

The Future of Recycling at UVA

CURC Webinar

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University of Virginia

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UVA Sustainability Plan

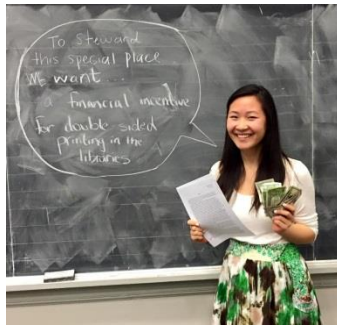
U.Va. Sustainability Plan

As we embark on creating U.Va.'s first Sustainability Plan, we want to hear from you! U.Va.'s Sustainability Plan will outline targeted actions to pursue over the next five years to meet existing and new sustainability goals, while ensuring flexibility to enable ongoing innovation towards achievement of a longer-term vision. The Plan will compile new and existing ideas while building upon U.Va.'s current initiatives and accomplishments. Make your voice heard!

TO STEWARD
THIS SPECIAL PLACE,
I WANT...

ADD YOUR VOICE

Sustainability at the University of Virginia calls for collaboration and ingenuity to promote the well-being of the community, solve local and global challenges through scholarship and practice, educate ethical leaders and steward this special place.
-U.Va. Sustainability Statement



Recyclables are going into the Trash



Recycling lacks uniformity and consistency



High quality commodities are the key to success

Waste Management CEO Says 'Recycling Is in a Crisis,' as Firm Posts Loss

By SERENA NG
AND ANGELA CHEN

around handling glass, which has become a money loser for the Houston-based company.

Steiner said in an interview. "It isn't profitable for us, and we have to react to that by shutting down plants."

Mr. Steiner said Waste Management's recycling division lost \$13 million during the quarter and shut down four facilities

been less lucrative than other businesses like collecting and disposing of trash from companies and cities to let residents dump all their recyclables in a single bin. That collection system is harder for recyclers to profit, because the mixed materials are often contaminated with garbage, which is expensive to sort out.

