BetterBuilt NW

The Pulse of Multifamily

October 5, 2017

Housekeeping

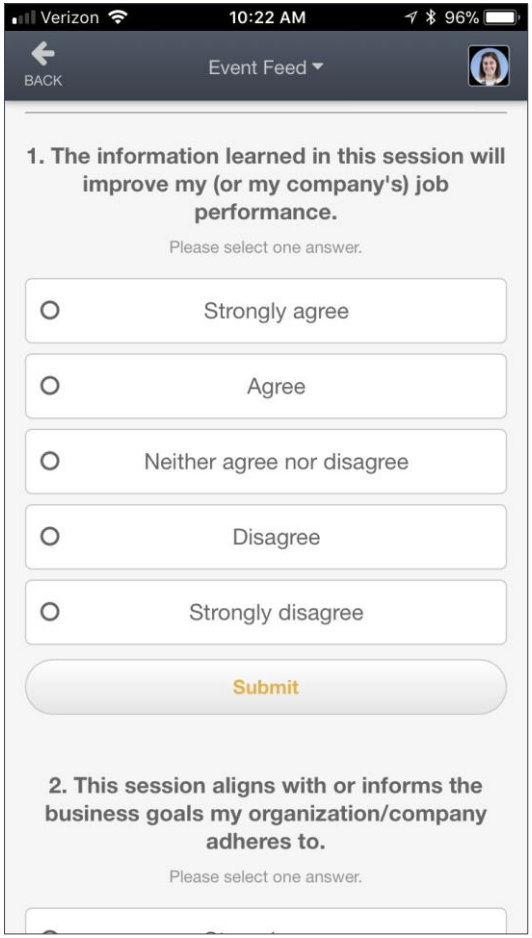
Welcome

- 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



Agenda

- Multifamily Market Overview
- Built Green Program
- BPA Programs

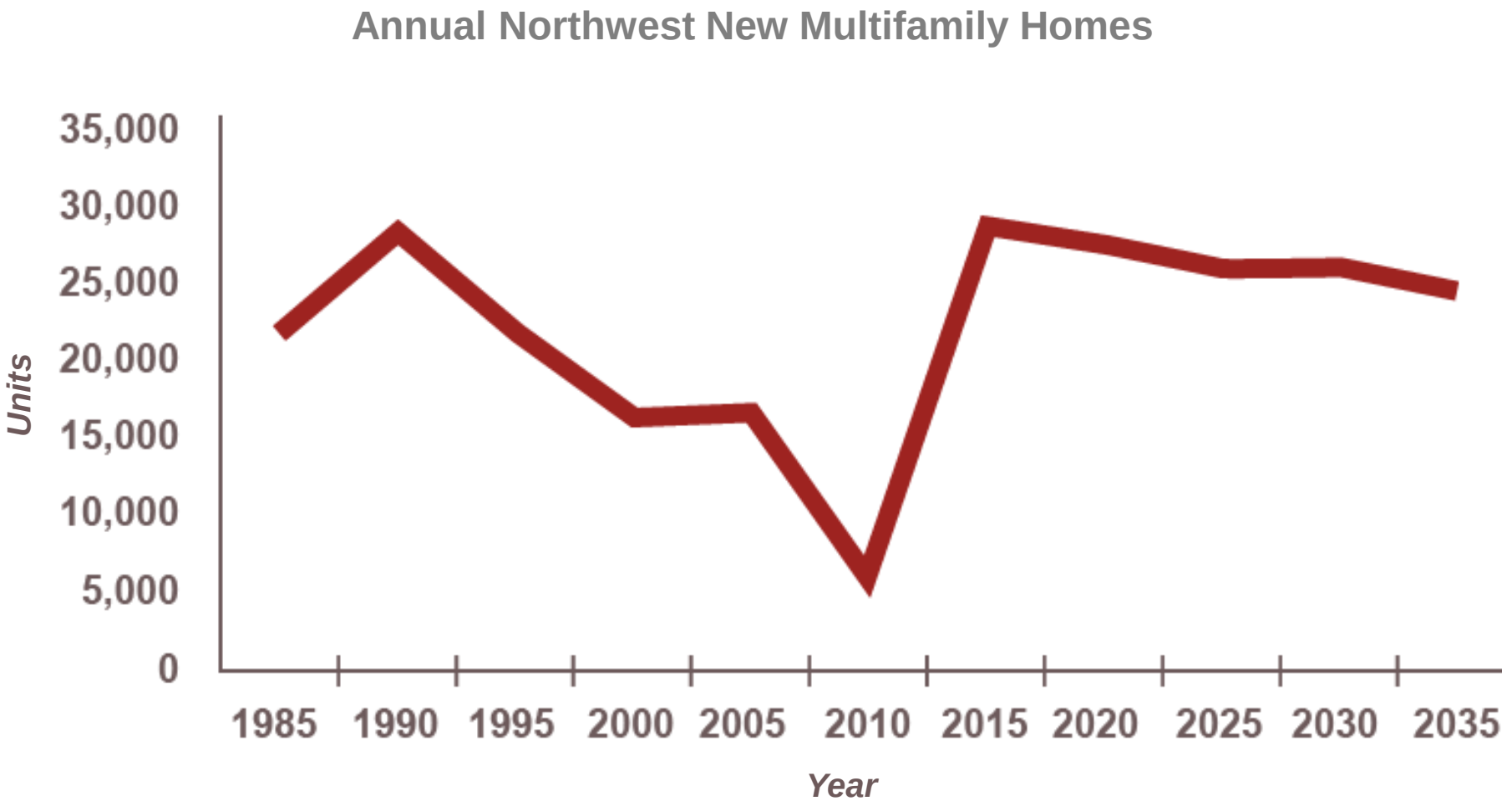
