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# Portland MSA Economic & Population Outlook April 2017

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PORTLAND MSA

# ECONOMIC & POPULATION OUTLOOK

APRIL 2017

NeRC

# NeRC

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## ACKNOWLEDGEMENTS



NERC is based at Portland State University in the College of Urban and Public Affairs. The Center focuses on economic research that supports private and public policy decision-making, and relates to issues important to Oregon and the Portland Metropolitan Area. NERC serves the public, nonprofit, and private sector community with high quality, unbiased, and credible economic analysis. Dr. Tom Potiowsky is the Director of NERC, and also serves as the Chair of the Department of Economics at Portland State University. Dr. Jenny H. Liu is NERC's Assistant Director and Assistant Professor in the Toulon School of Urban Studies and Planning. Peter Hulseman is NERC's Senior Economist, and research support was provided by Hieu Nguyen, Emma Willingham and Peter Whitehead.



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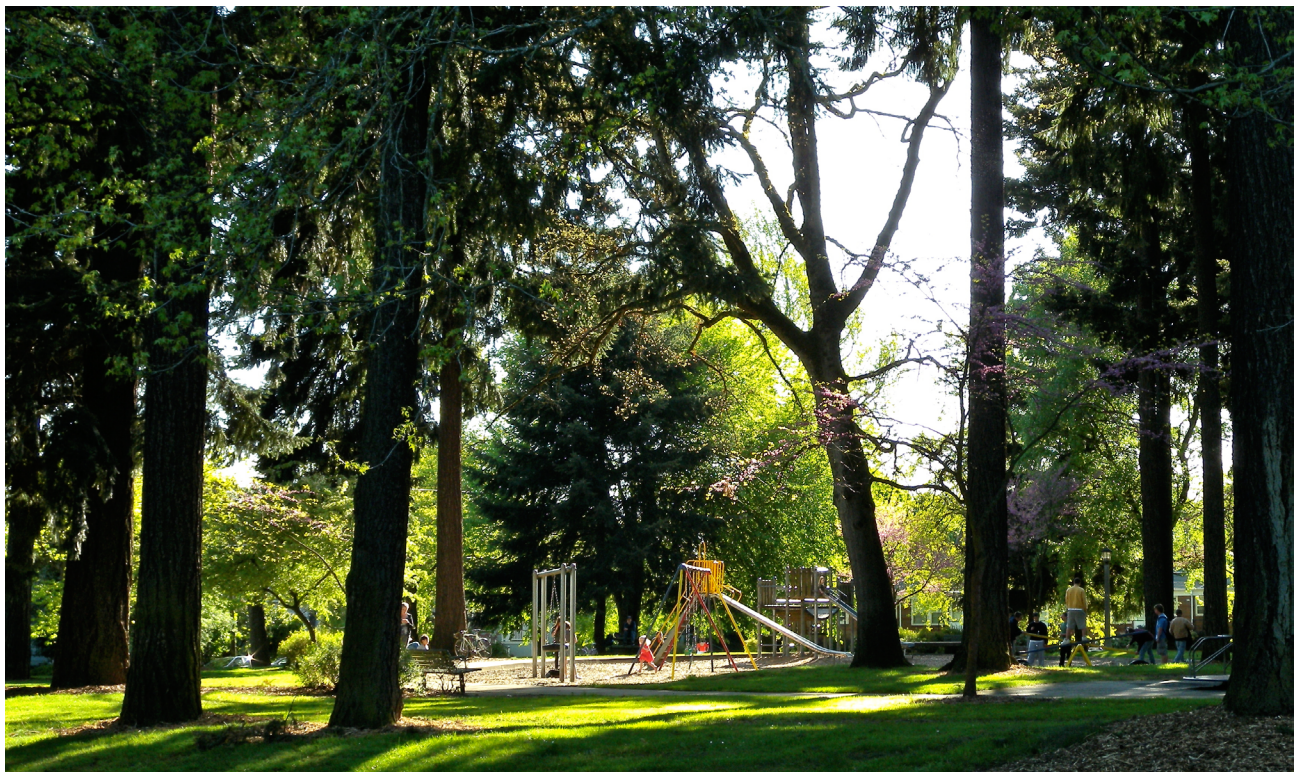




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## INTRODUCTION

The U.S. economic expansion is about to enter its eighth year, with Oregon and the Portland MSA following seven months behind. In December 2015, Federal Reserve Chair Janet Yellen was asked by a reporter for ABC News whether this long period of growth would inevitably be broken by a recession, citing historical standards. Yellen replied, “[I]t’s a myth that expansions die of old age [...] so the fact that this has been quite a long expansion doesn’t lead me to believe that [...] its days are numbered.”<sup>1</sup> Economic journalist Robert J. Samuelson countered that Yellen is wrong, because the longer the expansion lasts, the more attitudes and behavior change in ways that will bring about its demise: “Sooner or later, old age is fatal.”<sup>2</sup> Samuelson’s argument brings to mind the reason that most car accidents happen near home: not only do people drive more often in that area, but over time, they become so familiar with the nearby streets that their driving behavior changes and they become less cautious. Carelessness leads to accidents. To take one specific economic example, the longer the expansion, the longer housing prices continue to rise, and brokers can sell riskier mortgages because the rising tide will continue to lift all boats in the harbor—until it doesn’t, and lenders are suddenly bereft beyond the point where they would have been had their practices remained cautious. Bad behavior, in the end, is never rewarded.

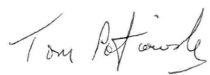
Is this long economic expansion causing us to behave badly? While increased debt levels have appeared and there is evidence of some house flipping, the increased spending is more or less supported by strong job growth and rising wages. This state of health has contributed to an atmosphere of suspicion towards regulation: the argument gains traction that the economy is strong, and legislative limits (whether financial or environmental) only serve as unnecessary hindrance to further growth. Risky ventures are now safer to explore than in years past and can certainly promote further economic growth, if judiciously executed. However, if we see too many such endeavors and some unforeseen factor causes a shift in the tide, we could experience some ill effects indeed.

Setting aside this discussion of sentiment, our forecasts for the Portland MSA indicate continuing (albeit slowing) economic growth, for reasons not embedded in the psychology of businesses and consumers. As the economy reaches full employment, it becomes more difficult to maintain high growth rates, as businesses reach capacity and labor growth slows to match working age population growth. With slowing job growth, in-migration will likely moderate as well, and the region will settle into a sustained pattern. The article “*Are We There Yet?*” *Full Employment in the Portland MSA* further explores the question of whether or not we have reached what might be termed the “ceiling” stage of the business cycle, where growth slows not due to dysfunction, but due to a dearth of slack in markets—the same slack that fed the breakneck pace previously observed. If we are at full employment, signs should appear: more rapidly rising wages, rising interest rates, and a reawakening of our old economic foe, inflation. To be clear, this does not mean that the economic expansion comes to an end—to borrow Samuelson’s metaphor, it does not die, but starts to show its age and move a bit more slowly.

In this forecast release, we highlight growth and trends in employment, population, incomes, and housing for the Portland MSA, and the seven individual counties that comprise it. We delve a bit deeper into one aspect of housing with our article *The Millennial Question*—now a larger demographic than the Baby Boomers and entering their nesting years, this group will be a primary influence in the housing market in the years ahead. Our report takes a “top-down” narration style: following macroeconomic discussion of the US and Oregon, the Portland MSA is considered, and focus shifts lastly to dynamics within the individual counties.

As always, we welcome your comments on the April 2017 forecast release as we strive for continual improvement.

Sincerely,



Tom Potiowsky



<sup>1</sup> Samuelson, Robert. (February 21, 2016). “Janet Yellen is wrong. Expansions do die of old age.” Washington Post.

<sup>2</sup> Ibid

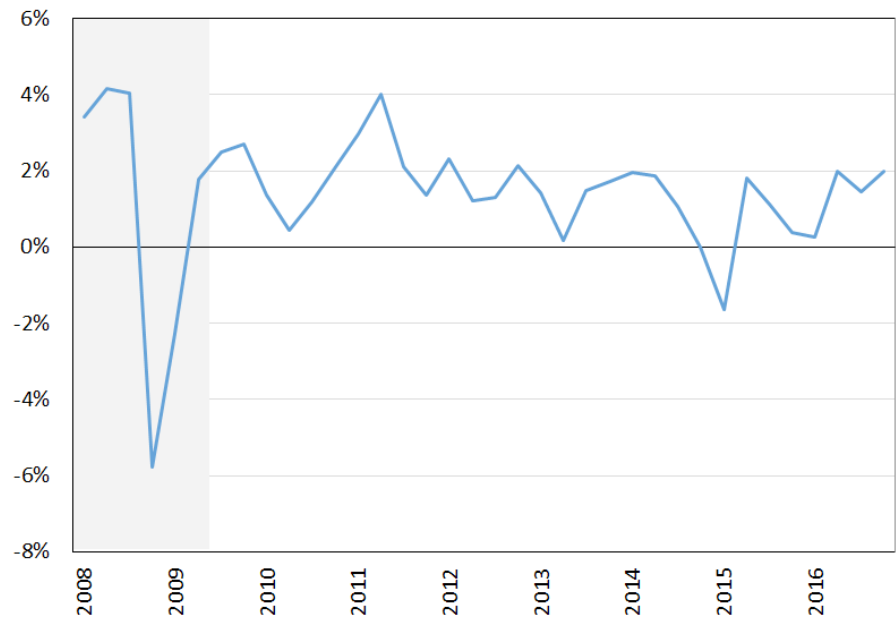


# MACROECONOMIC TRENDS: US AND OREGON

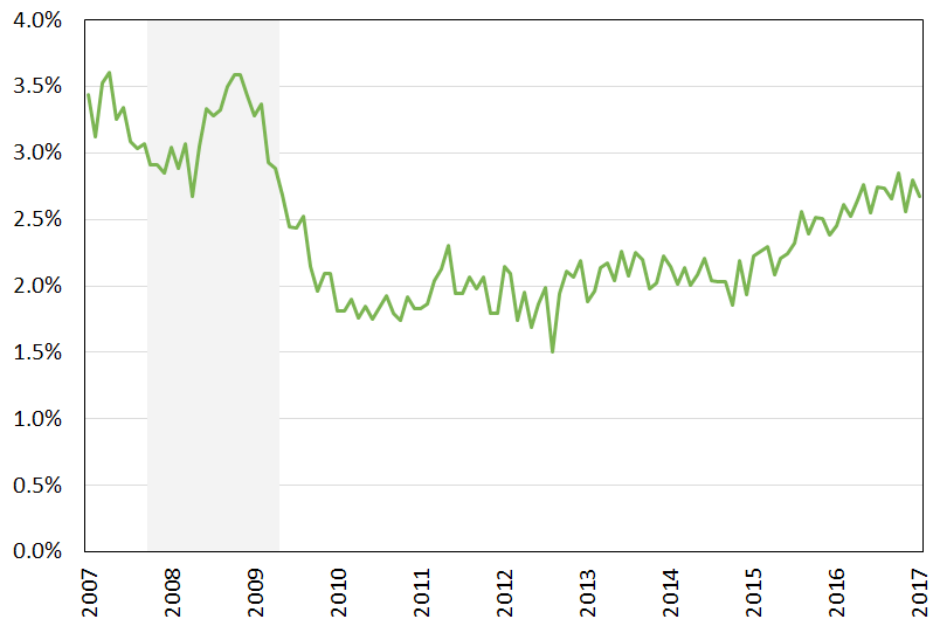
The U.S. economy is now in its third longest expansion. While it took several years for the economy to rebound from the recent recession, solid job growth is manifest in most areas of the country. We also see hints that the U.S. economy is approaching full employment, as the unemployment rate is near historical lows and wages are rising at a rapid rate. While this economic news is worth celebrating, there is a strong possibility that the nation is entering a pressure phase on prices, raising the prospect of higher inflation than in the recent past. This economic environment has prompted the Federal Reserve to move from an expansionary position to a more cautionary stance, guarding against possible inflationary pressures. With the Personal Consumption Expenditure Implicit Price Deflator (the Federal Reserve's preferred measure of inflation) moving towards the two percent target, analysts expect the Federal Open Market Committee to continue its December and March twenty-five basis point increases, with at least two more increases this year.

As the Federal Reserve moves slowly towards more contractionary measures, the new presidential administration has expressed plans to move fiscal policy in the expansionary direction. The preliminary proposed federal budget is a classic "guns and butter" tradeoff: expanding national defense and the border wall, while reducing spending on various discretionary programs. Coupled with

**Figure 1: Personal Consumption Expenditure Implicit Price Deflator**  
Annualized QoQ Percent Change, 2008-2017



**Figure 2: Average Hourly Earnings**  
Annualized Monthly Percent Change, 2007-2017



tax cuts for individuals and businesses, this budget will increase federal deficits, while providing a spending-induced bump for the economy. On the other hand, the administration indicates plans for immigration policy changes, regulatory reform, and possible higher tariffs and international trade restrictions—all tactics associated with reduced economic activity. Needless to say, estimating the outcome is a task that would make a Las Vegas bookie's head spin.

Executive and legislative actions and strategies will continue to evolve until the end of this year, and likely into 2018, and the economic results will not be immediately felt. If fiscal policy leads to a strong expansionary position during a time of near full employment and inflationary pressure, the battle between an ever increasing fiscal push against a stronger contractionary stance on monetary policy could have unpredictable outcomes. Unfortunately, this is not a pretty picture.

Of course, the devil is in the details. How will taxes be reformed, and when? What will the ultimate federal budget look like? How will the Federal Reserve react? The ultimate outcome and macroeconomic consequences are largely unknown at this time. One thing is certain: the federal government, which remained relatively obedient to conventional economic dictates during the previous administration (expansionary during the recession, pulled back during recovery), has moved to the center stage of macroeconomic uncertainty.

Although there is uncertainty surrounding the course of the US

economy, there are still expectations for the short term outlook. Here are some of the topics that are at the forefront for both the U.S. and Oregon economies.

### REAL GDP

Long-term real GDP growth is driven by two factors: an expanding labor force, and productivity gains. Given that the U.S. is near full employment and the population's rate of natural increase is below replacement level, a primary source of labor force growth going forward would be immigration; however the flow of immigrants to the U.S. is expected to slow. Taken in conjunction with an aging population, a smaller influx of immigrants means that longer term real GDP growth will need to be driven by productivity gains.

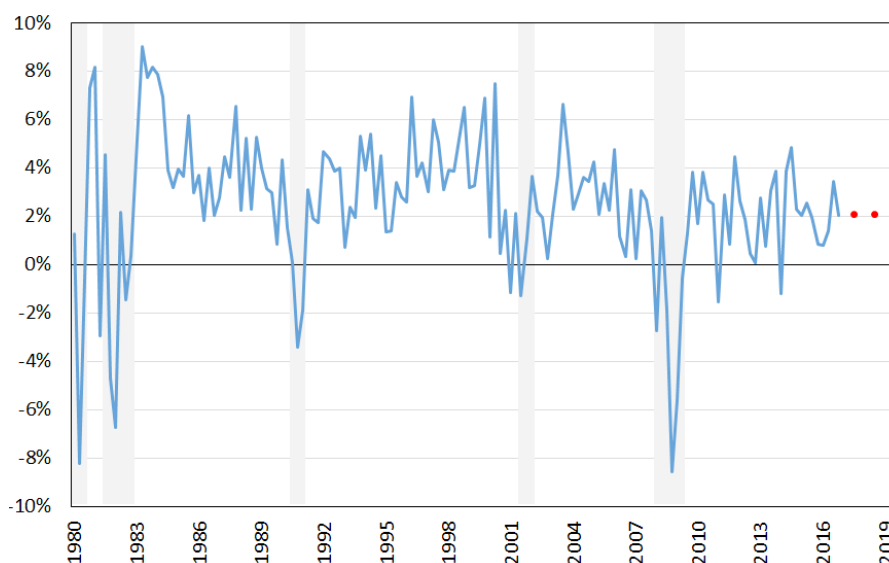
Unfortunately, however, many economists see the low rate of recent productivity growth as the beginning of a long-term trend. There are a few theories for why this is the case. First, the impact of new technologies is less

now than in the past, and expected to continue to decline (although new technology breakthroughs are difficult to forecast). Secondly, capital investments have been below pre-2001 recession levels, and especially weak the last two years. This could be a contributor to lower productivity numbers, but there remains the possibility, entertained by many economists, that bad data measures are to blame and productivity has merely been underestimated. If the decrease is real, there is some policy upside risk, as tax-cuts and deregulation should provide some short term boosts to productivity.

