



Higher Education Recycling Guide

Insights & Best Practices from
Three Atlanta Universities



Acknowledgements

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in collaboration with Cascadia Consulting Group and these
Atlanta-based higher education institutions:*



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Driving Innovation and Change

The strategies and tactics described in each case study are meant to provide inspiration for other institutions to replicate, improve upon, and share further, continuing the academic tradition of testing, innovating, and sharing in pursuit of solving our most complex recycling challenges.

Atlanta's higher education institutions are a fundamental dimension of what makes this metropolis thrive.



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There are **57 colleges and universities in the Atlanta city area**, ranging from small to large and liberal arts to technical. Those institutions include many of the nation's most prestigious historically black colleges and universities (HBCUs).²

Atlanta is seventh in student enrollment among America's largest urban areas and sixth in annual college graduates.

Due to the number of colleges, **higher education creates 130,000 jobs across all industries** in Georgia.²

Higher education creates a demonstrable mark on the makeup and culture of the great city of Atlanta, reflecting its rich diversity and creating economic drivers through employment and educated workers.

ACADEMIC INSTITUTIONS MUST BE A CONNECTED PART OF THE ECOSYSTEM THAT SERVES EVERYONE.



COLLEGES & UNIVERSITIES IN ATLANTA REFLECT THE DIVERSITY OF THE CITY.

Academic institutions must be an active and connected part of the ecosystem that delivers a circular economy, one that serves everyone and in which everyone has equal opportunity to participate.

The City of Atlanta has one of the most diverse populations of any large urban area in the United States. Roughly half of the population (49.8%) identifies as Black or African American while 40% identifies as White and 4.8% as Asian American.³

More than half of city residents have a college education (53.4%) and approximately one-third have either graduated or attained some high school-level education.

Colleges and universities in Atlanta reflect the diversity of the city, with Georgia State University (GSU) being one of the most diverse schools in the country with 40% of the population identifying as Black, 15.6% as Asian, 12.7% as Hispanic, and 6.2% as multi-ethnic.²

More than five HBCUs call Atlanta home, including the Atlanta University Center Consortium, the largest consortium of HBCUs in the country made up of Clark-Atlanta University, Morehouse College, Spelman College, Morehouse School of Medicine, International Theological Seminary (ITC), and Morris Brown College.

² Visit Atlanta Colleges | discoveratlanta.com

³ Population of Atlanta, Georgia | worldpopulationreview.com

As Atlanta continues to develop and evolve, many students are choosing to graduate from school and stay in the city to build their professional and personal lives. As students grow with the city, their recycling experience across the city should be clear, consistent, and accessible.

This guide underscores the possibility of thinking about recycling for an academic institution beyond its campus property lines to be a coordinated effort with the broader community as a way to serve everyone more effectively. It should be mentioned that in tandem with the work showcased in this guide, The Recycling Partnership worked with the City of Atlanta and other critical stakeholders to boost citywide recycling and to harmonize infrastructure and education for single- and multifamily households. Academic institutions can contribute to driving recycling outcomes that have statewide economic impacts.



ACCORDING TO THE GEORGIA RECYCLING COALITION, MORE THAN 120 GEORGIA BUSINESSES USE RECYCLED MATERIALS TO PRODUCE NEW PRODUCTS AND 23,000 GEORGIANS ARE EMPLOYED BY RECYCLING ACTIVITIES.⁴



FURTHER, 33% OF ALL PLASTIC BEVERAGE CONTAINERS AND 8% OF ALL PAPER IN NORTH AMERICA ARE RECYCLED IN GEORGIA.⁵



⁴ Georgia Recycles Fact Card | georgiarecycles.org

⁵ Georgia Recycles Fact Card | georgiarecycles.org

Recycling Ecosystem Change

5 Important Actions to Drive Change



Just get started, don't wait.

Each school is on its own unique recycling journey and can take steps to make progress. For example, can you start compiling existing waste quantity data to better understand your program? Map your existing bins and physical collection infrastructure and material flows? Take action to reduce waste in dining, housing, administrative, and classroom spaces? Identify and build ownership with stakeholders who are essential to program success? Look for and act on opportunities to serve within the community.

EACH SCHOOL IS ON ITS OWN UNIQUE RECYCLING JOURNEY AND CAN TAKE STEPS TO MAKE PROGRESS.

Start with a comprehensive look at the materials management systems already on your campus.

The adage often used to improve energy and water efficiency is true for waste and recycling too—"you can't manage what you don't measure"—so start by using the tools provided in this guide to fully consider the whole system. Taking this systematic approach helps orient the direction of effort, create a stepwise plan, engage stakeholders and funding, and track progress against the plan.

