

Enhancing the Sustainability of Electronic Waste Handling on the UW Seattle Campus

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University of Washington

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EWaste Handling at UW Seattle Overview

What's the Problem?

UW Seattle Survey



How can we improve?

Increasing Awareness

Increasing Ease of Recycling

Improving Reuse of Electronic Waste



E-Waste Recycling at the UW

Reuse, Recycling, and Disposal of Electronics at UW

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Hello,

People in your UW community are sharing their views about recycling electronics on campus. This survey is an opportunity to have your voice heard about this important issue. The primary goal of this survey is to get more electronics out of the trash and into sustainable recycle, reuse, or repurpose pathways.

Your input is valuable, and will inform decisions about campus recycling programs that may affect you. All information we collect from this survey will be kept anonymous and confidential, and your participation is voluntary. It will take about (10) minutes to complete the survey.

This survey is for fact-finding purposes only. Our intention is to understand what **actually** happens to the electronic waste stream, independent of UW policies and regulations regarding electronic waste. We are in no way discouraging adherence to UW policies via this fact-finding effort, but instead are seeking to better understand approaches and practices to channeling waste in a way that is sustainable and practical.

Background Information

Question 1.

Which UW campus are you affiliated with?

Required.

- ☐ Bothell
- ☐ Seattle
- ☐ Tacoma

Question 2.

Which is your home department (the department or unit in which most of your research, teaching, or other effort is focused)?

UW Seattle Survey focused on:

- Volume of Electronic Waste
- Frequency of E-Waste Recycling
- Fate of E-Waste Recycling
- E-waste relative to other Waste

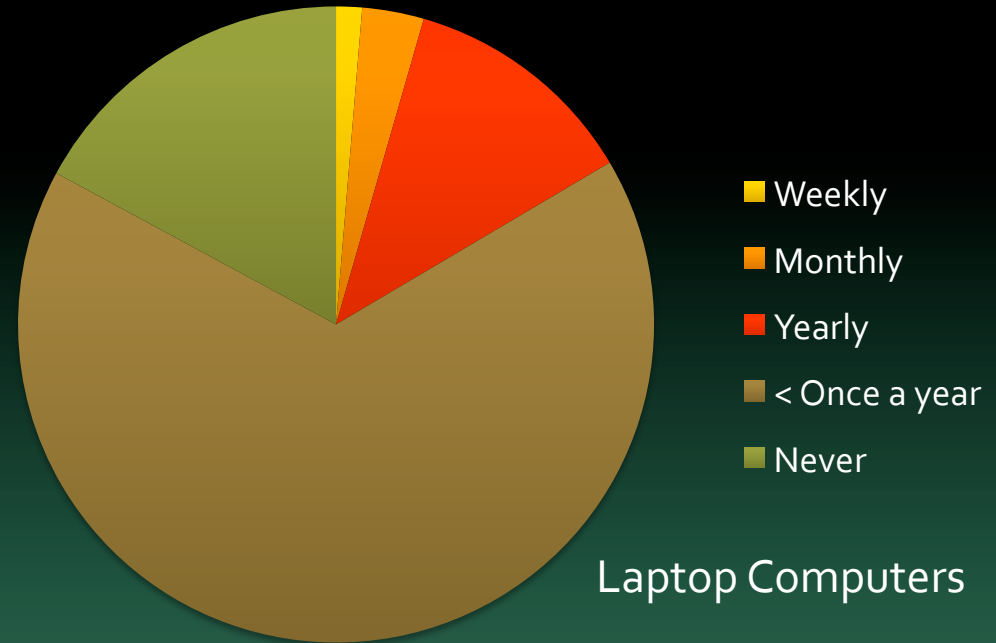
Respondents (N = 159)

- College of Engineering: 54%
- Outside of COE: 46%
- Regular TT Faculty: 63%
- Staff: 14%
- Other: 23%

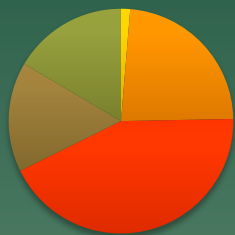
E-Waste Recycling at the UW

Volume of Waste: How often is electronic waste disposed of?

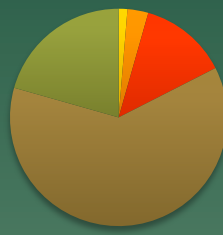
- Batteries and Printer Cartridges are the most common form of electronic waste on campus.
- Most larger electronics are disposed of less than once a year.
- A majority of respondents never dispose of tablets, E-readers, test equipment, custom electronics, fabrication equipment, or electronic components.



