



# FIND A BETTER PLACE TO CALL HOME

A SMARTER INVESTMENT. A HEALTHIER HOME. A HAPPIER YOU.

BUY

RENT

REMODEL

## 2018 NGBS

April 2017

# One Standard, All Residential

- Housing for
  - Renters / Buyers
  - Seniors
  - Students
  - Travelers (extended-stay hotels)
- Buildings that provide for living, sleeping, eating, sanitation
- Housing that is
  - Affordable / Subsidized
  - Urban walkable
  - Suburban or rural





# NGBS Green Certification

## Activity by Year

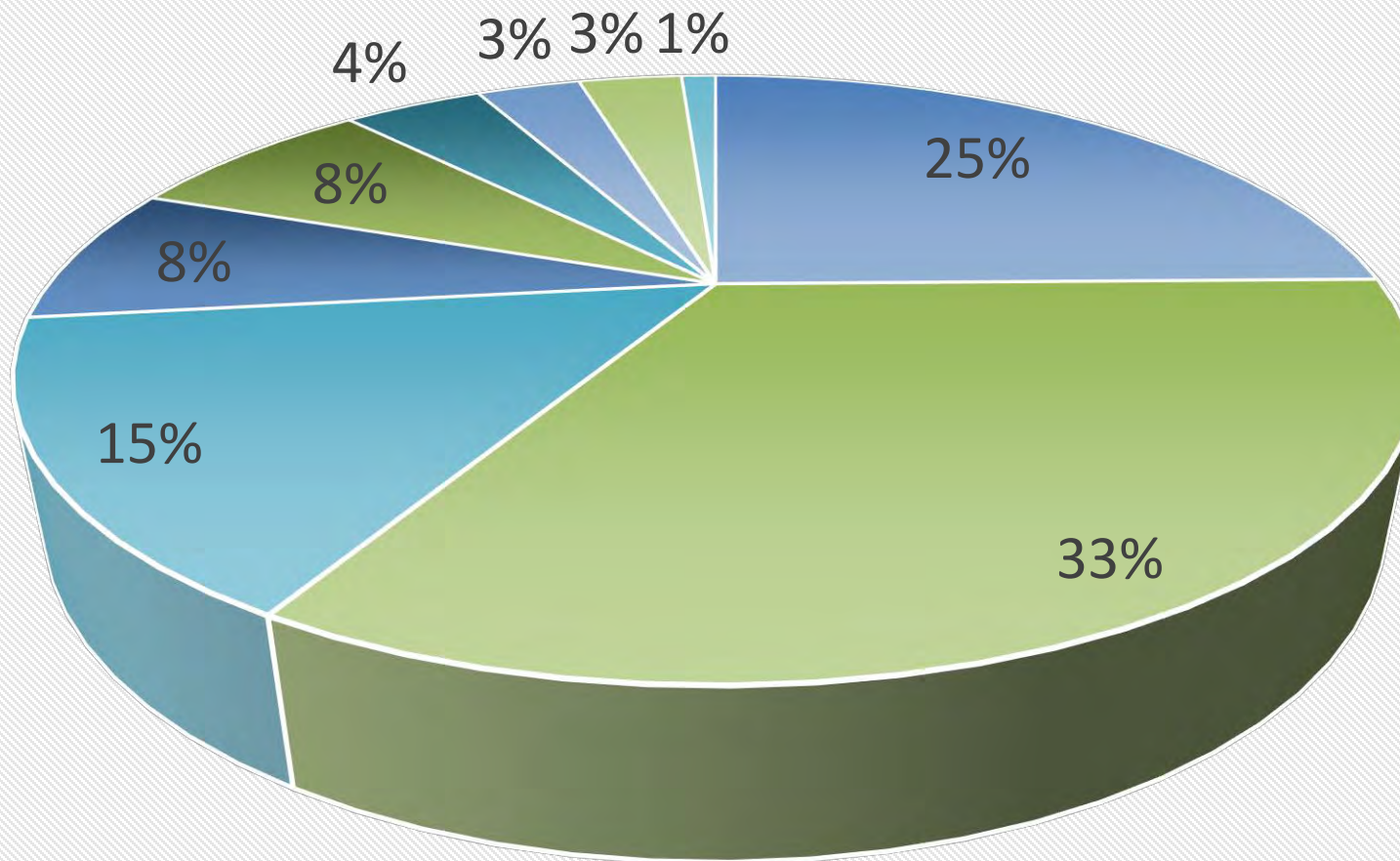


NGBS Project Type	Certified	In Process
<b>Single-Family Homes (new &amp; remodeled) *</b>	12,064	1,789
<b>Multifamily Buildings (new &amp; remodeled)</b>	2,569	1,477
Units within NGBS Multifamily Buildings *	89,512	75,172
<b>Land Developments</b>	25	10
Lots within NGBS Land Developments	1,652	24,802