GEORGIA TECH HAS PROJECTED 60% MORE RECYCLING EXPECTED AS A RESULT OF IMPLEMENTING THE AWARE PROGRAM, THEIR CAMPUS-WIDE SOURCE SEPARATION CAMPAIGN.

Physical infrastructure, consistent education, and logistics management improvements are critical and doable.

Georgia Tech expanded recycling across interior spaces on campus by more than 60% through its AWARE centralized recycling station initiative (more details later in this guide).

Through source-separated recycling systems and internal Recycling Team quality control, both Georgia State University (GSU) and Georgia Tech receive revenue from the sale of their recyclables to local vendors, such as mixed recyclable paper, aluminum cans, and plastic bottles.

GSU is experiencing substantial labor efficiencies from optimizing in-house materials collection and processing, such as redeploying compactor trucks for cardboard collection and transport and baling of loose and shredded paper as well as plastic film for sale to local recyclers.

Engage students and the community to be a part of the solution.

Morehouse College is an activator and innovator for social change and community service. Student leaders are engaging with leadership at the highest levels of the college and Atlanta University Center Consortium to advance environmental justice goals, including recycling and waste minimization.

Morehouse College has both students and staff actively engaged in the surrounding community in Atlanta's West End and the broader city and metro area. For example, there are strong ties to community food programs and local farms to close the food insecurity gap and use high-grade food scraps for animal feed and compost to bolster the local, sustainable agriculture economy.

GSU effectively partners with student entrepreneurs, such as EcGo (formerly Conserve), a mobile web-based application invented by GSU students and piloted in partnership with GSU's Office of Sustainability.

GSU's Office of Sustainability also actively recruits, hires, and collaborates with interns, who are essential to advance recycling and waste reduction initiatives across campus.

PEOPLE AND PERSONALITIES OFTEN DRIVE SUCCESS. IT CAN START WITH JUST ONE PERSON WILLING TO BRING THE RIGHT TOOLS AND RESOURCES TO THE INSTITUTION AND CONNECT THE DOTS TO THE BROADER SYSTEM.

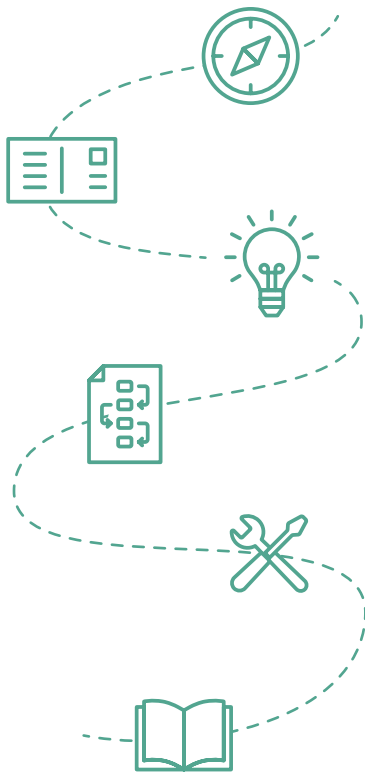


Tools to Build and Cultivate a Circular Economy

The Higher Education Recycling Guide

Call to Personal Action

As you read this guide, please take it as a call to action to be a leader in delivering change toward a more sustainable and resilient community and planet. This guide is an invitation to join the leaders in this space (many described below), who demonstrate vision, dedication, and commitment to waste less (or nothing) while building community. Educational institutions help set the pace for each generation of leaders. The example set on campuses for recycling can change the world for the better. Positive impact is possible on any campus, no matter what size.



Objectives

This guide is intended to show you what we have done and to give you the tools to do this wherever you are.

Guidance to develop recycling programs that have real, measurable, and sustainable impacts.

Visual instructions and tools for creating programs, posters, flyers, and campaign materials.

Tips to help you get the best results on your campus.

Strategies for improving recycling performance by capturing quality recyclables.

Tools to help you tailor solutions to your unique institution and campus.

Quick links to resource documents to help get you started today.

Case Studies

This guide highlights a diversity of higher educational institutions located in the City of Atlanta. First as a comparative analysis of three institutions and then in a case study analysis of the two institutions that received direct grant funding from The Recycling Partnership. Though these case studies are not intended to be universally applicable to every university or college in the U.S., it is our hope that schools will generally be able to identify with one or more of the case studies based on the following factors.



School Types

Including publicly and privately funded schools.



Campus Types

Including more traditional closed campuses where buildings are clustered together and many students live on school grounds, as well as campuses that are more open and have a distributed network of buildings.



Geography

Including schools located in the Atlanta downtown and midtown urban core, as well as schools located within more residential or suburban areas. In addition to their main campuses, most of these schools also have satellite campuses located further outside the city.