Mekha Abraham

NEEA New Homes

TRC Energy Services

Pulse of Multifamily

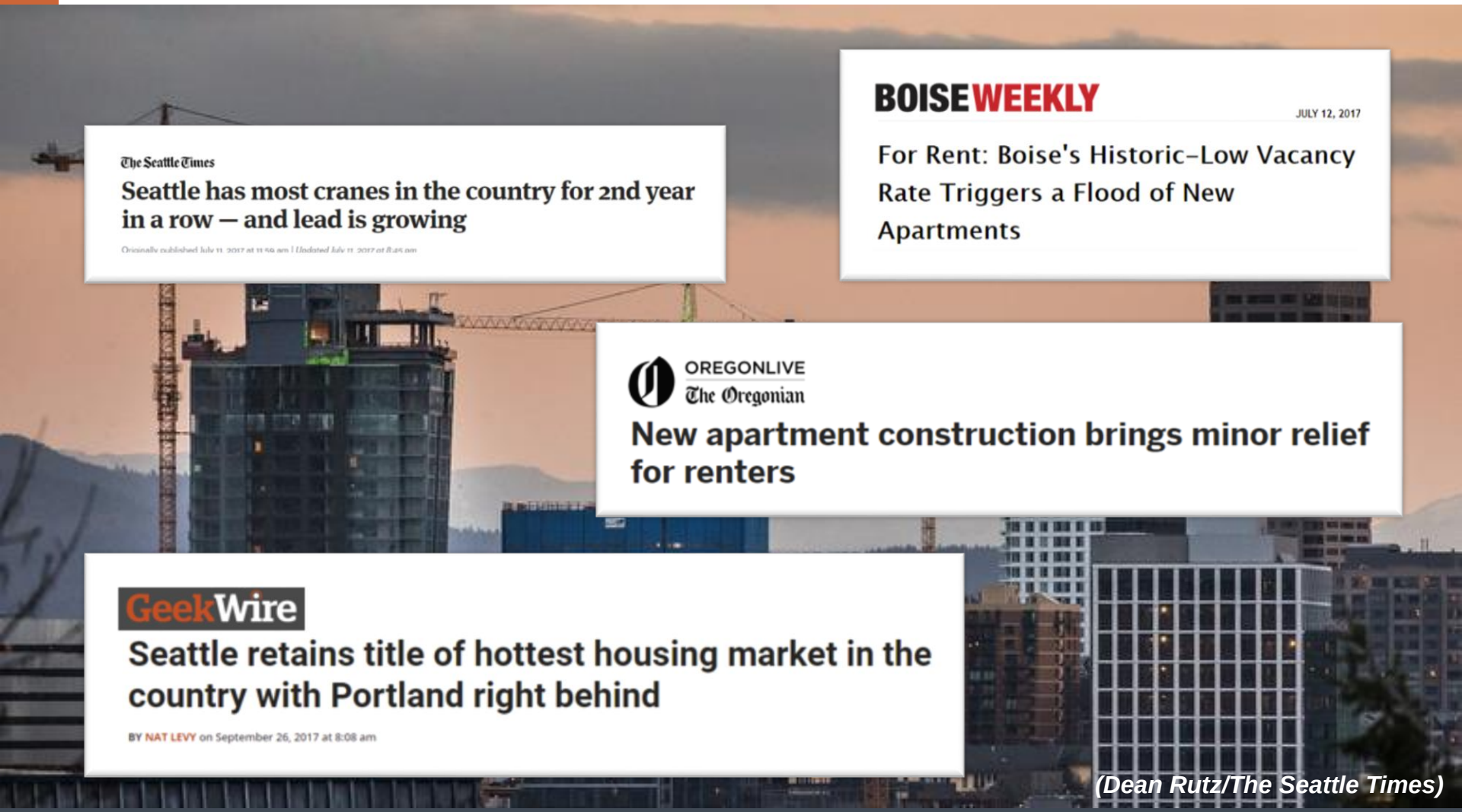
Pulse of Multifamily



[1]**Multifamily**: Housing structures with greater than four units

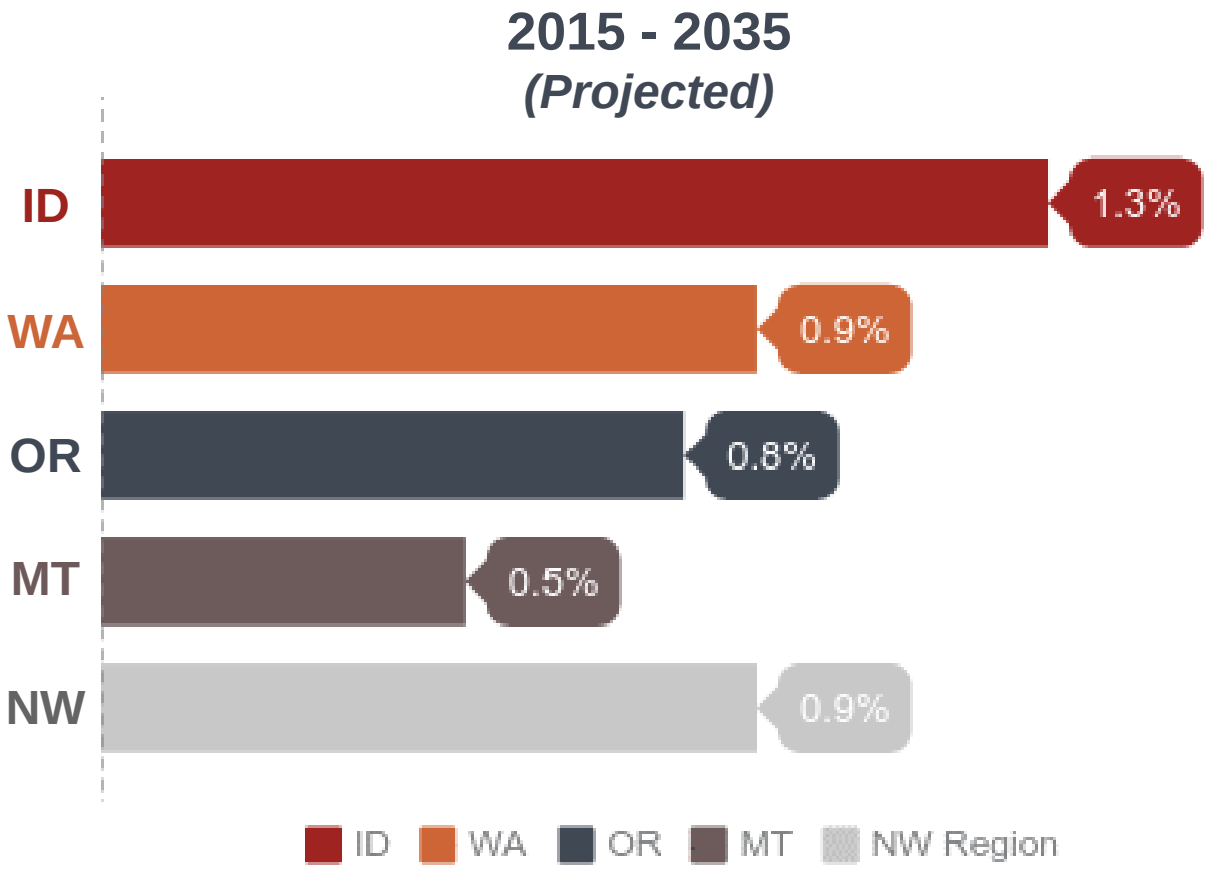
Source: Northwest Power and Conservation Council

