EXHIBIT: A AGENDA ITEM: 8
LAND CONSERVATION & DEVELOPMENT COMMISSION
DATE: 9.26.14
SUBMITTED BY: Bob Parker

HB 2254 Land Use Efficiency Research: Progress Report and Preliminary Findings

Land Development and Conservation Commission

September 26, 2014

Today's Presentation

- Background and Context
  - Objectives/HB 2254 guidance
  - How to measure "land use efficiency"
- Summary of Preliminary Findings and Conclusions
  - Possibilities and limitations of the data
  - Implications for the implementation of HB 2254

BACKGROUND AND CONTEXT

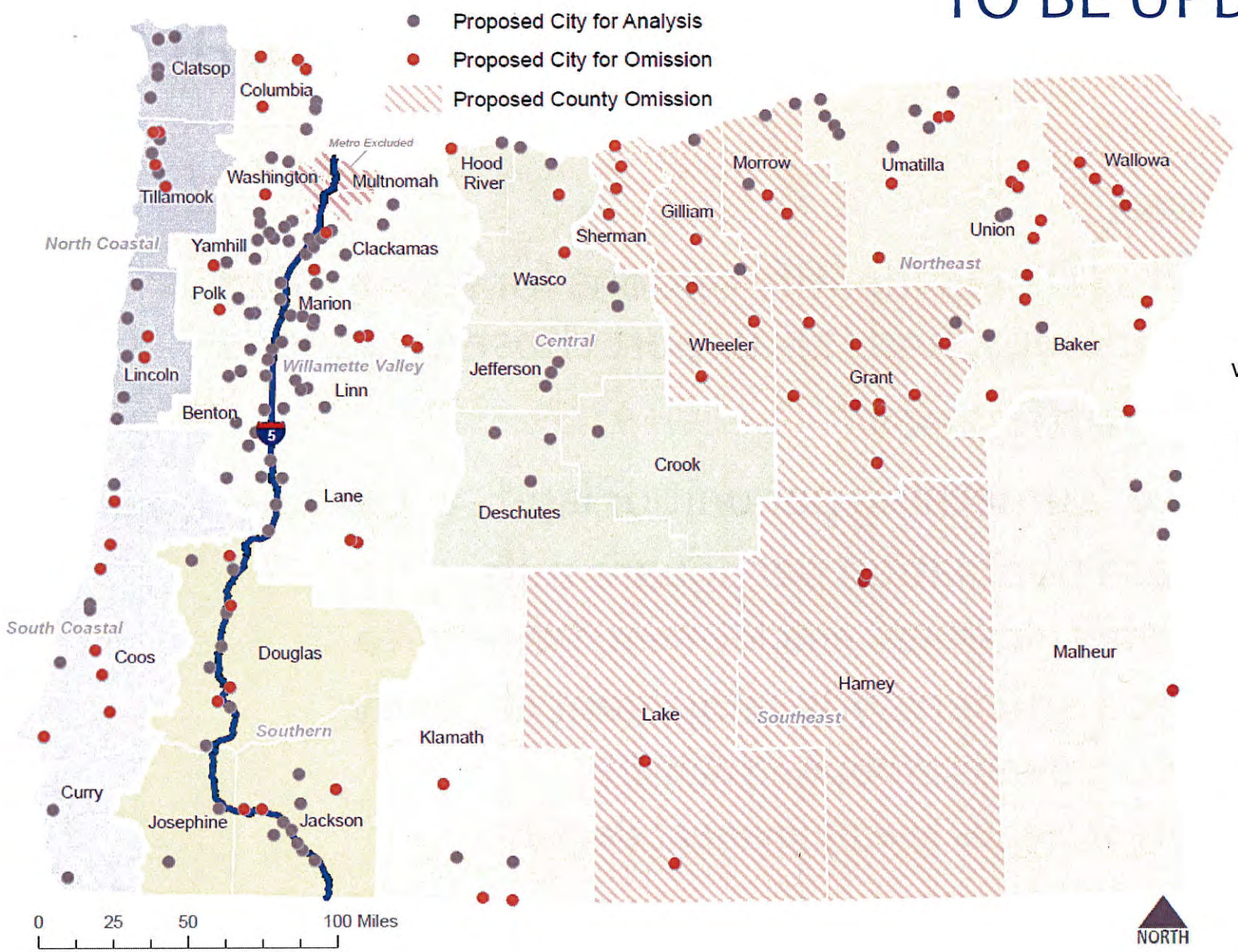
Big Picture: Objectives

- Oregon land use program
  - Preserve farm and forest land
  - Encourage more efficient urban uses
  - Key tool: UGB
- HB 2254
  - UGB process complicated; simplify
  - Broad guidance, but not details about how
    - "increase efficiency" "increase population per sq mile"

U of O Research

- Purpose
  - Data to (1) help identify options for a simplified methodology, and (2) support chosen methods
- Focus: "efficiency"
  - More of something per unit of land = density
  - Increase population per square mile
    - Related measures: employment, DU per area
  - Increase efficiency/development capacity
    - Recent trends in housing density
    - Recent trends in employment density

TO BE UPDATED



Study omits cities with population less than 5,000 and a growth rate of less than 1% per year between 1993 and 2012

Omitted counties primarily contain cities that meet this criteria

Framework for analysis

- City limits <u>inside</u> UGBs
- Three tiers of analysis
  - Tier 1: City limit level
  - Tier 2: All taxlots
  - Tier 3: Developed taxlots by use
- Eliminated "prohibitive constraints"
  - Water
  - Floodway
- Cities that are not growing will be excluded

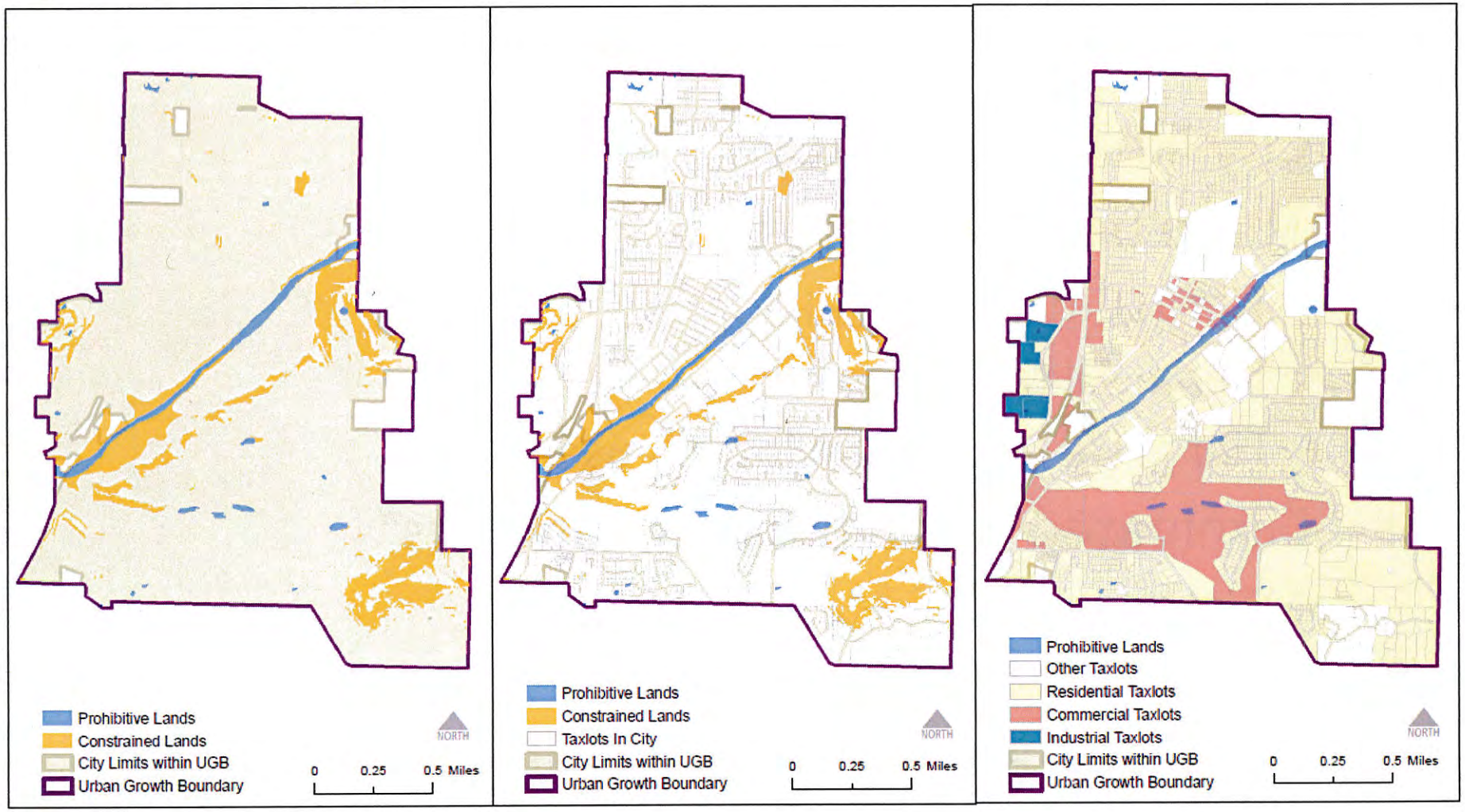
Tier 1

Tier 2

Tier 3

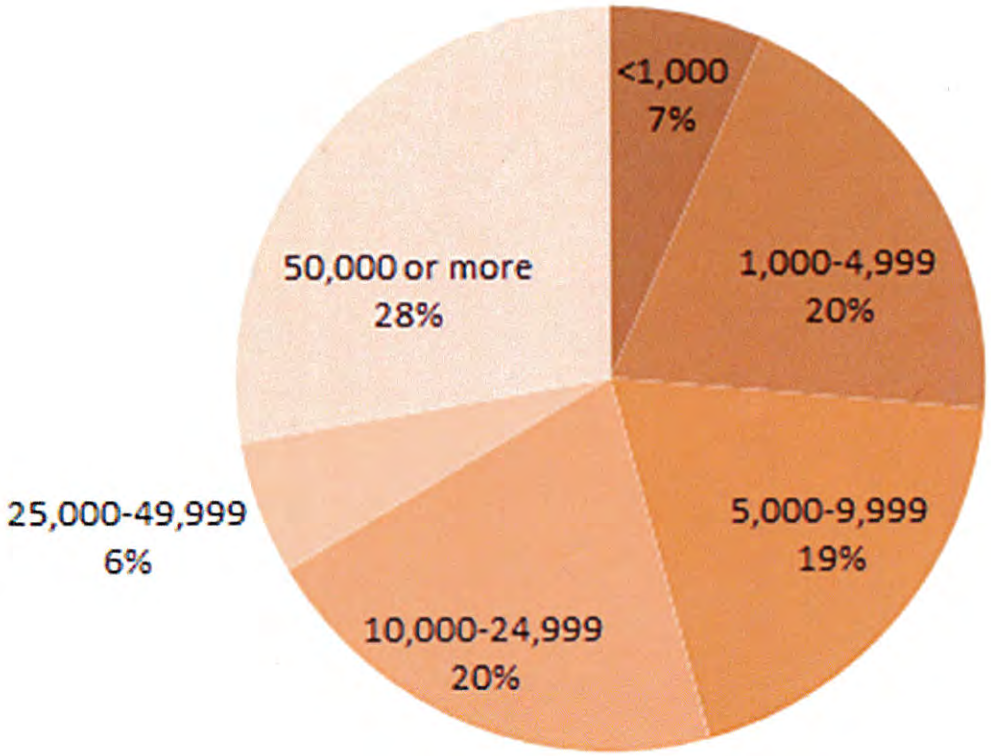
TO BE UPDATED

Eagle Point, Jackson County



FINDINGS

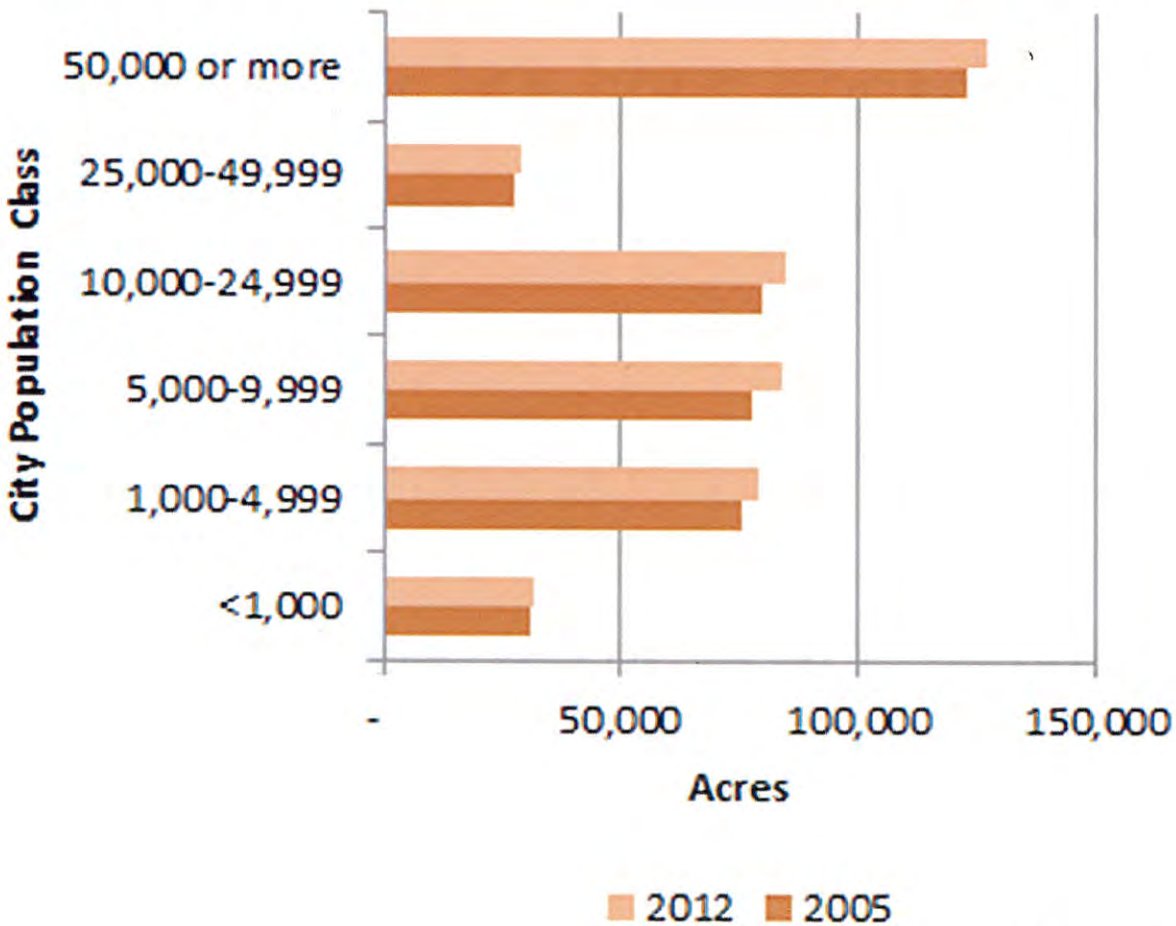
Acres in UGBs, 2012



City Size	Number of Cities	Acres in UGB
<1,000	81	38,253
1,000-4,999	79	112,271
5,000-9,999	28	111,008
10,000-24,999	17	117,974
25,000-49,999	4	33,234
50,000 or more	7	158,290
Total	**216**	**571,030**

