LAKE COUNTY
Investing in People
and Our Communities

Sustainable Facility Rating Programs

Energy & Environment Committee November 6, 2019



Agenda

- Background
- Research Summary
- Options
- Discussion

Background

- January 2019: E&E expressed interest in the County achieving "net zero" status
- February August: Ongoing discussions explored "net zero" definitions and strategies
- September-October: Staff researched facility rating systems that advance energy reduction goals.



Objective

- Third-party rating systems ensure that new construction and major renovations are designed to achieve sustainability goals, such as:
 - Energy efficiency
 - Net Zero energy use
 - Water efficiency
 - Healthy interiors
 - Stormwater management
 - Habitat protection and enhancement
 - Walkability and access to mass transit & cycling
 - Sustainable materials management, including waste

Rating Systems

- Energy Star
- Leadership in Energy & Environmental Design (LEED)
- WELL Building Standard (WELL)
- Sustainable SITES Initiative (SITES)
- Living Building Challenge



Energy Star

- Program Operator: U.S. EPA and Dept. of Energy
- Summary
 - Demonstrates commitment to energy efficiency.
 - Rating based on comparison to similar building types.

Cost

- During construction: No direct costs. Architect/Engineer needs to generate an energy model.
- Operational: No direct costs. Staff time to register and report utility data in Energy Star Portfolio Manager is required.

Pro/Con

- Pro: Lowest cost option.
- Con: Less comprehensive metrics, buildings tend to be lower performing than those with additional certifications.

LEED

- Program Operator: US Green Building Council
- Summary
 - Demonstrates commitment to comprehensive environmental responsibility
 - Most widely used green building rating system worldwide.

Cost

- During Construction: \$75K-\$200K
- Operational: No direct costs. Staff time to register and report utility data in Energy Star Portfolio Manager.

Pro/Con

- Pro: Widely recognized, broad familiarity among architects, engineers, contractors.
- Con: Additional design and construction costs.

WELL

- Program Operator: International WELL Building Institute
- Summary
 - Demonstrates a commitment to employee health and wellbeing.
 - Rates the human health impacts of building's interior

Cost

- During construction: \$25K \$100K
- Operational: \$15K \$50K
- Pro/Con
 - Pro: Human Resources positives: productivity, morale, recruitment/retention.
 - Con: Additional cost in design, construction, and operation.

SITES

- Program Operator: Green Building Certification Inc.
- Summary
 - Demonstrates a commitment to green infrastructure and ecosystem value.
 - Focuses on land development with or without buildings
- Cost
 - During Construction: \$25K \$100K
 - Operational: No direct costs.
- Pro/Con:
 - Pro: Applicable for buildings in flood-prone locations.
 - Con: Additional cost in design and construction.

Living Building Challenge

- Program Operator: International Living Future Institute
- Summary
 - Demonstrates a commitment to comprehensive environmental responsibility, human health, and equitable communities. Offers a Net Zero Energy certification option.
 - Rigorous rating system that requires actual, rather than anticipated, performance

Cost

- During Construction: \$50K \$300K
- Operational: Performance monitoring in Year 1

Pro/Con

- Pro: Most comprehensive option
- Con: Additional cost in construction and Year 1



Discussion Prompts

- Program Preference
 - Which system best articulates the County's priorities?
- Applicability
 - What are the upcoming new construction or major renovation projects where a rating system could be tested?
 - How many in the next 5 years?
- Next Steps