Joint OR/ WA APA Conference
Portland, Oregon 2011

LEED ND
(and it's application to Urban Design, Code Writing, and other work)

Today's Discussion

- Welcome and Applicability
- LEED ND 101
- Local Project Description
- Workshop [applying/ testing credits for Case Study]
- Report Back
- Wrap up

Today's Speakers

- **Derek** AICP, LEED GA – Senior Planner with Parametrix.

- **Kelley** MA, Environmental Policy– Oregon Advocacy & Outreach Manager, Cascadia Green Building Council . Formerly with Friends of the Columbia Gorge and the Wilderness Society in Washington DC . Acknowledged as one of the "35 innovators under 35" by 1000 Friends of Oregon.

- **Robin** - AICP, LEED AP+ND – Urban Planner with Ecology & Environment. Focus is assisting development projects with LEED certification, land use review, and sustainable design. …also provides project assistance to NEPA analyses, emergency planning projects, and renewable energy projects throughout the Pacific Northwest.

- **Mary** – Licensed Architect and Project Manager with Housing Authority of Clackamas County (HACC) . The founding Executive Director of the Portland Community Land Trust, now known as Proud Ground.

Who cares about LEED specifics?

Feds:

US Army, EPA, GSA

State:

Washington State funded projects over 5,000 sq. ft. to achieve LEED Silver certification.

In Oregon, BETC for commercial developments earning Silver or Gold LEED certification.

AND

the OR Housing and Community Services Fund requires LEED or Earth Advantage

Local: **Portland (as an example)**

Green Bldg Policy (as amended) new facilties Gold, and EBOM Silver

For what assignments could you use LEED ND metrics?

Plan performance: Connectivity, Access to Public Spaces,
Design: Water Efficient Landscaping, Light Pollution Reduction

Today's Workshop:

Smart Location and Linkage,

Neighborhood Pattern and Design,
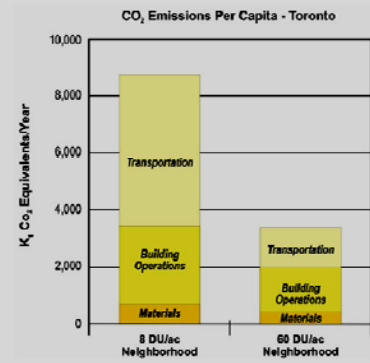
Green Infrastructure and Buildings.

LEED FOR NEIGHBORHOOD DEVELOPMENT

The Problem

Residential CO² Emissions From Development

CO₂ Emissions Per Capita - Toronto

Source: Norman, ASCE 2006

The Way It Is

Columbia Pike in Arlington, VA

The Way It Could Be

Source: Urban Advantage

What LEED-ND Is: A Collaborative Program

CONGRESS FOR THE NEW URBANISM   NRDC   USGBC

LEED FOR NEIGHBORHOOD DEVELOPMENT

What LEED-ND Is:

SMART GROWTH   NEW URBANISM   GREEN BUILDINGS

IMPROVED QUALITY OF LIFE

What LEED-ND Is: Smart Growth

Smart Growth is well-planned development that protects open space and farmland, revitalizes communites, keeps housing affordable and provides more transportation choices.

Slide information from Smart Growth America

What LEED-ND Is: Smart Growth

Smart Growth is...	Smart Growth is NOT...
more transportation choices and less traffic	against cars and roads
vibrant cities, suburbs and towns	anti-suburban
wider variety of housing choices	against growth
well-planned growth that improves the quality of life	about telling people where or how to live

Slide information from Smart Growth America

What LEED-ND Is: New Urbanism

Source: Federal Realty Investment Trust

What LEED-ND Is: New Urbanism

Principles of the New Urbanism

- Compact, walkable neighborhoods
- Mixed-use urban form
- Highly connected street networks
- Sufficient density
- Building design that emphasizes human-scale
- Range of housing to serve diverse populations
- Regional planning

