**Funding Criteria**

**A. General Rules**

1. Students, faculty, and staff are encouraged to submit requests for funding. Student-led projects require a faculty or staff sponsor in order to have funds awarded.
2. Funding can only go to university-affiliated projects from students, faculty, staff, and departments.
3. All SSC projects must make a substantial impact on students. This may be a direct impact or an impact through education and engagement. All SSC funding is 100% from student green fees, so the projects funded by the students must benefit them.
4. SSC encourages innovation and new technologies – creative projects are encouraged to apply.
5. Unless a type of expense is specifically listed below as having restrictions, SSC can generally fund it. The items referenced below should not be taken as comprehensive list.

**B. Things SSC Can Fund, On A Case-By-Case Basis**

1. SSC can fund feasibility studies and design work; however, it must work toward ultimately addressing a sustainability need on campus.
2. SSC can fund staff positions that are related to improving campus sustainability. Strong preference will be given to proposals receiving matching funding from departments and/or plans for maintaining continuity of the position after the end of the initial grant.
3. SSC can fund outreach events with a central theme of sustainability, provided their primary audience is the general campus community.
4. SSC discourages funding requests for food and prizes but will consider proposals on a case by case basis that prove significant reasoning.
5. SSC can fund repairs and improvements to existing building systems as long as it works toward the goal of improving campus sustainability; however, a preference is shown to projects utilizing new or innovative ideas.
6. SSC can provide departments with loans for projects with a distinct payback on a case by case base. Loans will require a separate memorandum of understanding between SSC and departmental leadership pledging to repay the award in full and detailing the payback plan.

**C. Things SSC Will Not Fund:**

1. SSC will not fund projects with a primary end goal of generating revenue for non-University entities.
2. SSC will not fund personal lodging, food, beverage, and other travel expenses.
3. SSC will not fund any travel expenses.
4. SSC will not fund tuition or other forms of personal financial assistance for students beyond standard student employee wages.

**Your Step 2 funding application should include this application, the supplemental budget form, and any letters of support.**

*Please submit this completed application and any relevant supporting documentation to* [*Sustainability-Committee@Illinois.edu*](mailto:Sustainability-Committee@Illinois.edu)*. The Working Group Chairs will be in contact with you regarding any questions about the application. If you have any questions about the application process, please contact the Student Sustainability Committee at* [*sustainability-committee@illinois.edu.*](mailto:sustainability-committee@illinois.edu.)

**General & Contact Information**

**Project Name:** ISTC-UIUC Waste Characterization Study & Opportunity Assessment

**Total Amount Requested from SSC:** $18,979 (with F&S matching these funds for a total of $37,958)

**Project Topic Areas:**  Land & Water  Education  Energy

Transportation  Food & Waste

**Applicant Name:** Daphne Hulse

**Campus Affiliation (Unit/Department or RSO/Organization):** Facilities & Services, Zero Waste

**Email Address:** dlhulse2@illinois.edu

**Check one:**

This project is solely my own ***OR***

This project is proposed on behalf of (name of student org., campus dept., etc.): Facilities & Services and the Illinois Sustainable Technology Center

**Project Team Members**

|  |  |  |
| --- | --- | --- |
| **Name** | **Department** | **Email** |
| **Pete Varney** | Facilities & Services | pvarney@illinois.edu |
| **Shawn Patterson** | Facilities & Services | spttrsn@illinois.edu |
| **Dan Hiser** | Facilities & Services | dwhiser@illinois.edu |
| **Daphne Hulse** | Facilities & Services | dlhulse2@illinois.edu |
| **Joy Scrogum** | Illinois Sustainable Technology Center | jscrogum@illinois.edu |
| **Savannah Feher** | Illinois Sustainable Technology Center | sfeher@illinois.edu |
| **Zach Samaras** | Illinois Sustainable Technology Center | zsamaras@illinois.edu |

**Student-Led Projects (Mandatory):**

Name of Faculty or Staff Project Advisor:   
Advisor’s Email Address:

**Financial Contact *(Must be a full-time University of Illinois staff member)***

Contact Name: Mike Alsip

Unit/Department: Facilities & Services, Shared Administrative Services

Email Address: alsip@illinois.edu

**Project Information**

*Please review the proposal materials and online content carefully. It is highly recommended you visit a working group meeting sometime during the proposal submission process.*

**Please provide a brief background of the project, its goals, and the desired outcomes:**

*You may copy and paste your Step 1 application answer if nothing has changed.*

In 2014, F&S and ISTC began collaboration on a two-phase waste characterization study and waste reduction opportunity assessment through the waste sampling of eight campus buildings and surveying of building occupants. ISTC assessed the buildings’ waste stream and occupant knowledge and satisfaction of current practices.

