

# APPALACHIAN STATE UNIVERSITY 2013 SOLID AND HAZARDOUS WASTE AUDIT

# FINAL REPORT JULY 2013



Prepared for: Appalachian State University

Office of Sustainability

East Hall

Boone, NC 28608

Submitted by:

**Kessler Consulting, Inc.** 

innovative waste solutions 14620 N. Nebraska Ave., Bldg. D

Tampa, FL 33613

printed on recycled paper

This report has been prepared for the use and benefit of the client for the specific purposes identified in the report. The conclusions, observations, and recommendations contained herein attributed to Kessler Consulting, Inc. constitute the opinions of Kessler Consulting. The services provided by Kessler Consulting and this report are not intended for the benefit of any third party and shall not be relied upon by any third party. To the extent that statements, information, and opinions provided by other third parties have been used in the preparation of this report, Kessler Consulting has relied upon the same to be accurate, and for which no assurances are intended and no representations or warranties are made. Kessler Consulting makes no certification and gives no assurances except as explicitly set forth in this report.

Copyright 2013, Kessler Consulting, Inc. All rights reserved.

Kessler Consulting, Inc. is a member of, or was awarded, the following











# **Table of Contents**

Section	on 1	Introduction	1
:	1.1	Purpose and Scope	1
:	1.2	Background	1
:	1.3	Acknowledgement	2
Section	on 2	Methodology	3
;	2.1	Solid Waste Audit Methodology	3
:	2.2	Hazardous Waste Audit Methodology	
Section	on 3	Solid Waste Audit Results	9
3	3.1	Organization of Audit Results	9
	3.2	Academic Buildings	
3	3.3	Residential Halls	10
	3.4	Student Union	
	3.5	Sports and Recreation Waste	11
	3.6	Central Dining	12
	3.7	Physical Plant	12
3	3.8	Other Campus Locations	13
3	3.9	Discussion of Findings and Opportunities	14
Section	on 4	Hazardous Waste Audit Results	46
4	4.1	Introduction	46
4	4.2	Audit Results	46
4	4.3	Compliance with DENR and EPA Regulations	48
4	4.4	Summary of Findings and Recommendations	50
Tables			
Table 3.1:	Comp	osition of Academic Waste Disposed (% by weight)	18
Table 3.2:	Comp	osition of Residential Waste Disposed (% by weight)	21
		osition of Student Union Waste Disposed (% by weight)	
Table 3.4:	Comp	osition of Sports and Recreation Waste Disposed (% by weight)	28
		osition of Central Dining Waste Disposed (% by weight)	
	-	osition of All Physical Plant Waste Disposed (% by weight)	
		osition of Auxiliary Building Waste Disposed (% by weight)	
		ary of Solid Waste Audit Results (% by weight)	

#### **Figures**

Figure 3.1: Composition of Academic Waste Disposed (% by weight)	20
Figure 3.2: Composition of Residential Waste Disposed (% by weight)	22
Figure 3.3: Composition of Student Union Waste Disposed (% by weight)	24
Figure 3.4: Composition of University Bookstore Waste Disposed (% by weight)	25
Figure 3.5: Composition of Cascades Café Waste Disposed (% by weight)	26
Figure 3.6: Composition of McAlister's Deli Waste Disposed (% by weight)	27
Figure 3.7: Composition of Kidd Brewer Stadium Waste Disposed (% by weight)	29
Figure 3.8: Composition of Athletics Center Waste Disposed (% by weight)	30
Figure 3.9: Composition of Student Recreation Center Waste Disposed (% by weight)	31
Figure 3.10: Composition of Legends Waste Disposed (% by weight)	32
Figure 3.11: Composition of Central Dining Waste Disposed (% by weight)	34
Figure 3.12: Composition of River Street Pulped Waste (% by weight)	35
Figure 3.13: Composition of Sanford Commons Pulped Waste (% by weight)	35
Figure 3.14: Composition of All Physical Plant Waste Disposed (% by weight)	37
Figure 3.15: Composition of Auxiliary Warehouse Waste Disposed (% by weight)	39
Figure 3.16: Composition of Miles Annas Waste Disposed (% by weight)	40
Figure 3.17: Composition of Lucy Brock Waste Disposed (% by weight)	41
Figure 3.18: Composition of Cone Hall Renovation Waste (% by weight)	42
Figure 3.19: Composition of PET Plastic Bottles (% by weight)	43

# **Appendices**

Appendix A - Ma	aterial Category	Descriptions
-----------------	------------------	--------------

Appendix B – Academic Waste - Individual Building Results

Appendix C – Residential Waste - Individual Building Results

Appendix D - Student Union Waste - Individual Location Results

Appendix E – Sports and Recreation Waste - Individual Location Results

Appendix F – Central Dining Waste - Individual Location Results

Appendix G – Physical Plant Waste - Individual Location Results

Appendix H – Other Campus Waste - Individual Location Results

# Section 1 Introduction

# 1.1 Purpose and Scope

Appalachian State University (App State) contracted Kessler Consulting, Inc. (KCI) to conduct an audit of the solid and hazardous wastes generated on the App State campus.

The objective of the Solid Waste Audit (SWA) was to determine the composition of the solid waste stream generated in the academic, auxiliary, and residential areas of the App State campus. The SWA consisted of the sampling and sorting solid waste (garbage) from over 45 distinct areas of the App State campus to determine the types and quantities of recoverable materials currently being disposed.

The objective of the Hazardous Waste Audit (HWA) was to evaluate the handling, storage, and disposal practices for hazardous waste materials. The HWA was to establish a benchmark of App State's compliance with United State Environmental Protection Agency (EPA) and North Carolina Department of Environment and Natural Resources (DENR) regulations pertaining to hazardous waste generators. The audit addressed hazardous waste compliance pertaining to chemical waste from teaching and research operations, chemical waste from non-academic university operations, radioactive waste from teaching and research operations, and biological waste from teaching and research operations.

# 1.2 Background

App State is located in the Blue Ridge Mountains in the town of Boone, North Carolina. Its campus is home to more than 21,000 students, faculty, and staff. A hallmark of the App State experience is its strong sense of community fostered by small classes and close student-faculty interaction. In recent years, the App State community has committed itself to taking a leadership role in sustainability by integrating sustainable practices into all aspects of campus planning and operations. In fact, students from across the country are attracted to App State because of its increased focus on sustainability initiatives.

One of the key elements of the Sustain Appalachian program is a focus on proper solid waste management and resource recovery. The 2012 Waste Reduction Strategic Plan outlines the University's goal to become a zero waste campus by achieving 90% waste diversion by 2022. Major initiatives include single stream recycling, e-waste reuse and recycling, football and tailgate recycling (Recycle at the Rock), organized swap events, and a newly expanded composting facility for increased food waste diversion. The Sustain Appalachian program also produces education and outreach materials to support the University's solid waste management initiatives.

This comprehensive waste audit was identified as a primary initiative intended to provide a benchmark from which additional programs and policies can be developed to help achieve a zero waste campus.

# 1.3 Acknowledgement

KCI would like to acknowledge and thank App State staff members who assisted with this study, in particular Jennifer Maxwell, Kevin Madsen and the staff responsible for collecting and storing waste samples for the SWA. Their cooperation throughout the study enabled us to successfully and effectively complete our work.

# Section 2 Methodology

# 2.1 Solid Waste Audit Methodology

The two-week SWA focused on identifying the composition of solid waste discarded in distinct areas of the App State Campus. Prior to the sorting event, App State Office of Sustainability staff identified 32 campus buildings for inclusion in the audit. During each week of the two-week audit, samples from 45 different areas/operations, within the selected 32 buildings, were sampled and sorted. A total of 91 samples were sorted over the two-week period of April 15 to 26, 2013.

#### 2.1.1 Material Categories

KCI worked with App State staff to develop a list of 40 material categories into which each waste sample was sorted during the Audit. These categories included recyclables accepted in App State's single stream recycling program (Program Recyclables), other commonly recyclable materials (Other Recyclables), materials that can be composted (Compostable Materials), and various other material types. The full list of material categories and definitions can be found in Appendix A.

#### 2.1.2 Locations, Equipment and Labor

The two-week SWA sorting event was conducted between the hours of 8:00 am to 4:00 pm Monday through Friday at the Broyhill Events Center. KCl provided an Audit Supervisor, Sorting Supervisor, all sorting equipment and safety gear. All sort labor was provided by KCl through an agreement with Labor Ready of Boone.

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

#### 2.1.3 Sampling Schedule and Procedures

Each of the 32 buildings included in the Audit were sampled each week for a total of two samples per location. Each sample consisted of approximately 24-hours of waste generation, hereafter referred to as "waste load." Prior to sampling, University housekeeping staff emptied all waste within each building. Approximately 24-hours later, all of the waste generated was collected for sampling and sorting by the Audit staff.

Waste loads were delivered to the Audit site through a variety of methods, which included:

- Deliveries of smaller waste loads by individual building supervisors;
- Deliveries of residential halls by physical plant staff using an App State front-end load vehicle; and
- Collection of waste loads from staging areas by KCI staff.

In the case of the residential halls, each dumpster was emptied on Saturday evening and serviced Monday morning by Physical Plant staff.

In some cases, the buildings were subdivided into distinct operations. For example, the Student Union was divided into four distinct areas: the Union, McAlister's Deli, Cascades Cafe, and the University Bookstore. The breakdown of samples is provided below.

	Building	Sample Site	Category	Sample #	Appendix
1	Anne Belk Hall	Entire Building	Academic	31, 77	B-1
2	Belk Library Complex	Entire Building	Academic	25, 75	B-2
3	Broyhill Music Center	Entire Building	Academic	38, 85	B-3
4	Business Affairs Annex (Old Lowes)	Entire Building	Academic	15,71	B-4
5	Cap Science Complex	Entire Building	Academic	9, 53	B-5
6	College Of Education	Entire Building	Academic	29, 79	B-6
7	Holmes Convocation Center	Entire Building	Academic	32, 74	B-7
8	Jet (John E. Thomas) Hall	Entire Building	Academic	35, 82	B-8
9	Katherine Harper/Kerr Scott	Entire Building	Academic	6, 54	B-9
10	L.S. Dougherty Building	Entire Building	Academic	33, 84	B-10
11	Living Learning Center	Academic Portion	Academic	42, 91	B-11
12	Raley (Thelma C. Raley) Hall	Entire Building	Academic	24, 80	B-12
13	Rankin Science Complex	Entire Building	Academic	30, 72	B-13
14	University Hall	Entire Building	Academic	36, 86	B-14
15	Wey Hall	Entire Building	Academic	10, 56	B-15
16	Appalachian Heights	Entire Building	Residential	1,50	C-1
17	Bowie Residence Hall	Entire Building	Residential	5, 47	C-2
18	Cone Residence Hall	Entire Building	Residential	7, 52	C-3
19	Living Learning Center	Residential Portion	Residential	3, 48	C-4
20	Mountaineer Hall	Entire Building	Residential	2, 49	C-5
21	Panhellenic Residence Hall	Entire Building	Residential	8, 55	C-6
22	Winkler Residence Hall	Entire Building	Residential	4, 46	C-7
23	Student Union	Plemmons Student Union	Student Services	12, 57	D-1
24	Student Union	University Bookstore	Student Services	11, 58	D-2
25	Student Union	Cascades Cafe	Student Services	13, 59	D-3
26	Student Union	McAlister's Deli	Student Services	14, 60	D-4
27	Kidd Brewer Stadium	Kidd Brewer Stadium	Recreation	45	E-1
28	Athletics Center	Athletics Center	Recreation	37, 87	E-2
29	Student Recreation Center	Student Recreation Center	Recreation	27, 70	E-3
30	Legends	Legends	Recreation	41, 78	E-4
30	Central Dining	Central Dining Hall	Student Services	28, 76	F-1
31	Central Dining	River Street	Student Services	44, 90	F-2
01	Central Dining	Sanford Commons	Student Services	43, 89	F-3
	Physical Plant	Carpentry Shop	Physical Services	23, 65	_
	Physical Plant	Electrical Shop	Physical Services	19, 67	
	Physical Plant	Landscape	Physical Services	16, 63, 69	
	Physical Plant	Lock Shop	Physical Services	21, 81	
32	Physical Plant	Mechanical Shop	Physical Services	22, 68	
32	Physical Plant	Motor Pool	Physical Services	17, 66	G
	Physical Plant	Physical Plant Office	Physical Services	40	
	Physical Plant	Paint Shop	Physical Services	20, 62	
	Physical Plant	Telecom	Physical Services Physical Services	18, 61	
	Physical Plant	Print Shop	Physical Services Physical Services	64	
33	Auxiliary Warehouse	Auxiliary Warehouse	Physical Services Physical Services	39, 88	H-1
34	Lucy Brock Child Center	Lucy Brock Child Center	Student Services	26, 73	H-2
35	Miles Annas Student Services	Miles Annas Student Services	Student Services Student Services		
33	Cone Residence Hall (C&D)	Construction Waste Only	Student Services	34, 83 51	H-3
<b>-</b>		· ·	-		
	PET Plastic Bottles	Water/Soda/Juice Breakdown	-	Extra	

KCI worked with App State staff to develop a collection, delivery, and sampling schedule for each building. App State housekeeping staff collected waste from each building and transferred it to a consolidation point. Once at the consolidation point, waste loads were delivered to the Audit site by the aforementioned methods.

As the waste loads arrived at the sort site, KCI staged each waste load on a tarp and clearly labeled it with a sample number and building name. Other information, such as delivery/collection time, sample size, and other notes were recorded on the sample's data recording form. Photo 2.1 depicts three large waste loads ready for sampling and sorting and Photo 2.2 depicts a waste load sample staged on a single tarp.

In most instances, the entire waste load was hand sorted by Audit staff; however, due to the large quantities of waste generated by some buildings, (residential halls, Plemmons Student Union, Central Dining, Kidd Brewer Stadium, and Belk Library) representative samples of approximately 250 pounds were pulled from the waste load and sorted. This is in accordance to protocols set forth by KCI and agreed upon by University staff prior to conducting the sorting event. This protocol also follows industry-accepted standards as outlined in the ASTM Standard Test Method for Determination of the Composition of Unprocessed Municipal Solid Waste (D5231-92; reapproved 2003).

#### 2.1.4 Sorting Procedures

All samples were hand sorted into the previously defined material categories. Photo 2.3 depicts the sorting location and set-up. After the entire waste load (or sample) was sorted, the Audit Supervisor weighed and recorded the weights of each material category on a data recording form. Tare weights of empty containers were subtracted from the weights of each material container after sorting to obtain the net weight of each



Photo 2.1: Three Residential Waste



**Photo 2.2: Typical Waste Load** 



Photo 2.3: Waste Sorting Location and Set-up

material category. All recyclables sorted from the waste stream were recovered during the Audit.

It should also be noted that during the second week of the Audit, the waste load from Cone Hall contained a large amount of construction and demolition (C&D) debris. To help the University understand the composition of the waste generated during building renovations, KCI sampled and sorted the C&D debris separately from the residential waste. The results of this C&D sample are discussed in Section 3.

Additionally, App State staff requested that KCI note the breakdown of PET plastic bottles discarded on campus. The objective was to determine whether staff and students are reducing bottled water consumption as the University encourages the use of refillable water bottles and the campus' water filling stations. To accomplish this request, KCI sorted all of the PET plastic bottles recovered from the waste loads on one day of the Audit and sorted them into the following categories: water bottles, juice and sports drinks, soda bottles, and other PET bottles and jars. The results of this PET sample are also discussed in Section 3.

A video showing the sorting and weighing of a complete sample is provided with this report.

#### 2.1.5 Analytical Procedures

Following the sorting event, KCI calculated the weighted average of each material category for each of the 45 locations sampled. When applicable, building locations were combined to calculate a weighted average of similar building types, such as academic and resident halls. In these instances, confidence intervals were calculated for each material category using a standard statistical t-test.

The SWA results are provided and discussed in Section 3.1. Additionally, Appendices B through H contain a stand-alone summary for each building.

### 2.2 Hazardous Waste Audit Methodology

The HWA entailed inspections of the locations where hazardous wastes were being generated and stored as identified by the Appalachian State Project Manager. The purpose was to determine compliance with North Carolina and United States Environmental Protection Agency Hazardous Waste Regulations. Prior to the Audit, a pre-inspection walk through of the identified buildings was conducted on March 8, 2013. Inspections of a representative number of laboratories were performed on April 15 and April 17, 2013.

#### 2.2.1 Locations

App State provided a list of academic and non-academic buildings where hazardous waste was being generated. During the two-day audit, KCI staff accompanied by an Appalachian State representative, inspected each of the buildings identified by the University. These included biology teaching and research laboratories, chemical teaching and research laboratories, radiological laboratories, and the technologies building. Non-academic areas such as the Physical Plant were also inspected.

KCI staff noted how hazardous wastes were being managed in each of the laboratories and classrooms, looking for significant instances of non-compliance and abuse and all instances of illegal acts.

#### **App State Facilities Identified for Hazardous Waste Audit**

Description	Property Class	Gross Sq. Ft.	Notes
Auxiliary Warehouse	Residential	11,042	Hazardous Waste – Housing
Cap Science Complex	Academic	114,810	Hazardous Waste – Science
Holmes Convocation Center	Academic	200,840	Hazardous Waste – HLES- Special Events
Katherine Harper/ Kerr Scott	Academic	80,260	Hazardous Waste – Technology
Motor Pool/Telecom Office – Physical Plant	Academic Support	13,070	Hazardous Waste – Shop
Rankin Science North (Annex)	Academic	29,803	Hazardous Waste – Science
Rankin Science South (New)	Academic	43,378	Hazardous Waste – Science
Rankin Science West (Old)	Academic	87,232	Hazardous Waste – Science
Wey Hall	Academic	54,900	Hazardous Waste – Art

#### 2.2.2 Audit Procedures

Research Laboratories, Teaching Laboratories, Waste Accumulation Areas and Non-academic buildings were inspected to determine compliance with the following North Carolina Hazardous Waste Management Regulations:

#### 15A NCAC 13A.0107 STDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE - PART 262

- (a) 40 CFR 262.10 through 262.12 (Subpart A), "General" address waste determinations.
- (b) 40 CFR 262.20 through 262.27 (Subpart B) "The Manifest" address shipments of hazardous waste.
- (c) 40CFR 262.30 through 262.34 (Subpart C) address pre-transport requirements.
- (d) 40 CFR 262.40 through 262.44 (Subpart D) address recordkeeping and reporting.
- (e) 40 CFR 262.200 through 262.216 (Subpart K) address alternative requirements hazardous waste determination and accumulation of unwanted material for laboratories owned by eligible academic entities.

During the inspections, KCI staff noted instances of compliance and non-compliance in each laboratory or building, such as how containers were labeled and managed, if the waste was properly stored, and if a hazardous waste determination had been made. KCI staff also reviewed manifests and emergency procedures and plans to determine if they were adequate.

#### 2.2.3 Audit Form

Prior to the start of the audit, KCI developed an audit form to be used by App State staff during regularly scheduled inspections of the teaching and research laboratories where hazardous wastes are generated and stored. The form is based on 40 CFR 262.200 through 262.216 (Subpart K), "Alternative Requirements for Hazardous Waste Determinations and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities," developed by the EPA.

# **Section 3 Solid Waste Audit Results**

# 3.1 Organization of Audit Results

All SWA results are expressed in terms of percentage by weight. The percentages included in the tables and figures are the mean values for each material category. To facilitate review of the results, all tables and figures are provided at the end of this section, organized by building type. The individual material categories on the tables and figures are grouped as defined below:

- Program Recyclables materials included in App State's single stream recycling program, such as recyclable paper and containers.
- Other Recyclables materials that can be recycled but are typically not collected with Program Recyclables, such as laboratory glass, other ferrous and non-ferrous metals, ewaste, technotrash, and white goods/small appliances.
- Compostable Materials materials that could potentially be recovered for composting, such as yard waste, food waste, clean wood waste, other recyclable organic waste, and compostable paper.
- All Other Materials materials not listed above.

Where appropriate, the results for similar building types were combined to 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.

The following subsections discuss the SWA results by building type, each highlighting the areas of greatest waste diversion opportunity by providing the percentages of Program Recyclables, Other Recyclables, and Compostable Materials. The final subsection provides an overall discussion of the SWA findings and waste diversion opportunities.

### 3.2 Academic Buildings

A total of 15 academic buildings were included in the SWA. Results from the 15 academic buildings were combined to determine the average composition of waste generated in the academic portion of the App State campus. The resulting weighted average is referred to as "Academic Waste" throughout this report. Table 3.1 presents the composition of waste from each of the 15 academic buildings and of the combined Academic Waste. Figure 3.1 depicts the composition of the Academic Waste. Results for each individual academic building are provided in Appendix B.

The main opportunities to increase waste diversion are summarized below. Program Recyclables represent approximately 19 percent of the waste stream and Other Recyclables an additional 5.3 percent. However, the greatest opportunity is in Compostable Materials, which comprise more

than 42 percent of the waste disposed. The majority of Compostable Materials consisted of compostable paper, followed by food waste.

Material Categories	Percent by Weight
Recyclable Paper	12.8%
Recyclable Containers	6.0%
Other Recyclables	5.3%
Compostable Materials	42.4%
Subtotal	66.5%

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

Also worth noting, two vacutainers of blood and a bag of animal fetuses were found in the waste load from Holmes Convocation. Because the fetuses were preserved in formalin, a hazardous waste determination should be made on these wastes.

#### 3.3 Residential Halls

A total of 7 residential halls were included in the SWA. Results for the seven residential halls also were combined to determine the average composition of waste generated in the residential portion of the App State campus. This is referred to throughout this section as "Residential Waste." Table 3.2 presents the waste composition of the seven residential halls and the combined Residential Waste. Figure 3.2 depicts the composition of the Residential Waste. Results for each individual residential hall are provided in Appendix C.

Program Recyclables represented near one-third of the waste disposed in residential halls, indicating an opportunity to improve the recycling program in these locations. Compostable Materials comprised another third of the waste stream, most of it consisting of food waste.

Material Categories	Percent by Weight
Recyclable Paper	13.7%
Recyclable Containers	18.0%
Other Recyclables	5.9%
Compostable Materials	34.7%
Subtotal	72.3%

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

#### 3.4 Student Union

Waste from four distinct areas of the Student Union was collected during the SWA. These include the Plemmons Student Union common areas, the University Bookstore, Cascades Cafe, and McAlister's Deli. Because the waste streams generated in these locations are substantially different from each other, the results were not combined. Table 3.3 and Figures 3.3-3.6 present the results for each location and Appendix D provides a one-page summary for each of the four areas.

As expected, food waste comprised the largest percentage of the waste streams (32-42 percent) in the Student Union common areas, Cascades Café, and McAlister's Deli. Combined with compostable paper (13-18 percent), Compostable Materials represented more than half of the waste streams in these three areas. Compostable Materials comprised about 29 percent of waste from the University Bookstore, which also contained 29 percent Program Recyclables. Also worth

noting are plastic bags, which comprised 12-16 percent of the waste streams in all areas of the Student Union.

	Weighted Average							
	Student Univ. Cascades McAlister's							
Material Categories	Union	Bookstore	Café	Deli				
Recyclable Paper	4.7%	23.0%	6.6%	2.6%				
Recyclable Containers	4.1%	6.0%	4.6%	4.0%				
Other Recyclables	5.8%	5.7%	5.5%	8.8%				
Compostable Materials	50.5%	29.3%	54.8%	57.3%				
Subtotal	65.1%	63.9%	71.5%	72.5%				

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

Also worth noting, two blood collection tubes with needles attached were found in the Student Union waste load. These wastes should have been disposed as biomedical waste.

# 3.5 Sports and Recreation Waste

To understand the composition of waste disposed during the campus' recreational activities, waste loads were collected from Kidd Brewer Stadium, the Athletics Center, Student Recreation Center, and Legends. Waste streams generated at these various locations were also substantially different from each other; therefore, the results were not combined. It should be noted that only one waste load from Kidd Brewer Stadium was collected during the Audit. This waste load was generated during App State's spring football game on April 20, 2013. The two waste loads included in the Audit from Legends nightclub were generated during two separate performances. Table 3.4 and Figures 3.7-3.10 present the waste composition for each location; one-page summaries for each of the Sports and Recreation areas are provided in Appendix E.

Of the Sports and Recreation areas, Kidd Brewer Stadium offers the greatest opportunity for increasing diversion of Program Recyclables (nearly 28 percent of the waste stream). As expected, the majority of the Program Recyclables consists of recyclable containers. Program Recyclables comprised 10-22 percent of the waste streams in the three other Sports and Recreation venues.

Other Recyclables comprised nearly 17 percent of the waste from Kidd Brewer, but this consisted of aluminum scrap from a broken pop-up tent, which probably is not a normal part of the waste stream. Compostable Materials represented a substantial amount of the waste in all locations (24-58 percent). Compostable paper and food waste were the greatest contributors to Compostable Materials.

	Weighted Average							
	Kidd	Kidd Athletic Rec.						
Material Categories	Brewer	Center	Center	Legends				
Recyclable Paper	6.8%	16.0%	4.8%	10.1%				
Recyclable Containers	21.1%	5.8%	5.6%	12.2%				
Other Recyclables	16.8%	4.2%	3.8%	5.6%				
Compostable Materials	26.7%	24.1%	49.5%	57.6%				
Subtotal	71.4%	50.0%	63.7%	85.5%				

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

# 3.6 Central Dining

To understand the composition of waste disposed at App State's Central Dining Hall, waste loads were collected from the Central Dining common areas as well as from back-of-house locations in River Street and Sanford Commons. The purpose of collecting back-of-house waste was to identify the composition of materials that are sent through the University's pulping machines. The back-of-house samples consisted of two, 36-gallons roll-carts of waste materials from each location. Table 3.5 and Figures 3.11-3.13 present the waste compositions of each location; one-page summaries for each area of the Central Dining Hall are provided in Appendix F.

As expected, food waste and compostable paper comprised the majority of the waste generated in all areas of the Central Dining Hall. Program Recyclables represented about 13 percent of the Central Dining waste and 9-12 percent of the materials entering the pulping machines. The majority of the Other Recyclables generated in the Hall were comprised of rigid plastics, such as plastics cutlery and plastic cups.

	Weighted Average						
Material Categories	Central River San Dining Street Com						
Recyclable Paper	7.6%	6.3%	7.2%				
Recyclable Containers	5.7%	3.1%	5.1%				
Other Recyclables	4.9%	6.0%	6.4%				
Compostable Materials	58.5%	71.9%	58.2%				
Subtotal	76.8%	87.4%	77.0%				

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

# 3.7 Physical Plant

App State staff requested that waste loads be collected from eight different areas within the Physical Plant. To evaluate the overall waste generated at the Physical Plant, the weighted average of these eight samples was also calculated. Due to the relatively distinct waste streams generated by the various shops located within the Physical Plant, calculating confidence intervals was not appropriate. Table 3.6 presents the results of each location and Figure 3.14 depicts the composition of all waste generated by the Plant. One-page summaries for each area of the Physical Plant areas are provided in Appendix G.

Program Recyclables represented about 26 percent of the overall Physical Plant waste stream, and comprised more than one-third of the waste from the Lock Shop, Motor Pool, and Mechanical area. Substantial amounts of Other Recyclables were found in several areas. Most notable were ferrous metals in the Motor Pool and Electric waste stream. Compostable Materials comprised approximately 25 percent of the waste stream, with the greatest contributions from the Office/Telecom, Landscaping, and Carpentry.

		Weighted Average								
Material Categories	Landscape	Motor Pool	Electrical	Paint	Lock Shop	Mechanical	Carpentry	Office / Telecom	All Physical Plant	
Recyclable Paper	8.8%	11.7%	12.7%	12.4%	24.1%	26.7%	16.3%	7.1%	13.0%	
Recyclable Containers	12.3%	24.0%	2.5%	6.7%	9.6%	6.4%	5.5%	12.7%	13.0%	
Other Recyclables	6.8%	21.2%	33.7%	6.7%	12.8%	2.0%	5.2%	11.8%	15.2%	
Compostable Materials	43.6%	13.0%	11.9%	10.3%	11.8%	21.1%	30.6%	52.8%	25.0%	
Subtotal	71.1%	69.9%	60.8%	36.2%	58.3%	56.2%	57.6%	84.4%	66.2%	

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

# 3.8 Other Campus Locations

The SWA also included waste loads collected from Miles Annas, Lucy Brock Child Center, and the Auxiliary Warehouse. Table 3.7 and Figures 3.15-3.17 present the results for each location; one-page summaries for each are provided in Appendix H.

Opportunities exist to increase the diversion of Program Recyclables, especially at the Auxiliary Warehouse (34 percent of the waste stream) and Miles Annas (22 percent). Compostable Materials, mainly in the form of compostable paper and food waste, represented a substantial portion of the waste stream in these three locations as well.

	Weighted Average						
Material Categories	Auxiliary Lucy Brock Miles Warehouse Child Center Annas						
Recyclable Paper	30.2%	2.7%	16.1%				
Recyclable Containers	3.5%	4.3%	5.7%				
Other Recyclables	3.0%	2.0%	3.1%				
Compostable Materials	19.5%	42.0%	35.6%				
Subtotal	56.2%	51.1%	60.5%				

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

As mentioned previously, the waste load from Cone Hall was divided into waste from building renovations and regular solid waste. Figure 3.18 depicts the composition of the building renovation waste. The vast majority of the waste consisted of commercial carpet. Worth noting, however, is that 16 percent of the renovation waste consisted of wood waste and 13 percent of cardboard, both of which could be recycled.

Also previously mentioned, PET containers from one-day of the sorting events were sorted by type. Figure 3.19 depicts the composition of PET plastic bottles generated on campus. Juice/sports drink bottles comprised 31 percent of the PET bottles, but the remainder fairly equally distributed between water bottles, soda bottles, and other PET bottles.

# 3.9 Discussion of Findings and Opportunities

App State has an extensive recycling program in place and installed a composting facility in 2011. Through these efforts, the University has achieved a 38 percent waste diversion rate. The purpose of the SWA was to establish a baseline of the current program and to identify opportunities for future program expansion.

Table 3.8 consolidates the key results of the SWA into a single table. As can be seen in the table and as discussed throughout this section, the majority of the waste currently disposed on the App State campus could potentially be recycled or composted. The purpose of this project was not to conduct a comprehensive evaluation of App State's recycling program; however, this section offers a discussion of the results of the SWA, primarily as they relate to future waste diversion opportunities.