What LEED-ND Is: Green Building & Infrastructure

Dockside Green Photo Credit: Enrico Dagostini & Vince Klassen

Wentworth Commons Photo Credit: Anthony May Photography

Dockside Green Photo Credit: Enrico Dagostini & Vince Klassen

The Benefits: Triple Bottom Line

HEALTHIER communities   **CLEANER** environment   **STRONGER** economy

The Benefits of LEED-ND

The Benefits: Health & Community

The Benefits: The Economy
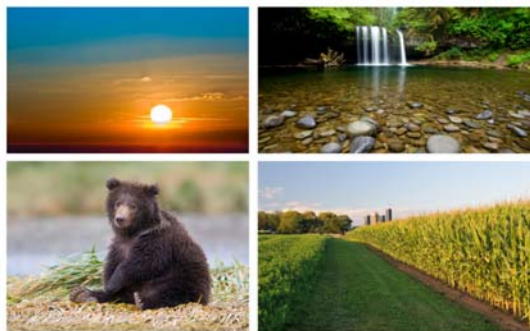

The Benefits: The Economy

"**56%** of respondents **prefer smart growth neighborhoods** over neighborhoods that require more driving between home, work, and recreation"

"**77% look for** neighborhoods with abundant sidewalks and **pedestrian-friendly features**"

Source: Consumer Preference Survey, NAR 2011

The Benefits: The Environment

Credit Categories

LEED® for Neighborhood Development

Total Possible Points**	110*
Smart Location & Linkage	27
Neighborhood Pattern & Design	44
Green Infrastructure & Buildings	29

*Out of a possible 100 points + 10 bonus points
**Certified 40+ points, Silver 50+ points, Gold 60+ points, Platinum 80+ points

Innovation & Design Process	6
Regional Priority Credit	4

Smart Location & Linkage

Build This:

Keep This:

Smart Location & Linkage

Measure Location
- Proximity to existing development
- Proximity to goods and services
- Proximity to existing infrastructure

Enhance Location
- Preserve sensitive lands
- Locate jobs near housing
- Provide bicycle amenities

Neighborhood Pattern & Design

Compact, Complete, Connected
- People connected to place and to each other
- Shared public spaces
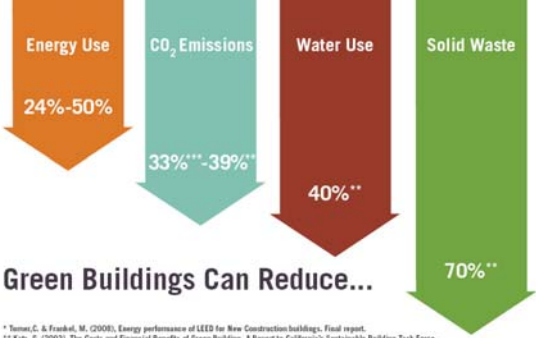- Nearby goods and services

Neighborhood Pattern & Design

Green Neighborhoods Have Great Variety
- Housing in many types and prices
- Farmers' markets and community gardens
- Neighborhood schools
- Civic spaces
- Community participation in design

Green Infrastructure & Buildings

Energy Use 24%-50%

CO_2 Emissions 33%***-39%**

Water Use 40%**

Solid Waste 70%**

Green Buildings Can Reduce...

* Turner, C. & Frankel, M. (2008). Energy performance of LEED for New Construction buildings. Final report.
** Kats, G. (2003). The Costs and Financial Benefits of Green Building. A Report to California's Sustainable Building Task Force.
*** GSA Public Buildings Service (2008). Assessing green building performance. A post occupancy evaluation of 12 GSA buildings.

Green Infrastructure & Buildings

Green Infrastructure as Neighborhood Amenities

Roof Top Terrace
Children's Garden
Tree Orchard
Townhouse Rear Yards
Street Plantings
Green Roofs
Vegetable Garden

Image courtesy of Dattner Architects/Grimshaw/Lee Weintraub Landscape

Innovation & Design Process

Going above and beyond

IDP Credit 1: Innovation and Exemplary Performance
- 1-5 points

IDP Credit 2: LEED Accredited Professional
- 1 point

LEED AP ND | LEED AP BD+C | LEED AP HOMES | LEED AP ID+C | LEED AP O+M

Regional Priority Credit

Meeting Local Needs

RPC Credit 1: Regional Priority • 1-4 points

www.usgbc.org/LEED

"LEED Resources"

"Regional Priority Credit Database"

Considerations

Single or multiple uses

Various location types

Project Profile: Twinbrook Station

Twinbrook Station
Rockville, MD

26 acres
Certified Plan, Stage 2
Gold, 66 points
Greyfield

LEED® for Neighborhood Development Pilot

Total Possible Points**	106*
Smart Location & Linkage	20
Neighborhood Pattern & Design	30
Green Construction & Technology	10