# Green Certification Marketshare



**Home Innovation**  
NGBS GREEN CERTIFIED

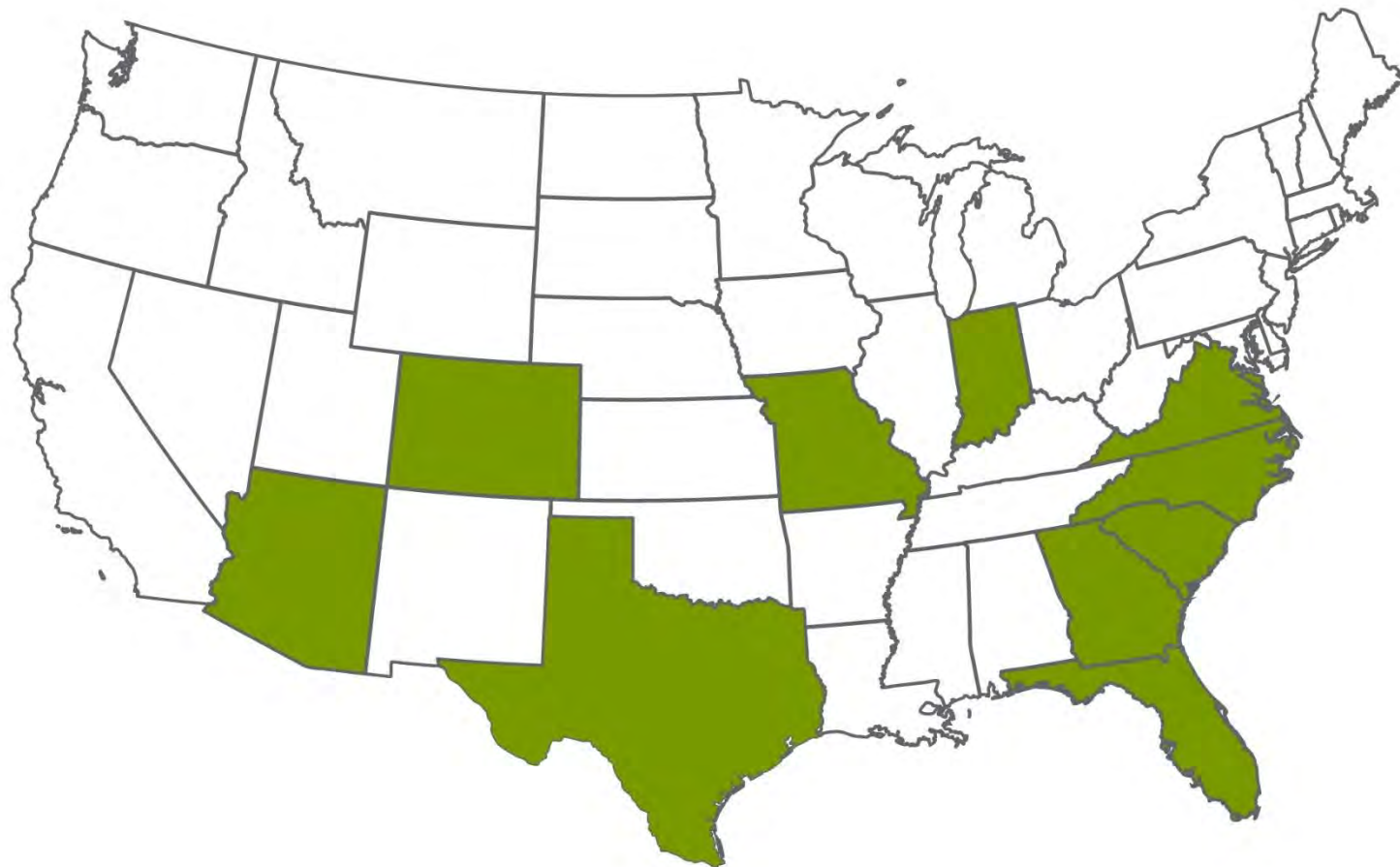


- LEED
- NGBS Green
- Green Communities
- Green Built Gulf Coast
- EarthCraft
- Austin Energy
- Green Built WA
- Green Built TX
- Green Globes

