



**CHATHAM COUNTY**  
**2014 WASTE COMPOSITION STUDY**  
**FINAL REPORT**

**February 2014**



Prepared for:

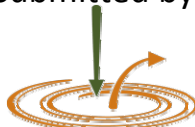
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# Chatham County, North Carolina 2014 Waste Composition Study

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# Section 1

## Introduction

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### 1.1 Purpose and Scope

Chatham County (County) contracted Kessler Consulting, Inc. (KCI) to conduct a Waste Composition Study (WCS) of Class I garbage and a Visual Waste Audit (VWA) of Class III bulky wastes to determine the composition of solid waste generated at the County's Collection Centers and delivered to Waste Management Inc.'s (WMI) Siler City Transfer Station for disposal.

The study consisted of sampling and sorting materials from the County's solid waste compactors and pre-crushers from each of the County's twelve collection centers. The Study also included a visual assessment of all bulky wastes collected in roll-offs at each collection center.

### 1.2 Background

Chatham County operates 12 collection centers throughout the County. These centers collect recyclables and MSW from residents in the unincorporated areas of the County. Each center has a compactor and a bulky waste roll-off container for MSW collection and 2 of the centers have additional pre-crushers for bulky waste.

In addition to MSW collection, each of the collection centers has receptacles for the following source-separated recyclables:

- Glass (brown, green, and clear)
- Aluminum cans
- Steel cans
- Mixed paper
- Corrugated cardboard
- Plastics (#1 - #7 bottles)
- Scrap metal (including white goods)
- Electronics.

The goal of the WCS and VWA was to analyze the materials that are being placed in the MSW receptacles to determine if recyclable materials are being managed properly. Results of this study will help the County to better focus their education and enforcement efforts.

The 2014 Study was conducted to evaluate changes in the waste stream since a similar, baseline study was conducted in 2011. Comparisons of the results from each study are provided herein.

# Section 2

## Methodology

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### 2.1 Generator Sectors

The 2014 study focused on all materials generated at the County's 12 collection centers and delivered to WMI's Siler City Transfer Station. Three generator sectors were evaluated during the study:

- MSW Compactors (manually sorted)
- MSW Pre-Crushers (manually sorted)
- Bulky MSW Roll-Offs (visually characterized)

### 2.2 Material Categories

KCI worked with County staff to develop a list of 48 material categories into which waste was sorted. To develop this list of material categories, KCI provided a list of suggested material categories to the County for review and approval. KCI worked to ensure that all results from the 2014 study were comparable to the County's previous study. The final list of material categories and descriptions are provided in Appendix A.

### 2.3 Locations, Equipment and Labor

The two-day sorting event was conducted between the hours of 7:30 am to 4:00 pm on January 27 and 28, 2014. KCI provided a Study Supervisor, Sorting Supervisor, all sorting equipment, and safety gear. WMI provided a loader and operator to gather samples and remove waste upon completion of sorting activities. All sort labor was provided by KCI, through an agreement with Labor Ready of Greensboro.

KCI prepared and County staff reviewed and approved a site safety plan that was followed throughout the sorting event. KCI worked closely with County and WMI staff to coordinate and set up a sort location that would ensure worker safety. Each morning of the event, sorters were given thorough safety instructions by one of KCI's Supervisors to ensure safety and proper sorting. No injuries or emergencies occurred during the sorting event.

### 2.4 Sampling Schedule and Procedures

Per the County's direction, all of the compactors, pre-crushers, and bulky waste roll-offs at each of the County's 12 collection centers were included in this study. In total, 14 samples from the County's compactors and pre-crushers were manually sorted and 12 bulky waste roll-offs were visually characterized during the two-day sorting event.

Upon entering the transfer station, County vehicle drivers were asked for the name of the collection center from which the waste originated. On the data recording form, the Study Supervisor noted the following information: truck number, date and time, generator sector, and collection center location. Once the materials in each compactor and pre-crusher vehicle were tipped, representative samples of more than 200 pounds were selected and placed in totes, where they were staged until being sorted. Photo 2.1 depicts a typical sample ready for sorting. For bulky waste roll-offs, the materials were tipped on the tip floor, where they were carefully inspected and visually characterized by the Study Supervisor.



**Photo 2.1: Typical Manually Sorted Sample**

## 2.5 Sorting Procedures

All samples were transferred onto the sort table where they were hand-sorted into the previously defined material categories. Photo 2.2 depicts the sorting activities. After the entire sample was sorted, the Sorting Supervisor weighed and recorded the weights of each container on a data recording form. Tare weights of empty containers were subtracted from the weights of the containers after sorting to obtain the net weight of each material category.



**Photo 2.2: Waste Sorting Activities**

## 2.6 Visual Audit Procedures

Because bulky wastes are not conducive to manual sorting, KCI visually characterized the waste generated in each of the collection center roll-offs to determine the composition of incoming bulk wastes.

Upon arrival at the Transfer Station, the Sort Supervisor asked the County vehicle driver to estimate how full each roll-off was with material. Each of the roll-offs were determined to be between 60 and 100 percent full at the time of arrival. On the visual audit recording form, the Sort Supervisor recorded the truck number, date and time, generator sector, and collection center location. Once tipped, the load was inspected to determine the presence (by volume) of various material types starting with the most abundant (major) materials. Following the determination of the major material categories, the percent by volume of each minor material type was then recorded on the visual audit data form. Figure 2.3, depicts the typical bulky contents of a County roll-off. A sample visual audit data form is provided in Appendix B.



**Photo 2.3: Typical Roll-Off Load**

## 2.7 Analytical Procedures

After the sorting event, KCI calculated the weighted average of each material category for each generator sector following the industry-accepted standards outlined in the *ASTM Standard Test Method for Determination of the Composition of Unprocessed Municipal Solid Waste (D5231-92; reapproved 2008)*. Confidence intervals were also calculated for each material category using a standard statistical t-test.

To assist the County in further quantifying the roll-off waste stream, KCI utilized industry-accepted conversion factors to convert the visual audit results (percent by volume) into the percent by weight. While not an exact determination, it will help the County conduct further comparisons and weight based analyses.

# Section 3

## Results

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### 3.1 Introduction to Results

All results presented in this section are expressed in percentage by weight or volume. The percentages included in the tables and figures are the mean values for each material category. Where appropriate, the tables also provide the 90 percent confidence intervals for each material category. The confidence interval indicates that, with a 90 percent level of confidence, the actual arithmetic mean (the arithmetic mean obtained if an infinite number of samples were sorted) is within the upper and lower limits shown. This provides an understanding of how much variation occurred in the quantity of that material category found in the samples sorted. Generally, the more homogeneous the waste stream and the greater the number of samples sorted, the higher the level of accuracy achieved and the narrower the margin between the upper and lower bounds of the confidence interval.

### 3.2 Collection Center Compactor Waste

Figure 3.1 depicts the composition of waste disposed within the compactors located at the County's collection centers and Table 3.1 compares these results with the 2011 Study. Individual sample data for the compactor samples can be found in Appendix C.

**Comparison with 2011 Results:** Overall, the results of the 2011 and 2014 studies are similar. Study results reveal some differences in the individual material categories; however, the types of materials, i.e., recyclable paper, recyclable containers, etc., were relatively stable between the two studies. Some of the most significant changes in composition between the 2011 and 2014 studies include:

- An increase in corrugated cardboard, from 1.5 percent in 2011 to 4.3 percent in 2014.
- A reduction in plastic film, from 9.3 percent in 2011 to 5.7 percent in 2014.
- A reduction in textiles, from 6.6 percent in 2011 to 3.8 percent in 2014.

**Diversion Opportunities:** Table 3.2 details the diversion opportunities found within the County's compactors. Approximately 39.1 percent of the waste stream is comprised of materials that can be recycled in the County's current recycling programs, i.e., recyclable paper and containers and scrap metals, batteries, pallets, and computers/televisions. Other commonly recycled materials, which could be recovered through an expansion of the current recycling program, include non bottle PET, bottles from toxics, rigid plastics, and aerosol cans. The materials represent the opportunity to divert an additional 3.4 percent of the waste stream, and could be included in the County's current recycling system by working with your processor/end markets. Organic wastes comprise the largest component (27.4 percent) of this waste stream; however recovery of organics and other potentially recyclable items (15.6 percent) would potentially require fundamental changes to the County's collection and processing system.

### Compactor Waste Diversion Opportunities

Material Types	2014 Percent by Weight	2011 Percent by Weight
Recyclable Paper	22.5%	19.9%
Recyclable Containers	13.3%	13.9%
Other County-Accepted Recyclables	3.3%	2.2%
Other Common Recyclable Materials	3.4%	5.9%
Compostable Organics	27.4%	25.5%
Other Potentially Recyclable Items	15.6%	19.5%
Subtotal	<b>85.5%</b>	<b>86.3%</b>

*Details regarding this table are provided in Table 3.2*

## 3.3 Collection Center Pre-Crusher Waste

Figure 3.2 depicts the composition of waste disposed within the pre-crushers located at the County’s collection centers and Table 3.2 compares these results with the 2011 study. The intention of the pre-crushers is to process materials that are too large for disposal in the collection center compactors; however the results of the study show that significant quantities of household garbage are also being disposed in the pre-crushers. Individual sample data for the pre-crusher samples can be found in Appendix D.

**Comparison with 2011 Results:** Unlike the compactor waste stream, the results of the pre-crusher studies differ significantly. Much of this could be attributed to the higher quantities of household garbage found in the samples of the 2014 study. The increase in household garbage in the 2014 samples can explain the increase of recyclable paper and containers. Some of the most significant changes in composition between the 2011 and 2014 studies include:

- An increase in corrugated cardboard, from 1.5 percent in 2011 to 3.2 percent in 2014.
- An increase in small appliances and technotrash from less than 0.3 percent in 2011 to 6.6 percent in 2014.
- An increase in glass containers, from 0.5 percent in 2011 to 4.1 percent in 2014.
- An increase in textiles, from 2.2 percent in 2011 to 5.1 percent in 2014.
- A reduction in untreated wood waste, from 17.8 percent in 2011 to 9.4 percent in 2014.
- A reduction in treated wood waste, from 20.0 percent in 2011, to 9.8 percent in 2014.
- A reduction in all other garbage, from 11.9 percent in 2011, to 1.8 percent in 2014.

**Diversion Opportunities:** Table 3.4 details the diversion opportunities found within the County’s pre-crushers. Based on the results of the 2014 study, approximately 36.7 percent of this waste stream is comprised of materials that can be recycled in the County’s current recycling programs. Other commonly recycled materials represent the opportunity to divert an additional 4.2 percent of the waste stream. Once again, organic wastes comprise the largest component (24.1 percent) of the waste stream, however recovery of organics and other potentially recyclable items (27.2

percent) would require new collection and processing systems to successfully divert these materials from the waste stream.

