Sustainable Sports Venues: Striving for Continuous Improvement

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Experience running various sustainability initiatives at Target Field and TCF Bank Stadium

Currently manages the Sustainability Program at U.S. Bank Stadium
Intro to U.S. Bank Stadium

- Multi-purpose stadium that hosts a large variety of events including:
  - Super Bowl 52
  - NCAA Final Four 2019
  - Summer X Games
  - Minnesota Vikings Football
  - Concerts/Trade shows/Corporate events/High School Sport Events

- 66,200 seating capacity for football, 72,000+ for basketball/concerts.

- Over 500 events per year.
Sustainability Summary

**Waste Diversion Program**
- Compost
- Recycling
- Food donation
- Repurposing
- Waste to energy

**Energy Efficiency**
- LED lighting
- Smart building management systems
- Strict lighting and energy use policies

**Responsible Water Management**
- Stormwater management system
- Industry-best low flow fixtures

**Sustainably Designed and Built**
- LEED Gold for Building Design and Construction
- Located at the confluence of the Green and Blue light rail lines
- LEED Platinum for Operations and Maintenance

**Sustainability Focused Education Tours**
- Educate k-12 students on sustainability
Waste Diversion
Procurement
Fan Education

- Food Waste
- Food Containers
- Napkins
- Beverage Cups
Front of house Waste collection
Staff Education
Back of house waste collection
Post Event Collection (Bowl Pick)
Responsible Waste Management

• We have to manually sort waste after all events to ensure we meet our recycler's and composter’s contamination standards.
• Fan education is a vital piece to streamlining this process.
Tracking & Recognition
Waste Facts and Figures

Cost Per Ton

Waste Breakdown by Fiscal Year

FY1 FY2 FY3 FY4

Cost Per Ton

FY1 FY2 FY3 FY4

Waste Breakdown by Fiscal Year

Trash Recycling Cardboard Compost

US BANK STATION SUSTAINABILITY INITIATIVE
LET’S MAKE LESS OF AN IMPRESSION
Waste Diversion Timeline

- **July 2016**: Stadium Opens
- **July 2017**: Organics recycling implemented
- **October 2017**: Battery recycling implemented
  - 50% Monthly diversion rate achieved
- **December 2017**: Aramark converted all food and drink vessels to compostable alternatives
  - 60% Monthly diversion rate achieved
- **February 2018**: Diverted more than 90% of all game day waste at Super Bowl 52
- **May 2018**: Recognized as one of the Green Sports Alliance’s Innovators of the year for 2018 for the Super Bowl waste diversion efforts
- **August 2018**: 70% Monthly diversion rate achieved
- **December 2018**: 80% Monthly diversion rate achieved
Challenges

• Continuing education
  • Turnover issues
    • 3000+ part-time employees
  • Diverse events

• Fan education
  • 66,000 fans with varying levels of waste management knowledge. How can we get them to want to engage?

• Changing Behaviors is tough
Challenges (cont.)

• Costs
  • Materials costs
    • Compostable food containers
      • Price per unit has increased greatly. Times that by a diverse group of products and the cost escalate quickly.
    • Compostable waste bags
      • Need to be strong, stand up to wear and tear, while meeting the local composting standards.
  • Labor Costs
    • More labor to sort waste and end of events
    • Extra bowl pick to collect organics
Challenges (cont.)

• Securing buy-in
  • Climate change is a politicized issue. How can we ensure that resources are being allocated to the sustainability program?

• Logistical restraints
  • Space and time is at a premium in the facility. It takes time and space to sort and properly manage the waste. NCAA Final Four was a logistical nightmare.
The Future of Sustainability at U.S. Bank Stadium

- Find more energy efficiency improvements.
- Reach a yearly goal to divert 90%+ of waste from the waste-to-energy incinerator.
- Create fan engagement videos at all events to educate fans about the waste diversion program and how they can help it succeed.
- Work with Metro Transit on a plan to subsidize light rail passes to and from events at the stadium.
- Whatever else we can do to minimize our carbon footprint (within financial limitations).
The Future of Sports and Sustainability

Sustainable sports venues are becoming the norm, and venues who do not participate are becoming the minority.

Major events like the Super Bowl and X Games all have robust sustainability plans and expect venues to be operating at a basic sustainability baseline.

Venues have the platform to encourage positive change. Venues and teams need to use their platform to encourage greater sustainability.
Questions?