

Green Communities: A proven, cost-effective approach to creating sustainable homes for low-income families



Leading with Ideas

DEMONSTRATION THROUGH ACTION

Transforming with Capital

SUSTAINING THROUGH POLICIES AND PARTNERSHIP

WHAT IS GREEN COMMUNITIES?

\$555 mm to create 8,500 environmentally sustainable homes



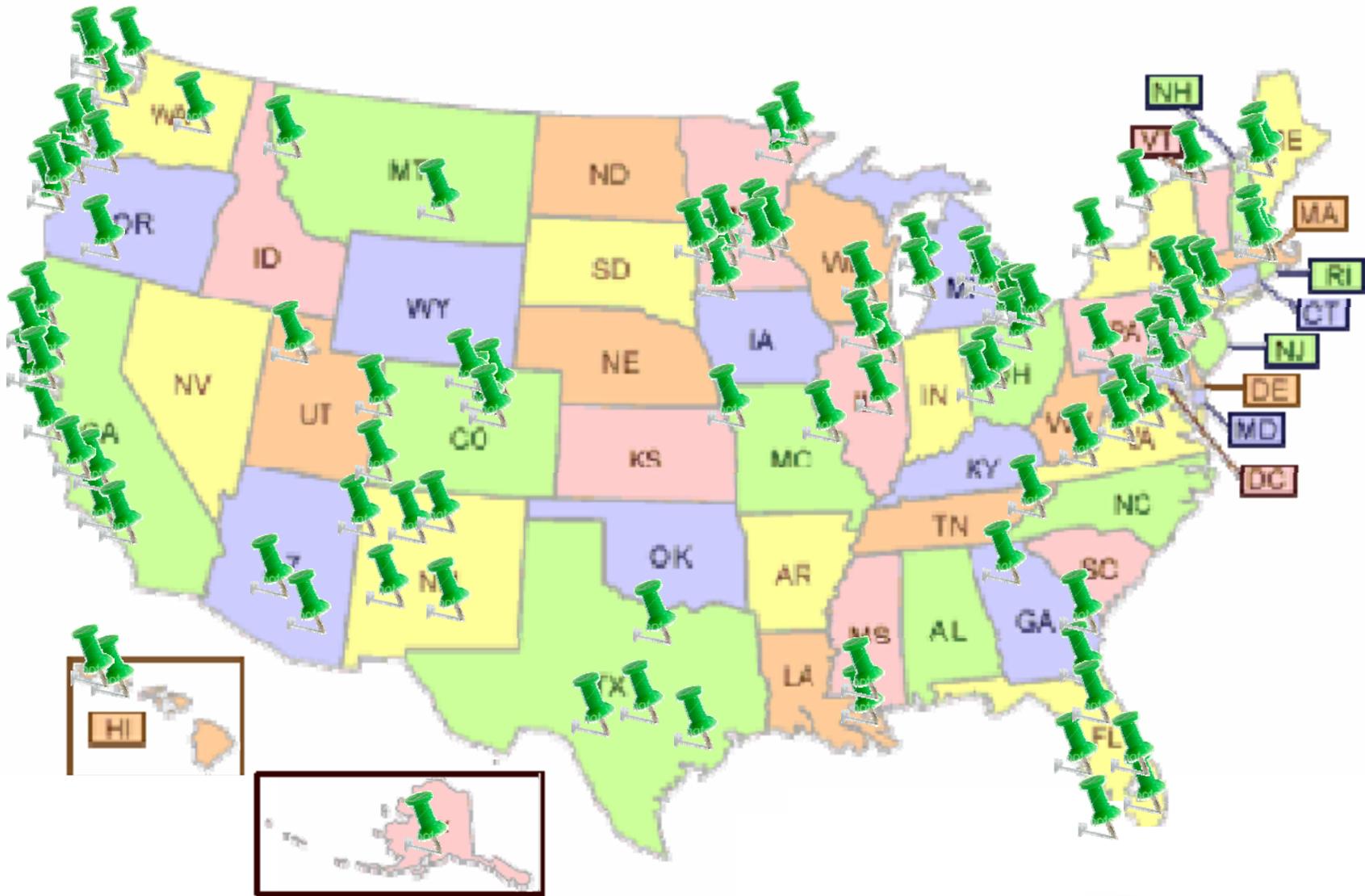
Transform how we locate, design, and build affordable housing



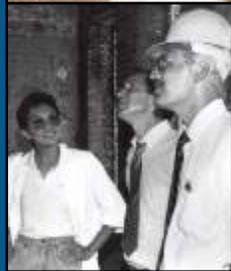
Build bridge between environmentalists and community developers



Results at Work



Green Communities Results to Date



- Established the Green Communities Criteria.
- \$655 million invested.
- 14,500 sustainable homes underway in 350 developments in 30 states.
- 4,000 professionals trained through in-person and on-line events.
- 20 state and local housing policies made more sustainable.