### 3.9.1 Recycling Opportunities

App State has made paper and container recycling available in almost all areas of the campus, yet Program Recyclables comprised as much as 33 percent of the waste stream in some locations. Provided below are suggested action items for consideration:

- Prioritize areas to focus on, starting first with those that generate the most waste and/or
  the highest percentage of Program Recyclables. Based on the SWA results, the residential
  halls, Auxilliary Warehouse, University Bookstore, Kid Brewer Stadium, Physical Plant,
  Legends, Athletic Center, and Miles Annas generated the highest percentage by weight of
  Program Recyclables.
- Review the placement of solid waste and recycling receptables to ensure that recycling is as
  convenient as possible. Ideally, all waste receptacles should have an accompanying
  recycling receptacle. Because of the influx of new students each year, recycling needs to be
  easy, conveninet, and readily apparent. It needs to become institutionalized.
- Enhance recycling program outreach and education. Program materials and signage should be simple, direct, and informative. If they are not already, the University's Zero Waste mission, sustainability initiatives, and waste reduction programs should be part of the student orientation process.
- Explore the ability to add rigid plastics to the list of Program Recyclables. With only a few exceptions, rigid plastics comprised the majority of the Other Recyclables categories. Many single stream processors are accepting "all plastics," which includes items such plastic cups, clamshell containers, and packaging that were present in nearly all samples.
- Work with vending machine companies and other vendors to ensure they are aware of and will participate in the recycling program.
   In Bowie Hall, it appeared that the vending machine company was disposing of the



Photo 3.1: Vending machine boxes at Bowie Hall

empty cardboard trays (see Photo 3.1). App State should work with vendors to ensure that all cardboard is recycled.

- Initiate scrap metal recycling at the Physical Plant if such a program does not currently exist. Even if generation of scrap metal is sporadic, it has value and likely could be recycled at no additional cost to the University.
- Initiate a recycling system for used oil containers in the Motor Pool. A large number of these containers were found in the waste stream. Staff can set up an emptying/drying rack (see Photo 3.2) to drain the remaining oil from these container, which would help decrease oil purchased and should allow the containers to be recycled in the single stream program.
- Initiate a recycling system for building renovations. Nearly 20 percent of the renovation waste sample from Cone Hall consisted of cardboard and wood/pallets



Photo 3.2: Example Draining Rack

that could have been recycled. The potential to recycle carpet also could have been explored. If renovations are conducted by App State staff, a recycling system and markets for C&D materials could be established. If a contractor is doing the renovations, the contract could require recycling certain types or a specific percentage of the C&D debris.

#### 3.9.2 Composting Opportunities

Compostable Materials represented 20-58 percent of the waste generated at the various locations throughout the campus. The majority of these materials consisted of food waste and compostable paper. Therefore, a comprehensive organics waste recovery and expanded composting program will need to be a key component of App State's waste diversion system to achieve its Zero Waste goals.

Numerous universities have initiated successful composting programs, including Washington State University (<a href="http://facops.wsu.edu/Compost/compost\_home.htm">http://facops.wsu.edu/Compost/compost\_home.htm</a>) and Wesleyan University in Connecticut (<a href="http://www.wesleyan.edu/sustainability/recycling/compost.html">http://www.wesleyan.edu/sustainability/recycling/compost.html</a>). In addition, EPA has developed a best management practices guide for university dining services composting (<a href="http://www.epa.gov/region1/assistance/univ/pdfs/bmps/BatesReformat1-8-07.pdf">http://www.epa.gov/region1/assistance/univ/pdfs/bmps/BatesReformat1-8-07.pdf</a>).

Although KCI has extensive experience developing and implementing composting programs, providing a detailed plan for such a comprehensive program is beyond the scope of this project. It will require working with App State staff to develop a customized plan that is feasible and cost-effective.

#### 3.9.3 Other Waste Reduction Opportunities

Based on the SWA results, additional waste reduction opportunities that might be considered are mentioned below. Some of these entail changes in purchasing habits, while others might require operational changes.

- Plastic bags and film comprised an estimated 5-18 percent of the University's waste stream.
   Options to reduce this waste include:
  - Working with housekeeping staff to ensure that garbage bags are only pulled when necessary. In many waste loads, garbage bags were found with little or no waste in them, including many instances of large amounts of unused bags being discarded.
  - Reviewing the type and quality of the garbage bags utilized throughout campus. It
    appears that all garbage bags are of a high quality (i.e., relatively thick). While these
    bags are necessary in places of high waste generation, they are not needed in every
    location. Based on the quantity of the plastic bags disposed, reducing the thickness of
    the bags would help to reduce waste tonnage and save money.
  - Retail plastic bags could be reduced by promoting alternatives, such using your own bag or backpack or just opting for no bag.
- A substantial number of partially full toilet paper rolls were found in the waste streams
  from most locations. It was common to find rolls that were one-third to three-quarters full.
  App State could discuss this with housekeeping staff to ensure that rolls are replaced only
  when needed.
- App State should continue to promote its water filling stations. Approximately 24 percent of the PET bottles discarded were water bottles.
- App State could determine what types of "disposable" cups and food service containers are accepted by its recyclables processor and work with campus vendors to use only those types of cups and containers. Plastic-coated cups represented up to 8 percent of the waste stream in some locations, and Styrofoam food service packaging was found in all waste samples. Alternatively, if a comprehensive composting program is established in the future, converting from disposable cups, packaging, and cutlery to compostable ones might be considered. Compostable cups were found randomly throughout the SWA. Though not found in large quantities, these cups are being utilized somewhere on campus.

Compostable cups are beneficial when used in combination with a composting program; however, recycling processors consider them contamination when placed in the recycling containers.

 Substantial quantities of partial rolls of athletic wrap and tape were found in the Athletic Center waste stream (see Photo 3.3). These contributed to the All Other Garbage category, which represented 17 percent of the waste from this location. Staff and students could be encouraged to fully utilize these materials before discarding.



Photo 3.3: Athletic Wrap and Tape Rolls

 App State staff should look for other purchasing or operational changes that would allow them to divert more materials from disposal.

In conclusion, the results of the SWA provide App State with extensive information regarding the composition of waste being discarded at various locations throughout the campus. The results

Appalachian State University 2013 Solid and Hazardous Waste Audit Section 3: Solid Waste Audit Results

demonstrate the existence of substantial quantities of recyclable and compostable materials in the waste stream. KCl has extensive experience in working with universities and other institutions to develop and implement expanded recycling programs designed to maximize waste diversion. The data from this study not only benchmarks current waste generation, but also provides the foundation on which to develop future waste reduction and recycling systems that will enable the University to navigate the path toward Zero Waste.

Table 3.1: Composition of Academic Waste Disposed (% by weight)

#	Material Category	Anne Belk Hall	Belk Library Complex	Broyhill Music Ctr.	Business Affairs Annex	Cap Science Complex	College of Education	Holmes Convocation	JET Hall	K. Harper/ Kerr Scott
1	Recyclable Glass	3.1%	1.3%	4.6%	0.0%	1.4%	2.0%	0.3%	0.8%	1.2%
4	Aluminum Cans	0.3%	0.3%	0.5%	0.0%	0.7%	0.4%	0.3%	0.4%	0.2%
5	Steel or Tin Cans	0.3%	0.0%	0.5%	0.0%	0.6%	0.2%	0.2%	0.1%	0.8%
8	Corrugated Cardboard	1.0%	1.1%	4.5%	0.0%	0.0%	1.0%	9.6%	1.3%	2.7%
9	Office Paper	1.6%	0.9%	7.4%	6.5%	8.0%	3.5%	7.1%	6.9%	2.6%
10	Newspaper	0.1%	0.1%	0.0%	0.0%	0.9%	0.3%	0.9%	0.8%	0.7%
11	Magazines	0.1%	0.2%	0.5%	0.0%	0.3%	0.0%	1.0%	1.5%	0.0%
12	Books	0.0%	0.0%	1.3%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%
13	Other Recyclable Paper	3.3%	2.9%	3.7%	7.1%	13.1%	5.1%	1.6%	3.8%	4.4%
16	Aseptic Containers	0.1%	0.1%	0.1%	0.6%	0.3%	0.8%	0.1%	0.3%	0.0%
17	PET Plastic Cont. (SP#1)	2.8%	3.4%	3.7%	1.8%	3.0%	2.0%	2.4%	2.1%	0.9%
18	HDPE Plastic Cont. (SP#2)	0.4%	0.0%	0.3%	0.5%	0.4%	0.3%	0.5%	0.2%	0.3%
19	Plastic Cont. (SP#3-#7)	0.8%	1.0%	0.9%	0.7%	0.6%	1.1%	2.6%	1.5%	0.4%
	Total Program Recyclables	13.9%	11.4%	28.1%	17.1%	34.2%	16.6%	26.6%	19.7%	14.2%
2	Laboratory Glass	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
6	Other Ferrous Metals	0.1%	0.0%	0.2%	0.0%	0.1%	0.1%	0.7%	0.1%	0.4%
7	Other Non-Ferrous Metals	0.3%	0.2%	0.3%	2.3%	0.3%	0.5%	0.1%	1.3%	0.3%
20	Rigid Plastics	3.8%	5.5%	2.1%	5.5%	3.9%	6.0%	2.0%	3.0%	2.8%
30	Electronic Waste	0.0%	0.3%	0.4%	0.8%	0.1%	0.1%	0.0%	1.0%	0.1%
31	Technotrash	0.1%	0.0%	0.1%	0.0%	0.1%	0.4%	0.0%	0.1%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.0%	0.0%
	Total Other Recyclables	4.2%	6.1%	3.0%	8.6%	4.5%	7.1%	3.8%	5.5%	3.6%
14	Compostable Paper	29.8%	27.6%	21.1%	24.5%	26.8%	25.7%	13.8%	21.1%	20.3%
25	Food Waste	16.4%	20.9%	11.2%	25.1%	13.1%	19.0%	13.5%	31.0%	13.9%
26	Yard Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.1%	0.0%	1.3%	0.0%	0.1%	0.1%	0.2%	0.1%	2.2%
28	Other Rec. Org. Waste	0.2%	0.4%	0.1%	0.2%	0.2%	0.4%	0.1%	1.3%	1.0%
	Total Compostables	46.4%	49.0%	33.8%	49.9%	40.2%	45.3%	27.5%	53.5%	37.6%
	<b>Total Recoverable Materials</b>	64.5%	66.6%	64.9%	75.6%	78.8%	69.0%	57.9%	78.7%	55.4%
3	Other Non-Rec. Glass	0.3%	0.0%	1.9%	0.5%	0.0%	0.0%	0.6%	0.5%	12.1%
15	Non-Compostable Paper	6.3%	8.7%	2.7%	1.9%	3.1%	5.5%	4.6%	2.2%	2.9%
21	Plastic Bags and Film	11.3%	8.2%	12.0%	7.8%	6.6%	12.9%	7.0%	9.4%	7.9%
22	Styrofoam (food service)	3.7%	3.3%	1.7%	7.5%	1.8%	2.0%	0.6%	1.4%	2.7%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	1.8%
24	All Other Plastics	0.9%	0.5%	0.2%	0.7%	1.7%	0.9%	0.4%	0.6%	3.2%
29	Treated Wood Waste	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%
32	Textiles/Clothing	0.1%	0.3%	0.3%	0.0%	0.6%	3.0%	0.4%	0.1%	1.5%
34	All Furniture	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%
35	Tires/Rubber	0.1%	0.1%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.3%
36	Special Waste	0.0%	0.2%	0.2%	0.0%	1.0%	0.0%	17.8%	0.1%	0.1%
37	Construction Waste	0.0%	0.0%	1.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.8%
38	All Other Garbage	2.7%	3.0%	3.8%	6.0%	2.7%	3.7%	1.7%	4.6%	4.0%
39	Liquids	10.1%	9.2%	10.1%	0.0%	3.6%	2.9%	8.9%	2.1%	0.2%
40	Grit	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%
	All Other Materials	35.5%	33.4%	35.1%	24.4%	21.2%	31.0%	42.1%	21.3%	44.6%
	<b>Grand Total</b>		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

**Table 3.1: Composition of Academic Waste Disposed (continued)** 

		L.S. Dougherty	Living Learning Ctr	Raley Hall	Rankin Science (all)	University Hall	Wey Hall	Weighted Average		dence rvals
#	Material Category	L.S. Dou	Livi Lea	Ral	Rar Scio	Univ Hall	×	A & W	Lower	Upper
1	Recyclable Glass	1.3%	2.3%	0.6%	0.2%	0.0%	2.9%	1.5%	0.9%	2.1%
4	Aluminum Cans	0.4%	0.9%	0.9%	0.3%	0.3%	0.5%	0.4%	0.3%	0.5%
5	Steel or Tin Cans	0.0%	0.6%	0.4%	0.2%	0.5%	0.0%	0.3%	0.1%	0.4%
8	Corrugated Cardboard	1.6%	0.0%	0.7%	2.4%	0.8%	2.0%	2.5%	1.4%	3.7%
9	Office Paper	0.9%	19.1%	2.5%	3.9%	8.9%	5.8%	4.5%	2.4%	6.6%
10	Newspaper	0.2%	2.1%	0.8%	0.8%	0.0%	2.1%	0.6%	0.3%	0.9%
11	Magazines	0.0%	1.8%	0.3%	2.5%	1.6%	0.9%	0.7%	0.3%	1.0%
12	Books	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%	-0.2%	1.0%
13	Other Recyclable Paper	2.0%	4.0%	3.2%	3.5%	4.5%	2.8%	3.9%	2.7%	5.1%
16	Aseptic Containers	0.2%	0.5%	0.2%	0.3%	0.7%	0.1%	0.2%	0.1%	0.3%
17	PET Plastic Cont. (SP#1)	4.8%	2.1%	1.3%	2.1%	0.6%	2.7%	2.5%	2.0%	3.0%
18	HDPE Plastic Cont. (SP#2)	0.8%	0.0%	0.2%	0.3%	0.2%	0.1%	0.3%	0.2%	0.3%
19	Plastic Cont. (SP#3-#7)	1.7%	0.8%	1.2%	0.7%	1.2%	0.7%	1.1%	0.9%	1.4%
	Total Program Recyclables	13.9%	34.1%	12.3%	17.2%	19.1%	20.7%	18.8%		
2	Laboratory Glass	0.0%	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%
6	Other Ferrous Metals	0.0%	0.0%	0.1%	0.3%	0.2%	2.8%	0.4%	0.1%	0.7%
7	Other Non-Ferrous Metals	3.3%	0.5%	0.4%	0.3%	1.4%	0.3%	0.4%	0.0%	0.9%
20	Rigid Plastics	5.0%	1.8%	2.9%	2.3%	7.5%	3.1%	3.8%	3.0%	4.5%
30	Electronic Waste	0.0%	0.0%	0.1%	1.5%	0.0%	0.0%	0.3%	0.1%	0.5%
31	Technotrash	0.0%	0.0%	0.1%	0.0%	3.5%	0.7%	0.2%	-0.2%	0.6%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%	0.2%	0.0%	0.3%
	Total Other Recyclables	8.3%	2.3%	3.5%	4.9%	12.5%	7.4%	5.3%		
14	Compostable Paper	31.9%	24.0%	37.5%	28.3%	20.7%	24.5%	24.8%	22.2%	27.3%
25	Food Waste	18.7%	14.0%	21.2%	12.8%	19.0%	5.8%	16.8%	14.0%	19.6%
26	Yard Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.1%	0.0%	0.2%	0.8%	0.4%	0.1%	0.6%
28	Other Rec. Org. Waste	0.6%	0.0%	0.3%	0.3%	1.8%	0.1%	0.4%	0.2%	0.6%
	Total Compostables	51.2%	38.0%	59.0%	41.5%	41.7%	31.1%	42.4%		
	<b>Total Recoverable Materials</b>	73.5%	74.5%	74.8%	63.6%	73.3%	59.3%	66.5%		
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%	0.1%	0.0%	0.4%	1.1%	-0.3%	2.5%
15	Non-Compostable Paper	4.5%	2.4%	6.3%	4.2%	3.0%	2.1%	4.9%	4.0%	5.8%
21	Plastic Bags and Film	7.4%	5.8%	7.1%	8.9%	8.5%	9.0%	8.9%	7.9%	9.8%
22	Styrofoam (food service)	3.0%	0.6%	1.5%	1.6%	1.4%	1.7%	2.1%	1.3%	2.8%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	-0.1%	0.4%
24	All Other Plastics	0.9%	1.5%	1.2%	2.7%	3.4%	1.5%	1.2%	0.7%	1.6%
29	Treated Wood Waste	0.1%	0.0%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%
32	Textiles/Clothing	0.0%	1.5%	0.7%	1.0%	1.7%	0.7%	0.8%	0.4%	1.2%
34	All Furniture	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.1%	0.2%	0.2%	0.4%	0.1%	0.1%	0.2%
36	Special Waste	0.0%	0.0%	0.0%	11.3%	0.0%	0.9%	3.3%	0.9%	5.7%
37	Construction Waste	0.0%	0.0%	1.7%	0.0%	0.0%	21.0%	1.8%	-0.7%	4.2%
38	All Other Garbage	1.4%	2.1%	1.6%	1.7%	5.5%	1.9%	2.9%	2.2%	3.5%
39	Liquids	9.2%	11.5%	5.0%	4.2%	2.8%	0.9%	5.8%	4.0%	7.7%
40	Grit	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.5%	-0.3%	1.3%
	All Other Materials	26.5%	25.5%	25.2%	36.4%	26.7%	40.7%	33.5%		
	Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

 ${\it Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.}$ 

Figure 3.1: Composition of Academic Waste Disposed (% by weight)

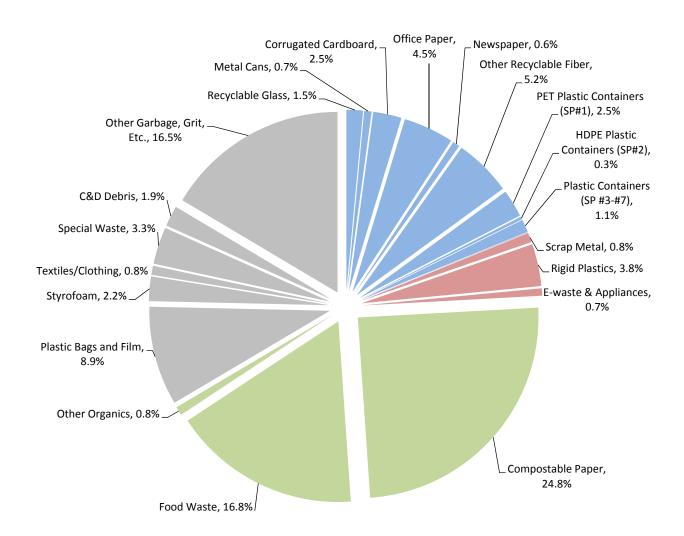


Table 3.2: Composition of Residential Waste Disposed (% by weight)

		Appalachian Heights	Bowie Hall	Cone Hall	Living Learning Ctr.	Mountaineer Hall	Panhellenic Hall	Winkler Hall	Weighted Average		dence rvals
#	Material Category	Арк Неі	Bov	Co	Livi Lea	Mou Hall	Pan Hall	N K	We	Lower	Upper
1	Recyclable Glass	16.7%	6.5%	5.3%	6.7%	9.0%	7.2%	7.6%	8.6%	5.8%	11.4%
4	Aluminum Cans	1.0%	1.1%	1.0%	0.7%	0.6%	0.6%	0.9%	0.9%	0.7%	1.0%
5	Steel or Tin Cans	1.6%	0.6%	0.9%	2.3%	0.8%	0.3%	1.0%	1.1%	0.6%	1.6%
8	Corrugated Cardboard	4.6%	7.0%	3.6%	3.0%	4.0%	3.9%	3.9%	4.4%	3.5%	5.3%
9	Office Paper	2.8%	1.4%	2.0%	2.4%	1.9%	3.2%	1.3%	2.0%	1.5%	2.5%
10	Newspaper	0.4%	0.8%	1.3%	0.4%	0.3%	0.1%	1.3%	0.6%	0.3%	1.0%
11	Magazines	0.4%	0.9%	1.9%	0.3%	0.5%	0.1%	0.1%	0.5%	0.0%	1.0%
12	Books	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%	0.2%	0.1%	0.0%	0.2%
13	Other Recyclable Paper	6.4%	5.3%	6.4%	5.1%	5.8%	7.7%	3.9%	5.5%	4.6%	6.4%
16	Aseptic Containers	0.2%	0.7%	0.4%	0.2%	0.6%	0.1%	0.6%	0.5%	0.3%	0.6%
17	PET Plastic Cont. (SP#1)	5.4%	4.4%	5.2%	3.8%	3.5%	4.9%	4.6%	4.4%	3.9%	4.9%
18	HDPE Plastic Cont. (SP#2)	2.3%	1.5%	2.3%	2.2%	1.7%	1.6%	1.3%	1.8%	1.5%	2.1%
19	Plastic Cont. (SP#3-#7)	1.0%	1.3%	1.7%	1.1%	1.4%	1.2%	1.2%	1.2%	1.1%	1.4%
	<b>Total Program Recyclables</b>	42.8%	31.5%	31.9%	28.5%	30.1%	31.0%	28.0%	31.7%		
2	Laboratory Glass	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.3%	0.0%	0.4%	0.2%	1.3%	0.1%	0.1%	0.4%	0.0%	0.7%
7	Other Non-Ferrous Metals	0.6%	0.4%	0.2%	0.4%	1.5%	0.2%	0.7%	0.6%	0.3%	1.0%
20	Rigid Plastics	3.6%	3.6%	2.3%	4.5%	3.1%	3.7%	5.0%	3.9%	3.2%	4.5%
30	Electronic Waste	0.3%	0.2%	0.6%	0.1%	0.1%	0.0%	2.1%	0.5%	0.0%	1.1%
31	Technotrash	0.0%	0.0%	2.0%	0.1%	0.2%	0.0%	0.0%	0.2%	-0.4%	0.7%
33	White Goods/Small Apps.	0.0%	0.0%	0.3%	1.2%	0.4%	0.0%	0.4%	0.4%	0.0%	0.7%
	Total Other Recyclables	4.8%	4.2%	5.8%	6.5%	6.6%	4.0%	8.3%	5.9%		
14	Compostable Paper	7.4%	4.6%	6.7%	9.8%	10.6%	4.0%	5.7%	7.2%	5.3%	9.0%
25	Food Waste	24.6%	19.8%	18.8%	29.5%	23.9%	22.5%	24.9%	23.9%	21.3%	26.5%
26	Yard Waste	0.0%	13.8%	0.0%	0.4%	3.1%	2.5%	0.0%	3.3%	-0.4%	7.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	0.7%	0.2%	0.5%	0.3%	0.1%	0.2%	0.4%	0.3%	0.2%	0.5%
	Total Compostables	32.7%	38.5%	26.0%	40.1%	37.7%	29.3%	31.0%	34.7%		
	Total Recoverable Materials	80.3%	74.2%	63.6%	75.1%	74.3%	64.3%	67.3%	72.3%		
3	Other Non-Rec. Glass	0.0%	0.1%	0.1%	0.4%	0.1%	0.8%	0.7%	0.3%	0.1%	0.6%
	Non-Compostable Paper	2.0%	1.6%	2.9%	1.5%	1.5%	1.7%	3.8%	2.1%	1.5%	2.8%
21	Plastic Bags and Film	6.0%	4.6%	9.0%	6.1%	5.5%	5.0%	4.6%	5.5%	4.4%	6.6%
22	Styrofoam (food service)	2.8%	2.9%	1.1%	1.6%	2.3%	1.1%	3.7%	2.4%	1.7%	3.2%
23	Styrofoam (packaging)	0.0%	0.0%	0.6%	0.0%	0.2%	0.0%	0.0%	0.1%	-0.1%	0.2%
24	All Other Plastics	0.8%	0.5%	1.7%	1.6%	1.1%	1.4%	0.3%	1.0%	0.6%	1.4%
29	Treated Wood Waste	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	0.0%	0.1%
32	Textiles/Clothing	2.0%	1.7%	2.5%	2.3%	3.4%	3.8%	6.4%	3.3%	2.1%	4.4%
34	All Furniture	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.1%	0.0%	0.7%	0.1%	0.1%	0.2%	0.0%	0.3%
36	Special Waste	0.1%	0.0%	0.0%	0.0%	0.1%	0.2%	0.4%	0.1%	0.0%	0.3%
37	Construction Waste	0.5%	0.0%	6.2%	1.3%	0.0%	0.0%	0.0%	0.7%	-1.0%	2.4%
38	All Other Garbage	1.7%	3.2%	8.4%	4.7%	4.9%	4.4%	3.0%	4.0%	2.4%	5.5%
39	Liquids	3.6%	8.7%	3.7%	4.9%	5.8%	17.0%	8.0%	7.2%	3.8%	10.6%
40	Grit	0.0%	2.5%	0.0%	0.3%	0.0%	0.0%	1.4%	0.8%	0.0%	1.5%
	All Other Materials	19.7%	25.8%	36.4%	24.9%	25.7%	35.7%	32.7%	27.7%		
l	Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%		

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

Figure 3.2: Composition of Residential Waste Disposed (% by weight)

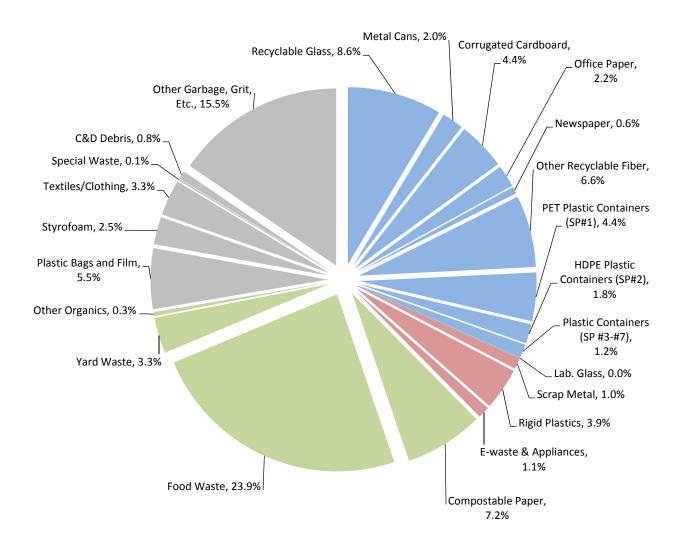


Table 3.3: Composition of Student Union Waste Disposed (% by weight)

#	Material Category	Plemmons Student Union	University Bookstore	Cascades Cafe	McAlister's Deli
1	Recyclable Glass	0.8%	1.5%	0.2%	0.0%
4	Aluminum Cans	0.1%	0.6%	0.1%	0.0%
5	Steel or Tin Cans	0.3%	0.0%	0.3%	0.1%
8	Corrugated Cardboard	0.8%	2.4%	0.5%	0.5%
9	Office Paper	0.7%	10.3%	0.3%	0.9%
10	Newspaper	0.5%	0.8%	0.3%	0.0%
11	Magazines	0.1%	0.0%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%	0.0%
13	Other Recyclable Paper	1.4%	8.9%	5.4%	0.9%
16	Aseptic Containers	1.2%	0.6%	0.2%	0.2%
17	PET Plastic Cont. (SP#1)	1.8%	2.3%	1.4%	0.4%
18	HDPE Plastic Cont. (SP#2)	0.1%	0.6%	0.9%	0.5%
19	Plastic Cont. (SP#3-#7)	0.8%	1.0%	1.7%	2.9%
	Total Program Recyclables	8.7%	29.0%	11.2%	6.5%
2	Laboratory Glass	0.0%	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.3%	0.0%	0.0%	0.0%
7	Other Non-Ferrous Metals	0.7%	0.5%	0.2%	0.1%
20	Rigid Plastics	4.8%	5.2%	5.3%	8.7%
30	Electronic Waste	0.0%	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%	0.0%
	Total Other Recyclables	5.8%	5.7%	5.5%	8.8%
14	Compostable Paper	17.8%	18.0%	14.8%	14.6%
25	Food Waste	32.5%	10.1%	39.8%	42.6%
26	Yard Waste	0.0%	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.2%	1.0%	0.1%	0.1%
28	Other Rec. Org. Waste	0.0%	0.2%	0.0%	0.0%
	Total Compostables	50.5%	29.3%	54.8%	57.3%
	Total Recoverable Materials	65.1%	63.9%	71.5%	72.5%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%	0.0%
15	Non-Compostable Paper	5.5%	6.6%	8.5%	4.5%
21	Plastic Bags and Film	13.6%	15.8%	12.3%	13.3%
22	Styrofoam (food service)	2.8%	2.6%	2.4%	2.6%
23	Styrofoam (packaging)	0.0%	0.2%	0.0%	0.0%
24	All Other Plastics	0.7%	0.9%	1.2%	1.5%
29	Treated Wood Waste	0.0%	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.3%	0.0%	0.0%	0.0%
34	All Furniture	0.0%	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%	0.2%
36	Special Waste	3.8%	0.0%	0.0%	0.0%
37	Construction Waste	0.4%	0.0%	0.0%	0.0%
38	All Other Garbage	1.5%	7.5%	2.2%	2.4%
39	Liquids	6.3%	2.5%	2.0%	2.9%
40	Grit	0.0%	0.0%	0.0%	0.0%
	All Other Materials	34.9%	36.1%	28.5%	27.5%
	<b>Grand Total</b>	100.0%	100.0%	100.0%	100.0%

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

Figure 3.3: Composition of Student Union Waste Disposed (% by weight)

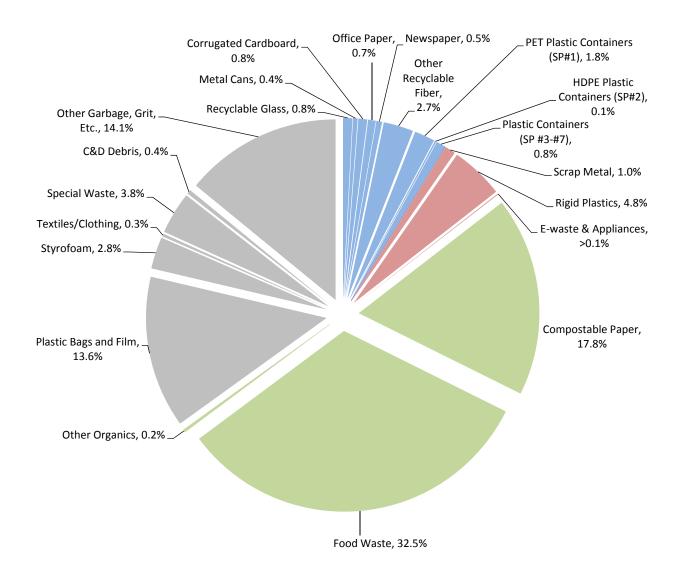


Figure 3.4: Composition of University Bookstore Waste Disposed (% by weight)

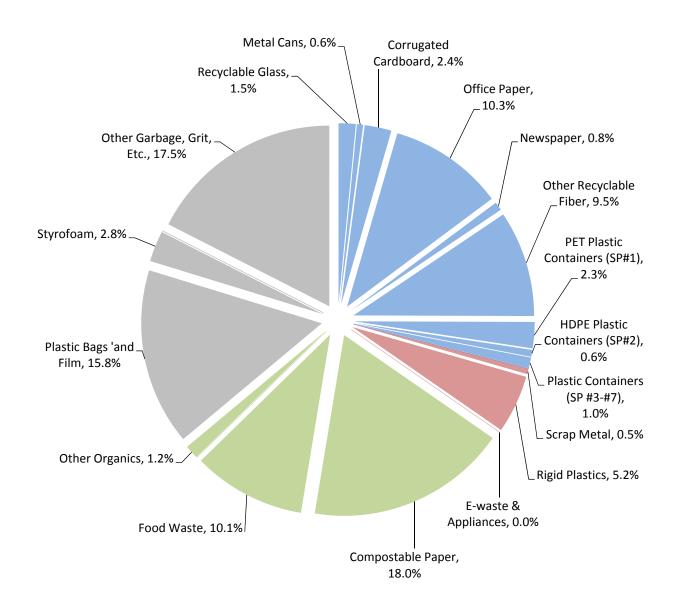


Figure 3.5: Composition of Cascades Café Waste Disposed (% by weight)