Size and Scale

Including a range of sizes, in terms of population, scale, buildings, and square footage.



Collection System

Including a combination of source-separated systems in which individual recycling commodities are separated at the point of generation, as well as systems that accept mixed recycling at the point of generation, such as dual-stream (typically cans/bottles and mixed paper) or single-stream (cans, bottles, and paper combined).



Collection Bins

Including different types of interior and exterior recycling collection bins to facilitate proper source separation across campus.



Waste-Diversion Rate

Including the percent of all waste generated that is diverted for recycling, reuse, or repurposing versus disposal.

Case Studies

Comparison on Three Universities

The following table summarizes key information about three Atlanta higher education featured in this guide, aligning with the key factors defined above.

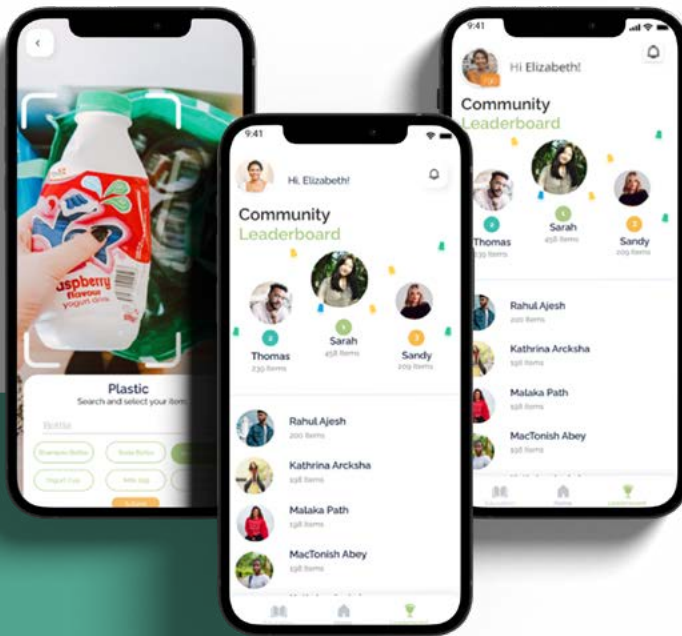
School	Georgia State University	Morehouse College	Georgia Institute of Technology
Funding Type	Public	Private	Public
Campus Type	Open	Closed	Hybrid (open & closed) campus
Geography	Urban Satellite campuses: Rural	Urban	Urban Satellite campuses: Georgia Tech Savannah (School for Professional and continuing Education); Georgia Tech: Lorraine (France); Athlone (Ireland); Shenzhen (China); Singapore
Size (population)	36K students, 7K employees, visitors (2021-2022)	2,800 (2021-22 academic year)	25K students, 7K employees, visitors (2020)
Buildings (# & sq. ft.)	81 structures, 12M+ sq. ft.	36 buildings, 1.54M+ sq. ft.	172 buildings, 13M+ sq. ft.
Collected System	Landfill, Cardboard, Plastic bottles, Aluminum cans, Mixed office paper, Single stream, Glass, Newsprint, Books, Metal, Electronics e-waste, Office supplies, Plastic film, Plastic foam expanded polystyrene, Composting, Recycling, Composting, and Disposal	Disposal, single-stream commingled recycling: 31 Recycling, single-stream commingled recycling + cardboard: 6	14 source-separated recycling streams: Aluminum, Cardboard, Compost, Confidential paper, Electronic waste, Glass, Hardback books, Mixed metal, Mixed office paper, Newsprint, Pallets, Plastic bottles, Single-stream commingled, Clothes and textiles
Hauling Operations	In-house recycling team service recycling; contracted haulers service garbage dumpsters—GFL and Office of Sustainability	All contracted haulers service garbage and recycling dumpsters (primarily WM, some Republic).	In-house recycling team service recycling Contracted haulers service garbage dumpsters —WM/ GT Recycling/CompostNow

