

The background features a large, faint, circular seal of the Oregon Office of Economic Analysis. The seal contains an eagle with wings spread, a plow, and a sheaf of wheat, with the text 'OFFICE OF ECONOMIC ANALYSIS OF OREGON' and '1859' around the perimeter.

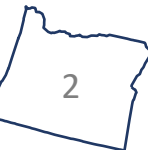
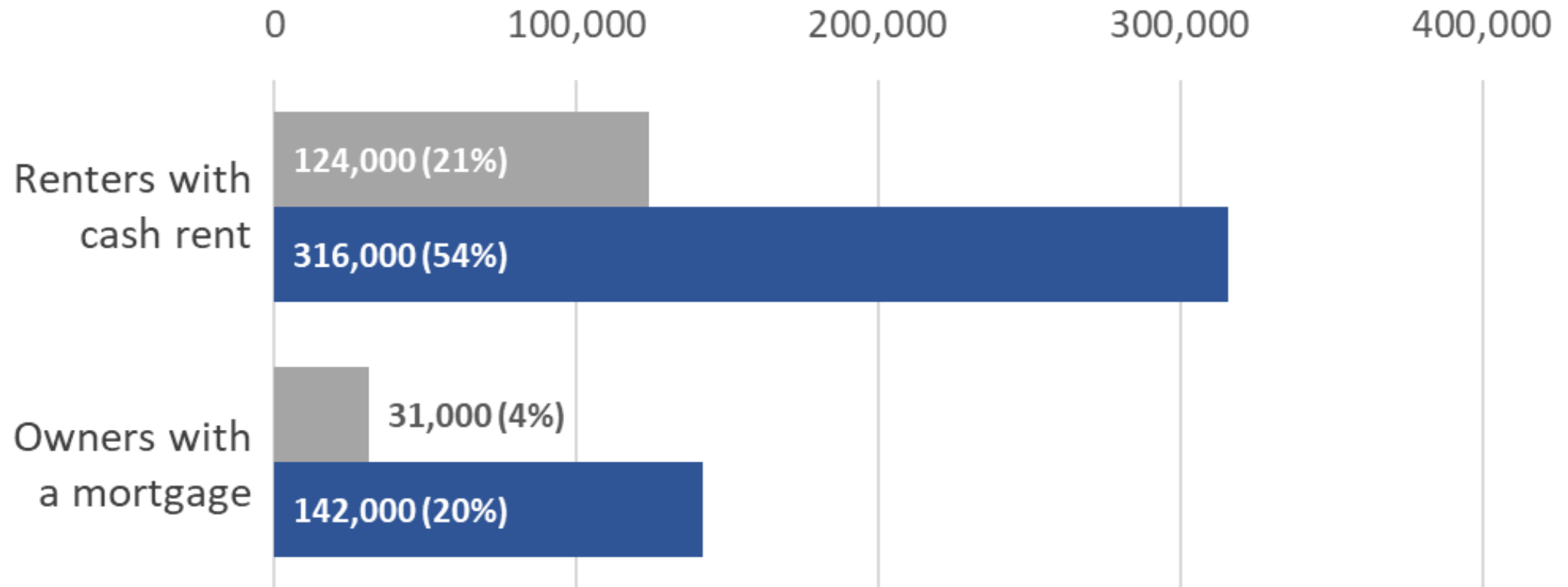
Addressing Oregon's Housing Shortage

March 10th, 2023

Oregon Office of Economic Analysis
Josh Lehner

Oregon Households Struggling with Housing Costs

*Oregon households living below the federal poverty threshold, or that **do not have enough residual income left over after paying for housing***