Green Communities Framework



- Urban, Suburban, Rural
- New Construction
- Rehabilitation
- Moderate Rehabilitation
- Adaptive Re-use
- Single-family Detached
- Single-family Attached
- Multi-family high-,mid-,and low-rise



Model Green Rehab Specifications

Available at www.greencommunitiesonline.org

Green Housing Rehabilitation Specs

General Requirements

Spec	Spec Title	Spec Description
7	GREEN COMMUNITIES INITIATIVE—GENERAL REQUIREMENTS	<p>This project is designed to meet the Green Communities Initiative Criteria created by Enterprise Community Partners. The following requirements and other requirements described in specifications with the suffix “GCI” must be strictly adhered to:</p> <ul style="list-style-type: none"> * Recycle all cardboard generated by construction and all cardboard trash in the house to the local recycling plant. * All paints and primers must meet the Green Seal G-11 Environmental Standard http://www.greenseal.org/certification/standards/paints.cfm * Adhesives must comply with Rule 1168 of the South Coast Air Quality Management District. - http://www.aqmd.gov/rules/reg/reg11/r1168.pdf * All caulks and sealants, including floor finishes, must comply with regulation 8, rule 51, of the Bay Area Air Quality Management District http://www.baaqmd.gov/dst/regulations/rg0851.pdf and may not exceed 250 grams of VOC per liter of coating as thinned to the manufacturer’s maximum recommendation, excluding the volume of any water, exempt compounds, or colorant added to the tint bases. - * All particleboard components shall meet ANSI A208.1 for formaldehyde emission limits or all exposed particleboard edges shall be sealed with a clear low VOC sealant or have a factory applied sealant prior to installation. All MDF edges shall meet ANSI A208.2 for formaldehyde emission limits.

