Greening a Neighborhood: LEED® for Neighborhood Development

Rail~Volution 2008
Sophie Lambert, Director of LEED-ND, US Green Building Council
October 28, 2008
OUR MISSION

To transform the way buildings and communities are designed, built and operated, enabling an environmentally and socially responsible, healthy and prosperous environment that improves the quality of life.
Leadership in Energy and Environmental Design

A leading-edge system for certifying the greenest performing buildings in the world

LEED® for Neighborhood Development is a partnership of:
LEED for Neighborhood Development PILOT

- Pilot opened in July 2007
- 371 Projects Submitted EOIs
- 238 Projects Registered
- Pilots located in 39 states & 6 countries
- Range in size from 0.17 acres to 12,800 acres
- Total square footage in pilot – 60,000 acres
Status of Pilot

2008
- Revisions to rating system
- Public comment periods begin

2009
- Public comment periods end
- Full post-pilot rating system ballot and launch
Eligible Projects

- Residential, commercial, mixed-use
- Whole, fractions of, or multiple neighborhoods (no minimum or maximum size)
- New or re-development
- Appropriate urban, suburban, and rural sites
The Issue

“Land is being consumed for development at a rate almost three times faster than population growth.”

“Two-thirds of the development on the ground in 2050 will be built between now and then.”

Source: Growing Cooler: The Evidence on Urban Development and Climate Change, Urban Land Institute
The Issue
Why Better Planning?
Why Better Planning?
The Benefits: Environment

- With more compact development, people drive 20 to 40 percent less.

- Shifting 60 percent of new growth to compact patterns would save 79 million metric tons of CO₂ annually by 2030.

Source: Growing Cooler: The Evidence on Urban Development and Climate Change, Urban Land Institute
Get a Bicycle
LOAN for just 5.99% APR

Save the environment AND money on gas!

Lafayette Federal Credit Union
Offer ends October 31, 2008.
There are **three categories** of prerequisites and credits in the rating system.

- **Smart Location & Linkage**
- **Neighborhood Pattern & Design**
- **Green Construction & Technology**
Smart Location & Linkage: Where Not?

Anywhere that:

- Endangers sensitive natural areas (i.e., wetlands, critical wildlife habitat)
- Fragments habitat
Smart Location & Linkage: Where?
Smart Location & Linkage: Where?
Smart Location & Linkage: Where?
Smart Location & Linkage: Where?
Location & Linkages: Public Transportation
Neighborhood Pattern & Design

- After determining where, identify how
- Building choices that make life convenient, healthier, and happier
- Walkable communities
Neighborhood Pattern & Design: Walkable Streets
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Walkable Streets
Neighborhood Pattern & Design: Walkable Streets
Green Construction & Technology

Use advanced techniques and systems to reduce environmental impacts based on:

- Site
- Water
- Energy
- Materials
- Buildings
- Infrastructure
Green Buildings Can Reduce...

- ENERGY USE: 24% - 50%
- CO₂ EMISSIONS: 33%*** - 39%**
- WATER USE: 40%**
- SOLID WASTE: 70%**

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Certification Process

1. Optional Pre-Review

2. Certification of Approved Plan

3. Certification of Completed Neighborhood Development
Certification Levels

- Certified  40 to 49 points
- Silver     50 to 59 points
- Gold       60 to 79 points
- Platinum   80 to 106 points