# TOP 10 STATES OVERALL 2016 NGBS GREEN CERTIFICATION



**Home Innovation**  
NGBS GREEN CERTIFIED



## OVERALL

1. TEXAS
2. FLORIDA
3. NORTH CAROLINA
4. COLORADO
5. VIRGINIA
6. GEORGIA
7. INDIANA
8. ARIZONA
9. MISSOURI
10. SOUTH CAROLINA

# Top 10 MF & SF States for 2016



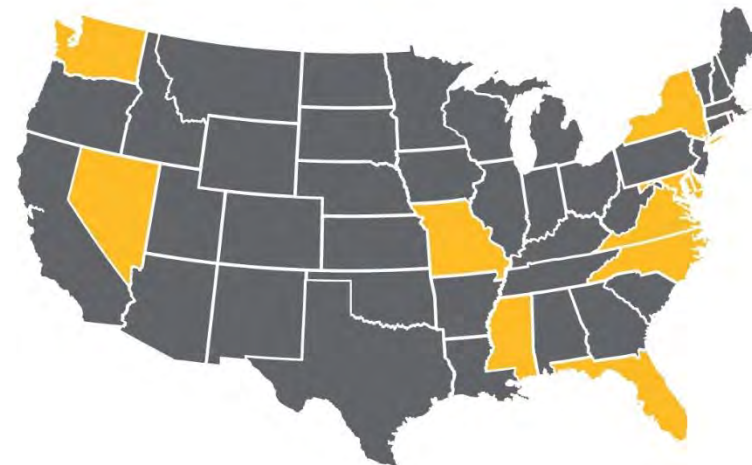
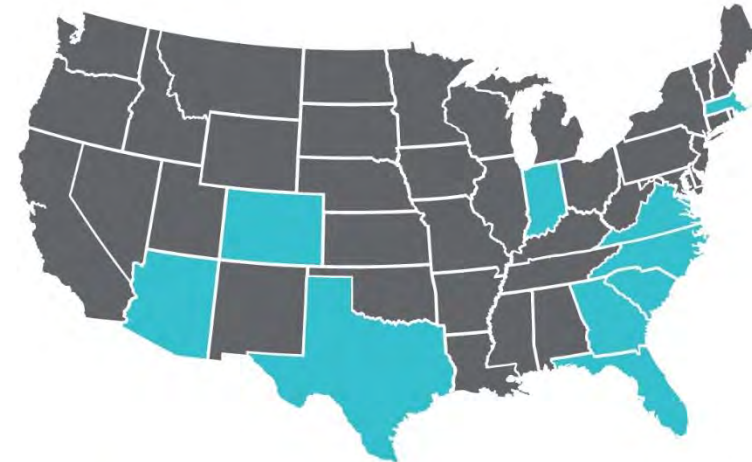
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9. SOUTH CAROLINA
10. MASSACHUSETTS



1. NORTH CAROLINA
2. DELAWARE
3. VIRGINIA
4. MISSOURI
5. MISSISSIPPI
6. FLORIDA
7. NEVADA
8. WASHINGTON
9. NEW YORK
10. MARYLAND





# SF New Construction Stats

NGBS Version	2008	2012	2012 In-process
SF Homes	6,036	4,448	1,659





# SF Builders

- Custom, small volume, and regional production
- Looking to set themselves apart from national production builders
- All locations: urban, suburban, ex-urban
- All price ranges
- Harder to compete in areas with a local green building program