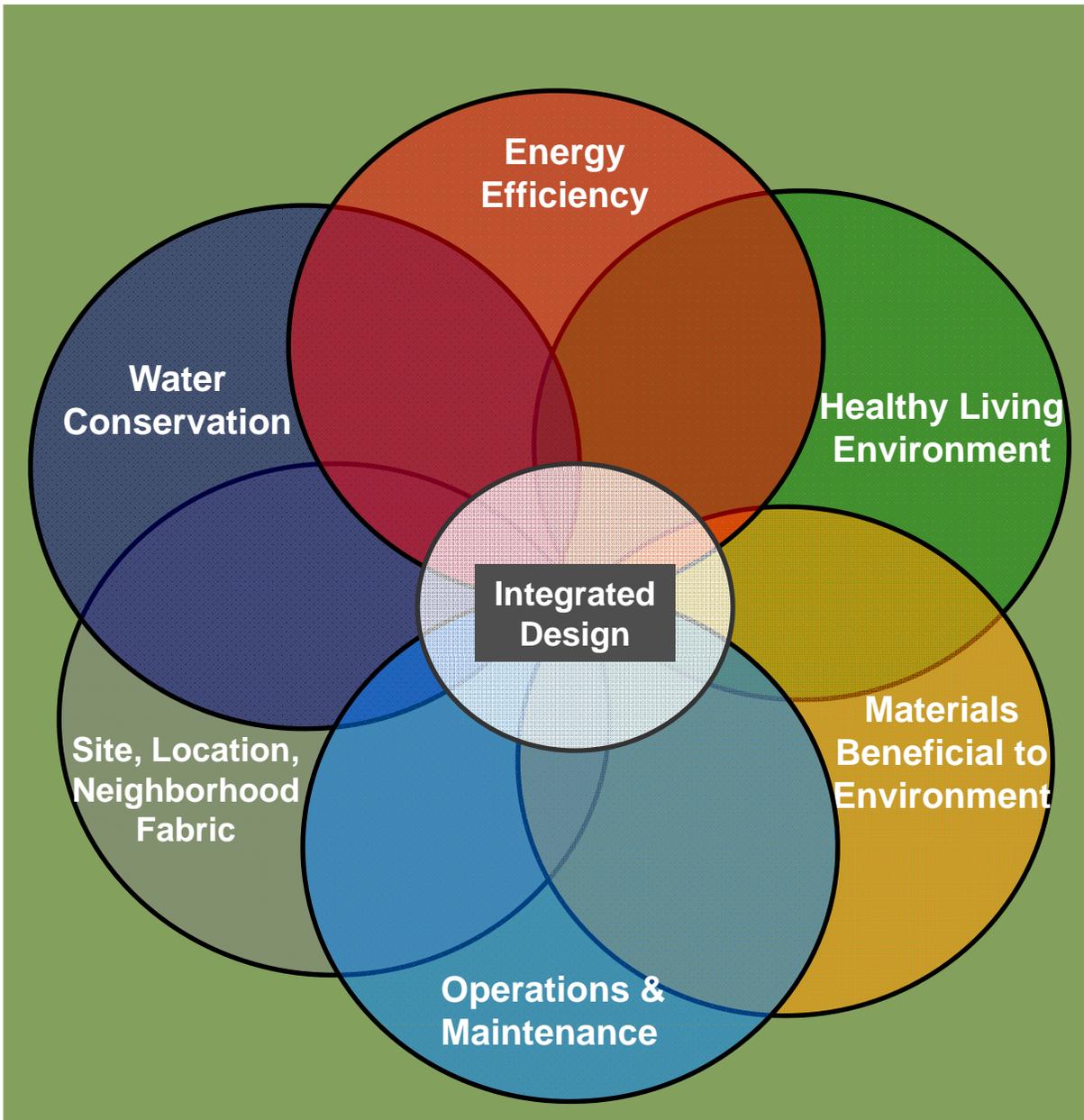
Model Green
Rehab
Specifications

Available at www.greencommunitiesonline.org

Greening NSP – Local Partnerships



- Los Angeles
- New York City
- Rochester
- Dallas
- Cleveland
- Columbus
- St. Paul
- New Orleans



Green Communities Criteria

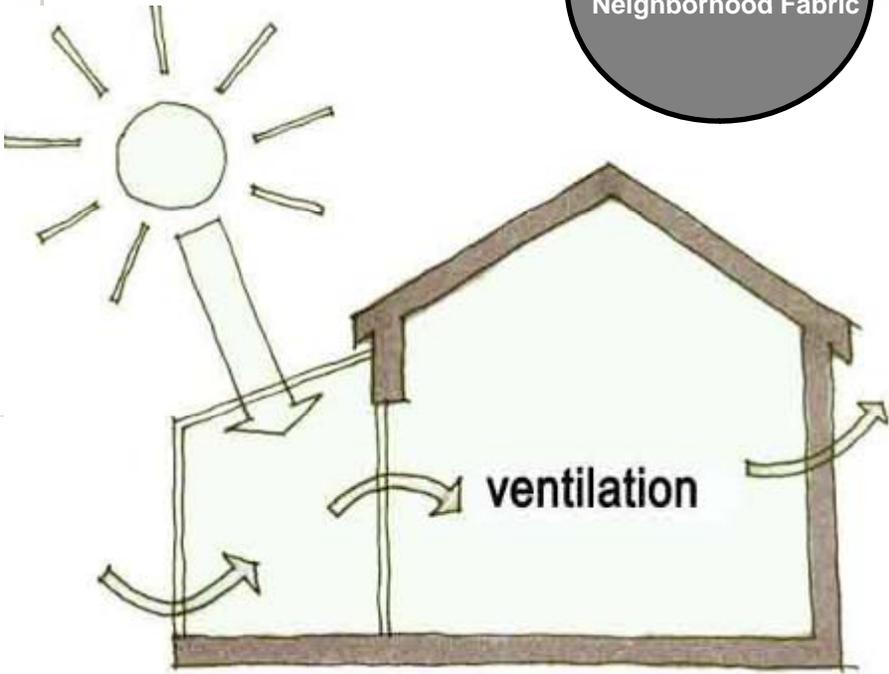




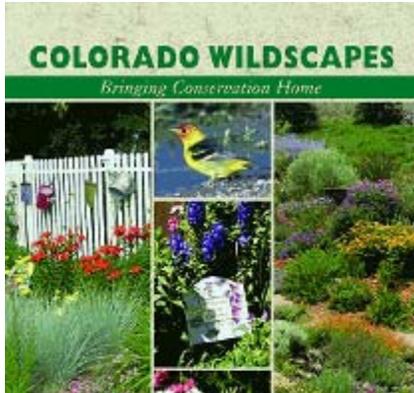
Integrated Design Process

Integration of green measures
Overview of green specifications,
materials and methods

Site, Location & Neighborhood Fabric



Site Planning & Layout



Faucets < 2.0 GPM



Front load washers save 60%+

Water Efficient
Fixtures:
Faucets
Showers
Toilets

Efficient Irrigation



Water Conservation



Showerheads < 2.0 GPM



Toilet with < 1.3 Gallons per flush that meet performance specification see;

www.cwwa.ca/freepub_e.asp

Minimum Energy Performance

Energy Efficiency

- ▶ **New Construction (NC) – exceed Title 24 by 15 %**
- ▶ **NC Low Rise and Single Family – meet Energy Star**
- ▶ **Renovation - 15% improvement from existing**
 - ▶ Requires energy audit and modeling.

