University of Arkansas Recycling KPI 2009-2013



Sustainability House 26 February 2014

Overview

This project outlines the current trends of recycling efforts on the University of Arkansas Campus. As part of the process of preparing a new recycling policy for campus, it is necessary that a baseline of previous recycling efforts is provided.

Contacts

Carlos Ochoa Marty Matlock Rachel Kraus OFS, Director OFS, Executive Director OFS, Intern 479-466-8637 479-575-2849 469-777-2544 cochoajr@uark.edu mmatlock@uark.edu rkraus@uark.edu

Gary Enzor Recycling Foreman 479-575-3028 genzor@uark.edu

Methodology

The numbers included in this report are only those from the efforts of Razorback Recycling who collects from all E&G (Education and General Purpose) buildings on campus. While it is not a complete study of all recycling on campus, the numbers given are the most susceptible to change with a new recycling policy and are thus the most relevant.

Table 1. Razorback Recycling recycling totals, 2009-2013

CALENDAR	PRODUCT GRADES						
YEAR	C & B	SWL	MIX	PMX	OFW	ONP	OCC
2013	20.59	62.71	85.38	46.13	13.62	37.53	152.79
2012	19.79	68.24	97.42	47.43	21.04	56.11	126.37
2011	15.19	61.75	100.56	46.87	24.13	52.26	122.19
2010	18.75	58.70	85.33	34.91	34.80	63.70	96.32
2009	17.62	77.75	113.85	41.39	26.18	89.03	83.45
PRODUCT	01 0/	220 15	182 54	216 72	110 77	208 63	591 12

ANNUAL				
TOTALS				
418.75				
436.40				
422.95				
392.51				
449.27				

PRODUCT	01.04	220.45	402.54	216 72	110 77	200.62	F01 12
TOTALS	91.94	329.15	482.54	216.73	119.77	298.63	581.12

2 110 00	OVERALL		
2,119.88	TOTAL		

*ALL WEIGHTS ARE QUOTED IN TONS.

LEGEND

C & B = CANS & BOTTLES

SWL = SORTED WHITE LEDGER

MIX = MIXED PAPER

PMX = PRINTERS MIX

OFW = OFFICE FILE WASTE

ONP = OLD NEWS PRINT

OCC = OLD CORRUGATED CONTAINERS

For clarification:

• Printer's mix can be almost any color, contains no ground wood and no glued bindings and is the pre-consumer trimmings from printing jobs.

• Sorted white ledger is post-consumer, no ground wood, no glued bindings and no excessive ink or glossy coatings.

Analysis

As can be seen from the data, total recycling rates are actually on a decline. The recycling total from 2013 is 4.0 percent lower from 2012 and 6.7 percent lower than they were in 2009. While at first thought this trend is seen as a bad thing, it is actually a good thing if we assume that the reason the numbers are declining is because less recyclable products are being used, such as with packaging and printing policies on campus. For example, the totals sorted white ledger paper have decreased 19.3 percent since 2009 and office file waste has also declined significantly (50 percent) since 2009 (Figure 1). This reflects the trend in curriculum to turn assignments in online and the increase in electronic office to office communication.

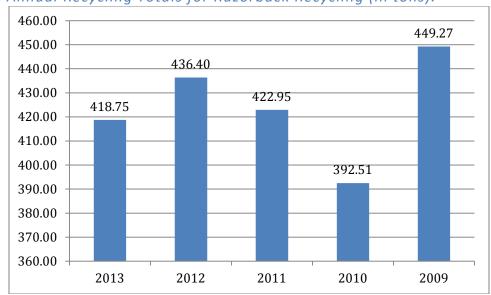


Figure 1. Annual Recycling Totals for Razorback Recycling (in tons).

The two items that make up majority of the items being recycled are cardboard and mixed paper. For almost any given year, the numbers of tons of cardboard and mixed paper are larger than any other type of recyclable. In 2013, old corrugated containers made up 36.5 percent of the recycled waste stream, while mixed paper made up 20.4 percent. Combined this is over half of the recycled waste stream.

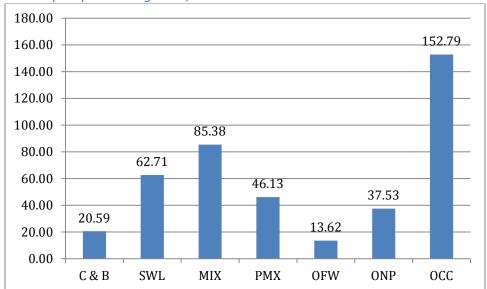


Figure 2. Totals per product grade, 2013

Currently the recycling to trash ratio is 30 percent. Therefore, in generating 418.75 tons of recycling, we also generate around 980 tons of trash.

Project Summary

As can be seen from the data, recycling rates at the University of Arkansas have decreased steadily in the last five years. While it could be due to less printing and more utilization of the electronic communication, the cause is not known for sure. It is sure, however, that a change in the recycling policy will increase recycling rates and decrease waste rates on campus, thus increasing revenues from recycling.