

## The Pulse of Multifamily

October 5, 2017

# Housekeeping

## Welcome

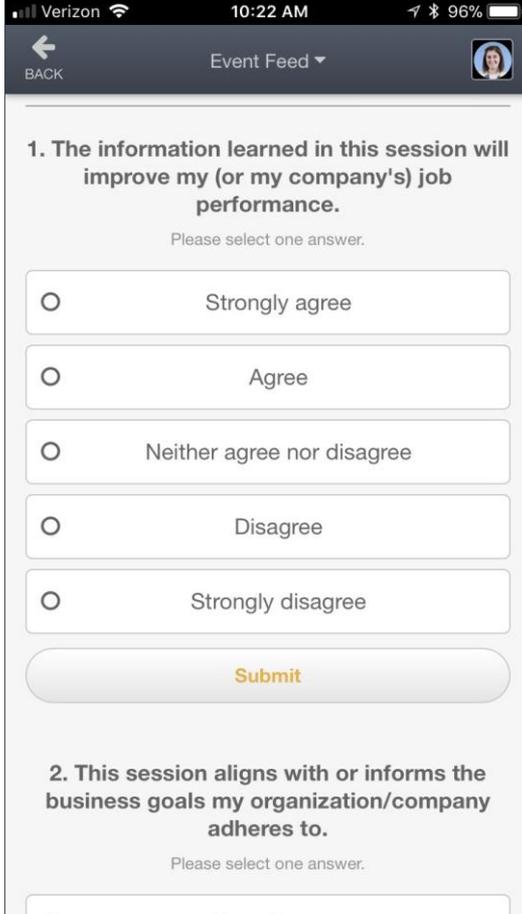
- Safety
- Bathrooms
- Cell phones



# Session Survey Instructions

At the end of each session, you will be given 5 minutes to complete the session survey.

1. Open the “HEF2017” app
2. Navigate to “Agenda” and select the session
3. Scroll down to “Session Feedback”
4. For each question, select answer and hit “Submit”
5. Show completed survey to BetterBuiltNW rep to earn points
6. Prizes awarded Friday to the top point earners
  - See “Challenge” section in the app for activities
7. Assistance available at the BetterBuiltNW table



The screenshot shows a mobile app interface for a survey. At the top, the status bar shows 'Verizon', '10:22 AM', and '96%' battery. The app header includes a 'BACK' button, 'Event Feed', and a user profile icon. The main content area displays a survey question: '1. The information learned in this session will improve my (or my company's) job performance.' Below the question is the instruction 'Please select one answer.' and five radio button options: 'Strongly agree', 'Agree', 'Neither agree nor disagree', 'Disagree', and 'Strongly disagree'. A 'Submit' button is located below the options. The second question is partially visible at the bottom: '2. This session aligns with or informs the business goals my organization/company adheres to.' with the instruction 'Please select one answer.'

# Agenda

- Multifamily Market Overview
- Built Green Program
- BPA Programs



**Mekha Abraham**

NEEA New Homes

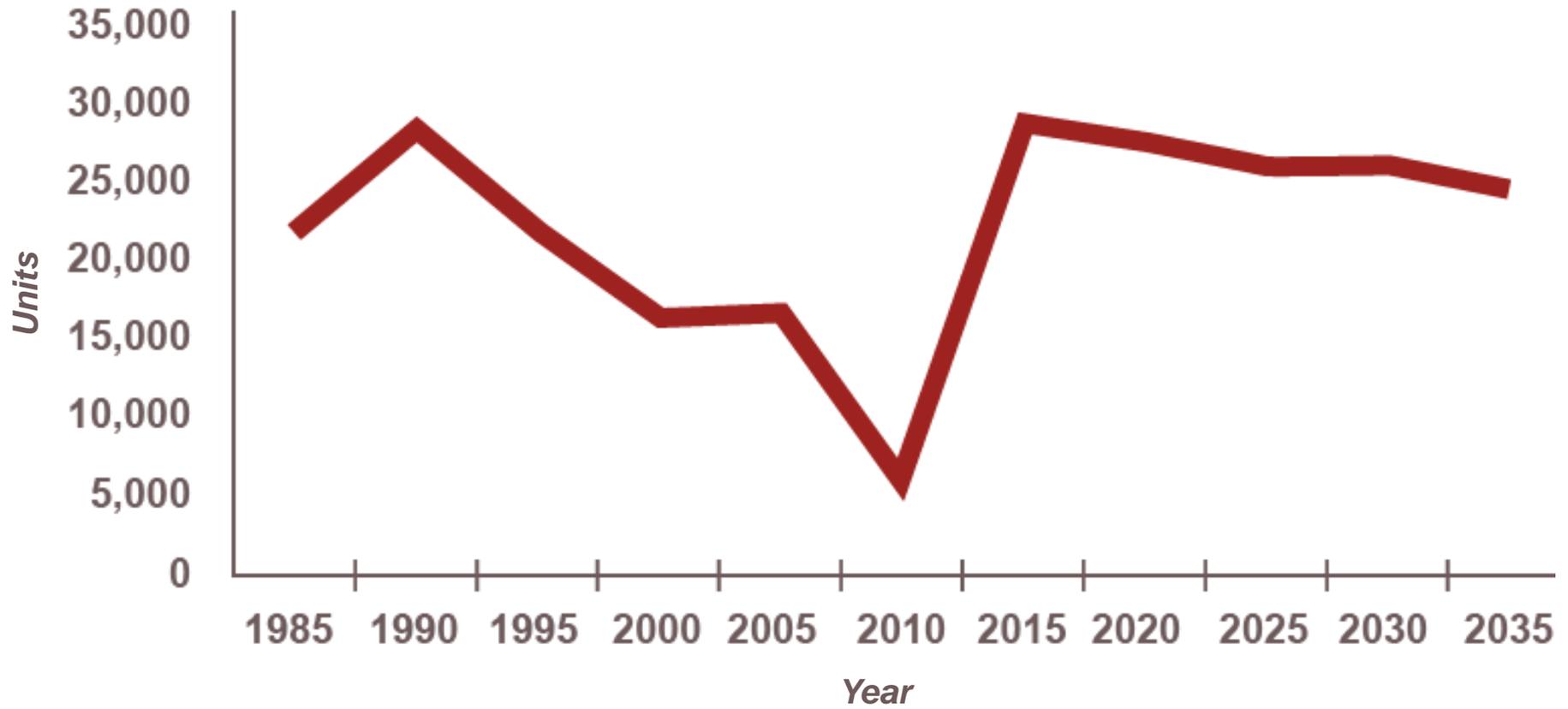
TRC Energy Services

# Pulse of Multifamily



# Pulse of Multifamily

## Annual Northwest New Multifamily Homes



<sup>1</sup>**Multifamily:** Housing structures with greater than four units

Source: Northwest Power and Conservation Council

# Construction Growth

The Seattle Times

**Seattle has most cranes in the country for 2nd year in a row — and lead is growing**

Originally published July 11, 2017 at 11:56 am | Updated July 11, 2017 at 8:45 am