The fact remains that real GDP growth has been relatively slow for the past fifteen years compared to pre-2001 recession periods. Taking this into account, many economic forecasters expect roughly 2% annual real GDP growth for at least the next couple of years - a rate that's significantly lower than in decades past (see Figure 3). The Federal Reserve predicts real GDP growth of 2% in 2018 and 2.1% in

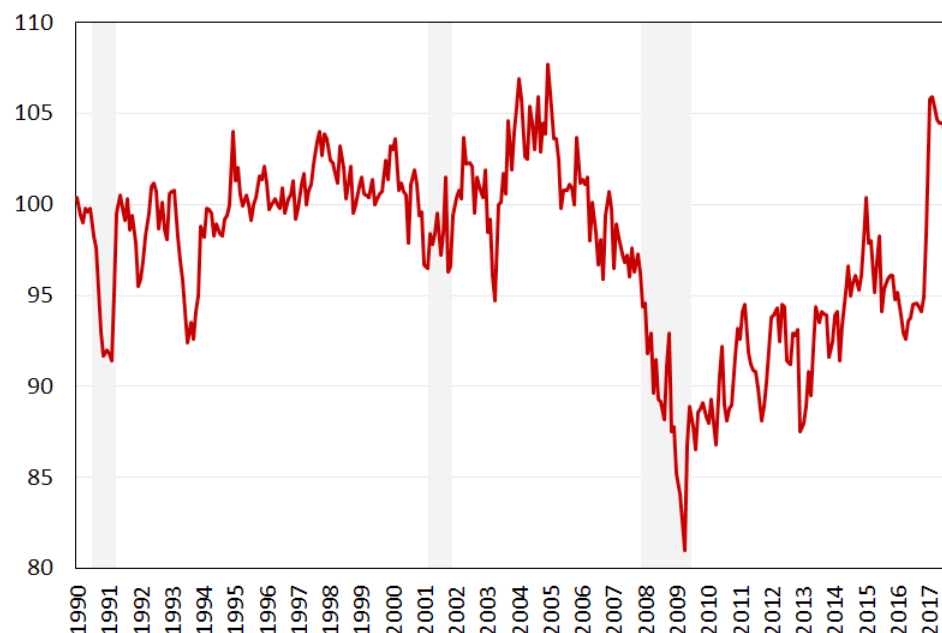
**Figure 3: Gross Domestic Product Growth**

Annualized Quarterly Percent Change, 1980-2019, dots indicate Federal Reserve forecasts



**Figure 4: NFIB Small Business Optimism Survey Results**

Index value (1986 = 100), 1990-2017



2019. However, as stated earlier, the possibility of higher real GDP growth in the near term could become a reality if various features of the fiscal policy under consideration are implemented.

### CONSUMER AND BUSINESS EXPECTATIONS

Consumers are bullish on the economy. Well, at least Republican consumers are. In February the Michigan Surveys of Consumers reported “unprecedented partisan divergence, with Democrats expecting a recession and Republicans expecting robust growth.” While neither outcome seems likely, it is telling that the independents polled were relatively optimistic. Consumer sentiment has been tied to consumption of durable goods, so the current trend is a positive sign for first quarter real GDP. (An advance estimate for the first quarter will be available April 28th.)

Small businesses, which account for roughly half of U.S. private employment, are now more optimistic than at any other time since the Great Recession (see Figure 4). This bodes well, as optimism on the part of business owners leads to future

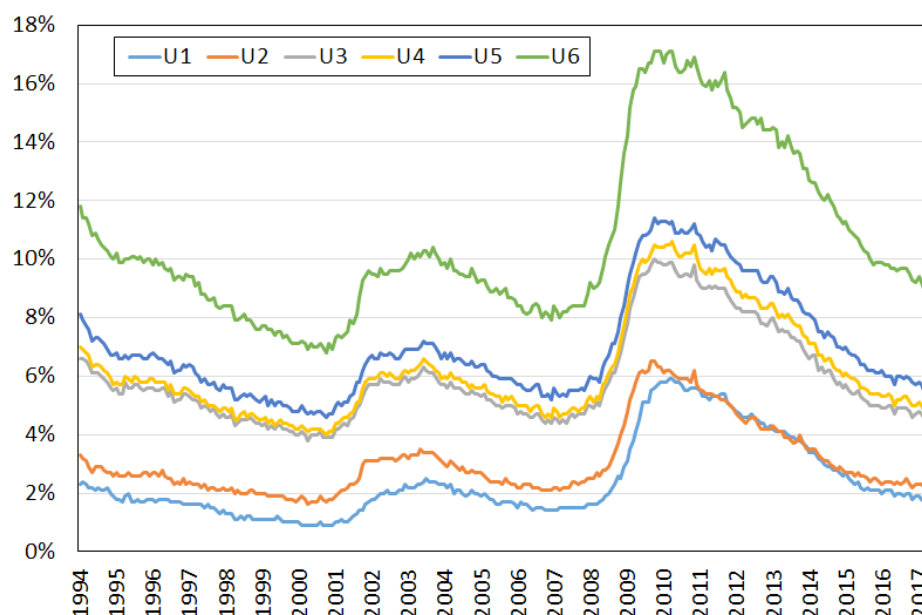
capital and labor investments, and may indicate the awakening of Keynes’ “animal spirits” and further stimulate GDP growth.

### EMPLOYMENT

Policy aside, the data for the U.S. economy are solid, if unspectacular. The unemployment rate is hovering around decade lows, although broader measures of unemployment have not yet fallen to their pre-recession rates (see Figure 5). This may not be what is termed unavoidable “slack”, as there is speculation that the economic crisis was so deep that some workers are now “permanently discouraged,” leaving the labor market in a weakened state described in economic theory with the borrowed term hysteresis. This term describes effects that persist after their cause has vanished; recession-induced unemployment has a lagged lasting effect that lingers after the cause, recession, has ended. Going forward,

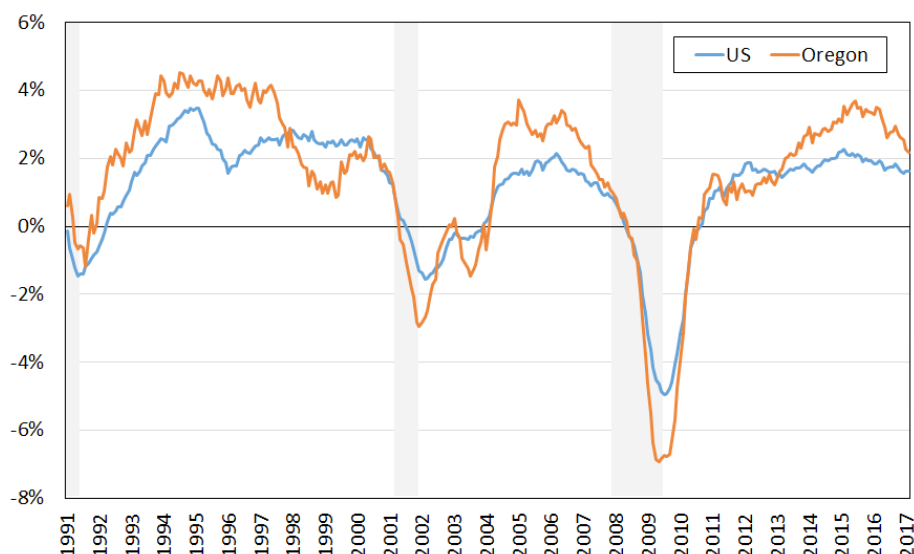
**Figure 5: Select Unemployment Measures**

Percent, 1994-2017



**Figure 6: Total Nonfarm Employment, US and Oregon**

Annualized Quarterly Percent Change, 1991-2017



the number of jobs added each month is expected to stabilize, as the nation squeezes the final drops out of the recent recovery boost. Slower employment growth coupled with increasing consumer demand has historically led to higher wages for employees.

Oregon, a highly responsive state, saw deeper employment cuts during the recession and faster growth during the expansion than the nation as a whole (see Figure 6). However, this growth has been uneven between industry sectors. Professional Business Services, the fastest growing sector since the recession, slowed to a more stable 1.3% year-over-year (YoY) employment growth rate in 2016. Likely due to cuts at Intel, manufacturing employment shrunk by a little over 1% YoY in 2016. Health Services and Education employment – which typically grows at a similar rate to the total population – grew by 2.5% YoY in 2016. Importantly, construction grew at the fastest rate in 2016, at 5% YoY. This bodes well for

housing supply, as a dearth of well-qualified laborers has been cited as a significant barrier to new housing in years past. Now that the labor market has tightened, slow and stable employment growth is on the docket for the next few years.

Federal policy on immigration may also influence the labor supply in the coming years. To the extent that immigrant workers are barred from entering the U.S. and Oregon, we could see some pockets of labor shortage in sectors like high technology and agriculture. This could translate into lower supply and higher prices. We may see Oregon wineries telling their wine club members that if they want to drink the coming vintage, they'd better get out in the vineyards and pick the grapes.

### SELECT POLICY IMPACTS ON OREGON

Oregon is not immune to federal policy. For example, a strong dependence on trade means any new tariffs could lead to a number of

outcomes. If intermediate goods from Malaysia or Vietnam are taxed, that would manifest as a drag on electronic manufacturing. If importing from Canada becomes more expensive, then we can expect a boost to logging employment.

However, in the near-term, local policy is more pertinent for Oregonians. The outcomes from current legislative discussions regarding the anticipated \$1.6 billion budget deficit over the next biennium will have significant impacts. Options abound for tackling the looming shortfall, but any cutback on government services will likely have adverse economic impacts – although other options may be equally unpalatable.

### HOUSING AND DEMOGRAPHICS

One aspect of the economy that has risen anew from the recessionary ashes is the single family housing market. Millennials are now aging into prime homeownership years, and demand for housing could begin to shift from multifamily units—apartments, condominiums, and townhouses—to single family units. Although this shift has been delayed (in part to unprecedented levels of student loan debt, which stood at \$1.31 trillion in aggregate at the end of 2016), surveys conducted by Zillow and the National Association of Home Builders (NAHB)<sup>1</sup> indicate that the majority of millennials prefer single family homes.

If demand is truly shifting from apartments and nightclubs to picket fences and minivans, there should be

<sup>1</sup> National Association of Home Builders. (March 1, 2016). "Housing preferences across generations." NAHBClassic.org



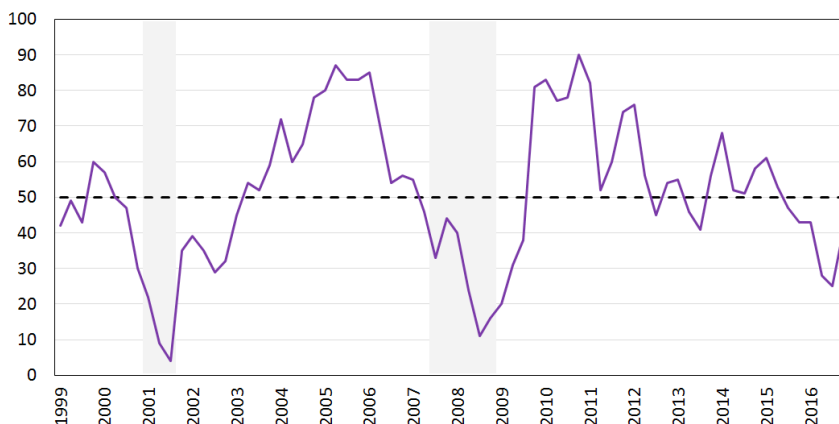
evidence that the multifamily market is loosening, especially considering the recent increase in supply. In January, the National Multifamily Housing Council reported a Market Tightness Index of 25 – the lowest in over seven years (less than 50 is considered loose and more than 50 is tight, see Figure 7). Furthermore, new multifamily structure permits have tapered off, leading to speculation that the U.S. is past the point of “peak renter”<sup>2</sup> (see Figure 8).

Of course, there are still reasons to be bearish on all types of housing. Inventories remain very low, and new construction has failed to meet the rising demand. This is exacerbating rising home prices, and pushing homeownership further out of reach for many potential first time buyers. Strict land-use regulations and a lack of qualified laborers are oft-cited reasons for this dearth of inventory.

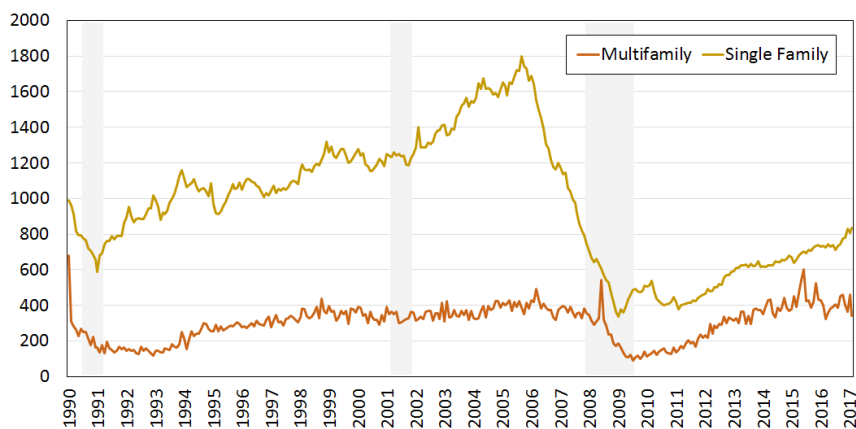
## THE OUTLOOK

At the national scale, a stable labor market, growing housing sector, and upbeat consumer base indicate that the greatest recession risks are policy mistakes or exogenous shocks (e.g. a stock market crash, natural disaster, or global recession). This description fits Oregon as well – though perhaps its citizenry are less optimistic than the nation as a whole. However, Oregon and the Portland MSA are not experientially in tandem, and the latter is now dealing with problems unique to fast-growing metropolises.

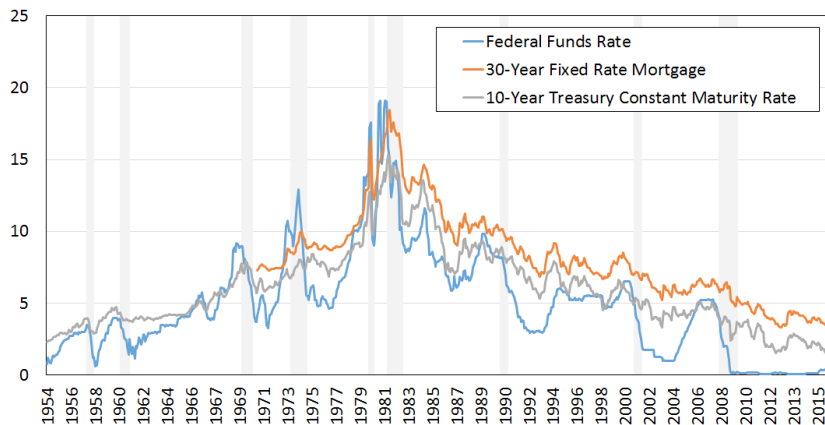
**Figure 7: National Multifamily Housing Council Market Tightness Index Diffusion Index, 1999-2017**



**Figure 8: Single Family and Multifamily Housing Permits Issued, US 3-quarter moving average, 1990-2017**



**Figure 9: Interest, Mortgage, and Treasury Rates Percent, 1954-2017**



<sup>2</sup> Lehner, Josh. (October 12, 2015). “Is 2015 peak renter?” OregonEconomicAnalysis.com.

## *“ARE WE THERE YET?”*

### *FULL EMPLOYMENT IN THE MSA*

The concept of full employment is complex and widely debated. One broad definition states that every individual who is able and willing to work is employed. The nearness of a labor market to this state strongly influences decisions made by the Federal Reserve. If full employment is achieved, then the goal of the Federal Reserve turns from maximizing employment to keeping a watchful eye on inflation. While important to national policy, the concept has salience at the local level as well. If the Portland MSA were to achieve full employment, then employment growth would slow to match the growth rate of the labor force. (Note we do not say that employment growth would

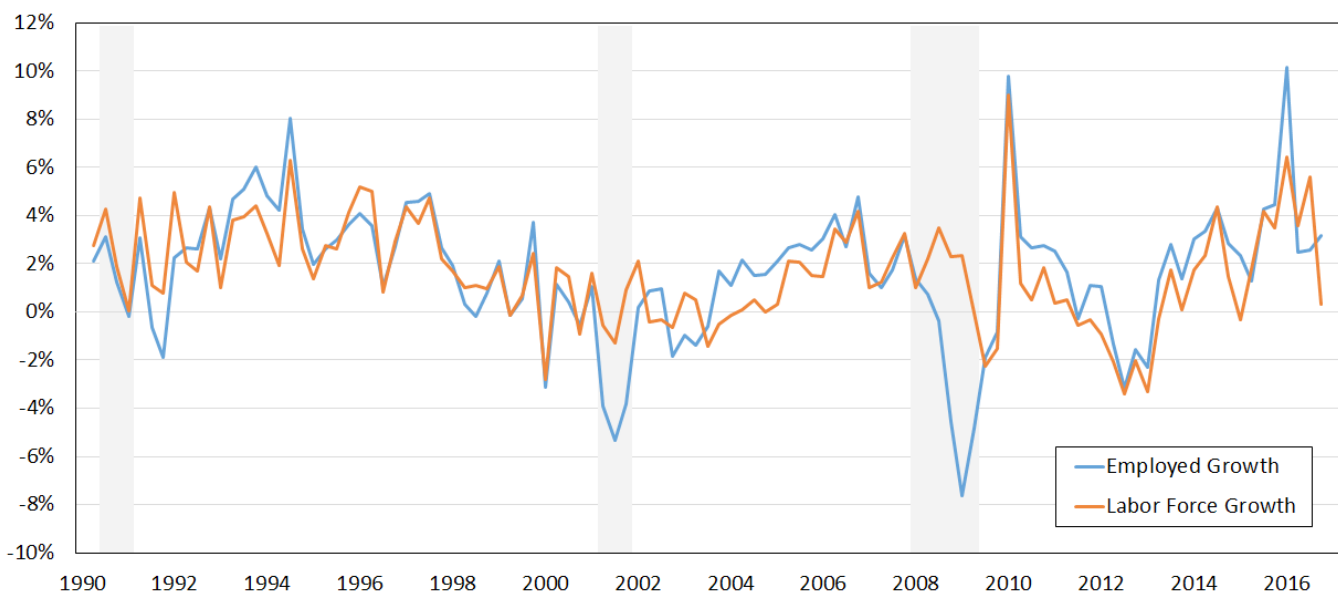
match population growth. The labor force participation rate is influenced by population growth, but could move in the opposite direction, as experienced through most of the last 15 years.<sup>1)</sup> This slowing is not a bad thing: everyone who is able and willing to work is employed. However, the trend change complicates the process of forecasting employment, as said forecast must implicitly assume the time when full employment is achieved, and modify growth from that point forwards.

