



WHAT IS LEED ?



## Leadership in Energy and Environmental Design

LEED is the **nationally accepted** benchmark for the design, construction, and operation of **high-performance**, green buildings.



## Leadership in Energy and Environmental Design

LEED gives building owners and operators the tools they need to **measurably** impact and **improve** their buildings' performance.

LEED promotes an integrated, **systems-oriented** approach to **high-performance** design and construction.



# Who & What Can Be LEED?

Buildings

>

**Certified**

Building  
Professionals

>

**Accredited**



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## LEED- History

- Over 10 Years in Development
- Available to the Public in March of 2000
- Initially 1 Program (for New Construction only)
- Now 7 Different LEED Rating Programs



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## LEED Rating Programs

- **LEED-NC** (New Construction)
- **LEED-EB** (Existing Buildings)
- **LEED-CI** (Commercial Interiors)
- **LEED-CS** (Core & Shell)
- **LEED-H** (Homes)
- **LEED-S** (Schools)
- **LEED-ND** (Neighborhood Development)



# LEED Rating Levels



26-32



33-38



39-51



52 +

69 Total Points Possible



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## **LEED Rating System Categories**

- **SUSTAINABLE SITES**
- **WATER EFFICIENCY**
- **ENERGY & ATMOSPHERE**
- **MATERIALS & RESOURCES**
- **INDOOR ENVIRONMENTAL QUALITY**
- **INNOVATION IN DESIGN PROCESS**



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## LEED ADVANTAGES

**immediate**

**& measurable**



# PERCEIVED ADVANTAGES OF BUILDING GREEN

**8-9%** decrease in operating costs

**7.5%** increase in building values

**6.6%** improvement in roi

**3.5%** increase in occupancy

**3%** rent increase



**Increased  
Productivity.**

**SCHOOLS**

**20%  
BETTER TEST  
PERFORMANCE**

**HOSPITALS**

**2 1/2 DAY  
EARLIER  
DISCHARGE**

**RETAIL**

**INCREASE  
IN SALES  
PER SQUARE  
FOOT**

**FACTORIES**

**INCREASED  
PRODUCTION**

**OFFICES**

**2-16%  
PRODUCTIVITY  
INCREASE**



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## What Does it *Really* Cost?

### *Cost of Green Revisited*

*Reexamining the Feasibility and Cost Impact of Sustainable Design in the Light of Increased Market Adoption*

July 2007

Davis Langdon, Inc. founded in San Francisco in 1974 specifically to provide comprehensive construction cost management services to builders, architects and owners



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## Community Centers





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## What Does it *Really* Cost?

### CONSTRUCTION COST

- The majority of the buildings are able to achieve LEED certification **without** additional funding.
- Some required additional funding, but only for **specific features**, such as photovoltaics.
- Cost per square foot for LEED buildings falls within the **existing range** of costs for similar buildings.



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## What Does it *Really* Cost?

### OVERALL COST

- Construction Costs are **Comparable**
- **8-10%** Increase in **A & E** Costs
- **LCA** (Life Cycle Analysis) Costing Shows LEED Buildings **Increase** ROI (Return on Investment) & **Save Money** overall

# Additional Construction Costs for LEED-certified buildings

Average for offices and schools, based on 40 buildings

Conventional Building Cost (100%)

