UCLA Sustainability Action Resarch

Zero Waste Team

Stakeholder: Kikei Wong (UCLA Zero Waste Manager)

Team leads: Jinsuh Jung-Aum & Taylor Sieverling

Team members: Hennessy Martinez, Mohona Sen,

& Madeline Zhang



Policy Background

2022 UCLA Sustainability Plan Goals **Zero Waste**



By April, 2024: Reduce waste generation

By April, 2025: Divert 90% municipal solid waste from landfill

(UCLA, 2022)

Research Questions

What Contamination Trends Exist within UCLA's On-Campus Centralized Tri-Stream Waste System?

How do they arise, and how may they be mitigated?

Purpose of Study

1. Address misconceptions and barriers

2. Develop initiatives and resources

3. Broaden sustainability impact



Primary Variables

1. Informational Interviews

Challenges & successes

2. Visual Waste Audits

- Relative fullness & contamination
- Commonly contaminated items

3. Student Survey

- Sorting knowledge & misconceptions
- Recommendations for waste management



Methods

Visual Waste Audits & Informational Interviews

Three distinct buildings: Public Affairs, Kaplan, Boelter

Diverse cross-section

Building manager interviews (winter)

Feedback on initiatives and unique waste

Visual audits (winter & spring)

- Consistent auditors
- Photographed bins
- Quantified fullness and contamination



Methods

Student Survey

Questions:

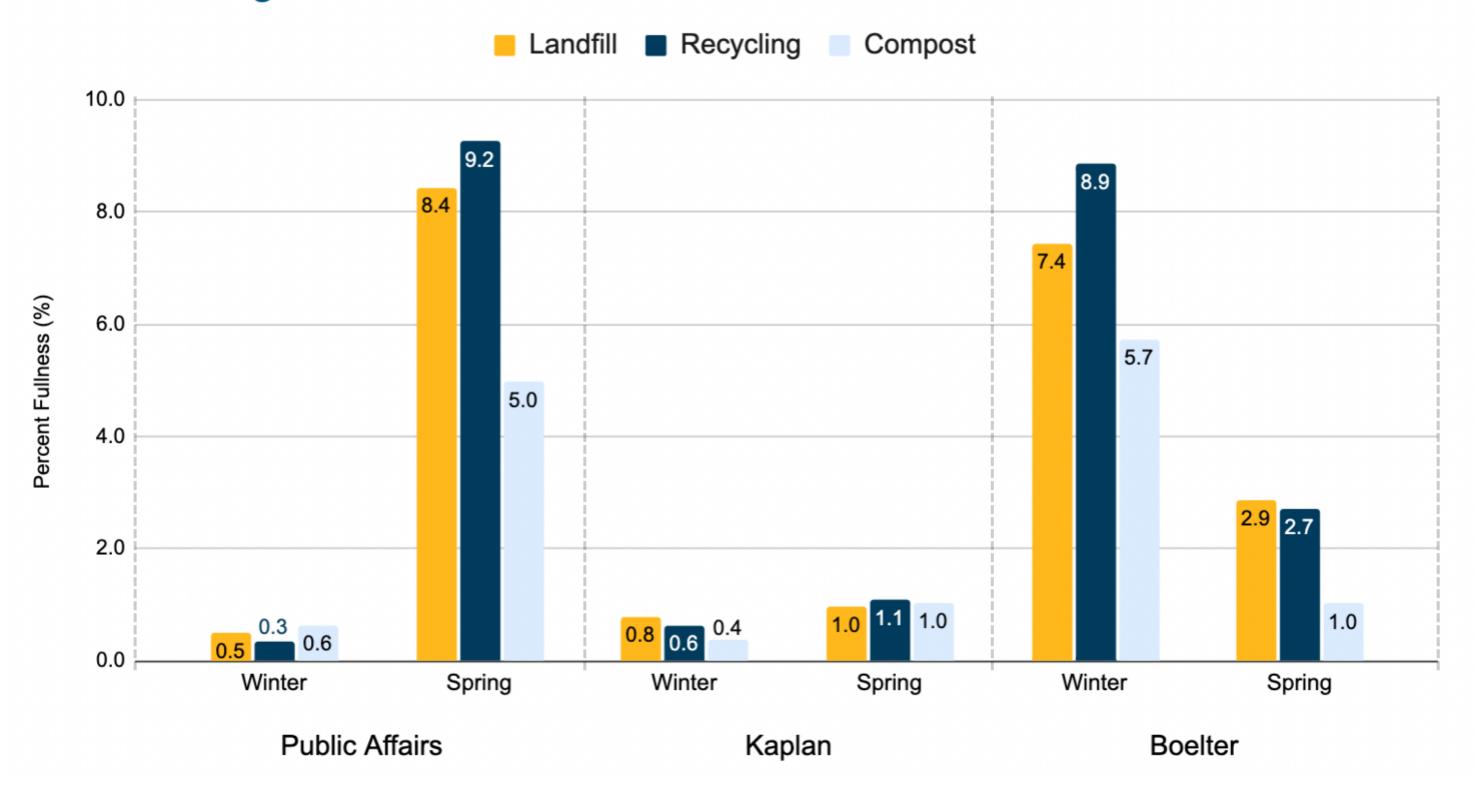
- Demographics
- Sorting knowledge & behaviors
- Feedback on proposed ideas
- Further suggestions