#### Pre-Crusher Waste Diversion Opportunities

Material Types	2014 Percent by Weight	2011 Percent by Weight
Recyclable Paper	15.1%	10.6%
Recyclable Containers	10.7%	3.5%
Other County-Accepted Recyclables	10.9%	2.6%
Other Common Recyclable Materials	4.2%	3.2%
Compostable Organics	24.1%	28.5%
Other Potentially Recyclable Items	27.2%	35.6%
Subtotal	<b>92.2%</b>	<b>84.0%</b>

*Details regarding this table are provided in Table 3.4*

### 3.4 Collection Center Roll-Off Waste

Figure 3.3 depicts the composition of waste disposed within the roll-offs located at the County's collection centers and Table 3.5 compares these results with the 2011 study. Although not calculated in the previous study, Table 3.6 estimates the results of the 2014 visual audit in terms of percent by weight by utilizing industry-accepted conversion factors. Individual sample data for the roll-off samples can be found in Appendix E.

The main types of wastes disposed in the County's roll-off containers are furniture, carpet and padding, treated and untreated wood and household bagged garbage. Like the pre-crushers, the County's roll-off containers are not intended for the collection of household garbage; however, many of the roll-offs delivered contained large amounts of residential bagged waste, as identified by their white, kitchen-style garbage bags.

**Comparison with 2011 Results:** The results of the 2011 and 2014 studies reveal several variations in volume; however, the volumes of bulk waste can vary widely due to the large nature of these materials. For example, a single couch can alter the composition, by volume, of a roll-off container. Study results reveal some variation in the common material types, while there is lesser variation in the less common material types. The largest changes in volume composition include:

- An increase in carpet and padding, from 2.6 percent in 2011 to 13.6 percent in 2014.
- An increase in treated wood waste, from less than 3.8 percent in 2011 to 13.4 percent in 2014.
- A reduction in untreated wood waste, from 15.4 percent in 2011 to 11.6 percent in 2014.
- A reduction in other glass, from 5.4 percent in 2011, to 0.2 percent in 2014.

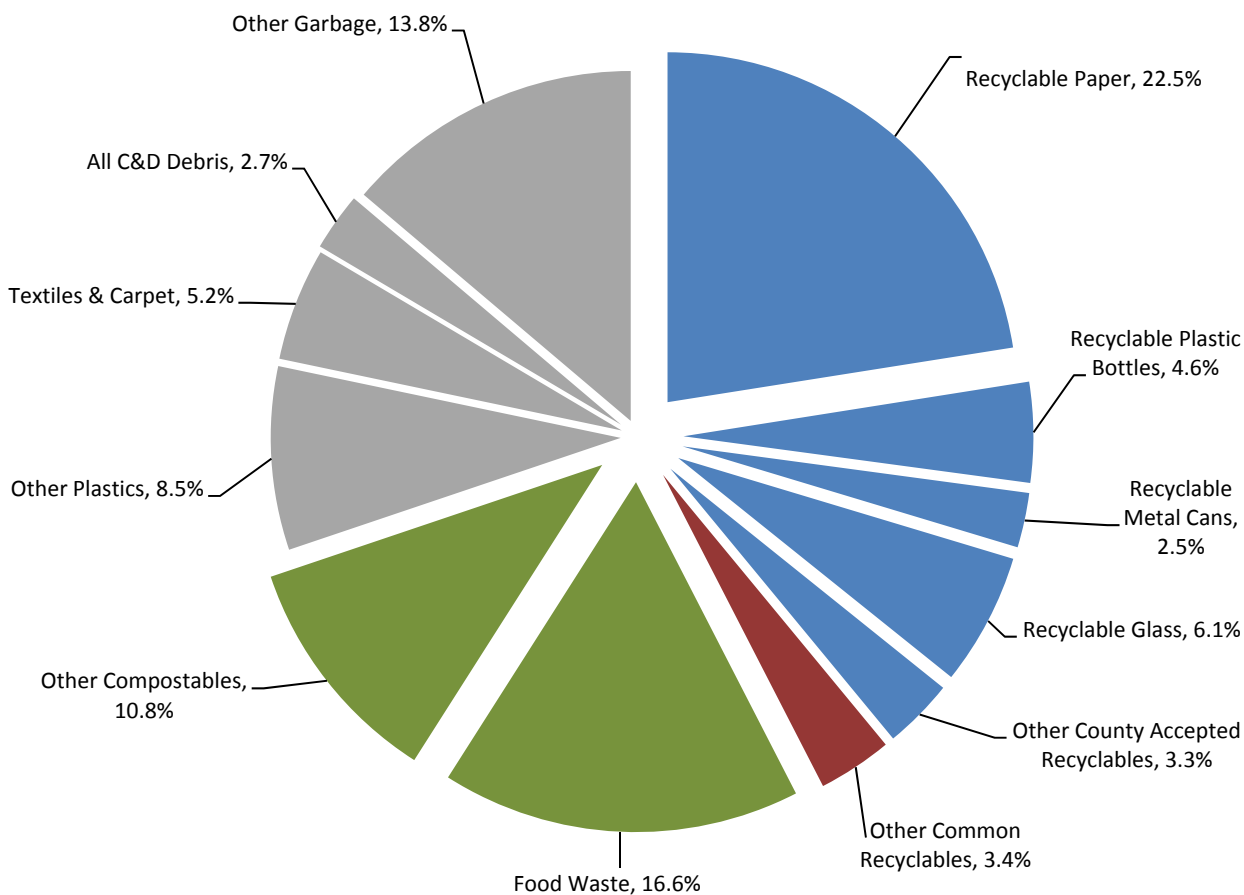
**Diversion Opportunities:** Based on the results of the 2014 study, much of the roll-off waste stream is comprised of common construction and demolition (C&D) debris that can be recycled or diverted from disposal utilizing new collection and processing systems. Contracting with a C&D Debris processor/recycler is one method of diverting this material from disposal; however, all residential

household garbage would have to be eliminated from this waste stream in order to comply with most C&D Debris processing permits. Public outreach educating residents about the materials accepted in roll-offs will help to reduce the amount of household garbage entering the roll-offs and may also lead to increased recovery of corrugated cardboard, metals, televisions, and computers.

**Bulk Waste Diversion Opportunities**

<b>Material Types</b>	<b>2014 Percent by Volume</b>	<b>2011 Percent by Volume</b>
Furniture	20.1%	17.8%
Carpet and Padding	13.6%	2.6%
Treated Wood	13.4%	3.8%
Untreated Wood	11.6%	15.4%
Household Bagged Waste	11.1%	28.2%
Mattresses	7.8%	6.7%
Rigid Plastics	5.7%	6.3%
<b>Subtotal</b>	<b>83.3%</b>	<b>80.8%</b>

**Figure 3.1: Composition of Collection Center Compactor Waste (% by weight)**



Note: For the purpose of this chart:

- Recyclable Paper includes the categories of Newspaper, Corrugated Cardboard, Magazines, Recyclable Paper and Aseptic Containers;
- Recyclable Plastic Bottles includes the categories of PET Bottles, HDPE Bottles, Other Narrow-Neck Plastic Bottles, and Plastic Cups and Tubs;
- Recyclable Metal Cans includes the categories of Aluminum and Tin/Steel Cans;
- Recyclable Glass includes the categories of Clear, Green, and Brown Glass Bottles;
- Other County Accepted Recyclables includes the categories of White Goods/Small Appliances, Other Ferrous, Other Non-Ferrous, Computers, Televisions, Oil Filters, Lead Acid Batteries, Other E-Waste and Technotrash, Household Batteries, Pallets, Brick and Concrete, and Tires and Rubber;
- Other Common Recyclables include Bottles from Toxics, Non Bottle PET, Rigid Plastics, and Aerosol Cans;
- Other Compostables includes the categories of Low Grade Paper, Untreated Wood Waste, and Yard Waste;
- Other Plastics includes the categories of Plastic Film, Styrofoam, and All Other Plastics;
- All C&D Debris includes the categories of Treated/Painted Wood Waste, C&D Debris, Furniture, and Mattresses; and
- Other Garbage includes the categories of Other Glass, Special Wastes, All Other Garbage, Grit, and Liquids.

**Table 3.1: Composition of Collection Center Compactor Waste (% by weight)**

2014 WCS Results			2011 WCS Results	
Material Category		Mean Composition	Mean Composition	Material Category
1	Newspaper	3.4%	3.1%	Newspaper
2	Corrugated Cardboard (OCC)	4.3%	1.5%	Recyclable OCC
3	Magazines	1.2%	2.5%	Glossy/Magazines
4	Recyclable Paper	13.2%	0.2%	Non-Recyclable OCC
			12.5%	Mixed Paper
			<0.1%	Hardcover Books
5	Low Grade Paper	9.4%	1.1%	Paper Plates
			7.7%	Other Paper
6	Aseptic Containers	0.3%	0.2%	Gable Top
			0.1%	Aseptic/Coated
<b>Total Paper</b>		<b>31.9%</b>	<b>29.1%</b>	
7	PET Containers (SPI #1)	2.2%	3.4%	PET #1 Bottles
8	HDPE Containers (SPI #2)	1.1%	1.7%	HDPE Bottles
9	Bottles that held toxics	0.2%	0.2%	Bottles that held toxics
10	PET #1 Non-Bottles	0.7%	0.3%	PET #1 Non-Bottles
11	Other Narrow-Neck Bottles	0.5%	1.0%	Other Bottles
12	Plastic Cups and Tubs	0.8%	1.1%	Plastic Cups/Tubs
13	Non-rigid Plastic Film	5.7%	9.1%	Plastic Film
			0.2%	AG Plastic Film
			<0.1%	PP #5 Bags
14	Expanded Polystyrene Foam (EPS)	1.2%	2.1%	Polystyrene
15	Rigid Plastics	2.2%	3.3%	Rigid Plastics
16	All Other Plastics	1.5%	n/a	n/a
<b>Total Plastic</b>		<b>16.1%</b>	<b>22.5%</b>	
17	Tin/Steel Cans	1.6%	1.4%	Steel/Bi-Metal Food Cans
18	Aerosol Cans	0.4%	0.6%	Aerosol Cans
19	White Goods and Small Appliances	0.1%	<0.1%	Microwaves
			0.5%	Small Appliances
20	Other Ferrous	0.5%	1.1%	Other Ferrous
21	Aluminum Cans	0.9%	0.8%	Aluminum Cans
22	Other Non-Ferrous	0.7%	0.5%	Aluminum/Tin Foil
			0.2%	Other Non-Ferrous
<b>Total Metal</b>		<b>4.2%</b>	<b>4.6%</b>	
23	Clear Glass Containers	2.4%	2.9%	Clear Glass Bottles/Jars
24	Brown Glass Containers	2.0%	1.4%	Brown Glass Bottles/Jars
25	Green Glass Containers	1.7%	0.2%	Green Glass Bottles/Jars
26	Other Glass	0.8%	0.3%	Ceramic Glass
			<0.1%	Other Glass
<b>Total Glass</b>		<b>6.9%</b>	<b>4.8%</b>	

Note: Totals may not appear to calculate correctly due to rounding.