School	Georgia State University	Morehouse College	Georgia Institute of Technology
Collection Bins	<p>Pre-intervention (before purchase of new infrastructure): 109 exterior bin systems, 2,000+ interior bins, source-separated recycling and garbage bins typically paired together, however sometimes trash is the only bin, sometimes recycling is the only bin.</p>	<p>Pre-intervention (before purchase of new infrastructure): Rubbermaid Brute & Slim Jim collection bins in interior spaces—primarily garbage only, selected recycling. Located in foyers, hallways, offices, classrooms, etc.</p> <p>Back-of-house cardboard collected loose and deposited into dumpsters.</p> <p>Aggregate collection bins in exterior areas of campus—garbage only.</p> <p><i>This infrastructure relates to a 6% diversion rate.</i></p>	<p>Internal—recycling bins source-separated streams (plastic, aluminum, paper), occasional pairing with compost, sometimes bin(s) with garbage stream only.</p> <p>External—garbage and recycling (source-separated) pairing or just garbage.</p> <p>476 exterior bins (395 landfill, 81 recycling)</p>
Waste-Diversion Rate	Pre-intervention: 20% of all waste materials generated	Pre-intervention: 6%	30% diversion rate (2021)
Recycling Tonnage (tons/year)	<p>Annualized modeling predicts that approximately 380 tons per year are directed to local recycling markets.</p> <p>About 11% of GSU's material stream is recycled.</p> <p>About 9% of GSU's material stream is composted</p>	<p>Annualized modeling predicts that approximately 70 tons per year are directed to local recycling markets and about 1030 tons per year are directed to landfill</p>	<p>2,500 to 2,960 (2021)</p> <p>8,656 (2021) annual tons of waste (landfill)</p> <p>452 tons composted</p> <p>253 tons donated</p>
Revenues	GSU receives between \$12,000-16,000 in annual recycling revenues, last reported in 2021	None	\$40,000 in annual recycling revenues in 2019
Added Recycling Capacity and Other Improvements	<p>In 2021-22, with the help of grant fund provided by The Recycling Partnership, GSU added recycling collection capacity infrastructure worth approximately: \$55,000.</p> <p>This investment translates into the addition of 349 collection bins on campus for items, such as clothes, wire, glass, cardboard electronics, paper, plastic bottles, polystyrene, plastic film, and trash.</p> <p>Additionally, GSU invested \$45,000 in waste reduction initiatives, such as ValidFill cups and OZZI reusable food containers.</p> <p>Finally, GSU invested \$10,000 in racking systems to better organize the Recycling Center and to support back-of-house waste reduction initiatives through PantherDining.</p>	<p>In 2022, with the help of grant fund provided by The Recycling Partnership, Morehouse identified needs for over 100 recycling stations across campus.</p> <p>This includes:</p> <p>1) adding new signage and color-coding across all stations; 2) interior collection stations, aligning with existing garbage bins and leveraging surplus bin inventory; and 3) optimizing exterior collection depots/enclosures (i.e., placement, capacity, color, signage).</p> <p>In total, these infrastructure investments total nearly \$76,000.</p>	<p>Georgia Tech has projected 60% more recycling expected as a result of implementing their AWARE program, their campus-wide source separation campaign, with centralized, source-separated recycling stations offered throughout campus spaces, including offices and corridors.</p>

Case Study

Large Higher Education Institution

The Recycling Partnership worked with Georgia State University over the course of three years to develop a comprehensive materials management plan with the help of Cascadia Consulting. This comprehensive plan identified the challenges and opportunities for improvement that guided a strategic and holistic infrastructure and educational improvement investment via a grant from The Recycling Partnership to Georgia State University. This case study articulates the investments made through that process:



Collaboration with Student Entrepreneurs: Mobile App

Georgia State University's (GSU) Office of Sustainability partnered with EcGo (formerly Conserve) to support the development of a mobile app using computer vision and machine learning to detect the recyclability of campus materials. Conserve was founded by GSU students Nicole Toole and Ishir Vasavada.



EcGo launched at GSU's Piedmont North housing facility in March 2022. To help initiate awareness of recycling and current waste-diversion practices on campus, GSU Sustainability and EcGo held tabling events to invite students to download the app.

GSU students who downloaded the app received sustainable prizes. App users can also earn gift cards and other sustainable prizes for recycling with the app.

Supportive Infrastructure = Effective Source Separation

In the spring of 2022, GSU Sustainability staff and Civic Engagement student volunteers set up Residential Recycling Centers at three GSU housing locations: Piedmont North, University Lofts, and University Commons. Each of the Residential Recycling Centers offer source-separated bins to boost the quality and revenues from recycling commodities GSU sells to local markets.



Bins are individually labeled and color-coded by material to indicate source separation into seven different material types: plastic bottles, aluminum cans, mixed paper, plastic bags, cardboard, foam packaging (expanded polystyrene), and glass.



Each station resembles a bright and attractive rainbow, which enhances visibility and creates a vibrant, happy space for recycling. The varying bin colors also serve as a signal, alongside the individually labeled bins, reinforcing to users the need to separate recyclable materials by type.



As shown in these photos, the **Residential Recycling Centers are producing quality recyclables** with minimal contamination.

GSU Sustainability Team uses building-specific references for each Recycling Center—such as Recycling Center at Piedmont North—in their social media posts, tabling sessions, and flyers. The team created banners with the full name and posted them above the recycling bins to draw attention to the infrastructure, support directional wayfinding, and create a sense of place.