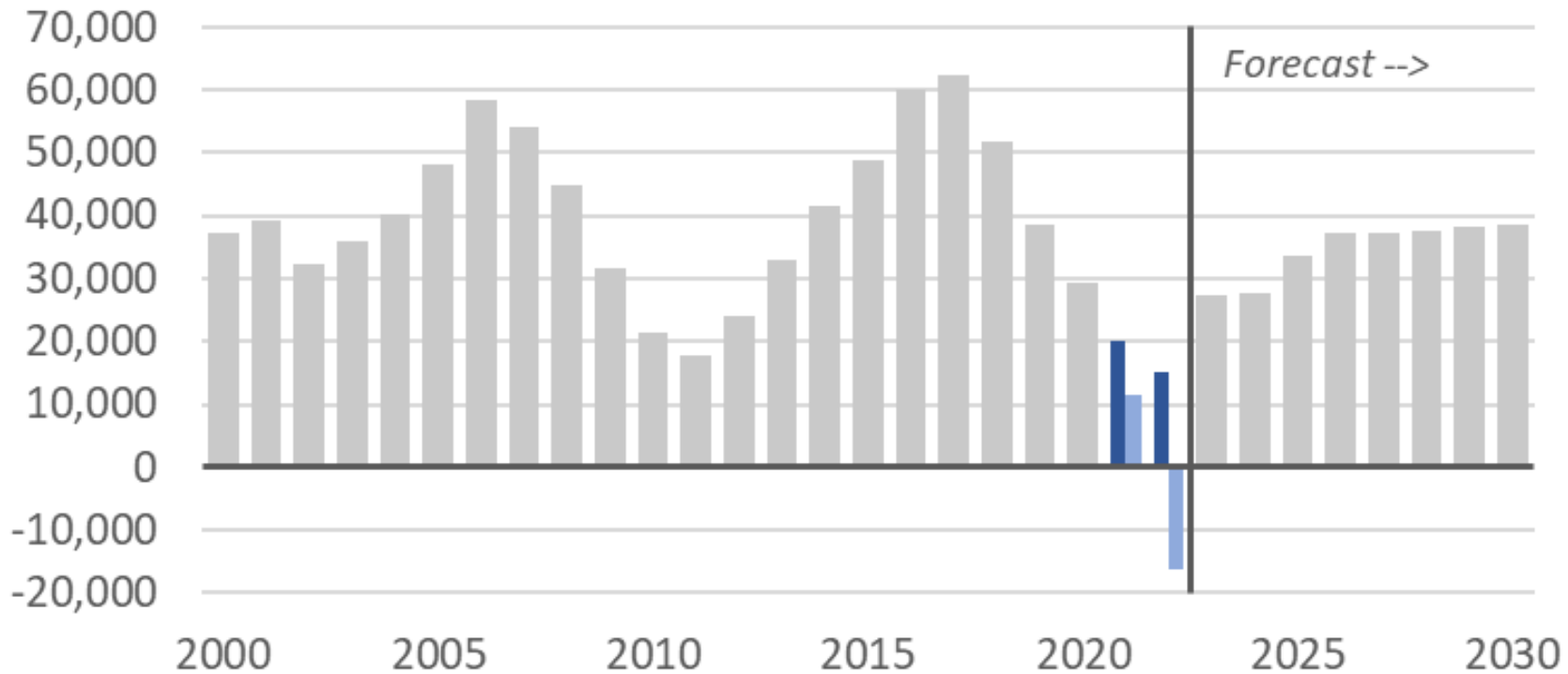


Housing is a macroeconomic risk

Oregon Pandemic Population Growth

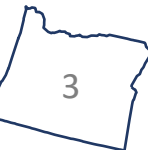
Annual change in total state population

OEA History and Forecast, [Portland State Estimates](#), [Census Bureau Estimates](#)



Source: Census, Portland State Population Research Center, Oregon Office of Economic Analysis

- Population growth is the primary reason Oregon grows faster than U.S.
 - Local businesses can hire and expand at faster rate because 20- and 30-something migrate at highest rates
- Housing affordability can act as an initial repellant, meaning households choose to move elsewhere due to high cost of living
- Should Oregon's population growth be slower than expected, local economic growth will be slower as well

