

Imagine a world where housing for low and moderate income people was not only abundant, but also healthy, safe, durable, comfortable, efficient, resilient, beautifully designed, and environmentally responsible.

And imagine that these exemplary homes are not just demonstrations of excellence, but the standard manner of designing, building, and operating high quality affordable housing.

This is our vision. This can be our reality.



CRITERIA OVERVIEW



DOWNLOAD THE 2015 CRITERIA HERE

Enterprise Green Communities Certification is a two-step process housed within the Green Communities Certification portal.

Step I Submit PreBuild Application

Step 2 Submit PostBuild Application

All applications will be reviewed in no more than 30 days by Enterprise.

www.enterprisecommunity.com/ solutions-and-innovation/ enterprise-green-communities/ certification-2015 Introduced in 2004, the Enterprise Green Communities Criteria emerged as the first national standard for affordable housing developers to extend the economic, health and environmental benefits of green building without compromising affordability. The 2015 Critieria is the fourth update to this green building rating system, addressing five themes: **integrative design**, **health**, **resilience**, **water** and **energy efficiency** and **connections** to transit and opportunity.

The 2015 Criteria will break new ground in the affordable housing and green building industy in three key ways:

- Seekers of EGC certification must assess, and address, community health characteristics and relevant resilience measures during the integrative design process.
- Projects pursuing Certification must explore best practices of TOD, offering means to connect to community amenities in more meaningful ways that ever before.
- Energy and water data will not simply be collected by Enterprise, but will also be managed by each project owner in a manner that influences project operations.

For a developer for whom sustainability is brand new, our Criteria provides a clear roadmap for achieving holistic project performance. For a developer that aspires for the highest performance possible, our optional Criteria provide a launching pad for these groups to explore the cutting edge. And for policy makers, the Criteria serves as a quality assurance tool designed specifically to ensure holistic project performance for affordable housing developments.



2015 CRITERIA HIGHLIGHTS

1. Integrative Design

1.1 Designing for Project Performance1.2 Resident Health and Well-Being1.3 Resilient Communities

Whether it's resilience, water and energy conservation, or health outcomes, integrative design is the practice that ties everything together. We know that 70% of design decisions are made during the first 10% of a project. Buildings are complex systems, and involving stakeholders and professionals early in the process in an interdisciplinary fashion allows developers to design with intention towards the outcomes we want to see in our communities.

The 2015 Criteria contains several new integrative design measures. Two mandatory criteria offer project teams a straightforward pathway to address health and resilience in a manner that is relevant to their project type and resident population. Two additional optional criteria allow groups to above and beyond these mandatory measures. The third optional criterion provides a data collection and monitoring methodology to track project performance over time. We will be building out best practices around outcomes-based design, linking early planning to future impacts of a project.

"If Integrative design makes you think of blue sky brainstorming and unmet expectations, this is a new day and it's time for a new mental model. The integrative process is about committing the project team to clearly understood outcome goals. Design strategies, construction delivery, and turnover to occupancy are all integrated and accountable to those goals – ensuring that the building you get is the building that will deliver on your financial, social and environmental intentions." -Alistair Jackson, 2015 Criteria Technical Working Team

"With its emphasis on health, preparedness and cost-effective performance, the 2015 Green Communities' newly polished Integrated Design criteria is leading the way on strategies for resilient housing. Deeply integrating these priorities early in the planning of a project will be a game changer for developers to protect their investment through adaptation and mitigation strategies for climate change." -Jamie Blosser, 2015 Criteria Technical Working Team

HEALTH



2015 CRITERIA HIGHLIGHTS

1. Integrative Design

1.2 Resident Health and Well-Being

7. Healthy Living Environments

7.1 Ventiliation

7.12 Active Design: Physical Activity 7.13 Active Design: Staircases

7.14 Indoor/Outdoor Activity Spaces

Enterprise Green Communities has always had health as an underlying principle, and has been recognized as a leader among comparable standards in promoting healthy living environments. This issue is particularly timely with the growing body of research showing that design can impact today's biggest health epidemics: obesity and its related chronic diseases.