**BOISE WEEKLY**

JULY 12, 2017

**For Rent: Boise's Historic-Low Vacancy Rate Triggers a Flood of New Apartments**



**New apartment construction brings minor relief for renters**

**GeekWire**

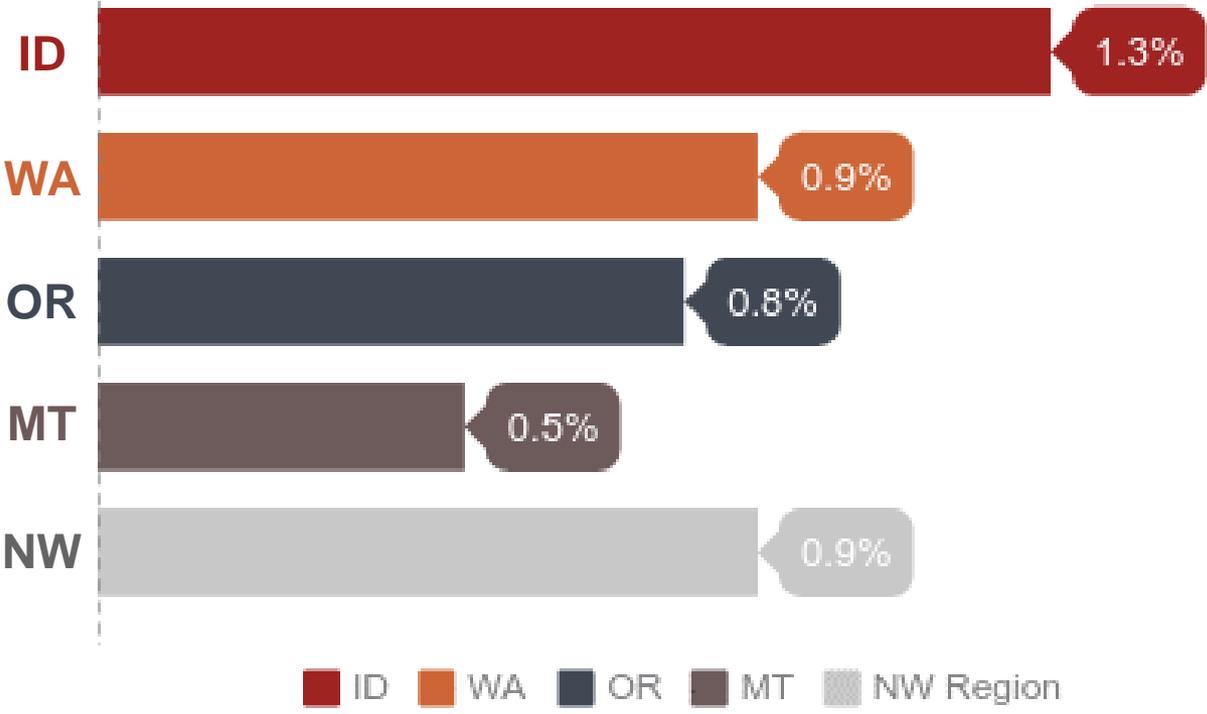
**Seattle retains title of hottest housing market in the country with Portland right behind**

BY NAT LEVY on September 26, 2017 at 8:08 am

*(Dean Rutz/The Seattle Times)*

# Population Growth

2015 - 2035  
(Projected)



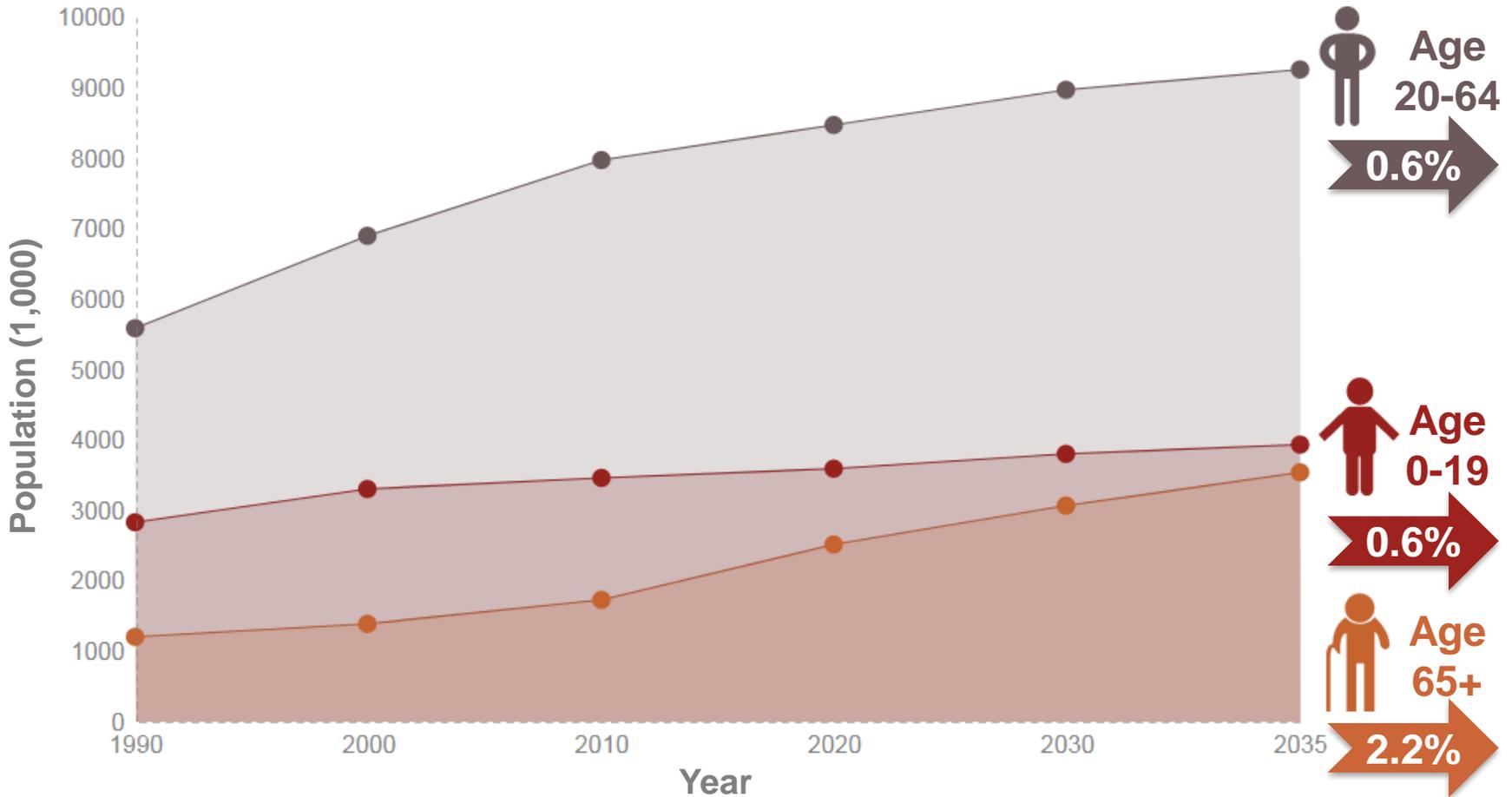
2035 Projected  
Population  
(millions)



