

UNIVERSITY OF WASHINGTON

ZERO WASTE ATLAS CAMPUS ASSESSMENT 2021



TABLE OF CONTENTS

Introduction	3
Zero Waste Scorecard	8
Program Scoresheet	9
Scope 1 - Hard Goods: Surplus & Hard-to-Recycle Materials (HRM)	12
Hard Goods Infrastructure & Programs	13
Surplus: Expand Capacity (Infrastructure and Staffing) for Campus-Wide Management of Surplus Property and Material Donation	13
HRM: Expand Capacity of Campus Wide Management of Hard-to-Recycle Materials (HRM)	16
Programs: Thrift Store & Residential Halls	24
Hard Goods Policy	26
Hard Goods Bin & Signage Standardization	29
Scope 2 - Soft Goods: Food, Plastic & Compost	31
Figure: Campus Dining Facilities and Food-Service Vendors	32
Soft Goods Infrastructure & Programs	33
Expand Reusable Dishware, To-Go Ware, and Access to Reusables	33
Expand Capacity for Food Recovery and Food Waste Minimization to All Food-Service Facilities on Campus	39
Expand Capacity of Compost Program and Eliminate All Single-Use Disposable Plastics	43
Other Programs and Initiatives	47
Campus-Wide Soft Goods Policies and Zero Waste Events / Policies	52
Soft Goods Policy	52
Zero Waste Events	56
Accessibility Policy	61
Soft Goods Bin & Signage Standardization	64
Standardize Collection Systems, 3-Bin Systems, Eliminate Unpaired Bins, and Establish Liquid Collection	64
Conclusion	67
Acknowledgements	68

INTRODUCTION

In Spring 2021, UW Recycling hired the [Post-Landfill Action Network \(PLAN\)](#) to support UW Recycling Zero Waste Program Assistant, Julie Ira '22, to conduct a holistic assessment of the University's waste management system. The UW's [Sustainability Action Plan for FY2022](#) names a goal of 10% less solid waste by 2025 with a focus on diverting compostable waste, implementing low-waste campus kitchens, and reducing single-use disposable items under the guiding principles of "Use Resources Responsibly" and "Decarbonization". However, the UW has expressed commitment to not only reducing their waste sent to landfill by 2025, but also changing the ways that the campus purchases and manages goods to be more reflective of embedded emissions and resource use, as well as harnessing the University's purchasing power and research leadership to promote sustainability and equity. The following report is intended to identify concrete steps that the UW can take to shift towards holistic zero waste systems.

Julie used PLAN's Atlas Zero Waste Assessment - a project designed to help campuses assess and streamline campus systems for materials management - to collect the information used to inform this report. This report offers a snapshot of existing programs, services and infrastructure, illustrates ideal material flows throughout a campus, and proposes recommendations to fill the gaps identified during the assessment. While this Atlas assessment provides numerous suggestions based on its assessment of the capacity of existing campus systems and best practices from other campuses, campus stakeholders must ultimately decide on the exact path the University takes to achieve zero waste. [Numerous resources](#) are available to PLAN member campuses to guide them in making these decisions.

Note: This report is currently being produced during the COVID-19 Pandemic when most colleges switched to virtual learning. All systems were assessed as they were pre-COVID-19. Concerns and questions about Reuse Programs and the COVID-19 pandemic are addressed in [this fact sheet](#).

Terms used in this report can be found in the [Atlas Glossary of Terms](#).

This report was prepared for the University of Washington by the Post-Landfill Action Network, a non-profit zero waste advising organization based in Dover, New Hampshire. Any views, thoughts, or opinions expressed in the text belong solely to the Post-Landfill Action Network and do not reflect the views of the University of Washington.

ASSESSMENT PROCESS

Julie was trained by PLAN’s Atlas team on the findings and theories that originally informed PLAN’s Atlas Zero Waste Program, and on the interview process central to the assessment. She used PLAN’s Atlas Stage 1 Campus Programs Checklist to complete in-depth interviews with 45 representatives from various campus departments, documenting and gathering data through a series of yes/no questions on the current infrastructure, policies, and communication channels related to the University’s waste mitigation and management. A complete list of the interviewed representatives can be found in the Acknowledgements section of this report.

Following data collection, Julie scored the campus checklist - points are awarded in accordance with [the zero waste hierarchy](#), with **3 points** awarded for source reduction initiatives, **2 points** for reuse initiatives, and **1 point** for recycling/ compost initiatives. The campus was awarded an overall score, scores for the two major systems of campus materials management described in the following section, and specific programmatic scores, which are all collectively used to guide this report.

METHODOLOGY - MATERIAL MANAGEMENT SCOPES

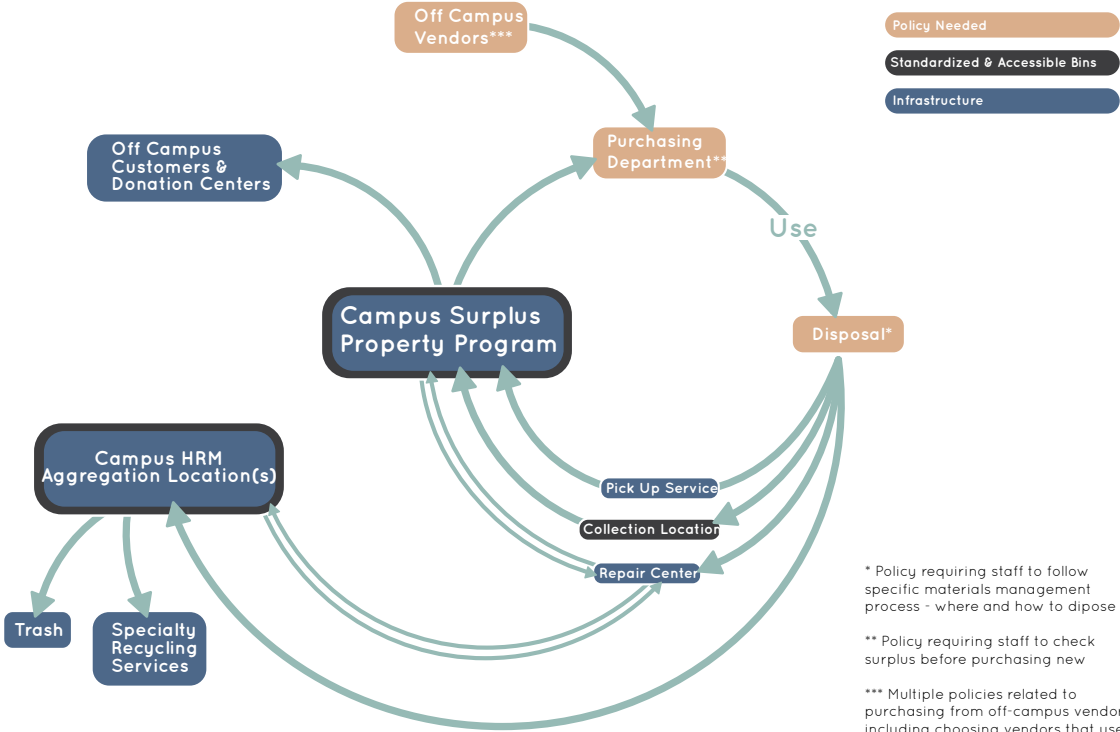
SCOPE 1 HARD GOODS Surplus Property and Hard-to-Recycle Materials Materials the campus has direct control over	SCOPE 2 SOFT GOODS Food and Single-Use Materials Materials the campus purchases, but has limited control over which bin the material is placed in
Electronics Furniture Office Supplies Lab / Art Equipment Vehicles / Tires / Oil Chemicals / EH&S Facilities / C&D	Food Waste Food Packaging Disposable Dishware Disposable To-Go Ware Compostable Dishware Compostable To-Go Ware Reusable Dishware Reusable To-Go Ware

[The Zero Waste Atlas project](#) is unique in that it does not simply measure waste outputs, but instead looks holistically at the entire campus materials management system from purchase to use to collection to disposal.

In **Scope 1 - “Hard Goods”**: We assess the materials management system for all materials the campus has direct control over - namely, items that the campus purchases, manages, uses, and maintains ownership over, and is ultimately fully responsible for the method in which they are discarded. Below is an **example** of how a campus would manage materials in an ideal version of this system. You can also chart the path of this item through the idealized system map provided below.

A faculty member wants to **purchase** a file cabinet. First, per **campus policy**, they check the **campus surplus property program** and other local reuse facilities before buying a new item. When reuse isn’t an option, the faculty member **purchases** the file cabinet following the campus’s procurement policies. Years later, when the file cabinet is being discarded - the staff member contacts the **surplus property program** to schedule a **pick-up**, and the item is picked up for free. The item is **catalogued**, listed for sale on the **University’s online surplus sale site**, and possibly also on sale at a **surplus storefront**. If the item goes unsold for weeks or months, the item is **donated to the community** or sent to the **campus aggregation point for hard-to-recycle materials** - where it is stripped into parts. In this case, the file cabinet parts would go to **industrial metal recycling**.

Scope 1 - An Example of Material Flow Options Through an Idealized Version of a Hard Goods System Map

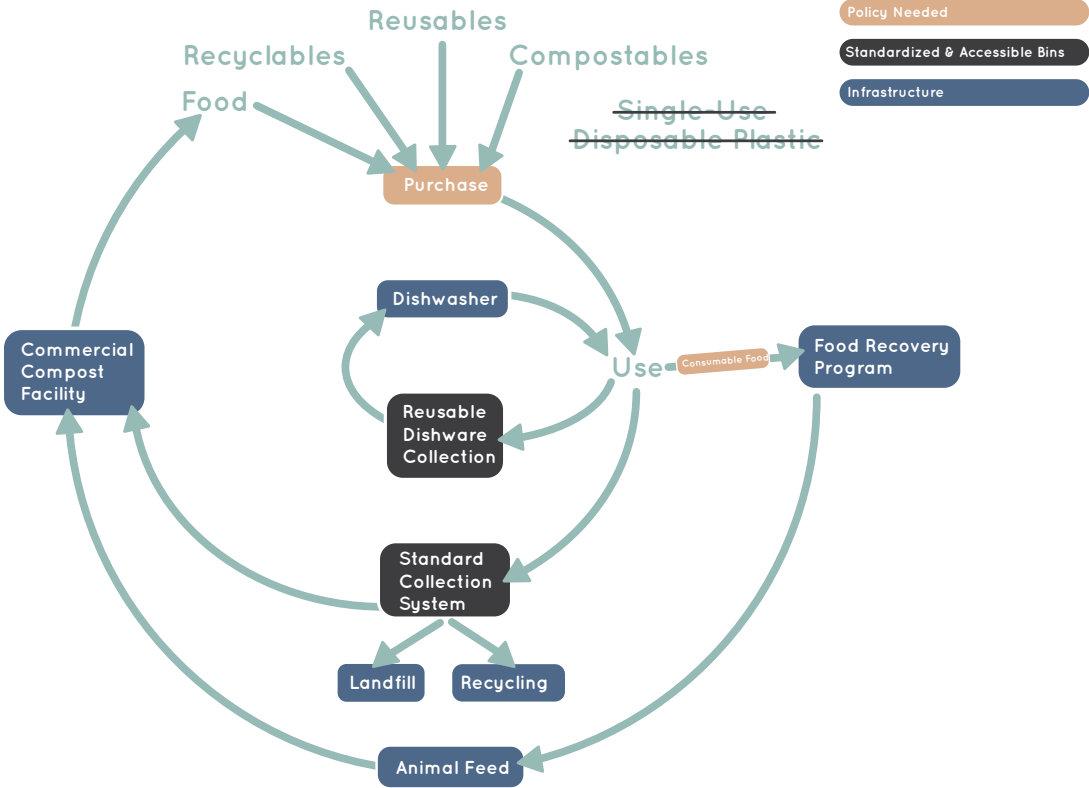


* Policy requiring staff to follow specific materials management process - where and how to dispose
 ** Policy requiring staff to check surplus before purchasing new
 *** Multiple policies related to purchasing from off-campus vendors including choosing vendors that use recycled materials, make recyclable products, have takeback programs,

In **Scope 2 - “Soft Goods”**: We assess the materials management system for all materials that the campus purchases, but ultimately wind up in the hands of individual users, leading to limited control over which bin the material is placed in. Below is an **example** of how a campus would manage materials in an ideal version of this system. You can also chart the path of this item through the idealized example of a system map provided below:

A student purchases a coffee from a coffee vendor on campus that is required to comply with the **campus procurement policy**. The student can either get the coffee in a **reusable to-go mug** or in a **compostable cup**. The student walks across campus with their coffee, and when finished, discards their coffee container in the **standardized collection bin** for either compostable materials or reusable dishware, available in every building on campus. If compostable, the material is collected and transported to an **industrial composting facility** (either on or off campus). If reusable, the dishes are taken to a **campus dishwasher** to be washed and re-distributed back to campus food vendors.

Scope 2 - An Example of Material Flow Options Through an Idealized Version of a Soft Goods System Map



© 2021. Post-Landfill Action Network. All Rights Reserved

The Zero Waste Atlas project is designed to streamline campus material management systems, as illustrated by the example scenarios for Scope 1: “Hard Goods” and Scope 2: “Soft Goods.” Not addressed in this systemic analysis is a proverbial “Scope 3”, which would account for all items brought to campus (ie, not purchased by the campus) by individual consumers (faculty, staff, students, visitors, etc). We do not include these items in this assessment because the campus has no control over the purchasing of these items, and the ultimate management and disposal of these items falls under the parameters of Scopes 1 and 2. Therefore, effectively-designed Scope 1 & 2 systems will ultimately be capable of capturing Scope 3 materials. Below is an ideal version of how a Scope 3 material would be captured in this system.