The Washington Post

D.C. Politics

American recycling is stalling, and the big blue bin is one reason why

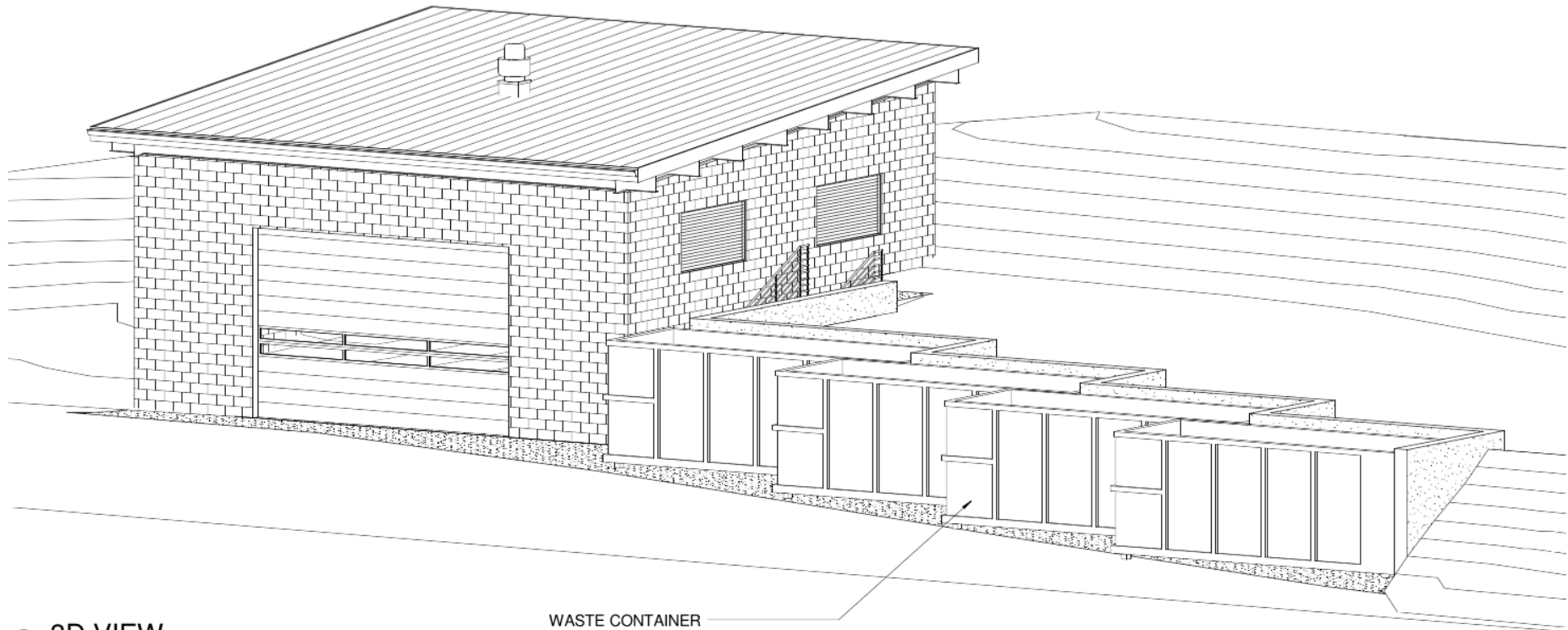


A forklift operator stacks bales of recyclables at Waste Management's facility in Elkridge, Md. The District and other

Local “all-in-one-can” message undermines this



Fully enclosed sort facility under construction



6 3D VIEW
Scale:

WASTE CONTAINER
(TYPICAL OF 4)

Compost Wants to Grow

ZERO WASTE EVENT GUIDE

Congratulations on your decision to minimize waste at your event! This guide provides step-by-step instructions on how to turn any event into a zero waste event. If you have questions or need assistance, please contact Jess Wenger at 982-5540; jsw6d@virginia.edu or Amy Muldoon at 982-0812; ajm6u@virginia.edu.

CHECKLIST

DAY OF THE ZERO WASTE EVENT

CATERERS

WHO WILL SUPPORT ZERO WASTE EVENTS



Photo Credit: Jane DeGeorge



Contamination & sorting remain issues



UVA Recycling moves materials from buildings



Two sets of personnel is a barrier



Why are we making this change?

- Improved co-location
 - Leads to more Recycling
- Wider adoption of compost
 - Recycling cannot service compost weekly
- Oversized Containers
 - Recycling containers are sized for a week
 - Beverage containers can sit for 7 days
- Snow Support
 - Recycling is clearing snow while materials back up in buildings
- Greater efficiency creates new opportunities