Nearly a decade later, F&S and ISTC aim to again characterize a sample size of waste on campus, engage stakeholders via focus groups, and propose opportunities for waste reduction and/or diversion. A key deliverable of this study is the forward-facing report, intended to serve not only as a guideline for F&S strategic implementation, but also as a public resource detailing the current waste management processes and initiatives at the U of I.

New to this study, ISTC will integrate an “activity zone” approach: classifying a building according to its primary purpose. Two representative buildings were identified for each of the four activity zones (academic, academic + laboratory, multi-activity, and student living), for a total of eight buildings. Results from and recommendations for each activity zone can be extrapolated and applied to other buildings that exist within the same zone.

From the waste characterization and stakeholder engagement results, F&S strives to:

* Compare 2023 results to 2014 results to understand how campus waste has evolved over time.
* Strengthen its relationships with campus buildings in the realm of waste management.
* Gauge stakeholders’ (students, faculty, and staff) suggestions for ways to improve recyclable collection and waste reduction strategies.
* Integrate ISTC recommendations for high-impact waste reduction strategies into F&S operations.

**Where will the project be located? Are special permissions required for this project site?**

*If special permission is required for this location, please explain, and submit any relevant letters of support with the application.*

Waste collections will take place at the following facilities listed below. Special permissions are not required.

1. Academic Facilities
   * Business Instructional Facility
   * Campus Instructional Facility
2. Academic + Laboratory Facilities
   * Roger Adams Laboratory
   * Noyes Laboratory
3. Multi-use Facilities
   * Illini Union
   * Activities and Recreation Center
4. Student Living Facilities
   * Lincoln Avenue Residence Hall
   * Allen Residence Hall

The waste characterization process will take place at the Waste Transfer Facility.

**Other than the project team, who will have a stake in the project? Please list other individuals, groups, or departments affiliated directly or indirectly by the project. This includes any entity providing funding (immediate, future, ongoing, matching, in-kind, etc.) and any entities that benefit from this project.**

*Please attach letters of commitment or support at the end of the application.*

1. Facilities & Services will provide funding and benefit from this project.
   1. Facilities & Services is matching SSC funding dollar-for-dollar. Facilities & Services will benefit from the information and recommendations that ISTC summarizes from their characterization of campus waste. F&S will be able to strategically implement the highest-impact recommendations.
2. Building occupants of the facilities listed below will be included in focus groups that ISTC facilitates. Focus groups will allow these building occupants to express their thoughts and concerns on the waste management process, and provide their recommendations for improvement. Therefore, these occupants have a stake in this project and stand to benefit from the implementation of their ideas.
   1. Business Instructional Facility
   2. Campus Instructional Facility
   3. Roger Adams Laboratory
   4. Noyes Laboratory
   5. Illini Union
   6. Activities and Recreation Center
   7. Lincoln Avenue Residence Hall
   8. Allen Residence Hall
3. Illinois Sustainable Technology Center has a stake in this project as members of their Technical Assistance Program are executing this project.
4. The general student, faculty, and staff population on the U of I campus will indirectly benefit from this project as our selection of the above facilities was strategically designed to work as generalized “activity zones.” What is found from each of the two academic, academic + laboratory, multi-activity, and student living facilities will allow F&S and ISTC to generally extrapolate to other campus facilities of similar activity zones. Therefore, F&S can make improvements to facilities on campus beyond the facilities listed specifically on this application.