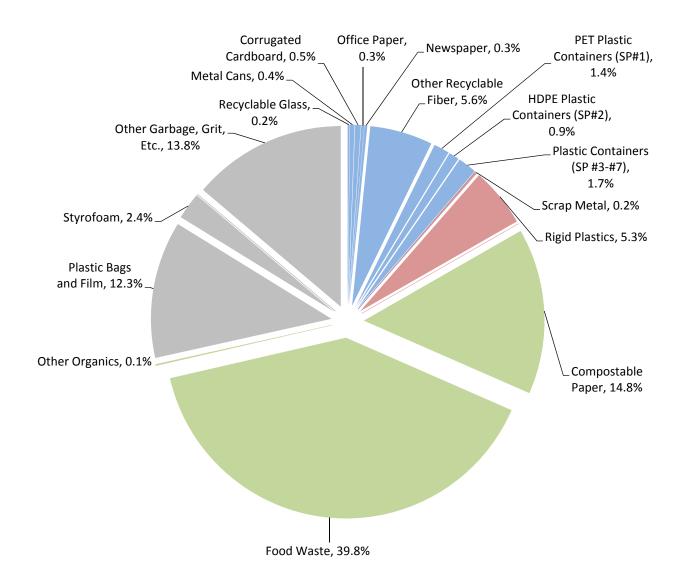
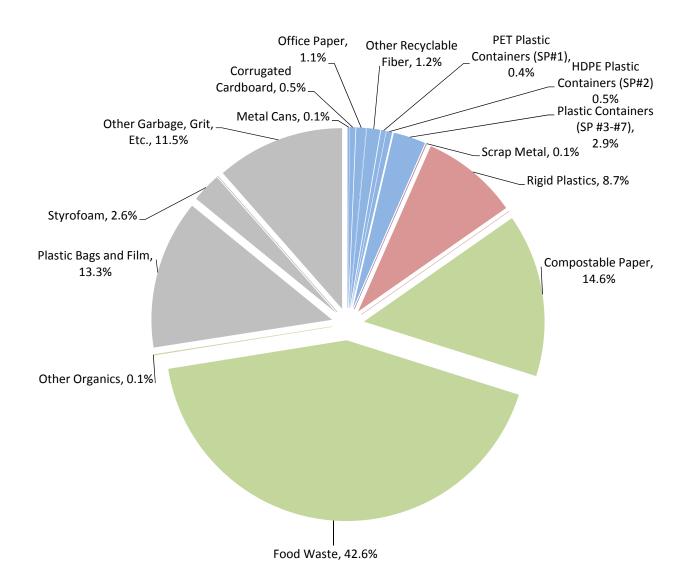


Figure 3.6: Composition of McAlister's Deli Waste Disposed (% by weight)



27

Table 3.4: Composition of Sports and Recreation Waste Disposed (% by weight)

#	Material Category	Kidd Brewer Stadium	Athletic Center	Student Recreation Center	<b>Legends</b>
1	Recyclable Glass	11.0%	0.0%	0.0%	4.7%
4	Aluminum Cans	3.3%	0.4%	0.5%	2.7%
5	Steel or Tin Cans	1.4%	0.1%	0.1%	0.0%
8	Corrugated Cardboard	2.7%	6.0%	0.3%	5.3%
9	Office Paper	0.7%	3.7%	1.8%	1.5%
10	Newspaper	0.2%	0.4%	0.6%	0.0%
11	Magazines	0.5%	0.9%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%	0.0%
13	Other Recyclable Paper	2.7%	4.3%	2.0%	3.3%
16	Aseptic Containers	0.1%	0.7%	0.0%	0.0%
17	PET Plastic Cont. (SP#1)	3.9%	3.1%	3.4%	1.2%
18	HDPE Plastic Cont. (SP#2)	0.4%	1.1%	0.8%	0.0%
19	Plastic Cont. (SP#3-#7)	1.3%	1.1%	0.8%	3.5%
	Total Program Recyclables	27.9%	21.8%	10.4%	22.2%
2	Laboratory Glass	0.0%	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.1%	0.2%	0.4%	0.7%
7	Other Non-Ferrous Metals	14.2%	0.1%	0.4%	1.6%
20	Rigid Plastics	2.5%	3.8%	3.0%	3.3%
30	Electronic Waste	0.0%	0.1%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%	0.0%
	Total Other Recyclables	16.8%	4.2%	3.8%	5.6%
14	Compostable Paper	8.9%	12.3%	36.4%	25.5%
25	Food Waste	15.7%	11.3%	8.7%	30.9%
26	Yard Waste	0.0%	0.0%	0.0%	0.0%
27	Clean Wood Waste	1.3%	0.1%	0.0%	0.0%
28	Other Rec. Org. Waste	0.8%	0.3%	4.4%	1.2%
	Total Compostables	26.7%	24.1%	49.5%	57.6%
	Total Recoverable Materials	71.4%	50.0%	63.7%	85.5%
3	Other Non-Rec. Glass	0.3%	0.6%	0.1%	0.0%
15	Non-Compostable Paper	2.8%	0.8%	2.2%	1.8%
21	Plastic Bags and Film	6.2%	15.4%	18.5%	5.2%
22	Styrofoam (food service)	3.4%	0.6%	0.9%	2.2%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%	0.0%
24	All Other Plastics	2.5%	1.2%	0.8%	2.5%
29	Treated Wood Waste	0.0%	0.0%	0.0%	0.0%
32	Textiles/Clothing	2.0%	1.3%	2.3%	0.6%
34	All Furniture	0.0%	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.1%	0.1%	0.9%
36	Special Waste	0.0%	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	9.3%	0.0%	0.0%
38	All Other Garbage	2.1%	17.2%	6.4%	1.4%
39	Liquids	9.3%	3.3%	5.0%	0.0%
40	Grit	0.0%	0.0%	0.0%	0.0%
	All Other Materials	28.6%	50.0%	36.3%	14.5%
l	Grand Total	100.0%	100.0%	100.0%	100.0%

 ${\it Note:} \ {\it Totals} \ {\it may} \ {\it not} \ {\it appear} \ {\it to} \ {\it add} \ {\it correctly} \ {\it due} \ {\it to} \ {\it rounding}.$ 

Figure 3.7: Composition of Kidd Brewer Stadium Waste Disposed (% by weight)

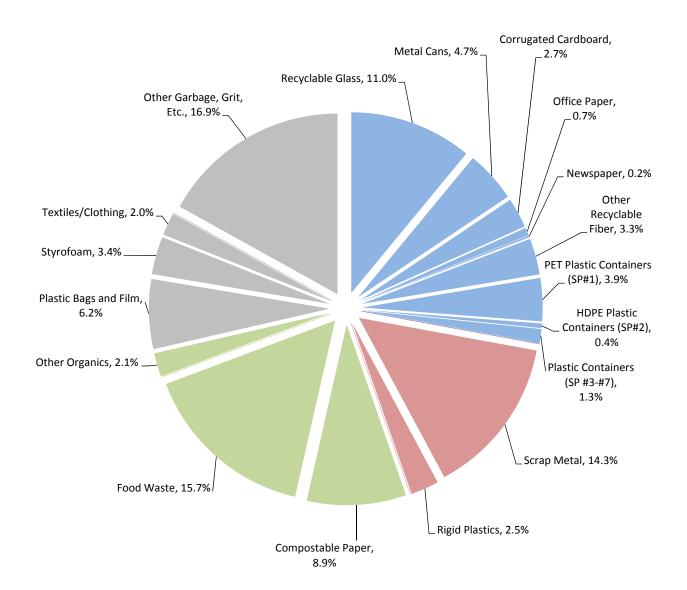


Figure 3.8: Composition of Athletics Center Waste Disposed (% by weight)

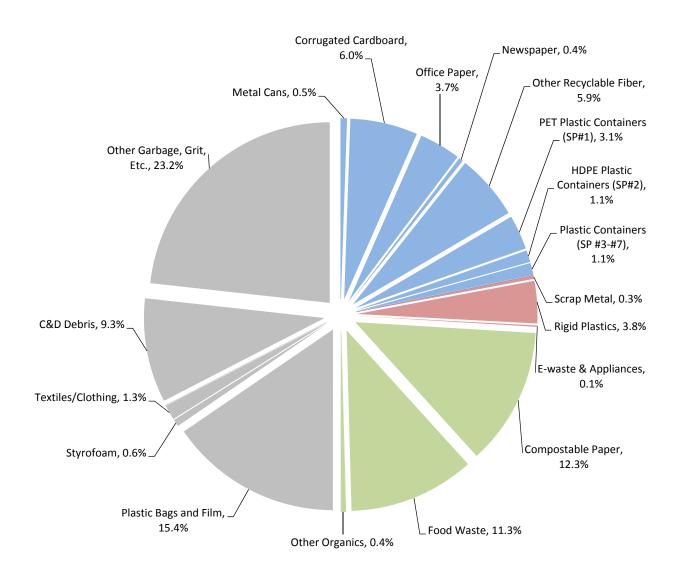


Figure 3.9: Composition of Student Recreation Center Waste Disposed (% by weight)

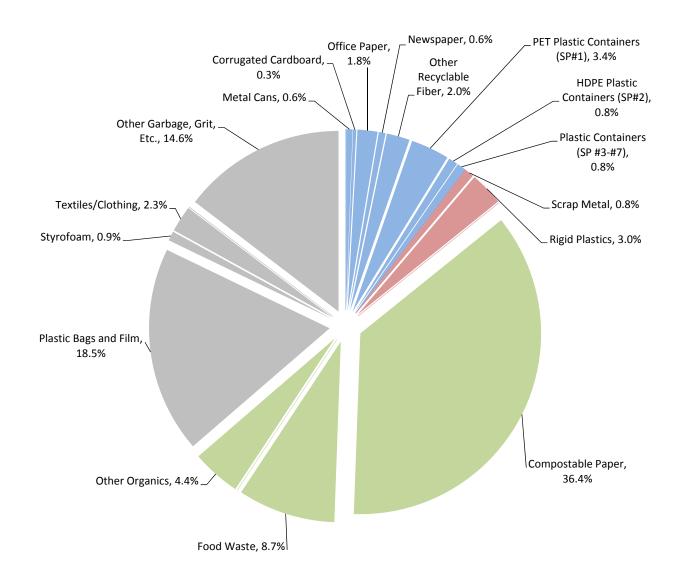


Figure 3.10: Composition of Legends Waste Disposed (% by weight)

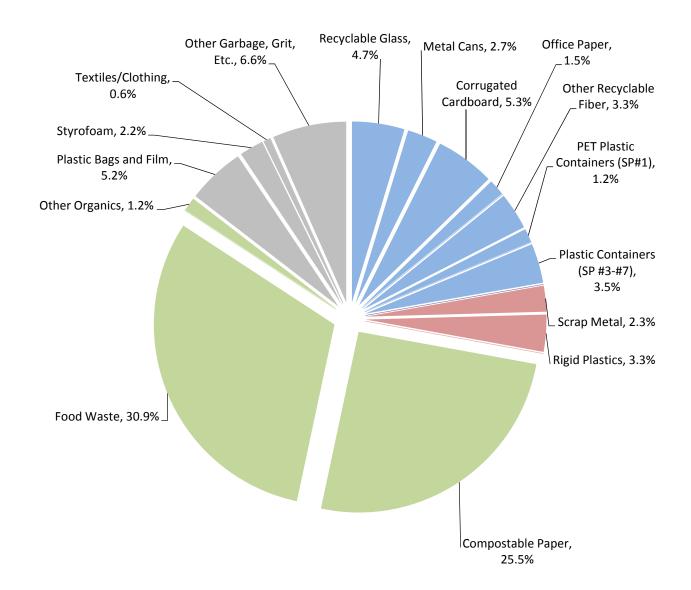


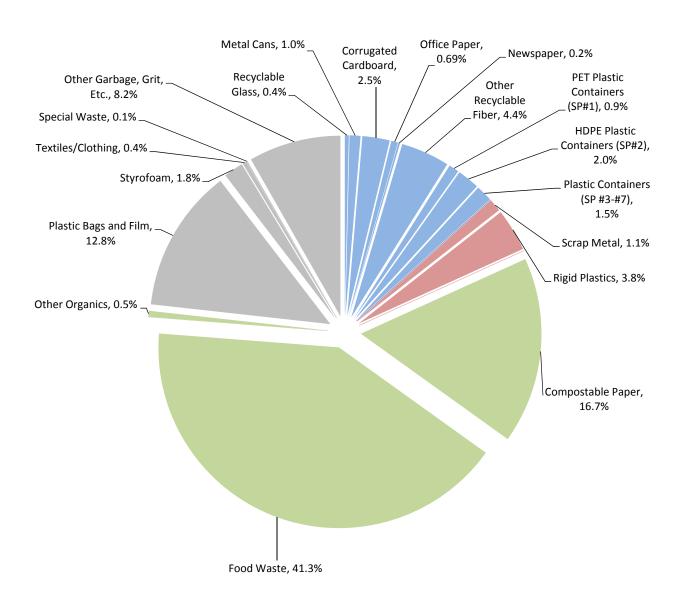
Table 3.5: Composition of Central Dining Waste Disposed (% by weight)

			reet	Su
	Matarial Catanana	Central Dining	River Street	Sanford Commons
#	Material Category			
1	Recyclable Glass	0.4%	0.0%	0.0%
4	Aluminum Cans	0.1%	0.0%	0.0%
5	Steel or Tin Cans	0.9%	0.0%	0.0%
8	Corrugated Cardboard	2.5%	0.0%	0.0%
9	Office Paper	0.6%	0.0%	0.0%
10	Newspaper	0.2%	0.2%	0.0%
11	Magazines	0.2%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	3.5%	4.0%	6.7%
16	Aseptic Containers	0.7%	2.2%	0.5%
17	PET Plastic Cont. (SP#1)	0.9%	0.0%	0.6%
18	HDPE Plastic Cont. (SP#2)	2.0%	0.0%	3.4%
19	Plastic Cont. (SP#3-#7)	1.5%	3.1%	1.1%
	Total Program Recyclables	13.3%	9.5%	12.4%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.1%	0.3%	0.3%
7	Other Non-Ferrous Metals	1.0%	1.6%	0.7%
20	Rigid Plastics	3.8%	4.1%	5.4%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	4.9%	6.0%	6.4%
14	Compostable Paper	16.7%	31.8%	20.2%
25	Food Waste	41.3%	39.8%	38.0%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.5%	0.3%	0.0%
28	Other Rec. Org. Waste	0.0%	0.0%	0.0%
	Total Compostables	58.5%	71.9%	58.2%
	Total Recoverable Materials	76.8%	87.4%	77.0%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	3.1%	4.6%	3.9%
21	Plastic Bags and Film	12.8%	2.4%	9.4%
22	Styrofoam (food service)	1.8%	2.5%	2.0%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	1.4%	0.3%	0.6%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.4%	0.3%	1.2%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.3%	0.0%	0.0%
36	Special Waste	0.1%	0.0%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	2.2%	0.8%	2.5%
39	Liquids	1.2%	1.7%	3.5%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	23.2%	12.6%	23.0%
	Grand Total	100.0%	100.0%	100.0%

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

33

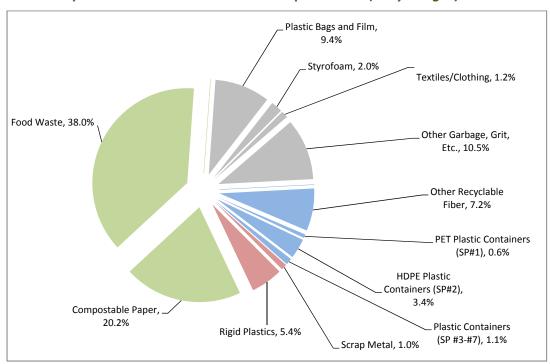
Figure 3.11: Composition of Central Dining Waste Disposed (% by weight)



Other Organics Plastic Bags and Film 0.3% 2.4% Styrofoam Food Waste Textiles/Clothing 2.5% 39.8% 0.3% Other Garbage, Grit, Etc., 7.4% Newspaper 0.2% Other Recyclable Fiber 6.2% PET Plastic Containers (SP#1) 0.0% **HDPE** Plastic Containers (SP#2) 0.0% Compostable Paper Plastic Containers (SP 31.8% **Rigid Plastics** #3-#7) 4.1% Scrap Metal 3.1% 1.9%

Figure 3.12: Composition of River Street Pulped Waste (% by weight)





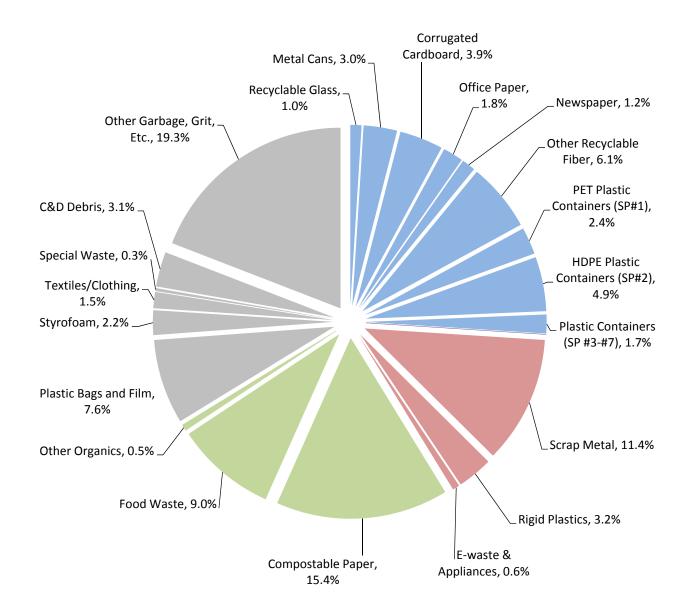
Note: For the purpose of these charts, Other Recyclable Fiber includes the categories of Magazines, Books, Other Recyclable Paper and Aseptic Containers; Metal Cans includes the categories of Aluminum and Tin/Steel Cans; Scrap Metals includes the categories of Ferrous and Non-Ferrous Metals; Other Organics includes the categories of Clean Wood Waste and Other Recyclable Organic Waste; Styrofoam includes both food service and packaging Styrofoam categories; and Other Garbage, Grit, Etc. includes the categories Non-Compostable Paper, All Other Plastics, Tires/Rubber, All Furniture, Other Non-Recyclable Glass, All Other Garbage, Liquids, and Grit.

Table 3.6: Composition of All Physical Plant Waste Disposed (% by weight)

#	Material Category	Landscape	Motor Pool	Electric	Paint	Lock Shop	Mechanical	Carpentry	Office / Telecom	Weighted Average
1	Recyclable Glass	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
4	Aluminum Cans	1.4%	1.1%	1.3%	0.0%	4.3%	0.0%	0.7%	0.0%	1.2%
5	Steel or Tin Cans	2.2%	1.0%	0.0%	6.7%	0.0%	4.0%	0.6%	0.0%	1.8%
8	Corrugated Cardboard	2.2%	2.4%	2.4%	11.7%	15.5%	15.7%	0.0%	0.0%	3.9%
9	Office Paper	1.8%	1.2%	0.9%	0.0%	0.0%	5.5%	0.0%	0.0%	1.8%
10	Newspaper	0.5%	0.8%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.2%
11	Magazines	0.0%	2.8%	0.0%	0.0%	0.0%	0.0%	10.7%	0.0%	1.7%
12	Books	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
13	Other Recyclable Paper	4.3%	4.5%	4.4%	0.7%	8.6%	5.5%	5.6%	7.1%	4.4%
16	Aseptic Containers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17	PET Plastic Cont. (SP#1)	1.4%	5.4%	0.4%	0.0%	2.1%	1.4%	1.7%	1.9%	2.4%
18	HDPE Plastic Cont. (SP#2)	0.8%	14.7%	0.0%	0.0%	0.0%	0.0%	1.6%	4.2%	4.9%
19	Plastic Cont. (SP#3-#7)	2.9%	1.7%	0.8%	0.0%	3.2%	1.0%	1.0%	6.6%	1.7%
	Total Program Recyclables	20.8%	35.6%	15.2%	19.1%	33.7%	33.1%	21.7%	19.8%	26.0%
2	Laboratory Glass	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6	Other Ferrous Metals	3.1%	19.4%	18.4%	2.1%	0.0%	0.0%	5.0%	0.0%	10.2%
7	Other Non-Ferrous Metals	1.1%	0.2%	3.7%	0.0%	0.0%	0.3%	0.0%	9.9%	1.3%
20	Rigid Plastics	2.6%	1.5%	8.1%	4.6%	12.8%	1.7%	0.2%	1.9%	3.2%
30	Electronic Waste	0.0%	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.6%
31	Technotrash	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total Other Recyclables	6.8%	21.2%	33.7%	6.7%	12.8%	2.0%	5.2%	11.8%	15.2%
14	Compostable Paper	30.8%	10.2%	7.2%	10.3%	11.8%	9.9%	9.1%	29.2%	15.4%
25	Food Waste	12.8%	2.8%	4.8%	0.0%	0.0%	11.3%	15.3%	23.6%	9.0%
26	Yard Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.2%	0.0%	0.5%
28	Other Rec. Org. Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total Compostables	43.6%	13.0%	11.9%	10.3%	11.8%	21.1%	30.6%	52.8%	25.0%
	Total Recoverable Materials	71.1%	69.8%	60.9%	36.2%	58.3%	56.2%	57.6%	84.4%	66.2%
3	Other Non-Rec. Glass	0.0%	0.2%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
15	Non-Compostable Paper	1.6%	0.5%	2.6%	0.0%	0.0%	1.5%	0.0%	2.8%	1.2%
21	Plastic Bags and Film	7.5%	4.2%	5.9%	19.5%	40.6%	12.3%	9.5%	5.7%	7.6%
22	Styrofoam (food service)	4.1%	0.4%	2.3%	2.1%	0.0%	2.0%	3.5%	3.3%	2.2%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
24	All Other Plastics	0.4%	1.4%	1.4%	5.0%	0.0%	1.5%	22.7%	0.0%	3.2%
29	Treated Wood Waste	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
32	Textiles/Clothing	0.0%	1.0%	2.4%	17.0%	0.0%	2.1%	0.0%	0.0%	1.5%
34	All Furniture	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
35	Tires/Rubber	1.2%	1.3%	0.0%	1.1%	0.0%	0.0%	0.0%	2.4%	0.7%
36	Special Waste	0.0%	0.0%	0.0%	0.0%	0.0%	2.2%	0.0%	0.0%	0.3%
37	Construction Waste	0.0%	0.0%	6.8%	16.7%	0.0%	11.4%	0.0%	0.0%	3.0%
38	All Other Garbage	5.9%	4.8%	9.9%	2.5%	1.1%	5.4%	0.7%	1.4%	5.2%
39	Liquids	8.1%	11.3%	5.3%	0.0%	0.0%	3.8%	6.1%	0.0%	6.9%
40	Grit	0.0%	5.0%	0.7%	0.0%	0.0%	1.6%	0.0%	0.0%	1.8%
	All Other Materials	28.9%	30.2%	39.1%	63.8%	41.7%	43.8%	42.4%	15.6%	33.8%
	Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

 ${\it Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.}$ 

Figure 3.14: Composition of All Physical Plant Waste Disposed (% by weight)



37

Table 3.7: Composition of Auxiliary Building Waste Disposed (% by weight)

		, use	Miles Annas	쏭
		ary hot	An	3ro
		Auxiliary Warehouse	les	Lucy Brock
#	Material Category	,		
1	Recyclable Glass	0.0%	1.2%	2.4%
4	Aluminum Cans	0.5%	0.4%	0.0%
5	Steel or Tin Cans	1.7%	0.3%	0.0%
8	Corrugated Cardboard	3.5%	0.0%	0.0%
9	Office Paper	14.8%	4.7%	0.7%
10	Newspaper	1.5%	0.7%	0.0%
11	Magazines	1.5%	2.3%	0.0%
12	Books	2.3%	0.0%	0.0%
13	Other Recyclable Paper	6.3%	8.4%	1.1%
16	Aseptic Containers	0.3%	0.0%	1.0%
17	PET Plastic Cont. (SP#1)	1.1%	2.4%	0.2%
18	HDPE Plastic Cont. (SP#2)	0.0%	0.3%	1.1%
19	Plastic Cont. (SP#3-#7)	0.3%	1.1%	0.7%
	Total Program Recyclables	33.7%	21.8%	7.0%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.4%	0.0%	0.4%
7	Other Non-Ferrous Metals	0.7%	0.4%	0.2%
20	Rigid Plastics	1.7%	2.5%	1.1%
30	Electronic Waste	0.0%	0.1%	0.0%
31	Technotrash	0.2%	0.0%	0.3%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	3.0%	3.1%	2.0%
14	Compostable Paper	11.5%	21.9%	24.0%
25	Food Waste	8.1%	12.6%	17.9%
26	Yard Waste	0.0%	0.1%	0.0%
27	Clean Wood Waste	0.0%	0.4%	0.1%
28	Other Rec. Org. Waste	0.0%	0.7%	0.0%
	Total Compostables	19.5%	35.6%	42.0%
	Total Recoverable Materials	56.2%	60.5%	51.1%
3	Other Non-Rec. Glass	0.0%	0.0%	0.3%
15	Non-Compostable Paper	1.0%	1.8%	0.7%
21	Plastic Bags and Film	7.1%	6.3%	9.3%
22	Styrofoam (food service)	0.8%	1.5%	0.5%
23	Styrofoam (packaging)	0.0%	0.1%	0.0%
24	All Other Plastics	0.8%	4.3%	1.6%
29	Treated Wood Waste	0.0%	0.0%	0.1%
32	Textiles/Clothing	1.2%	0.0%	0.1%
34	All Furniture	0.0%		0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste		0.1%	
37	Construction Waste	0.0%	4.5%	0.0%
		30.3%	0.0%	0.0%
38	All Other Garbage	2.1%	17.0%	36.4%
39	Liquids	0.6%	3.3%	0.0%
40	Grit All Other Materials	0.0%	0.0%	0.0%
	All Other Materials	43.8%	39.5%	48.9%
<u> </u>	Grand Total	100.0%	100.0%	100.0%

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

Figure 3.15: Composition of Auxiliary Warehouse Waste Disposed (% by weight)

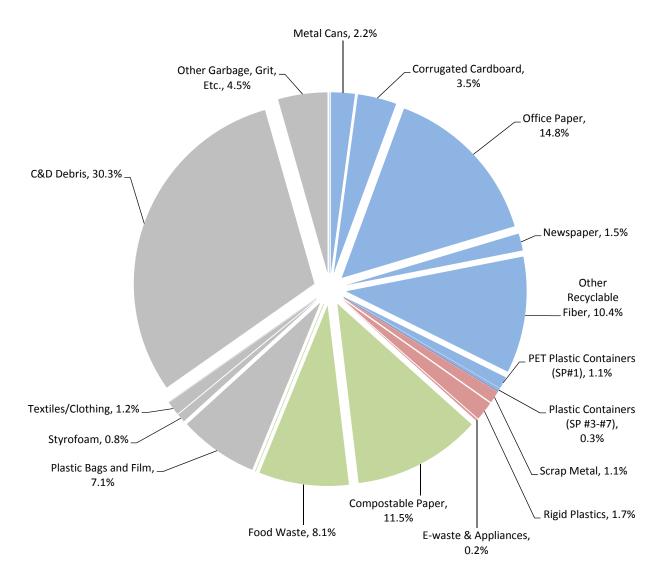


Figure 3.16: Composition of Miles Annas Waste Disposed (% by weight)

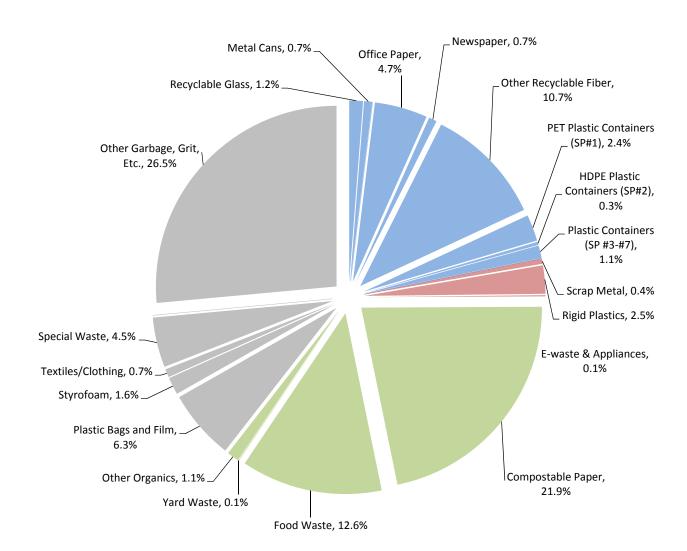


Figure 3.17: Composition of Lucy Brock Waste Disposed (% by weight)

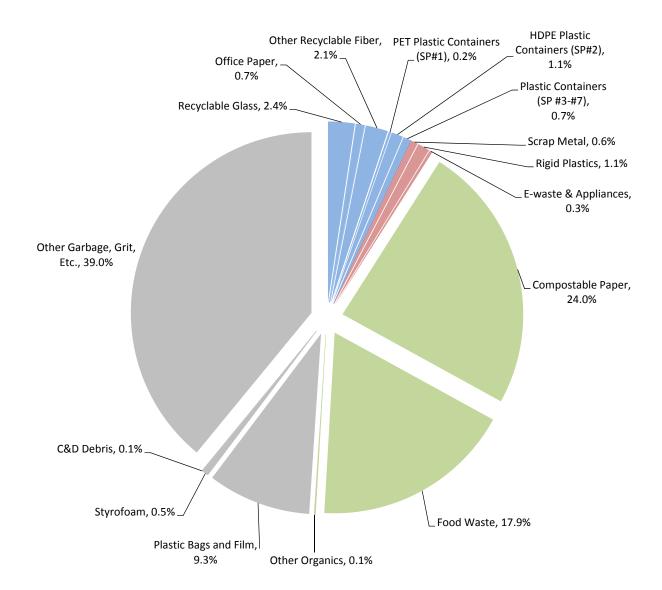


Figure 3.18: Composition of Cone Hall Renovation Waste (% by weight)

