

Update on Sustainable Rating Systems.

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Investing in the *Nature* of Southwestern Illinois

www.swircd.org

**SOUTHWESTERN ILLINOIS
RESOURCE CONSERVATION & DEVELOPMENT**
RESPECTING OUR ENVIROMENT, GROWING OUR FUTURE

HOME ABOUT Us PROGRAM AREAS TAKE ACTION

Delivering environmental and conservation programs specific to the regions needs;
ensuring open space, clean water, clean air, and vibrant communities since 1989



and social communities

ACCOMPLISHMENTS
Southwestern Illinois Resource Conservation & Development has invested **\$17 MILLION** in conservation, permanently protected over **4,750 ACRES** of open space, and implemented over **375 PROJECTS** within our region.

NEWS & EVENTS

- ▶ What's New
- ▶ Newsletter
- ▶ Meetings & Events
- ▶ Publications

Upcoming Seasonal Trek
[Harvest Hike](#)
October 22
Patriots Park, Greenville, IL

OUR PROGRAM AREAS

- ▶ CONSERVATION OF OPEN SPACE
- ▶ FOSTERING LIVABLE & SUSTAINABLE COMMUNITIES

TAKE ACTION TODAY WHY SUPPORT OUR MISSION? IMPORTANT LINKS

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Events / Treks



Livable
Communities



Conservation





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How many sustainable rating systems have been created since 2008?



How many sustainable rating systems have been created since 2008?

One every 54 minutes....



- ⑩ LEED Neighborhood Development (ND)
- ⑩ Sustainable Sites Initiative
- ⑩ Envision
- ⑩ Greenroads
- ⑩ GreenLITES
- ⑩ I-LAST
- ⑩ STARS

Green Infrastructure / Site Development

- Sustainable Sites Initiative
- Envision



Transportation

- Greenroads
- GreenLITES
- I-LAST
- STARS



Community Development

- LEED ND



LEED Neighborhood Development



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10 Partners:

- U.S. Green Building Council
- Congress for the New Urbanism
- Natural Resource Defense Council



10 2009





LEED Neighborhood Development

- ⑩ Third Party Verification
- ⑩ 100 Point Rating System
(Plus 10 for Innovation and Regional Priority)
 - Smart Location and Linkage (27 pts)
 - Neighborhood Pattern and Design (44 pts)
 - Green Infrastructure and Buildings (29 pts)
 - Innovation (6 pts)
 - Regional Priority (4 pts)

Focus:

Preferred Locations: 10pts

Walkability: 12pts

Reduced Auto
Dependence: 7pts

Total 29pts
(30%)

Sustainable Sites Initiative



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10 Partners:

- American Society of Landscape Architects
- Lady Bird Johnson Wildflower Center
- United States Botanic Garden



10 2009



Sustainable Sites Initiative



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10 Third Party Verification

10 250 Point Rating System

- Site Selection
- Planning
- Site Design – Water
- Site Design – Soil and Vegetation
- Site Design – Material Selection
- Site Design – Human Health & Well Being
- Construction
- Operations and Maintenance

Focus:

Site Design – Soils
and Vegetation:

51pts

(20%)

All Site Design
Categories:

163pts
(65%)

Envision



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10 **envision**TM

10 Institute for Sustainable Infrastructure

10 Partners:

- American Society of Civil Engineers
- American Council of Engineering Companies
- American Public Works Association

10 2011



Envision



10 Third Party Verification

10 Categories

- Pathway
- Project Strategy and Management
- Community: Long and Short Term Effects
- Land Use & Restoration
- Landscapes
- Ecology and Biodiversity
- Water Resource & Environment
- Energy & Carbon
- Resource Management Including Waste
- Assess and Mobility

Focus:

Weighted Distribution:

Low – Landscapes	7.0%
High – Pathway	12.6%

Highest Sub-Category:

“Avoid traps that create high, long-term cost for the community.”

Greenroads



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10 Greenroads Foundation

10 Partners:

- University of Washington
- CH2MHill

10 Version 1.5, 2011



Greenroads



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10 Third Party Verification

10 118 Point Rating System

- Environment and Water
- Access and Equity
- Construction Activities
- Materials and Resource
- Pavement Technology
- Custom

Focus:

Context Sensitive Design /
Emission Reduction: 10pts
(8%)

Pavement and
Pavement Re-use: 25pts
(21%)

GreenLITES



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10 New York Department of Transportation

10 LITES

(Leadership In Transportation and Environmental
Sustainability)

10 2008



GreenLITES



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10 Self Certification

10 Categories

- Sustainable Sites
- Water Quality
- Materials and Resources
- Energy and Atmosphere
- Innovation

Focus:

Fairly even distribution
among categories.