**Table 3.1: Composition of Collection Center Compactor Waste (Continued)**

2014 WCS Results			2011 WCS Results	
Material Category		Mean Composition	Mean Composition	Material Category
27	Textiles	3.8%	6.6%	Textiles
			<0.1%	Leather
28	Carpet	1.4%	<0.1%	Other Textiles
29	Oil Filters	0.0%	0.3%	Oil Filters
30	Lead-Acid Batteries	0.0%	<0.1%	Lead-Acid Batteries
31	Special Wastes	0.1%	<0.1%	HHW
			<0.1%	Paint
			<0.1%	CFLs
			<0.1%	Infectious Waste
32	Computers	0.0%	<0.1%	Computers
33	Televisions	0.0%	<0.1%	Televisions
34	Other E-Waste and Technotrash	1.6%	<0.1%	Handheld Devices
			<0.1%	Printers, VCRs
			0.5%	Other Electronics
			<0.1%	DVDs/CDs
35	Household Batteries	0.2%	<0.1%	Dry Cell Batteries
36	Untreated Wood Waste	1.3%	1.0%	Untreated Wood
37	Treated/Painted Wood Waste	0.8%	<0.1%	Treated Wood
38	Pallets	0.0%	<0.1%	Pallets
39	Brick and Concrete	0.1%	<0.1%	Brick
			<0.1%	Concrete
40	C&D Debris	1.0%	<0.1%	Drywall
			<0.1%	Vinyl Siding
			<0.1%	PVC Pipe
			0.1%	Roofing Shingles
			<0.1%	Other Building Materials
41	Furniture	0.9%	0.5%	Furniture
42	Mattresses	0.0%	<0.1%	Mattresses
43	Tires and Rubber	0.1%	0.1%	Rubber
44	Yard Waste	0.1%	1.1%	Yard Waste
			<0.1%	Stumps
45	Food Waste	16.6%	14.5%	Food Waste
46	All Other Garbage	9.4%	3.3%	Diapers
			<0.1%	Pet Waste
			7.1%	Other Organics
47	Liquids	0.7%	n/a	n/a
48	Grit	2.8%	3.1%	Fines
<b>Total Other Materials</b>		<b>40.8%</b>	<b>39.0%</b>	
<b>Total All Materials</b>		<b>100.0%</b>	<b>100.0%</b>	

Note: Totals may not appear to calculate correctly due to rounding.

**Table 3.2: Collection Center Compactor Waste Diversion Opportunities (% by weight)**

	Material Categories	2014 WCS Results			2011 Weighted Average
		Weighted Average	Lower Bounds	Upper Bounds	
1	NEWSPAPER	3.4%	1.9%	4.9%	3.1%
2	CORRUGATED CARDBOARD	4.3%	2.6%	6.1%	1.5%
3	MAGAZINES	1.2%	0.7%	1.8%	2.5%
4	RECYCLABLE PAPER	13.2%	10.9%	15.6%	<12.8
6	ASEPTIC CONTAINERS	0.3%	0.1%	0.5%	0.3%
	<b>Total Recyclable Paper</b>	<b>22.5%</b>			<b>&lt;20.2%</b>
7	PET BOTTLES #1	2.2%	1.4%	3.0%	3.4%
8	HDPE BOTTLES #2	1.1%	0.9%	1.4%	1.7%
11	OTHER NARROW NECK PLASTIC BOTTLES	0.5%	0.3%	0.7%	1.0%
12	PLASTIC CUPS AND TUBS	0.8%	0.4%	1.2%	1.1%
17	TIN/STEEL CANS	1.6%	1.0%	2.1%	1.4%
21	ALUMINUM CANS	0.9%	0.7%	1.2%	0.8%
23	CLEAR GLASS BOTTLES	2.4%	2.0%	2.8%	2.9%
24	BROWN GLASS BOTTLES	2.0%	1.4%	2.7%	1.4%
25	GREEN GLASS BOTTLES	1.7%	1.2%	2.1%	0.2%
	<b>Total Recyclable Containers</b>	<b>13.3%</b>			<b>13.9%</b>
19	WHITE GOODS/SMALL APPLIANCES	0.1%	0.0%	0.2%	<0.6%
20	OTHER FERROUS	0.5%	0.3%	0.7%	1.1%
22	OTHER NON FERROUS	0.7%	0.5%	0.9%	0.7%
32	COMPUTERS	0.0%	0.0%	0.0%	<0.1%
33	TELEVISIONS	0.0%	0.0%	0.0%	<0.1%
29	OIL FILTERS	0.0%	0.0%	0.0%	0.3%
30	LEAD ACID BATTERIES	0.0%	0.0%	0.0%	<0.1%
34	OTHER E WASTE & TECHNORASH	1.6%	0.1%	3.2%	<0.6%
35	HOUSEHOLD BATTERIES	0.2%	0.0%	0.3%	<0.1%
38	PALLETS	0.0%	0.0%	0.0%	<0.1%
39	BRICK AND CONCRETE	0.1%	0.0%	0.2%	<0.1%
43	TIRES AND RUBBER	0.1%	0.0%	0.2%	0.1%
	<b>Total Other County-Accepted Recyclables</b>	<b>3.3%</b>			<b>&lt;4.0%</b>
9	BOTTLES FROM TOXICS	0.2%	0.0%	0.3%	0.2%
10	NON BOTTLE PET	0.7%	0.5%	0.9%	0.3%
15	RIGID PLASTICS (BULKY)	2.2%	1.5%	2.9%	3.3%
18	AEROSOL CANS	0.4%	0.2%	0.6%	0.6%
	<b>Total Other Commonly-Recycled Items</b>	<b>3.4%</b>			<b>4.4%</b>

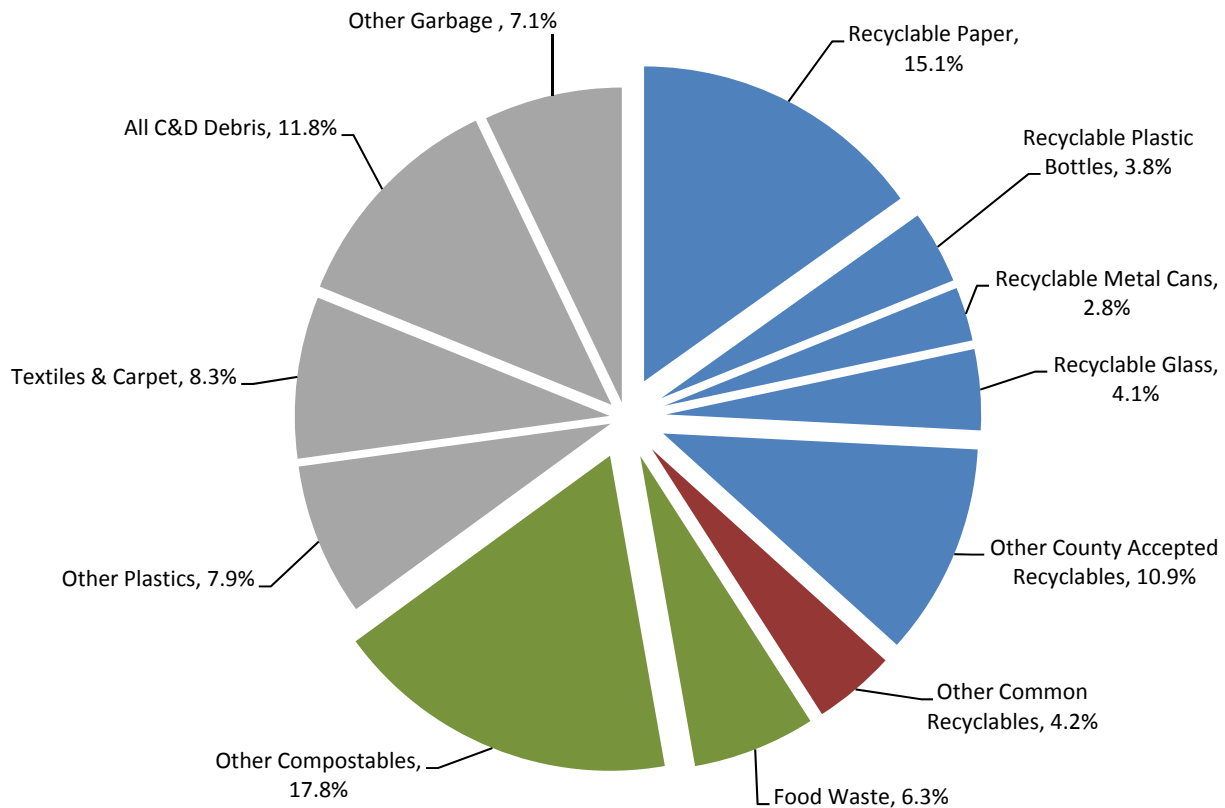
Note: Totals may not appear to calculate correctly due to rounding.

**Table 3.2: Collection Center Compactor Waste Diversion Opportunities** *(continued)*

	Material Categories	2014 WCS Results			2011 Weighted Average
		Weighted Average	Lower Bounds	Upper Bounds	
5	LOW GRADE PAPER	9.4%	7.7%	11.1%	8.8%
36	WOOD WASTE UNTREATED	1.3%	0.3%	2.2%	1.0%
44	YARD WASTE	0.1%	0.0%	0.2%	<1.2%
45	FOOD WASTE	16.6%	14.1%	19.0%	14.5%
	<b>Total Compostable Organics</b>	<b>27.4%</b>			<b>&lt;25.5%</b>
13	PLASTIC FILM	5.7%	4.9%	6.6%	<9.4%
14	STYROFOAM	1.2%	0.7%	1.7%	2.1%
26	OTHER GLASS	0.8%	0.2%	1.3%	<0.4%
26	TEXTILES	3.8%	2.7%	4.9%	<6.7%
28	CARPET	1.4%	-0.2%	3.1%	<0.1%
37	WOOD WASTE TREATED/PAINTED	0.8%	0.1%	1.5%	<0.1%
40	C&D DEBRIS	1.0%	0.0%	2.1%	<0.3%
41	FURNITURE	0.9%	-0.7%	2.4%	0.5%
42	MATTRESSES	0.0%	0.0%	0.0%	<0.1%
	<b>Other Potentially Recyclable Items</b>	<b>15.6%</b>			<b>&lt;19.5%</b>
16	ALL OTHER PLASTICS	1.5%	0.7%	2.3%	n/a
31	SPECIAL WASTES	0.1%	0.0%	0.1%	<0.1%
46	ALL OTHER GARBAGE	9.4%	6.8%	12.1%	<10.5%
47	LIQUIDS	0.7%	-0.2%	1.7%	n/a
48	GRIT	2.8%	1.4%	4.2%	3.1%
	<b>Total All Other Materials</b>	<b>14.5%</b>			<b>&lt;13.7%</b>
	<b>TOTALS</b>	<b>100.0%</b>			<b>100.0%</b>

Note: Totals may not appear to calculate correctly due to rounding.

