THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

UNC Chapel Hill Recycling and Waste Management

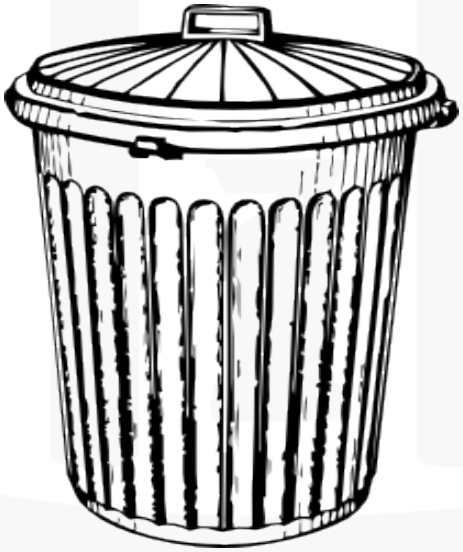
2013-14 Waste Stream

47% Recycled

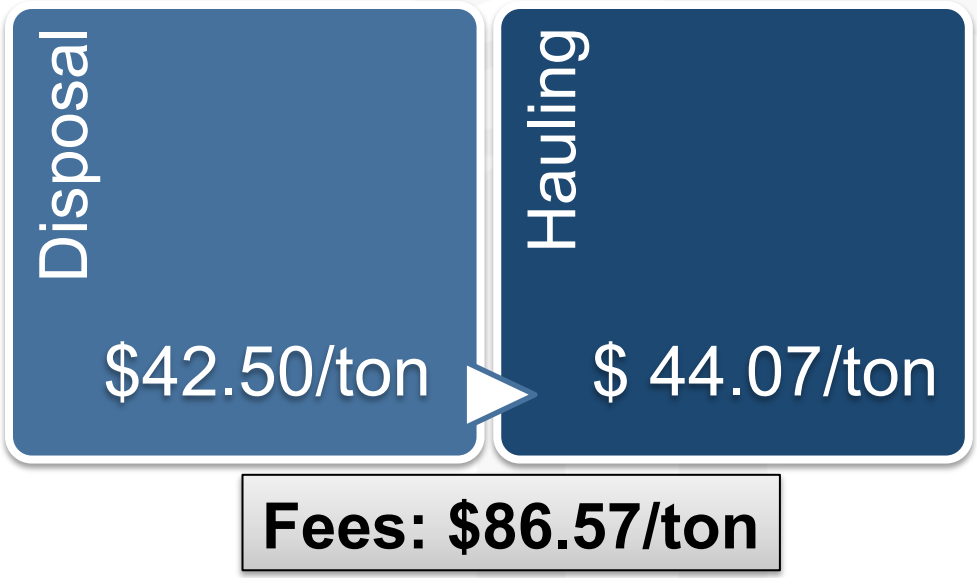
5,038 Tons

53% Landfilled

5,789 Tons



Municipal Solid Waste to Landfill

