17,569
Prunings	0.1%	0.2%	2,982
Animal Manure	0.3%	0.3%	7,137
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.3%	0.4%	7,395
R/C Organics	0.3%	0.3%	6,383
Wood Debris	**8.3%**		**180,446**
Treated Wood	1.9%	1.6%	42,336
Painted Wood	1.6%	1.1%	35,207
Dimensional Lumber	0.8%	0.6%	16,942
Engineered Wood	0.9%	0.7%	19,203
Pallets & Crates	1.7%	0.8%	37,997
Other Untreated Wood	0.1%	0.1%	2,936
Wood By-Products	0.1%	0.1%	2,019
R/C Wood Debris	1.1%	0.7%	23,806
Construction Materials	**17.6%**		**383,439**
Natural Wood	0.0%	0.0%	122
Insulation	0.8%	0.8%	17,631
Asphalt Paving	0.2%	0.3%	3,780
Concrete	0.2%	0.2%	5,295
Drywall	3.9%	4.4%	84,346
Carpet	4.0%	3.9%	87,897
Carpet Padding	1.2%	1.8%	26,773
Soil, Rocks, Sand	1.7%	1.4%	36,201
Asphalt Roofing	0.4%	0.5%	9,242
Plastic Flooring	0.4%	0.6%	8,318
Ceramics & Brick	2.8%	3.3%	60,306
R/C Construction Materials	2.0%	1.6%	43,527

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**10.1%**		**219,884**
Newspaper	1.0%	0.6%	22,083
Cardboard/Kraft Paper Products	0.1%	0.1%	2,632
Magazines	0.7%	0.4%	16,108
High-Grade Paper Products	1.3%	0.7%	28,671
Other Groundwood Paper Products	0.1%	0.1%	2,324
Mixed Low Grade Paper Products	1.5%	0.5%	31,644
Compostable Paper Products	4.9%	1.9%	105,861
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.5%	0.2%	10,560
Plastic Products	**4.8%**		**103,415**
#1 PETE Plastic Products	0.0%	0.0%	107
#2 HDPE Plastic Products	0.1%	0.1%	1,343
#3 PVC Plastic Products	0.0%	0.0%	353
#4 LDPE Plastic Products	0.0%	0.0%	9
#5 PP Plastic Products	0.1%	0.1%	1,909
#6 PS Plastic Products	0.2%	0.1%	3,284
#7 Other Plastic Products	0.9%	0.3%	19,047
PLA Products	0.0%	0.0%	8
Plastic Garbage Bags	1.7%	0.5%	37,671
Plastic Film Products	0.2%	0.1%	3,991
R/C Plastic Products	1.6%	1.1%	35,692
Consumer Products	**4.0%**		**87,871**
Televisions - CRT	0.1%	0.1%	2,330
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	11
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	67
Computer Peripherals	0.0%	0.0%	161
Audio Equipment	0.0%	0.0%	243
Gaming Equipment	0.0%	0.0%	12
Other Consumer Electronics	0.8%	0.6%	17,329
Textiles - Organic	1.1%	0.6%	23,852
Textiles - Synthetic	0.5%	0.2%	10,276
Shoes, Purses, Belts	0.1%	0.1%	2,678
Tires & Rubber	0.2%	0.1%	4,737
Furniture	1.0%	0.6%	21,447
Mattresses	0.1%	0.1%	2,509
R/C Consumer Products	0.1%	0.1%	2,218
Hazardous/Special Wastes	**2.8%**		**61,683**
Pesticides/Herbicides	0.0%	0.0%	10
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	52
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	907
Solvent-based Glues	0.0%	0.0%	461
Latex-based Glues	0.0%	0.0%	51
Oil-based Paint & Solvent	0.0%	0.0%	44
Caustic Cleaners	0.0%	0.0%	566
Dry-cell Batteries	0.0%	0.0%	342
Wet-cell Batteries	0.0%	0.0%	35
Gasoline/Kerosene	0.1%	0.1%	1,317
Motor Oil	0.0%	0.0%	367
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	56
Oil Filters	0.1%	0.0%	1,232
Explosives	0.0%	0.0%	2
Medical Wastes	1.0%	0.8%	22,164
Pharmaceuticals/Vitamins	0.0%	0.0%	687
Disposable Diapers	1.4%	1.0%	31,424
Other Cleaners & Soaps	0.0%	0.0%	703
Other Hazardous	0.0%	0.0%	977
Other Non-hazardous	0.0%	0.0%	285
Residues	**0.3%**		**6,393**
Ash	0.1%	0.1%	1,746
Dust	0.0%	0.0%	394
Fines	0.2%	0.1%	4,253
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**2,174,075**
Sample Count	**164**		

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

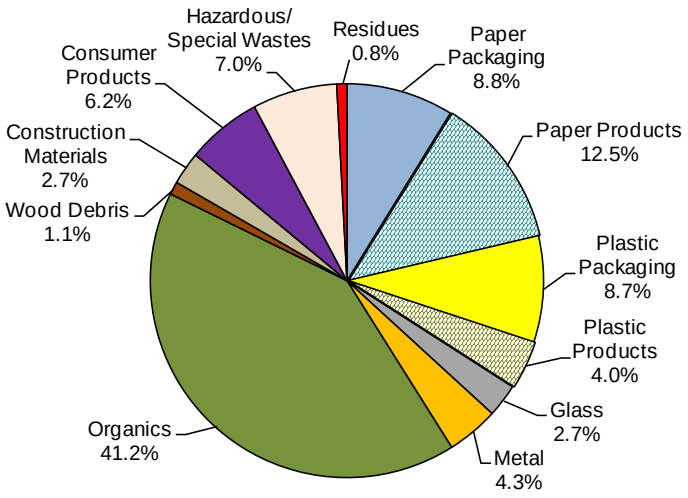
Residential Waste

This section characterizes disposed *MSW* from the residential sector for the entire state of Washington, combining residential samples from all six WGAs considered in this study. Composition and quantity data are generated from data collected from the ten counties visited during the 2009 statewide study and use the material list of 130 *material types*.

Overview by Material Class

Composition estimates by **Material Class** for the statewide residential disposed waste sector are illustrated in Figure 11. The largest **Material Class** in this waste sector is **Organics**, which accounts for approximately 41 percent of the waste sector by weight, followed by **Paper Products** (13 percent) and **Paper Packaging** (9 percent). See Appendix B: List and Definitions of Material Types for a description of the *material types* included in each **Material Class**.

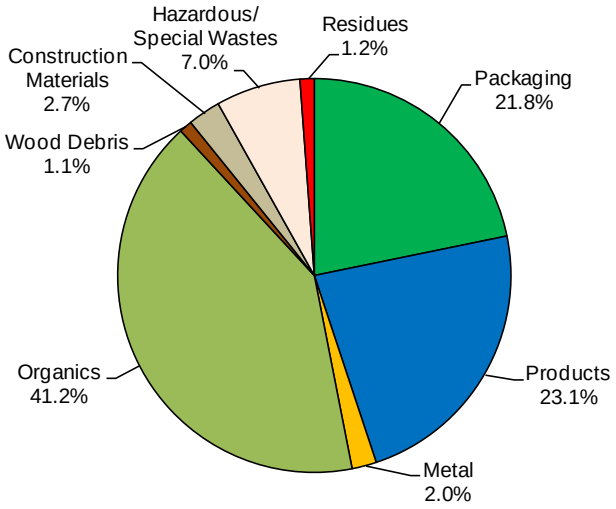
Figure 11: Residential Disposed Waste Sector Composition by Material Class, 2009



Overview of Packaging and Product Material Groups

As shown in Figure 12, products account for approximately 23 percent of the residential disposed waste sector. Packaging materials make up approximately 22 percent. See Appendix B: List and Definitions of Material Types for a description of the *material type*s included in packaging, products, and the other *material type* groups shown.

Figure 12: Residential Disposed Waste Sector
Packaging, Products, and Other Material Groups, 2009



Fifteen Most Prevalent Materials

Food-vegetative is the most prevalent *material type* and approximately 17 percent of residential disposed waste. Approximately 69 percent of residential waste is composed of the 15 *material type*s shown in Table 12. *Mixed/low grade paper packaging* is the most prevalent traditionally recyclable *material type* and approximately 4 percent of residential disposed waste.

Table 12: Residential Disposed Waste Sector
Fifteen Most Prevalent Material Types, 2009

Material	Est. Percent	Cum. Percent	Est. Tons
Food - Vegetative	17.0%	17.0%	310,306
Leaves & Grass	8.7%	25.7%	159,278
Animal Manure	7.9%	33.6%	144,994
Disposable Diapers	5.8%	39.5%	106,210
Food - Non-vegetative	5.7%	45.1%	103,700
Compostable Paper Products	5.0%	50.1%	91,023
Mixed/Low Grade Paper Packaging	3.7%	53.8%	67,972
Cardboard/Kraft Paper Packaging	2.5%	56.3%	45,555
Non-industrial Packaging Film Plastic	2.5%	58.8%	45,453
Mixed Low Grade Paper Products	2.5%	61.3%	44,791
Textiles - Organic	2.1%	63.4%	39,166
Newspaper	2.0%	65.4%	36,540
Clear Glass Containers	1.3%	66.8%	24,592
Plastic Garbage Bags	1.3%	68.1%	24,305
Textiles - Synthetic	1.3%	69.4%	24,036
Total	**69.4%**		**1,267,922**

Detailed Composition

The composition percentages by weight for each *material type* in Washington's residential disposed waste sector are in Table 13.

Table 13: Residential Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**8.8%**		**160,982**
Newspaper Packaging	0.1%	0.1%	2,103
Cardboard/Kraft Paper Packaging	2.5%	0.5%	45,555
Other Groundwood Paper Packaging	0.2%	0.1%	4,148
Mixed/Low Grade Paper Packaging	3.7%	0.5%	67,972
Compostable Paper Packaging	1.0%	0.4%	18,811
R/C Paper Packaging	1.2%	0.1%	22,392
Plastic Packaging	**8.7%**		**159,779**
#1 PETE Plastic Bottles	1.1%	0.1%	20,510
#1 PETE Plastic Non-bottles	0.5%	0.1%	8,496
#2 HDPE Plastic Natural Bottles	0.5%	0.1%	8,273
#2 HDPE Plastic Colored Bottles	0.7%	0.1%	12,187
#2 HDPE Plastic Jars & Tubs	0.1%	0.1%	2,257
#3 PVC Plastic Packaging	0.0%	0.0%	605
#4 LDPE Plastic Packaging	0.0%	0.0%	182
#5 PP Plastic Packaging	0.6%	0.1%	10,216
#6 PS Plastic Packaging	0.7%	0.2%	12,553
#7 Other Plastic Packaging	0.9%	0.1%	15,974
PLA Packaging	0.0%	0.0%	106
Plastic Merchandise Bags	1.0%	0.1%	17,756
Non-industrial Packaging Film Plastic	2.5%	0.2%	45,453
Industrial Packaging Film Plastic	0.1%	0.0%	1,883
R/C Plastic Packaging	0.2%	0.1%	3,326
Glass	**2.7%**		**49,705**
Clear Glass Containers	1.3%	0.4%	24,592
Green Glass Containers	0.3%	0.1%	4,617
Brown Glass Containers	0.6%	0.2%	10,750
Plate Glass	0.0%	0.0%	189
Stoneware/Kitchen Ceramics/Glassware	0.2%	0.1%	3,448
R/C Glass	0.3%	0.1%	6,110
Metal	**4.3%**		**77,962**
Aluminum Beverage Cans	0.6%	0.2%	11,784
Aluminum Foil/Containers	0.2%	0.0%	3,264
Other Aluminum	0.0%	0.0%	835
Other Nonferrous	0.1%	0.0%	1,086
Food Cans - Tinned	1.0%	0.2%	17,999
Food Cans - Coated	0.2%	0.1%	4,143
White Goods	0.2%	0.4%	3,930
Other Ferrous Metal	0.9%	0.2%	16,976
R/C Metals	1.0%	0.4%	17,946
Organics	**41.2%**		**752,542**
Food - Vegetative	17.0%	1.7%	310,306
Food - Non-vegetative	5.7%	0.9%	103,700
Leaves & Grass	8.7%	3.9%	159,278
Prunings	1.0%	0.4%	17,931
Animal Manure	7.9%	2.9%	144,994
Animal Carcasses	0.0%	0.0%	465
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.9%	0.2%	15,869
Wood Debris	**1.1%**		**19,345**
Treated Wood	0.0%	0.0%	708
Painted Wood	0.3%	0.1%	5,321
Dimensional Lumber	0.1%	0.0%	1,551
Engineered Wood	0.1%	0.1%	2,109
Pallets & Crates	0.0%	0.0%	0
Other Untreated Wood	0.1%	0.1%	1,389
Wood By-Products	0.3%	0.3%	5,476
R/C Wood Debris	0.2%	0.1%	2,791
Construction Materials	**2.7%**		**49,218**
Natural Wood	0.1%	0.1%	1,792
Insulation	0.1%	0.1%	1,185
Asphalt Paving	0.0%	0.0%	62
Concrete	0.1%	0.1%	1,525
Drywall	0.1%	0.0%	1,351
Carpet	0.8%	0.4%	14,222
Carpet Padding	0.1%	0.1%	1,772
Soil, Rocks, Sand	0.7%	0.3%	12,780
Asphalt Roofing	0.3%	0.4%	4,660
Plastic Flooring	0.1%	0.0%	965
Ceramics & Brick	0.1%	0.1%	2,061
R/C Construction Materials	0.4%	0.2%	6,842
Paper Products	**12.5%**		**228,478**
Newspaper	2.0%	0.6%	36,540
Cardboard/Kraft Paper Products	0.0%	0.1%	653
Magazines	1.3%	0.4%	23,302
High-Grade Paper Products	1.0%	0.3%	18,687
Other Groundwood Paper Products	0.6%	0.4%	10,085
Mixed Low Grade Paper Products	2.5%	0.5%	44,791
Compostable Paper Products	5.0%	0.7%	91,023
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.2%	0.1%	3,398
Plastic Products	**4.0%**		**73,025**
#1 PETE Plastic Products	0.0%	0.0%	65
#2 HDPE Plastic Products	0.0%	0.0%	28
#3 PVC Plastic Products	0.0%	0.0%	482
#4 LDPE Plastic Products	0.0%	0.0%	4
#5 PP Plastic Products	0.0%	0.0%	355
#6 PS Plastic Products	0.1%	0.1%	2,516
#7 Other Plastic Products	1.3%	0.6%	23,969
PLA Products	0.0%	0.0%	41
Plastic Garbage Bags	1.3%	0.1%	24,305
Plastic Film Products	0.2%	0.1%	4,485
R/C Plastic Products	0.9%	0.8%	16,775
Consumer Products	**6.2%**		**113,099**
Televisions - CRT	1.0%	1.5%	18,402
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	74
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	322
Computers	0.0%	0.0%	481
Computer Peripherals	0.1%	0.1%	1,417
Audio Equipment	0.1%	0.1%	1,442
Gaming Equipment	0.0%	0.0%	509
Other Consumer Electronics	0.3%	0.2%	5,172
Textiles - Organic	2.1%	0.7%	39,166
Textiles - Synthetic	1.3%	0.5%	24,036
Shoes, Purses, Belts	0.7%	0.2%	12,416
Tires & Rubber	0.4%	0.2%	7,066
Furniture	0.0%	0.0%	763
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.1%	0.1%	1,834
Hazardous/Special Wastes	**7.0%**		**127,136**
Pesticides/Herbicides	0.0%	0.0%	21
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	159
Fluorescent Tubes	0.0%	0.0%	12
Asbestos	0.0%	0.0%	0
Latex Paint	0.2%	0.1%	2,781
Solvent-based Glues	0.4%	0.7%	7,436
Latex-based Glues	0.0%	0.0%	14
Oil-based Paint & Solvent	0.0%	0.0%	754
Caustic Cleaners	0.0%	0.0%	104
Dry-cell Batteries	0.1%	0.0%	1,034
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	146
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	8
Oil Filters	0.0%	0.0%	303
Explosives	0.0%	0.0%	9
Medical Wastes	0.1%	0.1%	2,495
Pharmaceuticals/Vitamins	0.0%	0.0%	645
Disposable Diapers	5.8%	1.3%	106,210
Other Cleaners & Soaps	0.2%	0.1%	3,550
Other Hazardous	0.0%	0.0%	479
Other Non-hazardous	0.1%	0.0%	976
Residues	**0.8%**		**15,249**
Ash	0.0%	0.0%	796
Dust	0.2%	0.1%	3,411
Fines	0.6%	0.2%	11,043
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**1,826,521**
Sample Count	**148**		

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

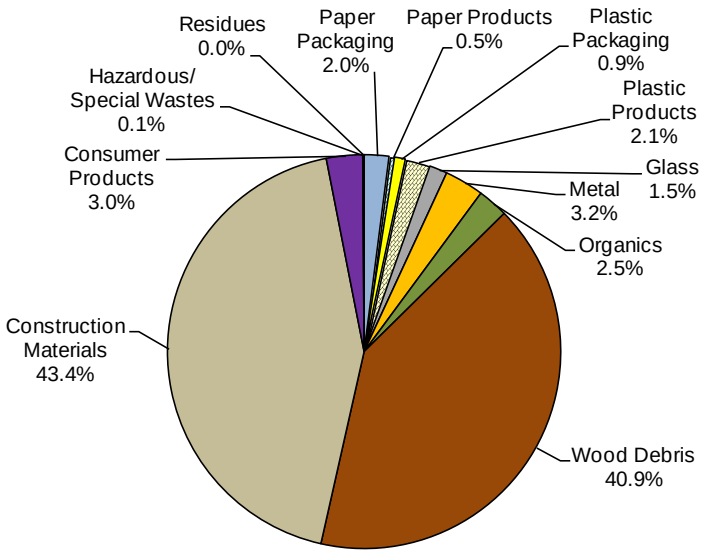
Self-hauled C&D Waste

This section characterizes disposed MSW from the self-hauled C&D sector for the entire state of Washington, combining self-hauled C&D samples from all six WGAs considered in this study. Composition and quantity data are generated from data collected from the ten counties visited during the 2009 statewide study and use the material list of 130 *material types*.

Overview by Material Class

Composition estimates by **Material Class** for the statewide self-hauled C&D disposed waste sector are shown in Figure 13. The largest **Material Class** in this waste sector is **Construction Materials**, which accounts for approximately 43 percent of the waste sector by weight, followed by **Wood Debris** (41 percent). The ten remaining **Material Classes** combined comprise approximately 16 percent of the self-hauled C&D disposed waste sector. See Appendix B: List and Definitions of Material Types for a description of the *material types* included in each **Material Class**.

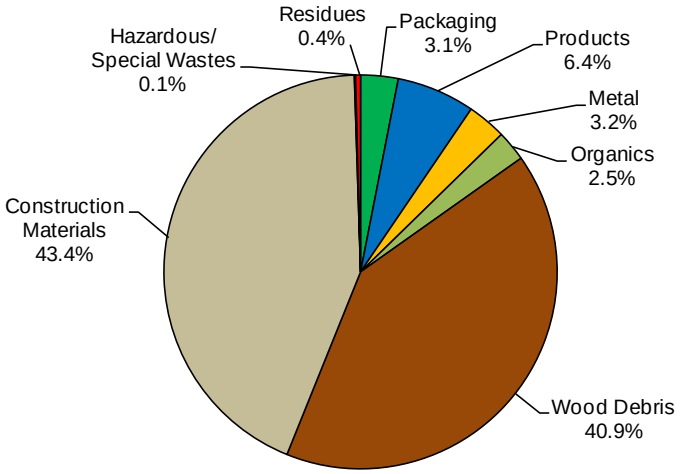
Figure 13: Self-hauled C&D Disposed Waste Sector Composition by Material Class, 2009



Overview of Packaging and Product Material Groups

As shown in Figure 14, packaging materials and products combined are approximately ten percent of this waste sector. The majority of self-hauled C&D disposed waste is either construction materials (43 percent) or wood debris (41 percent). See Appendix B: List and Definitions of Material Types for a description of the *material types* included in packaging, products, and the other *material type* groups shown.

**Figure 14: Self-hauled C&D Disposed Waste Sector
Packaging, Products, and Other Material Groups, 2009**



Fifteen Most Prevalent Materials

As shown in Table 14, when combined the 15 most prevalent *material types* in the self-hauled C&D disposed waste sector account for approximately 84 percent of this waste sector. *Asphalt roofing*, *painted wood*, and *drywall* each comprise more than ten percent of the self-hauled C&D disposed waste sector.

**Table 14: Self-hauled C&D Disposed Waste Sector
Fifteen Most Prevalent Material Types, 2009**

Material	Est. Percent	Cum. Percent	Est. Tons
Asphalt Roofing	12.8%	12.8%	48,000
Painted Wood	11.3%	24.1%	42,304
Drywall	10.4%	34.5%	38,957
Carpet	8.5%	43.1%	31,999
Engineered Wood	8.0%	51.0%	29,846
Dimensional Lumber	7.4%	58.4%	27,632
Other Untreated Wood	5.0%	63.4%	18,554
R/C Construction Materials	4.7%	68.1%	17,706
Pallets & Crates	3.2%	71.3%	11,863
R/C Wood Debris	2.9%	74.2%	10,854
Treated Wood	2.6%	76.8%	9,904
Other Ferrous Metal	2.0%	78.8%	7,491
Furniture	1.9%	80.7%	7,023
Cardboard/Kraft Paper Packaging	1.7%	82.4%	6,481
Asphalt Paving	1.6%	84.0%	5,833
Total	**84.0%**		**314,449**

Detailed Composition

Table 15 lists the composition percentages by weight for each *material type* in Washington's self-hauled C&D disposed waste sector.

Table 15: Self-hauled C&D Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**2.0%**		**7,587**
Newspaper Packaging	0.0%	0.0%	106
Cardboard/Kraft Paper Packaging	1.7%	0.7%	6,481
Other Groundwood Paper Packaging	0.0%	0.0%	4
Mixed/Low Grade Paper Packaging	0.1%	0.1%	348
Compostable Paper Packaging	0.1%	0.1%	188
R/C Paper Packaging	0.1%	0.1%	459
Plastic Packaging	**0.9%**		**3,320**
#1 PETE Plastic Bottles	0.0%	0.0%	119
#1 PETE Plastic Non-bottles	0.0%	0.0%	25
#2 HDPE Plastic Natural Bottles	0.0%	0.1%	149
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	20
#2 HDPE Plastic Jars & Tubs	0.2%	0.3%	803
#3 PVC Plastic Packaging	0.0%	0.0%	0
#4 LDPE Plastic Packaging	0.0%	0.0%	15
#5 PP Plastic Packaging	0.0%	0.0%	88
#6 PS Plastic Packaging	0.0%	0.0%	107
#7 Other Plastic Packaging	0.0%	0.0%	181
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.0%	0.0%	29
Non-industrial Packaging Film Plastic	0.1%	0.1%	419
Industrial Packaging Film Plastic	0.3%	0.2%	1,086
R/C Plastic Packaging	0.1%	0.1%	280
Glass	**1.5%**		**5,490**
Clear Glass Containers	0.1%	0.2%	450
Green Glass Containers	0.0%	0.0%	12
Brown Glass Containers	0.0%	0.0%	55
Plate Glass	0.9%	0.8%	3,486
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	0
R/C Glass	0.4%	0.5%	1,488
Metal	**3.2%**		**12,079**
Aluminum Beverage Cans	0.0%	0.0%	41
Aluminum Foil/Containers	0.0%	0.0%	12
Other Aluminum	0.1%	0.1%	226
Other Nonferrous	0.1%	0.1%	468
Food Cans - Tinned	0.0%	0.0%	63
Food Cans - Coated	0.0%	0.0%	1
White Goods	0.0%	0.0%	0
Other Ferrous Metal	2.0%	0.9%	7,491
R/C Metals	1.0%	0.6%	3,777
Organics	**2.5%**		**9,346**
Food - Vegetative	0.3%	0.3%	958
Food - Non-vegetative	0.1%	0.2%	487
Leaves & Grass	0.8%	0.6%	2,989
Prunings	0.2%	0.2%	687
Animal Manure	0.0%	0.0%	93
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	1.1%	1.1%	4,130
Wood Debris	**40.9%**		**153,150**
Treated Wood	2.6%	3.0%	9,904
Painted Wood	11.3%	7.1%	42,304
Dimensional Lumber	7.4%	3.5%	27,632
Engineered Wood	8.0%	5.1%	29,846
Pallets & Crates	3.2%	3.2%	11,863
Other Untreated Wood	5.0%	6.4%	18,554
Wood By-Products	0.6%	0.6%	2,191
R/C Wood Debris	2.9%	1.6%	10,854
Construction Materials	**43.4%**		**162,415**
Natural Wood	0.8%	1.4%	3,138
Insulation	0.7%	0.4%	2,717
Asphalt Paving	1.6%	1.9%	5,833
Concrete	0.5%	0.4%	1,776
Drywall	10.4%	7.8%	38,957
Carpet	8.5%	8.7%	31,999
Carpet Padding	0.5%	0.3%	1,823
Soil, Rocks, Sand	1.3%	1.4%	4,841
Asphalt Roofing	12.8%	8.9%	48,000
Plastic Flooring	0.1%	0.1%	476
Ceramics & Brick	1.4%	1.2%	5,149
R/C Construction Materials	4.7%	2.2%	17,706

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**0.5%**		**1,700**
Newspaper	0.0%	0.0%	14
Cardboard/Kraft Paper Products	0.1%	0.2%	468
Magazines	0.1%	0.1%	273
High-Grade Paper Products	0.0%	0.0%	29
Other Groundwood Paper Products	0.0%	0.0%	13
Mixed Low Grade Paper Products	0.1%	0.1%	232
Compostable Paper Products	0.1%	0.1%	393
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.1%	0.0%	278
Plastic Products	**2.1%**		**7,732**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	9
#3 PVC Plastic Products	0.0%	0.1%	167
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	22
#6 PS Plastic Products	0.0%	0.0%	43
#7 Other Plastic Products	0.9%	0.6%	3,302
PLA Products	0.0%	0.0%	5
Plastic Garbage Bags	0.2%	0.1%	673
Plastic Film Products	0.2%	0.2%	583
R/C Plastic Products	0.8%	0.7%	2,929
Consumer Products	**3.0%**		**11,148**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.1%	0.1%	253
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	17
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.0%	0.0%	34
Textiles - Organic	0.2%	0.2%	889
Textiles - Synthetic	0.2%	0.2%	576
Shoes, Purses, Belts	0.1%	0.1%	383
Tires & Rubber	0.2%	0.3%	909
Furniture	1.9%	2.3%	7,023
Mattresses	0.3%	0.2%	1,031
R/C Consumer Products	0.0%	0.0%	34
Hazardous/Special Wastes	**0.1%**		**388**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	22
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.1%	0.1%	273
Solvent-based Glues	0.0%	0.0%	6
Latex-based Glues	0.0%	0.0%	41
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	11
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.0%	0.0%	0
Pharmaceuticals/Vitamins	0.0%	0.0%	5
Disposable Diapers	0.0%	0.0%	1
Other Cleaners & Soaps	0.0%	0.0%	8
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.0%	0.0%	22
Residues	**0.0%**		**30**
Ash	0.0%	0.0%	0
Dust	0.0%	0.0%	0
Fines	0.0%	0.0%	30
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**374,386**
Sample Count	**109**		

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

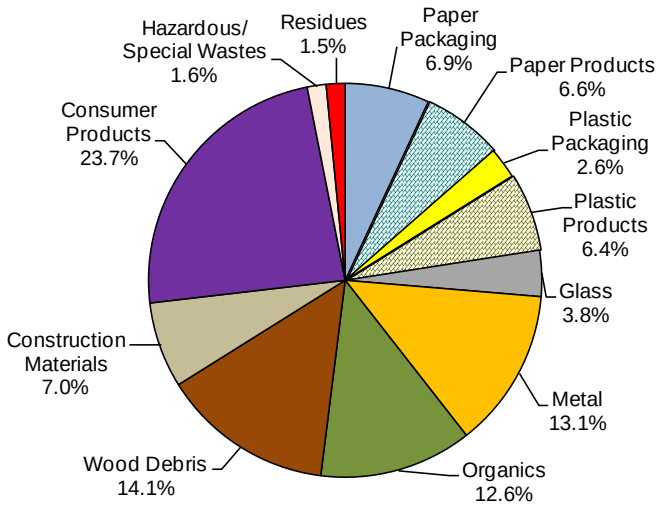
Self-hauled Other Waste

This section characterizes MSW disposed by the self-hauled other sector for the entire state of Washington, combining self-hauled other samples from all six WGAs considered in this study. Composition and quantity data are generated from data collected from the ten counties visited during the 2009 statewide study and use the material list of 130 *material types*.

Overview by Material Class

Figure 15 shows composition estimates by **Material Class** for the statewide self-hauled other disposed waste sector. The largest **Material Class** in this waste sector is **Consumer Products**, which account for approximately 24 percent of the waste sector by weight, followed by **Wood Debris** (14 percent) and **Metal** (13 percent). See Appendix B: List and Definitions of Material Types for a description of the *material types* included in each **Material Class**.

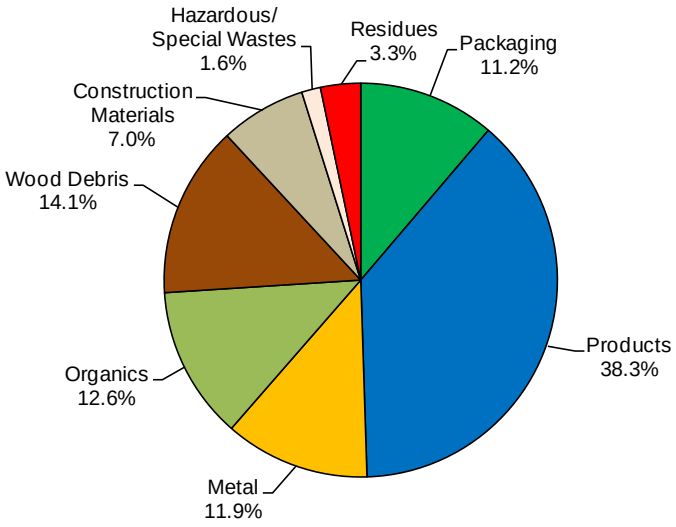
Figure 15: Statewide Self-hauled Other Disposed Waste Sector Composition by Material Class, 2009



Overview of Packaging and Product Material Groups

As Figure 16 shows, products make up approximately 38 percent of the waste sector and are nearly three times more prevalent than wood debris (14 percent), the next largest material group. Packaging materials comprise approximately 11 percent of self-hauled other disposed waste. See Appendix B: List and Definitions of Material Types for a description of the *material types* included in packaging, products, and the other material groups shown.

Figure 16: Self-hauled Other Disposed Waste Sector
Packaging, Products, and Other Material Groups, 2009



Fifteen Most Prevalent Materials

When combined, the 15 most prevalent *material type*s in the self-hauled other disposed waste sector account for nearly two thirds (61 percent) of the waste sector, as shown in Table 16. *Furniture* (11 percent) and *other ferrous metal* (nine percent) are the two most prevalent materials in the self-hauled other disposed waste sector.

Table 16: Self-hauled Other Disposed Waste Sector
Fifteen Most Prevalent Material Types, 2009

Material	Est. Percent	Cum. Percent	Est. Tons
Furniture	11.3%	11.3%	68,387
Other Ferrous Metal	9.1%	20.5%	55,125
Pallets & Crates	6.1%	26.6%	36,845
Cardboard/Kraft Paper Packaging	5.4%	31.9%	32,297
Leaves & Grass	4.0%	35.9%	24,073
Textiles - Organic	3.9%	39.8%	23,565
#7 Other Plastic Products	2.9%	42.7%	17,598
R/C Metals	2.7%	45.4%	16,242
Food - Vegetative	2.5%	48.0%	15,368
R/C Wood Debris	2.5%	50.5%	15,246
Painted Wood	2.3%	52.8%	14,051
Textiles - Synthetic	2.3%	55.1%	13,980
R/C Plastic Products	2.1%	57.2%	12,375
Animal Carcasses	2.0%	59.2%	12,133
Newspaper	2.0%	61.2%	11,958
Total	**61.2%**		**369,243**

Detailed Composition

Table 17 lists the composition percentages by weight for each *material type* in Washington's self-hauled other disposed waste sector.

Table 17: Self-hauled Other Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**6.9%**		**41,881**
Newspaper Packaging	0.1%	0.1%	347
Cardboard/Kraft Paper Packaging	5.4%	3.8%	32,297
Other Groundwood Paper Packaging	0.0%	0.0%	228
Mixed/Low Grade Paper Packaging	1.0%	0.6%	5,771
Compostable Paper Packaging	0.2%	0.1%	1,007
R/C Paper Packaging	0.4%	0.2%	2,229
Plastic Packaging	**2.6%**		**15,457**
#1 PETE Plastic Bottles	0.3%	0.1%	1,835
#1 PETE Plastic Non-bottles	0.1%	0.0%	315
#2 HDPE Plastic Natural Bottles	0.1%	0.0%	364
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	1,087
#2 HDPE Plastic Jars & Tubs	0.1%	0.1%	771
#3 PVC Plastic Packaging	0.0%	0.0%	65
#4 LDPE Plastic Packaging	0.0%	0.0%	46
#5 PP Plastic Packaging	0.1%	0.1%	844
#6 PS Plastic Packaging	0.2%	0.1%	1,106
#7 Other Plastic Packaging	0.3%	0.1%	1,513
PLA Packaging	0.0%	0.0%	10
Plastic Merchandise Bags	0.2%	0.1%	1,049
Non-industrial Packaging Film Plastic	0.5%	0.2%	3,050
Industrial Packaging Film Plastic	0.4%	0.3%	2,565
R/C Plastic Packaging	0.1%	0.1%	836
Glass	**3.8%**		**22,842**
Clear Glass Containers	0.8%	0.7%	4,811
Green Glass Containers	0.1%	0.1%	751
Brown Glass Containers	0.2%	0.1%	1,297
Plate Glass	0.1%	0.1%	842
Stoneware/Kitchen Ceramics/Glassware	0.8%	1.1%	4,613
R/C Glass	1.7%	1.8%	10,527
Metal	**13.1%**		**79,057**
Aluminum Beverage Cans	0.3%	0.2%	1,599
Aluminum Foil/Containers	0.0%	0.0%	153
Other Aluminum	0.0%	0.0%	258
Other Nonferrous	0.1%	0.1%	367
Food Cans - Tinned	0.2%	0.1%	1,444
Food Cans - Coated	0.1%	0.1%	455
White Goods	0.6%	0.6%	3,413
Other Ferrous Metal	9.1%	7.1%	55,125
R/C Metals	2.7%	1.1%	16,242
Organics	**12.6%**		**75,773**
Food - Vegetative	2.5%	1.2%	15,368
Food - Non-vegetative	0.9%	0.5%	5,336
Leaves & Grass	4.0%	2.0%	24,073
Prunings	0.9%	0.9%	5,340
Animal Manure	1.3%	1.1%	7,664
Animal Carcasses	2.0%	3.0%	12,133
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	1.0%	1.3%	5,858
Wood Debris	**14.1%**		**85,233**
Treated Wood	0.5%	0.6%	3,198
Painted Wood	2.3%	1.1%	14,051
Dimensional Lumber	1.0%	0.5%	5,803
Engineered Wood	0.5%	0.3%	3,167
Pallets & Crates	6.1%	7.7%	36,845
Other Untreated Wood	0.7%	0.6%	4,036
Wood By-Products	0.5%	0.4%	2,888
R/C Wood Debris	2.5%	2.0%	15,246
Construction Materials	**7.0%**		**42,546**
Natural Wood	0.0%	0.0%	95
Insulation	0.1%	0.1%	845
Asphalt Paving	0.0%	0.0%	0
Concrete	0.4%	0.4%	2,321
Drywall	1.1%	1.1%	6,820
Carpet	1.8%	1.1%	11,163
Carpet Padding	0.5%	0.4%	2,843
Soil, Rocks, Sand	0.7%	0.8%	4,185
Asphalt Roofing	0.1%	0.0%	313
Plastic Flooring	0.0%	0.1%	295
Ceramics & Brick	0.3%	0.3%	2,102
R/C Construction Materials	1.9%	1.3%	11,564

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**6.6%**		**39,988**
Newspaper	2.0%	2.3%	11,958
Cardboard/Kraft Paper Products	0.0%	0.0%	141
Magazines	1.1%	0.8%	6,465
High-Grade Paper Products	0.4%	0.2%	2,280
Other Groundwood Paper Products	0.2%	0.2%	1,452
Mixed Low Grade Paper Products	0.7%	0.4%	4,401
Compostable Paper Products	0.7%	0.4%	4,524
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	1.5%	2.1%	8,767
Plastic Products	**6.4%**		**38,739**
#1 PETE Plastic Products	0.0%	0.0%	1
#2 HDPE Plastic Products	0.1%	0.1%	503
#3 PVC Plastic Products	0.0%	0.0%	107
#4 LDPE Plastic Products	0.0%	0.0%	103
#5 PP Plastic Products	0.2%	0.2%	1,288
#6 PS Plastic Products	0.0%	0.0%	224
#7 Other Plastic Products	2.9%	1.3%	17,598
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	0.4%	0.1%	2,135
Plastic Film Products	0.7%	0.7%	4,406
R/C Plastic Products	2.1%	1.3%	12,375
Consumer Products	**23.7%**		**143,269**
Televisions - CRT	1.4%	1.1%	8,280
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.3%	0.3%	1,561
Computer Monitors - CRT	0.2%	0.2%	1,476
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.1%	0.1%	491
Computer Peripherals	0.3%	0.5%	2,097
Audio Equipment	0.4%	0.4%	2,407
Gaming Equipment	0.0%	0.0%	221
Other Consumer Electronics	1.2%	1.3%	7,496
Textiles - Organic	3.9%	1.9%	23,565
Textiles - Synthetic	2.3%	1.0%	13,980
Shoes, Purses, Belts	0.4%	0.3%	2,454
Tires & Rubber	0.4%	0.2%	2,504
Furniture	11.3%	8.9%	68,387
Mattresses	0.4%	0.3%	2,120
R/C Consumer Products	1.0%	0.9%	6,231
Hazardous/Special Wastes	**1.6%**		**9,381**
Pesticides/Herbicides	0.0%	0.0%	222
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	2
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.4%	0.4%	2,252
Solvent-based Glues	0.0%	0.0%	87
Latex-based Glues	0.0%	0.0%	137
Oil-based Paint & Solvent	0.2%	0.3%	1,289
Caustic Cleaners	0.0%	0.0%	130
Dry-cell Batteries	0.0%	0.0%	78
Wet-cell Batteries	0.0%	0.0%	172
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	3
Other Vehicle Fluids	0.0%	0.0%	12
Oil Filters	0.0%	0.0%	10
Explosives	0.0%	0.0%	13
Medical Wastes	0.1%	0.1%	409
Pharmaceuticals/Vitamins	0.0%	0.0%	7
Disposable Diapers	0.4%	0.3%	2,385
Other Cleaners & Soaps	0.3%	0.3%	1,889
Other Hazardous	0.0%	0.0%	93
Other Non-hazardous	0.0%	0.0%	191
Residues	**1.5%**		**9,350**
Ash	0.9%	1.4%	5,346
Dust	0.0%	0.0%	256
Fines	0.0%	0.0%	266
Sludge/Special Industrial	0.6%	1.0%	3,483
Totals	**100.0%**		**603,514**
Sample Count	**109**		

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

Appendix A: Detailed Methodology

Developing a Project Plan

Prior to carrying out any of the data-collection strategies—sampling, sorting, and surveying—Ecology developed a waste characterization project plan that provided the framework for all subsequent data collection and analysis strategies.

Ecology's planning stage included:

1. Selecting representative counties across the state to visit;
2. Scheduling solid waste disposal facilities statewide to survey and sample;
3. Defining the waste sectors to examine during the study; and
4. Creating the list of *material type*s to examine throughout the study.

The following methodology presents a detailed list of actions Cascadia and our partner in field sampling, Sky Valley Associates, took to plan the field data collection process and analyze the data.

Organizing Data Collection

Coordination with Facilities

Cascadia worked with Ecology to create a questionnaire and conducted brief interviews with the management of each of the ten solid waste facilities recruited by Ecology.

The information collected during these interviews guided us as we scheduled visits, planned a precise data collection strategy for each site, and created vehicle selection forms that allowed a suitable random selection process. The interviews gained the following information:

- Contact information for key personnel.
- Days and hours of operation for each facility.
- Approximate numbers of vehicles from each sector (residential, commercial, self-hauled construction and demolition (C&D), and self-hauled other) expected on each day of the week and the likely peak time of day for each type of load.
- Ability and willingness of gatehouse personnel to assist with the vehicle selection process.
- Logistical strategy to determine locations for setting up the work area, taking samples, queuing samples, discarding sorted samples, and other in-process activities.
- Recycling or recovery operations that exist at the facility, and how the study team may obtain samples of waste after any recycling or recovery operations have already been applied to the waste (if applicable).
- Whether the facility can provide the use of a loader for obtaining waste samples.
- Unusual conditions (e.g., weather, anomalies in traffic patterns, etc.) that might affect data collection and necessitate special logistical arrangements.
- Facility-specific health and safety procedures and emergency contact numbers.

- Any other concerns that should be addressed prior to sampling.

Consistent, clear communication with facility management leads to smooth sampling and sorting and substantial willingness among facility staff to help us however they could. Cascadia contacted the management of each disposal facility two weeks prior to the scheduled visits to address logistical concerns and reiterate any requests for sample collection assistance. A day or two prior to the visit, the Field Manager made a final reminder call to ensure the facility was ready and resolve any last minute issues.

Prepare Data Forms

Customized field forms were developed to correlate to the specific sampling strategy and information needed by this study. These forms included:

A **Vehicle Selection Form** was created for each day and location of sampling activity. This form listed the sample quotas specific to each day by sector, and was used to select vehicles entering the facility in a random manner for sampling.

A **Sample Placard** was created to flag vehicles selected for sampling. The sample placard is a brightly colored paper sign that was placed on the windshield of every vehicle entering the facility chosen for sampling. The sample placard has the sample number (Res-1, Com-5, etc.) pre-printed on the front and was easily seen and intercepted by the sorting Field Manager.

A **Waste Sample Tally Sheet** included a list of all materials and cells to record the weights for each material.

Field form applications will be described in more detail below in Task 4: Sampling and Sorting.

Preparing the Sorting Crew

Training

At the outset of each season, the Field Manager and sorting crew familiarized themselves with the materials list, field forms, and any unique sorting protocols employed during the season. The Field Manager was present onsite to provide continual support and supervision. Training for the 2009 Washington State study also addressed:

- General facility overviews.
- Facility-specific health and safety requirements.
- Personal protective equipment (PPE) requirements.
- Waste handling techniques.
- Productivity strategies and daily sorting quotas.

The Field Manager ensured the sorting protocol was followed, along with the health and safety requirements, and closely evaluated each individual sample to ensure material categories were understood and interpreted uniformly by the sorting crew.

Health and Safety

Our team followed a strict health and safety plan that meets Occupational Safety and Health Administration (OSHA) standards.

Equipment

Following is the list of equipment used for sampling and sorting. The Field Manager stocked extra safety equipment to ensure the safety of observers or others present at the sorting site.

Equipment for sorting:

- Sorting table/stations (1 per sorter)
- 30-50 laundry baskets per waste sector to sort material into
- 1 shovel
- 2 brooms
- 1 digital scale (weighs to 1/10 pound)
- 10-20 tarps
- 4 clipboards
- A 7.1 megapixel standard digital camera
- 2 coolers with cold drinks

Safety equipment:

- Dust masks (1 per person/day)
- Puncture resistant gloves (1 pair per person)
- Glove liners (1 per person/day)
- Safety glasses (1 per person)
- Reflective safety vests (1 per person)
- Hard hats (1 per person)
- Leather work gloves (1 pair per person)
- Safety/medical kit

Statewide Sampling Strategy

After considering the sampling locations (Table 18) Ecology chose and recruited, and studying a Washington State map, Cascadia developed a sorting strategy that allowed us to cover ten counties in eleven days. During this period, we visited the four eastern facilities during one week and the remaining six western facilities the second week.

Figure 17 shows the counties where sampling occurred. We repeated this sampling strategy throughout each of the four seasons, making an attempt to vary the days of the week each facility was visited to capture variability associated with days of the week. Table 19 and Table 20 show all four seasons of planned and actual samples by county.