Source: Northwest Power and Conservation Council

# Demographic Change

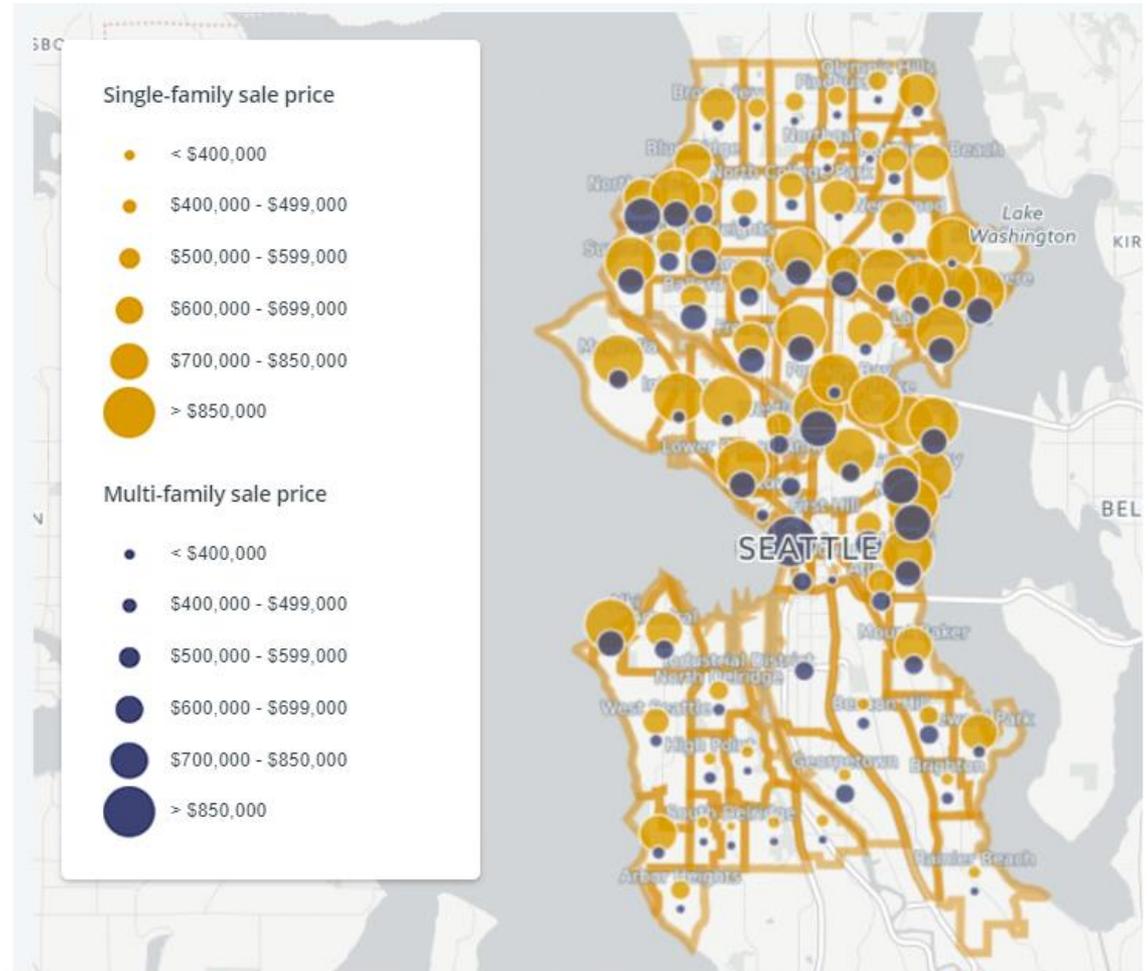
## Northwest Regional Population Composition