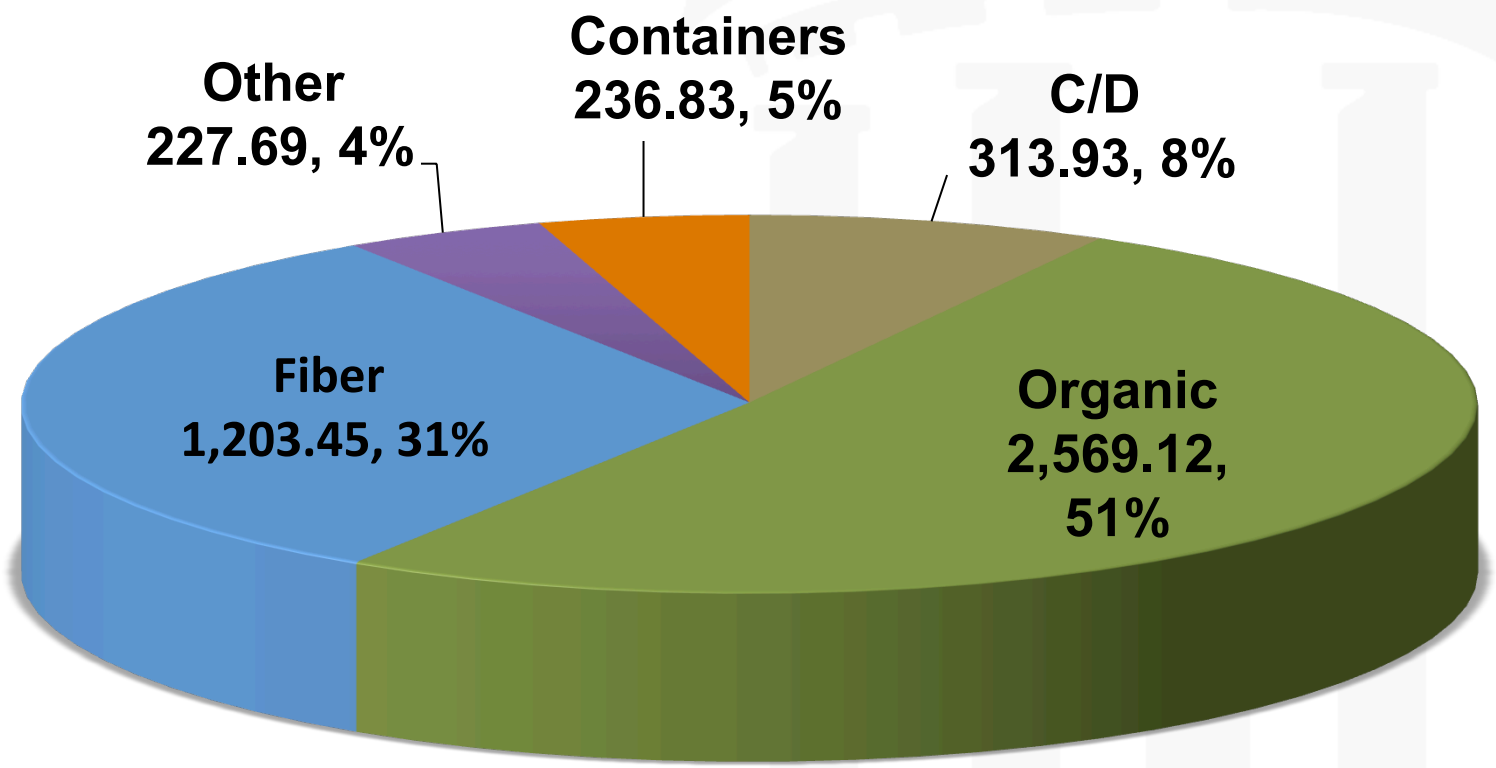


Total Waste Landfilled FY2013-14: **5,789 tons**

Total Cost: $501,153

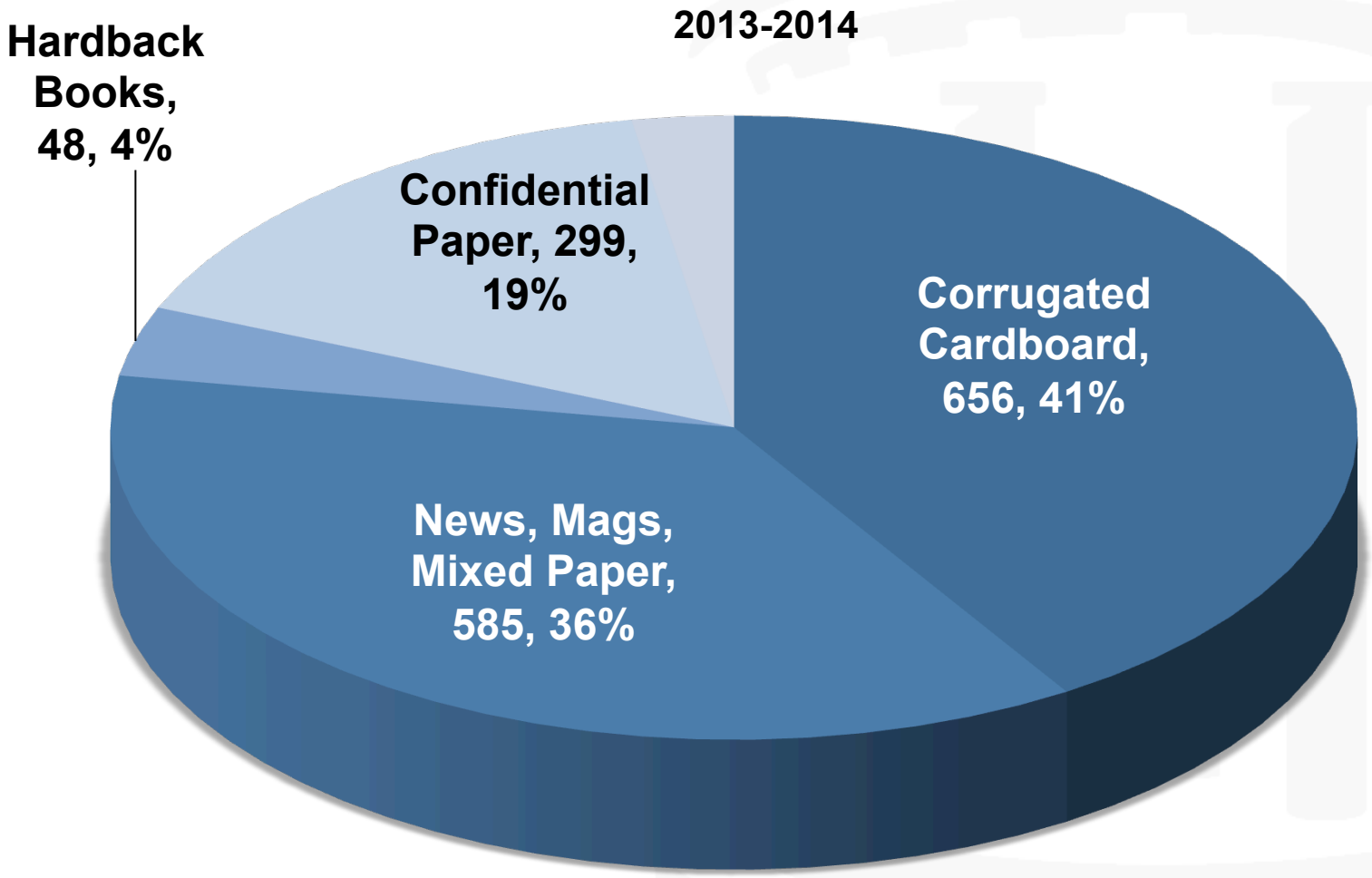
Waste is taken to the Waste Industries transfer station in Durham and ultimately placed in WI's Sampson County landfill.