**Customers: Provide Lessons
Learned & Engage in Change**

**Ops: Create
Processes &
Train**

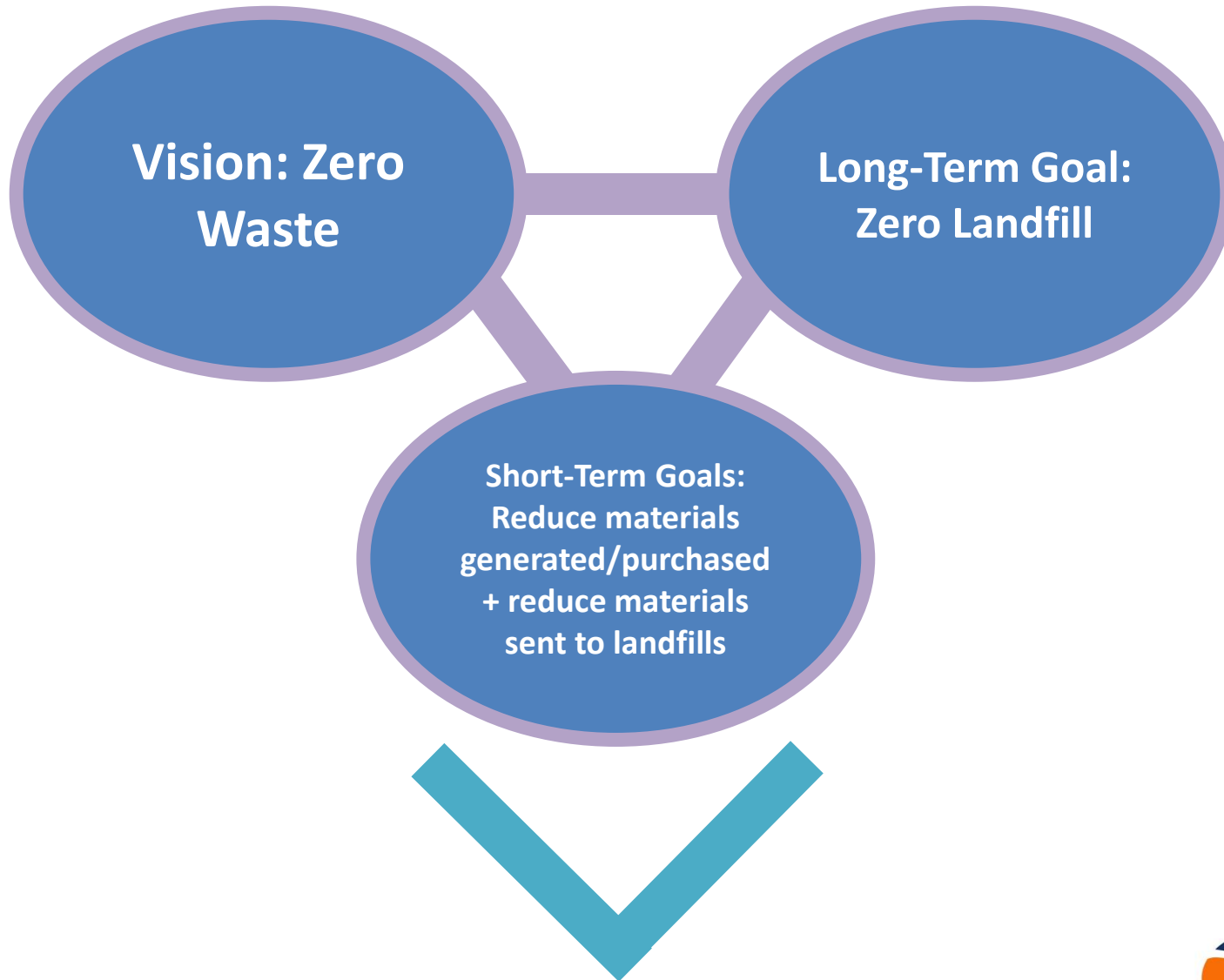
**Sustainability:
Develop
Vision &
Milestones;
Get UVA
Buy-in**



Facilitated Retreat



Vision and Goals



**Vision: Zero
Waste**

**Long-Term Goal:
Zero Landfill**

**Short-Term Goals:
Reduce materials
generated/purchased
+ reduce materials
sent to landfills**

Guiding Principles



Guiding Principles

1. Focus on the Participant Experience

- Ease to find and use
- Easy to understand
- Flexible to adapt to feedback
- Provide training, enable education, signage

2. Enable Operations to Support the Participant Experience

- Improve quality of capture
- Cost effective model
- Evaluate efficiencies, performance, team cohesion



Goals and Objectives



“The Wish List”

- One set of footprints (inside and out)
- All containers co-located
- Containers emptied daily
- Consistent containers throughout UVA
- Continue Participant Sorting
- Sustainability as Second Nature



Container Redesign Goals

- Critical Goals
 - Preserve aesthetics/cleanliness of the space
 - Consistent signage across UVA
 - Signage relevant to user
 - Universal language
- Secondary Goals
 - Containers should be designed with future commodities in mind
 - Design a system that coordinates with the city and county



Proposed Ergocan Best Practices

- Group containers to create a “module.”
- Container sizes are standard.
- Container lids, openings and order are standard.
- Colors and language are standard.
- Customers would customize graphics based on materials and their respective design vocabulary.