Table 18: Counties and Facilities Visited for Sampling

COUNTY	FACILITY
Clallam	Port Angeles Transfer Station
Grays Harbor	Aberdeen Central Transfer Station
Whatcom	Regional Disposal Company
Clark	West Van Material Recovery Center
Lewis	Lewis County Central Transfer Station
Kitsap	Olympic View Transfer Station
Grant	Ephrata Landfill
Yakima	Terrace Heights Landfill
Spokane	Spokane Regional Waste to Energy Facility
Walla Walla	Sudbury Road Landfill

Figure 17: Map of Waste Generation Areas and Counties Included

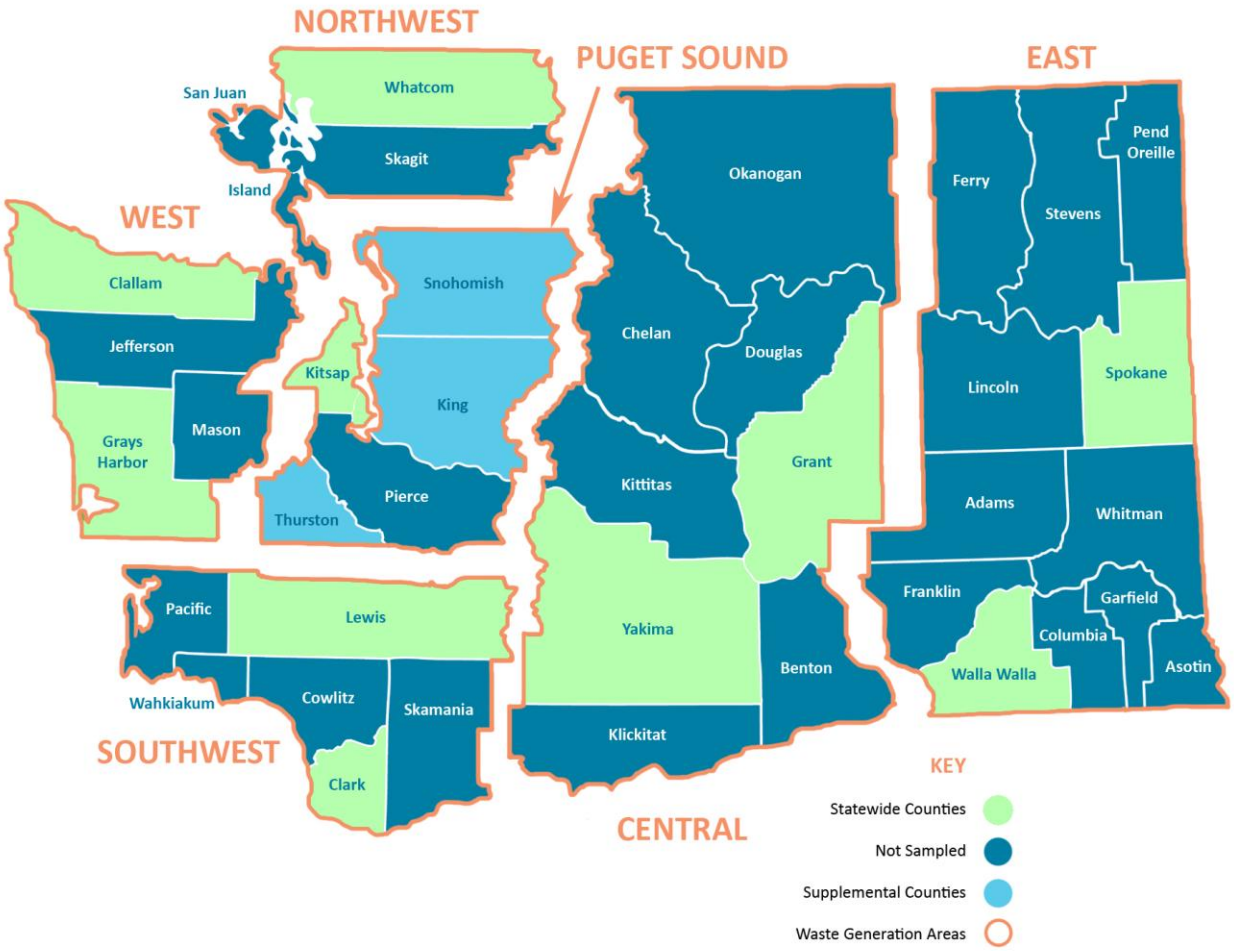


Table 19: Season One and Two Sampling Allocations: Planned vs. Actual

			Season One: March/April					Season Two: May/June				
Waste Generation Area	**County representing WGA**	**Planned/ Actual**	**Com**	**Res**	**SH C&D**	**SH Other**	**Total**	**Com**	**Res**	**SH C&D**	**SH Other**	**Total**
West	Clallam	Planned	2	2	2	2	8	2	2	2	2	8
		Actual	2	2	2	2	8	2	3	2	2	9
	Grays Harbor	Planned	3	3	2	2	10	3	3	2	2	10
		Actual	3	3	2	2	10	3	3	2	2	10
Northwest	Whatcom	Planned	4	4	3	3	14	4	4	3	3	14
		Actual	4	4	3	3	14	4	4	3	3	14
Puget Sound	Kitsap	Planned	2	2	2	2	8	2	2	2	2	8
		Actual	2	2	2	2	8	3	2	2	2	9
Southwest	Clark	Planned	4	4	2	2	12	4	4	2	2	12
		Actual	3	3	3	3	12	4	4	2	2	12
	Lewis	Planned	2	2	2	2	8	2	2	2	2	8
		Actual	2	2	2	2	8	2	2	2	2	8
West Samples Planned			**17**	**17**	**13**	**13**	**60**	**17**	**17**	**13**	**13**	**60**
West Samples Sampled			**16**	**16**	**14**	**14**	**60**	**18**	**18**	**13**	**13**	**62**
Central	Yakima	Planned	5	5	3	3	16	5	5	3	3	16
		Actual	6	5	3	3	17	5	5	3	3	16
	Grant	Planned	5	5	3	3	16	5	5	3	3	16
		Actual	3	7	3	3	16	6	4	3	3	16
East	Spokane (day 1)	Planned	4	4	2	2	12	4	4	2	2	12
		Actual	4	3	2	2	11	4	4	2	2	12
	Spokane (day 2)	Planned	4	4	2	2	12	4	4	2	2	12
		Actual	4	5	2	2	13	4	4	2	2	12
	Walla Walla	Planned	5	5	3	3	16	5	5	3	3	16
		Actual	4	5	3	3	15	4	6	3	3	16
East Samples Planned			**23**	**23**	**13**	**13**	**72**	**23**	**23**	**13**	**13**	**72**
East Samples Sampled			**21**	**25**	**13**	**13**	**72**	**23**	**23**	**13**	**13**	**72**
Total Samples Planned			**40**	**40**	**26**	**26**	**132**	**40**	**40**	**26**	**26**	**132**
Total Samples Sampled			**37**	**41**	**27**	**27**	**132**	**41**	**41**	**26**	**26**	**134**
Total Days of Sampling							**11**					**11**

Table 20: Season Three and Four Sampling Allocations: Planned vs. Actual

			Season Three: August/September					Season Four: January				
Waste Generation Area	**County representing WGA**	**Planned/ Actual**	**Com**	**Res**	**SH C&D**	**SH Other**	**Total**	**Com**	**Res**	**SH C&D**	**SH Other**	**Total**
West	Clallam	Planned	4	3	3	2	12	4	3	2	3	12
		Actual	4	3	3	2	12	4	3	2	3	12
	Grays Harbor	Planned	4	3	2	3	12	4	3	3	2	12
		Actual	4	3	2	3	12	4	3	3	2	12
Northwest	Whatcom	Planned	4	3	3	2	12	4	3	2	3	12
		Actual	4	3	3	2	12	4	3	2	3	12
Puget Sound	Kitsap	Planned	4	3	2	3	12	4	3	3	2	12
		Actual	4	3	2	3	12	4	3	3	2	12
Southwest	Clark	Planned	4	3	3	2	12	4	3	2	3	12
		Actual	4	3	3	2	12	4	3	2	3	12
	Lewis	Planned	4	3	2	3	12	4	3	3	2	12
		Actual	4	3	2	3	12	4	3	3	2	12
West Samples Planned			**24**	**18**	**15**	**15**	**72**	**24**	**18**	**15**	**15**	**72**
West Samples Sampled			**24**	**18**	**15**	**15**	**72**	**24**	**18**	**15**	**15**	**72**
Central	Yakima	Planned	4	3	3	2	12	4	3	2	3	12
		Actual	4	3	3	2	12	4	3	3	3	13
	Grant	Planned	4	3	2	3	12	4	3	3	2	12
		Actual	4	3	2	3	12	2	3	3	3	11
East	Spokane (day 1)	Planned	4	3	3	2	12	4	3	3	2	12
		Actual	4	3	2	3	12	4	3	2	2	11
	Spokane (day 2)	Planned	4	3	2	3	12	4	3	2	3	12
		Actual	4	3	3	2	12	4	3	3	3	13
	Walla Walla	Planned	4	3	3	2	12	4	3	2	3	12
		Actual	4	3	3	2	12	4	3	2	3	12
East Samples Planned			**20**	**15**	**13**	**12**	**60**	**20**	**15**	**12**	**13**	**60**
East Samples Sampled			**20**	**15**	**13**	**12**	**60**	**18**	**15**	**13**	**14**	**60**
Total Samples Planned			**44**	**33**	**28**	**27**	**132**	**44**	**33**	**27**	**28**	**132**
Total Samples Sampled			**44**	**33**	**28**	**27**	**132**	**42**	**33**	**28**	**29**	**132**
Total Days of Sampling							**11**					**11**

Conducting Fieldwork

Obtaining Samples

The Field Manager followed a systematic procedure to select vehicles with commercial, residential, self-hauled C&D, and self-hauled other waste for sampling. To calculate vehicle sampling frequency for each waste sector, the project team established a sampling interval for each day of sampling. Sampling intervals were determined by dividing the total expected number of loads for each sector arriving at the facility on the scheduled day—based on information from the disposal facility questionnaire—by the number of samples needed each day. The resulting number is the sampling frequency, which determines whether, for example, every third vehicle, every sixth vehicle, or every 20th vehicle is selected for sampling. This strategy is referred to as "selecting every nth vehicle" within a waste sector. A vehicle selection form was created for each day and each location of sampling activity.

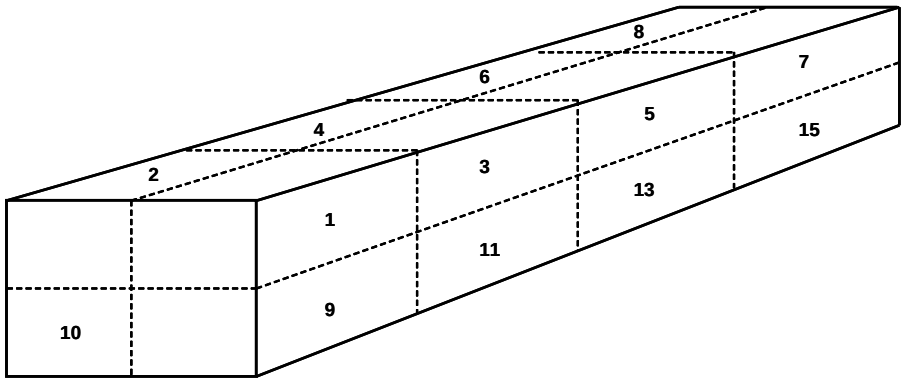
For a vehicle to be eligible for sampling, the load had to fit clearly within the commercial, residential, self-hauled C&D and self-hauled other definitions depending on the targeted waste sector. Samples of commercial and residential waste were obtained from major haulers, such as Waste Management or Allied, or from municipal haulers.

When the "nth" vehicle in each waste sector arrived, a unique, sequential sample identification (ID) number was assigned to the load. The sample ID number was entered on the vehicle selection form and a unique sample placard was placed in the windshield of the chosen vehicle. The sample ID matched the corresponding waste sector prefix (COM, RES, SH). For example, the first commercial sample ID on a given day was COM-1, while the fourth residential sample ID was RES-4. The brightly colored sample placard alerted the Field Manager and sorting crew to the presence of a sample. Where feasible, the vehicle selection responsibility was handled by the scale house crew, as they were uniquely positioned to count off and select the *nth* vehicle during the course of the sampling day.

Hand-sorting Samples

Loads selected to provide hand-sorted samples were extracted from the elongated piles ejected from the dumping vehicle. From each selected pile, the Field Manager randomly selected one sample of waste using an imaginary 16-cell grid (see below) superimposed over the dumped material. Then, with the assistance of a loader operator, a sample of waste weighing 225 pounds (on average) was removed from the designated cell and placed on a tarp. Each sample was labeled with the identifying sample ID number and digitally photographed.

Figure 18: The 16-Cell Grid as Applied to a Tipped Load



Our process for hand-sorting samples included the following:

1. After each sample of waste was placed on a tarp, photographs of the sample were taken using a digital camera. The sample placard that identified each sample was positioned so it was visible in each photograph.
2. Each sample of waste was then sorted into the *material type*s, and the sorting crew used plastic laundry baskets to contain the separated materials. The sorting crew members typically specialized in groups of materials, such as papers or plastics. The Field Manager monitored the homogeneity of material in the baskets as they accumulated, rejecting any materials which may have been improperly classified.
3. The Field Manager then verified the purity of each material as it was weighed in its basket using a pre-calibrated scale, and recorded each material weight (excluding the weight of the basket) on the sample tally form. The Field Manager oversaw all weighing and data recording of each sample.

At the conclusion of each sorting day, the Field Manager conducted a quality control review of the data recorded on each sample tally sheet. The completed sample tally sheet was taken to the Cascadia Consulting office for data entry.

Site Maintenance and Cleanup

Our field crew took steps to reduce or eliminate the risk of litter, particularly in open-air environments. A thorough cleanup effort followed each day of work and included:

- Organizing and stowing sorting supplies in a designated location;
- Removing all sorted waste discarded throughout the day (the host facility loader operator typically helped with removal);
- Sweeping and cleaning the sorting area to prevent windblown litter and other situations that could attract vectors;
- Removing and properly disposing any single-use personal protective equipment; and
- Checking out with the Facility Manager each day.

Data Management

Our quality assurance/quality control process involved:

- Assigning a unique combination sample number, county of origin, date, and time to each sample and then transferring the information to the tally sheet that was used to record material weights for the sample.
- Encoding the type of waste load into the sample number. For example, on a particular date, samples of commercial waste were numbered Com-1, Com-2, and so on.
- Using the vehicle selection form to track the numbers of each type of load obtained and sampled.
- Verifying that data forms were obtained for each day the data collection crew was in the field.
- Designing the data entry databases to prevent out-of-range values for vehicle and sample characteristics such as vehicle type, net weight, and other factors.
- Randomly checking computer-entered data against the paper forms to verify that numbers were entered correctly and to look for any systematic or random errors.

Following each season of fieldwork, all field forms were taken to Cascadia's office and entered into a waste composition database created specifically for the 2009 Washington statewide study. Our team's data entry procedure was developed to protect the integrity of the data at every step of the process, from collection in the field to final analysis.

After the sample tally sheets were checked by the Field Manager, the Data Manager verified that all required data was recorded properly and supervised the data entry process. As an additional step in quality control, randomly selected records were inspected in detail to monitor the accuracy of the data entry process.

Collecting Composition and Quantity Data

Composition of Waste

Composition estimates that resulted from sorting samples were combined with quantity data to produce meaningful results at the material and waste sector levels. The data collected in the field provided Ecology with the *percentages* of the various materials found in the waste sector, but not the *tonnages*. When these percentages were paired with the tonnage figures collected from Washington's waste generations areas, the percentages were scaled up to a specific weight. In other words, knowing a waste sector is composed of 20 percent food waste is helpful, but only when one knows that 20 percent equates to 40,000 tons of food can concrete planning occur and diversion programs be established.

Quantity of Waste

To determine how many tons of disposed waste were associated with each of the waste sectors addressed in the study, we gathered tonnage data from two sources:

1. A vehicle survey carried out during season four at each of the ten sampling facilities.
2. Tonnage data provided by 36 statewide disposal facilities.

We began the tonnage data collection process by gathering tonnage data during the pre-fieldwork conversations with facilities we expected to visit. The collection of the data involved conversations, faxes, or collection of transaction logs. It should be noted that facilities do not always track data in a consistent manner, and availability varies from facility to facility. Therefore, Cascadia needed to interpret some of the data to create comparable information. In addition to collecting tonnage data from the ten facilities visited for sampling, Cascadia collected tonnage data from an additional 36 facilities statewide.

Vehicle Surveys

Vehicle surveys were administered to the drivers of each vehicle entering the facility through the gate where the surveyor was posted. If the facility had multiple gates (such as the Spokane Regional Waste to Energy Facility), then the surveyor rotated among the gates at regular intervals of about one hour. Table 21 shows the number of vehicles surveyed at each facility.

Table 21: Vehicle Surveys Conducted by County and Facility

COUNTY	FACILITY	VEHICLES SURVEYED
Clallam	Port Angeles Transfer Station	107
Grays Harbor	Aberdeen Central Transfer Station	97
Whatcom	Regional Disposal Company	73
Clark	West Van Material Recovery Center	80
Lewis	Lewis County Central Transfer Station	157
Kitsap	Olympic View Transfer Station	142
Grant	Ephrata Landfill	64
Yakima	Terrace Heights Landfill	177
Spokane	Spokane Regional Waste to Energy	189
Walla Walla	Sudbury Road Landfill	58
Total		**1,144**

The ultimate product of the survey data was an estimate of the fraction of the overall waste sector contributed by each of the waste sectors at each participating facility.

On survey days, the surveyor arrived at the site at the scheduled start time, which was assigned to permit full coverage throughout the day and at times of greatest traffic at the facility. The surveyor introduced himself or herself to the scale house staff and verified the procedure for administering the survey that day by confirming several key details:

- The procedure for obtaining vehicle net weights;
- Any rules the facility used for assigning a minimum net weight to certain types of vehicles, such as those carrying self-hauled loads; and
- Any rules governing assignment of net volume estimates instead of net weights.

The surveyor was positioned at the designated entrance to the facility and interviewed the driver of each passing vehicle. The information gathered through the interview included:

- The waste sector (residential, commercial, self-hauled C&D, and self-hauled other);
- In cases where loads were composed of waste from multiple sectors, the estimated proportions of the sectors represented in the load;
- The activity that generated the waste; and
- Vehicle type.

An example vehicle survey form that was used to collect the data is in Appendix C: Forms Used during the Study.

At most of the facilities, it was possible for the surveyor to obtain net weights for vehicles by observing the weighing process at the scale house and recording the weight at the same moment the vehicle drove across the scales. In some cases, the surveyor coordinated with scale house personnel throughout the day to obtain weight tickets (transaction receipts) corresponding to every load of waste brought to the facility.

In all cases, the surveyor recorded the type of waste and net weight, net volume, or default assigned weight for every vehicle encountered that was carrying disposed waste that did not come from another solid waste facility. The survey did not record loads of non-disposed waste, material to be recycled or recovered, Alternative Daily Cover, or material brought from transfer stations or other solid waste or recovery facilities.

Collected survey data were checked for accuracy in the field. The surveyor checked the forms to ensure all appropriate information was gathered. The survey supervisor checked the surveys after they were returned to the office to confirm all required data was properly entered. Survey entries with errors or incomplete were not used.

The survey data were entered into a Microsoft Access database. The entries were compared in two separate checks with the written field records. First, the field survey data were entered into a customized database that compared the two sets of entries and flagged any that did not match. Second, each database record was reviewed and compared against the original field form. Any data entry errors were addressed. In cases where data entry errors or omissions could not be resolved, the entry was deleted.

Additional Tonnage Data

In addition to the vehicle surveys, additional data was collected from 36 solid waste facilities throughout Washington. The sites were not randomly selected but chosen from a list of all waste facilities in the state Ecology provided. Each facility was asked to provide:

- Annual disposed tonnage;
- Percent or tonnages allocated to the residential and commercial waste sectors; and
- Percent or tonnages allocated to the self-hauled C&D and self-hauled other waste sectors.

Most facilities could provide the annual tons and residential/commercial tons, but very few track their self-hauled or “public” loads in a way we could use for our analysis. Due to these uncertainties, we relied

most heavily on the vehicle survey data to provide sector tonnages, and used the additional survey data only when we were confident of its accuracy. Table 22 presents a list of all 36 facilities that could provide tonnage data for one of the three categories listed above.

Table 22: Additional Survey Facilities

COUNTY	FACILITY	COUNTY	FACILITY
Grant	CDSI Transfer & Recycling	King	Factoria Transfer Station
Chelan	Dryden Transfer Station	King	Houghton Transfer Station
Yakima	Cheyne Road Landfill	King	Renton Transfer Station
Yakima	Yakima County Lower Valley RTS	King	Algona Transfer Station
Kittitas	Ellensburg Transfer Station	King	Skykomish Transfer Station
Kittitas	Cle Elum Transfer Station	King	Bow Lake Transfer Station
Kittitas	Ryegrass Landfill	King	Enumclaw Transfer Station
Spokane	North County Transfer Station	King	Vashon Transfer Station
Spokane	Valley Transfer Station	King	Cedar Falls Transfer Station
Spokane	Northside Landfill	King	Shoreline Transfer Station
Benton	Horn Rapids Landfill	Clark	Central Transfer Station
Benton	Kennewick Transfer Station	Lewis	East Lewis County Transfer Station
Franklin	Basin Disposal Transfer Station	Cowlitz	Cowlitz County Landfill
Kitsap	Bainbridge Island Recycling & Garbage Facility	Clallam	Blue Mtn. Transfer Station
Kitsap	Hansville Recycling & Garbage Facility	Grays Harbor	Elma McCleary Transfer Station
Kitsap	Ollala Recycling & Garbage Facility	Grays Harbor	Hogan's Corner Transfer Station
Kitsap	Silverdale Recycling & Garbage Facility	Grays Harbor	Ocosta Transfer Station
Pierce	Tacoma City Municipal Landfill	Grays Harbor	Pacific Beach Transfer Station

Explaining the Calculations and Statistical Procedures Used

Data from vehicle surveys, facility tonnage reports, and sorting waste samples were analyzed to yield estimates of percentages and tonnages of *material types* in Washington's waste stream. This section describes the methodology used to obtain each estimate and its associated confidence interval (error range).

The general calculation strategy involved two basic practices: 1) the use of ratio estimators to determine composition percentages of the waste stream, and 2) aggregation of sample data from the waste generation area (WGA) level to the statewide level.

Estimating Waste Composition

To develop waste characterization and quantity profiles for this study, three main steps were taken:

1. Convert volumetric estimates of materials to weight for the samples.
2. Calculate the estimated composition of all samples in a given sector based on the sample weight.
3. Combine the results for individual sectors using a weighted average procedure to produce findings for combined sectors.

In the descriptions of calculation methods, the following variables are used frequently:

- *i* denotes an individual sample;
- *j* denotes the *material type*;
- c_j is the weight of the *material type j* in a sample;
- *w* is the weight of an entire sample;
- r_j is the composition estimate for material *j* (*r* stands for *ratio*);
- *a* denotes a WGA (*a* stands for *area*);
- *s* denotes a particular sector of the waste sector; and
- *n* denotes the number of samples in the particular group that is being analyzed at that step.

Estimating the Composition

The following method was used to estimate the composition of waste belonging to the commercial, residential, self-hauled C&D, and self hauled other sectors.

For a given stratum (that is, for the samples belonging to the same waste sector within the same WGA), the composition estimate denoted by r_j represents the ratio of the component's weight to the total weight of all the samples in the stratum. This estimate was derived by summing each component's weight across all of the selected samples belonging to a given stratum and dividing by the sum of the total weight of waste for all of the samples in that stratum, as shown in the following equation:

$$r_j = \frac{\sum_i c_{ij}}{\sum_i w_i} \qquad (1)$$

where:

- *c* = weight of particular component;
- *w* = sum of all component weights;
- for *i* = 1 to *n*, where *n* = number of selected samples; and
- for *j* = 1 to *m*, where *m* = number of components.

For example, the following simplified scenario involves three samples. For the purposes of this example, only the weights of the component *carpet* are shown.

	SAMPLE 1	SAMPLE 2	SAMPLE 3
Weight (c) of carpet	5	3	4
Total Sample Weight (w)	80	70	90

$$r_{Carpet} = \sum \frac{5+3+4}{80+70+90} = 0.05$$

To find the composition estimate for the component *carpet*, the weights for that material are added for all selected samples and divided by the total sample weights of those samples. The resulting composition is 0.05, or 5 percent. In other words, 5 percent of the sampled material by weight is *carpet*. This finding is then projected onto the stratum being examined in this step of the analysis.

The confidence interval for this estimate was derived in two steps. First, the variance around the estimate was calculated, accounting for the fact that the ratio included two random variables (the component and total sample weights). The variance of the ratio estimator equation follows:

$$\mathrm{Var}(r_j) \approx \left(\frac{1}{n}\right)\left(\frac{1}{\overline{w}^2}\right)\left(\frac{\sum_i (c_{ij} - r_j w_i)^2}{n-1}\right) \qquad (2)$$

where:

$$\overline{w} = \frac{\sum_i w_i}{n} \qquad (3)$$

(For more information regarding Equation 2, refer to *Sampling Techniques, 3rd Edition* by William G. Cochran [John Wiley & Sons, Inc., 1977].)

Second, precision levels at the 90 percent confidence level were calculated for a component's mean as follows:

$$r_j \pm \left(z\sqrt{\mathrm{Var}(r_j)}\right) \qquad (4)$$

where *z* = the value of the *z*-statistic (1.645) corresponding to a 90 percent confidence level.

Composition results for strata were then combined using a weighted averaging method to estimate the composition of larger portions of the waste sector. The relative tonnages associated with each stratum served as the weighting factors. The calculation was performed as follows:

$$O_j = (p_1 * r_{j1}) + (p_2 * r_{j2}) + (p_3 * r_{j3}) + \ldots \quad (5)$$

where:

- *p* = the proportion of tonnage contributed by the noted waste stratum (the weighting factor);
- *r* = ratio of component weight to total waste weight in the noted waste stratum (the composition percent for the given material component); and
- for j = 1 to m, where m = number of material components.

For example, the above equation is illustrated here using three waste strata.

	STRATUM 1	STRATUM 2	STRATUM 3
Ratio (r) of carpet	5%	10%	10%
Tonnage	25,000	100,000	50,000
Proportion of tonnage (*p*)	14.3%	57.1%	28.6%

To estimate the portion of larger portions of the waste stream, the composition results for the three strata are combined as follows.

$$O_{Carpet} = (0.143 * 0.05) + (0.571 * 0.10) + (0.286 * 0.10) = 0.093 = 9.3\%$$

The variance of the weighted average was calculated as follows:

$$\mathrm{Var}(O_j) = (p_1^2 \ \mathrm{Var}(r_{j1})) + (p_2^2 \ \mathrm{Var}(r_{j2})) + (p_3^2 \ \mathrm{Var}(r_{j3})) + \ldots \quad (6)$$

Estimating Composition of Entire Statewide Disposed Waste Stream

Composition results for all waste sectors were combined using a weighted averaging method to estimate the composition of the entire statewide disposed waste stream. The relative tonnages associated with each sector served as the weighting factors. The calculation was performed as follows:

$$O_j = (p_1 * r_{j1}) + (p_2 * r_{j2}) + (p_3 * r_{j3}) + \ldots \quad (7)$$

where:

- *p* = the proportion of tonnage contributed by the noted waste sector (the weighting factor);
- *r* = ratio of component weight to total waste weight in the noted waste sector (the composition percent for the given material component); and
- for *j* = 1 to *m*, where *m* = number of material components.

The following scenario illustrates the above equation. This example involves the component *carpet* in three waste sectors.

	WASTE SECTOR 1	WASTE SECTOR 2	WASTE SECTOR 3
Ratio of carpet (r)	0.05	0.10	0.15
Proportion of Tonnage (p)	0.50	0.25	0.25

$$O_{Carpet} = (0.50 * 0.05) + (0.25 * 0.10) + (0.25 * 0.15) = 0.0875$$

So, it is estimated that 0.0875 or 8.75 percent of the entire waste stream is composed of *carpet*.

The variance of the weighted average was calculated as follows:

$$\mathrm{Var}(O_j) = \left(p_1^2 \ \mathrm{Var}(r_{j1})\right) + \left(p_2^2 \ \mathrm{Var}(r_{j2})\right) + \left(p_3^2 \ \mathrm{Var}(r_{j3})\right) + \ldots \quad (8)$$

Quantifying Disposed Waste

Disposed waste from each sector was quantified through vehicle surveys, phone surveys, and tonnage reports. The calculation method is described below.

Step 1: Aggregating Survey Records to Produce Findings at the Facility Level. For a given facility on a given day, each vehicle included in the gatehouse survey had its net weight assigned to one or more of the established waste sectors, according to the response of the driver. Thus, the tonnage from each vehicle was assigned or apportioned to one or more of the commercial, residential, self-hauled C&D, or self-hauled other sectors. The tonnages identified through the survey were used to calculate the relative proportions of the waste associated with each sector.

Each facility provided its disposed tonnage for the Calendar Year 2009. The relative proportions described above were applied to these reported figures to produce estimates of the tons of disposed waste associated with each sector at the facility in question.

For example, suppose Facility A was visited on two days and also provided transaction records for 2009. The following scenario describes how percentages of waste for each sector were calculated for this facility.

First, survey data from the facility for the two days the survey crew was present were examined to determine the tons associated with the studied sectors. A hypothetical accounting of tonnages from two daily transaction reports is shown below. Example numbers are rounded and decimals are not carried through calculations.

	CONTRACTED		SELF-HAULED		TOTAL
Facility A	**Commercial**	**Residential**	**Self-hauled C&D**	**Self-hauled Other**	
Tonnage from survey day 1	20	20	15	15	**70**
Tonnage from survey day 2	30	15	20	10	**75**
Tonnage for two days	**50**	**35**	**35**	**25**	**145**

Next, the tonnages were converted into percentages within the franchised and self-hauled categories as shown below.

	CONTRACTED			SELF-HAULED		
Facility A	Commercial	Residential	**Total Contracted**	Self-hauled C&D	Self-hauled Other	**Total Self-hauled**
Tonnage for two days	50	35	**85**	35	25	**60**
Percentages	**59%**	**41%**	**100%**	**58%**	**42%**	**100%**

These percentages were then applied to the annual contracted and self-hauled tonnages from transaction records supplied by the facility. Suppose Facility A accepted 15,000 tons of waste in 2009, of which 10,000 tons came from contracted haulers and 5,000 came from self-haulers. Quantities would be assigned to each sector as shown below.

	CONTRACTED		SELF-HAULED	
Facility A	Commercial	Residential	Self-hauled C&D	Self-hauled Other
Total Annual Tons	10,000		5,000	
Tons per sector	**5,900**	**4,100**	**2,900**	**2,100**

Step 2: Aggregating Tonnage from Facilities to Produce Findings at the WGA Level. Tonnage estimates for each type of waste were combined for participating facilities within each WGA, using a weighted averaging method. The tonnage estimates for each type of waste at all participating facilities within a WGA were aggregated, and relative proportions were calculated for each sector. The aggregated proportions for each sector were then applied to the total 2008 disposal figure for the WGA as reported by Ecology.

For example, hypothetical annual tonnages by sector for two facilities visited in a WGA are shown below.

	COMMERCIAL	RESIDENTIAL	SELF-HAULED C&D	SELF-HAULED OTHER	TOTAL
Facility A	5,900	4,100	2,900	2,100	**15,000**
Facility B	150,000	80,000	30,000	5,000	**265,000**
Total (tons)	**155,900**	**84,100**	**32,900**	**7,100**	**280,000**
% of Total	**56%**	**30%**	**12%**	**2%**	**100%**

Using an annual tonnage for this WGA of 2,000,000 tons, we can assign tonnages to the four waste sectors according to the percentages from the survey data.

WGA 1	COMMERCIAL	RESIDENTIAL	SELF-HAULED C&D	SELF-HAULED OTHER	TOTAL
Percents	56%	30%	12%	2%	**100%**
Tons	1,120,000	600,000	240,000	40,000	**2,000,000**

Step 3: Aggregating WGA Findings to Produce Sector Tonnage Estimates Statewide. The relative proportions of disposed waste corresponding to each sector were combined among WGAs using a weighted aggregation method. The weightings associated with each WGA were proportional to the total disposed tonnage for the WGA for Calendar Year 2008. This step resulted in a final set of proportions reflecting the relative disposal of waste corresponding to each waste sector statewide. The proportions were then multiplied by the total 2008 statewide disposal figure to produce the statewide tonnage estimate associated with each sector.

	COMMERCIAL	RESIDENTIAL	SELF-HAULED C&D	SELF-HAULED OTHER	TOTAL
WGA 1	1,120,000	600,000	240,000	40,000	**2,000,000**
WGA 2	550,000	375,000	118,000	82,000	**1,125,000**
WGA 3	690,000	410,000	73,000	127,000	**1,300,000**
Total	**2,360,000**	**1,385,000**	**431,000**	**249,000**	**4,425,000**

The actual 2008 figures for disposed tonnage associated with each WGA are shown below.

Table 23: Annual Disposed Tonnage by Waste Generation Area 2008

WASTE GENERATION AREAS	ANNUAL DISPOSED TONNAGE
Central WGA	523,636
East WGA	734,627
Northwest WGA	306,189
Puget Sound WGA	2,810,988
Southwest WGA	428,085
West WGA	174,971
Total	**4,978,496**

Appendix B: List and Definitions of Material Types for Statewide Study

Introduction

The list and definitions of the *material type*s used in this study are shown below. The field crew sorted materials into 130 *material type*s. The list of *material type*s was designed to "roll up" into a condensed list used for presenting results of this study combined with results from other waste characterization studies in the Puget Sound WGA.

The complete list developed for this study is shown below followed by detailed definitions for each *material type*. The rolled up material list used for the supplemental study with corresponding materials from the three additional Puget Sound studies is shown in Table 56 at the beginning of Appendix E.

Why 130 Material Types?

The types and quantities of materials in our waste streams are always in flux and therefore, so are the diversion possibilities. Ecology chose these 130 material types as a way to track current reuse/recycling programs while looking forward toward creation of future stewardship opportunities.

List of Material Types

Following is the complete list of **Material Classes** and *material types*. As part of the 2009 Statewide Waste Characterization Study, solid waste was sorted into the 130 *material types* shown from which composition percentages as well as quantities were calculated.

Table 24: List of Material Types

Material Class Material Type	Material Class Material Type
Paper Packaging	**Paper Products**
Newspaper Packaging	Newspaper
Cardboard/Kraft Paper Packaging	Cardboard/Kraft Paper Products
Other Groundwood Paper Packaging	Magazines
Mixed/Low Grade Paper Packaging	High-Grade Paper Products
Compostable Paper Packaging	Other Groundwood Paper Products
R/C Paper Packaging	Mixed Low Grade Paper Products
	Compostable Paper Products
Plastic Packaging	Paper Processing Sludge
#1 PETE Plastic Bottles	R/C Paper Products
#1 PETE Plastic Non-bottles	
#2 HDPE Plastic Natural Bottles	**Plastic Products**
#2 HDPE Plastic Colored Bottles	#1 PETE Plastic Products
#2 HDPE Plastic Jars & Tubs	#2 HDPE Plastic Products
#3 PVC Plastic Packaging	#3 PVC Plastic Products
#4 LDPE Plastic Packaging	#4 LDPE Plastic Products
#5 PP Plastic Packaging	#5 PP Plastic Products
#6 PS Plastic Packaging	#6 PS Plastic Products
#7 Other Plastic Packaging	#7 Other Plastic Products
PLA Packaging	PLA Products
Plastic Merchandise Bags	Plastic Garbage Bags
Non-industrial Packaging Film Plastic	Plastic Film Products
Industrial Packaging Film Plastic	R/C Plastic Products
R/C Plastic Packaging	
	Consumer Products
Glass	Televisions - CRT
Clear Glass Containers	Televisions - LCD
Green Glass Containers	VCR's, DVD's, DVR's
Brown Glass Containers	Computer Monitors - CRT
Plate Glass	Computer Monitors - LCD
Stoneware/Kitchen Ceramics/Glassware	Computers
R/C Glass	Computer Peripherals
	Audio Equipment
Metal	Gaming Equipment
Aluminum Beverage Cans	Other Consumer Electronics
Aluminum Foil/Containers	Textiles - Organic
Other Aluminum	Textiles - Synthetic
Other Nonferrous	Shoes, Purses, Belts
Food Cans - Tinned	Tires & Rubber
Food Cans - Coated	Furniture
White Goods	Mattresses
Other Ferrous Metal	R/C Consumer Products
R/C Metals	

Table 24: List of Material Types**, continued**

Material Class Material Type	Material Class Material Type
Organics	**Hazardous/Special Wastes**
Food - Vegetative	Pesticides/Herbicides
Food - Non-vegetative	Mercury Vapor Lighting
Leaves & Grass	Compact Fluorescent Lights
Prunings	Fluorescent Tubes
Animal Manure	Asbestos
Animal Carcasses	Latex Paint
Crop Residues	Solvent-based Glues
Fruit Waste	Latex-based Glues
R/C Organics	Oil-based Paint & Solvent
	Caustic Cleaners
Wood Debris	Dry-cell Batteries
Treated Wood	Wet-cell Batteries
Painted Wood	Gasoline/Kerosene
Dimensional Lumber	Motor Oil
Engineered Wood	Antifreeze
Pallets & Crates	Other Vehicle Fluids
Other Untreated Wood	Oil Filters
Wood By-Products	Explosives
R/C Wood Wastes	Medical Wastes
	Pharmaceuticals/Vitamins
Construction Materials	Disposable Diapers
Natural Wood	Other Cleaners & Soaps
Insulation	Other Hazardous
Asphalt Paving	Other Non-hazardous
Concrete	
Drywall	**Residues**
Carpet	Ash
Carpet Padding	Dust
Soil, Rocks, Sand	Fines
Asphalt Roofing	Sludge/Special Industrial
Plastic Flooring	
Ceramics & Brick	
R/C Construction Materials	

Material Types Organized by Packaging and Products Material Groups

The list below shows how each of the 130 *material type*s were distributed for the Packaging and Products analysis found in the statewide study analysis above.

Table 25: Material Types by Packaging and Products Material Groups

Material Group Material Type	Material Group Material Type
Packaging	**Products**
Newspaper Packaging	Newspaper
Cardboard/Kraft Paper Packaging	Cardboard/Kraft Paper Products
Other Groundwood Paper Packaging	Magazines
Mixed/Low Grade Paper Packaging	High-Grade Paper Products
Compostable Paper Packaging	Other Groundwood Paper Products
R/C Paper Packaging	Mixed Low Grade Paper Products
#1 PETE Plastic Bottles	Compostable Paper Products
#1 PETE Plastic Non-bottles	Paper Processing Sludge
#2 HDPE Plastic Natural Bottles	R/C Paper Products
#2 HDPE Plastic Colored Bottles	#1 PETE Plastic Products
#2 HDPE Plastic Jars & Tubs	#2 HDPE Plastic Products
#3 PVC Plastic Packaging	#3 PVC Plastic Products
#4 LDPE Plastic Packaging	#4 LDPE Plastic Products
#5 PP Plastic Packaging	#5 PP Plastic Products
#6 PS Plastic Packaging	#6 PS Plastic Products
#7 Other Plastic Packaging	#7 Other Plastic Products
PLA Packaging	PLA Products
Plastic Merchandise Bags	Plastic Garbage Bags
Non-industrial Packaging Film Plastic	Plastic Film Products
Industrial Packaging Film Plastic	R/C Plastic Products
R/C Plastic Packaging	Televisions - CRT
Clear Glass Containers	Televisions - LCD
Green Glass Containers	VCR's, DVD's, DVR's
Brown Glass Containers	Computer Monitors - CRT
Aluminum Beverage Cans	Computer Monitors - LCD
Aluminum Foil/Containers	Computers
Food Cans - Tinned	Computer Peripherals
Food Cans - Coated	Audio Equipment
	Gaming Equipment
Organics	Other Consumer Electronics
Food - Vegetative	Textiles - Organic
Food - Non-vegetative	Textiles - Synthetic
Leaves & Grass	Shoes, Purses, Belts
Prunings	Tires & Rubber
Animal Manure	Furniture
Animal Carcasses	Mattresses
Crop Residues	R/C Consumer Products
Fruit Waste	Plate Glass
R/C Organics	Stoneware/Kitchen Ceramics/Glassware
	White Goods

Table 25: Material Types by Packaging and Products Material Groups, continued

Material Group Material Type	Material Group Material Type
Metal	**Hazardous/Special Wastes**
Other Aluminum	Pesticides/Herbicides
Other Nonferrous	Mercury Vapor Lighting
Other Ferrous Metal	Compact Fluorescent Lights
R/C Metals	Fluorescent Tubes
	Asbestos
Wood Debris	Latex Paint
Treated Wood	Solvent-based Glues
Painted Wood	Latex-based Glues
Dimensional Lumber	Oil-based Paint & Solvent
Engineered Wood	Caustic Cleaners
Pallets & Crates	Dry-cell Batteries
Other Untreated Wood	Wet-cell Batteries
Wood By-Products	Gasoline/Kerosene
R/C Wood Wastes	Motor Oil
	Antifreeze
Construction Materials	Other Vehicle Fluids
Natural Wood	Oil Filters
Insulation	Explosives
Asphalt Paving	Medical Wastes
Concrete	Pharmaceuticals/Vitamins
Drywall	Disposable Diapers
Carpet	Other Cleaners & Soaps
Carpet Padding	Other Hazardous
Soil, Rocks, Sand	Other Non-hazardous
Asphalt Roofing	
Plastic Flooring	**Residues**
Ceramics & Brick	R/C Glass
R/C Construction Materials	Ash
	Dust
	Fines
	Sludge/Special Industrial

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. Other Groundwood Paper Packaging: Other packaging made from groundwood paper, such as egg cartons.
4. Mixed/Low-Grade Paper Packaging: Low-grade recyclable papers, including non-corrugated paperboard packaging, aseptic packaging, and polycoated paperboard packaging. Includes cereal and cracker boxes

5. Compostable Paper Packaging: Packaging paper that can be composted such as pizza boxes, waxed cardboard boxes, and all cups/containers from fast food establishments.
6. 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

7. 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).
8. Cardboard and Kraft Paper Products: Unwaxed Kraft paper and corrugated products and, unless poly- or foil-laminated. Could include cat scratching pads.
9. Magazines: Magazines, catalogs and similar products with glossy paper. Includes Sunday edition news magazines, if found separate from the newspaper.
10. 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.
11. Other Groundwood Paper Products: Non-packing products made from groundwood paper, including phone books, some tablet paper, and paperback books.
12. 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.
13. Compostable Paper Products: Non-packaging papers that can be composted such as paper towels/napkins, paper cups and plates (if purchased empty), and tissues.
14. Paper Processing Sludge: Paper-based materials from industrial non-packaging sources that do not easily fit into the above materials, such as sludges.
15. 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

16. #1 PETE (Polyethylene terephthalate) Plastic bottles: Includes plastic bottles bearing the #1, such as carbonated drink bottles and water bottles.
17. #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.
18. #2 HDPE (High-density polyethylene) Plastic Natural Bottles: Includes milk jugs and water jugs and any natural bottle bearing the #2.
19. #2 HDPE (High-density polyethylene) Plastic Colored Bottles: Includes detergent bottles, some hair care product bottles, and any opaque plastic bottle bearing the #2.
20. #2 HDPE (High-density polyethylene) Plastic Jars and Tubs: Yogurt and margarine tubs and any packaging jar or tub bearing the #2. This category includes five-gallon plastic pails (with or without handles) and lids.
21. #3 PVC (Polyvinyl chloride) Plastic Packaging: Includes any plastic bottle or container marked with a # 3.
22. #4 LDPE (Low-density polyethylene) Plastic Packaging: Includes any plastic bottle or container marked with the #4.

23. #5 PP (Polypropylene) Plastic Packaging: Includes any plastic packaging marked with the #5 as well as plastic straws.
24. #6 PS (Polystyrene) Plastic Packaging: Includes any plastic packaging marked with the #6 and also includes packing peanuts, Styrofoam coolers, egg cartons, meat trays, compact disc cases, and any other Styrofoam packaging.
25. #7 Other/Unknown Plastic Packaging: Includes all non-numbered plastic packaging and any other plastic packaging product not listed in another category.
26. 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.
27. Plastic Merchandise Bags: Will include all grocery, shopping, and merchandise bags.
28. Non-industrial Packaging Film Plastic: Includes other types of packaging film such as cling wrap, bread and food bags, and plastic potato chip bags.
29. Industrial Packaging Film Plastic: Includes bubble wrap and shrink wrap and any other packaging film used in a typically industrial manner.
30. 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. Examples would include plastic toys with metal attachments.

Plastic Products

31. #1 PETE (Polyethylene terephthalate) Plastic Products: Includes any PET product bearing the #1 and used in a non-packaging application.
32. #2 HDPE (High-density polyethylene) Plastic Products: Includes any other non-packaging product bearing the #2.
33. #3 PVC (Polyvinyl chloride) Plastic Products: Includes any non-packaging product bearing the #3 but also including plastic piping, some shower curtains, and some toys.
34. #4 LDPE (Low-density polyethylene) Plastic Products: Includes any other non-packaging product bearing the #4.
35. #5 PP (Polypropylene) Plastic Products: Includes any plastic non-packaging product bearing the #5 but also includes some reusable food containers.
36. #6 PS (Polystyrene) Plastic Products: Includes any plastic non-packaging product bearing the #6 but also includes plastic tableware.
37. #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 (tooth brushes, dinnerware), and electronic media (CDs and DVDs).
38. 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.
39. Plastic Garbage Bags: Includes all bags whose primary use is to hold trash or garbage.
40. Plastic Non-bag Film Products: Includes Visqueen sheeting for drop cloths, other plastic tarps, and any other film product not used for packaging purposes.
41. 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.

Glass

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

Metal

48. Aluminum Beverage Cans: Aluminum beverage cans.
49. Aluminum Foil/Containers: Aluminum foil, food trays and similar items.
50. Other Aluminum: Aluminum scrap and products that do not fit into the above two materials.
51. 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 "residual/composite").
52. 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.
53. Food Cans-Coated: Including many plastic-lined aluminum pet food containers.
54. White Goods: Large household appliances or parts thereof. Special note should be taken if any of these are found still containing refrigerant.
55. 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 "residual/composite"). This material will include paint and other non-food "tin cans", as well as aerosol cans.
56. 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

57. Food Waste, Vegetative: Plant-based foods including the food container when the container weight is not appreciable compared to the food inside.
58. Food Waste, Meats, Fats, and Oils: Animal derived foods and oils including the food container when the container weight is not appreciable compared to the food inside.
59. Yard, Garden Waste (Leaves and Grass): Grass clippings, leaves and weeds.
60. Yard, Garden Waste (Prunings): Materials including prunings six inches or less (branches with leaves OK).
61. Animal Manure: All animal manures and soiled bedding and litter whether derived from an agricultural or residential origin. Includes kitty litter.

62. 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.
63. Crop Residues: Vegetative materials that are left over from growing crops (except tree fruit) and that are treated as a waste (specify type of crop).
64. Fruit Waste: Fruit (apples, berries, grapes, etc.) and processing wastes (apple, grape, berry pomace, etc) that are left over from growing and processing fruit in Washington and that are treated as a waste (**specify type of fruit**). Does not include fruit purchased at groceries, etc.
65. Remainder/Composite Organics: Other organics that do not easily fit into the above materials must note identity of whatever material is placed in this category.

