

Oregon Property Tax Capitalization: Evidence from Portland

NeRC

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Property Taxes in Oregon

- **Pre-1990:**
 - Tax rate =
Required Revenue / Net Assessed Value
- **Measure 5 (1990)**
 - Property tax limits
 - Compression
- **Measure 50 (1997)**
 - Permanent tax rates
 - Reduced assessed values & limit growth

Study Objective

- Property tax capitalization –
if two houses are similar in all ways
except for their property tax payments,
do their sale prices differ as a result?

Methodology

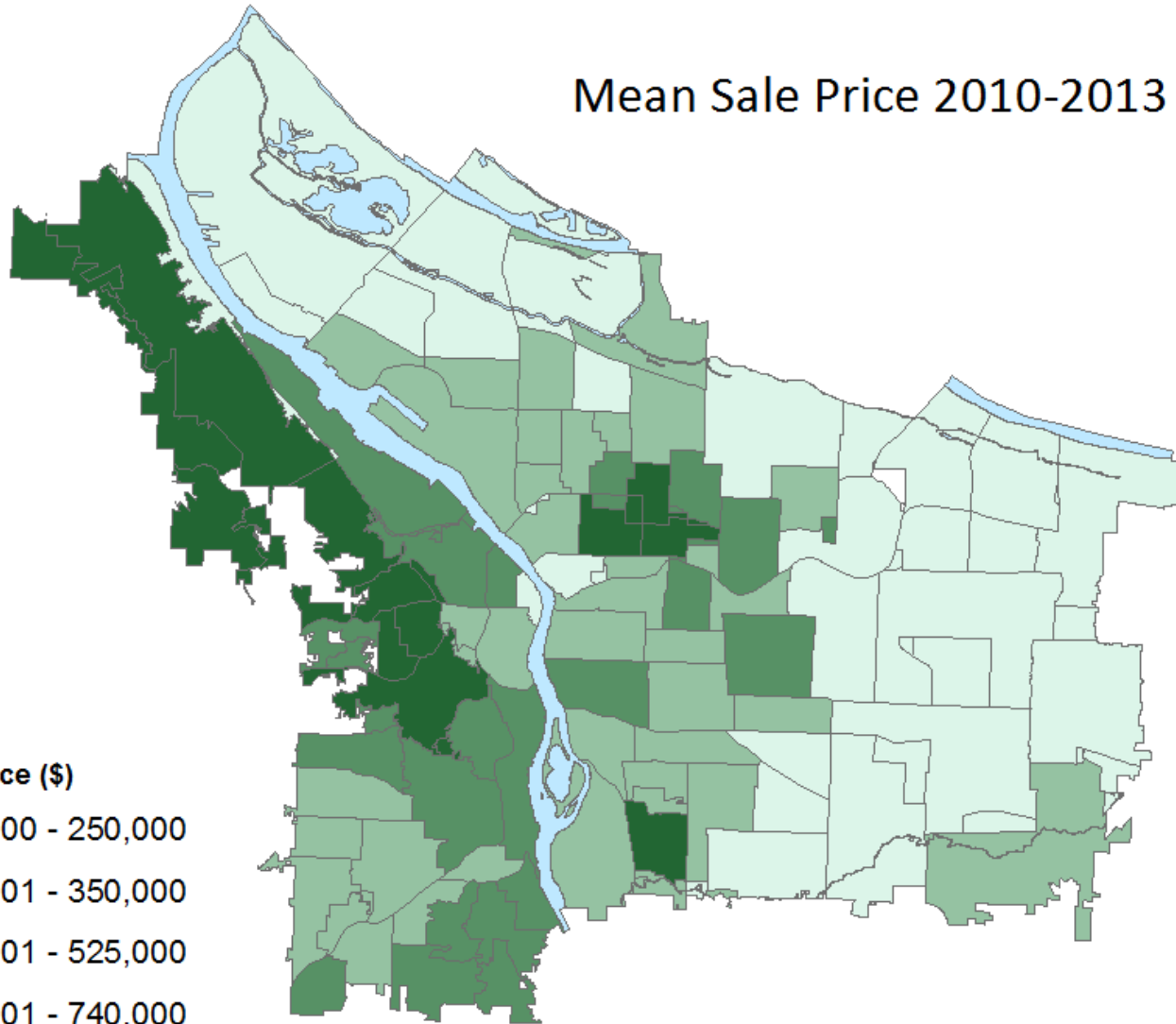
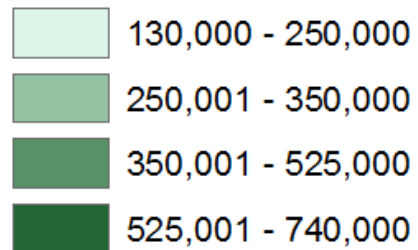
- Hedonic Pricing (Regression) – a method for estimating demand or value by breaking down a product into its characteristics and estimating the value of each characteristic.

