Report on Sustainability in Athletics at the University of Illinois at Urbana-Champaign

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#### **Executive Summary**

The University of Illinois Department of Intercollegiate Athletics is among our institution's most public facing entity. Each year, Illinois Athletics events bring thousands of students, fans, and community members to cheer on student athletes. Every Illinois Athletics event features advertisements from sponsors and messaging from the University on topics such as diversity, equity, and inclusion; however, environmental sustainability was not included as an aspect of DIA messaging until very recently, and this lack of action has placed Illinois behind fellow Big Ten institutions who are leading the national charge in incorporating sustainability into athletics. Two examples of conference peers leading the way in sustainability are the University of Michigan and the Ohio State University, who both received full credit in the AASHE STARS report for the range of sustainability practices incorporated.

This report analyzes green athletics initiatives submitted by AASHE member institutions as a part of their STARS report (n=18) to discern commonalities between accredited green athletics institutions and to establish best practices and implementation strategies the University of Illinois can follow when incorporating sustainability to the DIA. The report begins with a summary of current sustainability practices related to Illini Athletics followed by an analysis of the AASHE Green Athletics credit and associated criteria to earn the credit. Next, the report features a section on common sustainability practices implemented by university athletic departments, and concludes with recommended practices for implementation at the University of Illinois.

## Sustainability in University of Illinois Athletics

The University of Illinois features a mix of front-facing and internal programs that promote sustainability at athletic events and within the athletic department. The two primary sustainability programs associated with athletics are the Be Orange Go Green Program promoting recycling at Illinois Football Games, and enrollment by Illinois Facilities & Services in the Green Sports Alliance. Furthermore, the State Farm Center, home to Illini Men's and Women's basketball as well as various community events, is certified LEED Gold.

## Be Orange Go Green Program

The Be Orange Go Green Program is a partnership between the College of ACES and the Department of Intercollegiate Athletics which premiered during the 2021 Football season. The objective of the program is to promote the recycling of all cans and bottles at Memorial Stadium and its associated Tailgating locations. During home games, parking personnel greet tailgating fans with blue recycling bags and distributes free t-shirts to tailgaters participating in Be Orange Go Green. Student volunteers also play a role in the program, greeting fans at entry portals to the stadium and collecting recyclable materials. Student volunteers also collect recycling during timeouts, running through the stands while messaging promoting recycling is delivered through the PA. The Be Orange Go Green includes a pedagogical lesson, as it is coordinated by AHS professor Dr. Michael Raycraft and incorporated into the curriculum for Sustainability in Sports Courses.

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## Facilities & Services Enrollment in the Green Sports Alliance

The Green Sports Alliance is an environmentally focused, international trade organization that features members from all aspects of sport. The GSA shares resources, experience, and expertise among its members to promote environmental sustainability in sports and mobilize all sports stakeholders to further progress on sustainability and promote behavior change.

The 2020 Illinois Climate Action Plan calls for the university to increase the visibility of campus sustainability efforts by joining the Green Sports Alliance through the Division of Intercollegiate Athletics by summer 2021. While the DIA has not formally joined the Green Sports Alliance, Facilities & Services became a member of the GSA in June 2021, and GSA presented at the October 2021 Illinois Green Infrastructure & Erosion Control Conference.

Other Big Ten Institutions involved in the GSA are Indiana University, Michigan State University, Pennsylvania State University, The Ohio State University, The University of Iowa, The University of Michigan, and The University of Minnesota.

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# Gameday Recycling Challenge

The University of Illinois participates in the GameDay Recycling Challenge, part of the Campus Race to Zero Waste. Illinois participates in two separate competitions: Diversion, which tracks the cumulative percentage of materials recycled each week, and the Per Capita Classic, which tracks the pounds of

recycling per capita. At the end of the 2021 season, Illinois' cumulative diversion percentage was 16.08%, and the pounds of recycling per person was 2.98.