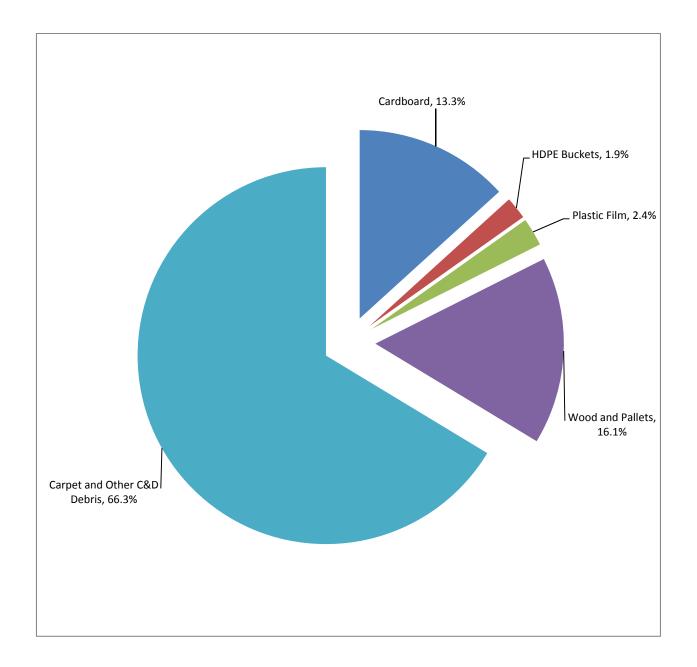


Figure 3.19: Composition of PET Plastic Bottles (% by weight)

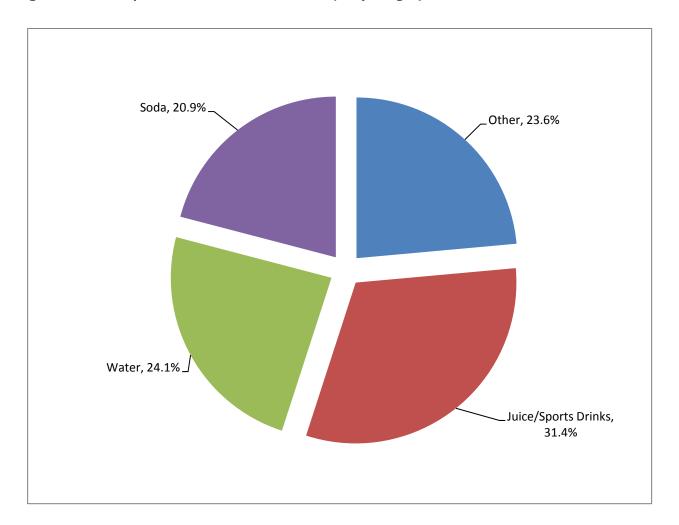


Table 3.8: Summary of Solid Waste Audit Results (% by weight)

#	Material Category	Academic Waste	Residential Waste	Plemmons Student Union	University Bookstore	Cascades Cafe	McAlister's Deli	Central Dining
1	Recyclable Glass	1.5%	8.6%	0.8%	1.5%	0.2%	0.0%	0.4%
4	Aluminum Cans	0.4%	0.9%	0.1%	0.6%	0.1%	0.0%	0.1%
5	Steel or Tin Cans	0.3%	1.1%	0.3%	0.0%	0.3%	0.1%	0.9%
8	Corrugated Cardboard	2.5%	4.4%	0.8%	2.4%	0.5%	0.5%	2.5%
9	Office Paper	4.5%	2.0%	0.7%	10.3%	0.3%	0.9%	0.6%
10	Newspaper	0.6%	0.6%	0.5%	0.8%	0.3%	0.0%	0.2%
11	Magazines	0.7%	0.5%	0.1%	0.0%	0.0%	0.0%	0.2%
12	Books	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
13	Other Recyclable Paper	3.9%	5.5%	1.4%	8.9%	5.4%	0.9%	3.5%
16	Aseptic Containers	0.2%	0.5%	1.2%	0.6%	0.2%	0.2%	0.7%
17	PET Plastic Cont. (SP#1)	2.5%	4.4%	1.8%	2.3%	1.4%	0.4%	0.9%
18	HDPE Plastic Cont. (SP#2)	0.3%	1.8%	0.1%	0.6%	0.9%	0.4%	2.0%
19	Plastic Cont. (SP#3-#7)	1.1%	1.2%	0.1%	1.0%	1.7%	2.9%	1.5%
	Total Program Recyclables	18.8%	31.7%	8.7%	29.0%	11.2%	6.5%	13.3%
2	Laboratory Glass	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.4%	0.4%	0.3%	0.0%	0.0%	0.0%	0.1%
7	Other Non-Ferrous Metals	0.4%	0.4%	0.7%	0.5%	0.2%	0.1%	1.0%
20	Rigid Plastics	3.8%	3.9%	4.8%	5.2%	5.3%	8.7%	3.8%
30	Electronic Waste	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
31	Technotrash	0.2%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
33	Total Other Recyclables	5.3%	5.9%	5.8%	5.7%	5.5%	8.8%	4.9%
14	Compostable Paper	24.8%	7.2%	17.8%	18.0%	14.8%	14.6%	16.7%
25	Food Waste	16.8%	23.9%	32.5%	10.1%	39.8%	42.6%	41.3%
26	Yard Waste	0.0%	3.3%	0.0%	0.0%	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.4%	0.0%	0.2%	1.0%	0.1%	0.0%	0.5%
28	Other Rec. Org. Waste	0.4%	0.3%	0.2%	0.2%	0.1%	0.1%	0.0%
20	Total Compostables	42.4%	34.7%	50.5%	29.3%	54.8%	57.3%	58.5%
	Total Recoverable Materials	66.5%	72.3%	65.1%	63.9%	71.5%	72.5%	76.8%
3	Other Non-Rec. Glass	1.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
15	Non-Compostable Paper	4.9%	2.1%	5.5%	6.6%	8.5%	4.5%	3.1%
21	Plastic Bags and Film	8.9%	5.5%	13.6%	15.8%	12.3%	13.3%	12.8%
22	Styrofoam (food service)	2.1%	2.4%	2.8%	2.6%	2.4%	2.6%	1.8%
23	Styrofoam (packaging)	0.1%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%
24	All Other Plastics	1.2%	1.0%	0.7%	0.2%	1.2%	1.5%	1.4%
29	Treated Wood Waste	0.1%	0.1%	0.7%	0.9%	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.1%	3.3%	0.3%	0.0%	0.0%	0.0%	0.0%
34	All Furniture	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.4%
35	Tires/Rubber	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
36	Special Waste	3.3%	0.2%	3.8%	0.0%	0.0%	0.2%	0.1%
37	Construction Waste	1.8%	0.1%	0.4%	0.0%	0.0%	0.0%	0.1%
38	All Other Garbage	2.9%	4.0%	1.5%	7.5%	2.2%	2.4%	2.2%
39	Liquids	5.8%	7.2%	6.3%	2.5%	2.0%	2.4%	1.2%
40	Grit	0.5%	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%
40	All Other Materials	33.5%	27.7%	34.9%	36.1%	28.5%	27.5%	23.2%
	Grand Total							
	Granu roldi	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

Table 3.8: Summary of Solid Waste Audit Results (continued)

Kidd Brewer Stadium Student Rec. Center Center Center (all shops) Auxiliary	Warehouse Miles Annas	3roc
	Wai	Lucy Brock
1 Recyclable Glass 11.0% 0.0% 0.0% 4.7% 1.0% 0.0	0% 1.2%	2.4%
4 Aluminum Cans 3.3% 0.5% 0.4% 2.7% 1.2% 0.5	5% 0.4%	0.0%
5 Steel or Tin Cans 1.4% 0.1% 0.1% 0.0% 1.8% 1.7	7% 0.3%	0.0%
8 Corrugated Cardboard 2.7% 0.3% 6.0% 5.3% 3.9% 3.5	5% 0.0%	0.0%
9 Office Paper 0.7% 1.8% 3.7% 1.5% 1.8% 14.	8% 4.7%	0.7%
10 Newspaper 0.2% 0.6% 0.4% 0.0% 1.2% 1.5	5% 0.7%	0.0%
11 Magazines 0.5% 0.0% 0.9% 0.0% 1.7% 1.5	5% 2.3%	0.0%
12 Books 0.0% 0.0% 0.0% 0.0% 0.0% 2.3	3% 0.0%	0.0%
13 Other Recyclable Paper 2.7% 2.0% 4.3% 3.3% 4.4% 6.3	8.4%	1.1%
16 Aseptic Containers 0.1% 0.0% 0.7% 0.0% 0.0% 0.3	3% 0.0%	1.0%
17 PET Plastic Cont. (SP#1) 3.9% 3.4% 3.1% 1.2% 2.4% 1.1	1% 2.4%	0.2%
18 HDPE Plastic Cont. (SP#2) 0.4% 0.8% 1.1% 0.0% 4.9% 0.0	0.3%	1.1%
19 Plastic Cont. (SP#3-#7) 1.3% 0.8% 1.1% 3.5% 1.7% 0.3	3% 1.1%	0.7%
Total Program Recyclables 27.9% 10.4% 21.8% 22.2% 26.0% 33.	7% 21.8%	7.0%
2 Laboratory Glass 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	0.0%	0.0%
6 Other Ferrous Metals 0.1% 0.4% 0.2% 0.7% 10.2% 0.4	1% 0.0%	0.4%
7 Other Non-Ferrous Metals 14.2% 0.4% 0.1% 1.6% 1.3% 0.7	7% 0.4%	0.2%
20 Rigid Plastics 2.5% 3.0% 3.8% 3.3% 3.2% 1.7	7% 2.5%	1.1%
30 Electronic Waste 0.0% 0.0% 0.1% 0.0% 0.6% 0.0	0.1%	0.0%
31 Technotrash 0.0% 0.0% 0.0% 0.0% 0.0% 0.2	2% 0.0%	0.3%
33 White Goods/Small Apps. 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	0.0%	0.0%
Total Other Recyclables 16.8% 3.8% 4.2% 5.6% 15.2% 3.0	3.1%	2.0%
14 Compostable Paper 8.9% 36.4% 12.3% 25.5% 15.4% 11.	5% 21.9%	24.0%
25 Food Waste 15.7% 8.7% 11.3% 30.9% 9.0% 8.1	12.6%	17.9%
26 Yard Waste 0.0% 0.0% 0.0% 0.0% 0.0% 0.0	0.1%	0.0%
27 Clean Wood Waste 1.3% 0.0% 0.1% 0.0% 0.5% 0.0	0.4%	0.1%
28 Other Rec. Org. Waste 0.8% 4.4% 0.3% 1.2% 0.0% 0.0	0.7%	0.0%
Total Compostables 26.7% 49.5% 24.1% 57.6% 25.0% 19.1	5% 35.6%	42.0%
Total Recoverable Materials 71.4% 63.7% 50.0% 85.5% 66.2% 56	2% 60.5%	51.1%
3 Other Non-Rec. Glass 0.3% 0.1% 0.6% 0.0% 0.3% 0.0	0.0%	0.3%
15 Non-Compostable Paper 2.8% 2.2% 0.8% 1.8% 1.2% 1.0	0% 1.8%	0.7%
21 Plastic Bags and Film 6.2% 18.5% 15.4% 5.2% 7.6% 7.1	1% 6.3%	9.3%
22 Styrofoam (food service) 3.4% 0.9% 0.6% 2.2% 2.2% 0.8	3% 1.5%	0.5%
23 Styrofoam (packaging) 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	0.1%	0.0%
24 All Other Plastics 2.5% 0.8% 1.2% 2.5% 3.2% 0.8		1.6%
29 Treated Wood Waste 0.0% 0.0% 0.0% 0.0% 0.1% 0.0	0.0%	0.1%
32 Textiles/Clothing 2.0% 2.3% 1.3% 0.6% 1.5% 1.2	2% 0.7%	0.0%
34 All Furniture 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	0.0%	0.0%
35 Tires/Rubber 0.0% 0.1% 0.1% 0.9% 0.7% 0.0	0.1%	0.0%
36 Special Waste 0.0% 0.0% 0.0% 0.0% 0.3% 0.0	0% 4.5%	0.0%
37 Construction Waste 0.0% 0.0% 9.3% 0.0% 3.0% 30.	3% 0.0%	0.0%
	17.0%	36.4%
38   All Other Garbage   2.1%   6.4%   17.2%   1.4%   5.2%   2.1		
38         All Other Garbage         2.1%         6.4%         17.2%         1.4%         5.2%         2.1           39         Liquids         9.3%         5.0%         3.3%         0.0%         6.9%         0.6	3.3%	0.0%
		0.0%
39 Liquids 9.3% 5.0% 3.3% 0.0% 6.9% 0.6	0.0%	

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

# **Section 4 Hazardous Waste Audit Results**

## 4.1 Introduction

The purpose of the Hazardous Waste Audit (HWA) was to assist App State in establishing a benchmark of the University's compliance with EPA and DENR regulations pertaining to hazardous waste generators. Specifically, the audit was to address compliance with 40 CFR 262.10 through 40 CFR 262.89, 40 CFR 262.200 – 262.216, and 262 Appendix IX as adopted in 15A NCAC 13A.0107.

## 4.2 Audit Results

Each building was inspected for compliance with DENR and EPA regulations. The findings of the inspections of each building are summarized in the following sections.

## 4.2.1 Rankin Science

Throughout the Rankin Science Buildings it was common for professors or graduate assistants to make the determination of when an unwanted material becomes a waste. There was no professional that was trained to make the hazardous waste determination or any formal protocol to follow. Quite often the University's vendor made the hazardous waste determination when the vendor arrived on campus to collect waste. The **Neufeld Lab** was well organized, with chemicals organized into the following categories: organic bases, general storage, organic acids, flammable/combustibles, buffers, silica/gels, paint, and low hazardous. Compatibility of the waste was an issue in the **Eco-physiology and Toxicology Lab**. In most labs, once it was determined that a chemical was ready to discard, it was placed under a hood. This was the case in three of the five labs visited, specifically the **Brauer Lab**, the **Biology Stockroom**, and the **Plant Physiology Teaching Lab**. Some containers were labeled as waste and some were not. Some of the containers labeled as hazardous waste did not indicate the nature or type of chemical that was being discarded. Most materials were stored in a hood and some containers were labeled and some were not.

A Technology Department professor volunteers as Radiation Safety Office and is responsible for ensuring the **Radiology Labs** comply with Federal requirements. The **Radiology Labs** were in excellent condition, containers were labeled and organized. The only area of concern was in the **Radiology Workroom** were there did not appear to be a schedule for removing the waste.

## 4.2.2 CAP Science

The **Chemical Lab Storage Area** was in excellent condition. The wastes were labeled as hazardous wastes and a date was placed on the containers when consolidated in storage. Containers were in good condition and properly stored. In the **Chemical Teaching Lab**, chemicals were stored around and under the hood. Containers were closed, had accumulation dates on them, and were in good condition. In the **Chemical Research Lab**, the hazardous wastes were stored under the hood. There was an open hazardous waste container in the hood. In the **Enology Teaching and Research Lab**, the hazardous wastes were stored in the hood. Some containers were labeled as hazardous

wastes but there were no accumulation dates on the containers. An accumulation date is placed on the containers by the University's hazardous waste vendor at time of pickup. In **Biohazard Storage**, the hazardous waste containers were stored in the hood. The **Organics Synthesis Lab** is a decommissioned lab in which chemicals were stored in a haphazard manner and were not segregated by compatibility.

## 4.2.3 Wey Hall

In the **Art Department**, rags are used to collect solvents and oils and placed in a 55-gallon drum. Two or three drums of rags are generated each semester. Approximately five gallons of pickling wastes (acids and metals) are generated each semester and placed in chemical drums. Other wastes generated include about twenty gallons of rinse water per semester, three gallons of potassium sulfate per semester, and small amounts of ferric chloride and nitric acid. In the **Photography Department**, fixers are recovered and reclaimed. Toners are collected by the gallon and included in the chemical pickup by the University's vendor. Approximately one gallon is generated and collected every other pickup. In the **Clay Working Area**, fine dust from clay and dry glazes are collected by HEPA vacuum. This dust may contain cadmium, lithium, and other hazardous metals. A hazardous waste determination has not been made on the glaze. Sand molds are created in the **Foundry** and disposed of in the dumpster. The **Foundry** fabricates bronze, iron and aluminum materials and uses a bonding agent in the sand molds. No hazardous waste determination has been made for the sand molds. In the **Welding Area**, all shaved metals are disposed of in a dumpster.

## 4.2.4 Holmes Convocation Center

The Fischer Hamilton/Nycom Lab is a biochemical lab that generates waste from human and animal samples. The biohazard waste is placed in biohazard containers that are handled by Stericycle. Approximately eight boxes of biohazard waste are generated each year. Sharps go into the same box and the box has a maximum weight of 50 pounds. Chemical wastes are stored in containers and picked up after each semester. Incompatible wastes are segregated. A secondary label is placed on the containers when they are collected by the vendor. Formalin collected in the Anatomy and Physiology (AP) Lab is taken back to the Fisher Hamilton/Nycom Lab. Approximately one five-gallon bucket is generated each semester. Pig kidneys are stored in formaldehyde and placed in the garbage when discarded. Sharps are generated in the AP Lab. Students put gloves and other waste into the sharps containers, along with scalpel blades. Only sharps should be placed in the containers. The containers should be changed out when two-thirds full. The containers were filled to the brim during the inspection. Students need to use biohazard bags for alcohol wipes contaminated with blood droplets, not for sharps. Cadavers are sent back to East Tennessee State University and there is accounting for all parts. As noted during the Solid Waste Audit, two vacutainers of blood and a bag of animal fetuses were improperly disposed of in solid waste from the Holmes Convocation Center. The AP Lab uses Chematix to determine the expiration dates for the chemicals used in the lab. The chemical containers are placed in a tray until pickup by the University's vendor.

## 4.2.5 Harper/Scott

In making Pottery, most of the glaze is used and there is very little waste. The waste glaze is dried before disposal. A five-gallon bucket of dried glaze is generated every two years. Acids are no longer used for etching. A HEPA vacuum is used to collect flint, silica, and glaze powder in selfcontained bags. No hazardous waste determination has been made on the material collected by the vacuum. Waste clay is taken to the farm. In the Finishing (Paint Booth), solvent-based wastes, such as MEK, Acetone, and Mineral Spirits, are generated. Some oil-based waste is also generated along with some rags used to absorb solvent. Containers were labeled as waste but no accumulation date was on the containers. The waste is picked up by the University's hazardous waste vendor. In the **Storage Room**, waste flammables were stored until picked up by the University's hazardous waste vendor. Paint thinners stored in the cabinet needed to be labeled. Drums labeled as oil had been stored in the room for so long that cobwebs clung to the drums. In the Hazardous Waste Temporary Storage Area, there were hazardous waste labels on all of the hoods. Some of the wastes stored under the hoods were not hazardous wastes. Several of the containers of wastes were not properly labeled. All were labeled as hazardous wastes. In Printing, the waste inks are picked up with the hazardous waste collection, once or twice a year. Solvent rags are collected by Safety Kleen. Screen printing generates some solvent rags but uses waterbased materials.

## 4.2.6 Motor Pool/Physical Plant

In the **Paint Area**, paint thinner, varnish, and varsol are picked up by Safety Kleen and recycled. In the **Shop**, Noble Oil picks up the used oil filters, oil, antifreeze, and brake fluid twice a year from a 1000-gallon tank. Batteries are returned for the cores, tires are taken to the county collection site at the landfill, and solvents from the parts washer are collected by Safety Kleen. In the **Drop-off Building**, ballasts, batteries, fluorescent tubes, lead-acid batteries, Ni-Cd batteries, and lithium batteries are collected for recycling. Drop-off areas are labeled as to the type of material accepted. The **Motor Pool and Physical Plant** were doing a good job in managing wastes and appeared to be in compliance with DENR.

## 4.3 Compliance with DENR and EPA Regulations

App State is currently classified as a Conditionally-Exempt, Small Quantity Generator (CESQG). As a CESQG, App State must (1) identify wastes generated to determine whether or not they are hazardous wastes; (2) not accumulate more than 2,200 pounds of hazardous waste at any one time (or 2.2 pounds of acute hazardous waste); and (3) ensure that the waste is sent to either a permitted or interim status treatment, storage or disposal facility, a permitted municipal or industrial solid waste facility, or a recycling facility, or treat or dispose of the waste on-site as long as it does not endanger the environment or public health.

## 4.3.1 Hazardous Waste Determinations (40 CFR 262.10)

All generators are responsible for determining whether or not the waste generated at their site is hazardous. There is no uniform method being used by the University to make a hazardous waste determination or any one person making the determination. In most cases, the determination is made by the University's vendor. Even if the University continues to rely on the vendor to make

the hazardous waste determinations, it would be prudent for the University to have someone on staff familiar with regulatory requirements and trained to make hazardous waste determinations.

## 4.3.2 Labeling and Management of Containers (40 CFR 262.34)

Some containers were labeled with the words "Hazardous Waste," some were not labeled, and others labeled with a chemical name. Some containers were dated with accumulation start dates and others not. There did not appear to be any method from one laboratory to another. Once a container is labeled as a hazardous waste, it should be managed as a hazardous waste. Though not required, it would be best to follow EPA's guidance for university laboratories and label the containers as "unwanted material" with the chemical name, the type or class of chemical, and the date the material first began accumulating in the container. Once the container is labeled as a hazardous waste it counts toward the CESQG status.

## 4.3.3 Storage of Waste (40 CFR 262.34, 40 CFR 265.171)

In most labs, chemicals that were determined to be waste were stored under the hoods. Some containers were closed and some were open. Some were labeled and some were not. Containers should be compatible with their contents to avoid reactions, made or lined with material that is compatible with the contents, and closed at all times except when adding, removing, or bulking wastes, or when venting is necessary. In most buildings, such as Rankin, Wey, CAP, and HLES, hazardous waste is moved into a central storage area to be stored until picked up by a vendor. A trained professional should accompany the movement of hazardous waste from the labs to the central storage area to ensure that the wastes are safely transported to the central storage area and that only compatible wastes are stored adjacent to one another. The trained professional should ensure that all containers are properly labeled.

## 4.3.4 Laboratory Clean-Out (40 CFR 262.213)

Several labs had numerous chemicals that appeared to be waste stored haphazardly throughout the labs. In some instances, chemical containers were not labeled as to contents or date purchased. The University should conduct a clean out of each lab at least once each twelve months to remove outdated and unwanted chemicals. The University should develop a written Laboratory Management Plan as described in 40 CFR 262.214. This plan should describe how the University will manage unwanted materials.

## 4.3.5 Training (40 CFR 261.34)

There was no formal training for workers and students regarding the proper management of unwanted materials. Though many containers were labeled as hazardous waste, there was not a trained professional making the hazardous waste determination. Students and faculty have not been trained on the proper labeling and storage of containers.

## 4.3.6 Tracking Waste (40 CFR 262.20 – 262.23)

The University's vendor packages waste for shipment to a disposal or recycling facility. It appears that the vendor makes the final determination whether or not the waste is a regulated hazardous waste. Waste shipments are properly manifested and signed by appropriate personnel. The University uses Chematix to track chemical quantities and locations throughout the University. This system allows professors to see what chemicals may be available within their Department and chemicals available in other Departments that have been declared as excess chemicals. It should help reduce unnecessary purchases of chemicals that may already be available on campus.

## 4.3.7 Recordkeeping (40 CFR 262.40 - 262.44)

Currently, waste shipment manifests are kept on-site and are available for review. All manifests were properly signed by the University and the receiving facility.

## 4.4 Summary of Findings and Recommendations

Because App State is classified as a CESQG, it is not required to meet many of the requirements for Small Quantity and Large Quantity Generators. In fact, the only requirements are not to exceed the maximum hazardous waste generation quantity and accumulation quantity for a conditionally exempt generator and ensuring that the waste is shipped to the proper facility. It appears that the University is meeting the standard for shipping waste to the proper facility; however, whether the University meets the maximum generation and accumulation quantities is uncertain.

The University uses a private vendor to make the "official" hazardous waste determinations at the time of pickup; however, professors and graduate assistants are also constantly making determinations that materials are waste and in some instances being labeled as hazardous waste. One weakness in the program is that a set protocol does not exist for making the hazardous waste determinations, nor a tracking system of the determinations. Therefore, it is impossible to quantify the exact amount of waste on-site at any instance.

To ensure that the University maintains its status as a CESQG, it needs to do a better job in tracking the amount of waste being generated and stored on-site. While the Chemistry Department does have personnel familiar with the regulatory requirements for managing hazardous waste, the major weakness in the program is not having a designated person to make hazardous waste determinations, to ensure that waste containers are properly labeled and stored, and to track the waste from the time it is generated until it is shipped offsite to a treatment, storage or disposal facility. A designated position could also train faculty and staff in the proper handling and management of hazardous waste and materials, update contingency plans and emergency procedures, and conduct weekly inspections of laboratories and non-academic buildings that generate and store waste.

Though it is exempt from many of the requirements for Small Quantity and Large Quantity Generators, it would be in the best interest of the University to properly manage any hazardous waste generated and follow the standards outlined in 40 CFR 262.200 through 262.216 (Subpart K), "Alternative Requirements for Hazardous Waste Determination and Accumulation of Unwanted Material for Laboratories Owned by Eligible Academic Entities." A large number of chemical containers have accumulated in several labs. The University needs to routinely schedule an annual

laboratory cleanup of all unwanted materials. This would allow University staff to find out what materials may be on campus that could be used by other teaching and research areas.

During the solid waste audit, biomedical and potentially biohazard wastes were found in the regular solid waste stream. Two vacutainers of blood and a bag of animal fetuses were found in waste from the Holmes Convocation Center and two blood collection tubes with needles attached were found in the Student Union waste load. The University has a protocol for handling biohazard materials that is reviewed every three years by a Bio-Safety Committee. The procedures for proper disposal of blood, syringes, animal and human parts are in place, but should be strictly followed. Sharps containers are available for disposal of syringes, blades, and other sharps; however, the containers should be emptied on a more frequent basis. Autoclave bags were being used in the biohazard storage area for collection of instruments requiring autoclaving. Biohazard boxes and bags were available for disposal of biohazard materials. The procedures in place for returning human parts to East Tennessee State University appear to ensure the proper disposal of these wastes.

The radiological lab was well organized and appeared to be in compliance with federal requirements for managing radiological waste. If there is not one, there may need to be a removal schedule for radiological waste such as the waste Cr51 that was stored on the shelf in the Radiological Workroom.

Finally, the software being used by the University to track chemical purchases should significantly reduce the overstocking of chemicals used in various parts of the University. Use of this software should continue to be expanded. In the event that the University does not want to create a position designated specifically for hazardous waste management, the University may want to purchase the Purchasing and Waste modules developed by the software company to track chemicals from the time of purchase to disposal.

## Appendix A

## **Material Categories**

#	#	Category	Description			
S	1	Recyclable Glass	Clear, Brown, and Green glass bottles and containers.			
GLASS	2	Laboratory Glass	Pyrex and Laboratory-type glass.			
<u>G</u>	3 Other Non-Recyclable Glass		Window panes, mirrors, ceramics, and drinking glasses.			
	4	Aluminum Cans	Aluminum soft drink, beer, and some food cans.			
,,	5	Steel or Tin Cans	Tin-plated steel cans, usually food containers, and aerosol cans.			
ALS		Other France Martel	Steel, clothes hangers, sheet metal products, pipes, miscellaneous metal			
METALS	б	Other Ferrous Metals	scraps, and other magnetic metal items.			
_	7	Other New Terrors	Scrap aluminum, aluminum foil and catering trays, and other non-			
	7	Other Non-Ferrous	magnetic metal, copper wiring and tubing, brass fixtures.			
	8	Corrugated Cardboard	Uncoated brown "cardboard" boxes with a wavy core (no plastic liners,			
	0	Corrugated Cardboard	waxy coatings).			
			Printed or unprinted paper typically generated in an office environment			
	9	Office Paper	including white, colored, coated and uncoated papers, manila and pastel			
			colored file folders.			
	10	Newspaper	Newspaper (loose, tied or shredded) including other paper normally			
			distributed inside newspaper such as ads, flyers, etc.			
	_	Magazines	Magazines and catalogs printed on glossy, coated paper stock.			
~	12	Books	Hard covered books.			
PAPER	13 Other Recyclable Paper		All paperboard, chipboard, brown paper bags, telephone books and other			
PA			printed material on non-glossy paper.			
		Compostable Paper	All remaining paper not categorized in other paper categories, including			
	14	(Wax Coated)	waxed cardboard and contaminated paper (i.e. napkins, pizza boxes,			
		,	paper towels, fast-food wrappers, etc.).			
	4-	Non-Compostable Paper	All remaining paper not categorized in other paper categories, that is			
	15	(Plastic Coated)	plastic-coated and non-compostable.			
	16	Acontic Containors	Gable top milk cartons, juice boxes, and other similar containers.			
	10	Aseptic Containers	Gable top milk cartons, juice boxes, and other similar containers.			
	47	DET DI .: 0 (CDI #4)	Clear and colored bottles or containers coded PET #1 such as soda			
	1/	PET Plastic Containers (SPI #1)	bottles, water bottles, etc.			
	10	HDPE Plastic Containers	Clear/natural and pigmented bottles or containers coded HDPE #2 such			
	18	(SPI #2)	as milk jugs, detergent bottles, etc.			
	19	Plastic Containers (SPI #3-#7)	Plastic containers coded #3 through #7, with the triangle label symbol.			
S			Buckets, flower pots, laundry baskets, toys, large children's play			
TIC	20	Rigid Plastics	equipment, plastic cups, plastic utensils, fast-food drink lids, straws,			
PLASTICS			clamshell containers and plastic plates.			
Ь	21	Plastic Bags and Film	Grocery bags, garbage bags, plastic sheeting, clear plastic wrap, re-			
		-	sealable plastic bags, etc.			
	22	Styrofoam (food service)	Disposable coffee cups, plates, clam-shells, etc.			
	23	Styrofoam (packaging)	Styrofoam packaging, peanuts, etc.			
	24	All Other Plastics	Any plastic materials not categorized above, such as deodorant cases,			
	_ +	5 (1) (1) (1) (1)	toothpaste tubes, tooth brushes, broom heads, etc.			

## Appendix A

## **Material Categories**

;	#	Category	Description
	25	Food Waste	Meat and vegetable waste (includes coffee grinds and tea bags).
ICS	26	Yard Waste	Shrub and brush prunings, household bedding plants, weeds, leaves, grass clippings, and other landscaping and gardening wastes.
AN	27	Clean Wood Waste	Untreated, unpainted lumber, and other pieces of clean wood.
ORGANICS	28	Other Recyclable Organic Waste	Hair, cut flowers, etc.
	29	Treated/Painted Wood Waste	Treated, painted lumber, pallets and other pieces of treated, stained, or painted wood.
E-WASTE	30	Electronic Waste (E-waste)	Electronic devices such as televisions, computers, cell phones, cordless telephones, PDA, handheld devices, rechargeable batteries, etc.
E-V	31	Techno Trash	Media items such as CDs, DVDs, tapes, etc.
	32	Textiles/Clothing	Clothing apparel, rags, leather, blankets, curtains, shoes, wallets, purses, belts, scrap leather.
	White Goods/Small		Large and small household appliances, such as refrigerators, blenders, hair dryers, microwaves, etc.
	34	All Furniture	All types of furniture, including wood, metal, mixed, desks, chairs, etc.
ALS	35	Tires/Rubber	Small and large tires and other items made of rubber.
ALL OTHER MATERIALS	36	Special Waste	Items usually associated with household hazardous waste collection centers, such as cleaners, oil and oil filters, pool chemicals, fluorescent lights, medical waste, solvents, etc.
OTHE	37	Construction Waste	Construction and demolition debris that includes concrete, carpet, drywall, , insulation, and roofing materials.
ALI	38	All Other Garbage	All other wastes not included in the above categories, including diapers, and products that are a composite of materials such as frozen juice cans, binders, Pringle's cans, chip bags, etc.
	39	Liquids	All liquids within recyclable containers will be emptied into this category.
	40	Grit	Indistinguishable items less than 1-inch square.