Note: Includes all cities outside the Metro UGB

Acres in City Limits, In UGBs



Acres
2005 – 414, 259
2012 – 434,490
Change – 20,231

Acres in city limits outside UGBs:
793

Note: Includes all cities outside the Metro UGB

Statewide Population Growth Trends

1. Total population change 2003-12: 285,000
2. 55% went into non-Metro (PDX) cities
   - 157,000
3. 73% of growth in non-Metro cities went in cities >10,000
4. Cities <1,000 declined in population

Population Change 2005-12, City Limits

City Size	Number of Cities	Number	Percent	Share of Total Growth
<1,000	79	-778	-2.3%	-1%
1,000-4,999	81	11,160	6.5%	10%
5,000-9,999	28	17,090	8.5%	16%
10,000-24,999	17	16,730	6.2%	15%
25,000-49,999	4	19,405	17.5%	18%
50,000 or more	7	44,420	7.5%	41%
Total	**216**	**108,027**	**7.9%**	**100.0%**

Cities< 1,000 are losing population

Cities over 50,000 accounted for 41% of growth 05-12

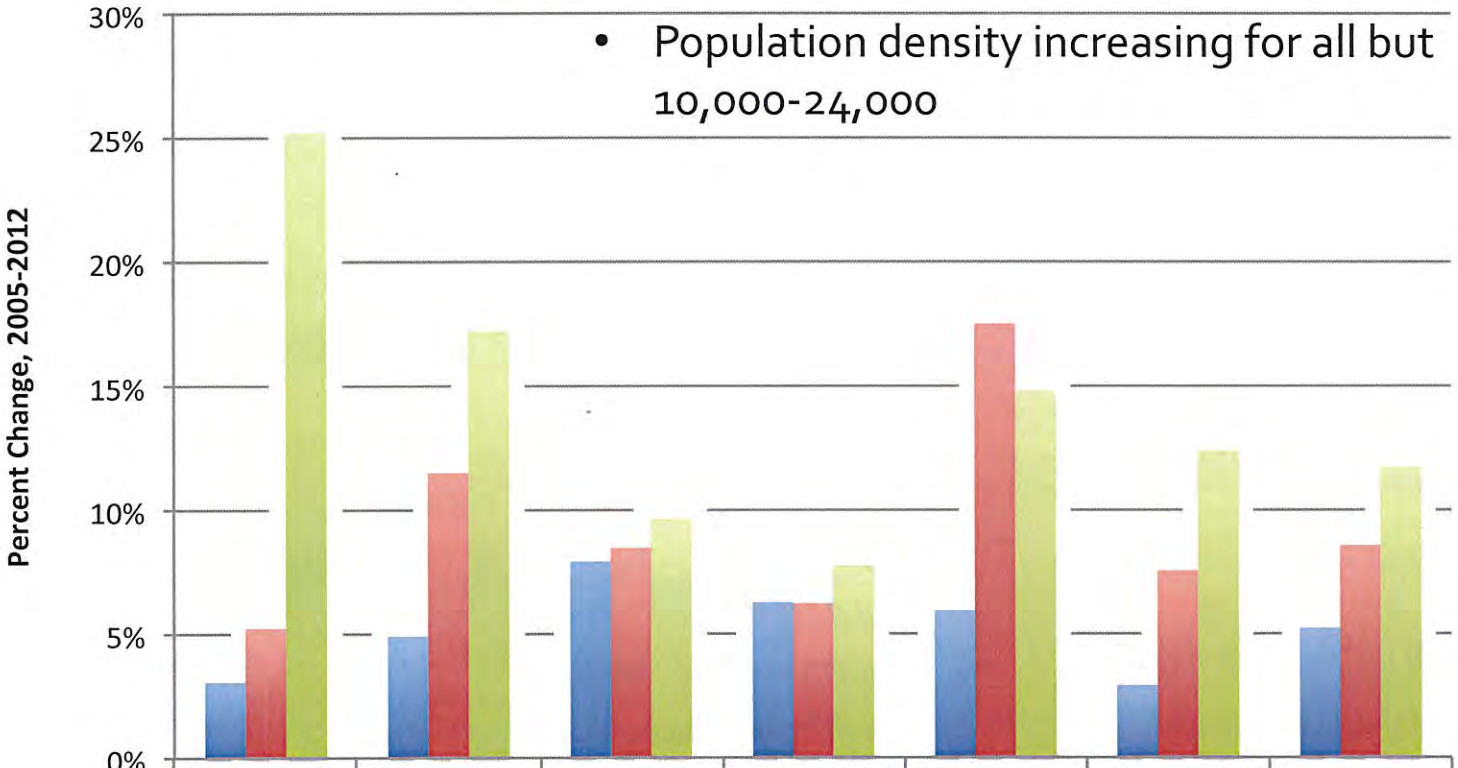
Valley accounted for 61% of population increase

Central/So. Oregon, 34%

City Size	Number of Cities	Number	Percent	Share of Total Growth
Central Oregon	15	17,840	13.7%	17%
North Coastal Oregon	19	2,475	4.2%	2%
Northeast Oregon	56	2,486	2.4%	2%
South Coastal Oregon	13	840	1.4%	1%
Southeast Oregon	14	448	0.9%	0%
Southern Oregon	24	18,528	9.0%	17%
Willamette Valley	75	65,410	8.5%	61%
Total	**216**	**108,027**	**7.9%**	**100.0%**

Note: Includes all cities outside the Metro UGB

Change by city size, 2005-12

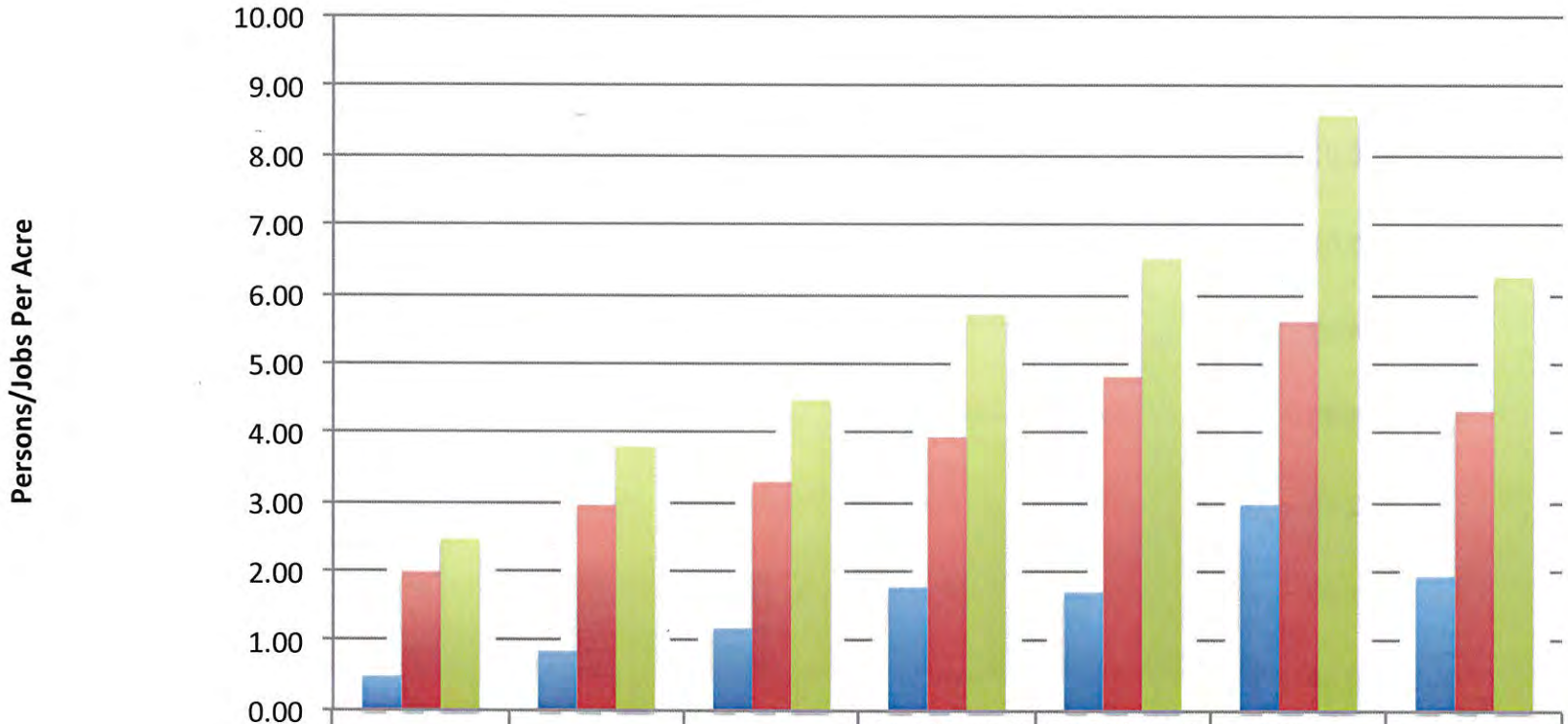


- Population density increasing for all but 10,000-24,000

	<1,000	1,000-4,999	5,000-9,999	10,000-24,999	25,000-49,999	50,000 or more	All Classes
Acres	3%	5%	8%	6%	6%	3%	5%
Pop	5%	11%	8%	6%	18%	8%	9%
Pop Den	25%	17%	10%	8%	15%	12%	12%

Note: Includes 128 Tier 1 cities outside the Metro UGB for unprohibitive acres

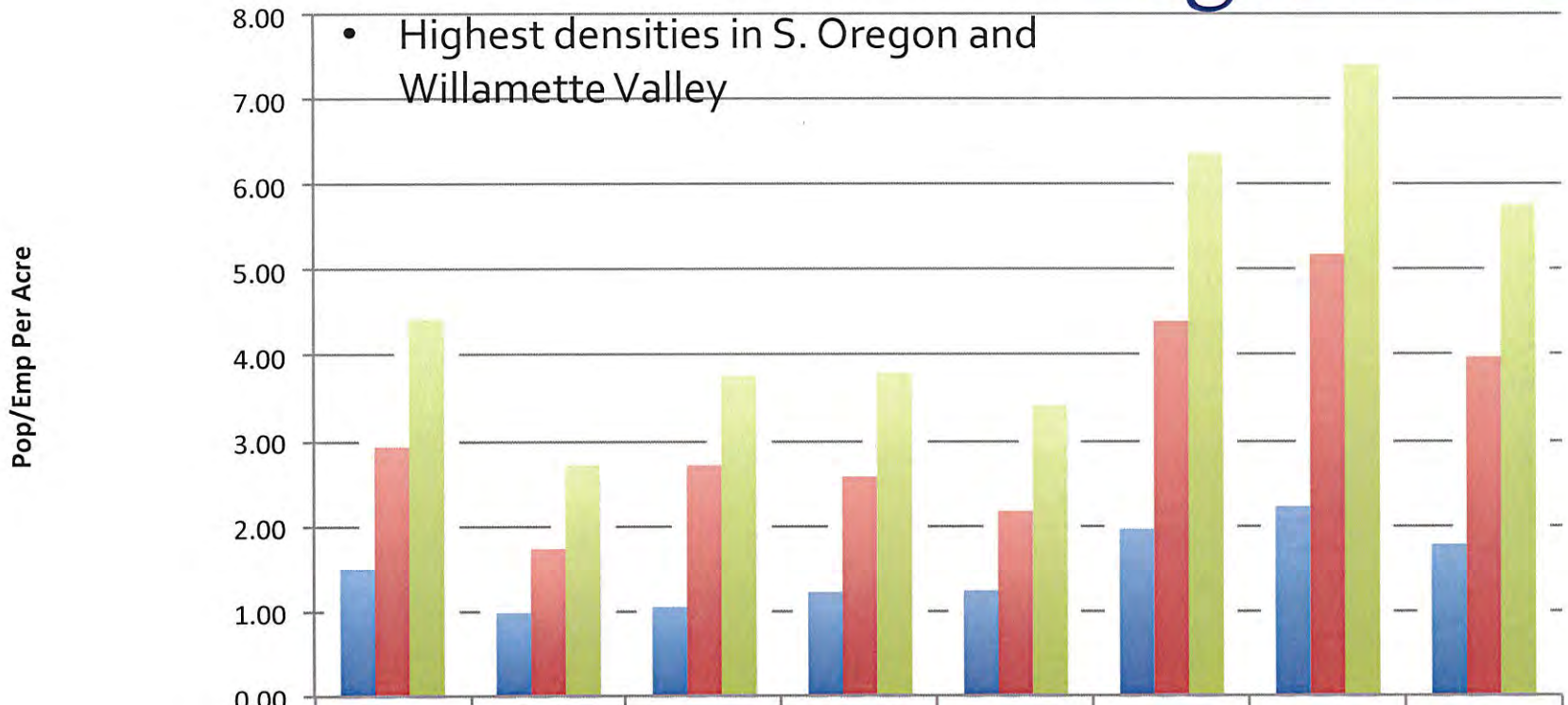
Pop/Emp density (per acre), by city size class 2012