Logistics:

- Anonymous Google form
- Incentivized with zero waste prizes
- 119 respondents
- Sent to a diverse array of orgs/clubs

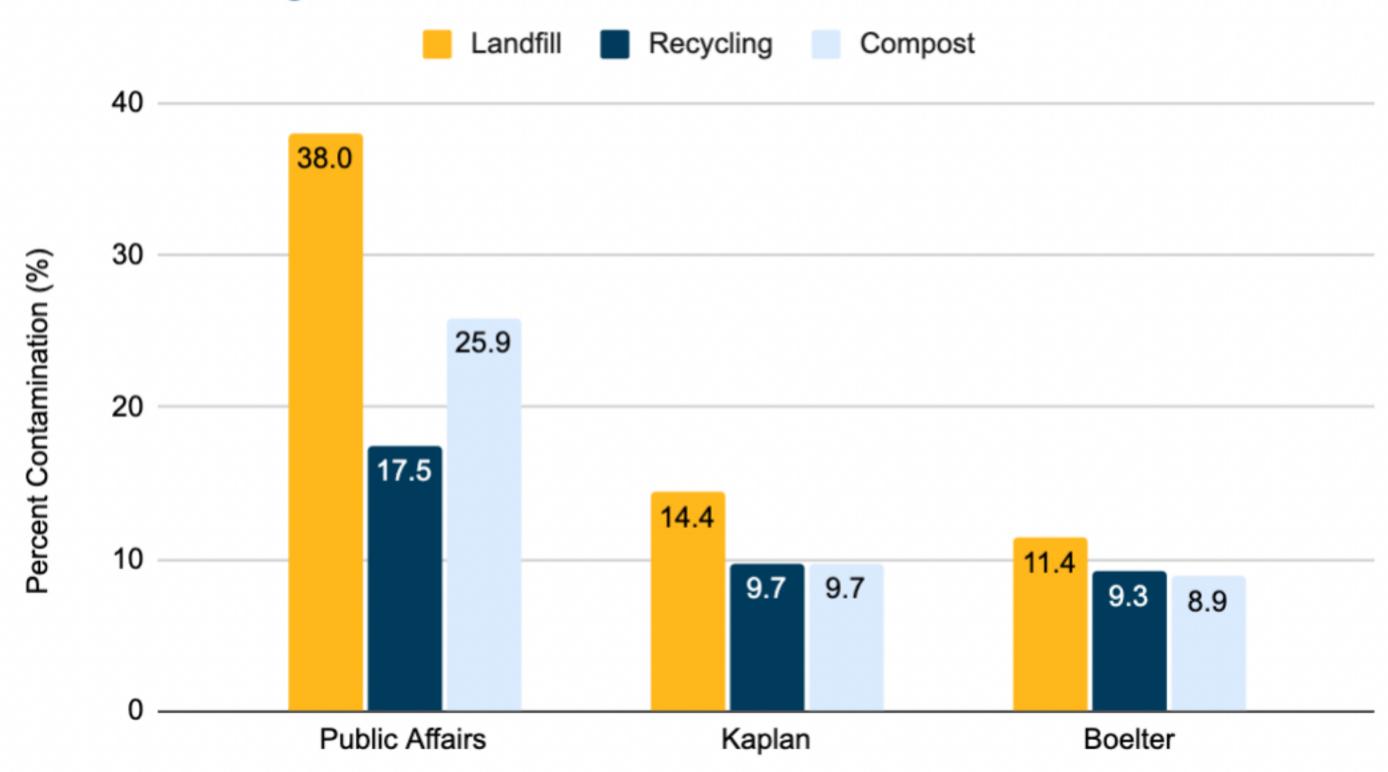