Additional Cost

**PLATINUM** (2 buildings)

**6.8%**

**GOLD** (9 buildings)

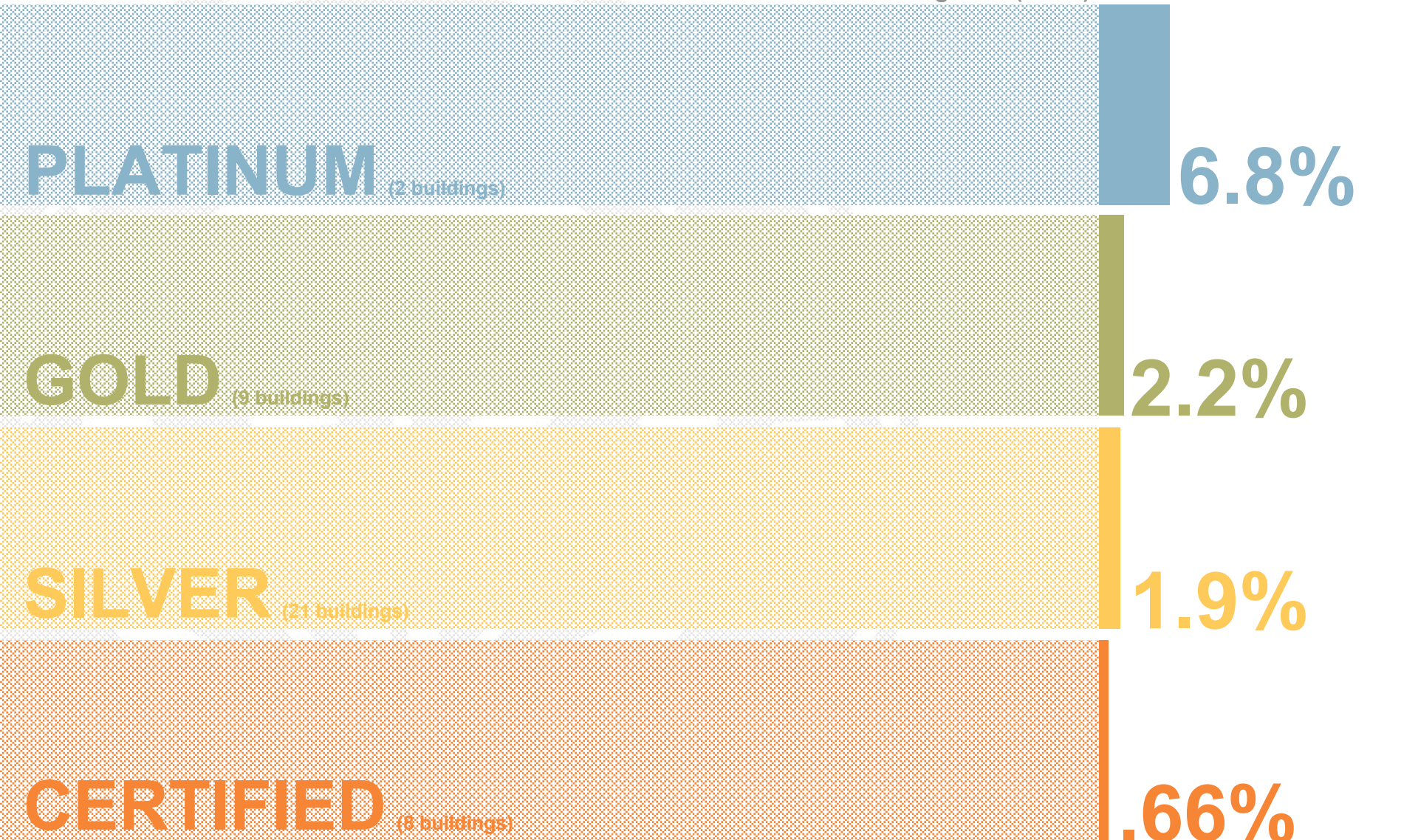
**2.2%**

**SILVER** (21 buildings)

**1.9%**

**CERTIFIED** (8 buildings)

**.66%**





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## Who's Building LEED?

- Hospitals
- Universities
- Government (Federal, State, County, & Local)
- School Districts
- Corporations
- Private Home Owners