Major Recycling Categories (In Tons)



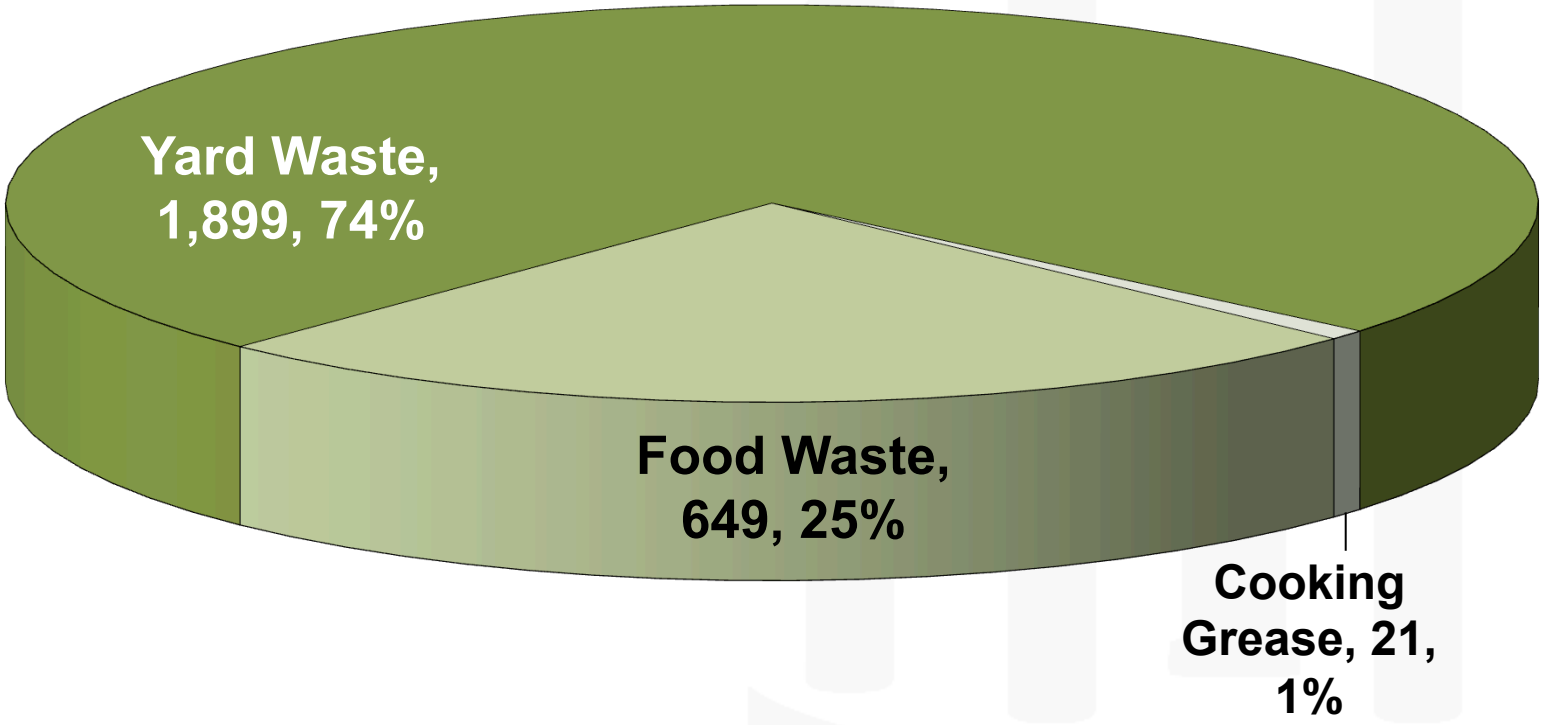
C/D (Construction & Demolition): scrap metal, pallets and clean wood waste, concrete and block, carpet, and ceiling tiles
Containers = commingled bottles and cans (aluminum cans, glass bottles [green/blue, clear, brown, plastic bottles], steel cans)
Fiber = corrugated cardboard, office paper, confidential paper, magazines and newspaper, hardback books and mixed paper
Organic = animal bedding, food waste, yard waste, trees, firewood, and sawdust
Other = auto batteries, auto oil, brake cleaning fluid, transformer oil,, cooking grease, printer cartridges, fluorescent lights, lab recycling & tires

Fiber (In Tons)



Organics (In Tons)

2013-2014



NOTE: In July 2013, a project at Carolina North resulted in 45 tons of stumps being recycled.