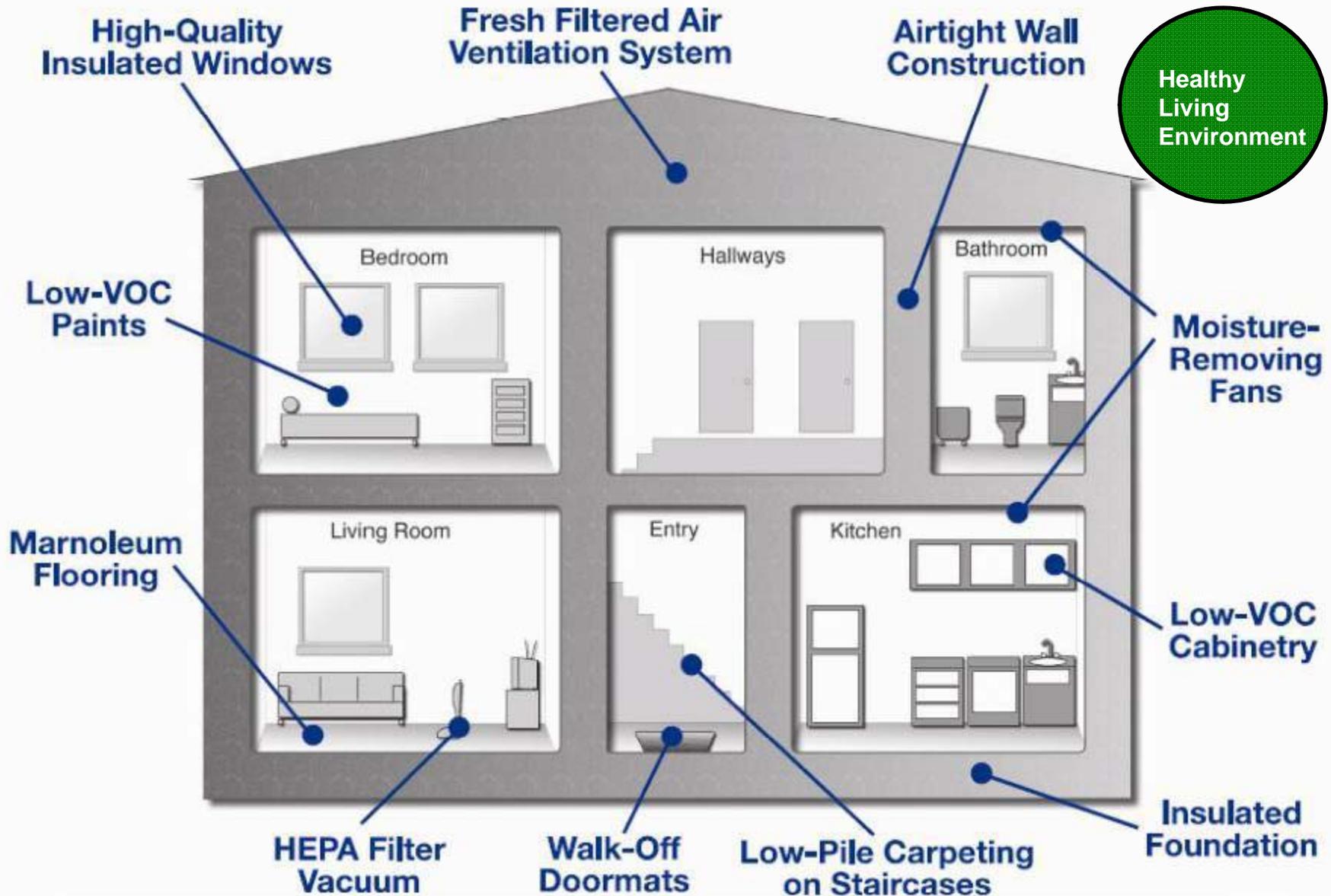




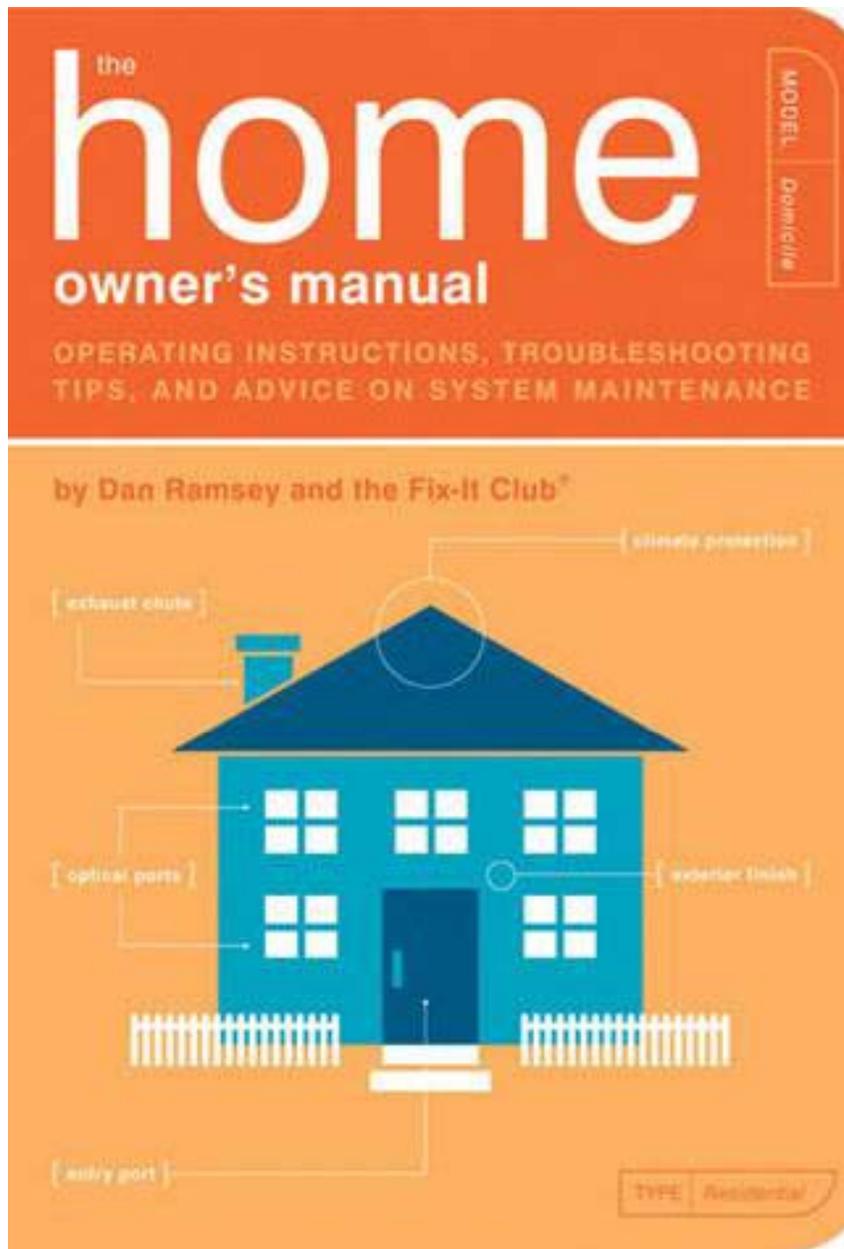
Materials Beneficial to the Environment

- Recycled-content material
- Heat island mitigation
- Maximizing Impermeable surfaces
- Reducing construction waste





**Slides Courtesy of Tom Phillips, Seattle Housing Authority
Highpoint Hope VI Development – Example from Breath Easy Homes**