	<1,000	1,000-4,999	5,000-9,999	10,000-24,999	25,000-49,999	50,000 or more	All Classes
Employment Density	0.49	0.85	1.18	1.78	1.71	2.97	1.94
Population Density	1.99	2.95	3.30	3.94	4.81	5.62	4.32
Pop+Emp Density	2.48	3.80	4.48	5.72	6.52	8.59	6.25

Note: Includes 128 Tier 1 cities outside the Metro UGB for unprohibitive acres

Pop/Emp density (per acre), by region 2012

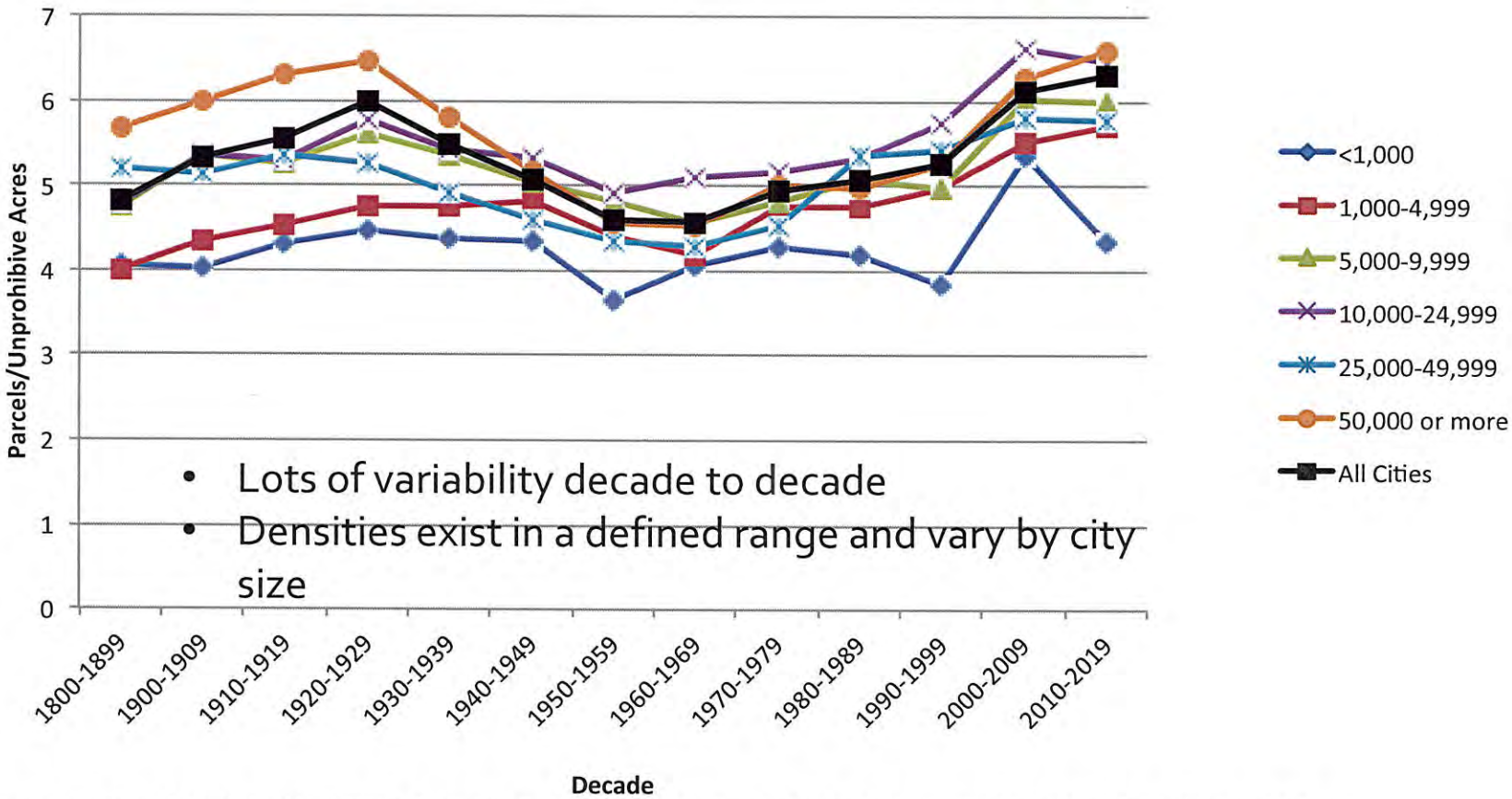


- Highest densities in S. Oregon and Willamette Valley

	Central Oregon	North Coastal Oregon	Northeast Oregon	South Coastal Oregon	Southeast Oregon	Southern Oregon	Willamette Valley	Total
Employment Density	1.50	0.98	1.05	1.22	1.24	1.96	2.23	1.78
Population Density	2.93	1.73	2.72	2.58	2.17	4.40	5.18	3.98
Pop+Emp Density	4.44	2.72	3.77	3.80	3.41	6.36	7.41	5.76

Note: Includes 128 Tier 1 cities outside the Metro UGB for unprohibitive acres

Improved Single Family and Plex Average Density by Population Class by Decade, Cities in Study, 1800-2012

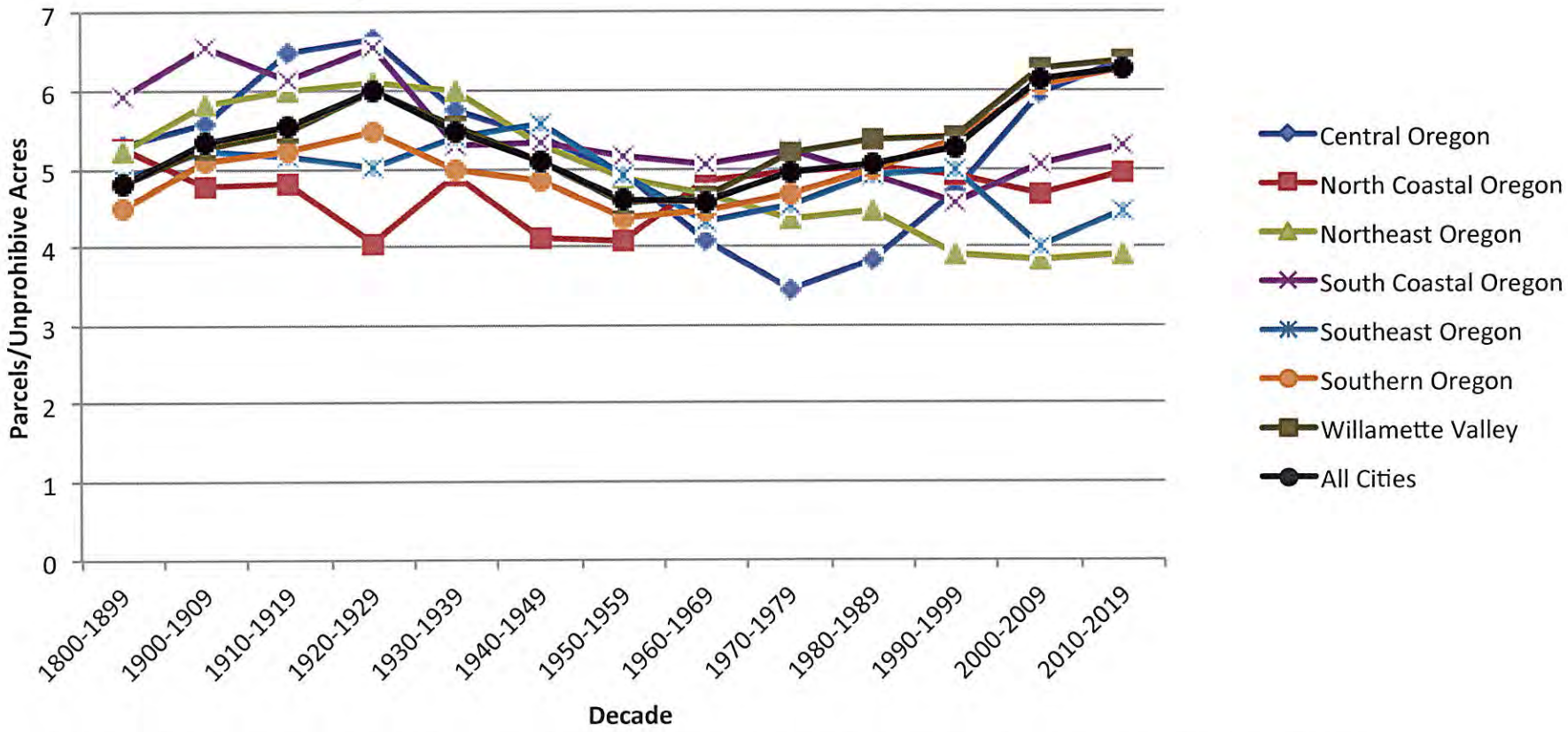


- Lots of variability decade to decade
- Densities exist in a defined range and vary by city size

Description: Count of Parcels (Residential Class 100)/Unprohibitive Acres. Data is filtered on Yr Built, Improved and General Land Classification. The Yr Built Filter excludes Null and 0. Improved: property classification code improved AND assessed improved value >$10,000. The Generalized Land Classification filter keeps Residential, which includes structures with <5 units. Parcels >0.5 acres areexcluded.

Note: Includes 91 Tier 3 cities outside the Metro UGB for unprohibitive acres

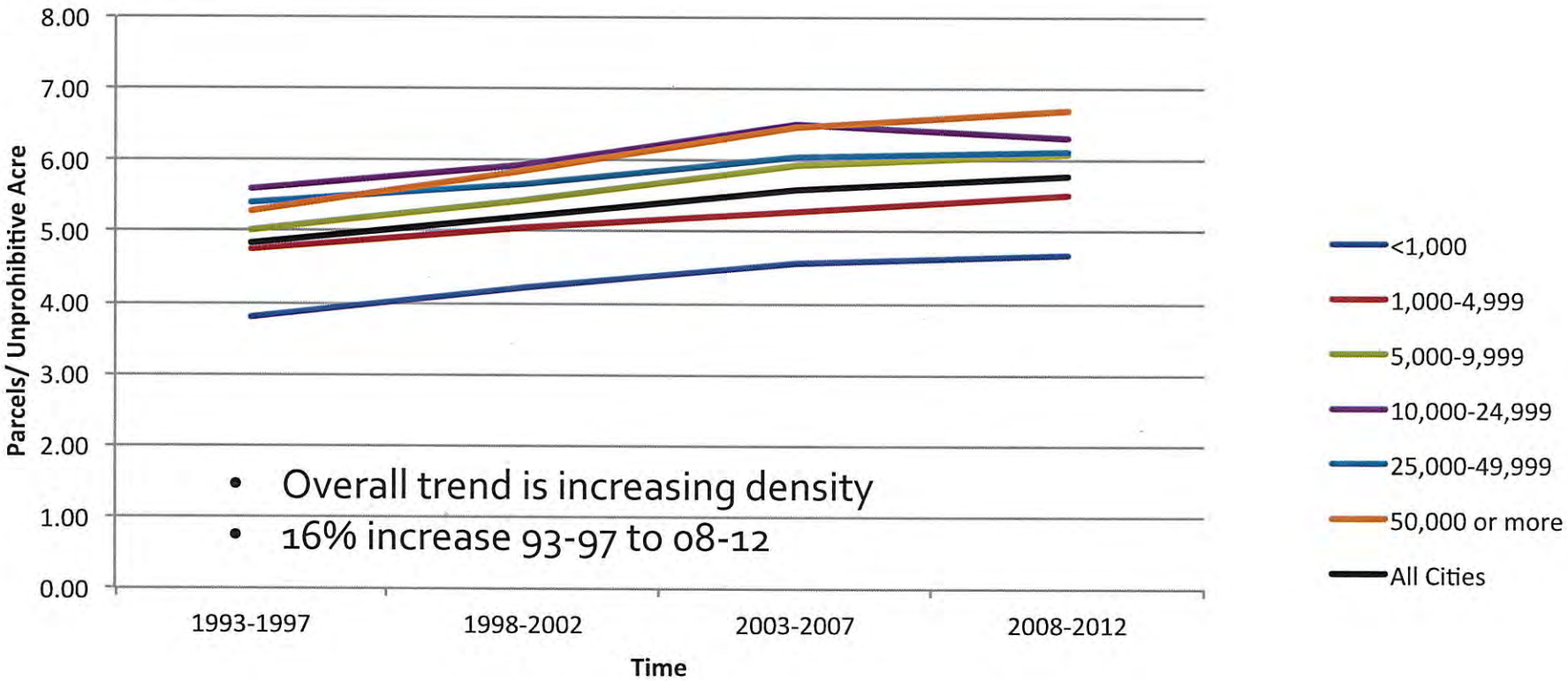
Improved Single Family and Plex Average Density by Population Class by Decade, Cities in Study, 1800-2012



Description: Count of Parcels (Residential Class 100)/Unprohibitive Acres. Data is filtered on Yr Built, Improved and General Land Classification. The Yr Built Filter excludes Null and 0. Improved: property classification code improved AND assessed improved value >$10,000. The Generalized Land Classification filter keeps Residential, which includes structures with <5 units. Parcels >0.5 acres areexcluded.

Note: Includes 91 Tier 3 cities outside the Metro UGB for unprohibitive acres

Improved Single Family and Plex Average Density by Population Class, Cities in Study, 1993-2012



- Overall trend is increasing density
- 16% increase 93-97 to 08-12

Description: Count of Parcels (Residential Class 100)/Unprohibitive Acres. Data is filtered on Yr Built, Improved and General Land Classification. The Yr Built Filter excludes Null and 0. Improved: property classification code improved AND assessed improved value >$10,000. The Generalized Land Classification filter keeps Residential, which includes structures with <5 units. Parcels >0.5 acres are excluded.

