



2023 Campus Race to Zero Waste Case Study Competition Towson University

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Focus of Case study:

TU's campaign focused on educating the TU community on waste minimization and diversion efforts through the promotion of TU's new digital waste search directory.

Detailed description of campaign or effort:

In August of 2022, TU's Office of Sustainability purchased the Recollect Waste Wizard, a digital waste search directory, from the company Routeware. The tool, which lives as a widget on the university's waste webpage, allows users to search for any item to find out its proper disposal stream. Prior to the launch of TU's version of the tool, Know Before You Throw, the Office of Sustainability inputted over 200 items ranging from everyday waste like paper and soda cans to campus-specific items like Starbucks Cups and Chick-fil-a packaging. The tool had a soft launch on America Recycles Day (November 15th, 2022); however, the official launch and marketing effort was planned for CR2ZW.

A series of engagement efforts were executed during CR2ZW to promote the new tool while educating the TU community on proper waste management.

Digital Signage

Six digital signs were shared across campus throughout CR2ZW. Each sign followed a "Did you know... Know Before You Throw" format where a waste fact was shared and the Know Before You Throw tool was promoted. Six facts across six categories were chosen (reduction in landfill waste, organics collection, zero waste events, electronics recycling, furniture reuse and donation, and food recovery) to be highlighted in the "Did you know" section of the design.

Residence Hall Trash Room Signage

The Residence Hall trash room signage was refreshed to include a QR code for the new waste tool and consolidate information and images to make smaller posters that are more easily reprinted and replaced when damaged. The Eco-Reps were tasked with removing the old signage and installing the updated signage.

Bus Shelter Ads

Ads for the Know Before You Throw tool were run at two prominent bus shelters during February and March.

Additional Efforts

A waste infographic was created, highlighting TU's many waste efforts and accomplishments. This infographic was shared on a large digital screen in the Science Building. The Office of Sustainability also presented on sustainable material management at March's Towson University Staff Senate (TUSS) meeting. Following the TUSS meeting, both the presentation and waste infographic were sent out to all TU staff members via email. Six TU Todays (daily campus announcements emails) were shared over the course of the competition. The TU Todays elaborated on the six facts shared through the digital signage and promoted the new tool.

Graphics from these efforts can be found in the final section.

Planning steps & timeline to implement:

- Summer 2022
 - Procured ReCollect Waste Wizard software.
 - Developed the Know Before You Throw widget content.
- Early November 2022
 - Began planning the marketing strategy for the Know Before You Throw tool. Decided to officially launch and promote the tool during CR2ZW.
- Early December 2022
 - Initial brainstorming meetings for educational campaigns as part of spring 2023 outreach planning.
- Late December 2022
 - Hosted a brainstorming meeting between the Office of Sustainability and ABM's Zero Waste Manager to decide on the project(s) for CR2ZW. Determined next steps.
- Early January 2023
 - Began official outline of CR2ZW efforts including a timeline, goals for the initiative, what outreach materials would be needed, design concepts for outreach materials, a cost breakdown, and task tracking.
 - Gathered facts to be shared for the "Did You Know Campaign".
 - Worked with Design and Graphic Services to get cost estimates for design needs.
- Late January 2023
 - Held two meetings with Marketing and Communications Office to determine a communications plan for CR2ZW.
 - Submitted design request to Design and Graphic Services (the earlier the better) along with a timeline of when we would need each of the designs over the course of the competition.
 - Reserved bus ad locations through Design and Graphic Services (only two locations were available this close to the competition. Would recommend reserving earlier if possible).
- February
 - Began running bus ads.
 - Began running digital signage.

- Posted 2 posts and 6 stories on Instagram and Facebook promoting the competition and initiative following the same “Did You Know” format as the digital signs.
- Featured Know Before You Throw tool in 6 TU Todays (daily campus announcement emails).
- March
 - Printed new residence hall trash room signage through TU Printing Services.
 - Eco-Reps hung new trash room signage in all residence halls.
 - Office of Sustainability presented on sustainable material management to the TU staff senate.
 - Distributed the new waste infographic to all TU staff through the TU staff senate.
 - Continued running bus ads and digital signage.
 - Shared the new waste infographic on a large digital screen in the science complex.

