

THE UNIVERSITY OF MARYLAND, COLLEGE PARK

OVERVIEW OF PLASTIC REDUCTION EFFORTS ON CAMPUS

UPDATED FEBRUARY 2021



[RECYCLE.UMD.EDU](https://recycle.umd.edu)



FACILITIES
MANAGEMENT

(Page Left Intentionally Blank)

Plastic Reduction Efforts at the University of Maryland, College Park

Table of Contents

Acknowledgements	4
Introduction & Background	5
Plastics at the University of Maryland	5
Plastic Reduction Policies	6
Can the Can Program - Facilities Management's Waste Collection Standard in Faculty and Staff Offices	7
Anytime Dining - Dining Services Initiative Eliminating Take-Out Containers	8
Ocean Friendly Campus - Dining Services Initiative to Further Minimize Single-Use Plastics	8
Goodies to Go & Good Tidings Packaging Upgrades - Dining Services' Sustainable Catering Options	8
Resident Hall Association Mandate for Compostable Items	9
The Office of Sustainability & Behavior Change Programs	9
Green Office Program	9
Green Terp & Green Chapter Programs	10
Cultivating A Culture of Reuse	11
Water Bottle Filling Stations	11
Trash To Treasure - Campus Move-Out Program	11
Student Recycling & Compost Bins	11
Keeping Campus Clean - The Arboretum & Campus Clean-Up Events	12
Conclusion	12
Graphic: Minimizing Disposable Plastics in Your Personal Life	14
Graphic: Timeline of Plastics Reduction at The UMD-CP Campus	15

Acknowledgements

Thank you to the facility and staff at the University of Maryland, College Park who have worked tirelessly to reduce campus waste, meet campus sustainability goals, and reduce or eliminate disposable plastics on campus.

This report was prepared and published by **Adrienne Small**, Recycling Coordinator, Building & Landscape Maintenance, Facilities Management.

Contributors to this report include:

Lisa Alexander, Coordinator of Sustainable Programming, Department of Resident Life

Tanvi Gadhia, Sustainability Outreach Coordinator, Environmental Safety, Sustainability, and Risk

Katie Stouffs Grimes, Communications Program Director, Facilities Management

Bill Guididas, Assistant Director, Administrative Services, Facilities Management

Emily Hightower, Sustainability Associate, Environmental Safety, Sustainability, and Risk

Bart Hipple, Assistant Director of Communications, Dining Services

David Kramer, Communications Specialist, Facilities Management

Jessica Moore, Recycling Manager, Building & Landscape Maintenance, Facilities Management

Mark Stewart, Sustainability Manager, Environmental Safety Sustainability, and Risk

Harry Teabout III, Executive Director, Building & Landscape Maintenance, Facilities Management

Allison Tjaden, Assistant Director of New Initiatives, Dining Services

Plastic Reduction Efforts at the University of Maryland, College Park

Introduction & Background

This report introduces key efforts taken by the University of Maryland, College Park to reduce the use and disposal of plastics on campus. As a campus we are committed to reducing the use and disposal of single use plastics and to reach this goal, we have implemented many programs and policies to reduce and eliminate plastic waste. These initiatives have taken place throughout the campus and the effects are far-reaching. This report highlights the main programs and initiatives that have been implemented to reduce campus waste and specifically reduce single use, disposable plastics.

The university created its first climate action plan in 2009 after signing on to the American and University Presidents' Climate Commitment in 2007. Since then, departments at the university have worked together to reduce greenhouse gas emissions through a variety of means. As part of this commitment, we aim to reduce the amount of waste going to landfills through source reduction, promoting a culture of reuse, and diverting waste from the landfill through recycling, composting, and donation efforts. Over the past several decades, the university has made great strides in reducing greenhouse gas emissions and the amount of waste generated on campus. The campus aims to be carbon neutral from all sources of emissions by 2050.

Plastics at the University of Maryland

Plastic materials are unique in that there are many types, uses, and disposal methods. This report analyzes all types of plastic waste on campus, not just recyclable plastics. As of January 2021, recyclable plastics only include plastic bottles and containers. Non-recyclable plastics include small plastic items, plastic bags, and plastic liners. These plastic materials are sent to the landfill as there are currently no local, viable recycling options. For the purpose of this report we will be examining all types of single-use, disposable plastics throughout the campus waste streams, regardless of the recyclability of a product. Below is a chart of the types of plastics commonly found on campus and their correct disposal method.