Wood Debris

66. Treated Wood: Wood treated with preservatives such as creosote, CCA and 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"), strandboard, and other wood.
67. Painted Wood: Wood painted, varnished or coated in similar ways.
68. Dimensional Lumber: Wood commonly used in construction for framing and related uses, including 2 x 4's, 2 x 6's and posts/headers (4x8's, etc.).
69. Engineered Wood: Building materials that have been manufactured and 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.
70. Pallets and Crates: Partial or whole pallets, crates and similar shipping containers.
71. Other Untreated Wood: Other types of wood products and materials that do not fit into the above materials, excluding composite materials (see Residual/Composites below).
72. Wood Byproducts: Sawdust and shavings, not otherwise identifiable.
73. Remainder/Composite Wood Debris: Items that consist primarily of wood but 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

74. 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.
75. Insulation: Includes all pad, roll, or blown-in types of insulation.
76. Asphalt Paving: Asphalt paving material.
77. Concrete: Cement (mixed or unmixed), concrete blocks, and similar wastes.
78. 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).
79. Carpet: Pieces of carpet and rugs made of similar material.
80. Carpet Padding: Foam rubber and other materials used as padding under carpets.

81. Soil, Rocks and Sand: Rock, gravel, soil, sand and similar naturally-occurring materials.
82. Asphalt Roofing: Asphalt and fiberglass shingles, tar paper, and similar wastes from demolition or installation of roofs. Does not include wooden shingle or shakes.
83. Plastic Floor Covering: Such as plastic tile, vinyl flooring, and linoleum.
84. Ceramics and Bricks: Includes clay, porcelain bricks and tiles, such as used toilets, sinks and bricks of various types and sizes.
85. Remainder/Composite Construction Materials: Other construction and demolition materials that do not fit easily into the above materials or are composites made up of two or more different materials.

Consumer Products

86. Televisions-CRT: Television sets containing a cathode ray tube (CRT).
87. Televisions-LCD: LCD or plasma.
88. Television Peripherals: DVRs, VCRs, DVD players, etc.
89. Computer Monitors-CRT: Computer monitors containing a cathode ray tube (CRT).
90. Computer monitors-LCD: LCD computer monitors.
91. Computers: Towers, laptops and portable computers
92. Computer Peripherals: Keyboard, mice and mouse pads, printers, disk drives, etc.
93. Audio Equipment: Examples include stereo equipment, receivers, speakers, radios, tape players, CD players, turntables, etc.
94. Electronic Gaming equipment: Such as Nintendo, Play Stations, joysticks, etc.
95. 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.
96. 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.
97. 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.
98. Shoes, Purses, and Belts: All shoes and boots, purses, and belts whether made of leather, rubber, other materials, or a combination thereof.
99. 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 bath mats, inner tubes, rubber hose and foam rubber (except carpet padding, see below).
100. Furniture: Mixed-material furniture such as upholstered chairs (furniture made of a single material would be classified with that material category).
101. Mattresses: Mattresses made of various materials and in any condition.
102. Remainder/Composite Consumer Products: This is a catch-all material for objects consisting of more than one material.

Hazardous and Special Wastes

103. Pesticides and Herbicides: Includes a variety of poisons whose purpose is to discourage or kill pests, weeds or microorganisms. Fungicides and wood preservatives, such as pentachlorophenol, are also included in this material.
104. High-Intensity Discharge Lamps (HID): Includes high pressure sodium, metal halide and mercury vapor.

105. Compact Fluorescent Lamps (CFL)
106. Fluorescent Tubes: Includes linear, u-shaped, and circular.
107. Asbestos: Pure asbestos and asbestos-containing products where the asbestos present is the most distinguishing characteristic of the material.
108. Latex Paints: Water-based paints and similar products.
109. 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.
110. Water-Based Adhesives/Glues: Water-based glues, caulking compounds, grouts, and Spackle.
111. Oil-Based Paint/Solvent: Solvent-based paints, varnishes, and similar products. Various solvents, including 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.
112. Caustic Cleaners: Caustic acids and bases whose primary purpose is to clean surfaces, unclog drains, or perform other actions.
113. Dry-Cell Batteries: Dry-cell batteries of various sizes and types as commonly used in households. Includes cell phone and button cell batteries. Distinguish between single use batteries and rechargeable batteries.
114. Wet-Cell Batteries: Wet-cell batteries of various sizes and types as commonly used in automobiles.
115. Gasoline/Kerosene: Gasoline, diesel fuel, and fuel oils.
116. Motor Oil: Lubricating oils, primarily used in vehicles but including other types with similar characteristics.
117. Antifreeze: Automobile and other antifreeze mixtures based on ethylene or propylene glycol.
118. Other Vehicle Fluids: Includes brake, power steering, and hydraulic, and transmission fluid.
119. Oil Filters: Used oil filters, primarily those used in cars but possibly including similar filters from other types of vehicles and other applications.
120. Explosives: Gunpowder, unspent ammunition, picric acid, and other potentially explosive chemicals.
121. 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.
122. Pharmaceuticals and Vitamins: Not including the container. Classify container according to material type.
123. Disposable Diapers: Disposable baby diapers and protective undergarments for adults (including feminine hygiene products).
124. Other Cleaners/Chemicals: Soaps, non-caustic cleaners, medicines, cosmetics, and other household chemicals.
125. Other Potentially Hazardous Wastes: Other chemicals or potentially harmful wastes that do not fit into the above categories, including unidentifiable materials.
126. Other Non-Hazardous Waste: Problem wastes that do not fall into one of the above materials, but that are not hazardous, weak acids and bases (cleaners), automotive products (car wax, etc.)

Residuals

127. Ash: Fireplace, burn barrel or firepit ash, as well as boiler and ash from industrial sources.
128. Dust: Baghouse and other dusts from industrial sources, as well as bags of vacuum cleaner dust.
129. Fines/Sorting Residues: Mixed waste that remains on the sorting table after all the materials that can practicably be removed are 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.

130. Sludges and Other Special Industrial Wastes: Sludges and other wastes from industrial sources that cannot easily be fit into any of the above material. Can include liquids and semi-solids but only if these materials are treated as a solid waste.

Appendix C: Forms Used During the Study

List of Forms Used

- Vehicle Selection Form;
- Sample Placard;
- Sample Sorting & Characterization Form;
- Vehicle Survey Form;
- Additional Tonnage Data Survey Form.

Figure 19: Vehicle Selection Sheet

Washington 2009 Waste Characterization Study
Vehicle Selection Form

Site: _____

Date: _____ **Goal:** 12 **Samples Total**

Each number represents an expected vehicle based on the available data.

Cross off one number for each category of vehicle entering the landfill and circle the number when a vehicle is selected for sampling.

Hand the driver a sample placard, record the information below, and collect a net weight when possible.

RESIDENTIAL: (Res 1-3) NEED 3 TOTAL

**Must be at least 80% single-family residential waste.*

1 2 3 4 5 6 7 8

(expect 8)

COMMERCIAL: (Com 1-4) NEED 4 TOTAL

**Must be at least 80% commercial waste.*

1 2 3 4 5

(expect 5)

SELF HAULED C&D: (CD 1-2) NEED 2 TOTAL

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

(expect 60)

SELF HAULED OTHER: (SH 1-3) NEED 3 TOTAL

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40
41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60
61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80
81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

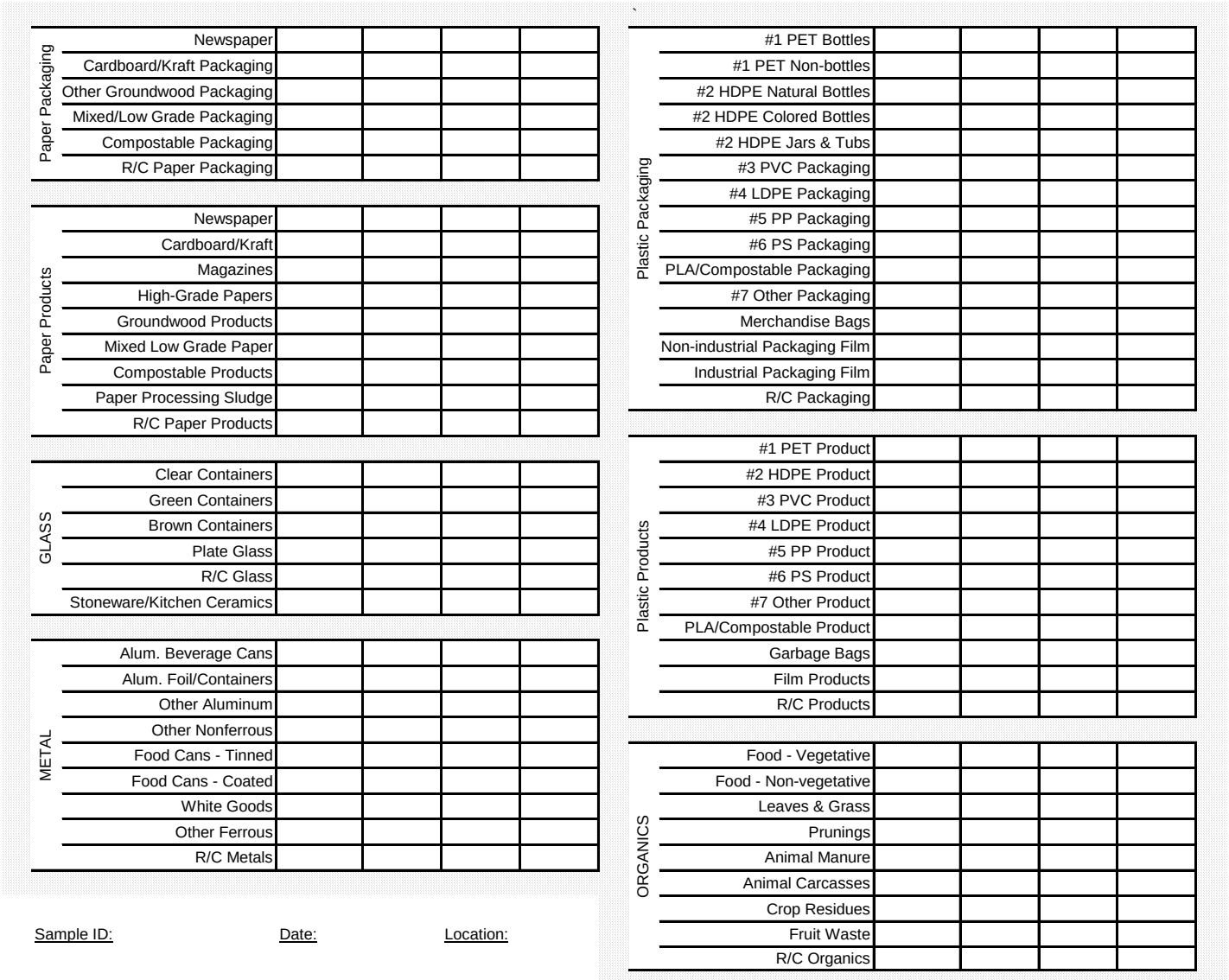
(expect 100)

Sample ID	Vehicle Type (enter code)	Single Source?	Net Weight	Notes
Res 1		yes no		
Res 2		yes no		
Res 3		yes no		
Com 1		yes no		
Com 2		yes no		
Com 3		yes no		
Com 4		yes no		
CD 1		yes no		
CD 2		yes no		
SH 1		yes no		
SH 2		yes no		
SH 3		yes no		

Vehicle Codes	
1	Rear Packer
2	Front Packer
3	Side Packer
4	Drop Box, Loose
5	Drop Box, Compacted
6	Pick-up, Van, SUV
7	Large Other
8	Car
9	Semi-Truck

Figure 20: Sample Placard

Figure 21: Sample Sorting and Characterization Form, Front

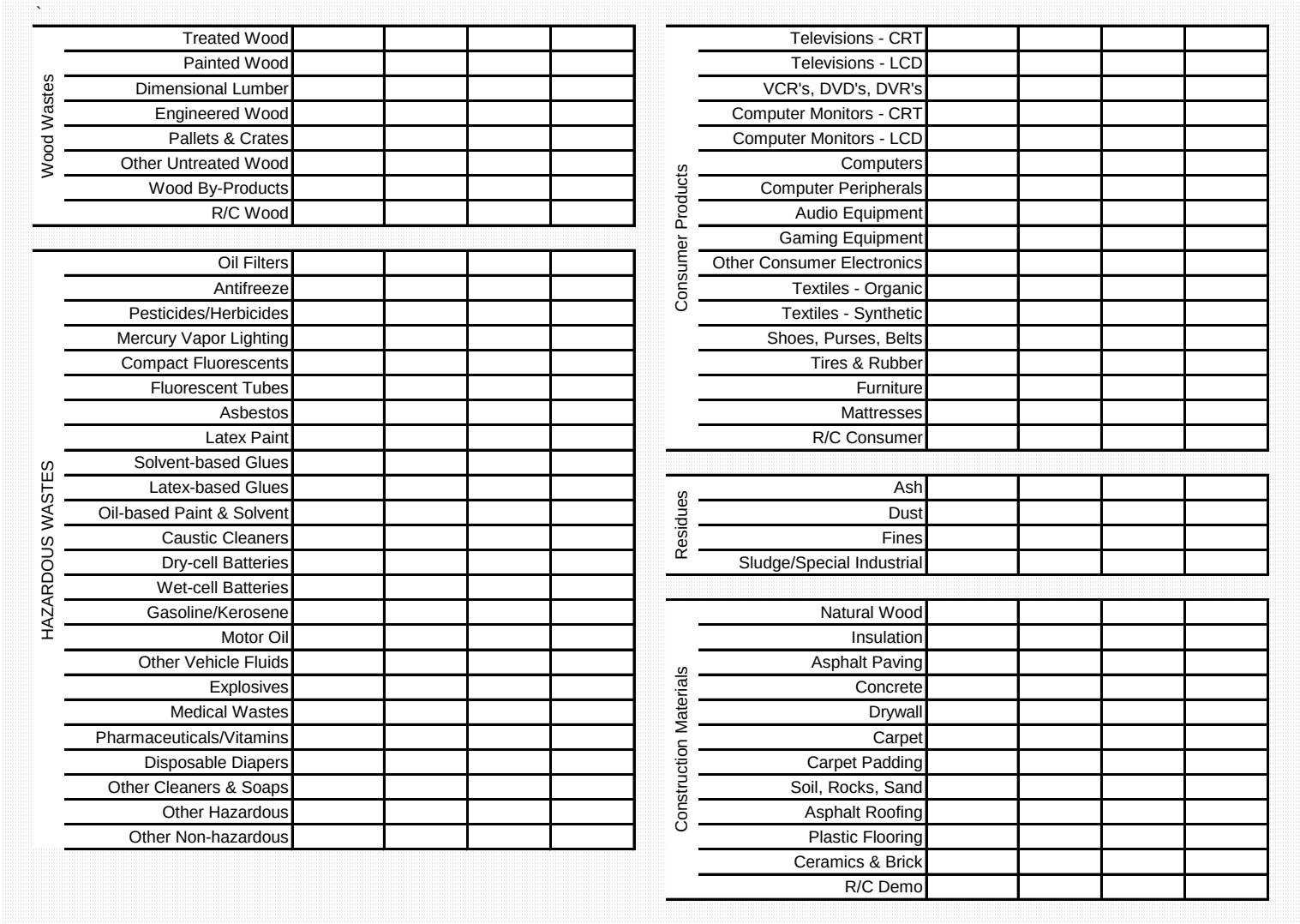


Paper Packaging	Newspaper				
	Cardboard/Kraft Packaging				
	Other Groundwood Packaging				
	Mixed/Low Grade Packaging				
	Compostable Packaging				
	R/C Paper Packaging				
Paper Products	Newspaper				
	Cardboard/Kraft				
	Magazines				
	High-Grade Papers				
	Groundwood Products				
	Mixed Low Grade Paper				
	Compostable Products				
	Paper Processing Sludge				
	R/C Paper Products				
GLASS	Clear Containers				
	Green Containers				
	Brown Containers				
	Plate Glass				
	R/C Glass				
	Stoneware/Kitchen Ceramics				
METAL	Alum. Beverage Cans				
	Alum. Foil/Containers				
	Other Aluminum				
	Other Nonferrous				
	Food Cans - Tinned				
	Food Cans - Coated				
	White Goods				
	Other Ferrous				
	R/C Metals				

Sample ID: Date: Location:

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				
	PLA/Compostable Packaging				
	#7 Other Packaging				
	Merchandise Bags				
	Non-industrial Packaging Film				
	Industrial Packaging Film				
	R/C Packaging				
Plastic Products	#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				
	Film Products				
	R/C Products				
ORGANICS	Food - Vegetative				
	Food - Non-vegetative				
	Leaves & Grass				
	Prunings				
	Animal Manure				
	Animal Carcasses				
	Crop Residues				
	Fruit Waste				
	R/C Organics				

Figure 22: Sample Sorting and Characterization Form, Back



Wood Wastes	Treated Wood				
	Painted Wood				
	Dimensional Lumber				
	Engineered Wood				
	Pallets & Crates				
	Other Untreated Wood				
	Wood By-Products				
	R/C Wood				

HAZARDOUS WASTES	Oil Filters				
	Antifreeze				
	Pesticides/Herbicides				
	Mercury Vapor Lighting				
	Compact Fluorescents				
	Fluorescent Tubes				
	Asbestos				
	Latex Paint				
	Solvent-based Glues				
	Latex-based Glues				
	Oil-based Paint & Solvent				
	Caustic Cleaners				
	Dry-cell Batteries				
	Wet-cell Batteries				
	Gasoline/Kerosene				
	Motor Oil				
	Other Vehicle Fluids				
	Explosives				
	Medical Wastes				
	Pharmaceuticals/Vitamins				
	Disposable Diapers				
	Other Cleaners & Soaps				
	Other Hazardous				
	Other Non-hazardous				

Consumer Products	Televisions - CRT				
	Televisions - LCD				
	VCR's, DVD's, DVR's				
	Computer Monitors - CRT				
	Computer Monitors - LCD				
	Computers				
	Computer Peripherals				
	Audio Equipment				
	Gaming Equipment				
	Other Consumer Electronics				
	Textiles - Organic				
	Textiles - Synthetic				
	Shoes, Purses, Belts				
	Tires & Rubber				
	Furniture				
	Mattresses				
	R/C Consumer				

Residues	Ash				
	Dust				
	Fines				
	Sludge/Special Industrial				

Construction Materials	Natural Wood				
	Insulation				
	Asphalt Paving				
	Concrete				
	Drywall				
	Carpet				
	Carpet Padding				
	Soil, Rocks, Sand				
	Asphalt Roofing				
	Plastic Flooring				
	Ceramics & Brick				
	R/C Demo				

Figure 23: Vehicle Survey Form, Front

Date ____/____/____
Survey Site ____________________________
Minimum Weight Car: _________lbs. **Pickup:**_________lbs.

Surveyor ____________________________
Checked by ____________________________

Page _____ **of** _____
This sheet started at _________**am pm**

ID	Vehicle Type	Trailer	Sector					For COM Only			For SH and SHC	For SHC Only	For All Loads			Notes & Comments
Enter the weightback ticket number here (if used)	1. Rear Packer 2. Front Packer 3. Side Packer 4. DB-Loose 5. DB-Compacted 6. Pickup, Van, SUV 7. Large Other 8. Car 9. Other	Check if the vehicle has a trailer with garbage in it.	**SF** single-family residential **COM** commercial/multifamily **SH** self-haul **SHC** self-haul construction					Did this load come from a single garbage source?	If this load is from a single source, which business type (from the list in the margin of the page) best describes the source of this load?	For single source loads get name of source, if possible.	Did this load come from a home or someplace else (business, park, church, government office, etc.)	What kind of construction job? If yes: N=new construction, R=renovation, D=demolition, RF=roofing, OC=other c&d	Net Weight of Load. If you use the same units for all loads just circle the units on the first line, otherwise be sure to circle the units on every line.	Alternative minumum weight. Check if used and note the facilities minimum weight at the top of this sheet.		If needed for notes any time you choose NA or about the load, or to record license/vehicle #s for identification purposes, etc.
			SF %	COM %COM	COM % MF	SH %	SHC %							*Car*	*Pickup*	
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			
								y			R NR	N R D RF OC	tons lbs yds			

0 = NA	1 = Construction	2 = Food Retail	3 = Big Box Retail	4 = Manufacturing	
5 = Wholesale	6 = Mixed Commercial	7 = Other Retail	8 = Medical/Hospital	9 = Education	
10 = Residential	11 = Landscaping	12 = Food Processing	13 = Agriculture	14 = Prison	15 = Other

Figure 24: 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".
If the load is either SH or SHC note whether it is from a residence or a business.
If the load is from a construction site, circle only one of the activities in the For SHC what kind of construction job? column.
If load is from a single source note the generator type. Get the name too if possible

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 **sector** generated the load

If you circle more than one sector, be sure to ask the driver for the estimated % of each.

Commercially collected residential: Single-family (SF)	Waste that is collected by a commercial hauler from single-family residences or multifamily structures with less than 4 units
Commercially collected residential: Multifamily (MF)	Waste that is collected by a commercial hauler from multi-unit structures with greater than 4 units
Commercially collected commercial (COM)	Waste disposed by businesses, industries (factories, farms, etc.), and governments (schools, highways, parks, etc.) that is collected and transported by professional waste haulers
Self-hauled	Waste hauled to a disposal site by a resident or business that is from a construction job
Self-hauled construction	Waste hauled to a disposal site by a resident or business that is not from a construction job

IF THE SOURCE IS COM AND THE VEHICLE TYPE IS DB-LOOSE OR DB-COMPACTED, ASK

Is this load from a single source (a single business generated the garbage in this load)

If yes, circle Y in the single source column
Ask what type of business and note the generator type that best matches in the generator type column
If possible get the business name and note it

IF THE SOURCE IS SH OR SHC, ASK

Is the load from a residence or someplace else (business, government office, manufacturing, public works facility)

If it's a residence circle R, if it's not circle NR

IF DRIVER IS FROM A CONSTRUCTION SITE, ASK:

If it is a C&D load, ask the driver what **activity** generated the waste.

New construction (NC)	Construction materials generated from the construction of new buildings
Remodel (R)	Construction or demolition materials generated from the remodeling of buildings
Demolition (D)	Materials generated from the tearing down of any facility, structure, pavement or building, (wall, fence) whether in whole or in part, whether interior or exterior
Roofing (RF)	Waste generated by the installation or replacement of roofs
Other construction & demolition (OC)	Waste generated by construction or demolition of buildings, not included in categories above or from public works projects.

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.

Figure 25: Additional Tonnage Data Survey Form

Tonnage Data Collection: ECYStatewide2009

Facility:
County:

Annual Tons Incoming Disposed Waste

Note: tons should be non-transfer disposed waste only, excluding tons separated for recycling, composting, or other diversions such as alternative daily cover (ADC).

Year: _____ Select one: Calendar or Fiscal

	Tons
Overall	
Check if any are transfer tons (list tons)	
Check if any are diversion tons (list tons)	
Overall (excluding transfer and diversion)	

Franchise or Commercially-collected or City-collected Waste

Note: Fill out either tons of each or percent of each (with a total tons).

	Tons	**Percent**	**Notes**
Residential			
Commercial			
Total			
Tons % is based on:			

Self-hauled or Public Waste

Note: Fill out either tons of each or percent of each (with a total tons).

	Tons	**Percent**	**Notes**
C&D			
Non-C&D			
Total			
Tons % is based on:			

Check Total Tons

Check that the overall tons and sum of sector tons are equal

Figure 26: Additional Tonnage Data Survey Form, Back

	Tons
Residential Tons (from above)	
Commercial Tons (from above)	
Self-hauled C&D Tons (from above)	
Self-hauled Other Tons (from above)	
Sum the Total Sector Tons	
Does this equal the overall tons reported above?	

Reports Provided

Ask if facility has reports available, especially if no annual breakdown for our sectors. Ask for daily scale transactions from a typical week (or two), preferably in Excel, that we can use to tease out the percentage of tons from our sectors.

Report Type	**Notes**
☐ Daily Scale Transaction	
☐ Annual Reports	
☐ Other:	
☐ Other:	

Contacts

Name:
Phone:
Email:
Notes:

Name:
Phone:
Email:
Notes:

Appendix D: Waste Generation Area Composition Results

This section presents waste composition results for each of Washington's six WGAs:

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

Each WGA section presents composition tables for the following sectors:

- Overall
- Commercial
- Residential
- Self-hauled C&D
- Self-hauled Other

In addition to the sector tables, a set of six figures, one for each WGA, is presented comparing the overall **Material Class** composition findings for the overall waste stream.

All WGAs were analyzed using the 2009 statewide study (130 material type list) format. The Puget Sound WGA was also analyzed using the supplemental format, presented in Appendix E, which added King, Snohomish, and Thurston Counties and used the 50 "rolled up" materials types.

Figure 27 through Figure 32 show a comparison of each WGAs overall waste composition at the **Material Class** level. This analysis uses the supplemental "rolled-up" set of **Material Classes** used for the supplemental study, as described in Appendix E, below.

Table 26 through Table 55 present detailed composition tables for each of the six WGAs for the overall waste stream and for each of the four sectors analyzed.

Figure 27: Central WGA

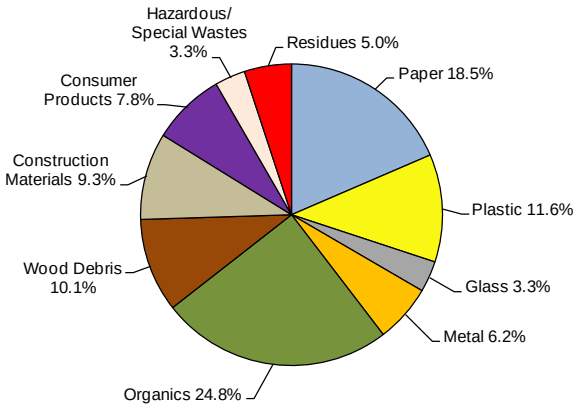


Figure 28: East WGA

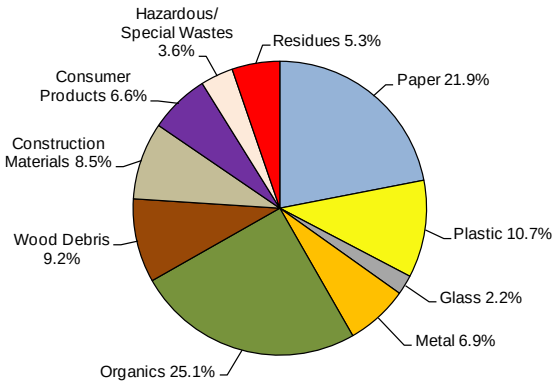


Figure 29: Northwest WGA

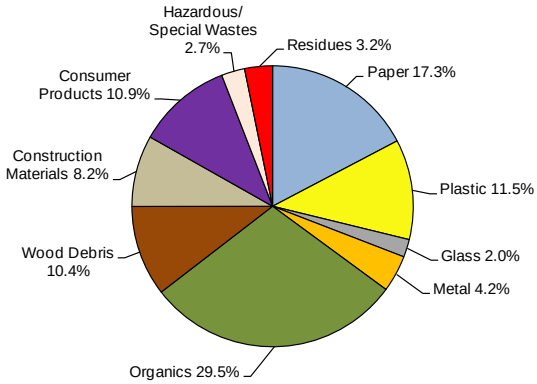


Figure 30: Puget Sound WGA

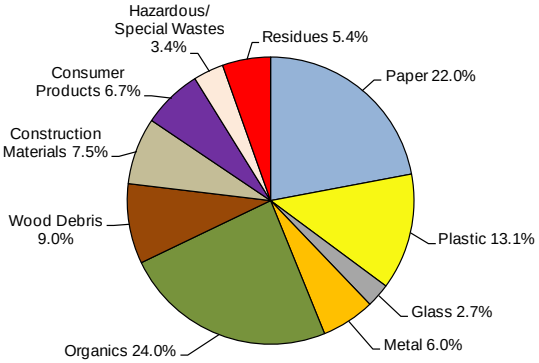


Figure 31: Southwest WGA

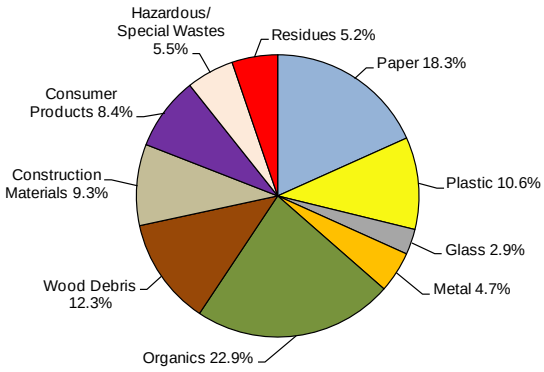
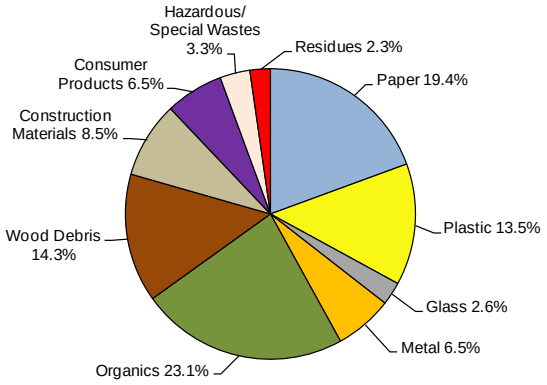


Figure 32: West WGA



Central Waste Generation Area Composition Tables

Table 26: Central WGA Overall Disposed Waste Stream Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons	Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**10.3%**		**54,129**	**Paper Products**	**8.2%**		**42,845**
Newspaper Packaging	0.0%	0.0%	126	Newspaper	1.2%	0.3%	6,277
Cardboard/Kraft Paper Packaging	5.3%	1.2%	27,556	Cardboard/Kraft Paper Products	0.0%	0.0%	179
Other Groundwood Paper Packaging	0.2%	0.1%	957	Magazines	0.6%	0.2%	3,396
Mixed/Low Grade Paper Packaging	3.2%	1.5%	16,710	High-Grade Paper Products	0.6%	0.2%	2,906
Compostable Paper Packaging	0.9%	0.3%	4,582	Other Groundwood Paper Products	0.2%	0.2%	1,065
R/C Paper Packaging	0.8%	0.2%	4,198	Mixed Low Grade Paper Products	1.9%	0.5%	9,985
				Compostable Paper Products	2.9%	0.5%	15,047
Plastic Packaging	**6.7%**		**35,266**	Paper Processing Sludge	0.0%	0.0%	0
#1 PETE Plastic Bottles	1.0%	0.2%	5,244	R/C Paper Products	0.8%	0.5%	3,990
#1 PETE Plastic Non-bottles	0.3%	0.0%	1,344				
#2 HDPE Plastic Natural Bottles	0.4%	0.1%	1,892	**Plastic Products**	**4.8%**		**25,219**
#2 HDPE Plastic Colored Bottles	0.3%	0.1%	1,617	#1 PETE Plastic Products	0.0%	0.0%	4
#2 HDPE Plastic Jars & Tubs	0.2%	0.1%	962	#2 HDPE Plastic Products	0.0%	0.0%	29
#3 PVC Plastic Packaging	0.0%	0.0%	38	#3 PVC Plastic Products	0.1%	0.1%	534
#4 LDPE Plastic Packaging	0.0%	0.0%	79	#4 LDPE Plastic Products	0.0%	0.0%	94
#5 PP Plastic Packaging	0.3%	0.1%	1,408	#5 PP Plastic Products	0.0%	0.0%	167
#6 PS Plastic Packaging	0.6%	0.2%	3,217	#6 PS Plastic Products	0.0%	0.0%	261
#7 Other Plastic Packaging	0.7%	0.4%	3,662	#7 Other Plastic Products	1.2%	0.5%	6,327
PLA Packaging	0.0%	0.0%	92	PLA Products	0.0%	0.0%	0
Plastic Merchandise Bags	0.5%	0.1%	2,780	Plastic Garbage Bags	1.2%	0.2%	6,132
Non-industrial Packaging Film Plastic	1.5%	0.3%	7,817	Plastic Film Products	0.4%	0.2%	1,871
Industrial Packaging Film Plastic	0.8%	0.6%	4,386	R/C Plastic Products	1.9%	1.5%	9,799
R/C Plastic Packaging	0.1%	0.1%	728				
				Consumer Products	**8.5%**		**44,398**
Glass	**3.4%**		**17,910**	Televisions - CRT	0.7%	1.1%	3,616
Clear Glass Containers	1.4%	0.4%	7,157	Televisions - LCD	0.0%	0.0%	0
Green Glass Containers	0.3%	0.1%	1,599	VCR's, DVD's, DVR's	0.0%	0.0%	0
Brown Glass Containers	0.9%	0.4%	4,515	Computer Monitors - CRT	0.1%	0.2%	644
Plate Glass	0.2%	0.3%	1,124	Computer Monitors - LCD	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	0.1%	0.1%	464	Computers	0.0%	0.0%	0
R/C Glass	0.6%	0.4%	3,050	Computer Peripherals	0.1%	0.1%	678
				Audio Equipment	0.1%	0.1%	648
Metal	**6.2%**		**32,515**	Gaming Equipment	0.0%	0.0%	0
Aluminum Beverage Cans	0.6%	0.1%	2,973	Other Consumer Electronics	0.3%	0.2%	1,385
Aluminum Foil/Containers	0.1%	0.0%	601	Textiles - Organic	2.1%	0.7%	10,748
Other Aluminum	0.2%	0.2%	1,100	Textiles - Synthetic	1.2%	0.4%	6,121
Other Nonferrous	0.1%	0.1%	658	Shoes, Purses, Belts	0.3%	0.2%	1,662
Food Cans - Tinned	0.7%	0.1%	3,524	Tires & Rubber	0.5%	0.3%	2,510
Food Cans - Coated	0.1%	0.0%	595	Furniture	2.1%	1.4%	11,220
White Goods	0.0%	0.0%	0	Mattresses	0.4%	0.3%	1,858
Other Ferrous Metal	1.9%	0.6%	10,088	R/C Consumer Products	0.6%	0.8%	3,306
R/C Metals	2.5%	1.1%	12,976				
				Hazardous/Special Wastes	**3.4%**		**17,723**
Organics	**26.3%**		**137,515**	Pesticides/Herbicides	0.0%	0.0%	0
Food - Vegetative	9.2%	1.5%	48,024	Mercury Vapor Lighting	0.0%	0.0%	0
Food - Non-vegetative	3.1%	0.6%	16,445	Compact Fluorescent Lights	0.0%	0.0%	27
Leaves & Grass	8.8%	2.6%	46,122	Fluorescent Tubes	0.0%	0.0%	0
Prunings	1.1%	1.1%	5,837	Asbestos	0.0%	0.0%	0
Animal Manure	1.2%	0.4%	6,163	Latex Paint	0.1%	0.2%	761
Animal Carcasses	0.0%	0.0%	7	Solvent-based Glues	0.0%	0.0%	33
Crop Residues	0.0%	0.0%	0	Latex-based Glues	0.0%	0.0%	78
Fruit Waste	1.4%	1.6%	7,395	Oil-based Paint & Solvent	0.0%	0.0%	115
R/C Organics	1.4%	1.6%	7,523	Caustic Cleaners	0.0%	0.0%	19
				Dry-cell Batteries	0.0%	0.0%	124
Wood Debris	**10.0%**		**52,510**	Wet-cell Batteries	0.0%	0.0%	0
Treated Wood	1.4%	1.8%	7,551	Gasoline/Kerosene	0.0%	0.0%	0
Painted Wood	2.9%	1.4%	14,991	Motor Oil	0.0%	0.0%	42
Dimensional Lumber	1.2%	0.6%	6,429	Antifreeze	0.0%	0.0%	0
Engineered Wood	1.0%	0.5%	5,303	Other Vehicle Fluids	0.0%	0.0%	30
Pallets & Crates	1.9%	2.0%	10,167	Oil Filters	0.0%	0.0%	68
Other Untreated Wood	0.2%	0.2%	901	Explosives	0.0%	0.0%	3
Wood By-Products	0.0%	0.0%	137	Medical Wastes	1.1%	0.8%	5,560
R/C Wood Wastes	1.3%	0.8%	7,031	Pharmaceuticals/Vitamins	0.0%	0.1%	255
				Disposable Diapers	1.9%	0.5%	9,897
Construction Materials	**10.9%**		**57,272**	Other Cleaners & Soaps	0.1%	0.0%	576
Natural Wood	0.0%	0.1%	200	Other Hazardous	0.0%	0.0%	59
Insulation	1.0%	1.0%	5,113	Other Non-hazardous	0.0%	0.0%	75
Asphalt Paving	0.3%	0.6%	1,765				
Concrete	0.2%	0.2%	790	**Residues**	**1.2%**		**6,337**
Drywall	1.0%	0.6%	5,235	Ash	0.1%	0.1%	382
Carpet	2.1%	1.0%	10,924	Dust	0.0%	0.0%	189
Carpet Padding	0.6%	0.4%	2,909	Fines	1.1%	0.5%	5,766
Soil, Rocks, Sand	1.4%	1.4%	7,130	Sludge/Special Industrial	0.0%	0.0%	0
Asphalt Roofing	1.6%	1.0%	8,324				
Plastic Flooring	0.2%	0.1%	910				
Ceramics & Brick	0.2%	0.2%	1,101	**Totals**	**100.0%**		**523,636**
R/C Construction Materials	2.5%	2.0%	12,871	**Sample Count**	**113**		

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

Table 27: Central WGA Commercial Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+/-	Est. Tons
Paper Packaging	**16.1%**		**29,655**
Newspaper Packaging	0.0%	0.0%	37
Cardboard/Kraft Paper Packaging	8.6%	3.0%	15,796
Other Groundwood Paper Packaging	0.1%	0.0%	171
Mixed/Low Grade Paper Packaging	4.7%	4.2%	8,719
Compostable Paper Packaging	1.6%	0.8%	2,900
R/C Paper Packaging	1.1%	0.4%	2,031
Plastic Packaging	**8.7%**		**15,979**
#1 PETE Plastic Bottles	1.0%	0.4%	1,895
#1 PETE Plastic Non-bottles	0.3%	0.1%	499
#2 HDPE Plastic Natural Bottles	0.3%	0.1%	516
#2 HDPE Plastic Colored Bottles	0.2%	0.1%	296
#2 HDPE Plastic Jars & Tubs	0.2%	0.1%	286
#3 PVC Plastic Packaging	0.0%	0.0%	11
#4 LDPE Plastic Packaging	0.0%	0.0%	15
#5 PP Plastic Packaging	0.2%	0.1%	377
#6 PS Plastic Packaging	0.9%	0.5%	1,611
#7 Other Plastic Packaging	1.2%	1.0%	2,133
PLA Packaging	0.0%	0.0%	5
Plastic Merchandise Bags	0.3%	0.1%	636
Non-industrial Packaging Film Plastic	1.9%	0.7%	3,488
Industrial Packaging Film Plastic	2.1%	1.8%	3,939
R/C Plastic Packaging	0.1%	0.1%	271
Glass	**3.7%**		**6,748**
Clear Glass Containers	1.6%	0.8%	2,936
Green Glass Containers	0.5%	0.3%	988
Brown Glass Containers	1.1%	1.0%	2,111
Plate Glass	0.0%	0.1%	74
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	43
R/C Glass	0.3%	0.4%	595
Metal	**7.7%**		**14,133**
Aluminum Beverage Cans	0.7%	0.3%	1,235
Aluminum Foil/Containers	0.1%	0.1%	222
Other Aluminum	0.3%	0.5%	553
Other Nonferrous	0.1%	0.1%	160
Food Cans - Tinned	0.6%	0.3%	1,049
Food Cans - Coated	0.0%	0.0%	57
White Goods	0.0%	0.0%	0
Other Ferrous Metal	2.4%	1.3%	4,462
R/C Metals	3.5%	2.9%	6,396
Organics	**17.8%**		**32,895**
Food - Vegetative	8.6%	3.0%	15,806
Food - Non-vegetative	3.4%	1.3%	6,310
Leaves & Grass	1.1%	1.3%	2,053
Prunings	0.2%	0.2%	315
Animal Manure	0.4%	0.5%	796
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	4.0%	4.6%	7,395
R/C Organics	0.1%	0.1%	219
Wood Debris	**13.2%**		**24,458**
Treated Wood	3.1%	4.8%	5,806
Painted Wood	2.2%	2.6%	4,037
Dimensional Lumber	1.0%	0.9%	1,897
Engineered Wood	1.1%	1.1%	2,059
Pallets & Crates	5.2%	5.5%	9,568
Other Untreated Wood	0.0%	0.1%	83
Wood By-Products	0.0%	0.1%	90
R/C Wood Debris	0.5%	0.7%	919
Construction Materials	**9.2%**		**17,036**
Natural Wood	0.0%	0.0%	17
Insulation	1.8%	2.8%	3,284
Asphalt Paving	0.0%	0.0%	0
Concrete	0.0%	0.0%	0
Drywall	0.1%	0.1%	151
Carpet	1.1%	1.6%	1,961
Carpet Padding	0.0%	0.0%	0
Soil, Rocks, Sand	2.5%	3.7%	4,603
Asphalt Roofing	0.1%	0.2%	243
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	0.0%	0.0%	40
R/C Construction Materials	3.6%	5.2%	6,737

Material	Est. Percent	+/-	Est. Tons
Paper Products	**7.4%**		**13,636**
Newspaper	0.7%	0.3%	1,217
Cardboard/Kraft Paper Products	0.1%	0.1%	153
Magazines	0.1%	0.1%	166
High-Grade Paper Products	0.3%	0.1%	557
Other Groundwood Paper Products	0.1%	0.1%	163
Mixed Low Grade Paper Products	1.4%	0.8%	2,628
Compostable Paper Products	3.0%	1.0%	5,477
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	1.8%	1.4%	3,275
Plastic Products	**7.2%**		**13,263**
#1 PETE Plastic Products	0.0%	0.0%	3
#2 HDPE Plastic Products	0.0%	0.0%	6
#3 PVC Plastic Products	0.0%	0.0%	0
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	81
#6 PS Plastic Products	0.0%	0.0%	56
#7 Other Plastic Products	1.3%	0.9%	2,367
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.9%	0.7%	3,500
Plastic Film Products	0.5%	0.4%	900
R/C Plastic Products	3.4%	4.2%	6,351
Consumer Products	**4.2%**		**7,841**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	52
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.1%	0.1%	129
Textiles - Organic	1.2%	0.9%	2,160
Textiles - Synthetic	0.5%	0.3%	865
Shoes, Purses, Belts	0.1%	0.1%	213
Tires & Rubber	0.8%	0.8%	1,525
Furniture	0.8%	1.3%	1,490
Mattresses	0.7%	0.9%	1,302
R/C Consumer Products	0.1%	0.1%	107
Hazardous/Special Wastes	**3.7%**		**6,844**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	11
Solvent-based Glues	0.0%	0.0%	22
Latex-based Glues	0.0%	0.0%	4
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	73
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	38
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	22
Oil Filters	0.0%	0.0%	44
Explosives	0.0%	0.0%	1
Medical Wastes	2.1%	1.9%	3,855
Pharmaceuticals/Vitamins	0.0%	0.0%	18
Disposable Diapers	1.5%	1.2%	2,681
Other Cleaners & Soaps	0.0%	0.0%	44
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.0%	0.0%	30
Residues	**1.2%**		**2,228**
Ash	0.0%	0.0%	0
Dust	0.1%	0.1%	153
Fines	1.1%	0.7%	2,075
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**184,716**
Sample Count	**34**		

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

Table 28: Central WGA Residential Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**9.6%**		**19,485**
Newspaper Packaging	0.0%	0.1%	88
Cardboard/Kraft Paper Packaging	3.8%	1.0%	7,782
Other Groundwood Paper Packaging	0.4%	0.2%	779
Mixed/Low Grade Paper Packaging	3.6%	0.4%	7,329
Compostable Paper Packaging	0.7%	0.3%	1,498
R/C Paper Packaging	1.0%	0.3%	2,009
Plastic Packaging	**8.7%**		**17,563**
#1 PETE Plastic Bottles	1.6%	0.2%	3,157
#1 PETE Plastic Non-bottles	0.4%	0.1%	816
#2 HDPE Plastic Natural Bottles	0.7%	0.1%	1,332
#2 HDPE Plastic Colored Bottles	0.6%	0.1%	1,256
#2 HDPE Plastic Jars & Tubs	0.1%	0.1%	285
#3 PVC Plastic Packaging	0.0%	0.0%	25
#4 LDPE Plastic Packaging	0.0%	0.0%	26
#5 PP Plastic Packaging	0.5%	0.1%	914
#6 PS Plastic Packaging	0.7%	0.2%	1,460
#7 Other Plastic Packaging	0.6%	0.1%	1,275
PLA Packaging	0.0%	0.1%	87
Plastic Merchandise Bags	1.0%	0.2%	2,072
Non-industrial Packaging Film Plastic	2.0%	0.3%	4,139
Industrial Packaging Film Plastic	0.2%	0.1%	356
R/C Plastic Packaging	0.2%	0.2%	363
Glass	**3.2%**		**6,557**
Clear Glass Containers	1.6%	0.4%	3,212
Green Glass Containers	0.3%	0.1%	589
Brown Glass Containers	0.9%	0.3%	1,835
Plate Glass	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	0.2%	0.2%	396
R/C Glass	0.3%	0.1%	524
Metal	**5.0%**		**10,096**
Aluminum Beverage Cans	0.7%	0.1%	1,511
Aluminum Foil/Containers	0.2%	0.1%	365
Other Aluminum	0.1%	0.1%	187
Other Nonferrous	0.1%	0.1%	179
Food Cans - Tinned	1.2%	0.2%	2,336
Food Cans - Coated	0.3%	0.1%	538
White Goods	0.0%	0.0%	0
Other Ferrous Metal	1.3%	0.7%	2,556
R/C Metals	1.2%	0.8%	2,423
Organics	**38.5%**		**78,203**
Food - Vegetative	15.2%	2.8%	30,840
Food - Non-vegetative	4.6%	0.9%	9,319
Leaves & Grass	14.8%	4.5%	30,089
Prunings	0.5%	0.4%	919
Animal Manure	2.3%	0.9%	4,717
Animal Carcasses	0.0%	0.0%	7
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	1.1%	0.6%	2,311
Wood Debris	**1.5%**		**3,118**
Treated Wood	0.0%	0.0%	11
Painted Wood	0.8%	0.6%	1,657
Dimensional Lumber	0.1%	0.1%	206
Engineered Wood	0.2%	0.3%	445
Pallets & Crates	0.0%	0.0%	0
Other Untreated Wood	0.0%	0.0%	91
Wood By-Products	0.0%	0.0%	36
R/C Wood Debris	0.3%	0.2%	671
Construction Materials	**4.4%**		**8,928**
Natural Wood	0.1%	0.1%	183
Insulation	0.3%	0.4%	557
Asphalt Paving	0.0%	0.0%	0
Concrete	0.0%	0.0%	0
Drywall	0.2%	0.2%	355
Carpet	1.6%	1.1%	3,204
Carpet Padding	0.4%	0.4%	824
Soil, Rocks, Sand	1.0%	0.7%	1,941
Asphalt Roofing	0.3%	0.4%	518
Plastic Flooring	0.3%	0.3%	514
Ceramics & Brick	0.2%	0.2%	319
R/C Construction Materials	0.3%	0.2%	514
Paper Products	**12.8%**		**25,878**
Newspaper	2.4%	0.6%	4,937
Cardboard/Kraft Paper Products	0.0%	0.0%	0
Magazines	1.3%	0.4%	2,582
High-Grade Paper Products	0.9%	0.5%	1,816
Other Groundwood Paper Products	0.4%	0.4%	760
Mixed Low Grade Paper Products	3.1%	0.8%	6,367
Compostable Paper Products	4.6%	0.7%	9,241
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.1%	0.1%	175
Plastic Products	**3.0%**		**6,071**
#1 PETE Plastic Products	0.0%	0.0%	1
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.2%	0.3%	407
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	61
#6 PS Plastic Products	0.1%	0.0%	161
#7 Other Plastic Products	0.8%	0.2%	1,617
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.2%	0.2%	2,451
Plastic Film Products	0.3%	0.2%	575
R/C Plastic Products	0.4%	0.2%	797
Consumer Products	**6.6%**		**13,307**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.2%	0.3%	407
Audio Equipment	0.2%	0.3%	425
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.5%	0.4%	1,012
Textiles - Organic	2.7%	1.1%	5,529
Textiles - Synthetic	1.8%	0.8%	3,737
Shoes, Purses, Belts	0.5%	0.2%	998
Tires & Rubber	0.2%	0.2%	500
Furniture	0.2%	0.3%	409
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.1%	0.1%	292
Hazardous/Special Wastes	**4.7%**		**9,613**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	27
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	43
Solvent-based Glues	0.0%	0.0%	0
Latex-based Glues	0.0%	0.0%	4
Oil-based Paint & Solvent	0.0%	0.0%	39
Caustic Cleaners	0.0%	0.0%	19
Dry-cell Batteries	0.0%	0.0%	46
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	4
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	8
Oil Filters	0.0%	0.0%	24
Explosives	0.0%	0.0%	1
Medical Wastes	0.8%	1.2%	1,705
Pharmaceuticals/Vitamins	0.1%	0.1%	237
Disposable Diapers	3.5%	0.9%	7,098
Other Cleaners & Soaps	0.2%	0.1%	331
Other Hazardous	0.0%	0.0%	26
Other Non-hazardous	0.0%	0.0%	0
Residues	**2.0%**		**4,080**
Ash	0.2%	0.2%	382
Dust	0.0%	0.0%	36
Fines	1.8%	1.1%	3,663
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**202,900**
Sample Count	**33**		