Source: Northwest Power and Conservation Council

# Housing Affordability

**Single-family homes cost 42% more than multifamily homes**



Source: Sightline Institute

# Housing Forecast

2010

2030

Household  
Size



Avg. Size: 2.6



Avg. Size: 2.4

Population

13.1 million

15.8 million

No. of Homes

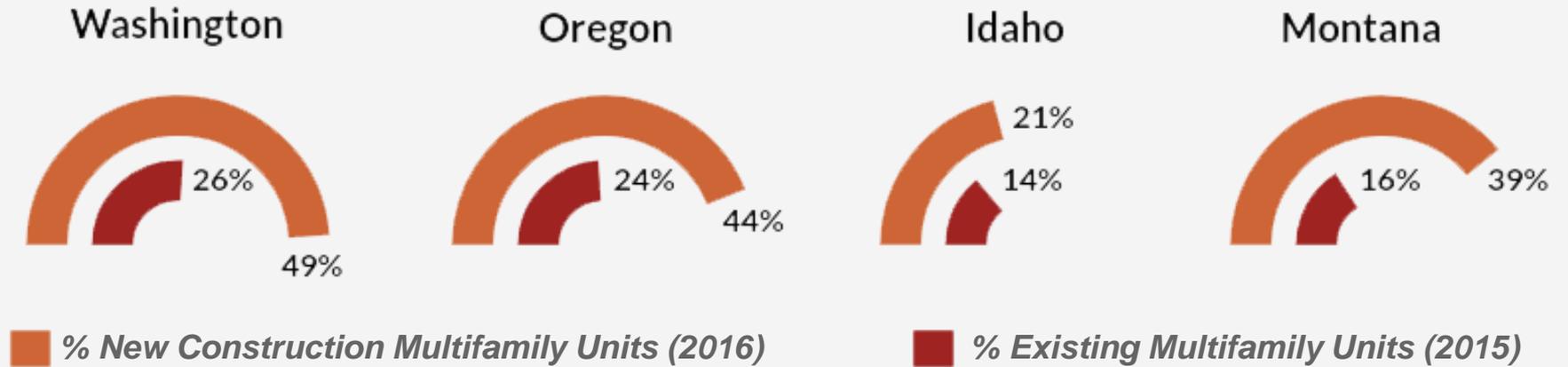
5.1 million

6.6 million

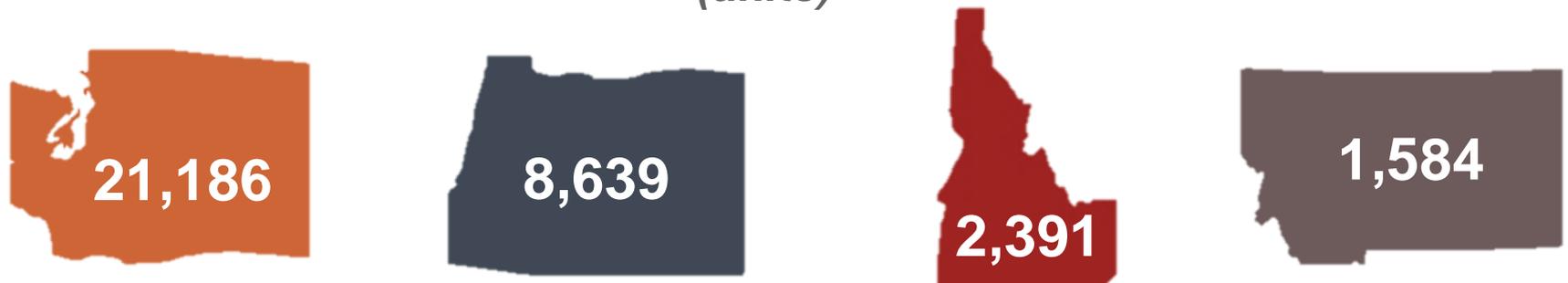
**1.5 million new homes**

Source: Northwest Power and Conservation Council

# The Shift To Multifamily



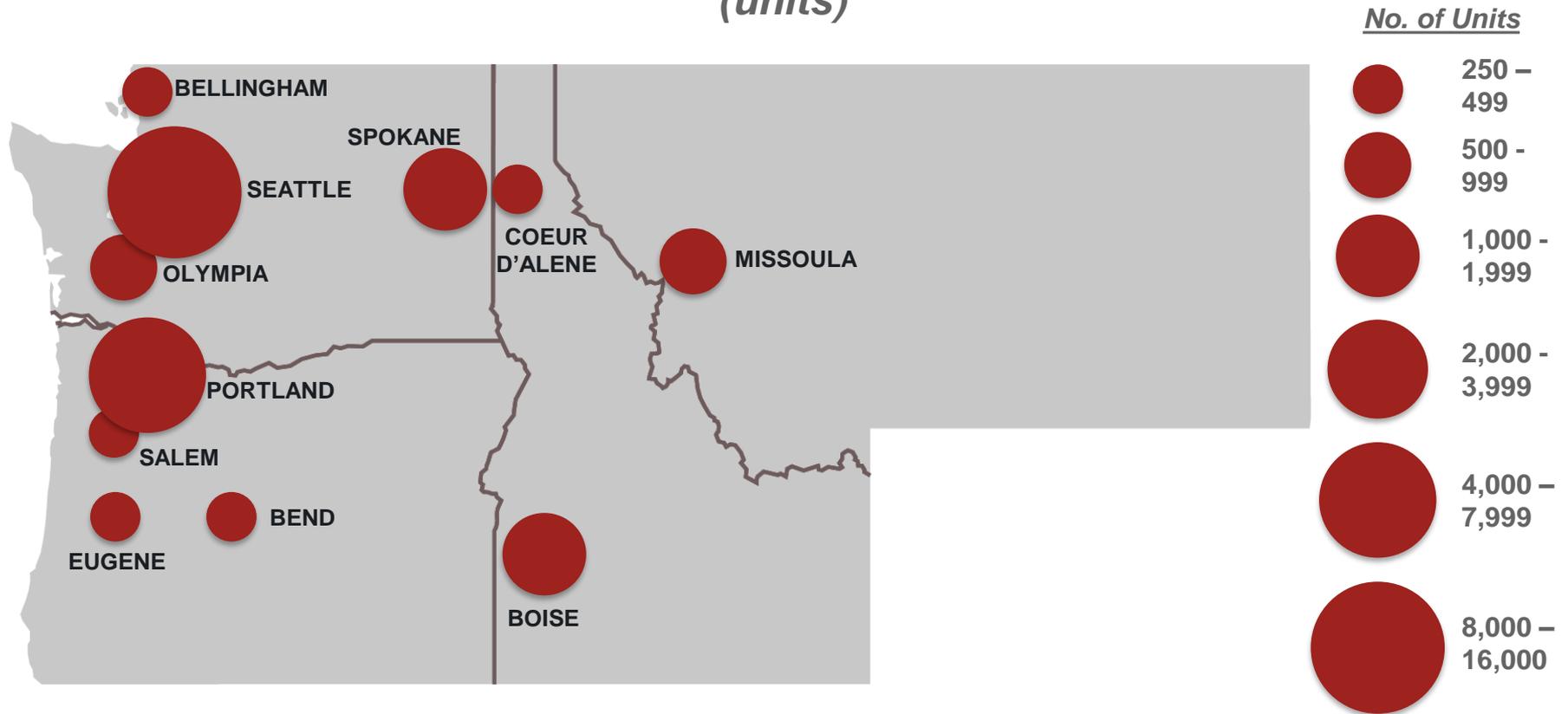
## 2016 Multifamily<sup>1</sup> NC Activity (units)



<sup>1</sup>**Multifamily:** Housing structures with greater than four units

# Multifamily NC Hotspots

2016 Multifamily<sup>1</sup> NC Activity  
(units)

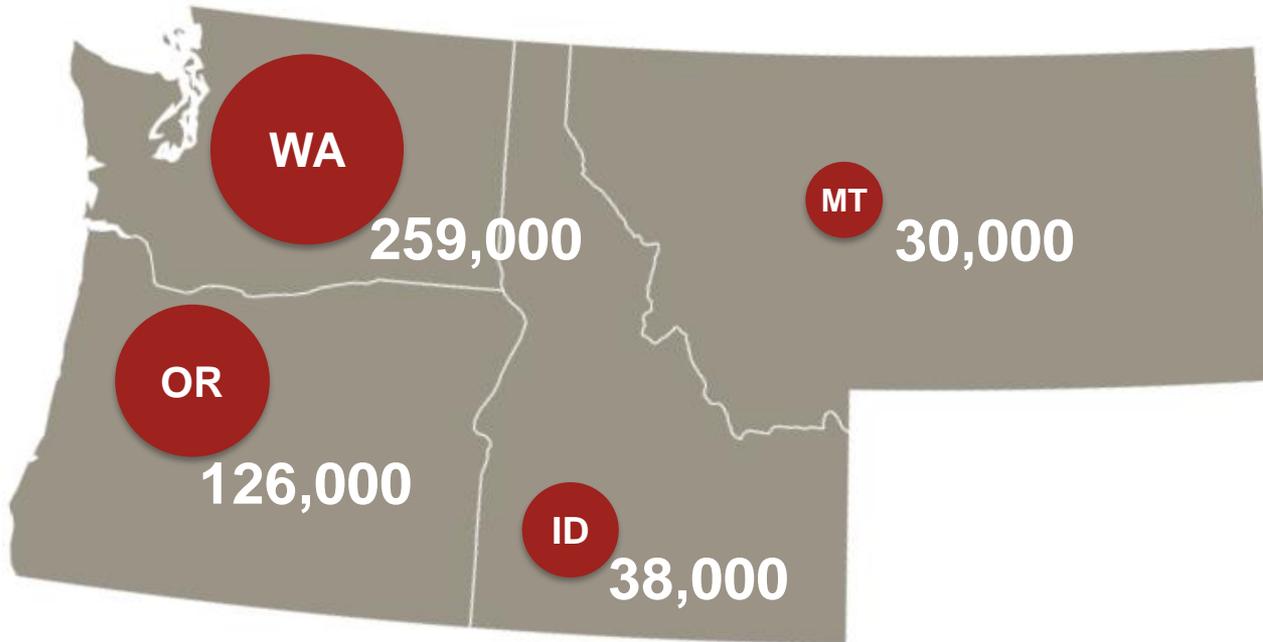


<sup>1</sup>**Multifamily:** Housing structures with greater than four units

Source: National Association of Home Builders

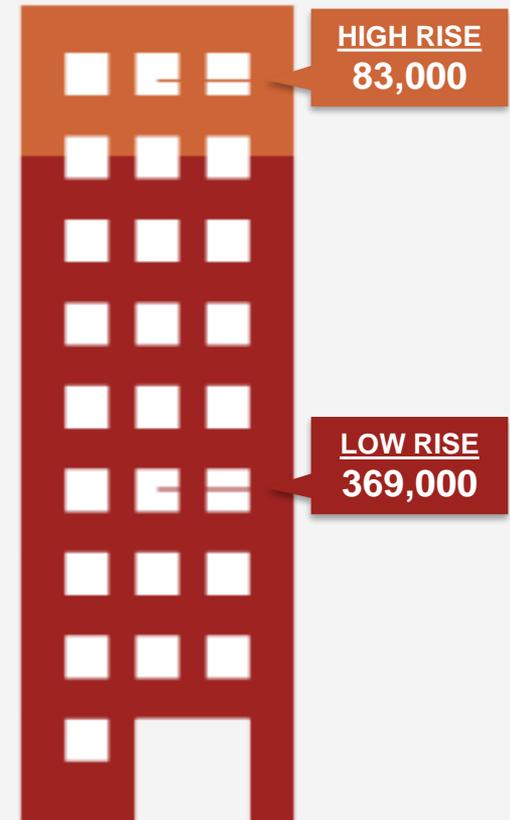
# Market Potential

*Multifamily New Construction Units  
by 2035*



*Northwest Regional  
Multifamily Units by  
2035*

**452,000**



# Market Potential



## THE 2030 CHALLENGE

*All new buildings, developments, and major renovations shall be carbon-neutral by 2030*

## Northwest Regional Multifamily Units by 2035

452,000





# CHALLENGES / BARRIERS

# Building Type Diversity

## multifamily

*adjective* / mul-ti-fam-i-ly | ,mɒltē'fam(ə)lē/

denoting or relating to accommodation designed for occupation by more than one family.