Construction Growth



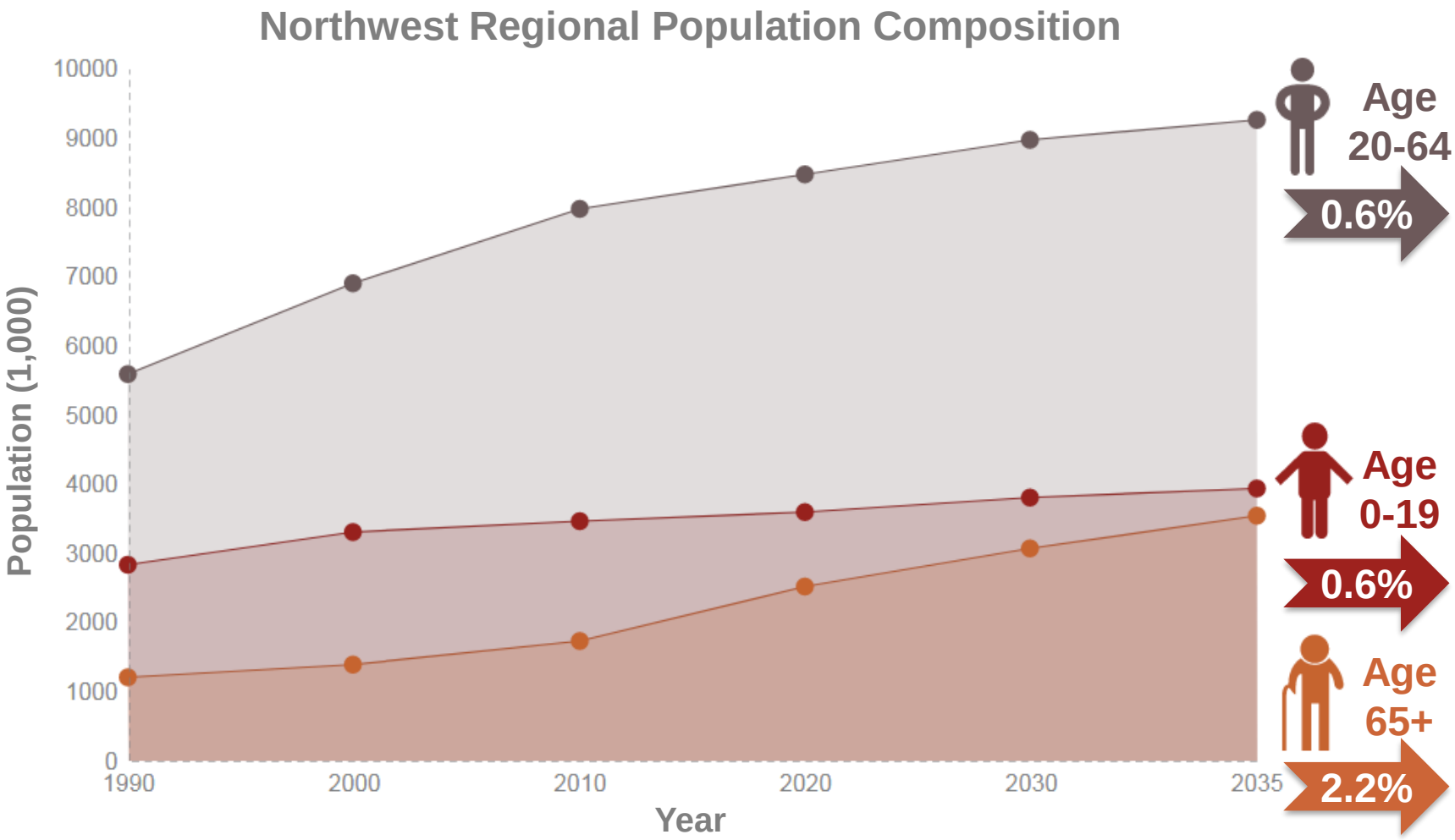
(Dean Rutz/The Seattle Times)

