iCAP Team Recommendation

Name of iCAP Team: Zero Waste

iCAP Team Chair and Vice-Chair: Shreya Mahajan and Nishant Garg

Date submitted to iWG: 5/5/23

Recommendation title: State Farm Center Recycling (ZW011)

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Date reviewed by iCAP Working Group:

Specific actions/policy recommendation:

Suggested unit/department to address implementation:

Division of Intercollegiate Athletics

Rationale for recommendation:

State Farm Center Background

State Farm Center has implemented the use of blue recycling bags in their silver recycling bins, located on the first floor (below the upper concourse). State Farm Center hosts a plethora of large-scale entertainment events each year, including men's and women's basketball, wrestling, concerts, and local high school sporting competitions. In the 2022-2023 academic year alone, State Farm Center held 18 home men's basketball games, 6 men's wrestling events, and 16 women's basketball games.

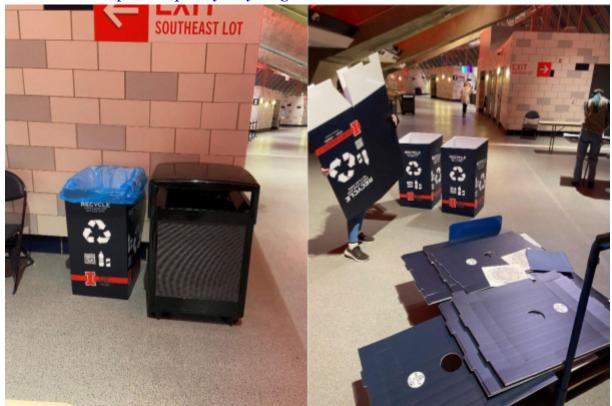
With attendees spanning across the campus community, the state, and the Midwest region, and the country, the University of Illinois has an incredible opportunity to engage a wide, ever-changing audience on the importance of recycling. Instilling the habit to recycle a product in the correct bin extends beyond this campus and equips visitors with the mindset to not only recycle in State Farm Center, but to look for recycling bins at any facility, on or off campus, that they may visit in the future.

Fighting Illini, Fighting Waste

In the 2022-2023 academic year, two *Fighting Illini*, *Fighting Waste* recycling events were held at State Farm Center during Illini men's basketball games. *Fighting Illini*, *Fighting Waste* is a high visibility, evergreen campaign coordinated between the Division of Intercollegiate Athletics; the Institute for Sustainability, Energy and Environment; Facilities & Services; and Coca-Cola.

This initiative exists to increase recycling and reduce waste at athletic events. On November 14, 2022 the inaugural event was held in light of America Recycles Day, observed each year on November 15. The second event was held on March 2, 2023 during the final Illini men's basketball game of the season. During these events, student

volunteers assist with set up, execution, and clean up of the event. Because recycling bins are not currently present on the upper concourse (where a majority of seats are accessed, and a majority of concessions sales take place), *Fighting Illini, Fighting Waste* includes the set up of temporary recycling bins.



Example photo illustrating the set up and placement of temporary recycling bins during the November 14 game day.

Event Outcomes

November 14, 2022

- Nearly 50 student volunteers executed the event.
- 280 pounds of recyclables were collected (cardboard, aluminum cans, plastic bottles, paper).
- The event achieved an 11% diversion rate.
- In a post-event survey released to game day attendees, 300+ responses showed the following:
 - \circ 51% of attendees were aware that this was a recycling-focused event.
 - o 55% of attendees did recycle their bottles and/or cans.
 - \circ 83% of attendees would support future recycling events at State Farm Center.
 - General comments indicated overall support for seeing the volunteers in action and support for the implementation of permanent recycling containers at the facility.

• Coverage in The Daily Illini: https://dailyillini.com/newsstories/campus-life/2022/11/17/fighting-i llini-fighting-waste/

March 2, 2023

- Nearly 100 student volunteers executed the event.
- 1,280 pounds of recyclables were collected (cardboard, aluminum cans, plastic bottles, paper).
- Breakdown of where and what materials were collected:
 - o Arena:
 - 220 pounds aluminum
 - 300 pounds plastic
 - TOTAL: 520 pounds from the arena
 - o Recycling bins around the concourse:
 - 120 pounds aluminum
 - 200 pounds plastic
 - TOTAL: 320 pounds from the recycling bins
 - Pulled from the waste stream (came from the compactor below the facility):
 - 440 pounds of mixed materials (paper, cardboard, aluminum, plastic) that the sort workers pulled at the Waste Transfer Station o