Plastic Items Found in UMD's Waste			
Landfill	Mixed Recycling	Compost	Recycled Separately
Plastic Bags & Wrap Small Plastic Items Plastic Liners Unclassified Materials*	PET #1 Bottles HDPE #2 Bottles Trays & Cups	Compostable #7 Plastics	Bulk Rigid Plastics

*includes chip bags, candy wrappers, popcorn bags, etc.

Several waste audits have been performed at the university over the years. Some audits were performed by a certified, third party company and others have been performed by students at

the university, led by a Student Waste Audit Coordinator or the campus Recycling Coordinator. These audits have provided great insight into the composition of the waste at the university. Below is a chart that shows the years and locations of waste audits that took place on campus since 2013.

Waste Audits Conducted at the University of Maryland, College Park (2013 - 2019)								
KEY		Student Waste Audit Coordinator	Students (Class or Organization)			Third Party (SCS Engineers)		
		2019	2018	2017	2016	2015	2014	2013
Dining Halls	Plate Waste	X	X	X	X	X	X	
	Landfill						X	
	Recycle						X	
	Compost						X	
Residence Hall(s)	Landfill	X	X		X	X	X	
	Recycle	X	X		X	X	X	
	Compost	X	X		X	X		
Stamp Student Union Food Court	Landfill	X	X	X	X	X	X	X
	Recycle	X	X	X	X	X	X	X
	Compost	X	X	X	X	X	X	X
Admin/Academic	Landfill							X
	Recycle							X
	Compost							X
Maryland Stadium	Landfill				X		X	
	Recycle						X	
	Compost						X	

Key Findings from Campus Waste Audits:

- In 2018, plastics comprised 29.7% of the total waste analyzed.
- In 2019, plastics comprised 23.34% of the total waste analyzed.
- From 2002 to 2014, the percentage of PET (#1) plastic bottles in the landfill fell from 3.1% to 2.3%.
- The percentage of polystyrene in the landfill waste stream dropped from 11% in 2002 to 1.9% in 2014.
- The percentage of HDPE (#2) plastic bottles also dropped from 0.7% in 2002 to 0.6% in 2014.

The following pages outline efforts taken on campus to reduce the use and disposal of single-use plastics.

Plastic Reduction Policies

The University of Maryland, College Park, is located in Prince George's County, Maryland and must adhere to all relevant county, state, and national government regulations. In 2016, Prince George's County issued a ban on the use or sale of expanded polystyrene (EPS) for food and beverage containers within the county. The State of Maryland followed the county's lead in 2019 banning the use of EPS in food service containers across the state. The University of Maryland discontinued the use of polystyrene cups and take-out containers in 2016 in order to comply with the relevant legislation and to promote sustainable alternatives.

Can the Can Program - Facilities Management's Waste Collection Standard in Faculty and Staff Offices

The Can the Can, or Mini Bin Waste Collection Program, was implemented in 2010 and changed the way individual offices on campus collect and dispose of their personal waste. Prior to the implementation of this program, Building Services emptied all waste bins at faculty and staff desks. Once this program was implemented, the standard

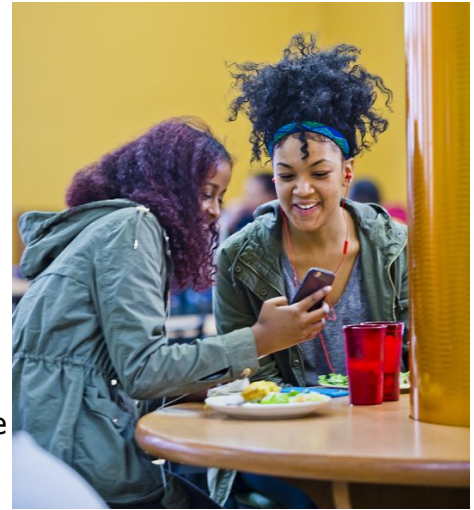


desk-side trash can was replaced with a "Mini Bin," and individuals became responsible for emptying their own trash into a centrally located landfill collection bin. The implementation of this program eliminated the need for individual, plastic liners within offices on campus. Along with the change in trash cans, every office was outfitted with a desk-side recycling bin. The Building Services team empties the desk-side recycling bins throughout administrative and academic buildings without the use of plastic liners in the bins. This program has contributed to

significant cost savings and has greatly minimized the need for plastic bin liners throughout campus.

Anytime Dining - Dining Services Initiative Eliminating Take-Out Containers

In 2016, with the support from a Sustainability Fund Grant, Dining Services implemented the Anytime Dining Program. Anytime Dining extended the hours of campus dining halls, allowed unlimited access by students with meal plans, and eliminated take-out from the facilities. This change eliminated all single-use disposables from the dining rooms including carryout containers, cups, lids, straws, utensils, bowls, condiment packages, etc. With the elimination of the take-out option, the program was able to prevent 6.3 million pieces of single-use disposable products from entering the waste stream annually! This program was placed on hold as a response to the global COVID-19 pandemic due to requirements from the Prince George's County Health Department and University of Maryland.