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

Table 29: Central WGA Self-hauled C&D Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**2.7%**		**1,211**
Newspaper Packaging	0.0%	0.0%	0
Cardboard/Kraft Paper Packaging	2.7%	2.5%	1,198
Other Groundwood Paper Packaging	0.0%	0.0%	0
Mixed/Low Grade Paper Packaging	0.0%	0.0%	10
Compostable Paper Packaging	0.0%	0.0%	1
R/C Paper Packaging	0.0%	0.0%	1
Plastic Packaging	**0.4%**		**163**
#1 PETE Plastic Bottles	0.0%	0.0%	7
#1 PETE Plastic Non-bottles	0.0%	0.0%	0
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	2
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	1
#2 HDPE Plastic Jars & Tubs	0.0%	0.0%	0
#3 PVC Plastic Packaging	0.0%	0.0%	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0
#5 PP Plastic Packaging	0.0%	0.0%	3
#6 PS Plastic Packaging	0.1%	0.1%	30
#7 Other Plastic Packaging	0.0%	0.0%	4
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.0%	0.0%	0
Non-industrial Packaging Film Plastic	0.2%	0.4%	101
Industrial Packaging Film Plastic	0.0%	0.0%	15
R/C Plastic Packaging	0.0%	0.0%	0
Glass	**2.4%**		**1,070**
Clear Glass Containers	0.0%	0.0%	0
Green Glass Containers	0.0%	0.0%	0
Brown Glass Containers	0.1%	0.1%	23
Plate Glass	2.4%	3.8%	1,047
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	0
R/C Glass	0.0%	0.0%	0
Metal	**7.7%**		**3,434**
Aluminum Beverage Cans	0.0%	0.1%	18
Aluminum Foil/Containers	0.0%	0.0%	0
Other Aluminum	0.5%	0.6%	204
Other Nonferrous	0.2%	0.2%	83
Food Cans - Tinned	0.0%	0.0%	0
Food Cans - Coated	0.0%	0.0%	0
White Goods	0.0%	0.0%	0
Other Ferrous Metal	2.9%	2.0%	1,290
R/C Metals	4.1%	3.8%	1,840
Organics	**1.4%**		**601**
Food - Vegetative	0.0%	0.0%	6
Food - Non-vegetative	0.0%	0.0%	0
Leaves & Grass	0.9%	1.4%	390
Prunings	0.5%	0.8%	205
Animal Manure	0.0%	0.0%	0
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.0%	0.0%	0
Wood Debris	**23.5%**		**10,419**
Treated Wood	0.1%	0.1%	31
Painted Wood	5.9%	4.3%	2,624
Dimensional Lumber	8.9%	5.7%	3,965
Engineered Wood	5.3%	4.1%	2,370
Pallets & Crates	1.4%	2.2%	599
Other Untreated Wood	0.0%	0.0%	3
Wood By-Products	0.0%	0.0%	0
R/C Wood Debris	1.9%	2.2%	826
Construction Materials	**56.0%**		**24,847**
Natural Wood	0.0%	0.0%	0
Insulation	2.5%	2.1%	1,117
Asphalt Paving	4.0%	6.5%	1,765
Concrete	0.8%	1.4%	374
Drywall	10.7%	7.1%	4,729
Carpet	11.0%	7.7%	4,895
Carpet Padding	2.9%	2.4%	1,304
Soil, Rocks, Sand	1.3%	1.6%	586
Asphalt Roofing	17.1%	11.4%	7,563
Plastic Flooring	0.7%	1.0%	327
Ceramics & Brick	0.0%	0.0%	6
R/C Construction Materials	4.9%	3.5%	2,182

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**0.3%**		**113**
Newspaper	0.0%	0.0%	1
Cardboard/Kraft Paper Products	0.0%	0.0%	0
Magazines	0.2%	0.3%	72
High-Grade Paper Products	0.0%	0.0%	0
Other Groundwood Paper Products	0.0%	0.0%	0
Mixed Low Grade Paper Products	0.1%	0.1%	34
Compostable Paper Products	0.0%	0.0%	0
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.0%	0.0%	6
Plastic Products	**4.8%**		**2,130**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.3%	0.4%	121
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	0
#6 PS Plastic Products	0.0%	0.0%	0
#7 Other Plastic Products	2.6%	3.9%	1,168
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	0.1%	0.1%	48
Plastic Film Products	0.8%	1.3%	340
R/C Plastic Products	1.0%	1.7%	453
Consumer Products	**0.8%**		**352**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	0
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.0%	0.0%	6
Textiles - Organic	0.1%	0.2%	51
Textiles - Synthetic	0.0%	0.0%	1
Shoes, Purses, Belts	0.0%	0.0%	0
Tires & Rubber	0.0%	0.0%	1
Furniture	0.0%	0.0%	0
Mattresses	0.7%	0.8%	293
R/C Consumer Products	0.0%	0.0%	0
Hazardous/Special Wastes	**0.0%**		**5**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	0
Solvent-based Glues	0.0%	0.0%	5
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	0
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.0%	0.0%	0
Pharmaceuticals/Vitamins	0.0%	0.0%	0
Disposable Diapers	0.0%	0.0%	0
Other Cleaners & Soaps	0.0%	0.0%	0
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.0%	0.0%	0
Residues	**0.0%**		**0**
Ash	0.0%	0.0%	0
Dust	0.0%	0.0%	0
Fines	0.0%	0.0%	0
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**44,345**
Sample Count	**23**		

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

Table 30: Central WGA Self-hauled Other Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**4.1%**		**3,778**
Newspaper Packaging	0.0%	0.0%	0
Cardboard/Kraft Paper Packaging	3.0%	1.7%	2,781
Other Groundwood Paper Packaging	0.0%	0.0%	7
Mixed/Low Grade Paper Packaging	0.7%	0.6%	652
Compostable Paper Packaging	0.2%	0.2%	183
R/C Paper Packaging	0.2%	0.2%	156
Plastic Packaging	**1.7%**		**1,561**
#1 PETE Plastic Bottles	0.2%	0.2%	186
#1 PETE Plastic Non-bottles	0.0%	0.0%	28
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	42
#2 HDPE Plastic Colored Bottles	0.1%	0.1%	64
#2 HDPE Plastic Jars & Tubs	0.4%	0.6%	391
#3 PVC Plastic Packaging	0.0%	0.0%	2
#4 LDPE Plastic Packaging	0.0%	0.1%	39
#5 PP Plastic Packaging	0.1%	0.1%	114
#6 PS Plastic Packaging	0.1%	0.1%	116
#7 Other Plastic Packaging	0.3%	0.2%	249
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.1%	0.0%	71
Non-industrial Packaging Film Plastic	0.1%	0.1%	90
Industrial Packaging Film Plastic	0.1%	0.1%	75
R/C Plastic Packaging	0.1%	0.2%	94
Glass	**3.9%**		**3,535**
Clear Glass Containers	1.1%	0.9%	1,009
Green Glass Containers	0.0%	0.0%	22
Brown Glass Containers	0.6%	0.5%	545
Plate Glass	0.0%	0.0%	3
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	25
R/C Glass	2.1%	2.2%	1,931
Metal	**5.3%**		**4,852**
Aluminum Beverage Cans	0.2%	0.2%	209
Aluminum Foil/Containers	0.0%	0.0%	14
Other Aluminum	0.2%	0.3%	156
Other Nonferrous	0.3%	0.3%	236
Food Cans - Tinned	0.2%	0.1%	139
Food Cans - Coated	0.0%	0.0%	0
White Goods	0.0%	0.0%	0
Other Ferrous Metal	1.9%	1.1%	1,780
R/C Metals	2.5%	1.5%	2,317
Organics	**28.2%**		**25,815**
Food - Vegetative	1.5%	1.4%	1,372
Food - Non-vegetative	0.9%	0.8%	815
Leaves & Grass	14.8%	10.7%	13,590
Prunings	4.8%	6.1%	4,397
Animal Manure	0.7%	1.1%	649
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	5.4%	8.8%	4,992
Wood Debris	**15.8%**		**14,515**
Treated Wood	1.9%	3.1%	1,703
Painted Wood	7.3%	5.6%	6,672
Dimensional Lumber	0.4%	0.3%	362
Engineered Wood	0.5%	0.7%	428
Pallets & Crates	0.0%	0.0%	0
Other Untreated Wood	0.8%	1.2%	724
Wood By-Products	0.0%	0.0%	12
R/C Wood Debris	5.0%	4.2%	4,615
Construction Materials	**7.0%**		**6,461**
Natural Wood	0.0%	0.0%	0
Insulation	0.2%	0.3%	155
Asphalt Paving	0.0%	0.0%	0
Concrete	0.5%	0.5%	417
Drywall	0.0%	0.0%	0
Carpet	0.9%	1.1%	865
Carpet Padding	0.9%	1.4%	781
Soil, Rocks, Sand	0.0%	0.0%	0
Asphalt Roofing	0.0%	0.0%	0
Plastic Flooring	0.1%	0.1%	69
Ceramics & Brick	0.8%	0.9%	736
R/C Construction Materials	3.8%	4.1%	3,438

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**3.5%**		**3,218**
Newspaper	0.1%	0.1%	122
Cardboard/Kraft Paper Products	0.0%	0.0%	25
Magazines	0.6%	0.6%	576
High-Grade Paper Products	0.6%	0.5%	533
Other Groundwood Paper Products	0.2%	0.2%	143
Mixed Low Grade Paper Products	1.0%	1.4%	955
Compostable Paper Products	0.4%	0.4%	329
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.6%	0.6%	534
Plastic Products	**4.1%**		**3,755**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	23
#3 PVC Plastic Products	0.0%	0.0%	6
#4 LDPE Plastic Products	0.1%	0.2%	94
#5 PP Plastic Products	0.0%	0.0%	25
#6 PS Plastic Products	0.0%	0.1%	45
#7 Other Plastic Products	1.3%	1.1%	1,176
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	0.1%	0.1%	133
Plastic Film Products	0.1%	0.1%	55
R/C Plastic Products	2.4%	1.6%	2,199
Consumer Products	**25.0%**		**22,897**
Televisions - CRT	3.9%	6.4%	3,616
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.7%	1.1%	644
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.3%	0.4%	271
Audio Equipment	0.2%	0.3%	172
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.3%	0.3%	238
Textiles - Organic	3.3%	2.6%	3,009
Textiles - Synthetic	1.7%	1.3%	1,519
Shoes, Purses, Belts	0.5%	0.7%	452
Tires & Rubber	0.5%	0.5%	484
Furniture	10.2%	7.6%	9,322
Mattresses	0.3%	0.5%	263
R/C Consumer Products	3.2%	4.7%	2,907
Hazardous/Special Wastes	**1.4%**		**1,261**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.8%	1.3%	708
Solvent-based Glues	0.0%	0.0%	6
Latex-based Glues	0.1%	0.1%	70
Oil-based Paint & Solvent	0.1%	0.1%	76
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	5
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.0%	0.0%	0
Pharmaceuticals/Vitamins	0.0%	0.0%	0
Disposable Diapers	0.1%	0.1%	119
Other Cleaners & Soaps	0.2%	0.2%	201
Other Hazardous	0.0%	0.1%	33
Other Non-hazardous	0.0%	0.1%	44
Residues	**0.0%**		**28**
Ash	0.0%	0.0%	0
Dust	0.0%	0.0%	0
Fines	0.0%	0.0%	28
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**91,675**
Sample Count	**23**		

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

East Waste Generation Area Composition Tables

Table 31: East WGA Overall Disposed Waste Stream Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**10.0%**		**73,765**
Newspaper Packaging	0.1%	0.1%	635
Cardboard/Kraft Paper Packaging	4.6%	1.0%	34,135
Other Groundwood Paper Packaging	0.2%	0.1%	1,339
Mixed/Low Grade Paper Packaging	2.8%	0.4%	20,711
Compostable Paper Packaging	1.3%	0.4%	9,340
R/C Paper Packaging	1.0%	0.6%	7,605
Plastic Packaging	**7.0%**		**51,689**
#1 PETE Plastic Bottles	0.8%	0.1%	5,986
#1 PETE Plastic Non-bottles	0.3%	0.0%	2,258
#2 HDPE Plastic Natural Bottles	0.3%	0.0%	1,859
#2 HDPE Plastic Colored Bottles	0.4%	0.1%	3,039
#2 HDPE Plastic Jars & Tubs	0.3%	0.1%	1,860
#3 PVC Plastic Packaging	0.0%	0.0%	60
#4 LDPE Plastic Packaging	0.0%	0.0%	143
#5 PP Plastic Packaging	0.4%	0.1%	3,184
#6 PS Plastic Packaging	0.7%	0.2%	5,009
#7 Other Plastic Packaging	0.5%	0.1%	3,483
PLA Packaging	0.0%	0.0%	3
Plastic Merchandise Bags	0.6%	0.1%	4,115
Non-industrial Packaging Film Plastic	1.5%	0.2%	11,346
Industrial Packaging Film Plastic	0.5%	0.3%	3,988
R/C Plastic Packaging	0.7%	0.9%	5,356
Glass	**2.3%**		**16,670**
Clear Glass Containers	0.8%	0.1%	5,805
Green Glass Containers	0.4%	0.2%	3,030
Brown Glass Containers	0.6%	0.2%	4,162
Plate Glass	0.1%	0.1%	701
Stoneware/Kitchen Ceramics/Glassware	0.1%	0.1%	800
R/C Glass	0.3%	0.2%	2,172
Metal	**6.9%**		**50,608**
Aluminum Beverage Cans	0.4%	0.1%	3,085
Aluminum Foil/Containers	0.1%	0.0%	916
Other Aluminum	0.1%	0.1%	475
Other Nonferrous	0.3%	0.2%	2,194
Food Cans - Tinned	0.7%	0.1%	5,045
Food Cans - Coated	0.1%	0.0%	675
White Goods	0.9%	1.0%	6,459
Other Ferrous Metal	2.6%	1.0%	18,859
R/C Metals	1.8%	0.8%	12,902
Organics	**25.8%**		**189,406**
Food - Vegetative	7.8%	1.0%	57,364
Food - Non-vegetative	3.0%	0.6%	22,355
Leaves & Grass	8.4%	2.1%	61,995
Prunings	1.4%	0.9%	9,950
Animal Manure	2.8%	1.0%	20,344
Animal Carcasses	1.7%	2.4%	12,196
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.7%	0.4%	5,201
Wood Debris	**9.0%**		**66,179**
Treated Wood	0.3%	0.3%	2,550
Painted Wood	2.3%	0.8%	16,722
Dimensional Lumber	1.8%	0.6%	13,204
Engineered Wood	1.5%	0.5%	10,737
Pallets & Crates	1.7%	1.1%	12,715
Other Untreated Wood	0.4%	0.3%	2,691
Wood By-Products	0.1%	0.1%	959
R/C Wood Wastes	0.9%	0.6%	6,602
Construction Materials	**11.3%**		**83,239**
Natural Wood	0.2%	0.2%	1,611
Insulation	0.1%	0.1%	1,051
Asphalt Paving	0.0%	0.0%	0
Concrete	1.0%	0.7%	7,185
Drywall	1.9%	1.5%	13,966
Carpet	2.3%	1.2%	16,807
Carpet Padding	0.3%	0.2%	2,360
Soil, Rocks, Sand	1.8%	0.9%	13,498
Asphalt Roofing	0.4%	0.5%	3,295
Plastic Flooring	0.1%	0.1%	733
Ceramics & Brick	0.8%	0.7%	5,664
R/C Construction Materials	2.3%	1.1%	17,069

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**11.9%**		**87,466**
Newspaper	1.7%	0.3%	12,401
Cardboard/Kraft Paper Products	0.1%	0.2%	754
Magazines	1.7%	0.8%	12,492
High-Grade Paper Products	1.6%	1.2%	11,969
Other Groundwood Paper Products	0.4%	0.2%	3,082
Mixed Low Grade Paper Products	2.7%	0.6%	19,958
Compostable Paper Products	3.1%	0.5%	23,127
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.5%	0.2%	3,682
Plastic Products	**3.7%**		**27,070**
#1 PETE Plastic Products	0.0%	0.0%	33
#2 HDPE Plastic Products	0.1%	0.2%	1,068
#3 PVC Plastic Products	0.0%	0.0%	85
#4 LDPE Plastic Products	0.0%	0.0%	6
#5 PP Plastic Products	0.0%	0.0%	254
#6 PS Plastic Products	0.0%	0.0%	355
#7 Other Plastic Products	1.2%	0.3%	8,629
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.3%	0.2%	9,201
Plastic Film Products	0.3%	0.1%	2,208
R/C Plastic Products	0.7%	0.3%	5,230
Consumer Products	**6.8%**		**50,065**
Televisions - CRT	0.4%	0.4%	3,216
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	74
Computer Monitors - CRT	0.0%	0.1%	312
Computer Monitors - LCD	0.0%	0.1%	322
Computers	0.1%	0.1%	717
Computer Peripherals	0.0%	0.0%	141
Audio Equipment	0.2%	0.1%	1,150
Gaming Equipment	0.1%	0.1%	371
Other Consumer Electronics	0.3%	0.2%	2,385
Textiles - Organic	0.8%	0.2%	6,194
Textiles - Synthetic	0.9%	0.2%	6,940
Shoes, Purses, Belts	0.3%	0.1%	1,966
Tires & Rubber	0.8%	0.3%	5,587
Furniture	2.6%	1.3%	18,770
Mattresses	0.1%	0.1%	397
R/C Consumer Products	0.2%	0.1%	1,524
Hazardous/Special Wastes	**3.7%**		**27,256**
Pesticides/Herbicides	0.0%	0.0%	10
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	67
Fluorescent Tubes	0.0%	0.0%	11
Asbestos	0.0%	0.0%	0
Latex Paint	0.3%	0.3%	2,207
Solvent-based Glues	0.1%	0.1%	411
Latex-based Glues	0.0%	0.0%	6
Oil-based Paint & Solvent	0.2%	0.2%	1,261
Caustic Cleaners	0.0%	0.0%	98
Dry-cell Batteries	0.0%	0.0%	331
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	133
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	12
Oil Filters	0.2%	0.1%	1,255
Explosives	0.0%	0.0%	7
Medical Wastes	0.6%	0.7%	4,149
Pharmaceuticals/Vitamins	0.0%	0.0%	330
Disposable Diapers	2.0%	0.5%	14,926
Other Cleaners & Soaps	0.1%	0.0%	780
Other Hazardous	0.1%	0.1%	812
Other Non-hazardous	0.1%	0.0%	449
Residues	**1.5%**		**11,215**
Ash	0.0%	0.0%	15
Dust	0.1%	0.0%	632
Fines	1.0%	0.3%	7,085
Sludge/Special Industrial	0.5%	0.8%	3,483
Totals	**100.0%**		**734,627**
Sample Count	**151**		

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

Table 32: East WGA Commercial Disposed Waste Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**12.4%**		**30,412**
Newspaper Packaging	0.1%	0.2%	252
Cardboard/Kraft Paper Packaging	6.0%	1.3%	14,833
Other Groundwood Paper Packaging	0.2%	0.1%	377
Mixed/Low Grade Paper Packaging	2.2%	0.8%	5,450
Compostable Paper Packaging	2.1%	1.1%	5,273
R/C Paper Packaging	1.7%	1.7%	4,226
Plastic Packaging	**9.3%**		**22,999**
#1 PETE Plastic Bottles	0.9%	0.3%	2,211
#1 PETE Plastic Non-bottles	0.3%	0.1%	733
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	393
#2 HDPE Plastic Colored Bottles	0.4%	0.2%	912
#2 HDPE Plastic Jars & Tubs	0.4%	0.2%	926
#3 PVC Plastic Packaging	0.0%	0.0%	5
#4 LDPE Plastic Packaging	0.0%	0.0%	41
#5 PP Plastic Packaging	0.5%	0.3%	1,206
#6 PS Plastic Packaging	1.3%	0.5%	3,100
#7 Other Plastic Packaging	0.4%	0.1%	950
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.4%	0.1%	951
Non-industrial Packaging Film Plastic	1.6%	0.5%	4,028
Industrial Packaging Film Plastic	1.2%	0.8%	2,978
R/C Plastic Packaging	1.9%	2.7%	4,564
Glass	**2.1%**		**5,077**
Clear Glass Containers	0.7%	0.2%	1,841
Green Glass Containers	0.5%	0.3%	1,125
Brown Glass Containers	0.5%	0.3%	1,294
Plate Glass	0.2%	0.3%	481
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	40
R/C Glass	0.1%	0.1%	294
Metal	**8.6%**		**21,227**
Aluminum Beverage Cans	0.3%	0.1%	820
Aluminum Foil/Containers	0.1%	0.0%	254
Other Aluminum	0.2%	0.2%	370
Other Nonferrous	0.5%	0.7%	1,178
Food Cans - Tinned	0.5%	0.3%	1,286
Food Cans - Coated	0.0%	0.0%	92
White Goods	0.0%	0.0%	22
Other Ferrous Metal	4.9%	2.8%	12,060
R/C Metals	2.1%	1.3%	5,146
Organics	**18.6%**		**45,878**
Food - Vegetative	8.8%	2.5%	21,560
Food - Non-vegetative	4.1%	1.6%	10,136
Leaves & Grass	4.3%	2.6%	10,681
Prunings	0.9%	1.4%	2,240
Animal Manure	0.3%	0.3%	801
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.2%	0.1%	460
Wood Debris	**6.0%**		**14,869**
Treated Wood	0.1%	0.1%	303
Painted Wood	0.7%	0.4%	1,741
Dimensional Lumber	0.5%	0.3%	1,326
Engineered Wood	0.4%	0.4%	970
Pallets & Crates	3.0%	2.8%	7,443
Other Untreated Wood	0.1%	0.1%	260
Wood By-Products	0.2%	0.4%	595
R/C Wood Debris	0.9%	1.0%	2,231
Construction Materials	**13.1%**		**32,124**
Natural Wood	0.0%	0.0%	46
Insulation	0.0%	0.0%	4
Asphalt Paving	0.0%	0.0%	0
Concrete	1.8%	2.1%	4,495
Drywall	3.0%	4.4%	7,357
Carpet	3.1%	2.4%	7,642
Carpet Padding	0.5%	0.5%	1,137
Soil, Rocks, Sand	0.3%	0.3%	705
Asphalt Roofing	0.0%	0.0%	13
Plastic Flooring	0.1%	0.2%	277
Ceramics & Brick	1.5%	2.0%	3,592
R/C Construction Materials	2.8%	2.3%	6,856
Paper Products	**15.9%**		**39,135**
Newspaper	1.8%	0.8%	4,309
Cardboard/Kraft Paper Products	0.3%	0.5%	753
Magazines	2.5%	2.2%	6,194
High-Grade Paper Products	3.6%	3.5%	8,798
Other Groundwood Paper Products	0.2%	0.1%	378
Mixed Low Grade Paper Products	3.4%	1.5%	8,301
Compostable Paper Products	3.6%	1.0%	8,908
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.6%	0.3%	1,493
Plastic Products	**4.3%**		**10,679**
#1 PETE Plastic Products	0.0%	0.0%	19
#2 HDPE Plastic Products	0.4%	0.5%	951
#3 PVC Plastic Products	0.0%	0.0%	21
#4 LDPE Plastic Products	0.0%	0.0%	1
#5 PP Plastic Products	0.1%	0.1%	150
#6 PS Plastic Products	0.0%	0.0%	70
#7 Other Plastic Products	0.9%	0.5%	2,176
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.7%	0.4%	4,110
Plastic Film Products	0.3%	0.2%	622
R/C Plastic Products	1.0%	0.6%	2,560
Consumer Products	**6.1%**		**14,928**
Televisions - CRT	0.6%	1.0%	1,446
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.1%	116
Audio Equipment	0.1%	0.1%	157
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.1%	0.1%	238
Textiles - Organic	0.5%	0.3%	1,210
Textiles - Synthetic	0.7%	0.4%	1,666
Shoes, Purses, Belts	0.3%	0.2%	622
Tires & Rubber	0.9%	0.6%	2,115
Furniture	2.8%	2.9%	6,832
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.2%	0.2%	527
Hazardous/Special Wastes	**3.0%**		**7,389**
Pesticides/Herbicides	0.0%	0.0%	10
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	11
Asbestos	0.0%	0.0%	0
Latex Paint	0.1%	0.2%	338
Solvent-based Glues	0.1%	0.2%	363
Latex-based Glues	0.0%	0.0%	6
Oil-based Paint & Solvent	0.0%	0.0%	14
Caustic Cleaners	0.0%	0.0%	14
Dry-cell Batteries	0.1%	0.1%	132
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	44
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.5%	0.4%	1,137
Explosives	0.0%	0.0%	1
Medical Wastes	1.5%	2.0%	3,608
Pharmaceuticals/Vitamins	0.0%	0.0%	17
Disposable Diapers	0.3%	0.2%	707
Other Cleaners & Soaps	0.1%	0.0%	155
Other Hazardous	0.2%	0.2%	591
Other Non-hazardous	0.1%	0.1%	240
Residues	**0.6%**		**1,442**
Ash	0.0%	0.0%	15
Dust	0.1%	0.1%	146
Fines	0.5%	0.3%	1,281
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**246,159**
Sample Count	**48**		

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

Table 33: East WGA Residential Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+/-	Est. Tons
Paper Packaging	**11.5%**		**37,241**
Newspaper Packaging	0.1%	0.2%	374
Cardboard/Kraft Paper Packaging	4.5%	1.9%	14,654
Other Groundwood Paper Packaging	0.3%	0.1%	924
Mixed/Low Grade Paper Packaging	4.5%	0.7%	14,433
Compostable Paper Packaging	1.2%	0.3%	3,916
R/C Paper Packaging	0.9%	0.2%	2,941
Plastic Packaging	**8.2%**		**26,417**
#1 PETE Plastic Bottles	1.1%	0.1%	3,653
#1 PETE Plastic Non-bottles	0.4%	0.1%	1,450
#2 HDPE Plastic Natural Bottles	0.4%	0.1%	1,432
#2 HDPE Plastic Colored Bottles	0.6%	0.1%	2,051
#2 HDPE Plastic Jars & Tubs	0.2%	0.1%	727
#3 PVC Plastic Packaging	0.0%	0.0%	53
#4 LDPE Plastic Packaging	0.0%	0.0%	82
#5 PP Plastic Packaging	0.6%	0.1%	1,842
#6 PS Plastic Packaging	0.5%	0.1%	1,691
#7 Other Plastic Packaging	0.7%	0.1%	2,362
PLA Packaging	0.0%	0.0%	3
Plastic Merchandise Bags	1.0%	0.1%	3,086
Non-industrial Packaging Film Plastic	2.2%	0.2%	7,016
Industrial Packaging Film Plastic	0.2%	0.1%	495
R/C Plastic Packaging	0.1%	0.1%	475
Glass	**3.1%**		**10,168**
Clear Glass Containers	1.1%	0.2%	3,659
Green Glass Containers	0.6%	0.3%	1,899
Brown Glass Containers	0.8%	0.2%	2,647
Plate Glass	0.0%	0.0%	139
Stoneware/Kitchen Ceramics/Glassware	0.2%	0.1%	693
R/C Glass	0.3%	0.2%	1,132
Metal	**5.3%**		**17,320**
Aluminum Beverage Cans	0.7%	0.1%	2,204
Aluminum Foil/Containers	0.2%	0.0%	632
Other Aluminum	0.0%	0.0%	88
Other Nonferrous	0.2%	0.1%	752
Food Cans - Tinned	1.1%	0.2%	3,599
Food Cans - Coated	0.2%	0.1%	550
White Goods	1.2%	2.0%	3,930
Other Ferrous Metal	0.9%	0.4%	2,922
R/C Metals	0.8%	0.3%	2,643
Organics	**37.7%**		**122,298**
Food - Vegetative	10.2%	1.2%	33,107
Food - Non-vegetative	3.5%	0.5%	11,255
Leaves & Grass	14.5%	4.2%	47,117
Prunings	2.3%	1.7%	7,375
Animal Manure	5.9%	2.3%	19,045
Animal Carcasses	0.1%	0.1%	163
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	1.3%	0.8%	4,237
Wood Debris	**1.2%**		**3,796**
Treated Wood	0.0%	0.0%	77
Painted Wood	0.5%	0.3%	1,581
Dimensional Lumber	0.3%	0.1%	887
Engineered Wood	0.2%	0.2%	591
Pallets & Crates	0.0%	0.0%	0
Other Untreated Wood	0.0%	0.0%	157
Wood By-Products	0.0%	0.0%	117
R/C Wood Debris	0.1%	0.1%	386
Construction Materials	**4.4%**		**14,178**
Natural Wood	0.5%	0.5%	1,487
Insulation	0.0%	0.0%	18
Asphalt Paving	0.0%	0.0%	0
Concrete	0.4%	0.3%	1,268
Drywall	0.1%	0.1%	378
Carpet	0.4%	0.3%	1,239
Carpet Padding	0.2%	0.2%	615
Soil, Rocks, Sand	2.2%	1.2%	7,182
Asphalt Roofing	0.0%	0.1%	130
Plastic Flooring	0.0%	0.0%	82
Ceramics & Brick	0.2%	0.2%	758
R/C Construction Materials	0.3%	0.3%	1,021
Paper Products	**13.9%**		**45,019**
Newspaper	2.4%	0.4%	7,892
Cardboard/Kraft Paper Products	0.0%	0.0%	0
Magazines	1.8%	0.7%	5,919
High-Grade Paper Products	0.8%	0.3%	2,582
Other Groundwood Paper Products	0.8%	0.3%	2,542
Mixed Low Grade Paper Products	3.4%	0.6%	11,053
Compostable Paper Products	4.1%	0.7%	13,198
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.6%	0.3%	1,833
Plastic Products	**3.4%**		**11,011**
#1 PETE Plastic Products	0.0%	0.0%	14
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.0%	0.0%	18
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	53
#6 PS Plastic Products	0.1%	0.0%	196
#7 Other Plastic Products	0.9%	0.3%	2,958
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.4%	0.2%	4,665
Plastic Film Products	0.3%	0.1%	985
R/C Plastic Products	0.7%	0.3%	2,121
Consumer Products	**4.5%**		**14,521**
Televisions - CRT	0.1%	0.1%	268
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	74
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.1%	0.2%	322
Computers	0.1%	0.2%	464
Computer Peripherals	0.0%	0.0%	10
Audio Equipment	0.2%	0.1%	511
Gaming Equipment	0.1%	0.1%	298
Other Consumer Electronics	0.4%	0.2%	1,162
Textiles - Organic	1.3%	0.4%	4,187
Textiles - Synthetic	1.2%	0.3%	3,871
Shoes, Purses, Belts	0.3%	0.1%	1,048
Tires & Rubber	0.5%	0.4%	1,564
Furniture	0.0%	0.1%	145
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.2%	0.2%	597
Hazardous/Special Wastes	**5.0%**		**16,062**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	65
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.1%	0.1%	470
Solvent-based Glues	0.0%	0.0%	39
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.1%	0.0%	162
Caustic Cleaners	0.0%	0.0%	85
Dry-cell Batteries	0.1%	0.0%	178
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	89
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	117
Explosives	0.0%	0.0%	6
Medical Wastes	0.1%	0.0%	180
Pharmaceuticals/Vitamins	0.1%	0.1%	309
Disposable Diapers	4.1%	1.0%	13,354
Other Cleaners & Soaps	0.2%	0.1%	577
Other Hazardous	0.1%	0.1%	221
Other Non-hazardous	0.1%	0.1%	209
Residues	**1.9%**		**6,059**
Ash	0.0%	0.0%	0
Dust	0.1%	0.1%	441
Fines	1.7%	0.6%	5,618
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**324,090**
Sample Count	**45**		

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

Table 34: East WGA Self-hauled C&D Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**4.8%**		**3,438**
Newspaper Packaging	0.0%	0.0%	0
Cardboard/Kraft Paper Packaging	4.1%	2.4%	2,942
Other Groundwood Paper Packaging	0.0%	0.0%	0
Mixed/Low Grade Paper Packaging	0.2%	0.2%	177
Compostable Paper Packaging	0.1%	0.2%	93
R/C Paper Packaging	0.3%	0.4%	226
Plastic Packaging	**1.2%**		**858**
#1 PETE Plastic Bottles	0.0%	0.0%	5
#1 PETE Plastic Non-bottles	0.0%	0.0%	11
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	3
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	2
#2 HDPE Plastic Jars & Tubs	0.0%	0.1%	31
#3 PVC Plastic Packaging	0.0%	0.0%	0
#4 LDPE Plastic Packaging	0.0%	0.0%	15
#5 PP Plastic Packaging	0.0%	0.0%	0
#6 PS Plastic Packaging	0.0%	0.0%	16
#7 Other Plastic Packaging	0.0%	0.0%	25
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.0%	0.0%	1
Non-industrial Packaging Film Plastic	0.1%	0.1%	38
Industrial Packaging Film Plastic	0.6%	0.5%	462
R/C Plastic Packaging	0.3%	0.5%	250
Glass	**0.9%**		**631**
Clear Glass Containers	0.0%	0.0%	0
Green Glass Containers	0.0%	0.0%	0
Brown Glass Containers	0.0%	0.0%	0
Plate Glass	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	0
R/C Glass	0.9%	1.5%	631
Metal	**4.2%**		**2,982**
Aluminum Beverage Cans	0.0%	0.0%	7
Aluminum Foil/Containers	0.0%	0.0%	0
Other Aluminum	0.0%	0.0%	16
Other Nonferrous	0.3%	0.2%	191
Food Cans - Tinned	0.0%	0.1%	33
Food Cans - Coated	0.0%	0.0%	0
White Goods	0.0%	0.0%	0
Other Ferrous Metal	2.8%	1.3%	2,039
R/C Metals	1.0%	1.3%	695
Organics	**2.0%**		**1,421**
Food - Vegetative	0.0%	0.1%	24
Food - Non-vegetative	0.0%	0.0%	5
Leaves & Grass	1.6%	1.8%	1,143
Prunings	0.3%	0.6%	243
Animal Manure	0.0%	0.0%	0
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.0%	0.0%	6
Wood Debris	**48.5%**		**34,783**
Treated Wood	1.4%	0.9%	1,007
Painted Wood	13.0%	6.4%	9,307
Dimensional Lumber	11.1%	5.0%	7,953
Engineered Wood	11.5%	4.5%	8,256
Pallets & Crates	5.2%	5.1%	3,755
Other Untreated Wood	2.3%	2.2%	1,644
Wood By-Products	0.3%	0.3%	219
R/C Wood Debris	3.7%	4.5%	2,641
Construction Materials	**30.3%**		**21,727**
Natural Wood	0.0%	0.1%	32
Insulation	1.0%	1.3%	692
Asphalt Paving	0.0%	0.0%	0
Concrete	0.9%	1.1%	631
Drywall	7.7%	4.4%	5,491
Carpet	6.2%	6.2%	4,451
Carpet Padding	0.3%	0.3%	185
Soil, Rocks, Sand	2.0%	3.3%	1,445
Asphalt Roofing	4.2%	4.9%	3,013
Plastic Flooring	0.2%	0.2%	149
Ceramics & Brick	0.7%	0.9%	468
R/C Construction Materials	7.2%	5.6%	5,170

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**0.3%**		**249**
Newspaper	0.0%	0.0%	10
Cardboard/Kraft Paper Products	0.0%	0.0%	0
Magazines	0.2%	0.3%	118
High-Grade Paper Products	0.0%	0.0%	2
Other Groundwood Paper Products	0.0%	0.0%	0
Mixed Low Grade Paper Products	0.0%	0.0%	3
Compostable Paper Products	0.0%	0.0%	21
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.1%	0.2%	94
Plastic Products	**2.3%**		**1,660**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.1%	0.1%	46
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	22
#6 PS Plastic Products	0.0%	0.0%	0
#7 Other Plastic Products	1.7%	1.2%	1,193
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	0.1%	0.1%	73
Plastic Film Products	0.2%	0.3%	127
R/C Plastic Products	0.3%	0.5%	199
Consumer Products	**5.2%**		**3,736**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.4%	0.6%	253
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	0
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.0%	0.0%	0
Textiles - Organic	0.1%	0.2%	101
Textiles - Synthetic	0.0%	0.0%	0
Shoes, Purses, Belts	0.0%	0.0%	0
Tires & Rubber	1.1%	1.4%	794
Furniture	3.1%	4.3%	2,192
Mattresses	0.6%	0.9%	397
R/C Consumer Products	0.0%	0.0%	0
Hazardous/Special Wastes	**0.3%**		**234**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.3%	0.5%	234
Solvent-based Glues	0.0%	0.0%	0
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	0
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.0%	0.0%	0
Pharmaceuticals/Vitamins	0.0%	0.0%	0
Disposable Diapers	0.0%	0.0%	0
Other Cleaners & Soaps	0.0%	0.0%	1
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.0%	0.0%	0
Residues	**0.0%**		**15**
Ash	0.0%	0.0%	0
Dust	0.0%	0.0%	0
Fines	0.0%	0.0%	15
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**71,735**
Sample Count	**29**		

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

Table 35: East WGA Self-hauled Other Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**2.9%**		**2,673**
Newspaper Packaging	0.0%	0.0%	9
Cardboard/Kraft Paper Packaging	1.8%	1.1%	1,706
Other Groundwood Paper Packaging	0.0%	0.1%	38
Mixed/Low Grade Paper Packaging	0.7%	0.4%	650
Compostable Paper Packaging	0.1%	0.0%	58
R/C Paper Packaging	0.2%	0.1%	212
Plastic Packaging	**1.5%**		**1,415**
#1 PETE Plastic Bottles	0.1%	0.1%	117
#1 PETE Plastic Non-bottles	0.1%	0.1%	63
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	31
#2 HDPE Plastic Colored Bottles	0.1%	0.1%	74
#2 HDPE Plastic Jars & Tubs	0.2%	0.2%	176
#3 PVC Plastic Packaging	0.0%	0.0%	2
#4 LDPE Plastic Packaging	0.0%	0.0%	5
#5 PP Plastic Packaging	0.1%	0.1%	137
#6 PS Plastic Packaging	0.2%	0.3%	202
#7 Other Plastic Packaging	0.2%	0.1%	147
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.1%	0.1%	77
Non-industrial Packaging Film Plastic	0.3%	0.2%	264
Industrial Packaging Film Plastic	0.1%	0.1%	53
R/C Plastic Packaging	0.1%	0.1%	67
Glass	**0.9%**		**794**
Clear Glass Containers	0.3%	0.3%	304
Green Glass Containers	0.0%	0.0%	6
Brown Glass Containers	0.2%	0.2%	220
Plate Glass	0.1%	0.1%	81
Stoneware/Kitchen Ceramics/Glassware	0.1%	0.1%	67
R/C Glass	0.1%	0.2%	115
Metal	**9.8%**		**9,079**
Aluminum Beverage Cans	0.1%	0.0%	55
Aluminum Foil/Containers	0.0%	0.0%	30
Other Aluminum	0.0%	0.0%	0
Other Nonferrous	0.1%	0.1%	73
Food Cans - Tinned	0.1%	0.1%	126
Food Cans - Coated	0.0%	0.1%	32
White Goods	2.7%	3.8%	2,507
Other Ferrous Metal	2.0%	1.7%	1,837
R/C Metals	4.8%	5.0%	4,418
Organics	**21.4%**		**19,808**
Food - Vegetative	2.9%	1.9%	2,673
Food - Non-vegetative	1.0%	0.9%	960
Leaves & Grass	3.3%	3.0%	3,053
Prunings	0.1%	0.1%	93
Animal Manure	0.5%	0.6%	498
Animal Carcasses	13.0%	19.3%	12,034
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.5%	0.8%	498
Wood Debris	**13.7%**		**12,732**
Treated Wood	1.3%	1.9%	1,163
Painted Wood	4.4%	3.1%	4,093
Dimensional Lumber	3.3%	2.2%	3,038
Engineered Wood	1.0%	1.1%	919
Pallets & Crates	1.6%	1.9%	1,517
Other Untreated Wood	0.7%	1.1%	629
Wood By-Products	0.0%	0.0%	27
R/C Wood Debris	1.5%	2.1%	1,345
Construction Materials	**16.4%**		**15,211**
Natural Wood	0.0%	0.1%	45
Insulation	0.4%	0.6%	337
Asphalt Paving	0.0%	0.0%	0
Concrete	0.9%	0.9%	792
Drywall	0.8%	1.2%	739
Carpet	3.8%	4.4%	3,475
Carpet Padding	0.5%	0.5%	423
Soil, Rocks, Sand	4.5%	5.3%	4,167
Asphalt Roofing	0.2%	0.2%	140
Plastic Flooring	0.2%	0.4%	226
Ceramics & Brick	0.9%	1.3%	846
R/C Construction Materials	4.3%	5.0%	4,022

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**3.3%**		**3,062**
Newspaper	0.2%	0.1%	191
Cardboard/Kraft Paper Products	0.0%	0.0%	0
Magazines	0.3%	0.2%	260
High-Grade Paper Products	0.6%	0.7%	587
Other Groundwood Paper Products	0.2%	0.3%	162
Mixed Low Grade Paper Products	0.6%	0.4%	601
Compostable Paper Products	1.1%	0.8%	1,001
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.3%	0.2%	261
Plastic Products	**4.0%**		**3,720**
#1 PETE Plastic Products	0.0%	0.0%	1
#2 HDPE Plastic Products	0.1%	0.2%	117
#3 PVC Plastic Products	0.0%	0.0%	0
#4 LDPE Plastic Products	0.0%	0.0%	5
#5 PP Plastic Products	0.0%	0.0%	30
#6 PS Plastic Products	0.1%	0.1%	89
#7 Other Plastic Products	2.5%	1.9%	2,301
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	0.4%	0.3%	353
Plastic Film Products	0.5%	0.6%	475
R/C Plastic Products	0.4%	0.2%	350
Consumer Products	**18.2%**		**16,880**
Televisions - CRT	1.6%	1.8%	1,502
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.3%	0.6%	312
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.0%	15
Audio Equipment	0.5%	0.5%	482
Gaming Equipment	0.1%	0.1%	73
Other Consumer Electronics	1.1%	1.0%	984
Textiles - Organic	0.8%	0.6%	696
Textiles - Synthetic	1.5%	1.3%	1,404
Shoes, Purses, Belts	0.3%	0.4%	296
Tires & Rubber	1.2%	1.3%	1,114
Furniture	10.4%	6.3%	9,602
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.4%	0.4%	399
Hazardous/Special Wastes	**3.9%**		**3,570**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	2
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	1.3%	2.1%	1,165
Solvent-based Glues	0.0%	0.0%	9
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	1.2%	1.9%	1,085
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	21
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	12
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.4%	0.5%	361
Pharmaceuticals/Vitamins	0.0%	0.0%	4
Disposable Diapers	0.9%	1.2%	864
Other Cleaners & Soaps	0.1%	0.1%	46
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.0%	0.0%	0
Residues	**4.0%**		**3,699**
Ash	0.0%	0.0%	0
Dust	0.0%	0.1%	45
Fines	0.2%	0.2%	171
Sludge/Special Industrial	3.8%	6.2%	3,483
Totals	**100.0%**		**92,643**
Sample Count	**29**		