Yard Waste

During FY 2013-2014,
1,899 tons of yard waste were collected on UNC's campus

Food Waste

During FY 2013-2014, UNC composted **649 tons** of food waste.

Brooks Contractors

UNC has composted over **10 million pounds** of food waste since the program began in 2000.

Other Recycling Cost/Ton

Cardboard

$43/ton

Mattresses

$10/mattress

Scrap Metal

Handled by UNC-CH Surplus
(revenue based on market rates)

Pallets & Clean Wood

$54/ton

($18/ton tipping fee + hauling)

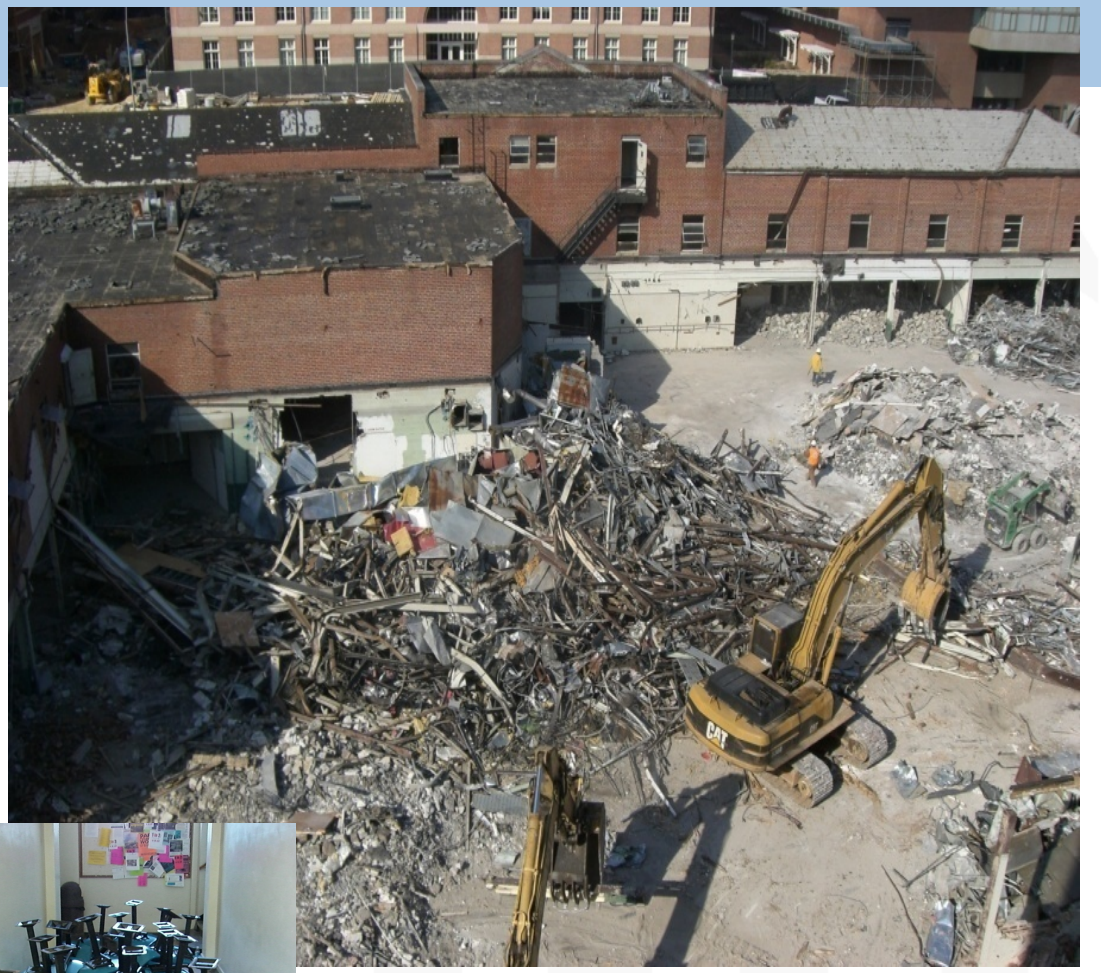
C&D – Capital Project Specifications

- **01060 Regulatory Requirements**
- **01505 Construction Waste Management**
- **02070 Selective Demo**

- **<u>01505 Construction Waste Management</u>**
- General Information, Definition & Goals
  - Draft Waste Management Plan
  - Final Waste Management Plan
- Implementation and Documentation of Waste Management Plan

Venable Demolition: 61% Diversion

- Salvaged 36 tons (2%)
- Recycled 1079 tons (59%)
- Landfilled 723 tons (39%)