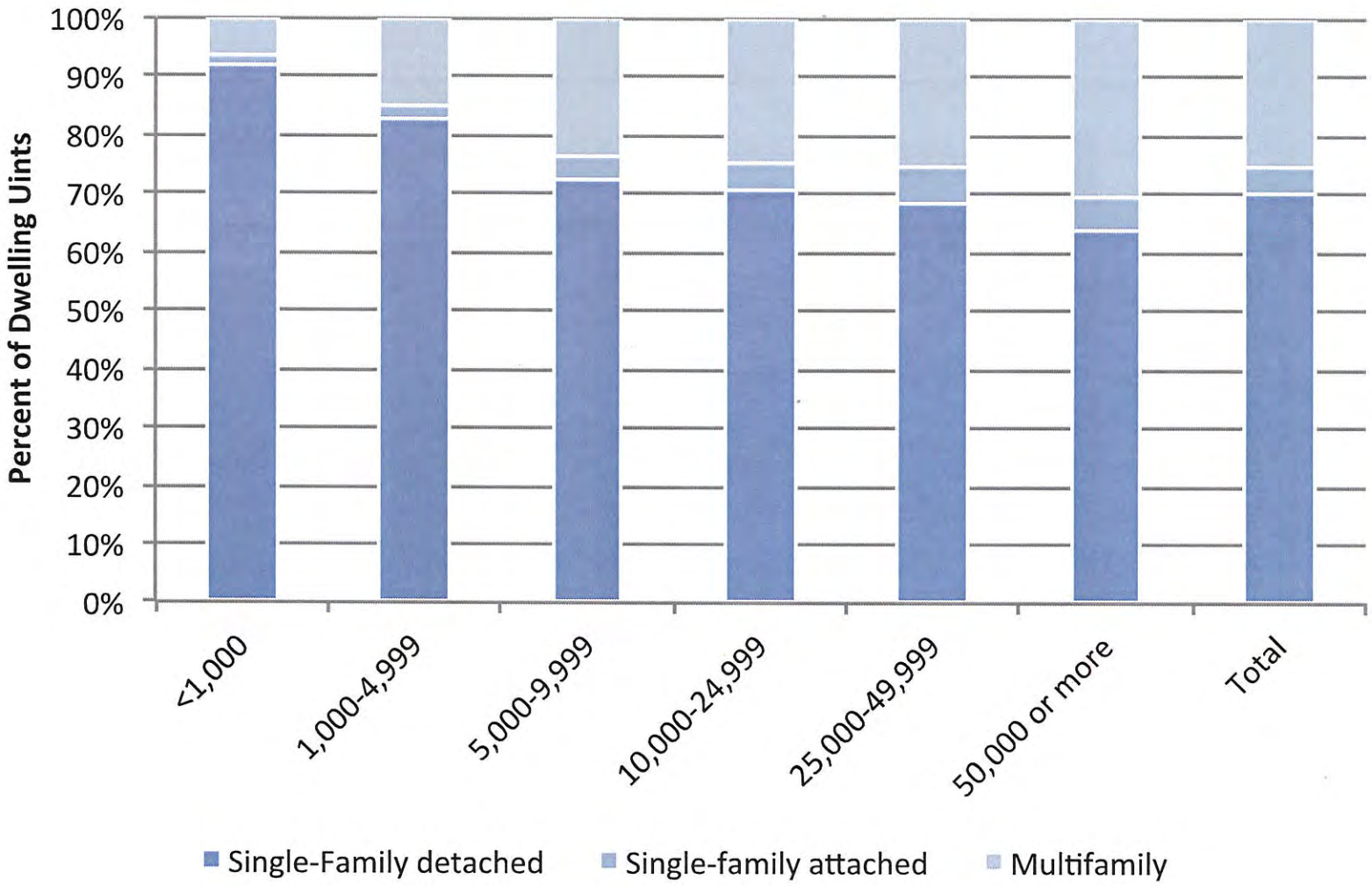
Note: Includes 91 Tier 3 cities outside the Metro UGB for unprohibitive acres

Improved Single Family and Plex Average Density by City Size, 2012, Cities in Clackamas, Coos, Deschutes, Jackson, Linn, Polk, Washington, Yamhill

! "#$%&" (	) *+ , (-% . /%"#(0	&'123(%45+ "3$% 6%73(8	&'123(945+ "3$	73(8
! "#$$$	%	&'"(	)'*(	%$*
"#$$$+, #***	)"	,'&"	,'")	-'&&
%#$$$+*#***	"$	,'.)	,'%*	.'(-
"$#$$$+) , #***	(	%, ,	%"(	('%'
)%#$$$+, *#***	%	.'**	.', .	*'*$
%$#$$$/01/2 013	)	,'".	&'*.	"'"'"*
%%. #53) <=(-52(	**>?**	**@B@**	**@A>C**	**DA>D**

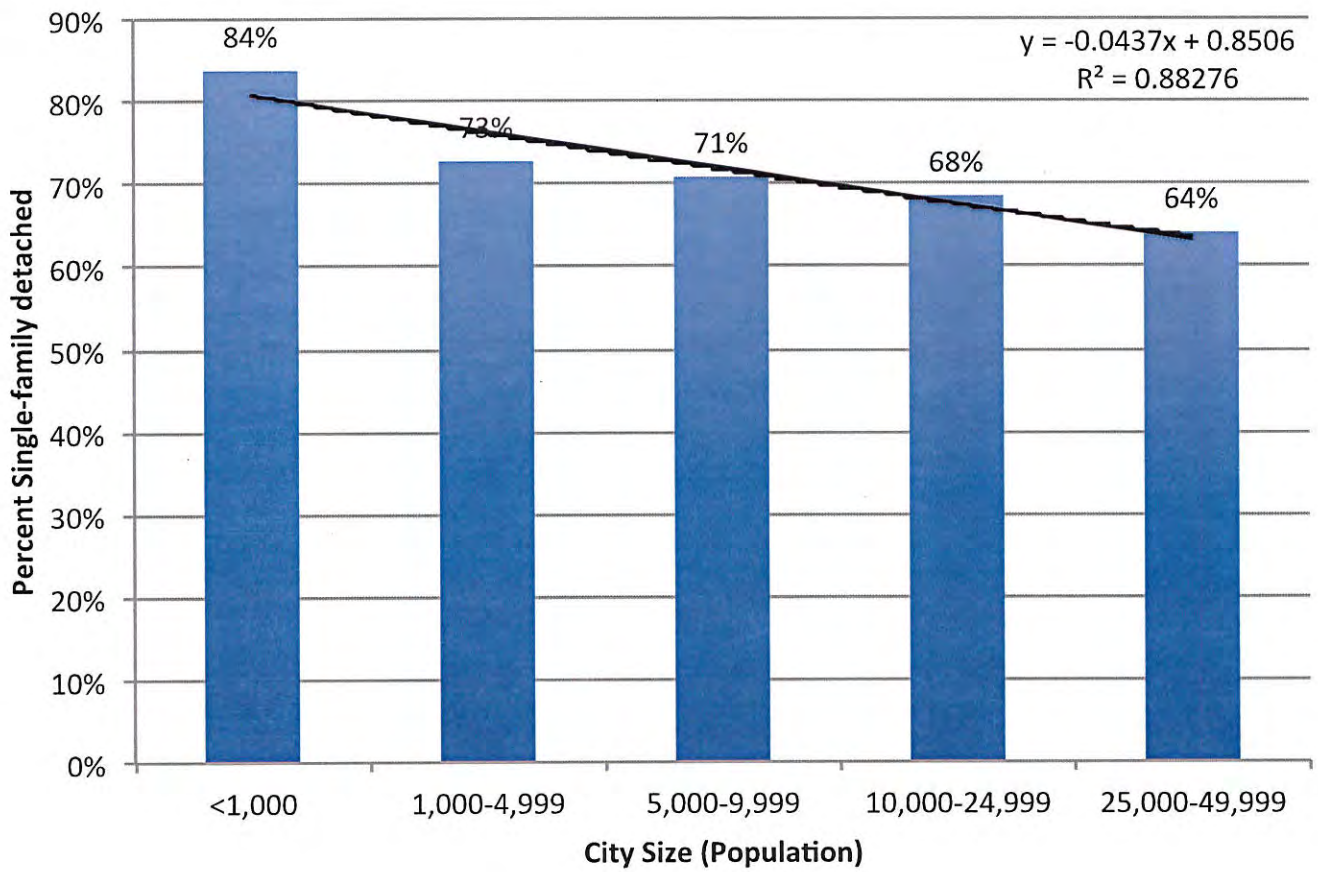
Note: Includes 51 Tier 3 cities outside the Metro UGB for unprohibitive acres

Housing mix by city size, 2008-12



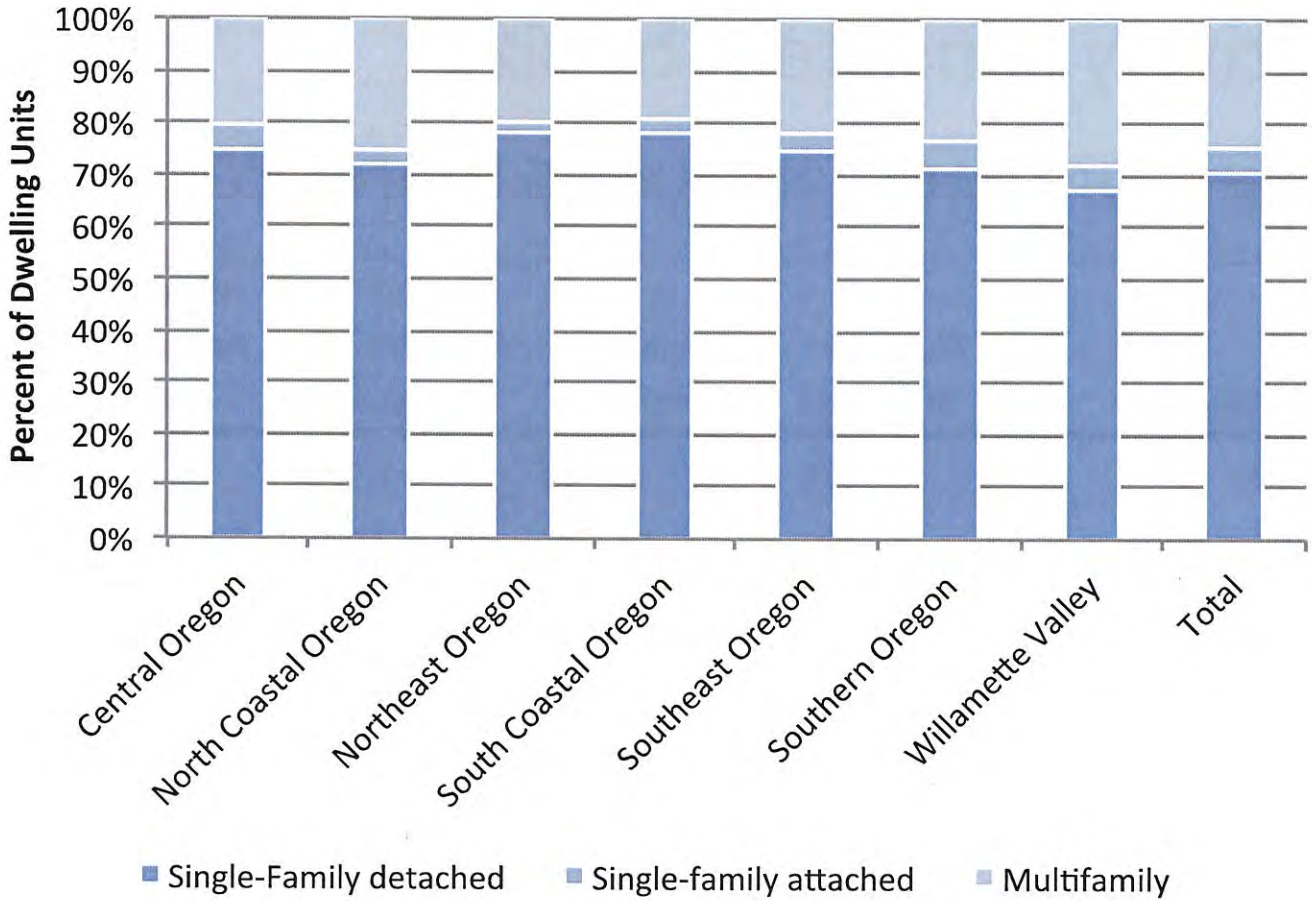
Note: Includes all cities outside the Metro UGB

Mix trendline by city size, 2008-12



Note: Includes all cities outside the Metro UGB

Housing mix by region, 2008-12



Note: Includes all cities outside the Metro UGB

Estimated land in roads and public use, by city size, 2012

- Relatively consistent by size
- Higher for 5-10k; includes many Port cities

City Size	Number of Cities	Acres in City Limit	Est Road/Public Total Ac	Percent of Acres in City Limits
<1,000	20	6,548	1,505	23%
1,000-4,999	41	37,133	7,945	21%
5,000-9,999	23	71,437	21,867	31%
10,000-24,999	14	66,507	15,013	23%
25,000-49,999	4	28,703	6,972	24%
50,000 or more	7	126,594	25,257	20%
All Cities	**109**	**336,922**	**78,560**	**23%**

Note: Includes 109 Tier 2 cities outside the Metro UGB

Summary

- Non-Metro cities are adding population and employment faster than land
  - Annexed ~20,000 between 2005-12 (~5% increase)
  - Population grew 8% between 2005-12
    - larger (>25,000) cities (59%)
    - Willamette Valley (61%)
    - Central (17%) and Southern (17%) Region
  - Employment grew 1.4% between 2005-12

Summary (continued)

- For non-Metro cities:
  - Population density increased 12% between 2005-12
  - Single-family/plex density increased 16% between 2005-12
  - About 70% of dwelling units are single-family detached; little change since 2000