Centralized Waste Stations in Office Areas

GSU Sustainability Initiatives has repurposed surplus stand-alone recycling bins into source-separated recycling stations that include multiple bins for various waste streams.



Interns from the Office of Sustainability Initiatives labelled each bin by material type (plastic bottles, cans, paper, etc.) and placed them in employee breakrooms and copy rooms throughout campus. These stations are being referred to as Centralized Waste Stations in verbal and written communication. Furthermore, they support GSU's policy of employees emptying desktide bins into centralized locations.



GSU already has a culture in which staff mostly know to empty their desktide bins into a centralized waste station. However, this has been informal, lacking both a formal program name and even a mention on the website or in the employee handbook.



As we create these stations, we are installing educational banners that name the stations (Centralized Waste Station) and provide a call to action, directing users to sort all waste and recycling into appropriate bins. The banner also displays a QR code directing users to GSU's recycling website for guidelines and a quick link to initiate work orders. The display also lists GSU Sustainability's Instagram account, [@sustainableGSU](#), for those interested in following on social media.



This initiative is highly cost effective, both in repurposing existing bins and being student-led. Sustainability intern Deanna Rodriguez is assessing every building on campus, mapping all break and copy rooms, identifying infrastructure needs, and managing volunteer "recycling makeover" workdays to set up new centralized waste stations.



Aligned with the GSU Housing Recycling Centers, these Centralized Waste Stations promote effective source separation of recyclables into the seven different material types. The number of bins at each station depends on the size of the room and the materials generated in each space.



The Recycling Center at Center Park Stadium

GSU has unique access to ground-level, covered space at the stadium where the Recycling Team stockpiles and processes material to then directly transport to local reuse and recycling markets.

The Recycling Team is trained to process each material, including baling materials such as cardboard, plastic film, and mixed paper as well as densifying polystyrene.



GSU has developed long-term partnerships with a range of local recycling and reuse markets, such as **CHaRM (the Center for Hard to Recycle Materials)**, **Sonoco**, and **Greif**. The Recycling Team transports truckloads of recyclables from the stadium directly to these and other local recycling facilities.

Compactor Truck

In 2022, GSU redeployed a compactor truck that was previously underutilized to collect cardboard across the campus and deliver it directly to a hyper-local recycling facility.

Previously, the Recycling Team was baling cardboard, which was a highly labor-intensive process, and keeping up with the sheer quantity of cardboard was overwhelming.

Now the Recycling Team is able to be more efficient and provide a high level of service, with most centralized cardboard locations receive collection service two to five times per week in addition to responding to work orders requiring special trips.

The Recycling Team removes cardboard from inside each building and places the material on the loading docks to be serviced by the compactor truck.

THE RECYCLING TEAM PROVIDES A HIGH LEVEL OF SERVICE BY PROVIDING CARDBOARD COLLECTION SERVICE TWO TO FIVE TIMES PER WEEK.

The compactor truck delivers full truckloads of cardboard at least weekly to a recycling facility located 1 mile from the Stadium Recycling Center.

This change has helped keep the Stadium Recycling Center cleaner, without large volumes of cardboard piling up to be baled. An additional benefit is being able to deploy GSU's existing balers differently (see baler section below for details).

With grant funds provided by The Recycling Partnership, GSU Sustainability Initiatives purchased several large, foldable wire containers for collecting cardboard. They are approximately the size of gaylord

boxes but are a durable material that is expected to hold up for years. They are challenging to move, however, meaning that—once installed—the chance of them being repurposed by a different department is low. The team created large “Cardboard Recycling” posters and attached them to the bins to provide directions to users. These containers keep docks clean (versus having cardboard spread out on the floor) and are effective at convincing users to take the time to flatten their cardboard.

GSU Sustainability Initiatives also attached Klever Cutters to the containers using wire rope. That way, users always have a way to break down cardboard boxes in the field.



Balers

GSU has two balers at its Stadium Recycling Center, one for paper and one for plastic film.

Paper

The baler that was previously used to process cardboard is now used for paper. GSU Sustainability has been transitioning paper out of single-stream collection to improve material quality and associated revenue from recyclers.

Previously, the Recycling Team consolidated paper in gaylord bins, which would fill up quickly and led to added clutter at the Stadium Recycling Center. The team could easily fill up four gaylords in one to two days.

Baling paper is saving space in the Stadium Recycling Center and reduces the number of hauls to local recyclers.

Fun fact: One bale of paper is roughly equivalent to 10 gaylords of paper.⁶

The Recycling Team can haul three to four bales of paper in GSU's box truck to deliver to the recycler and completes a delivery nearly every week.