So has the Portland MSA achieved full employment? The limited indicators available provide mixed signals. At the end of last year,

employment growth exceeded labor force growth, indicating that job growth exceeds population growth and full employment is still on the horizon (see Figure 10). However, the Local Area Unemployment Statistics (LAUS) data from which this measure was drawn rely on household surveys that have relatively large margins of error, and are thus too imprecise a source to hit the small target of full employment with confidence.

However, multiple LAUS data series taken in conjunction can tell a more complete picture. Using Census figures for the adult population and LAUS figures for labor force participation, NERC calculates

**Figure 10: Portland MSA Employed and Labor Force Growth**  
Annualized Quarterly Growth Rates, 1990-2017



the labor force participation rate for the Portland MSA (see Figure 11). This chart tells two different stories. First, since 2013 the labor force participation rate has steadily rebounded since the recession. The second story is one of demographics. As the baby boomer generation ages, many of them – still within the threshold of the adult population – may choose to retire. This pushes down the labor force participation rate, and helps to explain the stark level change from the 1990s to today. While rising participation in the labor force is certainly a positive sign, as it leaves less illusory slack (jobs that discouraged participants are not filling), it is difficult to determine from a single measure how many more people can join

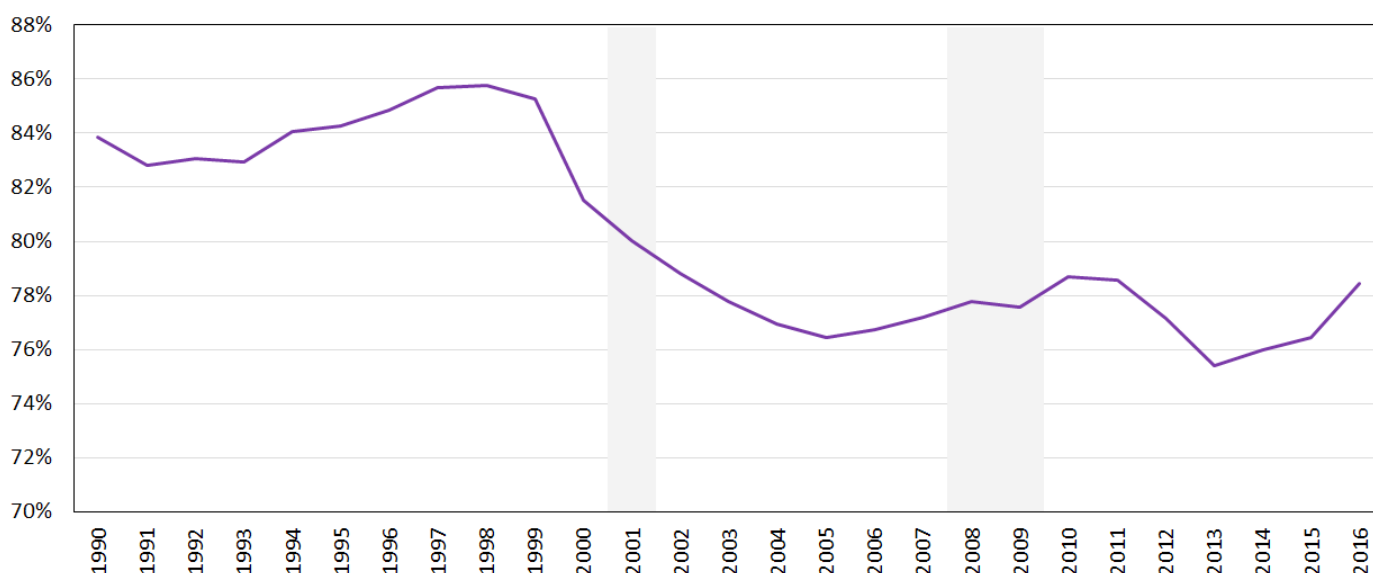
the employed labor force before maximum employment is reached.

Even though we are at historical lows for the unemployment rate – the Portland MSA's seasonally adjusted unemployment rate was 3.5% in February – the economic environment is very different today in comparison to times past, rendering inference on that basis open to critique. However, in much the same that a way a doctor can get a general idea of a patient's diagnosis by examining the symptoms, economists can get a general sense of nearness to full employment by looking at wages and inflation – both rise when workers gain the bargaining power implied in tight labor markets. The

Portland MSA Consumer Price Index rose 2.14% in 2016, well above the 2015 rate of 1.23%. Meanwhile, wages rose 3% and 2.25% in the second and third quarters of 2016. While this is only two of many indicators, they point towards a tight labor market. Taken in conjunction with slowing jobs growth, the symptoms indicate a bout of full employment. In the forecast, NERC incorporates this transition to strong wage growth leading to declining growth in employment.

<sup>1</sup> Hotchkiss, Julie L., "Employment Growth and Labor Force Participation: How Many Jobs are Enough?", Economic Review, First Quarter 2005, Federal Reserve Bank of Atlanta.

**Figure 11: Portland MSA Labor Force Participation**  
Annual Percent of Adult Population, 1990-2016









# THE PORTLAND MSA

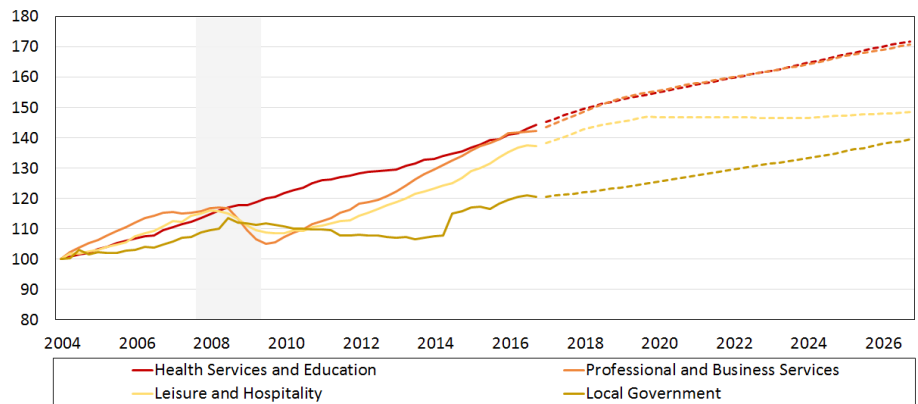
The year 2016 was a particularly strong one for the Portland MSA. Total nonfarm employment grew at 2.4%, population grew at 1.8%, and housing prices continued to ascend. What follows is a breakdown of the recent trends and forecasts for employment, housing, and population in the Portland MSA, that ends with the special article *The Millennial Question*.

## EMPLOYMENT

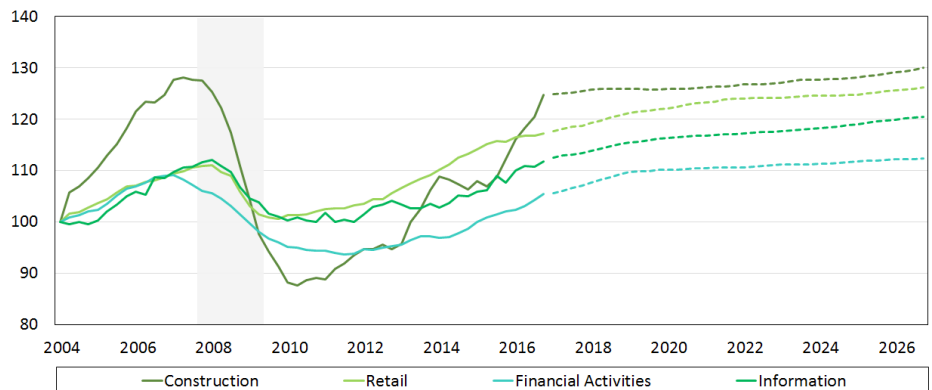
In 2016, total nonfarm employment in the Portland MSA grew at a year-over-year (YoY) rate of 2.4%, well above the population growth rate of 1.8%. If the Portland MSA is nearing full-employment then that rate should be dropping, as it did throughout the year – the seasonally adjusted, annualized quarter-over-quarter growth rate began at a strong 3.30% in the first quarter and fell throughout the year, ending at a moderate 1.60% in the final quarter of 2016. This helps substantiate the idea that the recovery is finally ending and the Portland MSA has approached full-employment.

In years past, an oft-cited reason for the lack of new housing has been the dearth of well-qualified construction employees. While there still may be a shortfall in construction labor, 2016 saw 6,500 new construction employees. That represents an 11.21% YoY growth rate, making construction by far the strongest growing industry in the Portland MSA. Also encouraging is that this growth was spread throughout the counties, with only Columbia and Skamania growing less than 8% YoY (Columbia

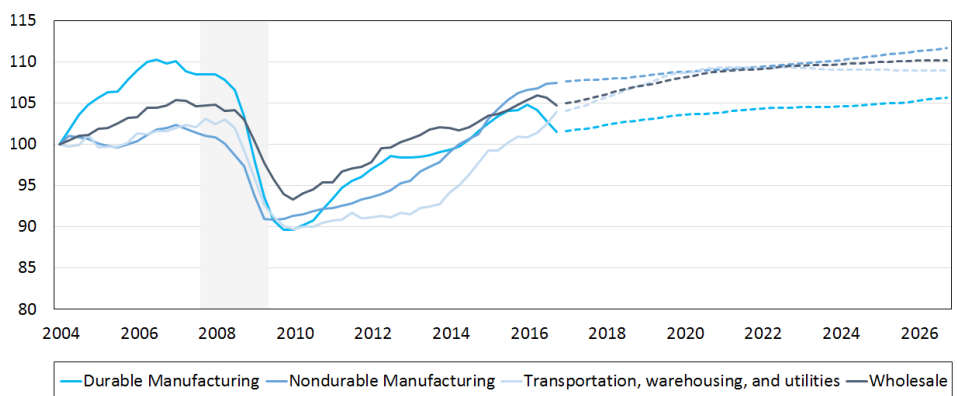
**Figure 12: Employment in Fast-Growth Industries**  
Index (2004 = 100), 2004-2026



**Figure 13: Employment in Medium-Growth Industries**  
Index (2004 = 100), 2004-2026



**Figure 14: Employment in Slow-Growth Industries**  
Index (2004 = 100), 2004-2026

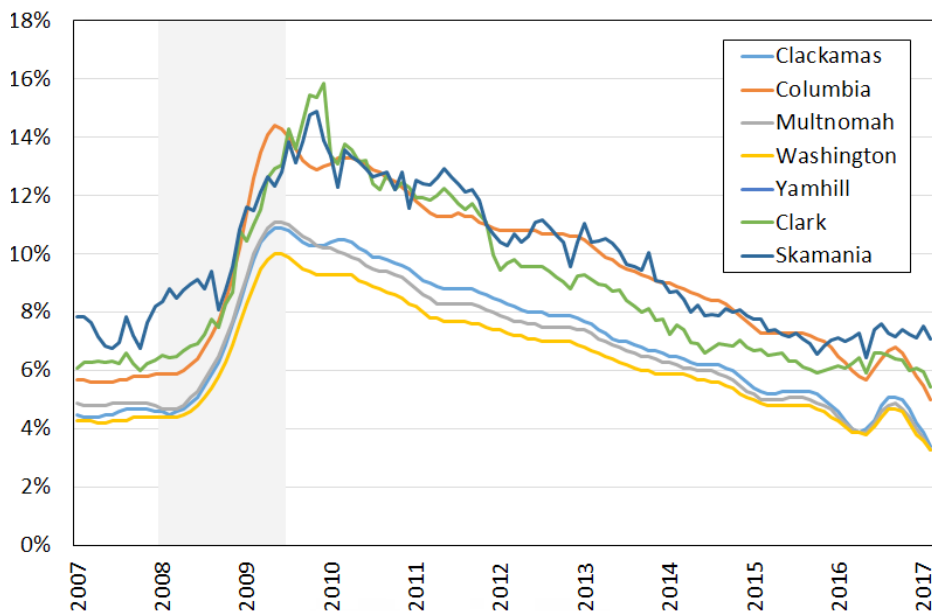


## NOTABLE EMPLOYMENT EVENTS:

- **Troutdale Amazon Distribution Center:** Amazon is opening a distribution center in Troutdale which will employ roughly one thousand workers – a significant increase to trade, transportation, and warehousing employment in Multnomah County over the next couple of years.
- **Intel Layoffs:** In 2016, Intel laid off 12,000 employees nationwide as part of a restructuring initiative. Intel is Oregon's largest private employer, with 19,500 workers in Washington County alone. An estimated 784 jobs were lost in that county, not including buyouts. This is a significant negative impact on high tech employment in Washington County and the MSA as a whole; however, all but 200 jobs have since been recovered.

**Figure 15: Unemployment Rates by County**

Percent, 2007-2017 (WA counties seasonally adjusted manually)



and Skamania make up a combined 1.1% of the MSA's construction employment).

The Portland MSA's hardest hit industry in 2016 was durable manufacturing, down 2.5% since the end of 2015. This is concerning not only because these are some of the higher paying jobs, but also because durable manufacturing accounts for almost a quarter of the MSA's GDP—despite accounting for roughly 8% of the MSA's employment. Some of

the decline can be attributed to large layoffs at Intel in the second and third quarter, but sectoral employment loss occurred outside of Washington County and the computer and electronic manufacturing industry as well. Every county that has durable manufacturing employment data available experienced some level of employment loss in 2016, and non-computer and electronic manufacturing sectors also experienced losses in aggregate. Going forward, durable manufacturing

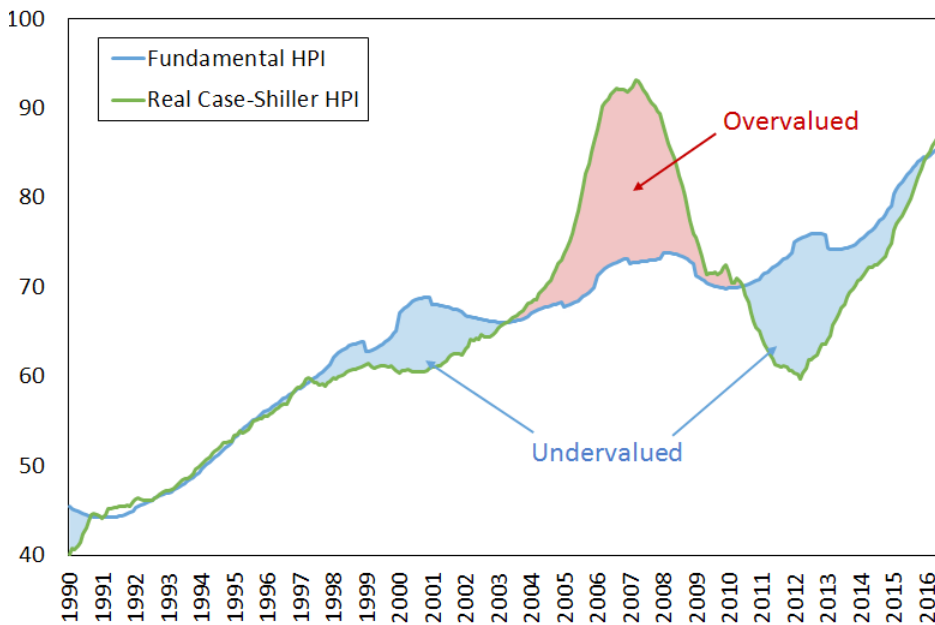
is expected to be a slower growing industry (see Figure 14), even without accounting for potential headwinds such as changes to trade policy.

Employment in healthcare and education, local government, federal government, information, professional business services, leisure and hospitality, TWU (trade, warehousing and utilities) and other services (a catch-all category for service employment) grew faster than the 1.8% population growth rate observed in the MSA in 2016. Many of these sectors, such as other services or health services and education, are strongly tied to population—more people in the MSA means more demand for teachers, nurses, and barbers. However, going forward there will be some headwinds. A rising minimum wage should reduce employment growth in those sectors that disproportionately rely on low wage employees – such as leisure and hospitality or healthcare. Healthcare is also facing potential pullbacks in Medicare. Less people with insurance means less office visits, which means less revenue and less healthcare employees.