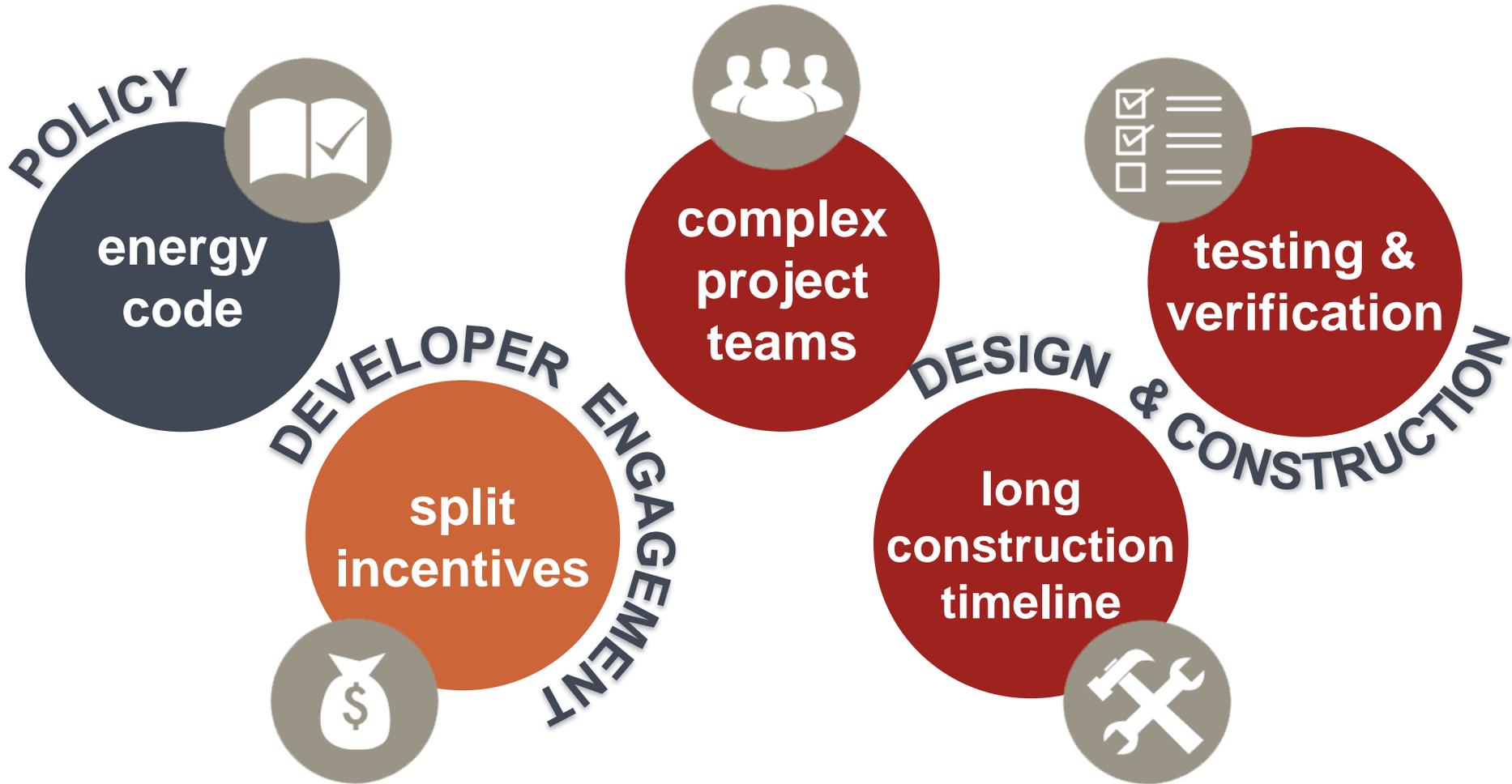
**LOW-RISE**  
**(1-3 stories)**



**HIGH-RISE**  
**(4+ stories)**

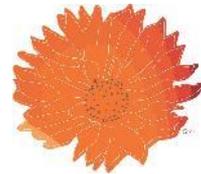


# Market Barriers



# Adapting to Market

## NATIONAL PROGRAMS



LIVING  
BUILDING  
CHALLENGE™



NATIONAL  
GREEN BUILDING  
STANDARD™

## REGIONAL PROGRAMS



A photograph of a wooden building frame under construction, showing a complex network of beams and joists. The structure is set against a clear blue sky with some light clouds. The foreground shows a wooden floor joist system. A dark blue rectangular overlay is positioned in the center-left, containing the text. An orange L-shaped graphic element is located to the left of the text box.

**Leah Missik**

Built Green



# Greening Multifamily

Trends & updates in the Seattle region

# Introduction

- What is Built Green?
  - Program, process, support
- Built Green multifamily history
  - Trends, causes, market share
- Checklist update
  - Why, how



# Built Green ABOUT

# What is Built Green?

- Certification program
  - Residential
  - Holistic
  - Tiered
- Member network
  - Program of MBA
- Advocacy and Education
  - Works with local governments and utilities
  - Promotes brand
  - Conference



# Certification Process

- Tiered star-levels
- Requirements for each level
  - Points are accumulated in each section in addition
- All projects are third-party verified
- Verifier submits packet to Built Green for certification

## CERTIFICATION PROCESS

1 | Join Built Green



2 | Enroll Project



3 | Hire Verifier



### WITH YOUR VERIFIER

4 | Track Green Features



5 | Save Pertinent Documentation



6 | Photograph Pertinent Items



7 | Sign Checklist



8 | Verifier Submits Certification Packet



9 | Built Green Reviews Documentation



10 | Certificate Awarded



[builtgreen@mbaks.com](mailto:builtgreen@mbaks.com)

[builtgreen.net](http://builtgreen.net)

# Support

- **For builders:** marketing, incentives, education, networking
- **For verifiers:** clear guidelines, open communication, updated materials, networking
- **For local government:** collaboration on goals, affirmation of certification status, program education