# MF New Construction Stats

<b>NGBS Version</b>	<b>2008</b>	<b>2012</b>	<b>2012 In-process</b>
<b>Buildings</b>	<b>1,333</b>	<b>932</b>	<b>1,371</b>
<b>Units</b>	<b>56,971</b>	<b>28,243</b>	<b>69,918</b>
<b>Average Height</b>	<b>3</b>	<b>3</b>	<b>4</b>
<b>Average # Units</b>	<b>42</b>	<b>30</b>	<b>50</b>
<b>Tallest</b>	<b>70</b>	<b>33</b>	<b>55</b>





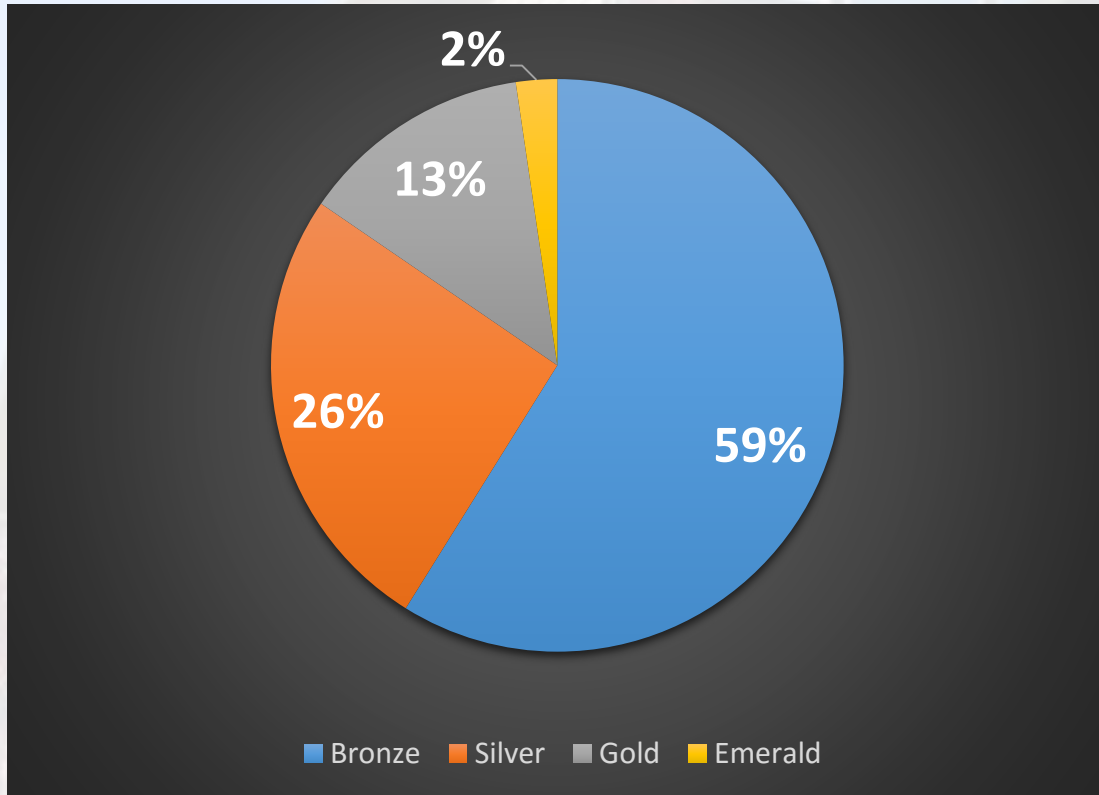
# Renovation Stats

<b>NGBS Version</b>	<b>2008</b>	<b>2012</b>	<b>2012 In-progress</b>
<b>SF Rehab</b>	<b>204</b>	<b>21</b>	<b>45</b>
<b>MF Rehab</b>	<b>151</b>	<b>126</b>	<b>68</b>
<b>Avg. Height</b>	<b>1-2</b>	<b>2</b>	<b>3</b>
<b>Average # units</b>	<b>8</b>	<b>13</b>	<b>25</b>
<b>Functional Area Rehab</b>	<b>0</b>	<b>9</b>	<b>2</b>