The Gameday Recycling Challenge hosts a "Wall of Fame" which is divided into three tiers: Football programs that have announced plans to become zero waste, Football programs that achieved a 70-90% diversion rate, and Football programs that achieved a 90% or higher diversion rate. The University of Minnesota and University of Maryland have both achieved the 70-90% Wall of fame recognition in past years, and The Ohio State University and the University of Minnesota have both achieved the 90% or higher diversion rate.

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## State Farm Center LEED Gold Certification

The State Farm Center has been certified LEED Gold, attaining a level of LEED certification that few other institutions have reached in their athletic buildings. The State Farm Center LEED certification sets a standard that other athletic facilities at UIUC should seek to emulate.

## Green Athletics in The AASHE STARS Report

The AASHE STARS Report offers 0.5 bonus points for institutions that satisfy the criteria for the Green Athletics credit that is included as part of the Innovation and Leadership Category at the end of the report. To earn the full 0.5 points for the Green Athletics credit, an institution must satisfy at least six of seven of the criteria, institutions that satisfy 3-5 criteria will earn 0.25 points. The criteria for the Green Athletics credit are as follows:

- Zero waste and/pr carbon neutral athletic events.
- A stadium or arena certified under a green building rating system.
- A sustainable food and beverage purchasing program that includes athletic event vendors and concessions.
- A program to minimize the sustainability impacts of turf management (ex. Installing low input turfgrass or environmentally preferable artificial turf that is fully recyclable or cradle to cradle certified).
- A program to support more sustainable transportation options for athletic events.
- Community engagement efforts (ex. Educating students and fans/supporters about the institution's sustainability initiatives).
- An athletic team certification program (ex. An internal program to formally recognize sports teams that integrate sustainability into their culture and practices).

While the criteria for the Green Athletics credit may not seem difficult, only 18 institutions have earned the credit, with only 9 earning the full 0.5 points. Among the schools that received the full 0.5 points are Division I athletic institutions: The University of Michigan, The Ohio State University, and Florida State University. An analysis of the criteria that were most commonly satisfied is presented below.

Criteria	Schools Participating
Zero Waste/ Carbon Neutral Program	14
Green Building Certified Stadium	11
Sustainable Turf Management	11
Community Engagement Efforts	11
Sustainable Food & Beverage Program	11
Program to support sustainable transportation	8
Athletic Team Certification Program	5

## Recommendations

Observing the distribution of achieved criteria from Green Athletics certified institutions provides insight into which athletic sustainability initiatives are most common to pursue and successfully implement. The University of Illinois has already achieved at least 2/7 of the criteria required for the green building credit, with the LEED Gold Certification of the State Farm Center satisfying the Green Building Certified Stadium criteria and the "Be Orange, Go Green" program serving as a community engagement effort. The following section presents best practices from schools who have received credits for the Green Athletics program that the University of Illinois can implement in its own athletic programs.

## Zero waste and/or carbon neutral athletic events

The Ohio State University and the University of Michigan have both implemented a zero-waste policy at their home football games. The University of Michigan claims that in 2017, their zero-waste policy resulted in a diversion of 88% of stadium waste from landfill, and The Ohio State University claims it has diverted 90% or more of its stadium waste from landfills.

Zero-waste events at football game appear to require sorting services to ensure waste is properly diverted from landfill. At Ithaca College in New York State, Eco-Reps educate fans on the proper way to sort their waste into landfill, recycling, and compost. Texas A&M takes a professional approach to waste diversion, partnering with a recycling company to sort through the trash at events to ensure everything that can be reused or recycled is removed.

# Sustainable Food & Beverage Program

Many schools incorporate sustainable food purchasing programs as part of broader university purchasing goals. The University of Michigan includes food purchased for athletic events in its foal to purchase 20% of food in accordance with U-M sustainable food purchasing guidelines, and at The Ohio State University, athletics related food restaurants strive to align with the university goal of purchasing 40% of food from local and/or sustainable sourced by 2025. Colgate University follows a similar policy, with 28% of its food being community=based and/or third-party certified, including serving local beer at athletic events.