Conclusions and Implications

1. Cities outside Metro are becoming more efficient by all measures
2. City size appears to be a better predictor for many metrics than region
3. Some regional differences exist
4. Research is useful to inform HB 2254 rulemaking…but has much broader potential

HB 2254 Land Use Efficiency Research: Progress Report and Preliminary Findings

Land Development and Conservation Commission

September 26, 2014

Today's Presentation

- Background and Context
  - Objectives/HB 2254 guidance
  - How to measure "land use efficiency"
- Summary of Preliminary Findings and Conclusions
  - Possibilities and limitations of the data
  - Implications for the implementation of HB 2254

BACKGROUND AND CONTEXT

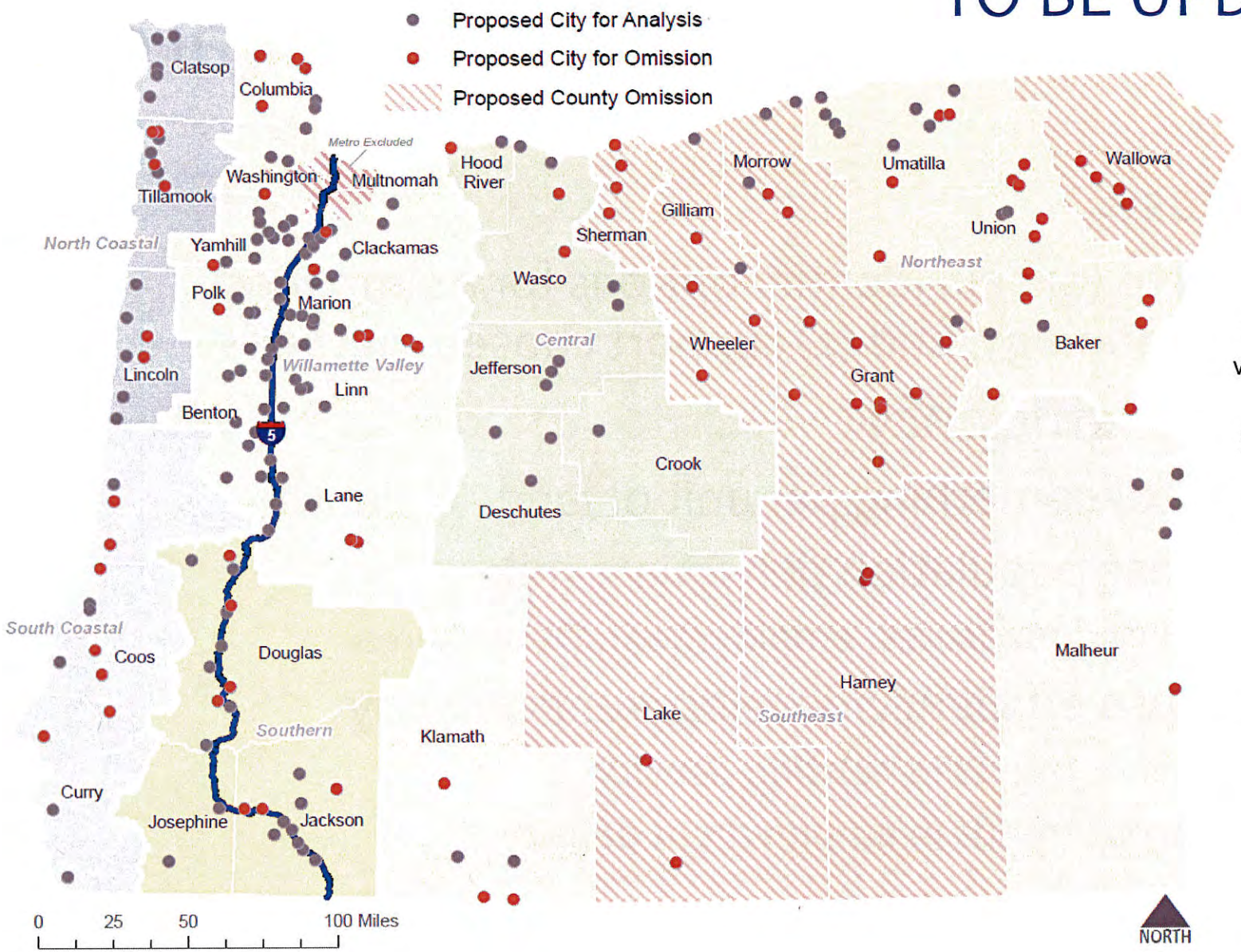
Big Picture: Objectives

- Oregon land use program
  - Preserve farm and forest land
  - Encourage more efficient urban uses
  - Key tool: UGB
- HB 2254
  - UGB process complicated; simplify
  - Broad guidance, but not details about how
    - "increase efficiency" "increase population per sq mile"

U of O Research

- Purpose
  - Data to (1) help identify options for a simplified methodology, and (2) support chosen methods
- Focus: "efficiency"
  - More of something per unit of land = density
  - Increase population per square mile
    - Related measures: employment, DU per area
  - Increase efficiency/development capacity
    - Recent trends in housing density
    - Recent trends in employment density

TO BE UPDATED



Study omits cities with population less than 5,000 and a growth rate of less than 1% per year between 1993 and 2012

Omitted counties primarily contain cities that meet this criteria

Framework for analysis

- City limits inside UGBs
- Three tiers of analysis
  - Tier 1: City limit level
  - Tier 2: All taxlots
  - Tier 3: Developed taxlots by use
- Eliminated "prohibitive constraints"
  - Water
  - Floodway
- Cities that are not growing will be excluded

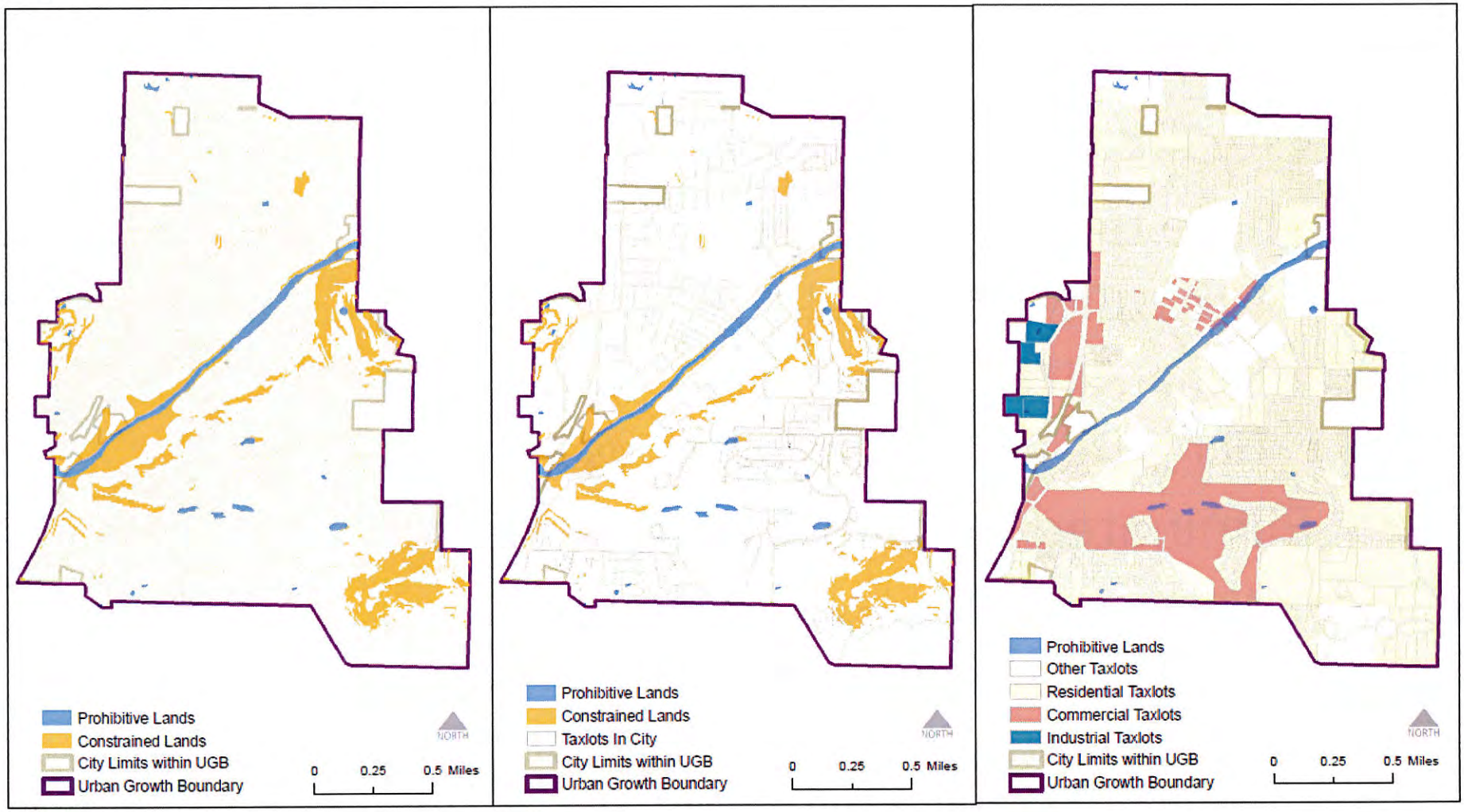
Tier 1

Tier 2

Tier 3

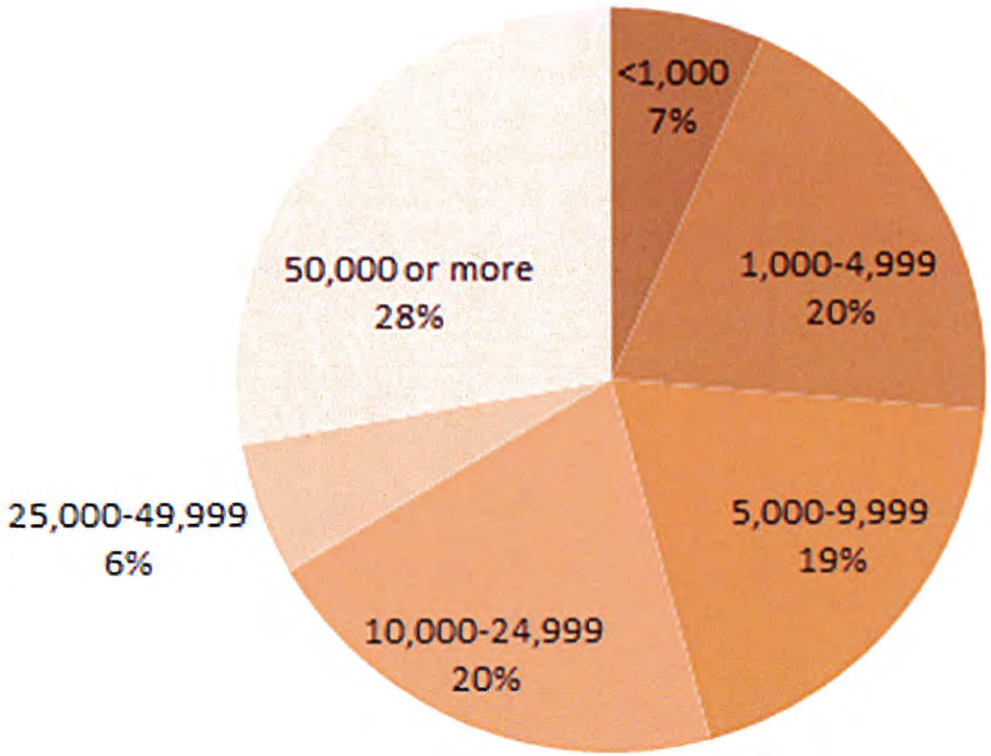
TO BE UPDATED

Eagle Point, Jackson County



FINDINGS

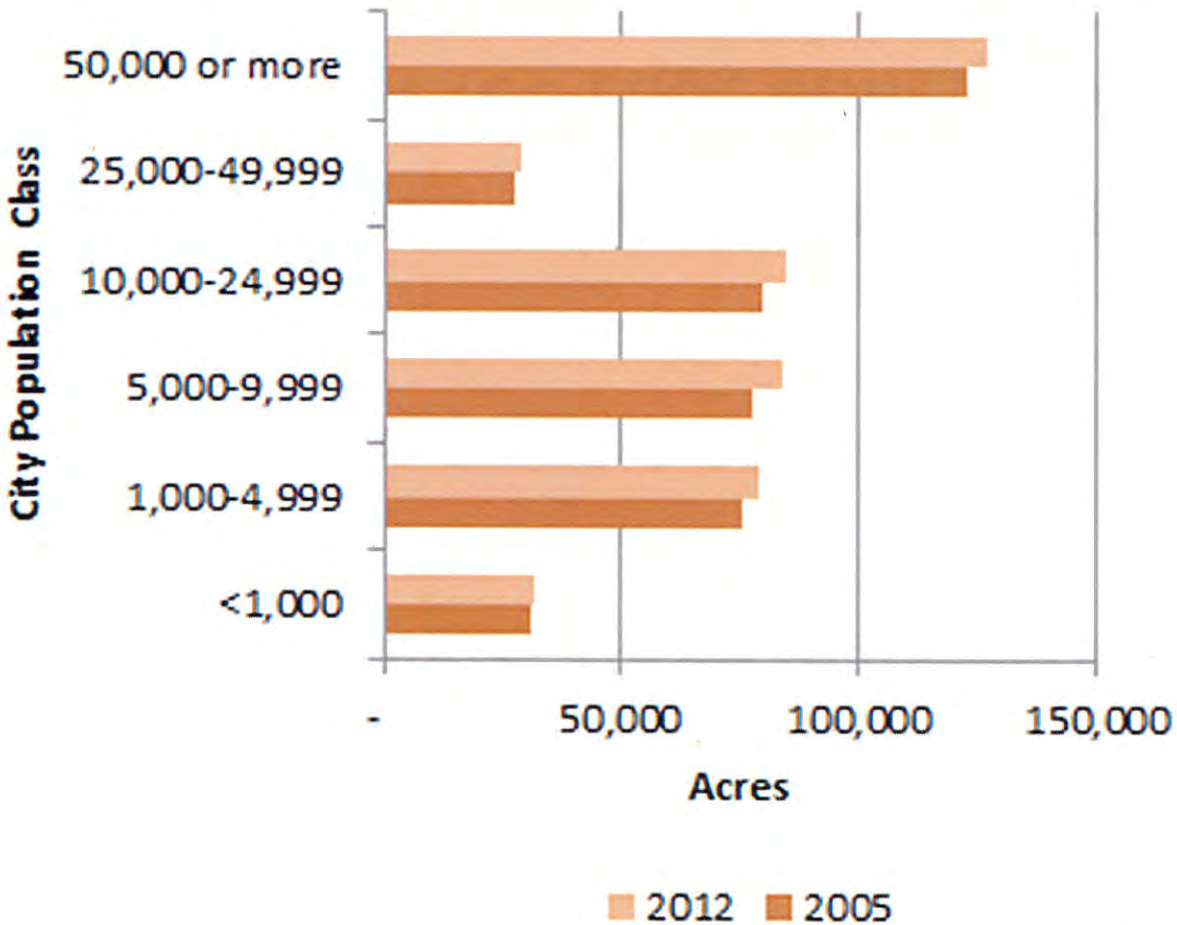
Acres in UGBs, 2012



City Size	Number of Cities	Acres in UGB
<1,000	81	38,253
1,000-4,999	79	112,271
5,000-9,999	28	111,008
10,000-24,999	17	117,974
25,000-49,999	4	33,234
50,000 or more	7	158,290
Total	**216**	**571,030**

