

Strategies for Campus Recycling and Waste Reduction

Handout For Sustainable Endowments Institute Webinar
Roger Guzowski
February 17, 2010

Categories of waste on campus

- Routine Waste (incl. food wastes)
- Buildings & Furnishings Waste
- Grounds wastes
- Special wastes (universal, hazardous, etc.)

Different areas on campus:

- Offices
- Residence Halls
- Food service sit-down dining
- Food Service to-go dining
- Academic public areas (classrooms, library, etc)
- Non-academic public areas (campus center, etc.)
- Conferences & Events
- Hospital & Health Services
- Science labs
- Athletic facilities
- Facilities Services/Physical Plant
- Construction
- Grounds & outdoor spaces
- Special agricultural areas (farm center, equestrian center, etc.)

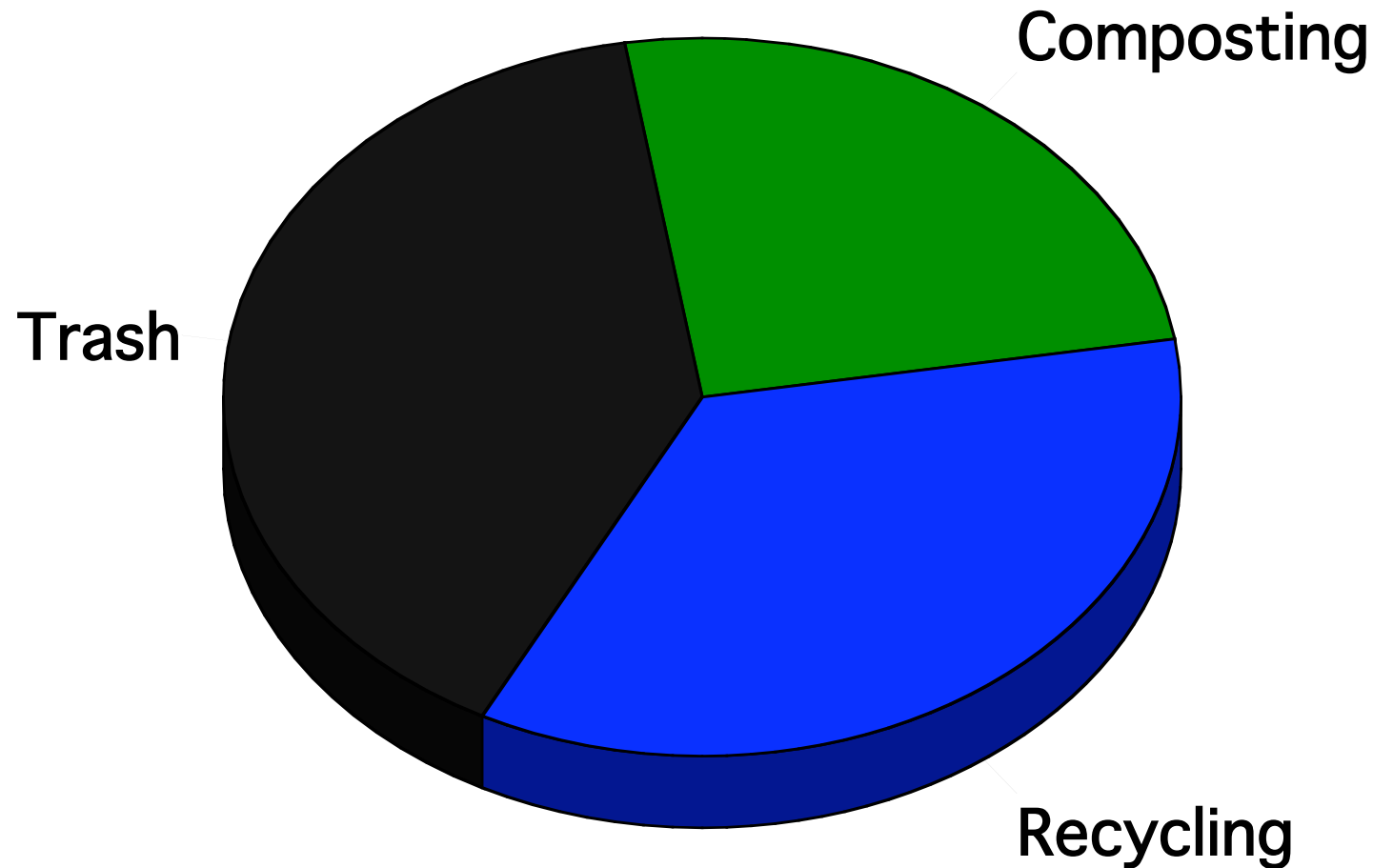
Every campus is unique because they have a unique blend of the types and size of each of these areas.