TOTAL: 1,280 pounds of recyclables

- 340 pounds of aluminum
- 500 pounds of plastic
- 440 pounds of mixed material (paper, cardboard, aluminum, plastic)
- Several fans approached the *Fighting Illini*, *Fighting Waste* homebase folding table on the upper concourse to express appreciation of our efforts, and to discuss further how they would like to see recycling permanently installed throughout the facility.
- Coverage on WCIA:
 - https://www.wcia.com/news/volunteers-collect-recyclables-forf ighting-illini-fighting-waste-initiative/
 - https://www.wcia.com/video/volunteers-collect-recyclablesforfighting-illini-fighting-waste-initiative/8440178/

Of particular note is the comparison between the quantity of recyclables collected in the temporary bins set up around the upper concourse versus the quantity of recyclables collected from the arena (what still remained after the game). MAX-R hypothesizes that without the installation of permanent recycling containers on the upper concourse, there is no "habit" that fans can build to recycle their materials after an event. Once there is recycling readily available, State Farm Center should expect to see more fans taking their materials from the arena seats to the containers. This would save on staff time, if there was less material to pick from the arena after an event. Additionally, fan experience would improve; it is a "feel good" experience to recycle bottles and cans.

Don't Waste Campaign

Fighting Illini, Fighting Waste is part of a larger campus-wide "Don't Waste" campaign in partnership with U of I's beverage provider, Coca-Cola. Each year Coca-Cola and the university share a mutual pool of funds to be towards campus sustainability programs. Fighting Illini, Fighting Waste was the first initiative born out of this partnership.

As part of the sustainability contract with the university, Coca-Cola has a commitment to, "collect and recycle a bottle or can for every one sold by 2030." Understanding the recapture rate of aluminum cans and plastic bottles is important for Coca-Cola and the university to track and report this shared objective. Facilities of the Division of Intercollegiate Athletics have been identified as some of the highest retailers of Coca-Cola's plastic bottles and aluminum cans, so State Farm Center is a facility of particular importance to this objective.

Additionally, Coca-Cola has made explicit comments that consistency is a key component to a successful recycling program across campus. Therefore, this recommendation encourages State Farm Center to adhere to the campus standard MAX-R bins.

State Farm Center Waste Management

State Farm Center has implemented the use of blue recycling bags in their silver recycling bins, located on the first floor (below the upper concourse):



Silver recycling bin. Has cutouts for bottles to nudge fans to use the bins for a specific recyclable material and discourage the disposal of trash in the bins.



A blue recycling bag lines each of the silver bins. The blue bags are disposed of in the compactor below the facility, with the black landfill trash bags.

The use of blue bags on this floor is a great first step to holistic facility recycling practices. Because infrastructure exists on this floor already, the focus of the recommendation is on the upper concourse, which has only landfill bins:



Large black landfill bins line the upper concourse vomitory entrances into the arena. There are 26 of these bins that are consistently located within the upper concourse, 2 bins at each of the 13 vomitory entrances. A map is attached showing the specific locations of these bins.

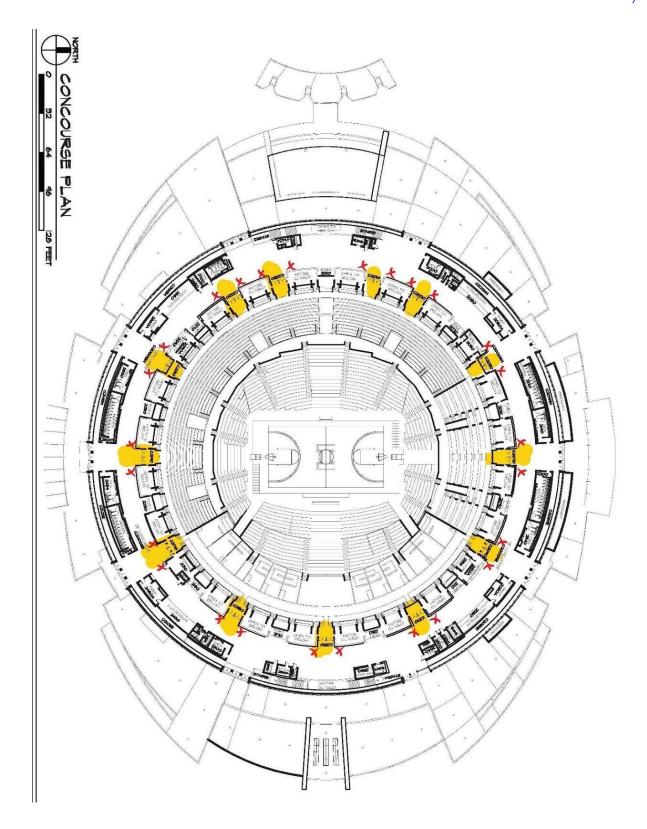


Figure 1. State Farm Center arena denoted by its landfill bins on the upper concourse. Yellow indicates a vomitory, and a red check indicates a landfill bin.