Data Sources

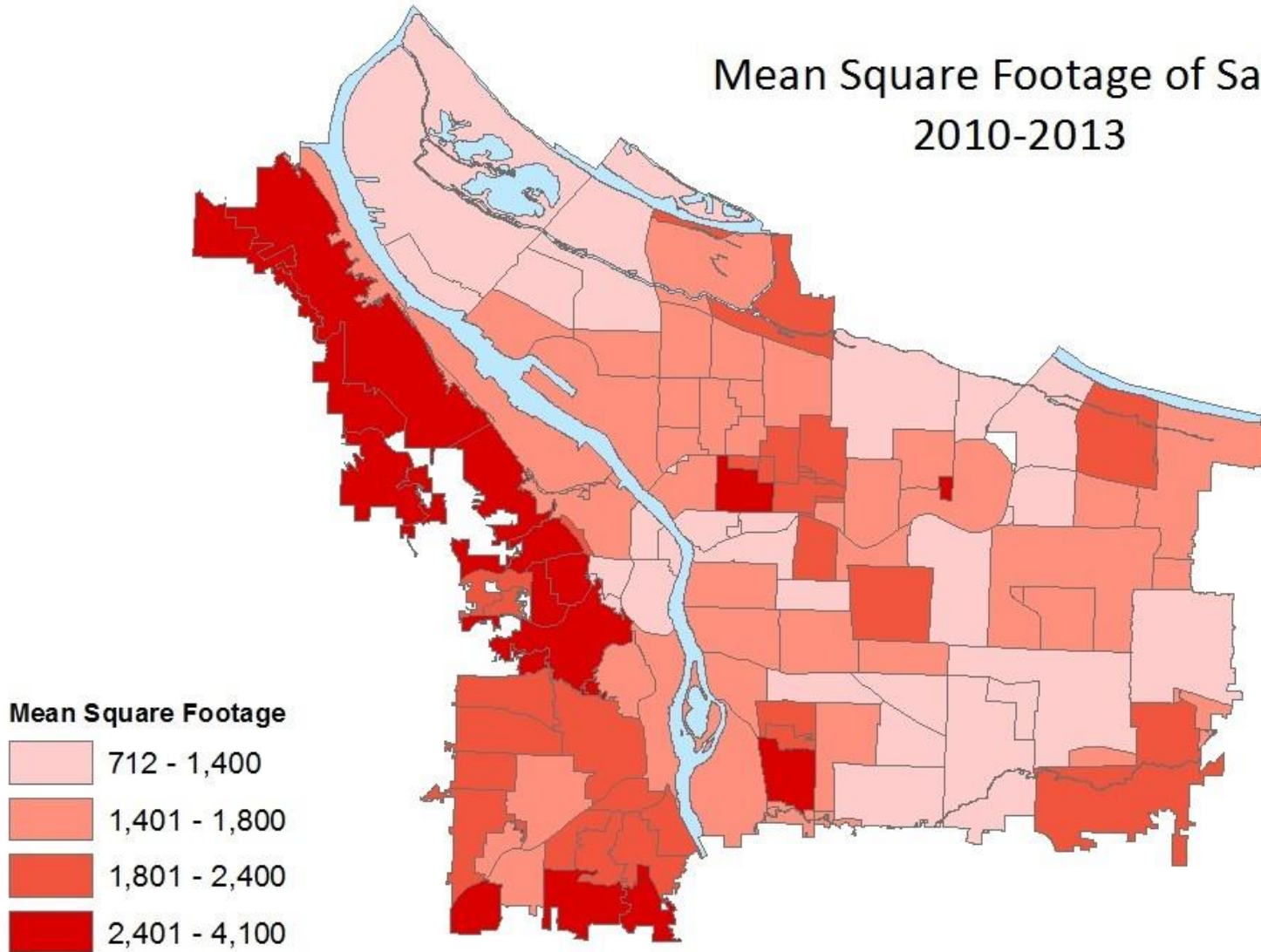
- **Property Tax / Home characteristics**
 - Multnomah County Assessor's Office
 - 2010-2013 Certified tax rolls
 - 2010-2013 Homes sales
 - Interior square footage, lot size, number of rooms, age, ...
- **Neighborhood characteristics**
 - Portland neighborhood crime rates
 - Walk Score® / Transit Score®
- **School characteristics**
 - Elementary school test scores (Writing/Math)