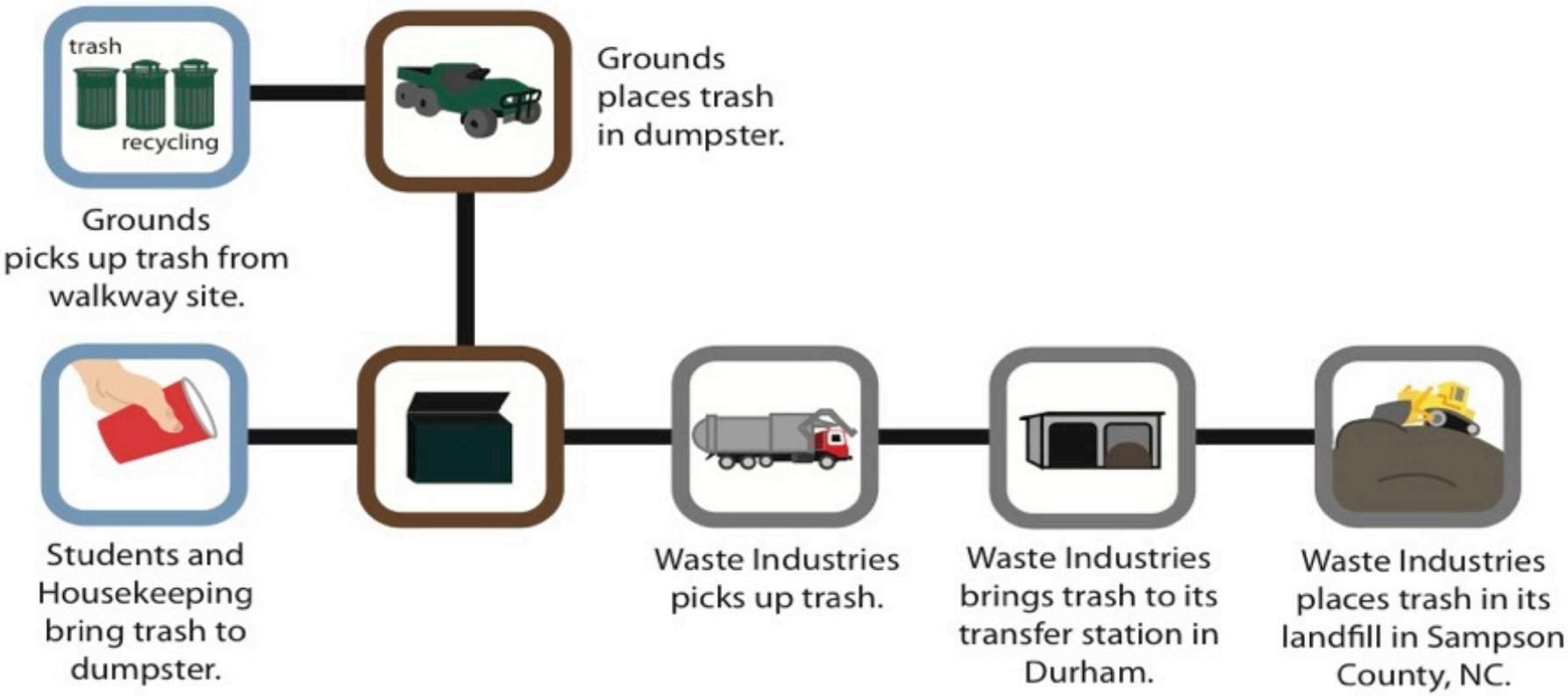


Campus Services and Collection

60 Walkway Sites

200 Trash and Cardboard Sites

TRASH COLLECTION



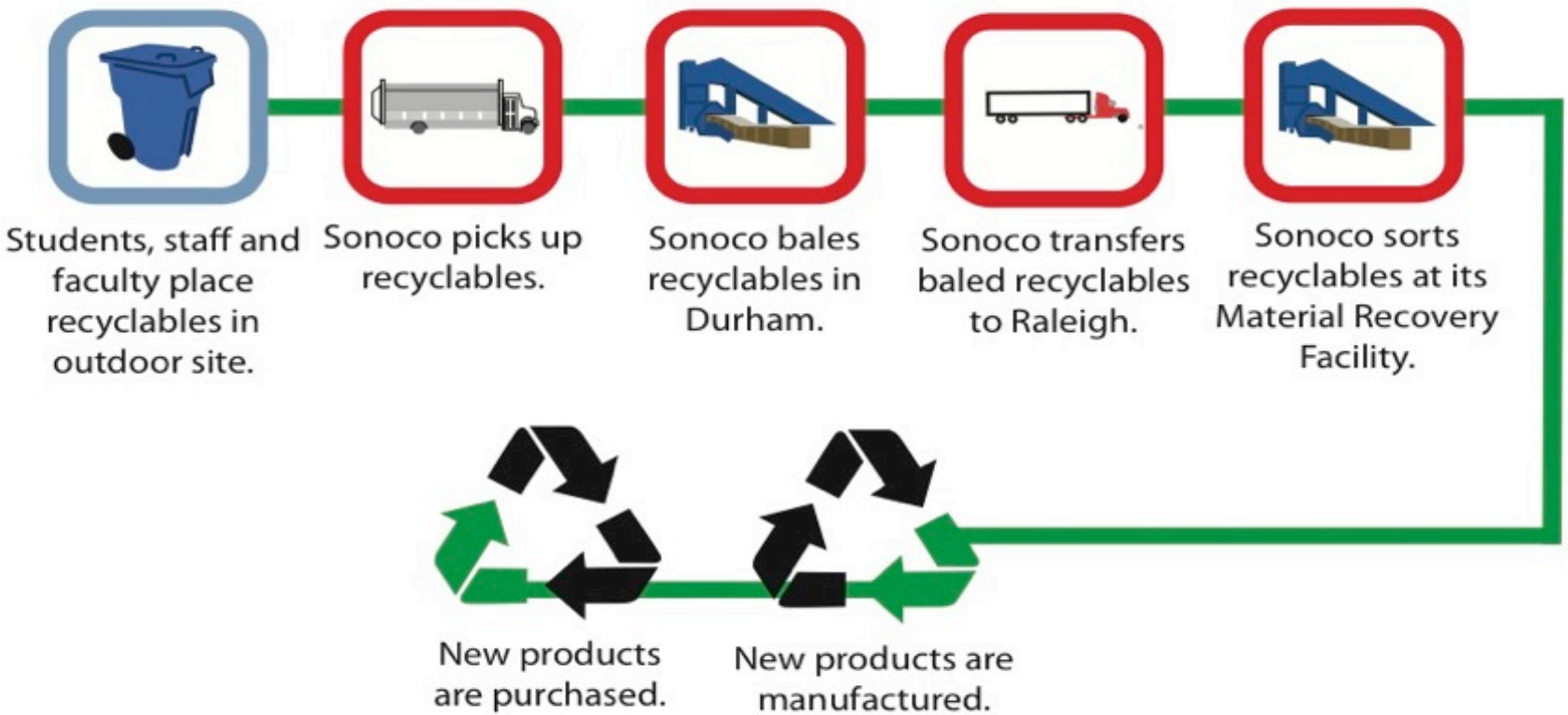
Maggie Ruf, OWRR Graphics

Cart Collection

78 Outdoor Sites at
Residence Halls and Various Buildings Around Campus.