A student living in a residence hall on campus discovers that their lamp is broken. They bring the lamp to the **campus repair center** (a facility assessed in **Scope 1**), where an attempt to repair the lamp is made. If the lamp cannot be repaired - the lamp is placed in a **standardized electronic waste recycling bin** which can be found in most buildings on campus.

PROGRAM SCORING

In addition to the Hard Goods and Soft Goods Material Scopes, and the Additional Programs groupings, all of the questions in the Campus Programs Checklist were also categorized by specific program, as seen in the included Program Scoresheet, such as reusable to-go ware or residential hall initiatives. Program recommendations will be included in the same sections that assess Hard Goods Infrastructure and Soft Goods Infrastructure; note that these programs are generally smaller-scale projects versus campus-wide infrastructure projects. These scores preface the assessment and recommendations in each section and are summarized in the scoresheet included in the following pages. The scores preceded by a “+” at the top of each section indicate “Additional Programs,” meaning that they are added as unweighted extra credit to the Hard Goods and Soft Goods scores.

In some sections, findings are presented in the form of tables and can be interpreted as follows:

yes	full points awarded, i.e. 100% adoption across all facilities
half yes	half points awarded, i.e. facilities are still in the process of adoption
no	no points awarded, i.e. facilities have not adopted this practice and are not in the process of adopting it
n/a	question is not asked or is not applicable to this facility
+0	no extra points awarded - this is an additional credit question
+number	extra points awarded - this is an additional credit question

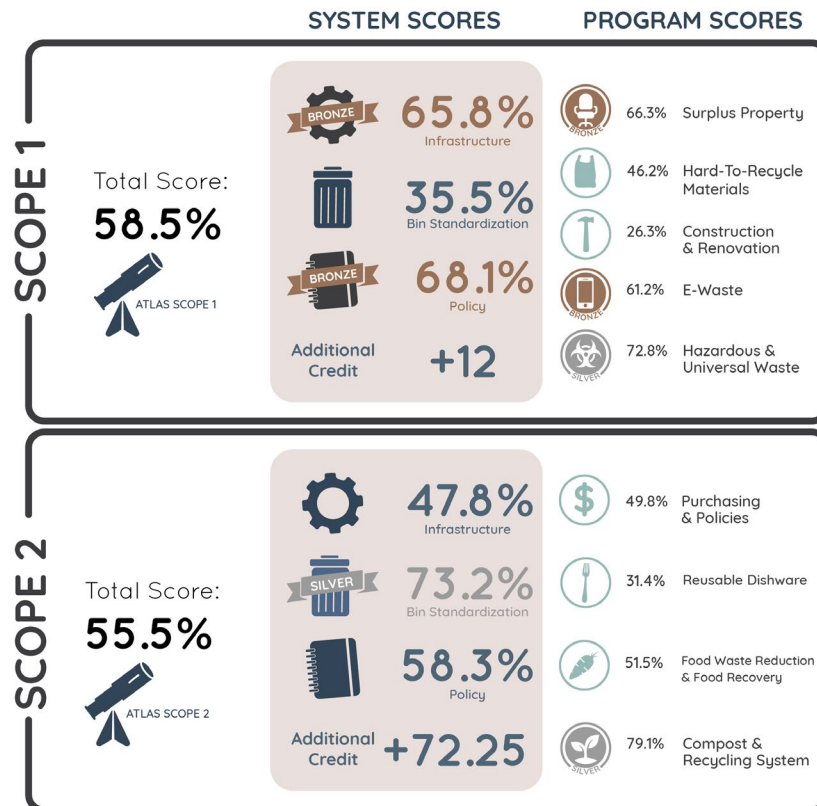
UW ZERO WASTE SCORECARD

University of Washington
Spring 2021



Zero Waste™ Certification
A Program of PLAN

Total Score: 56.5%



PROGRAM SCORESHEET

	Points Given	Points Possible	Points Given	Points Possible
Scope 1: Surplus Property & Hard-to-Recycle Materials (HRM)			921.5	1596

Surplus Property	236	356
Surplus Program Policies & Communication	99.5	131
Surplus Program & Managed Materials	77.5	125
Reuse & Repair of Departmental Surplus Items	31	39
Reuse & Sharing of Student Items	28	61

Hard to Recycle Materials	235	509
HRM from Specialized Facilities	177.5	328
HRM Aggregation & Collection Point Accessibility	57.5	181

Construction & Renovation	15	57
Construction & Renovation Policies	15	57

Electronic Waste	292	477
Policy Requiring Staff to Send E-Waste to Surplus/Recycling	41	43
Procurement Policies for Purchase, Takeback & Recycling	24	27
Electronics Repair & Recycling	171	223
E-Waste Collection Infrastructure	56	184

Hazardous Materials	143.5	197
Hazardous Waste Collection & Management	143.5	197

Scope 2: Compost, Food, and Plastics			1618.25	3044.5
---	--	--	----------------	---------------

Purchasing & Policies	633.5	1271
Adherence to Campus Procurement Policies	295	403
Policies That Favor Bulk Products Over Single-Use	194	450
Institutionalization of Zero Waste Goals & Plans	33	96
Paper Reduction & Reuse Initiatives	111.5	322

Compost/Recycling & Bin System	598	756
Composting Program	100.5	104
Compostable Dining Ware & Disposables	212.5	281
Bin Standardization	205	249
Recycling	80	122

Reusable Dining and To-Go Ware	213.75	681.5
Accessibility Policy	25	27
Reusable Dining Ware at Sit-Down Eateries	130.75	249.5
Reusable To-Go Ware Program	8.5	289
Hydration Station Availability	43	56
BYO Program	4	27
Collection Locations for To-Go Ware	2.5	33

Food Waste Reduction & Food Recovery	173	336
Food Recovery Program	64.5	129
Food Waste Reduction Initiatives & Education	108.5	207

Additional Credit	84.25	332
Additional Credit - Surplus Sharing Initiatives	9	20
Additional Credit - Hard-to-Recycle Material	0	12
Additional Credit - Hard Goods Reuse	3	5
Additional Credit - Reusable Dishware, To-Go Ware, BYO	11	143
Additional Credit - Food Recovery & Waste Minimization	2	8
Additional Credit - Compost	5.5	23.5
Additional Credit - Education	48.5	67
Additional Credit - Soft Goods Policies	0.5	12
Additional Credit - Liquid Collection	4.75	41.5

PLAN's Zero Waste Atlas project has found so far that the average campus score is between 40-50%. As we expand this project to more campuses, we will continue to update [national scoring averages and standings](#) for how campuses compare with each other. Larger versions of the Scorecard (previous page) and the Program Scoresheet are [linked](#). A detailed breakdown of the campus' points can be found in the Campus Programs Checklist.

SUMMARY RECOMMENDATIONS

We recommend that the University of Washington gather a **Zero Waste Task Force** or similar working group that spans all three campuses to review this report, in tandem with the goals set out in the UW's [Sustainability Action Plan for FY2022](#). Following that review, we recommend working collaboratively with all stakeholders to discuss and build a strategic vision to address system-wide solutions, and create a comprehensive **"Zero Waste Roadmap"** for the University. The established vision may update existing goals and outline ambitious new goals that require advanced long-term strategic planning and establishment of new campus infrastructure and systems, as well as policies and standard operating procedures that may differ from the way materials are currently managed. They may also require looking into organizational restructuring to relocate and redefine program management and responsibilities, which should be coupled with ample research to make decisions around management and costs. The Task Force should aim to develop a timeline to achieve measurable progress towards the following recommendations:

SCOPE 1

- Encourage faculty and staff to **check surplus options** before purchasing new items and better communicate the existing ways that UW Surplus communicates its inventory to all three campuses.
- Expand the capacity of all three campuses to more efficiently collect, manage, and reallocate **hard-to-recycle materials (HRM) and universal and electronic waste**.
- Establish policies prioritizing **deconstruction and reuse of construction materials** for both contracted and in-house construction and renovation projects.
- Increase opportunities for students to **share and reuse** surplus items and hard-to-recycle materials across campus by establishing shared resources websites between similar facilities, campus community repair spaces in specialized facilities, free spaces in residence halls, and a Thrift/Free Store on each campus.
- Establish and communicate **sustainable procurement policies** based off of [Procurement's guidelines](#) to guide departments with purchasing electronics and other hard goods, that are consistent across all three campuses.

SCOPE 2

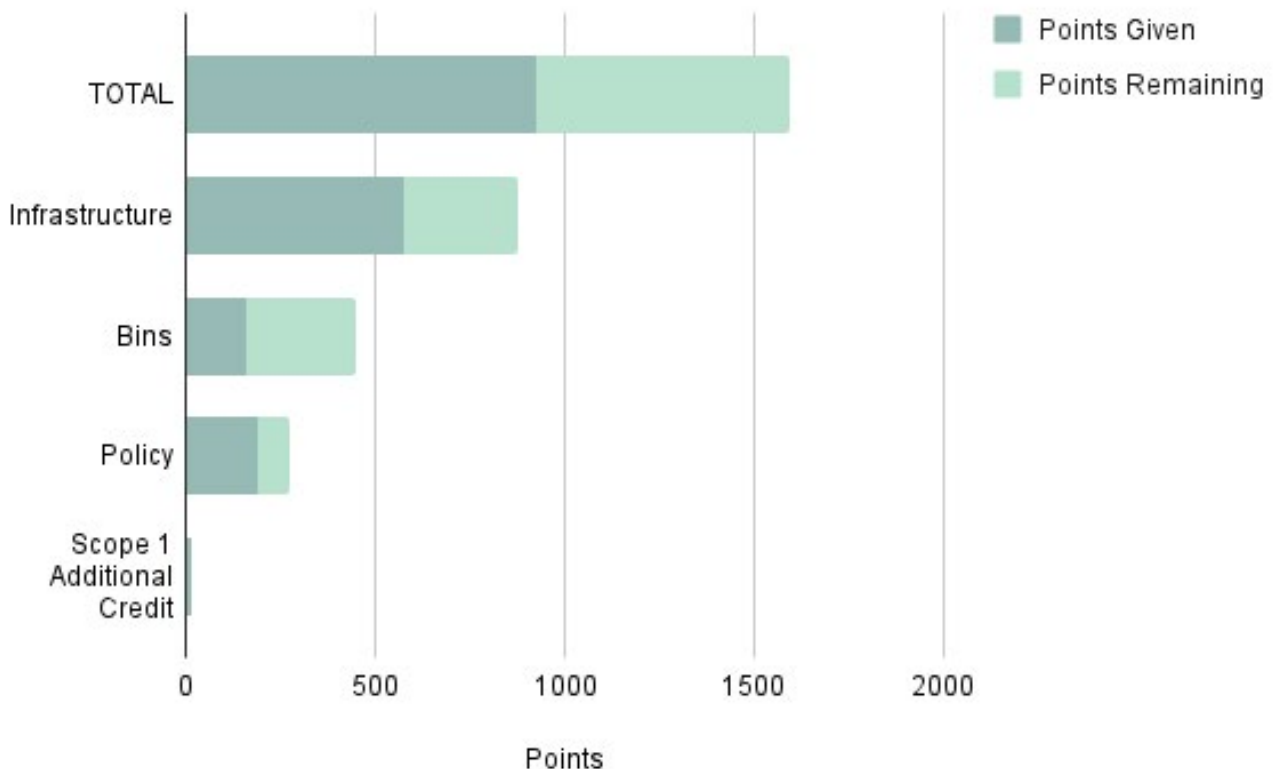
- Explore options to **limit disposable dining ware usage**, such as by offering reusable dining ware to all food service facilities with dishwashers on campus, expanding the reusable to-go container program, and/or developing a bring-your-own-container program that is universally accepted at all facilities.
- Pledge to **limit single-use plastic and non-essential packaged items** by signing the [Break Free From Plastic Campus Pledge](#), as well as establishing systems for bulk service and bulk purchasing.
- Expand **food recovery programs** to dining locations and events on all three campuses, and establish **food waste reduction programs** for both back-of-house and customer-facing purposes.
- Establish and better communicate **sustainable procurement policies and event guidelines** for soft goods material management (e.g. dining ware) based on Procurement's guidelines and in line with what items each campuses' haulers can accept in their composting stream.

SCOPE 1 - HARD GOODS: SURPLUS & HARD-TO-RECYCLE MATERIALS (HRM)

MAP OUT INTERDEPARTMENTAL MATERIAL FLOW

An important first step to better understand connections, increase communication, and identify gaps in surplus and HRM management on UW's campus is creating a material flow map. This should outline the movement of materials throughout the stages of purchasing, use, collection and disposal between various departments on campus. This should also outline stakeholders that interact with this process, and the logistics and infrastructure necessary throughout each stage. A simplified example of a relatively perfect system map is provided in the Methodology section - note that stakeholders are not identified in this diagram because the distribution of responsibility varies between campuses.