Built Green

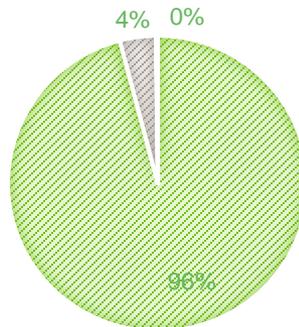
MULTIFAMILY  
HISTORY



# Share of Built Green

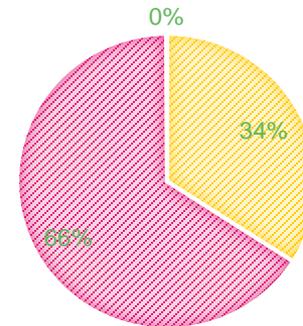
## 2016 CERTIFICATIONS BY BUILDING TYPE

■ Single-Family ■ Multi-Family ■ Remodel

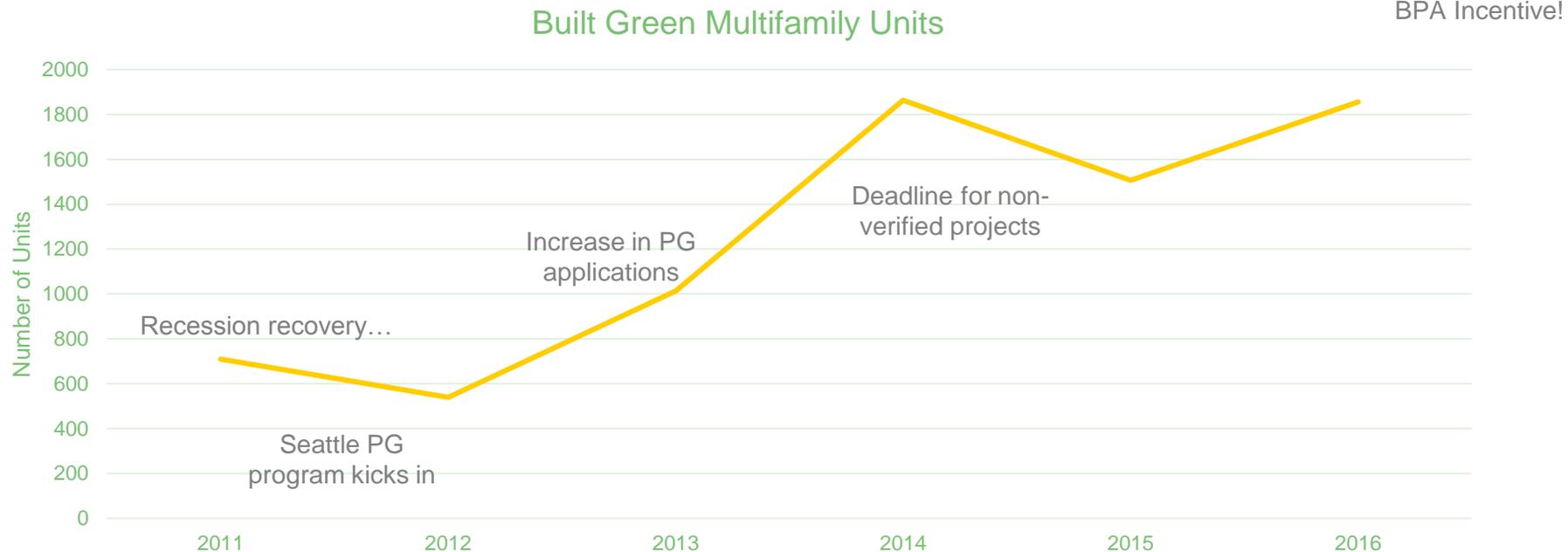


## 2016 CERTIFIED UNITS BY BUILDING TYPE

■ Single-Family ■ Multi-Family ■ Remodel



# Multifamily Certification

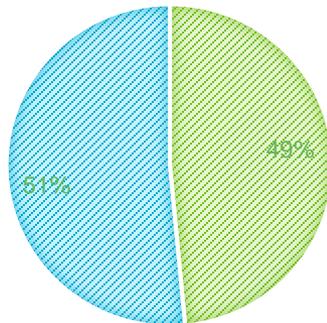


593 units certified so far in 2017...  
1,927 units enrolled!

# Share of Market

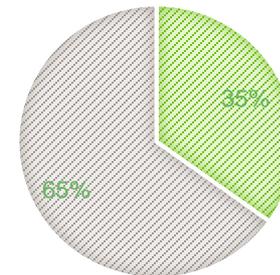
## SEATTLE MARKET SHARE

■ Built Green ■ Not Certified



## KING COUNTY MARKET SHARE

■ Built Green ■ Not Certified





Built Green

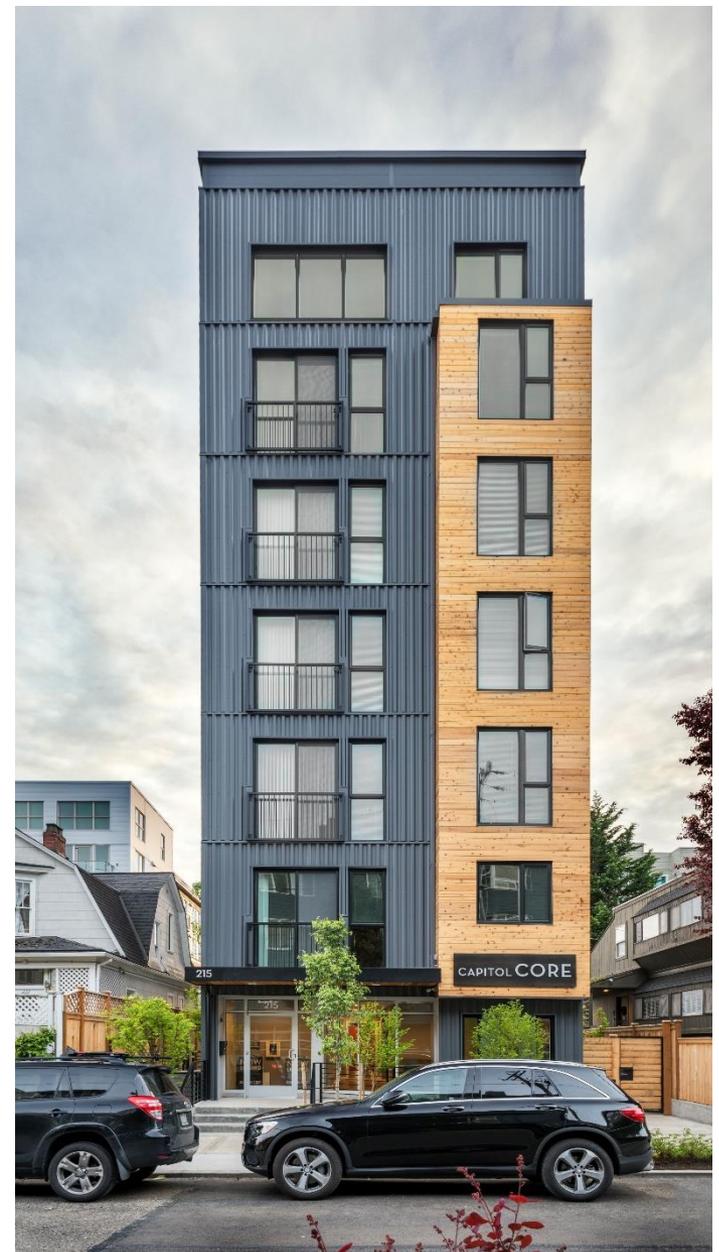
# CHECKLIST UPDATE

# How?

- Group of: energy experts, verifiers, local government
- Feedback from builders at multiple points
- Met for over a year in person
- ½ year+ of emails
- Tested old projects on checklists to compare
- Handbook revision

# Why?

- Last full update in 2009...
- Code update
- Incentive eligibility
- Environmental impact





**BUILT GREEN<sup>®</sup>**

The background of the slide is a photograph of stacks of lumber in a workshop. The wood is light-colored with visible grain patterns. An orange L-shaped graphic element is positioned to the left of the text box.

**Jess Kincaid**

Bonneville Power Administration

# DESIGNING COLLABORATIVE NEW MULTIFAMILY CONSTRUCTION PROGRAMS

*Home Efficiency Forum | October, 2017*

*Jess Kincaid, Bonneville Power Administration*

Bonneville  
POWER ADMINISTRATION



# INTRO

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## 01

What is Bonneville  
Power  
Administration?

- + *BPA  
Overview*
- + *Partnership  
with Utility  
Customers*
- + *Customer  
Role*

## 02

Development  
Background

- + *Market  
Potential*
- + *Policy  
Framework*
- + *Stakeholder  
Outreach*
- + *Program Goal*

## 03

The New Program

- + *Technical  
Analysis*
- + *Program  
Design*
- + *Measure  
Payments*
- + *Qualified  
Programs List*

# Bonneville Power Administration (BPA) Background



## Federal Wholesale Power Marketing Administration

- Provide Wholesale Power and High Voltage Transmission in Portions of Seven States

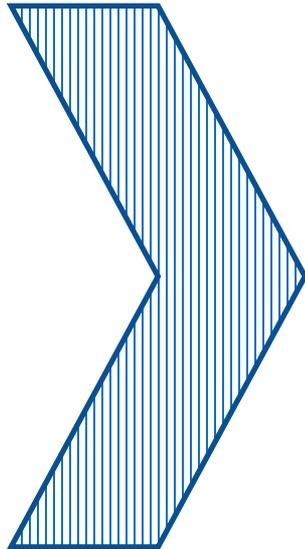
Our Customers are Cooperative, Customer-Owned, and Municipal Utilities

- We Provide EE Program Options to Utility Customers who Chose Whether to Offer the Program
- Customers Deliver the Electricity EE Measures to Consumers

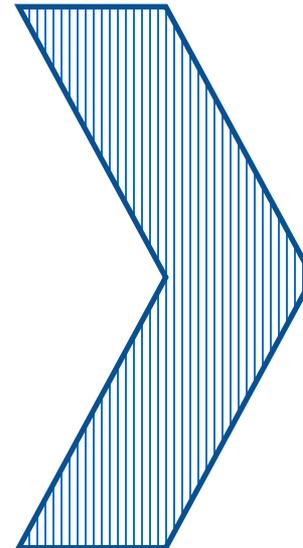
# BPA Energy Efficiency Funding

*BPA Energy  
Efficiency  
Incentives  
(Incentives)*

Bonneville  
POWER ADMINISTRATION



*Customer  
Utilities*



*Incentives to  
Consumers*



# Market Potential



**Significant Market  
Potential for New MF  
Construction**

**Current New MF  
Construction Program  
not Utilized**

Utilities are working  
through custom projects or  
emerging technologies

# Stakeholder Outreach

## *Formal and Informal Discussions:*

- 1. Technology Advisory Group*
- 2. Outreach to Utility Customers*
- 3. Outreach to national and regional experts*
- 4. Outreach to builders and developers*
- 5. Multiple conference presentations*