Resources and stakeholders involved:

Budget:

- **Design work and signage** – \$1500
- **Bus Shelter Ad Space Rental** - \$50 per location per month (2 locations for 2 months)

Stakeholders and support:

- **TU Design and Graphic Services:** created official, TU-branded, campaign graphics to distribute throughout campus.
- **Eco-Reps:** Distributed the new trash room waste signage in residence halls and promoted CR2ZW in their residence halls.
- **Housing and Residence Life:** Supported the Eco-Reps in the installation of new waste signage in residence halls.
- **Marketing and Communications:** Worked with the Office of Sustainability to plan campus-wide messaging
- **Campus marketing tools:** Submitted campaign reminders and materials to TU’s daily campus announcements email, digital display screens across campus, and campus bus shelter ad space.
- **Office of Sustainability:** Coordinated CR2ZW effort, created graphics for social media
- **Social Media Support:** various offices and groups on campus shared our social media posts on their pages and helped draw attention to the campaign.

Results of this campaign component:

- **General results:**

Through this campaign, the TU community became more aware of the Know Before You Throw tool, and therefore more aware of how to properly sort and dispose of waste. The tool was covered as the main story of one edition of TU Today, TU’s daily campus announcements email publication. The TU Today article resulted in the highest usage of the tool to date.

The Office of Sustainability posted six additional announcements to the TU Today, highlighting different waste reduction topics. We found that there was some correlation between the information shared through TU Today and the items searched on the Know Before You Throw tool. For example, following a message

about specialty recycling, batteries became the 5th most searched item on Know Before You Throw that week. In general, we saw an increase in usage of the tool as a result of the various engagement efforts.

- **Specific measurable impact:**

CR2ZW 2023 Recollect Usage

	Week 1 1/29 - 2/4	Week 2 2/5 - 2/11	Week 3 2/12 - 2/18	Week 4 2/19 - 2/25	Week 5 2/26 - 3/4	Week 6 3/5 - 3/11	Week 7 3/12 - 3/18	Week 8 3/19 - 3/25	Total
Material views	234*	49	65	246**	265*	38	14	2	913
User Sessions	18	21	25	84	29	12	9	1	199
First Time Visitors	3	17	21	74	15	11	6	1	148

*Recollect appears to have an issue where on the first and second of each month, each item in the tool is searched exactly one time by one user. This skews the data for that month and makes usage appear higher than it is. TU’s Office of Technology Services has investigated the issue and believes that a bot on ReCollect’s end causes the items to be searched. Material views are likely about 110 less than the numbers shown above for 1/19-2/4 and 2/26-3/4.

** Know Before You Throw featured as the main TU Today story

TU Today Views

Topic	Landfill	Composting	Zero Waste Events	Specialty Recycling	Surplus Furniture	Know Before You Throw (main story)	Food Recovery
Date	2/9/23	2/14/23	2/16/23	2/21/23	2/23/23	2/23/23	2/28/23
Views	46	17	Data not available	25	36	198	21

Top Recollect Materials Each Week of CR2ZW

	Week 1 1/29 - 2/4	Week 2 2/5 - 2/11	Week 3 2/12 - 2/18	Week 4 2/19 - 2/25	Week 5 2/26 - 3/4	Week 6 3/5 - 3/11	Week 7 3/12 - 3/18	Week 8 3/19 - 3/25
1st	Paper	Pizza Box	Pizza Box	Pizza Box	Paper Napkins	Pizza Box	Hair	Pizza Box
2nd	Plastic Tub	Chick-fil-a Packaging	Chick-fil-a Packaging	Packaging	Chick-fil-a Packaging	Chick-fil-a Packaging	Pizza Box	Paper
3rd	Pizza Box	Paper	Popsicle Sticks and Toothpicks	Popsicle Sticks and Toothpicks	Pizza Box	Popsicle Sticks and Toothpicks	Paint – Latex	N/A
4th	Printer Cartridge	Popsicle Sticks and Toothpicks	Paper	Paper	Popsicle Sticks and Toothpicks	Paper Napkins	CD, DVD, VHS	N/A

5 th	Metal Beverage Can	Cardboard Take-out Container	Eggs	Batteries	Plastic 'Clam Shell' Container	Panda Express Take-out Container	Coffee Cup Tray	N/A
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The Know Before You Throw tool has an option for users to submit items to be added to the directory. During CR2ZW the following items were suggested by users and subsequently added to the tool: wooden cutlery, wooded cooking utensils, ice packs, and balloons.