Average Percent Bin Fullness for the 2021-2022 Academic Year





Average Percent Contamination Per Waste Stream



Common Contaminant

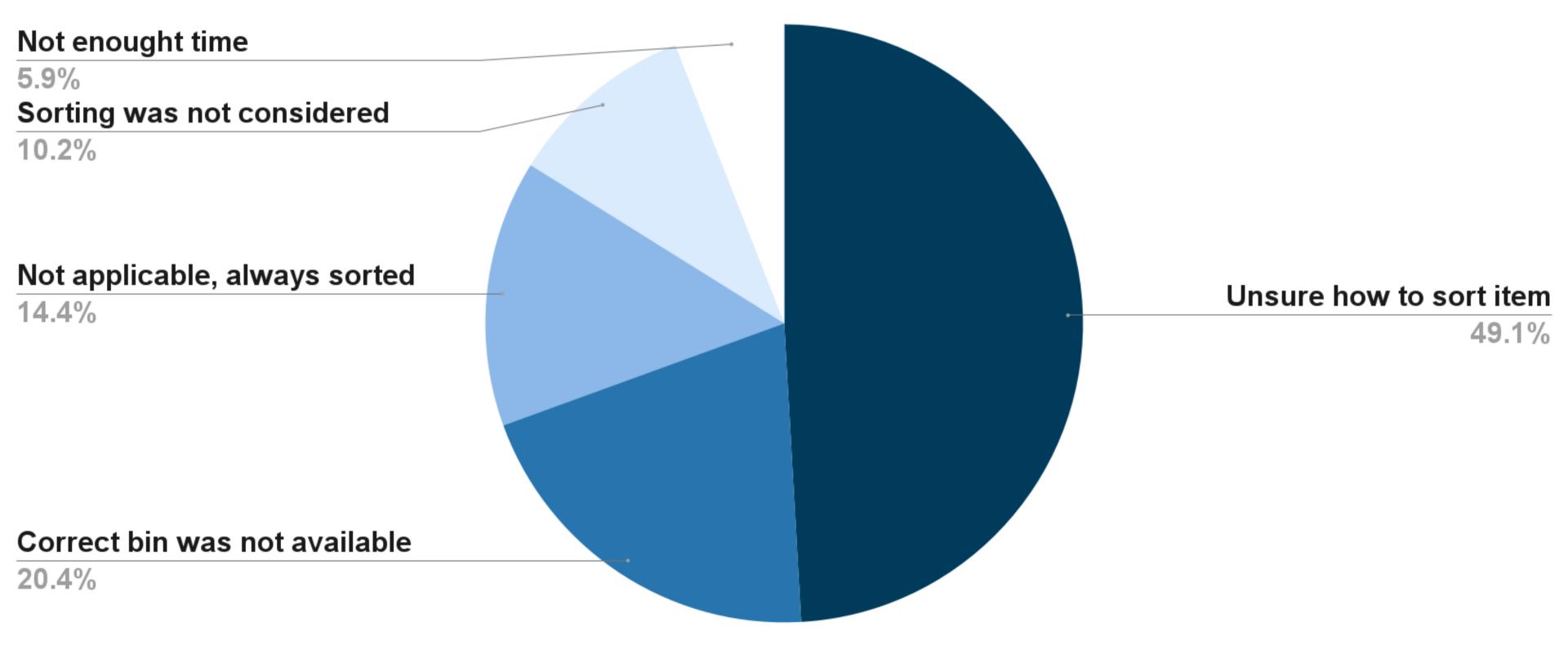
On average, *soiled paper products* represented