## *What we Heard:*

- 1. Design so people will actually use it*
  - 2. Make space for local utility programs/ certifications*
  - 3. Ensure programs can coordinate with gas utility programs*
  - 4. Make program similar between residential and commercial MF*
-

# Policy Framework

- 1. Acquire Additional Efficiency Above Stringent Washington Energy Codes*
- 2. Align with Affordable and Market Rate Housing*
- 3. Support Certification Industry Already in Use in the Region*
- 4. Help the Market Toward the Most Energy Efficient Buildings Possible*



# Goal:

Pay an incentive  
for building certifications that  
deliver energy performance  
significantly above code

# Program Design

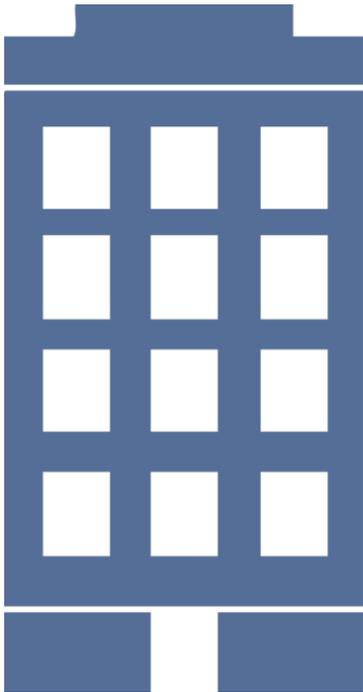
**Set Performance Bars**

```
graph TD; A[Set Performance Bars] --> B[Test Programs Against Performance Bars]; B --> C[Add Qualified Programs to Incentive Paths];
```

**Test Programs Against  
Performance Bars**

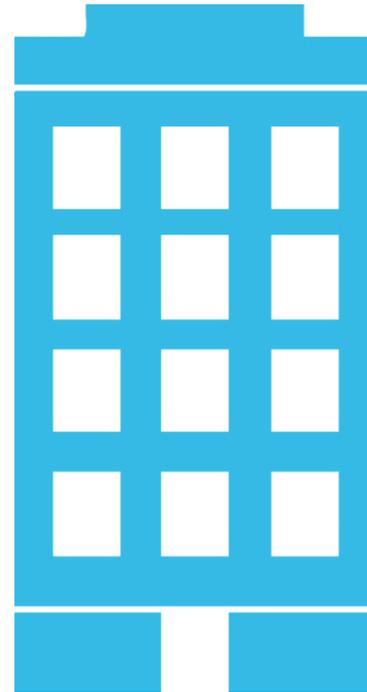
**Add Qualified Programs to  
Incentive Paths**

## Energy Efficient



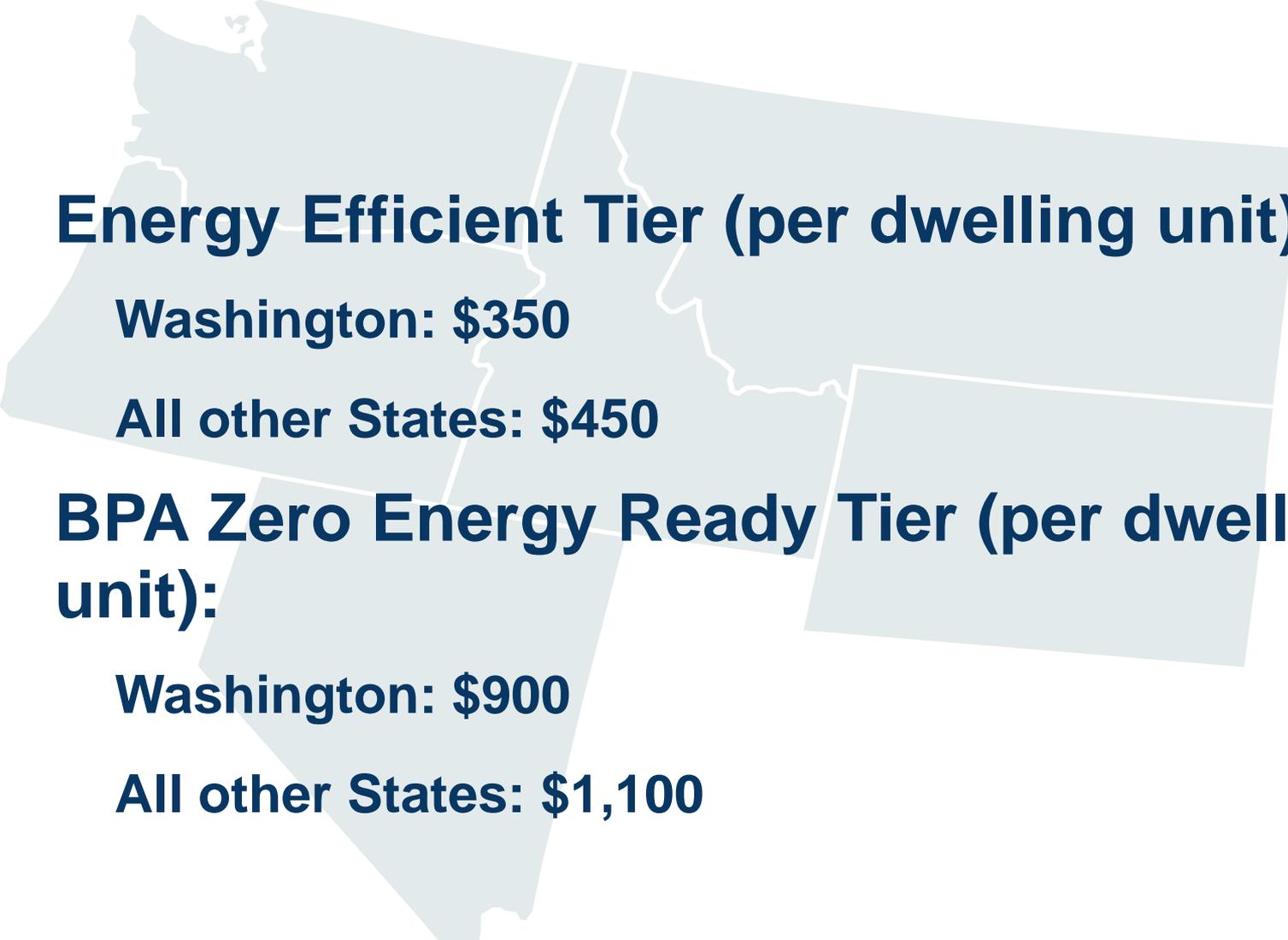
10% More Efficient  
(  $\approx 27.6$  kBtu/ ft<sup>2</sup>)

## BPA Zero Energy Ready



25% More Efficient  
(  $\approx 23.0$  kBtu/ ft<sup>2</sup>)

# Measure Payments to Utility Customers



## **Energy Efficient Tier (per dwelling unit):**

**Washington: \$350**

**All other States: \$450**

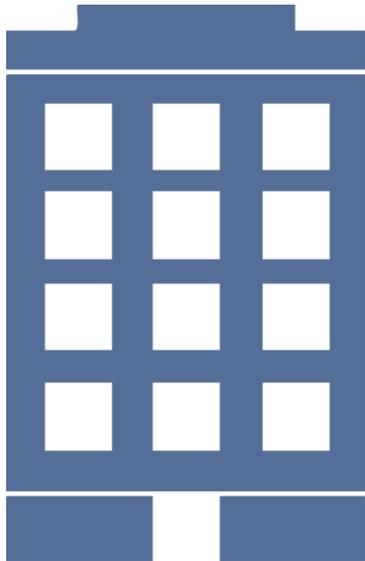
## **BPA Zero Energy Ready Tier (per dwelling unit):**