HARD GOODS: ASSESSMENT & RECOMMENDATIONS



HARD GOODS INFRASTRUCTURE & PROGRAMS

I. Surplus: Expand Capacity (Infrastructure and Staffing) for Campus-Wide Management of Surplus Property and Material Donation

This section measures the campus’s capacity in terms of infrastructure, services, and staff to fully capture surplus property from all departments and locations

77.5 / 125	Surplus Program & Managed Materials
31 / 39	Reuse & Repair of Departmental Surplus Items
+ 9	Additional Credit - Surplus

on campus, with the intended purpose of making those items available for reuse on-campus or donation off-campus, as well as non-electronic repair initiatives like textiles and furniture. **All three campuses use the same Surplus program on UW’s main Seattle campus, so the assessment and recommendations found in this section should be taken to apply to all three campuses.**

TABLE 1: CAMPUS SURPLUS PROPERTY COLLECTION

Table 1: Campus Surplus Property Collection	
Surplus Property	Collected by Campus for Reuse
Furniture	Yes
Electronics (laptops, lab and medical, refrigerators, air conditioners, appliances, handheld devices, wires and cables)	Yes
Mixed media (CD’s, DVD’s, etc.)	Yes
Textiles (clothing, uniforms, etc.)	Yes
Reusable building fixtures (i.e lighting, HVAC systems, plumbing fixtures, doors, etc.)	Yes
Construction & demolition material (brick, stone, tiles, wood, shingles, etc.)	Half yes
Misc. household goods (dishware, classroom equipment, decorations, school supplies, sporting equipment, etc.)	Yes
Campus vehicles	Yes
Books	Yes
Paint & art supplies	No
Lab equipment*	Yes
Medical supplies (e.g. crutches)*	Yes
Bikes & bike parts	Yes

*can be collected for internal reuse by specific campus department

Successes

As seen in Table 1, the University of Washington's campus-wide surplus property program has the capacity to collect and manage 12 of the 13 assessed materials for reuse. All interviewed stakeholders were aware that campus-owned property must be sent to surplus according to state law, including department-specific equipment such as lab, medical, and athletic equipment. UW Surplus collects most reusable building fixtures such as lighting, plumbing fixtures, wood furniture, etc. and will also accept unused or broken items that have been sitting in storage. Additionally, any items left behind by students or visitors become campus-owned property after a certain time period. UW Surplus uses its website and various forms of social media to publicize its inventory to the campus community, and recently launched an online store to make surplus items more accessible to both students and the greater community during COVID.

Most departments and facilities on UW's campus have repair programs to maintain campus-owned equipment. For example, Hall Health and the UW Medical Center work with UW Scientific Instruments, Facilities, and Primary Investigators to keep scientific equipment in repair, and the Fine Arts Department's Instructional Technicians maintain equipment and ensure that plaster molds/clay are reused.

UW also runs the U Bike bike rental program, which allows students to rent bicycles on a monthly or quarterly basis. This program comes with regular maintenance, but the ASUW Bike Shop also provides repairs to bikes in this program as well as personally-owned bikes. The Bike Shop also collects old bike parts in the "Bone Yard" that are then sold for very low prices or traded to customers for other parts.

Challenges

As with most state schools, UW Surplus only accepts campus-owned property as they are considered property of the state - therefore, students must find other channels for donating unwanted but still usable items.

The program is also limited in terms of the construction material and fixtures it can accept because of health and safety hazards - items such as wood paneling and old doors must be checked by EH&S before being given to Surplus. In addition, UW Surplus cannot donate items to off-campus community organizations, but can sometimes work out no-cost transfers with other state agencies and schools. Finally, UW Surplus does not offer free transportation of items to the surplus either; offering free moving services in the past was financially unsustainable, so departments, facilities, or individuals must now pay an hourly fee for moving services.

Some science labs and art studios already have shared equipment/resources websites and/or offer their resources and space to the campus community, but the campus could continue exploring these methods within other departments to increase the reuse of department-specific items and incorporating the use of surplus property items into day-to-day operations. UW's IT department offers technical support to help departments with software installation and other challenges, but this is only available to staff and faculty and does not extend to cover hardware repair.

Recommendations

The University of Washington could consider expanding aspects of its surplus property within the constraints of state laws to encourage more effective use by staff members and students.¹ Some possibilities include:

- Establish a policy/standard practice for staff members to check surplus property inventory before purchasing new items for a department
- Exploring ways to make transportation of surplus property to the warehouse free or more convenient
- Explore more opportunities for interdepartmental sharing of items, such as through the creation of shared resource websites for labs and makerspaces, or by offering sharing spaces in offices and architecture studios for swapping office supplies, art supplies, etc.

¹A few successful and innovative examples of surplus management include [Michigan State University's](#) combined Surplus Store and MRF and the [Online Swap at University of Southern Maine](#). The [University Surplus Property Association](#) is also a great resource.

Additional Credit

Surplus Reuse & Sharing Among Individual Departments: UW earned additional credit for internal reuse and sharing of materials within a few campus departments. Some campus labs share some spaces and equipment between multiple groups and run the autoclaves/dishwashers as a cost center. The UW Performing Arts Center and the Fine Arts Department also share equipment with other local entities or with the UW community, and UW Recycling will sometimes send material that Surplus plans to discard to the Fine Arts Department to be repurposed.

II. HRM: Expand Capacity of Campus Wide Management of Hard-to-Recycle Materials (HRM)

This section measures each campus' capacity in terms of infrastructure, services, and staff to fully capture Hard-to-Recycle Materials (HRM) from all departments and locations on its

campus with the intended purpose of aggregating those items for economical recycling of them through industrial facilities. HRM's exist in different pockets and departments of campus, and are more efficient and cost-effective to manage at campus-scale via a campus-wide system. The following table assesses whether each campus collects and manages the following hard-to-recycle materials for reuse or recycling in any campus-wide capacity.

177.5 / 328	HRM from Specialized Facilities
143.5 / 197	Hazardous Waste Management
171 / 223	Electronics Repair Services
+ 0	Additional Credit - HRM

Assessment

Non-hazardous hard-to-recycle materials are collected individually by each campus and are assessed **separately** from each other. We assess each campus' ability to aggregate the materials shown in the following tables.

TABLE 2A: UW SEATTLE AGGREGATION OF HRM

Hard-to-Recycle Materials (HRM)	Collected at a Campus Aggregation Point
Lab plastics	No
Lab glass	No
Plastic film & bags, bubble wrap, plastic wrap, air packages for recycling	Yes
Styrofoam & packing peanuts	Yes
Rigid plastics (e.g. tubes, pots, pesticide containers)	Yes
Rubber gloves	No
Scrap metal	Yes
Wood and/or sawdust	Yes
Concrete	Half yes
Brick	Half yes
Drywall	Half yes
Roof shingles	Half yes
Porcelain (e.g. sinks, toilets, tubs, etc.)	Yes
Textiles	No
Carpet	No
Mattresses	Yes
Plastic signage	No
Wood pallets	Yes
Cooking oil	Yes
HRM for Terracycle	No

- Plastics, Films, and Styrofoam:** Lab plastics and glass are not collected in a central aggregation point, but are generally collected in departments where they are generated, such as science labs and UWMC-Montlake facilities. UW Recycling collects plastic film, styrofoam, and rigid plastics for recycling.
- Construction and Renovation Materials:** Material from contracted construction and renovation projects are required to be recycled, but material from in-house projects are not necessarily aggregated and/or recycled.
- Textiles, Plastic Signage, and Terracycle Programs:** Textiles, carpet (recycled until a few years ago, when there was no longer a market for them), mattresses, plastic signage, are not centrally collected for campus-wide recycling, but Meany Hall collects textiles separately from trash. The campus does not participate in any Terracycle programs (which does not negatively impact the campus' score).

- **Wooden Pallets:** Wooden pallets are collected for composting across campus, or are taken back by the vendor for reuse. UW Recycling estimates that about 6 tons of wooden pallets are reused per month, either by community members collecting them from docks informally, or by various departments saving, sharing, or reusing pallets in good condition.
- **Cooking Oil:** Local Point and Center Table work with a company called Sequential, which picks up used oil and repurposes it after the oil has been used, filtered, and reused several times. Cultivate and most Casual Sit-Down Eateries have a system for recycling their cooking oil, but the food trucks do not.

TABLE 2B: UW TACOMA AGGREGATION OF HRM

Table 2b: UW Tacoma Aggregation of HRM	
Hard-to-Recycle Materials (HRM)	Collected at a Campus Aggregation Point
Lab plastics	Yes
Lab glass	Yes
Plastic film & bags, bubble wrap, plastic wrap, air packages for recycling	Half yes
Styrofoam & packing peanuts	Half yes
Rigid plastics (e.g. tubes, pots, pesticide containers)	Yes
Rubber gloves	Half yes
Scrap metal	Yes
Wood and/or sawdust	Half yes
Concrete	n/a
Brick	n/a
Drywall	Yes
Roof shingles	n/a
Porcelain (e.g. sinks, toilets, tubs, etc.)	Yes
Textiles	Half yes
Carpet	Yes
Mattresses	Yes
Plastic signage	Half yes
Wood pallets	Half yes
Cooking oil	Yes
HRM for Terracycle	n/a

- **Plastics, Films, and Styrofoam:** UW Tacoma does not have specific aggregation points throughout campus for hard-to-recycle material aggregation, but specific departments and labs collect lab plastics and glass. This collection is only open to students or staff working in that specific facility. Plastic films and styrofoam are only collected in the Mailing Services department and not offered as a campus-wide collection point.
- **Construction and Renovation Materials:** Material from construction and renovation projects are only collected by the departments and facilities that produce it and not open to the general campus community, with the exception of scrap metal, which is collected and delivered to the local metal recycling center.
- **Textiles, Plastic Signage, and Terracycle Programs:** UW Tacoma contracts for laundry service for FS shop and custodial towels, but other textiles are not collected at any aggregation points on campus. Carpeting and the two to three mattresses that are disposed of each year are collected and managed by the department that produces them. There is no central aggregation point for vinyl and plastic signage aside from whichever department generates signage. The campus does not participate in any Terracycle programs (which does not negatively impact the campus' score).
- **Wooden Pallets:** Wooden pallets are collected for recycling by the departments where they are generated.
- **Cooking Oil:** There is a limited amount of cooking oil used on campus - event activities are the only location where it is encountered and collected.

TABLE 2C: UW BOTHELL AGGREGATION OF HRM

Table 2c: UW Bothell Aggregation of HRM	Collected at a Campus Aggregation Point
Hard-to-Recycle Materials (HRM)	
Lab plastics	Yes
Lab glass	Yes
Plastic film & bags, bubble wrap, plastic wrap, air packages for recycling	Half yes
Styrofoam & packing peanuts	Half yes
Rigid plastics (e.g. tubes, pots, pesticide containers)	n/a
Rubber gloves	n/a
Scrap metal	Yes
Wood and/or sawdust	Yes
Concrete	Yes
Brick	n/a
Drywall	n/a
Roof shingles	n/a
Porcelain (e.g. sinks, toilets, tubs, etc.)	n/a
Textiles	Half yes
Carpet	Yes
Mattresses	Yes
Plastic signage	n/a
Wood pallets	Yes
Cooking oil	n/a
HRM for Terracycle	n/a

- Plastics, Films, and Styrofoam:** Similarly to UW Tacoma, UW Bothell does not collect any hard-to-recycle materials at aggregation points across campus. Lab plastics, films, styrofoam, and rigid plastics are only collected within the specific facilities that generate it - for example, the School of STEM Teaching Labs collect lab glass, styrofoam, and rigid plastics separately from trash.
- Construction and Renovation Materials:** Scrap metal, wood and/or sawdust, and concrete are collected by the departments and facilities that generate them, and brick, drywall, roof shingles, and porcelain are not generated on campus.
- Textiles, Plastic Signage, and Terracycle Programs:** Textiles are only collected within individual campus departments. Plastic signage is not generated on campus, and the campus does not participate in any Terracycle programs (which does not negatively impact the campus' score).
- Wooden Pallets:** Wooden pallets are collected for recycling by the departments where they are generated.
- Cooking Oil:** Cooking oil is not generated on campus.

Recommendations

We recommend that the University continue exploring options for improving hard-to-recycle material collection systems on all three campuses, including:

- Mapping out material flow across campus for items that are not currently collected, identifying where items are already aggregated throughout different facilities, where collection points could be established across campus, and establishing which positions would be responsible for managing these aggregation spaces and collecting these materials.
- Increasing accessibility of ubiquitous hard-to-recycle material collection such as plastic films, styrofoam, and textiles beyond just the users of select facilities.
- Expand collection of construction materials generated by in-house projects.
- Continuing to align strategic planning with the campus surplus property program, such as doubling up efforts on identifying further aggregation and storage space and as a way to serve the surplus property program when items sent for reuse ultimately have to be broken down into material parts and recycled.