Ocean Friendly Campus - Dining Services Initiative to Further Minimize Single-Use Plastics

Dining Services initiated the Ocean Friendly Campus initiative in 2018 with the support of the Sustainability Fund Grant in response to student desire to eliminate plastic straws from campus. The student-led Sustainable Oceans Alliance advocates for campus solutions to promote healthy marine ecosystems. Through a collaboration between Dining Services and the Sustainable Oceans Alliance student group, the Ocean Friendly Campus initiative was developed. This program includes a variety of



initiatives aimed to reduce plastic waste from campus dining operations. UMD Dining offers a free, reusable bag to each student with a dining plan and 5-cent discounts are available when using any reusable bag at campus convenience shops. Additionally, where possible, UMD Dining offers compostable straws, paper bags, compostable utensils, and paper stirrers at campus retail locations.

Goodies to Go & Good Tidings Packaging Upgrades - Dining Services' Sustainable Catering Options

[Good Tidings](#) is the campus's full-service catering program run and operated by UMD Dining Services. Good Tidings is committed to sustainability and provides tips for reducing waste at your event. Good Tidings offers the choice between disposables or porcelain plates, stainless steel flatware, and glassware for an event. Through this initiative, campus events now generate

much less waste than in the past. Additionally, [Goodies to Go](#), the campus' delivery catering program offers compostable and recyclable packaging for its customers.

Resident Hall Association Mandate for Compostable Items

In 2017, the Resident Hall Association (RHA) passed a resolution to mandate compostable items for hall and area council events. This resolution requires the purchase of compostable items for events, whenever such items are available at a cost comparable to non-compostable options. Additionally, the resolution requires the RHA to compost all appropriate waste from community events. The resolution further encourages the prioritization of reusable items over disposables. The expansion of the campus compost collection program has allowed groups throughout campus to eliminate disposable plastics in favor of compostable alternatives.

The Office of Sustainability & Behavior Change Programs

A variety of programs have been initiated throughout the university to help change the behavior of students, faculty, and staff on campus. These programs aim to promote sustainable work and lifestyle practices with the goals of reducing environmental impact, greenhouse gas generation, and waste. [The Office of Sustainability](#), within the Department of Environmental Safety, Sustainability, and Risk spearheads many of these behavior change programs. The Office of Sustainability has many internship and engagement opportunities available for students.

Green Office Program

Launched in 2011, the [Green Office Program](#) supports faculty and staff taking steps to reduce their environmental footprint in their offices while working at the University of Maryland. The program contains four tiers of recognition: bronze, silver, gold, and platinum. At each tier there are options that offices can choose to reduce waste, minimize energy consumption, and promote sustainable purchasing. Action items related to plastic waste reduction are listed here.



BRONZE:

- Establish an office supply sharing and reuse area for file folders, binders, pens, tape, etc. This action item reduces office supply waste and encourages sharing of resources.
- Ensure recycling bins with informational signage are in the office to allow faculty and staff to recycle all appropriate waste.
- Recycle used toner and ink cartridges from printers and copy machines to prevent these items from ending up in the landfill.

SILVER:

- Eliminate personal bottled water from offices.
- Buy condiments and other supplies in bulk to minimize packaging waste.
- Decrease the number of giveaways, freebies, and gifts purchased by the office.

- Eliminate disposable dishware and cutlery for daily personal use, meetings, and events.

GOLD:

- Eliminate the use of disposable K-Cups and individually wrapped coffee pods through the purchase of reusable or compostable K-Cups.

Green Terp & Green Chapter Programs

The [Green Terp Program](#) is the behavior change program aimed at residence hall students with the goal of establishing sustainable practices in their daily lives. To become a certified Green Terp, students must select a minimum of 10 action items to incorporate into their daily lives. Action items are divided into categories including participation/engagement, waste, water, energy, transportation, food-dining, and personal & household cleaning products. Action items in several categories are related to reducing waste in general and plastic waste in particular. Once a student has become a certified Green Terp, they have their choice of a participation gift of bamboo cutlery or a stainless steel straw set.



Relevant Green Terp Action Items include:

- I will carry and use a reusable water bottle.
- I will put cans, bottles, plastics, and paper into the blue recycling bins on campus.
- I will ensure that my unwanted items are donated for reuse at the end of the school year.
- I will use a reusable shopping bag/backpack when I make purchases on and off campus.
- I will buy food items with less packaging.
- I will not purchase bottled water.
- I will choose to eat-in instead of take-out from local restaurants.
- I will purchase or make a multi-purpose green cleaner.