## HOUSING

Housing is among the most contentious and complex topics in the Portland MSA right now. The housing inventory is low due to the limited land-supply, high cost of entry for developers, and – at least up through 2015 – a dearth of qualified construction workers. Meanwhile, demand for housing is strong. The Portland MSA's economic growth over the past few years has pushed up incomes and brought considerable employment gains, and low house

**Figure 16: Fundamental Housing Price Index**  
Index, 1990-2016

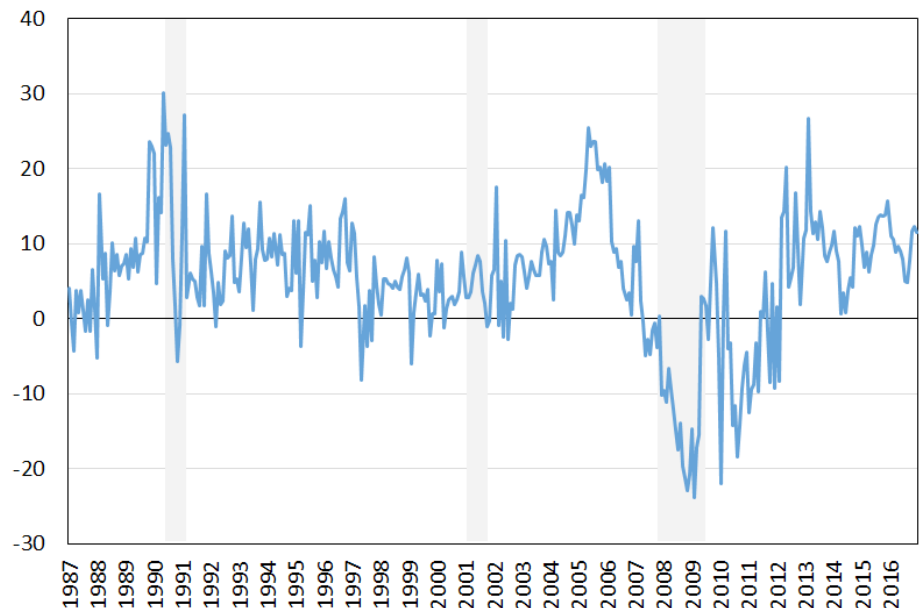


prices relative to other West Coast metropolitan areas have resulted in increased moves into the urban core by both state residents and new arrivals (see Figure 17). Given this confluence of factors, it stands to reason that year over year house price growth reached the double digits for most of 2015 and 2016.

However, even though rising demand and stagnant supply have driven up house prices, they have not reached the kind of unsustainable level observed prior to the housing bust of the late 2000s. In an effort to catch the kind of “irrational exuberance” that characterized that phenomenon, NERC estimates a ‘fundamental House Price Index’ (HPI) based off of the relationship between fluctuations in house prices and fluctuations in population and income (see Figure 16). This metric shows that much of the house price growth seen over the past few years can be attributed

to a recovery effect, and from strong growth in incomes and population in 2015 and 2016. Although NERC found little evidence of unsubstantiated house price gains, more moderate

**Figure 18: Case-Shiller Index for Portland MSA**  
Annualized MoM Percent Growth, 1987-2016



**Figure 17: Zillow Median House Price by West Coast Metropolitan Region**

METRO AREA	MEDIAN HOME PRICE
PORTLAND	\$358,700
DENVER	\$359,100
SEATTLE	\$420,200
SAN FRANCISCO	\$839,600

growth is anticipated going forward as there will no longer be a recovery effect. While this is certainly positive news for many Portlanders, this does not mean an end to the ‘affordability crisis,’ as that pertains as much to uneven income growth as to house prices.

Housing permits, which are always difficult to forecast, became increasingly unpredictable in 2016 due to some recent policies. The construction excise tax and

## NOTABLE HOUSING DEVELOPMENTS:

- **South Cooper Mountain:** Beaverton's largest housing development in ten years brings 270 multifamily units and 308 detached single family homes to Washington County. Construction began this year.
- **River Terrace:** Immediately adjacent to the above, in Tigard, the River Terrace development will add 2,500 new units over a two-decade period. While most units will be detached single family, multifamily and duplex types are expected as well.
- **South Hillsboro:** Over the next twenty years, southern Hillsboro will develop over 1,400 acres. When complete, the development will include a combination of more than 600 multifamily units, 3,800 single-family units, and 90 acres of mixed-use with a central town center.

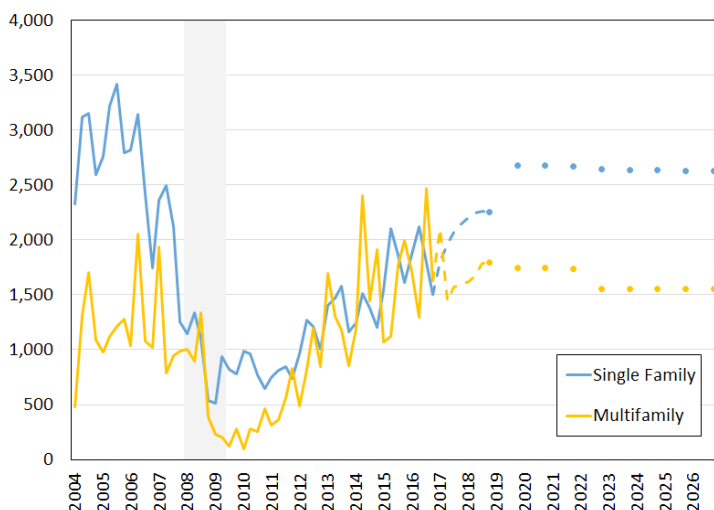
inclusionary zoning act, the latter of which went into effect in February of 2017, incentivized developers to accelerate the permitting process in order to avoid additional taxes or requirements. This means that the number of multifamily permits for Multnomah County, from midway through 2016 to the end of February 2017, can be assessed as artificially high. Consequently, during the next few years there will be less multifamily permits in Multnomah County than there would have been otherwise, as developers sought permitting at an earlier stage than

they would have absent the new legislation, in order to avoid the associated increased cost. This is accounted for in the forecast and is seen in the rather large downtick in multifamily permits from the first to the second quarter of 2017.

Overall, the number of housing permits will continue to rise in the Portland MSA. However, multifamily permit growth will slow relative to the scorching rate observed in 2015 and 2016. Single family permits will continue to climb back from the recession as millennials age into prime

homeownership years. (However, this bump may not be imminent; see The Millennial Question.) Taking the moderation in multifamily growth and increase in single-family demand in conjunction with house prices that will grow

**Figure 20: Housing Permit, Historical and Forecast, MSA**  
Total Permits, 2004-2026



**Figure 19: Growth in Portland MSA by County**

Percent change, 2015-2016

CLACKAMAS	1.91%
CLARK	1.50%
COLUMBIA	0.80%
MULTNOMAH	1.70%
SKAMANIA	0.44%
WASHINGTON	2.29%
YAMHILL	1.31%

at roughly 6-7% year over year due to strong migration and income growth, the Portland MSA's housing market looks to return to relative normalcy in the coming years.

## POPULATION

A major driver of the strong growth seen throughout the MSA in 2016 was the influx of migrants. Net migration accounted for over 33,000 new residents, who contributed to a population growth rate of 1.8% – the strongest observed since 2001. Furthermore, preliminary estimates from the Population Research Center indicate that Clackamas, Multnomah, and Washington counties each had the highest number of in-migrants since the turn of the century.

This high rate of in-migration feeds into both the affordability problems – as these migrants eat into the available housing, driving up demand – and into rising incomes and employment, as more people means more goods and services demanded. Going forward, NERC anticipates net migration moderating as employment begins to approach its long run growth rate and millennials age past their 'root-setting' years.



## THE MILLENNIAL QUESTION

Millennials, the largest generation in the Portland MSA, appear to defy the life trajectory observed in previous generations, making their behavior notoriously difficult to predict. While loosely defined as being born between 1977 and 1995 (according to Nielsen Media Research), they are more directly defined as the first generation to be engulfed from childhood in the age of the internet, cell phones, and social media. There is a growing belief that millennials would prefer to spend their resources on experiences<sup>1</sup> – e.g., eating exotic foods in strange places – rather than on the large durable good purchases enjoyed by previous generations – e.g., a house and two cars. Perhaps this is due to instantaneous access to unprecedented information, or maybe the experience of a massive debt-induced financial crisis during their formative years, but if this change in spending proves persistent, then the growth seen in cities will continue and the suburban revival will be postponed at least another generation.

However, surveys indicate that millennials aren't all that different from previous generations. A 2014 Zillow survey found that almost two thirds of young adults think that owning a home is necessary to live "The Good Life", and 80% of renters are at least "somewhat confident" that they will eventually be able

to afford a home. A 2016 National Association of Home Builders survey found that 68% of millennials want a detached single family home (compared to 65% for all buyers). Furthermore, a 2015 Urban Land Institute survey found that 70% of millennials expect to own a home by 2020, even though only 26% currently own one. So the question is, if owning a single family detached home is what millennials want, then what is stopping them?

The answer is affordability, or rather, the lack thereof. Assuming that the average millennial household in Portland spends 30% on mortgage payments, puts 20% down, and

gets a 30-year fixed mortgage at 4.25%, then the house they can afford costs approximately \$393,600 (assuming earnings equivalent to the median 2015 household income for the 25-44 age group [\$64,635]). According to Zillow, the median home value for the Portland MSA in February was \$358,700, so right now owning a home is well within reason. However, 42% of millennials carry student debt, and the average student loan repayment is \$351 a month for those in the 20-30 age bracket. This is an expense not borne to the same degree by previous generations, and it leaves millennials financially impeded in relative terms. A recent Federal

Figure 23: Millennial Housing Preference Statistics

### Percent of Millennials that....

...Want a Single Family Home	65%
...Own a Single Family Home	26%
...Expect to own a Single Family Home by 2020	70%
...Carry Student Debt	42%
...Are "Somewhat Confident" That They Will Own a Single Family Home	80%

Reserve of New York study found that a 33 year-old with some level of student debt was 5% less likely to own a home than one with no student debt. Finally, increasingly strict lending standards – the average FICO score on closed conventional new purchase loans was 752 in February – mean that the pool of potential home buyers shrinks even more significantly.

Coming out of the Great Recession, a millennial household needs greater than average financial resources in order to be able to afford a home at the median price in the Portland MSA. However, this doesn't mean millennials will never be able to afford buying in the Portland MSA – incomes have risen significantly in the past few years, and an increasing inventory

should moderate the growth in house prices. It is probable that demand for single family homes will continue to rise as more millennials form families, increase earnings, and age into prime homeownership years; the factors discussed above have merely delayed life events that happened at an earlier age in prior generations.

<sup>1</sup> Harris Poll. (2014). Millennials: Fueling the Experience Economy. Conducted for and released by Eventbrite.com.

<sup>2</sup> Terrazas, Aaron. (2014). Zillow's Housing Confidence Index: Will Youthful Exuberance Today Mean More Sales Tomorrow? Zillow.com.

<sup>3</sup> National Association of Home Builders. (January 21, 2016). Millennials to Shape Housing Preferences—Once They Start Buying. NAHB.org.

<sup>4</sup> Brett, Deborah L and Lachman, Leanne M. (2015). Gen Y and Housing. Urban Land Institute. ULI.org.

<sup>5</sup> United States Census Bureau. 2011-2015 American Community Survey 5-Year Estimates for Portland-Vancouver-Hillsboro OR-WA Metro Area. FactFinder.census.gov.

<sup>6</sup> Institute of Politics at Harvard University. (2013). Fall 2013 Survey. IOP.Harvard.edu.

<sup>7</sup> Elvery, Joel. (May 16, 2016). Is There a Student Loan Crisis? Not in Payments. Forefront. Clevelandfed.org.

<sup>8</sup> Chakrabarti, Rajashri, Gorton, Nicole, and van der Klaauw, Wilbert. (April 3, 2017). Diplomas to Doorsteps: Education, Student Debt, and Homeownership. Liberty Street Economics. LibertyStreetEconomics.newyorkfed.org.

<sup>9</sup> EllieMae®. (February 2017). Origination Insight Report. CDN.Elliemae.com.



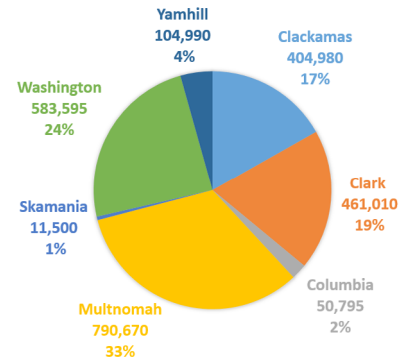
# COMPARING ACROSS THE COUNTIES

## POPULATION

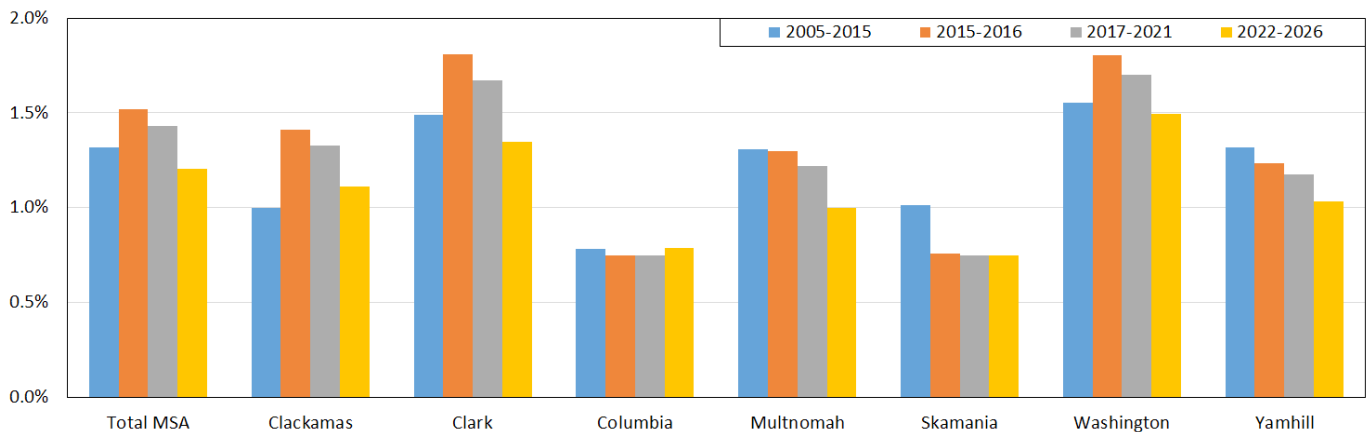
TOTAL POPULATION (2016)

Clackamas	404,980
Clark	461,010
Columbia	50,795
Multnomah	790,670
Skamania	11,500
Washington	583,595
Yamhill	104,990

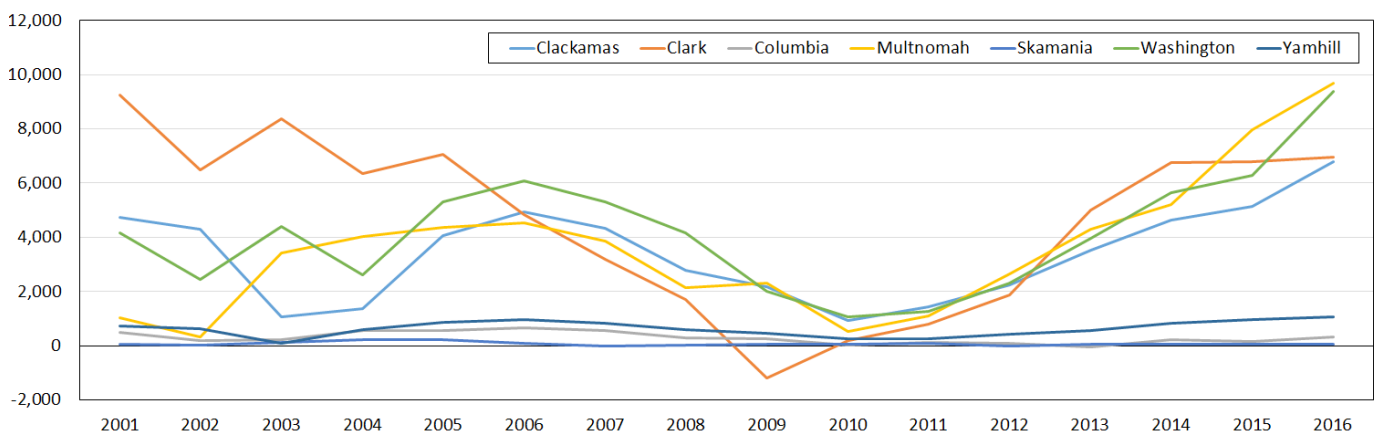
SHARE OF PORTLAND MSA (2016)