**Figure 3.2: Composition of Collection Center Pre-Crusher Waste (% by weight)**



Note: For the purpose of this chart:

- Recyclable Paper includes the categories of Newspaper, Corrugated Cardboard, Magazines, Recyclable Paper and Aseptic Containers;
- Recyclable Plastic Bottles includes the categories of PET Bottles, HDPE Bottles, Other Narrow-Neck Plastic Bottles, and Plastic Cups and Tubs;
- Recyclable Metal Cans includes the categories of Aluminum and Tin/Steel Cans;
- Recyclable Glass includes the categories of Clear, Green, and Brown Glass Bottles;
- Other County Accepted Recyclables includes the categories of White Goods/Small Appliances, Other Ferrous, Other Non-Ferrous, Computers, Televisions, Oil Filters, Lead Acid Batteries, Other E-Waste and Technotrash, Household Batteries, Pallets, Brick and Concrete, and Tires and Rubber;
- Other Common Recyclables include Bottles from Toxics, Non Bottle PET, Rigid Plastics, and Aerosol Cans;
- Other Compostables includes the categories of Low Grade Paper, Untreated Wood Waste, and Yard Waste;
- Other Plastics includes the categories of Plastic Film, Styrofoam, and All Other Plastics;
- All C&D Debris includes the categories of Treated/Painted Wood Waste, C&D Debris, Furniture, and Mattresses; and
- Other Garbage includes the categories of Other Glass, Special Wastes, All Other Garbage, Grit, and Liquids.

**Table 3.3: Composition of Collection Center Pre-Crusher Waste (% by weight)**

2014 WCS Results			2011 WCS Results	
Material Category		Mean Composition	Mean Composition	Material Category
1	Newspaper	4.0%	3.1%	Newspaper
2	Corrugated Cardboard (OCC)	3.2%	2.5%	Recyclable OCC
3	Magazines	2.0%	<0.1%	Glossy/Magazines
4	Recyclable Paper	5.6%	<0.1%	Non-Recyclable OCC
			5.9%	Mixed Paper
			<0.1%	Hardcover Books
5	Low Grade Paper	8.4%	0.3%	Paper Plates
			2.5%	Other Paper
6	Aseptic Containers	0.3%	<0.1%	Gable Top
			<0.1%	Aseptic/Coated
<b>Total Paper</b>		<b>23.5%</b>	<b>14.3%</b>	
7	PET Containers (SPI #1)	1.0%	1.6%	PET #1 Bottles
8	HDPE Containers (SPI #2)	1.7%	0.4%	HDPE Bottles
9	Bottles that held toxics	0.6%	0.4%	Bottles that held toxics
10	PET #1 Non-Bottles	0.2%	<0.1%	PET #1 Non-Bottles
11	Other Narrow-Neck Bottles	0.5%	<0.1%	Other Bottles
12	Plastic Cups and Tubs	0.5%	0.2%	Plastic Cups/Tubs
13	Non-rigid Plastic Film	5.4%	3.2%	Plastic Film
			<0.1%	AG Plastic Film
			<0.1%	PP #5 Bags
14	Expanded Polystyrene Foam (EPS)	1.7%	0.5%	Polystyrene
15	Rigid Plastics	2.4%	2.5%	Rigid Plastics
16	All Other Plastics	0.7%	n/a	n/a
<b>Total Plastic</b>		<b>14.8%</b>	<b>8.80%</b>	
17	Tin/Steel Cans	1.7%	0.5%	Steel/Bi-Metal Food Cans
18	Aerosol Cans	1.0%	<0.1%	Aerosol Cans
19	White Goods and Small Appliances	2.9%	<0.1%	Microwaves
			<0.1%	Small Appliances
20	Other Ferrous	2.7%	0.3%	Other Ferrous
21	Aluminum Cans	1.1%	0.3%	Aluminum Cans
22	Other Non-Ferrous	0.3%	0.4%	Aluminum/Tin Foil
			<0.1%	Other Non-Ferrous
<b>Total Metal</b>		<b>9.6%</b>	<b>1.5%</b>	
23	Clear Glass Containers	2.4%	0.4%	Clear Glass Bottles/Jars
24	Brown Glass Containers	0.3%	<0.1%	Brown Glass Bottles/Jars
25	Green Glass Containers	1.4%	<0.1%	Green Glass Bottles/Jars
26	Other Glass	0.0%	<0.1%	Ceramic Glass
			<0.1%	Other Glass
<b>Total Glass</b>		<b>4.1%</b>	<b>0.4%</b>	

Note: Totals may not appear to calculate correctly due to rounding.

**Table 3.3: Composition of Collection Center Pre-Crusher Waste (Continued)**

2014 WCS Results			2011 WCS Results	
Material Category		Mean Composition	Mean Composition	Material Category
27	Textiles	5.1%	2.2%	Textiles
			0.5%	Leather
28	Carpet	3.2%	<0.1%	Other Textiles
29	Oil Filters	0.0%	0.2%	Oil Filters
30	Lead-Acid Batteries	0.0%	<0.1%	Lead-Acid Batteries
31	Special Wastes	0.0%	<0.1%	HHW
			<0.1%	Paint
			<0.1%	CFLs
			<0.1%	Infectious Waste
32	Computers	0.0%	1.5%	Computers
33	Televisions	0.0%	<0.1%	Televisions
34	Other E-Waste and Technotrash	3.7%	<0.1%	Handheld Devices
			<0.1%	Printers, VCRs
			<0.1%	Other Electronics
			<0.1%	DVDs/CDs
			<0.1%	Printer Ink Cartridges
35	Household Batteries	0.0%	<0.1%	Dry Cell Batteries
36	Untreated Wood Waste	9.4%	17.8%	Untreated Wood
37	Treated/Painted Wood Waste	9.8%	20.0%	Treated Wood
38	Pallets	1.3%	<0.1%	Pallets
39	Brick and Concrete	0.0%	1.7%	Brick
			<0.1%	Concrete
40	C&D Debris	2.0%	<0.1%	Drywall
			<0.1%	Vinyl Siding
			<0.1%	PVC Pipe
			1.7%	Roofing Shingles
			0.4%	Other Building Materials
41	Furniture	0.0%	3.7%	Furniture
42	Mattresses	0.0%	<0.1%	Mattresses
43	Tires and Rubber	0.0%	1.6%	Rubber
44	Yard Waste	0.0%	1.2%	Yard Waste
			<0.1%	Stumps
45	Food Waste	6.3%	6.7%	Food Waste
46	All Other Garbage	1.8%	4.1%	Diapers
			<0.1%	Pet Waste
			7.7%	Other Organics
47	Liquids	0.0%	n/a	n/a
48	Grit	5.3%	3.9%	Fines
<b>Total Other Materials</b>		<b>47.9%</b>	<b>75.0%</b>	
Total All Materials		100.0%	100.0%	

Note: Totals may not appear to calculate correctly due to rounding.

**Table 3.4: Pre-Crusher Waste Diversion Opportunities (% by weight)**

	Material Categories	2014 WCS Results			2011 Weighted Average
		Weighted Average	Lower Bounds	Upper Bounds	
1	NEWSPAPER	4.0%	-4.2%	12.2%	3.1%
2	CORRUGATED CARDBOARD	3.2%	-4.5%	11.0%	1.5%
3	MAGAZINES	2.0%	-4.0%	8.0%	<0.1%
4	RECYCLABLE PAPER	5.6%	-0.7%	11.9%	<6.0%
6	ASEPTIC CONTAINERS	0.3%	0.2%	0.3%	<0.1%
	<b>Total Recyclable Paper</b>	<b>15.1%</b>			<b>&lt;10.7%</b>
7	PET BOTTLES #1	1.0%	-3.1%	5.2%	1.6%
8	HDPE BOTTLES #2	1.7%	-0.3%	3.6%	0.4%
11	OTHER NARROW NECK PLASTIC BOTTLES	0.5%	-1.0%	2.1%	<0.1%
12	PLASTIC CUPS AND TUBS	0.5%	0.4%	0.6%	0.2%
17	TIN/STEEL CANS	1.7%	-2.3%	5.6%	0.5%
21	ALUMINUM CANS	1.1%	-1.9%	4.1%	0.3%
23	CLEAR GLASS BOTTLES	2.4%	0.6%	4.3%	0.4%
24	BROWN GLASS BOTTLES	0.3%	-2.2%	2.8%	<0.1%
25	GREEN GLASS BOTTLES	1.4%	1.2%	1.7%	<0.1%
	<b>Total Recyclable Containers</b>	<b>10.7%</b>			<b>&lt;3.5%</b>
19	WHITE GOODS/SMALL APPLIANCES	2.9%	-11.3%	17.0%	<0.1%
20	OTHER FERROUS	2.7%	-9.8%	15.3%	0.3%
22	OTHER NON FERROUS	0.3%	-2.0%	2.5%	<0.5%
32	COMPUTERS	0.0%	0.0%	0.0%	1.5%
33	TELEVISIONS	0.0%	0.0%	0.0%	<0.1%
29	OIL FILTERS	0.0%	0.0%	0.0%	0.2%
30	LEAD ACID BATTERIES	0.0%	0.0%	0.0%	<0.1%
34	OTHER E WASTE & TECHNORASH	3.7%	-3.7%	11.1%	<0.2%
35	HOUSEHOLD BATTERIES	0.0%	0.0%	0.0%	<0.1%
38	PALLETS	1.3%	-5.2%	7.8%	<0.1%
39	BRICK AND CONCRETE	0.0%	0.0%	0.0%	<1.8%
43	TIRES AND RUBBER	0.0%	0.0%	0.0%	1.6%
	<b>Total Other County-Accepted Recyclables</b>	<b>10.9%</b>			<b>&lt;6.6%</b>
9	BOTTLES FROM TOXICS	0.6%	-4.9%	6.2%	0.4%
10	NON BOTTLE PET	0.2%	-0.8%	1.1%	<0.1%
15	RIGID PLASTICS (BULKY)	2.4%	-9.3%	14.0%	2.5%
18	AEROSOL CANS	1.0%	-2.0%	4.1%	<0.1%
	<b>Total Other Commonly-Recycled Items</b>	<b>4.2%</b>			<b>&lt;3.1%</b>