Population Growth



Source: Northwest Power and Conservation Council

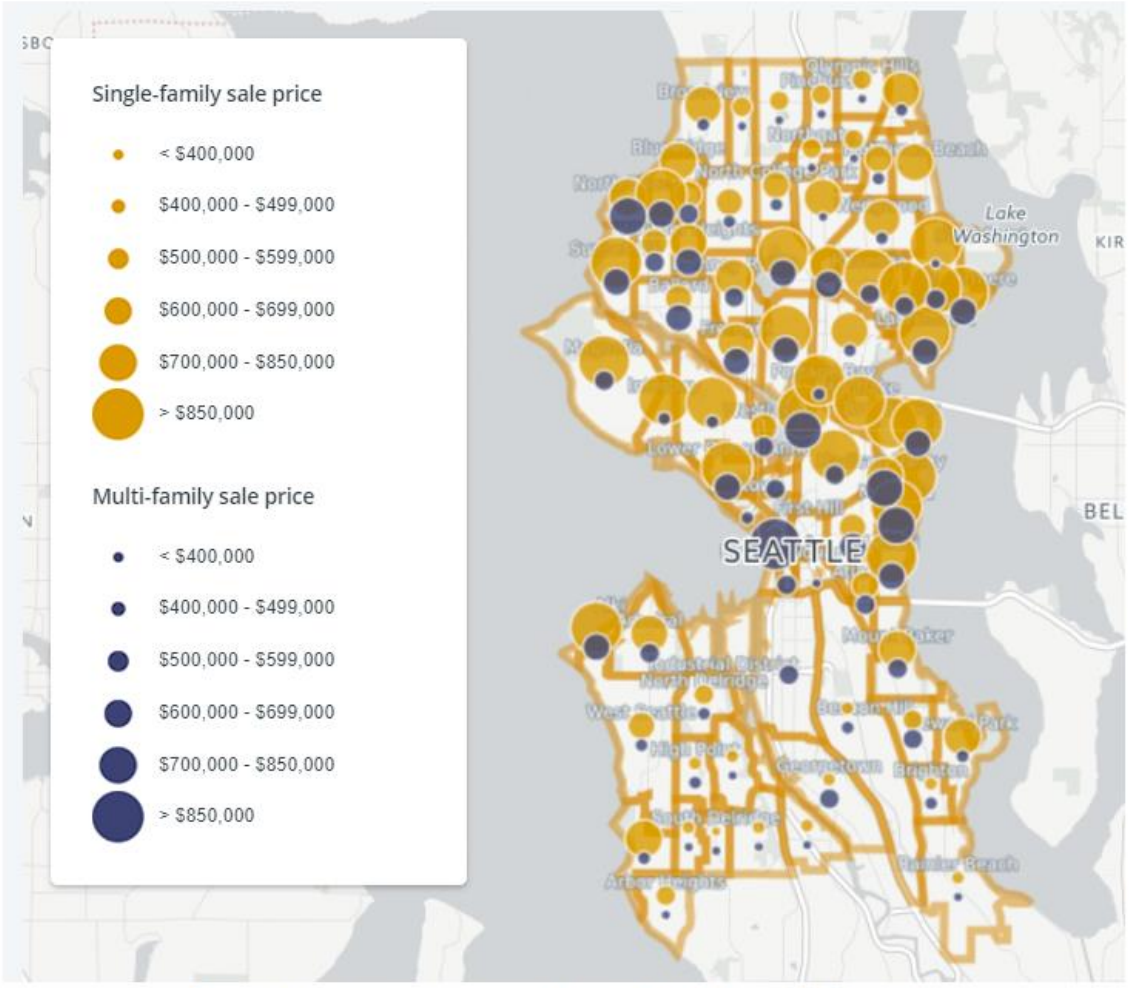
Demographic Change



Source: Northwest Power and Conservation Council

Housing Affordability

Single-family homes cost 42% more than multifamily homes



Source: Sightline Institute

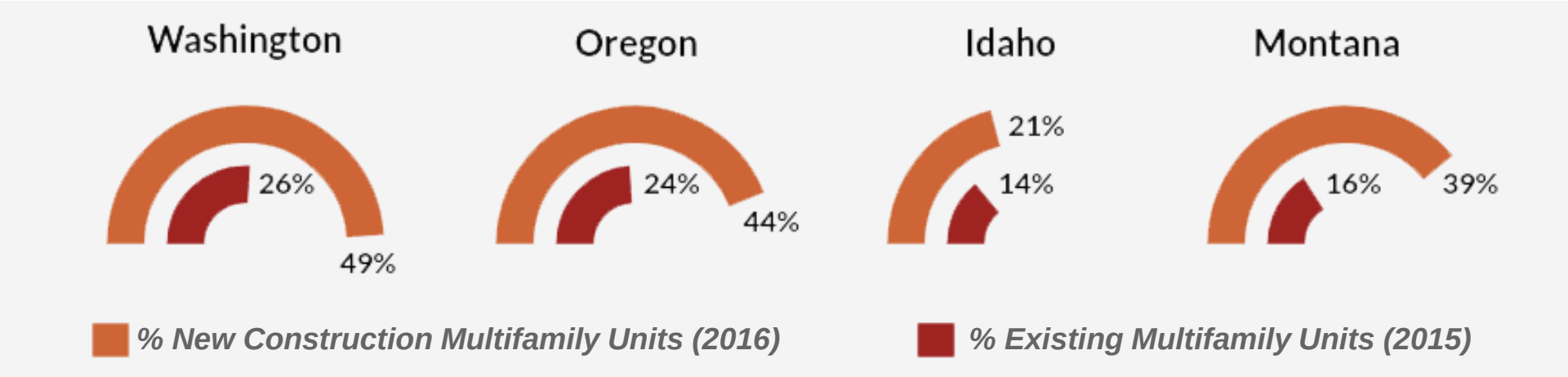
Housing Forecast

	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

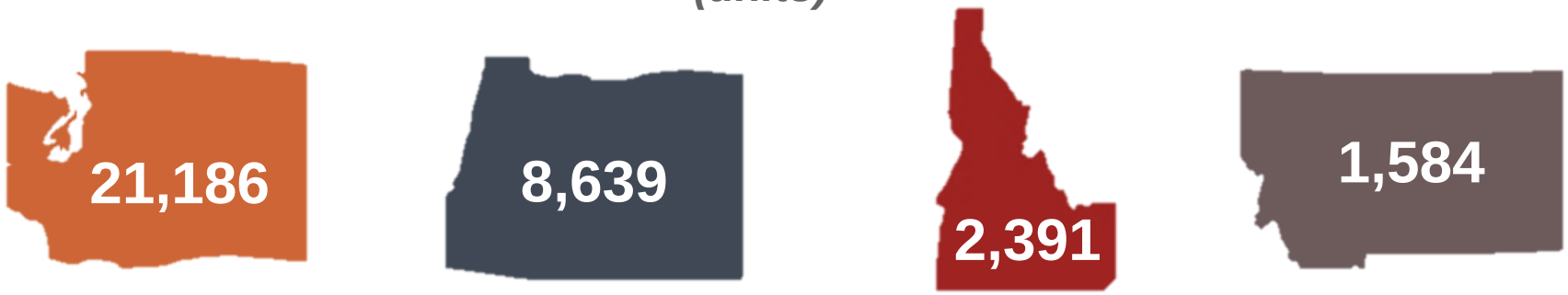
1.5 million new homes

Source: Northwest Power and Conservation Council

The Shift To Multifamily



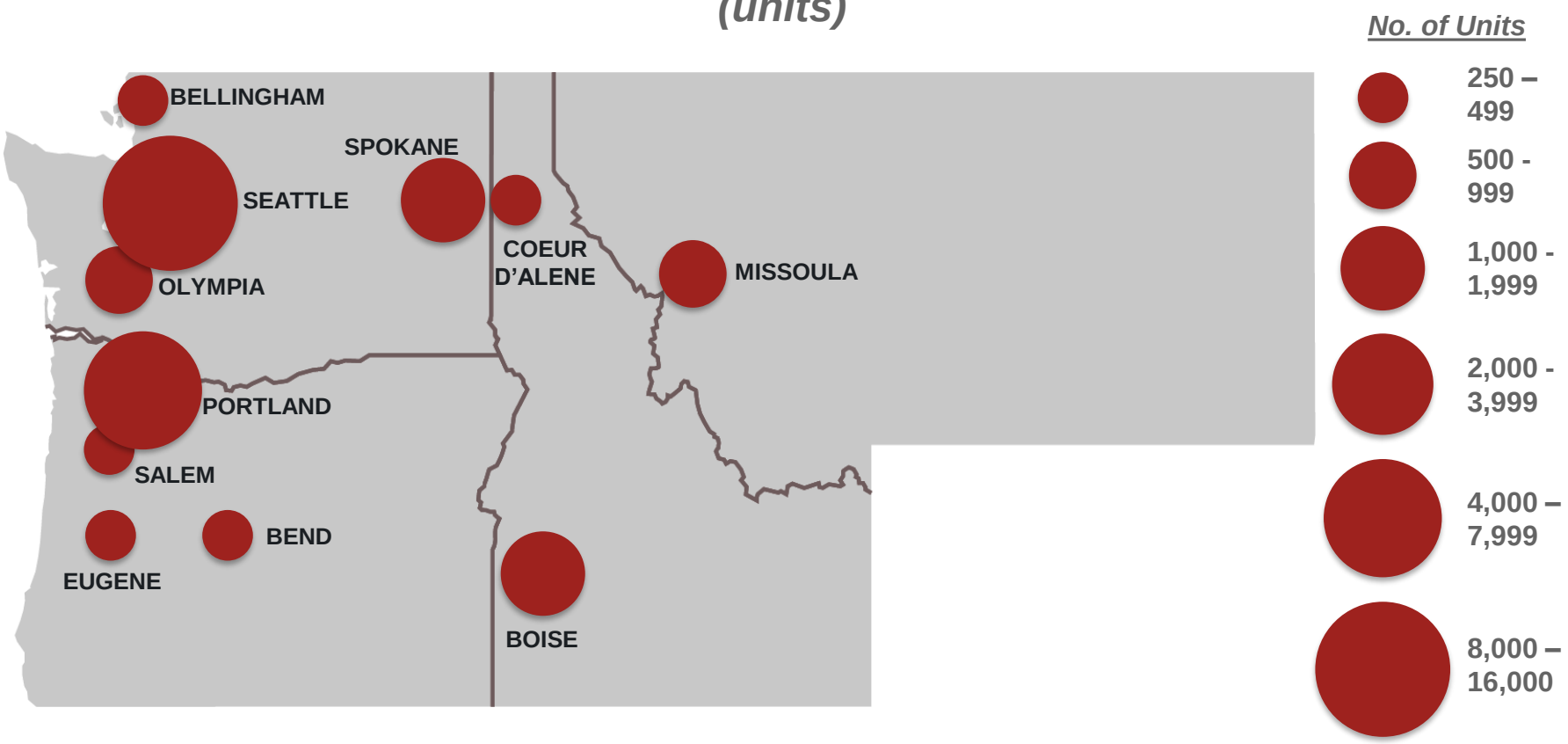
2016 Multifamily[1] NC Activity (units)