- 80% of the contamination in the landfill
- 50% of the contamination in the recycling



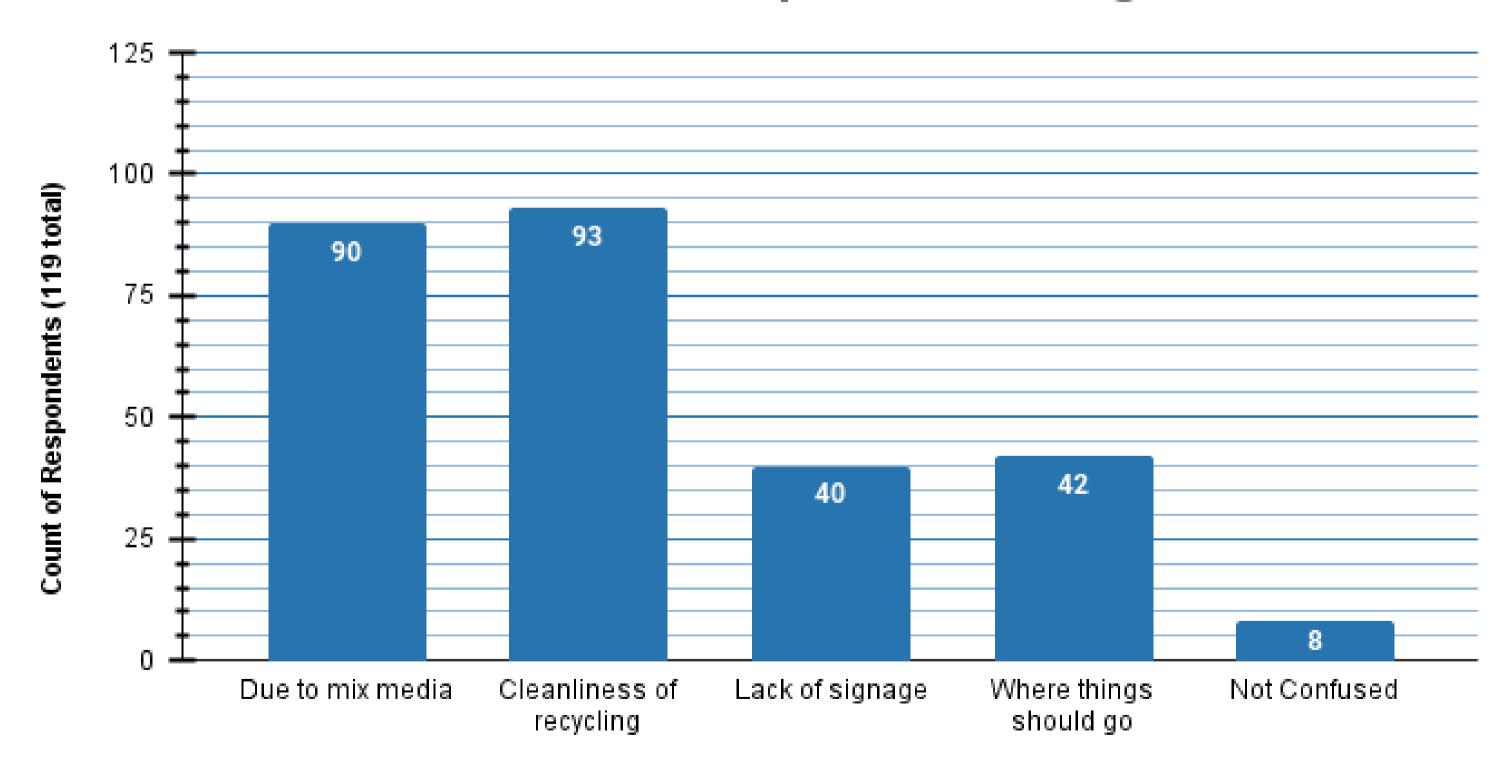


What has Kept Individuals from Sorting their Waste at UCLA:





What Confuses People While Sorting:



Different Type of Responses

Recycling Misconceptions

Of all student respondents,

- 14.3% indicated that styrofoam should be recycled
- 39.5% indicated that plastic film should be recycled
- 61.3% indicated that plastic cutlery should be recycled

All of these items belong in the landfill





Composting Misconceptions

Of all student respondents,

- 47% were unaware that animal-based foods are compostable
- 78% incorrectly said bioplastics are compostable



Call for Change

Of all student respondents,

- 69.7% wanted improved signage
- 69.7% wanted more free on-campus zero waste resources
- **58**% wanted a *sustainability section* added to the UCLA Mobile and/or the UCLA Housing apps



Scannable QR Code for Bins

- Goal: Increase access to sorting information and zero waste initiatives
- Progress:
 - Proposed design





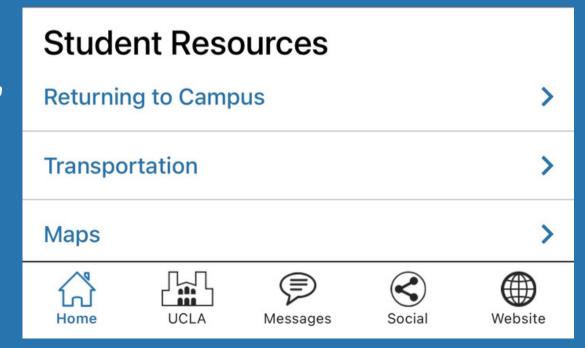


UCLA Mobile / UCLA Housing Apps

- Goal: Increase access to sustainability information and resources
- Progress:
 - Proposed general design
 - Pitching idea to UCLA Mobile Steering committee on 6/01







UCLA

Results

Table Tents

- Goal: Clarify sorting misconceptions
- Progress:
 - 7 designs created
 - Being placed throughout
 Powell Library on 5/27





New Student Orientation Video

 Goal: Explain proper waste sorting methods for UCLA's tri-stream system & address misconceptions

• Progress:

- Skit on sorting different waste, particularly confusing items
- Section on suggested single-use swaps







Significance

1. Identified...

- Items frequently contributing to contamination
- Misconceptions about waste sorting

2. Promoted better waste sorting practices via...

- Informational table tents
- Waste sorting video
- Recommendations

Recommendations

Stakeholder

- QR Code sticker on bins
- Sustainability section on UCLA Mobile app

Future SAR teams

- Promote recycling, reusing, and proper sorting via:
 - Engagement initiatives for students + faculty
 - Educational tools (ex. UCLA Housing app)
 - On-campus resources



Acknowledgements

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Thank You!





References

UCLA. (2022). UCLA Sustainability Plan. UCLA Sustainability. Retrieved May 14, 2022, from https://www.sustain.ucla.edu/plan/