This process improvement also allows GSU to bale both shredded and loose paper together, whereas GSU's single-stream vendor does not accept shredded paper.

SINCE IMPLEMENTING THE CARDBOARD AND PAPER IMPROVEMENTS IN 2022, AVERAGE MONTHLY RECYCLING REVENUES INCREASED BY MORE THAN 30%.

Plastic film

GSU has a second baler that was previously underutilized. GSU Sustainability considered moving or selling the baler for space purposes. Instead, the baler was redeployed to process plastic film.

Due to its voluminous nature, plastic film was taking up too much space at the Stadium Recycling Center.⁷

In May 2022, GSU began to accumulate all plastic film collected across campus in the baler.



⁶ Standard Volume-to-Weight Conversion | [epa.gov](https://www.epa.gov)

⁷ Standard Volume-to-Weight Conversion | [epa.gov](https://www.epa.gov)



3,800
PARTICIPANTS

Reusable GSU Dining Clamshells Eliminate Packaging Waste

Campus dining is typically one of the largest sources, if not the largest source, of waste generated at colleges and universities. GSU has the benefit of staff serving GSU Dining also serving the Office of Sustainability. Of note, GSU Dining is staffed by an internal team of university employees rather than a third-party vendor, so there is more opportunity to directly control waste management and dining assets.

PantherDining provides all meal plan holders (students and employees) with re-usable OZZI containers to use when choosing the “to-go” option for meals. OZZI containers resemble a traditional, disposable 9” x 9” clamshell, which are often of Styrofoam or single-use plastic. Unlike the disposable containers, OZZIs are designed to be re-used multiple times, with customers swapping out a used OZZI container for a fresh one as needed. The

OZZI containers are a distinctive bright green and are very durable. PantherDining staff clean and sanitize the used OZZIs, then place them back into circulation for future swaps. The OZZIs play an important part in reducing on-campus waste from the dining halls. Although the OZZI containers are a great fit for meal-plan holders who return regularly, the dining halls also serve one-time customers, such as parents and guests, for whom a returnable food container is not a great fit. In these instances, PantherDining uses compostable clamshells.

- GSU began offering reusable OZZI clamshells to the GSU community in 2020.
- Approximately 3,800 people currently participate in the program.
- To ensure alignment with the university's equity goals, there is no deposit required for the first OZZI clamshell, though a \$5 deposit is required for each additional or replacement OZZI clamshell.



**WHILE NEW
INFRASTRUCTURE
HAS ONLY BEEN
IN PLACE IN
2022, TOTAL
RECYCLED
TONNAGE HAS
INCREASED
BY 65%.**

Compost Contracting

By taking composting in-house, GSU was able to create a nimbler, more well-funded program by bypassing the state limit on uncontracted work.

Previously, GSU had outside vendors operating its dining services. When the school switched to self-operation, dining operations had to adhere to state contract and procurement rules. Since GSU was already working on a contract expansion, it was able to be adaptive to get services the dining halls needed while following procurement regulations. The state contract process is lengthy, and if GSU was not already working on contracting, the dining halls would not have had adequate service for the capacity of food waste they needed to divert from the landfill.

While new infrastructure has only been in place in 2022, as of the writing of this guide, total recycled tonnage has increased by 65% compared to the same time period in 2021, resulting in 69 new tons of recycled material diverted from landfill (January through end of July 2022).



The Engine Behind the Program

No recycling program can be effective without a champion. At GSU, Jennifer Wilson is the engine behind their leading-edge recycling programs.

Jennifer has leveraged key best practices from managing Kennesaw State University's recycling program from 2016-2022, such as color-coded, source-separated recycling collection stations, cardboard cutters, and clear signage.

She brings practical and efficient solutions to optimize systems, staffing, infrastructure, and education to maximize program impacts.

Jennifer is also highly collaborative with the Recycling Team, which collects, processes, and transports all of the recycling materials across campus, as well as students and staff serving the Office of Sustainability and launching startups related to recycling and sustainability.



Jennifer Wilson
GSU Manager of
Sustainability Initiatives



Case Study

Small Higher Education Institution

The Recycling Partnership worked with Morehouse College over the course of one and a half years to develop a comprehensive materials management plan with the help of Cascadia Consulting. This comprehensive plan identified the challenges and opportunities for improvement that guided a strategic and holistic infrastructure and educational improvement investment via grant funds from The Recycling Partnership. This case study articulates the investments at a small higher education institute made through that process:



Community-Centered Approach Maximizing Impact

Morehouse's mission is focused on service to the community, specifically "to develop men with disciplined minds who will lead lives of leadership and service."