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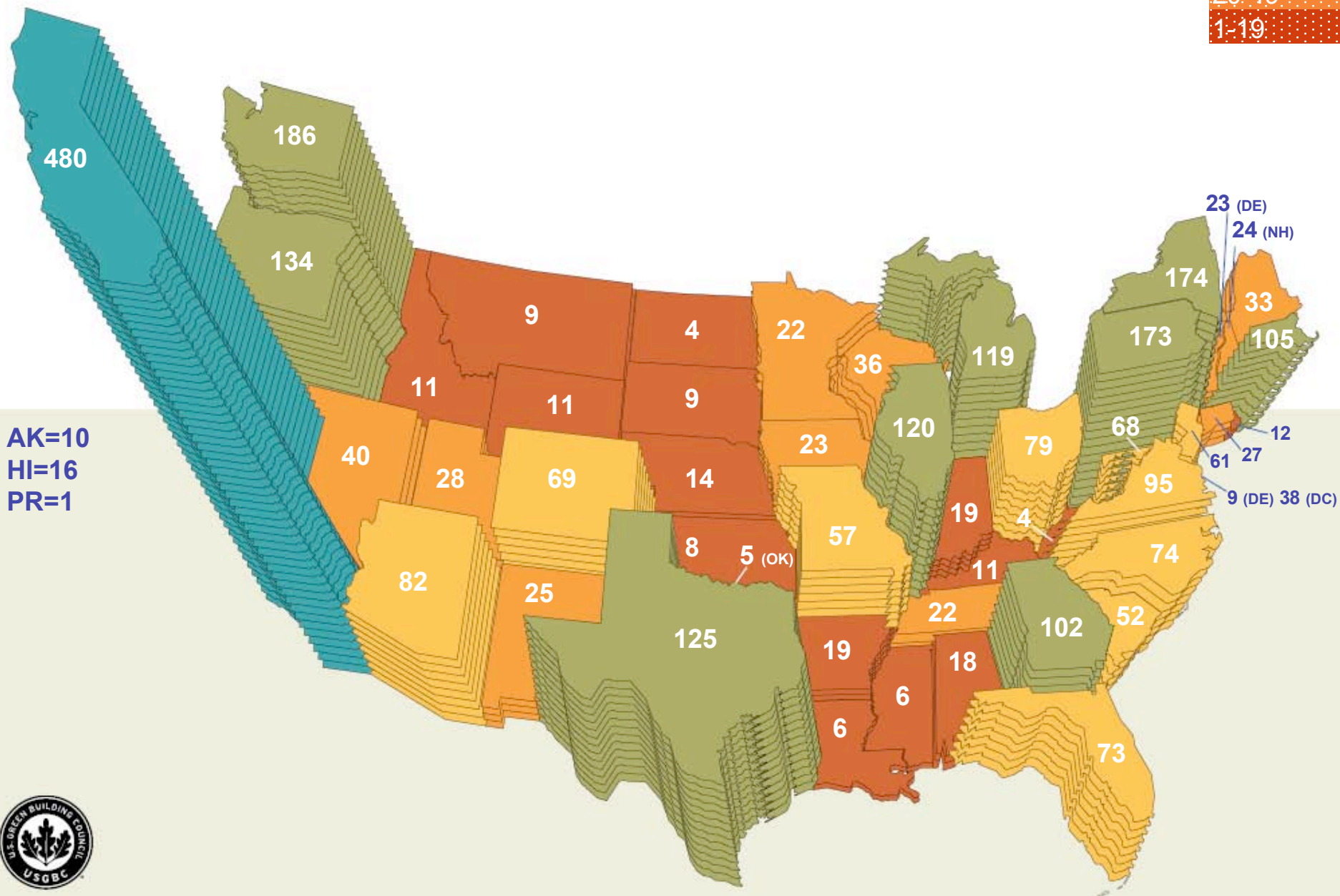
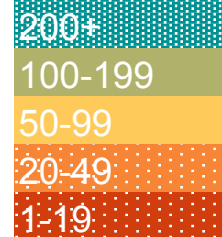
## Commitments to LEED...

- 100 Cities & Counties Nationwide
- 33 School Districts
- 25 State Mandates
- 12 Different Federal Agencies



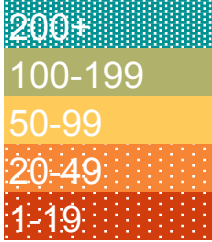
# LEED for new construction buildings as of 07/06

## Distribution by geography



# Registered LEED Buildings as of 07/06

## Distribution by geography



**Today (3/1/08) There are  
165 Registered &  
33 Certified LEED  
Buildings in Arizona**





## Arizona Commits to LEED...

- State of Arizona- LEED Certification Mandate
- City of Scottsdale- LEED Gold Ordinance
- City of Phoenix- LEED Rating System Guidelines
- City of Tuscon- LEED Silver Resolution



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## **LEED in Arizona** (3/1/08)

- 33 Certified Projects
- 2- Platinum, 12- Gold, 4- Silver, 15- Basic
- 165 Projects Registered
- 1st Platinum- ASU's BioDesign Research Center
- 1st Tri-City LEED Building-  
Yavapai College Agri-Business Center
- Prescott's 1st LEED Building-  
Highlands Center for Natural History

# James Environmental Learning Center

PRESCOTT ARIZONA'S 1ST LEED CERTIFIED BUILDING

1ST LEED-GOLD IN YAVAPAI COUNTY



CATALYST ARCHITECTURE, LLC



# James Environmental Learning Center