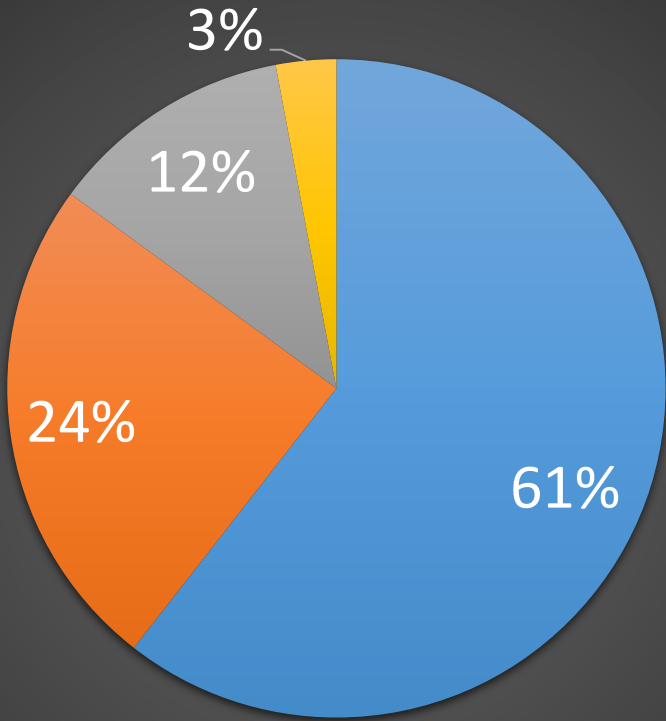


# Certification Levels 2008 + 2012 NGBS





# 2008 NGBS Certification Levels

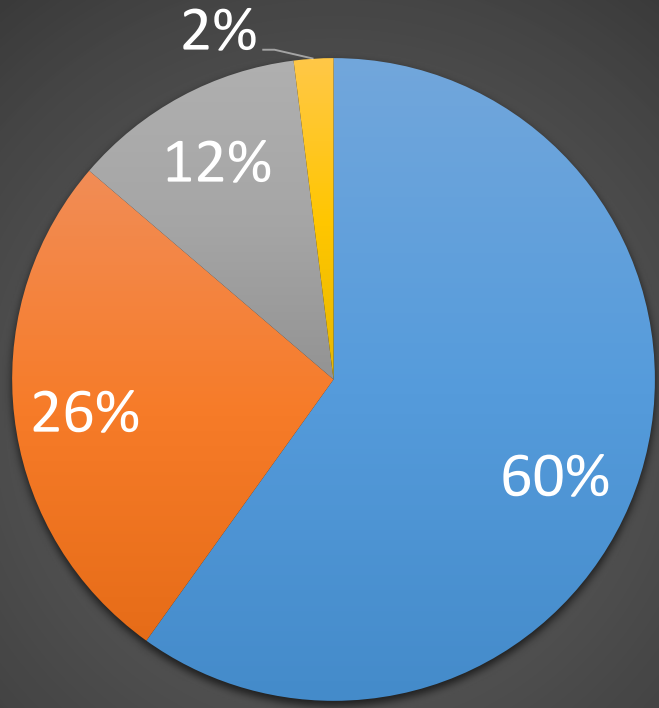


■ Bronze ■ Silver ■ Gold ■ Emerald





# 2012 NGBS Certification Levels



■ Bronze ■ Silver ■ Gold ■ Emerald



# MF Builders

- All segments of MF industry
- Largely new construction
- Market-rate, affordable, LIHTC, conversions
- Perceived value is long term valuation
- Corporate responsibility, marketing





# Multifamily

- Broad diversity of building types and locations
- Used frequently for single building project, apartment and campus communities
- MF renovation needs varied
  - Multi-year renovation
  - Rolling renovations for occupied properties
  - Minor, moderate, and gut rehab
  - Historic and affordable properties







**Student Housing |**  
**The Retreat, Blacksburg, VA |**



# Seniors Housing

- Significant increase in seniors housing, assisted living, residential memory care units
- Desire to earn NGBS Green certification
- Projects are residential in nature, not institutional, with limited care provided for residents
- Typically have facilities for sleeping, living, sanitation, and eating (meeting NGBS definition of dwelling unit)





**NGBS Remodel Path:** |  
Streamlined, Performance-based |



## Renovation Path

- Great opportunity to reach poorly performing existing buildings
- To date, used infrequently but MF renovations on the rise
- Pro: Focus on energy and water efficiency improvements
- Con: For MF buildings, doesn't allow for rolling renovations which are common for occupied buildings