The new 2015 Criteria includes best practices in active design, health impact assessments and new standards for indoor air quality. There is an approachable mandatory requirement to develop a baseline understand of chronic health conditions in the community and associated stretch-goal optional criterion based on conducting a health impact assessment. The 2015 Criteria also addresses active design for the first time, addressing strategies to increase frequency and duration of physical activity inside and outside certified Enterprise Green Communities projects.

"Building or renovating affordable housing is an opportunity to make a real difference in the health of the occupants who live in our developments. Consider asthma which affects roughly 1 in 10 Americans; 20-30% of asthma attacks are linked to home conditions that can be avoided by following these new criteria. Or consider obesity and the diseases linked to being overweight, we can build homes and apartments that encourage walking and moving and make health food more accessible. Or cancer, building smoke free housing reduces risks for cancer as well as asthma, heart issues, and sudden infant death syndrome, and at the same time saving owners in maintenance funds." -Ellen Tohn, 2015 Criteria Technical Working Team

RESILIENCY



2015 CRITERIA HIGHLIGHTS

1. Integrative Design

1.3 Resilient Communities

3. Site Improvements

3.6 Surface Stormwater Management

4. Water Conservation

4.6 Access to Potable Water During Emergencies

5. Energy Efficiency

- 5.2 Nearing Net Zero
- 5.8 Resilient Energy Systems

8. Operations and Maintenance

8.2 Emergency Management Manual

In the wake of Hurricane Katrina and Superstorm Sandy, Enterprise has been working to ensure that low-income communities are resilient to changing conditions in the future, including climate or weather related events such as persistent drought, severe storms, and/or service disruptions from utilities or other service providers. Resilient buildings and communities are those that are less disturbed by these disasters and that also respond more effectively.

The 2015 Criteria contains five new criteria specific to resilience, with two framing our approach through a practical onramp to these issues within our Integrative Design category. Several other criteria, spanning every category of the 2015 Criteria, also contribute to a project's resilience (ex: near net zero energy, stormwater management), and in those areas we specifically called out those mechanisms and added appropriate resources and references.

"We saw with Superstorm Sandy just how vulnerable affordable housing in New York City is to flooding; the new focus on resiliency in the Criteria seeks to reduce that vulnerability. Through the EGC Criteria we hope to see the energy performance and "passive survivablity" of affordable housing improve over the years both to keep residents safer and save them money." -Alex Wilson, 2015 Criteria Technical Working Team



2015 CRITERIA HIGHLIGHTS

4. Water Conservation

4.2 Advanced Water Conservation4.3: Leaks & Water Metering4.4: Efficient Plumbing Layout and Design

5. Energy Efficiency

5.1 Building Performance Standards5.2 Nearing Net Zero5.5 Lighting5.8 Resiliency Energy Systems

Water conservation translates into direct utility savings for residents and building owners and conserves a precious national resource. Improvements in building energy performance result in utility cost savings from more efficient heating, cooling, hot water, lights and appliances, which improves residents' comfort and lowers operating costs. Better building performance and lower utilities are key components of a truly affordable home.

The 2015 Criteria has doubled its emphasis on water and energy efficiency, adding three new water conservation criteria and increasing the baseline standards for energy efficiency. The water consumption performance standards have increased in stringency but also have relaxed in terms of the method of how these water conservation goals may be achieved. For projects pursuing Certification, energy and water data will not simply be collected by Enterprise, but will also be managed by each project owner in a manner that influences project operations.

Green Communities certified homes are 15% more efficient than conventionally-built homes, reducing energy use by almost 2,000 kilowatt hours per home per year and greenhouse gas emissions by 1.4 metric tons per home per year.