(Up to 6 Innovation & Design points)
# Certified Pilot Projects

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Location</th>
<th>Certification Stage</th>
<th>Certification Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beijing Olympic Village</td>
<td>Beijing, China</td>
<td>Stage 2</td>
<td>Gold</td>
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<tr>
<td>Currie Barracks</td>
<td>Calgary, AB</td>
<td>Stage 2</td>
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<td>Decker Walk EnvirowHOMES</td>
<td>Baltimore, MD</td>
<td>Stage 2</td>
<td>Silver</td>
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<tr>
<td>Depot Walk</td>
<td>Orange, CA</td>
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<td>Certified</td>
</tr>
<tr>
<td>Eliot Tower</td>
<td>Portland, OR</td>
<td>Stage 3</td>
<td>Silver</td>
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<td>Emeryville Marketplace</td>
<td>Emeryville, CA</td>
<td>Stage 1</td>
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<td>Ever Vail</td>
<td>Vail, CO</td>
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<td>Good</td>
<td>West Sacramento, CA</td>
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<tr>
<td>Helensview</td>
<td>Portland, OR</td>
<td>Stage 2</td>
<td>Gold</td>
</tr>
<tr>
<td>Station Park Green</td>
<td>San Mateo, CA</td>
<td>Stage 2</td>
<td>Gold</td>
</tr>
<tr>
<td>Technopole Angus</td>
<td>Montreal, QC</td>
<td>Stage 1</td>
<td>Gold</td>
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<tr>
<td>Union Park</td>
<td>Las Vegas, NV</td>
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<td>Westfield UTC Revitalization</td>
<td>San Diego, CA</td>
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</table>
LEED for Neighborhood Development Pilot Program

Case Studies:
LEED-ND Projects Adjacent to Transit
Case Study #1

Eliot Tower: A Prime Green Location
Portland, Oregon

- 1 acre
- Previously developed
- Stage 3
- Certification level: Silver

<table>
<thead>
<tr>
<th>Credit Category</th>
<th>Points Earned</th>
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<tr>
<td>Smart Location &amp; Linkage</td>
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<tr>
<td>Neighborhood Pattern &amp; Design</td>
<td>25</td>
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<tr>
<td>Green Construction &amp; Technology</td>
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<tr>
<td>Innovation &amp; Design</td>
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<tr>
<td>Total</td>
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Eliot Tower: A Prime Green Location
Eliot Tower: A Prime Green Location

- Converted prime parcel of land from single-story Safeway and parking lot to mixed-use, high-rise tower
- Asbestos clean-up
- Easy access to parkland
- Nearby museums and performing arts centers
- 30,000 jobs, light rail, streetcar and more than 600 bus trips within half-mile walk of Tower
Eliot Tower: A Prime Green Location

- Total square feet: 352,800
- Retail square fee: 30,000
- Condo units: 252
- Residential density: 247 dwelling units/acre
- Non-residential density: .76 FAR
Case Study #2
Station Park Green: A Transit-Friendly Community
San Mateo, California

- 12 acres
- Brownfield
- Stage 1
- Pre-review approval level: Gold

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<td>Smart Location &amp; Linkage</td>
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<tr>
<td><strong>Total</strong></td>
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</table>
Station Park Green: Transit-Friendly

- Residential units: 599
- Square feet of office facilities: 10,000
- Square feet of retail: > 60,000
- Residential density: 104.2 dwelling units per acre
- Non-residential density: 3.08 FAR
Station Park Green: Transit-Friendly
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Station Park Green: Transit-Friendly

- Adjacent to Hayward Park Caltrain station
- All dwelling units and businesses within half-mile walk of public transit
- Free shuttle service to other stations/downtown
- Responds to San Mateo Corridor Plan
- 41% of project square footage pending LEED certification
LEED-ND as a Policy Tool

• Financial Incentives
• Expedited Review Process
• Evaluative screen for zoning codes, regulations, and master/sector plans
LEED addresses the complete lifecycle of buildings:

- Homes
- Neighborhood Development (in pilot)
- Commercial Interiors
- Core & Shell
- New Construction
- Schools, Healthcare, Retail

Existing Buildings Operations & Maintenance

Building Lifecycle
- Design
- Construction
- Operations
LEED 2009 Changes

• **SS Credit 2:** Development Density & Community Connectivity
  – 1 point to 5 points

• **SS Credit 4.1:** Alternative Transportation: Public Transportation Access
  – 1 point to 6 points
Stay connected to LEED for Neighborhood Development...

Visit www.usgbc.org/leed/nd

- Download the complete LEED for Neighborhood Development Pilot Rating System.

- View a complete list of pilot projects.

- Sign up for our corresponding committee listserv to receive announcements & participate in the public comment period.