**How will this project involve and/or benefit students?**

*This includes both direct and indirect impact.*

Completing the waste characterization and opportunity assessment will benefits students in the following ways:

* Students from the two identified “student living” buildings will be given an opportunity to voice their thoughts on current campus waste practices and suggest ideas for how F&S can improve waste reduction and diversion.
* Results from the final report will be used as a guideline for how F&S can more effectively target outreach and education initiatives regarding waste to the U of I student population.

Students are involved with this project in the following way:

* Student volunteers (supervised by ISTC staff) will be the primary audience ISTC recruits from for waste sorting. Students will gain experience with waste sorting and directly contribute to the results of the project in a supervised and controlled environment.

The educational component of the project is the end deliverable: a forward-facing report designed for public consumption. It will include the following:

* Results from the waste characterization.
* A summary of themes discussed at the stakeholder focus groups.
* Current practices of waste management.
* Planned initiatives which address waste reduction or diversion.

Recommended action items for waste reduction and diversion with low, medium, and high impact on campus.

**How will you bring awareness and publicize the project on campus? In addition to SSC, where will information about this project be reported?**

* Sustainability-related projects are kept on record within the [iCAP Portal](https://icap.sustainability.illinois.edu/project/zero-waste-icap-team) website. The iCAP Portal content and design is led by Facilities & Services and the Institute for Sustainability, Energy, and Environment, and the database/website administration is handled through the College of Education’s Office for Math, Science, and Technology Education.
* F&S Customer Relations & Communications, the division charged with communication of information internally and externally within F&S and outward to campus customers, will publicize results from ISTC’s report through their various communication pathways: social media, news releases, newsletters, e-updates, and the F&S website.
* ISTC maintains a comprehensive list of their waste audit reports which can be shared to their website and the ISTC newsletter.
  + During the waste characterization process, ISTC will have a call-out for student volunteers interested in getting involved with the waste sorting process. F&S and iSEE will assist with volunteer gathering and advertisement of the opportunity.

# Financial Information

*In addition to the below questions, please submit the supplemental budget spreadsheet available on the Student Sustainability Committee* [*website*](http://ssc.sustainability.illinois.edu/?page_id=2087)*. Submission of both documents by the submission deadline is required for consideration of your project.*

**Have you applied for funding from SSC before? If so, for what project?**

No, I (Daphne Hulse) have not applied for funding from SSC before.

**If this project is implemented, will you require any ongoing funding required? What is the strategy for supporting the project in order to cover replacement, operation, or renewal costs?***Please note that SSC provides funding on a case by case basis annually and should not be considered as an ongoing source of funding.*

No, ongoing funding will not be required.

**Please include any other obtained sources of funding. Have you applied for funding elsewhere?**

*Please attach any relevant letters of support as needed in a separate document.*

F&S will be matching SSC funding dollar-for-dollar. Funding has not been applied for elsewhere.

# Environmental, Economic, and Awareness Impacts

**How will the project improve environmental sustainability at the Urbana-Champaign campus? If applicable, how does this project fit within any of the** [**Illinois Climate Action Plan**](https://icap.sustainability.illinois.edu/) **(iCAP) goals?**

Characterizing campus waste and soliciting feedback from students, faculty, and staff on how F&S can better reduce or divert waste relates to iCAP Objective 5.2, “Reduce the total campus waste going to landfills from 5,049 tons in FY19 to 4,544 tons or less in FY24, which is a decrease of at least 10%.”

Campus began achieving this objective starting in 2020, when total landfilled waste fell below 5,049 tons. With the onset of the COVID-19 pandemic, achieving this objective may be attributed to this anomaly, or a sudden and drastic shift in operations. Only recently has campus activity started to resume to its usual frequency.

Integral to reducing landfilled waste on campus is understanding what characterizes that waste, and how its producers (students, faculty, and staff) interface with the waste management process. First, gauging stakeholders’ knowledge of current practices empowers F&S to effectively focus education and outreach initiatives to target audiences. Second, soliciting feedback from the campus community on how F&S might improve its waste management process enables the community to voice concerns and strengthen their existing relationship with F&S. A community-oriented approach to waste reduction and diversion is imperative for both achieving and maintaining the targets of iCAP objectives.