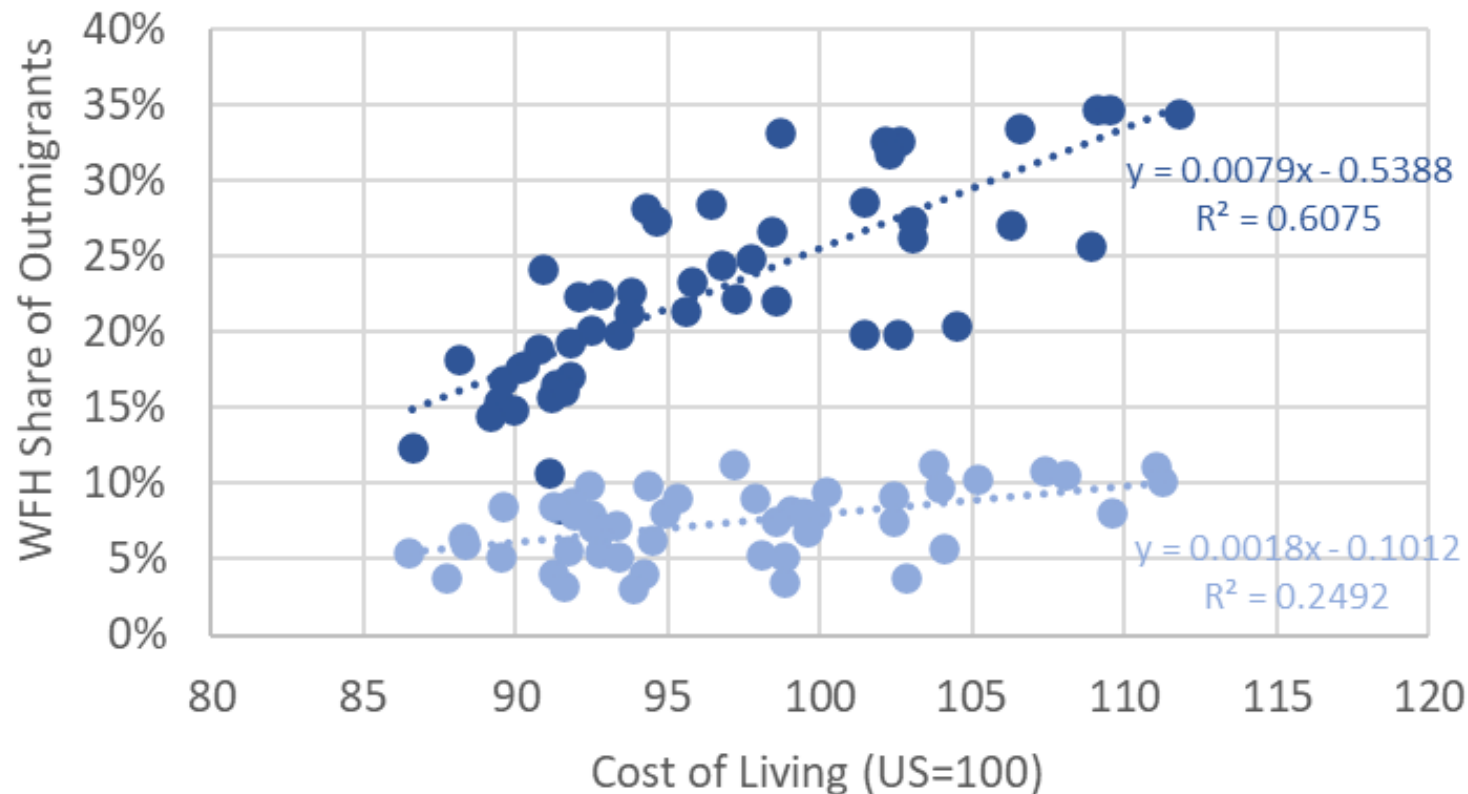




Out-of-state WFH migration a larger share in high-cost states

WFH Outmigration from High-Cost States

Share of workers leaving each state who work from home in 2019 and 2021



- Focus only of employed workers moving out of state
- The higher the cost of living, the higher the share of workers leaving that are WFH
 - A 1% increase in the relative cost of living correlates with a 0.8% increase in the share of WFH outmigrants
- From 2019 to 2021 the correlation strengthened considerably
 - Essentially the coefficient quadrupled and the goodness of fit doubled





Oregon has a housing shortage. It impacts middle- and low-income households the most.

Exhibit 30. Housing Need by Income Category, State of Oregon, 2020-2040

Source(s): ECONorthwest analysis; PSU, 2020-2070 Coordinated Population Forecasts; HUD, FY 2018 Income Limits; U.S. Census Bureau, 2018 ACS 1-year PUMS estimates; HUD, 2019 PIT count; ODE, SY 2018-2019 McKinney Vento data

Median Family Income	New units for each of the following...				
	Projected Need	Underproduction	Housing for the Homeless	Total Units	% of Units
120%	201,656	7,725	-	209,381	36%
80-120%	82,796	18,326	-	101,121	17%
50-80%	70,013	30,574	875	101,462	17%
30-50%	44,400	26,119	2,334	72,852	12%
0-30%	44,701	28,076	25,965	98,742	17%
Oregon	443,566	110,819	29,174	583,559	100%
% of Units	76%	19%	5%	100%	

Source: Implementing a Region Housing Needs Analysis Methodology in Oregon

<https://www.oregon.gov/ohcs/about-us/Documents/RHNA/RHNA-Technical-Report.pdf>



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Increasing Oregon's housing production

- Increase land availability
- Turn land into buildable lots faster (the *effective* land supply)
- Allow more units to be built
- Decrease, or at least stabilize development costs per unit
- Increase the construction workforce
 - Private sector builders and developers
 - Public sector building and planning departments