Exterior Containers – Paper



Exterior Containers - Cardboard

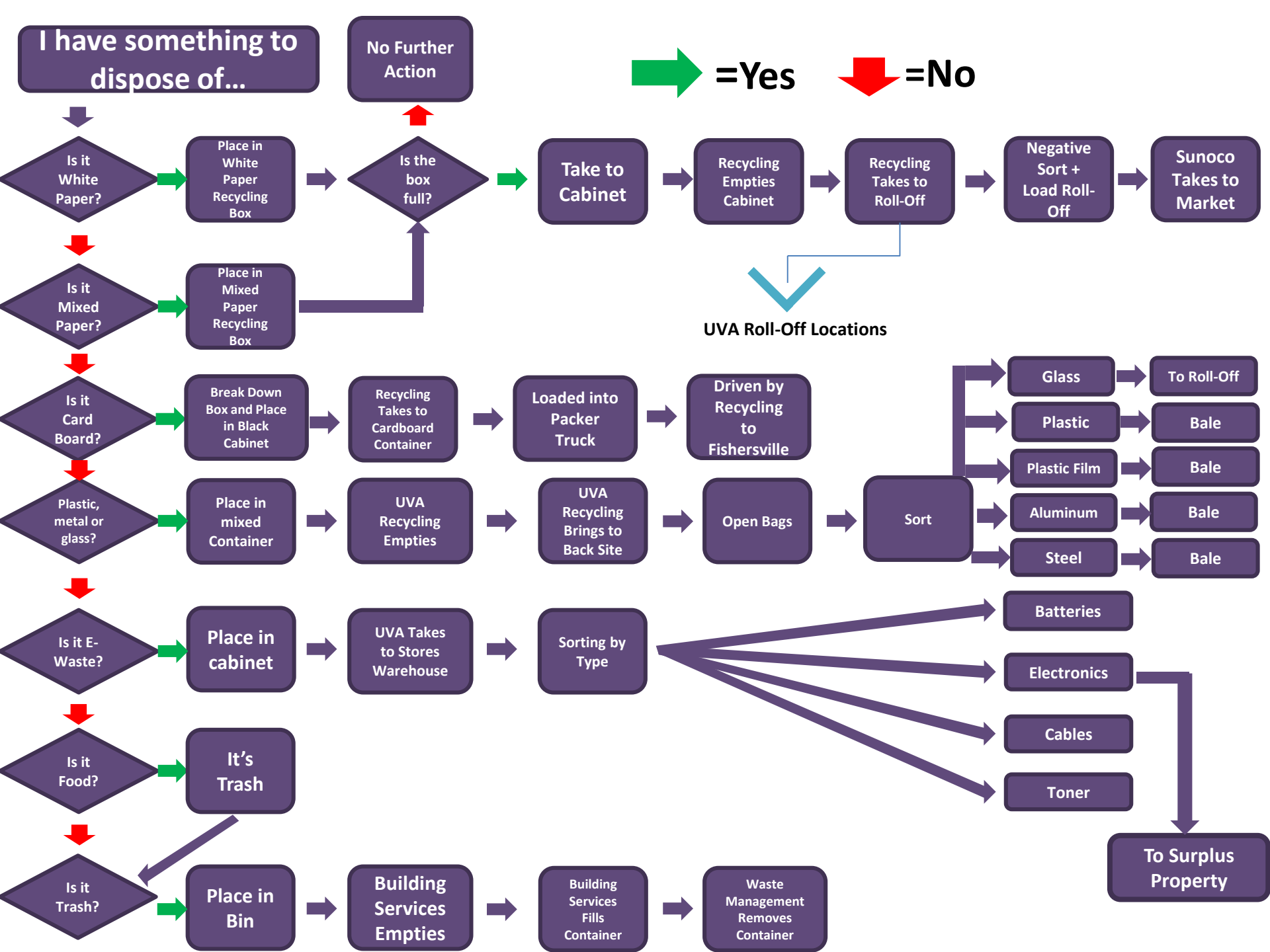


Exterior Containers – Plastic, Glass & Metal



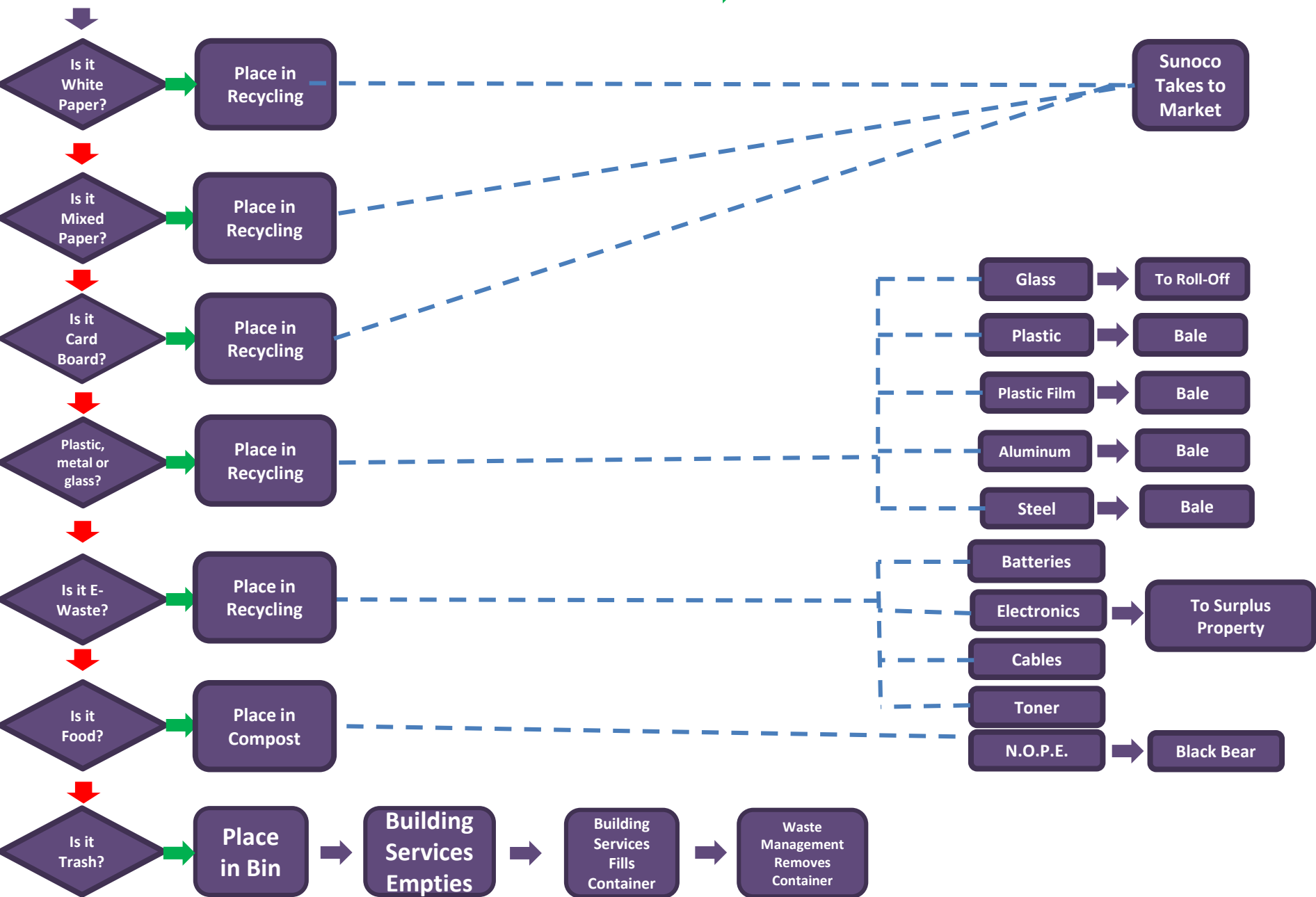
Exterior Containers - Compost





I have something to dispose of...