Undergraduate students Zubin Abraham-Ahmed and Jeremiah D. Davis (2022 graduates) presented a vision for a "Green New Deal" to the Atlanta University Center Consortium leadership in the spring of 2022.



These students are part of a student-led movement centering on environmental justice and community service. In addition to promoting behaviors and policy related to recycling and waste reduction, they are committed to improving access to healthy food for Morehouse and the surrounding community, among other pressing community needs.



IN 2022, MOREHOUSE IS ACTIVELY COLLABORATING WITH THE RECYCLING PARTNERSHIP TO ADAPT THE COLLEGE'S COVID-19 SIGNAGE TECHNIQUES.

Utilizing COVID-19 Pandemic Campaign and Signage to Maximize Behavior Change

Morehouse championed a flagship COVID-19 behavior-change campaign between 2020-2022, with exceptional outcomes in terms of compliance and campus health. This behavior change campaign included created materials about their new compliance policies and creating up-to-date information and policies with other institutions in the Atlanta University Center Consortium.⁸

The COVID-19 behavior-change campaign signage is visible, consistently Morehouse-branded, and posted throughout all of the highly visible spaces on campus, from administrative hallways, offices, bathrooms, and breakrooms to student housing, classrooms, foyers, and public corridors.

In 2022, Morehouse is actively collaborating with The Recycling Partnership to adapt the college's COVID-19 signage techniques and leverage The Recycling Partnership DIY recycling signage tools to launch a new recycling campaign, associated signage, and material.

Recycling signage will accompany recycling stations from classrooms, residence halls, and gathering spaces to centralized reuse and recycling depots accessible at high-traffic locations on central campus.

⁸ COVID Information Resource | morehouse.edu



Driving Innovation in Recycling and Circularity

Shadeed Abdul-Salaam, a newly elected board member of the National College and Institutional Recycling Coalition, is driving innovation in recycling and circularity as a Morehouse College faculty member and alumnus who directs sustainability, agriculture, and innovation.

Shadeed is deeply rooted in service to the Atlanta community, especially in the areas of food insecurity, public health, and sustainable agriculture and composting.

He is strategically advancing recycling and circularity at Morehouse through collaboration with stakeholders across campus and entrepreneurs and service organizations across the greater Atlanta region.

His vision for Morehouse's recycling program is to be an innovative flagship program that inspires action throughout the Atlanta University Center Consortium—which includes the communities and shared campuses of Spelman College, Clark University, and Morehouse School of Medicine—and across the country.

**SHADEED'S VISION FOR MOREHOUSE'S
RECYCLING PROGRAM IS TO BE AN
INNOVATIVE FLAGSHIP PROGRAM THAT
INSPIRES ACTION.**



Taking Behavior Change to the Next Level

Innovation Stations in High-Traffic Areas



Best-in-Class Recycling Collection Stations

Morehouse actively collaborated with various peer institutions, The Recycling Partnership, and Cascadia to identify the best, most suitable recycling collection options for the various areas across the college's main campus, prioritizing cost, aesthetic, accessibility, and sustainability, as well as future scalability for potential expansion.



Digital Interactive Displays

Morehouse is preparing to add "Innovation Stations" in strategic, high-visibility locations on campus to elevate the importance of recycling and sustainability to the campus community.

- These sites are envisioned to include digital displays showcasing images and videos of the story of reuse and recycling—from in-house operations and on-campus systems and behaviors to workers who are handling, collecting, and transporting materials to divert from landfill and direct to end markets, both for recycling and organic materials.
- As part of the implementation of new campuswide recycling infrastructure and education for students on campus, Morehouse College is working with The Recycling Partnership and other subject matter experts to develop and deliver an educational installation that demonstrates the value of recycling as a tool for environmental justice. Installation is expected in fall 2022.
- Morehouse is intentionally connecting everyday recycling behaviors and habits to large-scale environmental, community, and economic impacts.



Source-Separated vs Single-Stream Recycling System, or Hybrid?

- Morehouse thoughtfully evaluated options for recycling collection, whether to separate materials into multiple bins or mix (single-stream) in the same container.
- Morehouse chose to implement a hybrid approach with predominantly single-stream commingled recycling setups in academic and outdoor and public areas, and source-separated stations in residence halls and at the student center in an effort to reduce contamination and activate high participation across campus.

Interior Infrastructure

With a grant provided by The Recycling Partnership, Morehouse chose to build on existing infrastructure—largely Rubbermaid Brute and Slim Jim container systems—for corridors and back-of-house areas such as offices and dining kitchens.