[1]**Multifamily**: Housing structures with greater than four units

Multifamily NC Hotspots

2016 Multifamily[1] NC Activity (units)

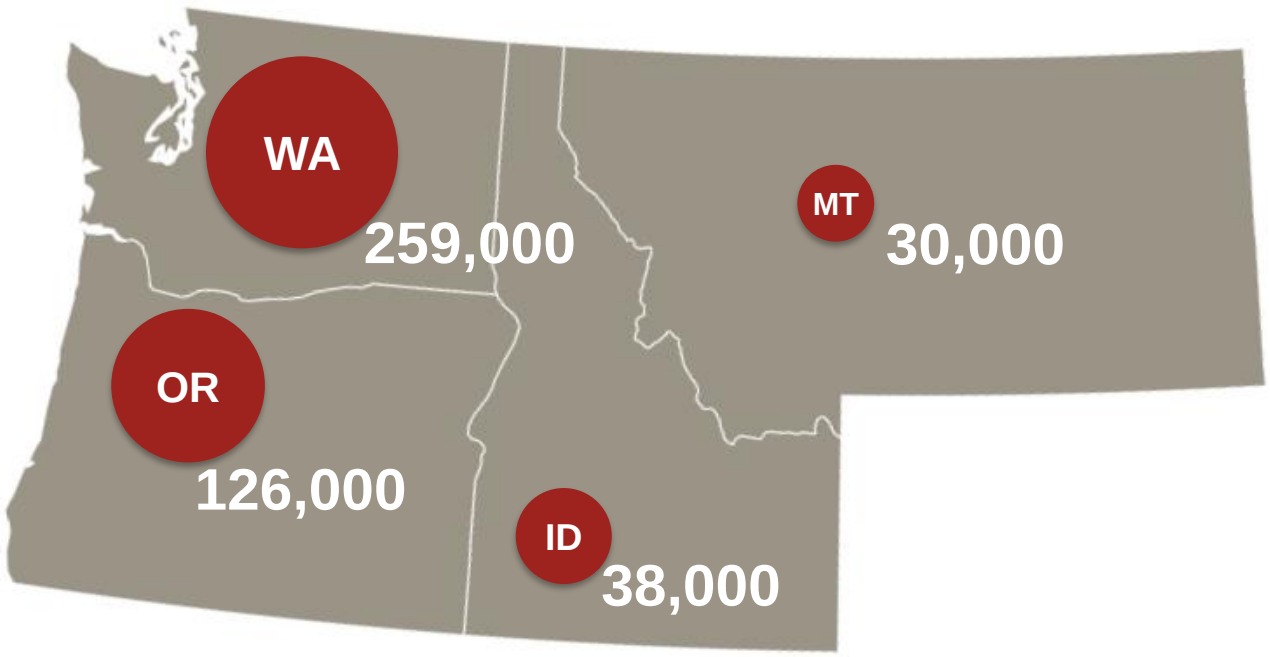


[1]**Multifamily**: Housing structures with greater than four units

Source: National Association of Home Builders

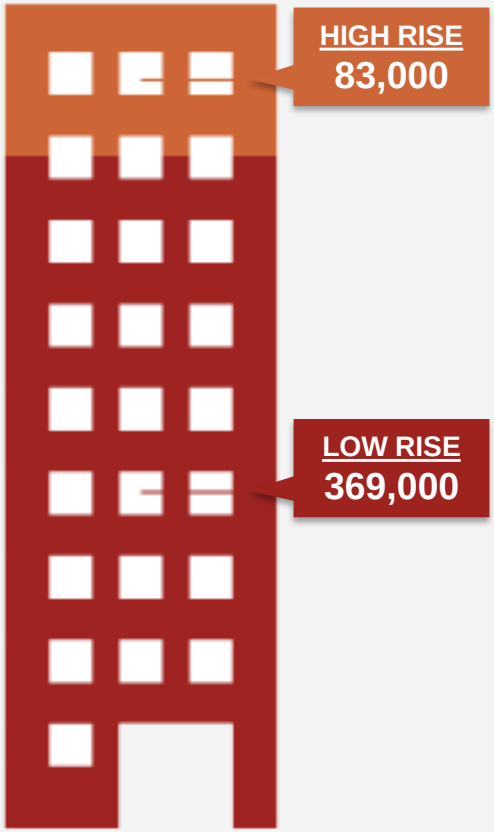
Market Potential

Multifamily New Construction Units by 2035



Northwest Regional Multifamily Units by 2035

452,000



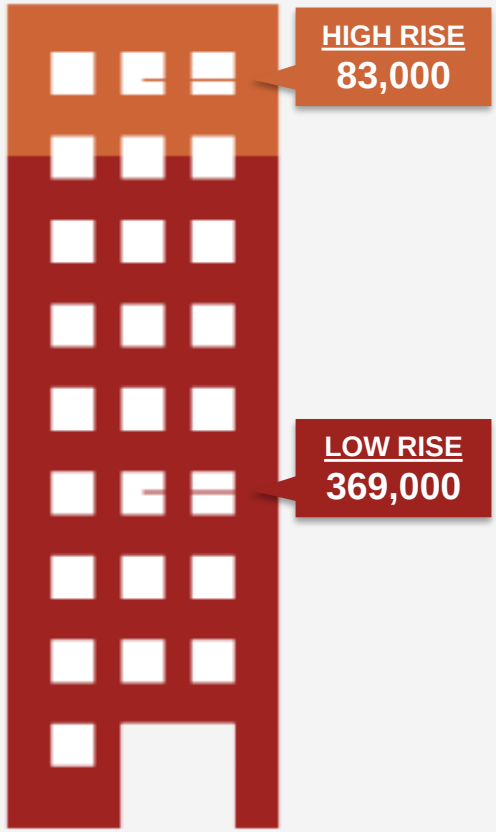
Market Potential

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

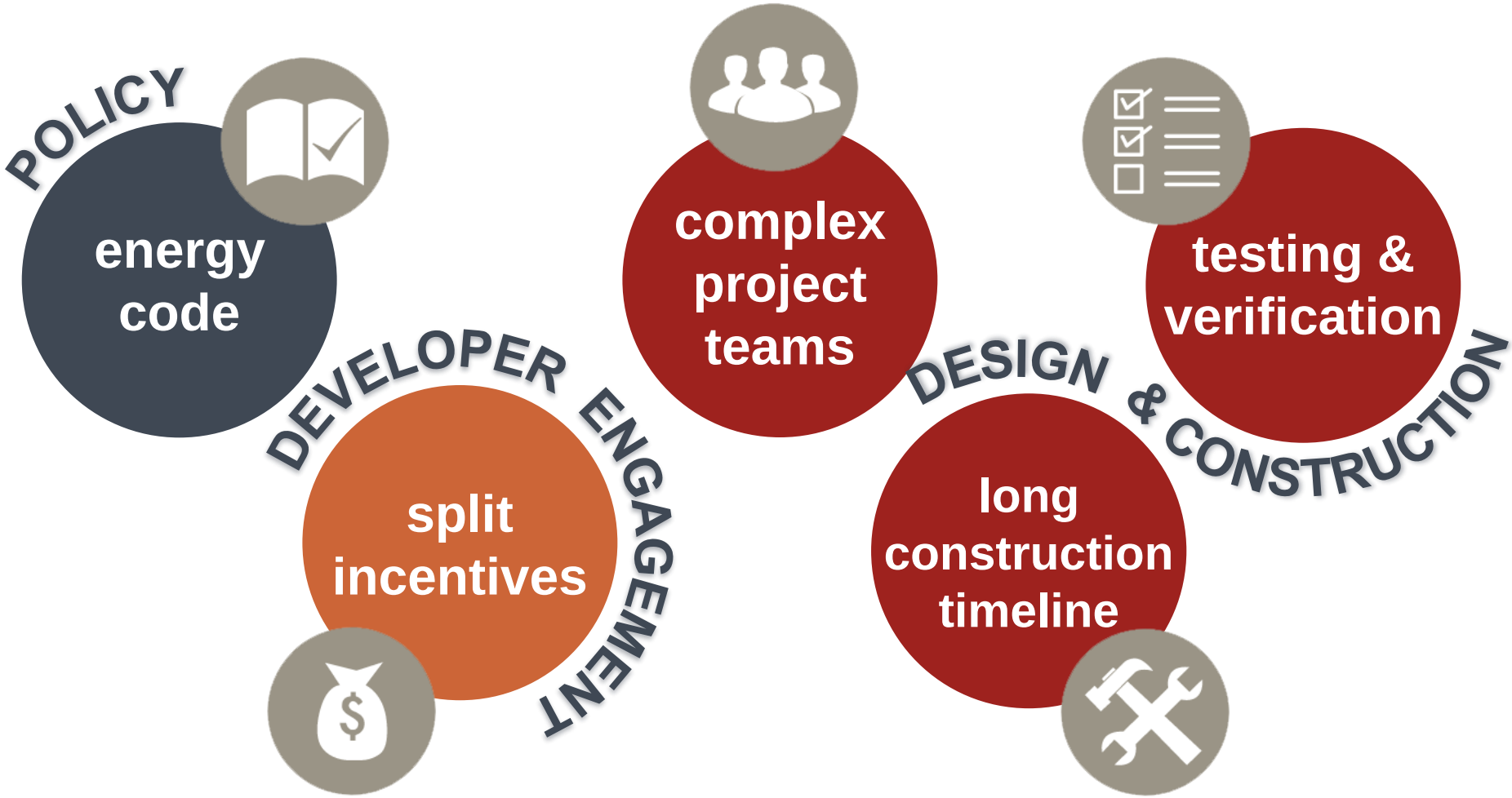
adjective | mul·ti·fam·i·ly | ˌməltēˈfam(ə)lē/

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

ZERO ENERGY READY HOME
U.S. DEPARTMENT OF ENERGY

ENERGY STAR

LEED

PHIUS
Passive House Institute US

LIVING BUILDING CHALLENGE™

NATIONAL GREEN BUILDING STANDARD™

REGIONAL PROGRAMS

BUILT GREEN®

Bonneville
POWER ADMINISTRATION