Historic  
Preservation  
Artspace Artist  
Lofts, Michigan  
City, IN





# Historic Renovation

- NGBS works very well with properties designated as historic
- Focus on achieving energy and water efficiency improvements regardless of how
- Restriction regarding window replacement or façade changes are not an issue





# Office Conversions

- Have seen an increasing number of existing office buildings converted to residential and seeking NGBS Green certification
- Given the age of these properties can see a significant improvement in water and energy efficiency
- NGBS assures conversion addresses indoor environmental quality and not just energy



# Land Development

- Have ranged in size from 8 lots to 20,000 acres
- Not used as extensively as we would like
- Land development certification can help SF homes earn certification – often developer's actions impede builder's ability to earn certification





# Chapter 5

## Site Selection & Lot Design

- Difficult for production homes to get enough number of points for certification





# Lessons Learned

- Less suited to production builders
- Works well with MF projects of all types
- Renovation growing for MF buildings, but outstanding issues
- Limited use for SF remodeling
- Functional area remodeling not used





# Transition to 2012 NGBS

- Approved March 2013
- SF sunset 18 months;  
MF sunset 3 years
  - MF deadline Feb 2016
  - SF deadline Dec 2014
- More uniformity in  
State code adoption



# Transition to 2015 NGBS

- Approved Jan. 2016
- State Codes
  - 9 with no state code
  - 13 states still at 2009 IECC
  - 16 states between 2009 and 2012/2015
  - 8 at 2012/2015 IECC
  - 3 above 2015 IECC
- Sunset (construction completion) Dec 2021 for 2012 NGBS projects