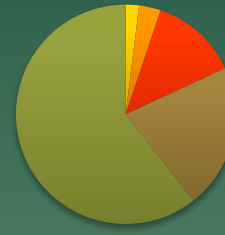
Laptop Computers



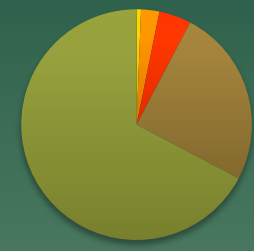
Printer Cartridges



Printers, Scanners



Electronic Components

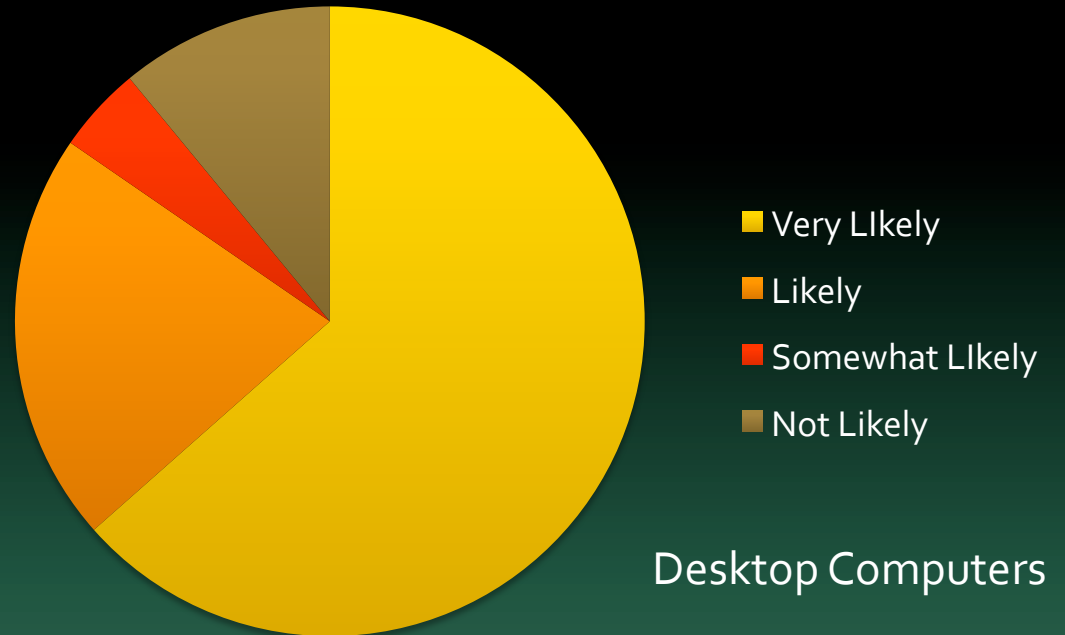


Test Equipment

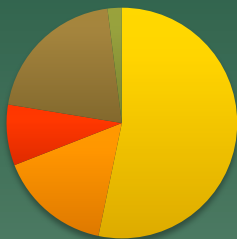
E-Waste Recycling at the UW

Frequency of Recycling: How likely is E-Waste to be Recycled?

- Computers and related equipment (e.g. Tablets) are most likely to be recycled when disposed.
- Many smaller items, such as electronic components and subassemblies as well as computer accessories are the least likely to be recycled.