## **ANNE BELK HALL**

		Samp	le #'s	Wtd
#	Material Category	31	77	Avg.
1	Recyclable Glass	0.9%	5.2%	3.1%
4	Aluminum Cans	0.3%	0.3%	0.3%
5	Steel or Tin Cans	0.3%	0.3%	0.3%
8	Corrugated Cardboard	1.6%	0.5%	1.0%
9	Office Paper	1.6%	1.6%	1.6%
10	Newspaper	0.0%	0.2%	0.1%
11	Magazines	0.3%	0.0%	0.1%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	3.4%	3.3%	3.3%
16	Aseptic Containers	0.1%	0.1%	0.1%
17	PET Plastic Cont. (SP#1)	2.7%	2.8%	2.8%
18	HDPE Plastic Cont. (SP#2)	0.0%	0.8%	0.4%
19	Plastic Cont. (SP#3-#7)	1.0%	0.6%	0.8%
	<b>Total Program Recyclables</b>	12.1%	15.6%	13.9%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.2%	0.1%
7	Other Non-Ferrous Metals	0.3%	0.2%	0.3%
20	Rigid Plastics	3.1%	4.3%	3.8%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.1%	0.1%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	3.4%	4.9%	4.2%
14	Compostable Paper	28.7%	30.7%	29.8%
25	Food Waste	17.0%	15.8%	16.4%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.2%	0.0%	0.1%
28	Other Rec. Org. Waste	0.0%	0.3%	0.2%
	Total Compostables	45.9%	46.9%	46.4%
	<b>Total Recoverable Materials</b>	61.4%	67.4%	64.5%
3	Other Non-Rec. Glass	0.0%	0.6%	0.3%
15	Non-Compostable Paper	6.4%	6.3%	6.3%
21	Plastic Bags and Film	12.8%	9.9%	11.3%
22	Styrofoam (food service)	4.1%	3.2%	3.7%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	1.0%	0.9%	0.9%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.1%	0.1%	0.1%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.1%	0.1%
36	Special Waste	0.0%	0.1%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	2.7%	2.7%	2.7%
39	Liquids	11.4%	8.8%	10.1%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	38.6%	32.6%	35.5%
	Grand Total	100.0%	100.0%	100.0%

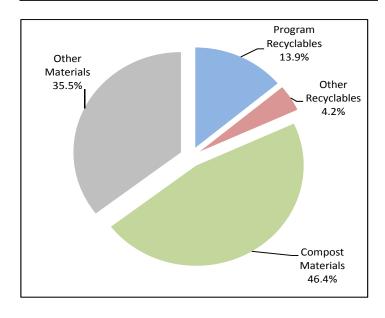


## **Building Notes**

Academic Building – 142,672 sq. ft. Estimated Daily Waste Generated – 83 lbs/day

#### Sample Notes

- Nearly 14 percent recyclable paper and containers.
- Large quantities of paper towels, food waste and plastic garbage bags.
- Many garbage bags with little content.
- Many partially full cups and plastic bottles.
- Special waste included one syringe.



 ${\it Note:}\ {\it Totals}\ {\it may}\ {\it not}\ {\it appear}\ {\it to}\ {\it add}\ {\it correctly}\ {\it due}\ {\it to}\ {\it rounding}.$ 

## **BELK LIBRARY**

		Samp	ole #'s	Wtd
#	Material Category	25	75	Avg.
1	Recyclable Glass	0.9%	1.7%	1.3%
4	Aluminum Cans	0.3%	0.3%	0.3%
5	Steel or Tin Cans	0.0%	0.1%	0.0%
8	Corrugated Cardboard	0.6%	1.6%	1.1%
9	Office Paper	0.8%	1.1%	0.9%
10	Newspaper	0.0%	0.2%	0.1%
11	Magazines	0.3%	0.1%	0.2%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	4.0%	1.9%	2.9%
16	Aseptic Containers	0.1%	0.1%	0.1%
17	PET Plastic Cont. (SP#1)	3.0%	3.9%	3.4%
18	HDPE Plastic Cont. (SP#2)	0.1%	0.0%	0.0%
19	Plastic Cont. (SP#3-#7)	1.2%	0.8%	1.0%
	<b>Total Program Recyclables</b>	11.1%	11.7%	11.4%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.1%	0.0%
7	Other Non-Ferrous Metals	0.3%	0.2%	0.2%
20	Rigid Plastics	6.4%	4.7%	5.5%
30	Electronic Waste	0.0%	0.6%	0.3%
31	Technotrash	0.0%	0.1%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	6.7%	5.6%	6.1%
14	Compostable Paper	25.3%	29.9%	27.6%
25	Food Waste	23.3%	18.5%	20.9%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	0.2%	0.7%	0.4%
	Total Compostables	48.8%	49.2%	49.0%
	<b>Total Recoverable Materials</b>	66.7%	66.4%	66.6%
3	Other Non-Rec. Glass	0.0%	0.1%	0.0%
15	Non-Compostable Paper	9.5%	7.9%	8.7%
21	Plastic Bags and Film	8.1%	8.3%	8.2%
22	Styrofoam (food service)	4.3%	2.2%	3.3%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.4%	0.5%	0.5%
29	TreatedWood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.3%	0.3%	0.3%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.1%	0.1%
36	Special Waste	0.3%	0.1%	0.2%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	3.2%	2.9%	3.0%
39	Liquids	7.2%	11.1%	9.2%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	33.3%	33.6%	33.4%
	Grand Total	100.0%	100.0%	100.0%

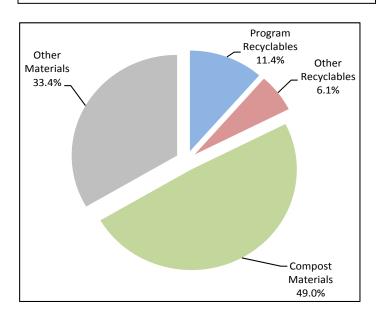


## **Building Notes**

Academic Building – 221,836 sq. ft.
Estimated Daily Waste Generated – Not Available
Average Sample Size – 256 lbs.

## Sample Notes

- Nearly 50 percent of waste stream is compostable.
- Large quantities of bathroom tissue, food waste, and liquids.
- Significant amounts of food packaging including straws, lids and cups.



 ${\it Note:}\ {\it Totals}\ {\it may}\ {\it not}\ {\it appear}\ {\it to}\ {\it add}\ {\it correctly}\ {\it due}\ {\it to}\ {\it rounding}.$ 

## **BROYHILL MUSIC CENTER**

		Samn	ole #'s	Wtd
#	Material Category	38	85	Avg.
1	Recyclable Glass	5.3%	3.6%	4.6%
4	Aluminum Cans	0.3%	0.9%	0.5%
5	Steel or Tin Cans	0.6%	0.4%	0.5%
8	Corrugated Cardboard	6.3%	1.8%	4.5%
9	Office Paper	5.8%	9.9%	7.4%
10	Newspaper	0.0%	0.0%	0.0%
11	Magazines	0.8%	0.0%	0.5%
12	Books	2.1%	0.0%	1.3%
13	Other Recyclable Paper	3.4%	4.1%	3.7%
16	Aseptic Containers	0.0%	0.3%	0.1%
17	PET Plastic Cont. (SP#1)	3.4%	4.3%	3.7%
18	HDPE Plastic Cont. (SP#2)	0.3%	0.4%	0.3%
19	Plastic Cont. (SP#3-#7)	0.8%	1.1%	0.9%
	<b>Total Program Recyclables</b>	29.0%	26.8%	28.1%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.1%	0.3%	0.2%
7	Other Non-Ferrous Metals	0.2%	0.3%	0.3%
20	Rigid Plastics	3.0%	0.8%	2.1%
30	Electronic Waste	0.6%	0.0%	0.4%
31	Technotrash	0.1%	0.0%	0.1%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	4.0%	1.4%	3.0%
14	Compostable Paper	18.0%	25.8%	21.1%
25	Food Waste	10.2%	12.7%	11.2%
26	Yard Waste	0.0%	0.1%	0.0%
27	Clean Wood Waste	2.1%	0.0%	1.3%
28	Other Rec. Org. Waste	0.2%	0.1%	0.1%
	Total Compostables	30.6%	38.7%	33.8%
	Total Recoverable Materials	63.6%	66.9%	64.9%
3	Other Non-Rec. Glass	3.0%	0.2%	1.9%
15	Non-Compostable Paper	2.4%	3.1%	2.7%
21	Plastic Bags and Film	12.1%	11.9%	12.0%
22	Styrofoam (food service)	1.8%	1.5%	1.7%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.0%	0.4%	0.2%
29	Treated Wood Waste	0.1%	0.2%	0.1%
32	Textiles/Clothing	0.0%	0.7%	0.3%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.7%	0.2%	0.5%
36	Special Waste	0.1%	0.3%	0.2%
37	Construction Waste	2.6%	0.0%	1.6%
38	All Other Garbage	2.2%	6.3%	3.8%
39	Liquids	11.4%	8.2%	10.1%
40	Grit Other Materials	0.0%	0.0%	0.0%
	All Other Materials	36.4% 100.0%	33.1% 100.0%	35.1% 100.0%
	Grand Total	100.076	100.076	100.076

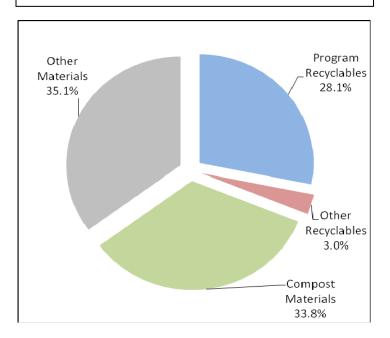
 ${\it Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.}$ 



## **Building Notes**

Academic Building – 92,478 sq. ft. Estimated Daily Waste Generated – 76 lbs/day

- Significant amounts of bathroom tissue, food waste, and liquids.
- Electronic waste included device chargers.
- Substantial amount of program recyclables, including office paper (sheet music).
- Large quantities of food service Styrofoam also present.



## **BUSINESS AFFAIRS ANNEX**

#		Samp	Sample #'s	
	Material Category	15	71	Wtd Avg.
1	Recyclable Glass	0.0%	0.0%	0.0%
4	Aluminum Cans	0.0%	0.0%	0.0%
5	Steel or Tin Cans	0.0%	0.0%	0.0%
8	Corrugated Cardboard	0.0%	0.0%	0.0%
9	Office Paper	3.7%	9.7%	6.5%
10	Newspaper	0.0%	0.0%	0.0%
11	Magazines	0.0%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	5.0%	9.5%	7.1%
16	Aseptic Containers	0.0%	1.3%	0.6%
17	PET Plastic Cont. (SP#1)	2.1%	1.5%	1.8%
18	HDPE Plastic Cont. (SP#2)	0.0%	1.1%	0.5%
19	Plastic Cont. (SP#3-#7)	0.0%	1.5%	0.7%
	Total Program Recyclables	10.9%	24.5%	17.1%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.0%	0.0%
7	Other Non-Ferrous Metals	1.1%	3.8%	2.3%
20	Rigid Plastics	7.1%	3.6%	5.5%
30	Electronic Waste	1.4%	0.0%	0.8%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	9.6%	7.4%	8.6%
14	Compostable Paper	24.1%	25.1%	24.5%
25	Food Waste	28.0%	21.7%	25.1%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	0.0%	0.4%	0.2%
	Total Compostables	52.0%	47.3%	49.9%
	Total Recoverable Materials	72.5%	79.1%	75.6%
3	Other Non-Rec. Glass	0.0%	1.1%	0.5%
15	Non-Compostable Paper	2.1%	1.7%	1.9%
21	Plastic Bags and Film	8.4%	7.2%	7.8%
22	Styrofoam (food service)	10.9%	3.6%	7.5%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.0%	1.5%	0.7%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.0%	0.0%	0.0%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	6.1%	5.9%	6.0%
39	Liquids	0.0%	0.0%	0.0%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	27.5%	20.9%	24.4%
	Grand Total	100.0%	100.0%	100.0%

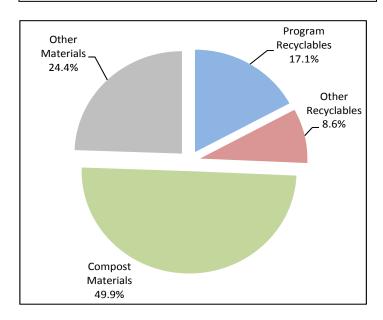


## **Building Notes**

Academic Building – 29,544 sq. ft. Estimated Daily Waste Generated – 10 lbs/day

#### Sample Notes

- Nearly half of waste stream is compostable.
- Compostable paper consisted primarily of bathroom tissue.
- Significant quantities of food waste.
- Large quantities of program recyclables present in waste.



 ${\it Note:}\ {\it Totals}\ {\it may}\ {\it not}\ {\it appear}\ {\it to}\ {\it add}\ {\it correctly}\ {\it due}\ {\it to}\ {\it rounding}.$ 

## **CAP SCIENCE COMPLEX**

		Samp	le #'s	Wtd
#	Material Category	9	53	Avg.
1	Recyclable Glass	0.8%	2.0%	1.4%
4	Aluminum Cans	0.4%	1.0%	0.7%
5	Steel or Tin Cans	0.6%	0.5%	0.6%
8	Corrugated Cardboard	0.0%	0.0%	0.0%
9	Office Paper	6.2%	9.9%	8.0%
10	Newspaper	1.3%	0.4%	0.9%
11	Magazines	0.0%	0.5%	0.3%
12	Books	0.0%	10.4%	5.0%
13	Other Recyclable Paper	20.8%	4.8%	13.1%
16	Aseptic Containers	0.5%	0.2%	0.3%
17	PET Plastic Cont. (SP#1)	3.3%	2.6%	3.0%
18	HDPE Plastic Cont. (SP#2)	0.5%	0.2%	0.4%
19	Plastic Cont. (SP#3-#7)	0.6%	0.6%	0.6%
	Total Program Recyclables	35.0%	33.3%	34.2%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.3%	0.1%
7	Other Non-Ferrous Metals	0.3%	0.3%	0.3%
20	Rigid Plastics	3.5%	4.2%	3.9%
30	Electronic Waste	0.1%	0.0%	0.1%
31	Technotrash	0.0%	0.2%	0.1%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	4.0%	5.0%	4.5%
14	Compostable Paper	23.8%	30.0%	26.8%
25	Food Waste	12.5%	13.6%	13.1%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.1%	0.2%	0.1%
28	Other Rec. Org. Waste	0.1%	0.2%	0.2%
20	Total Compostables	36.6%	44.0%	40.2%
-	Total Recoverable Materials	75.5%	82.3%	78.8%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	3.5%	2.6%	3.1%
21	Plastic Bags and Film	7.4%	5.6%	6.6%
22	Styrofoam (food service)	1.8%	1.8%	1.8%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	1.6%	1.8%	1.7%
29	Treated Wood Waste	0.1%	0.0%	0.0%
32	Textiles/Clothing	0.1%	0.3%	0.6%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	1.9%	0.1%	1.0%
37	Construction Waste	0.0%	0.1%	0.0%
38	All Other Garbage	2.6%	2.9%	
39	Liquids	4.8%	2.3%	2.7% 3.6%
40	Grit	0.0%		
40	All Other Materials		0.0%	0.0%
		24.5%	17.7%	21.2%
(	GRAND TOTAL	100.0%	100.0%	100.0%

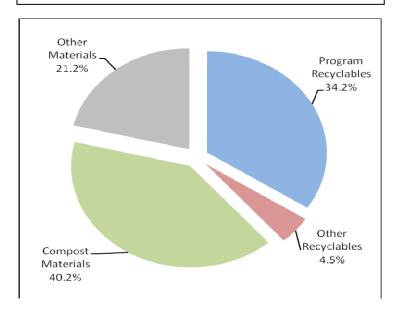
 ${\it Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.}$ 



## **Building Notes**

Academic Building – 114,810 sq. ft. Estimated Daily Waste Generated– 69 lbs/day

- Program recyclables comprise over a third of waste stream.
- Compostable paper consisted primarily of bathroom tissue.
- Significant quantities of office and other recyclable paper present in waste stream.
- Autoclave bags found in waste stream.



## **COLLEGE OF EDUCATION**

#		Sample #'s		18/6-4
	Material Category	29	79	Wtd Avg.
1	Recyclable Glass	1.7%	2.2%	2.0%
4	Aluminum Cans	0.5%	0.3%	0.4%
5	Steel or Tin Cans	0.3%	0.1%	0.2%
8	Corrugated Cardboard	0.5%	1.4%	1.0%
9	Office Paper	3.4%	3.5%	3.5%
10	Newspaper	0.1%	0.5%	0.3%
11	Magazines	0.0%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	5.5%	4.5%	5.1%
16	Aseptic Containers	0.7%	0.9%	0.8%
17	PET Plastic Cont. (SP#1)	1.7%	2.2%	2.0%
18	HDPE Plastic Cont. (SP#2)	0.3%	0.2%	0.3%
19	Plastic Cont. (SP#3-#7)	1.3%	0.9%	1.1%
13	Total Program Recyclables	15.8%	16.8%	16.6%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.1%	0.1%	0.1%
7	Other Non-Ferrous Metals	1.8%	0.7%	0.5%
20	Rigid Plastics	8.5%	3.7%	6.0%
30	Electronic Waste	0.1%	0.0%	0.1%
31	Technotrash	0.2%	0.5%	0.4%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
33	Total Other Recyclables	10.7%	4.9%	7.1%
14	Compostable Paper	23.3%	27.3%	25.7%
25	Food Waste	21.3%	16.5%	19.0%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.1%	0.1%
28	Other Rec. Org. Waste	0.3%	0.6%	0.4%
	Total Compostables	44.9%	44.5%	45.3%
	Total Recoverable Materials	71.4%	66.3%	69.0%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	4.6%	6.1%	5.5%
21	Plastic Bags and Film	13.1%	12.3%	12.9%
22	Styrofoam (food service)	1.8%	2.1%	2.0%
23	Styrofoam (packaging)	0.1%	0.0%	0.1%
24	All Other Plastics	0.0%	1.7%	0.9%
29	Treated Wood Waste	1.5%	0.0%	0.0%
32	Textiles/Clothing	2.6%	3.3%	3.0%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	0.1%	0.0%	0.0%
37	Construction Waste	0.0%	0.2%	0.1%
38	All Other Garbage	4.8%	2.6%	3.7%
39	Liquids	0.0%	5.4%	2.9%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	28.6%	33.7%	31.0%
	Grand Total	100.0%	100.0%	100.0%

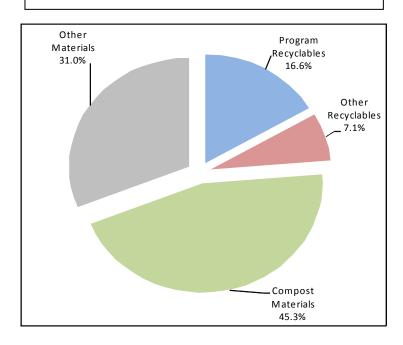
 ${\it Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.}$ 



## **Building Notes**

Academic Building – sq. ft. not available Estimated Daily Waste Generated – 140 lbs/day

- Nearly half of the waste stream is compostable.
- Compostable paper consisted largely of bathroom tissue.
- Large quantities of plastic bags with little to no waste.



## HOLMES CONVOCATION CENTER

		Sample #'s		Wtd
#	Material Category	32	74	Avg.
1	Recyclable Glass	0.3%	0.4%	0.3%
4	Aluminum Cans	0.3%	0.3%	0.3%
5	Steel or Tin Cans	0.2%	0.3%	0.2%
8	Corrugated Cardboard	17.2%	0.0%	9.6%
9	Office Paper	6.5%	7.9%	7.1%
10	Newspaper	1.3%	0.0%	0.9%
11	Magazines	1.3%	0.7%	1.0%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	2.0%	1.1%	1.6%
16	Aseptic Containers	0.2%	0.1%	0.1%
17	PET Plastic Cont. (SP#1)	3.0%	1.5%	2.4%
18	HDPE Plastic Cont. (SP#2)	0.8%	0.0%	0.5%
19	Plastic Cont. (SP#3-#7)	1.4%	4.2%	2.6%
	Total Program Recyclables	34.5%	16.3%	26.6%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	1.2%	0.1%	0.7%
7	Other Non-Ferrous Metals	0.2%	0.1%	0.1%
20	Rigid Plastics	3.2%	0.5%	2.0%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	2.2%	1.0%
	Total Other Recyclables	4.5%	2.8%	3.8%
14	Compostable Paper	10.9%	17.5%	13.8%
25	Food Waste	20.6%	4.7%	13.5%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.4%	0.2%
28	Other Rec. Org. Waste	0.0%	0.1%	0.1%
	Total Compostables	31.5%	22.7%	27.5%
	<b>Total Recoverable Materials</b>	70.5%	41.9%	57.9%
3	Other Non-Rec. Glass	0.0%	1.4%	0.6%
15	Non-Compostable Paper	7.7%	0.7%	4.6%
21	Plastic Bags and Film	7.8%	5.9%	7.0%
22	Styrofoam (food service)	0.4%	0.8%	0.6%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.3%	0.5%	0.4%
29	Treated Wood Waste	0.1%	0.0%	0.0%
32	Textiles/Clothing	0.0%	1.0%	0.4%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.1%	0.0%
36	Special Waste	0.1%	40.3%	17.8%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	1.7%	1.7%	1.7%
39	Liquids	11.4%	5.8%	8.9%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	29.5%	58.1%	42.1%
	<b>Grand Total</b>	100.0%	100.0%	100.0%

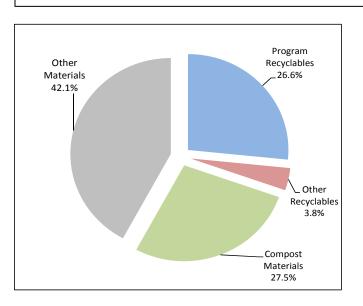


## **Building Notes**

Academic Building – 200,840 sq. ft. Estimated Daily Waste Generated – 178 lbs/day

#### Sample Notes

- Program recyclables represent over a quarter of the waste stream.
- Large amounts of office paper and corrugated cardboard.
- Over a quarter of waste stream is compostable.
- Significant quantities of special waste including medications and animal cadavers.



 ${\it Note:}\ {\it Totals}\ {\it may}\ {\it not}\ {\it appear}\ {\it to}\ {\it add}\ {\it correctly}\ {\it due}\ {\it to}\ {\it rounding}.$ 

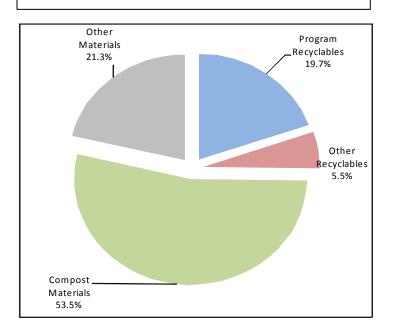
## JOHN E. THOMAS (JET) HALL

#	# Sample #'s		ole #'s	Wtd	
	Material Category	35	82	Avg.	
1	Recyclable Glass	0.7%	0.9%	0.8%	
4	Aluminum Cans	0.3%	0.4%	0.4%	
5	Steel or Tin Cans	0.4%	0.2%	0.1%	
8	Corrugated Cardboard	2.6%	0.2%	1.3%	
9	Office Paper	6.5%	7.2%	6.9%	
10	Newspaper	0.3%	1.3%	0.8%	
11	Magazines	1.2%	1.8%	1.5%	
12	Books	0.0%	0.0%	0.0%	
13	Other Recyclable Paper	3.8%	3.8%	3.8%	
16	Aseptic Containers	0.3%	0.2%	0.3%	
17	PET Plastic Cont. (SP#1)	2.2%	1.9%	2.1%	
18	HDPE Plastic Cont. (SP#2)	0.5%	0.0%	0.2%	
19	Plastic Cont. (SP#3-#7)	1.6%	1.4%	1.5%	
	Total Program Recyclables	20.4%	19.4%	19.7%	
2	Laboratory Glass	0.0%	0.0%	0.0%	
6	Other Ferrous Metals	0.1%	0.0%	0.1%	
7	Other Non-Ferrous Metals	0.3%	2.2%	1.3%	
20	Rigid Plastics	3.4%	2.7%	3.0%	
30	Electronic Waste	0.3%	1.6%	1.0%	
31	Technotrash	0.1%	0.1%	0.1%	
33	White Goods/Small Apps.	0.0%	0.0%	0.0%	
	Total Other Recyclables	4.2%	6.6%	5.5%	
14	Compostable Paper	23.6%	18.8%	21.1%	
25	Food Waste	28.4%	33.1%	31.0%	
26	Yard Waste	0.0%	0.0%	0.0%	
27	Clean Wood Waste	0.1%	0.2%	0.1%	
28	Other Rec. Org. Waste	2.6%	0.1%	1.3%	
	Total Compostables	54.7%	52.2%	53.5%	
	Total Recoverable Materials	79.3%	78.2%	78.7%	
3	Other Non-Rec. Glass	0.2%	0.8%	0.5%	
15	Non-Compostable Paper	2.0%	2.3%	2.2%	
21	Plastic Bags and Film	9.0%	9.7%	9.4%	
22	Styrofoam (food service)	1.5%	1.3%	1.4%	
23	Styrofoam (packaging)	0.0%	0.0%	0.0%	
24	All Other Plastics	0.6%	0.6%	0.6%	
29	Treated Wood Waste	0.2%	0.0%	0.1%	
32	Textiles/Clothing	0.0%	0.2%	0.1%	
34	All Furniture	0.0%	0.3%	0.2%	
35	Tires/Rubber	0.0%	0.0%	0.0%	
36	Special Waste	0.0%	0.2%	0.1%	
37	Construction Waste	0.0%	0.0%	0.0%	
38	All Other Garbage	3.8%	5.3%	4.6%	
39	Liquids	3.5%	0.9%	2.1%	
40	Grit	0.0%	0.0%	0.0%	
	All Other Materials	20.7%	21.8%	21.3%	
	Grand Total	100.0%	100.0%	100.0%	



Estimated Daily Waste Generated – 86 lbs/day

- Significant amounts of compostable paper and food waste.
- Large amounts of program recyclables present in waste stream.
- Many plastic bags being discarded with little to no waste in them.



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

## KATHERINE HARPER/KERR SCOTT HALL

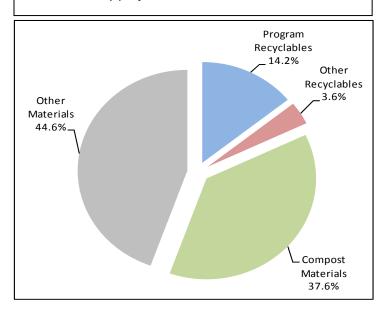
		Sample #'s		Wtd
#	Material Category	6	54	Avg.
1	Recyclable Glass	1.8%	0.5%	1.2%
4	Aluminum Cans	0.3%	0.2%	0.2%
5	Steel or Tin Cans	1.3%	0.3%	0.8%
8	Corrugated Cardboard	2.4%	3.0%	2.7%
9	Office Paper	3.4%	1.7%	2.6%
10	Newspaper	0.6%	0.9%	0.7%
11	Magazines	0.0%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	4.7%	4.1%	4.4%
16	Aseptic Containers	0.0%	0.0%	0.0%
17	PET Plastic Cont. (SP#1)	0.9%	0.9%	0.9%
18	HDPE Plastic Cont. (SP#2)	0.0%	0.5%	0.3%
19	Plastic Cont. (SP#3-#7)	0.0%	0.9%	0.4%
	<b>Total Program Recyclables</b>	15.4%	13.0%	14.2%
2	Laboratory Glass	0.1%	0.0%	0.1%
6	Other Ferrous Metals	0.3%	0.5%	0.4%
7	Other Non-Ferrous Metals	0.2%	0.3%	0.3%
20	Rigid Plastics	3.0%	2.5%	2.8%
30	Electronic Waste	0.0%	0.3%	0.1%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	3.7%	3.6%	3.6%
14	Compostable Paper	20.4%	20.2%	20.3%
25	Food Waste	12.6%	15.3%	13.9%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	3.1%	1.4%	2.2%
28	Other Rec. Org. Waste	0.0%	2.2%	1.0%
	Total Compostables	36.1%	39.1%	37.6%
	<b>Total Recoverable Materials</b>	55.2%	55.7%	55.4%
3	Other Non-Rec. Glass	16.5%	7.4%	12.1%
15	Non-Compostable Paper	2.9%	3.0%	2.9%
21	Plastic Bags and Film	8.9%	6.8%	7.9%
22	Styrofoam (food service)	3.1%	2.2%	2.7%
23	Styrofoam (packaging)	3.3%	0.1%	1.8%
24	All Other Plastics	2.6%	3.8%	3.2%
29	Treated Wood Waste	0.1%	0.6%	0.4%
32	Textiles/Clothing	1.2%	1.9%	1.5%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.7%	0.3%
36	Special Waste	0.3%	0.0%	0.1%
37	Construction Waste	0.4%	1.2%	0.8%
38	All Other Garbage	5.6%	2.3%	4.0%
39	Liquids	0.0%	0.3%	0.2%
40	Grit	0.0%	14.0%	6.8%
	All Other Materials	44.8%	44.3%	44.6%
	Grand Total	100.0%	100.0%	100.0%



#### **Building Notes**

Academic Building – 80,620 sq. ft. Estimated Daily Waste Generated – 92 lbs/day

- Recyclable paper present in waste stream.
- Substantial amounts of food waste, and compostable paper consisting primarily of bathroom tissue.
- Special waste included over twenty compact fluorescent light bulbs.
- Waste specific to building activities included terra cotta pottery, blue foam, and other artistry project waste.