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

Northwest Waste Generation Area Composition Tables

Table 36: Northwest WGA Overall Disposed Waste Stream Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**6.6%**		**20,110**
Newspaper Packaging	0.0%	0.0%	120
Cardboard/Kraft Paper Packaging	2.4%	0.6%	7,353
Other Groundwood Paper Packaging	0.1%	0.1%	359
Mixed/Low Grade Paper Packaging	1.7%	0.3%	5,296
Compostable Paper Packaging	0.8%	0.3%	2,490
R/C Paper Packaging	1.5%	0.4%	4,493
Plastic Packaging	**7.5%**		**22,848**
#1 PETE Plastic Bottles	0.6%	0.1%	1,903
#1 PETE Plastic Non-bottles	0.3%	0.1%	990
#2 HDPE Plastic Natural Bottles	0.3%	0.1%	935
#2 HDPE Plastic Colored Bottles	0.3%	0.1%	956
#2 HDPE Plastic Jars & Tubs	0.3%	0.2%	881
#3 PVC Plastic Packaging	0.0%	0.0%	79
#4 LDPE Plastic Packaging	0.0%	0.0%	35
#5 PP Plastic Packaging	0.6%	0.3%	1,802
#6 PS Plastic Packaging	0.7%	0.2%	2,118
#7 Other Plastic Packaging	0.6%	0.1%	1,968
PLA Packaging	0.1%	0.1%	202
Plastic Merchandise Bags	0.5%	0.1%	1,472
Non-industrial Packaging Film Plastic	2.6%	0.7%	8,039
Industrial Packaging Film Plastic	0.4%	0.2%	1,093
R/C Plastic Packaging	0.1%	0.1%	375
Glass	**2.1%**		**6,567**
Clear Glass Containers	0.9%	0.3%	2,771
Green Glass Containers	0.3%	0.2%	884
Brown Glass Containers	0.3%	0.1%	941
Plate Glass	0.3%	0.3%	968
Stoneware/Kitchen Ceramics/Glassware	0.1%	0.1%	304
R/C Glass	0.2%	0.2%	698
Metal	**4.2%**		**12,936**
Aluminum Beverage Cans	0.3%	0.1%	865
Aluminum Foil/Containers	0.2%	0.1%	554
Other Aluminum	0.0%	0.0%	39
Other Nonferrous	0.0%	0.0%	148
Food Cans - Tinned	0.6%	0.1%	1,696
Food Cans - Coated	0.1%	0.1%	303
White Goods	0.0%	0.0%	0
Other Ferrous Metal	1.8%	1.1%	5,442
R/C Metals	1.3%	0.6%	3,888
Organics	**30.0%**		**91,831**
Food - Vegetative	13.5%	2.4%	41,407
Food - Non-vegetative	6.0%	1.9%	18,384
Leaves & Grass	4.0%	1.5%	12,149
Prunings	1.2%	1.0%	3,558
Animal Manure	4.8%	2.2%	14,676
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.5%	0.3%	1,657
Wood Debris	**10.4%**		**31,961**
Treated Wood	0.6%	0.6%	1,847
Painted Wood	4.4%	2.5%	13,600
Dimensional Lumber	1.3%	1.1%	3,843
Engineered Wood	0.6%	0.4%	1,921
Pallets & Crates	1.2%	1.3%	3,588
Other Untreated Wood	1.1%	1.0%	3,304
Wood By-Products	0.4%	0.4%	1,237
R/C Wood Wastes	0.9%	0.8%	2,621
Construction Materials	**9.3%**		**28,602**
Natural Wood	0.0%	0.0%	6
Insulation	1.5%	2.2%	4,633
Asphalt Paving	1.3%	2.1%	4,068
Concrete	0.3%	0.4%	801
Drywall	0.7%	0.7%	2,102
Carpet	1.1%	1.4%	3,366
Carpet Padding	0.0%	0.0%	0
Soil, Rocks, Sand	0.2%	0.3%	721
Asphalt Roofing	1.3%	1.2%	3,960
Plastic Flooring	0.0%	0.0%	55
Ceramics & Brick	0.9%	1.0%	2,718
R/C Construction Materials	2.0%	1.7%	6,170
Paper Products	**10.7%**		**32,856**
Newspaper	1.0%	0.5%	2,985
Cardboard/Kraft Paper Products	0.1%	0.2%	318
Magazines	0.4%	0.2%	1,187
High-Grade Paper Products	0.5%	0.1%	1,545
Other Groundwood Paper Products	0.4%	0.4%	1,354
Mixed Low Grade Paper Products	2.2%	0.8%	6,821
Compostable Paper Products	5.6%	1.2%	17,268
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.4%	0.2%	1,378
Plastic Products	**4.1%**		**12,423**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.1%	0.1%	333
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	120
#6 PS Plastic Products	0.1%	0.1%	283
#7 Other Plastic Products	1.2%	0.4%	3,732
PLA Products	0.0%	0.0%	8
Plastic Garbage Bags	1.5%	0.3%	4,485
Plastic Film Products	0.6%	0.4%	1,709
R/C Plastic Products	0.6%	0.4%	1,754
Consumer Products	**11.1%**		**34,040**
Televisions - CRT	0.2%	0.3%	650
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.1%	0.2%	335
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	78
Computer Peripherals	0.0%	0.0%	42
Audio Equipment	0.0%	0.0%	3
Gaming Equipment	0.0%	0.0%	24
Other Consumer Electronics	0.6%	0.5%	1,787
Textiles - Organic	4.0%	3.3%	12,120
Textiles - Synthetic	1.9%	1.5%	5,738
Shoes, Purses, Belts	0.5%	0.2%	1,404
Tires & Rubber	0.4%	0.3%	1,287
Furniture	3.1%	2.9%	9,509
Mattresses	0.1%	0.2%	452
R/C Consumer Products	0.2%	0.2%	609
Hazardous/Special Wastes	**2.7%**		**8,415**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	2
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	96
Solvent-based Glues	0.0%	0.0%	89
Latex-based Glues	0.0%	0.0%	51
Oil-based Paint & Solvent	0.0%	0.0%	16
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	123
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	10
Explosives	0.0%	0.0%	13
Medical Wastes	0.2%	0.3%	708
Pharmaceuticals/Vitamins	0.0%	0.0%	19
Disposable Diapers	2.2%	0.6%	6,700
Other Cleaners & Soaps	0.1%	0.0%	197
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.1%	0.1%	392
Residues	**1.2%**		**3,600**
Ash	0.1%	0.2%	414
Dust	0.4%	0.4%	1,169
Fines	0.7%	0.5%	2,016
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**306,189**
Sample Count	**52**		

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

Table 37: Northwest WGA Commercial Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**7.0%**		**9,207**
Newspaper Packaging	0.1%	0.1%	110
Cardboard/Kraft Paper Packaging	2.4%	0.9%	3,128
Other Groundwood Paper Packaging	0.1%	0.1%	74
Mixed/Low Grade Paper Packaging	1.5%	0.5%	1,971
Compostable Paper Packaging	1.2%	0.7%	1,620
R/C Paper Packaging	1.7%	0.8%	2,304
Plastic Packaging	**8.7%**		**11,582**
#1 PETE Plastic Bottles	0.8%	0.3%	1,005
#1 PETE Plastic Non-bottles	0.4%	0.2%	494
#2 HDPE Plastic Natural Bottles	0.4%	0.2%	518
#2 HDPE Plastic Colored Bottles	0.3%	0.1%	355
#2 HDPE Plastic Jars & Tubs	0.5%	0.4%	672
#3 PVC Plastic Packaging	0.0%	0.0%	0
#4 LDPE Plastic Packaging	0.0%	0.0%	25
#5 PP Plastic Packaging	0.8%	0.6%	1,105
#6 PS Plastic Packaging	0.8%	0.3%	1,010
#7 Other Plastic Packaging	0.6%	0.3%	858
PLA Packaging	0.1%	0.1%	178
Plastic Merchandise Bags	0.3%	0.1%	337
Non-industrial Packaging Film Plastic	3.2%	1.4%	4,293
Industrial Packaging Film Plastic	0.4%	0.3%	536
R/C Plastic Packaging	0.1%	0.1%	196
Glass	**1.8%**		**2,430**
Clear Glass Containers	0.8%	0.5%	1,042
Green Glass Containers	0.3%	0.2%	412
Brown Glass Containers	0.3%	0.3%	387
Plate Glass	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	21
R/C Glass	0.4%	0.5%	568
Metal	**5.0%**		**6,666**
Aluminum Beverage Cans	0.2%	0.1%	329
Aluminum Foil/Containers	0.2%	0.2%	285
Other Aluminum	0.0%	0.0%	39
Other Nonferrous	0.0%	0.0%	28
Food Cans - Tinned	0.6%	0.3%	768
Food Cans - Coated	0.1%	0.1%	117
White Goods	0.0%	0.0%	0
Other Ferrous Metal	2.9%	2.5%	3,818
R/C Metals	1.0%	0.5%	1,282
Organics	**24.7%**		**32,745**
Food - Vegetative	14.7%	4.7%	19,476
Food - Non-vegetative	8.2%	4.2%	10,866
Leaves & Grass	1.0%	1.3%	1,278
Prunings	0.0%	0.0%	32
Animal Manure	0.6%	0.8%	728
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.3%	0.3%	364
Wood Debris	**9.0%**		**11,973**
Treated Wood	0.3%	0.5%	371
Painted Wood	2.8%	4.5%	3,686
Dimensional Lumber	0.2%	0.2%	202
Engineered Wood	0.6%	0.9%	829
Pallets & Crates	2.7%	3.0%	3,531
Other Untreated Wood	0.7%	1.2%	986
Wood By-Products	0.3%	0.6%	453
R/C Wood Debris	1.4%	1.8%	1,916
Construction Materials	**4.7%**		**6,217**
Natural Wood	0.0%	0.0%	0
Insulation	3.1%	5.2%	4,151
Asphalt Paving	0.0%	0.0%	0
Concrete	0.6%	1.0%	801
Drywall	0.0%	0.0%	0
Carpet	0.2%	0.3%	265
Carpet Padding	0.0%	0.0%	0
Soil, Rocks, Sand	0.0%	0.0%	0
Asphalt Roofing	0.1%	0.2%	138
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	0.3%	0.5%	453
R/C Construction Materials	0.3%	0.5%	410

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**13.6%**		**18,013**
Newspaper	0.7%	0.4%	876
Cardboard/Kraft Paper Products	0.2%	0.4%	307
Magazines	0.2%	0.3%	217
High-Grade Paper Products	0.6%	0.2%	798
Other Groundwood Paper Products	0.1%	0.1%	113
Mixed Low Grade Paper Products	2.4%	1.6%	3,218
Compostable Paper Products	8.6%	2.6%	11,431
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.8%	0.5%	1,052
Plastic Products	**4.9%**		**6,465**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.2%	0.3%	263
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	62
#6 PS Plastic Products	0.1%	0.1%	112
#7 Other Plastic Products	1.0%	0.5%	1,266
PLA Products	0.0%	0.0%	8
Plastic Garbage Bags	2.1%	0.7%	2,757
Plastic Film Products	0.7%	0.6%	963
R/C Plastic Products	0.8%	0.8%	1,035
Consumer Products	**18.7%**		**24,726**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	11
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.1%	0.1%	67
Computer Peripherals	0.0%	0.0%	42
Audio Equipment	0.0%	0.0%	0
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	1.0%	1.1%	1,347
Textiles - Organic	6.3%	7.6%	8,300
Textiles - Synthetic	3.2%	3.4%	4,270
Shoes, Purses, Belts	0.4%	0.4%	559
Tires & Rubber	0.3%	0.2%	440
Furniture	7.0%	6.8%	9,299
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.3%	0.4%	389
Hazardous/Special Wastes	**1.2%**		**1,547**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	2
Asbestos	0.0%	0.0%	0
Latex Paint	0.1%	0.1%	87
Solvent-based Glues	0.0%	0.0%	0
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.1%	0.1%	88
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.5%	0.7%	704
Pharmaceuticals/Vitamins	0.0%	0.0%	0
Disposable Diapers	0.5%	0.4%	641
Other Cleaners & Soaps	0.0%	0.0%	11
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.0%	0.0%	14
Residues	**0.6%**		**808**
Ash	0.0%	0.0%	0
Dust	0.1%	0.1%	85
Fines	0.5%	0.5%	723
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**132,378**
Sample Count	**16**		

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

Table 38: Northwest WGA Residential Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**7.6%**		**8,434**
Newspaper Packaging	0.0%	0.0%	0
Cardboard/Kraft Paper Packaging	2.3%	0.7%	2,502
Other Groundwood Paper Packaging	0.3%	0.2%	278
Mixed/Low Grade Paper Packaging	2.7%	0.7%	2,959
Compostable Paper Packaging	0.8%	0.5%	834
R/C Paper Packaging	1.7%	0.7%	1,861
Plastic Packaging	**8.2%**		**9,074**
#1 PETE Plastic Bottles	0.6%	0.1%	642
#1 PETE Plastic Non-bottles	0.4%	0.1%	449
#2 HDPE Plastic Natural Bottles	0.3%	0.1%	343
#2 HDPE Plastic Colored Bottles	0.4%	0.2%	421
#2 HDPE Plastic Jars & Tubs	0.1%	0.1%	146
#3 PVC Plastic Packaging	0.1%	0.1%	79
#4 LDPE Plastic Packaging	0.0%	0.0%	9
#5 PP Plastic Packaging	0.5%	0.1%	533
#6 PS Plastic Packaging	0.8%	0.4%	848
#7 Other Plastic Packaging	0.8%	0.1%	904
PLA Packaging	0.0%	0.0%	15
Plastic Merchandise Bags	0.9%	0.2%	1,052
Non-industrial Packaging Film Plastic	2.7%	0.4%	3,038
Industrial Packaging Film Plastic	0.4%	0.4%	432
R/C Plastic Packaging	0.1%	0.1%	163
Glass	**2.0%**		**2,256**
Clear Glass Containers	1.1%	0.5%	1,209
Green Glass Containers	0.3%	0.2%	291
Brown Glass Containers	0.4%	0.2%	434
Plate Glass	0.0%	0.1%	47
Stoneware/Kitchen Ceramics/Glassware	0.2%	0.2%	205
R/C Glass	0.1%	0.1%	70
Metal	**3.0%**		**3,296**
Aluminum Beverage Cans	0.4%	0.1%	468
Aluminum Foil/Containers	0.2%	0.1%	222
Other Aluminum	0.0%	0.0%	0
Other Nonferrous	0.1%	0.1%	84
Food Cans - Tinned	0.6%	0.2%	696
Food Cans - Coated	0.1%	0.1%	154
White Goods	0.0%	0.0%	0
Other Ferrous Metal	1.2%	0.7%	1,297
R/C Metals	0.3%	0.2%	374
Organics	**49.2%**		**54,530**
Food - Vegetative	17.9%	3.3%	19,880
Food - Non-vegetative	6.2%	1.3%	6,891
Leaves & Grass	8.3%	3.5%	9,152
Prunings	3.1%	2.9%	3,493
Animal Manure	12.6%	6.0%	13,947
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	1.1%	0.7%	1,168
Wood Debris	**1.8%**		**2,029**
Treated Wood	0.1%	0.1%	66
Painted Wood	0.4%	0.4%	472
Dimensional Lumber	0.1%	0.1%	108
Engineered Wood	0.3%	0.4%	311
Pallets & Crates	0.0%	0.0%	0
Other Untreated Wood	0.2%	0.3%	264
Wood By-Products	0.7%	0.8%	784
R/C Wood Debris	0.0%	0.0%	24
Construction Materials	**3.1%**		**3,432**
Natural Wood	0.0%	0.0%	0
Insulation	0.2%	0.2%	167
Asphalt Paving	0.0%	0.0%	0
Concrete	0.0%	0.0%	0
Drywall	0.0%	0.0%	0
Carpet	0.3%	0.5%	371
Carpet Padding	0.0%	0.0%	0
Soil, Rocks, Sand	0.6%	0.8%	719
Asphalt Roofing	0.0%	0.0%	0
Plastic Flooring	0.1%	0.1%	55
Ceramics & Brick	0.3%	0.2%	366
R/C Construction Materials	1.6%	2.1%	1,755

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**9.9%**		**10,980**
Newspaper	1.0%	0.6%	1,142
Cardboard/Kraft Paper Products	0.0%	0.0%	0
Magazines	0.4%	0.3%	441
High-Grade Paper Products	0.6%	0.3%	689
Other Groundwood Paper Products	0.3%	0.3%	281
Mixed Low Grade Paper Products	2.6%	0.9%	2,902
Compostable Paper Products	4.9%	1.0%	5,411
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.1%	0.1%	114
Plastic Products	**2.9%**		**3,271**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.0%	0.0%	28
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	54
#6 PS Plastic Products	0.1%	0.1%	142
#7 Other Plastic Products	0.8%	0.2%	907
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.2%	0.2%	1,286
Plastic Film Products	0.7%	0.9%	735
R/C Plastic Products	0.1%	0.1%	118
Consumer Products	**4.6%**		**5,131**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	11
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	3
Gaming Equipment	0.0%	0.0%	24
Other Consumer Electronics	0.1%	0.1%	94
Textiles - Organic	2.2%	1.2%	2,458
Textiles - Synthetic	1.0%	0.5%	1,081
Shoes, Purses, Belts	0.5%	0.4%	506
Tires & Rubber	0.5%	0.7%	609
Furniture	0.2%	0.3%	210
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.1%	0.2%	134
Hazardous/Special Wastes	**5.2%**		**5,786**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	0
Solvent-based Glues	0.0%	0.0%	21
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.0%	0.0%	16
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	14
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	2
Medical Wastes	0.0%	0.0%	3
Pharmaceuticals/Vitamins	0.0%	0.0%	18
Disposable Diapers	4.8%	1.4%	5,343
Other Cleaners & Soaps	0.1%	0.1%	151
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.2%	0.3%	217
Residues	**2.4%**		**2,693**
Ash	0.4%	0.6%	414
Dust	0.9%	1.1%	1,046
Fines	1.1%	1.1%	1,233
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**110,912**
Sample Count	**14**		

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

Table 39: Northwest WGA Self-hauled C&D Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**0.6%**		**227**
Newspaper Packaging	0.0%	0.0%	10
Cardboard/Kraft Paper Packaging	0.4%	0.5%	151
Other Groundwood Paper Packaging	0.0%	0.0%	0
Mixed/Low Grade Paper Packaging	0.1%	0.2%	37
Compostable Paper Packaging	0.0%	0.0%	0
R/C Paper Packaging	0.1%	0.1%	28
Plastic Packaging	**0.4%**		**130**
#1 PETE Plastic Bottles	0.0%	0.1%	12
#1 PETE Plastic Non-bottles	0.0%	0.0%	1
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	0
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	4
#2 HDPE Plastic Jars & Tubs	0.0%	0.0%	0
#3 PVC Plastic Packaging	0.0%	0.0%	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0
#5 PP Plastic Packaging	0.0%	0.0%	1
#6 PS Plastic Packaging	0.0%	0.0%	4
#7 Other Plastic Packaging	0.2%	0.3%	60
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.0%	0.0%	3
Non-industrial Packaging Film Plastic	0.0%	0.0%	4
Industrial Packaging Film Plastic	0.1%	0.1%	40
R/C Plastic Packaging	0.0%	0.0%	1
Glass	**1.5%**		**573**
Clear Glass Containers	0.0%	0.0%	4
Green Glass Containers	0.0%	0.0%	0
Brown Glass Containers	0.0%	0.0%	10
Plate Glass	1.5%	2.5%	559
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	0
R/C Glass	0.0%	0.0%	0
Metal	**0.1%**		**47**
Aluminum Beverage Cans	0.0%	0.0%	0
Aluminum Foil/Containers	0.0%	0.0%	0
Other Aluminum	0.0%	0.0%	0
Other Nonferrous	0.1%	0.1%	20
Food Cans - Tinned	0.0%	0.0%	0
Food Cans - Coated	0.0%	0.0%	0
White Goods	0.0%	0.0%	0
Other Ferrous Metal	0.0%	0.1%	15
R/C Metals	0.0%	0.0%	12
Organics	**3.3%**		**1,222**
Food - Vegetative	0.0%	0.0%	9
Food - Non-vegetative	0.0%	0.0%	0
Leaves & Grass	3.3%	4.4%	1,213
Prunings	0.0%	0.0%	0
Animal Manure	0.0%	0.0%	0
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.0%	0.0%	0
Wood Debris	**44.9%**		**16,705**
Treated Wood	3.6%	5.0%	1,347
Painted Wood	25.2%	12.6%	9,350
Dimensional Lumber	8.9%	8.9%	3,292
Engineered Wood	1.6%	1.6%	606
Pallets & Crates	0.0%	0.0%	0
Other Untreated Wood	5.5%	6.8%	2,049
Wood By-Products	0.0%	0.0%	0
R/C Wood Debris	0.2%	0.2%	61
Construction Materials	**47.2%**		**17,537**
Natural Wood	0.0%	0.0%	0
Insulation	0.5%	0.8%	188
Asphalt Paving	10.9%	17.0%	4,068
Concrete	0.0%	0.0%	0
Drywall	3.3%	5.3%	1,219
Carpet	6.8%	11.2%	2,516
Carpet Padding	0.0%	0.0%	0
Soil, Rocks, Sand	0.0%	0.0%	3
Asphalt Roofing	10.3%	9.5%	3,823
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	5.0%	8.1%	1,840
R/C Construction Materials	10.4%	12.3%	3,881

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**0.7%**		**257**
Newspaper	0.0%	0.0%	0
Cardboard/Kraft Paper Products	0.0%	0.0%	0
Magazines	0.1%	0.1%	32
High-Grade Paper Products	0.0%	0.0%	5
Other Groundwood Paper Products	0.0%	0.0%	0
Mixed Low Grade Paper Products	0.3%	0.5%	106
Compostable Paper Products	0.1%	0.1%	26
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.2%	0.3%	88
Plastic Products	**0.2%**		**82**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.0%	0.0%	0
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	0
#6 PS Plastic Products	0.0%	0.0%	0
#7 Other Plastic Products	0.1%	0.1%	29
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	0.0%	0.1%	15
Plastic Film Products	0.0%	0.0%	0
R/C Plastic Products	0.1%	0.2%	37
Consumer Products	**0.9%**		**350**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	0
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.1%	0.1%	28
Textiles - Organic	0.5%	0.8%	181
Textiles - Synthetic	0.2%	0.3%	65
Shoes, Purses, Belts	0.2%	0.3%	76
Tires & Rubber	0.0%	0.0%	0
Furniture	0.0%	0.0%	0
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.0%	0.0%	0
Hazardous/Special Wastes	**0.1%**		**32**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	9
Solvent-based Glues	0.0%	0.0%	0
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	0
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.0%	0.0%	0
Pharmaceuticals/Vitamins	0.0%	0.0%	1
Disposable Diapers	0.0%	0.0%	0
Other Cleaners & Soaps	0.0%	0.0%	0
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.1%	0.1%	22
Residues	**0.0%**		**6**
Ash	0.0%	0.0%	0
Dust	0.0%	0.0%	0
Fines	0.0%	0.0%	6
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**37,169**
Sample Count	**11**		

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

Table 40: Northwest WGA Self-hauled Other Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**8.7%**		**2,243**
Newspaper Packaging	0.0%	0.0%	0
Cardboard/Kraft Paper Packaging	6.1%	5.2%	1,571
Other Groundwood Paper Packaging	0.0%	0.0%	7
Mixed/Low Grade Paper Packaging	1.3%	0.7%	328
Compostable Paper Packaging	0.1%	0.1%	37
R/C Paper Packaging	1.2%	0.9%	300
Plastic Packaging	**8.0%**		**2,061**
#1 PETE Plastic Bottles	0.9%	0.8%	244
#1 PETE Plastic Non-bottles	0.2%	0.2%	45
#2 HDPE Plastic Natural Bottles	0.3%	0.2%	74
#2 HDPE Plastic Colored Bottles	0.7%	0.5%	176
#2 HDPE Plastic Jars & Tubs	0.2%	0.3%	63
#3 PVC Plastic Packaging	0.0%	0.0%	0
#4 LDPE Plastic Packaging	0.0%	0.0%	1
#5 PP Plastic Packaging	0.6%	0.6%	162
#6 PS Plastic Packaging	1.0%	0.6%	256
#7 Other Plastic Packaging	0.6%	0.5%	146
PLA Packaging	0.0%	0.1%	10
Plastic Merchandise Bags	0.3%	0.2%	80
Non-industrial Packaging Film Plastic	2.7%	1.9%	704
Industrial Packaging Film Plastic	0.3%	0.3%	85
R/C Plastic Packaging	0.1%	0.1%	14
Glass	**5.1%**		**1,308**
Clear Glass Containers	2.0%	1.5%	515
Green Glass Containers	0.7%	1.0%	181
Brown Glass Containers	0.4%	0.4%	110
Plate Glass	1.4%	2.1%	362
Stoneware/Kitchen Ceramics/Glassware	0.3%	0.4%	79
R/C Glass	0.2%	0.2%	61
Metal	**11.4%**		**2,927**
Aluminum Beverage Cans	0.3%	0.2%	68
Aluminum Foil/Containers	0.2%	0.3%	46
Other Aluminum	0.0%	0.0%	0
Other Nonferrous	0.1%	0.1%	17
Food Cans - Tinned	0.9%	0.6%	232
Food Cans - Coated	0.1%	0.1%	32
White Goods	0.0%	0.0%	0
Other Ferrous Metal	1.2%	0.6%	312
R/C Metals	8.6%	6.3%	2,220
Organics	**13.0%**		**3,334**
Food - Vegetative	7.9%	4.3%	2,043
Food - Non-vegetative	2.4%	1.7%	627
Leaves & Grass	2.0%	2.6%	506
Prunings	0.1%	0.2%	34
Animal Manure	0.0%	0.0%	0
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.5%	0.4%	125
Wood Debris	**4.9%**		**1,253**
Treated Wood	0.2%	0.2%	63
Painted Wood	0.4%	0.4%	91
Dimensional Lumber	0.9%	1.3%	242
Engineered Wood	0.7%	1.1%	175
Pallets & Crates	0.2%	0.4%	57
Other Untreated Wood	0.0%	0.0%	4
Wood By-Products	0.0%	0.0%	0
R/C Wood Debris	2.4%	3.6%	620
Construction Materials	**5.5%**		**1,416**
Natural Wood	0.0%	0.0%	6
Insulation	0.5%	0.8%	128
Asphalt Paving	0.0%	0.0%	0
Concrete	0.0%	0.0%	0
Drywall	3.4%	4.0%	883
Carpet	0.8%	1.3%	214
Carpet Padding	0.0%	0.0%	0
Soil, Rocks, Sand	0.0%	0.0%	0
Asphalt Roofing	0.0%	0.0%	0
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	0.2%	0.4%	60
R/C Construction Materials	0.5%	0.6%	125
Paper Products	**14.0%**		**3,606**
Newspaper	3.8%	4.6%	967
Cardboard/Kraft Paper Products	0.0%	0.1%	11
Magazines	1.9%	1.8%	497
High-Grade Paper Products	0.2%	0.2%	53
Other Groundwood Paper Products	3.7%	3.9%	960
Mixed Low Grade Paper Products	2.3%	2.6%	595
Compostable Paper Products	1.6%	1.1%	400
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.5%	0.5%	123
Plastic Products	**10.1%**		**2,606**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.2%	0.2%	42
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	4
#6 PS Plastic Products	0.1%	0.2%	30
#7 Other Plastic Products	5.9%	3.6%	1,530
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.7%	1.2%	427
Plastic Film Products	0.0%	0.0%	11
R/C Plastic Products	2.2%	2.7%	564
Consumer Products	**14.9%**		**3,833**
Televisions - CRT	2.5%	4.1%	650
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	1.3%	2.0%	324
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	0
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	1.2%	1.3%	318
Textiles - Organic	4.6%	3.3%	1,180
Textiles - Synthetic	1.3%	0.8%	322
Shoes, Purses, Belts	1.0%	1.1%	264
Tires & Rubber	0.9%	0.8%	237
Furniture	0.0%	0.0%	0
Mattresses	1.8%	2.8%	452
R/C Consumer Products	0.3%	0.5%	86
Hazardous/Special Wastes	**4.1%**		**1,050**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	0
Solvent-based Glues	0.3%	0.3%	68
Latex-based Glues	0.2%	0.3%	51
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.1%	0.1%	21
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.1%	10
Explosives	0.0%	0.1%	11
Medical Wastes	0.0%	0.0%	1
Pharmaceuticals/Vitamins	0.0%	0.0%	0
Disposable Diapers	2.8%	3.7%	716
Other Cleaners & Soaps	0.1%	0.1%	35
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.5%	0.8%	139
Residues	**0.4%**		**93**
Ash	0.0%	0.0%	0
Dust	0.2%	0.3%	39
Fines	0.2%	0.3%	54
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**25,730**
Sample Count	**11**		

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

Puget Sound Waste Generation Area Composition Tables

Table 41: Puget Sound WGA Overall Disposed Waste Stream Detailed Composition, 2009

Material	Est. Percent	+/-	Est. Tons
Paper Packaging	**9.3%**		**260,030**
Newspaper Packaging	0.3%	0.5%	8,518
Cardboard/Kraft Paper Packaging	3.5%	1.4%	98,468
Other Groundwood Paper Packaging	0.1%	0.1%	3,766
Mixed/Low Grade Paper Packaging	2.7%	0.7%	77,088
Compostable Paper Packaging	1.1%	0.8%	31,986
R/C Paper Packaging	1.4%	0.8%	40,202
Plastic Packaging	**6.9%**		**194,420**
#1 PETE Plastic Bottles	0.6%	0.1%	16,317
#1 PETE Plastic Non-bottles	0.3%	0.1%	8,598
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	6,179
#2 HDPE Plastic Colored Bottles	0.3%	0.1%	9,823
#2 HDPE Plastic Jars & Tubs	0.5%	0.6%	14,994
#3 PVC Plastic Packaging	0.0%	0.0%	440
#4 LDPE Plastic Packaging	0.0%	0.0%	22
#5 PP Plastic Packaging	0.3%	0.1%	8,597
#6 PS Plastic Packaging	0.4%	0.1%	10,169
#7 Other Plastic Packaging	0.5%	0.1%	13,873
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.5%	0.1%	13,163
Non-industrial Packaging Film Plastic	2.0%	0.5%	57,133
Industrial Packaging Film Plastic	0.3%	0.3%	9,573
R/C Plastic Packaging	0.9%	1.3%	25,537
Glass	**2.1%**		**58,769**
Clear Glass Containers	0.7%	0.3%	20,864
Green Glass Containers	0.0%	0.0%	1,154
Brown Glass Containers	0.2%	0.1%	4,781
Plate Glass	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	0.2%	0.2%	6,237
R/C Glass	0.9%	1.0%	25,732
Metal	**6.7%**		**188,206**
Aluminum Beverage Cans	0.5%	0.3%	14,188
Aluminum Foil/Containers	0.1%	0.1%	2,785
Other Aluminum	0.1%	0.1%	3,333
Other Nonferrous	0.1%	0.1%	2,120
Food Cans - Tinned	0.8%	0.5%	21,686
Food Cans - Coated	0.1%	0.1%	2,880
White Goods	0.0%	0.0%	0
Other Ferrous Metal	3.5%	2.3%	97,285
R/C Metals	1.6%	1.2%	43,930
Organics	**28.3%**		**795,872**
Food - Vegetative	15.5%	4.6%	435,262
Food - Non-vegetative	6.0%	2.8%	169,058
Leaves & Grass	2.4%	2.5%	68,079
Prunings	0.1%	0.1%	3,723
Animal Manure	3.7%	1.9%	104,798
Animal Carcasses	0.0%	0.0%	291
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.5%	0.3%	14,662
Wood Debris	**7.5%**		**210,036**
Treated Wood	1.0%	1.1%	27,488
Painted Wood	1.4%	1.2%	38,246
Dimensional Lumber	0.7%	0.6%	19,578
Engineered Wood	1.0%	0.8%	29,112
Pallets & Crates	1.6%	1.7%	45,722
Other Untreated Wood	0.7%	0.9%	18,536
Wood By-Products	0.2%	0.2%	6,276
R/C Wood Wastes	0.9%	0.7%	25,077
Construction Materials	**14.2%**		**399,938**
Natural Wood	0.1%	0.2%	3,190
Insulation	0.4%	0.5%	9,932
Asphalt Paving	0.0%	0.0%	0
Concrete	0.0%	0.1%	1,112
Drywall	3.5%	3.6%	97,428
Carpet	3.7%	3.2%	103,496
Carpet Padding	0.9%	1.4%	24,302
Soil, Rocks, Sand	0.9%	1.0%	26,617
Asphalt Roofing	1.3%	1.2%	36,881
Plastic Flooring	0.3%	0.4%	7,587
Ceramics & Brick	2.0%	2.6%	56,451
R/C Construction Materials	1.2%	1.2%	32,941
Paper Products	**9.8%**		**276,212**
Newspaper	1.6%	0.8%	45,889
Cardboard/Kraft Paper Products	0.1%	0.1%	2,176
Magazines	0.9%	0.4%	24,166
High-Grade Paper Products	1.0%	0.5%	27,740
Other Groundwood Paper Products	0.3%	0.3%	7,727
Mixed Low Grade Paper Products	1.2%	0.5%	35,057
Compostable Paper Products	4.4%	1.5%	122,803
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.4%	0.5%	10,654
Plastic Products	**4.6%**		**130,360**
#1 PETE Plastic Products	0.0%	0.0%	72
#2 HDPE Plastic Products	0.0%	0.0%	328
#3 PVC Plastic Products	0.0%	0.0%	0
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.1%	0.1%	2,607
#6 PS Plastic Products	0.1%	0.1%	4,180
#7 Other Plastic Products	1.3%	0.5%	36,041
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.3%	0.3%	36,840
Plastic Film Products	0.2%	0.2%	5,680
R/C Plastic Products	1.6%	1.0%	44,611
Consumer Products	**6.2%**		**175,237**
Televisions - CRT	0.6%	1.0%	16,991
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.1%	898
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.1%	0.1%	2,062
Audio Equipment	0.1%	0.1%	1,838
Gaming Equipment	0.0%	0.0%	114
Other Consumer Electronics	0.8%	0.6%	22,664
Textiles - Organic	1.6%	0.6%	43,874
Textiles - Synthetic	0.9%	0.4%	24,449
Shoes, Purses, Belts	0.4%	0.2%	10,932
Tires & Rubber	0.1%	0.1%	4,076
Furniture	1.7%	1.9%	46,845
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.0%	0.0%	493
Hazardous/Special Wastes	**4.1%**		**115,004**
Pesticides/Herbicides	0.0%	0.0%	172
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	75
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.1%	0.1%	2,535
Solvent-based Glues	0.3%	0.4%	7,336
Latex-based Glues	0.0%	0.0%	41
Oil-based Paint & Solvent	0.0%	0.0%	496
Caustic Cleaners	0.0%	0.0%	638
Dry-cell Batteries	0.0%	0.0%	494
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.1%	1,317
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.3%	0.5%	9,418
Pharmaceuticals/Vitamins	0.0%	0.0%	690
Disposable Diapers	3.1%	1.1%	87,646
Other Cleaners & Soaps	0.1%	0.1%	3,599
Other Hazardous	0.0%	0.0%	124
Other Non-hazardous	0.0%	0.0%	422
Residues	**0.2%**		**6,905**
Ash	0.2%	0.3%	5,346
Dust	0.1%	0.1%	1,558
Fines	0.0%	0.0%	0
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**2,810,988**
Sample Count	**41**		

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

Table 42: Puget Sound WGA Commercial Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**11.4%**		**152,263**
Newspaper Packaging	0.6%	1.0%	8,197
Cardboard/Kraft Paper Packaging	4.4%	2.3%	58,017
Other Groundwood Paper Packaging	0.1%	0.1%	1,769
Mixed/Low Grade Paper Packaging	2.7%	1.3%	36,315
Compostable Paper Packaging	1.7%	1.5%	22,135
R/C Paper Packaging	1.9%	1.7%	25,831
Plastic Packaging	**7.2%**		**95,880**
#1 PETE Plastic Bottles	0.3%	0.2%	4,362
#1 PETE Plastic Non-bottles	0.3%	0.2%	3,574
#2 HDPE Plastic Natural Bottles	0.1%	0.1%	1,801
#2 HDPE Plastic Colored Bottles	0.1%	0.1%	1,713
#2 HDPE Plastic Jars & Tubs	1.0%	1.3%	13,301
#3 PVC Plastic Packaging	0.0%	0.0%	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0
#5 PP Plastic Packaging	0.2%	0.1%	2,478
#6 PS Plastic Packaging	0.2%	0.1%	2,344
#7 Other Plastic Packaging	0.3%	0.2%	3,523
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.2%	0.2%	2,986
Non-industrial Packaging Film Plastic	2.2%	0.9%	29,707
Industrial Packaging Film Plastic	0.5%	0.5%	6,805
R/C Plastic Packaging	1.7%	2.8%	23,287
Glass	**1.6%**		**20,959**
Clear Glass Containers	0.3%	0.3%	4,540
Green Glass Containers	0.0%	0.0%	0
Brown Glass Containers	0.0%	0.0%	405
Plate Glass	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	0.1%	0.1%	674
R/C Glass	1.2%	1.9%	15,340
Metal	**6.8%**		**90,557**
Aluminum Beverage Cans	0.5%	0.5%	6,665
Aluminum Foil/Containers	0.1%	0.1%	1,083
Other Aluminum	0.2%	0.2%	2,840
Other Nonferrous	0.2%	0.2%	2,106
Food Cans - Tinned	0.9%	1.1%	11,638
Food Cans - Coated	0.0%	0.0%	108
White Goods	0.0%	0.0%	0
Other Ferrous Metal	2.9%	3.5%	38,569
R/C Metals	2.1%	2.5%	27,548
Organics	**26.9%**		**357,976**
Food - Vegetative	18.1%	9.4%	241,401
Food - Non-vegetative	8.1%	5.9%	107,807
Leaves & Grass	0.0%	0.1%	650
Prunings	0.0%	0.0%	337
Animal Manure	0.2%	0.4%	3,320
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.3%	0.5%	4,462
Wood Debris	**5.9%**		**78,682**
Treated Wood	1.6%	2.2%	21,021
Painted Wood	1.3%	1.5%	17,508
Dimensional Lumber	0.7%	0.9%	9,361
Engineered Wood	0.8%	1.0%	10,813
Pallets & Crates	0.5%	0.6%	6,204
Other Untreated Wood	0.1%	0.1%	1,131
Wood By-Products	0.0%	0.0%	0
R/C Wood Debris	0.9%	1.0%	12,645
Construction Materials	**22.0%**		**293,562**
Natural Wood	0.0%	0.0%	0
Insulation	0.7%	1.1%	9,852
Asphalt Paving	0.0%	0.0%	0
Concrete	0.0%	0.0%	0
Drywall	5.7%	7.2%	75,459
Carpet	5.6%	6.4%	74,357
Carpet Padding	1.8%	3.0%	24,302
Soil, Rocks, Sand	1.6%	2.0%	21,587
Asphalt Roofing	0.2%	0.3%	2,378
Plastic Flooring	0.6%	0.9%	7,332
Ceramics & Brick	4.0%	5.4%	53,585
R/C Construction Materials	1.9%	2.4%	24,711

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**9.3%**		**123,847**
Newspaper	1.1%	0.9%	14,482
Cardboard/Kraft Paper Products	0.1%	0.1%	1,109
Magazines	0.5%	0.6%	7,266
High-Grade Paper Products	1.2%	1.0%	15,973
Other Groundwood Paper Products	0.1%	0.1%	1,445
Mixed Low Grade Paper Products	1.0%	0.7%	13,317
Compostable Paper Products	5.1%	3.0%	67,998
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.2%	0.2%	2,258
Plastic Products	**4.4%**		**58,816**
#1 PETE Plastic Products	0.0%	0.0%	72
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.0%	0.0%	0
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.1%	0.2%	1,432
#6 PS Plastic Products	0.2%	0.2%	2,469
#7 Other Plastic Products	0.7%	0.4%	9,803
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.7%	0.7%	22,360
Plastic Film Products	0.1%	0.1%	807
R/C Plastic Products	1.6%	1.6%	21,874
Consumer Products	**1.9%**		**25,283**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	0
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	1.2%	1.0%	15,536
Textiles - Organic	0.5%	0.4%	6,306
Textiles - Synthetic	0.2%	0.2%	2,164
Shoes, Purses, Belts	0.1%	0.1%	915
Tires & Rubber	0.0%	0.0%	192
Furniture	0.0%	0.0%	0
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.0%	0.0%	170
Hazardous/Special Wastes	**2.6%**		**34,241**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	409
Solvent-based Glues	0.0%	0.0%	0
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.1%	552
Dry-cell Batteries	0.0%	0.0%	0
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.1%	0.2%	1,317
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.7%	1.1%	9,123
Pharmaceuticals/Vitamins	0.0%	0.1%	637
Disposable Diapers	1.6%	1.6%	21,728
Other Cleaners & Soaps	0.0%	0.0%	473
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.0%	0.0%	0
Residues	**0.0%**		**0**
Ash	0.0%	0.0%	0
Dust	0.0%	0.0%	0
Fines	0.0%	0.0%	0
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**1,332,068**
Sample Count	**13**		

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

Table 43: Puget Sound WGA Residential Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**7.8%**		**76,441**
Newspaper Packaging	0.0%	0.0%	0
Cardboard/Kraft Paper Packaging	1.5%	0.5%	15,021
Other Groundwood Paper Packaging	0.2%	0.1%	1,855
Mixed/Low Grade Paper Packaging	3.8%	0.9%	37,052
Compostable Paper Packaging	1.0%	0.7%	9,338
R/C Paper Packaging	1.3%	0.2%	13,175
Plastic Packaging	**9.0%**		**88,211**
#1 PETE Plastic Bottles	1.1%	0.2%	10,755
#1 PETE Plastic Non-bottles	0.5%	0.1%	4,882
#2 HDPE Plastic Natural Bottles	0.4%	0.2%	4,078
#2 HDPE Plastic Colored Bottles	0.8%	0.1%	7,418
#2 HDPE Plastic Jars & Tubs	0.1%	0.1%	879
#3 PVC Plastic Packaging	0.0%	0.1%	379
#4 LDPE Plastic Packaging	0.0%	0.0%	22
#5 PP Plastic Packaging	0.6%	0.2%	5,708
#6 PS Plastic Packaging	0.8%	0.4%	7,471
#7 Other Plastic Packaging	1.0%	0.2%	9,628
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	1.0%	0.2%	9,428
Non-industrial Packaging Film Plastic	2.6%	0.4%	25,641
Industrial Packaging Film Plastic	0.0%	0.1%	318
R/C Plastic Packaging	0.2%	0.1%	1,602
Glass	**2.4%**		**23,165**
Clear Glass Containers	1.3%	0.7%	13,067
Green Glass Containers	0.1%	0.0%	620
Brown Glass Containers	0.4%	0.4%	4,145
Plate Glass	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	0.2%	0.2%	1,642
R/C Glass	0.4%	0.2%	3,691
Metal	**4.1%**		**39,582**
Aluminum Beverage Cans	0.6%	0.3%	6,336
Aluminum Foil/Containers	0.2%	0.1%	1,641
Other Aluminum	0.0%	0.1%	422
Other Nonferrous	0.0%	0.0%	0
Food Cans - Tinned	0.9%	0.4%	9,188
Food Cans - Coated	0.2%	0.1%	2,415
White Goods	0.0%	0.0%	0
Other Ferrous Metal	0.9%	0.4%	8,608
R/C Metals	1.1%	0.7%	10,974
Organics	**42.2%**		**412,401**
Food - Vegetative	19.0%	3.0%	185,207
Food - Non-vegetative	6.0%	1.5%	58,588
Leaves & Grass	6.6%	7.1%	64,079
Prunings	0.3%	0.3%	2,767
Animal Manure	9.8%	5.3%	95,461
Animal Carcasses	0.0%	0.0%	291
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.6%	0.3%	6,008
Wood Debris	**0.7%**		**6,442**
Treated Wood	0.0%	0.0%	38
Painted Wood	0.0%	0.0%	196
Dimensional Lumber	0.0%	0.0%	0
Engineered Wood	0.0%	0.1%	464
Pallets & Crates	0.0%	0.0%	0
Other Untreated Wood	0.1%	0.1%	826
Wood By-Products	0.4%	0.6%	3,805
R/C Wood Debris	0.1%	0.1%	1,114
Construction Materials	**1.7%**		**16,625**
Natural Wood	0.0%	0.0%	84
Insulation	0.0%	0.0%	0
Asphalt Paving	0.0%	0.0%	0
Concrete	0.0%	0.0%	0
Drywall	0.0%	0.0%	0
Carpet	0.8%	0.7%	7,631
Carpet Padding	0.0%	0.0%	0
Soil, Rocks, Sand	0.2%	0.3%	2,235
Asphalt Roofing	0.4%	0.7%	3,921
Plastic Flooring	0.0%	0.0%	255
Ceramics & Brick	0.0%	0.1%	348
R/C Construction Materials	0.2%	0.4%	2,150

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**12.7%**		**124,036**
Newspaper	2.1%	1.1%	20,809
Cardboard/Kraft Paper Products	0.1%	0.1%	600
Magazines	1.3%	0.8%	12,480
High-Grade Paper Products	1.1%	0.6%	10,865
Other Groundwood Paper Products	0.6%	0.7%	6,282
Mixed Low Grade Paper Products	2.1%	0.9%	20,137
Compostable Paper Products	5.3%	1.2%	52,012
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.1%	0.1%	851
Plastic Products	**4.4%**		**43,067**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.0%	0.0%	0
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	0
#6 PS Plastic Products	0.2%	0.1%	1,693
#7 Other Plastic Products	1.5%	1.0%	14,916
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.3%	0.2%	12,831
Plastic Film Products	0.1%	0.1%	1,052
R/C Plastic Products	1.3%	1.5%	12,575
Consumer Products	**6.8%**		**66,312**
Televisions - CRT	1.7%	2.9%	16,991
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.1%	337
Audio Equipment	0.0%	0.0%	84
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.2%	0.2%	1,518
Textiles - Organic	2.2%	1.2%	21,686
Textiles - Synthetic	1.3%	0.9%	12,803
Shoes, Purses, Belts	0.9%	0.4%	9,026
Tires & Rubber	0.4%	0.3%	3,545
Furniture	0.0%	0.0%	0
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.0%	0.0%	323
Hazardous/Special Wastes	**8.1%**		**78,845**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	53
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.2%	0.2%	2,126
Solvent-based Glues	0.8%	1.2%	7,336
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.0%	0.1%	396
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.1%	483
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.0%	0.1%	295
Pharmaceuticals/Vitamins	0.0%	0.0%	48
Disposable Diapers	6.7%	2.3%	65,703
Other Cleaners & Soaps	0.2%	0.2%	1,857
Other Hazardous	0.0%	0.0%	124
Other Non-hazardous	0.0%	0.1%	422
Residues	**0.2%**		**1,497**
Ash	0.0%	0.0%	0
Dust	0.2%	0.2%	1,497
Fines	0.0%	0.0%	0
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**976,624**
Sample Count	**10**		