The [Green Chapter Program](#) is the behavior change program geared toward campus Fraternity and Sorority students. There are three steps to becoming a UMD Green Chapter: 1) appoint or elect a Sustainability Chair 2) 30% of the chapter become a certified Green Terp and 3) implement four chapter-wide actions. Eliminating disposable cups, plates, and utensils for meals and events hosted inside your house is a key action chapters can pick to eliminate plastic waste within their houses. Additionally, chapters can choose to store and reuse materials for events like Recruitment, Homecoming, Spring Fest, or Ritual. Choosing this action item reduces waste of all forms and particularly plastic waste.

Cultivating A Culture of Reuse

Water Bottle Filling Stations

With the assistance of the University's Student Sustainability Fund, the university now has nearly 100 water bottle filling stations throughout campus. These stations are located in most campus buildings and the Sustainability Fund is contributing additional funds for more of these to be added on campus every year. The opportunity to obtain free, filtered water throughout campus has greatly reduced the use of plastic water bottles in the campus waste stream. It is estimated that more than 6 million plastic water bottles have been saved through the use of these water filling stations since the first was installed in 2013. Water bottle filling stations can be found under the Sustainability layer of the [campus webmap](#).



Trash To Treasure - Campus Move-Out Program



The [Trash to Treasure Program](#), run by the Department of Resident Life, aims to donate reusable items to local charities and minimize the amount of landfill waste generated during the Spring move-out period. Through partnerships with the Department of Transportation, UMD

Campus Pantry, and the University Libraries, the Trash to Treasure program also collects bikes, non-perishable food, and textbooks for donation. Additionally, recycling opportunities are available for broken electronics, refrigerators, and carpets and foam padding. During the 2018 move-out period, the Trash to Treasure Program collected 12,783 pounds of reusable goods, 1,350 pounds of non-perishable food, 516 textbooks, 494 tvs for recycling, 16.5 tons of carpet for recycling, seven pallets of electronic waste, and nine bikes. The Trash to Treasure program was suspended prior to move-out 2019 due to the COVID-19 pandemic, but will be reinstated once it is determined safe to do so.

Student Recycling & Compost Bins

There are many opportunities to choose to reuse instead of purchasing new products. The Department of Resident Life, Dining Services, and Facilities Management has incorporated reuse into the personal recycling and compost bins that are provided to residence hall students. The university collects empty buckets from dining hall food



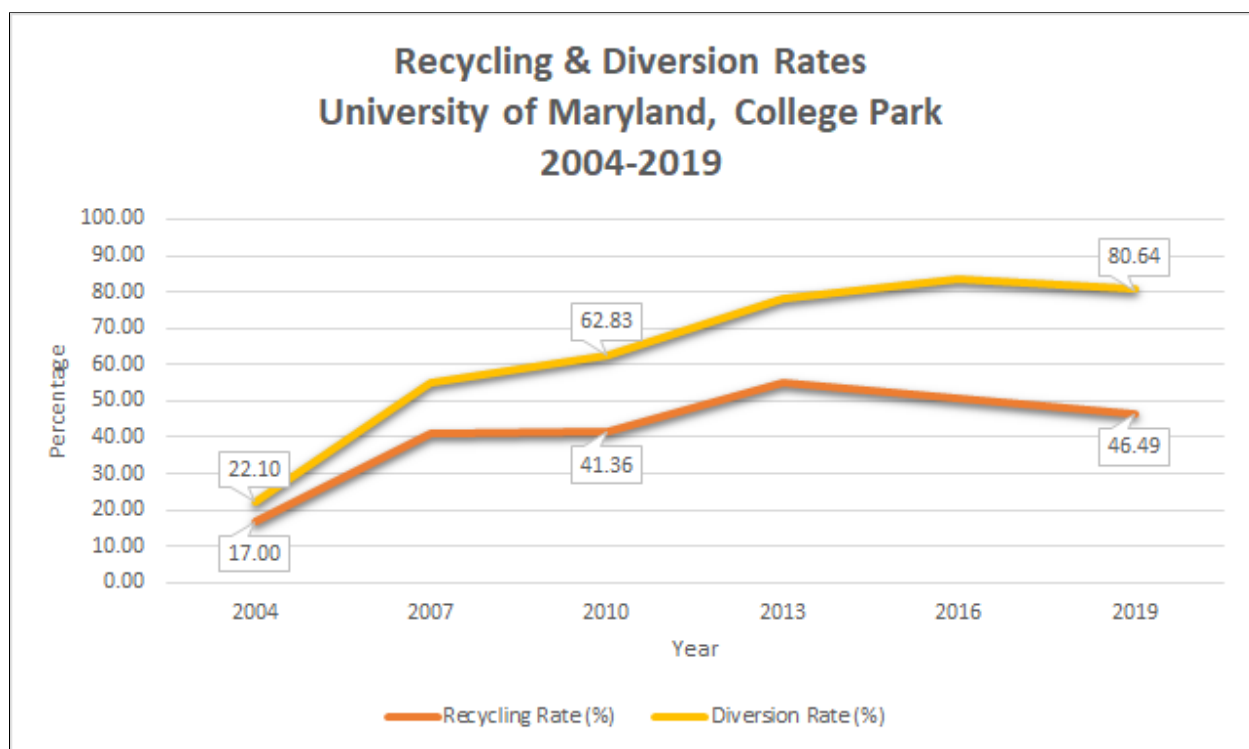
preparation, cleans these buckets, and provides them for students to use to collect recyclables or compostables within their room while on campus. Five-gallon buckets saved from the Maryland Dairy are converted into recycle bins and smaller tubs with lids from yogurt or sour cream are saved to be used as compost collection bins for campus suites and apartments. Reusing these containers minimizes the plastic recycling generated within the dining halls, allows items to be reused by students, and saves the university the cost of purchasing new bins. Outreach events are held at the beginning of each academic year to provide students with these bins and opportunities to decorate and personalize their bins.