earth advantage

Leah Missik

Built Green

Greening Multifamily

Trends & updates in the Seattle region

BUILT GREEN

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Introduction

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

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Built Green

ABOUT

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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

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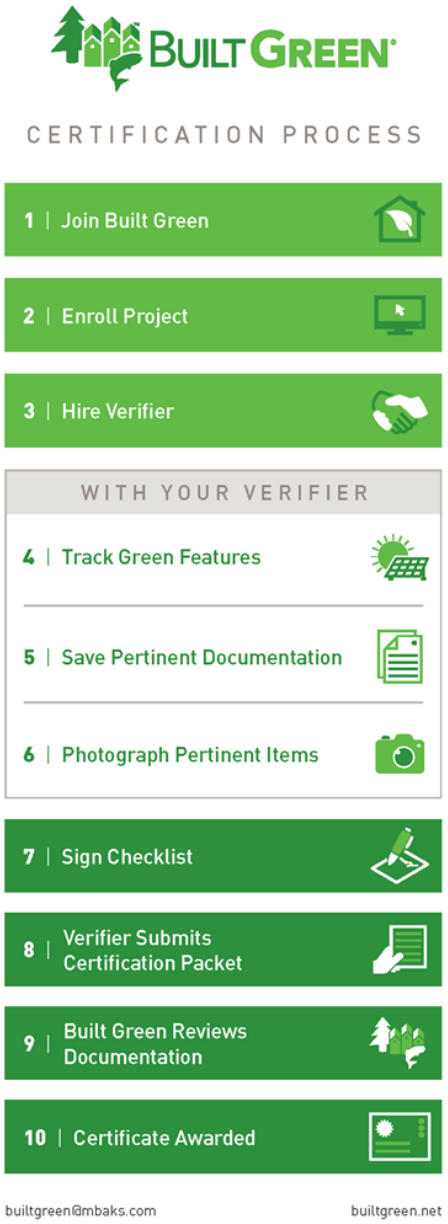
Certification Process

- 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



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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

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MULTIFAMILY HISTORY

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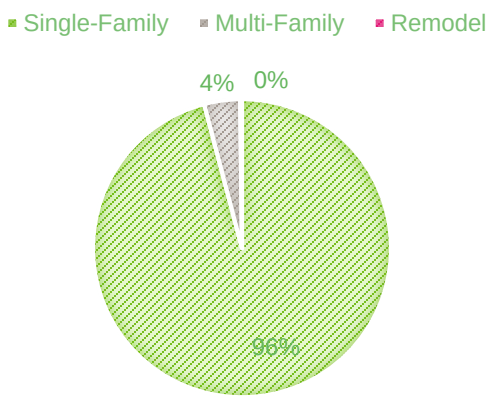
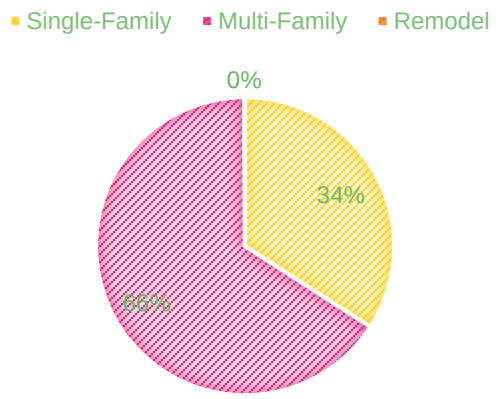
Share of Built Green