Note: Includes all cities outside the Metro UGB

Acres in City Limits, In UGBs



Acres
2005 – 414, 259
2012 – 434,490
Change – 20,231

Acres in city limits outside UGBs:
793

Note: Includes all cities outside the Metro UGB

Statewide Population Growth Trends

1. Total population change 2003-12: 285,000
2. 55% went into non-Metro (PDX) cities
   - 157,000
3. 73% of growth in non-Metro cities went in cities >10,000
4. Cities <1,000 declined in population

Population Change 2005-12, City Limits

City Size	Number of Cities	Number	Percent	Share of Total Growth
<1,000	79	-778	-2.3%	-1%
1,000-4,999	81	11,160	6.5%	10%
5,000-9,999	28	17,090	8.5%	16%
10,000-24,999	17	16,730	6.2%	15%
25,000-49,999	4	19,405	17.5%	18%
50,000 or more	7	44,420	7.5%	41%
Total	**216**	**108,027**	**7.9%**	**100.0%**

Cities< 1,000 are losing population

Cities over 50,000 accounted for 41% of growth 05-12

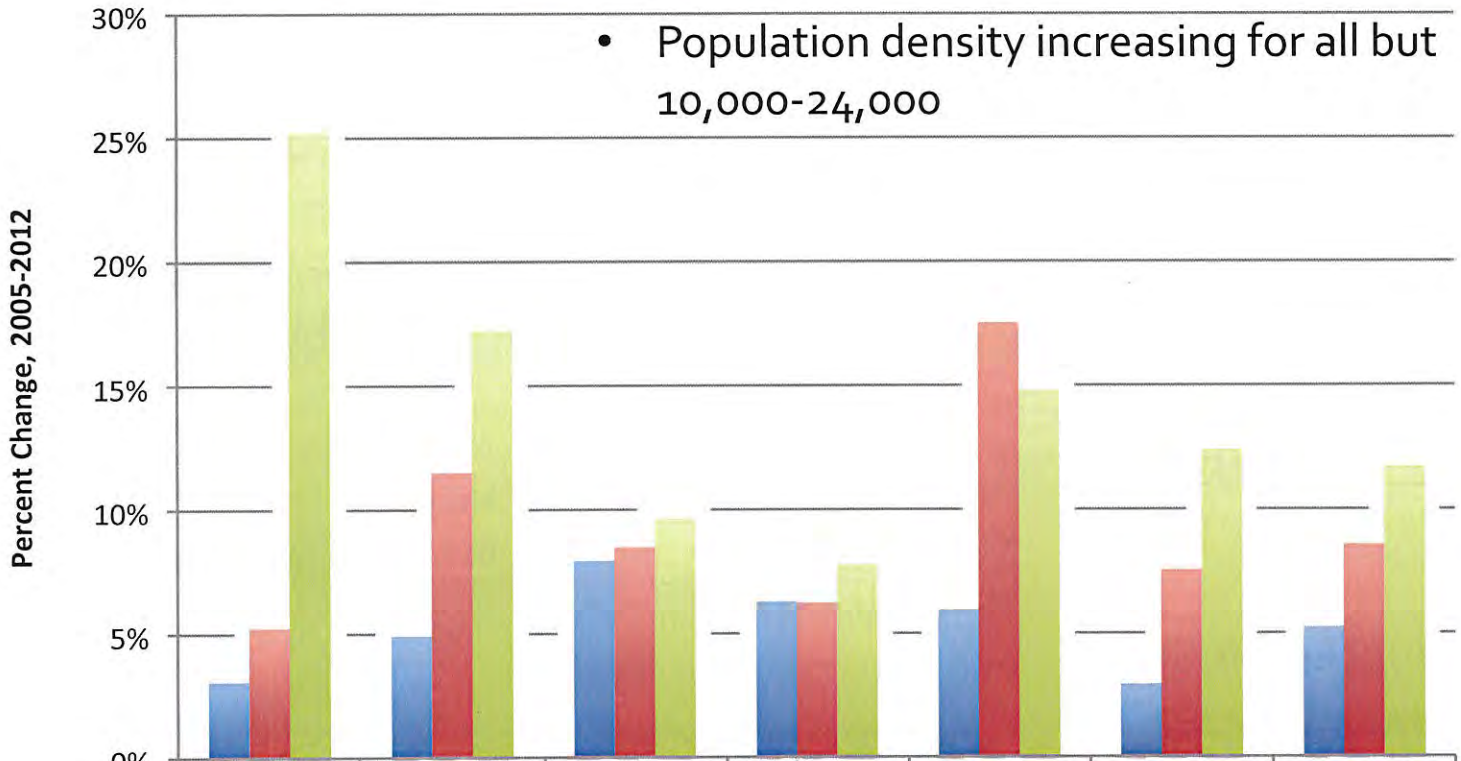
Valley accounted for 61% of population increase

Central/So. Oregon, 34%

City Size	Number of Cities	Number	Percent	Share of Total Growth
Central Oregon	15	17,840	13.7%	17%
North Coastal Oregon	19	2,475	4.2%	2%
Northeast Oregon	56	2,486	2.4%	2%
South Coastal Oregon	13	840	1.4%	1%
Southeast Oregon	14	448	0.9%	0%
Southern Oregon	24	18,528	9.0%	17%
Willamette Valley	75	65,410	8.5%	61%
Total	**216**	**108,027**	**7.9%**	**100.0%**

Note: Includes all cities outside the Metro UGB

Change by city size, 2005-12

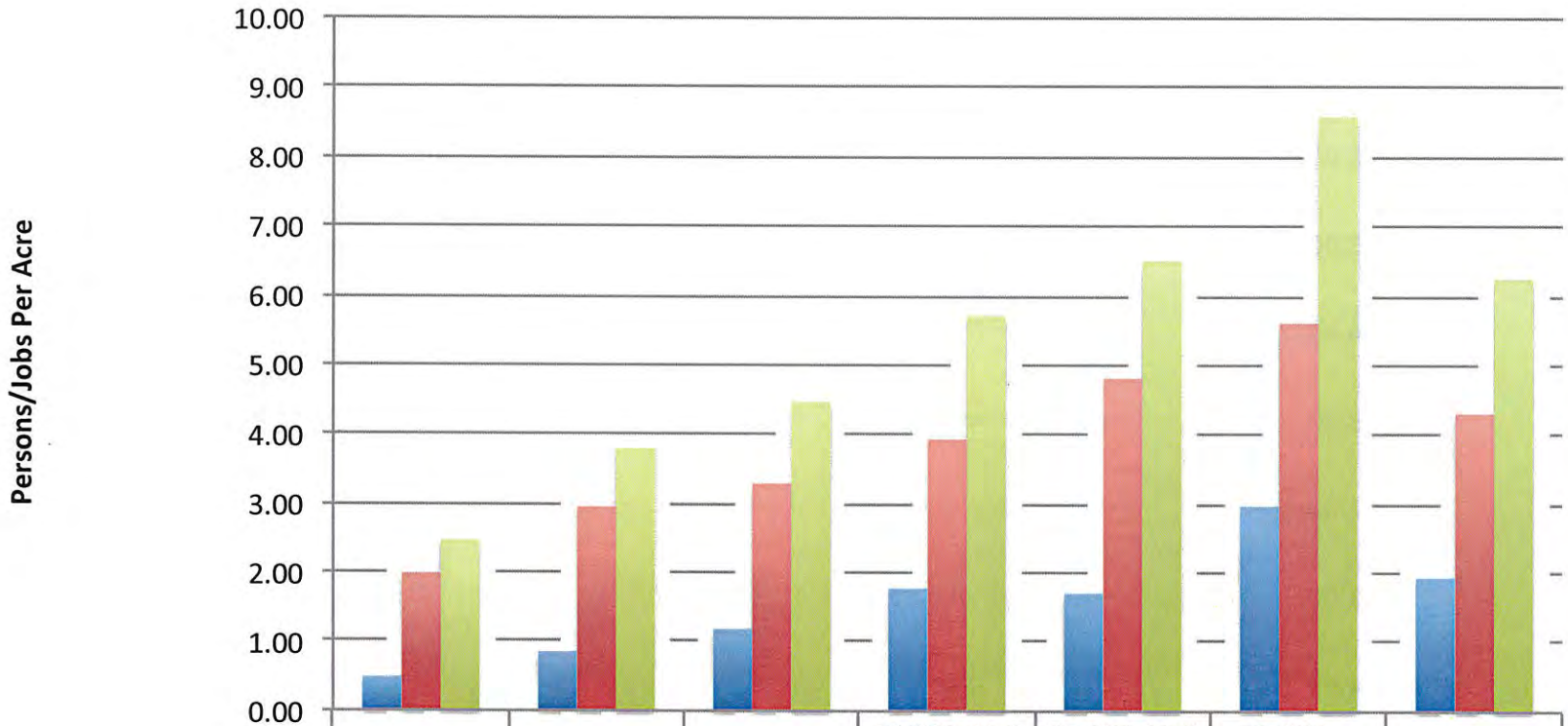


- Population density increasing for all but 10,000-24,000

	<1,000	1,000-4,999	5,000-9,999	10,000-24,999	25,000-49,999	50,000 or more	All Classes
Acres	3%	5%	8%	6%	6%	3%	5%
Pop	5%	11%	8%	6%	18%	8%	9%
Pop Den	25%	17%	10%	8%	15%	12%	12%

Note: Includes 128 Tier 1 cities outside the Metro UGB for unprohibitive acres

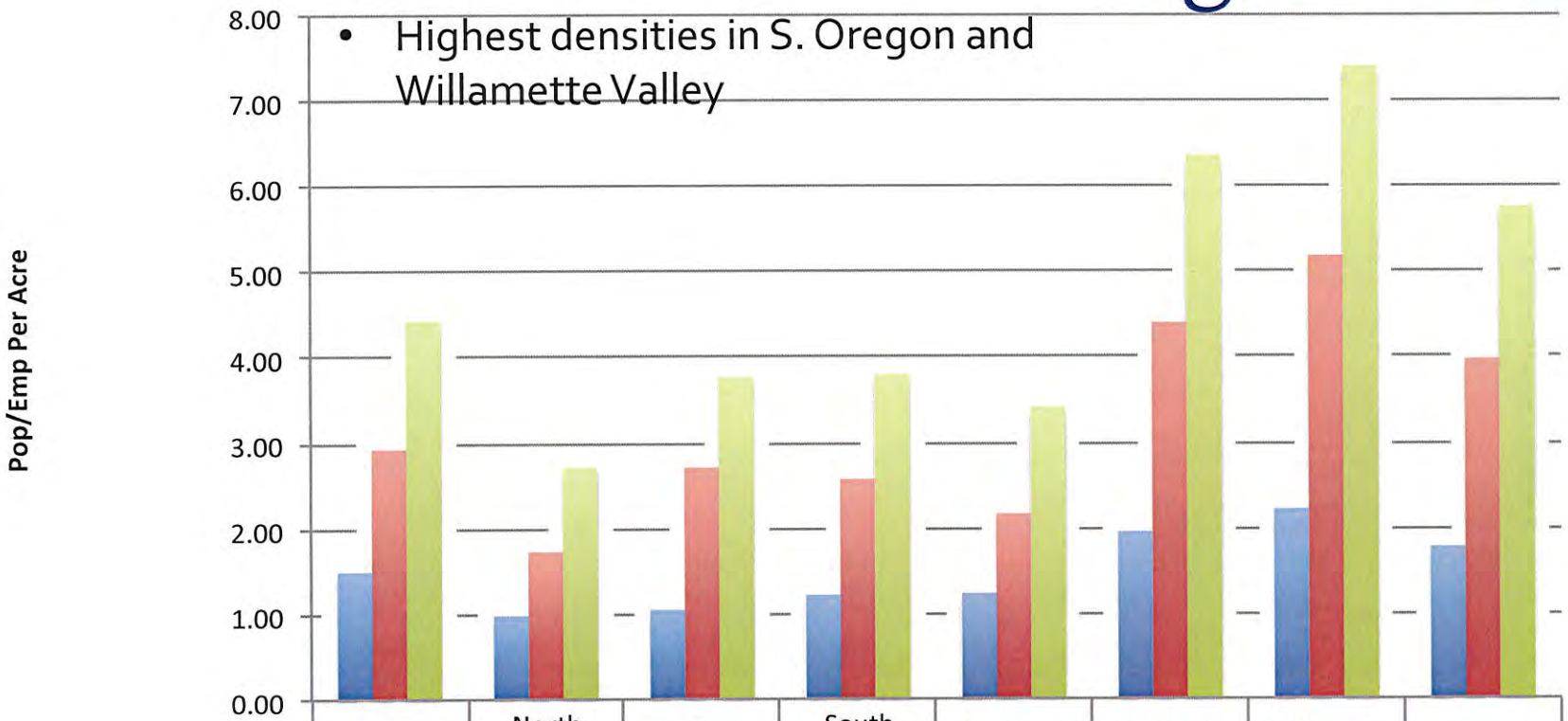
Pop/Emp density (per acre), by city size class 2012