However, the types of waste and options for managing the wastes from each of these distinct areas is very similar from campus to campus.

Stages of program development

- Pre-program advocacy
 - Pilot program
 - Continued pilot program
 - Integrated into campus operations
- There is a lot you can get away with in the initial pilot program stage that you cannot get away with when you move beyond it.
 - Too many programs get stuck in that continued pilot program stage, investing too much money to continue a pilot program that is not efficient, safe, or sustainable.
 - As you move beyond the pilot program stage, think through what the final program should look like if it was just as efficient and sustainable as your current waste collection.
 - Then, start to put those pieces in place, even if you have to do it slowly and piecemeal.
 - It is easier to move forward if it involves just putting the next good piece in place rather than having to blow up everything you put in place over the past few years to start over. At some point, if you invest too much in a bad system, eventually you are going to get stuck in a bad system because the cost to fix it is prohibitive.

One of the main keys to success is to not view trash and recycling and composting as separate operations, but as interconnected parts of the same solid waste pie.



Questions? Email webinar@endowmentinstitute.org

- Remember, campus crews have been collecting recyclables since the inception of the campus. The problem is that they have been collecting those items as trash and discarding them as trash.

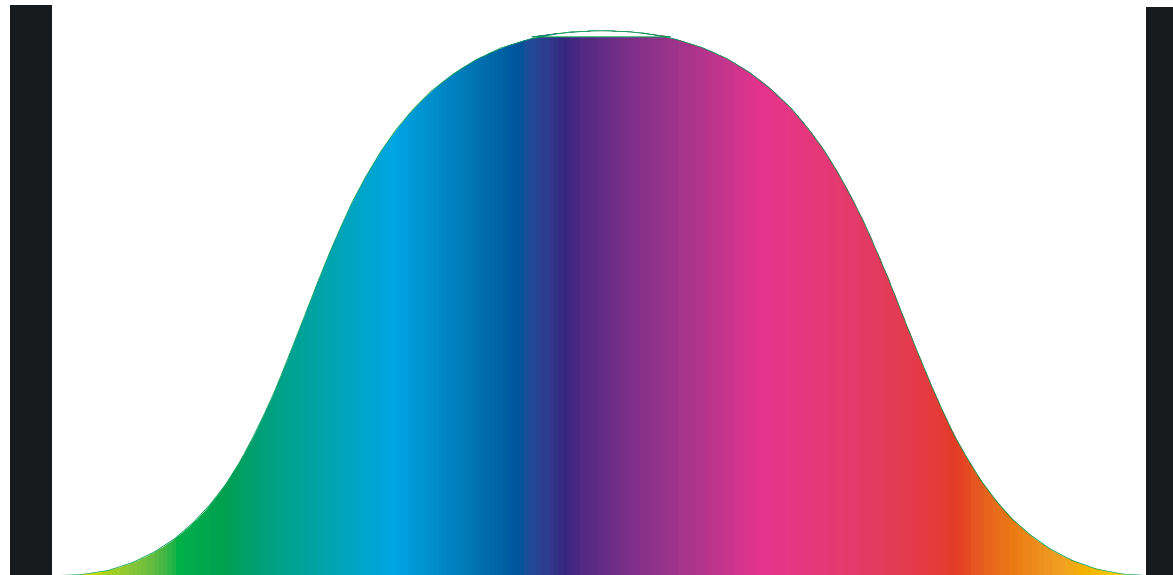


- For everything that you want to recycle on campus, you already have a system in place to deliver that stuff into the building and get that stuff out of the building.
- To collect it for recycling, you merely have to tweak your existing waste collection system in order to keep the recyclables segregated from other trash; or tweak your delivery system so that you back-haul recyclables out of a building as you deliver new stuff in.