Mean Sale Price 2010-2013

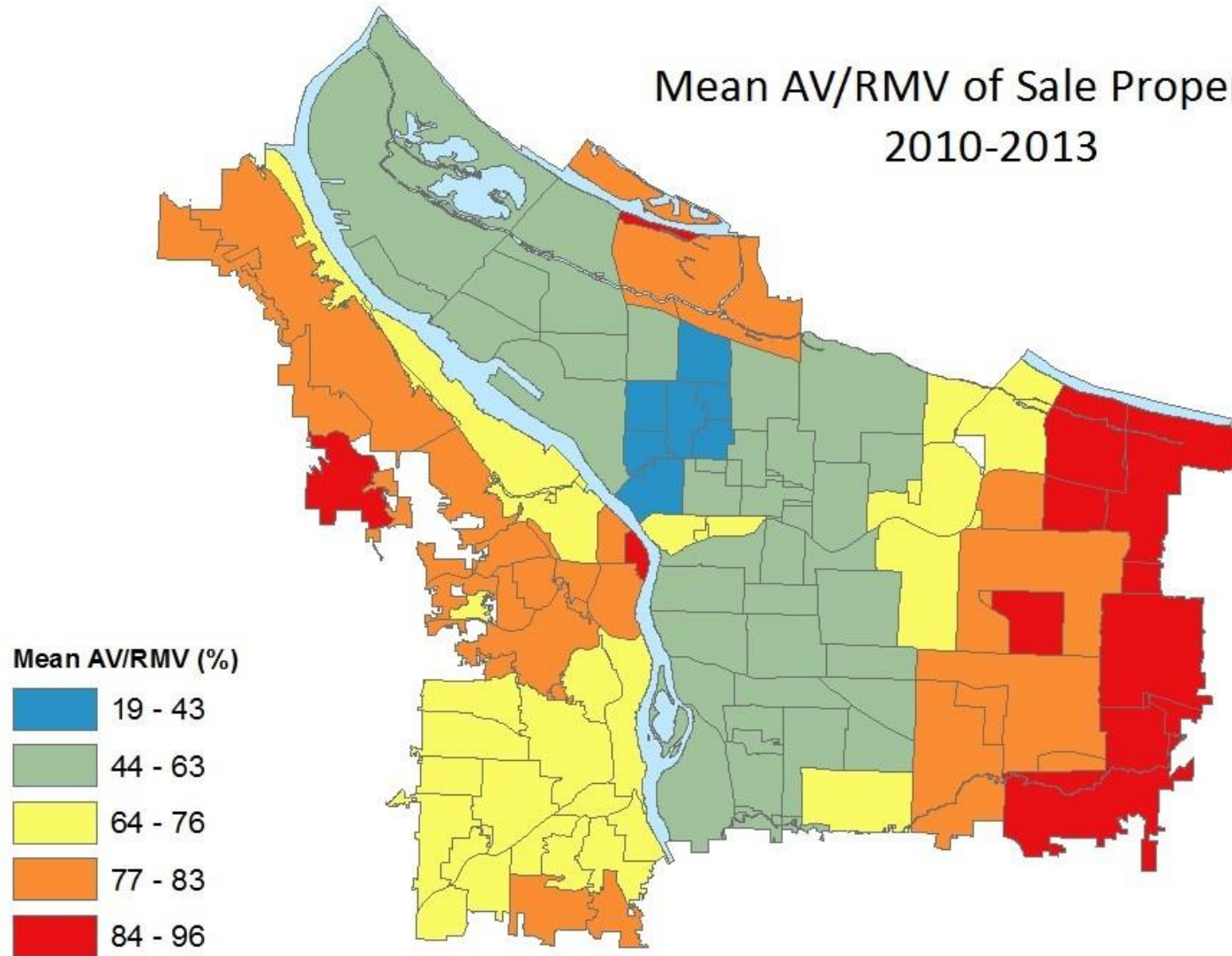
Mean Sale Price (\$)