CURRENT AND FORECAST POPULATION GROWTH RATE

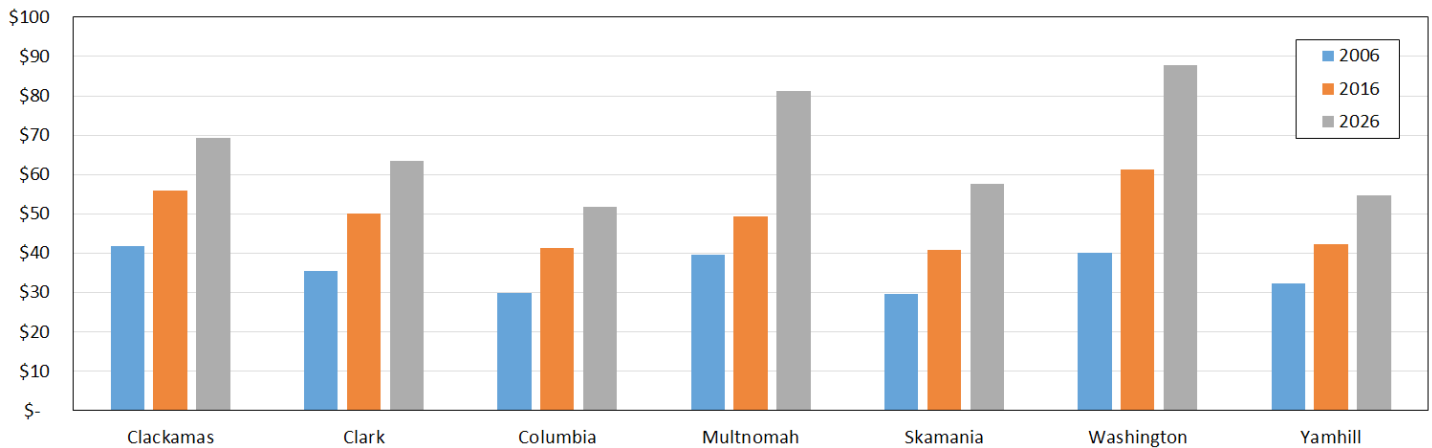


HISTORIC NET MIGRATION BY COUNTY



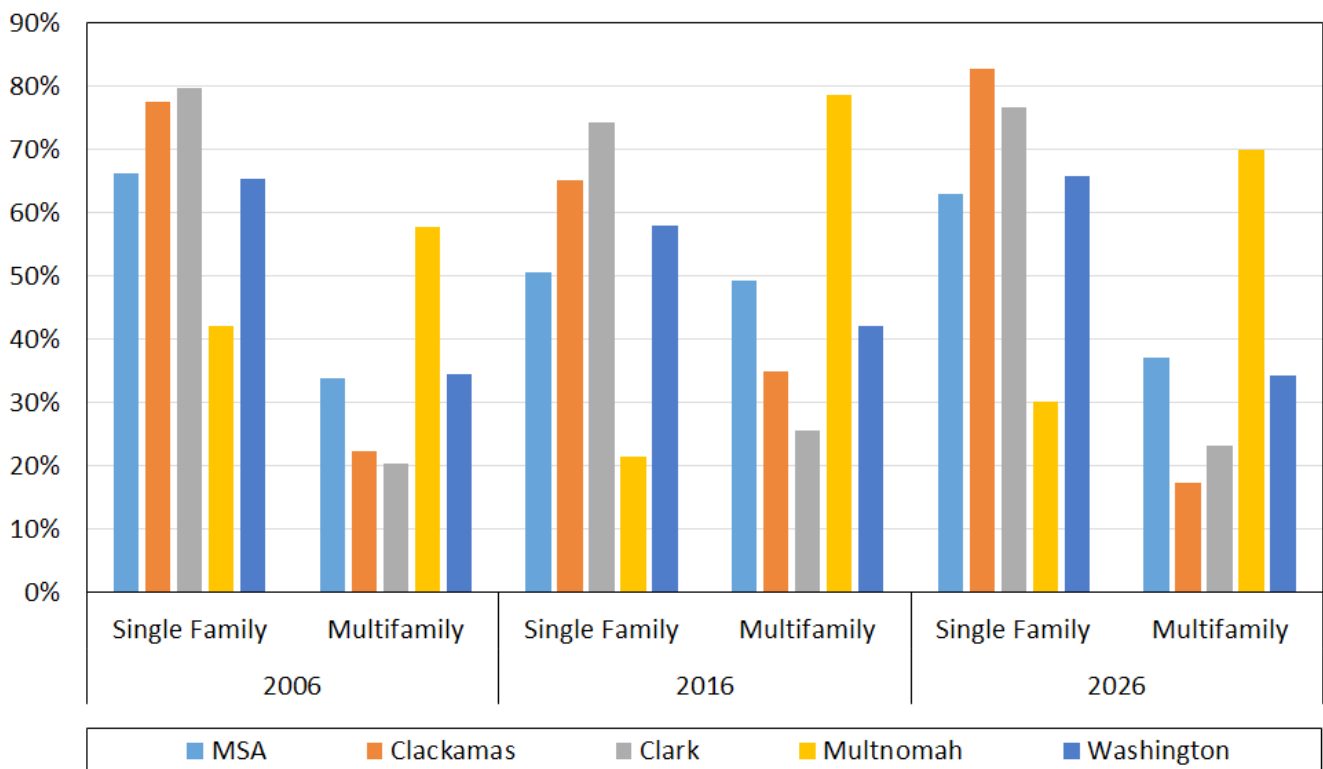
## INCOME

### HISTORIC AND FORECAST INCOME PER CAPITA



## HOUSING

### SINGLE FAMILY/MULTIFAMILY SPLIT IN HOUSING CONSTRUCTION

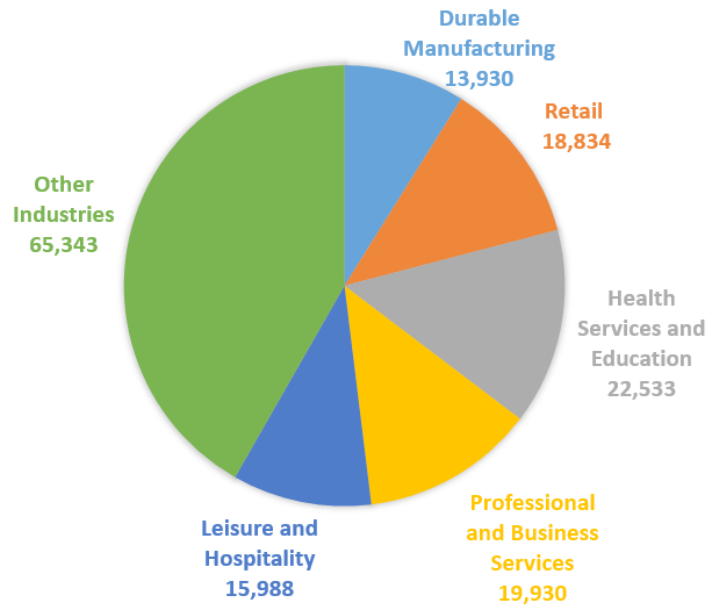
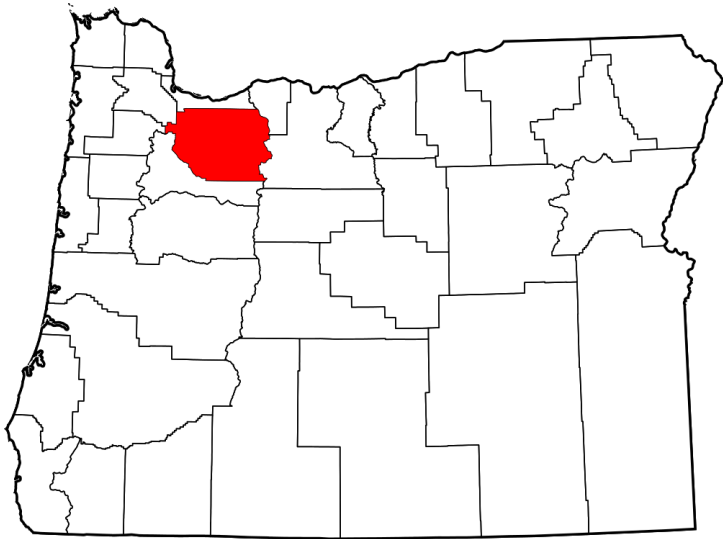


Note: Columbia, Skamania, and Yamhill Counties do not have consistent multifamily construction.

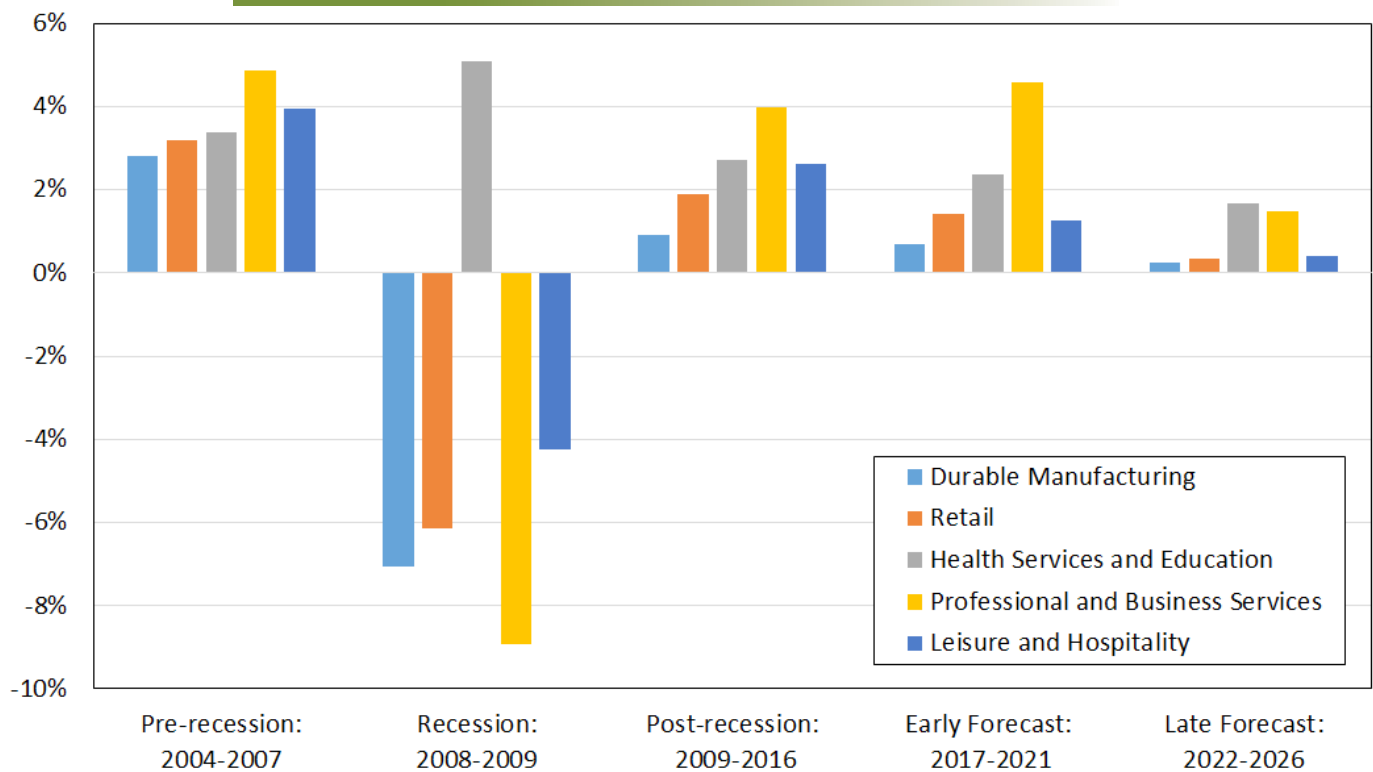


# CLACKAMAS COUNTY

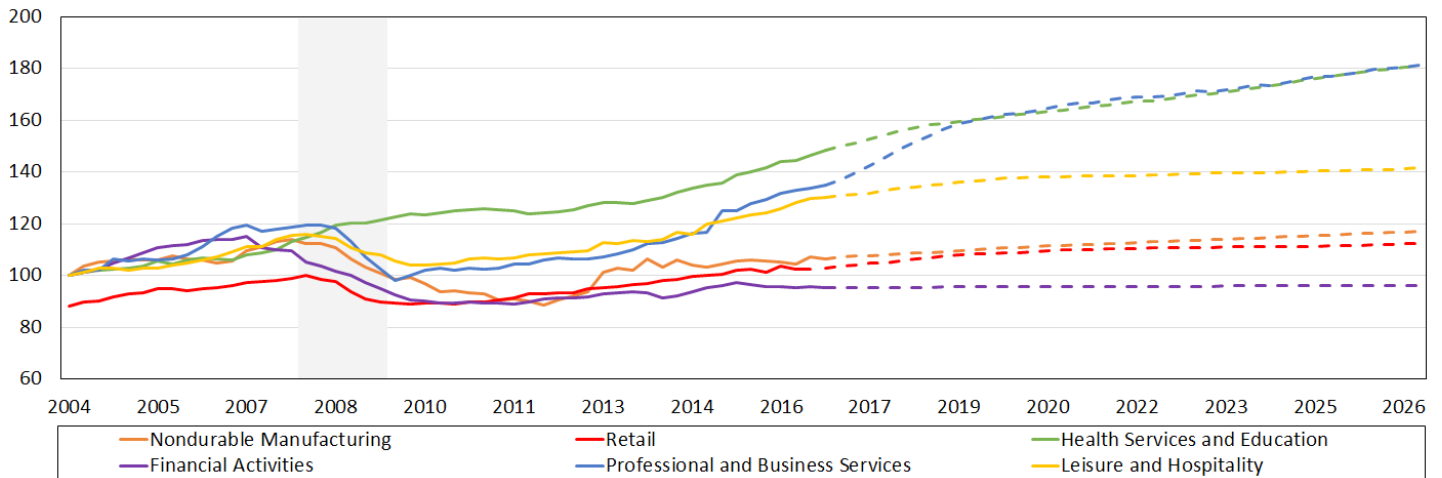
## MAJOR INDUSTRIES: TOTAL JOBS



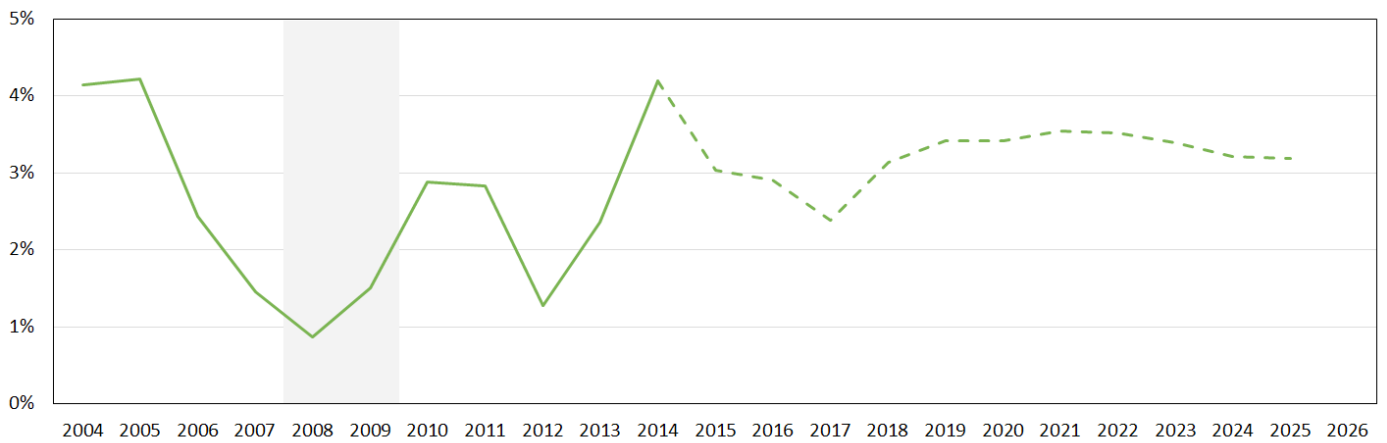
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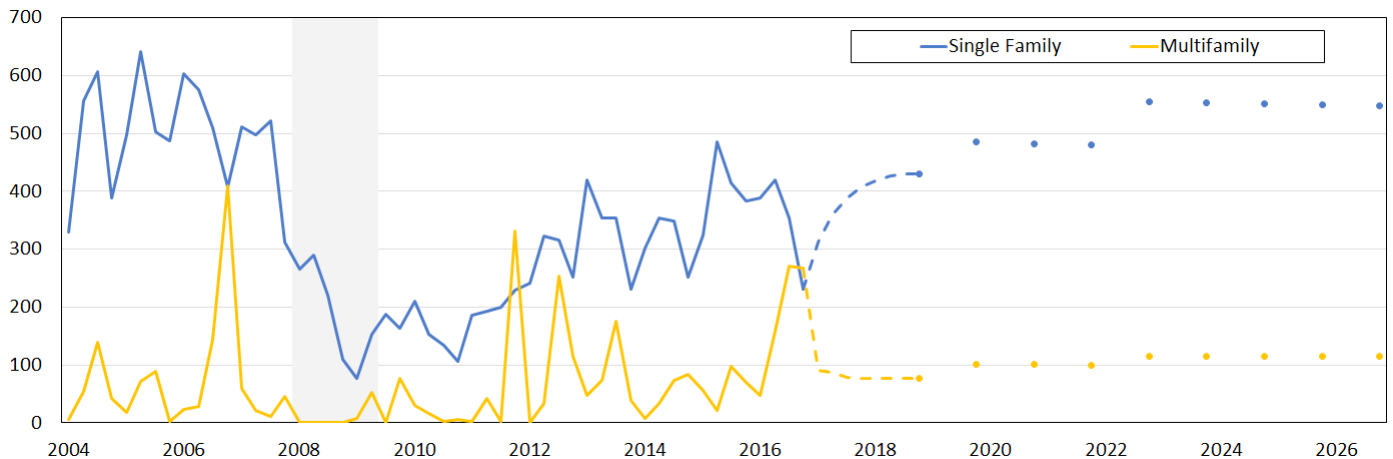
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### HISTORIC AND FORECAST AVERAGE ANNUALIZED NONFARM WAGE GROWTH