Electronic and universal waste from all three campuses is collected by UW Surplus and recycled in aggregate through campus-wide contracts with Electronics Recyclers International (ERI), Total Reclaim, and GreenDisk. **Hazardous material** that is generated at all three campuses is collected and processed by UW’s Environmental Health & Safety (EH&S) department. **These two categories of waste are assessed together for all three campuses.**

TABLE 2D: UNIVERSAL & HAZARDOUS WASTE

Table 2d: Universal & Hazardous Waste	
Electronic Recycling	Collected at a Campus Aggregation Point
Laptops/computers	Yes
Lab & medical electronic equipment	Yes
Freon-containing equipment (refrigerators, A/C)	Yes
Microwaves	Yes
Household appliances (fans, vacuums, anything w/cord or battery)	Yes
Handheld electronics	Yes
Wires and cables	Yes
Mixed media (CD’s and DVD’s)	Yes
Batteries	Yes
Lightbulbs	Yes
Ink & toner cartridges	Yes
Mercury-containing equipment (thermometers, fluorescent bulbs, etc.)	Yes
Hazardous/Regulated Waste	Clearly Defined Disposal Process
Tires	Yes
Paints and oil-based supplies	Yes
Lab chemicals or radiological waste	Yes
Waste oil	Yes
Pesticides	Yes
Fertilizer	Yes
Propane and propane tanks	Yes
Custodial chemicals	Yes
Sharps	Yes

- **Electronics Recycling and Universal Waste:** UW Surplus works with UW Recycling to manage campus-owned, electronic waste generated by all three campuses. UW Seattle hosts e-waste collection for student-generated electronics during move-in and move-out as well. Beyond recycling services, the “Computer Vet” service located at the Technology Help Desk in the UW Seattle Odegaard Undergraduate Library offers free assistance with software problems on personal computers to UW students, faculty, and staff.
- **Regulated and Hazardous Wastes:** All assessed regulated and hazardous wastes are collected and recycled or disposed of properly. The UW Fleet collects and manages tires, waste oil, and car batteries for proper disposal, and has a program for tire reuse. UW EH&S manages paints, oil-based supplies, lab/radiological waste, and propane tanks, and manages the small quantities of pesticides and custodial chemicals that are sometimes generated. Treated sharps are collected from hospitals and the Health Sciences building for proper disposal. Untreated sharps are collected from hospitals, Hall Health, clinics, and the Health Sciences building through coordination with UW Lab Services.

Recommendations

We recommend that the University explore options for improving e-waste collection systems on all three campuses by establishing year-round collection points for e-waste in residence halls and other high-traffic areas in coordination with the biannual move-in and move-out e-waste collection.

III. Programs: Thrift Store & Residential Halls

This section assesses programs that are often student-facing and can function either as part of campus-wide infrastructure assessed above or via separate programs that feed into or share components of larger campus-wide efforts.

28 / 61

Reuse & Sharing of Student Items

+ 3

Additional Credit - Hard Goods Reuse

Assessment & Recommendations

Thrift/Free Store:

None of the three University of Washington campuses has a centralized reuse space on campus, such as a thrift store or free store, but the HUB does host an annual lost & found sale, and some student groups host item swaps. We recommend that all three UW campuses explore the possibility of creating a space on campus that can accept unwanted but still usable student-owned items and clothing, especially since UW Surplus is unable to accept these items. At UW Seattle, this space could work in tandem with the SCRAM move-out programs in the Residence Halls.

Res Hall Reuse & Sharing:

The UW Housing & Food Services (HFS) residence halls and apartments encourage sharing of commonly purchased but difficult to dispose of appliances by offering microwaves in the communal kitchen areas and by making cupboard space available for items that are shared throughout the floor. These areas are not used as a “swap” space where students can give away unwanted but still usable items, and we recommend UW’s Residence Halls to explore the creation of such spaces. All items leftover at the end of the year could go to the SCRAM program, or to a campus thrift/free store. HFS also promotes [rental options](#) for microwaves and minifridges from Collegiate Concepts but does not offer them by default.

UW Recycling runs SCRAM, or Student Cleanup, Recycle, and Moveout, a donations-focused move out program at the end of each year in the UW HFS residence halls and apartments. Standardized [SCRAM Donation Stations](#) are available at every HFS residence hall or apartment and collection bins are reused each year. All items are collected by or donated to UW Food Pantry, University District Food Bank, Northwest Center, and Downtown Emergency Services Center., all items are . In addition, UW Recycling partners with Seattle Public Utilities, Recology King County, Waste Management and the UW Offices of Office of Fraternity & Sorority Life and Regional Relations to run the [Husky Neighborhood Cleanup](#) program, which offers free recycling, disposal, and donation collection of unwanted items for students living north of campus twice a year.

UW Tacoma's Court 17 is set up as fully furnished apartments that supply reusable household items and furniture. Residents participate in a donations-focused move out program at the end of each year. We recommend creating more opportunities throughout the year for students to swap usable items with each other, such as through creation of free spaces, organizing a swap or repair fair, offering communal cleaning supplies, etc.

Additional Credit

Programs: UW earned additional credits for making brooms, mops, and vacuum cleaners available as communal cleaning supplies in the residence halls. The Green Greek Representative Program has also hosted a clothing donation program in the past where gently-used items were resold at reduced prices, with proceeds going to an environmental organization.

HARD GOODS POLICY

I. Establish Hard Goods Policies

This section assesses the campus-wide procurement policies, communication strategies, and requirements for handling and disposal of all hard goods.

99.5 / 131

Surplus Program Policies & Communication

41 / 43

Policy Requiring Staff to Send E-Waste to Surplus/Recycling

24 / 27

Procurement Policies for Purchase, Take-Back & Recycling

15 / 57

Construction & Renovation Policies

Surplus: Assessment & Recommendations

All 45 campus stakeholders interviewed for this assessment responded that they and their staff are required to send materials to the campus surplus program, and about three-quarters of the stakeholders highly encourage their staff or follow a standard practice themselves of checking surplus before purchasing new items. Procurement Services works with the City of Seattle to qualify for rebates for preferential equipment purchasing, such as laboratory freezers. We recommend the campus consider strengthening communication that:

- Ensures that all staff are required to check surplus property before buying new items.
- Ensures that all staff know and understand how to access surplus property inventory and how to schedule pick-up/drop-off services if applicable.
- Ensure that all staff members are guided by [UW Procurement's preferences](#) for purchasing new products that come with take-back, warranty, or repair programs for items such as furniture, appliances, technical equipment, etc.
- Encourage same-type campus departments to practice centralized purchasing for bulk purchase options of commonly procured materials such as office supplies. The campus' centralized ordering system could be utilized for this purpose, if possible.

Electronics: Assessment & Recommendations

All interviewed stakeholders know that it is a requirement to send campus-owned electronics, even if they are broken, to UW Surplus, either directly or via UW IT. There appear to be multiple options for purchasing campus electronics, such as through existing UW contracted vendors, who provide UW with product reports, or through individual purchases. UW Procurement does make recommendations for green purchasing of electronics along with one requirement that all computers be Energy Star-rated.

To increase best practices around electronics materials management, UW should strengthen and communicate policies for electronics purchase, use, and disposal that could include language prioritizing:

- EPEAT Products certified Bronze, Silver, or Gold (currently specified in the [UW Sustainable Purchasing Guideline](#), but not adopted as a formal requirement)
- Leased equipment
- Companies with take back programs
- Repairable products with full-service warranties
- Refillable ink cartridges over disposable (currently recommends remanufactured ink cartridges but not a formal requirement)
- Keeping current electronics in use over purchasing new, and prioritizing purchasing from UW Surplus over new purchases (currently specified as something to consider but not adopted as a formal requirement)

Construction and Demolition: Assessment & Recommendations

The University of Washington has few formal policies in place regarding sustainable materials management for construction and demolition projects; most are just standard practices. For example, there is no policy that prioritizes rehabilitating existing buildings over building new ones, but this is a priority built into Project Delivery's rolling 5-year capital budget. Additionally, it is a general practice to prioritize deconstruction over demolition and to incorporate deconstructed materials into new design (either aesthetically or functionally).

It is, however, a requirement for building contractors to recycle or repurpose construction waste and a general practice to send all reusable materials, such as furniture and electronics, to UW Surplus. Depending on whether materials pose a health hazard or not, UW Surplus will also accept some building fixtures and non-reusable and hard-to-recycle-materials. For renovations and remodels, it is generally a practice to check UW Surplus before purchasing new furniture or equipment.

New buildings are required to install hydration stations that allow water bottle refills. Any new buildings that are funded by the state of Washington are required to have LEED Silver Certification at minimum, and most donor-funded buildings are LEED Gold. Buildings are not required to use modular carpet squares rather than carpet rolls or be made of nylon. Smaller construction, renovation, and maintenance projects are not required to reuse or recycle construction materials including carpet, wood, metal, paint, concrete, brick, drywall, and porcelain fixtures.

Policy gaps should be focused on both large, contracted projects as well as smaller in-house projects. We recommend that the campus establish policies that:

- Prioritize rehabilitating existing buildings over building new.
- Prioritize deconstruction over demolition in order to better salvage materials.
- Require contractors to use the campus surplus property (for sending salvaged materials and for furnishing new buildings) and electronic waste recycling programs where practical and safe.
- Require contractors and in-house teams to send non-reusable materials from construction and renovation projects to hard-to-recycle material collection.
- Require all in-house construction and renovation projects to recycle or repurpose C&D materials and building fixtures in line with [Seattle's Salvage Assessment requirement](#).
- Encourage designers to check Surplus options before furnishing buildings with all new items.

HARD GOODS BIN & SIGNAGE STANDARDIZATION

This section assesses UW's capacity to provide clear, standardized, and accessible drop-off locations and collection bins for all surplus and hard-to-recycle materials across campus.

Ideally, all students and staff on campus would know where they should bring items for discard.

57.5 / 181

Aggregation Facility & Clear Collection Points

56 / 184

E-Waste Collection Points

Assessment

The University of Washington collects campus-owned reusable materials and electronics from faculty and staff through UW Surplus and UW IT. On the UW Seattle campus, collection locations for campus-owned electronics are mapped [here](#). All HFS residence halls have eMedia bins for small electronics, toner cartridges, disks, and batteries that are available to students year-round, with opportunities to dispose of other electronics and appliances available during move-out. Plastic film, bags, and styrofoam collection are considered “self-service”, meaning UW Seattle departments can request a self-service collection box or bin for their own department, but this is only available to faculty and staff, or during move-in and move-out at the residence halls. Instructions and request forms for other hard-to-recycle materials and universal waste are provided [online](#), but it is not particularly easy to navigate to this request page and it is unclear how widely-used it is. In general, departments on any of the three campuses that generate hard-to-recycle materials are inconsistent in terms of having clear and accessible collection locations, and few, if any, of these locations are open to all students and the general campus community.

Recommendations

Across all three campuses, we recommend that UW:

- Better communicate HRM collection locations and processes for requesting self-service collection bins.
- Establish a standardization guide for bins and collection points for hard-to-recycle materials that provides clear standards for bin styles, shapes, colors, and signage designs.
- Create year-round opportunities to collect hard-to-recycle material and universal waste from students aside from twice a year at move-in and move-out.

SCOPE 2 - SOFT GOODS: FOOD, PLASTIC & COMPOST

MAP OUT INTERDEPARTMENTAL MATERIAL FLOW

Sustainable materials management for Scope 2 materials can be an extremely complex puzzle on campus that involves many different facilities. First and foremost, our goal is material reduction - what are the strategies the campus can take to effectively eliminate disposable materials from campus? This means looking at all possible opportunities to switch to reusable dishware and reusable to-go containers.

For all disposable products that are left on campus, we want to think about what steps we can take to effectively reduce contaminated streams by establishing a system that is standardized across campus, is simple to navigate, and reduces confusion. This means that **all disposable products should be switched to compostable wherever possible, all “recyclable” products should be free of food contamination, and all other single-use disposable products should be eliminated wherever possible.**

In both the reusable and compostable systems, campus-wide procurement policies could be enacted to ensure all events and food service outlets are in compliance, and campus-wide standards for collection bins should be considered in all facilities across campus to ensure the highest rate of successful material management.

An important first step to better understand this intricate system, identify gaps, and decrease the risk of contaminated streams is creating a material flow map for reusables and compostables. This outlines the movement of materials between departments and identifies stakeholders throughout the stages of purchasing, use, collection and logistics, and disposal. A simplified example of a system map for both reusable and compostable material streams can be found in the Methodology section.

CAMPUS DINING FACILITIES & FOOD-SERVICE VENDORS

For the purposes of this report, we divided dining facilities and campus vendors into assessment categories based on management and the style of food service. All UW campus dining locations are operated under UW Housing & Food Services, except for select UW Athletics concessions, which are run by Aramark, and UW Bothell's Food for Thought Cafe and Common Grounds Cafe, which are run by a third-party.