Operations & Maintenance

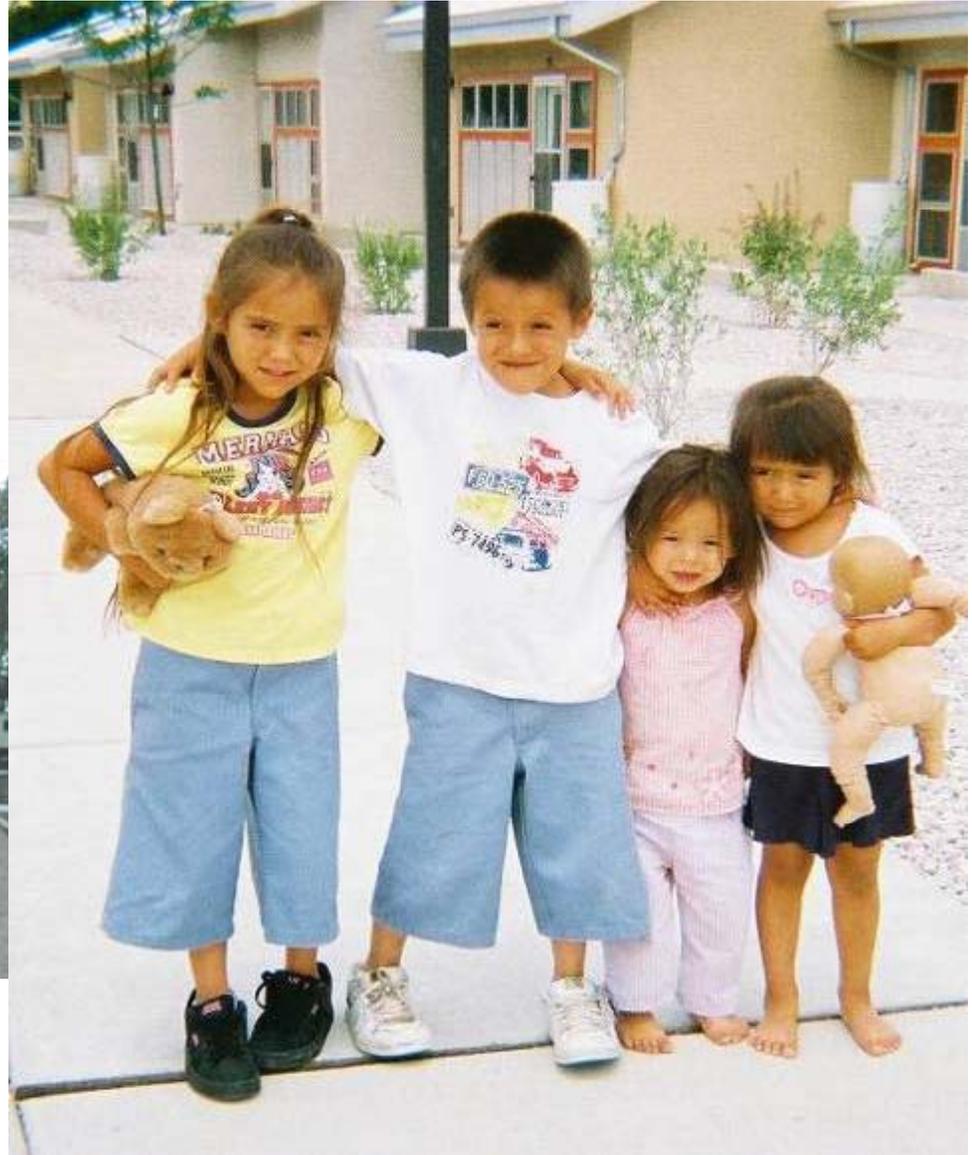
Create Manual; Conduct Orientation

- O&M info
- Warranty procedures
- Thermostat settings
- Community amenities
- What to expect

What are we learning?



Viking Terrace



Symptom-free days

(in a 2 week period)

Old Home:
7.6 days

New Home:
12.4 days

Urgent Clinical Care Visits

(total number of unplanned visits for group in one year period)

Old Home:
61.8

New Home:
20.6

Caretaker Quality of Life

(on a scale of 1 to 10)