*Out of a possible 100 points + 6 bonus points
**Certified 40+ points, Silver 50+ points, Gold 60+ points, Platinum 80+ points

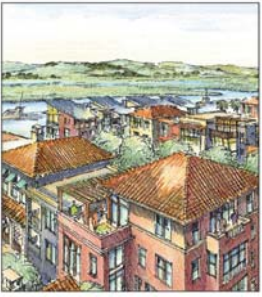| Innovation & Design Process | 6 |

Twinbrook Station: Transit-Focused Living

SPECS
1,595 multi-family residential units

325,000 sf of office space

225,000 sf of street front retail

80% of buildings seeking LEED certification

1,028 daily transit trips

30% reduction in water usage (projected)

Considerations

New or re-development

Whole, fraction, multiple neighborhoods

Representative Types of Projects

- Urban infill
- Suburban retrofit
- Small community
- Brownfield redevelopment
- Transit oriented development
- Development on adjacent land

LEED ND Projects in OR and WA

Certified (Pilot) projects (72 total)

- Eliot Tower, Portland OR, Silver (Pilot project)
- Helensview, Portland OR, Gold (Pilot project)
- Ladd Tower, Portland OR, Gold (Pilot project)
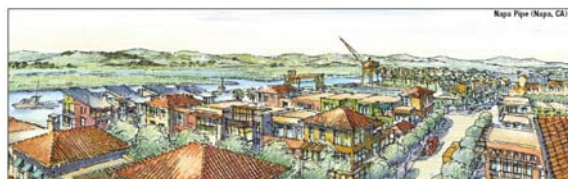- South Lake Union Urban Center, Seattle WA,

Registered projects (86 total)

- Clackamas Heights, Clackamas County, OR
- Hoyt Yards, Portland, OR
- Meadow Ridge Park, Bellingham WA
- Thornton Place ND, Seattle WA
- Washougal Blocks, Washougal WA
- The Waterfront District, Bellingham WA

Urban Infill

Brownfield Redevelopment
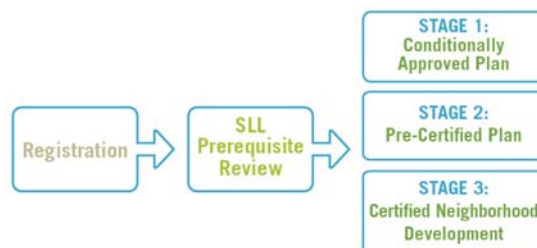

Transit Oriented Development

Suburban retrofit

New development on adjacent land

Small Community

Sweetwater (Hailey, ID)

Certification Process

STAGE 1:
Conditionally
Approved Plan

STAGE 2:
Pre-Certified Plan

STAGE 3:
Certified Neighborhood
Development

Registration → SLL Prerequisite Review →

www.gbci.org/leednd

Who Can Use LEED ND ?

Planners and developers of new construction projects :
  ➢ Examples: Helensview, Clackamas Heights, Hoyt Yards, South Lake   Union Urban Center, Washougal Blocks

Policy makers seeking to evaluate and prioritize projects:
  ➢ Resources: A Local Government Guide to LEED for Neighborhood Development (USGBC), Cool Planning: A Handbook on Local Strategies to Slow Climate Change (DLCD), Loring Park Neighborhood, Minneapolis

Facility Managers of hospitals, government or university campuses
  ➢ Examples: Port of Bellingham Washington (LEED ND Pilot Project)

Citizens seeking to evaluate new projects
  ➢ A Citizen's Guide to LEED for Neighborhood Development (USGBC, NRDC and the Congress for New Urbanism)

Workshop Process

- Separate into three groups, and allocate resources appropriately,
  – Designers / LEED pro's / Others
- Follow the instructions provided by your facilitator,
- Complete the Exercises,
- Report back.

Clackamas Heights

Clackamas Heights Redevelopment

Scorecard (excerpts from exercises)

Smart Location and Linkage	• Pr 1: Smart Location • Cr 1: Preferred Locations 10 • Cr 5: Housing and Jobs Proximity 3
Neighborhood Pattern and Design	• Pr 3: Connected and Open Community • Cr 6: Street Network 2 • Cr 13: Local Food Production 1
Green Infrastructure and Buildings	• Pr 1: Certified Green Building • Cr 7: Minimized Site Disturbance in Design and Construction 1 • Cr 8: Stormwater Management 4 • Cr 10: Solar Orientation 1