2015 CRITERIA HIGHLIGHTS

- 2. Location + Neighborhood Fabric
- 2.2 Connections to Existing Development2.8 Access to Public Transportation

7. Healthy Living Environments 7.11 Beyond ADA: Universal Design

Locating homes in existing communities with access to infrastructure and shared transit reduces financial burdens for residents, enabling families to save thousands of dollars that they would otherwise spend on transportation. Ensuring that pedestrian and cycling infrastructure is included encourages safe, active transportation, which can improve health by significantly increasing daily physical activity. Furthermore, buildings should be accessible to all ranges of abilities to reduce displacement, foster stronger communities, and prevent so many of the isolation issues that stem from aging/ mobility concerns.

Projects pursuing Certification under the 2015 Criteria must explore best practices of TOD, offering means to connect to community amenities in more meaningful ways that ever before. New construction projects will be required to have access to transit, connecting residents to opportunities for greater mobility and enhancing their ability to work and thrive. Through our 2015 Criteria, all projects will be encouraged to otherwise enhance resident mobility, such as through carshare access, bike racks and bikeshare access, and other opportunities (e.g., transit passes, etc.). Lastly, we updated our Universal Design measures, now found in Category 7: Healthy Living Environments.

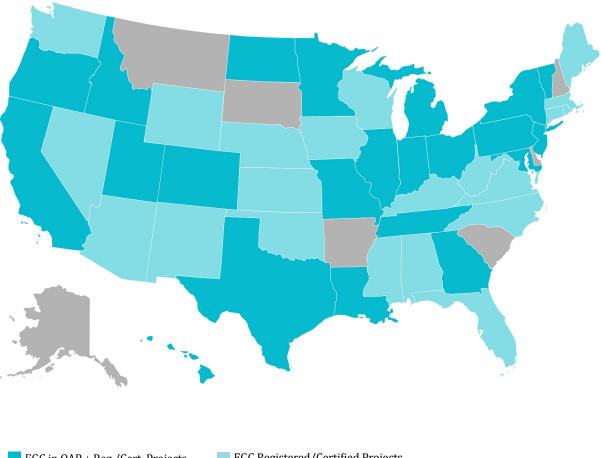
"The 5 most common reasons for functional mobility issues in the US are arthritis, back problems, diabetes, heart disease and respiratory disease – all conditions that are not necessarily apparent to the naked eye. And this impacts 54.4m Americans. We should start from the assumption that people have mobility issues or will one day have them, and build accordingly." -Josh Safdie, Kessler McGuinness & Associates, LLC

From 2004-2017, Enterprise Green Communities has:

- Deployed more than \$3 billion dollars in grants, ٠ loans, and equity to green projects
- We have supported the creation or preservation ٠ of 47,998 green homes and units across the U.S.
- We have integrated the Criteria into the QAP of 22 ٠ states and the funding streams of dozens of cities
- Seen affordable housing projects in 43 states and ٠ the District of Columbia pursue Certification.