- Residence Halls: source-separated recycling stations will be installed on residence hall hallways. 45 new collection stations have been ordered to collect paper, cans, plastic, and waste. To compliment these new set ups existing large brute receptacles are envisioned to be retooled to collect cardboard. Academic buildings: single-stream collection will be offered in all academic buildings utilizing 20 new dual stream set ups and retooling existing recycling and trash receptacles.
- Additionally, Morehouse and GSU collaborated to exchange surplus Simple Human collection bins to deploy in areas that require a more formal style or in lower volume across campus.



WITH A GRANT PROVIDED BY THE RECYCLING PARTNERSHIP, RECYCLING AND COLLECTION STATIONS WILL BE INSTALLED ACROSS CAMPUS.



**AS OF FALL 2022,
NEW RECYCLING
INFRASTRUCTURE
WILL INCREASE
COLLECTION CAPACITY
BY 4,895 GALLONS FOR
RECYCLING AND 2,825
GALLONS FOR TRASH.**

Exterior Infrastructure

Morehouse has identified existing and new locations on campus for recycling stations (garbage + single-stream recycling).

- Morehouse envisions reducing the total number of garbage collection bin stations by about 30% to concentrate on high-traffic areas and add paired single-stream recycling bins for maximum capture of recyclables.
- 38 new dual stream outdoor receptacles have been ordered and expected to be delivered and installed in the fall 2022. These receptacles will replace aged trash only collection sites as well as add new collection sites across campus.
- Morehouse used the following criteria to ultimately select this infrastructure:



Customization

These bins allow for tailoring of signage and messaging based on your campus's unique program.



Accessibility

Both for recyclers and for workers servicing collection bins. These bins offer intuitive and accessible slots, signage, and side compartments for ease of service for collection.



Sustainability

Bins are manufactured with recycled-content materials.



Recycling and Waste Depots

The team creating the comprehensive materials management plan consulted with the facility and grounds operations team to identify three main depot stations for recycling and landfill waste to ensure centralized areas were easily accessible from anywhere on campus for recycling and waste collection teams. These depots are the site where hauler dumpsters are located. The configuration of existing (and underutilized) dumpsters was evaluated and improved. Additional hard-to-recycle materials collection will be provided at these depots, as well as extra capacity for event days such as move in/move out.



Starving Landfills, Feeding the Community

Morehouse already has students and staff who volunteer time and resources to feed the Atlanta community.



The college is now furthering its commitment to contribute any additional surplus food suitable for human consumption to local food banks and meal programs.



Morehouse is establishing partnerships with local farmers and entrepreneurs to direct food scraps not suitable for human consumption to feeding animals at local farms.



Morehouse is including compost as a strategy to make it easier to collect cleaner recyclable materials and lower garbage costs by diverting this valuable surplus food from the kitchen to those in need and to local farms to feed the community.

**MOREHOUSE COLLEGE
IS ESTABLISHING
PARTNERSHIPS TO HELP
THOSE IN NEED AND TO
FEED THE COMMUNITY.**



Learn from Others: Sample Resources from Higher Education Recycling Programs

The following resources are intended to help you kick-start your efforts to reduce waste and improve recycling performance on your campus. We expect you will need to tailor and adapt these resources to be most helpful to your campus.



Communications and Engagement

1. [The Recycling Partnership's DIYSigns](#)
2. [GSU Dining Green](#)
[GSU Sustainability Initiatives](#)
3. [GA Tech's Recycling Buzz Newsletter](#)
[GA Tech's *Where does our waste go?* Video](#)
[GA Tech's Recycling Sites](#)
[GA Tech Campus Sustainability](#)
[GA Tech Office of Solid Waste & Recycling](#)
4. Morehouse's [More-Green blog](#)
[Sustainable Dining](#)
AUCC's [Our Campuses are Green Champions](#)



Data Tracking and Reporting

[Morehouse COVID-19 dashboard](#)



Infrastructure Design Standards

[GA Tech's *Indoor Container Standards*](#)



Documenting Existing Infrastructure

[GA Tech's *Dumpster and Recycle Bin Location Map*](#)

Other Resources to Advance Circularity in Higher Education

The following organizations provide valuable resources and support to advance waste reduction, recycling, and circularity in higher education:



The Recycling Partnership



College & University Recycling Coalition



Association for the Advancement of Sustainability in Higher Education



Campus Council (National Recycling Coalition*)
(nrcrecycles.org)



Campus Race to Zero Waste
(Formerly RecycleMania)



TRUE Certification



Green Sports Alliance



Green Events Campus Environmental Center
(utenvironment.org)



Collegiate Zero Waste Playbook [PDF]
(greensportsalliance.org)

*The National Recycling Coalition offers scholarships and performs surveys to identify Zero Waste Management practices.

Let's stay connected.

For more info and resources,
visit us at recyclingpartnership.org.