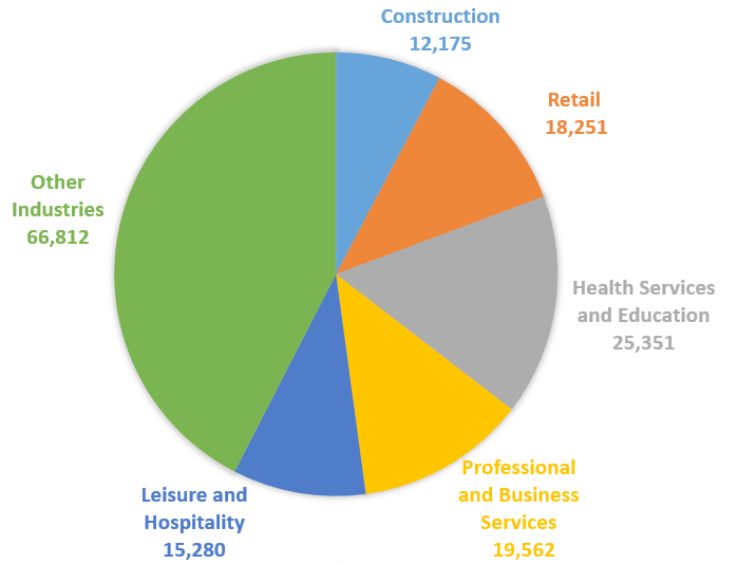
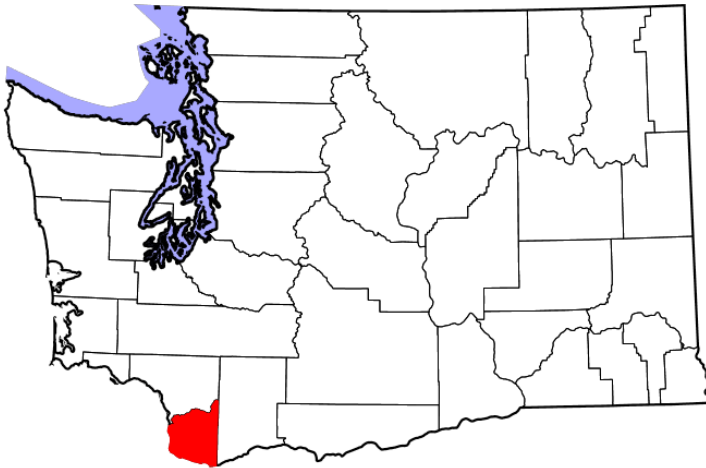


### HISTORIC AND FORECAST HOUSING PERMITS, SINGLE FAMILY AND MULTIFAMILY

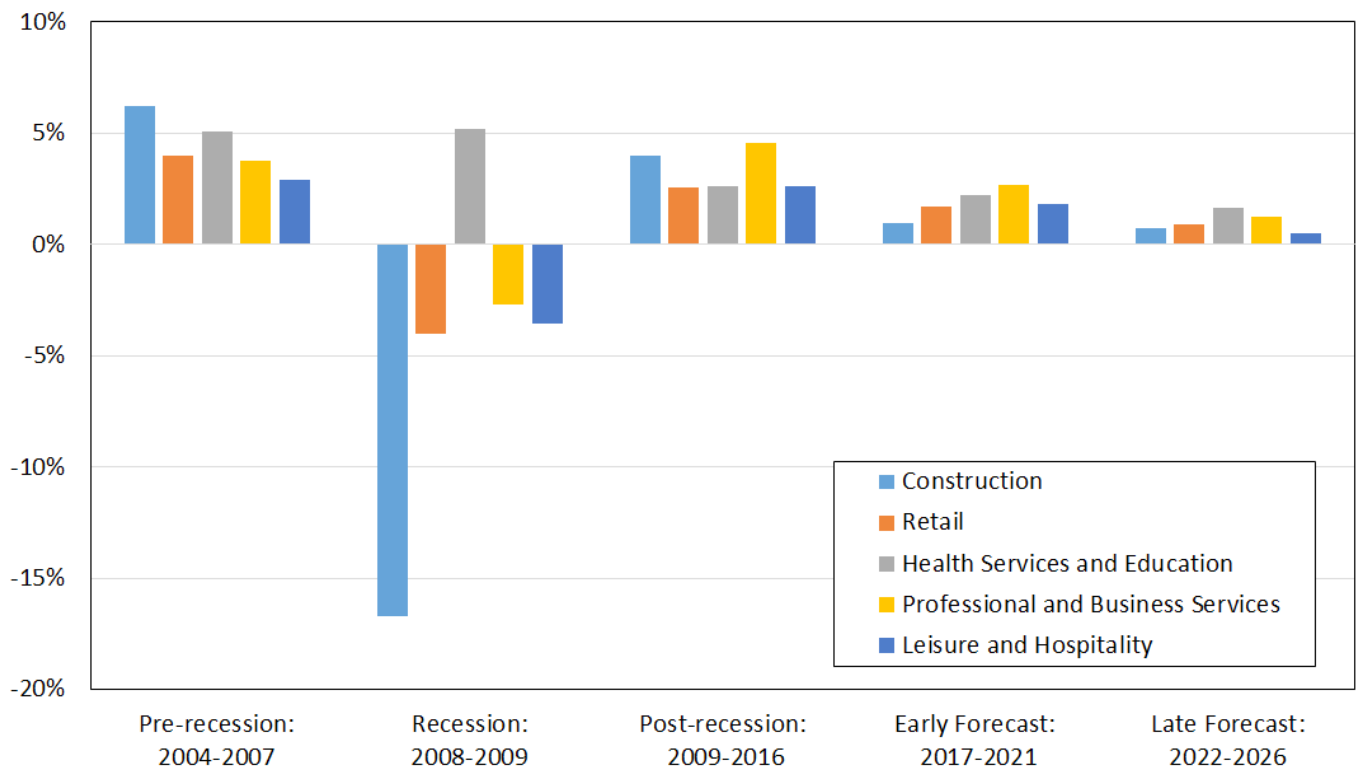


# CLARK COUNTY

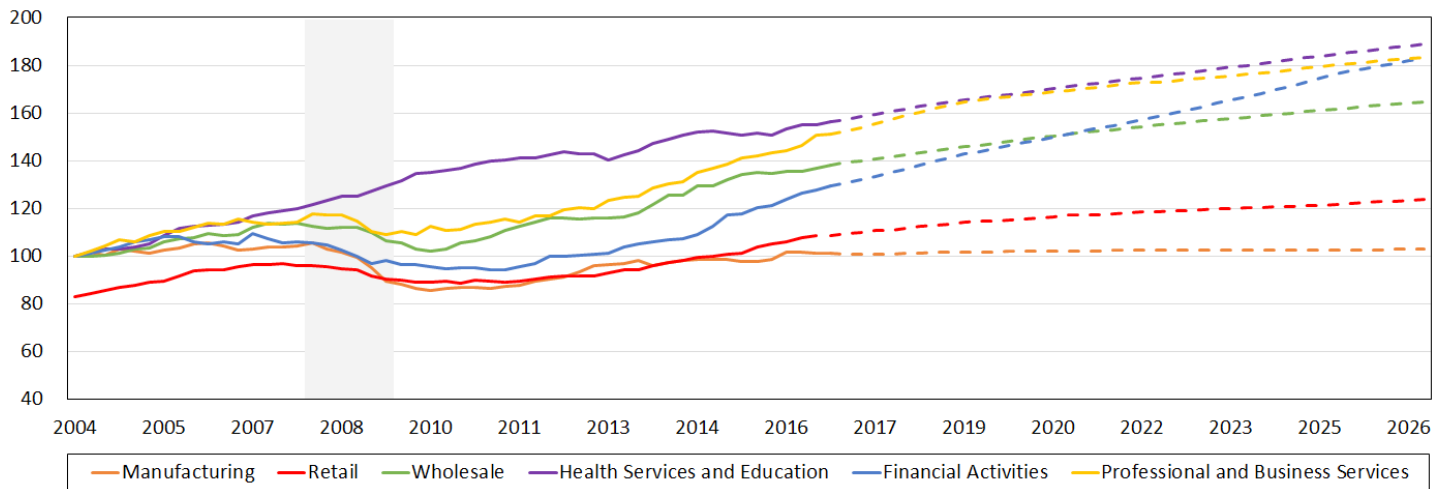
## MAJOR INDUSTRIES: TOTAL JOBS



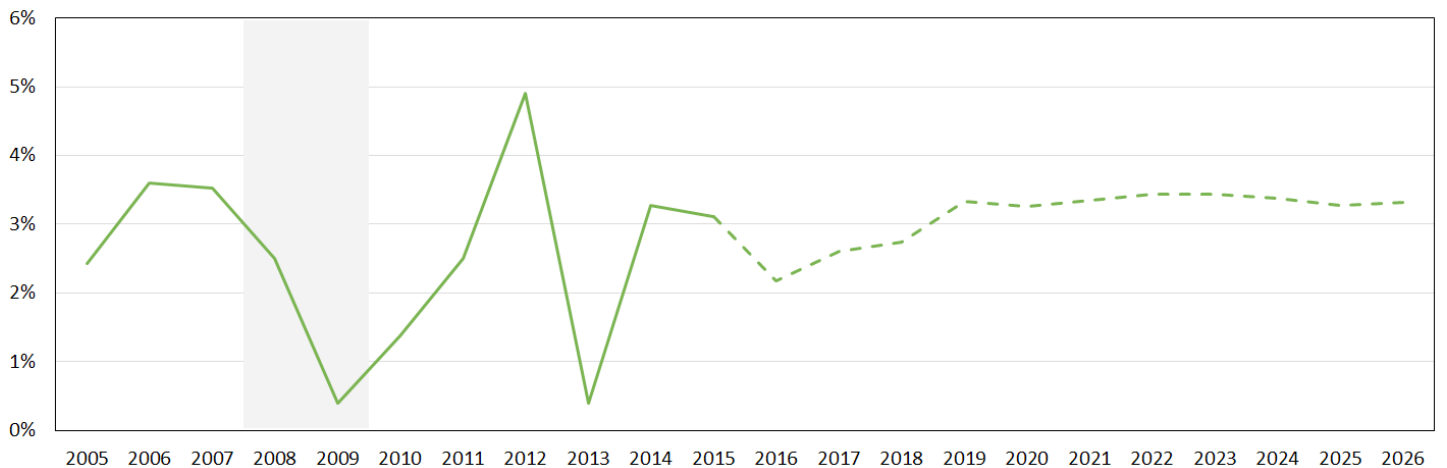
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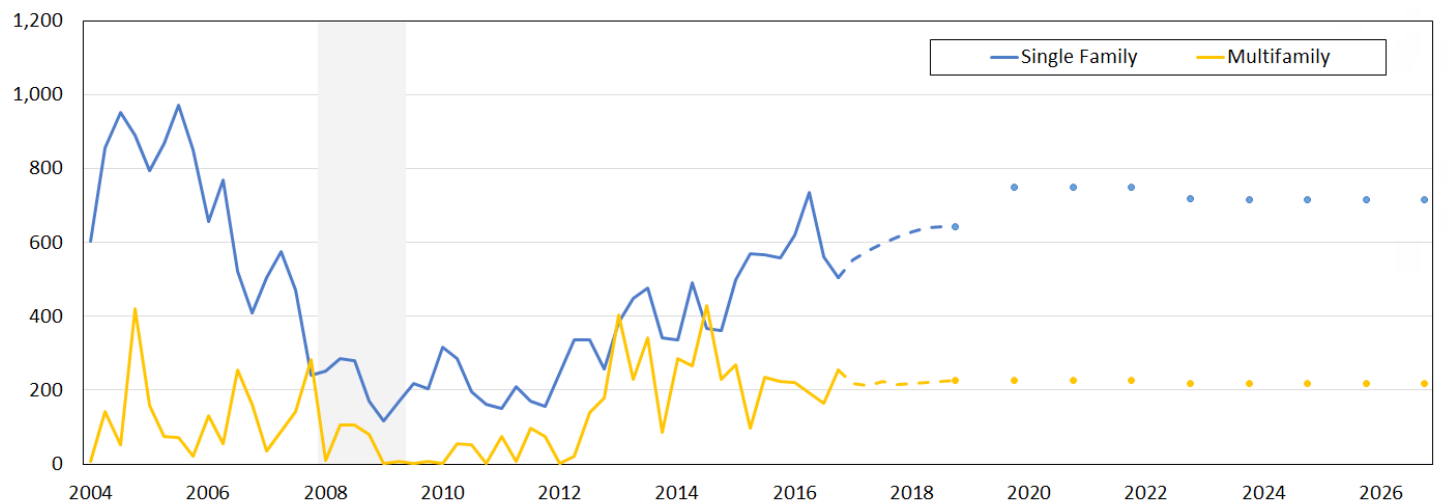
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### HISTORIC AND FORECAST AVERAGE ANNUALIZED NONFARM WAGE GROWTH



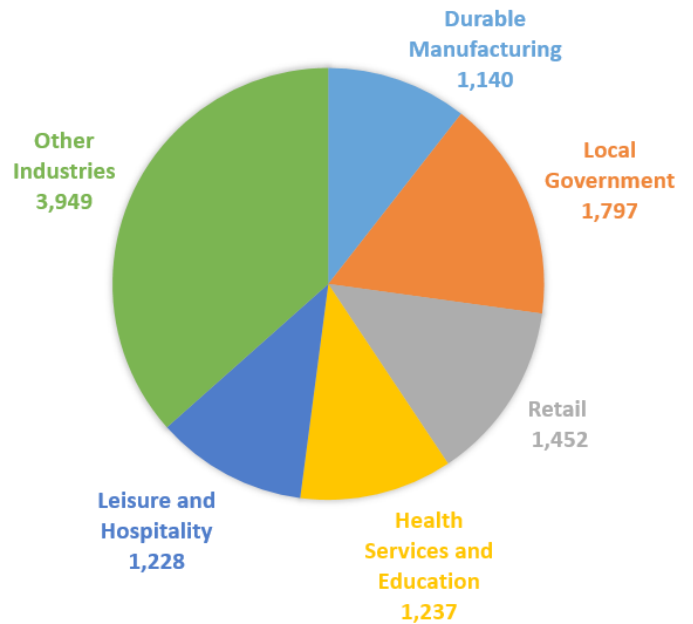
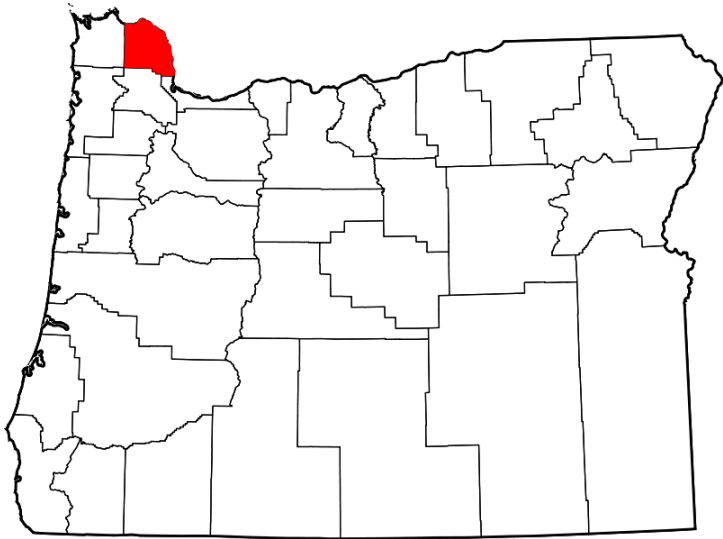
### HISTORIC AND FORECAST HOUSING PERMITS, SINGLE FAMILY AND MULTIFAMILY