➡ =Yes ⬇ =No

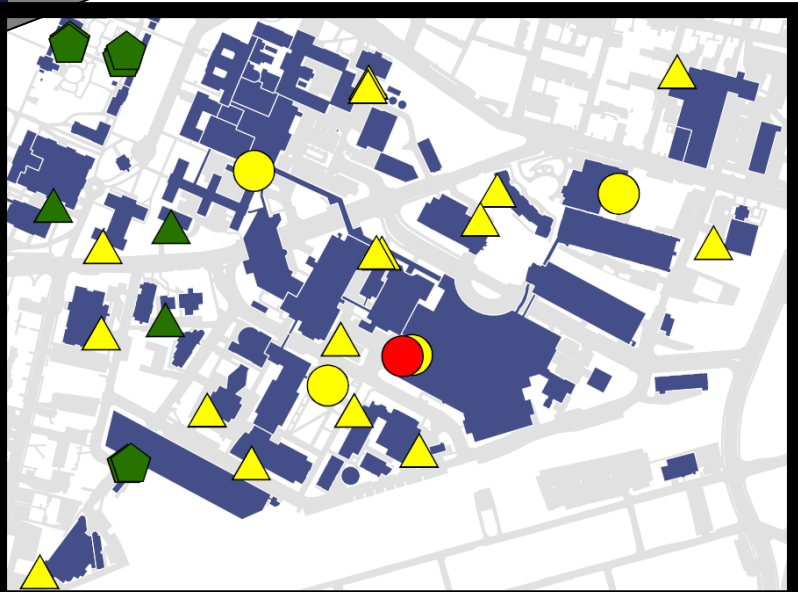
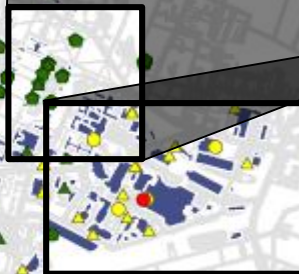
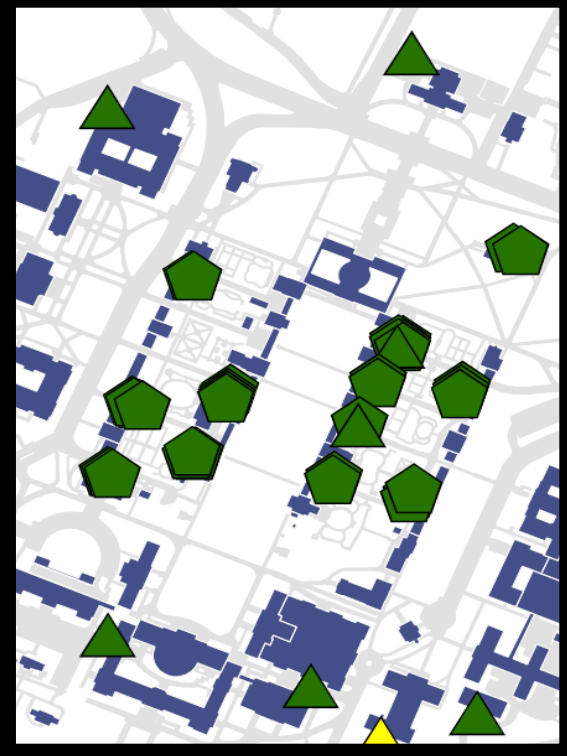