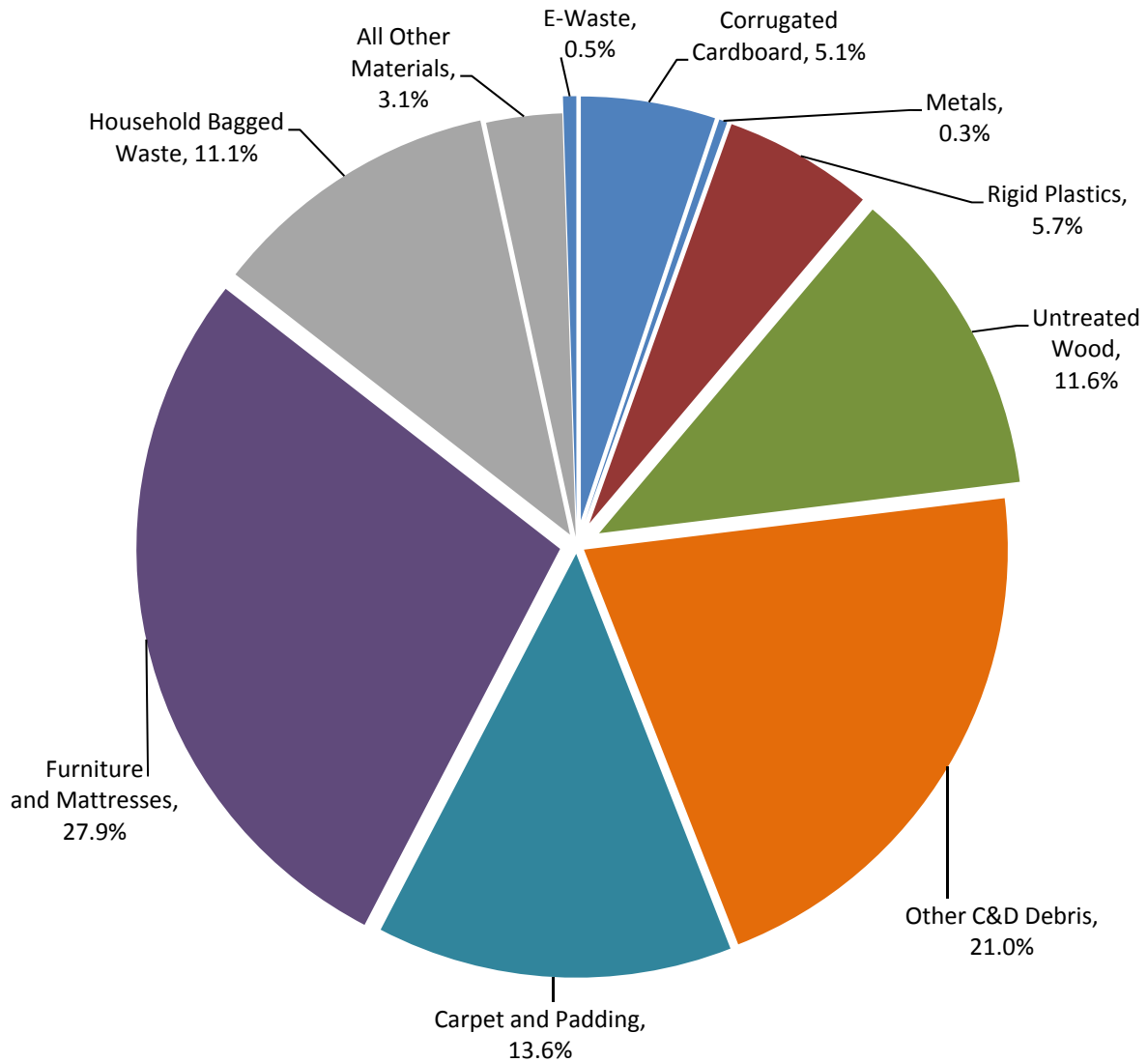
Note: Totals may not appear to calculate correctly due to rounding.

**Table 3.4: Pre-Crusher Waste Diversion Opportunities** *(continued)*

	Material Categories	2014 WCS Results			2011 Weighted Average
		Weighted Average	Lower Bounds	Upper Bounds	
5	LOW GRADE PAPER	8.4%	-0.8%	17.6%	2.8%
36	WOOD WASTE UNTREATED	9.4%	6.9%	11.8%	17.8%
44	YARD WASTE	0.0%	0.0%	0.0%	<1.2%
45	FOOD WASTE	6.3%	-12.0%	24.6%	6.7%
	<b>Total Compostable Organics</b>	<b>24.1%</b>			<b>&lt;28.5%</b>
13	PLASTIC FILM	5.4%	3.4%	7.5%	<3.3%
14	STYROFOAM	1.7%	-2.4%	5.7%	0.5%
26	OTHER GLASS	0.0%	0.0%	0.0%	<0.1%
26	TEXTILES	5.1%	-6.6%	16.7%	2.2%
28	CARPET	3.2%	-3.1%	9.6%	<0.1%
37	WOOD WASTE TREATED/PAINTED	9.8%	-16.3%	35.9%	20.0%
40	C&D DEBRIS	2.0%	-15.2%	19.1%	<2.2%
41	FURNITURE	0.0%	0.0%	0.0%	3.7%
42	MATTRESSES	0.0%	0.0%	0.0%	<0.1%
	<b>Other Potentially Recyclable Items</b>	<b>27.2%</b>			<b>&lt;32.3%</b>
16	ALL OTHER PLASTICS	0.7%	-5.8%	7.3%	n/a
31	SPECIAL WASTES	0.0%	0.0%	0.0%	<0.2%
46	ALL OTHER GARBAGE	1.8%	-2.8%	6.3%	<11.9%
47	LIQUIDS	0.0%	0.0%	0.0%	n/a
48	GRIT	5.3%	2.9%	7.8%	3.9%
	<b>Total All Other Materials</b>	<b>7.8%</b>			<b>&lt;16.0%</b>
	<b>TOTALS</b>	<b>100.0%</b>			<b>100.0%</b>

Note: Totals may not appear to calculate correctly due to rounding.

**Figure 3.3: Composition of Collection Center Bulky Waste Roll-Offs (% by volume)**



Note: For the purpose of this chart:

- Metals includes the categories of Ferrous and Non-Ferrous Metals;
- Other C&D Debris includes the categories of Treated Wood, Drywall, Insulation, Rock/Gravel/Grit, and C&D Debris Bagged Waste;
- All Other Materials includes the categories of Textiles, Other Glass, Rubber, Yard Waste, and Mixed Residue; and,
- E-Waste includes the categories of Computers, Televisions, and Other E-Waste.

**Table 3.5: Composition of Collection Center Bulky Waste Roll-Offs (% by volume)**

Material Category	2014 VWA Results			2011 Weighted Average (% by volume)
	Weighted Average (% by volume)	Lower Bounds	Upper Bounds	
Corrugated Cardboard	5.1%	3.4%	6.8%	4.2%
Other Ferrous Metals	0.3%	0.0%	0.7%	0.7%
Steel Cans	<0.1%	n/a	n/a	0.4%
Other Non-Ferrous Metals	<0.1%	n/a	n/a	0.4%
Rigid Plastics	5.7%	-0.1%	11.6%	6.3%
Treated Wood	13.4%	10.2%	16.6%	3.8%
Untreated Wood	11.6%	8.6%	14.7%	15.4%
Drywall	2.8%	0.3%	5.4%	<0.1%
Insulation	0.3%	-0.5%	1.1%	<0.1%
Rock/Gravel/Grit	0.6%	n/a	n/a	<0.1%
Roofing Shingles	<0.1%	n/a	n/a	3.5%
Furniture	20.1%	14.9%	25.3%	17.8%
Mattresses	7.8%	4.3%	11.3%	6.7%
Textiles	1.5%	0.7%	2.4%	3.9%
Carpet and Padding	13.6%	9.2%	17.9%	2.6%
Household Bagged Waste	11.1%	6.3%	15.9%	28.2% (category MSW)
C&D Debris Bagged Waste	3.8%	1.2%	6.5%	
Other Glass	0.2%	n/a	n/a	5.4%
Computers	<0.1%	n/a	n/a	0.2%
Televisions	<0.1%	n/a	n/a	0.3%
Other E-waste	0.5%	-0.5%	1.6%	<0.1%
Rubber	0.6%	n/a	n/a	<0.1%
Yard Waste	0.3%	n/a	n/a	0.4%
Mixed Residue	0.5%	n/a	n/a	<0.1%
<b>Totals</b>	<b>100.0%</b>	<b>-</b>	<b>-</b>	<b>100.0%</b>

Note: Totals may not appear to calculate correctly due to rounding.

**Table 3.6: Collection Center Roll-Off Waste Results (% by weight)**

<b>Material Category</b>	<b>Weighted Average (% by volume)</b>	<b>Estimated Volume (cy)</b>	<b>Average Density (lbs/cy)</b>	<b>Estimated Weight (lbs)</b>	<b>Weighted Average (% by weight)</b>
Corrugated Cardboard	5.1%	17	53	908	1.7%
Other Ferrous Metals	0.3%	1	150	159	0.3%
Steel Cans	<0.1%	<0.2	150	<30	<0.1%
Other Non-Ferrous Metals	<0.1%	<0.2	150	<30	<0.1%
Rigid Plastics	5.7%	19	50	954	1.8%
Treated Wood	13.4%	45	169	7,575	14.6%
Untreated Wood	11.6%	39	169	6,574	12.7%
Drywall	2.8%	9	467	4,410	8.5%
Insulation	0.3%	1	17	16	0.0%
Rock/Gravel/Grit	0.6%	2	999	2,134	4.1%
Roofing Shingles	<0.1%	<0.2	360	<72	<0.1%
Furniture	20.1%	67	80	5,369	10.3%
Mattresses	7.8%	26	55	1,431	2.8%
Textiles	1.5%	5	225	1,161	2.2%
Carpet and Padding	13.6%	45	147	6,661	12.8%
Household Bagged Waste	11.1%	37	150	5,554	10.7%
C&D Debris Bagged Waste	3.8%	13	150	1,919	3.7%
Other Glass	0.2%	1	1400	1,095	2.1%
Computers	<0.1%	<0.2	354	<71	<0.1%
Televisions	<0.1%	<0.2	354	<71	<0.1%
Other E-waste	0.5%	2	354	600	1.2%
Rubber	0.6%	2	2500	4,889	9.4%
Yard Waste	0.3%	1	127	107	0.2%
Mixed Residue	0.5%	2	140	150	0.3%
<b>Totals</b>	<b>100.0%</b>	<b>334</b>	<b>-</b>	<b>51,940</b>	<b>100.0%</b>

Note: Totals may not appear to calculate correctly due to rounding.

