



PUBLIC SECTOR GREEN BUILDING PROGRAM

Bureau of Engineering

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History

- 1995: City of Los Angeles Task Force on Sustainable Design is formed
- 1998: Library Bond Program for 32 Branch Libraries Uses LEED as a Guide
- 2000: Sustainable Design Implementation Program (SDIP) Established in the Architecture Division of Bureau of Engineering
- 2000: City Receives California Integrated Waste Management Board Grant for Deconstruction
- 2000: City Receives So. Cal. Gas Company Grant for Performing Case Studies on 5 Municipal Building Types-Fire Station, Library, Animal Care Facility, Community Center and Police Station



History-Cont.

- Early 2000: City Makes Effort to Develop its own Sustainable Guidelines Similar to that of the City of New York's "High Performance Building Guideline"
- 2000: US Green Building Council Releases LEED 2.0 (Leadership in Energy and Environmental Design) for Public Use. LEED is a green building assessment protocol that was developed and is maintained through a consensus process by the membership of the USGBC
- 2001: Coordination with the Department of Water and Power for Photovoltaics on City Projects



History-Cont.

- 2001: *“City of Los Angeles Sustainable Building Initiative”*
- 2001: City Becomes a Member of USGBC
- 2001: Board of Public Works Adopts the *“Sustainable Building Initiative”* and Mandates LEED Certified for City Funded New Construction of 7,500 Sq. Ft. or Larger, Effective July 1, 2002 for Public Works Projects
- April 30, 2002: City Council Unanimously Adopts the *“Sustainable Building Initiative”* and LEED Certified for All City Funded New Construction of 7,500 Sq. Ft. or Larger, Effective July 1, 2003



Current Projects

- Currently Public Works has 49 LEED Projects in Some Stages of the Building Process, Representing \$930M in Construction Value, and Approximately 1.9 M square feet.

This is a screenshot of a spreadsheet titled 'City of Los Angeles Bureau of Engineering' showing a list of LEED projects. The columns include project name, location, and LEED certification level. The projects are categorized into 'Green Building Program', 'Public Facility Best Program', and 'Transportation Program'. The spreadsheet is color-coded by category: green for Green Building, orange for Public Facility Best, and yellow for Transportation.

This is a second screenshot of the same LEED project spreadsheet. It includes a legend at the bottom with the following text:

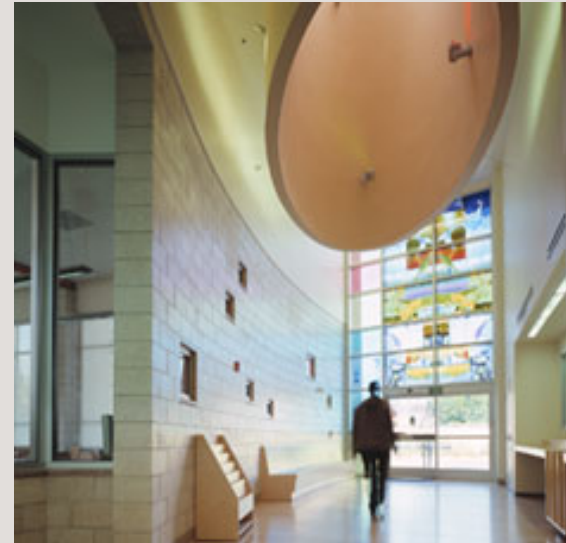
- 1. LEED will no longer finance the installation of electric charging stations.
- 2. Required the use of the system to create high efficiency, resilient buildings.
- 3. LEED is the measure of building green performance. Green Power Certificates can be purchased from other energy companies.
- 4. LEED v 1.0 released 9/1998 • 2.0 released 2002 • 2.1 released 11/2002 • 2.2 released 11/2003

Spread sheet available at www.eng.lacity.org



Current Projects

In 2005, Sun Valley Branch Library was the First City Project to Achieve LEED Gold Certification



Current Projects

Lake View Terrace Branch Library was the First Library in the City and in the Country to Achieve LEED Platinum Certification



Current Projects

- 8 Total Projects have been Certified
- 3 Projects are nearly Completed with Certification
- 30 Projects are Under Construction
- 1 is in the Bid & Award Phase
- 7 Projects are in Design



Commonly Pursued LEED Points

Bureau of Engineering has been Tracking City's LEED Projects since 2001.

Over 80% of the City Projects Pursue the Following LEED Points:
Sustainable Site

- Site Selection
- Alternative Transportation-Public Transportation Access
- Landscape and Exterior Design to Reduce Heat Island- Roof

Water Efficiency

- Water Efficient Landscaping-Reduce by 50%
- Water Use Reduction-20% Reduction

Energy and Atmosphere

- Optimize Energy Performance



Commonly Pursued LEED Points

Materials and Resources

- Construction Waste Management- Divert 75%
- Recycled Content- 5%
- Local/Regional Materials- 20% Manufactured Regionally

Indoor Environmental Quality

- Carbon Dioxide Monitoring
- Construction Indoor Air Quality Management Plan
- Low Emitting Materials-Adhesives and Sealants
- Low Emitting Materials- Paints
- Low Emitting Materials- Carpets
- Low Emitting Materials- Composite Wood
- Thermal Comfort-Comply with ASHRAE-55-1992

Innovation and Design Process

- LEED Accredited Professional



Cost of LEED

- Based on Project size the City has a LEED Premium that Ranges from 1.7% to 9.0%. Averaging 3.47% Increase in First Cost
- 16 of 49 Projects Pursue 32 points (LEED Silver) or more (32.7%)



Image of Valley Bomb Squad Facility- LEED Certified



Synergies of LEED with City and State Regulations

Existing Synergies

- Title 24- Energy Compliance
 - Standard Urban Stormwater Mitigation Plan-SUSMP
 - Construction Waste Management
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- Future Synergies
 - City's Zero Waste Plan
 - Plumbing Code Changes to require high efficiency faucets, shower heads, toilets and urinals
 - Landscape Ordinance- Lower Threshold to Capture More Projects
 - Dual Pipe System using recycled Water for Toilets and Irrigation



Challenges

- Hiring a commissioning agent with the tight budget
- Maintaining LEED® Points Through Construction
- Difficulties on acquiring documents from contractor after end of construction
- Projects budget not accounting for LEED costs



Rendering of South Los Angeles Neighborhood City Hall



City Dept. and Local Agencies Using LEED

- Harbor Department is constructing six LEED building
- Los Angeles Department of Water and Power is designing a LEED building complex
- Los Angeles World Airports is adding LEED criteria to the Tom Bradley Terminal, which is already in construction
- Community Redevelopment Agency (CRA) Requires Any Project over 50,000 square feet or over 50 Units and Receiving CRA Funding to be LEED Silver Certified
- City Council has Requested a Report Considering a LEED Silver Requirement for City Funded Projects

