**Zero Waste Program**

In this project, we worked with the Office of Sustainability which partnered with the Post Landfill Action Network (PLAN) to conduct a zero waste assessment of WashU's Danforth and Medical campuses. PLAN is an organization that does work with campuses to assess where they can improve waste management practices and sustainability policies in an effort to make universities a greener place while also ensuring that they promote diversity and inclusion in relation to sustainability.

With growing concerns about global warming and excessive waste generation it is critical that we push harder towards a zero waste economy. Zero waste is a sustainable approach that aims to eliminate or significantly reduce waste generation by redesigning products, processes, and systems. The goal is to prevent waste from entering landfills, incinerators, and the environment. Zero waste is a circular system where waste is treated as a resource and reused, recycled, or composted and involves reducing consumption, improving durable design, choosing eco-friendly alternatives, and implementing efficient waste management strategies. Through this project we hoped to lay down the framework of making WashU a zero waste campus.

To do so, we worked with PLAN's Atlas Zero Waste Program and used their educational and practical resources to learn about problems with waste and conduct phase one of the project which is to assess opportunities to improve. To do so we used PLAN's campus programs checklist which is a document containing many questions about each of the campus's departments. We asked stakeholders in different departments these questions and scored their responses to create a waste score for our campus and create recommendations on where the campus can improve to get closer to zero waste.

Our preliminary assessment gave Danforth campus a score of 52.64% and Medical campus a score of 51.92%. This score is pretty average compared with other universities in the PLAN program. Danforth campus got a bronze for electronic & universal waste recycling, while Medical campus got a bronze for compost/recycling & bin system, so they did a decent job in these two aspects.

Based on our interviews and scorings, we provided some suggestions to several departments, especially for Danforth campus. For dinning, more types of to-go container should be provided across all dinning areas, and food purchasing should be adjusted based on previous data to avoid unnecessary food waste. For construction and renovation, we recommend the campus practice more deconstruction rather than demolition. Some hard to recycle materials from house renovations should be systematically collected. We recommend establish a collection site, where staffs and students can dispose their hard to recycle materials. Deconstructed materials that are reusable should be incorporated into new designs. In terms of labs, most labs on campus practice some extent of recycling in the lab, but we lack a universal chemical sharing program across labs. Danforth campus holds lots of events every semester. For may big events like graduation ceremony, there are comprehensive waste recycling processes, but for small

student events such as those hold by student clubs, we currently don’t have any sustainability procurement.

In the end, we also have some general suggestions for all departments. We recommend the establishment of a Zero Waste department to help achieve zero waste goals. Sustainability procurement should be a required practice for most department, but this is currently not the case. Also, liquid waste should be treated separately from solid waste, which is not practice by any WashU departments.

What we have accomplished is only the first step of the whole program. The next two stages are strategic visioning and action planning. During these steps, the next team of fellows will use our data to provide solutions and create a applicable zero waste plan.