**How will you monitor and evaluate the project’s progress and environmental outcomes? What short-term and long-term environmental impacts do you expect?**

*Some examples include carbon emissions, water conservation, green behavior, and reduced landfill waste.*

As the project relates most closely with iCAP Objective 5.2, “Reduce the total campus waste going to landfills from 5,049 tons in FY19 to 4,544 tons or less in FY24, which is a decrease of at least 10%,” the F&S-tracked landfilled waste metric will be the primary mode of monitoring and evaluating the project’s progress and environmental outcomes. Total campus waste going to landfills is tracked by fiscal year and hosted on the [iCAP Portal](https://icap.sustainability.illinois.edu/objectives/52-reduce-landfilled-waste).

A second metric relevant to the project is iCAP Objective 5.2.1, “Install appropriate waste collection infrastructure throughout the University District, with new indoor bins placed in at least 150 buildings by FY24.” Based on previous ISTC recommendations, F&S began the deployment of 3-stream bins across campus buildings. In this proposed waste characterization project, ISTC would ascertain the efficacy of the 3-stream bins in buildings which utilized them against buildings which did not (e.g. BIF and CIF). This metric would be another venue through which environmental impact can be monitored and evaluated.

In the short term, this project would be executed, and a resulting final report would be delivered. Through the information provided on the final report, F&S can, in the short term, plan for execution of initiatives that would produce the highest-impact results. Long term, F&S would expect that the total campus waste going to landfills would reduce. F&S would also expect, pending the results of the analysis, an increased interest from facilities in obtaining 3-stream bins (in the short and long term, depending on the available budget for purchasing new bins).

**What are your specific outreach goals? How will this project inspire change at UIUC?**

The resulting final report is especially critical for F&S outreach goals. It is a recurring inquiry heard by F&S that members of the campus community are interested in learning more about how the campus waste management process works. F&S offers in-person tours of the Waste Transfer Station, where waste produced by campus is taken to be sorted through before it is sent to the landfill (currently Clinton, IL). F&S facilitates the tours for the purpose of education and outreach among the community, though there are many limiting factors which prevent the majority of campus from being able to visit the facility. A final report which includes not only the results of this waste characterization study but also a comprehensive overview of current waste management practices and initiatives provides campus community members a clear, and comprehensive, overview.

A piece of the waste characterization to be performed by ISTC includes the separation of materials into many categories (25 are listed below; the budget assumes for no more than 35 material categories). Understanding the composition of waste at facilities is imperative to understanding what kind of waste reduction must take place. Especially for materials which cannot be locally recycled on campus, understanding the type of materials found in waste can inform university purchasing/procurement policies and guidelines in an effort to reduce these sources, and inform F&S as to where specific outreach and education on waste reduction would be most effective.

Chart, treemap chart

Description automatically generated

Figure 1. Example of ISTC’s material categories for sorting.

A current limiting factor of waste management practices is organic waste. University Housing leads strongly in their commitment to mindful disposal of pre- and post-consumer food waste via their Grind2Energy systems. However, food waste still exists on campus in a variety of capacities (e.g. residence halls, staff kitchens, and food brought from outside campus which ultimately finds itself in university-serviced waste bins). Central Illinois currently lacks an industrial plant capable of accepting the quantity of food waste produced on the U of I campus, but it is also an issue many members of the university are interested in exploring further. Understanding the current landscape of organic waste quantities would be beneficial for conversations regarding organic waste disposal. Organic waste disposal directly relates to iCAP Objective 5.5, “Develop a detailed comprehensive plan including implementation and operational costs/benefits to sustainably dispose of all food scraps and other organics by FY24, and fully implement the plan by FY33.”

**If applicable, how does this project impact environmental injustice or social injustice?**

Waste relates closely to environmental and social injustices. Solid waste disposal is a public health issue. Landfills not only contribute to global greenhouse gas accumulation, but they also negatively impact the communities which surround them through land, air, and water quality deterioration. The university has the agency to reduce the quantity of waste being sent the landfill each day when the campus community collectively commits to using less single-use products and recycling waste when possible. F&S has direct control over the waste management process and therefore can impact this result significantly.

Additionally, the use of focus groups in this project allows for building users (and residents) to voice their concerns regarding the waste management process, and suggestions for improvements. Giving space to the campus community for feedback is critical. Inclusion is the start to achieving justice.