Old Home:
5.0

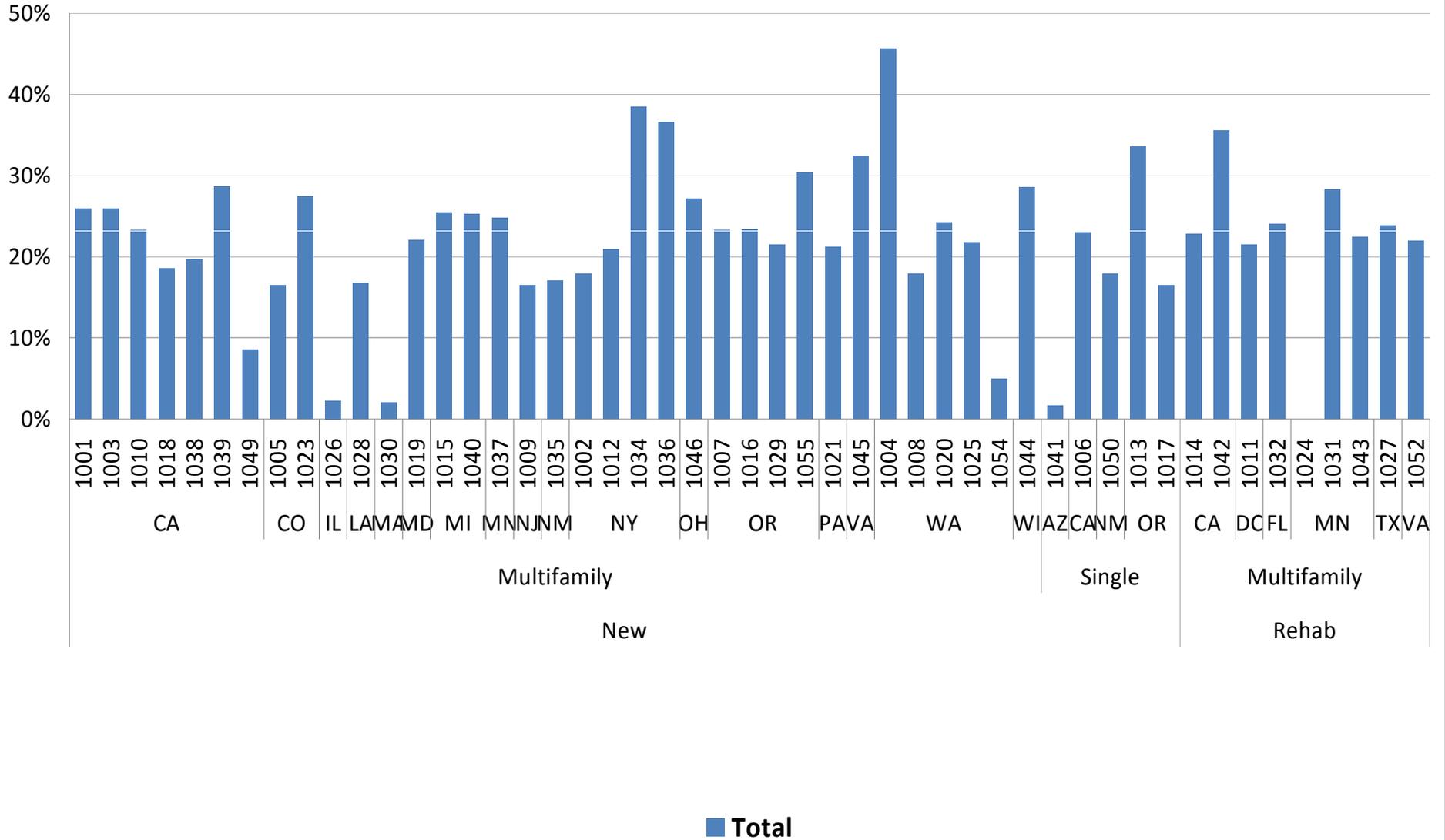
New Home:
5.8

**Slides Courtesy of Tom Phillips, Seattle Housing Authority
Results - Breath Easy Homes Study**

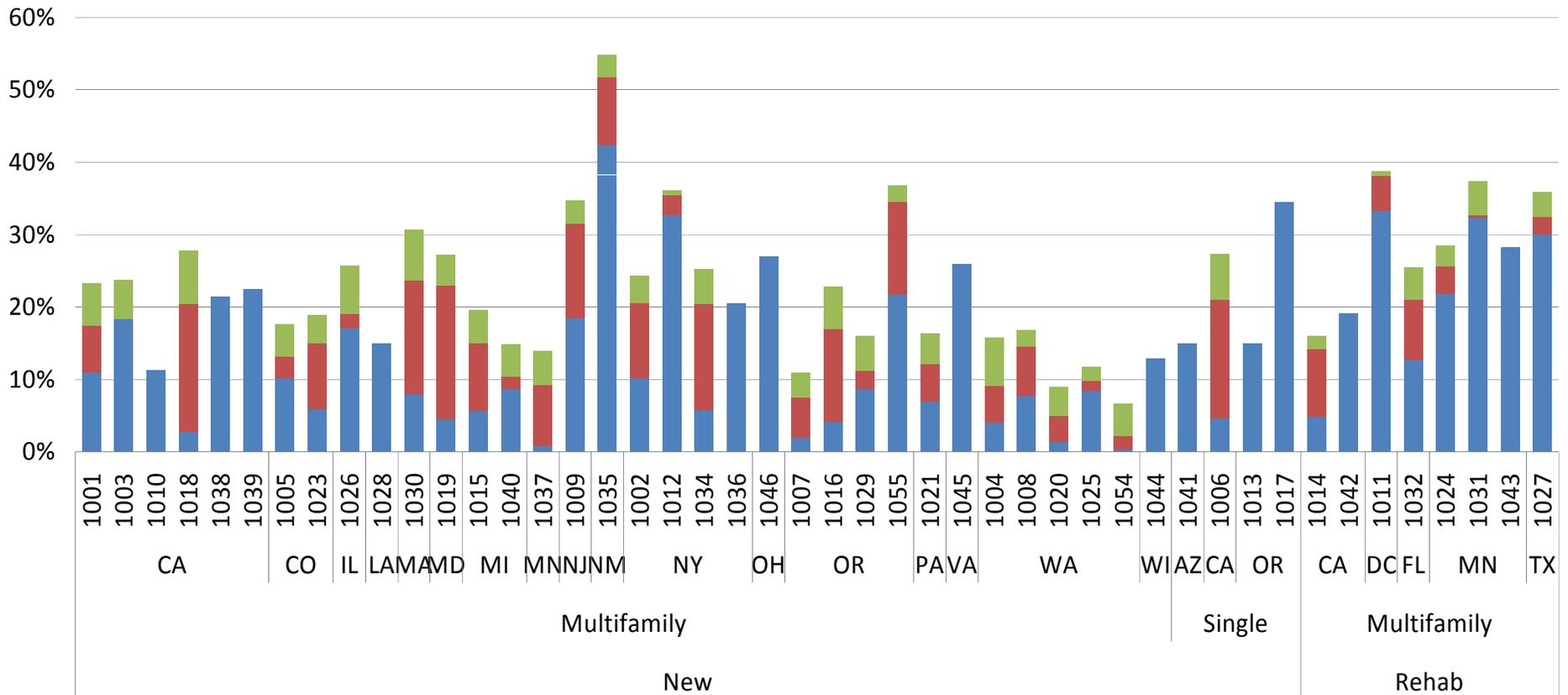
On Average to meet the Criteria it costs....