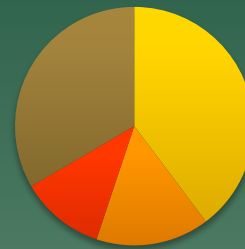
Desktop Computers



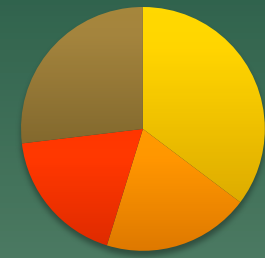
Batteries



Tablets



Electronic Components

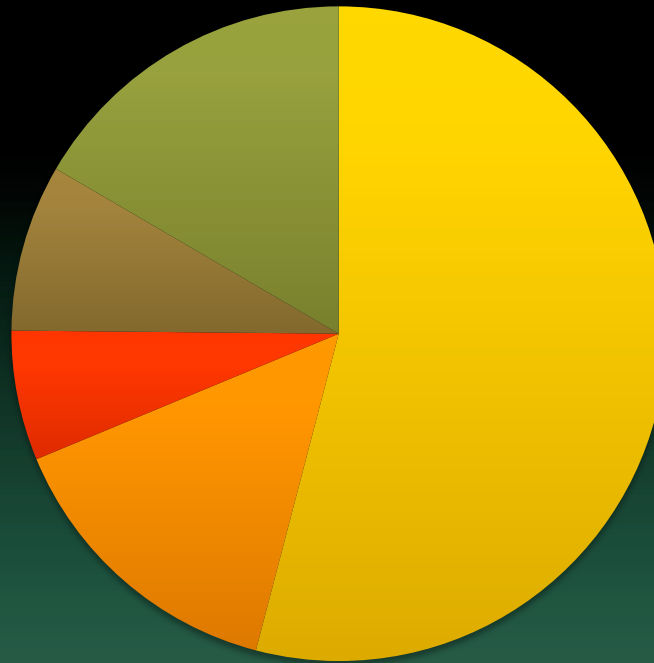


Electronic Subassemblies

E-Waste Recycling at the UW

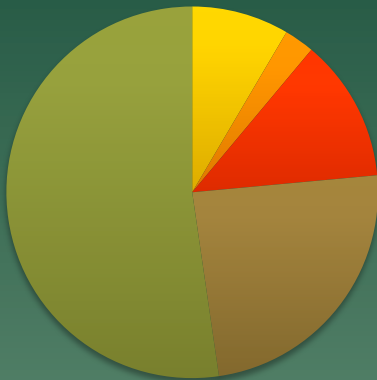
Fate of Recycling: Where is Job-Related Electronic Waste Recycled?

- Most job-related electronics are recycled through UW Surplus.
- Some job related ewaste, however, still lands in on-campus recycling bins or other recycling destinations.

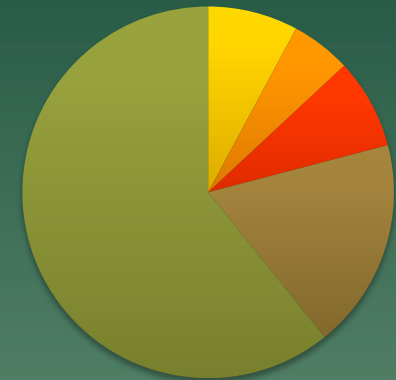


UW Surplus

- Between 76% and 100%
- Between 51% and 75%
- Between 26% and 50%
- Between 6% and 25%
- Less than 5%



On Campus Recycling Bins

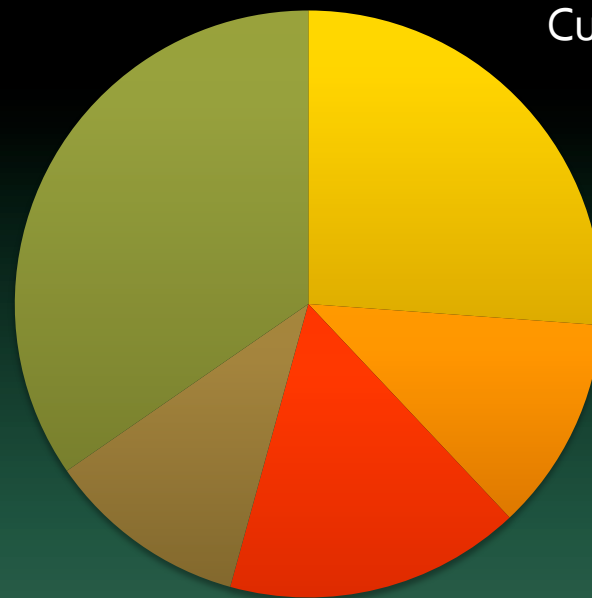


Other Recycling Resources

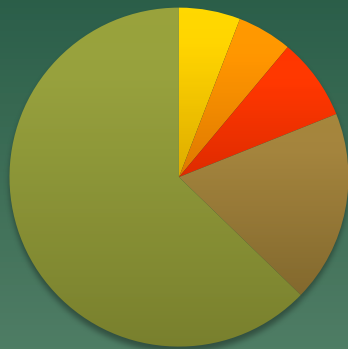
E-Waste Recycling at the UW

Fate of Recycling: Where is Personal Electronic Waste Recycled?

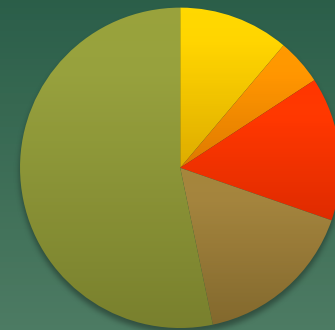
- Curbside and drop-off facilities appear to be the most common destination for personal electronics recycling.
- On campus recycling bins are not a popular destination for personal electronics recycling.