	<1,000	1,000-4,999	5,000-9,999	10,000-24,999	25,000-49,999	50,000 or more	All Classes
Employment Density	0.49	0.85	1.18	1.78	1.71	2.97	1.94
Population Density	1.99	2.95	3.30	3.94	4.81	5.62	4.32
Pop+Emp Density	2.48	3.80	4.48	5.72	6.52	8.59	6.25

Note: Includes 128 Tier 1 cities outside the Metro UGB for unprohibitive acres

Pop/Emp density (per acre), by region 2012

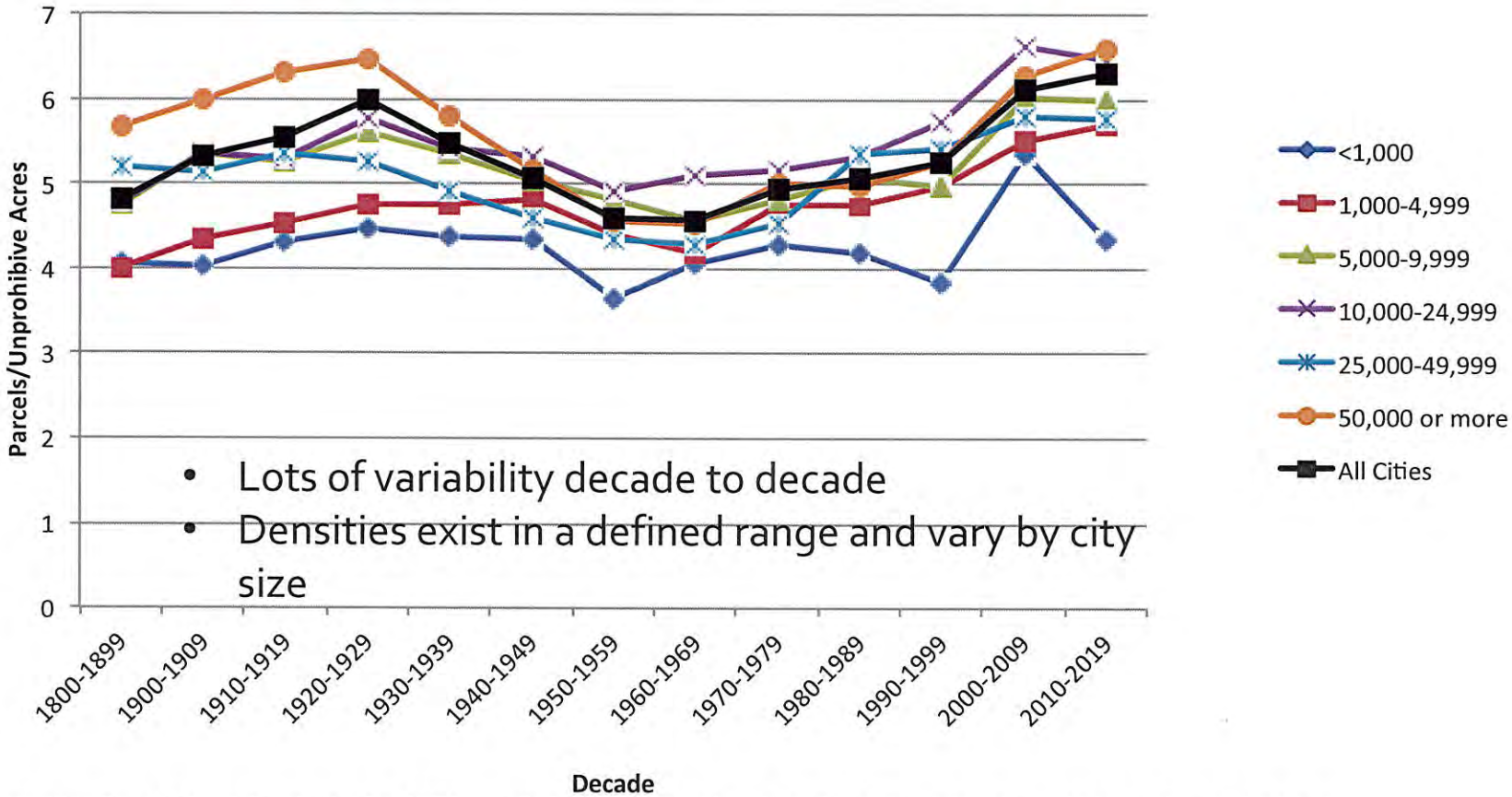


- Highest densities in S. Oregon and Willamette Valley

	Central Oregon	North Coastal Oregon	Northeast Oregon	South Coastal Oregon	Southeast Oregon	Southern Oregon	Willamette Valley	Total
Employment Density	1.50	0.98	1.05	1.22	1.24	1.96	2.23	1.78
Population Density	2.93	1.73	2.72	2.58	2.17	4.40	5.18	3.98
Pop+Emp Density	4.44	2.72	3.77	3.80	3.41	6.36	7.41	5.76

Note: Includes 128 Tier 1 cities outside the Metro UGB for unprohibitive acres

Improved Single Family and Plex Average Density by Population Class by Decade, Cities in Study, 1800-2012

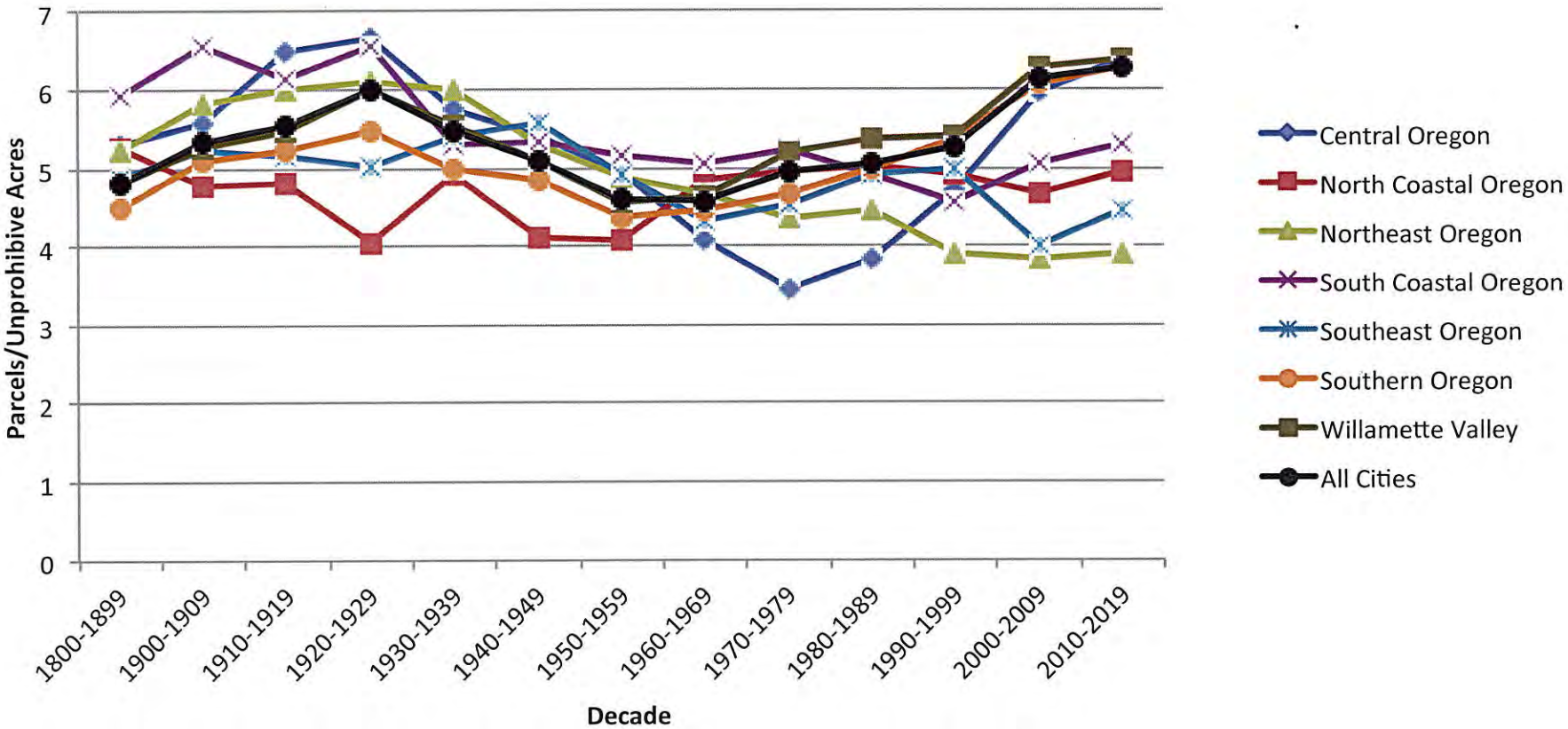


- Lots of variability decade to decade
- Densities exist in a defined range and vary by city size

Description: Count of Parcels (Residential Class 100)/Unprohibitive Acres. Data is filtered on Yr Built, Improved and General Land Classification. The Yr Built Filter excludes Null and 0. Improved: property classification code improved AND assessed improved value >$10,000. The Generalized Land Classification filter keeps Residential, which includes structures with <5 units. Parcels >0.5 acres areexcluded.

Note: Includes 91 Tier 3 cities outside the Metro UGB for unprohibitive acres

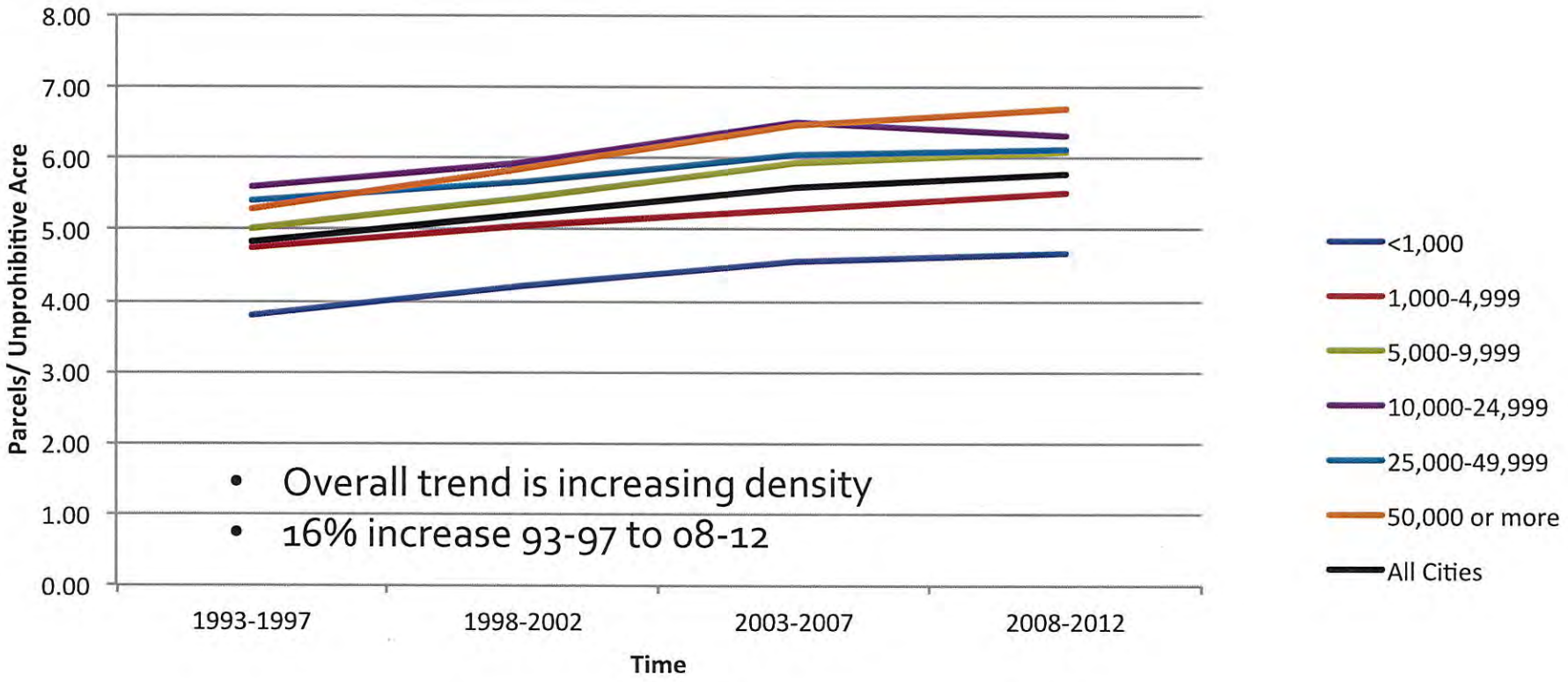
Improved Single Family and Plex Average Density by Population Class by Decade, Cities in Study, 1800-2012



Description: Count of Parcels (Residential Class 100)/Unprohibitive Acres. Data is filtered on Yr Built, Improved and General Land Classification. The Yr Built Filter excludes Null and 0. Improved: property classification code improved AND assessed improved value >$10,000. The Generalized Land Classification filter keeps Residential, which includes structures with <5 units. Parcels >0.5 acres areexcluded.

Note: Includes 91 Tier 3 cities outside the Metro UGB for unprohibitive acres

Improved Single Family and Plex Average Density by Population Class, Cities in Study, 1993-2012



- Overall trend is increasing density
- 16% increase 93-97 to 08-12

Description: Count of Parcels (Residential Class 100)/Unprohibitive Acres. Data is filtered on Yr Built, Improved and General Land Classification. The Yr Built Filter excludes Null and 0. Improved: property classification code improved AND assessed improved value >$10,000. The Generalized Land Classification filter keeps Residential, which includes structures with <5 units. Parcels >0.5 acres are excluded.