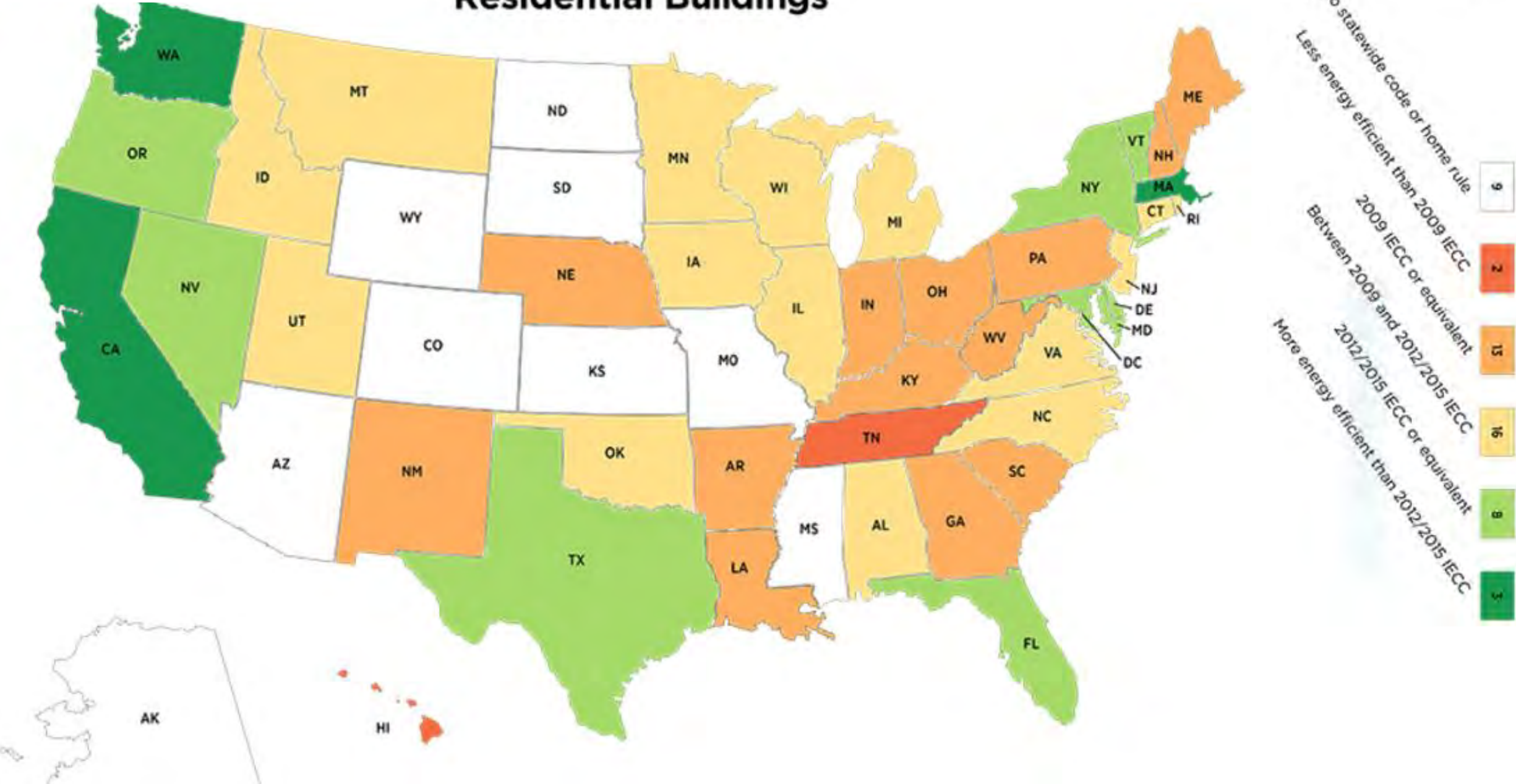


# 2012 NGBS vs. 2015 NGBS

- 2012
  - Baseline is 2009 IECC
  - Bronze is roughly 15% above 2009 IECC
  - Majority of states at 2009 IECC
- 2015
  - Baseline is 2015 IECC
  - Bronze is roughly at 2015 IECC
  - More diversity – easier compliance in states at 2015 IECC, bigger lift in states still at 2009 IECC



# Residential Buildings





# Value Proposition

- NGBS is
  - Affordable
  - Flexible
  - Credible
  - Rigorous
- Green rating system designed specifically for residential buildings
- 4 certification levels provide broad relevance