Recyclables from UNC residence halls are now collected single stream.

OUTDOOR COLLECTION



Maggie Ruf, OWRR Graphics

Indoor Recycling

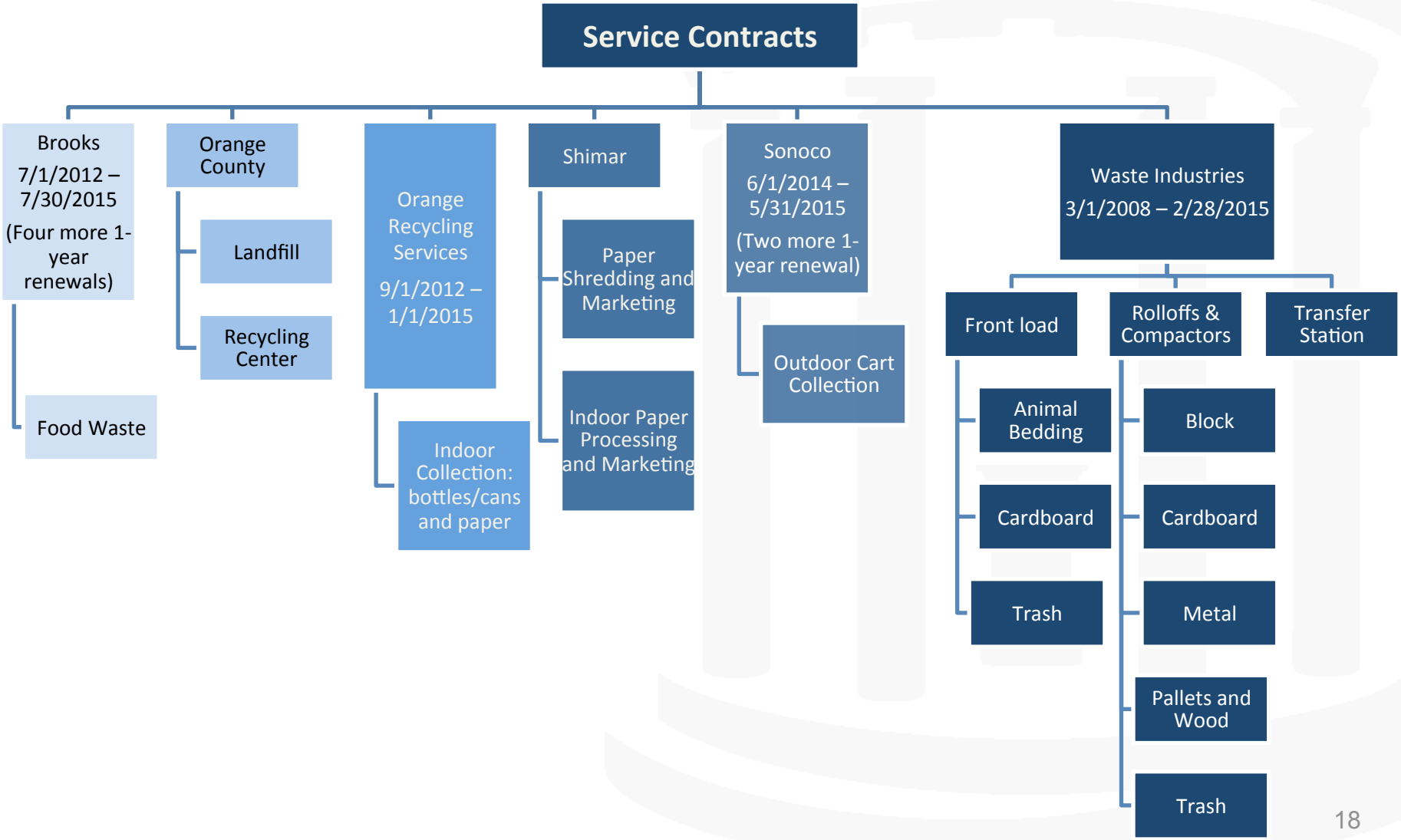
UNC uses a variety of resources to collect recycling from **3,500 bins** (1,600 sites) within **230 buildings**:

Orange Recycling Services
(collect and process)

In-house crews
(collect and transport to)

- Shimar (paper)
- Orange County (bottles and cans)
- Sonoco (single stream)

Contracts


Service Contracts
Brooks
7/1/2012 – 7/30/2015
(Four more 1-year renewals)
Food Waste
Orange County
Landfill
Recycling Center
Orange Recycling Services
9/1/2012 – 1/1/2015
Indoor Collection: bottles/cans and paper
Shimar
Paper Shredding and Marketing
Indoor Paper Processing and Marketing
Sonoco
6/1/2014 – 5/31/2015
(Two more 1-year renewal)
Outdoor Cart Collection
Waste Industries
3/1/2008 – 2/28/2015
Front load
Animal Bedding
Cardboard
Trash
Rolloffs & Compactors
Block
Cardboard
Metal
Pallets and Wood
Trash
Transfer Station

Campus Engagement

Carolina Green Events

~ 700 staff, students, and faculty have been **trained** to host Carolina Green events.

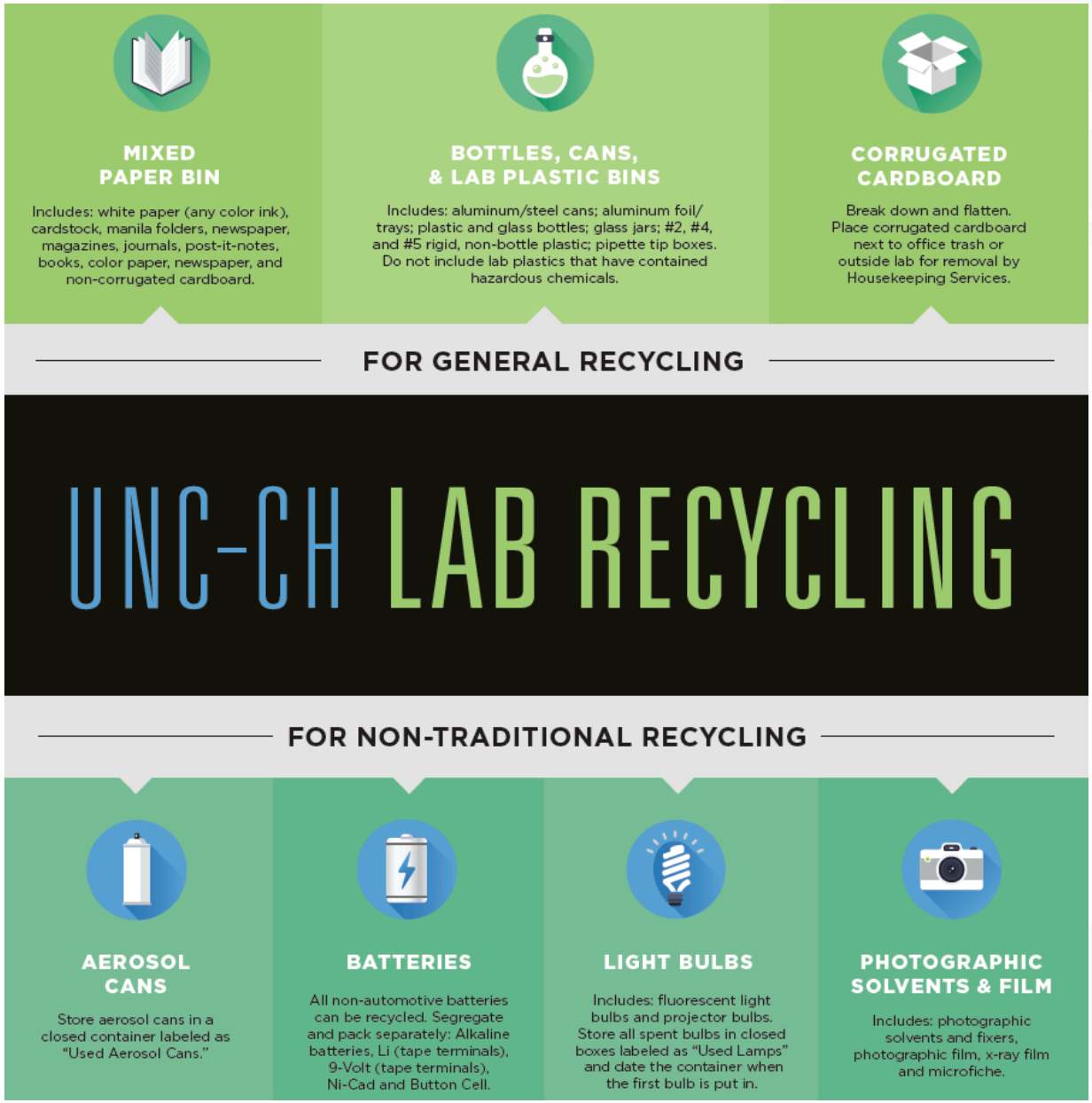
UNC staff and students hosted **73 zero waste events** during the last school year.