Mean Square Footage of Sales 2010-2013



Mean AV/RMV of Sale Properties 2010-2013

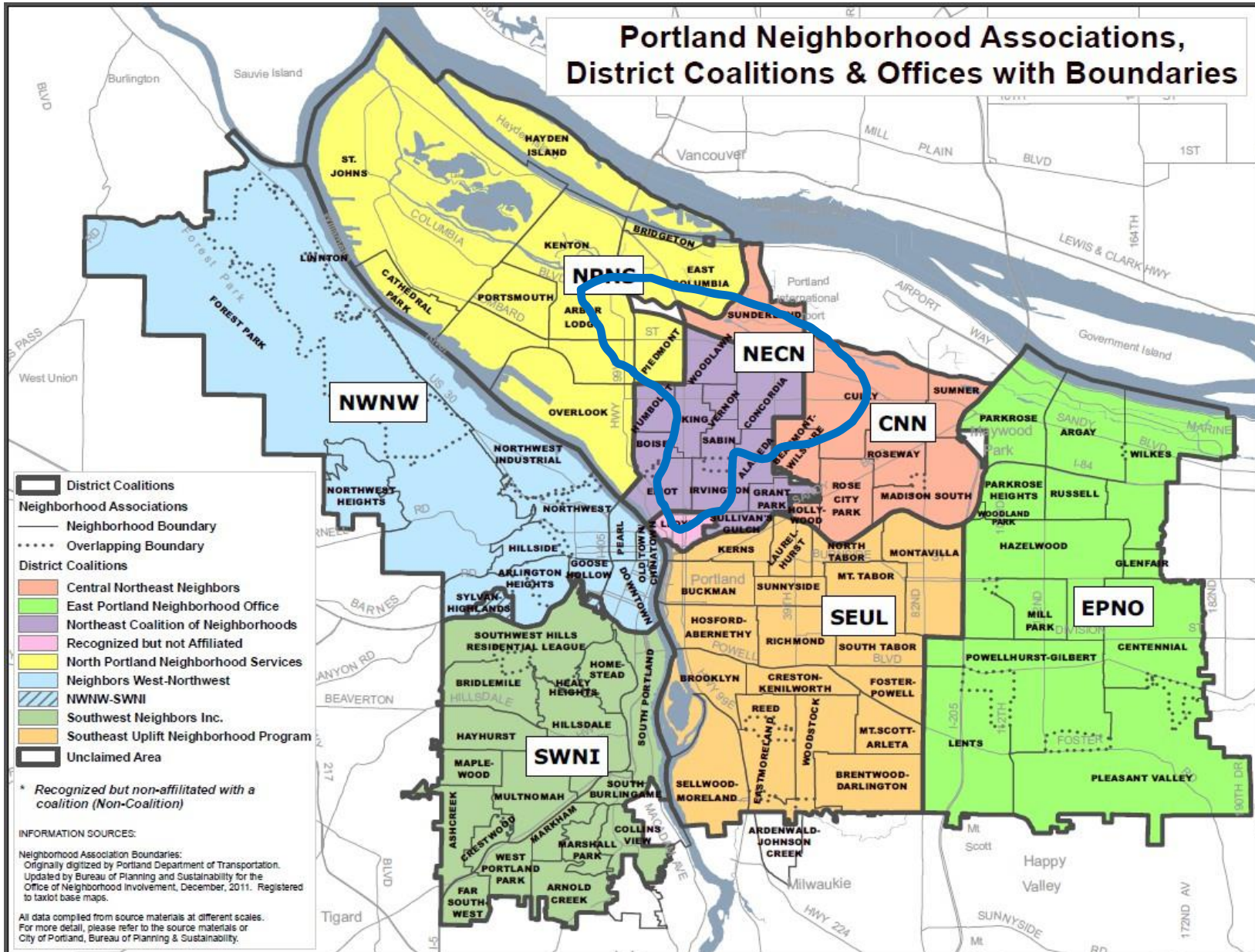


Highs and Lows

- **Highest AV/RMV Ratios:**
Bridgeton, Wilkes, Pleasant Valley, Centennial, Old Town-Chinatown, Argay, Glenfair, Mill Park, NW Heights, Russell
- **Lowest AV/RMV Ratios:**
Boise, Vernon, Humboldt, King, Woodlawn, Sabin, Eliot, Concordia, Piedmont, Arbor Lodge