Loyola University at Chicago has implemented a unique sustainability program, having the concessions run by a student social entrepreneurship program that selects materials based on their ability to be easily recycled or composted. Alternatively, Texas A&M employs a separate method, utilizes a contractor that practices sustainable purchasing initiatives.

## Sustainable Turf Management Program

Most Sustainable Turf Management Programs center around water reduction. The University of Michigan follows the University chemical reduction goal and uses moisture meters on fields to ensure efficient watering of the grass. Furthermore, the University of Michigan has certified its golf courses and various fields with the Michigan Turfgrass Environmental Stewardship Program. At the University of Texas at Austin, the school follows a sustainability goal of reducing campus water consumption by 20% from 2009-2020.

Other schools have renovated their athletic fields to utilize synthetic turf. The University of California at Santa Barbara, George Washington University, Colorado College, and Appalachian State university each use synthetic turf on at least a portion of their fields. Other unique turf management methods include the use of Integrated Pest Management, utilized at the University of Alberta, and Organic groundskeeping, used at Bowdoin College.

## Sustainable Transportation Options for Athletic Events

Institutions commonly use bus systems as a means to provide sustainable transportation to fans for sporting events. The University of Texas at Austin hosts a Longhorns express that transports fans to the football stadium from remote locations. Texas A&M utilizes a similar program, with University bus routes providing free service for anyone coming to campus. These programs are helpful for reducing congestion from personal vehicles around the stadium and enable greater access to games.

Other institutions have alternative transportation policies for off-campus athletic events. Colorado College provides a fan bus that transports students to and from the World Arena, where the school plays its home hockey games. George Washington University recommends charter bus transport for trips that are over 4.5 hours long, decreasing the use of a high number of school vans that would be required to transport athletes and equipment over a long distance. Ithaca College provides buses to transport students to and from away games when possible, and encourages rideshare services and carpooling when bus transportation is unavailable.

#### Athletic Team Certification Programs

Athletic Team Certification Programs are the least-achieved criteria for the Green Athletics certification, but the programs that are employed by participating schools are helpful in determining best practices for the University of Illinois and demonstrate the versatility with which certification programs can be designed and implemented. The University of Virginia offers a competitive green team certification program. The program promotes sustainable actions by offering points to teams who complete sustainable actions, and the point totals are then tracked on a leaderboard. Bowdoin College has implemented a similar program, with teams being encouraged to compete against each other to be more sustainable.

The University of California at Santa Barbara and University of Alberta offer green team certifications that are noncompetitive. At UC Santa Barbara, the goal of the program is to engage and educate student leaders on sustainable practices at an organizational and individual level, with points for the certification being scored in categories: community engagement, energy and water usage, purchasing, waste management, accommodation and transportation, and communication. The University of Alberta is less

clear on its certification program, but the institution's STARS report claims that the certification encourages varsity athletic teams to adopt sustainable practices and earn recognition for doing so.

A unique implementation of a student-led athletics organization is Texas A&M's Aggie B.L.U.E. (Black Leaders who Undertake Excellence). This organization's goal is to provide leadership opportunities and a sense of community for black individuals while empowering them to use their voice. This type of program fits into a broader definition of sustainability that institutions should consider when approaching sustainability.

# Green Building Certification

The University of Illinois has already achieved Green Building Certification at the State Farm Center, but understanding the volume of facilities that other institutions has certified is helpful. At the University of Virginia, five athletics facilities are certified LEED Gold, with one certified LEED Silver. Many schools have achieved LEED certification at their fitness centers, and the University of Washington at Seattle has achieved LEED certification for its football stadium.

## Community Engagement Efforts

The University of Illinois has a community engagement effort with the Be Orange, Go Green Program, and may benefit from the implementation of other institution's community engagement programs. The University of Texas at Austin hosts a similar community engagement program to the University of Illinois called the Bleed Orange, Live Green program. The unique difference with the University of Texas program is that student volunteers sort waste into proper streams in addition to their education and outreach efforts. Florida State University includes a unique community engagement effort by adding a sustainability page to its gameday app that contains green tips for visitors on topics such as recycling and transportation.