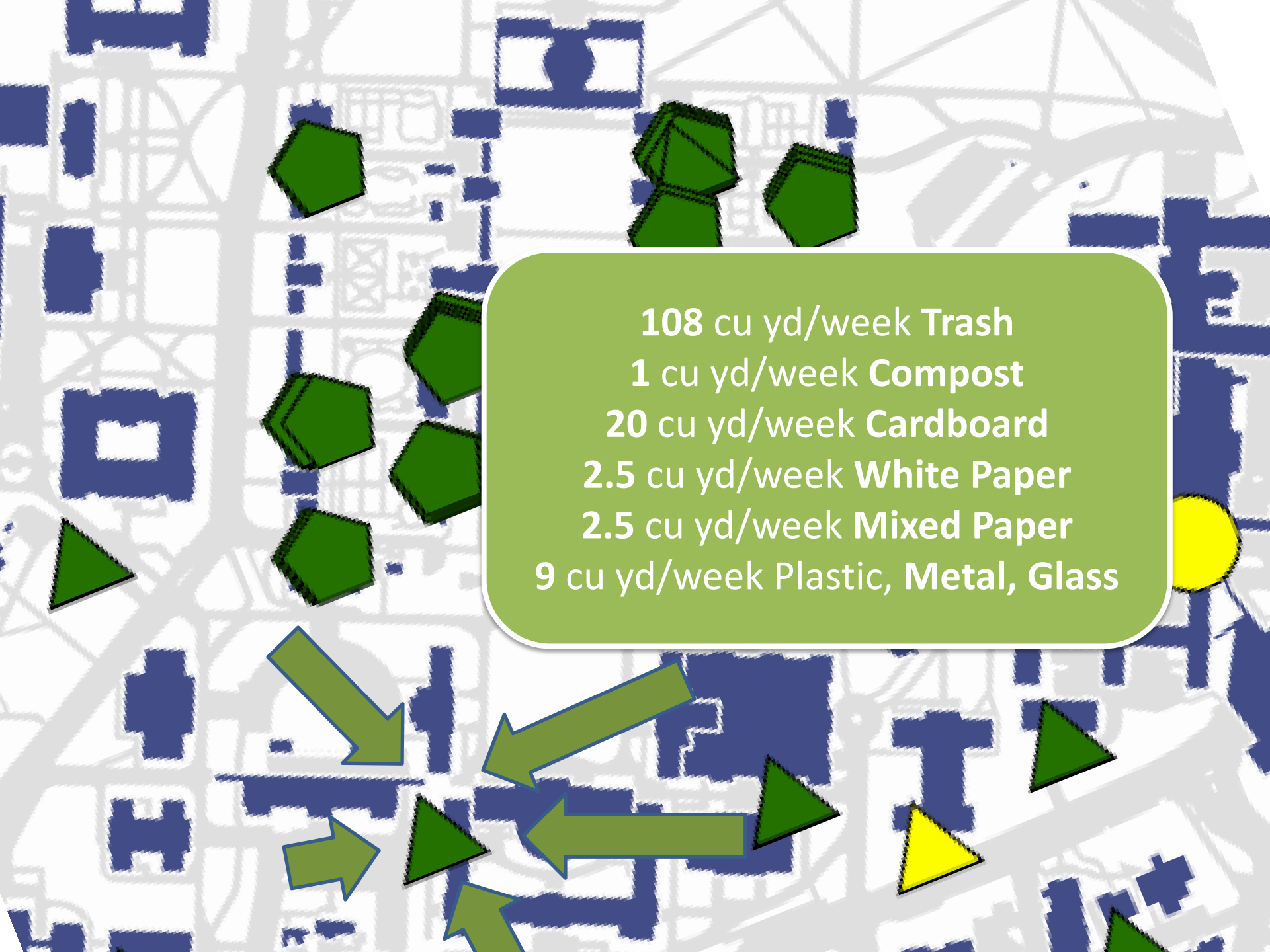
Developed Scenarios To Review and Compare

		Area	
		Central Grounds	Health System
Approach	Waste Corrals Serviced by Many Trucks	Central Grounds Zone with Waste Corrals Serviced by Many Trucks	Health System with Waste Corrals Serviced by Many Trucks
	Waste Corrals Serviced by UVA Recycling and Sorted Off-Site	Central Grounds Zone with Corrals Serviced by UVA and Sorted Off-Site	Health System with Corrals Serviced by UVA and Sorted Off-Site



- Municipal Solid Waste - Container Type**
- Composter
 - ▲ Food/Leaf
 - ▲ 50 Gallon
 - ▲ Wheel Cart
 - 20 Gallon
- Other Waste - Waste Stream (Color) / Container Type (Shape)**
- 20 Gallon Oil
 - OSHA/MSD Composter
 - ▲ OSHA/MSD Food/Leaf
 - OSHA/MSD Composter