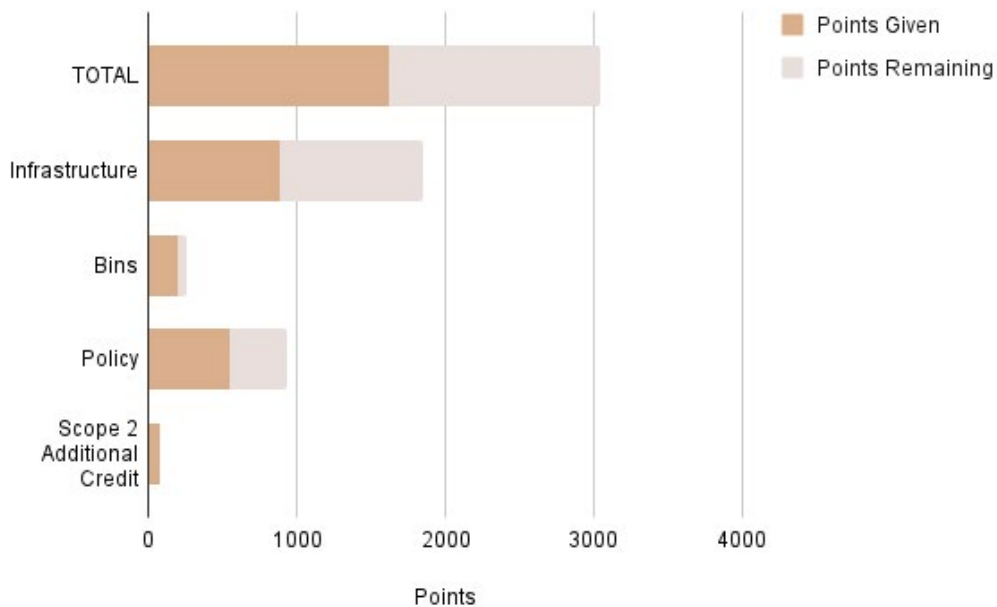
Facility Type	Description	Included Locations
Campus Dining Halls	Food court style service in an enclosed setting	- Local Point* & Center Table* - Conibear Shellhouse**
Restaurants	Enclosed locations with full sit-down service	- Cultivate
Casual Sit-Down Eateries	Locations that have seating but may not be fully enclosed locations, with both dine-in and to-go options.	- By George (Odegaard Library) - Evolutionary Grounds & Supreme Cup - Husky Den Food Court - Husky Grind (Mercer Court) - Microsoft Cafe - Orin's Place - Pagliacci Pizza (Willow Hall)* - Parnassus Cafe - Rotunda Cafe - Starbucks (Husky Den Food Court) - Starbucks (Suzzallo Library) - 815 Mercer (UWMC)
Grab & Go	Locations that primarily serve food for take-out. May have some seating but most food is to-go.	- Dawg Bites - Hot Dawgs & Motosurf Food Trucks - Mary Gates Hall Espresso & Tower Cafe - Overpass Cafe - Starbucks Coffee Truck* - Sunrise Griddle Food Truck - UW Bothell Food for Thought & Common Grounds Cafes
Convenience Stores	Locations that sell primarily pre-packaged food.	- ETC (HUB) - ETC (Magnuson) - UW Tacoma West Coast Grocery
Casual Sit-Down / Convenience Store Hybrid	Locations that serve pre-packaged food as well as some made-to-order items, with some on-site seating.	- District Market*
Athletics	Concessions stands within Athletics Facilities; also includes tailgates and traveling athletes.	- Aramark-run concessions in UW Athletics facilities***
Events	Food served outside of the above locations at various events.	- UW Dining Catering - Bay Laurel

*Location open during Spring 2021 school year, when this assessment was conducted.

**Location was unable to be interviewed for this assessment; thus data from this location is not included.

***HFS-serviced Athletics facilities were not included - this assessment focuses solely on Aramark-run concessions.

SOFT GOODS: ASSESSMENT & RECOMMENDATIONS



SOFT GOODS INFRASTRUCTURE & PROGRAMS

I. Expand Reusable Dishware, To-Go Ware, and Access to Reusables

This section assesses the campus infrastructure and systems in place to eliminate disposables, namely increasing the availability of reusable dining ware and encouraging reusable container use. In this section, we look at the prevalence of reusable dishware and reusable to-go containers, the availability of campus dishwashers in various facilities, the availability of hydration stations on campus, and the prevalence of discounts for users who bring their own containers. All recommendations made regarding reusable dishware and bulk bin programs may require further consideration in light of the ongoing COVID-19 pandemic.²

130.75 / 249.5	Reusable Dining Ware at Sit-Down Eateries
8.5 / 289	Reusable To-Go Container Program
43 / 56	Hydration Stations Availability
4 / 27	Bring-Your-Own Program
+ 11	Additional Credit - Reusable Dishware, To-Go Ware, BYO

²Refer to PLAN's [Reusables and Sanitation Toolkit](#) for guidance and best practices regarding reusable to-go ware and bulk bin programs during the COVID-19 pandemic.

TABLE 3A: REUSABLE DINING WARE INFRASTRUCTURE

Table 3a: Reusable Dining Ware Infrastructure															
	Local Point & Center Table (Dining Halls)	Cultivate (Restaurant)	By George (Casual Sit-Down)	Evolutionary Grounds & Supreme Cup (Casual Sit-Down)	Husky Den Food Court (Casual Sit-Down)	Husky Grind (Casual Sit-Down)	Microsoft Cafe (Casual Sit-Down)	Orin's Place (Casual Sit-Down)	Pagliacci Pizza (Casual Sit-Down)	Parnassus Cafe (Casual Sit-Down)	Rotunda Cafe (Casual Sit-Down)	Starbucks - Husky Den (Casual Sit-Down)	Starbucks - Suzzallo Library (Casual Sit-Down)	815 Mercer (Casual Sit-Down)	
Dishwasher	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Reusable Dishes															
Plates	Yes	Yes	No	Yes	No	Yes	No	No	Yes	Yes	No	No	Yes	Yes	
Bowls	No	Yes	No	Yes	No	Yes	No	No	n/a	Yes	No	No	Yes	Yes	
Utensils	Yes	Yes	No	Yes	No	Yes	No	No	Yes	Yes	No	No	No	No	
Mugs/cups	Yes	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	No	No	No	No	
Straws*	+0	+0.5	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	
Napkins*	+0	+0.5	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	
Reusable To-Go Ware															
Clamshell	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	
Soup	No	No	No	No	No	No	No	No	n/a	No	No	No	No	No	
Utensils	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
Mugs/cups	No	No	No	No	No	No	No	No	No	No	No	No	No	No	
Containers for bulk items*	n/a	n/a	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	
Customers Allowed to BYO Containers	Half yes	No	No	No	No	No	No	No	No	No	No	n/a	n/a	n/a	
Bring Your Own Discount															
Containers*	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	
Mugs/cups*	+0	n/a	+0.5	+0.5	+0	+0.5	+0.5	+0.5	+0	+0.5	+0.5	+0.5	+0.5	+0.5	
Bags*	n/a	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	
Utensils*	n/a	n/a	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	
Bulk bins*	n/a	n/a	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	

*Additional Credit questions

TABLE 3B: REUSABLE DINING WARE INFRASTRUCTURE

Table 3b: Reusable Dining Ware Infrastructure												
	Dawg Bites (Grab & Go)	Hot Dawgs & Motosurf Food Trucks (Grab & Go)	Mary Gates Hall Espresso & Tower Cafe (Grab & Go)	Starbucks Coffee Truck (Grab & Go)	Sunrise Griddle Food Truck (Grab & Go)	District Market	ETC - HUB (Convenience Store)	ETC - Magnuson Health Sciences (Convenience Store)	Athletics	Events	UW Bothell: Food for Thought & Common Grounds	UW Tacoma: West Coast Grocery
Dishwasher	Half yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Half yes	No	n/a
Reusable Dishes												
Plates	+0	+0	+0	+0	+0	No	n/a	n/a	n/a	Half yes	n/a	n/a
Bowls	+0	+0	+0	+0	+0	No	n/a	n/a	n/a	Half yes	n/a	n/a
Utensils	+0	+0	+0	+0	+0	No	n/a	n/a	n/a	Half yes	n/a	n/a
Mugs/cups	+0	+0	+0	+0	+0	Yes	n/a	n/a	n/a	Half yes	n/a	n/a
Straws*	+0	+0	+0	+0	+0	+0	n/a	n/a	n/a	n/a	+0	n/a
Napkins*	n/a	n/a	n/a	n/a	n/a	+0	n/a	n/a	n/a	Half yes	+0	n/a
Reusable To-Go Ware												
Clamshell	No	No	No	No	No	No	No	No	+0	+0	n/a	No
Soup	No	No	No	No	No	No	No	No	+0	+0	n/a	No
Utensils	No	No	No	No	No	No	No	No	+0	+0	No	No
Mugs/cups	No	No	No	No	No	No	No	No	+0	No	No	No
Containers for bulk items*	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0
Customers Allowed to BYO Containers	No	No	No	No	No	No	No	No	No	No	Yes	No
Bring Your Own Discount												
Containers*	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0
Mugs/cups*	+0.5	+0	+0.5	+0.5	+0	+0.5	+0.5	+0.5	+0	+0	+0.5	+0
Bags*	+0	+0	+0	+0	+0	+0.5	+0	+0	+0	+0	+0	+0
Utensils*	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0
Bulk bins*	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0

Recommendations

Reusable Dishes: As shown in Tables 3A and 3B, all dining locations on the UW Seattle campus aside from the Starbucks Coffee Truck, the Husky Den Starbucks, Mary Gates Hall Espresso, and Tower Cafe have access to an industrial dishwasher capable of washing all dining ware collected at the location. Specific events, including catered events and commencement, which is located in the Husky Stadium, have access to industrial dishwashers. Dawg Bites's dishwasher is used only for back-of-house dishes and utensils, and the Food Trucks (Hot Dawgs, Motosurf, and Sunrise Griddle) use By George's dishwasher.

Reusable dishes are available at Local Point, Center Table, and Cultivate, and a few other select sit-down campus eateries including Pagliacci Pizza (Willow Hall), Evolutionary Grounds, Supreme Cup, Husky Grind (Mercer Court), and Parnassus Cafe. Starbucks (Suzzallo Library) and 815 Mercer provide reusable plates and bowls only, and District Market provides reusable cups/mugs. Of the UW Seattle campus eateries with dine-in seating, this amounts to 9 of 23 offering reusables in some form. Reusable dining ware is available for some events, but is usually a more expensive option. UW Bothell and UW Tacoma only have grab & go-style dining locations or convenience stores and were not assessed on reusable for-here dining ware.

In general, we recommend UW consider transitioning to reusable dining ware as much as possible, especially in locations with already existing dishwashing capacity. To do this, we recommend exploring options to:

- Consider establishing a reusable dishware program at the eateries in the Husky Den Food Court, as this accounts for 10 eateries.
- Consider expanding and publicizing affordable reusable dishware options through on-campus catering and student-run events to eliminate disposable alternatives.

Reusable To-Go Ware: The UW Seattle campus offers reusable to-go containers through Ozzi at Local Point and Center Table. This pilot program includes a clamshell to-go container which students can bring for HFS staff to fill and can be returned at the Ozzi vending machine to be washed on-site.

Reusable to-go ware is not offered or accepted anywhere else on campus, except for the cafes that allow customers to bring their own reusable mugs for a discount - this practice was consistent across all eateries that serve coffee-type drinks pre-COVID.

Campuses have a wide variety of implementation strategies for reusable to-go ware initiatives, from barcoding containers to track their use and return, to either fining students for not returning them or identifying other creative methods to incentivize returns. Since many campuses struggle with container retention, it is worth exploring successful methodologies from other campuses for expansion/implementation.³

We recommend that the University of Washington explore options to:

- Establish a reusable to-go ware program that is universally accepted at all dining locations across campus. This could involve expanding the current Ozzi program to the HUB to start, and could eventually expand into Athletics venues and Events or even extend to pre-packaging food at Grab & Go locations and Convenience Stores in reusable to-go ware.
- Expand this program beyond the traditional clamshell container, to include reusable mugs/cups, containers for soup/salads, beverages, and utensils.

Hydration Stations: Hydration stations allow students to refill reusable water bottles rather than buying beverages in disposable containers. UW has installed hydration stations in most existing buildings on campus, and new buildings are required to install hydration stations. Most Casual Sit-Down Eateries have a water fountain in or near their facility to allow for bottle refills, but many Grab & Go eateries do not, making bottled water the only option for students. We recommend installing hydration stations or taps in these locations, or directing customers to nearby hydration stations through clear signage in facilities where installation is not an option. Additionally, most events do not offer tap water as an option - we recommend exploring options for portable water bottle refill stations for outdoor events.

³ Case studies of successful to-go ware programs can be found in PLAN's [Program Case Library](#).

Bring-Your-Own Container: Prior to COVID-19, customers were allowed to bring their own mugs/cups to Local Point and Center Table. During the ongoing COVID-19 pandemic, we recommend relying on a campus-run reusable to-go ware program that can be controlled in terms of sanitation and handling. Under other circumstances, UW could consider formalizing a BYO program as a campus-wide policy, and expanding it to allow students to bring their own containers to all dining locations, Athletics, and on-campus events, in addition to cups and mugs.

Bulk Snack Bins: UW does not offer snacks in bulk in any dining facilities on campus, except Athletics venues. We recommend UW explore options for installing bulk snack bins especially in Grab & Go's, Convenience Stores, and at Events, along with expanding reusable to-go container options for bulk products in order to cut down on the number of pre-packaged snacks in non-recyclable, non-compostable packaging. This could be a great project for a student group and a Convenience Store to pilot, with the intention of later expanding the program to be universal wherever applicable.⁴

Additional Credit

The University of Washington earned additional points for offering discounts for customers who brought their own reusable to-go mugs and cups to dining locations prior to COVID. Offering reusable to-go container programs in Athletics facilities and Events would also earn UW additional points. Finally, expanding bulk snack options around campus and accompanying reusable container options for those products would also earn UW more additional credit points.

⁴Included are examples of successful, student-initiated programs at the University of California, Berkeley - they have run successful bulk snack bin programs in one of their dining-operated [convenience stores](#) and at another [on-campus cafe](#).