Social Media Engagement CR2ZW 2023

Instagram Posts								
	Start of CR2ZW	Plastic Bag						Total
Likes	29	28						57
Accounts Reached	175	196						371
Impressions (number of times the content was shown to users)	244	254						498
Shares	9	8						17
Bookmarks	0	1						1
Instagram Stories								
	Did You Know - Landfill	Did You Know - Furniture	Did You Know - Food Recovery	Did You Know - Recycling	Did You Know - Composting	Did You Know - Catering	Did You Know - QR and Info	Total
Accounts Reached	63	58	55	53	50	48	47	374
Impressions (number of times the content was shown to users)	64	59	56	54	51	49	49	382
Link Clicks	N/A	1	N/A	N/A	N/A	0	0	1
Shares	0	0	1	0	0	0	0	1

We determined the cost (total campaign spend) per interaction (Know Before You Throw material views, TU Today views, Instagram likes, and Instagram accounts reached via stories) to be \$1.01 for this campaign. Similarly, the cost per Know Before You Throw material view was \$1.89.

All Instagram posts were automatically shared to the TU Office of Sustainability Facebook page; however, we've found that there is very little engagement on Facebook, and we chose to focus our efforts on Instagram.

What would you do differently in the future?

- Update all waste signage across campus to include a QR Code for the tool.
- Post more content on social media and through TU Today.
- Develop a plan for how to continuously promote the tool beyond CR2ZW.
- Include more graphics that are focused on specific items the TU community searches often (Pizza boxes, paper, chick-fil-a packaging, etc.)
- We had originally planned to have another set of digital signage that highlighted the people doing waste management work at TU. We did not plan that effort far enough in advance and we were advised that could distract from the goal of this campaign which was to promote the tool. In the future, we'd like to take more time to celebrate the people behind the work.

What advice would you give to another college that wanted to do a similar effort?

- If using Recollect or similar software, input as many campus-specific items and images as possible. Work with Dining to get a sample of all food packaging items so you can photograph the items, upload them to the software, and keep an inventory.
- Create content that is institution-specific and that celebrates your achievements.
- For reference, the widget costs TU about \$2000-\$2500 per year.

Photos and Graphics:

Digital Signage



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Try our **NEW**
KNOW
BEFORE
YOU THROW
Tool →

NOT SURE WHERE TO THROW?
LET US HELP YOU!
WASTE DIRECTORY,
BIN LOCATIONS,
& MORE! ↓



TU
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DID YOU KNOW?

TU has composted 2,705,080 lbs of food waste since 2010!



TOWSON.EDU/RECYCLING

Try our NEW **KNOW BEFORE YOU THROW Tool**

NOT SURE WHERE TO THROW? LET US HELP YOU! WASTE DIRECTORY, BIN LOCATIONS, & MORE!

TU Sustainability

DID YOU KNOW?

TU has recycled over 500 tons of electronics since 2007 (Weight = 262,000 iPhones)



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Try our NEW **KNOW BEFORE YOU THROW Tool**

NOT SURE WHERE TO THROW? LET US HELP YOU! WASTE DIRECTORY, BIN LOCATIONS, & MORE!

TU Sustainability

DID YOU KNOW?

TU's Food Recovery Network donated over 30,000lbs of food since 2014! (almost 10000lbs in 2022)



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Try our NEW **KNOW BEFORE YOU THROW Tool**

NOT SURE WHERE TO THROW? LET US HELP YOU! WASTE DIRECTORY, BIN LOCATIONS, & MORE!