I-LAST



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⑩ Illinois Department of Transportation

⑩ I-LAST

(Livable And Sustainable Transportation)

⑩ 2010



Illinois Department of Transportation
Division of Highways

I-LAST



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10 Self Certification

10 Categories

- Planning
- Design
- Environment
- Water Quality
- Transportation
- Lighting
- Materials

Focus:

Fairly even distribution
among categories.

STARS



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10 STARS

(Sustainable Transportaion Access Rating System)

10 Partners

- North American Sustainable Transportation Council
- Portland Bureau of Transportation

10 2011/2012

STARS



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10 Categories

- Integrated Process
- Access
- Climate and Energy
- Ecological Functions
- Cost Effective Analysis
- Innovations

Focus:

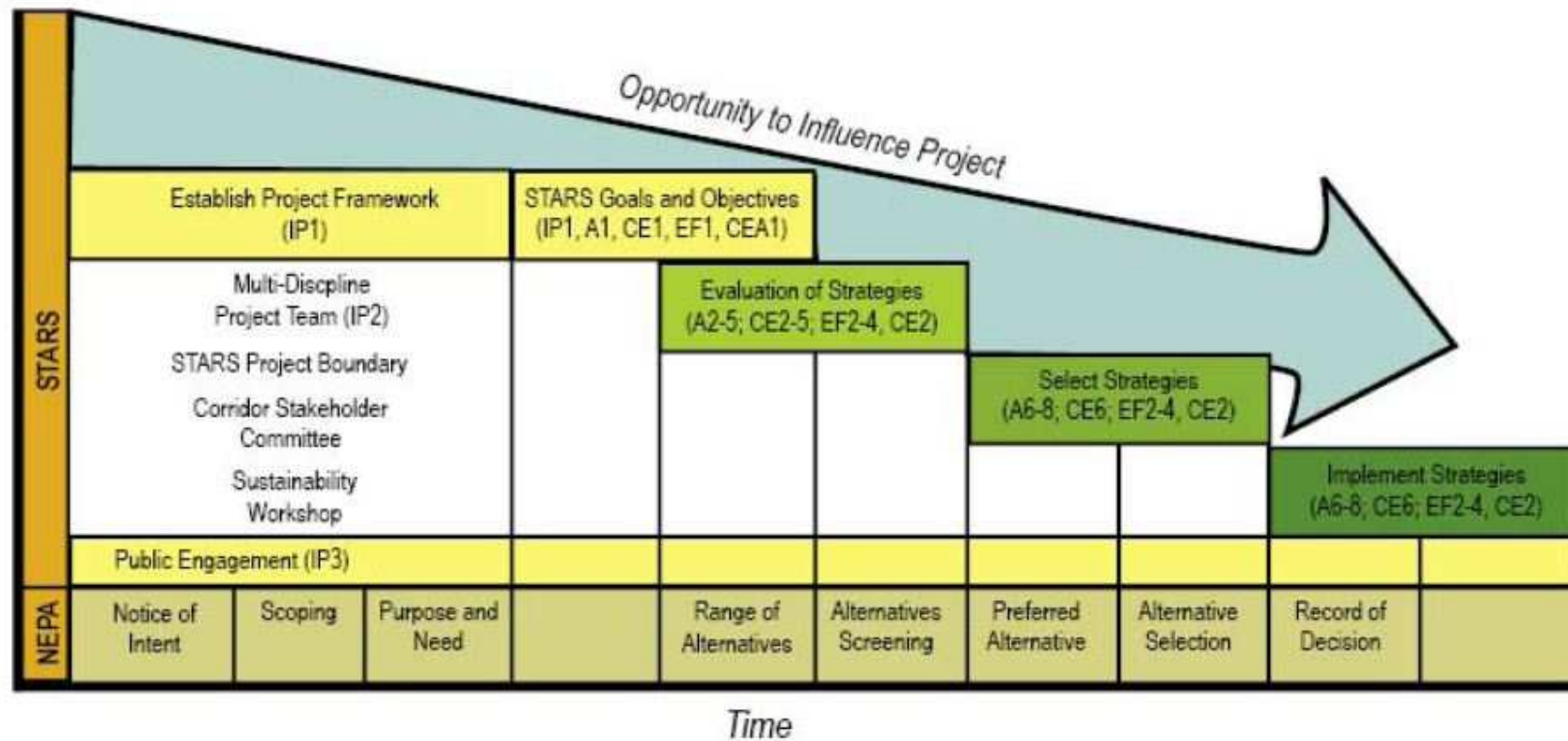
Emphasis on Life Cycle vs
Design and Construction

Integrated process determines
final goals and metrics.