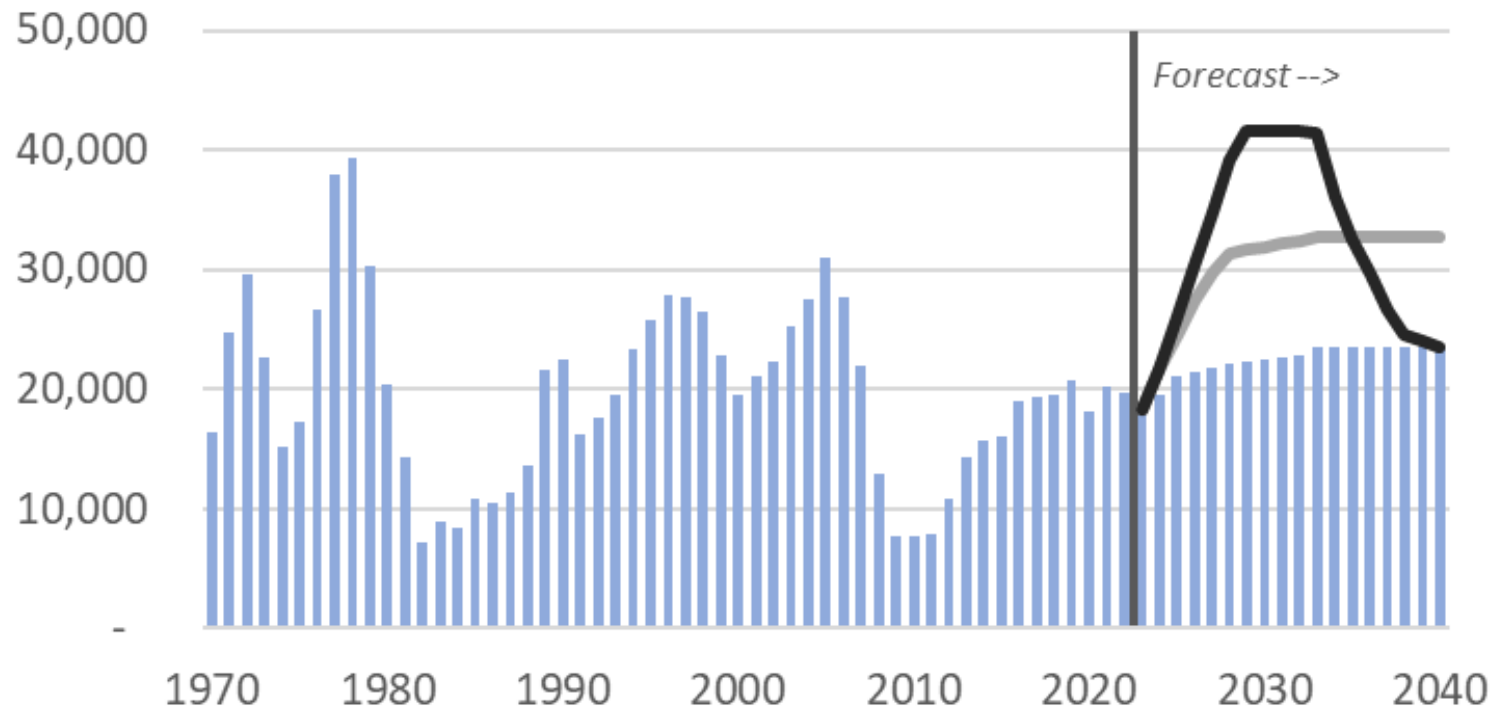




Scenario addressing housing shortage

Oregon Housing Starts

Baseline Forecast | 10 Year Scenario | 20 Year Scenario



• Baseline Forecast

- OEA's baseline meets the future projected need as it is population and demand-driven
- Does not make up the existing shortfall

• Address Shortage Scenarios

- Industry will be unable to start building significantly more units overnight without increasing the supply side of production capacity
- 10 Year Scenario
 - Makes up existing shortfall over 10 years, averaging 36,000 units per year. Peak construction of nearly 42,000 housing starts a year
- 20 Year Scenario
 - Makes up existing shortfall over 20 years, averaging 31,000 units per year. Peak construction of nearly 33,000 housing starts a year