Another major key to success is to realize that the world is not made up of absolutes like “recyclers” and “non-recyclers.” Rather, there is a full spectrum of participation.

More likely to
support program

Less likely to
support progra



As a general rule, the easier your program is to participate in and to understand, the more likely it is that more people will participate more often.

4 biggest keys to successful Campus Recycling logistics

- Immediate identification: People have to be able to tell in an instant what goes into a bin.
- Parallel access: System has to be as convenient as trash for **everyone** in the process.
- Dealing with surges in generation (end-of year move out in residence halls, events, parties, etc.)
- Re-informing folks about the system & dealing with high turnover

Immediate identification



What goes in this bin?

Parallel Access:

- To maximize the effectiveness of your recycling program, the recycling program has to be visibly different but co-located with, and just as convenient as the trash.
- If the trash is more convenient than the recycling, recyclable materials will end up in the trash.
- If the recycling bin is more convenient than the trash, trash will get dumped into the recyclables, and will over time cause recyclables to become contaminated and ultimately discarded as trash

Parallel Access vs Level of Service

- Parallel access should be maintained regardless of the level of service chosen.
- Each campus has to make level-of-service choices based on budget, building logistics, and campus expectations.
- As long as the level of service is not radically different from campus expectations or budget realities, the level of service is far less relevant in terms of program success than parallel access.
- E.g. If you don't have bins on every floor, students will carry stuff downstairs as long as they have to carry both trash & recycling downstairs.

Parallel Access:

Convenience is not just about waste generators. A recycling system needs to be convenient for everyone involved in the system, including:

- The generator of the waste or recyclables
- Custodial collection crews
- Outdoor collection crews
- Processing/brokering centers
- Mills that are using your recycled materials to make new products.

Remember, if the recycling system is not as easy as throwing something in the trash, somewhere along the line, your recyclable materials will find their way into the trash.

For collection crews, there are several different factors that make up convenience.

- The time involved
- The effort involved
- Safety
- Mess

Remember, if the trash system is significantly more convenient than the recycling system regarding any of these factors, recyclable materials will end up in the trash.

There are two options to ensure parallel access with collection crew's schedule.

- Tweak custodial schedule (e.g. instead of collecting trash 5 days/week, trash now collected MWF and TuTh dedicated to recycling collection).
- Co-collection containers or bags provided so that both trash and recyclables can be picked up at the same time.

Getting the next 50%

- Will require much more aggressive changes in purchasing and consuming on campus.
- This is a good time to begin to focus on such issues – They tie nicely with broader budget management issues on campus.

Strategies for getting the next 50%

- Working with suppliers to eliminate, take back, or use reusable packaging.
- Major overhaul of campus communications to reduce printed mailings and increase electronic notifications and publications.
- Reducing disposable to-go food packaging (compostable alternatives, reducing bottled water use in some applications, increased use of durables for short-radius to-go dining).
- Improved planning of menus and foodservice ware for campus events (to reduce or eliminate non-compostable wastes and maximize existing recycling & compost efforts).
- Returning durability parameters to purchasing decisions regarding campus furnishings Also ensure furnishings are designed for end-of-life considerations (made primarily of recyclable materials, non-recyclable materials easily separated, etc.)
- (e.g. stop replacing all-steel desks that have a 30+ year life span and that are fully recyclable at the end of that life, with presswood desks that have a 3-5 year life span and are not recyclable at the end of that life).
- Working more aggressively with students and their families to ship, store, and donate items at end of year rather than throw them away.
- Increasing and improving networked multifunction printers rather than individualized equipment.
- Design new buildings with adaptable utility grid and flexible spaces so spaces can be changed without renovation wastes.

Contact info:

Roger Guzowski
Five College Recycling Manager
rguzowski@fivecolleges.edu