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

Table 44: Puget Sound WGA Self-hauled C&D Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**0.8%**		**1,498**
Newspaper Packaging	0.0%	0.0%	0
Cardboard/Kraft Paper Packaging	0.7%	0.9%	1,308
Other Groundwood Paper Packaging	0.0%	0.0%	0
Mixed/Low Grade Paper Packaging	0.0%	0.0%	0
Compostable Paper Packaging	0.0%	0.1%	85
R/C Paper Packaging	0.1%	0.1%	105
Plastic Packaging	**1.0%**		**1,816**
#1 PETE Plastic Bottles	0.0%	0.0%	86
#1 PETE Plastic Non-bottles	0.0%	0.0%	0
#2 HDPE Plastic Natural Bottles	0.1%	0.1%	141
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	4
#2 HDPE Plastic Jars & Tubs	0.4%	0.7%	743
#3 PVC Plastic Packaging	0.0%	0.0%	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0
#5 PP Plastic Packaging	0.0%	0.0%	52
#6 PS Plastic Packaging	0.0%	0.0%	48
#7 Other Plastic Packaging	0.0%	0.0%	7
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.0%	0.0%	22
Non-industrial Packaging Film Plastic	0.2%	0.2%	273
Industrial Packaging Film Plastic	0.2%	0.3%	410
R/C Plastic Packaging	0.0%	0.0%	28
Glass	**0.2%**		**434**
Clear Glass Containers	0.2%	0.3%	434
Green Glass Containers	0.0%	0.0%	0
Brown Glass Containers	0.0%	0.0%	0
Plate Glass	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	0
R/C Glass	0.0%	0.0%	0
Metal	**2.1%**		**3,841**
Aluminum Beverage Cans	0.0%	0.0%	10
Aluminum Foil/Containers	0.0%	0.0%	11
Other Aluminum	0.0%	0.0%	0
Other Nonferrous	0.0%	0.0%	0
Food Cans - Tinned	0.0%	0.0%	26
Food Cans - Coated	0.0%	0.0%	0
White Goods	0.0%	0.0%	0
Other Ferrous Metal	1.7%	1.6%	3,034
R/C Metals	0.4%	0.4%	761
Organics	**3.0%**		**5,444**
Food - Vegetative	0.5%	0.7%	849
Food - Non-vegetative	0.3%	0.4%	482
Leaves & Grass	0.0%	0.0%	0
Prunings	0.0%	0.1%	63
Animal Manure	0.0%	0.0%	0
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	2.2%	2.2%	4,049
Wood Debris	**43.5%**		**78,865**
Treated Wood	3.5%	6.0%	6,366
Painted Wood	10.1%	14.2%	18,354
Dimensional Lumber	5.5%	6.6%	9,917
Engineered Wood	9.8%	10.3%	17,836
Pallets & Crates	4.0%	6.3%	7,316
Other Untreated Wood	7.7%	13.1%	13,928
Wood By-Products	0.5%	0.7%	831
R/C Wood Debris	2.4%	2.6%	4,318
Construction Materials	**44.1%**		**79,842**
Natural Wood	1.7%	2.9%	3,105
Insulation	0.0%	0.1%	80
Asphalt Paving	0.0%	0.0%	0
Concrete	0.0%	0.0%	0
Drywall	10.1%	15.6%	18,348
Carpet	10.8%	17.7%	19,498
Carpet Padding	0.0%	0.0%	0
Soil, Rocks, Sand	1.5%	2.6%	2,795
Asphalt Roofing	16.9%	17.8%	30,581
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	1.2%	1.9%	2,134
R/C Construction Materials	1.8%	2.5%	3,300

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**0.5%**		**904**
Newspaper	0.0%	0.0%	0
Cardboard/Kraft Paper Products	0.3%	0.4%	467
Magazines	0.0%	0.0%	0
High-Grade Paper Products	0.0%	0.0%	4
Other Groundwood Paper Products	0.0%	0.0%	0
Mixed Low Grade Paper Products	0.0%	0.1%	85
Compostable Paper Products	0.2%	0.2%	341
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.0%	0.0%	7
Plastic Products	**1.6%**		**2,886**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.0%	0.0%	0
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	0
#6 PS Plastic Products	0.0%	0.0%	19
#7 Other Plastic Products	0.4%	0.5%	665
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	0.3%	0.2%	529
Plastic Film Products	0.0%	0.0%	7
R/C Plastic Products	0.9%	1.4%	1,666
Consumer Products	**3.1%**		**5,566**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	0
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.0%	0.0%	0
Textiles - Organic	0.1%	0.1%	127
Textiles - Synthetic	0.3%	0.4%	493
Shoes, Purses, Belts	0.0%	0.0%	22
Tires & Rubber	0.1%	0.1%	93
Furniture	2.7%	4.5%	4,831
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.0%	0.0%	0
Hazardous/Special Wastes	**0.0%**		**78**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	22
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	0
Solvent-based Glues	0.0%	0.0%	0
Latex-based Glues	0.0%	0.0%	41
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	11
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.0%	0.0%	0
Pharmaceuticals/Vitamins	0.0%	0.0%	4
Disposable Diapers	0.0%	0.0%	0
Other Cleaners & Soaps	0.0%	0.0%	0
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.0%	0.0%	0
Residues	**0.0%**		**0**
Ash	0.0%	0.0%	0
Dust	0.0%	0.0%	0
Fines	0.0%	0.0%	0
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**181,174**
Sample Count	**9**		

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

Table 45: Puget Sound WGA Self-hauled Other Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**9.3%**		**29,827**
Newspaper Packaging	0.1%	0.1%	321
Cardboard/Kraft Paper Packaging	7.5%	7.1%	24,123
Other Groundwood Paper Packaging	0.0%	0.1%	143
Mixed/Low Grade Paper Packaging	1.2%	1.0%	3,721
Compostable Paper Packaging	0.1%	0.2%	428
R/C Paper Packaging	0.3%	0.3%	1,091
Plastic Packaging	**2.7%**		**8,513**
#1 PETE Plastic Bottles	0.3%	0.3%	1,113
#1 PETE Plastic Non-bottles	0.0%	0.1%	143
#2 HDPE Plastic Natural Bottles	0.0%	0.1%	158
#2 HDPE Plastic Colored Bottles	0.2%	0.2%	688
#2 HDPE Plastic Jars & Tubs	0.0%	0.0%	71
#3 PVC Plastic Packaging	0.0%	0.0%	61
#4 LDPE Plastic Packaging	0.0%	0.0%	0
#5 PP Plastic Packaging	0.1%	0.1%	359
#6 PS Plastic Packaging	0.1%	0.1%	307
#7 Other Plastic Packaging	0.2%	0.2%	715
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.2%	0.1%	727
Non-industrial Packaging Film Plastic	0.5%	0.3%	1,511
Industrial Packaging Film Plastic	0.6%	0.5%	2,040
R/C Plastic Packaging	0.2%	0.1%	620
Glass	**4.4%**		**14,210**
Clear Glass Containers	0.9%	1.3%	2,823
Green Glass Containers	0.2%	0.2%	535
Brown Glass Containers	0.1%	0.1%	232
Plate Glass	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	1.2%	2.0%	3,921
R/C Glass	2.1%	3.2%	6,701
Metal	**16.9%**		**54,225**
Aluminum Beverage Cans	0.4%	0.4%	1,178
Aluminum Foil/Containers	0.0%	0.0%	50
Other Aluminum	0.0%	0.0%	71
Other Nonferrous	0.0%	0.0%	14
Food Cans - Tinned	0.3%	0.2%	834
Food Cans - Coated	0.1%	0.1%	356
White Goods	0.0%	0.0%	0
Other Ferrous Metal	14.7%	13.3%	47,074
R/C Metals	1.4%	1.2%	4,648
Organics	**6.2%**		**20,052**
Food - Vegetative	2.4%	2.1%	7,805
Food - Non-vegetative	0.7%	0.8%	2,181
Leaves & Grass	1.0%	1.8%	3,350
Prunings	0.2%	0.3%	556
Animal Manure	1.9%	2.0%	6,016
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.0%	0.1%	143
Wood Debris	**14.3%**		**46,046**
Treated Wood	0.0%	0.0%	64
Painted Wood	0.7%	0.8%	2,189
Dimensional Lumber	0.1%	0.2%	299
Engineered Wood	0.0%	0.0%	0
Pallets & Crates	10.0%	14.5%	32,202
Other Untreated Wood	0.8%	1.1%	2,652
Wood By-Products	0.5%	0.8%	1,640
R/C Wood Debris	2.2%	3.5%	7,000
Construction Materials	**3.1%**		**9,908**
Natural Wood	0.0%	0.0%	0
Insulation	0.0%	0.0%	0
Asphalt Paving	0.0%	0.0%	0
Concrete	0.3%	0.6%	1,112
Drywall	1.1%	1.9%	3,621
Carpet	0.6%	1.0%	2,010
Carpet Padding	0.0%	0.0%	0
Soil, Rocks, Sand	0.0%	0.0%	0
Asphalt Roofing	0.0%	0.0%	0
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	0.1%	0.2%	385
R/C Construction Materials	0.9%	1.4%	2,780
Paper Products	**8.5%**		**27,424**
Newspaper	3.3%	4.3%	10,598
Cardboard/Kraft Paper Products	0.0%	0.0%	0
Magazines	1.4%	1.5%	4,420
High-Grade Paper Products	0.3%	0.4%	898
Other Groundwood Paper Products	0.0%	0.0%	0
Mixed Low Grade Paper Products	0.5%	0.6%	1,519
Compostable Paper Products	0.8%	0.8%	2,452
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	2.3%	3.9%	7,538
Plastic Products	**8.0%**		**25,591**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.1%	0.1%	328
#3 PVC Plastic Products	0.0%	0.0%	0
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.4%	0.4%	1,175
#6 PS Plastic Products	0.0%	0.0%	0
#7 Other Plastic Products	3.3%	2.4%	10,657
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	0.3%	0.2%	1,121
Plastic Film Products	1.2%	1.3%	3,814
R/C Plastic Products	2.6%	2.5%	8,497
Consumer Products	**24.3%**		**78,076**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.3%	0.5%	898
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.5%	0.9%	1,725
Audio Equipment	0.5%	0.7%	1,754
Gaming Equipment	0.0%	0.1%	114
Other Consumer Electronics	1.7%	2.4%	5,610
Textiles - Organic	4.9%	3.4%	15,756
Textiles - Synthetic	2.8%	1.8%	8,989
Shoes, Purses, Belts	0.3%	0.5%	969
Tires & Rubber	0.1%	0.1%	246
Furniture	13.1%	16.4%	42,015
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.0%	0.0%	0
Hazardous/Special Wastes	**0.6%**		**1,841**
Pesticides/Herbicides	0.1%	0.1%	172
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	0
Solvent-based Glues	0.0%	0.0%	0
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.0%	0.1%	100
Caustic Cleaners	0.0%	0.0%	86
Dry-cell Batteries	0.0%	0.0%	0
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.0%	0.0%	0
Pharmaceuticals/Vitamins	0.0%	0.0%	1
Disposable Diapers	0.1%	0.1%	214
Other Cleaners & Soaps	0.4%	0.6%	1,269
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.0%	0.0%	0
Residues	**1.7%**		**5,408**
Ash	1.7%	2.6%	5,346
Dust	0.0%	0.0%	61
Fines	0.0%	0.0%	0
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**321,121**
Sample Count	**9**		

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

Southwest Waste Generation Area Composition Tables

Table 46: Southwest WGA Overall Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**10.7%**		**45,753**
Newspaper Packaging	0.4%	0.2%	1,750
Cardboard/Kraft Paper Packaging	2.8%	0.7%	11,801
Other Groundwood Paper Packaging	0.2%	0.2%	682
Mixed/Low Grade Paper Packaging	1.7%	0.5%	7,200
Compostable Paper Packaging	1.7%	1.2%	7,273
R/C Paper Packaging	4.0%	2.8%	17,048
Plastic Packaging	**6.5%**		**27,823**
#1 PETE Plastic Bottles	0.6%	0.2%	2,471
#1 PETE Plastic Non-bottles	0.2%	0.0%	837
#2 HDPE Plastic Natural Bottles	0.3%	0.1%	1,112
#2 HDPE Plastic Colored Bottles	0.2%	0.0%	858
#2 HDPE Plastic Jars & Tubs	0.2%	0.2%	872
#3 PVC Plastic Packaging	0.0%	0.0%	45
#4 LDPE Plastic Packaging	0.0%	0.0%	37
#5 PP Plastic Packaging	0.3%	0.0%	1,080
#6 PS Plastic Packaging	0.3%	0.1%	1,390
#7 Other Plastic Packaging	0.5%	0.2%	2,347
PLA Packaging	0.0%	0.0%	13
Plastic Merchandise Bags	0.4%	0.1%	1,697
Non-industrial Packaging Film Plastic	3.0%	1.8%	12,878
Industrial Packaging Film Plastic	0.4%	0.3%	1,616
R/C Plastic Packaging	0.1%	0.1%	569
Glass	**3.1%**		**13,450**
Clear Glass Containers	0.9%	0.4%	3,725
Green Glass Containers	0.3%	0.2%	1,258
Brown Glass Containers	0.5%	0.3%	1,979
Plate Glass	0.5%	0.5%	2,252
Stoneware/Kitchen Ceramics/Glassware	0.2%	0.2%	985
R/C Glass	0.8%	0.6%	3,251
Metal	**4.7%**		**20,157**
Aluminum Beverage Cans	0.2%	0.1%	1,035
Aluminum Foil/Containers	0.1%	0.0%	377
Other Aluminum	0.0%	0.0%	70
Other Nonferrous	0.1%	0.1%	618
Food Cans - Tinned	0.6%	0.2%	2,464
Food Cans - Coated	0.1%	0.0%	276
White Goods	0.2%	0.3%	655
Other Ferrous Metal	1.9%	0.8%	8,269
R/C Metals	1.5%	0.7%	6,393
Organics	**23.5%**		**100,440**
Food - Vegetative	12.6%	3.6%	53,864
Food - Non-vegetative	5.3%	1.5%	22,519
Leaves & Grass	2.4%	1.3%	10,076
Prunings	0.6%	0.5%	2,482
Animal Manure	2.1%	0.7%	9,021
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.6%	0.3%	2,479
Wood Debris	**12.3%**		**52,579**
Treated Wood	3.1%	3.2%	13,329
Painted Wood	2.0%	2.0%	8,446
Dimensional Lumber	1.2%	0.7%	4,969
Engineered Wood	0.8%	0.6%	3,440
Pallets & Crates	2.6%	2.1%	11,320
Other Untreated Wood	0.2%	0.3%	1,011
Wood By-Products	0.7%	0.5%	3,120
R/C Wood Wastes	1.6%	1.0%	6,945
Construction Materials	**12.1%**		**51,976**
Natural Wood	0.0%	0.0%	0
Insulation	0.3%	0.2%	1,256
Asphalt Paving	0.9%	1.4%	3,684
Concrete	0.2%	0.3%	832
Drywall	2.1%	1.1%	9,152
Carpet	1.5%	1.0%	6,355
Carpet Padding	0.6%	0.5%	2,483
Soil, Rocks, Sand	2.1%	3.3%	9,072
Asphalt Roofing	2.0%	2.5%	8,492
Plastic Flooring	0.2%	0.3%	767
Ceramics & Brick	0.7%	1.0%	3,047
R/C Construction Materials	1.6%	0.8%	6,836
Paper Products	**7.6%**		**32,492**
Newspaper	0.4%	0.2%	1,745
Cardboard/Kraft Paper Products	0.1%	0.1%	330
Magazines	0.6%	0.3%	2,636
High-Grade Paper Products	0.9%	0.4%	3,822
Other Groundwood Paper Products	0.1%	0.1%	446
Mixed Low Grade Paper Products	1.5%	0.8%	6,583
Compostable Paper Products	3.6%	1.3%	15,273
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.4%	0.3%	1,657
Plastic Products	**4.1%**		**17,345**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	66
#3 PVC Plastic Products	0.0%	0.0%	38
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.1%	0.1%	323
#6 PS Plastic Products	0.2%	0.1%	873
#7 Other Plastic Products	1.2%	0.4%	5,238
PLA Products	0.0%	0.0%	41
Plastic Garbage Bags	1.2%	0.4%	5,145
Plastic Film Products	0.3%	0.2%	1,368
R/C Plastic Products	1.0%	0.6%	4,253
Consumer Products	**9.2%**		**39,399**
Televisions - CRT	1.1%	0.8%	4,539
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.1%	0.1%	339
Computer Monitors - CRT	0.1%	0.2%	519
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.1%	0.1%	495
Computer Peripherals	0.0%	0.0%	137
Audio Equipment	0.1%	0.1%	414
Gaming Equipment	0.0%	0.0%	171
Other Consumer Electronics	0.4%	0.3%	1,541
Textiles - Organic	2.5%	1.0%	10,821
Textiles - Synthetic	0.8%	0.3%	3,561
Shoes, Purses, Belts	0.3%	0.2%	1,355
Tires & Rubber	0.3%	0.1%	1,203
Furniture	2.0%	1.4%	8,657
Mattresses	0.5%	0.6%	2,182
R/C Consumer Products	0.8%	0.8%	3,464
Hazardous/Special Wastes	**5.6%**		**24,125**
Pesticides/Herbicides	0.0%	0.0%	44
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	6
Fluorescent Tubes	0.0%	0.0%	51
Asbestos	0.0%	0.0%	0
Latex Paint	0.1%	0.1%	410
Solvent-based Glues	0.0%	0.0%	41
Latex-based Glues	0.0%	0.0%	13
Oil-based Paint & Solvent	0.0%	0.0%	64
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.1%	0.0%	264
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.1%	0.1%	270
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	143
Explosives	0.0%	0.0%	0
Medical Wastes	1.1%	1.1%	4,579
Pharmaceuticals/Vitamins	0.0%	0.0%	31
Disposable Diapers	3.9%	1.4%	16,793
Other Cleaners & Soaps	0.2%	0.1%	792
Other Hazardous	0.1%	0.1%	503
Other Non-hazardous	0.0%	0.0%	123
Residues	**0.6%**		**2,545**
Ash	0.4%	0.7%	1,732
Dust	0.1%	0.1%	249
Fines	0.1%	0.1%	565
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**428,085**
Sample Count	**88**		

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

Table 47: Southwest WGA Commercial Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**15.2%**		**31,648**
Newspaper Packaging	0.4%	0.3%	749
Cardboard/Kraft Paper Packaging	3.3%	1.1%	6,918
Other Groundwood Paper Packaging	0.3%	0.4%	566
Mixed/Low Grade Paper Packaging	1.4%	0.8%	3,005
Compostable Paper Packaging	2.6%	2.4%	5,380
R/C Paper Packaging	7.2%	5.7%	15,031
Plastic Packaging	**7.2%**		**15,027**
#1 PETE Plastic Bottles	0.5%	0.3%	1,051
#1 PETE Plastic Non-bottles	0.1%	0.1%	250
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	313
#2 HDPE Plastic Colored Bottles	0.1%	0.1%	186
#2 HDPE Plastic Jars & Tubs	0.4%	0.3%	750
#3 PVC Plastic Packaging	0.0%	0.0%	20
#4 LDPE Plastic Packaging	0.0%	0.0%	0
#5 PP Plastic Packaging	0.1%	0.1%	271
#6 PS Plastic Packaging	0.2%	0.1%	495
#7 Other Plastic Packaging	0.4%	0.3%	924
PLA Packaging	0.0%	0.0%	13
Plastic Merchandise Bags	0.1%	0.1%	251
Non-industrial Packaging Film Plastic	4.3%	3.6%	8,949
Industrial Packaging Film Plastic	0.6%	0.6%	1,277
R/C Plastic Packaging	0.1%	0.1%	277
Glass	**2.0%**		**4,094**
Clear Glass Containers	0.9%	0.8%	1,948
Green Glass Containers	0.3%	0.3%	610
Brown Glass Containers	0.5%	0.7%	956
Plate Glass	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	36
R/C Glass	0.3%	0.3%	543
Metal	**4.8%**		**9,933**
Aluminum Beverage Cans	0.2%	0.1%	355
Aluminum Foil/Containers	0.0%	0.0%	92
Other Aluminum	0.0%	0.0%	12
Other Nonferrous	0.2%	0.3%	394
Food Cans - Tinned	0.5%	0.5%	1,074
Food Cans - Coated	0.0%	0.0%	8
White Goods	0.0%	0.0%	0
Other Ferrous Metal	2.2%	1.4%	4,641
R/C Metals	1.6%	1.2%	3,358
Organics	**18.0%**		**37,615**
Food - Vegetative	11.7%	7.2%	24,389
Food - Non-vegetative	4.2%	2.7%	8,711
Leaves & Grass	1.1%	1.5%	2,340
Prunings	0.0%	0.0%	13
Animal Manure	0.7%	1.1%	1,375
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.4%	0.5%	787
Wood Debris	**16.2%**		**33,794**
Treated Wood	5.7%	6.5%	11,938
Painted Wood	2.5%	4.0%	5,300
Dimensional Lumber	1.0%	1.1%	1,993
Engineered Wood	1.3%	1.0%	2,626
Pallets & Crates	4.1%	3.9%	8,601
Other Untreated Wood	0.1%	0.1%	111
Wood By-Products	0.4%	0.6%	861
R/C Wood Debris	1.1%	1.8%	2,363
Construction Materials	**12.3%**		**25,752**
Natural Wood	0.0%	0.0%	0
Insulation	0.1%	0.2%	296
Asphalt Paving	1.7%	2.8%	3,621
Concrete	0.0%	0.0%	0
Drywall	0.0%	0.0%	28
Carpet	0.1%	0.1%	234
Carpet Padding	0.3%	0.5%	660
Soil, Rocks, Sand	4.2%	6.8%	8,839
Asphalt Roofing	3.1%	5.1%	6,438
Plastic Flooring	0.3%	0.6%	709
Ceramics & Brick	1.2%	2.0%	2,576
R/C Construction Materials	1.1%	1.1%	2,351

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**8.0%**		**16,693**
Newspaper	0.4%	0.3%	750
Cardboard/Kraft Paper Products	0.1%	0.1%	175
Magazines	0.6%	0.5%	1,280
High-Grade Paper Products	0.9%	0.5%	1,980
Other Groundwood Paper Products	0.0%	0.1%	97
Mixed Low Grade Paper Products	1.6%	1.5%	3,341
Compostable Paper Products	3.7%	2.5%	7,634
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.7%	0.7%	1,437
Plastic Products	**4.1%**		**8,553**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.1%	66
#3 PVC Plastic Products	0.0%	0.0%	37
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.1%	0.1%	147
#6 PS Plastic Products	0.3%	0.3%	543
#7 Other Plastic Products	0.7%	0.4%	1,437
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.5%	0.8%	3,211
Plastic Film Products	0.2%	0.2%	405
R/C Plastic Products	1.3%	1.2%	2,707
Consumer Products	**6.5%**		**13,539**
Televisions - CRT	0.4%	0.7%	884
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	0
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.0%	0.0%	7
Textiles - Organic	2.5%	1.8%	5,299
Textiles - Synthetic	0.4%	0.3%	846
Shoes, Purses, Belts	0.1%	0.1%	241
Tires & Rubber	0.2%	0.1%	322
Furniture	1.8%	2.4%	3,714
Mattresses	0.6%	1.0%	1,207
R/C Consumer Products	0.5%	0.6%	1,021
Hazardous/Special Wastes	**4.9%**		**10,339**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	40
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	56
Solvent-based Glues	0.0%	0.0%	0
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.0%	0.0%	30
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	38
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.1%	0.2%	270
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	2.1%	2.3%	4,317
Pharmaceuticals/Vitamins	0.0%	0.0%	0
Disposable Diapers	2.5%	2.7%	5,213
Other Cleaners & Soaps	0.0%	0.0%	0
Other Hazardous	0.2%	0.3%	375
Other Non-hazardous	0.0%	0.0%	0
Residues	**0.9%**		**1,880**
Ash	0.8%	1.3%	1,732
Dust	0.0%	0.0%	0
Fines	0.1%	0.1%	148
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**208,867**
Sample Count	**27**		

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

Table 48: Southwest WGA Residential Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**8.6%**		**12,317**
Newspaper Packaging	0.6%	0.5%	904
Cardboard/Kraft Paper Packaging	2.6%	1.1%	3,797
Other Groundwood Paper Packaging	0.1%	0.1%	94
Mixed/Low Grade Paper Packaging	2.8%	0.6%	3,981
Compostable Paper Packaging	1.3%	0.6%	1,817
R/C Paper Packaging	1.2%	0.2%	1,724
Plastic Packaging	**8.3%**		**11,827**
#1 PETE Plastic Bottles	0.9%	0.1%	1,354
#1 PETE Plastic Non-bottles	0.4%	0.1%	563
#2 HDPE Plastic Natural Bottles	0.5%	0.2%	781
#2 HDPE Plastic Colored Bottles	0.4%	0.1%	641
#2 HDPE Plastic Jars & Tubs	0.1%	0.1%	101
#3 PVC Plastic Packaging	0.0%	0.0%	26
#4 LDPE Plastic Packaging	0.0%	0.0%	37
#5 PP Plastic Packaging	0.5%	0.0%	778
#6 PS Plastic Packaging	0.5%	0.2%	769
#7 Other Plastic Packaging	0.9%	0.2%	1,264
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	1.0%	0.2%	1,416
Non-industrial Packaging Film Plastic	2.5%	0.3%	3,623
Industrial Packaging Film Plastic	0.1%	0.1%	206
R/C Plastic Packaging	0.2%	0.1%	268
Glass	**3.0%**		**4,278**
Clear Glass Containers	1.2%	0.4%	1,754
Green Glass Containers	0.4%	0.3%	636
Brown Glass Containers	0.6%	0.3%	857
Plate Glass	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	0.3%	0.2%	473
R/C Glass	0.4%	0.2%	558
Metal	**3.1%**		**4,469**
Aluminum Beverage Cans	0.5%	0.1%	663
Aluminum Foil/Containers	0.2%	0.1%	278
Other Aluminum	0.0%	0.0%	52
Other Nonferrous	0.0%	0.1%	62
Food Cans - Tinned	0.9%	0.2%	1,324
Food Cans - Coated	0.2%	0.1%	251
White Goods	0.0%	0.0%	0
Other Ferrous Metal	0.7%	0.4%	1,074
R/C Metals	0.5%	0.4%	766
Organics	**40.5%**		**58,076**
Food - Vegetative	20.2%	2.2%	28,913
Food - Non-vegetative	9.3%	2.1%	13,355
Leaves & Grass	3.5%	2.2%	4,967
Prunings	1.5%	1.4%	2,184
Animal Manure	4.9%	1.4%	7,054
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	1.1%	0.5%	1,604
Wood Debris	**2.1%**		**3,055**
Treated Wood	0.3%	0.4%	451
Painted Wood	0.8%	0.6%	1,124
Dimensional Lumber	0.1%	0.1%	156
Engineered Wood	0.1%	0.1%	111
Pallets & Crates	0.0%	0.0%	0
Other Untreated Wood	0.0%	0.0%	28
Wood By-Products	0.4%	0.3%	609
R/C Wood Debris	0.4%	0.4%	576
Construction Materials	**3.3%**		**4,686**
Natural Wood	0.0%	0.0%	0
Insulation	0.3%	0.5%	443
Asphalt Paving	0.0%	0.1%	62
Concrete	0.1%	0.1%	125
Drywall	0.4%	0.4%	572
Carpet	1.2%	1.3%	1,680
Carpet Padding	0.2%	0.4%	330
Soil, Rocks, Sand	0.1%	0.2%	208
Asphalt Roofing	0.1%	0.1%	91
Plastic Flooring	0.0%	0.1%	58
Ceramics & Brick	0.1%	0.1%	137
R/C Construction Materials	0.7%	0.7%	979
Paper Products	**10.2%**		**14,650**
Newspaper	0.7%	0.3%	955
Cardboard/Kraft Paper Products	0.0%	0.1%	52
Magazines	0.7%	0.4%	1,028
High-Grade Paper Products	1.3%	0.8%	1,797
Other Groundwood Paper Products	0.1%	0.1%	161
Mixed Low Grade Paper Products	2.1%	0.7%	3,048
Compostable Paper Products	5.2%	1.4%	7,478
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.1%	0.1%	130
Plastic Products	**4.5%**		**6,489**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.0%	0.0%	0
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.1%	0.1%	174
#6 PS Plastic Products	0.2%	0.1%	284
#7 Other Plastic Products	1.7%	0.7%	2,501
PLA Products	0.0%	0.0%	41
Plastic Garbage Bags	1.3%	0.1%	1,898
Plastic Film Products	0.7%	0.5%	948
R/C Plastic Products	0.4%	0.2%	643
Consumer Products	**7.0%**		**10,068**
Televisions - CRT	0.8%	1.3%	1,143
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	6
Computer Peripherals	0.0%	0.0%	51
Audio Equipment	0.3%	0.4%	414
Gaming Equipment	0.1%	0.1%	137
Other Consumer Electronics	0.9%	0.8%	1,281
Textiles - Organic	2.5%	0.7%	3,562
Textiles - Synthetic	1.3%	0.7%	1,876
Shoes, Purses, Belts	0.4%	0.3%	519
Tires & Rubber	0.4%	0.3%	602
Furniture	0.0%	0.0%	0
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.3%	0.3%	476
Hazardous/Special Wastes	**8.9%**		**12,784**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	6
Fluorescent Tubes	0.0%	0.0%	12
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	7
Solvent-based Glues	0.0%	0.0%	40
Latex-based Glues	0.0%	0.0%	9
Oil-based Paint & Solvent	0.0%	0.0%	32
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.1%	0.1%	210
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.1%	0.1%	143
Explosives	0.0%	0.0%	0
Medical Wastes	0.2%	0.2%	259
Pharmaceuticals/Vitamins	0.0%	0.0%	28
Disposable Diapers	7.9%	1.9%	11,351
Other Cleaners & Soaps	0.3%	0.2%	486
Other Hazardous	0.1%	0.1%	80
Other Non-hazardous	0.1%	0.1%	121
Residues	**0.5%**		**657**
Ash	0.0%	0.0%	0
Dust	0.2%	0.2%	249
Fines	0.3%	0.3%	408
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**143,358**
Sample Count	**23**		

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

Table 49: Southwest WGA Self-hauled C&D Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+/-	Est. Tons
Paper Packaging	**2.0%**		**571**
Newspaper Packaging	0.3%	0.5%	92
Cardboard/Kraft Paper Packaging	1.3%	0.7%	354
Other Groundwood Paper Packaging	0.0%	0.0%	0
Mixed/Low Grade Paper Packaging	0.4%	0.6%	112
Compostable Paper Packaging	0.0%	0.0%	2
R/C Paper Packaging	0.0%	0.0%	11
Plastic Packaging	**0.4%**		**124**
#1 PETE Plastic Bottles	0.0%	0.0%	8
#1 PETE Plastic Non-bottles	0.0%	0.0%	5
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	3
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	9
#2 HDPE Plastic Jars & Tubs	0.0%	0.0%	0
#3 PVC Plastic Packaging	0.0%	0.0%	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0
#5 PP Plastic Packaging	0.0%	0.0%	3
#6 PS Plastic Packaging	0.0%	0.0%	0
#7 Other Plastic Packaging	0.0%	0.0%	6
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.0%	0.0%	2
Non-industrial Packaging Film Plastic	0.0%	0.0%	2
Industrial Packaging Film Plastic	0.3%	0.2%	86
R/C Plastic Packaging	0.0%	0.0%	1
Glass	**9.8%**		**2,749**
Clear Glass Containers	0.0%	0.0%	8
Green Glass Containers	0.0%	0.1%	12
Brown Glass Containers	0.0%	0.1%	14
Plate Glass	6.7%	8.1%	1,880
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	0
R/C Glass	3.0%	4.9%	835
Metal	**4.9%**		**1,384**
Aluminum Beverage Cans	0.0%	0.0%	4
Aluminum Foil/Containers	0.0%	0.0%	1
Other Aluminum	0.0%	0.0%	6
Other Nonferrous	0.6%	0.6%	160
Food Cans - Tinned	0.0%	0.0%	4
Food Cans - Coated	0.0%	0.0%	1
White Goods	0.0%	0.0%	0
Other Ferrous Metal	3.0%	3.1%	837
R/C Metals	1.3%	1.6%	371
Organics	**1.3%**		**357**
Food - Vegetative	0.0%	0.1%	13
Food - Non-vegetative	0.0%	0.0%	0
Leaves & Grass	0.0%	0.0%	2
Prunings	0.6%	1.0%	173
Animal Manure	0.3%	0.5%	93
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.3%	0.3%	75
Wood Debris	**30.2%**		**8,508**
Treated Wood	3.2%	5.3%	900
Painted Wood	5.9%	4.9%	1,648
Dimensional Lumber	4.8%	3.3%	1,351
Engineered Wood	0.0%	0.0%	6
Pallets & Crates	0.0%	0.0%	0
Other Untreated Wood	3.0%	4.6%	848
Wood By-Products	3.9%	5.9%	1,096
R/C Wood Debris	9.4%	6.7%	2,659
Construction Materials	**46.3%**		**13,048**
Natural Wood	0.0%	0.0%	0
Insulation	1.6%	1.8%	463
Asphalt Paving	0.0%	0.0%	0
Concrete	2.5%	4.1%	707
Drywall	24.9%	13.4%	7,022
Carpet	0.3%	0.3%	76
Carpet Padding	0.0%	0.0%	0
Soil, Rocks, Sand	0.0%	0.0%	12
Asphalt Roofing	6.6%	7.4%	1,861
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	1.2%	1.4%	334
R/C Construction Materials	9.1%	7.4%	2,573

Material	Est. Percent	+/-	Est. Tons
Paper Products	**0.3%**		**73**
Newspaper	0.0%	0.0%	3
Cardboard/Kraft Paper Products	0.0%	0.0%	0
Magazines	0.0%	0.1%	9
High-Grade Paper Products	0.0%	0.1%	12
Other Groundwood Paper Products	0.0%	0.0%	0
Mixed Low Grade Paper Products	0.0%	0.0%	3
Compostable Paper Products	0.0%	0.0%	1
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.2%	0.3%	46
Plastic Products	**2.0%**		**557**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.0%	0.0%	0
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	1
#6 PS Plastic Products	0.1%	0.1%	24
#7 Other Plastic Products	0.4%	0.3%	99
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	0.0%	0.0%	4
Plastic Film Products	0.0%	0.1%	11
R/C Plastic Products	1.5%	1.5%	418
Consumer Products	**2.6%**		**738**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	0
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.0%	0.0%	0
Textiles - Organic	1.5%	2.5%	426
Textiles - Synthetic	0.1%	0.1%	16
Shoes, Purses, Belts	1.0%	1.6%	285
Tires & Rubber	0.0%	0.1%	11
Furniture	0.0%	0.0%	0
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.0%	0.0%	0
Hazardous/Special Wastes	**0.1%**		**38**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.1%	0.2%	30
Solvent-based Glues	0.0%	0.0%	0
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	0
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.0%	0.0%	0
Pharmaceuticals/Vitamins	0.0%	0.0%	0
Disposable Diapers	0.0%	0.0%	1
Other Cleaners & Soaps	0.0%	0.0%	7
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.0%	0.0%	0
Residues	**0.0%**		**9**
Ash	0.0%	0.0%	0
Dust	0.0%	0.0%	0
Fines	0.0%	0.1%	9
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**28,156**
Sample Count	**19**		

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

Table 50: Southwest WGA Self-hauled Other Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**2.6%**		**1,218**
Newspaper Packaging	0.0%	0.0%	5
Cardboard/Kraft Paper Packaging	1.5%	1.1%	731
Other Groundwood Paper Packaging	0.0%	0.1%	23
Mixed/Low Grade Paper Packaging	0.2%	0.2%	102
Compostable Paper Packaging	0.2%	0.2%	74
R/C Paper Packaging	0.6%	0.7%	282
Plastic Packaging	**1.8%**		**844**
#1 PETE Plastic Bottles	0.1%	0.2%	58
#1 PETE Plastic Non-bottles	0.0%	0.0%	20
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	15
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	22
#2 HDPE Plastic Jars & Tubs	0.0%	0.1%	21
#3 PVC Plastic Packaging	0.0%	0.0%	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0
#5 PP Plastic Packaging	0.1%	0.1%	29
#6 PS Plastic Packaging	0.3%	0.4%	126
#7 Other Plastic Packaging	0.3%	0.3%	152
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.1%	0.0%	27
Non-industrial Packaging Film Plastic	0.6%	0.5%	304
Industrial Packaging Film Plastic	0.1%	0.1%	47
R/C Plastic Packaging	0.0%	0.1%	24
Glass	**4.9%**		**2,329**
Clear Glass Containers	0.0%	0.0%	15
Green Glass Containers	0.0%	0.0%	0
Brown Glass Containers	0.3%	0.5%	151
Plate Glass	0.8%	1.2%	373
Stoneware/Kitchen Ceramics/Glassware	1.0%	1.5%	476
R/C Glass	2.8%	4.4%	1,315
Metal	**9.2%**		**4,371**
Aluminum Beverage Cans	0.0%	0.0%	13
Aluminum Foil/Containers	0.0%	0.0%	5
Other Aluminum	0.0%	0.0%	0
Other Nonferrous	0.0%	0.0%	3
Food Cans - Tinned	0.1%	0.2%	63
Food Cans - Coated	0.0%	0.1%	17
White Goods	1.4%	2.3%	655
Other Ferrous Metal	3.6%	2.3%	1,717
R/C Metals	4.0%	3.1%	1,898
Organics	**9.2%**		**4,393**
Food - Vegetative	1.2%	1.2%	549
Food - Non-vegetative	0.9%	0.8%	453
Leaves & Grass	5.8%	6.5%	2,767
Prunings	0.2%	0.4%	112
Animal Manure	1.0%	1.7%	498
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.0%	0.0%	14
Wood Debris	**15.1%**		**7,222**
Treated Wood	0.1%	0.1%	39
Painted Wood	0.8%	0.9%	374
Dimensional Lumber	3.1%	4.0%	1,469
Engineered Wood	1.5%	2.4%	697
Pallets & Crates	5.7%	7.0%	2,719
Other Untreated Wood	0.0%	0.1%	24
Wood By-Products	1.2%	1.2%	554
R/C Wood Debris	2.8%	2.6%	1,347
Construction Materials	**17.8%**		**8,489**
Natural Wood	0.0%	0.0%	0
Insulation	0.1%	0.2%	54
Asphalt Paving	0.0%	0.0%	0
Concrete	0.0%	0.0%	0
Drywall	3.2%	5.3%	1,529
Carpet	9.2%	7.9%	4,365
Carpet Padding	3.1%	3.5%	1,494
Soil, Rocks, Sand	0.0%	0.0%	12
Asphalt Roofing	0.2%	0.3%	101
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	0.0%	0.0%	0
R/C Construction Materials	2.0%	2.6%	933

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**2.3%**		**1,075**
Newspaper	0.1%	0.1%	37
Cardboard/Kraft Paper Products	0.2%	0.3%	103
Magazines	0.7%	1.0%	319
High-Grade Paper Products	0.1%	0.1%	33
Other Groundwood Paper Products	0.4%	0.6%	187
Mixed Low Grade Paper Products	0.4%	0.6%	192
Compostable Paper Products	0.3%	0.3%	160
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.1%	0.1%	44
Plastic Products	**3.7%**		**1,745**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.0%	0.0%	0
#3 PVC Plastic Products	0.0%	0.0%	1
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	2
#6 PS Plastic Products	0.0%	0.1%	22
#7 Other Plastic Products	2.5%	2.6%	1,201
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	0.1%	0.0%	31
Plastic Film Products	0.0%	0.0%	3
R/C Plastic Products	1.0%	1.0%	486
Consumer Products	**31.6%**		**15,052**
Televisions - CRT	5.3%	4.9%	2,512
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.7%	0.8%	339
Computer Monitors - CRT	1.1%	1.8%	519
Computer Monitors - LCD	0.0%	0.0%	0
Computers	1.0%	1.2%	490
Computer Peripherals	0.2%	0.2%	86
Audio Equipment	0.0%	0.0%	0
Gaming Equipment	0.1%	0.1%	34
Other Consumer Electronics	0.5%	0.6%	253
Textiles - Organic	3.2%	3.7%	1,535
Textiles - Synthetic	1.7%	1.2%	823
Shoes, Purses, Belts	0.6%	0.7%	310
Tires & Rubber	0.6%	0.7%	268
Furniture	10.4%	7.0%	4,943
Mattresses	2.0%	3.3%	975
R/C Consumer Products	4.1%	6.6%	1,967
Hazardous/Special Wastes	**2.0%**		**964**
Pesticides/Herbicides	0.1%	0.1%	44
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.7%	1.0%	316
Solvent-based Glues	0.0%	0.0%	1
Latex-based Glues	0.0%	0.0%	4
Oil-based Paint & Solvent	0.0%	0.0%	2
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	16
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.0%	0.0%	3
Pharmaceuticals/Vitamins	0.0%	0.0%	3
Disposable Diapers	0.5%	0.7%	228
Other Cleaners & Soaps	0.6%	0.7%	299
Other Hazardous	0.1%	0.1%	48
Other Non-hazardous	0.0%	0.0%	1
Residues	**0.0%**		**0**
Ash	0.0%	0.0%	0
Dust	0.0%	0.0%	0
Fines	0.0%	0.0%	0
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**47,704**
Sample Count	**19**		

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

West Waste Generation Area Composition Tables

Table 51: West WGA Overall Disposed Waste Stream Detailed Composition, 2009

Material	Est. Percent	+/-	Est. Tons
Paper Packaging	**9.0%**		**15,788**
Newspaper Packaging	0.5%	0.3%	940
Cardboard/Kraft Paper Packaging	3.4%	0.8%	5,998
Other Groundwood Paper Packaging	0.1%	0.1%	239
Mixed/Low Grade Paper Packaging	2.1%	0.4%	3,657
Compostable Paper Packaging	1.4%	0.6%	2,520
R/C Paper Packaging	1.4%	0.5%	2,433
Plastic Packaging	**7.5%**		**13,190**
#1 PETE Plastic Bottles	0.8%	0.1%	1,423
#1 PETE Plastic Non-bottles	0.3%	0.1%	536
#2 HDPE Plastic Natural Bottles	0.3%	0.1%	569
#2 HDPE Plastic Colored Bottles	0.4%	0.1%	724
#2 HDPE Plastic Jars & Tubs	0.3%	0.2%	451
#3 PVC Plastic Packaging	0.0%	0.0%	48
#4 LDPE Plastic Packaging	0.0%	0.0%	12
#5 PP Plastic Packaging	0.4%	0.1%	661
#6 PS Plastic Packaging	0.4%	0.1%	676
#7 Other Plastic Packaging	0.5%	0.1%	949
PLA Packaging	0.0%	0.0%	1
Plastic Merchandise Bags	0.5%	0.1%	913
Non-industrial Packaging Film Plastic	2.2%	0.5%	3,878
Industrial Packaging Film Plastic	0.7%	0.4%	1,256
R/C Plastic Packaging	0.6%	0.5%	1,093
Glass	**2.6%**		**4,603**
Clear Glass Containers	1.2%	0.2%	2,031
Green Glass Containers	0.4%	0.2%	667
Brown Glass Containers	0.6%	0.2%	1,112
Plate Glass	0.0%	0.0%	36
Stoneware/Kitchen Ceramics/Glassware	0.1%	0.0%	102
R/C Glass	0.4%	0.2%	655
Metal	**6.5%**		**11,292**
Aluminum Beverage Cans	0.5%	0.1%	886
Aluminum Foil/Containers	0.1%	0.0%	194
Other Aluminum	0.1%	0.0%	150
Other Nonferrous	0.1%	0.0%	115
Food Cans - Tinned	0.8%	0.2%	1,357
Food Cans - Coated	0.2%	0.1%	325
White Goods	0.1%	0.2%	251
Other Ferrous Metal	3.0%	0.9%	5,277
R/C Metals	1.6%	0.6%	2,738
Organics	**23.5%**		**41,190**
Food - Vegetative	10.6%	1.5%	18,539
Food - Non-vegetative	5.8%	1.5%	10,062
Leaves & Grass	3.1%	1.4%	5,489
Prunings	0.8%	1.1%	1,390
Animal Manure	2.8%	1.1%	4,886
Animal Carcasses	0.1%	0.1%	104
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.4%	0.1%	719
Wood Debris	**14.2%**		**24,909**
Treated Wood	1.9%	2.6%	3,380
Painted Wood	2.8%	1.6%	4,879
Dimensional Lumber	2.2%	1.7%	3,905
Engineered Wood	2.2%	1.4%	3,811
Pallets & Crates	1.8%	2.0%	3,194
Other Untreated Wood	0.3%	0.3%	473
Wood By-Products	0.5%	0.3%	846
R/C Wood Wastes	2.5%	2.7%	4,421
Construction Materials	**9.5%**		**16,592**
Natural Wood	0.1%	0.1%	140
Insulation	0.2%	0.2%	394
Asphalt Paving	0.1%	0.1%	159
Concrete	0.1%	0.1%	196
Drywall	2.1%	1.6%	3,592
Carpet	2.5%	2.3%	4,333
Carpet Padding	0.7%	0.7%	1,157
Soil, Rocks, Sand	0.6%	0.4%	971
Asphalt Roofing	0.7%	0.7%	1,263
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	0.4%	0.2%	636
R/C Construction Materials	2.1%	1.3%	3,751