Latest: 2022 | Source: Oregon Office of Economic Analysis

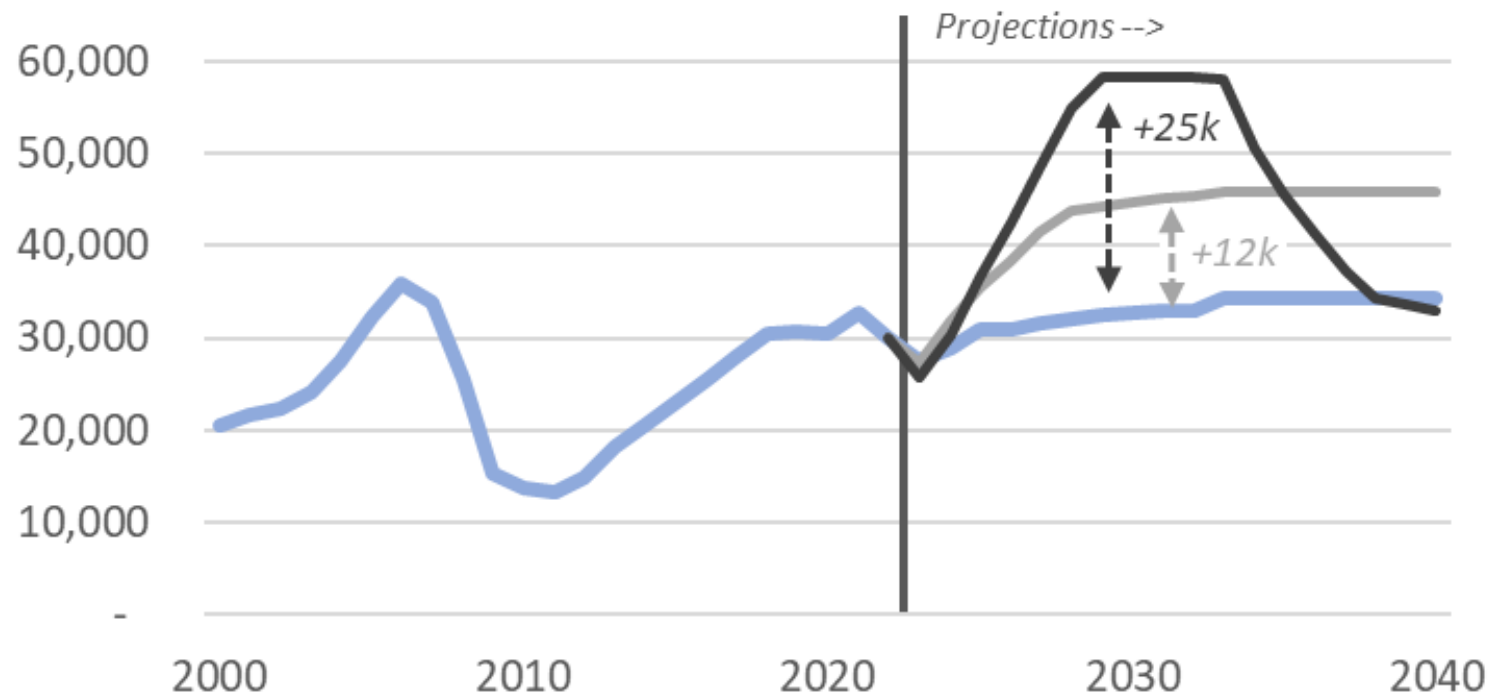




Increasing the construction workforce

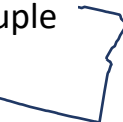
Residential Construction Employment

Baseline Forecast | 10 Year Scenario | 20 Year Scenario



Latest: 2022 | Source: Oregon Office of Economic Analysis

- To build more housing, Oregon needs more workers
- Residential Construction
 - Increase of 12,000 to 25,000 more workers per year to build more units
 - 1.4 jobs per housing start
 - Challenge: Labor market is tight, and residential pay is 15% below average
 - Increase number of construction firms
- Local Government
 - 400-500 per year to approve, permit, and inspect more units
 - Based on current staffing ratios of 0.04-0.05 FTE per housing permit
 - Larger increases likely needed to improve timeliness
 - Challenge: Decentralized need; every city and county needs to hire a couple to a couple dozen such workers





What types of workers are needed?

	Construction, Installation, Maintenance & Repair, and Production Occupations	All Other Industry Occupations
Minimal education and training required	400	0
3-12 months training, some apprenticeships	6,300	600
1+ years of training, including vocational, apprenticeships, and community colleges	3,600	200
Bachelors degree+	0	900
TOTAL	10,300	1,700

- Oregon's construction industry workforce
 - 70% work in the trades
 - 30% work in other occupations like management and office staff
- To grow productive capacity, projected need skews heavier on the trades. Hopefully, office-based staff can increase productivity easier.
- 84% of construction occupations have some form of existing apprenticeship programs
- Data Need
 - Better reporting that links CTE data with apprenticeship and vocational program data, and occupational projections

Estimates based on occupational mix of the construction industry and O*NET's job zones
Source: Census, IPUMS-USA, O*NET, Oregon Office of Economic Analysis