2016 CERTIFICATIONS BY BUILDING TYPE



2016 CERTIFIED UNITS BY BUILDING TYPE



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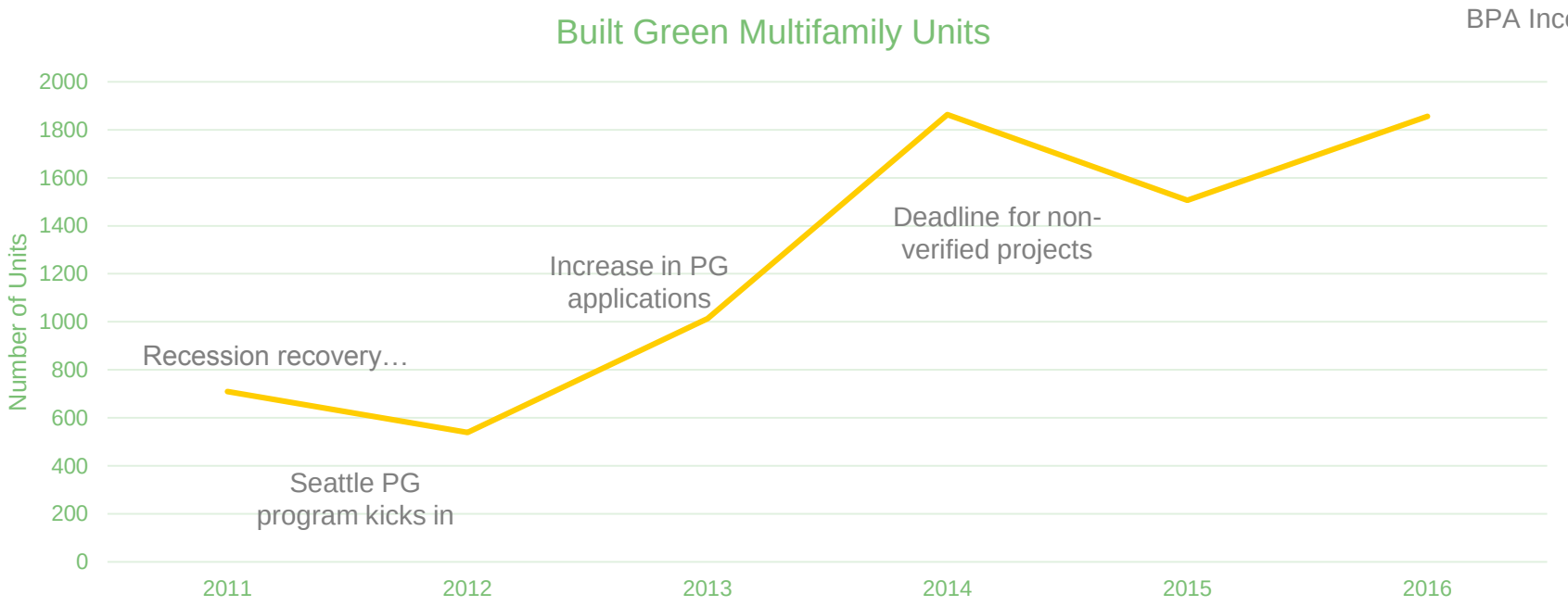
Multifamily Certification



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

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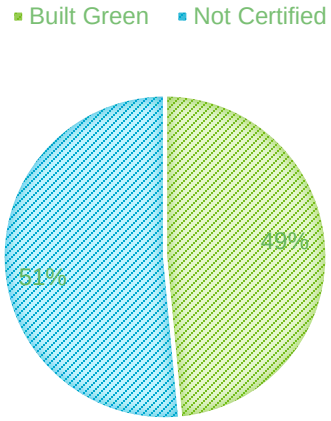
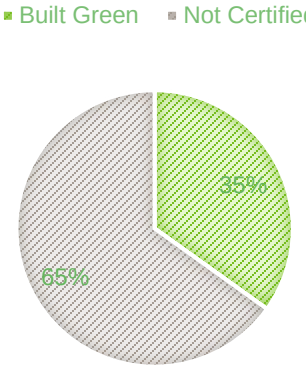
Share of Market

SEATTLE MARKET SHARE



KING COUNTY MARKET SHARE



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CHECKLIST UPDATE

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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

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Why?

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

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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

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

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

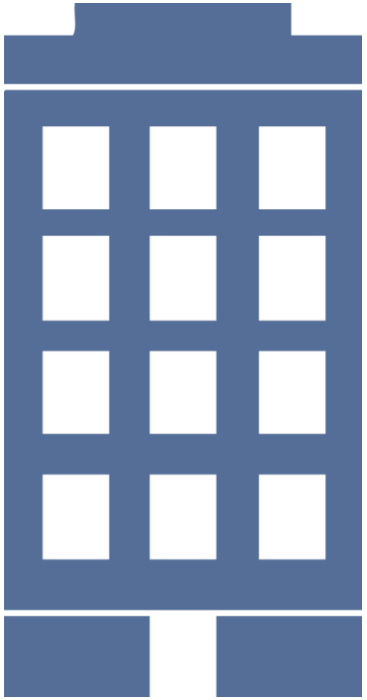
Program Design

Set Performance Bars

Test Programs Against Performance Bars

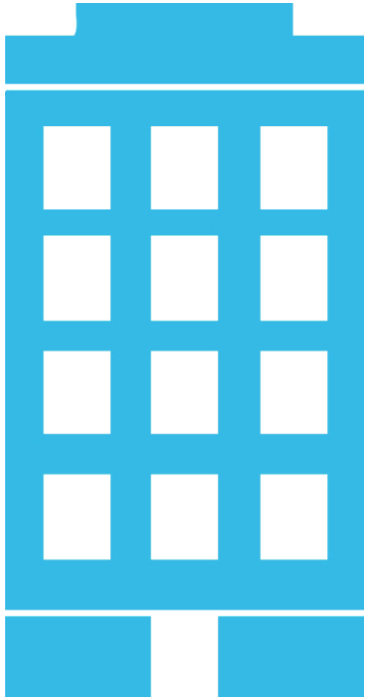
Add Qualified Programs to Incentive Paths

Energy Efficient



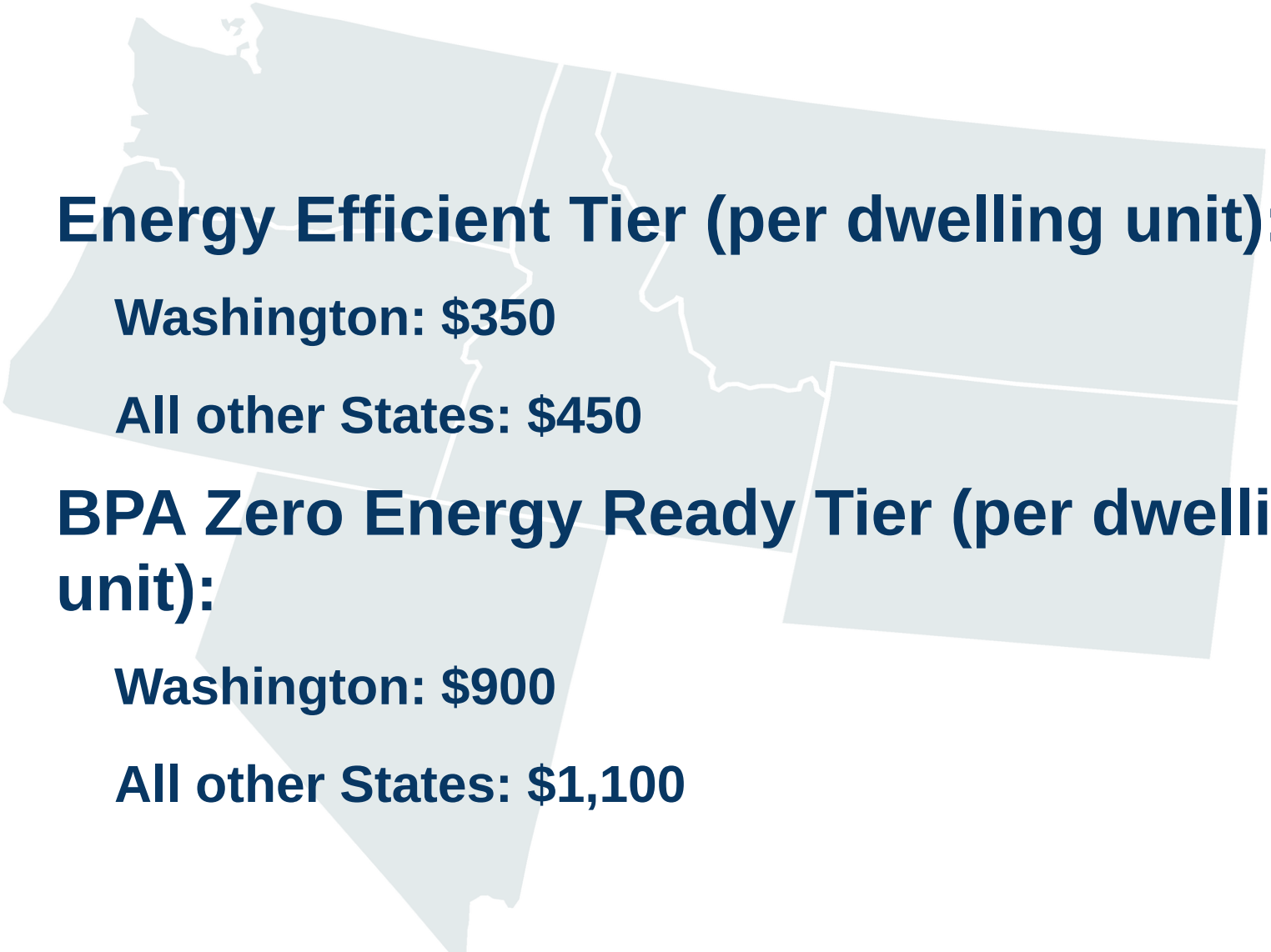
10% More Efficient
(≈27.6 kBtu/ ft2)