Keeping Campus Clean - The Arboretum & Campus Clean-Up Events

The University of Maryland, College Park campus is an [Arboretum and Botanical Garden!](#) As a part of the Building & Landscape Maintenance unit of Facilities Management, the campus Arboretum & Landscape Services is responsible for litter clean up on the campus grounds. A team of 40 employees are responsible for picking up litter and emptying the outdoor trash and recycling bins during the week, with an additional 10 employees over the weekend. In addition to the campus employees dedicated to litter removal, the campus Arboretum coordinates dozens of campus clean-up events throughout the year. Between the years 2017 and 2020, more than 229 bags of litter were collected from campus, averaging over 57 bags per year. Between calendar year 2016 and 2020, nearly 19,000 volunteer hours were spent on campus clean-up projects. These efforts are significant since a portion of this litter would have entered the waterways if not cleaned up and properly disposed.

Conclusion

The University of Maryland, College Park campus has taken significant steps to reduce plastic waste generated on campus. The chart below shows the changes in the campus recycling and diversion rates from 2004 through 2019. More data on the campus recycling and waste diversion efforts can be found on the [SustainableUMD Progress Hub](#).



Although these numbers show significant reduction in waste generation and strong improvement in the campus's waste diversion and recycling rates, the campus community can continue to make strides to further reduce waste. Faculty and staff can contribute by making conscientious efforts to reduce their personal waste and encourage their unit to join the Green Office Program. Students at the university are encouraged to participate in the Green Terp Program and join a student group that is dedicated to promoting environmentally friendly practices and reducing waste. The graphics at the end of this report are (1) steps individuals can take to further reduce plastic waste in their personal life and (2) a timeline of important events that have contributed to the reduction of plastic waste on the University of Maryland, College Park campus.

MINIMIZE DISPOSABLE PLASTICS

Tips to further reduce plastic waste in your personal life.

REUSABLE BAGS, CUPS, BOTTLES, UTENSILS, & STRAWS

Carrying and using reusables can contribute to a dramatic reduction in personal plastic waste. They can also save you money since many stores offer discounts for reusable mugs and bags.

REPLACE PLASTIC FOOD STORAGE

Use glass or metal containers instead of plastic. These usually last longer than plastic containers and no chemicals will leach into your food. Most plastic food containers can be recycled as long as they are clean and dry.

AVOID MICROPLASTICS

Many soaps and cosmetics contain tiny plastic particles (microplastics) that eventually enter waterways. Buy products without these!

BUY FOOD IN BULK

This reduces the amount of plastic packaging per item.

If a product does come with plastic packaging, check to see if you can recycle this with plastic bags at local grocery stores.

MINTS V GUM

Did you know chewing gum contains plastic?

Using mints instead of gum reduces plastic waste in the environment!

BE A CONSCIENTIOUS CONSUMER

Your purchases make a difference! Buy second-hand as appropriate. Think before you buy. Buy products that are designed to last and are able to be fixed if necessary.

REDUCE, REUSE, RECYCLE



TIMELINE OF UMD'S PLASTICS REDUCTION EFFORTS