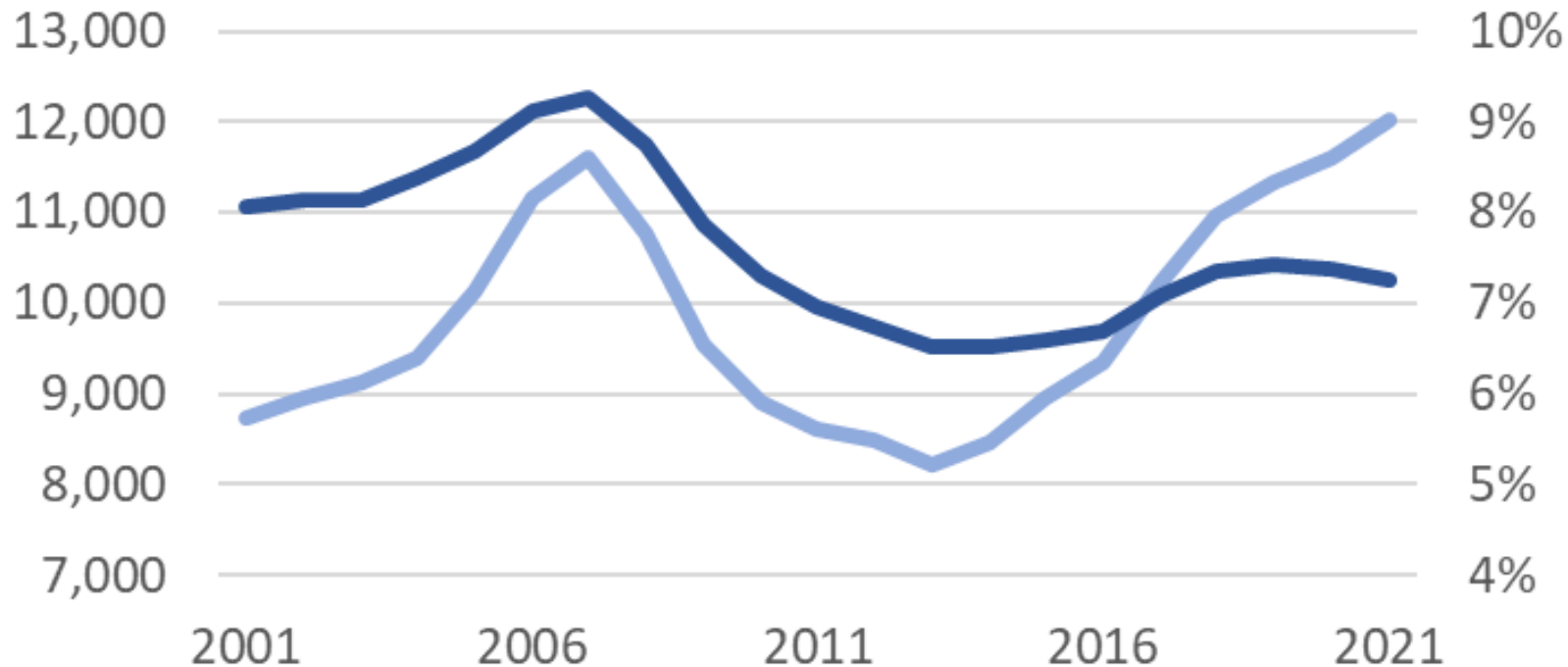




Issue: Fewer Construction Firms

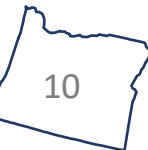
Oregon Residential Construction

Number of Business Units, left | Share of Total Private Sector, right



- Housing underwent industry consolidation following the bubble bursting 15 years ago
- Even as construction employment has fully returned, the number of construction firms as a share of the economy remains lower than pre-bubble era
- Implication is Oregon has 1,300 fewer residential construction companies than expected
 - Nationally about 100,000 fewer
- Like the overall economy, construction needs more entrepreneurship

Data: QCEW | Source: BLS, Oregon Office of Economic Analysis





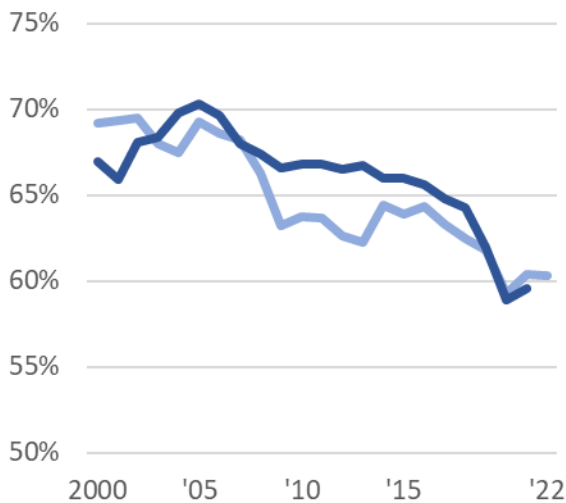
Possible Issue: Industry Structure

Construction Industry: More Managing. Less Doing?

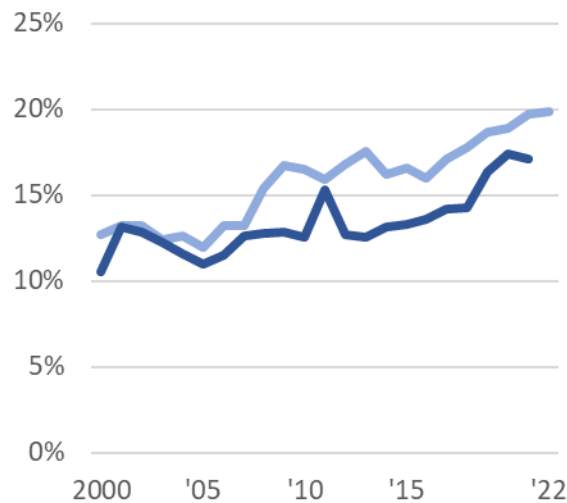
Decomposing the U.S. private sector construction industry by occupation

American Community Survey | Current Population Survey (aka Household Survey)