STARS



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Source: STARS Program Manual



Weaknesses of Ratings

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- ⑩ “Weighting” of Certain Categories
 - Project Type
 - Regional Differences
 - Local Priorities
 - Type of Project

- ⑩ Value of Third Party Certification

- ⑩ Applicability Across Project Types
 - Urban Streetscape versus Suburban Highway
 - Park project versus Commercial Campus

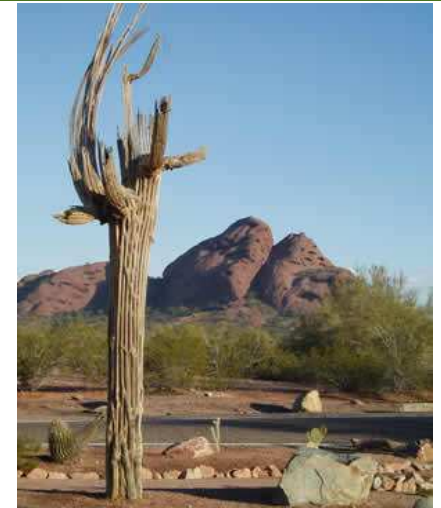
Weaknesses – Regional Differences

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10 Water Conservation versus Stormwater Quality / Quantity

10 Sustainable Sites

- Conservation: Credit 3.2 Reduce Portable Water (2-5 pnts), Credit 3.8 Water Maintenance (1-4 pnts)
- Stormwater: Credits 3.5-3.8 (9-22 pnts)



Weaknesses – Types of Projects

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10 Urban Streetscape versus Suburban/Rural Road



10 Greenroads

- Habitat Restoration (3 pnts)
- Ecological Connectivity (1-3 pnts)



Weaknesses – Quality vs Function

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10 Walkability

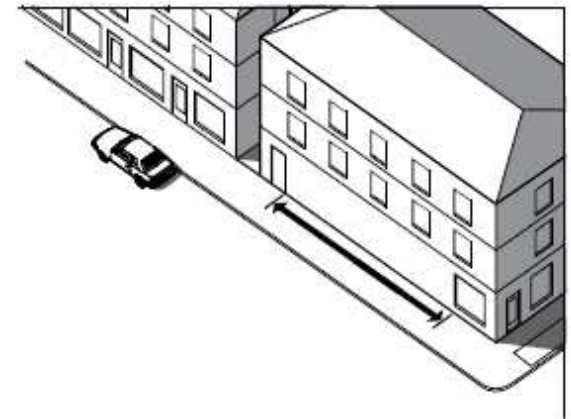
10 I-LAST

- New Sidewalk (2 pnts)
 - 10 Doesn't Measure Quality of Pedestrian Experience
- Sidewalk Widening (1 pnt)
- Parkway Separation (1 pnt)



10 LEED ND

- Walkable Street (up to 12 pnts)
 - 10 No blank façade more than 50' or 40% of façade length.





Weaknesses - Third Party Certification

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- ⑩ Comparison to LEED for Commercial Buildings:
 - Competitive Differentiator
 - Attract Tenants
 - ⑩ lease-up rates for green buildings typically range from average to 20 percent above average
 - Increase Rental Rates
 - Cost Effective
 - ⑩ An upfront investment of 2% in green building design, on average, results in life cycle savings of 20% of the total construction costs – more than ten times the initial investment. Additionally, building sale prices for energy efficient buildings are as much as 10% higher per square foot than conventional buildings.



Source USGBC

- ⑩ What is the Value of Planning/Green Infrastructure Certification?

Strengths of Ratings



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- 10 Toolkit of Ideas/Best Practices
- 10 Cost Savings (Life Cycle Costs)
- 10 Accountability
- 10 Future Funding





What System to Use?

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- ⑩ Community Planning
 - LEED ND
- ⑩ Site Development / Parks / Greenways
 - Sustainable Sites Initiative
- ⑩ Roadways
 - Greenroads
- ⑩ Good Toolkits
 - ⑩ I-LAST
 - ⑩ GreenLITES
- ⑩ Still Being Developed
 - Envision – Green Infrastructure
 - STARS – Transportation Planning

Sustainable Sites – Pilot Projects



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- ⑩ 25% Open space - Park
- ⑩ 20% Institutional/Educational
- ⑩ 15% Commercial
- ⑩ 13% Residential
- ⑩ 8% Transportation corridor/ Streetscape
- ⑩ 8% Open space - Garden/Arboretum
- ⑩ 6% Government Complex
- ⑩ 4% Mixed-use
- ⑩ 1% Industrial