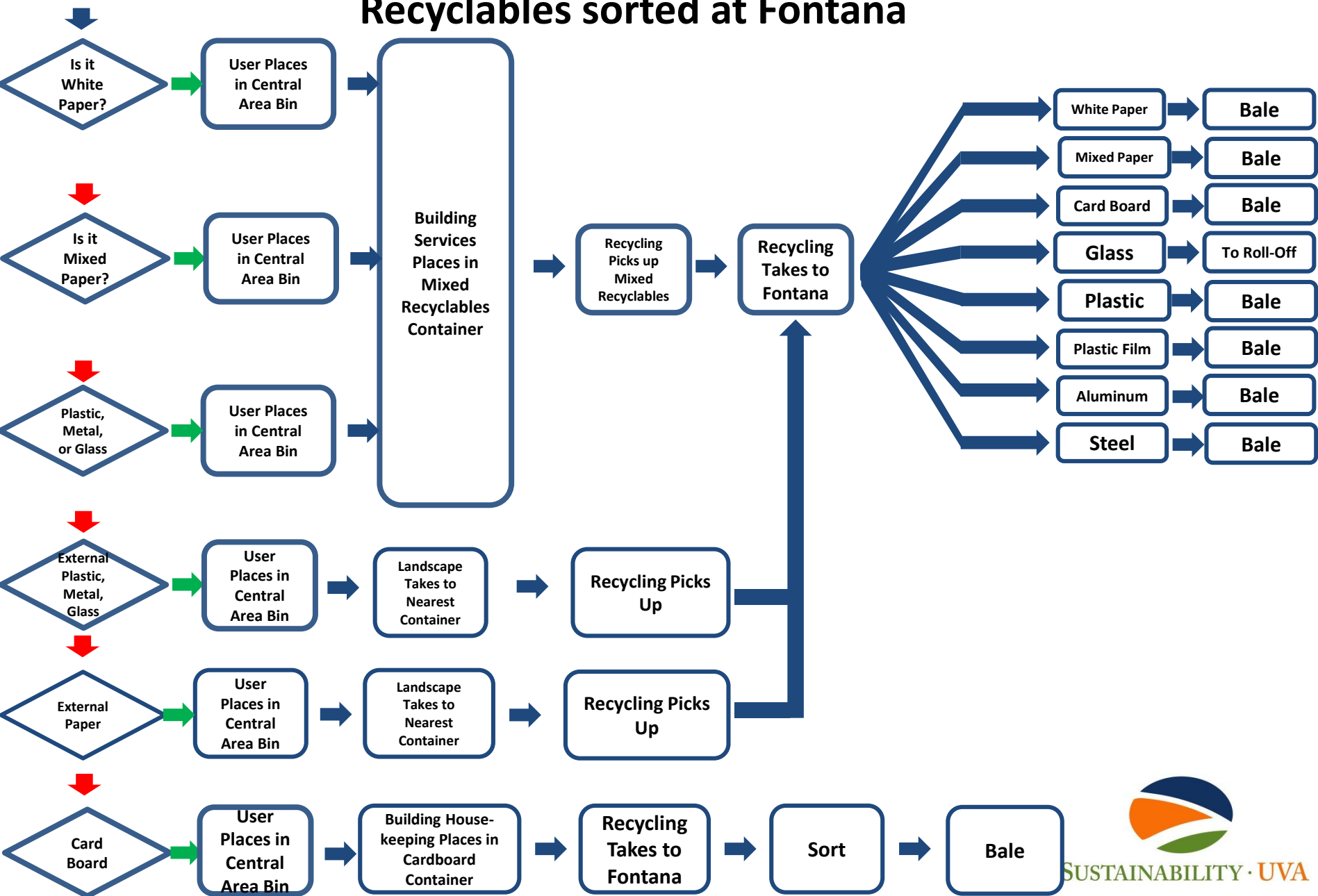


108 cu yd/week Trash
1 cu yd/week Compost
20 cu yd/week Cardboard
2.5 cu yd/week White Paper
2.5 cu yd/week Mixed Paper
9 cu yd/week Plastic, Metal, Glass

I have something to dispose of...

Central Grounds: Mixed Recyclables sorted at Fontana

➡ =YES ⬇ =No



Schedule

- June – August 2015: a series of meetings, facilitated by IEN, to develop the revised system
- June – August 2015: Receive user feedback, customer feedback (process, how?)
- August – December 2015: Pilot new bins, compost, single footprint - etc.
- January – February 2016: Analyze, refine based on pilot
- March – April 2016: Order and place bins, signage – everywhere else
- May – June 2016: Training and deployment, education and outreach
- July 2016: Full implementation, education and outreach



Questions

Contact:

**University of Virginia – Facilities Management
Office for Sustainability**

<http://sustainability.virginia.edu>

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