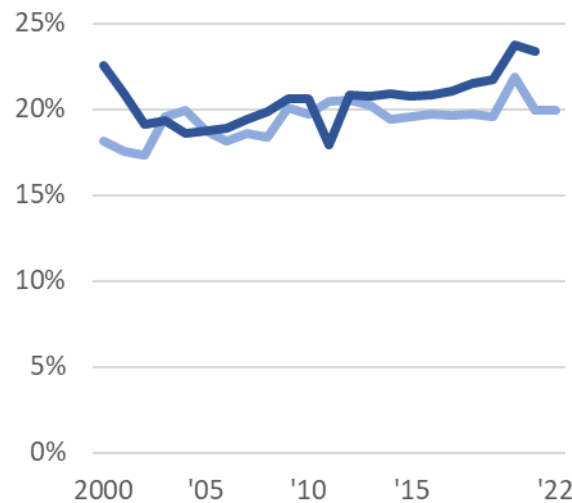
Construction Occupations



Management Occupations



All Other Occupations



Latest Data: ACS 2021, CPS August 2022 | Source: IPUMS-CPS, IPUMS-USA, Oregon Office of Economic Analysis

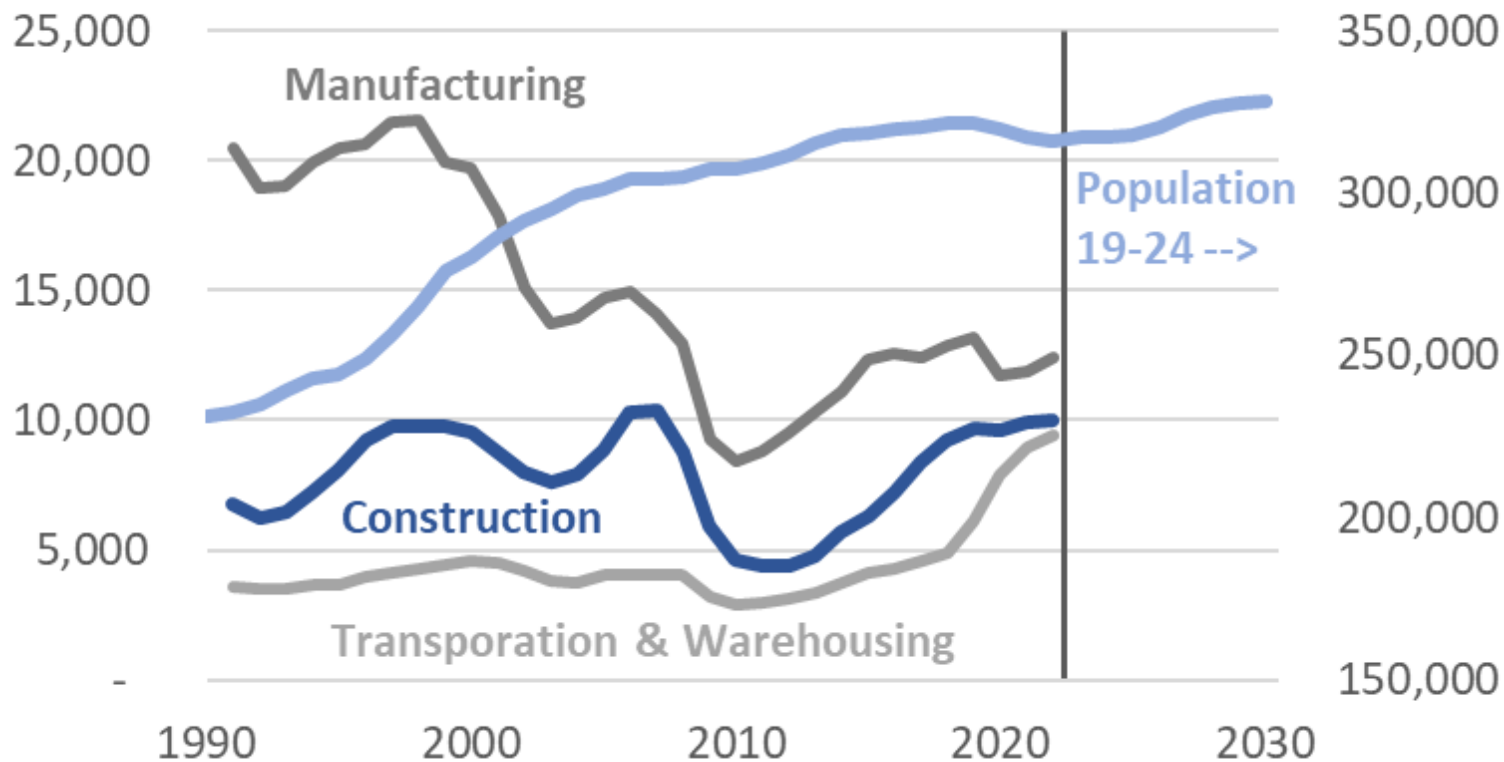
- The *share* of the construction industry workforce that actually builds things has fallen in recent decades
- The management share of the construction workforce has been increasing in recent decades
- Given industry consolidation, why is management/overhead increasing?
 - Is it just data or classification issues?
 - Note this data uses IPUMS consistently defined industry and occupation codes, but still a potential issue
 - Is this why construction overall has zero productivity gains? More workers for same volume of work?
 - Outsourcing of manual work to subcontractors or temp workers that show up classified somewhere else? (Household survey results similar looking at self-employment vs payroll jobs)
 - Change in the mix of projects?
 - Increased regulation/compliance?
 - Other industry-specific issues?