- **\$5 per square foot**
- **2% premium**
- **2 – 3 year payback**

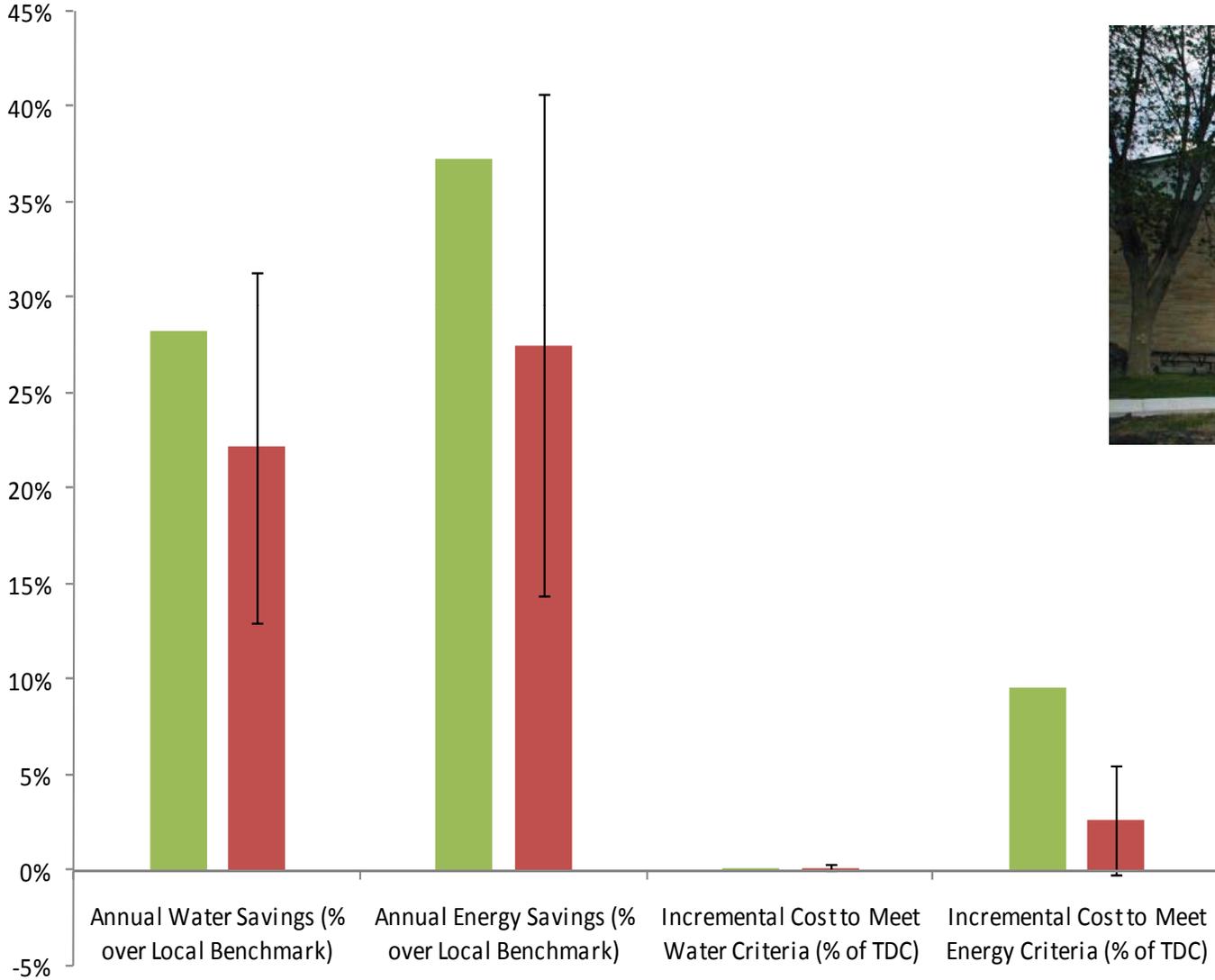
Water Savings Over Benchmark for Meeting Green Communities Criteria 4-1 (Percentage of Baseline Usage)



Annual Energy Savings for Meeting Mandatory Green Communities Energy Criteria (Percentage over Baseline)



Cost & Savings Scorecard (Percentages) for Mandatory Green Communities Criteria for Rehab Multifamily Developments



■ Viking Terrace Apartments
■ Population Average - Rehab Multifamily

A green roadmap for acquisition rehab



Green Affordable Housing Resources



- Website: www.greencommunitiesonline.org
- Hotline: 410.715.7433
- Training: Place-based and LOEs
- Technical Assistance: National Registry of Green TA providers