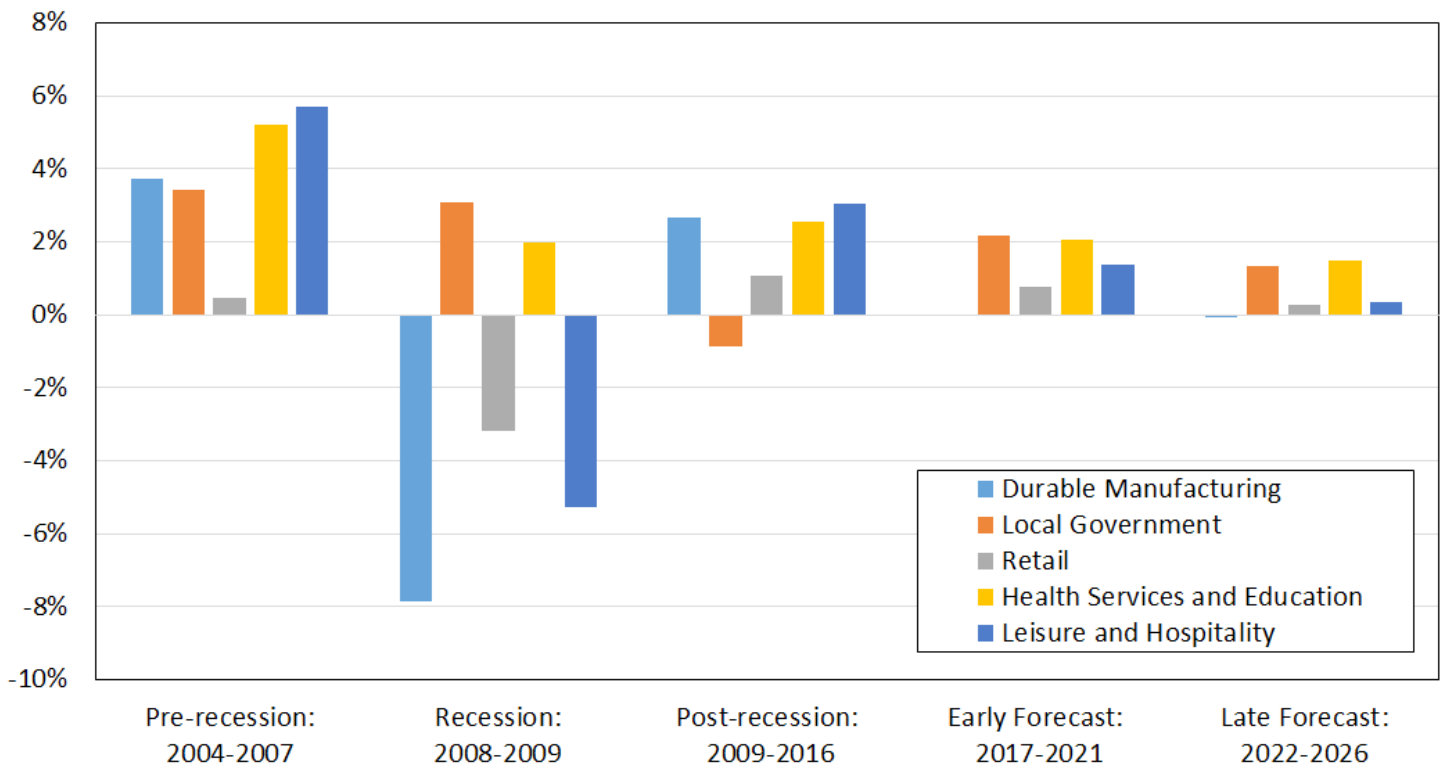


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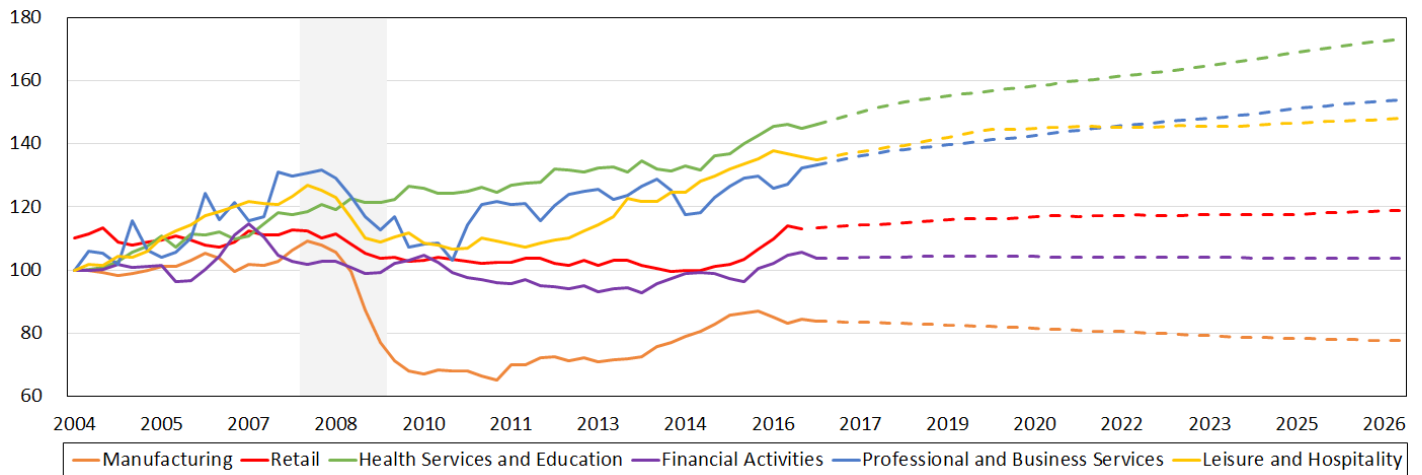
## MAJOR INDUSTRIES: TOTAL JOBS



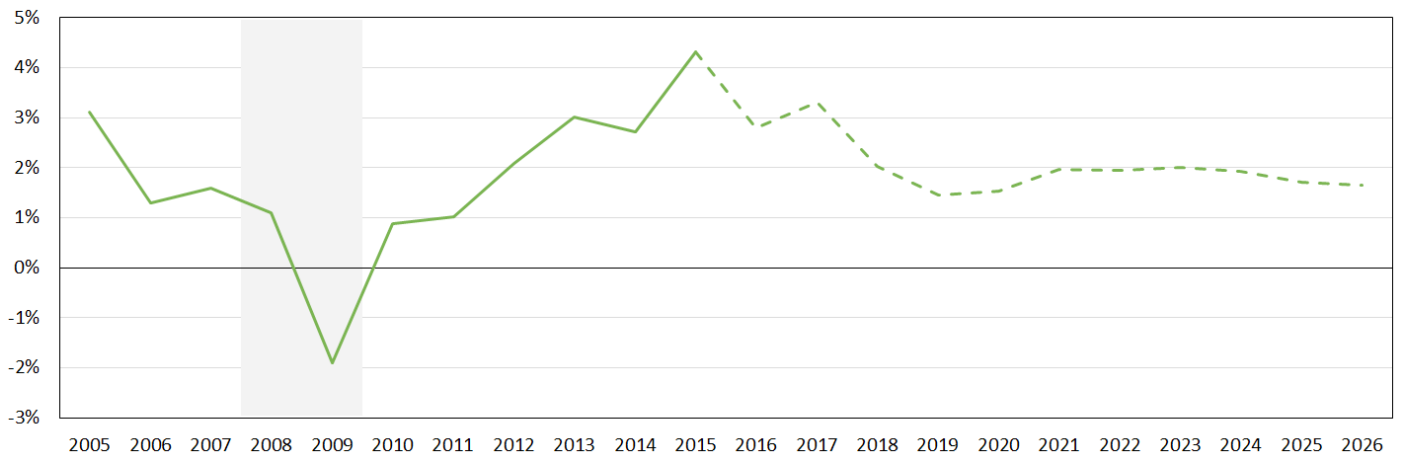
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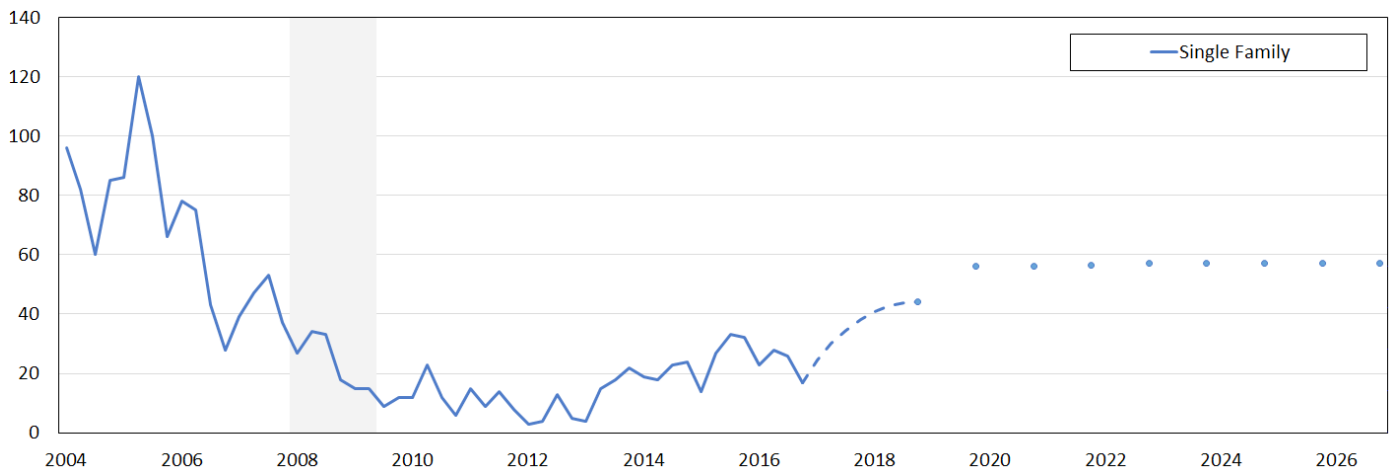
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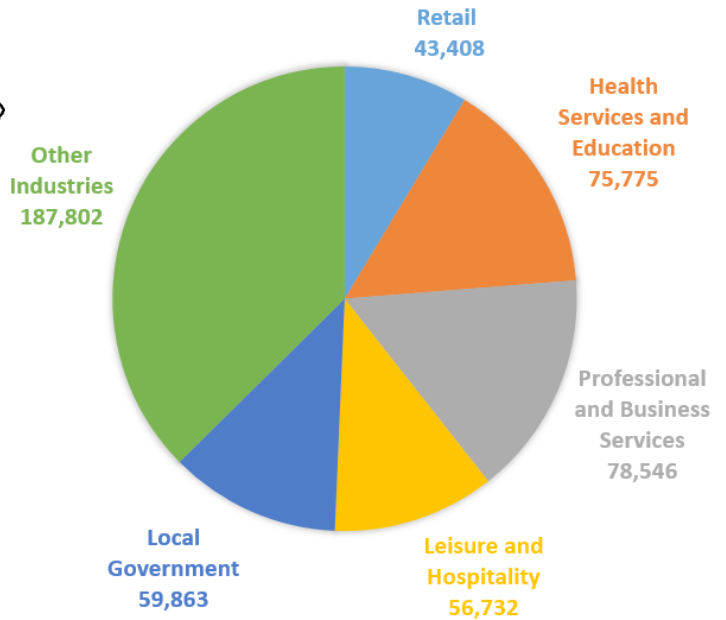
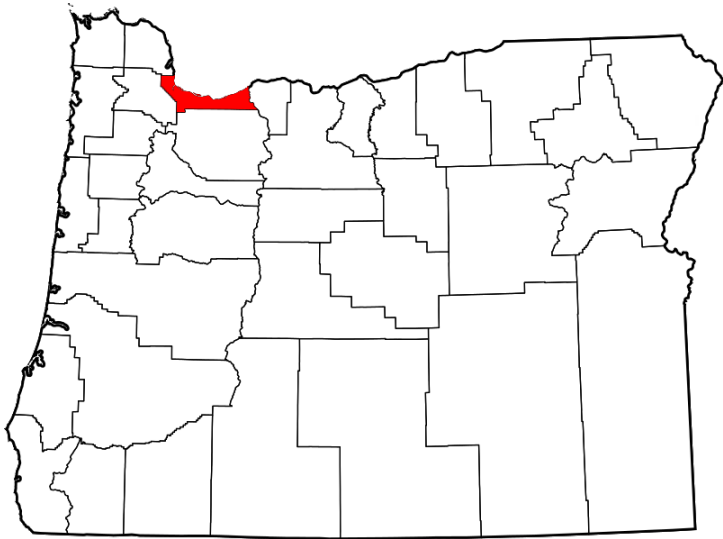