# Appendix A: Material Category Descriptions

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**Table A: Material Category Descriptions**

KCI Suggested Categories		Previous Categories & Compactor Waste Result		KCI Category Definition
1	Newspaper	1	Newspaper	Newspaper (loose, tied, or shredded) including other paper normally distributed inside newspaper such as ads, flyers, etc.
2	Corrugated Cardboard (OCC)	3	Recyclable OCC	Uncoated brown "cardboard" boxes with a wavy core (no plastic liners or waxy coatings).
3	Magazines	2	Glossy/Magazines	All magazines, catalogs and other materials printed on glossy paper.
4	Recyclable Paper	4	Non-Recyclable OCC	Includes chipboard, brown paper bags, telephone books, hard cover books, and other printed or unprinted paper typically generated in an office environment including white, colored, coated, and uncoated papers, manila and pastel colored file folders, and materials printed on non-glossy paper. Also includes waxy cardboard.
		5	Mixed Paper	
		6	Hardcover Books	
5	Low Grade Paper	9	Paper Plates	All remaining paper not categorized in other paper categories, including contaminated paper (i.e., napkins, pizza boxes, paper towels, fast-food wrappers, etc.).
		10	Other Paper	
6	Aseptic Containers	7	Gable Top	Gable top milk cartons, juice boxes, and other similar containers, such as ice cream boxes.
		8	Aseptic/Coated	
7	Polyethylene terephthalate (PET) Containers (SPI #1)	11	PET #1 Bottles	Clear and colored plastic bottles coded PET #1 such as soda bottles and water bottles.
8	High-density polyethylene (HDPE) Containers (SPI #2)	13	HDPE Bottles	Clear/natural and pigmented plastic bottles coded HDPE #2 such as milk jugs, vinegar bottles, and detergent bottles.
9	Bottles that held toxics	21	Bottles that held toxics	Empty pesticide, oil, and other empty bottles that held toxic chemicals.
10	PET #1 Non-Bottles	12	PET #1 Non-Bottles	Clear and colored plastic items labeled PET #1, such as clamshell containers, frozen food trays, disposable cups, and other items labeled PET #1.
11	Other Narrow-Neck Bottles	14	Other Bottles	All narrow-neck plastic containers coded #3-#7, such as vitamin bottles, Arizona Iced Tea™ gallon jugs, etc.

**Table A: Material Category Descriptions**

KCI Suggested Categories		Previous Categories & Compactor Waste Result		KCI Category Definition
12	Plastic Cups and Tubs	17	Plastic Cups/Tubs	Wide-mouthed tubs and containers labeled #2 or #5 including lids. Examples include yogurt cups, margarine tubs, Cool Whip® tubs, and other non-bottle dairy items.
13	Non-rigid Plastic Film	15	Plastic Film	Loose and bagged plastic bags such as garbage bags, shrink wrap, re-sealable bags, grocery bags, bread bags, AG film, etc.
		16	AG Plastic Film	
		20	PP #5 Bags	
14	Expanded Polystyrene Foam (EPS) (Styrofoam®)	18	Polystyrene	Styrofoam® containers and packaging such as egg cartons, clamshell food containers, packaging peanuts, etc.
15	Rigid Plastics	19	Rigid Plastics	Consists of non-container rigid plastic items such as plastic drums, crates, buckets, baskets, toys, refuse totes, lawn furniture, flower pots, laundry baskets, and other large plastic items.
16	All Other Plastics	n/a	n/a	Any plastic materials not categorized above, such as deodorant cases, toothpaste tubes, tooth brushes, broom heads, etc.
17	Tin/Steel Cans	22	Steel/Bi-Metal Food Cans	Tin-plated steel cans, usually food containers.
18	Aerosol Cans	25	Aerosol Cans	Empty aerosol cans. Full aerosol cans will be sorted into All Other Waste or Special Wastes depending upon the substance within.
19	White Goods and Small Appliances	52	Microwaves	Large and small household appliances such as refrigerators, blenders, hair dryers, microwaves, etc.
		53	Small Appliances	
20	Other Ferrous	26	Other Ferrous	Steel, clothes hangers, sheet metal products, pipes, miscellaneous metal scraps, and other magnetic metal items.
21	Aluminum Cans	23	Aluminum Cans	Aluminum soft drink, beer, and some food cans.
22	Other Non-Ferrous	24	Aluminum/Tin Foil	Scrap aluminum, aluminum foil, catering trays, copper wiring and tubing, brass fixtures, and other non-magnetic metals.
		27	Other Non-Ferrous	
23	Clear Glass Containers	41	Clear Glass Bottles/Jars	Clear glass bottles and jars as well as broken glass pieces larger than ½ square inch.

**Table A: Material Category Descriptions**

KCI Suggested Categories		Previous Categories & Compactor Waste Result		KCI Category Definition
24	Brown Glass Containers	43	Brown Glass Bottles/Jars	Brown/Amber glass bottles and jars as well as broken glass pieces larger than ½ square inch.
25	Green Glass Containers	42	Green Glass Bottles/Jars	Green glass bottles and jars as well as broken glass pieces larger than ½ square inch.
26	Other Glass	44	Ceramic Glass	Non container glass such as window panes, mirrors, ceramics, and drinking glasses.
		45	Other Glass	
27	Textiles	28	Textiles	Clothing apparel, rags, leather, blankets, curtains, shoes, wallets, purses, belts, scrap leather.
		30	Leather	
28	Carpet	29	Other Textiles	Carpet
29	Oil Filters	57	Oil Filters	Oil Filters
30	Lead-Acid Batteries	60	Lead-Acid Batteries	Lead-Acid Batteries
31	Special Wastes	55	HHW	Cleaners, paint, oil, pool chemicals, fluorescent lights, medical waste, solvents, etc., that are considered household hazardous waste.
		59	Paint	
		56	CFLs	
		61	Infectious Waste	
32	Computers	46	Computers	Computers, monitors, printers, scanners and peripherals.
33	Televisions	47	Televisions	Televisions of all sizes and types.
34	Other E-Waste and Technotrash	48	Handheld Devices	Electronic devices such as DVD players, VCRs, cell phones, cordless telephones, PDAs, handheld devices, rechargeable batteries, as well as media items such as CDs, DVDs, tapes, etc.
		49	Printers, VCRs	
		54	Other Electronics	
		50	DVDs/CDs	
		51	Printer Ink Cartridges	
35	Household Batteries	58	Dry Cell Batteries	Household batteries including AA, AAA, C, D, 9-volt, and button types.
36	Untreated Wood Waste	35	Untreated Wood	Untreated wood waste, free of paints, lacquers, and varnishes.
37	Treated/Painted Wood Waste	32	Treated Wood	Treated or painted wood waste.

**Table A: Material Category Descriptions**

KCI Suggested Categories		Previous Categories & Compactor Waste Result		KCI Category Definition
38	Pallets	36	Pallets	Pallets and pallet pieces.
39	Brick and Concrete	64	Brick	Brick and concrete of all sizes.
		65	Concrete	
40	C&D Debris	66	Drywall	Construction and demolition debris such as drywall, insulation, and roofing materials.
		67	Vinyl Siding	
		68	PVC Pipe	
		69	Roofing Shingles	
		70	Other Building Materials	
41	Furniture	33	Furniture	Metal, wood, and composite furniture, in whole or in part.
42	Mattresses	34	Mattresses	Mattresses and box springs.
43	Tires and Rubber	38	Rubber	Small and large tires and other items made of rubber.
44	Yard Waste	37	Yard Waste	Shrub and brush prunings, household bedding plants, weeds, leaves, grass clippings, and other landscaping and gardening wastes.
		39	Stumps	
45	Food Waste	31	Food Waste	Meat and vegetable waste (includes coffee grinds and tea bags).
46	All Other Garbage	62	Diapers	All other wastes not included in the above categories, including diapers, pet wastes, and products that are a composite of materials such as frozen juice cans, binders, Pringle's cans, chip bags, etc.
		63	Pet Waste	
47	Liquids	n/a	n/a	All containers containing liquids will be emptied into this category prior to sorting the container into the appropriate category.
48	Grit	71	Fines	All items that fall through the half inch mesh of the sort table.

# **Appendix B: Bulk Waste and C&D Debris Visual Audit Form**

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### Bulk Waste and C&D Debris Visual Audit Form#

CHATHAM COUNTY 2014 BULKY WASTE AUDIT FORM			
Step 1:		Step 2: Measure and Record Load Volume	
Site: _____		(Include Trailer Dimension is applicable)	
Date & Time: _____		Dimensions:	
Sample No: _____		_____ X _____ X _____ = _____ (l)	
Recorder: _____		_____ X _____ X _____ = _____ (t)	
		(L)                      (H)                      (W)	
Step 3: Identify and record all main material classes that appear in the load.			
Step 4: Estimate composition of load by volume for each main material class.			
Step 5: For each material class, estimate composition by volume of each specific material component.			
Step 6: Make sure main material class estimates AND material component estimates EACH total 100%.			
PAPER _____ %		YARD WASTE _____ %	
Unwaxed OCC _____		C&D DEBRIS _____ %	
Other Paper _____			
Subtotal (must = 100%) _____			
METAL _____ %			
Major Appliances _____			
HVAC Ducting _____		Treated Wood _____	
Steel Cans _____		Untreated Wood _____	
Other Ferrous _____		Carpet and Carpet Padding _____	
Other Non-Ferrous _____		Drywall _____	
Subtotal (must = 100%) _____		Asphalt Paving _____	
PLASTIC _____ %		Roofing Shingles _____	
Film _____		Rock, Gravel, and Grit _____	
Polystyrene Packaging/Insulation _____		Subtotal (must = 100%) _____	
Rigid Plastics _____		FURNITURE _____ %	
Other Plastic _____		Furniture _____	
Subtotal (must = 100%) _____		Mattresses _____	
GLASS CONT. _____ %		Subtotal (must = 100%) _____	
OTHER GLASS _____ %		BAGGED WASTE _____ %	
COMPUTERS _____ %		Household Garbage _____	
TELEVISIONS _____ %		C&D Debris _____	
OTHER E-WASTE _____ %		Other _____	
HHW _____ %		Subtotal (must = 100%) _____	
TIRES _____ %			
TEXTILES _____ %			
MIXED RESIDUE AND SMALL AMOUNTS OF MSW _____ %			
GRAND TOTAL _____ % (must equal 100%)			
<b>NOTES:</b>			
Number and type of appliances: _____			
Number of HDPE Buckets: _____			
Number of Pallets: _____			
Types of HHW: _____			

## **Appendix C: Individual Sample Results, Collection Center Compactors**

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**Table C: Collection Center Compactor Results (% by weight)**