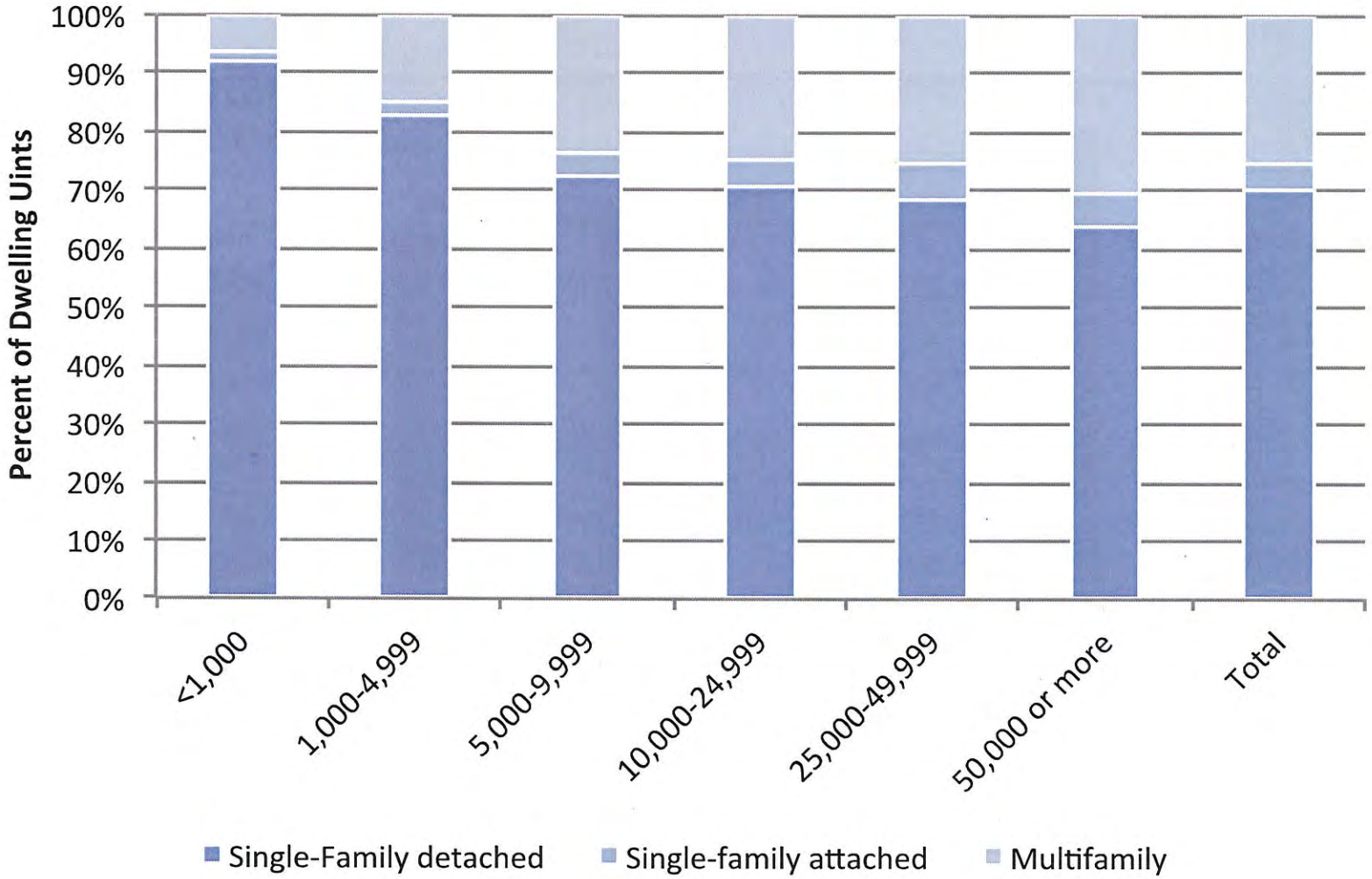
Note: Includes 91 Tier 3 cities outside the Metro UGB for unprohibitive acres

Improved Single Family and Plex Average Density by City Size, 2012, Cities in Clackamas, Coos, Deschutes, Jackson, Linn, Polk, Washington, Yamhill

! "#$%&" (	) *+ , (-% . /%"#'(0	&'123(%45+ "3$% 6%73(8	&'123(945+ "3$	73(8
! " #$$$	%	&'" (	) '*(	%$*
" #$$$+, #***	) "	, '&"	, '")	- '&&
%#$$$+*#***	" $	, '.)	, '%*	. '(-
" $#$$$+) , #***	(	%, ,	%" (	('%'
) %#$$$+, *#***	%	. '**	. ', .	*'*$
%$#$$$/01/2 013	)	, '".	&'*.	" " '" *
%%. #53 <=(-52(	**>?**	**@AB@**	**@A>C**	**DA>D**

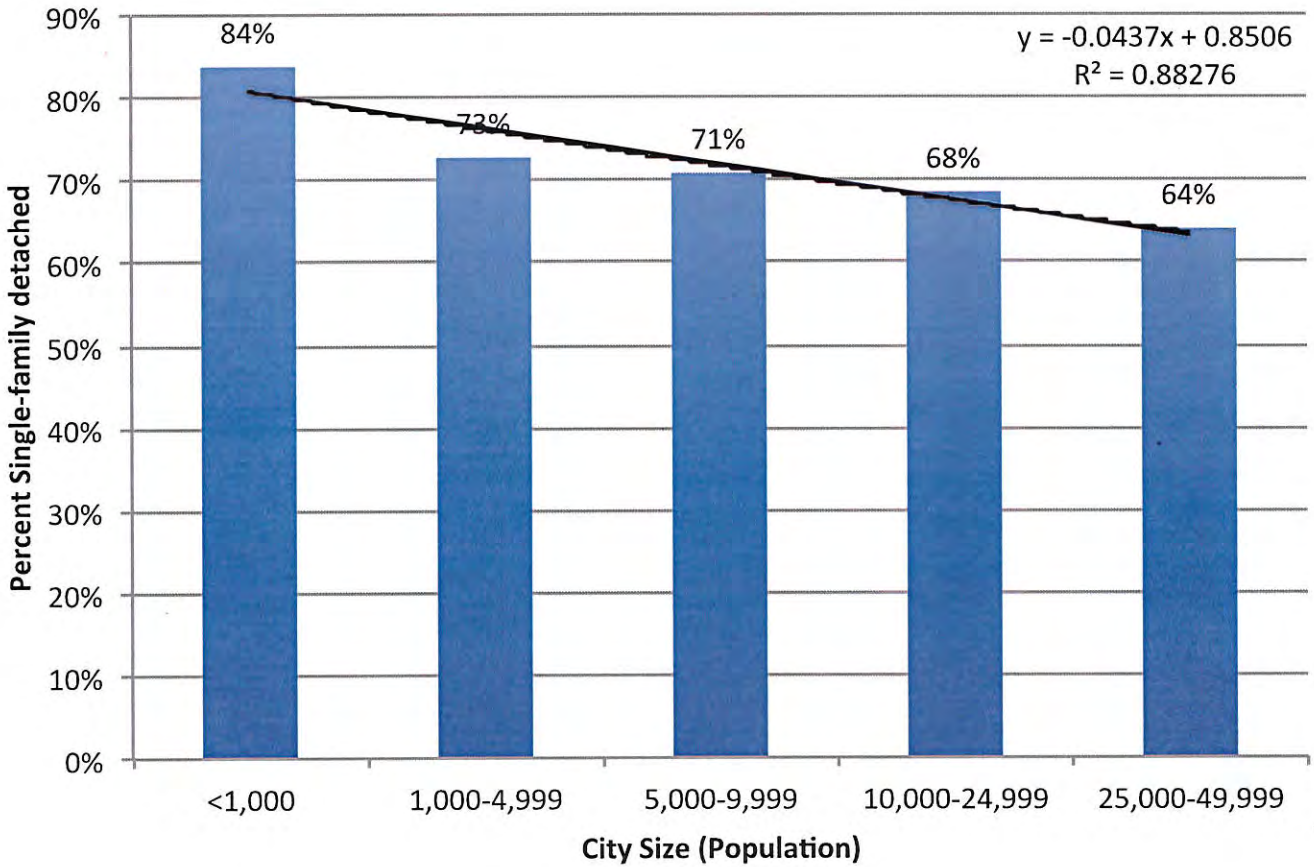
Note: Includes 51 Tier 3 cities outside the Metro UGB for unprohibitive acres

Housing mix by city size, 2008-12



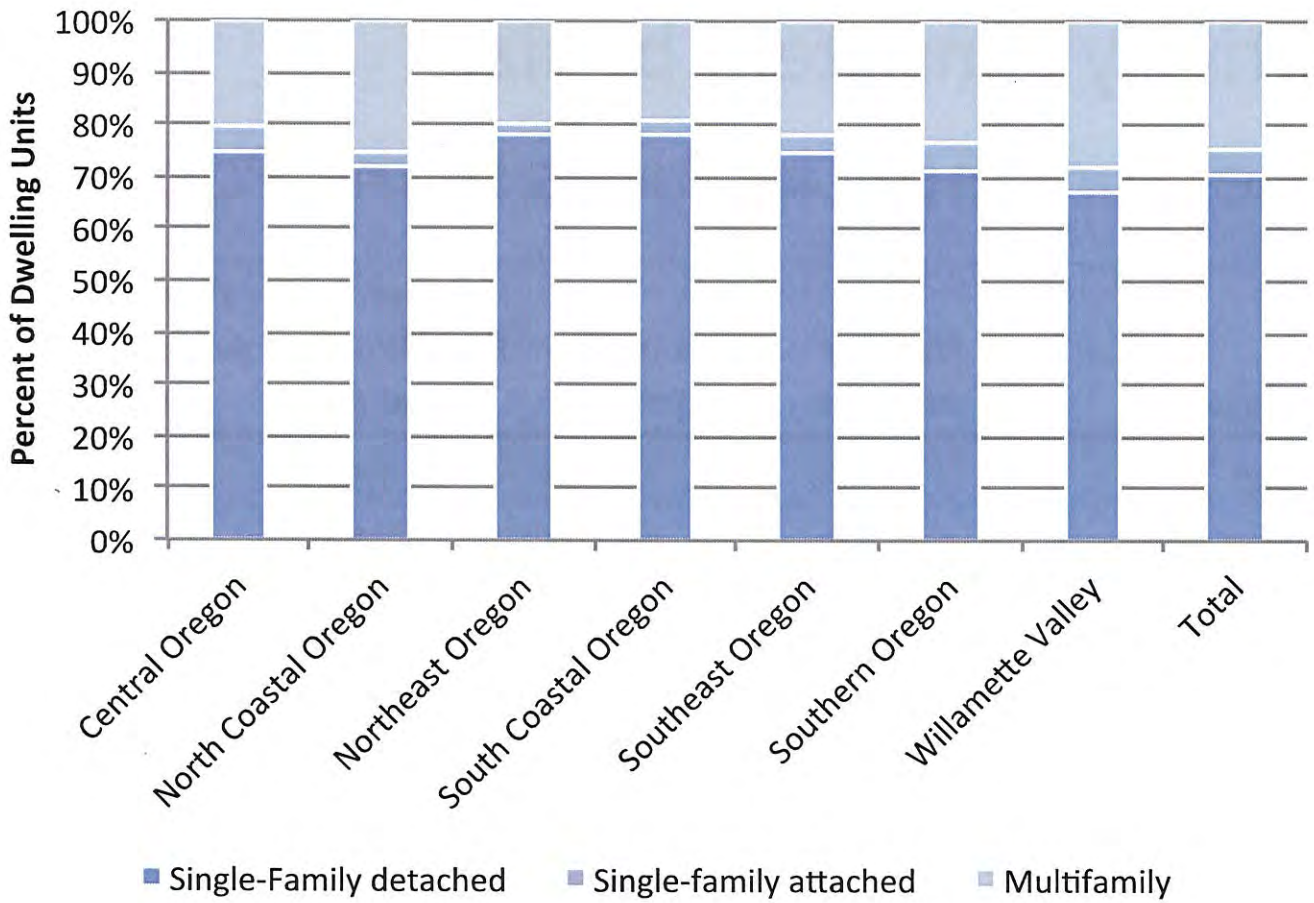
Note: Includes all cities outside the Metro UGB

Mix trendline by city size, 2008-12



Note: Includes all cities outside the Metro UGB

Housing mix by region, 2008-12



Note: Includes all cities outside the Metro UGB

Estimated land in roads and public use, by city size, 2012

- Relatively consistent by size
- Higher for 5-10k; includes many Port cities

City Size	Number of Cities	Acres in City Limit	Est Road/Public Total Ac	Percent of Acres in City Limits
<1,000	20	6,548	1,505	23%
1,000-4,999	41	37,133	7,945	21%
5,000-9,999	23	71,437	21,867	31%
10,000-24,999	14	66,507	15,013	23%
25,000-49,999	4	28,703	6,972	24%
50,000 or more	7	126,594	25,257	20%
All Cities	**109**	**336,922**	**78,560**	**23%**

Note: Includes 109 Tier 2 cities outside the Metro UGB

Summary

- Non-Metro cities are adding population and employment faster than land
  - Annexed ~20,000 between 2005-12 (~5% increase)
  - Population grew 8% between 2005-12
    - larger (>25,000) cities (59%)
    - Willamette Valley (61%)
    - Central (17%) and Southern (17%) Region
  - Employment grew 1.4% between 2005-12

Summary (continued)

- For non-Metro cities:
  - Population density increased 12% between 2005-12
  - Single-family/plex density increased 16% between 2005-12
  - About 70% of dwelling units are single-family detached; little change since 2000

Conclusions and Implications

1. Cities outside Metro are becoming more efficient by all measures
2. City size appears to be a better predictor for many metrics than region
3. Some regional differences exist
4. Research is useful to inform HB 2254 rulemaking…but has much broader potential