## L.S. DOUGHERTY BUILDING

		Sample #'s		Wtd
#	Material Category	33	84	Avg.
1	Recyclable Glass	0.0%	2.9%	1.3%
4	Aluminum Cans	0.0%	0.8%	0.4%
5	Steel or Tin Cans	0.0%	0.0%	0.0%
8	Corrugated Cardboard	0.0%	3.4%	1.6%
9	Office Paper	1.8%	0.0%	0.9%
10	Newspaper	0.3%	0.0%	0.2%
11	Magazines	0.0%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	2.9%	1.1%	2.0%
16	Aseptic Containers	0.0%	0.4%	0.2%
17	PET Plastic Cont. (SP#1)	5.9%	3.7%	4.8%
18	HDPE Plastic Cont. (SP#2)	1.4%	0.0%	0.8%
19	Plastic Cont. (SP#3-#7)	1.3%	2.2%	1.7%
	<b>Total Program Recyclables</b>	13.5%	14.4%	13.9%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.0%	0.0%
7	Other Non-Ferrous Metals	0.8%	6.3%	3.3%
20	Rigid Plastics	6.0%	3.8%	5.0%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	6.8%	10.0%	8.3%
14	Compostable Paper	38.5%	24.3%	31.9%
25	Food Waste	17.1%	20.5%	18.7%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	0.0%	1.4%	0.6%
	Total Compostables	55.6%	46.2%	51.2%
	Total Recoverable Materials	75.9%	70.6%	73.5%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	2.0%	7.3%	4.5%
21	Plastic Bags and Film	6.6%	8.3%	7.4%
22	Styrofoam (food service)	2.2%	3.9%	3.0%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	1.1%	0.7%	0.9%
29	Treated Wood Waste	0.3%	0.0%	0.1%
32	Textiles/Clothing	0.0%	0.0%	0.0%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	1.2%	1.7%	1.4%
39	Liquids	10.7%	7.4%	9.2%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	24.1%	29.4%	26.5%
	Grand Total	100.0%	100.0%	100.0%

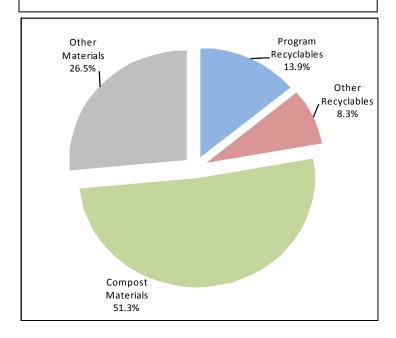


## **Building Notes**

Academic Building – 20,538 sq. ft. Estimated Daily Waste Generated – 22 lbs/day

#### Sample Notes

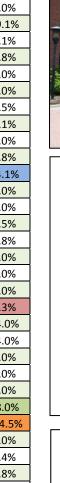
- Approximately 14% of waste stream is comprised of program recyclables.
- Compostable paper consisted primarily of bathroom tissue and compostable cups.
- Significant quantities of rigid plastics being discarded.
- Significant amounts of liquid present.



 $Note: Totals\ may\ not\ appear\ to\ add\ correctly\ due\ to\ rounding.$ 

## LIVING LEARNING CENTER (ACADEMIC)

		Samp	Wtd	
#	Material Category	42	91	Avg.
1	Recyclable Glass	4.3%	0.0%	2.3%
4	Aluminum Cans	0.6%	1.1%	0.9%
5	Steel or Tin Cans	1.1%	0.0%	0.6%
8	Corrugated Cardboard	0.0%	0.0%	0.0%
9	Office Paper	16.3%	22.3%	19.1%
10	Newspaper	0.5%	3.9%	2.1%
11	Magazines	0.0%	3.9%	1.8%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	2.5%	5.7%	4.0%
16	Aseptic Containers	0.0%	1.1%	0.5%
17	PET Plastic Cont. (SP#1)	1.6%	2.8%	2.1%
18	HDPE Plastic Cont. (SP#2)	0.0%	0.0%	0.0%
19	Plastic Cont. (SP#3-#7)	0.6%	0.9%	0.8%
	<b>Total Program Recyclables</b>	27.5%	41.8%	34.1%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.0%	0.0%
7	Other Non-Ferrous Metals	0.7%	0.2%	0.5%
20	Rigid Plastics	0.6%	3.2%	1.8%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	1.3%	3.4%	2.3%
14	Compostable Paper	24.3%	23.7%	24.0%
25	Food Waste	10.7%	17.9%	14.0%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	0.0%	0.0%	0.0%
	Total Compostables	35.0%	41.6%	38.0%
	<b>Total Recoverable Materials</b>	63.8%	86.9%	74.5%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	2.8%	2.1%	2.4%
21	Plastic Bags and Film	6.7%	4.8%	5.8%
22	Styrofoam (food service)	0.5%	0.7%	0.6%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	2.4%	0.5%	1.5%
29	Treated Wood Waste	0.1%	0.0%	0.0%
32	Textiles/Clothing	2.8%	0.0%	1.5%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	1.3%	3.0%	2.1%
39	Liquids	19.7%	2.1%	11.5%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	36.2%	13.1%	25.5%
	Grand Total	100.0%	0.0%	100.0%



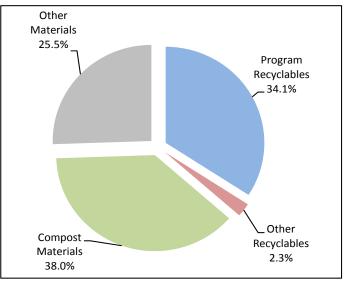


## **Building Notes**

Academic Building – 19,167 sq. ft. Estimated Daily Waste Generated – 24 lbs/day

#### Sample Notes

- Significant amounts of office paper and other program recyclables present in waste stream.
- Large amounts of compostable paper (bathroom tissue) and food waste.
- Many full and partially full cups and bottles contributed to the high composition of liquids.
- Large number of plastic bags discarded with little to no waste.



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

## THELMA C. RALEY HALL

		Sample #'s		Wtd
#	Material Category	24	80	Avg.
1	Recyclable Glass	0.0%	1.2%	0.6%
4	Aluminum Cans	1.4%	0.4%	0.9%
5	Steel or Tin Cans	0.5%	0.4%	0.4%
8	Corrugated Cardboard	0.3%	1.0%	0.7%
9	Office Paper	2.1%	2.9%	2.5%
10	Newspaper	0.4%	1.1%	0.8%
11	Magazines	0.0%	0.6%	0.3%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	3.9%	2.6%	3.2%
16	Aseptic Containers	0.2%	0.2%	0.2%
17	PET Plastic Cont. (SP#1)	1.1%	1.5%	1.3%
18	HDPE Plastic Cont. (SP#2)	0.4%	0.0%	0.2%
19	Plastic Cont. (SP#3-#7)	1.2%	1.2%	1.2%
	Total Program Recyclables	11.5%	13.0%	12.3%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.1%	0.1%
7	Other Non-Ferrous Metals	0.2%	0.5%	0.4%
20	Rigid Plastics	3.2%	2.6%	2.9%
30	Electronic Waste	0.0%	0.2%	0.1%
31	Technotrash	0.0%	0.1%	0.1%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	3.4%	3.5%	3.5%
14	Compostable Paper	38.3%	36.8%	37.5%
25	Food Waste	26.6%	16.2%	21.2%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.1%	0.1%	0.1%
28	Other Rec. Org. Waste	0.2%	0.4%	0.3%
	Total Compostables	65.2%	53.5%	59.0%
	<b>Total Recoverable Materials</b>	80.1%	70.0%	74.8%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	6.1%	6.5%	6.3%
21	Plastic Bags and Film	8.2%	6.2%	7.1%
22	Styrofoam (food service)	1.4%	1.7%	1.5%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.8%	1.7%	1.2%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.0%	1.3%	0.7%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.1%	0.1%	0.1%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	3.5%	0.0%	1.7%
38	All Other Garbage	0.0%	3.1%	1.6%
39	Liquids	0.0%	9.5%	5.0%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	19.9%	30.0%	25.2%
	Grand Total	100.0%	100.0%	100.0%

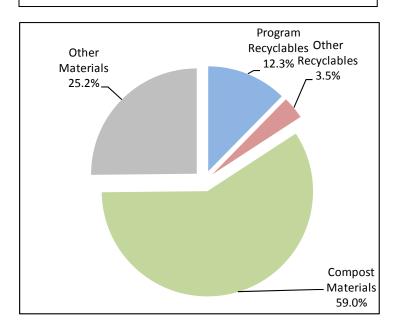


## **Building Notes**

Academic Building – 130,930 sq. ft. Estimated Daily Waste Generated – 106 lbs/day

#### Sample Notes

- Significant quantities of food waste and compostable paper.
- Compostable paper consisted primarily of paper towels and compostable cups.
- Opportunities exist for increased recovery of program recyclables.

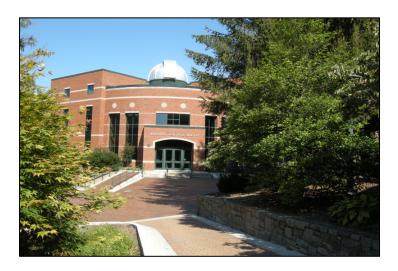


 ${\it Note:}\ {\it Totals}\ {\it may}\ {\it not}\ {\it appear}\ {\it to}\ {\it add}\ {\it correctly}\ {\it due}\ {\it to}\ {\it rounding}.$ 

## **RANKIN SCIENCE COMPLEX**

		Sample #'s		Wtd
#	Material Category	30	72	Avg.
1	Recyclable Glass	0.4%	0.0%	0.2%
4	Aluminum Cans	0.3%	0.4%	0.3%
5	Steel or Tin Cans	0.3%	0.0%	0.2%
8	Corrugated Cardboard	1.6%	3.9%	2.4%
9	Office Paper	2.8%	5.9%	3.9%
10	Newspaper	0.7%	1.0%	0.8%
11	Magazines	3.6%	0.5%	2.5%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	2.4%	5.4%	3.5%
16	Aseptic Containers	0.2%	0.5%	0.3%
17	PET Plastic Cont. (SP#1)	2.1%	2.0%	2.1%
18	HDPE Plastic Cont. (SP#2)	0.5%	0.0%	0.3%
19	Plastic Cont. (SP#3-#7)	0.5%	0.9%	0.7%
	<b>Total Program Recyclables</b>	15.5%	20.4%	17.2%
2	Laboratory Glass	0.5%	0.0%	0.3%
6	Other Ferrous Metals	0.5%	0.0%	0.3%
7	Other Non-Ferrous Metals	0.3%	0.4%	0.3%
20	Rigid Plastics	2.7%	1.5%	2.3%
30	Electronic Waste	0.0%	4.7%	1.5%
31	Technotrash	0.1%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	4.1%	6.7%	4.9%
14	Compostable Paper	27.6%	29.5%	28.3%
25	Food Waste	12.2%	13.8%	12.8%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.1%	0.0%
28	Other Rec. Org. Waste	0.4%	0.3%	0.3%
	Total Compostables	40.2%	43.8%	41.5%
	Total Recoverable Materials	59.8%	70.8%	63.6%
3	Other Non-Rec. Glass	0.1%	0.0%	0.1%
15	Non-Compostable Paper	3.7%	5.1%	4.2%
21	Plastic Bags and Film	8.8%	9.0%	8.9%
22	Styrofoam (food service)	1.4%	2.2%	1.6%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	2.6%	2.8%	2.7%
29	Treated Wood Waste	0.0%	0.3%	0.1%
32	Textiles/Clothing	1.2%	0.4%	1.0%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.1%	0.3%	0.2%
36	Special Waste	17.3%	0.0%	11.3%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	1.4%	2.4%	1.7%
39	Liquids	3.5%	5.6%	4.2%
40	Grit	0.0%	1.1%	0.4%
	All Other Materials	40.2%	29.2%	36.4%
	Grand Total	100.0%	100.0%	100.0%

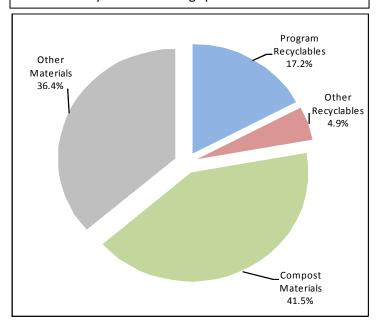
 ${\it Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.}$ 



## **Building Notes**

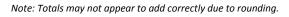
Academic Building – 43,378 sq. ft. Estimated Daily Waste Generated – 100 lbs/day

- Large amounts of program recyclables found in waste stream.
- Significant quantities of compostable paper (bathroom tissue).
- Waste specific to building activities included glass slides and other laboratory glass, gloves, animal and plans waste.
- Many autoclaved bags present in waste stream.



## **UNIVERSITY HALL**

		Sample #'s		Wtd
#	Material Category	36	86	Avg.
1	Recyclable Glass	0.0%	0.0%	0.0%
4	Aluminum Cans	0.0%	0.6%	0.3%
5	Steel or Tin Cans	0.0%	1.0%	0.5%
8	Corrugated Cardboard	0.0%	1.7%	0.8%
9	Office Paper	11.0%	6.4%	8.9%
10	Newspaper	0.0%	0.0%	0.0%
11	Magazines	2.2%	1.0%	1.6%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	5.9%	2.9%	4.5%
16	Aseptic Containers	0.4%	1.0%	0.7%
17	PET Plastic Cont. (SP#1)	0.3%	1.0%	0.6%
18	HDPE Plastic Cont. (SP#2)	0.3%	0.0%	0.2%
19	Plastic Cont. (SP#3-#7)	0.5%	2.0%	1.2%
	<b>Total Program Recyclables</b>	20.6%	17.5%	19.1%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.5%	0.2%
7	Other Non-Ferrous Metals	1.2%	1.6%	1.4%
20	Rigid Plastics	11.9%	2.3%	7.5%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	6.5%	0.0%	3.5%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	19.7%	4.3%	12.5%
14	Compostable Paper	25.7%	14.8%	20.7%
25	Food Waste	10.7%	28.6%	19.0%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.5%	0.2%
28	Other Rec. Org. Waste	1.3%	2.2%	1.8%
	Total Compostables	37.8%	46.1%	41.7%
	<b>Total Recoverable Materials</b>	78.0%	67.9%	73.3%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	2.3%	3.8%	3.0%
21	Plastic Bags and Film	3.9%	13.8%	8.5%
22	Styrofoam (food service)	0.8%	2.2%	1.4%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	5.2%	1.4%	3.4%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	3.2%	0.0%	1.7%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.5%	0.2%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	6.5%	4.3%	5.5%
39	Liquids	0.0%	6.0%	2.8%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	22.0%	32.1%	26.7%
	Grand Total	100.0%	100.0%	100.0%

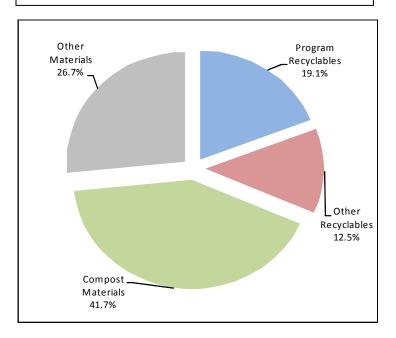




## **Building Notes**

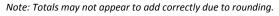
Academic Building – 34,592 sq. ft. Estimated Daily Waste Generated – 36 lbs/day

- Large amount of office paper and other recyclable paper being discarded.
- Significant amounts of food waste and bathroom tissue
- Electronic and technological waste included CDs, and hearing aids related electronics.
- Many garbage bags with little to no waste.



## **WEY HALL**

		Sample #'s		Wtd
#	Material Category	10	56	Avg.
1	Recyclable Glass	2.2%	3.8%	2.9%
4	Aluminum Cans	0.5%	0.6%	0.5%
5	Steel or Tin Cans	0.0%	0.0%	0.0%
8	Corrugated Cardboard	2.5%	1.4%	2.0%
9	Office Paper	4.2%	7.6%	5.8%
10	Newspaper	2.8%	1.3%	2.1%
11	Magazines	0.4%	1.5%	0.9%
12	Books	0.1%	0.0%	0.1%
13	Other Recyclable Paper	5.2%	0.0%	2.8%
16	Aseptic Containers	0.0%	0.2%	0.1%
17	PET Plastic Cont. (SP#1)	2.4%	3.2%	2.7%
18	HDPE Plastic Cont. (SP#2)	0.0%	0.3%	0.1%
19	Plastic Cont. (SP#3-#7)	0.6%	0.8%	0.7%
	Total Program Recyclables	20.8%	20.6%	20.7%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	4.9%	0.2%	2.8%
7	Other Non-Ferrous Metals	0.1%	0.4%	0.3%
20	Rigid Plastics	3.0%	3.3%	3.1%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	1.3%	0.0%	0.7%
33	White Goods/Small Apps.	0.0%	1.2%	0.6%
	Total Other Recyclables	9.4%	5.1%	7.4 %
14	Compostable Paper	20.9%	28.6%	24.5%
25	Food Waste	4.1%	7.8%	5.8%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.8%	0.8%	0.8%
28	Other Rec. Org. Waste	0.0%	0.1%	0.1%
	Total Compostables	25.8%	37.3%	31.1%
	Total Recoverable Materials	56.0%	63.1%	59.3%
3	Other Non-Rec. Glass	0.0%	0.8%	0.4%
15	Non-Compostable Paper	1.9%	2.4%	2.1%
21	Plastic Bags and Film	7.4%	10.7%	9.0%
22	Styrofoam (food service)	1.6%	1.7%	1.7%
23	Styrofoam (packaging)	0.6%	0.0%	0.3%
24	All Other Plastics	0.9%	2.2%	1.5%
29	Treated Wood Waste	0.0%	0.1%	0.1%
32	Textiles/Clothing	0.7%	0.8%	0.7%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.9%	0.4%
36	Special Waste	1.6%	0.0%	0.9%
37	Construction Waste	27.6%	13.3%	21.0%
38	All Other Garbage	1.6%	2.1%	1.9%
39	Liquids	0.0%	2.0%	0.9%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	44.0%	36.9%	40.7%
	<b>Grand Total</b>	100.0%	100.0%	100.0%

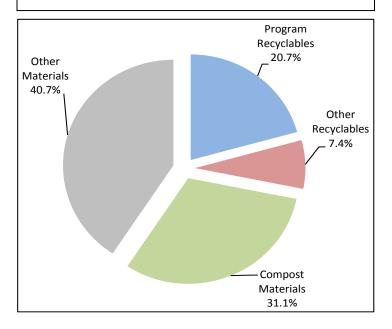




## **Building Notes**

Academic Building – 54,900 sq. ft. Estimated Daily Waste Generated – 100 lbs/day

- Substantial amounts of compostable paper towels
- Ferrous metal materials included film cans and other scrap metal.
- C&D debris included concrete mix, plaster and insulation foam related to art projects.
- Large amounts of plastic bags and film present in waste stream.



## **APPALACHIAN HEIGHTS**

		Sample #'s W		Wtd
#	Material Category	1	50	Avg.
1	Recyclable Glass	19.3%	13.1%	16.7%
4	Aluminum Cans	0.8%	1.4%	1.0%
5	Steel or Tin Cans	1.7%	1.4%	1.6%
8	Corrugated Cardboard	4.4%	4.9%	4.6%
9	Office Paper	0.0%	6.8%	2.8%
10	Newspaper	0.0%	1.0%	0.4%
11	Magazines	0.0%	0.9%	0.4%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	7.9%	4.2%	6.4%
16	Aseptic Containers	0.1%	0.4%	0.2%
17	PET Plastic Cont. (SP#1)	5.1%	5.9%	5.4%
18	HDPE Plastic Cont. (SP#2)	2.4%	2.0%	2.3%
19	Plastic Cont. (SP#3-#7)	0.8%	1.3%	1.0%
	<b>Total Program Recyclables</b>	42.5%	43.2%	42.8%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.4%	0.2%	0.3%
7	Other Non-Ferrous Metals	0.6%	0.6%	0.6%
20	Rigid Plastics	4.2%	2.8%	3.6%
30	Electronic Waste	0.3%	0.1%	0.3%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	5.6%	3.7%	4.8%
14	Compostable Paper	8.5%	6.0%	7.4%
25	Food Waste	23.7%	25.8%	24.6%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.1%	0.0%
28	Other Rec. Org. Waste	1.0%	0.2%	0.7%
	Total Compostables	33.2%	32.0%	32.7%
	Total Recoverable Materials	81.3%	78.9%	80.3%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	2.3%	1.6%	2.0%
21	Plastic Bags and Film	6.7%	5.0%	6.0%
22	Styrofoam (food service)	3.0%	2.4%	2.8%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.4%	1.5%	0.8%
29	Treated Wood Waste	0.1%	0.0%	0.1%
32	Textiles/Clothing	1.5%	2.7%	2.0%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	0.2%	0.1%	0.1%
37	Construction Waste	0.1%	1.2%	0.5%
38	All Other Garbage	0.9%	2.9%	1.7%
39	Liquids	3.5%	3.7%	3.6%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	18.7%	21.1%	19.7%
	Grand Total	100.0%	100.0%	100.0%

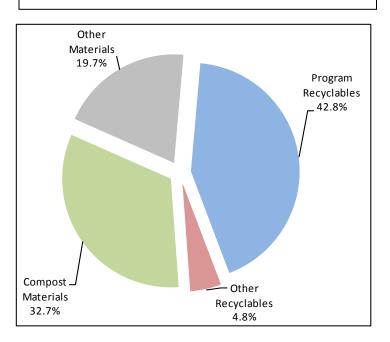


### **Building Notes**

Residential Building – 96,121 sq. ft.
Estimated Daily Waste Generated – Not Available
Average Sample Size – 259 lbs.

### Sample Notes

- Significant amounts of program recyclables being discarded.
- Large amounts of food waste present in waste stream.
- Special waste included prescription and overthe-counter medications.



## **BOWIE RESIDENCE HALL**

		Sample #'s		Wtd
#	Material Category	5	47	Avg.
1	Recyclable Glass	5.2%	8.5%	6.5%
4	Aluminum Cans	0.9%	1.3%	1.1%
5	Steel or Tin Cans	0.4%	1.0%	0.6%
8	Corrugated Cardboard	6.1%	8.3%	7.0%
9	Office Paper	0.9%	2.3%	1.4%
10	Newspaper	1.2%	0.1%	0.8%
11	Magazines	0.6%	1.5%	0.9%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	3.9%	7.4%	5.3%
16	Aseptic Containers	0.9%	0.5%	0.7%
17	PET Plastic Cont. (SP#1)	3.9%	5.2%	4.4%
18	HDPE Plastic Cont. (SP#2)	1.4%	1.7%	1.5%
19	Plastic Cont. (SP#3-#7)	0.8%	2.1%	1.3%
13	Total Program Recyclables	26.1%	39.9%	31.5%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.0%	0.0%
7	Other Non-Ferrous Metals	0.5%	0.1%	0.4%
20	Rigid Plastics	4.0%	3.1%	3.6%
30	Electronic Waste	0.0%	0.4%	0.2%
31	Technotrash	0.0%	0.4%	0.2%
33	White Goods/Small Apps.	0.0%	0.1%	0.0%
33	Total Other Recyclables	4.4%	3.9%	4.2%
14	Compostable Paper	4.4%	5.0%	4.6%
25	Food Waste	20.1%	19.4%	19.8%
26	Yard Waste	20.9%	2.8%	13.8%
27	Clean Wood Waste	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	0.3%	0.2%	0.2%
	Total Compostables	45.8%	27.3%	38.5%
	Total Recoverable Materials	76.3%	71.0%	74.2%
3	Other Non-Rec. Glass	0.0%	0.3%	0.1%
15	Non-Compostable Paper	1.6%	1.6%	1.6%
21	Plastic Bags and Film	4.0%	5.5%	4.6%
22	Styrofoam (food service)	3.3%	2.1%	2.9%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.3%	0.7%	0.5%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.9%	2.9%	1.7%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	1.2%	6.4%	3.2%
39	Liquids	8.3%	9.4%	8.7%
40	Grit	4.0%	0.0%	2.5%
	All Other Materials	23.7%	29.0%	25.8%
	Grand Total	100.0%	100.0%	100.0%

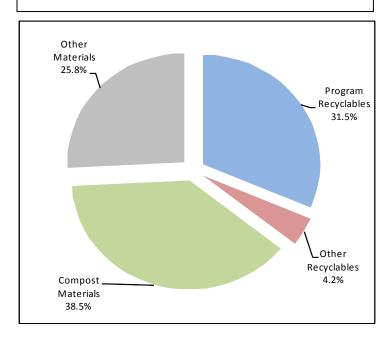
 ${\it Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.}$ 



### **Building Notes**

Residential Building – 52,384 sq. ft.
Estimated Daily Waste Generated – Not Available
Average Sample Size – 325 lbs

- Significant quantities of program recyclables being discarded.
- Large amounts of vendor-sourced corrugated cardboard (vending machine supply packaging).
- Yard waste present in the waste stream.



## **CONE RESIDENCE HALL**

		Sample #'s Wtd		\A/+d
#	Material Category	7	52	Avg.
1	Recyclable Glass	6.1%	3.3%	5.3%
4	Aluminum Cans	0.5%	2.2%	1.0%
5	Steel or Tin Cans	1.2%	0.0%	0.9%
8	Corrugated Cardboard	4.1%	2.4%	3.6%
9	Office Paper	2.0%	2.1%	2.0%
10	Newspaper	0.1%	4.4%	1.3%
11	Magazines	0.4%	5.7%	1.9%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	6.9%	4.9%	6.4%
16	Aseptic Containers	0.5%	0.3%	0.4%
17	PET Plastic Cont. (SP#1)	5.0%	5.6%	5.2%
18	HDPE Plastic Cont. (SP#2)	2.3%	2.1%	2.3%
19	Plastic Cont. (SP#3-#7)	1.5%	2.0%	1.7%
	Total Program Recyclables	30.7%	34.9%	31.9%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.5%	0.0%	0.4%
7	Other Non-Ferrous Metals	0.3%	0.2%	0.2%
20	Rigid Plastics	2.1%	2.7%	2.3%
30	Electronic Waste	0.8%	0.0%	0.6%
31	Technotrash	2.8%	0.0%	2.0%
33	White Goods/Small Apps.	0.0%	1.1%	0.3%
	Total Other Recyclables	6.5%	4.0%	5.8%
14	Compostable Paper	8.1%	3.0%	6.7%
25	Food Waste	18.0%	20.9%	18.8%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	0.1%	1.7%	0.5%
	Total Compostables	26.2%	25.5%	26.0%
	<b>Total Recoverable Materials</b>	63.4%	64.4%	63.6%
3	Other Non-Rec. Glass	0.1%	0.0%	0.1%
15	Non-Compostable Paper	2.9%	2.8%	2.9%
21	Plastic Bags and Film	10.6%	4.9%	9.0%
22	Styrofoam (food service)	0.9%	1.5%	1.1%
23	Styrofoam (packaging)	0.8%	0.2%	0.6%
24	All Other Plastics	1.7%	1.6%	1.7%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.4%	7.8%	2.5%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.2%	0.0%	0.1%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	8.7%	0.0%	6.2%
38	All Other Garbage	10.3%	3.6%	8.4%
39	Liquids	0.0%	13.3%	3.7%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	36.6%	35.6%	36.4%
	Grand Total	100.0%	100.0%	100.0%

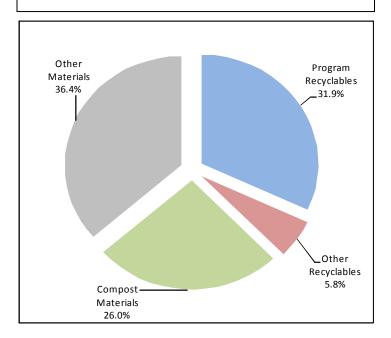
 ${\it Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.}$ 



### **Building Notes**

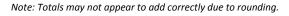
Residential Building – 58,803 sq. ft. Estimated Daily Waste Generated – 168 lbs/day

- Large amounts of program recyclables being discarded.
- Significant amounts of food waste present in waste stream.
- Large quantities of plastic bags and film in waste stream.
- C&D debris from renovations discussed in report.



# LIVING LEARNING CENTER (RESIDENTIAL)

		Sample #'s V		Wtd
#	Material Category	3	48	Avg.
1	Recyclable Glass	7.0%	6.4%	6.7%
4	Aluminum Cans	0.6%	0.9%	0.7%
5	Steel or Tin Cans	3.3%	1.5%	2.3%
8	Corrugated Cardboard	1.4%	4.4%	3.0%
9	Office Paper	2.4%	2.4%	2.4%
10	Newspaper	0.5%	0.4%	0.4%
11	Magazines	0.0%	0.6%	0.3%
12	Books	0.0%	0.6%	0.3%
13	Other Recyclable Paper	3.1%	6.7%	5.1%
16	Aseptic Containers	0.1%	0.3%	0.2%
17	PET Plastic Cont. (SP#1)	5.1%	2.7%	3.8%
18	HDPE Plastic Cont. (SP#2)	3.0%	1.5%	2.2%
19	Plastic Cont. (SP#3-#7)	1.1%	1.1%	1.1%
	Total Program Recyclables	27.5%	29.4%	28.5%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.4%	0.1%	0.2%
7	Other Non-Ferrous Metals	0.2%	0.5%	0.4%
20	Rigid Plastics	5.4%	3.8%	4.5%
30	Electronic Waste	0.0%	0.1%	0.1%
31	Technotrash	0.0%	0.2%	0.1%
33	White Goods/Small Apps.	0.1%	2.2%	1.2%
	<b>Total Other Recyclables</b>	6.1%	6.9%	6.5%
14	Compostable Paper	13.8%	6.4%	9.8%
25	Food Waste	29.9%	29.2%	29.5%
26	Yard Waste	0.8%	0.0%	0.4%
27	Clean Wood Waste	0.0%	0.1%	0.1%
28	Other Rec. Org. Waste	0.4%	0.2%	0.3%
	Total Compostables	45.0%	35.8%	40.1%
	<b>Total Recoverable Materials</b>	78.6%	72.1%	75.1%
3	Other Non-Rec. Glass	0.0%	0.8%	0.4%
15	Non-Compostable Paper	1.4%	1.5%	1.5%
21	Plastic Bags and Film	7.2%	5.3%	6.1%
22	Styrofoam (food service)	1.0%	2.1%	1.6%
23	Styrofoam (packaging)	0.1%	0.0%	0.0%
24	All Other Plastics	2.0%	1.2%	1.6%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	2.4%	2.3%	2.3%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	2.5%	1.3%
38	All Other Garbage	3.5%	5.7%	4.7%
39	Liquids	3.9%	5.9%	4.9%
40	Grit	0.0%	0.6%	0.3%
	All Other Materials	21.4%	27.9%	24.9%
	Grand Total	100.0%	100.0%	100.0%

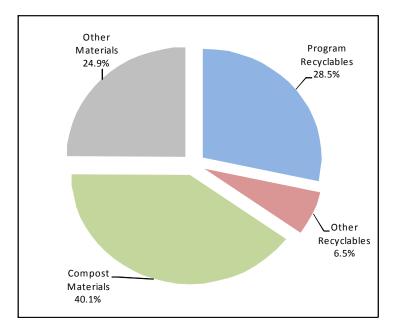




### <u>Building Notes</u> Residential Building – 87,272 sq. ft.

Daily Waste Generation Rate – Not Available Average Sample Size – 296 lbs

- Large amounts of program recyclables being discarded.
- Significant amounts of compostable bathroom tissue and food waste present in waste stream.