BPA Zero Energy Ready



25% More Efficient
(≈23.0 kBtu/ ft2)

Measure Payments to Utility Customers



Energy Efficient Tier (per dwelling unit):

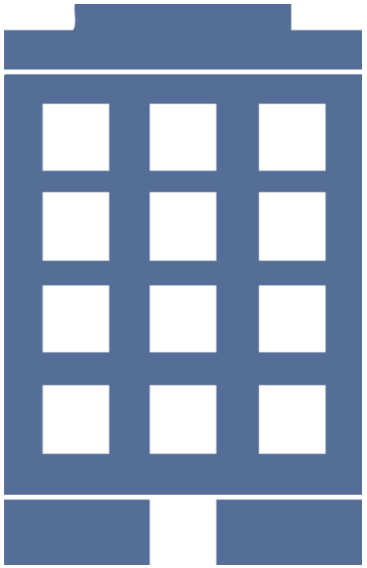
- **Washington: $350**
- **All other States: $450**

BPA Zero Energy Ready Tier (per dwelling unit):

- **Washington: $900**
- **All other States: $1,100**

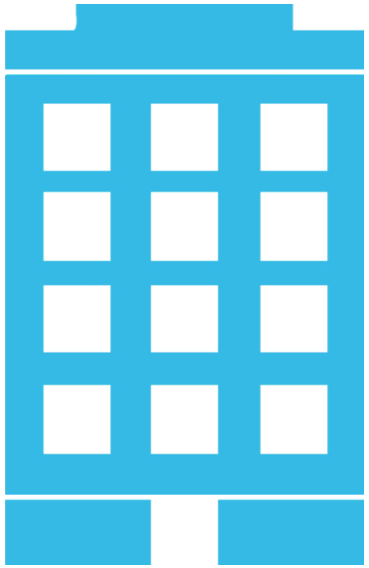
Current Qualified Programs Lists (QPL)

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

Questions?

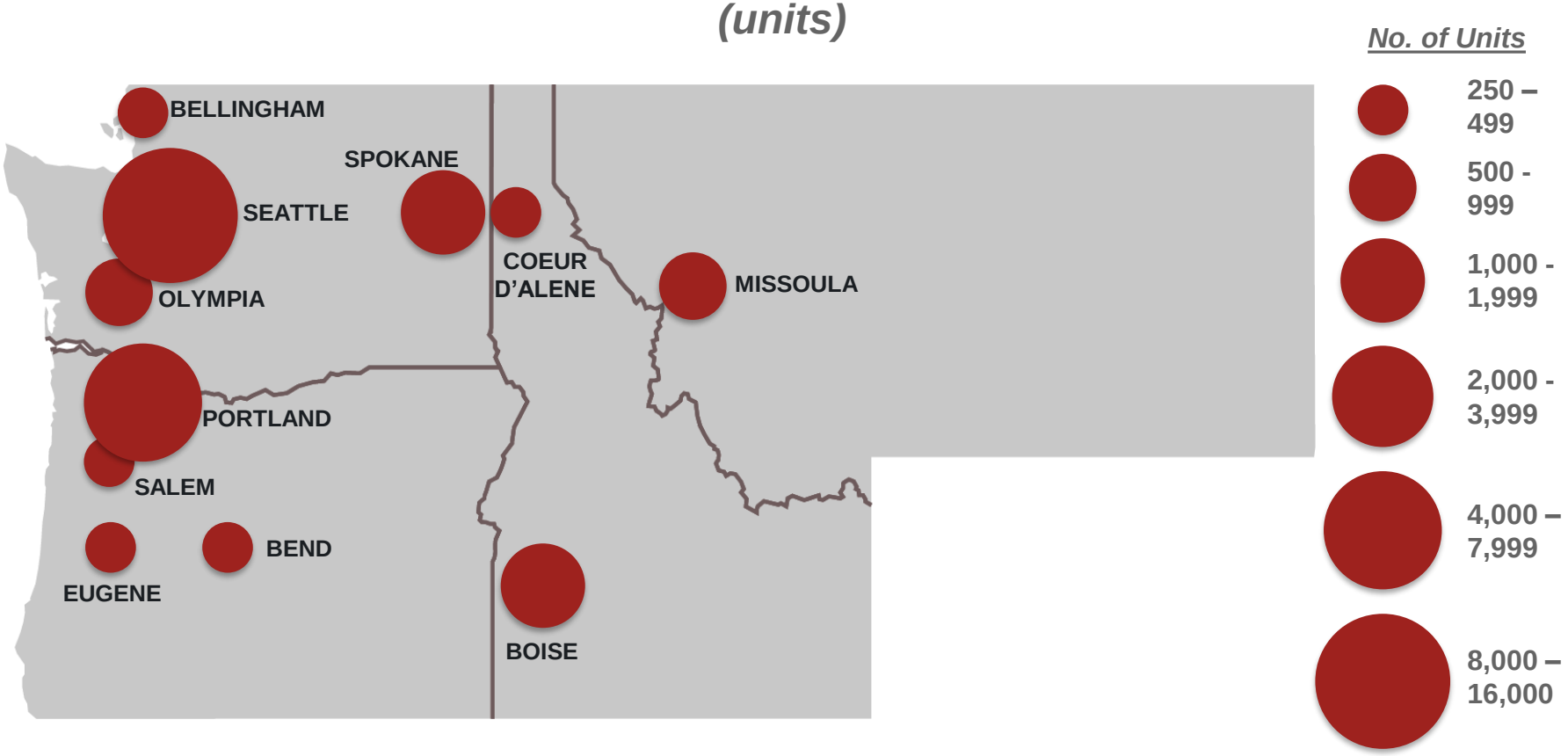
Jess Kincaid, ***jbkincaid@bpa.gov***

Developed by the Bonneville Power Administration | September 2017

Questions?
Discussion

Multifamily NC Hotspots

2016 Multifamily[1] NC Activity (units)



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THANK YOU!

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