office of waste reduction and recycling

green games

Student-led environmental competition between **housing communities** to promote **sustainable behavior** and **environmental education**.

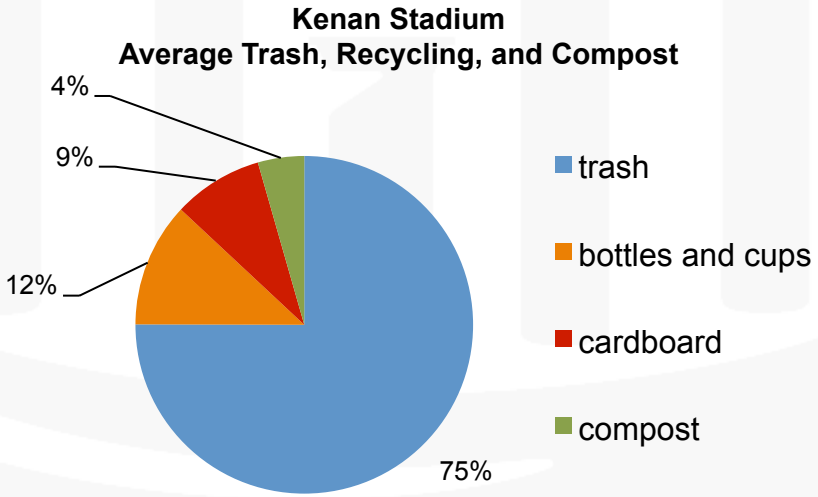
Green Labs


MIXED PAPER BIN
Includes: white paper (any color ink), cardstock, manila folders, newspaper, magazines, journals, post-it-notes, books, color paper, newspaper, and non-corrugated cardboard.
BOTTLES, CANS, & LAB PLASTIC BINS
Includes: aluminum/steel cans; aluminum foil/ trays; plastic and glass bottles; glass jars; #2, #4, and #5 rigid, non-bottle plastic; pipette tip boxes. Do not include lab plastics that have contained hazardous chemicals.
CORRUGATED CARDBOARD
Break down and flatten. Place corrugated cardboard next to office trash or outside lab for removal by Housekeeping Services.
FOR GENERAL RECYCLING
UNC-CH LAB RECYCLING
FOR NON-TRADITIONAL RECYCLING
AEROSOL CANS
Store aerosol cans in a closed container labeled as "Used Aerosol Cans."
BATTERIES
All non-automotive batteries can be recycled. Segregate and pack separately: Alkaline batteries, Li (tape terminals), 9-Volt (tape terminals), Ni-Cad and Button Cell.
LIGHT BULBS
Includes: fluorescent light bulbs and projector bulbs. Store all spent bulbs in closed boxes labeled as "Used Lamps" and date the container when the first bulb is put in.
PHOTOGRAPHIC SOLVENTS & FILM
Includes: photographic solvents and fixers, photographic film, x-ray film and microfiche.

Rameses Recycles

Rameses Recycles won a Spotlight Award from the Carolina Recycling Association for its participation in the EPA-sponsored Game Day Challenge.

Tailgate and stadium recycling during the 2013 football season resulted in a **25% recycling rate**.



Student Involvement

RecycleMania

Participating Schools = 161	NC	ACC	Schools: 17,001-30,000 students	Overall Ranking
Paper	2nd	2nd	2nd	10th
Cardboard	1st	1st	2nd	13th
Bottles & Cans	1st	1st	2nd	22nd
Food Waste Composting	1st	1st	3rd	26th
Gorilla Prize (gross tons)	2nd	4th	9th	21st

2014 Results

Greek Recycling

eco reps

carolina green

THE UNIVERSITY of NORTH CAROLINA at CHAPEL HILL

Matt Fajack
Vice Chancellor for Finance and Administration

BJ Tipton
Office of Waste Reduction and Recycling