Material	Est. Percent	+/-	Est. Tons
Paper Products	**10.4%**		**18,179**
Newspaper	0.7%	0.2%	1,297
Cardboard/Kraft Paper Products	0.1%	0.1%	136
Magazines	1.3%	0.5%	2,272
High-Grade Paper Products	1.0%	0.2%	1,685
Other Groundwood Paper Products	0.1%	0.1%	200
Mixed Low Grade Paper Products	1.5%	0.4%	2,663
Compostable Paper Products	4.7%	1.5%	8,283
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.9%	0.5%	1,642
Plastic Products	**6.0%**		**10,494**
#1 PETE Plastic Products	0.0%	0.0%	63
#2 HDPE Plastic Products	0.2%	0.3%	392
#3 PVC Plastic Products	0.1%	0.1%	119
#4 LDPE Plastic Products	0.0%	0.0%	16
#5 PP Plastic Products	0.1%	0.0%	103
#6 PS Plastic Products	0.1%	0.0%	114
#7 Other Plastic Products	2.3%	1.1%	3,948
PLA Products	0.0%	0.0%	5
Plastic Garbage Bags	1.7%	0.7%	2,980
Plastic Film Products	0.4%	0.2%	630
R/C Plastic Products	1.2%	0.8%	2,124
Consumer Products	**7.0%**		**12,249**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	2
Computer Peripherals	0.4%	0.6%	614
Audio Equipment	0.0%	0.0%	55
Gaming Equipment	0.0%	0.0%	62
Other Consumer Electronics	0.2%	0.1%	268
Textiles - Organic	2.1%	0.5%	3,714
Textiles - Synthetic	1.2%	0.4%	2,059
Shoes, Purses, Belts	0.3%	0.1%	611
Tires & Rubber	0.3%	0.2%	553
Furniture	1.5%	0.8%	2,618
Mattresses	0.4%	0.5%	771
R/C Consumer Products	0.5%	0.6%	922
Hazardous/Special Wastes	**3.5%**		**6,065**
Pesticides/Herbicides	0.0%	0.0%	28
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	8
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.1%	0.1%	205
Solvent-based Glues	0.0%	0.1%	81
Latex-based Glues	0.0%	0.0%	54
Oil-based Paint & Solvent	0.1%	0.1%	133
Caustic Cleaners	0.0%	0.0%	45
Dry-cell Batteries	0.1%	0.0%	129
Wet-cell Batteries	0.1%	0.2%	207
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.1%	68
Antifreeze	0.0%	0.0%	3
Other Vehicle Fluids	0.0%	0.0%	35
Oil Filters	0.0%	0.0%	70
Explosives	0.0%	0.0%	2
Medical Wastes	0.4%	0.5%	653
Pharmaceuticals/Vitamins	0.0%	0.0%	18
Disposable Diapers	2.3%	0.6%	4,059
Other Cleaners & Soaps	0.1%	0.0%	205
Other Hazardous	0.0%	0.0%	51
Other Non-hazardous	0.0%	0.0%	12
Residues	**0.2%**		**420**
Ash	0.0%	0.0%	0
Dust	0.1%	0.1%	262
Fines	0.1%	0.1%	158
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**174,971**
Sample Count	**85**		

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

Table 52: West WGA Commercial Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**8.5%**		**5,940**
Newspaper Packaging	0.3%	0.3%	187
Cardboard/Kraft Paper Packaging	3.3%	1.4%	2,285
Other Groundwood Paper Packaging	0.0%	0.0%	6
Mixed/Low Grade Paper Packaging	1.6%	0.7%	1,110
Compostable Paper Packaging	1.3%	0.9%	877
R/C Paper Packaging	2.1%	1.1%	1,475
Plastic Packaging	**7.5%**		**5,211**
#1 PETE Plastic Bottles	0.5%	0.2%	356
#1 PETE Plastic Non-bottles	0.3%	0.2%	177
#2 HDPE Plastic Natural Bottles	0.3%	0.1%	219
#2 HDPE Plastic Colored Bottles	0.4%	0.3%	260
#2 HDPE Plastic Jars & Tubs	0.4%	0.4%	254
#3 PVC Plastic Packaging	0.0%	0.0%	3
#4 LDPE Plastic Packaging	0.0%	0.0%	5
#5 PP Plastic Packaging	0.2%	0.1%	149
#6 PS Plastic Packaging	0.4%	0.2%	254
#7 Other Plastic Packaging	0.3%	0.1%	226
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.2%	0.1%	144
Non-industrial Packaging Film Plastic	2.4%	1.1%	1,704
Industrial Packaging Film Plastic	1.2%	0.8%	841
R/C Plastic Packaging	0.9%	1.1%	620
Glass	**0.9%**		**625**
Clear Glass Containers	0.3%	0.2%	192
Green Glass Containers	0.1%	0.1%	76
Brown Glass Containers	0.3%	0.3%	234
Plate Glass	0.0%	0.0%	10
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	18
R/C Glass	0.1%	0.1%	95
Metal	**5.9%**		**4,100**
Aluminum Beverage Cans	0.3%	0.2%	205
Aluminum Foil/Containers	0.1%	0.1%	60
Other Aluminum	0.0%	0.0%	34
Other Nonferrous	0.1%	0.1%	67
Food Cans - Tinned	0.6%	0.4%	452
Food Cans - Coated	0.1%	0.1%	74
White Goods	0.0%	0.0%	0
Other Ferrous Metal	3.0%	1.9%	2,077
R/C Metals	1.6%	1.1%	1,131
Organics	**16.4%**		**11,484**
Food - Vegetative	7.4%	2.9%	5,196
Food - Non-vegetative	7.8%	3.5%	5,470
Leaves & Grass	0.8%	0.7%	566
Prunings	0.1%	0.1%	45
Animal Manure	0.2%	0.2%	116
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.1%	0.1%	91
Wood Debris	**23.9%**		**16,669**
Treated Wood	4.1%	6.5%	2,896
Painted Wood	4.2%	4.0%	2,935
Dimensional Lumber	3.1%	4.2%	2,163
Engineered Wood	2.7%	3.2%	1,905
Pallets & Crates	3.8%	5.0%	2,651
Other Untreated Wood	0.5%	0.7%	365
Wood By-Products	0.0%	0.0%	20
R/C Wood Debris	5.3%	6.8%	3,733
Construction Materials	**12.5%**		**8,748**
Natural Wood	0.1%	0.1%	58
Insulation	0.1%	0.1%	44
Asphalt Paving	0.2%	0.4%	159
Concrete	0.0%	0.0%	0
Drywall	1.9%	3.2%	1,352
Carpet	4.9%	5.7%	3,438
Carpet Padding	1.0%	1.6%	674
Soil, Rocks, Sand	0.7%	0.8%	468
Asphalt Roofing	0.0%	0.1%	32
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	0.1%	0.1%	60
R/C Construction Materials	3.5%	3.2%	2,462

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**12.2%**		**8,559**
Newspaper	0.6%	0.3%	449
Cardboard/Kraft Paper Products	0.2%	0.2%	135
Magazines	1.4%	1.2%	984
High-Grade Paper Products	0.8%	0.4%	565
Other Groundwood Paper Products	0.2%	0.2%	128
Mixed Low Grade Paper Products	1.2%	0.6%	839
Compostable Paper Products	6.3%	3.7%	4,414
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	1.5%	1.1%	1,045
Plastic Products	**8.1%**		**5,638**
#1 PETE Plastic Products	0.0%	0.0%	13
#2 HDPE Plastic Products	0.5%	0.7%	320
#3 PVC Plastic Products	0.0%	0.1%	31
#4 LDPE Plastic Products	0.0%	0.0%	8
#5 PP Plastic Products	0.1%	0.1%	38
#6 PS Plastic Products	0.1%	0.0%	36
#7 Other Plastic Products	2.9%	2.4%	1,999
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	2.5%	1.7%	1,732
Plastic Film Products	0.4%	0.4%	294
R/C Plastic Products	1.7%	2.0%	1,167
Consumer Products	**2.2%**		**1,553**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.0%	2
Audio Equipment	0.0%	0.1%	34
Gaming Equipment	0.0%	0.0%	12
Other Consumer Electronics	0.1%	0.1%	72
Textiles - Organic	0.8%	0.7%	578
Textiles - Synthetic	0.7%	0.5%	466
Shoes, Purses, Belts	0.2%	0.2%	129
Tires & Rubber	0.2%	0.2%	143
Furniture	0.2%	0.3%	112
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.0%	0.0%	4
Hazardous/Special Wastes	**1.9%**		**1,324**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	7
Solvent-based Glues	0.1%	0.2%	77
Latex-based Glues	0.1%	0.1%	41
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	11
Wet-cell Batteries	0.1%	0.1%	35
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	14
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.1%	35
Oil Filters	0.1%	0.1%	51
Explosives	0.0%	0.0%	0
Medical Wastes	0.8%	1.1%	556
Pharmaceuticals/Vitamins	0.0%	0.0%	14
Disposable Diapers	0.6%	0.6%	454
Other Cleaners & Soaps	0.0%	0.0%	19
Other Hazardous	0.0%	0.0%	11
Other Non-hazardous	0.0%	0.0%	0
Residues	**0.1%**		**35**
Ash	0.0%	0.0%	0
Dust	0.0%	0.0%	10
Fines	0.0%	0.1%	25
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**69,886**
Sample Count	**26**		

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

Table 53: West WGA Residential Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**10.3%**		**7,063**
Newspaper Packaging	1.1%	0.7%	737
Cardboard/Kraft Paper Packaging	2.6%	0.7%	1,800
Other Groundwood Paper Packaging	0.3%	0.3%	218
Mixed/Low Grade Paper Packaging	3.2%	0.6%	2,217
Compostable Paper Packaging	2.1%	1.1%	1,409
R/C Paper Packaging	1.0%	0.2%	683
Plastic Packaging	**9.7%**		**6,687**
#1 PETE Plastic Bottles	1.4%	0.2%	948
#1 PETE Plastic Non-bottles	0.5%	0.1%	335
#2 HDPE Plastic Natural Bottles	0.4%	0.1%	307
#2 HDPE Plastic Colored Bottles	0.6%	0.1%	401
#2 HDPE Plastic Jars & Tubs	0.2%	0.2%	120
#3 PVC Plastic Packaging	0.1%	0.1%	43
#4 LDPE Plastic Packaging	0.0%	0.0%	6
#5 PP Plastic Packaging	0.6%	0.1%	441
#6 PS Plastic Packaging	0.5%	0.1%	313
#7 Other Plastic Packaging	0.8%	0.1%	541
PLA Packaging	0.0%	0.0%	1
Plastic Merchandise Bags	1.0%	0.1%	702
Non-industrial Packaging Film Plastic	2.9%	0.4%	1,996
Industrial Packaging Film Plastic	0.1%	0.1%	76
R/C Plastic Packaging	0.7%	0.6%	457
Glass	**4.8%**		**3,281**
Clear Glass Containers	2.5%	0.5%	1,691
Green Glass Containers	0.8%	0.4%	583
Brown Glass Containers	1.2%	0.5%	831
Plate Glass	0.0%	0.0%	3
Stoneware/Kitchen Ceramics/Glassware	0.1%	0.0%	39
R/C Glass	0.2%	0.2%	135
Metal	**4.7%**		**3,198**
Aluminum Beverage Cans	0.9%	0.2%	602
Aluminum Foil/Containers	0.2%	0.1%	127
Other Aluminum	0.1%	0.1%	85
Other Nonferrous	0.0%	0.0%	9
Food Cans - Tinned	1.2%	0.2%	856
Food Cans - Coated	0.3%	0.2%	234
White Goods	0.0%	0.0%	0
Other Ferrous Metal	0.8%	0.3%	519
R/C Metals	1.1%	0.6%	766
Organics	**39.4%**		**27,034**
Food - Vegetative	18.0%	2.4%	12,359
Food - Non-vegetative	6.3%	1.2%	4,293
Leaves & Grass	5.6%	3.3%	3,874
Prunings	1.7%	2.8%	1,194
Animal Manure	6.9%	2.7%	4,768
Animal Carcasses	0.0%	0.0%	4
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.8%	0.3%	541
Wood Debris	**1.3%**		**905**
Treated Wood	0.1%	0.1%	65
Painted Wood	0.4%	0.3%	292
Dimensional Lumber	0.3%	0.3%	194
Engineered Wood	0.3%	0.3%	187
Pallets & Crates	0.0%	0.0%	0
Other Untreated Wood	0.0%	0.1%	23
Wood By-Products	0.2%	0.2%	124
R/C Wood Debris	0.0%	0.0%	20
Construction Materials	**2.0%**		**1,369**
Natural Wood	0.1%	0.1%	38
Insulation	0.0%	0.0%	0
Asphalt Paving	0.0%	0.0%	0
Concrete	0.2%	0.3%	132
Drywall	0.1%	0.1%	46
Carpet	0.1%	0.2%	98
Carpet Padding	0.0%	0.0%	4
Soil, Rocks, Sand	0.7%	0.6%	497
Asphalt Roofing	0.0%	0.0%	0
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	0.2%	0.2%	133
R/C Construction Materials	0.6%	0.6%	422

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**11.5%**		**7,915**
Newspaper	1.2%	0.4%	806
Cardboard/Kraft Paper Products	0.0%	0.0%	0
Magazines	1.2%	0.4%	852
High-Grade Paper Products	1.4%	0.4%	937
Other Groundwood Paper Products	0.1%	0.1%	59
Mixed Low Grade Paper Products	1.9%	0.6%	1,284
Compostable Paper Products	5.4%	1.2%	3,682
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.4%	0.2%	294
Plastic Products	**4.5%**		**3,117**
#1 PETE Plastic Products	0.1%	0.1%	49
#2 HDPE Plastic Products	0.0%	0.0%	28
#3 PVC Plastic Products	0.0%	0.1%	29
#4 LDPE Plastic Products	0.0%	0.0%	4
#5 PP Plastic Products	0.0%	0.0%	13
#6 PS Plastic Products	0.1%	0.1%	40
#7 Other Plastic Products	1.6%	0.6%	1,069
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	1.7%	0.2%	1,174
Plastic Film Products	0.3%	0.2%	189
R/C Plastic Products	0.8%	0.4%	521
Consumer Products	**5.5%**		**3,759**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.9%	1.4%	611
Audio Equipment	0.0%	0.0%	4
Gaming Equipment	0.1%	0.1%	50
Other Consumer Electronics	0.2%	0.1%	105
Textiles - Organic	2.5%	0.7%	1,743
Textiles - Synthetic	1.0%	0.4%	669
Shoes, Purses, Belts	0.5%	0.2%	319
Tires & Rubber	0.4%	0.3%	245
Furniture	0.0%	0.0%	0
Mattresses	0.0%	0.0%	0
R/C Consumer Products	0.0%	0.0%	12
Hazardous/Special Wastes	**5.9%**		**4,046**
Pesticides/Herbicides	0.0%	0.0%	21
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	8
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.2%	0.2%	135
Solvent-based Glues	0.0%	0.0%	0
Latex-based Glues	0.0%	0.0%	1
Oil-based Paint & Solvent	0.2%	0.3%	108
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.2%	0.1%	103
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.1%	0.1%	53
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	19
Explosives	0.0%	0.0%	0
Medical Wastes	0.1%	0.1%	52
Pharmaceuticals/Vitamins	0.0%	0.0%	4
Disposable Diapers	4.9%	1.2%	3,361
Other Cleaners & Soaps	0.2%	0.1%	147
Other Hazardous	0.0%	0.0%	28
Other Non-hazardous	0.0%	0.0%	5
Residues	**0.4%**		**263**
Ash	0.0%	0.0%	0
Dust	0.2%	0.2%	142
Fines	0.2%	0.3%	121
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**68,636**
Sample Count	**23**		

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

Table 54: West WGA Self-hauled C&D Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**5.4%**		**643**
Newspaper Packaging	0.0%	0.1%	4
Cardboard/Kraft Paper Packaging	4.5%	6.5%	529
Other Groundwood Paper Packaging	0.0%	0.1%	4
Mixed/Low Grade Paper Packaging	0.1%	0.1%	12
Compostable Paper Packaging	0.1%	0.1%	7
R/C Paper Packaging	0.7%	1.2%	87
Plastic Packaging	**1.9%**		**229**
#1 PETE Plastic Bottles	0.0%	0.0%	1
#1 PETE Plastic Non-bottles	0.1%	0.1%	8
#2 HDPE Plastic Natural Bottles	0.0%	0.0%	0
#2 HDPE Plastic Colored Bottles	0.0%	0.0%	0
#2 HDPE Plastic Jars & Tubs	0.2%	0.4%	28
#3 PVC Plastic Packaging	0.0%	0.0%	0
#4 LDPE Plastic Packaging	0.0%	0.0%	0
#5 PP Plastic Packaging	0.2%	0.4%	29
#6 PS Plastic Packaging	0.1%	0.1%	8
#7 Other Plastic Packaging	0.7%	1.1%	79
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.0%	0.0%	0
Non-industrial Packaging Film Plastic	0.0%	0.0%	2
Industrial Packaging Film Plastic	0.6%	0.6%	73
R/C Plastic Packaging	0.0%	0.0%	0
Glass	**0.3%**		**32**
Clear Glass Containers	0.0%	0.0%	3
Green Glass Containers	0.0%	0.0%	0
Brown Glass Containers	0.1%	0.1%	8
Plate Glass	0.0%	0.0%	0
Stoneware/Kitchen Ceramics/Glassware	0.0%	0.0%	0
R/C Glass	0.2%	0.3%	21
Metal	**3.3%**		**392**
Aluminum Beverage Cans	0.0%	0.0%	2
Aluminum Foil/Containers	0.0%	0.0%	0
Other Aluminum	0.0%	0.0%	0
Other Nonferrous	0.1%	0.2%	14
Food Cans - Tinned	0.0%	0.0%	0
Food Cans - Coated	0.0%	0.0%	0
White Goods	0.0%	0.0%	0
Other Ferrous Metal	2.3%	2.0%	276
R/C Metals	0.8%	0.7%	100
Organics	**2.5%**		**301**
Food - Vegetative	0.5%	0.8%	57
Food - Non-vegetative	0.0%	0.0%	0
Leaves & Grass	2.0%	3.3%	241
Prunings	0.0%	0.0%	2
Animal Manure	0.0%	0.0%	0
Animal Carcasses	0.0%	0.0%	0
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.0%	0.0%	0
Wood Debris	**32.8%**		**3,870**
Treated Wood	2.1%	2.2%	253
Painted Wood	8.6%	3.5%	1,020
Dimensional Lumber	9.8%	6.1%	1,155
Engineered Wood	6.5%	4.0%	772
Pallets & Crates	1.6%	2.7%	192
Other Untreated Wood	0.7%	0.7%	82
Wood By-Products	0.4%	0.5%	45
R/C Wood Debris	3.0%	3.2%	349
Construction Materials	**45.9%**		**5,414**
Natural Wood	0.0%	0.0%	0
Insulation	1.5%	2.0%	178
Asphalt Paving	0.0%	0.0%	0
Concrete	0.5%	0.9%	64
Drywall	18.2%	13.4%	2,147
Carpet	4.8%	4.4%	563
Carpet Padding	2.8%	3.2%	334
Soil, Rocks, Sand	0.0%	0.0%	0
Asphalt Roofing	9.8%	10.8%	1,159
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	3.1%	2.9%	368
R/C Construction Materials	5.1%	4.3%	601

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**0.9%**		**103**
Newspaper	0.0%	0.0%	0
Cardboard/Kraft Paper Products	0.0%	0.0%	0
Magazines	0.4%	0.6%	42
High-Grade Paper Products	0.1%	0.1%	6
Other Groundwood Paper Products	0.1%	0.2%	13
Mixed Low Grade Paper Products	0.0%	0.0%	0
Compostable Paper Products	0.0%	0.1%	5
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	0.3%	0.5%	37
Plastic Products	**3.5%**		**417**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.1%	0.1%	9
#3 PVC Plastic Products	0.0%	0.0%	0
#4 LDPE Plastic Products	0.0%	0.0%	0
#5 PP Plastic Products	0.0%	0.0%	0
#6 PS Plastic Products	0.0%	0.0%	0
#7 Other Plastic Products	1.2%	1.9%	147
PLA Products	0.0%	0.1%	5
Plastic Garbage Bags	0.0%	0.0%	3
Plastic Film Products	0.8%	1.0%	97
R/C Plastic Products	1.3%	1.5%	156
Consumer Products	**3.4%**		**407**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	0
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.1%	0.2%	17
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.0%	0.0%	0
Textiles - Organic	0.0%	0.1%	4
Textiles - Synthetic	0.0%	0.0%	0
Shoes, Purses, Belts	0.0%	0.0%	0
Tires & Rubber	0.1%	0.1%	10
Furniture	0.0%	0.0%	0
Mattresses	2.9%	4.7%	341
R/C Consumer Products	0.3%	0.5%	34
Hazardous/Special Wastes	**0.0%**		**1**
Pesticides/Herbicides	0.0%	0.0%	0
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.0%	0.0%	0
Solvent-based Glues	0.0%	0.0%	1
Latex-based Glues	0.0%	0.0%	0
Oil-based Paint & Solvent	0.0%	0.0%	0
Caustic Cleaners	0.0%	0.0%	0
Dry-cell Batteries	0.0%	0.0%	0
Wet-cell Batteries	0.0%	0.0%	0
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	0
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	0
Medical Wastes	0.0%	0.0%	0
Pharmaceuticals/Vitamins	0.0%	0.0%	0
Disposable Diapers	0.0%	0.0%	0
Other Cleaners & Soaps	0.0%	0.0%	0
Other Hazardous	0.0%	0.0%	0
Other Non-hazardous	0.0%	0.0%	0
Residues	**0.0%**		**0**
Ash	0.0%	0.0%	0
Dust	0.0%	0.0%	0
Fines	0.0%	0.0%	0
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**11,808**
Sample Count	**18**		

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

Table 55: West WGA Self-hauled Other Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons
Paper Packaging	**8.7%**		**2,142**
Newspaper Packaging	0.0%	0.1%	11
Cardboard/Kraft Paper Packaging	5.6%	2.7%	1,385
Other Groundwood Paper Packaging	0.0%	0.1%	11
Mixed/Low Grade Paper Packaging	1.3%	0.7%	318
Compostable Paper Packaging	0.9%	1.1%	228
R/C Paper Packaging	0.8%	0.6%	189
Plastic Packaging	**4.3%**		**1,062**
#1 PETE Plastic Bottles	0.5%	0.3%	117
#1 PETE Plastic Non-bottles	0.1%	0.1%	16
#2 HDPE Plastic Natural Bottles	0.2%	0.1%	43
#2 HDPE Plastic Colored Bottles	0.3%	0.2%	64
#2 HDPE Plastic Jars & Tubs	0.2%	0.3%	49
#3 PVC Plastic Packaging	0.0%	0.0%	1
#4 LDPE Plastic Packaging	0.0%	0.0%	1
#5 PP Plastic Packaging	0.2%	0.1%	42
#6 PS Plastic Packaging	0.4%	0.4%	99
#7 Other Plastic Packaging	0.4%	0.2%	103
PLA Packaging	0.0%	0.0%	0
Plastic Merchandise Bags	0.3%	0.1%	67
Non-industrial Packaging Film Plastic	0.7%	0.5%	176
Industrial Packaging Film Plastic	1.1%	1.3%	266
R/C Plastic Packaging	0.1%	0.1%	16
Glass	**2.7%**		**664**
Clear Glass Containers	0.6%	0.7%	145
Green Glass Containers	0.0%	0.0%	8
Brown Glass Containers	0.2%	0.2%	39
Plate Glass	0.1%	0.1%	22
Stoneware/Kitchen Ceramics/Glassware	0.2%	0.2%	46
R/C Glass	1.6%	1.3%	404
Metal	**14.6%**		**3,602**
Aluminum Beverage Cans	0.3%	0.2%	76
Aluminum Foil/Containers	0.0%	0.0%	8
Other Aluminum	0.1%	0.1%	31
Other Nonferrous	0.1%	0.1%	25
Food Cans - Tinned	0.2%	0.1%	49
Food Cans - Coated	0.1%	0.1%	17
White Goods	1.0%	1.7%	251
Other Ferrous Metal	9.8%	3.6%	2,405
R/C Metals	3.0%	2.3%	741
Organics	**9.6%**		**2,371**
Food - Vegetative	3.8%	1.8%	926
Food - Non-vegetative	1.2%	0.7%	300
Leaves & Grass	3.3%	3.0%	807
Prunings	0.6%	0.8%	149
Animal Manure	0.0%	0.0%	2
Animal Carcasses	0.4%	0.6%	100
Crop Residues	0.0%	0.0%	0
Fruit Waste	0.0%	0.0%	0
R/C Organics	0.4%	0.3%	87
Wood Debris	**14.1%**		**3,466**
Treated Wood	0.7%	0.8%	166
Painted Wood	2.6%	2.2%	632
Dimensional Lumber	1.6%	1.1%	393
Engineered Wood	3.8%	3.2%	947
Pallets & Crates	1.4%	2.4%	350
Other Untreated Wood	0.0%	0.0%	3
Wood By-Products	2.7%	2.2%	656
R/C Wood Debris	1.3%	1.7%	320
Construction Materials	**4.3%**		**1,062**
Natural Wood	0.2%	0.3%	44
Insulation	0.7%	1.1%	172
Asphalt Paving	0.0%	0.0%	0
Concrete	0.0%	0.0%	0
Drywall	0.2%	0.3%	47
Carpet	1.0%	0.7%	234
Carpet Padding	0.6%	0.9%	144
Soil, Rocks, Sand	0.0%	0.0%	7
Asphalt Roofing	0.3%	0.4%	72
Plastic Flooring	0.0%	0.0%	0
Ceramics & Brick	0.3%	0.5%	75
R/C Construction Materials	1.1%	1.0%	266

Material	Est. Percent	+ / -	Est. Tons
Paper Products	**6.5%**		**1,602**
Newspaper	0.2%	0.2%	43
Cardboard/Kraft Paper Products	0.0%	0.0%	1
Magazines	1.6%	1.2%	394
High-Grade Paper Products	0.7%	0.8%	176
Other Groundwood Paper Products	0.0%	0.0%	0
Mixed Low Grade Paper Products	2.2%	1.9%	540
Compostable Paper Products	0.7%	0.6%	182
Paper Processing Sludge	0.0%	0.0%	0
R/C Paper Products	1.1%	1.0%	266
Plastic Products	**5.4%**		**1,322**
#1 PETE Plastic Products	0.0%	0.0%	0
#2 HDPE Plastic Products	0.1%	0.2%	35
#3 PVC Plastic Products	0.2%	0.3%	59
#4 LDPE Plastic Products	0.0%	0.0%	4
#5 PP Plastic Products	0.2%	0.2%	53
#6 PS Plastic Products	0.2%	0.2%	38
#7 Other Plastic Products	3.0%	3.0%	732
PLA Products	0.0%	0.0%	0
Plastic Garbage Bags	0.3%	0.2%	71
Plastic Film Products	0.2%	0.3%	49
R/C Plastic Products	1.1%	0.7%	280
Consumer Products	**26.5%**		**6,531**
Televisions - CRT	0.0%	0.0%	0
Televisions - LCD	0.0%	0.0%	0
VCR's, DVD's, DVR's	0.0%	0.0%	0
Computer Monitors - CRT	0.0%	0.0%	0
Computer Monitors - LCD	0.0%	0.0%	0
Computers	0.0%	0.0%	2
Computer Peripherals	0.0%	0.0%	0
Audio Equipment	0.0%	0.0%	0
Gaming Equipment	0.0%	0.0%	0
Other Consumer Electronics	0.4%	0.5%	92
Textiles - Organic	5.6%	2.6%	1,389
Textiles - Synthetic	3.7%	2.3%	923
Shoes, Purses, Belts	0.7%	0.5%	163
Tires & Rubber	0.6%	0.6%	155
Furniture	10.2%	5.8%	2,506
Mattresses	1.7%	2.8%	430
R/C Consumer Products	3.5%	4.0%	872
Hazardous/Special Wastes	**2.8%**		**694**
Pesticides/Herbicides	0.0%	0.0%	7
Mercury Vapor Lighting	0.0%	0.0%	0
Compact Fluorescent Lights	0.0%	0.0%	0
Fluorescent Tubes	0.0%	0.0%	0
Asbestos	0.0%	0.0%	0
Latex Paint	0.3%	0.3%	63
Solvent-based Glues	0.0%	0.0%	4
Latex-based Glues	0.0%	0.1%	12
Oil-based Paint & Solvent	0.1%	0.2%	25
Caustic Cleaners	0.2%	0.3%	45
Dry-cell Batteries	0.1%	0.1%	15
Wet-cell Batteries	0.7%	1.1%	172
Gasoline/Kerosene	0.0%	0.0%	0
Motor Oil	0.0%	0.0%	0
Antifreeze	0.0%	0.0%	3
Other Vehicle Fluids	0.0%	0.0%	0
Oil Filters	0.0%	0.0%	0
Explosives	0.0%	0.0%	2
Medical Wastes	0.2%	0.3%	45
Pharmaceuticals/Vitamins	0.0%	0.0%	0
Disposable Diapers	1.0%	1.0%	244
Other Cleaners & Soaps	0.2%	0.2%	39
Other Hazardous	0.0%	0.1%	12
Other Non-hazardous	0.0%	0.0%	7
Residues	**0.5%**		**122**
Ash	0.0%	0.0%	0
Dust	0.4%	0.6%	110
Fines	0.0%	0.1%	12
Sludge/Special Industrial	0.0%	0.0%	0
Totals	**100.0%**		**24,642**
Sample Count	**18**		

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

Appendix E: Supplemental Composition Results

This section presents waste composition results for the supplemental statewide study. The supplemental study generates statewide findings that incorporate recent studies done by King, Snohomish, and Thurston counties with data collected in the ten-county statewide study. First, data tables show supplemental composition results for the Puget Sound Waste Generation Area alone. Subsequently, statewide data are presented for the state overall and each waste sector (commercial, residential, self-hauled C&D, and self-hauled other) in three ways:

1. A pie chart presents an overview of waste composition by **Material Class**.
2. A table shows the 15 most prevalent *material types* by weight.
3. A detailed table lists the full composition and quantity results for the 50 *material type*s. Because King, Snohomish, and Thurston counties each used a different list of *material type*s for sorting—and none of the three used the same list as the 2009 statewide study—the list of 130 original *material type*s was merged into a list of 50 materials compatible with all four studies.

To combine the existing composition data from King, Snohomish, and Thurston counties with data collected in the ten sampled counties, Cascadia needed to merge or "roll up" four different material lists. Each study used a unique list of materials and grouped individual materials differently, so some materials in the four lists had to be merged into broader categories.

The first column of Table 56 presents these 50 "rolled up" *material type*s. The remaining four columns show the relationships between the material list used in the supplemental study list (50 materials) and the material lists used in the statewide study (130 materials), the King County study, the Snohomish County study, and the Thurston County study.

For example, the various *food material types* found in the four distinct studies—statewide study, King County, Snohomish County, and Thurston County—vary enough (six separate categories in the King County study, two in the Washington statewide study, and a single category for Snohomish and Thurston) that the common denominator ends up being only one category: *food*. Once a single material failed to be defined consistently in all four lists, a "rollup" occurred until consensus was found among all lists.

Table 56: Supplemental Statewide Results—Four Study Material Type Translation

Supplemental Study (rolled-up) Material Types	Statewide Study Material Types	King County Material Types	Snohomish County Material Types	Thurston County Material Types
Paper				
Newspaper	Newspaper Packaging Newspaper	Newspaper (ONP)	Newspaper	Newspaper
Cardboard	Cardboard/Kraft Paper Packaging Cardboard/Kraft Paper Products	Corrugated Cardboard (OCC)	Cardboard	Cardboard
Mixed Grade Paper	Other Groundwood Packaging Mixed/Low Grade Paper Packaging Magazines High-Grade Paper Products Other Groundwood Paper Products Mixed Low Grade Paper Products	High Grade Low Grade Recyclable Bleached Polycoated Paperboard	Phone Books Mixed Waste Paper Milk Cartons and Other Asceptic Containers	Phone Books Mixed Waste Paper Milk Cartons and Other Asceptic Containers
Compostable Paper	Compostable Paper Packaging Compostable Paper Products	Compostable Paper	Compostable Paper	Compostable Paper
R/C Paper	R/C Paper Packaging Paper Processing Sludge R/C Paper Products	Paper and Other Materials Other Paper	Non-Recyclable Paper	Non-Recyclable Paper
Plastic				
#1 PET Bottles	#1 PETE Plastic Bottles	PET Bottles	PET Bottles	PET Bottles
#2 HDPE Bottles	#2 HDPE Plastic Natural Bottles #2 HDPE Plastic Colored Bottles	HDPE Bottles	HDPE Bottles	HDPE Bottles
Other Plastic Packaging	#1 PETE Plastic Non-bottles #2 HDPE Plastic Jars & Tubs #3 PVC Plastic Packaging #4 LDPE Plastic Packaging #5 PP Plastic Packaging #7 Other Plastic Packaging	Other Plastic Containers Other Plastic Packaging	Bottle Types 3-7 Plastic Packaging	Bottle Types 3-7 Tubs Plastic Packaging
Other Plastic Products	#1 PETE Plastic Products #2 HDPE Plastic Products #3 PVC Plastic Products #4 LDPE Plastic Products #5 PP Plastic Products #7 Other Plastic Products	Plastic Products	Plastic Products	Plastic Products
Bags and Film	Plastic Merchandise Bags Non-industrial Packaging Film Plastic Industrial Packaging Film Plastic Plastic Garbage Bags Plastic Film Products	Plastic Film and Bags	Bags and Film Tyvek Vapor Barrier	Film and Bags
R/C Plastics	#6 PS Packaging R/C Packaging #6 PS R/C Products PLA Packaging PLA Products	Expanded Polystyrene Plastic and Other Materials	Expanded Polystyrene	Expanded Polystyrene
Glass				
Clear Glass Containers	Clear Glass Containers	Clear Containers	Clear Glass Containers	Clear Bottles
Green Glass Containers	Green Glass Containers	Green Containers	Green Glass Containers	Green Bottles
Brown Glass Containers	Brown Glass Containers	Brown Containers	Brown Glass Containers	Brown Bottles
R/C Glass	Plate Glass R/C Glass	Other Glass	Non-Recyclable Glass Light Bulbs	Light Bulbs Non-Recyclable Glass

Table 56: Supplemental Statewide Results—Four Study Material Type Translation, Continued

Supplemental Study (rolled-up) Material Types	Statewide Study Material Types	King County Material Types	Snohomish County Material Types	Thurston County Material Types
Metal				
Aluminum Cans	Aluminum Beverage Cans	Aluminum Cans	Aluminum Cans	Aluminum Cans
Tin Cans	Food Cans - Tinned Food Cans - Coated	Tinned Food Cans	Tin Cans	Tin Cans
Other Ferrous Metals	White Goods Other Ferrous Metal	Other Ferrous Compressed Gas Cylinders (empty)	Ferrous Metals White Goods Aerosol Cans	Ferrous Metals White Goods Aerosol Cans
Other Non-Ferrous Metals	Aluminum Foil/Containers Other Aluminum Other Nonferrous	Other Aluminum Other Non-Ferrous	Aluminum Foil Non-Ferrous Metals	Aluminum Foil Non-Ferrous Metals
R/C Metals	R/C Metals	Mixed Metals/Other Materials	Mixed Metal/Materials	Mixed Metals/Materials Auto Parts
Organics				
Food	Food - Vegetative Food - Non-vegetative	Packaged Bakery Items Opened/Unpackaged/Scrap Bakery Items Packaged Vegetative Food Opened/Unpackaged/Scrap Vegetative Food Packaged Non-vegetative Food Opened/Unpackaged/Scrap Non-vegetative Food	Food Waste	Food Waste
Green Waste	Leaves & Grass Prunings Crop Residues Fruit Waste	Yard Wastes Large Prunings	Yard Debris	Yard and Garden
Animal Manure	Animal Manure	Animal Feces	Animal Excrement	Animal Excrement
Animal Carcasses	Animal Carcasses	Animal Carcasses	Animal Carcasses	Animal Carcasses
Wood Debris				
Lumber and Pallets	Treated Wood Painted Wood Dimensional Lumber Engineered Wood Pallets & Crates Other Untreated Wood	Dimensional Lumber/Engineered Wood Treated Wood Other Wood Roofing and Siding Wood	Pallets Other Clean Wood Other Wood Waste Roofing Hog Fuel	Dimension Lumber Pallets Treated Wood Plywood Particle Board/Fiberboard Wood Products Other Wood Waste Roofing
Natural Wood	Natural Wood	Stumps	Natural Wood	Stumps and Other Bulky Wood
R/C Wood	Wood By-Products R/C Wood	Contaminated Wood	Other Contaminated Wood	Contaminated Wood
Construction Materials				
Roofing	Asphalt Roofing	Asphalt Shingles	Roofing	Roofing Waste
Drywall	Drywall	Gypsum Wallboard	Gypsum Board	Gypsum Board
Carpet	Carpet	Carpet	Carpet	Carpeting
Carpet Padding	Carpet Padding	Foam Rubber and Padding	Carpet Padding	Carpet Padding
Other Construction Materials	Insulation Asphalt Paving Concrete Plastic Flooring R/C Construction Materials	C&D Wastes	Concrete Fiberglass Insulation Other Fiberglass Asphalt Other C&D	Concrete Fiberglass Insulation Other Fiberglass Asphalt Other C&D

Table 56: Supplemental Statewide Results—Four Study Material Type Translation, Continued

Supplemental Study (rolled-up) Material Types	Statewide Study Material Types	King County Material Types	Snohomish County Material Types	Thurston County Material Types
Hazardous/Special Wastes				
Gasoline and Fuel Oils	Gasoline/Kerosene	Gasoline and Fuel Oil	Gasoline and Fuel Oil	Gasoline and Fuel Oil
Vehicle & Equipment Fluids	Oil Filters Antifreeze Motor Oil Other Vehicle Fluids	Used Oil Antifreeze/Brake Fluid	Oil Filters Motor Oil Antifreeze Brake and Hydraulic Fluid	Motor Oil, Other Oil Filters Antifreeze Other Automotive Maintenance
Vehicle Batteries	Wet-cell Batteries	Vehicle Batteries	Car Batteries	Car Batteries
Household Batteries	Dry-cell Batteries	Household Batteries	Household Batteries	Household Batteries
Latex Paint	Latex Paint	Latex Paint	Latex Paint	Latex Paint
Oil-based Paint & Solvents	Oil-based Paint & Solvent	Oil-based Paint Solvents and Thinners	Oil-Based Paint Solvents	Oil-Based Paint Solvents
Adhesives and Glues	Solvent-based Glues Latex-based Glues	Adhesives and Glue	Adhesives and Glues	Adhesives and Glues
Pesticides/Herbicides	Pesticides/Herbicides	Pesticides and Herbicides	Pesticides and Herbicides	Pesticides and Herbicides Fertilizers with Pesticides and Herbicides
Medical/Pharmaceutical Waste	Medical Wastes Pharmaceuticals/Vitamins	Medical Waste	Pharmaceuticals Medical Wastes	Medical Wastes Pharmaceuticals
Cleaners and Corrosives	Caustic Cleaners	Cleaners and Corrosives	Cleaners and Corrosives	Cleaners and Corrosives
Diapers	Disposable Diapers	Disposable Diapers	Diapers	Disposable Diapers
Other Hazardous Wastes/Special Wastes	Mercury Vapor Lighting Compact Fluorescent Lights Fluorescent Tubes Asbestos Explosives Other Hazardous Other Non-hazardous	Other Hazardous Waste	Asbestos Fertilizers Other Hazardous and Special Waste	Gas Cylinders (partially full) Fertilizers without Pesticides and Herbicides Other Hazardous and Special Waste
Consumer Products				
Textiles	Textiles - Organic Textiles - Synthetic Shoes, Purses, Belts	Textiles:Clothes/Other Recyclables Other Textiles	Textiles	Textiles
Tires and Rubber	Tires & Rubber	Tires Rubber Products	Tires Rubber Products	Tires Rubber Products
Furniture/Mattresses	Furniture Mattresses	Furniture/Mattresses	Furniture	Furniture and Mattresses
E-Waste	Televisions - CRT Televisions - LCD Computer Monitors - CRT Computer Monitors - LCD Computers VCR's, DVD's, DVR's Computer Peripherals Audio Equipment Gaming Equipment Other Consumer Electronics	Office Electronics Computer Monitors Televisions Laptops/LCD Monitors Household Appliances Printers/Copiers/Fax Machines Cell Phones	E-Waste Other Electronics	E-Waste Other Electronics
Residues				
Ash and Dust	Ash Dust	Ash	Ash and Dust	Ash and Dust
Fines/Residues/Inerts/Remainders	Fines Sludge/Special Industrial Soil, Rocks, Sand Ceramics & Brick Stone/kitchenware R/C Organics Other Cleaners & Soaps R/C Consumer	Miscellaneous Inorganics Nondistinct Fines Miscellaneous Organics	Residuals Ceramics, Porcelain, and China Rocks and Brick Soil, Dirt, and Non-Distinct Fines Cosmetics	Residuals Ceramics, Porcelain, and China Rocks and Brick Soil, Dirt, and Non-Distinct Fines Miscellaneous Organics Miscellaneous Inorganics Cosmetics

Supplemental Results for Puget Sound WGA

Table 57: Supplemental Results—Puget Sound WGA Overall Disposed Waste Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons	Material	Est. Percent	+ / -	Est. Tons
Paper	**22.0%**		**619,479**	**Construction Materials**	**7.5%**		**211,671**
Newspaper	1.6%	0.2%	44,019	Roofing	0.6%	0.2%	17,485
Cardboard	5.2%	0.7%	146,753	Drywall	1.1%	0.3%	29,702
Mixed Grade Paper	7.5%	0.8%	210,702	Carpet	2.5%	0.7%	70,792
Compostable Paper	6.2%	0.5%	173,730	Carpet Padding	0.5%	0.1%	12,802
R/C Paper	1.6%	0.2%	44,274	Other Construction Materials	2.9%	0.6%	80,890
Plastic	**13.1%**		**368,267**	**Hazardous/Special Wastes**	**3.4%**		**96,045**
#1 PET Bottles	0.8%	0.1%	23,586	Gasoline and Fuel Oils	0.0%	0.0%	556
#2 HDPE Bottles	0.5%	0.0%	13,580	Vehicle & Equipment Fluids	0.0%	0.0%	1,318
Other Plastic Packaging	1.7%	0.2%	48,192	Vehicle Batteries	0.0%	0.0%	559
Other Plastic Products	2.8%	0.4%	78,629	Household Batteries	0.1%	0.0%	1,952
Bags and Film	5.9%	0.4%	166,538	Latex Paint	0.1%	0.1%	2,682
R/C Plastics	1.3%	0.2%	37,743	Oil-based Paint & Solvents	0.0%	0.0%	711
				Adhesives and Glues	0.0%	0.0%	1,187
Glass	**2.7%**		**75,888**	Pesticides/Herbicides	0.0%	0.0%	1,190
Clear Glass Containers	1.0%	0.1%	29,088	Medical/Pharmaceutical Waste	0.2%	0.1%	4,404
Green Glass Containers	0.4%	0.0%	10,548	Cleaners and Corrosives	0.0%	0.0%	807
Brown Glass Containers	0.6%	0.1%	16,285	Diapers	2.7%	0.2%	76,301
R/C Glass	0.7%	0.2%	19,966	Other Hazardous/Special Wastes	0.2%	0.1%	4,379
Metal	**6.0%**		**169,159**	**Consumer Products**	**6.7%**		**189,105**
Aluminum Cans	0.4%	0.0%	11,543	Textiles	3.3%	0.4%	91,530
Tin Cans	1.1%	0.1%	30,249	Tires and Rubber	0.5%	0.1%	12,722
Other Ferrous Metals	2.1%	0.4%	59,191	Furniture/Mattresses	2.2%	0.5%	61,716
Other Non-Ferrous Metals	0.9%	0.2%	26,525	E-Waste	0.8%	0.2%	23,137
R/C Metals	1.5%	0.2%	41,651				
				Residues	**5.4%**		**152,726**
Organics	**24.0%**		**675,434**	Ash and Dust	0.3%	0.1%	8,838
Food Scraps	18.3%	2.2%	515,643	Fines/Residues/Inerts/Remainders	5.1%	0.7%	143,888
Green Waste	3.5%	0.5%	99,127				
Animal Manure	2.1%	0.2%	60,073				
Animal Carcasses	0.0%	0.0%	591				
Wood Debris	**9.0%**		**253,214**				
Lumber and Pallets	7.1%	1.2%	198,201				
Natural Wood	0.5%	0.4%	13,349	**Totals**	**100.0%**		**2,810,988**
R/C Wood	1.5%	0.3%	41,663	**Sample Count**	**923**		

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

Table 58: Supplemental Results—Puget Sound WGA Commercial Disposed Waste Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons	Material	Est. Percent	+ / -	Est. Tons
Paper	**26.9%**		**358,588**	**Construction Materials**	**6.7%**		**89,065**
Newspaper	1.7%	0.3%	22,840	Roofing	0.2%	0.2%	3,258
Cardboard	7.2%	1.4%	96,535	Drywall	0.5%	0.4%	7,108
Mixed Grade Paper	8.4%	1.3%	111,255	Carpet	3.0%	1.3%	40,312
Compostable Paper	7.7%	0.9%	102,993	Carpet Padding	0.5%	0.2%	6,562
R/C Paper	1.9%	0.3%	24,965	Other Construction Materials	2.4%	0.9%	31,826
Plastic	**15.1%**		**200,867**	**Hazardous/Special Wastes**	**2.1%**		**28,112**
#1 PET Bottles	0.8%	0.1%	10,913	Gasoline and Fuel Oils	0.0%	0.1%	546
#2 HDPE Bottles	0.4%	0.1%	5,929	Vehicle & Equipment Fluids	0.0%	0.0%	263
Other Plastic Packaging	1.8%	0.3%	23,708	Vehicle Batteries	0.0%	0.0%	0
Other Plastic Products	2.9%	0.7%	38,514	Household Batteries	0.0%	0.0%	576
Bags and Film	7.6%	0.8%	100,702	Latex Paint	0.1%	0.1%	1,529
R/C Plastics	1.6%	0.4%	21,101	Oil-based Paint & Solvents	0.0%	0.0%	56
				Adhesives and Glues	0.0%	0.0%	189
Glass	**2.3%**		**29,996**	Pesticides/Herbicides	0.1%	0.1%	809
Clear Glass Containers	0.9%	0.1%	11,432	Medical/Pharmaceutical Waste	0.2%	0.2%	2,831
Green Glass Containers	0.3%	0.1%	3,769	Cleaners and Corrosives	0.0%	0.0%	167
Brown Glass Containers	0.5%	0.2%	7,283	Diapers	1.5%	0.3%	20,200
R/C Glass	0.6%	0.3%	7,513	Other Hazardous/Special Wastes	0.1%	0.0%	946
Metal	**5.3%**		**70,829**	**Consumer Products**	**4.7%**		**63,190**
Aluminum Cans	0.4%	0.1%	5,163	Textiles	2.8%	0.5%	37,707
Tin Cans	0.9%	0.2%	12,125	Tires and Rubber	0.5%	0.1%	6,679
Other Ferrous Metals	1.8%	0.6%	24,105	Furniture/Mattresses	0.7%	0.3%	9,164
Other Non-Ferrous Metals	0.7%	0.3%	9,616	E-Waste	0.7%	0.3%	9,639
R/C Metals	1.5%	0.5%	19,819				
				Residues	**5.1%**		**67,678**
Organics	**23.6%**		**314,279**	Ash and Dust	0.2%	0.1%	3,295
Food Scraps	20.2%	3.7%	268,493	Fines/Residues/Inerts/Remainders	4.8%	1.1%	64,383
Green Waste	2.8%	0.8%	36,780				
Animal Manure	0.7%	0.2%	8,959				
Animal Carcasses	0.0%	0.0%	47				
Wood Debris	**8.2%**		**109,464**				
Lumber and Pallets	6.7%	1.8%	88,728				
Natural Wood	0.6%	0.9%	8,337	**Totals**	**100.0%**		**1,332,068**
R/C Wood	0.9%	0.4%	12,399	**Sample Count**	**295**		