Labor Challenge: Demographics

Young Oregonians in the Trades

19-24 Year Olds



- It's difficult recruiting and training workers in a tight labor market
- Bad news: labor market is structurally tight due to demographics with increased retirements and slower gains due to low birth rate and slower migration
- These challenges face all industries, construction is about average in this challenge
- Silver lining: young Oregonians in construction is at or near an all-time high

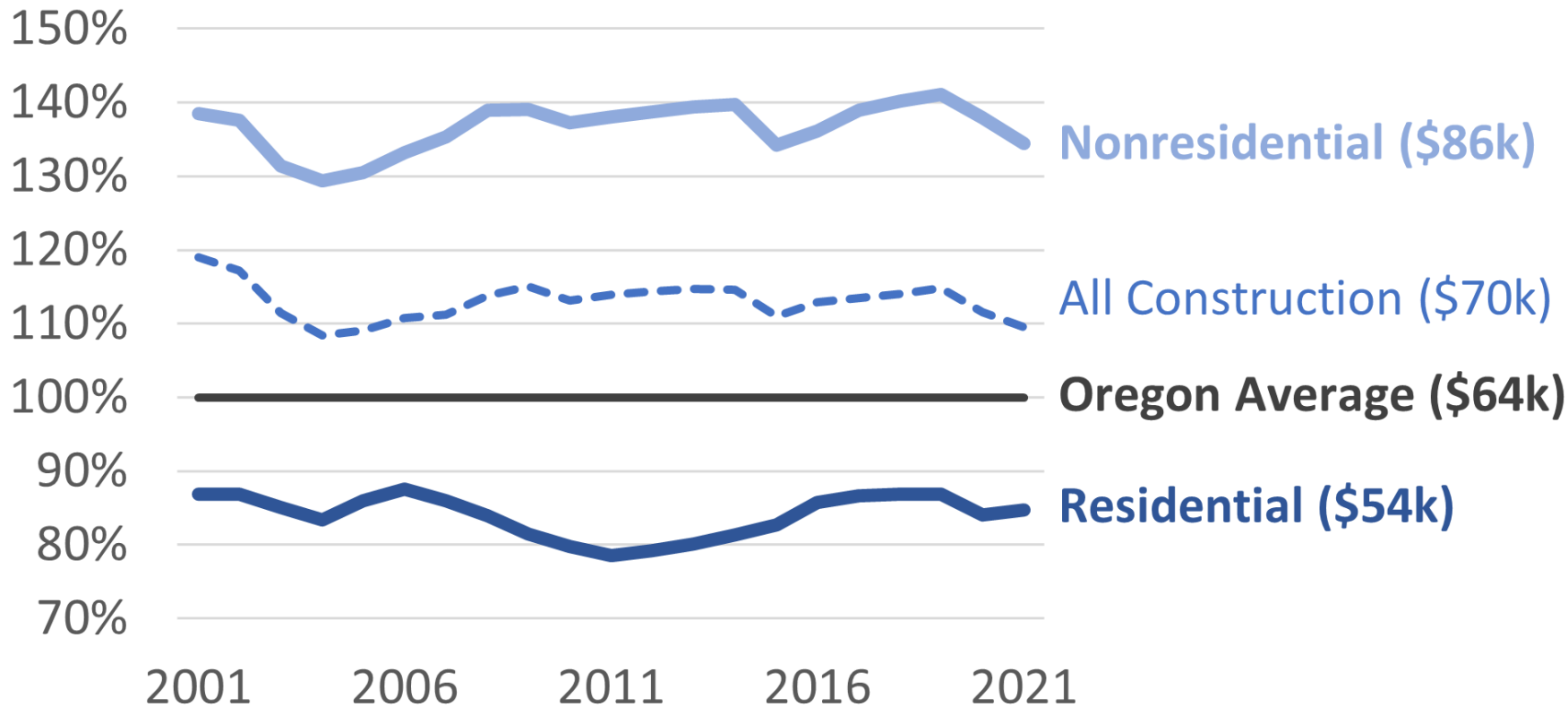




Potential Labor Issue: Wages

Oregon Construction Wages

Relative to Average for All Industries (2021 Avg Wage)

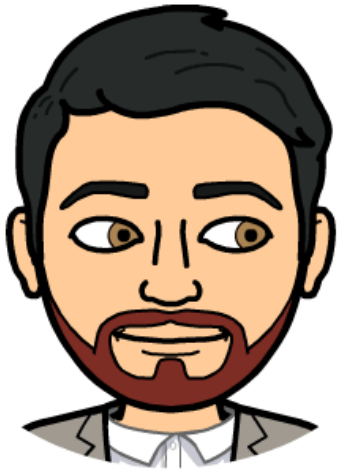


- There is a large difference in pay between residential and nonresidential construction
- There is a difference between construction “labor costs” which go into the cost of projects and the actual wages paid to workers





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