II. Expand Capacity for Food Recovery and Food Waste Minimization to All Food-Service Facilities on Campus

This section assesses the campuses' capacity to recover food, as well as reduce overall food waste via internal audits and external educational efforts.

64.5 / 129	Food Recovery Program
108 / 207	Food Waste Reduction Initiatives & Education
+ 2	Additional Credit - Food Recovery & Waste Minimization

Assessment & Recommendations

UW Seattle: All assessed dining facilities at UW Seattle regularly run audits on food purchasing to examine food consumption habits and reduce food waste; however, Events do not. Most locations have gone tray-less, and only Pagliacci Pizza (Willow Hall), Orin's Place, and the Husky Den Food Court offer trays for large orders. None of the dining locations regularly run food waste education campaigns or programming, and Rotunda Cafe is the only campus eatery that purchases "gleaned" products. Reducing food waste is in alignment with the second action of implementing low-waste campus kitchens in UW's [FY2021 Sustainability Action Plan](#) under its Waste Reduction goal, specifically through implementing over-production tracking and menu management systems.

We recommend that the University of Washington explore opportunities to:

- Purchase gleaned foods where possible.⁵
- Establish food waste education programming at campus eateries to regularly educate customers on the problems with food waste, the strategies to reduce it, and what steps UW HFS is currently taking to combat this issue.
- Run production records to restructure the amount and type of food purchased and ultimately served at Events.

⁵ The Food Recovery Network has a [Guide to Gleaning](#). Bon Appetit Management Company (BAMCO) also has great resources to explore through their [Imperfectly Delicious Produce](#) and [online recipes](#).

TABLE 4A: FOOD RECOVERY & FOOD WASTE REDUCTION PROGRAMS

Table 4a: Food Recovery & Food Waste Reduction Programs														
	Local Point & Center Table (Dining Halls)	Cultivate (Restaurant)	By George (Casual Sit-Down)	Evolutionary Grounds & Supreme Cup (Casual Sit-Down)	Husky Den Food Court (Casual Sit-Down)	Husky Grind (Casual Sit-Down)	Microsoft Cafe (Casual Sit-Down)	Orin's Place (Casual Sit-Down)	Pagliacci Pizza (Casual Sit-Down)	Parnassus Cafe (Casual Sit-Down)	Rotunda Cafe (Casual Sit-Down)	Starbucks - Husky Den (Casual Sit-Down)	Starbucks - Suzzallo Library (Casual Sit-Down)	815 Mercer (Casual Sit-Down)
Food Recovery Program	Yes	Half yes	Yes	No	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes
Food Waste Reduction														
Run audits	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Purchase gleaned	No	No	No	No	No	No	No	No	No	No	Yes	No	No	No
Food waste education	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Trayless dining	Yes	n/a	Yes	Yes	Half yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes

TABLE 4B: FOOD RECOVERY & FOOD WASTE REDUCTION PROGRAMS

Table 4b: Food Recovery & Food Waste Reduction Programs												
	Dawg Bites (Grab & Go)	Hot Dawgs & Motosurf Food Trucks (Grab & Go)	Mary Gates Hall Espresso & Tower Cafe (Grab & Go)	Starbucks Coffee Truck (Grab & Go)	Sunrise Griddle Food Truck (Grab & Go)	District Market	ETC - HUB (Convenience Store)	ETC - Magnuson Health Sciences (Convenience Store)	Athletics	Events	UW Bothell: Food for Thought & Common Grounds	UW Tacoma: West Coast Grocery
Food Recovery Program	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Food Waste Reduction												
Run audits	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes
Purchase gleaned	No	No	No	No	No	No	No	No	n/a	n/a	No	No
Food waste education	No	No	No	No	No	No	No	No	No	n/a	No	n/a
Trayless dining	n/a	n/a	n/a	n/a	n/a	Yes	n/a	n/a	n/a	n/a	No	n/a

UW Seattle has an on-campus Food Pantry located in Poplar Hall Center that is open three times a week and only accepts donations during those opening times. The Food Pantry works with UW Farm to supply fresh produce as well as other off-campus entities, such as ROOTS, to donate overflow food. As shown in Tables 4A and 4B, about 80% of UW Seattle’s dining locations run some kind of food recovery program - prepared food items from many HFS dining locations are also donated to the Food Pantry or Food Lifeline if the Pantry can’t accept their food. The College of Engineering also runs a program called Meal MatchUp, and a [study](#) performed in Spring 2019 for a class project identified the Conibear Shellhouse as a high-potential source of recoverable food.

We recommend the University of Washington explore opportunities to:

- Identify, map out, and form partnerships between the current organizations on UW’s campuses that run food recovery programs or accept donations.
- Expand hours of operation for the UW Seattle Food Pantry. (This may have changed due to COVID, but food insecurity is a definite consequence of living with fewer resources during the pandemic.)
- Increase food recovery programs to all dining facilities, especially Events.

UW Tacoma: West Coast Grocery is a convenience store on UW Tacoma’s campus that is managed in-house. It tracks food purchasing and production to better anticipate food consumption patterns and reduce food waste, but does not purchase any gleaned products or host any food waste education programming as it is a convenience store. West Coast Grocery donates recovered food to the UW Tacoma Food Pantry as well as to homeless shelters.

UW Bothell: UW Bothell has two grab-and-go-style cafes called Common Grounds Cafe and Food for Thought Cafe that are managed by a third-party. These cafes do not have a food recovery program, do not run audits or production records, purchase any “gleaned” products, or have any food waste education programming. There is a food pantry at UW Bothell but it does not collaborate with these cafes, nor accept donations from students, faculty, and staff. We recommend working with the cafes’ management to implement food recovery and food waste reduction programs, and to partner with the food pantry to increase on-campus food security.

III. Expand Capacity of Compost Program and Eliminate All Single-Use Disposable Plastics

This section assesses the prevalence of compostable products at all food-service vendors on campus, the availability of compost collection and management at those same facilities, and the risk of contamination in

the compost stream from the distribution of non-compostable disposables. This assessment looks at each location as a holistic system, with the goal of reducing the risk of contamination in compost and recycling streams as much as possible. There is mixed consensus on whether the composting infrastructure on campus can efficiently process compostable dining ware from campus eateries. Full points are given to an assessment category only when it has full (100%) adoption; half points are awarded when a facility is still in the process of transitioning to fully compostable products.

100.5 / 104

Composting Program

212.5 / 281

Compostable Dining Ware & Disposables

+ 5.5

Additional Credit - Compost

Assessment & Recommendations

Compostable Dining Ware & Disposables

Tables 5A and 5B show that all campus dining locations distribute compostable dining ware aside from a few locations that do not have compostable napkins (Evolutionary Grounds, Supreme Cup, Husky Grind, Parnassus Cafe) or compostable straws (Dawg Bites, Motosurf, Sunrise Griddle, UW Bothell cafes, UW Tacoma West Coast Grocery). Events on UW Seattle's campus must comply with city law, which requires all disposable dining ware to be compostable or recyclable. Most locations do not provide miscellaneous pre-packaged items or single-use condiments in compostable packaging, or are in the process of transitioning items to compostable.

TABLE 5A: COMPOSTABLE MATERIALS

Table 5a: Compostable Materials

	Local Point & Center Table (Dining Halls)	Cultivate (Restaurant)	By George (Casual Sit-Down)	Evolutionary Grounds & Supreme Cup (Casual Sit-Down)	Husky Den Food Court (Casual Sit-Down)	Husky Grind (Casual Sit-Down)	Microsoft Cafe (Casual Sit-Down)	Orin's Place (Casual Sit-Down)	Pagliacci Pizza (Casual Sit-Down)	Parnassus Cafe (Casual Sit-Down)	Rotunda Cafe (Casual Sit-Down)	Starbucks - Husky Den (Casual Sit-Down)	Starbucks - Suzzallo Library (Casual Sit-Down)	815 Mercer (Casual Sit-Down)
Compostable Ware														
Plates/bowls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hot bowls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes
Utensils	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cups/mugs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Straws	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Napkins	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
To-go ware	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Miscellaneous packaged food items (e.g. sushi boxes)	No	No	No	Half yes	No	Half yes	No	No	n/a	Half yes	No	No	No	No
Single-use creamers, condiments, butters, etc.	Yes	Yes	No	No	No	No	No	No	Half yes	No	No	No	No	No
Containers for bulk items	n/a	n/a	n/a	No	n/a	No	No	n/a	n/a	No	No	No	No	No
Compost Program														
Food waste as feedstock for agriculture*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Back-of-house collection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Front-of-house collection	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

TABLE 5B: COMPOSTABLE MATERIALS

Table 5b: Compostable Materials												
	Dawg Bites (Grab & Go)	Hot Dawgs & Motosurf Food Trucks (Grab & Go)	Mary Gates Hall Espresso & Tower Cafe (Grab & Go)	Starbucks Coffee Truck (Grab & Go)	Sunrise Griddle Food Truck (Grab & Go)	District Market	ETC - HUB (Convenience Store)	ETC - Magnuson Health Sciences (Convenience Store)	Athletics	Events	UW Bothell: Food for Thought & Common Grounds	UW Tacoma: West Coast Grocery
Compostable Ware												
Plates/bowls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No
Hot bowls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No
Utensils	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Cups/mugs	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Straws	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Napkins	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
To-go ware	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	No
Miscellaneous packaged food items (e.g. sushi boxes)	Half yes	No	Half yes	Half yes	n/a	No	Half yes	Half yes	Yes	Yes	Half yes	No
Single-use creamers, condiments, butters, etc.	No	No	No	No	No	Half yes	Half yes	No	No	Half yes	No	No
Containers for bulk items	n/a	n/a	No	No	n/a	Yes	n/a	n/a	Yes	Yes	n/a	No
Food waste as feedstock for agriculture*	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Back-of-house collection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a
Front-of-house collection	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

We recommend that the University of Washington explore options to:

- Continue transitioning all disposable products to compostable in all locations on all three campuses.
- Add language into third-party dining contracts at UW Bothell and UW Tacoma specifying requirements for compostable dining ware.
- Alternatively, UW can consider eliminating all single-use disposables where possible and implementing a reusable to-go ware system to reduce the overall need for expensive compostable dining ware that is also often challenging for composting facilities to process. For example, to eliminate plastic straws (except where necessary for accessibility reasons), UW could consider including reusable or compostable (where a system to process compostable plastics exists) to-go mugs with sippy cup lids in a campus-wide reusable to-go ware system.

Composting Program

All three UW campuses contract with an external vendor called Cedar Grove to compost food scraps and dining ware, but have an on-site composting system for landscaping material. UW Housing & Food Services compacts its own food waste on-site, then sends it to Cedar Grove for composting. Compostable dining ware that is distributed across campus goes to this facility as well. UW Grounds was awarded a grant from CSF for holding bins to collect fallen leaves which are combined with coffee grounds from a few select cafes and dining facilities (most recently included UWMC Plaza Cafe, Parnassus Cafe, and Rotunda Cafe) for on-site composting. Another bin area is available for wood chip collection, which is also made available to other local contractors at no cost. Any other landscaping and grass clippings are taken to Cedar Grove to compost.

Both front-of-house and back-of-house compost is provided at all dining facilities, Events, and Athletics facilities on all three UW campuses, as shown in Tables 5A and 5B.

Additional Credit

Compostables: Additional credit in this section is awarded when specific disposable products, such as gloves, hairnets, and aprons, are compostable or recyclable, or for innovative practices such as using reusable liner bags for waste bins. UW was awarded additional credit points for the use of coffee grounds in on-campus composting and the use of compostable gloves in Athletics buildings and recyclable gloves for hot cooks in Athletics dining areas.

IV. Other Programs & Initiatives

This section mainly covers paper-reduction and diversion-based programs and practices.

80 / 122

Recycling

111.5 / 322

Paper Reduction & Reuse Initiatives

Paper Reduction, Recycling & Education

UW has the capacity to systematically reduce paper consumption, but has yet to implement practices such as transitioning from paper receipts to electronic receipts and ensuring that all self-serve printers are set up with a print-release function and automatically print double-sided. As shown in Tables 6A and 6B, many campus eateries have the capability of turning off paper receipts, but are unable to transition completely to electronic receipts for scaling reasons.

Events practice paperless programming and review printing patterns to avoid overprinting, Meany Hall and Burke Museum use electronic ticketing programs and recycle or are moving to paperless programming, and UW Mailing has a program to unsubscribe and staff from junk mail. Few printers are automatically programmed to print double-sided or set up with a print-release function because most printers are controlled by individual departments that have the option to contract out with companies like Xerox. While professors are not required to post course packets online to reduce printing, electronic readings and e-signatures have become increasingly popular but are not the standard.