TU Sustainability

DID YOU KNOW?

TU Reduced landfill waste over 66% in 2021 (based on 2007 baseline)



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Try our NEW **KNOW BEFORE YOU THROW Tool**

NOT SURE WHERE TO THROW? LET US HELP YOU! WASTE DIRECTORY, BIN LOCATIONS, & MORE!

TU Sustainability

DID YOU KNOW?

Discounted surplus furniture is available on TU ReUse Shop website



TOWSON.EDU/RECYCLING

Try our NEW **KNOW BEFORE YOU THROW Tool**

NOT SURE WHERE TO THROW? LET US HELP YOU! WASTE DIRECTORY, BIN LOCATIONS, & MORE!

TU Sustainability

Digital Signage created by TU's Design and Graphic Services. Shared on screens across campus throughout the competition.

Residence Hall Trash Room Refresh

KNOW BEFORE YOU THROW

NOT SURE WHERE TO THROW? LET US HELP YOU! WASTE DIRECTORY, BIN LOCATIONS, & MORE!

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COMPOST



FOOD SCRAPS & COMPOSTABLE PACKAGING



RECYCLE



GLASS, PLASTIC, PAPER, CARDBOARD & CANS



TRASH



PLASTIC BAGS & OTHER NON-RECYCLABLES

Refreshed Residence Hall trash room signage. Designed by TU's Design and Graphic services to incorporate the new tool and consolidate information into an easily printed size (11"x17")

Bus shelter Ad

Try our **NEW**
KNOW BEFORE YOU THROW
Tool

NOT SURE WHERE TO THROW?
LET US HELP YOU!
← WASTE DIRECTORY,
BIN LOCATIONS,
& MORE!

towson.edu/recycling

COMPOST
RECYCLE
LANDFILL

Join the
CAMPUS RACE TO ZERO WASTE
with National Wildlife Federation

TU TOWSON UNIVERSITY Sustainability

The bus shelter ad, designed by TU's Design and Graphic Services, was run at two prominent bus stops on campus throughout the competition.

Waste Infographic

WASTE MINIMIZATION AT TU

2020 TU recognized by EPA for Food Waste Reduction efforts

2019 TU wins national RecycleMania Education & Awareness Award

2019 Tiger Pride Day becomes first Zero-Waste Event to be held in State Capital

2017 TU wins National RecycleMania Education & Awareness Award

All Catered events are zero waste ready, meaning 90% of waste is divertible

100% of catering serve ware is compostable

Discounted surplus furniture is available on TU ReUse Shop website

Furniture that can't be resold is often donated to non-profits.

Surplus food collected during move out is donated to the campus food pantry and other non-profits combatting food insecurity.

47 tons of fluorescent light tubes recycled since 2007!

TU has recycled over 500 tons of electronics since 2007

An average of 34.61 tons of electronics are recycled per year. Surplus items are donated to local schools.

TU has reduced its landfill waste by over 66% since 2007

- TU diverted 150 tons of organics in 2022 (83% increase since 2012)
- Finished compost is used across campus, including at the urban farm!
- 1,794 tons of yard waste composted since 2007

Donations from Move Out are sold at a community yard sale every June with all proceeds going to local charities!

TU has composted 2,705,080 lbs of food waste since 2010!

NOT SURE WHERE TO THROW? LET US HELP YOU!

WASTE DIRECTORY, BIN LOCATIONS, & MORE!

TU Sustainability

TOWSON.EDU/RECYCLING

TU has recycled over 25 million lbs since 2010

The waste infographic, designed by TU's Design and Graphic Services, was shared on a large digital screen in the Science Building and with the entire TU Staff.