Curbside or Drop-Off Facilities



On Campus Recycling Bins



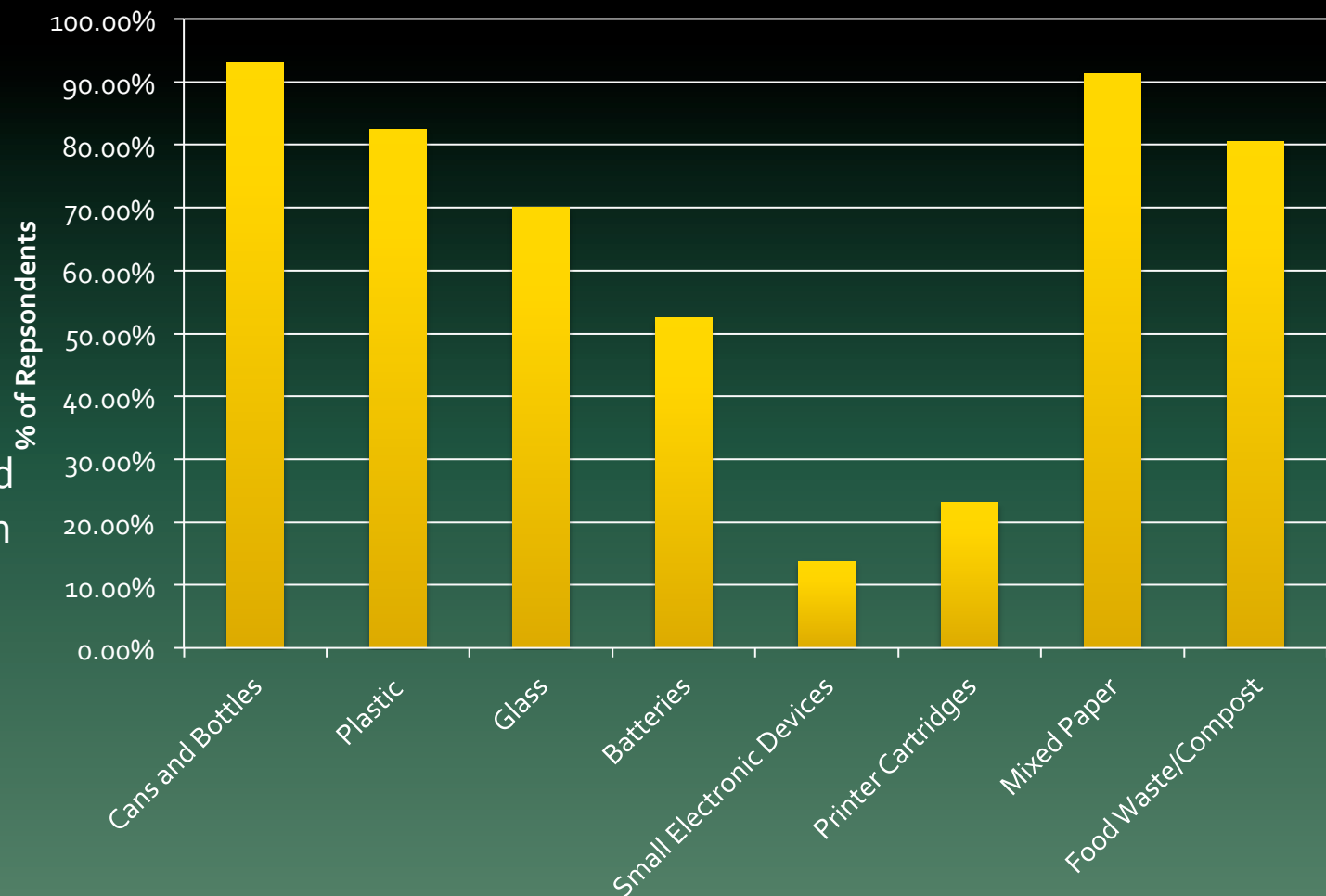
Other Recycling Resources

E-Waste Recycling at the UW

Recycling of E-waste relative to Other Waste on the UW Seattle Campus

Electronics still have a way to go to get higher recycling rates.

Batteries are the most-recycled electronics on campus, and could be connected with small electronics recycling to improve recycling rates.



E-Waste Recycling

Increasing Awareness



E-Waste Recycling

Increasing Ease of Recycling

Placement of General Purpose E-Waste Recycling Bins in High Use Areas

- Electrical Engineering Building
- Computer Science and Engineering (Paul Allen Center)

One Located Near Smaller eMedia Bins and Recycling/Compost Bins To Increase Association With Well-Recycled Items (Batteries) and Composting/Paper Recycling



E-Waste Recycling

Improving ReUse of Electronic Waste

Fashioning Electronic Waste into Jewelry and...



Endless Possibilities...

for using electronic waste to raise awareness about
the issues surrounding local-to-global e-waste

Enhancing the Sustainability of Electronic Waste Handling on the UW Seattle Campus

Overall, UW Seattle handles the disposal of e-waste responsibly relative to other communities in the U.S. However, some electronic waste continues to fall through the cracks, giving UW even further opportunity to be a leader in E-Waste Recycling & ReUse!

- Many unique or low volume items need to be recycled as readily as more common, higher volume items – this can be supported by associating less-recycled items with most-recycled items through bin placement and other strategic techniques.
- UW can be a leader not only in recycling, but in discovering new ways to reuse and extend product lifecycles, as well as to raise awareness in Western Washington about the seriousness of e-waste.