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

Table 59: Supplemental Results—Puget Sound WGA Residential Disposed Waste Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons	Material	Est. Percent	+ / -	Est. Tons
Paper	**21.5%**		**210,404**	**Construction Materials**	**2.0%**		**19,427**
Newspaper	1.9%	0.3%	18,549	Roofing	0.1%	0.1%	1,350
Cardboard	3.3%	0.4%	32,474	Drywall	0.4%	0.2%	3,439
Mixed Grade Paper	8.6%	1.3%	84,234	Carpet	0.6%	0.3%	6,254
Compostable Paper	6.3%	0.4%	61,899	Carpet Padding	0.1%	0.1%	997
R/C Paper	1.4%	0.2%	13,248	Other Construction Materials	0.8%	0.3%	7,388
Plastic	**12.7%**		**124,457**	**Hazardous/Special Wastes**	**6.2%**		**60,212**
#1 PET Bottles	1.1%	0.1%	11,189	Gasoline and Fuel Oils	0.0%	0.0%	10
#2 HDPE Bottles	0.7%	0.1%	6,498	Vehicle & Equipment Fluids	0.1%	0.1%	849
Other Plastic Packaging	2.0%	0.3%	19,708	Vehicle Batteries	0.1%	0.1%	551
Other Plastic Products	2.1%	0.2%	20,024	Household Batteries	0.1%	0.0%	1,175
Bags and Film	5.7%	0.5%	55,526	Latex Paint	0.1%	0.0%	641
R/C Plastics	1.2%	0.2%	11,512	Oil-based Paint & Solvents	0.0%	0.1%	472
				Adhesives and Glues	0.1%	0.1%	651
Glass	**3.4%**		**32,727**	Pesticides/Herbicides	0.0%	0.0%	270
Clear Glass Containers	1.5%	0.1%	14,873	Medical/Pharmaceutical Waste	0.1%	0.1%	1,448
Green Glass Containers	0.6%	0.1%	5,461	Cleaners and Corrosives	0.0%	0.0%	355
Brown Glass Containers	0.7%	0.1%	7,322	Diapers	5.4%	0.5%	53,202
R/C Glass	0.5%	0.1%	5,071	Other Hazardous/Special Wastes	0.1%	0.0%	589
Metal	**5.5%**		**54,087**	**Consumer Products**	**7.9%**		**77,471**
Aluminum Cans	0.6%	0.0%	5,563	Textiles	4.2%	0.7%	41,085
Tin Cans	1.3%	0.1%	13,127	Tires and Rubber	0.3%	0.1%	3,315
Other Ferrous Metals	1.5%	0.5%	14,820	Furniture/Mattresses	2.4%	1.2%	23,842
Other Non-Ferrous Metals	1.2%	0.3%	11,348	E-Waste	0.9%	0.4%	9,230
R/C Metals	0.9%	0.2%	9,229				
				Residues	**6.6%**		**64,343**
Organics	**31.6%**		**308,316**	Ash and Dust	0.3%	0.1%	2,866
Food Scraps	23.0%	3.6%	224,732	Fines/Residues/Inerts/Remainders	6.3%	1.4%	61,478
Green Waste	3.9%	0.9%	37,907				
Animal Manure	4.6%	0.6%	45,139				
Animal Carcasses	0.1%	0.1%	537				
Wood Debris	**2.6%**		**25,179**				
Lumber and Pallets	1.8%	0.6%	17,748				
Natural Wood	0.2%	0.2%	1,574	**Totals**	**100.0%**		**976,624**
R/C Wood	0.6%	0.2%	5,857	**Sample Count**	**251**		

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

Table 60: Supplemental Results—Puget Sound WGA Self-hauled C&D Disposed Waste Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons	Material	Est. Percent	+ / -	Est. Tons
Paper	**7.3%**		**13,141**	**Construction Materials**	**32.8%**		**59,481**
Newspaper	0.2%	0.1%	407	Roofing	5.3%	2.7%	9,683
Cardboard	2.7%	0.8%	4,844	Drywall	5.1%	3.1%	9,244
Mixed Grade Paper	1.4%	0.6%	2,518	Carpet	8.6%	3.5%	15,495
Compostable Paper	2.1%	2.1%	3,885	Carpet Padding	1.2%	0.6%	2,192
R/C Paper	0.8%	0.5%	1,488	Other Construction Materials	12.6%	4.5%	22,867
Plastic	**7.1%**		**12,898**	**Hazardous/Special Wastes**	**1.5%**		**2,723**
#1 PET Bottles	0.2%	0.1%	400	Gasoline and Fuel Oils	0.0%	0.0%	0
#2 HDPE Bottles	0.2%	0.1%	312	Vehicle & Equipment Fluids	0.0%	0.0%	15
Other Plastic Packaging	0.8%	0.6%	1,523	Vehicle Batteries	0.0%	0.0%	0
Other Plastic Products	3.3%	2.1%	5,925	Household Batteries	0.0%	0.0%	34
Bags and Film	2.0%	0.7%	3,594	Latex Paint	0.1%	0.2%	270
R/C Plastics	0.6%	0.5%	1,144	Oil-based Paint & Solvents	0.0%	0.1%	66
				Adhesives and Glues	0.0%	0.0%	9
Glass	**1.4%**		**2,449**	Pesticides/Herbicides	0.0%	0.0%	0
Clear Glass Containers	0.2%	0.1%	451	Medical/Pharmaceutical Waste	0.0%	0.0%	13
Green Glass Containers	0.2%	0.1%	368	Cleaners and Corrosives	0.0%	0.0%	0
Brown Glass Containers	0.1%	0.1%	228	Diapers	0.3%	0.2%	588
R/C Glass	0.8%	0.5%	1,401	Other Hazardous/Special Wastes	1.0%	1.5%	1,729
Metal	**5.8%**		**10,550**	**Consumer Products**	**3.6%**		**6,564**
Aluminum Cans	0.2%	0.1%	283	Textiles	0.9%	0.4%	1,698
Tin Cans	0.2%	0.1%	293	Tires and Rubber	0.2%	0.2%	380
Other Ferrous Metals	3.2%	1.4%	5,796	Furniture/Mattresses	2.0%	1.3%	3,574
Other Non-Ferrous Metals	0.2%	0.2%	441	E-Waste	0.5%	0.4%	911
R/C Metals	2.1%	1.0%	3,737				
				Residues	**3.1%**		**5,601**
Organics	**4.4%**		**8,053**	Ash and Dust	0.8%	1.2%	1,394
Food Scraps	3.0%	1.5%	5,515	Fines/Residues/Inerts/Remainders	2.3%	0.9%	4,207
Green Waste	0.7%	0.6%	1,333				
Animal Manure	0.7%	0.5%	1,200				
Animal Carcasses	0.0%	0.0%	5				
Wood Debris	**33.0%**		**59,716**				
Lumber and Pallets	25.7%	9.0%	46,564				
Natural Wood	0.4%	0.4%	814	**Totals**	**100.0%**		**181,174**
R/C Wood	6.8%	2.7%	12,337	**Sample Count**	**117**		

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

Table 61: Supplemental Results—Puget Sound WGA Self-hauled Other Disposed Waste Detailed Composition, 2009

Material	Est. Percent	+/-	Est. Tons	Material	Est. Percent	+/-	Est. Tons
Paper	**11.6%**		**37,346**	**Construction Materials**	**13.6%**		**43,699**
Newspaper	0.7%	0.2%	2,224	Roofing	1.0%	0.5%	3,194
Cardboard	4.0%	0.7%	12,901	Drywall	3.1%	1.2%	9,912
Mixed Grade Paper	4.0%	0.9%	12,695	Carpet	2.7%	1.1%	8,732
Compostable Paper	1.5%	0.3%	4,953	Carpet Padding	1.0%	0.6%	3,052
R/C Paper	1.4%	0.4%	4,573	Other Construction Materials	5.9%	1.7%	18,809
Plastic	**9.4%**		**30,044**	**Hazardous/Special Wastes**	**1.6%**		**4,997**
#1 PET Bottles	0.3%	0.1%	1,085	Gasoline and Fuel Oils	0.0%	0.0%	0
#2 HDPE Bottles	0.3%	0.1%	841	Vehicle & Equipment Fluids	0.1%	0.0%	191
Other Plastic Packaging	1.0%	0.2%	3,253	Vehicle Batteries	0.0%	0.0%	8
Other Plastic Products	4.4%	0.8%	14,165	Household Batteries	0.1%	0.0%	167
Bags and Film	2.1%	0.4%	6,716	Latex Paint	0.1%	0.1%	242
R/C Plastics	1.2%	0.7%	3,985	Oil-based Paint & Solvents	0.0%	0.0%	117
				Adhesives and Glues	0.1%	0.1%	339
Glass	**3.3%**		**10,717**	Pesticides/Herbicides	0.0%	0.0%	111
Clear Glass Containers	0.7%	0.2%	2,332	Medical/Pharmaceutical Waste	0.0%	0.0%	112
Green Glass Containers	0.3%	0.1%	950	Cleaners and Corrosives	0.1%	0.0%	285
Brown Glass Containers	0.5%	0.2%	1,453	Diapers	0.7%	0.4%	2,311
R/C Glass	1.9%	1.0%	5,981	Other Hazardous/Special Wastes	0.3%	0.3%	1,115
Metal	**10.5%**		**33,693**	**Consumer Products**	**13.0%**		**41,880**
Aluminum Cans	0.2%	0.0%	534	Textiles	3.4%	0.6%	11,039
Tin Cans	1.5%	0.5%	4,704	Tires and Rubber	0.7%	0.3%	2,348
Other Ferrous Metals	4.5%	1.3%	14,470	Furniture/Mattresses	7.8%	1.9%	25,136
Other Non-Ferrous Metals	1.6%	0.5%	5,120	E-Waste	1.0%	0.5%	3,358
R/C Metals	2.8%	0.6%	8,865				
				Residues	**4.7%**		**15,104**
Organics	**13.9%**		**44,786**	Ash and Dust	0.4%	0.2%	1,284
Food Scraps	5.3%	1.3%	16,904	Fines/Residues/Inerts/Remainders	4.3%	1.4%	13,820
Green Waste	7.2%	2.1%	23,106				
Animal Manure	1.5%	0.6%	4,775				
Animal Carcasses	0.0%	0.0%	1				
Wood Debris	**18.3%**		**58,854**				
Lumber and Pallets	14.1%	3.8%	45,160				
Natural Wood	0.8%	0.8%	2,624	**Totals**	**100.0%**		**321,121**
R/C Wood	3.4%	1.1%	11,071	**Sample Count**	**260**		

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

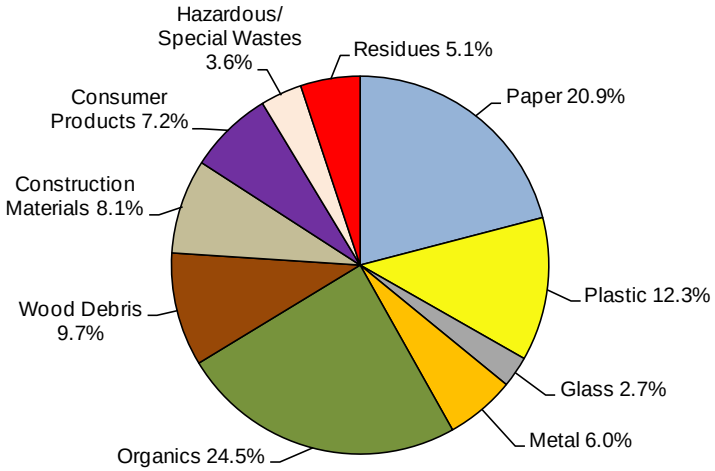
Supplemental Statewide Results—Overall Disposed Waste Stream

This section characterizes the overall disposed MSW stream for the entire state of Washington by combining all four sectors and all six WGAs considered in this study with supplemental data from recent studies completed by King, Snohomish, and Thurston counties. It uses the list of 50 *material type*s that resulted from the process of combining material lists from these four analyses.

Overview by Material Class

Composition estimates by **Material Class** for the overall statewide disposed waste stream are illustrated in Figure 33. The largest **Material Class** in the overall waste stream is **Organics**, which account for approximately 25 percent of the waste stream by weight, followed by **Paper** (21 percent) and **Plastic** (12 percent). See Appendix B: List and Definitions of Material Types for a description of the *material type*s included in each **Material Class**.

Figure 33: Supplemental Statewide Results—Overall Statewide Disposed Waste Stream Composition by Material Class, 2009



Fifteen Most Prevalent Materials

When combined, the 15 most prevalent *material type*s in the overall waste stream account for more than three quarters of the waste stream (76 percent). As shown in Table 62, *Food scraps* (17 percent) is the most prevalent *material type*. *Mixed grade paper* is the most prevalent *material type* that is commonly recyclable, comprising seven percent of the overall waste stream.

Table 62: Supplemental Statewide Results—Overall Statewide Disposed Waste Stream Fifteen Most Prevalent Material Types, 2009

Material	Est. Percent	Cum. Percent	Est. Tons
Food Scraps	16.6%	16.6%	824,605
Lumber and Pallets	7.9%	24.4%	392,420
Mixed Grade Paper	7.3%	31.8%	363,920
Compostable Paper	5.6%	37.4%	278,932
Bags and Film	5.4%	42.8%	269,539
Green Waste	5.3%	48.1%	265,570
Fines/Residues/Inerts/Remainders	4.8%	52.9%	240,128
Cardboard	4.7%	57.7%	235,313
Textiles	3.3%	61.0%	166,545
Other Construction Materials	3.3%	64.3%	161,980
Diapers	2.6%	66.8%	128,676
Furniture/Mattresses	2.4%	69.2%	118,151
Animal Manure	2.3%	71.5%	115,163
Other Ferrous Metals	2.3%	73.8%	114,491
Carpet	2.3%	76.1%	112,579
Total	**76.1%**		**3,788,012**

Detailed Composition

Table 63 lists the composition percentages by weight for each *material type* in Washington's overall disposed waste stream.

Table 63: Supplemental Statewide Results—Overall Statewide Disposed Waste Stream Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons	Material	Est. Percent	+ / -	Est. Tons
Paper	**20.9%**		**1,042,861**	**Construction Materials**	**8.1%**		**402,838**
Newspaper	1.5%	0.1%	72,295	Roofing	0.9%	0.3%	42,819
Cardboard	4.7%	0.5%	235,313	Drywall	1.3%	0.3%	63,749
Mixed Grade Paper	7.3%	0.8%	363,920	Carpet	2.3%	0.5%	112,579
Compostable Paper	5.6%	0.4%	278,932	Carpet Padding	0.4%	0.1%	21,711
R/C Paper	1.9%	0.3%	92,400	Other Construction Materials	3.3%	0.6%	161,980
Plastic	**12.3%**		**611,632**	**Hazardous/Special Wastes**	**3.6%**		**177,079**
#1 PET Bottles	0.8%	0.0%	40,613	Gasoline and Fuel Oils	0.0%	0.0%	556
#2 HDPE Bottles	0.5%	0.0%	27,143	Vehicle & Equipment Fluids	0.1%	0.0%	3,457
Other Plastic Packaging	1.6%	0.2%	80,303	Vehicle Batteries	0.0%	0.0%	766
Other Plastic Products	2.2%	0.3%	110,350	Household Batteries	0.1%	0.0%	2,923
Bags and Film	5.4%	0.5%	269,539	Latex Paint	0.1%	0.1%	6,360
R/C Plastics	1.7%	0.3%	83,684	Oil-based Paint & Solvents	0.0%	0.0%	2,301
				Adhesives and Glues	0.0%	0.0%	2,043
Glass	**2.7%**		**132,433**	Pesticides/Herbicides	0.0%	0.0%	1,271
Clear Glass Containers	1.0%	0.1%	50,577	Medical/Pharmaceutical Waste	0.4%	0.2%	20,706
Green Glass Containers	0.4%	0.0%	17,986	Cleaners and Corrosives	0.0%	0.0%	969
Brown Glass Containers	0.6%	0.1%	28,994	Diapers	2.6%	0.2%	128,676
R/C Glass	0.7%	0.2%	34,876	Other Hazardous/Special Wastes	0.1%	0.1%	7,051
Metal	**6.0%**		**296,667**	**Consumer Products**	**7.2%**		**359,431**
Aluminum Cans	0.4%	0.0%	20,386	Textiles	3.3%	0.4%	166,545
Tin Cans	0.9%	0.1%	46,509	Tires and Rubber	0.5%	0.1%	23,862
Other Ferrous Metals	2.3%	0.3%	114,491	Furniture/Mattresses	2.4%	0.5%	118,151
Other Non-Ferrous Metals	0.7%	0.1%	34,734	E-Waste	1.0%	0.3%	50,874
R/C Metals	1.6%	0.2%	80,548				
				Residues	**5.1%**		**254,011**
Organics	**24.5%**		**1,218,236**	Ash and Dust	0.3%	0.1%	13,883
Food Scraps	16.6%	1.4%	824,605	Fines/Residues/Inerts/Remainders	4.8%	0.8%	240,128
Green Waste	5.3%	0.9%	265,570				
Animal Manure	2.3%	0.3%	115,163				
Animal Carcasses	0.3%	0.4%	12,898				
Wood Debris	**9.7%**		**483,309**				
Lumber and Pallets	7.9%	1.2%	392,420				
Natural Wood	0.3%	0.2%	15,307	**Totals**	**100.0%**		**4,978,496**
R/C Wood	1.5%	0.3%	75,582	**Sample Count**	**1,412**		

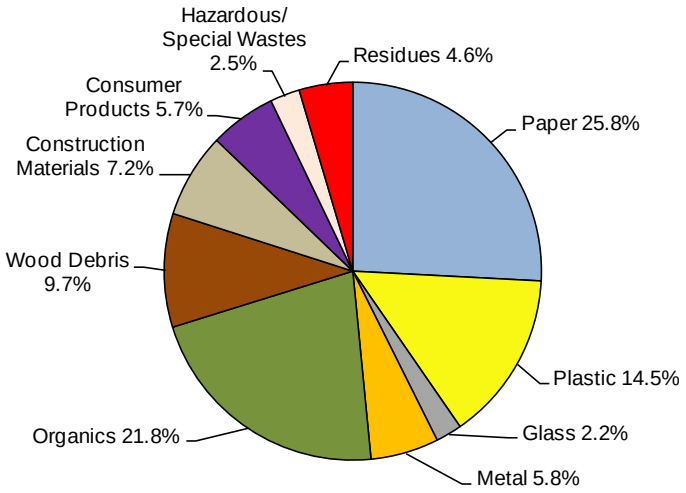
Supplemental Statewide Results—Commercial Waste

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 with supplemental data from recent studies completed by King, Snohomish, and Thurston counties. It uses the list of 50 *material type*s that resulted from the process of combining material lists from these four analyses.

Overview by Material Class

Composition estimates by **Material Class** for the statewide commercial disposed waste sector are illustrated in Figure 34. The largest **Material Class** in this waste sector is **Paper**, which accounts for approximately 26 percent of the waste sector by weight, followed by **Organics** (22 percent) and **Plastic** (15 percent). See Appendix B: List and Definitions of Material Types for a description of the *material type*s included in each **Material Class**.

Figure 34: Supplemental Statewide Results—Statewide Commercial Disposed Waste Sector Composition by Material Class, 2009



Fifteen Most Prevalent Materials

The 15 most prevalent *material type*s in the commercial waste sector as shown in Table 64 combined account for more than 80 percent of the waste sector (81 percent). The four most prevalent materials—*food scraps*, *lumber and pallets*, *mixed grade paper*, and *compostable paper*—are all typically recoverable either through compost or recycling programs. Together these four materials account for approximately 42 percent of the waste sector by weight.

Table 64: Supplemental Statewide Results—Statewide Commercial Disposed Waste Sector Fifteen Most Prevalent Material Types, 2009

Material	Est. Percent	Cum. Percent	Est. Tons
Food Scraps	18.2%	18.2%	396,411
Lumber and Pallets	8.2%	26.4%	177,311
Mixed Grade Paper	8.0%	34.4%	173,452
Compostable Paper	7.2%	41.6%	156,906
Bags and Film	7.1%	48.6%	153,550
Cardboard	6.5%	55.1%	141,019
Fines/Residues/Inerts/Remainders	4.3%	59.5%	94,328
Other Construction Materials	3.1%	62.6%	68,482
Textiles	3.0%	65.6%	65,130
Green Waste	2.9%	68.5%	63,740
R/C Paper	2.7%	71.2%	58,333
Carpet	2.5%	73.7%	53,853
Other Ferrous Metals	2.4%	76.1%	51,186
Other Plastic Products	2.3%	78.4%	49,976
R/C Plastics	2.2%	80.6%	48,337
Total	**80.6%**		**1,752,013**

Detailed Composition

Table 65 lists the composition percentages by weight for each *material type* in Washington's commercial disposed waste sector.

Table 65: Supplemental Statewide Results—Statewide Commercial Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons	Material	Est. Percent	+ / -	Est. Tons
Paper	**25.8%**		**561,485**	**Construction Materials**	**7.2%**		**157,485**
Newspaper	1.5%	0.2%	31,776	Roofing	0.5%	0.5%	10,121
Cardboard	6.5%	0.9%	141,019	Drywall	0.7%	0.6%	15,996
Mixed Grade Paper	8.0%	1.4%	173,452	Carpet	2.5%	0.9%	53,853
Compostable Paper	7.2%	0.8%	156,906	Carpet Padding	0.4%	0.2%	9,033
R/C Paper	2.7%	0.7%	58,333	Other Construction Materials	3.1%	1.0%	68,482
Plastic	**14.5%**		**316,264**	**Hazardous/Special Wastes**	**2.5%**		**55,325**
#1 PET Bottles	0.8%	0.1%	17,431	Gasoline and Fuel Oils	0.0%	0.0%	546
#2 HDPE Bottles	0.5%	0.1%	9,898	Vehicle & Equipment Fluids	0.1%	0.1%	1,918
Other Plastic Packaging	1.7%	0.3%	37,072	Vehicle Batteries	0.0%	0.0%	35
Other Plastic Products	2.3%	0.5%	49,976	Household Batteries	0.0%	0.0%	918
Bags and Film	7.1%	0.9%	153,550	Latex Paint	0.1%	0.1%	2,027
R/C Plastics	2.2%	0.7%	48,337	Oil-based Paint & Solvents	0.0%	0.0%	100
				Adhesives and Glues	0.0%	0.0%	701
Glass	**2.2%**		**48,812**	Pesticides/Herbicides	0.0%	0.1%	819
Clear Glass Containers	0.9%	0.1%	19,391	Medical/Pharmaceutical Waste	0.7%	0.4%	15,921
Green Glass Containers	0.3%	0.1%	6,980	Cleaners and Corrosives	0.0%	0.0%	180
Brown Glass Containers	0.6%	0.2%	12,266	Diapers	1.4%	0.3%	29,896
R/C Glass	0.5%	0.2%	10,174	Other Hazardous/Special Wastes	0.1%	0.1%	2,263
Metal	**5.8%**		**126,888**	**Consumer Products**	**5.7%**		**123,729**
Aluminum Cans	0.4%	0.0%	8,106	Textiles	3.0%	0.7%	65,130
Tin Cans	0.8%	0.1%	17,100	Tires and Rubber	0.5%	0.1%	11,224
Other Ferrous Metals	2.4%	0.6%	51,186	Furniture/Mattresses	1.5%	0.7%	33,120
Other Non-Ferrous Metals	0.6%	0.2%	13,365	E-Waste	0.7%	0.3%	14,256
R/C Metals	1.7%	0.4%	37,132				
				Residues	**4.6%**		**99,763**
Organics	**21.8%**		**472,974**	Ash and Dust	0.3%	0.2%	5,435
Food Scraps	18.2%	2.6%	396,411	Fines/Residues/Inerts/Remainders	4.3%	1.2%	94,328
Green Waste	2.9%	0.8%	63,740				
Animal Manure	0.6%	0.2%	12,776				
Animal Carcasses	0.0%	0.0%	47				
Wood Debris	**9.7%**		**211,349**				
Lumber and Pallets	8.2%	2.1%	177,311				
Natural Wood	0.4%	0.5%	8,459	**Totals**	**100.0%**		**2,174,075**
R/C Wood	1.2%	0.4%	25,579	**Sample Count**	**446**		

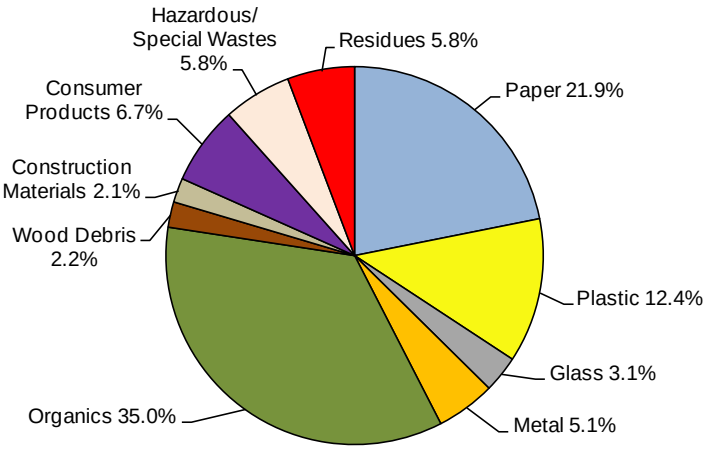
Supplemental Statewide Results—Residential Waste

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 with data from recent studies completed by King, Snohomish, and Thurston counties. It uses the list of 50 *material type*s that resulted from the process of combining material lists from these four analyses.

Overview by Material Class

Figure 35 shows composition estimates by **Material Class** for the statewide residential disposed waste sector. The largest **Material Class** in this waste sector is **Organics**, which account for approximately 35 percent of the waste sector by weight, followed by **Paper** (22 percent) and **Plastic** (12 percent). See Appendix B: List and Definitions of Material Types for a description of the *material type*s included in each **Material Class**.

Figure 35: Supplemental Statewide Results—Statewide Residential Disposed Waste Sector Composition by Material Class, 2009



Fifteen Most Prevalent Materials

Food scraps is the most prevalent *material type*, comprising about 22 percent of residential disposed waste. A total of about 82 percent of residential waste is composed of the 15 *material type*s shown in Table 66. *Mixed grade paper* is the most prevalent *material type* that is traditionally recyclable, comprising approximately nine percent of residential disposed waste.

Table 66: Supplemental Statewide Results—Statewide Residential Disposed Waste Sector Fifteen Most Prevalent Material Types, 2009

Material	Est. Percent	Cum. Percent	Est. Tons
Food Scraps	21.6%	21.6%	394,943
Mixed Grade Paper	9.0%	30.6%	164,547
Green Waste	8.1%	38.7%	148,271
Compostable Paper	6.0%	44.8%	110,383
Bags and Film	5.5%	50.3%	100,139
Fines/Residues/Inerts/Remainders	5.5%	55.7%	99,649
Animal Manure	5.2%	60.9%	94,672
Diapers	5.1%	66.0%	93,709
Textiles	4.0%	70.1%	73,188
Cardboard	3.5%	73.5%	63,060
Newspaper	2.0%	75.5%	36,383
Other Plastic Packaging	2.0%	77.5%	35,941
Other Plastic Products	1.6%	79.1%	30,010
Lumber and Pallets	1.5%	80.6%	27,304
Other Ferrous Metals	1.5%	82.1%	27,118
Total	**82.1%**		**1,499,318**

Detailed Composition

Table 67 lists the composition percentages by weight for each *material type* in Washington's residential disposed waste sector.

Table 67: Supplemental Statewide Results—Statewide Residential Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons	Material	Est. Percent	+ / -	Est. Tons
Paper	**21.9%**		**399,387**	**Construction Materials**	**2.1%**		**38,053**
Newspaper	2.0%	0.3%	36,383	Roofing	0.1%	0.1%	2,088
Cardboard	3.5%	0.5%	63,060	Drywall	0.3%	0.1%	4,790
Mixed Grade Paper	9.0%	1.6%	164,547	Carpet	0.7%	0.2%	12,845
Compostable Paper	6.0%	0.4%	110,383	Carpet Padding	0.2%	0.1%	2,769
R/C Paper	1.4%	0.2%	25,013	Other Construction Materials	0.9%	0.3%	15,561
Plastic	**12.4%**		**225,984**	**Hazardous/Special Wastes**	**5.8%**		**106,810**
#1 PET Bottles	1.1%	0.1%	20,943	Gasoline and Fuel Oils	0.0%	0.0%	10
#2 HDPE Bottles	0.8%	0.1%	15,463	Vehicle & Equipment Fluids	0.1%	0.0%	1,307
Other Plastic Packaging	2.0%	0.3%	35,941	Vehicle Batteries	0.0%	0.0%	551
Other Plastic Products	1.6%	0.2%	30,010	Household Batteries	0.1%	0.0%	1,726
Bags and Film	5.5%	0.7%	100,139	Latex Paint	0.1%	0.0%	1,297
R/C Plastics	1.3%	0.2%	23,488	Oil-based Paint & Solvents	0.0%	0.0%	829
				Adhesives and Glues	0.0%	0.0%	765
Glass	**3.1%**		**57,461**	Pesticides/Herbicides	0.0%	0.0%	291
Clear Glass Containers	1.4%	0.1%	26,398	Medical/Pharmaceutical Waste	0.2%	0.1%	4,244
Green Glass Containers	0.5%	0.1%	9,459	Cleaners and Corrosives	0.0%	0.0%	459
Brown Glass Containers	0.8%	0.1%	13,927	Diapers	5.1%	0.4%	93,709
R/C Glass	0.4%	0.1%	7,678	Other Hazardous/Special Wastes	0.1%	0.0%	1,624
Metal	**5.1%**		**92,467**	**Consumer Products**	**6.7%**		**122,747**
Aluminum Cans	0.6%	0.0%	11,011	Textiles	4.0%	0.6%	73,188
Tin Cans	1.3%	0.1%	23,666	Tires and Rubber	0.4%	0.1%	6,836
Other Ferrous Metals	1.5%	0.5%	27,118	Furniture/Mattresses	1.3%	0.7%	24,605
Other Non-Ferrous Metals	0.8%	0.2%	14,471	E-Waste	1.0%	0.4%	18,118
R/C Metals	0.9%	0.2%	16,202				
				Residues	**5.8%**		**105,224**
Organics	**35.0%**		**638,597**	Ash and Dust	0.3%	0.1%	5,575
Food Scraps	21.6%	2.3%	394,943	Fines/Residues/Inerts/Remainders	5.5%	1.2%	99,649
Green Waste	8.1%	2.0%	148,271				
Animal Manure	5.2%	0.7%	94,672				
Animal Carcasses	0.0%	0.0%	711				
Wood Debris	**2.2%**		**39,790**				
Lumber and Pallets	1.5%	0.4%	27,304				
Natural Wood	0.2%	0.1%	3,282	**Totals**	**100.0%**		**1,826,521**
R/C Wood	0.5%	0.1%	9,204	**Sample Count**	**389**		

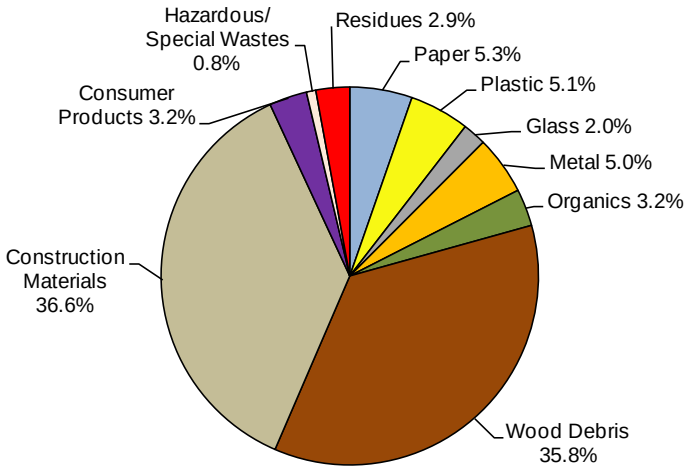
Supplemental Statewide Results—Self-hauled C&D Waste

This section characterizes the MSW disposed by the self-hauled C&D sector from the entire state of Washington by combining data from all six WGAs considered in this study with data from recent studies completed by King, Snohomish, and Thurston counties. It uses the list of 50 *material type*s that resulted from the process of combining material lists from these four analyses.

Overview by Material Class

Figure 36 shows composition estimates by **Material Class** for the statewide self-hauled C&D disposed waste sector. The largest **Material Class** in this waste sector is **Construction Materials**, which accounts for approximately 37 percent of the waste sector by weight, followed by **Wood Debris** (36 percent). The eight remaining **Material Classes** combined comprise approximately 27 percent of the self-hauled C&D disposed waste sector. See Appendix B: List and Definitions of Material Types for a description of the *material type*s included in each **Material Class**.

Figure 36: Supplemental Statewide Results—Statewide Self-hauled C&D Disposed Waste Sector Composition by Material Class, 2009



Fifteen Most Prevalent Materials

When combined, the 15 most prevalent *material type*s in the self-hauled C&D disposed waste sector account for approximately 90 percent of the waste sector as shown in Table 68. *Lumber and pallets* is the most prevalent *material type*, comprising nearly one-third of the self-hauled C&D disposed waste sector.

Table 68: Supplemental Statewide Results—Statewide Self-hauled C&D Disposed Waste Sector Fifteen Most Prevalent Material Types, 2009

Material	Est. Percent	Cum. Percent	Est. Tons
Lumber and Pallets	30.2%	30.2%	112,952
Other Construction Materials	12.8%	43.0%	47,995
Drywall	8.0%	51.0%	29,853
Carpet	7.5%	58.4%	27,996
Roofing	7.2%	65.7%	27,102
R/C Wood	5.4%	71.1%	20,233
Other Ferrous Metals	2.7%	73.8%	10,254
Cardboard	2.7%	76.5%	10,018
Fines/Residues/Inerts/Remainders	2.5%	79.0%	9,421
Other Plastic Products	2.3%	81.4%	8,760
Furniture/Mattresses	1.8%	83.2%	6,797
R/C Metals	1.8%	85.0%	6,754
R/C Glass	1.7%	86.7%	6,375
Food Scraps	1.5%	88.2%	5,629
Bags and Film	1.4%	89.6%	5,141
Total	**89.6%**		**335,279**

Detailed Composition

Table 69 lists the composition percentages by weight for each *material type* in Washington's self-hauled C&D disposed waste sector.

Table 69: Supplemental Statewide Results—Statewide Self-hauled C&D Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+ / -	Est. Tons	Material	Est. Percent	+ / -	Est. Tons
Paper	**5.3%**		**20,026**	**Construction Materials**	**36.6%**		**136,960**
Newspaper	0.1%	0.1%	526	Roofing	7.2%	2.4%	27,102
Cardboard	2.7%	0.8%	10,018	Drywall	8.0%	2.3%	29,853
Mixed Grade Paper	0.9%	0.3%	3,329	Carpet	7.5%	2.5%	27,996
Compostable Paper	1.1%	1.0%	4,040	Carpet Padding	1.1%	0.4%	4,015
R/C Paper	0.6%	0.3%	2,113	Other Construction Materials	12.8%	4.4%	47,995
Plastic	**5.1%**		**19,249**	**Hazardous/Special Wastes**	**0.8%**		**3,026**
#1 PET Bottles	0.1%	0.0%	432	Gasoline and Fuel Oils	0.0%	0.0%	0
#2 HDPE Bottles	0.1%	0.0%	337	Vehicle & Equipment Fluids	0.0%	0.0%	15
Other Plastic Packaging	0.5%	0.3%	1,832	Vehicle Batteries	0.0%	0.0%	0
Other Plastic Products	2.3%	1.2%	8,760	Household Batteries	0.0%	0.0%	34
Bags and Film	1.4%	0.4%	5,141	Latex Paint	0.1%	0.1%	543
R/C Plastics	0.7%	0.4%	2,747	Oil-based Paint & Solvents	0.0%	0.0%	66
				Adhesives and Glues	0.0%	0.0%	14
Glass	**2.0%**		**7,505**	Pesticides/Herbicides	0.0%	0.0%	0
Clear Glass Containers	0.1%	0.1%	467	Medical/Pharmaceutical Waste	0.0%	0.0%	14
Green Glass Containers	0.1%	0.1%	380	Cleaners and Corrosives	0.0%	0.0%	0
Brown Glass Containers	0.1%	0.0%	283	Diapers	0.2%	0.1%	589
R/C Glass	1.7%	1.0%	6,375	Other Hazardous/Special Wastes	0.5%	0.7%	1,751
Metal	**5.0%**		**18,788**	**Consumer Products**	**3.2%**		**12,112**
Aluminum Cans	0.1%	0.0%	315	Textiles	0.8%	0.3%	2,904
Tin Cans	0.1%	0.0%	331	Tires and Rubber	0.3%	0.3%	1,197
Other Ferrous Metals	2.7%	0.8%	10,254	Furniture/Mattresses	1.8%	1.1%	6,797
Other Non-Ferrous Metals	0.3%	0.1%	1,135	E-Waste	0.3%	0.2%	1,215
R/C Metals	1.8%	0.7%	6,754				
				Residues	**2.9%**		**10,815**
Organics	**3.2%**		**11,873**	Ash and Dust	0.4%	0.6%	1,394
Food Scraps	1.5%	0.7%	5,629	Fines/Residues/Inerts/Remainders	2.5%	1.4%	9,421
Green Waste	1.3%	0.8%	4,946				
Animal Manure	0.3%	0.2%	1,293				
Animal Carcasses	0.0%	0.0%	5				
Wood Debris	**35.8%**		**134,033**				
Lumber and Pallets	30.2%	9.5%	112,952				
Natural Wood	0.2%	0.2%	847	**Totals**	**100.0%**		**374,386**
R/C Wood	5.4%	1.8%	20,233	**Sample Count**	**217**		

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

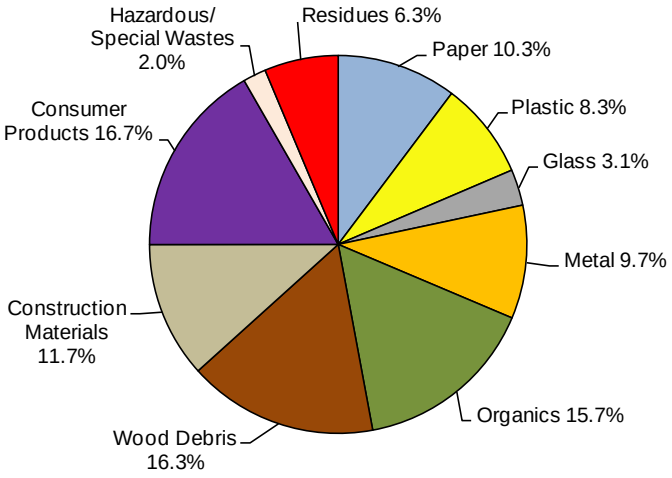
Supplemental Statewide Results—Self-hauled Other Waste

This section characterizes the MSW disposed by the self-hauled other sector from the entire state of Washington by combining data from all six WGAs considered in this study with data from recent studies completed by King, Snohomish, and Thurston counties. It uses the list of 50 *material type*s that resulted from the process of combining material lists from these four analyses.

Overview by Material Class

Figure 37 illustrates composition estimates by **Material Class** for the statewide self-hauled other disposed waste sector. The largest **Material Class** in this waste sector is **Consumer Products**, which accounts for approximately 17 percent of the waste sector by weight, followed by **Wood Debris** (16 percent) and **Organics** (16 percent). See Appendix B: List and Definitions of Material Types for a description of the *material type*s included in each **Material Class**.

Figure 37: Supplemental Statewide Results—Statewide Self-hauled Other Disposed Waste Sector Composition by Material Class, 2009



Fifteen Most Prevalent Materials

When combined, the 15 most prevalent *material type*s in the self-hauled other disposed waste sector account for more than three quarters (77 percent) of the waste sector as shown in Table 70. *Lumber and pallets* (12 percent) and *furniture/mattresses* (nine percent) are the two most prevalent materials in the self-hauled other disposed waste sector.

Table 70: Supplemental Statewide Results—Statewide Self-hauled Other Disposed Waste Sector Fifteen Most Prevalent Material Types, 2009

Material	Est. Percent	Cum. Percent	Est. Tons
Lumber and Pallets	12.4%	12.4%	74,854
Furniture/Mattresses	8.9%	21.3%	53,628
Green Waste	8.1%	29.3%	48,613
Fines/Residues/Inerts/Remainders	6.1%	35.4%	36,731
Other Construction Materials	5.0%	40.4%	29,942
Food Scraps	4.6%	45.0%	27,621
Other Ferrous Metals	4.3%	49.3%	25,934
Textiles	4.2%	53.5%	25,323
Mixed Grade Paper	3.7%	57.2%	22,593
Other Plastic Products	3.6%	60.8%	21,604
Cardboard	3.5%	64.3%	21,216
R/C Wood	3.4%	67.7%	20,565
R/C Metals	3.4%	71.1%	20,460
Carpet	3.0%	74.1%	17,885
E-Waste	2.9%	76.9%	17,285
Total	**76.9%**		**464,255**

Detailed Composition

Table 71 lists the composition percentages by weight for each *material type* in Washington's self-hauled other disposed waste sector.

Table 71: Supplemental Statewide Results—Statewide Self-hauled Other Disposed Waste Sector Detailed Composition, 2009

Material	Est. Percent	+/-	Est. Tons	Material	Est. Percent	+/-	Est. Tons
Paper	**10.3%**		**61,963**	**Construction Materials**	**11.7%**		**70,339**
Newspaper	0.6%	0.3%	3,610	Roofing	0.6%	0.3%	3,508
Cardboard	3.5%	0.6%	21,216	Drywall	2.2%	0.8%	13,110
Mixed Grade Paper	3.7%	1.0%	22,593	Carpet	3.0%	1.1%	17,885
Compostable Paper	1.3%	0.3%	7,604	Carpet Padding	1.0%	0.5%	5,894
R/C Paper	1.2%	0.3%	6,941	Other Construction Materials	5.0%	1.6%	29,942
Plastic	**8.3%**		**50,135**	**Hazardous/Special Wastes**	**2.0%**		**11,918**
#1 PET Bottles	0.3%	0.1%	1,807	Gasoline and Fuel Oils	0.0%	0.0%	0
#2 HDPE Bottles	0.2%	0.0%	1,446	Vehicle & Equipment Fluids	0.0%	0.0%	217
Other Plastic Packaging	0.9%	0.2%	5,458	Vehicle Batteries	0.0%	0.0%	180
Other Plastic Products	3.6%	0.8%	21,604	Household Batteries	0.0%	0.0%	245
Bags and Film	1.8%	0.4%	10,709	Latex Paint	0.4%	0.4%	2,493
R/C Plastics	1.5%	0.6%	9,112	Oil-based Paint & Solvents	0.2%	0.3%	1,306
				Adhesives and Glues	0.1%	0.0%	563
Glass	**3.1%**		**18,655**	Pesticides/Herbicides	0.0%	0.0%	162
Clear Glass Containers	0.7%	0.2%	4,321	Medical/Pharmaceutical Waste	0.1%	0.1%	527
Green Glass Containers	0.2%	0.1%	1,167	Cleaners and Corrosives	0.1%	0.0%	330
Brown Glass Containers	0.4%	0.1%	2,519	Diapers	0.7%	0.3%	4,482
R/C Glass	1.8%	0.7%	10,649	Other Hazardous/Special Wastes	0.2%	0.2%	1,414
Metal	**9.7%**		**58,524**	**Consumer Products**	**16.7%**		**100,842**
Aluminum Cans	0.2%	0.0%	955	Textiles	4.2%	0.9%	25,323
Tin Cans	0.9%	0.3%	5,413	Tires and Rubber	0.8%	0.3%	4,605
Other Ferrous Metals	4.3%	1.1%	25,934	Furniture/Mattresses	8.9%	2.1%	53,628
Other Non-Ferrous Metals	1.0%	0.3%	5,763	E-Waste	2.9%	1.8%	17,285
R/C Metals	3.4%	0.9%	20,460				
				Residues	**6.3%**		**38,208**
Organics	**15.7%**		**94,792**	Ash and Dust	0.2%	0.1%	1,478
Food Scraps	4.6%	0.9%	27,621	Fines/Residues/Inerts/Remainders	6.1%	3.0%	36,731
Green Waste	8.1%	3.0%	48,613				
Animal Manure	1.1%	0.4%	6,422				
Animal Carcasses	2.0%	3.0%	12,135				
Wood Debris	**16.3%**		**98,138**				
Lumber and Pallets	12.4%	3.3%	74,854				
Natural Wood	0.5%	0.4%	2,719	**Totals**	**100.0%**		**603,514**
R/C Wood	3.4%	1.0%	20,565	**Sample Count**	**360**		

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