**Washington: \$900**

**All other States: \$1,100**

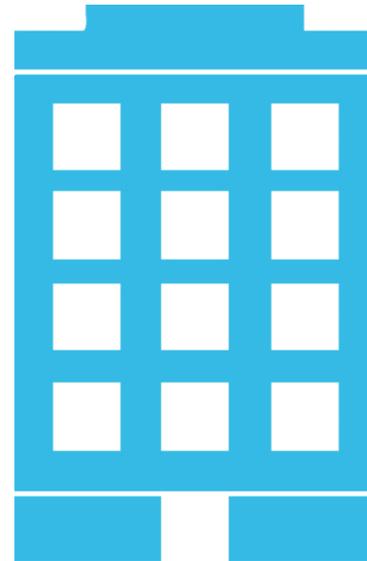
# Current Qualified Programs Lists (QPL)

Energy  
Efficient



Built Green 4 Star  
DOE ZER

BPA Zero  
Energy Ready



Built Green 5 Star  
PHIUS  
PHI  
ILFI 2030 + Reveal

# What does this mean for certification providers, raters, and developers?

1. *Build the relationship with your local public utility*
  2. *Build to the specifications of one of the programs on the qualified programs list*
  3. *Get incentives from your local utility*
-

# The Program is an emerging technology incubator

- *Let market developers, design firms, and certification providers pick their own emerging technologies*
- *Promote market innovation and a system design approach*
- *Give BPA real-world test data*

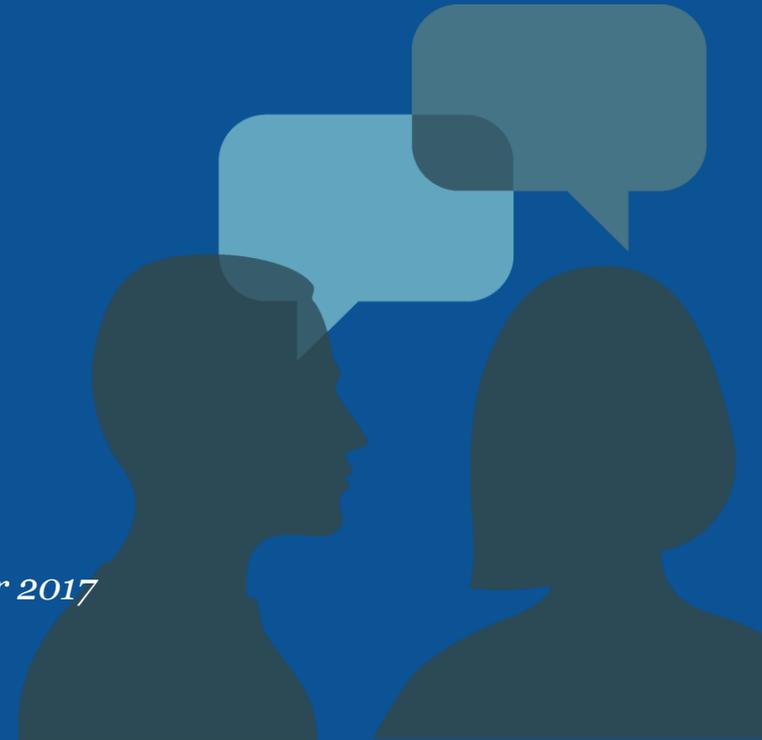
Goal is to create new stand alone  
measure incentives

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# Questions?

**Jess Kincaid, *[jbkincaid@bpa.gov](mailto:jbkincaid@bpa.gov)***

*Developed by the Bonneville Power Administration | September 2017*

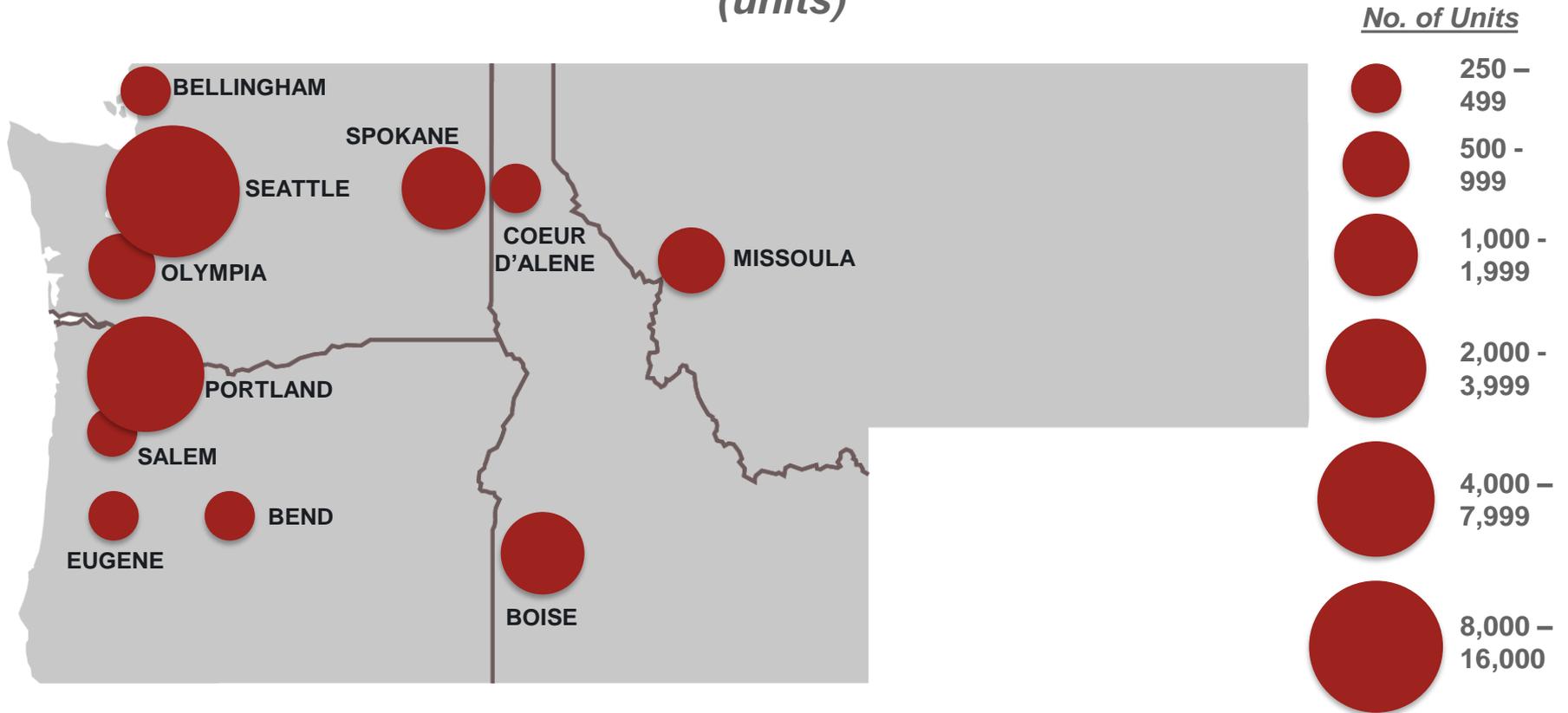




**Questions?  
Discussion**

# Multifamily NC Hotspots

2016 Multifamily<sup>1</sup> NC Activity  
(units)



<sup>1</sup>**Multifamily:** Housing structures with greater than four units

Source: National Association of Home Builders



# THANK YOU!

Mekha Abraham

[mabraham@trcsolutions.com](mailto:mabraham@trcsolutions.com)

Leah Missik

[lmissik@mbaks.com](mailto:lmissik@mbaks.com)

Jess Kincaid

[jbkincaid@bpa.gov](mailto:jbkincaid@bpa.gov)