	Location	Siler City	Pittsboro	Cole Park	Bonlee	
	Material Categories	sample #	1	2	3	4
1	NEWSPAPER		4.41%	7.12%	3.29%	1.50%
2	CORRUGATED CARDBOARD		2.50%	3.86%	3.75%	9.03%
3	MAGAZINES		4.45%	0.56%	0.77%	1.53%
4	RECYCLABLE PAPER		9.64%	15.34%	13.35%	13.13%
5	LOW GRADE PAPER		10.47%	8.15%	8.53%	11.83%
6	ASEPTIC CONTAINERS		0.26%	0.25%	0.45%	0.23%
7	PET BOTTLES #1		2.66%	0.82%	0.50%	3.08%
8	HDPE BOTTLES #2		0.88%	1.20%	0.68%	0.27%
9	BOTTLES FROM TOXICS		0.00%	0.00%	0.04%	0.00%
10	NON BOTTLE PET		0.08%	0.43%	1.52%	0.98%
11	OTHER NARROW NECK PLASTIC BOTTLES		0.51%	1.34%	0.65%	0.26%
12	PLASTIC CUPS AND TUBS		0.17%	0.24%	0.77%	0.66%
13	PLASTIC FILM		2.34%	7.33%	7.54%	7.08%
14	STYROFOAM		0.84%	0.62%	0.72%	1.46%
15	RIGID PLASTICS (BULKY)		1.29%	1.54%	2.84%	2.66%
16	ALL OTHER PLASTICS		1.70%	3.63%	0.00%	0.22%
17	TIN/STEEL CANS		2.94%	0.94%	0.68%	2.12%
18	AEROSOL CANS		0.24%	1.01%	0.00%	0.34%
19	WHITE GOODS/SMALL APPLIANCES		0.00%	0.00%	0.00%	0.00%
20	OTHER FERROUS		0.30%	0.00%	1.04%	0.17%
21	ALUMINUM CANS		1.48%	0.70%	0.53%	1.58%
22	OTHER NON FERROUS		0.39%	0.23%	0.86%	0.95%
23	CLEAR GLASS BOTTLES		1.67%	0.71%	2.79%	3.29%
24	BROWN GLASS BOTTLES		2.65%	0.29%	1.47%	2.42%
25	GREEN GLASS BOTTLES		1.51%	1.08%	0.66%	1.50%
26	OTHER GLASS		1.22%	0.00%	0.65%	0.94%
27	TEXTILES		3.27%	4.94%	3.75%	3.63%
28	CARPET		0.00%	0.00%	0.00%	0.00%
29	OIL FILTERS		0.00%	0.00%	0.00%	0.00%
30	LEAD ACID BATTERIES		0.00%	0.00%	0.00%	0.00%
31	SPECIAL WASTES		0.00%	0.00%	0.00%	0.00%
32	COMPUTERS		0.00%	0.00%	0.00%	0.00%
33	TELEVISIONS		0.00%	0.00%	0.00%	0.00%
34	OTHER E WASTE & TECHNOTRASH		1.56%	0.77%	10.86%	0.32%
35	HOUSEHOLD BATTERIES		0.00%	0.00%	0.72%	0.52%
36	WOOD WASTE UNTREATED		0.00%	0.44%	1.59%	0.74%
37	WOOD WASTE TREATED/PAINTED		0.00%	1.01%	0.69%	1.29%
38	PALLETS		0.00%	0.00%	0.00%	0.00%
39	BRICK AND CONCRETE		0.00%	0.00%	0.00%	0.00%
40	C&D DEBRIS		0.00%	4.12%	0.00%	0.00%
41	FURNITURE		0.00%	0.00%	0.00%	0.00%
42	MATTRESSES		0.00%	0.00%	0.00%	0.00%
43	TIRES AND RUBBER		0.00%	0.00%	0.45%	0.00%
44	YARD WASTE		0.00%	0.00%	0.00%	0.00%
45	FOOD WASTE		20.47%	9.79%	22.30%	16.08%
46	ALL OTHER GARBAGE		16.58%	18.71%	3.55%	8.26%
47	LIQUIDS		0.00%	0.00%	0.49%	0.00%
48	GRIT		3.54%	2.83%	1.54%	1.96%
	TOTALS		100.00%	100.00%	100.00%	100.00%
	Load Weights (lbs)		201.56	207.44	219.12	206.90

**Table C: Collection Center Compactor Results (continued)**

		Location	Asbury	Goldston	Harpers	Bennett
	Material Categories	sample #	5	6	8	9
1	NEWSPAPER		0.40%	7.80%	1.03%	7.66%
2	CORRUGATED CARDBOARD		0.85%	1.89%	0.83%	12.34%
3	MAGAZINES		0.39%	0.50%	0.99%	1.03%
4	RECYCLABLE PAPER		6.00%	13.55%	22.92%	15.75%
5	LOW GRADE PAPER		10.67%	11.72%	5.15%	11.36%
6	ASEPTIC CONTAINERS		0.29%	0.16%	1.25%	0.18%
7	PET BOTTLES #1		4.98%	1.53%	0.65%	1.82%
8	HDPE BOTTLES #2		1.16%	0.80%	1.70%	1.15%
9	BOTTLES FROM TOXICS		0.39%	0.00%	0.10%	0.83%
10	NON BOTTLE PET		0.29%	0.56%	0.68%	0.19%
11	OTHER NARROW NECK PLASTIC BOTTLES		0.28%	0.42%	0.93%	0.00%
12	PLASTIC CUPS AND TUBS		3.12%	0.91%	0.86%	0.10%
13	PLASTIC FILM		4.63%	7.60%	4.68%	6.01%
14	STYROFOAM		0.95%	1.01%	0.94%	0.83%
15	RIGID PLASTICS (BULKY)		3.72%	1.20%	0.95%	0.56%
16	ALL OTHER PLASTICS		2.14%	1.06%	4.28%	2.96%
17	TIN/STEEL CANS		0.88%	1.44%	1.49%	0.87%
18	AEROSOL CANS		0.67%	0.47%	0.50%	0.39%
19	WHITE GOODS/SMALL APPLIANCES		0.00%	0.42%	0.00%	0.00%
20	OTHER FERROUS		0.82%	0.95%	0.10%	0.19%
21	ALUMINUM CANS		1.46%	1.52%	0.12%	0.43%
22	OTHER NON FERROUS		0.57%	1.18%	0.45%	0.00%
23	CLEAR GLASS BOTTLES		2.35%	2.07%	2.76%	3.20%
24	BROWN GLASS BOTTLES		1.24%	1.35%	1.48%	0.70%
25	GREEN GLASS BOTTLES		3.70%	2.53%	1.11%	1.13%
26	OTHER GLASS		0.22%	0.76%	0.55%	0.00%
27	TEXTILES		1.46%	2.64%	5.47%	2.92%
28	CARPET		0.00%	6.22%	1.46%	0.00%
29	OIL FILTERS		0.00%	0.00%	0.00%	0.00%
30	LEAD ACID BATTERIES		0.00%	0.00%	0.00%	0.00%
31	SPECIAL WASTES		0.00%	0.00%	0.00%	0.00%
32	COMPUTERS		0.00%	0.00%	0.00%	0.00%
33	TELEVISIONS		0.00%	0.00%	0.00%	0.00%
34	OTHER E WASTE & TECHNOTRASH		0.55%	0.00%	2.29%	0.09%
35	HOUSEHOLD BATTERIES		0.00%	0.15%	0.00%	0.20%
36	WOOD WASTE UNTREATED		0.00%	0.64%	4.83%	0.14%
37	WOOD WASTE TREATED/PAINTED		0.00%	0.22%	0.47%	0.00%
38	PALLETS		0.00%	0.00%	0.00%	0.00%
39	BRICK AND CONCRETE		0.00%	0.11%	0.00%	0.00%
40	C&D DEBRIS		0.00%	0.00%	0.00%	0.76%
41	FURNITURE		0.00%	0.00%	0.00%	0.00%
42	MATTRESSES		0.00%	0.00%	0.00%	0.00%
43	TIRES AND RUBBER		0.19%	0.11%	0.00%	0.00%
44	YARD WASTE		0.13%	0.00%	0.41%	0.00%
45	FOOD WASTE		20.27%	9.02%	16.68%	20.74%
46	ALL OTHER GARBAGE		15.01%	9.14%	11.89%	3.01%
47	LIQUIDS		0.00%	6.28%	0.00%	1.13%
48	GRIT		10.22%	2.04%	0.00%	1.33%
	TOTALS		100.00%	100.00%	100.00%	100.00%
	Load Weights (lbs)		233.18	207.56	218.08	202.38

**Table C: Collection Center Compactor Results (continued)**

	Location	Marthas	Moncure	Crutchfield	Hadley	Weighted	
	Material Categories	sample #	10	11	13	14	Average
1	NEWSPAPER		0.58%	0.47%	2.39%	4.84%	3.42%
2	CORRUGATED CARDBOARD		4.80%	3.35%	6.58%	3.20%	4.34%
3	MAGAZINES		1.04%	1.33%	0.76%	1.50%	1.22%
4	RECYCLABLE PAPER		17.83%	14.72%	8.33%	9.41%	13.25%
5	LOW GRADE PAPER		15.52%	5.21%	4.67%	9.92%	9.43%
6	ASEPTIC CONTAINERS		0.05%	0.00%	0.00%	0.28%	0.29%
7	PET BOTTLES #1		4.42%	1.70%	3.54%	0.85%	2.21%
8	HDPE BOTTLES #2		1.66%	1.91%	1.58%	0.59%	1.13%
9	BOTTLES FROM TOXICS		0.00%	0.00%	0.00%	0.48%	0.16%
10	NON BOTTLE PET		0.46%	1.04%	1.26%	0.66%	0.68%
11	OTHER NARROW NECK PLASTIC BOTTLES		0.52%	0.15%	0.00%	0.47%	0.46%
12	PLASTIC CUPS AND TUBS		0.66%	0.58%	0.60%	0.88%	0.82%
13	PLASTIC FILM		5.46%	5.91%	6.36%	4.28%	5.74%
14	STYROFOAM		4.17%	1.02%	0.72%	1.37%	1.23%
15	RIGID PLASTICS (BULKY)		5.27%	1.63%	1.01%	3.23%	2.20%
16	ALL OTHER PLASTICS		0.59%	0.00%	1.04%	0.47%	1.50%
17	TIN/STEEL CANS		0.51%	1.36%	4.08%	1.76%	1.58%
18	AEROSOL CANS		0.00%	0.24%	0.00%	0.72%	0.39%
19	WHITE GOODS/SMALL APPLIANCES		0.00%	0.00%	0.50%	0.28%	0.10%
20	OTHER FERROUS		0.43%	0.74%	0.00%	0.89%	0.48%
21	ALUMINUM CANS		1.12%	0.44%	0.64%	1.28%	0.95%
22	OTHER NON FERROUS		0.53%	1.28%	1.17%	0.90%	0.71%
23	CLEAR GLASS BOTTLES		1.36%	2.36%	2.96%	3.34%	2.42%
24	BROWN GLASS BOTTLES		3.21%	2.10%	4.75%	2.71%	2.04%
25	GREEN GLASS BOTTLES		2.60%	0.81%	2.45%	0.72%	1.65%
26	OTHER GLASS		1.25%	0.00%	3.84%	0.00%	0.77%
27	TEXTILES		0.80%	2.41%	8.71%	5.45%	3.80%
28	CARPET		0.00%	9.72%	0.00%	0.00%	1.41%
29	OIL FILTERS		0.00%	0.00%	0.00%	0.07%	0.01%
30	LEAD ACID BATTERIES		0.00%	0.00%	0.00%	0.00%	0.00%
31	SPECIAL WASTES		0.21%	0.00%	0.51%	0.00%	0.06%
32	COMPUTERS		0.00%	0.00%	0.00%	0.00%	0.00%
33	TELEVISIONS		0.00%	0.00%	0.00%	0.00%	0.00%
34	OTHER E WASTE & TECHNOTRASH		0.64%	0.56%	0.91%	0.88%	1.64%
35	HOUSEHOLD BATTERIES		0.00%	0.00%	0.00%	0.29%	0.16%
36	WOOD WASTE UNTREATED		0.00%	0.00%	1.01%	4.96%	1.26%
37	WOOD WASTE TREATED/PAINTED		0.00%	0.20%	0.00%	4.84%	0.78%
38	PALLETS		0.00%	0.00%	0.00%	0.00%	0.00%
39	BRICK AND CONCRETE		0.00%	0.00%	0.00%	0.62%	0.07%
40	C&D DEBRIS		0.00%	0.00%	6.17%	1.53%	1.05%
41	FURNITURE		0.00%	10.59%	0.00%	0.00%	0.86%
42	MATTRESSES		0.00%	0.00%	0.00%	0.00%	0.00%
43	TIRES AND RUBBER		0.00%	0.00%	0.24%	0.00%	0.08%
44	YARD WASTE		0.00%	0.21%	0.00%	0.53%	0.11%
45	FOOD WASTE		14.07%	21.19%	10.55%	17.35%	16.58%
46	ALL OTHER GARBAGE		8.22%	5.75%	7.98%	5.32%	9.42%
47	LIQUIDS		0.00%	1.05%	0.00%	0.00%	0.72%
48	GRIT		2.00%	0.00%	4.69%	3.14%	2.84%
	TOTALS		100.00%	100.00%	100.00%	100.00%	100.00%
	Load Weights (lbs)		233.18	207.56	218.08	202.38	