TABLE 6A: PAPER RECEIPT ELIMINATION

Table 6a: Paper Receipt Elimination														
	Local Point & Center Table (Dining Halls)	Cultivate (Restaurant)	By George (Casual Sit-Down)	Evolutionary Grounds & Supreme Cup (Casual Sit-Down)	Husky Den Food Court (Casual Sit-Down)	Husky Grind (Casual Sit-Down)	Microsoft Cafe (Casual Sit-Down)	Orin's Place (Casual Sit-Down)	Pagliacci Pizza (Casual Sit-Down)	Parnassus Cafe (Casual Sit-Down)	Rotunda Cafe (Casual Sit-Down)	Starbucks - Husky Den (Casual Sit-Down)	Starbucks - Suzzallo Library (Casual Sit-Down)	815 Mercer (Casual Sit-Down)
Transitioned from paper receipts to electronic	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Can turn off paper receipts	Yes	Yes	Half yes	Half yes	Half yes	Yes	No	Half yes	Yes	Yes	Half yes	Half yes	Half yes	Half yes

TABLE 6B: PAPER RECEIPT ELIMINATION

Table 6b: Paper Receipt Elimination												
	Dawg Bites (Grab & Go)	Hot Dawgs & Motosurf Food Trucks (Grab & Go)	Mary Gates Hall Espresso & Tower Cafe (Grab & Go)	Starbucks Coffee Truck (Grab & Go)	Sunrise Griddle Food Truck (Grab & Go)	District Market	ETC - HUB (Convenience Store)	ETC - Magnuson Health Sciences (Convenience Store)	Athletics	Events	UW Bothell: Food for Thought & Common Grounds	UW Tacoma: West Coast Grocery
Transitioned from paper receipts to electronic	No	No	No	No	No	No	No	No	No	No	No	No data
Can turn off paper receipts	Half yes	Yes	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes	Yes	Yes	No	No data

UW could further explore programs and policies that reduce paper, such as:

- Explore ways to reduce paper receipts on a large scale, whether by making it the standard to turn off paper receipts at each location and only printing them for customers who explicitly ask for them, or transitioning completely to electronic receipts.
- Limiting paper programming for marketing purposes, orientation, events, and performances.
- Establishing a requirement for all department printers to automatically print-double sided and expanding UW Printing Services' print-release system to all campus printers to reduce accidental print jobs.
- Requiring professors to post course packets and other class materials online and only providing printed versions upon request.
- Ensuring that e-signatures and e-readings are available as the norm, while keeping physical copies available for front-line staff who must sign documents physically or for students who need physical readings for accessibility purposes.

Campus Recycling & Reuse of Recyclables

UW Seattle: UW Seattle manages its own recycling for academic and administrative buildings, but larger facilities such as UWMC-Montlake, Athletics venues, etc. are managed by an external hauler contracted by UW Recycling. Mixed paper, cardboard, cartons, aluminum cans, glass, and plastic cups, tubs, jugs, bottles, and non-compostable clamshells are accepted for recycling, including the liners for recycling bins. Waste characterizations are conducted every 15 years and include a recycling contamination audit - the last waste characterization was in 2018.

UW Tacoma: UW Tacoma contracts with an external hauler called JMK Fibers Tacoma to process its recycling and Waste Management through the City of Tacoma for trash. Mixed paper, cardboard, cartons, aluminum cans, and plastic resins #1 and #2 are accepted by the hauler, but glass and other kinds of plastic are not. The hauler works with the campus to prioritize both cost savings and waste reduction.

UW Bothell: UW Bothell contracts an external hauler called Recology to process its recycling and trash. Recology accepts mixed paper, cardboard, cartons, aluminum, and glass for recycling. They do not accept any kinds of plastic, but will accept the clear plastic liners used in larger recycling containers around campus. Recology does not work with the campus to prioritize cost savings and waste reduction, and the class that used to conduct waste audits of the campus is no longer offered.

CAMPUS-WIDE SOFT GOODS POLICIES AND ZERO WASTE EVENTS/POLICIES

I. Establish Soft Goods Policies

In this section we assess the existence of a variety of procurement policies related to soft goods management including the types of products purchased, requirements or standard operating procedures for staff to use those policies, and the existence of zero waste guidelines. **All UW campuses adhere to the same procurement policies.**

Assessment & Recommendations

The University of Washington does not have a set of campus-wide procurement policies governing sustainable purchasing, but does have a set of [guidelines](#) written by Procurement Services. The only listed requirements are for 100% recycled printer and copier paper and Energy Star rated appliances and computers. Otherwise, Procurement works with suppliers to reduce packaging, source locally, and influence purchasing through contract language.

295 / 403	Adherence to Campus Procurement Policies
194 / 450	Policies that Favor Bulk Products Over Single-Use
+ 0.5	Additional Credit - Scope 2: Soft Goods Policies

Many of the interviewed stakeholders stated that they were aware of some sustainable procurement policies for UW, but key stakeholders involved in sustainability initiatives elaborated that these guidelines are not well-promoted, difficult to find online, and that staff are not trained to follow these. Stakeholders also referenced a variety of policies that they try to follow, including UW Medicine-specific policies, UW Surplus policies, UW Recycling’s recommendations, the UW Sustainability Action Plan, and Green Cleaning Policies.

General Sustainable Procurement Policies

SB5022, which goes into effect later in 2021, made all utensils and straws available by request only in the State of Washington. It also bans styrofoam food packaging and coolers, and requires trash bags and personal hygiene product containers to be made from post-consumer recycled content. We recommend that the University unify and standardize its existing procurement guidelines into a policy or policies that aligns with state law and applies to all campus departments, contracted franchises, and vendors that state preferences for:

- Reusable, repairable, and refillable products and PPE over single-use products*
- Packaging, products, and dining ware made from compostable materials or post-consumer recycled content⁶
- A restriction on disposable swag, in favor of products that are durable, reusable etc.⁷
- A restriction/guideline on plastic water bottles
- Companies that have take-back programs*

*Similar language exists in the current [Procurement guidelines](#), but is not implemented as a campus-wide policy.

Policies that Prefer Bulk Purchase over Single-Use Products

About two-thirds of the stakeholders interviewed for this assessment purchase products in bulk as a standard practice whenever possible, mostly for cost saving and efficiency reasons. Less-frequently cited reasons include environmental reasons such as reducing the number of shipments, packaging material, and the carbon footprint of transportation, and reducing the number of trucks that circulate around campus. For example, UW Mailing Services practices centralized purchasing by ordering in bulk for several internal units to share, which reduces costs and waste as well as facilitating supply monitoring. To reduce disposable packaging and the life cycle impacts of shipping multiple orders, UW should explore enacting policies that require all staff to purchase in bulk where practical and implement more centralized purchasing practices between similar facilities to consolidate shipments, as current practices are on a very individualized department-by-department level.

⁶ Signing up to be a NERC Recycling Demand Champion or Advocate allows the campus to access lists of items made from post-consumer recycled content.

⁷ We define “swag” as a free giveaway that is distributed at events or by organizations to their members. Check out [PLAN Swag Hierarchy](#) for more information.

TABLE 7A: PROCUREMENT POLICIES

Table 7a: Procurement Policies														
	Local Point & Center Table (Dining Halls)	Cultivate (Restaurant)	By George (Casual Sit-Down)	Evolutionary Grounds & Supreme Cup (Casual Sit-Down)	Husky Den Food Court (Casual Sit-Down)	Husky Grind (Casual Sit-Down)	Microsoft Cafe (Casual Sit-Down)	Orin's Place (Casual Sit-Down)	Pagliari Pizza (Casual Sit-Down)	Parnassus Cafe (Casual Sit-Down)	Rotunda Cafe (Casual Sit-Down)	Starbucks - Husky Den (Casual Sit-Down)	Starbucks - Suzzallo Library (Casual Sit-Down)	815 Mercer (Casual Sit-Down)
Procurement Policies														
Vendor required to comply with campus procurement policies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reusable gloves/aprons/hairnets	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recyclable/compostable gloves/aprons/hairnets*	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0	+0
Eliminated plastic bags	n/a	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Eliminated sales of bottled water	n/a	No	No	No	No	No	No	No	No	No	No	No	No	No
Bulk Procurement														
Eliminated unnecessarily wrapped single-serve items	Half yes	Yes	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes	No	Half yes
Snacks and sides in bulk	n/a	n/a	Half yes	No	No	No	No	No	n/a	No	No	No	No	No
Beverages in bulk dispensers	Yes	No	Yes	Half yes	Half yes	Half yes	Yes	Yes	No	Half yes	Half yes	Half yes	Half yes	Half yes
Eliminated K-Cups and plastic-wrapped tea bags	Yes	Yes	No	No	No	No	No	Yes	Yes	No	No	No	No	No
Bulk dispense creamers, condiments, butters, jellies	Half yes	No	No	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes	Half yes

TABLE 7B: PROCUREMENT POLICIES

Table 7b: Procurement Policies												
Procurement Policies	Dawg Bites (Grab & Go)	Hot Dawgs & Motosurf Food Trucks (Grab & Go)	Mary Gates Hall Espresso & Tower Cafe (Grab & Go)	Starbucks Coffee Truck (Grab & Go)	Sunrise Griddle Food Truck (Grab & Go)	District Market	ETC - HUB (Convenience Store)	ETC - Magnuson Health Sciences (Convenience Store)	Athletics	Events	UW Bothell: Food for Thought & Common Grounds	UW Tacoma: West Coast Grocery
Vendor required to comply with campus procurement policies	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reusable gloves/aprons/hairnets	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Half yes	n/a	n/a	n/a
Recyclable/compostable gloves/aprons/hairnets*	+0	+0	+0	+0	+0	+0	+0	+0	+0.5	n/a	+0	+0
Eliminated plastic bags	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes
Eliminated sales of bottled water	No	No	No	Yes	No	No	No	No	No	No	No	No
Bulk Procurement												
Eliminated unnecessarily wrapped single-serve items	Half yes	Yes	Half yes	No	Half yes	Half yes	No	Half yes	No	No	No	No
Snacks and sides in bulk	No	No	No	No	No	Half yes	No	No	Yes	No	n/a	Yes
Beverages in bulk dispensers	Half yes	No	Half yes	No	No	No	Half yes	Yes	Yes	Half yes	No	N/A
Eliminated K-Cups and plastic-wrapped tea bags	No	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Bulk dispense creamers, condiments, butters, jellies	Half yes	No	Half yes	Half yes	No	Half yes	Half yes	Half yes	Half yes	Half yes	No	No

UW could also explore purchasing policies that apply to all food-service facilities shown in Tables 7A and 7B, including contracted franchises and vendors, that:

- Favor bulk items over unnecessarily wrapped single-serve items (e.g. napkins, oyster crackers, individually wrapped fresh baked goods, mints, toothpicks, etc.)
- Favor snacks and side dishes in bulk rather than individually packaged
- Favor beverages in bulk dispensers rather than individually packaged (e.g. soda, juice, milk, coffee, K-cups, etc.)
- Favor bulk dispensers for all condiments (e.g. sauces, creamers, sugars, salt, pepper, butter, peanut butter, and jellies) rather than individually-wrapped products⁷

Additional Credit

Additional credits are awarded for special policies on campus. In this case, UW was awarded an extra credit for providing shampoo and soap in bulk in the residence halls.

II. Zero Waste Events Guides, Plans, and Policies

Zero Waste Plans

UW does not have a specific waste reduction guiding document aside from its goal in the [Sustainability Action Plan for FY2021](#), which sets a goal of 10% less solid waste by 2025 and outlines two actions: 1)

divert compostable waste from recycling and landfilling and 2) Implement low-waste campus kitchens. We recommend the University of Washington review its waste reduction goals in preparation for its FY2022 plan, and increase the breadth of its actions to focus on materials beyond compostables, as the campus scored a near perfect score for its composting program.

33 / 96

Institutionalizing Zero Waste Goals & Plans

48.5 / 67

Additional Credit - Education

⁸ For a more comprehensive list of single-use products that we suggest phasing out, refer to PLAN's [Break Free From Plastic campus pledge](#).

In addition, we recommend the campus establish a campus-wide **zero waste strategic vision**. To accomplish this, we recommend establishing a **zero waste task force** made up of many of the stakeholders interviewed in this report who would be tasked with analyzing this report and reviewing the [campus' progress](#) towards recently set waste reduction goals, identifying gaps, and developing idealized versions of the system flow charts detailed in the Methodology section.

This task force should include representatives from UW Bothell and UW Tacoma as well to increase communication, collaboration, and a shared understanding of goals between the three campuses. The projects identified in the system flow charts may require establishing new campus infrastructure and systems, as well as policies and standard operating procedures that may differ from the way materials are currently managed at the University of Washington.

For this process to be successful, it is important to work collaboratively with all stakeholders to build a vision for how these new initiatives will be managed in the future, which may also require looking into organizational restructuring to relocate and redefine program management and responsibilities. After completing the visioning process, we recommend going through the process of "[backcasting](#)" to identify what resources would be required to achieve these goals, and what decisions around management and costs need to be made in order for these initiatives to be operationalized.

This backcasting would lay the groundwork for a strategic plan. From there, we recommend UW develop timelines and goals and identify what the campus capacity is for investing in the various initiatives detailed in the plan. As these initiatives advance, we recommend the University of Washington consider establishing specific guidelines for campus departments on how to host zero waste events, practice sustainable procurement, and otherwise institutionalize elements of the campus-wide sustainability action plan in their daily operations.

Zero Waste Events Guides

The [Green Events Guide](#) outlines some strategies for hosting zero waste events, including sections on waste collection with instructions on who to contact to request bins, paperless communications, and promoting giveaways made from reusable materials. We recommend the University increase communication around this guide and ensure that it is standard practice to consult this guide when planning events, from student-run events to large events such as Commencement. UW could also consider creating a volunteer waste monitoring program to educate users on how to use the standardized bin and signage set-up at outdoor and sporting events. We recommend that Events Services and Catering follow existing and recommended sustainable purchasing policies and event waste collection follow campus bin standardization guidelines to limit confusion across campus.