Grey landfill bins are located sporadically throughout the arena, occasionally showing up near bathrooms. There are far fewer of the grey bins than the black bins.

Proposed Solution

Pairing recycling bins with trash bins is especially important, and F&S Waste Management believes the deployment of its MAX-R 3-stream bins (picture attached below) has played a significant role in increasing the campus diversion rate from roughly 22% to roughly 30%.



Allowing users to make the decision about where their waste goes at one place is preferred, rather than requiring users to walk considerable distance to a recycling bin (in State Farm Center's case, users walking to the floor below the upper concourse, or users bringing their waste home to their personal recycling bin).

As of April 5th, 2023 campus has 210 out of 230 available 3-stream bins deployed at 63 different campus buildings. Having a consistent design, with clear and concise labeling, allows users to be familiar with the waste system throughout campus facilities. DIA is encouraged to utilize this standard.

MAX-R bins are durable and have the added ergonomic benefit of allowing workers to pull out trash bins rather than pulling up trash bins. If a part is ever broken or damaged, the vendor can replace it. They can be designed and customized to work within an existing space, the vendor is familiar with designing waste systems for entertainment and sports facilities. See examples here.



Figure 2. Proposed design for bins at State Farm Center. Can be modified and changed as needed.

Keeping Competitive with Our Peer Institutions

Our Big Ten peer institutions are also pursuing waste management approaches that align with sustainability goals:

- At the <u>University of Michigan</u>, Michigan Stadium is pursuing zero waste efforts through clear and consistent signage throughout the facility, sourcing concessions materials that are locally recyclable and compostable, and athletics operations staff who continue to develop strategies to improve the waste separation process during cleanup.
- At The Ohio State University, <u>Ohio Stadium</u> continually strives to be a top university achieving waste diversion away from the landfill.

At both schools, providing recycling infrastructure around the arena is crucial for achieving and maintaining recycling habits among attendees.

Conclusion

Without appropriate recycling infrastructure on the upper concourse of State Farm Center, campus is losing valuable recyclable materials sent to the landfill (particularly with recyclable items left in the arena). Additionally, the installation of permanent recycling bins on the upper concourse would facilitate the ability for fans to recycle at any athletic or entertainment event held at State Farm Center.

The purpose of this recommendation is to be a conversation-starter in regard to permanent recycling on the upper concourse. The proposed use of MAX-R bins is a suggestion, based on campus' success with the roll-out of these bins throughout our facilities.

Connection to iCAP goals:

This recommendation relates to Zero Waste iCAP objective 5.2, ""Reduce the total campus waste going to landfills from 5.049 tons in FY19 to 4.544 tons or less in FY24, which is a decrease of at least 10%." The collection of plastic and aluminum recyclables at State Farm Center events will reduce landfill waste, as corroborated by the two *Fighting Illini, Fighting Waste* events held in fall 2022 and spring 2023.

This recommendation also relates to Zero Waste iCAP objective 5.2.1, "Install appropriate waste collection infrastructure." State Farm Center currently lacks appropriate waste collection infrastructure on its upper concourse.

The iCAP continues on page 110, "One of the clearest indicators of a unified waste collection infrastructure is the appearance of our indoor and outdoor bins. In addition to performing a vital function, our waste and recycling receptacles embody the time, attention, and resources devoted to campus sustainability. By renovating and improving our bins' presentation, we can ensure that we are capitalizing on every available opportunity to recycle and that waste that must be disposed of is handled correctly. This will also provide a visible signal to students, staff, faculty members, and visitors that our campus prioritizes sustainability and is committed to making zero-waste behaviors accessible to all."

Perceived challenges:

- Bin price. The cost of durable recycling bins, specifically MAX-R, is an investment.
- Separation of blue-bagged recyclables from black-bagged landfill waste.
 - Currently, all waste from State Farm Center (black-bagged landfill bins, blue-bagged silver bins on the first floor, and loose materials that are taken from the seats in the arena after events) is taken straight to the compactor located below the facility.
 - The facility does have 3 open-top pans located near the east parking lot which could be utilized for recyclable collection.
 - Training staff on the separation of recyclables from landfill waste may be a challenge.