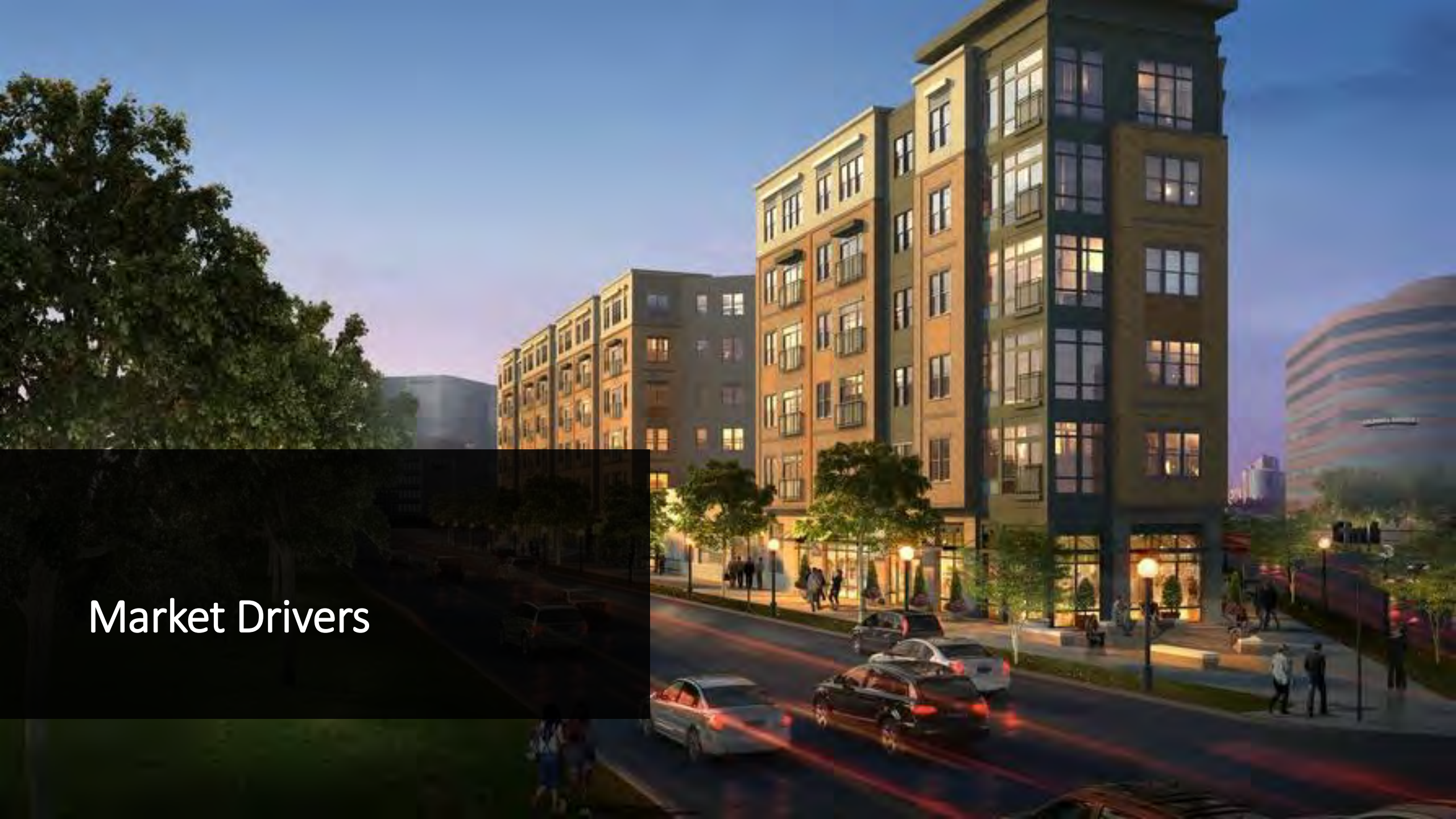


# Fine-Tune, Not Revamp

- No hands-on experience using 2015 yet
- NGBS development is faster than code adoption at the State level
- Home Innovation's experiences as Adopting Entity can help Committee revise NGBS to maintain rigor, but become even more relevant
- NGBS is leading rating system for residential in U.S.
- Aspirational goal is to provide rigorous green certification that improves building performance + provides value to developers/builders



# Market Drivers





# MF Financing Incentives

- Institutional equity investors want green building certification
- Fannie Mae and Freddie Mac offer preferred financing for NGBS Green Certified buildings – new and rehab
- HUD offers significant mortgage insurance premium reduction for NGBS Green - new or rehab





# Affordable Housing LIHTC Incentives

- 27 states recognize NGBS Green
- States either mandate or incentivize green certification to get higher performing, healthier residences
- Recognition can be game changer at state level
- Prior to NGBS, Enterprise Green was green rating system used most for affordable housing





# Market Transformation

- Pivotal Energy downloads building and certification data nightly
- Consolidates into Axis validated rating data for distribution into the real estate market
- Goal to drive proper valuation of green homes
- Facilitate educated consumer decisions with regard to home buying and renting







# Local Incentives Examples

- Density bonus; Miami, FL
- Building permit rebates; Cherry Hills, CO
- Defines High Performance Homes to be those certified as NGBS Silver, Gold, or Emerald; Maryland
- 10-year tax credit; Baltimore, MD
- Tax credit up to 35% of total costs for projects certified within Urban Transit Hubs
- 0.25 interest rate reduction for NGBS Green certified homes; Washington State



# Chapter 10

## Operation & Maintenance

- Too few points available to earn higher levels of certification
- Fannie Mae and HUD financing requirements will mean more buildings monitor energy performance
- Calculating energy performance in MF remains a challenge – most buildings are sub-metered







2012

INTERNATIONAL  
GREEN  
CONSTRUCTION  
CODE™

A Member of the International Code Family®

IGCC™

- Includes  ANSI/ASHRAE/USGBC Standard 189.1-2011 Design of High-Performance Green Buildings
- References  ICC 700-2008 National Green Building Standard™ for residential construction



THE AMERICAN  
INSTITUTE  
OF ARCHITECTS

# Alternative Compliance Path

- Adopted in Dallas, Baltimore, District of Columbia
- NGBS is alternative compliance path for buildings 4+ stories
- When adopted for buildings >4 stories, NGBS is sole compliance path
- Provided opportunity for third-party certification to demonstrate code compliance



# Chapter 12

## Functional Area Renovation

- Rarely used
- Might be useful to consider applicability of chapter to MF and SF separately





Las Olas Walk  
Fort  
Lauderdale, FL