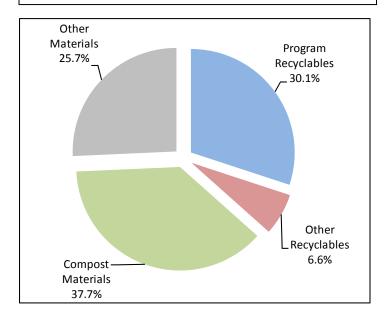


## **MOUNTAINEER HALL**

		Samp	ole #'s	Wtd
#	Material Category	2	49	Avg.
1	Recyclable Glass	8.6%	9.4%	9.0%
4	Aluminum Cans	0.7%	0.5%	0.6%
5	Steel or Tin Cans	0.8%	0.8%	0.8%
8	Corrugated Cardboard	4.5%	3.4%	4.0%
9	Office Paper	2.1%	1.5%	1.9%
10	Newspaper	0.4%	0.0%	0.3%
11	Magazines	0.7%	0.2%	0.5%
12	Books	0.1%	0.0%	0.1%
13	Other Recyclable Paper	5.7%	5.9%	5.8%
16	Aseptic Containers	1.1%	0.0%	0.6%
17	PET Plastic Cont. (SP#1)	4.0%	2.9%	3.5%
18	HDPE Plastic Cont. (SP#2)	1.9%	1.4%	1.7%
19	Plastic Cont. (SP#3-#7)	1.4%	1.4%	1.4%
	<b>Total Program Recyclables</b>	32.1%	27.5%	30.1%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.4%	2.4%	1.3%
7	Other Non-Ferrous Metals	0.0%	3.4%	1.5%
20	Rigid Plastics	3.2%	3.0%	3.1%
30	Electronic Waste	0.0%	0.1%	0.1%
31	Technotrash	0.1%	0.3%	0.2%
33	White Goods/Small Apps.	0.7%	0.0%	0.4%
	<b>Total Other Recyclables</b>	4.4%	9.2%	6.6%
14	Compostable Paper	12.6%	8.0%	10.6%
25	Food Waste	22.4%	25.8%	23.9%
26	Yard Waste	5.5%	0.0%	3.1%
27	Clean Wood Waste	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	0.1%	0.2%	0.1%
	Total Compostables	40.6%	34.0%	37.7%
	<b>Total Recoverable Materials</b>	77.1%	70.8%	74.3%
3	Other Non-Rec. Glass	0.1%	0.1%	0.1%
15	Non-Compostable Paper	1.9%	1.1%	1.5%
21	Plastic Bags and Film	5.6%	5.5%	5.5%
22	Styrofoam (food service)	1.9%	2.9%	2.3%
23	Styrofoam (packaging)	0.4%	0.0%	0.2%
24	All Other Plastics	0.8%	1.6%	1.1%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	4.7%	1.8%	3.4%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	1.6%	0.7%
36	Special Waste	0.1%	0.1%	0.1%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	2.8%	7.5%	4.9%
39	Liquids	4.8%	7.0%	5.8%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	22.9%	29.2%	25.7%
	<b>Grand Total</b>	100.0%	100.0%	100.0%



- Large quantities of program recyclables being
- Significant amounts of compostable paper and food waste also present in waste stream.
- Some yard waste found in waste stream.
- Liquids and plastic bags also found in large amounts.



## PANHELLENIC RESIDENCE HALL

		Sample #'s Wtd		18/4-4
#	Material Category	8	55	Avg.
1	Recyclable Glass	4.9%	8.4%	7.2%
4	Aluminum Cans	0.9%	0.6%	0.6%
5	Steel or Tin Cans	0.2%	0.4%	0.3%
8	Corrugated Cardboard	1.2%	5.4%	3.9%
9	Office Paper	5.3%	2.0%	3.2%
10	Newspaper	0.0%	0.2%	0.1%
11	Magazines	0.3%	0.0%	0.1%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	10.3%	6.2%	7.7%
16	Aseptic Containers	0.1%	0.1%	0.1%
17	PET Plastic Cont. (SP#1)	4.4%	5.1%	4.9%
18	HDPE Plastic Cont. (SP#2)	2.8%	1.0%	1.6%
19	Plastic Cont. (SP#3-#7)	1.8%	0.9%	1.2%
	Total Program Recyclables	32.2%	30.4%	31.0%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.2%	0.1%
7	Other Non-Ferrous Metals	0.3%	0.1%	0.2%
20	Rigid Plastics	5.4%	2.7%	3.7%
30	Electronic Waste	0.1%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	5.8%	3.1%	4.0%
14	Compostable Paper	3.3%	4.4%	4.0%
25	Food Waste	19.8%	23.9%	22.5%
26	Yard Waste	7.1%	0.0%	2.5%
27	Clean Wood Waste	0.1%	0.1%	0.1%
28	Other Rec. Org. Waste	0.2%	0.2%	0.2%
	Total Compostables	30.6%	28.5%	29.3%
	Total Recoverable Materials	68.6%	62.0%	64.3%
3	Other Non-Rec. Glass	1.2%	0.7%	0.8%
15	Non-Compostable Paper	3.4%	0.8%	1.7%
21	Plastic Bags and Film	4.5%	5.3%	5.0%
22	Styrofoam (food service)	1.6%	0.8%	1.1%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	1.9%	1.1%	1.4%
29	Treated Wood Waste	0.0%	0.1%	0.0%
32	Textiles/Clothing	2.5%	4.5%	3.8%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.2%	0.1%
36	Special Waste	0.1%	0.3%	0.2%
37	Construction Waste	0.0%	0.1%	0.0%
38	All Other Garbage	6.7%	3.2%	4.4%
39	Liquids	9.5%	21.1%	17.0%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	31.4%	38.0%	35.7%
	Grand Total	100.0%	100.0%	100.0%

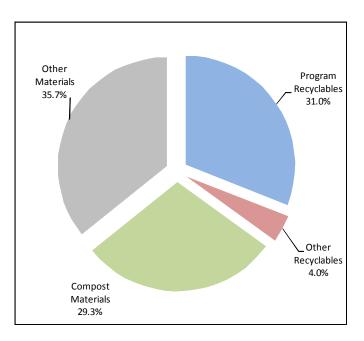
 ${\it Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.}$ 



## **Building Notes**

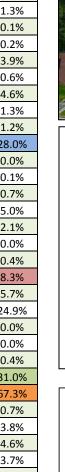
Residential Building – 98,450 sq. ft. Estimated Daily Waste Generated – 170 lbs/day

- Large amounts of program recyclables being discarded.
- Significant amounts of food waste were present.
- Special waste included prescription medications.
- Substantial amounts of liquids were also present.



## WINKLER RESIDENCE HALL

		Sample #'s		Wtd
#	Material Category	4	46	Avg.
1	Recyclable Glass	6.7%	8.8%	7.6%
4	Aluminum Cans	0.9%	1.0%	0.9%
5	Steel or Tin Cans	0.9%	1.1%	1.0%
8	Corrugated Cardboard	4.4%	3.4%	3.9%
9	Office Paper	1.2%	1.5%	1.3%
10	Newspaper	0.0%	3.0%	1.3%
11	Magazines	0.0%	0.3%	0.1%
12	Books	0.0%	0.4%	0.2%
13	Other Recyclable Paper	3.9%	3.9%	3.9%
16	Aseptic Containers	0.5%	0.9%	0.6%
17	PET Plastic Cont. (SP#1)	4.7%	4.4%	4.6%
18	HDPE Plastic Cont. (SP#2)	1.2%	1.5%	1.3%
19	Plastic Cont. (SP#3-#7)	1.2%	1.2%	1.2%
	<b>Total Program Recyclables</b>	25.6%	31.2%	28.0%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.1%	0.1%
7	Other Non-Ferrous Metals	1.0%	0.5%	0.7%
20	Rigid Plastics	6.2%	3.4%	5.0%
30	Electronic Waste	3.7%	0.1%	2.1%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.7%	0.0%	0.4%
	Total Other Recyclables	11.5%	4.1%	8.3%
14	Compostable Paper	6.2%	5.1%	5.7%
25	Food Waste	26.9%	22.3%	24.9%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	0.0%	0.8%	0.4%
	Total Compostables	33.1%	28.2%	31.0%
	Total Recoverable Materials	70.1%	63.5%	67.3%
3	Other Non-Rec. Glass	0.0%	1.6%	0.7%
15	Non-Compostable Paper	5.4%	1.5%	3.8%
21	Plastic Bags and Film	5.0%	4.1%	4.6%
22	Styrofoam (food service)	3.2%	4.4%	3.7%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.2%	0.5%	0.3%
29	Treated Wood Waste	0.4%	0.0%	0.3%
32	Textiles/Clothing	3.2%	10.6%	6.4%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.1%	0.1%
36	Special Waste	0.5%	0.3%	0.4%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	2.5%	3.7%	3.0%
39	Liquids	6.9%	9.5%	8.0%
40	Grit	2.5%	0.0%	1.4%
	All Other Materials	29.9%	36.5%	32.7%
	Grand Total	100.0%	100.0%	100.0%



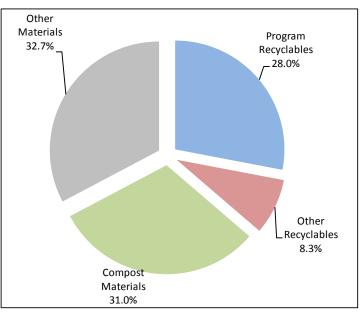


### **Building Notes**

Residential Building – 66,609 sq. ft. Estimated Daily Waste Generated – Not Available Average Sample Size - 348 lbs

### Sample Notes

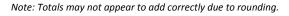
- Large amounts of program recyclables being discarded.
- Large quantities of food waste and compostable paper present in waste stream.
- Textiles consisted of carpet and clothes.
- Small appliances included a hair dryer.



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

## PLEMMONS STUDENT UNION

		Sample #'s		Wtd
#	Material Category	12	57	Avg.
1	Recyclable Glass	0.7%	0.9%	0.8%
4	Aluminum Cans	0.2%	0.1%	0.1%
5	Steel or Tin Cans	0.2%	0.4%	0.3%
8	Corrugated Cardboard	1.2%	0.3%	0.8%
9	Office Paper	0.7%	0.7%	0.7%
10	Newspaper	0.5%	0.5%	0.5%
11	Magazines	0.1%	0.0%	0.1%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	1.6%	1.2%	1.4%
16	Aseptic Containers	0.6%	1.7%	1.2%
17	PET Plastic Cont. (SP#1)	2.2%	1.5%	1.8%
18	HDPE Plastic Cont. (SP#2)	0.2%	0.1%	0.1%
19	Plastic Cont. (SP#3-#7)	0.7%	1.0%	0.8%
	Total Program Recyclables	8.9%	8.6%	8.7%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.2%	0.3%	0.3%
7	Other Non-Ferrous Metals	1.3%	0.1%	0.7%
20	Rigid Plastics	4.7%	4.9%	4.8%
30	Electronic Waste	0.0%	0.1%	0.0%
31	Technotrash	0.1%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	<b>Total Other Recyclables</b>	6.2%	5.3%	5.8%
14	Compostable Paper	24.1%	11.4%	17.8%
25	Food Waste	22.6%	42.6%	32.5%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.2%	0.2%	0.2%
28	Other Rec. Org. Waste	0.0%	0.1%	0.0%
	Total Compostables	46.8%	54.3%	50.5%
	<b>Total Recoverable Materials</b>	62.0%	68.3%	65.1%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	6.4%	4.6%	5.5%
21	Plastic Bags and Film	16.9%	10.2%	13.6%
22	Styrofoam (food service)	3.8%	1.9%	2.8%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.5%	0.8%	0.7%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.4%	0.1%	0.3%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	0.1%	7.5%	3.8%
37	Construction Waste	0.8%	0.0%	0.4%
38	All Other Garbage	1.8%	1.3%	1.5%
39	Liquids	7.3%	5.3%	6.3%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	38.0%	31.7%	34.9%
	GRAND TOTAL		100.0%	100.0%

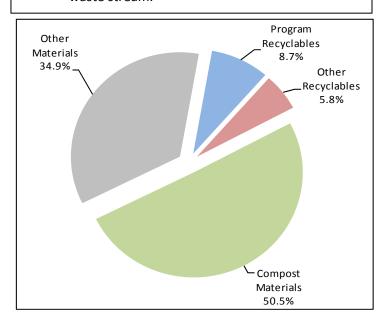




### **Building Notes**

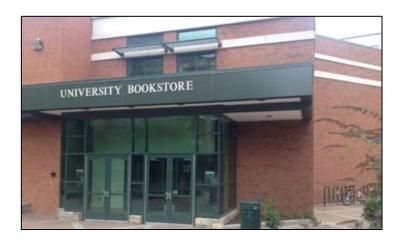
Student Services Building – 98,172 sq. ft.
Estimated Daily Waste Generated – Not Available
Average Sample Size – 260 lbs.

- Significant amounts of compostable paper and food waste was present.
- Large amounts of plastic bags/film present due to the large number of garbage cans in Union.
- Special waste included full aerosol cans and medical supplies.
- Many full or partially full drinks and bottles in waste stream.



## STUDENT UNION – UNIVERSITY BOOKSTORE

#		Sample #'s		Wtd
	Material Category	11	58	Avg.
1	Recyclable Glass	2.9%	0.0%	1.5%
4	Aluminum Cans	0.6%	0.5%	0.6%
5	Steel or Tin Cans	0.0%	0.0%	0.0%
8	Corrugated Cardboard	0.6%	4.4%	2.4%
9	Office Paper	7.0%	13.9%	10.3%
10	Newspaper	0.0%	1.6%	0.8%
11	Magazines	0.0%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	5.8%	12.3%	8.9%
16	Aseptic Containers	1.1%	0.0%	0.6%
17	PET Plastic Cont. (SP#1)	1.9%	2.9%	2.3%
18	HDPE Plastic Cont. (SP#2)	1.2%	0.0%	0.6%
19	Plastic Cont. (SP#3-#7)	0.8%	1.2%	1.0%
13	Total Program Recyclables	21.8%	36.7%	29.0%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.0%	0.0%
7	Other Non-Ferrous Metals	0.6%	0.3%	0.5%
20	Rigid Plastics	4.9%	5.5%	5.2%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
33	Total Other Recyclables	5.5%	5.8%	5.7%
14	Compostable Paper	23.5%	12.0%	18.0%
25	Food Waste	7.3%	13.2%	10.1%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.6%	1.5%	1.0%
28	Other Rec. Org. Waste	0.4%	0.0%	0.2%
20	Total Compostables	31.7%	26.6%	29.3%
	Total Recoverable Materials	59.0%	69.2%	63.9%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	8.5%	4.6%	6.6%
21	Plastic Bags and Film	19.8%	11.5%	15.8%
22	Styrofoam (food service)	3.0%	2.0%	2.6%
23	Styrofoam (packaging)	0.0%	0.4%	0.2%
24	All Other Plastics	0.5%	1.3%	0.9%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.0%	0.0%	0.0%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	6.4%	8.7%	7.5%
39	Liquids	2.7%	2.3%	2.5%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	41.0%	30.8%	36.1%
	GRAND TOTAL	100.0%	100.0%	100.0%

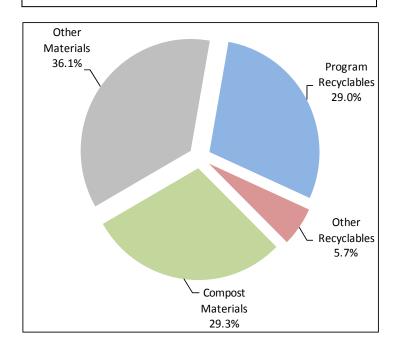


### **Building Notes**

Student Services Building – 41,410 sq. ft. Estimated Daily Waste Generated – 20 lbs/day

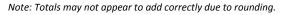
### Sample Notes

- Large amounts of program recyclables being discarded including significant amounts of office and other recyclable paper.
- Substantial amounts of plastic film used for packaging were also present in waste stream.



# STUDENT UNION - CASCADES CAFÉ

#		Samp	Sample #'s	
	Material Category	13	59	Wtd Avg.
1	Recyclable Glass	0.0%	0.4%	0.2%
4	Aluminum Cans	0.2%	0.1%	0.1%
5	Steel or Tin Cans	0.3%	0.3%	0.3%
8	Corrugated Cardboard	0.5%	0.5%	0.5%
9	Office Paper	0.4%	0.1%	0.3%
10	Newspaper	0.1%	0.4%	0.3%
11	Magazines	0.0%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	8.9%	1.5%	5.4%
16	Aseptic Containers	0.3%	0.2%	0.2%
17	PET Plastic Cont. (SP#1)	1.4%	1.4%	1.4%
18	HDPE Plastic Cont. (SP#2)	0.7%	1.1%	0.9%
19	Plastic Cont. (SP#3-#7)	1.0%	2.4%	1.7%
	Total Program Recyclables	13.7%	8.5%	11.2%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.0%	0.0%
7	Other Non-Ferrous Metals	0.2%	0.2%	0.2%
20	Rigid Plastics	5.9%	4.7%	5.3%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	6.1%	4.8%	5.5%
14	Compostable Paper	8.5%	21.7%	14.8%
25	Food Waste	36.0%	43.9%	39.8%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.1%	0.1%	0.1%
28	Other Rec. Org. Waste	0.0%	0.0%	0.0%
	Total Compostables	44.6%	65.8%	54.8%
	Total Recoverable Materials	64.5%	79.1%	71.5%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	12.3%	4.3%	8.5%
21	Plastic Bags and Film	14.6%	9.7%	12.3%
22	Styrofoam (food service)	2.7%	2.0%	2.4%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.7%	1.7%	1.2%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.0%	0.0%	0.0%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	2.4%	2.0%	2.2%
39	Liquids	2.7%	1.1%	2.0%
40	Grit All Other Materials	0.0%	0.0%	0.0%
	All Other Materials	35.5%	20.9%	28.5%
	GRAND TOTAL	100.0%	100.0%	100.0%

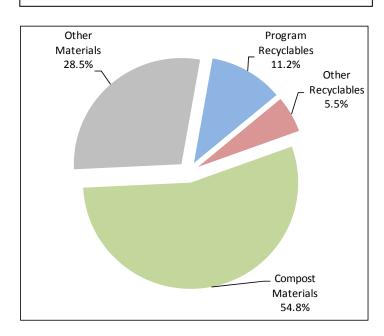




### **Building Notes**

Student Services Building –sq. ft. unknown Estimated Daily Waste Generated – 180 lbs/day

- Significant amounts of food waste present in waste stream.
- Some program recyclables being discarded.
- Large quantities of compostable paper, including bathroom tissue and food service paper.
- Many garbage and food service bags.



## STUDENT UNION - McALISTER'S DELI

		Samn	le #'s	Wtd
#	Material Category	14	60	Avg.
1	Recyclable Glass	0.0%	0.0%	0.0%
4	Aluminum Cans	0.0%	0.1%	0.0%
5	Steel or Tin Cans	0.2%	0.0%	0.1%
8	Corrugated Cardboard	0.4%	0.6%	0.5%
9	Office Paper	0.0%	1.9%	0.9%
10	Newspaper	0.0%	0.0%	0.0%
11	Magazines	0.0%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	0.6%	1.4%	0.9%
16	Aseptic Containers	0.2%	0.3%	0.2%
17	PET Plastic Cont. (SP#1)	0.3%	0.6%	0.4%
18	HDPE Plastic Cont. (SP#2)	0.4%	0.7%	0.5%
19	Plastic Cont. (SP#3-#7)	3.5%	2.2%	2.9%
	Total Program Recyclables	5.6%	7.7%	6.5%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.0%	0.0%
7	Other Non-Ferrous Metals	0.0%	0.1%	0.1%
20	Rigid Plastics	10.4%	6.6%	8.7%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	10.5%	6.6%	8.8%
14	Compostable Paper	11.9%	17.9%	14.6%
25	Food Waste	43.3%	41.8%	42.6%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.1%	0.1%
28	Other Rec. Org. Waste	0.0%	0.0%	0.0%
	Total Compostables	55.2%	59.8%	57.3%
	Total Recoverable Materials	71.2%	74.1%	72.5%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	6.6%	1.8%	4.5%
21	Plastic Bags and Film	13.4%	13.3%	13.3%
22	Styrofoam (food service)	2.6%	2.6%	2.6%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	1.8%	1.1%	1.5%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.0%	0.0%	0.0%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.3%	0.2%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	2.9%	1.9%	2.4%
39	Liquids	1.5%	4.8%	2.9%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	28.8%	25.9%	27.5%
	GRAND TOTAL	100.0%	100.0%	100.0%

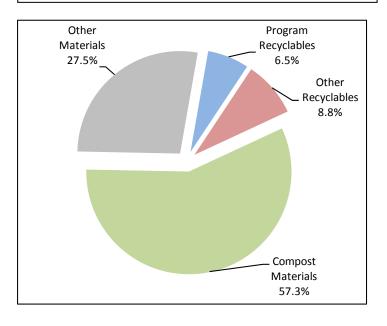


### **Building Notes**

Student Services Building – Unknown sq. ft. Estimated Daily Waste Generated – 252 lbs/day

### Sample Notes

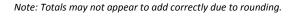
- Significant amounts of food waste present in waste stream.
- Some program recyclables being discarded.
- Large quantities of compostable paper, including bathroom tissue and food service paper.
- Many garbage and food service bags.



 $Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.$ 

## KIDD BREWER STADIUM

		Sample #
#	Material Category	45
1	Recyclable Glass	11.0%
4	Aluminum Cans	3.3%
5	Steel or Tin Cans	1.4%
8	Corrugated Cardboard	2.7%
9	Office Paper	0.7%
10	Newspaper	0.2%
11	Magazines	0.5%
12	Books	0.0%
13	Other Recyclable Paper	2.7%
16	Aseptic Containers	0.1%
17	PET Plastic Cont. (SP#1)	3.9%
18	HDPE Plastic Cont. (SP#2)	0.4%
19	Plastic Cont. (SP#3-#7)	1.3%
	Total Program Recyclables	27.9%
2	Laboratory Glass	0.0%
6	Other Ferrous Metals	0.1%
7	Other Non-Ferrous Metals	14.2%
20	Rigid Plastics	2.5%
30	Electronic Waste	0.0%
31	Technotrash	0.0%
33	White Goods/Small Apps.	0.0%
	Total Other Recyclables	16.8%
14	Compostable Paper	8.9%
25	Food Waste	15.7%
26	Yard Waste	0.0%
27	Clean Wood Waste	1.3%
28	Other Rec. Org. Waste	0.8%
	Total Compostables	26.7%
	<b>Total Recoverable Materials</b>	71.4%
3	Other Non-Rec. Glass	0.3%
15	Non-Compostable Paper	2.8%
21	Plastic Bags and Film	6.2%
22	Styrofoam (food service)	3.4%
23	Styrofoam (packaging)	0.0%
24	All Other Plastics	2.5%
29	Treated Wood Waste	0.0%
32	Textiles/Clothing	2.0%
34	All Furniture	0.0%
35	Tires/Rubber	0.0%
36	Special Waste	0.0%
37	Construction Waste	0.0%
38	All Other Garbage	2.1%
39	Liquids	9.3%
40	Grit	0.0%
	All Other Materials	28.6%
	Grand Total	100.0%

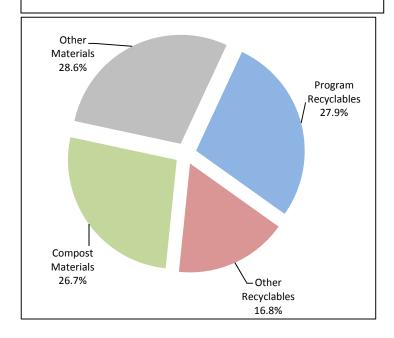




### **Building Notes**

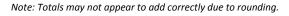
Recreation Building – 13,916 sq. ft.
Estimated Daily Waste Generated – Not Available
Sample Size – 346 lbs

- Significant quantities of program recyclables being generated at football games.
- Other non-ferrous metals consisted of pop-up tent hardware.
- Large amounts of food waste also present in waste stream.



## **ATHLETICS CENTER**

		Samp	ole #'s	Wtd
#	Material Category	37	87	Avg.
1	Recyclable Glass	0.0%	0.0%	0.0%
4	Aluminum Cans	0.3%	0.8%	0.4%
5	Steel or Tin Cans	0.2%	0.0%	0.1%
8	Corrugated Cardboard	6.1%	5.9%	6.0%
9	Office Paper	3.4%	4.6%	3.7%
10	Newspaper	0.5%	0.0%	0.4%
11	Magazines	1.3%	0.0%	0.9%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	2.4%	9.9%	4.3%
16	Aseptic Containers	0.6%	0.8%	0.7%
17	PET Plastic Cont. (SP#1)	3.1%	3.2%	3.1%
18	HDPE Plastic Cont. (SP#2)	1.4%	0.0%	1.1%
19	Plastic Cont. (SP#3-#7)	1.2%	0.9%	1.1%
	Total Program Recyclables	20.4%	26.0%	21.8%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.2%	0.3%	0.2%
7	Other Non-Ferrous Metals	0.0%	0.3%	0.1%
20	Rigid Plastics	4.7%	1.0%	3.8%
30	Electronic Waste	0.2%	0.0%	0.1%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	5.0%	1.7%	4.2%
14	Compostable Paper	11.4%	15.1%	12.3%
25	Food Waste	11.5%	10.7%	11.3%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.1%	0.3%	0.1%
28	Other Rec. Org. Waste	0.1%	1.1%	0.3%
	Total Compostables	23.1%	27.1%	24.1%
	<b>Total Recoverable Materials</b>	48.5%	54.7%	50.0%
3	Other Non-Rec. Glass	0.0%	2.4%	0.6%
15	Non-Compostable Paper	0.8%	0.8%	0.8%
21	Plastic Bags and Film	15.8%	14.5%	15.5%
22	Styrofoam (food service)	0.7%	0.6%	0.6%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.8%	2.6%	1.2%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	1.4%	1.2%	1.3%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.4%	0.1%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	12.4%	0.0%	9.3%
38	All Other Garbage	17.7%	15.7%	17.2%
39	Liquids	2.0%	7.1%	3.3%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	51.5%	43.5%	50.0%
	Grand Total	100.0%	100.0%	100.0%

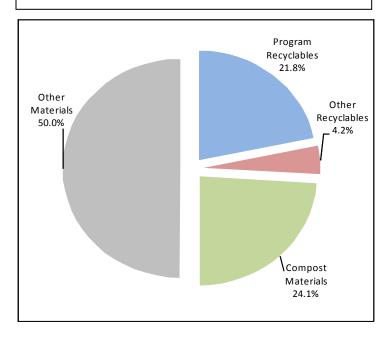




### **Building Notes**

Recreation Building – sq. ft. unknown Estimated Daily Waste Generated – 75 lbs/day

- Large amounts of program recyclables being discarded.
- Many small garbage bags with little content, combined within larger bags.
- Significant quantities of compostable materials present in waste stream.
- Substantial amount of athletic wrap and tape rolls, that could be used further, found in



## STUDENT RECREATION CENTER

		Samr	ole #'s	Wtd
#	Material Category	27	70	Avg.
1	Recyclable Glass	0.0%	0.0%	0.0%
4	Aluminum Cans	0.5%	0.4%	0.5%
5	Steel or Tin Cans	0.0%	0.2%	0.1%
8	Corrugated Cardboard	0.0%	0.7%	0.3%
9	Office Paper	1.9%	1.7%	1.8%
10	Newspaper	0.8%	0.4%	0.6%
11	Magazines	0.0%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	1.8%	2.3%	2.0%
16	Aseptic Containers	0.0%	0.1%	0.0%
17	PET Plastic Cont. (SP#1)	3.6%	3.3%	3.4%
18	HDPE Plastic Cont. (SP#2)	1.2%	0.3%	0.8%
19	Plastic Cont. (SP#3-#7)	1.0%	0.5%	0.8%
	<b>Total Program Recyclables</b>	10.8%	9.8%	10.4%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.9%	0.4%
7	Other Non-Ferrous Metals	0.0%	0.9%	0.4%
20	Rigid Plastics	3.1%	2.8%	3.0%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	3.1%	4.6%	3.8%
14	Compostable Paper	37.9%	34.5%	36.4%
25	Food Waste	6.8%	11.0%	8.7%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	5.8%	2.6%	4.4%
	Total Compostables	50.6%	48.1%	49.5%
	Total Recoverable Materials	64.6%	62.6%	63.7%
3	Other Non-Rec. Glass	0.3%	0.0%	0.1%
15	Non-Compostable Paper	2.0%	2.5%	2.2%
21	Plastic Bags and Film	18.3%	18.7%	18.5%
22	Styrofoam (food service)	0.9%	0.8%	0.9%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.8%	0.8%	0.8%
29	Treated Wood Waste	0.0%	0.1%	0.0%
32	Textiles/Clothing	0.7%	4.3%	2.3%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.2%	0.1%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	5.8%	7.0%	6.4%
39	Liquids	6.6%	3.1%	5.0%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	35.4%	37.4%	36.3%
	Grand Total	100.0%	100.0%	100.0%

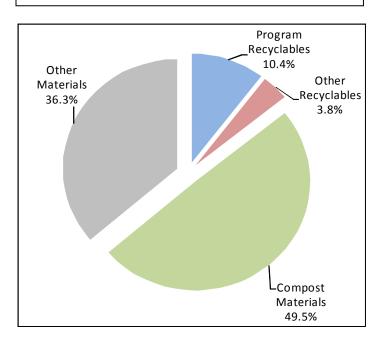
 ${\it Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.}$ 



### **Building Notes**

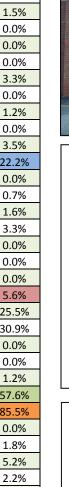
Recreation Building – 125,129 sq. ft. Estimated Daily Waste Generated – 58 lbs/day

- Significant amounts of compostable paper and food waste present in waste stream.
- Some program recyclables being discarded.
- Large amounts of plastic bags and film found in waste stream.
- Large number of hand wipes found as well.



## **LEGENDS**

		Samp	ole #'s	Wtd
#	Material Category	41	78	Avg.
1	Recyclable Glass	0.0%	6.6%	4.7%
4	Aluminum Cans	0.0%	3.8%	2.7%
5	Steel or Tin Cans	0.0%	0.0%	0.0%
8	Corrugated Cardboard	18.5%	0.0%	5.3%
9	Office Paper	3.0%	0.9%	1.5%
10	Newspaper	0.0%	0.0%	0.0%
11	Magazines	0.0%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	4.3%	2.9%	3.3%
16	Aseptic Containers	0.0%	0.0%	0.0%
17	PET Plastic Cont. (SP#1)	4.3%	0.0%	1.2%
18	HDPE Plastic Cont. (SP#2)	0.0%	0.0%	0.0%
19	Plastic Cont. (SP#3-#7)	5.1%	2.9%	3.5%
	<b>Total Program Recyclables</b>	35.2%	17.0%	22.2%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	1.0%	0.7%
7	Other Non-Ferrous Metals	0.0%	2.3%	1.6%
20	Rigid Plastics	4.0%	3.0%	3.3%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	4.0%	6.3%	5.6%
14	Compostable Paper	24.2%	26.0%	25.5%
25	Food Waste	15.1%	37.2%	30.9%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	1.1%	1.3%	1.2%
	Total Compostables	40.3%	64.5%	57.6%
	<b>Total Recoverable Materials</b>	79.6%	87.8%	85.5%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	2.4%	1.5%	1.8%
21	Plastic Bags and Film	9.9%	3.2%	5.2%
22	Styrofoam (food service)	4.0%	1.4%	2.2%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	3.0%	2.4%	2.5%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.0%	0.9%	0.6%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	1.3%	0.9%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	1.1%	1.5%	1.4%
39	Liquids	0.0%	0.0%	0.0%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	20.4%	12.2%	14.5%
	Grand Total	100.0%	100.0%	100.0%



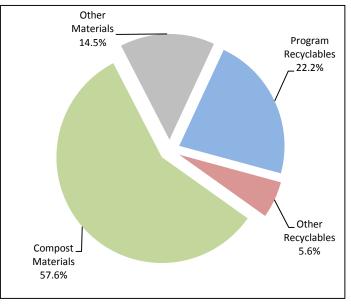


### **Building Notes**

Recreation Building – 15,162 sq. ft. Estimated Daily Waste Generated – 13 lbs/day

### Sample Notes

- Overall Legends does a great job recycling the majority of the waste being generated.
- On average just 13 pounds of waste was generated each night.
- Some program recyclables still remain in waste stream.
- The majority of the waste stream is compostable.