Anticipated timeline of implementation:

- Summer 2023: Bin design finalized and ordered.
- Fall 2023: Bin installation. Recycling collection separate from the compactor, piloted.
- Spring 2024: Recycling at State Farm Center is in full swing, in time for the basketball season.

Anticipated budget (identify if cost is up-front or continuous):

Up-front cost

Recycling bins. See attachment below.

Continuous cost

• Staff training. In addition to the installation of recycling bins, DIA staff will need to be trained on the new recycling process – separation of blue bags from black bags. Additionally, collection from the bowl after games and events will need to ensure that trash and recycling are separated and bagged appropriately.



3		Spec Sheet For Waste and Recycling 11902: University of Illinois Urbana Champaign Qty: 1 \$3,528.00 Each \$3,528.00 Total			
0	Collection F	Panel Design	Loading Orientation	Top Style	Header Board
	Terra	None	Top Load	Vail Interchangeable	Rectangular - Black
	Material Option	Trim Style	Door Pulls Notched Out	Casters None	Header Graphics Landscape - 10" X 7.5"
VII.	All Plastic				
1	Color Option	Panel Color	Trim Color	Top Color	Brand Label
	Multi Color Tops	Dark Gray Black	Black	Black Frame	Max R
	Section 1		Section 2		
Capacity	55		55		
Top Insert Color	Blue		Black		
Opening Shape	One Circle - 10"		Max Size - 10" Square		
Opening ID: Text	Bottles & Cans		Landfill		
Opening ID: Type - Color	Overlaid - Symbol and Border - \ Blue	White / O	verlaid - Symbol and Border - V Black	Vhite /	
Front Graphic	Bottle and Can		Trash Man		
Front Graphic: Type - Color	Overlay - White / Dark Gra	у	Overlay - White / Dark Gray	ne.	
_eft Side Graphic			8.		
_eft Graphic: Type - Color	Overlay - White / Dark Gra	у	5		
Right Side Graphic	2				
Right Graphic: Type - Color	-		Overlay - White / Dark Gray		
Header Graphic Insert	Compost - Food Waste - Option	on 1	Waste - Landfill - Option 1		
Milk Jug Overlay	Yes		Yes		

Individual comments are required from each SWATeam member (one or two sentences):

Team Member Name	Team Member's Comments
Nikki Palella	I support this recommendation to strengthen zero waste efforts at the State Farm Center and within the DIA. This will increase the accessibility of recycling infrastructure to local and visiting participants who wish to dispose of their waste responsibly.
Shreya Mahajan	I support this recommendation and think it is a great start to incorporate recycling in the State Farm Center and divert a large amount of waste from the landfill through investing in recycling bins.
Justin Holding	I fully support this recommendation. It represents a significant stride towards reducing waste, while leveraging the reach of the DIA and State Farm Center to educate the public about the importance of recycling.
Daphne Hulse	I support this recommendation! F&S is eager to strengthen its partnership with the DIA to ensure a waste management system that is effective for both units.
Nishant Garg	I support this improvement at the State Farm Center.
Jenna Schaefer	I support this recommendation. There is clearly a need for recycling infrastructure at State Farm Center and this recommendation will help to make recycling accessible there.
Aaron Finder	There is a substantial opportunity to improve landfill diversion rates. I support this recommendation.

Thurman Etchison	I fully support this recommendation. I believe that we have an obligation to lead by example. A visible recycling program at State Farm Center might impact local opinions about recycling in general due to the high profile / visibility of DIA. This recommendation will reduce landfill waste and fees, possibly reduce labor for State Farm Center and generate revenue for the Transfer Station.
Joe Bradley	I fully support this recommendation. It seems that this effort is definitely needed and will make a significant impact. Additionally, it signals to the community that the State Farm Center is being a leader in recycling efforts.
Joy Scrogum	I support this recommendation. Expanding recycling infrastructure, especially in high-traffic areas, is part of fostering sustainable behavior within the campus and surrounding communities. This recommendation will build off the momentum created by the zero waste basketball games and reinforce the messaging at those events, making it more likely that visitors to State Farm Center will form a habit of recycling. These efforts might also increase revenue generated by the sale of recyclable commodities, and possibly save costs associated with clean-up of the arena after events.

Further explanation and background (can be supplied in an attachment):

Comments from consultation group (if any; these can be anonymous):