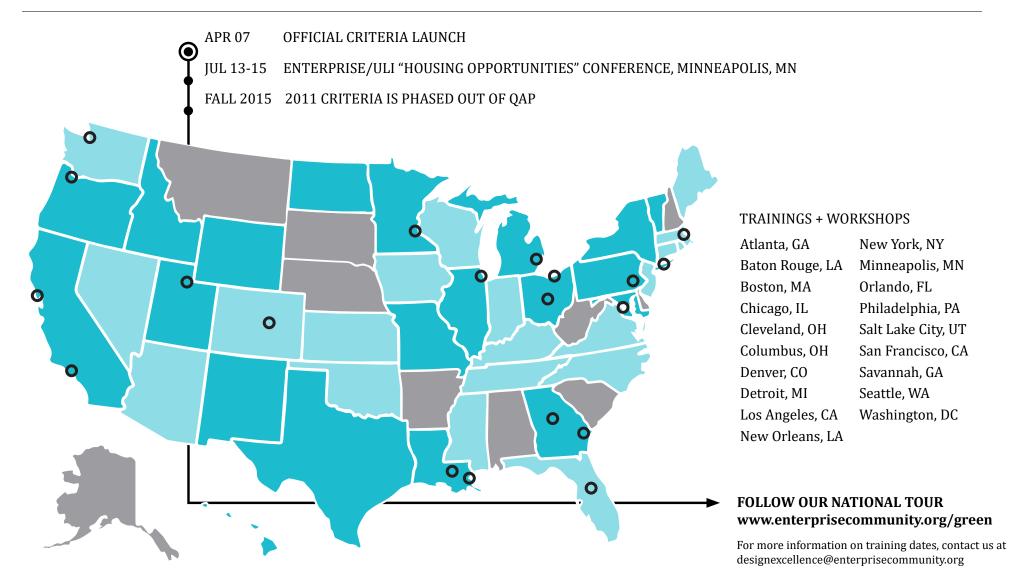
Enterprise's 2012 report, "Incremental Cost, Measurable Savings", showed that the median cost of implementing the Green Communities Criteria represents less than a two percent increase to **the total development cost** for a project – and that the total cost savings begins to exceed this upfront premium within 6 years.

To integrate only the energy and water saving efficiency criteria, the median cost was \$1,139 per unit. Projected lifetime utility cost savings for implementing just the water and energy criterion is \$3,140 per unit, based on a 20-year life cycle.



EGC in QAP + Reg./Cert. Projects

EGC Registered/Certified Projects



• Cities on the 2015 EGC Tour

To propel the success of the 2015 launch of the updated Criteria, Enterprise is activating an interdisciplinary Design Excellence Team. This team is leading national efforts to advocate for excellence in design and disseminate the best practices embedded in the Criteria. We have selected a group of leading designer and developers to join the Design Excellence's Advisory Team, providing strategic guidance as we launch this new criteria.

DESIGN EXCELLENCE ADVISORY TEAM

Jamie Blosser	Atkin Olshin Schade Architects
Lauren Baumann	New Ecology
Gina Ciganki	Aeon
Alistair Jackson	O'Brien & Company
Rachel Lindberg	Pew Charitable Trusts
Sunshine Mathon	Foundation Communities
Jim Newman	Linnean Solutions
Brian Phillips	ISA
Clare Rosenberger	NeighborWorks
Josh Safdie	Kessler McGuinness & Associates
Megan Sandel	BU School of Medicine
Rupal Sanghvi	HealthxDesign
Cady Seabaugh	McCormack Baron Salazar
Ellen Tohn	Tohn Environmental
Matt Trowbridge	University of Virginia
Rebecca Warntz	Enterprise Homes
Walker Wells	Global Green
Alex Wilson	Resilient Design Institute
Peter Yost	Building Green, Inc.

Enterprise will be building out a suite of tools to supplement the Criteria, several of which are already developed and available on the website.

COMPLETED* 2015 Criteria FAQ 2011 vs. 2015 Comparison Template for Criteria 1.2, 4.2

* located here: www.enterprisecommunity.com/solutions-and-innovation/enterprise-green-communities/criteria

MANUALS Emergency Management Plan Resident Engagement Manual & Plan Building Operations Manual & Plan O&M and Resident Engagement orientations Specifications (multifamily, single family, universal design) TOOLKITS Project Management Guide Criteria Ambassador Toolkit Criteria Originators Toolkit Resiliency Toolkit Aging in Place Principles

SUBJECT BRIEFS** Resiliency Aging in Place Transit-Oriented Development Integrative Design Health Equity Outcomes Based Design Performance Monitoring / Transparency

OTHER Green Rating Systems Comparison

Evaluation Studies

**Subject Briefs, similar to 'white papers', will be written and presented by invited experts, demonstrating thought leadership around various topic areas