### APPENDIX F

## **CENTRAL DINING**

### Independent sample results on next page

Inde	Independent sample results on next page								
#	Material Category	Weighted Average							
1	Recyclable Glass	0.4%							
4	Aluminum Cans	0.1%							
5	Steel or Tin Cans	0.9%							
8	Corrugated Cardboard	2.5%							
9	Office Paper	0.6%							
10	Newspaper	0.2%							
11	Magazines	0.2%							
12	Books	0.0%							
13	Other Recyclable Paper	3.5%							
16	Aseptic Containers	0.7%							
17	PET Plastic Cont. (SP#1)	0.9%							
18	HDPE Plastic Cont. (SP#2)	2.0%							
19	Plastic Cont. (SP#3-#7)	1.5%							
	Total Program Recyclables	13.3%							
2	Laboratory Glass	0.0%							
6	Other Ferrous Metals	0.1%							
7	Other Non-Ferrous Metals	1.0%							
20	Rigid Plastics	3.8%							
30	Electronic Waste	0.0%							
31	Technotrash	0.0%							
33	White Goods/Small Apps.	0.0%							
	Total Other Recyclables	4.9%							
14	Compostable Paper	16.7%							
25	Food Waste	41.3%							
26	Yard Waste	0.0%							
27	Clean Wood Waste	0.5%							
28	Other Rec. Org. Waste	0.0%							
	Total Compostables	58.5%							
	Total Recoverable Materials	76.8%							
3	Other Non-Rec. Glass	0.0%							
15	Non-Compostable Paper	3.1%							
21	Plastic Bags and Film	12.8%							
22	Styrofoam (food service)	1.8%							
23	Styrofoam (packaging)	0.0%							
24	All Other Plastics	1.4%							
29	Treated Wood Waste	0.0%							
32	Textiles/Clothing	0.4%							
34	All Furniture	0.0%							
35	Tires/Rubber	0.3%							
36	Special Waste	0.1%							
37	Construction Waste	0.0%							
38	All Other Garbage	2.2%							
39	Liquids	1.2%							
40	Grit	0.0%							
	All Other Materials	23.2%							
	Grand Total	100.0%							

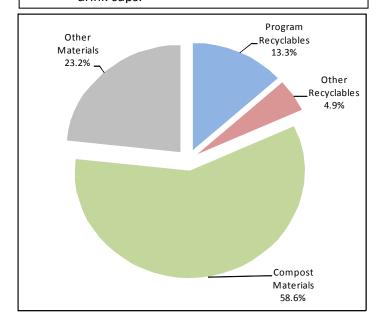


### **Building Notes**

Student Services – 84,744 sq. ft.
Estimated Daily Waste Generated – Not Available
Average Sample Size - 321 lbs

### Sample Notes

- Substantial amounts of food waste and compostable paper generated in the Central Dining Hall.
- Some program recyclables being discarded.
- Large amounts of garbage and food service bags found in waste stream.
- Non-compostable paper consists of paper drink cups.



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

### APPENDIX F

# **CENTRAL DINING**

	Independent Sample Weighted Averages		ining Hall	River	Street	Sanford Commons		
#	Material Category	28	76	44	90	43	89	
1	Recyclable Glass	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	
4	Aluminum Cans	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
5	Steel or Tin Cans	1.3%	0.4%	0.0%	0.0%	0.0%	0.0%	
8	Corrugated Cardboard	2.0%	3.0%	0.0%	0.0%	0.0%	0.0%	
9	Office Paper	0.3%	0.9%	0.0%	0.0%	0.0%	0.0%	
10	Newspaper	0.2%	0.1%	0.4%	0.0%	0.0%	0.0%	
11	Magazines	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
12	Books	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
13	Other Recyclable Paper	2.2%	5.0%	1.6%	6.6%	7.7%	5.7%	
16	Aseptic Containers	0.9%	0.4%	3.2%	1.0%	0.4%	0.6%	
17	PET Plastic Cont. (SP#1)	1.6%	0.2%	0.0%	0.0%	1.2%	0.0%	
18	HDPE Plastic Cont. (SP#2)	3.5%	0.3%	0.0%	0.0%	0.0%	7.1%	
19	Plastic Cont. (SP#3-#7)	1.3%	1.7%	4.2%	1.9%	0.8%	1.5%	
	Total Program Recyclables	14.5%	11.9%	9.4%	9.5%	10.1%	14.9%	
2	Laboratory Glass	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
6	Other Ferrous Metals	0.0%	0.2%	0.0%	0.7%	0.0%	0.6%	
7	Other Non-Ferrous Metals	1.1%	0.9%	1.2%	1.9%	0.2%	1.2%	
20	Rigid Plastics	4.5%	3.1%	4.4%	3.7%	5.2%	5.7%	
30	Electronic Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
31	Technotrash	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
33	White Goods/Small Apps.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Total Other Recyclables	5.6%	4.2%	5.7%	6.4%	5.4%	7.5%	
14	Compostable Paper	15.9%	17.5%	36.8%	26.3%	20.8%	19.5%	
25	Food Waste	39.1%	43.8%	36.9%	43.1%	38.8%	37.1%	
26	Yard Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
27	Clean Wood Waste	0.7%	0.3%	0.0%	0.6%	0.0%	0.0%	
28	Other Rec. Org. Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Total Compostables	55.8%	61.7%	73.7%	69.9%	59.6%	46.6%	
	Total Recoverable Materials	75.8%	77.8%	88.8%	85.8%	75.1%	79.0%	
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
15	Non-Compostable Paper	2.0%	4.3%	4.9%	4.2%	4.6%	3.2%	
21	Plastic Bags and Film	12.8%	12.9%	2.9%	1.9%	8.3%	10.7%	
22	Styrofoam (food service)	2.2%	1.3%	2.0%	3.0%	2.0%	1.9%	
23	Styrofoam (packaging)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
24	All Other Plastics	1.5%	1.2%	0.0%	0.6%	1.1%	0.0%	
29	Treated Wood Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
32	Textiles/Clothing	0.7%	0.0%	0.7%	0.0%	0.0%	2.4%	
34	All Furniture	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
35	Tires/Rubber	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	
36	Special Waste	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	
37	Construction Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
38	All Other Garbage	2.5%	1.9%	0.7%	1.0%	3.4%	1.5%	
39	Liquids	2.0%	0.4%	0.0%	3.6%	5.6%	1.3%	
40	Grit	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	All Other Materials	24.2%	22.2%	11.2%	14.2%	24.9%	21.0%	
	<b>Grand Total</b>	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

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

### APPENDIX G

# PHYSICAL PLANT

### Independent sample results on next page

mut	ependent sample results on ne	
#	Material Category	Weighted Average
1	Recyclable Glass	1.0%
4	Aluminum Cans	1.2%
5	Steel or Tin Cans	1.8%
8	Corrugated Cardboard	3.9%
9	Office Paper	1.8%
10	Newspaper	1.2%
11	Magazines	1.7%
12	Books	0.0%
13	Other Recyclable Paper	4.4%
16	Aseptic Containers	0.0%
17	PET Plastic Cont. (SP#1)	2.4%
18	HDPE Plastic Cont. (SP#2)	4.9%
19	Plastic Cont. (SP#3-#7)	1.7%
	Total Program Recyclables	26.0%
2	Laboratory Glass	0.0%
6	Other Ferrous Metals	10.2%
7	Other Non-Ferrous Metals	1.3%
20	Rigid Plastics	3.2%
30	Electronic Waste	0.6%
31	Technotrash	0.0%
33	White Goods/Small Apps.	0.0%
	Total Other Recyclables	15.2%
14	Compostable Paper	15.4%
25	Food Waste	9.0%
26	Yard Waste	0.0%
27	Clean Wood Waste	0.5%
28	Other Rec. Org. Waste	0.0%
	Total Compostables	25.0%
	Total Recoverable Materials	66.2%
3	Other Non-Rec. Glass	0.3%
15	Non-Compostable Paper	1.2%
21	Plastic Bags and Film	7.6%
22	Styrofoam (food service)	2.2%
23	Styrofoam (packaging)	0.0%
24	All Other Plastics	3.2%
29	Treated Wood Waste	0.1%
32	Textiles/Clothing	1.5%
34	All Furniture	0.0%
35	Tires/Rubber	0.7%
36	Special Waste	0.3%
37	Construction Waste	3.0%
38	All Other Garbage	5.2%
39	Liquids	6.9%
40	Grit	1.8%
70	All Other Materials	33.8%
	Grand Total	100.0%
	Granu Total	100.070

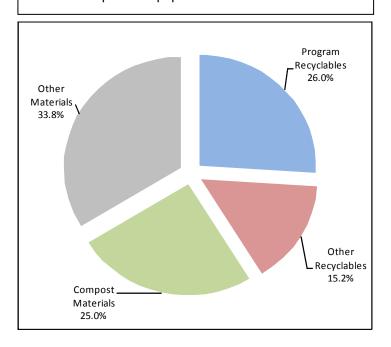
Note: Totals may not appear to add correctly due to rounding.



### **Building Notes**

Academic Support – sq. ft. unknown Estimated Daily Waste Generated – 100 lbs/dau

- Large amounts of program recyclables being discarded.
- Ferrous and non-ferrous metals found in waste stream.
- Many HDEP oil bottles found in Motor Pool waste stream.
- Significant quantities of food waste and compostable paper found in waste stream.



### APPENDIX G

# PHYSICAL PLANT

	Independent Sample Weighted Averages		entry	Elec	trical	Landscape			Lock	Lock Shop	
#	Material Category	23	65	19	67	16	69	63	21	81	
1	Recyclable Glass	0.0%	0.0%	0.0%	0.0%	6.9%	0.0%	0.0%	0.0%	0.0%	
4	Aluminum Cans	0.0%	1.0%	1.3%	1.2%	0.9%	0.5%	2.5%	0.0%	11.4%	
5	Steel or Tin Cans	0.0%	0.9%	0.0%	0.0%	2.0%	1.4%	2.8%	0.0%	0.0%	
8	Corrugated Cardboard	0.0%	0.0%	0.0%	5.3%	2.7%	0.0%	3.0%	24.8%	0.0%	
9	Office Paper	0.0%	0.0%	0.0%	2.0%	2.9%	0.0%	1.5%	0.0%	0.0%	
10	Newspaper	0.0%	0.0%	3.8%	6.6%	1.1%	0.0%	0.0%	0.0%	0.0%	
11	Magazines	29.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
12	Books	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
13	Other Recyclable Paper	4.0%	6.4%	4.1%	4.7%	3.8%	4.7%	4.6%	0.0%	22.9%	
16	Aseptic Containers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
17	PET Plastic Cont. (SP#1)	2.5%	1.2%	0.8%	0.0%	3.0%	0.0%	0.0%	0.0%	5.7%	
18	HDPE Plastic Cont. (SP#2)	4.3%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	0.0%	
19	Plastic Cont. (SP#3-#7)	2.8%	0.0%	1.4%	0.0%	2.3%	3.5%	3.4%	0.0%	8.6%	
	<b>Total Program Recyclables</b>	43.5%	9.5%	11.5%	19.8%	27.3%	10.2%	18.0%	24.8%	48.6%	
2	Laboratory Glass	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
6	Other Ferrous Metals	0.0%	7.8%	27.8%	6.7%	4.6%	1.2%	2.1%	0.0%	0.0%	
7	Other Non-Ferrous Metals	0.0%	0.0%	0.0%	8.2%	0.5%	0.7%	2.2%	0.0%	0.0%	
20	Rigid Plastics	0.0%	0.3%	4.8%	12.1%	3.2%	1.4%	2.4%	20.5%	0.0%	
30	Electronic Waste	0.0%	0.0%	0.0%	8.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
31	Technotrash	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
33	White Goods/Small Apps.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Total Other Recyclables	0.0%	8.2%	32.7%	35.1%	8.3%	3.3%	6.7%	20.5%	0.0%	
14	Compostable Paper	18.0%	4.2%	5.6%	9.0%	29.0%	48.9%	21.9%	15.4%	5.7%	
25	Food Waste	0.0%	23.8%	2.6%	7.4%	10.1%	9.7%	18.7%	0.0%	0.0%	
26	Yard Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
27	Clean Wood Waste	4.3%	7.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
28	Other Rec. Org. Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Total Compostables	22.4%	35.2%	8.2%	16.5%	39.1%	58.6%	40.6%	15.4%	5.7%	
	Total Recoverable Materials	65.8%	53.0%	52.4%	71.4%	74.7%	72.1%	65.4%	60.7%	54.3%	
3	Other Non-Rec. Glass	0.0%	0.0%	1.3%	1.0%	0.9%	0.0%	0.0%	0.0%	0.0%	
15	Non-Compostable Paper	0.0%	0.0%	1.8%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	
21	Plastic Bags and Film	7.8%	10.4%	4.3%	7.8%	2.3%	2.4%	0.0%	39.3%	42.9%	
22	Styrofoam (food service)	7.5%	1.2%	1.1%	3.8%	3.1%	13.7%	10.0%	0.0%	0.0%	
23	Styrofoam (packaging)	0.0%	0.0%	0.0%	0.0%	4.7%	2.1%	4.5%	0.0%	0.0%	
24	All Other Plastics	0.0%	35.4%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	
29	Treated Wood Waste	0.0%	0.0%	0.0%	1.4%	0.0%	0.0%	1.3%	0.0%	0.0%	
32	Textiles/Clothing	0.0%	0.0%	2.2%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	
34	All Furniture	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	
35	Tires/Rubber	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
36	Special Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	3.3%	0.0%	0.0%	
37	Construction Waste	0.0%	0.0%	12.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
38	All Other Garbage	1.9%	0.0%	15.1%	3.6%	0.0%	0.0%	0.0%	0.0%	2.9%	
39	Liquids	17.1%	0.0%	9.5%	0.0%	6.6%	6.6%	4.5%	0.0%	0.0%	
40	Grit	0.0%	0.0%	0.0%	1.6%	8.6%	2.4%	10.9%	0.0%	0.0%	
	All Other Materials	34.2%	47.0%	47.6%	28.6%	25.3%	27.9%	34.6%	39.3%	45.7%	
	Grand Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

### APPENDIX G

# PHYSICAL PLANT

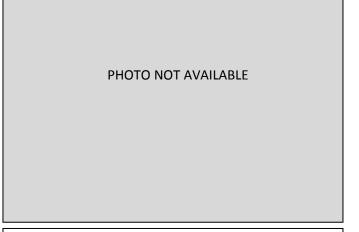
	Independent Sample Weighted Averages	Mech	anical	N	/lotor Poo	ol	Office	Pai	nts	Tele	com	Printing
#	Material Category	22	68	17	61	66	40	20	62	18	61	64
1	Recyclable Glass	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	12.5%	0.0%
4	Aluminum Cans	0.0%	0.0%	1.1%	0.8%	2.2%	4.3%	0.0%	0.0%	4.3%	3.3%	0.0%
5	Steel or Tin Cans	6.0%	2.7%	1.0%	1.5%	0.0%	4.8%	14.4%	0.0%	4.8%	7.3%	0.0%
8	Corrugated Cardboard	0.0%	25.6%	0.0%	6.8%	0.0%	0.0%	0.0%	22.0%	0.0%	0.0%	0.0%
9	Office Paper	0.0%	8.9%	0.7%	0.7%	5.2%	0.3%	0.0%	0.0%	0.3%	9.9%	0.0%
10	Newspaper	0.0%	0.0%	0.0%	0.0%	6.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
11	Magazines	0.0%	0.0%	5.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
12	Books	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
13	Other Recyclable Paper	8.0%	3.9%	7.5%	1.6%	0.3%	0.3%	0.0%	1.3%	0.3%	0.0%	7.1%
16	Aseptic Containers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
17	PET Plastic Cont. (SP#1)	3.7%	0.0%	2.1%	11.4%	3.3%	0.0%	0.0%	0.0%	0.0%	4.0%	1.9%
18	HDPE Plastic Cont. (SP#2)	0.0%	0.0%	15.4%	18.8%	0.0%	5.1%	0.0%	0.0%	5.1%	0.0%	4.2%
19	Plastic Cont. (SP#3-#7)	0.0%	1.6%	2.7%	0.8%	0.0%	2.1%	0.0%	0.0%	2.1%	0.0%	6.6%
	Total Program Recyclables	17.7%	42.7%	35.6%	42.2%	17.3%	16.8%	14.4%	23.3%	16.8%	37.0%	19.8%
2	Laboratory Glass	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.0%	0.0%	28.6%	12.2%	0.0%	2.9%	0.0%	4.0%	2.9%	0.0%	0.0%
7	Other Non-Ferrous Metals	0.9%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	9.9%
20	Rigid Plastics	1.5%	1.7%	1.8%	1.7%	0.3%	1.3%	5.3%	4.0%	1.3%	8.1%	1.9%
30	Electronic Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
31	Technotrash	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total Other Recyclables	2.4%	1.7%	30.4%	14.4%	0.3%	4.3%	5.3%	8.0%	4.3%	11.0%	11.8%
14	Compostable Paper	16.4%	5.8%	9.6%	11.4%	9.6%	40.3%	19.7%	2.0%	40.3%	17.9%	29.2%
25	Food Waste	8.6%	12.9%	3.7%	0.0%	7.1%	28.5%	0.0%	0.0%	28.5%	19.8%	23.6%
26	Yard Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Total Compostables	25.0%	18.7%	13.3%	11.4%	16.7%	68.8%	19.8%	2.0%	68.8%	37.7%	52.8%
	Total Recoverable Materials	45.0%	63.1%	79.3%	68.0%	34.2%	89.9%	39.4%	33.3%	89.9%	85.7%	84.4%
3	Other Non-Rec. Glass	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
15	Non-Compostable Paper	1.5%	1.5%	0.4%	0.7%	0.5%	1.1%	0.0%	0.0%	1.1%	0.0%	2.8%
21	Plastic Bags and Film	11.2%	13.1%	4.4%	2.5%	7.7%	5.1%	26.5%	13.3%	5.1%	10.6%	5.7%
22	Styrofoam (food service)	3.0%	1.3%	0.4%	0.6%	0.0%	1.9%	4.5%	0.0%	1.9%	3.7%	3.3%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
24	All Other Plastics	0.0%	2.4%	2.3%	0.6%	0.0%	2.1%	10.6%	0.0%	2.1%	0.0%	0.0%
29	Treated Wood Waste	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.0%	3.4%	0.0%	2.9%	0.0%	0.0%	15.2%	18.7%	0.0%	0.0%	0.0%
34	All Furniture	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	2.1%	0.6%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	2.4%
36	Special Waste	0.0%	3.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
37	Construction Waste	29.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	31.3%	0.0%	0.0%	0.0%
38	All Other Garbage	9.5%	2.8%	8.7%	0.6%	0.0%	0.0%	3.8%	1.3%	0.0%	0.0%	1.4%
39	Liquids	0.0%	6.2%	2.0%	9.1%	57.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
40	Grit	0.0%	2.6%	0.0%	14.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
.0	All Other Materials	55.0%	36.9%	20.7%	32.0%	65.8%	10.1%	60.6%	66.7%	10.1%	14.3%	15.6%
	Cirici iriateriais	55.070	33.370	20.770	32.070	03.070	10.170			10.170	17.570	13.070

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

## **AUXILLARY WAREHOUSE**

		Samp	Wtd	
#	Material Category	39	88	Avg.
1	Recyclable Glass	0.0%	0.0%	0.0%
4	Aluminum Cans	0.2%	1.1%	0.5%
5	Steel or Tin Cans	2.4%	0.0%	1.7%
8	Corrugated Cardboard	4.9%	0.0%	3.5%
9	Office Paper	11.6%	22.3%	14.8%
10	Newspaper	0.5%	3.9%	1.5%
11	Magazines	0.5%	3.9%	1.5%
12	Books	3.2%	0.0%	2.3%
13	Other Recyclable Paper	6.5%	5.7%	6.3%
16	Aseptic Containers	0.0%	1.1%	0.3%
17	PET Plastic Cont. (SP#1)	0.4%	2.8%	1.1%
18	HDPE Plastic Cont. (SP#2)	0.0%	0.0%	0.0%
19	Plastic Cont. (SP#3-#7)	0.0%	0.9%	0.3%
	<b>Total Program Recyclables</b>	30.3%	41.8%	33.7%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.5%	0.0%	0.4%
7	Other Non-Ferrous Metals	0.9%	0.2%	0.7%
20	Rigid Plastics	1.1%	3.2%	1.7%
30	Electronic Waste	0.0%	0.0%	0.0%
31	Technotrash	0.2%	0.0%	0.2%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	2.7%	3.4%	3.0%
14	Compostable Paper	6.3%	23.7%	11.5%
25	Food Waste	3.9%	17.9%	8.1%
26	Yard Waste	0.0%	0.0%	0.0%
27	Clean Wood Waste	0.0%	0.0%	0.0%
28	Other Rec. Org. Waste	0.0%	0.0%	0.0%
	Total Compostables	10.2%	41.6%	19.5%
	Total Recoverable Materials	43.3%	86.9%	56.2%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	0.5%	2.1%	1.0%
21	Plastic Bags and Film	8.0%	4.8%	7.1%
22	Styrofoam (food service)	0.8%	0.7%	0.8%
23	Styrofoam (packaging)	0.0%	0.0%	0.0%
24	All Other Plastics	0.9%	0.5%	0.8%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	1.7%	0.0%	1.2%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.0%	0.0%	0.0%
36	Special Waste	0.0%	0.0%	0.0%
37	Construction Waste	43.1%	0.0%	30.3%
38	All Other Garbage	1.7%	3.0%	2.1%
39	Liquids	0.0%	2.1%	0.6%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	56.7%	13.1%	43.8%
	Grand Total	100.0%	100.0%	100.0%

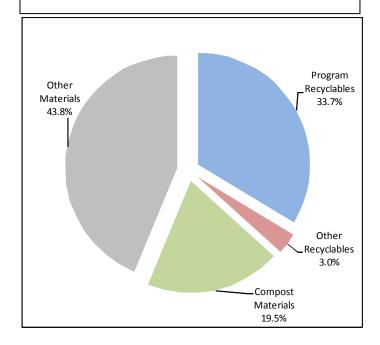
 ${\it Note: Totals \ may \ not \ appear \ to \ add \ correctly \ due \ to \ rounding.}$ 



### **Building Notes**

Physical Services Building – 11,042 sq. ft. Estimated Daily Waste Generated – 35 lbs/day

- Large amounts of program recyclables being discarded including significant amounts of shredded office paper.
- Significant quantities of compostable paper and food waste in waste stream.
- Large amounts of construction and demolition debris waste including ceiling tiles and carpet.



## LUCY BROCK CHILD CENTER

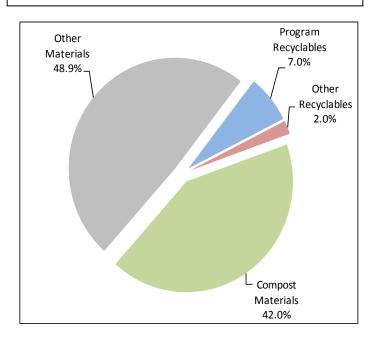
		Samp	Sample #'s		
#	Material Category	26	73	Wtd Avg.	
1	Recyclable Glass	0.0%	4.6%	2.4%	
4	Aluminum Cans	0.0%	0.0%	0.0%	
5	Steel or Tin Cans	0.0%	0.0%	0.0%	
8	Corrugated Cardboard	0.0%	0.0%	0.0%	
9	Office Paper	0.4%	1.0%	0.7%	
10	Newspaper	0.0%	0.0%	0.0%	
11	Magazines	0.0%	0.0%	0.0%	
12	Books	0.0%	0.0%	0.0%	
13	Other Recyclable Paper	0.0%	2.1%	1.1%	
16	Aseptic Containers	0.9%	1.0%	1.0%	
17	PET Plastic Cont. (SP#1)	0.4%	0.0%	0.2%	
18	HDPE Plastic Cont. (SP#2)	2.2%	0.0%	1.1%	
19	Plastic Cont. (SP#3-#7)	0.0%	1.3%	0.7%	
	<b>Total Program Recyclables</b>	3.9%	10.0%	7.0%	
2	Laboratory Glass	0.0%	0.0%	0.0%	
6	Other Ferrous Metals	0.5%	0.4%	0.4%	
7	Other Non-Ferrous Metals	0.0%	0.3%	0.2%	
20	Rigid Plastics	0.7%	1.5%	1.1%	
30	Electronic Waste	0.0%	0.0%	0.0%	
31	Technotrash	0.6%	0.0%	0.3%	
33	White Goods/Small Apps.	0.0%	0.0%	0.0%	
	<b>Total Other Recyclables</b>	1.7%	2.2%	2.0%	
14	Compostable Paper	27.8%	20.3%	24.0%	
25	Food Waste	15.3%	20.4%	17.9%	
26	Yard Waste	0.0%	0.0%	0.0%	
27	Clean Wood Waste	0.3%	0.0%	0.1%	
28	Other Rec. Org. Waste	0.0%	0.0%	0.0%	
	Total Compostables	43.4%	40.7%	42.0%	
1	otal Recoverable Materials	49.1%	52.9%	51.1%	
3	Other Non-Rec. Glass	0.0%	0.6%	0.3%	
15	Non-Compostable Paper	0.9%	0.6%	0.7%	
21	Plastic Bags and Film	10.3%	8.2%	9.3%	
22	Styrofoam (food service)	0.3%	0.7%	0.5%	
23	Styrofoam (packaging)	0.0%	0.0%	0.0%	
24	All Other Plastics	1.6%	1.6%	1.6%	
29	Treated Wood Waste	0.0%	0.2%	0.1%	
32	Textiles/Clothing	0.0%	0.0%	0.0%	
34	All Furniture	0.0%	0.0%	0.0%	
35	Tires/Rubber	0.0%	0.0%	0.0%	
36	Special Waste	0.0%	0.0%	0.0%	
37	Construction Waste	0.0%	0.0%	0.0%	
38	All Other Garbage	37.7%	35.1%	36.4%	
39	Liquids	0.0%	0.0%	0.0%	
40	Grit	0.0%	0.0%	0.0%	
	All Other Materials	50.9%	47.1%	48.9%	
	GRANDT QTAInay not appear to	al 2000 2011 ec	tly 1902 9%ro	unding.0%	



### **Building Notes**

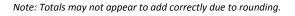
Student Services Building – 3,550 sq. ft. Estimated Daily Waste Generated– 54 lbs/day

- Significant amounts of food waste and compostable paper present in waste stream.
- Waste specific to building activities included diapers, metal utensils, and gloves.
- Technologic/electronic waste included cassette tapes.



## MILES ANNAS STUDENT SERVICES

#		Samp	Wtd	
	Material Category	34	83	Avg.
1	Recyclable Glass	0.6%	2.0%	1.2%
4	Aluminum Cans	0.3%	0.6%	0.4%
5	Steel or Tin Cans	0.3%	0.3%	0.3%
8	Corrugated Cardboard	0.0%	0.0%	0.0%
9	Office Paper	4.7%	4.8%	4.7%
10	Newspaper	0.1%	1.6%	0.7%
11	Magazines	2.9%	1.6%	2.3%
12	Books	0.0%	0.0%	0.0%
13	Other Recyclable Paper	8.8%	7.9%	8.4%
16	Aseptic Containers	0.0%	0.0%	0.0%
17	PET Plastic Cont. (SP#1)	2.0%	2.8%	2.4%
18	HDPE Plastic Cont. (SP#2)	0.5%	0.0%	0.3%
19	Plastic Cont. (SP#3-#7)	0.7%	1.7%	1.1%
	Total Program Recyclables	20.8%	23.1%	21.8%
2	Laboratory Glass	0.0%	0.0%	0.0%
6	Other Ferrous Metals	0.1%	0.0%	0.0%
7	Other Non-Ferrous Metals	0.5%	0.2%	0.4%
20	Rigid Plastics	2.9%	2.1%	2.5%
30	Electronic Waste	0.2%	0.0%	0.1%
31	Technotrash	0.0%	0.0%	0.0%
33	White Goods/Small Apps.	0.0%	0.0%	0.0%
	Total Other Recyclables	3.7%	2.3%	3.1%
14	Compostable Paper	20.5%	23.6%	21.9%
25	Food Waste	13.2%	12.0%	12.6%
26	Yard Waste	0.0%	0.1%	0.1%
27	Clean Wood Waste	0.4%	0.4%	0.4%
28	Other Rec. Org. Waste	0.3%	1.1%	0.7%
	Total Compostables	34.3%	37.2%	35.6%
	<b>Total Recoverable Materials</b>	58.8%	62.7%	60.5%
3	Other Non-Rec. Glass	0.0%	0.0%	0.0%
15	Non-Compostable Paper	1.2%	2.4%	1.8%
21	Plastic Bags and Film	6.6%	5.9%	6.3%
22	Styrofoam (food service)	1.5%	1.4%	1.5%
23	Styrofoam (packaging)	0.0%	0.1%	0.1%
24	All Other Plastics	3.8%	4.9%	4.3%
29	Treated Wood Waste	0.0%	0.0%	0.0%
32	Textiles/Clothing	0.5%	1.0%	0.7%
34	All Furniture	0.0%	0.0%	0.0%
35	Tires/Rubber	0.2%	0.0%	0.1%
36	Special Waste	7.3%	0.9%	4.5%
37	Construction Waste	0.0%	0.0%	0.0%
38	All Other Garbage	18.0%	15.7%	17.0%
39	Liquids	2.0%	5.0%	3.3%
40	Grit	0.0%	0.0%	0.0%
	All Other Materials	41.2%	37.3%	39.5%
	GRAND TOTAL	100.0%	100.0%	100.0%





### **Building Notes**

Student Services Building – 47,070 sq. ft. Estimated Daily Waste Generated – 65 lbs/day

- Large amounts of program recyclables found in waste stream.
- Waste specific to building activities included gloves and strapping, pipette tips, wooden tongue depressors, tourniquets, medical packaging, and hygienic paper.
- Special waste included medical waste, needles, blood and I.V. bags.