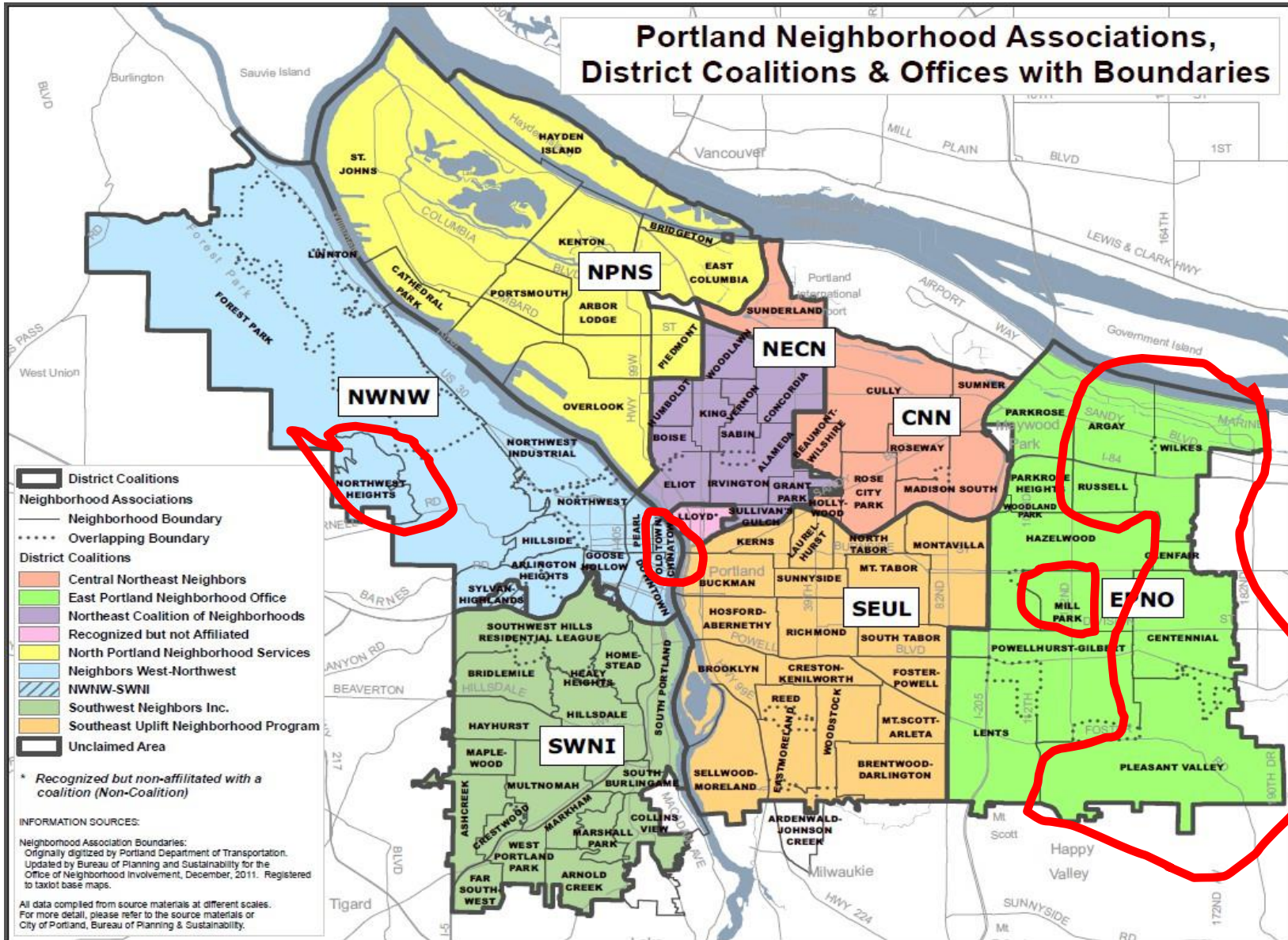
Portland Neighborhood Associations, District Coalitions & Offices with Boundaries

Lowest AV/RMV Ratios



Portland Neighborhood Associations, District Coalitions & Offices with Boundaries

Highest
AV/RMV
Ratios



Results

- Assuming 3% discount rate and perpetual lifespan: **15% to 92%** capitalization



Average Portland House

Sale Price = \$ 313,995 | 1,600 Sqft

AV/RMV Ratio = 65% | Effective Tax Rate (on RMV) = 1.37%

	AV/RMV Ratio		
	55%	65%	75%
Assessed Tax	\$3,366	\$3,979	\$4,591
Actual Tax	\$3,366	\$3,979	\$4,372
Sale Price	\$317,099 - \$329,412	\$313,995	\$310,891 - \$298,578

Sources of horizontal inequity

After controlling for house characteristics, neighborhood characteristics & school characteristics...

- **Differences in property tax capitalization**
- **Differences in real market value (RMV) growth**
- **Year built/re-assessed**

A large gap between AV and RMV does not mean that the owner of a property is paying low taxes because of differences in rates. Instead it means that these neighborhoods are paying less than what is expected based on location and sale price.



Thank you!

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Modeling Specification

$$P_i = \beta_0 + \beta_1 \mathbf{H}_i + \beta_2 \mathbf{S}_i + \beta_3 \mathbf{N}_i + \epsilon_i$$

- Sale price is a function of
 - H_i** – house characteristics
 - S_i** – school characteristics
 - N_i** – neighborhood characteristics
- Fixed effects –
year sold & neighborhood