Student Programs & Initiatives

UW has a few active student organizations with project groups focused on waste reduction or zero waste, such as a waste reduction and diversion project group within the Green Greek Representative Program and a project group within UW SEED that focuses on education for waste reduction and proper sorting in residence halls in collaboration with HFS and UW Recycling. [WASHPIRG](#)'s UW chapter was also very involved in promoting the statewide plastic bans. UW Recycling hired Julie Ira '22 as the Zero Waste Program Assistant starting in January 2021, but there do not appear to be other waste-focused paid employment opportunities for students - for example, internships hosted by the Office of Sustainability are not focused on waste. However, there are funding options for zero waste projects available to UW Seattle faculty and staff working with UW students, a UW Seattle registered student with a sponsor, or a UW Seattle Registered Student Organization; these entities are all eligible to apply to the [Campus Sustainability Fund](#) to cover expenses for zero waste projects, and also have access to grants through the [City of Seattle](#).

Finally, there is an ongoing effort by UW Sustainability to formalize a campus-wide work group focused on the [Sustainability Action Plan](#)'s Waste Target combined with the Purchasing Target and Food Target, that includes both students, faculty, and staff that could serve as the foundation for a campus-wide Zero Waste Task Force.

Education & Communication

In terms of academic curriculum, the interviewed students were not aware of any courses that address zero waste in their curriculum.

Waste reduction practices and education were introduced this year via the Intro to Recycling and Waste Diversion online bridge course, required for all UW Facilities staff, including custodial staff, and is being incorporated into UW Dining's onboarding program. This course will be promoted to staff, faculty, and students this year, and covers information on sorting waste as well as resources on campuses for reducing waste. UW Sustainability runs a [Green Office Program](#) which focuses on workplace practices such as purchasing, publications and marketing, and waste. New students will now undergo education on waste diversion and waste reduction in their Advising & Orientation online modules, including sustainability tips for move-in. We recommend ensuring that there is curriculum to familiarize students with opportunities to reduce waste and reuse, share, and repair items, appropriate use of the standardized collection stations, and disposal of hard-to-recycle materials. While education is extremely important in contributing to culture change, infrastructure change ultimately provides the greatest impetus for behavior change, so any educational campaigns must be coupled with the implementation of systems and programs to support long-lasting change.⁹

⁹ See PLAN's blog post on why [Infrastructure Change Must Precede Behavior Change](#), which shares takeaways from other behavioral psychology experts.

Additional Credit

The University of Washington received a few additional credits in this section. Points were awarded for staff who regularly communicate with custodial services in their buildings and for the Campus Race to Zero Waste hosted in the residence halls. Points were also awarded for waste-related events and workshops hosted by the campus or student organizations, such as the weekly speakers hosted by the Green Greek Representative Program and a clothing donation program they organized. Additional points were rewarded for recruiting volunteers to act as “bin goalies” or “trash talkers” at waste collection stations at Athletics events to help people sort their waste appropriately.¹⁰ Finally, UW Farm received additional points for growing food that is used in campus dining services and donated to the UW Seattle Food Pantry.

¹⁰ [Carleton College](#) incentivizes students to work as “trash talkers” by reimbursing their student organization or sports team for their time.

III. Accessibility Policy

We assess plastic straw accessibility in the policy section because it is imperative that straws are still available for those who need straws for accessibility reasons. As shown in Tables 8A and 8B on the following pages, plastic straws (compostable plastic only at the Seattle campus) are available at all campus eateries. While this is in practice on all three campuses, we recommend UW add language on the importance of continuing to stock plastic straws for accessibility reasons to their sustainable purchasing policies to formalize this standard.¹¹

25 / 27

Accessibility Policy

¹¹[Sample language can be found in PLAN's Break Free From Plastic Campus Pledge.](#)

TABLE 8A: ACCESSIBILITY POLICY

Table 8a: Accessibility Policy														
	Local Point & Center Table (Dining Halls)	Cultivate (Restaurant)	By George (Casual Sit-Down)	Evolutionary Grounds & Supreme Cup (Casual Sit-Down)	Husky Den Food Court (Casual Sit-Down)	Husky Grind (Casual Sit-Down)	Microsoft Cafe (Casual Sit-Down)	Orin's Place (Casual Sit-Down)	Pagliacci Pizza (Casual Sit-Down)	Parnassus Cafe (Casual Sit-Down)	Rotunda Cafe (Casual Sit-Down)	Starbucks - Husky Den (Casual Sit-Down)	Starbucks - Suzzallo Library (Casual Sit-Down)	815 Mercer (Casual Sit-Down)
Plastic straws still accessible	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	Yes	Yes

TABLE 8B: ACCESSIBILITY POLICY

Table 8b: Accessibility Policy												
	Dawg Bites (Grab & Go)	Hot Dawgs & Motosurf Food Trucks (Grab & Go)	Mary Gates Hall Espresso & Tower Cafe (Grab & Go)	Starbucks Coffee Truck (Grab & Go)	Sunrise Griddle Food Truck (Grab & Go)	District Market	ETC - HUB (Convenience Store)	ETC - Magnuson Health Sciences (Convenience Store)	Athletics	Events	UW Bothell: Food for Thought & Common Grounds	UW Tacoma: West Coast Grocery
Plastic straws still accessible	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

SOFT GOODS BIN & SIGNAGE STANDARDIZATION

I. Standardize Collection Systems, 3-Bin Systems, Eliminate Unpaired Bins, and Establish Liquid Collection

In this section we assess the existence of standardized collection stations (including compost collection) in all areas of campus, as well as ensuring that no standalone or “unpaired”

bins exist on campus. We also recommend exploring the benefits of establishing additional collection bins for liquids and to-go ware.¹²



Assessment

All of the stakeholders in charge of campus-wide systems and programs stated that they were aware of UW Recycling’s [Design Guidelines](#) around appearance and signage of waste bins and had standardized collection stations in their buildings/offices, most likely due to UW Recycling’s roll-out of standardized bins across campus to be completed by the end of Summer 2021. However, more stakeholders who worked in more specialized facilities (such as arts venues, UWMC buildings, and leased buildings) reported that they were not aware of standards for the areas and facilities they worked in/oversee. The University of Washington generally purchases a 3-bin system for landfill, compost, and mixed recyclables, although some buildings outside of academic/administrative buildings purchase custom bins.

¹² Check out our [Reusable Dishware on Campus During COVID-19](#) article on reusable to-go ware container programs during COVID.

Recommendations

Bin Standardization

As previously mentioned, infrastructure change is a prerequisite to achieving systemic behavior changes - to see universal adoption of sustainable material management behaviors, infrastructure has to be clear, consistent, and uniformly accessible in all locations. Standardized collection stations greatly increase diversion rates, decrease contamination rates, and are the first foundational step to setting up education and communication initiatives that have high likelihoods of success. Clearly communicated standards for bins and signage will ensure uniformity across campus and decrease confusion and resulting contamination of waste streams.

UW Recycling currently has a [formal resource](#) for campus-wide standardization for all types of bins and signage, including outdoor bins, external dumpsters, and compactors. These standards are communicated in a style guide that outlines what type and color of bin should be used across campus for each waste stream, and specifies where bins should be located, the types of bins that are used in different facilities and for on-campus events and Athletics. UW Bothell and Tacoma also have a set of guidelines for bin standards. We recommend ensuring that the existing guidelines include language to eliminate “standalone” or “unpaired” bins around campus, ensuring that landfill, recycling, compost, and liquids (where applicable) streams are always found side-by-side and in the same order.¹³ Furthermore, we recommend increasing communication to individual departments on the requirement that all containers used on the Seattle campus must be purchased through UW Recycling to avoid confusion.

Compost Collection

As mentioned in a previous section, UW’s compost program expands beyond collection in dining locations and departments to almost all buildings on the Seattle campuses, except for a few buildings that only offer compost in break rooms or do not place compost bins in conference rooms. UW Bothell and Tacoma also have campus-wide composting collection.

¹³ This example from the [University of Michigan](#) designates the difference between certain styles of bins, where they should be placed, and who pays for them.

Additional Credit

Liquids Collection: To make compost collection more efficient and disposal less expensive, liquids could be collected separately from the rest of the organics stream to reduce the weight of the compost. Additional credit was awarded for Husky Stadium's practice of collecting liquids to a limited extent, with plans to expand when they can. Additional credit was also awarded for the student-driven pilot programs that were introduced for liquid collection pre-pandemic; UW Recycling plans to restart this initiative when student industrial design projects are available again.¹⁴

Expand To-Go Ware Program Collection Locations

The University of Washington has a reusable to-go ware program that is available in Local Point and Center Table only - Local Point is also the only place with a collection point for used to-go ware. As mentioned above in the reusable to-go ware section, we recommend that the University of Washington expand the existing program to all food service locations, in addition to expanding the number of collection points.

CONCLUSION

The recommendations outlined above are just the beginning in a multi-stage zero waste planning process. We have provided recommendations based on best practices from campuses across the country, but the next step in zero waste planning is to identify the feasibility of these recommendations at the University of Washington and to strategize with PLAN's Atlas team to vision and develop a Zero Waste Task Force across all three campuses and subsequent Zero Waste Roadmap specific to the University of Washington. We encourage the campus to develop a goal that incorporates and extends beyond quantitative measurements like diversion, reduction, and recycling, to include qualitative goals to develop campus-wide service models for sustainable materials management and program areas such as engagement and education. For the University of Washington to achieve zero waste, there will need to be financial support behind campus-wide infrastructure changes and administrative support for campus-level policies. The University should utilize this report as a wayfinding tool to benchmark and track progress on the remaining opportunities for waste reduction.

ACKNOWLEDGMENTS

Contributors

Author & Report Design: Yu-Shien Ni, PLAN Co-Director of Atlas Zero Waste Strategy
Stage 1 Atlas Fellow & Interview Coordinator: Julie Ira '22, UW Recycling Zero Waste Assistant

Recognitions

Liz Gignilliat, Manager, UW Recycling
Casey Crane, Project and Purchasing Specialist & Dining Systems Program Coordinator, UW Housing & Food Services (HFS)
Allan Cortina, Sustainability Coordinator, UW Tacoma
Alexa Russo, Sustainability Coordinator, UW Bothell

List of Interviewed Stakeholders

JPerry Acworth, UW Farm Manager, UW Botanic Gardens
Meegan Amen, Facilities Coordinator, College of Built Environments
Karen Baebler, Assistant Athletic Director for Sport Operations
Katie Beth, Associate Director for Facilities & Operations, UW Recreation
Tom Burke, Technical Director, Meany Hall
Lucas Calderón, Security & Operations Manager, Burke Museum
Jeanel Cassidy, Moving & Surplus Manager, Materials Management
Diane Castanes, Senior Real Estate Manager, Roosevelt
Christy Cherrier, Science Lab Manager, UW Bothell School of STEM
Claudia Christenson, Purchasing Manager, Strategic Sourcing and Contracting Services & Sustainable Sourcing Team
Tessa Coleman, Associate Director of Maintenance & Operations, UW Tacoma Court 17
Zack Cross, Retail Manager & Executive Chef, UW Medical Center
Daniel Eden, Fleet Manager, Fleet Services
Kate Flowers, Assistant Director, HFS Custodial Services
Katy Folk-Way, Director, Creative Communications
Doug Gallucci, Assistant Director, EH&S Environmental Programs
Josh Gana, Associate Director, HFS Facilities
Liz Gignilliat, Manager, UW Recycling
Alyssa Hall, Operations & Strategic Programs Assistant, UW Tacoma Library
Meghan Hanlon, Program & Building Coordinator, Haring Center EEU
Mark Kirschenbaum, Assistant Director, Campus Utilities
Travis Lamance, Program Support Supervisor, Mailing Services
Vivian Leung, UW SEED Student Leader
Chip Lydum, Associate Athletic Director for Operations & Capital Projects

Pam Lynne, Administrator, Art Studios
Sophia Myers, Scientific Instructional
Technician, Health Sciences Academic
Services & Facilities
Howard Nasake, Manager, Grounds
Management & Building Envelope
Tim Nguyen, Director, UWMC
Environmental Services
Kurt Oglesby, Facilities Maintenance
Manager, HUB Facilities & Operations
Julieann Palumbo, Lab Coordinator, UW
Tacoma Science Labs
Steven Riggs, Facilities & Building
Coordinator, Hall Health Center
Steven Roberts, Assistant Director,
Creative Communications
Abby Rogerson, Gleaning Coordinator,
UW Pantry
Jacqueline Sam, Interim Facilities
Manager, UWMC Roosevelt

Michele Santos, Facilities Services
Supervisor, UW-IT
Jen Sward, General Manager University
of Washington, Aramark
Paul Siscel, Manager, Health Sciences
Building Management & Security
Steve Tatge, Executive Director, Project
Delivery Group
Michael Treptor, Program Operations,
DEOHS at 4225 Roosevelt
Brad Van Home, Facilities Manager, UW
Libraries
John Wallace, Industrial Hygienist, EH&S
Earl Wayman, Senior Property Manager,
Alumni House
Gene Woodard, Director, Building
Services Department
Angela Zurcher, Food Services Manager,
UW Tacoma