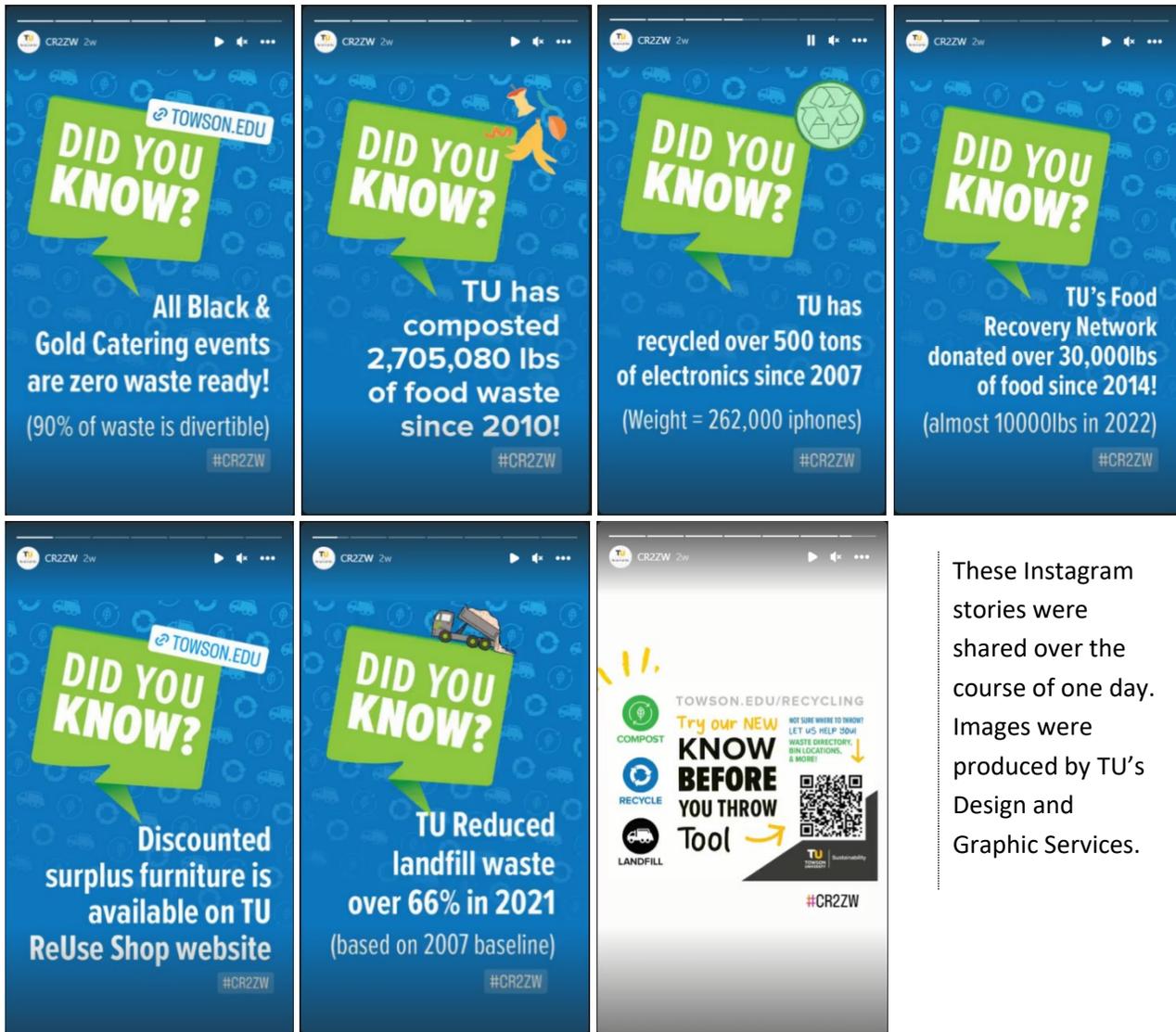
Social Media Posts



The above graphics were made by the Office of Sustainability and shared as a multiple-image Instagram post on the first day of the competition.



The above graphics were made by the Office of Sustainability and shared as a multiple-image Instagram post.



These Instagram stories were shared over the course of one day. Images were produced by TU's Design and Graphic Services.

All social media posts were also posted on our Facebook page and can be found on Instagram [here](#) or Facebook [here](#).

Photos



Eco-Reps with the new residence hall signage. Photo taken by Patricia Watson.