## **Appendix D: Individual Sample Results, Collection Center Pre-Crushers**

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**Table D: Collection Center Pre-Crusher Results (% by weight)**

		Location	Pittsboro	Cole Park	Weighted Average
	Material Categories	sample #	7	12	
1	NEWSPAPER		5.70%	3.10%	4.04%
2	CORRUGATED CARDBOARD		4.80%	2.34%	3.23%
3	MAGAZINES		0.79%	2.69%	2.01%
4	RECYCLABLE PAPER		4.35%	6.34%	5.62%
5	LOW GRADE PAPER		10.26%	7.35%	8.40%
6	ASEPTIC CONTAINERS		0.26%	0.25%	0.25%
7	PET BOTTLES #1		1.87%	0.55%	1.03%
8	HDPE BOTTLES #2		1.29%	1.91%	1.68%
9	BOTTLES FROM TOXICS		1.77%	0.00%	0.64%
10	NON BOTTLE PET		0.00%	0.30%	0.19%
11	OTHER NARROW NECK PLASTIC BOTTLES		0.21%	0.70%	0.53%
12	PLASTIC CUPS AND TUBS		0.54%	0.51%	0.52%
13	PLASTIC FILM		5.84%	5.20%	5.43%
14	STYROFOAM		0.85%	2.14%	1.68%
15	RIGID PLASTICS (BULKY)		0.00%	3.69%	2.36%
16	ALL OTHER PLASTICS		2.06%	0.00%	0.74%
17	TIN/STEEL CANS		0.88%	2.13%	1.68%
18	AEROSOL CANS		0.40%	1.37%	1.02%
19	WHITE GOODS/SMALL APPLIANCES		0.00%	4.47%	2.86%
20	OTHER FERROUS		0.20%	4.17%	2.74%
21	ALUMINUM CANS		0.48%	1.43%	1.08%
22	OTHER NON FERROUS		0.72%	0.00%	0.26%
23	CLEAR GLASS BOTTLES		2.05%	2.65%	2.43%
24	BROWN GLASS BOTTLES		0.79%	0.00%	0.29%
25	GREEN GLASS BOTTLES		1.37%	1.45%	1.42%
26	OTHER GLASS		0.00%	0.00%	0.00%
27	TEXTILES		7.42%	3.72%	5.06%
28	CARPET		4.53%	2.51%	3.24%
29	OIL FILTERS		0.00%	0.00%	0.00%
30	LEAD ACID BATTERIES		0.00%	0.00%	0.00%
31	SPECIAL WASTES		0.00%	0.00%	0.00%
32	COMPUTERS		0.00%	0.00%	0.00%
33	TELEVISIONS		0.00%	0.00%	0.00%
34	OTHER E WASTE & TECHNOTRASH		2.23%	4.57%	3.73%
35	HOUSEHOLD BATTERIES		0.00%	0.00%	0.00%
36	WOOD WASTE UNTREATED		9.86%	9.08%	9.36%
37	WOOD WASTE TREATED/PAINTED		4.53%	12.80%	9.82%
38	PALLETS		0.00%	2.06%	1.31%
39	BRICK AND CONCRETE		0.00%	0.00%	0.00%
40	C&D DEBRIS		5.42%	0.00%	1.96%
41	FURNITURE		0.00%	0.00%	0.00%
42	MATTRESSES		0.00%	0.00%	0.00%
43	TIRES AND RUBBER		0.00%	0.00%	0.00%
44	YARD WASTE		0.00%	0.00%	0.00%
45	FOOD WASTE		10.02%	4.21%	6.30%
46	ALL OTHER GARBAGE		2.70%	1.26%	1.78%
47	LIQUIDS		0.00%	0.00%	0.00%
48	GRIT		5.81%	5.04%	5.32%
	TOTALS		100.00%	100.00%	100.00%
	Load Weights (lbs)		225.04	398.54	

## **Appendix E: Individual Sample Results, Collection Center Roll-Offs**

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**Table E: Collection Center Roll-Off Results (% by volume)**

Sample Number	1	2	3	4
Date	1/27/2014	1/27/2014	1/27/2014	1/27/2014
Origin	Siler City	Pittsboro	Bonlee	Cole Park
County Vehicle	#8	#10	#8	#9
Container Size	30	40	30	30
Percent Full	100%	100%	100%	100%
Cubic Yards (present)	30.0	40.0	30.0	30.0
Time of Day	8:00am	8:45am	9:15am	9:30am
Unwaxed OCC	10.0%	5.0%	2.0%	2.0%
Other Ferrous				
Insulation				0.8%
Rigid Plastics	10.0%	2.0%	5.0%	2.3%
Yard Waste			3.0%	
Treated Wood	5.0%	15.0%	13.8%	21.0%
Untreated Wood	5.0%	20.0%	13.8%	21.0%
Carpet and Padding	10.0%	15.0%	27.5%	21.0%
Drywall				
Rock/Gravel/Grit				
Furniture	20.0%	15.0%	30.0%	12.0%
Mattresses		10.0%		18.0%
Household Bagged Waste	15.0%	12.6%	5.0%	2.0%
C&D Debris Bagged Waste	15.0%	5.4%		
Other Glass				
Other E-waste				
Textiles	3.0%			
Rubber				
Mixed Residue	7.0%	-	-	
<b>TOTAL</b>	100.0%	100.0%	100.0%	100.0%
<i>Comments</i>	lots of bagged waste	lots of wood	lots of furniture, couches and carpet	lots of wood and carpet
<b>Net Weight (lbs)</b>	<b>3,640</b>	<b>5,520</b>	<b>4,080</b>	<b>4,120</b>

**Table E: Collection Center Roll-Off Results (continued)**

<b>Sample Number</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
<b>Date</b>	<b>1/27/2014</b>	<b>1/27/2014</b>	<b>1/27/2014</b>	<b>1/28/2014</b>
<b>Origin</b>	<b>Asbury</b>	<b>Goldston</b>	<b>Harpers</b>	<b>Moncure</b>
<b>County Vehicle</b>	<b>#10</b>	<b>#8</b>	<b>#8</b>	<b>#10</b>
<b>Container Size</b>	<b>30</b>	<b>30</b>	<b>30</b>	<b>30</b>
<b>Percent Full</b>	<b>60%</b>	<b>100%</b>	<b>60%</b>	<b>100%</b>
<b>Cubic Yards (present)</b>	<b>18.0</b>	<b>30.0</b>	<b>18.0</b>	<b>30.0</b>
<b>Time of Day</b>	<b>11:15am</b>	<b>11:30am</b>	<b>1:47pm</b>	<b>9:15am</b>
Unwaxed OCC	10.0%	2.0%	5.0%	5.0%
Other Ferrous	3.0%			
Insulation		3.0%		
Rigid Plastics	3.0%	7.0%		5.0%
Yard Waste				
Treated Wood	1.0%	14.0%	15.0%	22.0%
Untreated Wood	9.0%	14.0%	5.0%	11.0%
Carpet and Padding		28.0%	15.0%	11.0%
Drywall			15.0%	5.5%
Rock/Gravel/Grit				5.5%
Furniture	23.0%	15.0%	15.0%	18.0%
Mattresses	23.0%	10.0%		2.0%
Household Bagged Waste	12.5%	4.5%	22.5%	10.0%
C&D Debris Bagged Waste	12.5%	0.5%	7.5%	
Other Glass				
Other E-waste	1.0%			
Textiles	2.0%	2.0%		5.0%
Rubber				
Mixed Residue	-	-	-	-
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>
<i>Comments</i>	lots of furniture and mattresses	good amount of bagged waste	lots of furniture and wood	lots of furniture and wood, some residential waste
<b>Net Weight (lbs)</b>	<b>2,500</b>	<b>3,680</b>	<b>3,120</b>	<b>5,660</b>

**Table E: Collection Center Roll-Off Results (continued)**

Sample Number	9	10	11	12	
Date	1/28/2014	1/28/2014	1/28/2014	1/28/2014	
Origin	Marthas	Bennett	Hadley	Crutchfield	
County Vehicle	#9	#8	#10	#8	
Container Size	40	30	30	30	
Percent Full	90%	60%	100%	80%	
Cubic Yards (present)	36.0	18.0	30.0	24.0	Weighted Average
Time of Day	9:15am	9:30am	10:46am	11:45am	
Unwaxed OCC	2.0%	2.0%	5.0%	10.0%	5.1%
Other Ferrous	2.0%				0.3%
Insulation					0.3%
Rigid Plastics	5.0%	40.0%	10.0%		5.7%
Yard Waste					0.3%
Treated Wood	10.4%	10.0%	16.2%	8.0%	13.4%
Untreated Wood	10.4%		16.2%	4.0%	11.6%
Carpet and Padding	2.6%	10.0%	16.2%	4.0%	13.6%
Drywall	2.6%		5.4%	4.0%	2.8%
Rock/Gravel/Grit					0.6%
Furniture	48.0%	18.0%	13.0%	18.0%	20.1%
Mattresses	12.0%	12.0%	13.0%	2.0%	7.8%
Household Bagged Waste		3.0%	5.0%	32.0%	11.1%
C&D Debris Bagged Waste				8.0%	3.8%
Other Glass				2.0%	0.2%
Other E-waste	0.5%	5.0%		2.0%	0.5%
Textiles	4.5%			1.0%	1.5%
Rubber				5.0%	0.6%
Mixed Residue					0.5%
<b>TOTAL</b>	100.0%	100.0%	100.0%	100.0%	<b>100.0%</b>
<i>Comments</i>	lots of furniture	good mix of materials, lots of plastics	good mix of materials	fluorescent bulbs, lots of household garbage	
<b>Net Weight (lbs)</b>	<b>3,980</b>	<b>1,760</b>	<b>4,920</b>	<b>5,700</b>	