### HISTORIC AND FORECAST HOUSING PERMITS, SINGLE FAMILY AND MULTIFAMILY

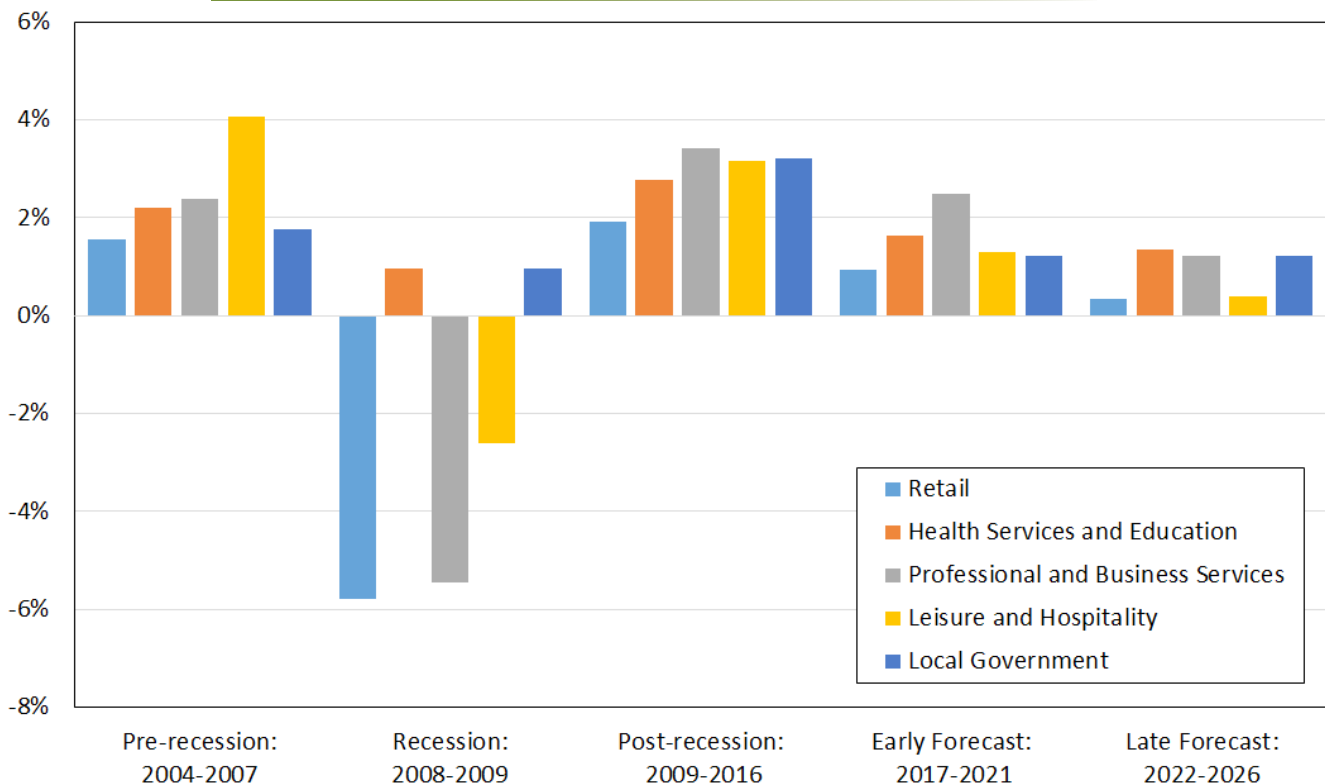


# MULTNOMAH COUNTY

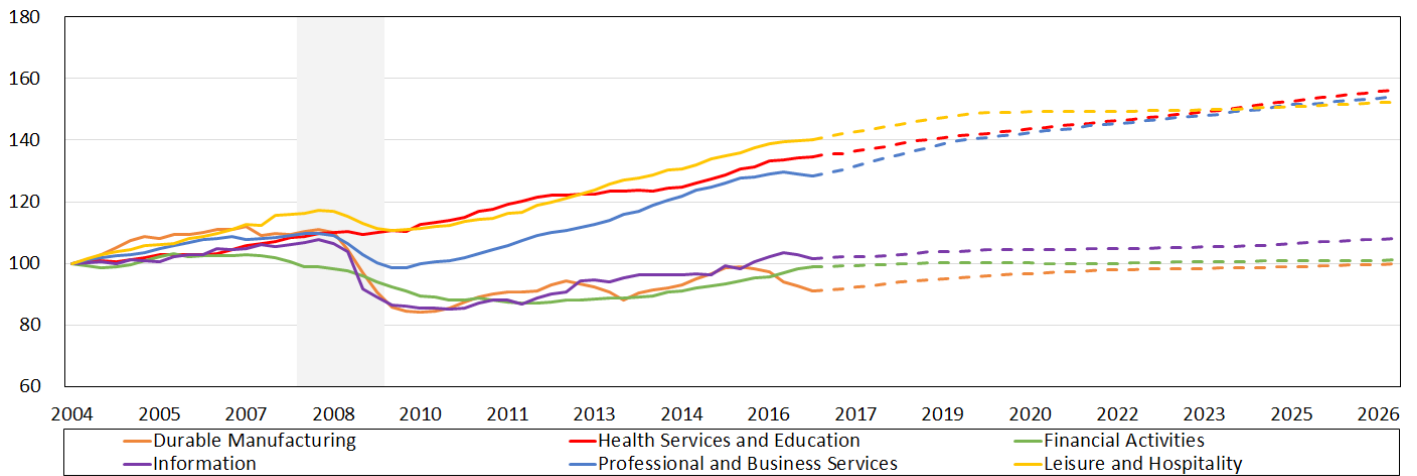
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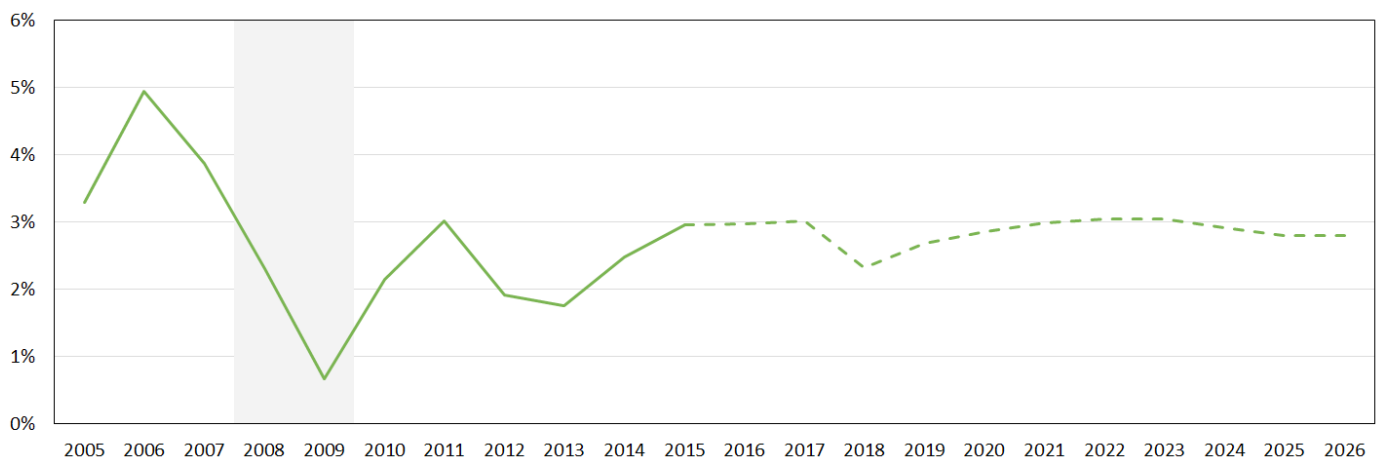
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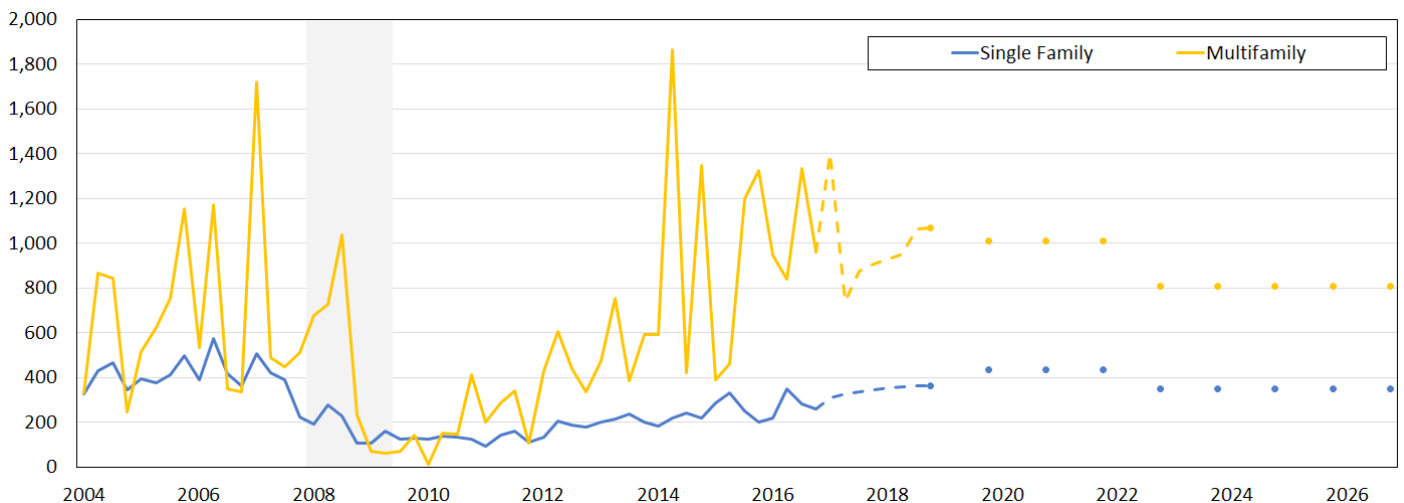
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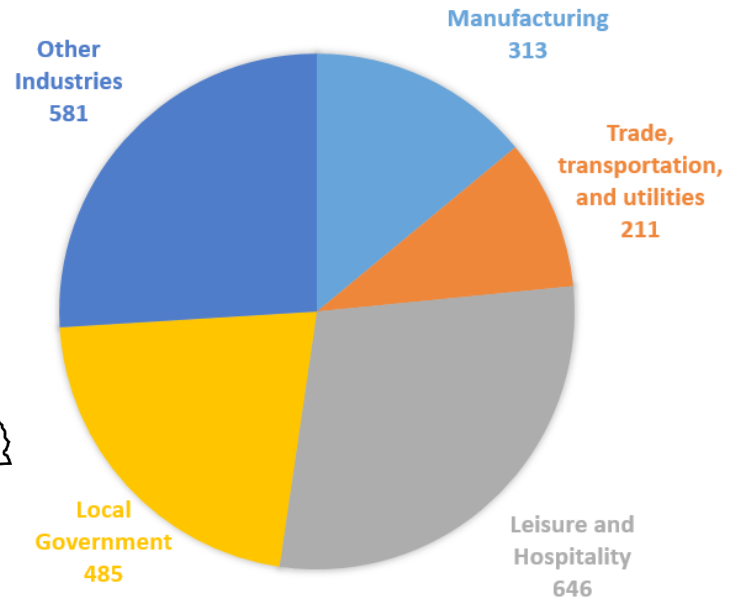
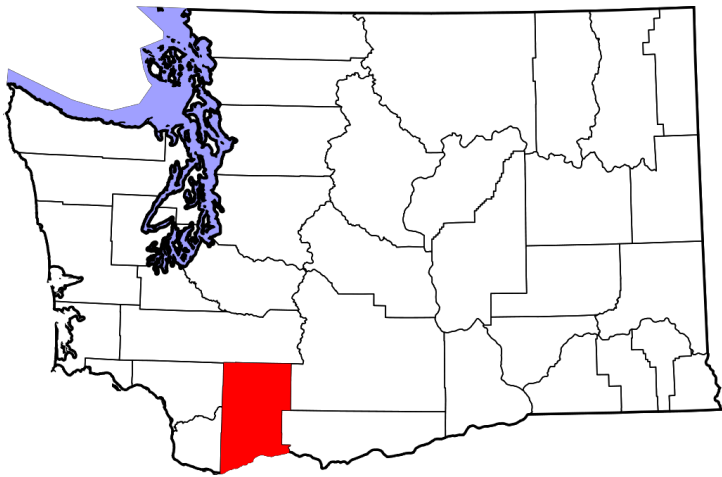
### HISTORIC AND FORECAST HOUSING PERMITS, SINGLE FAMILY AND MULTIFAMILY



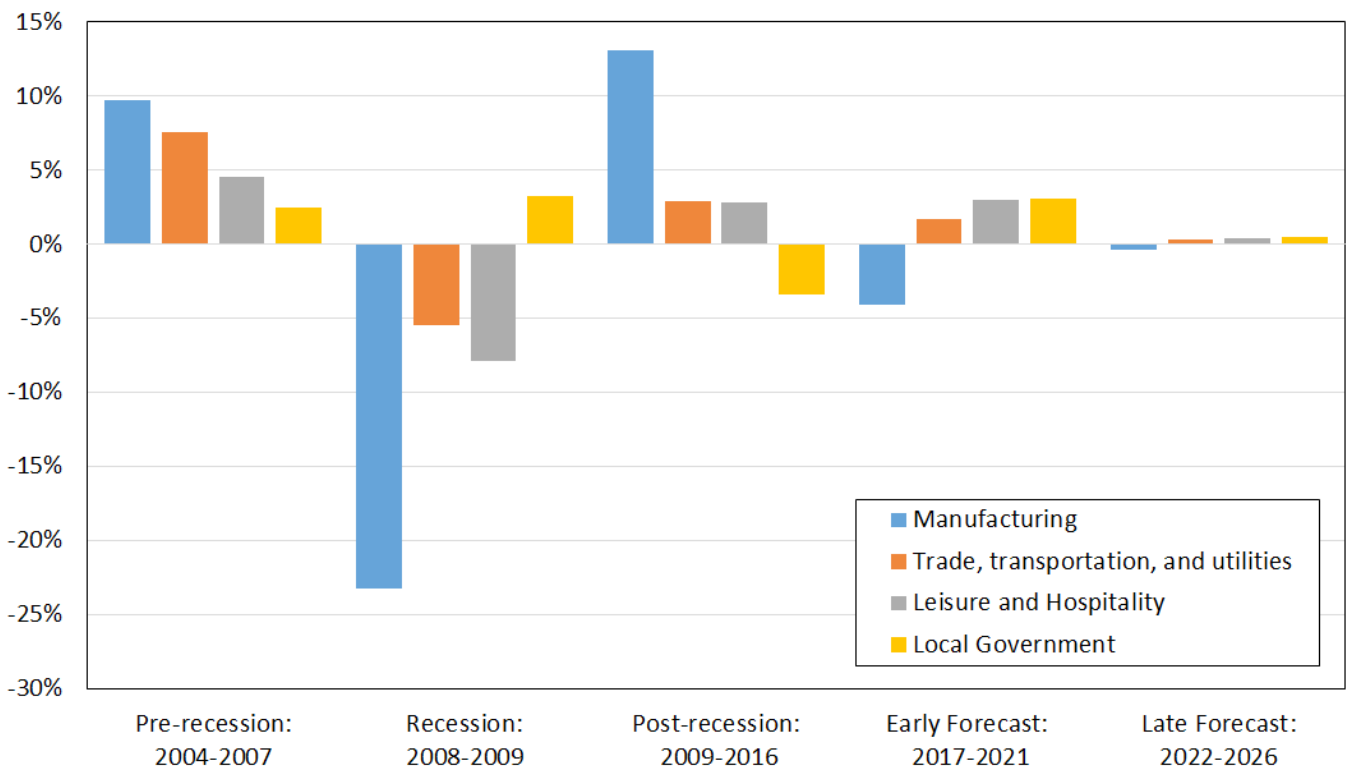


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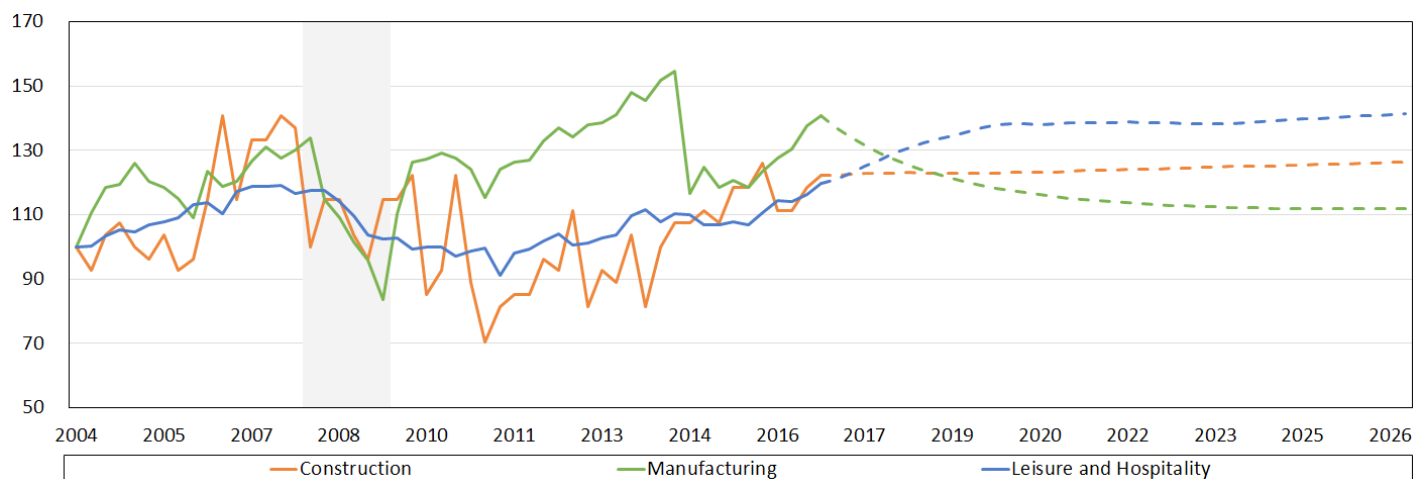
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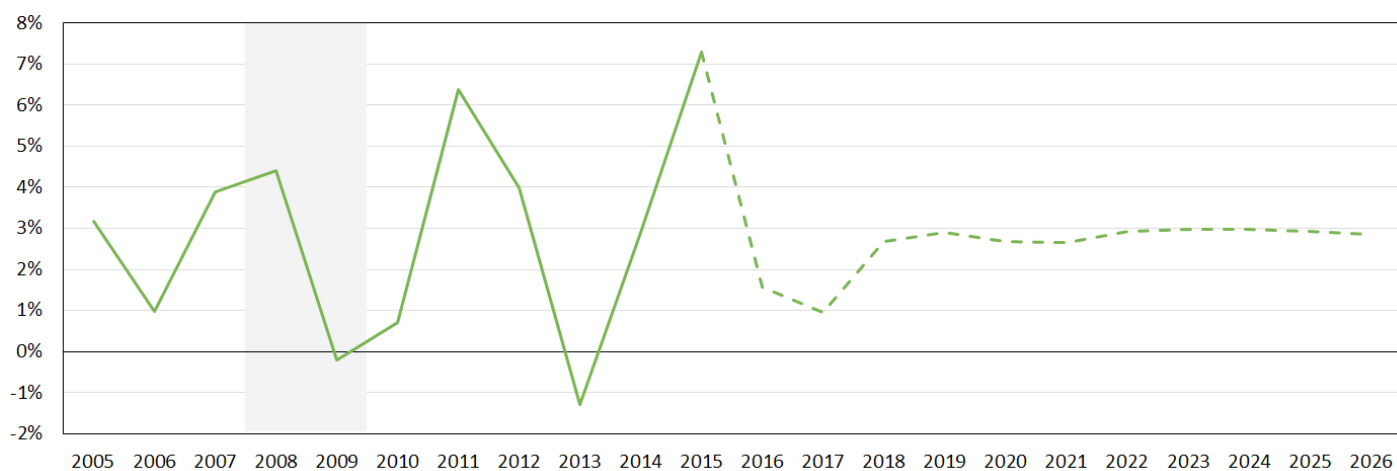
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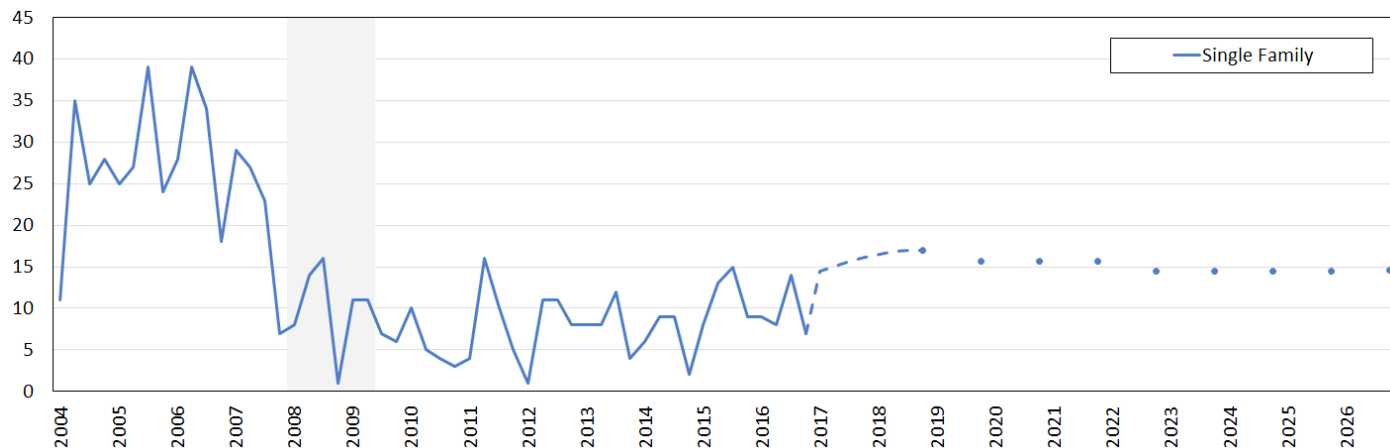
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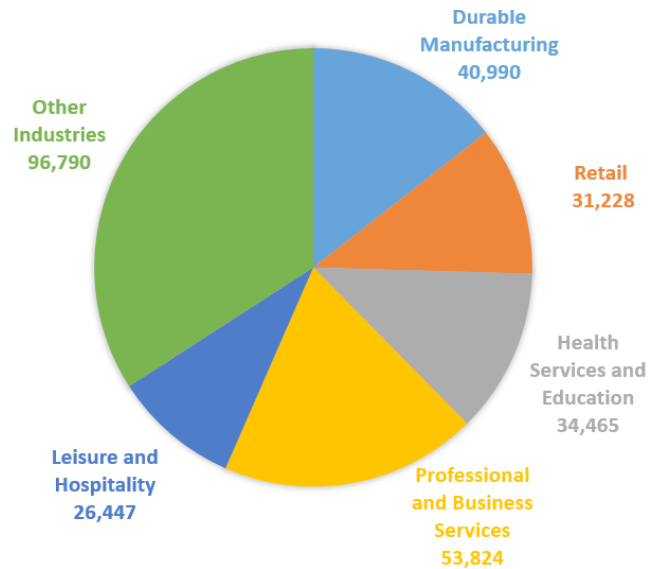
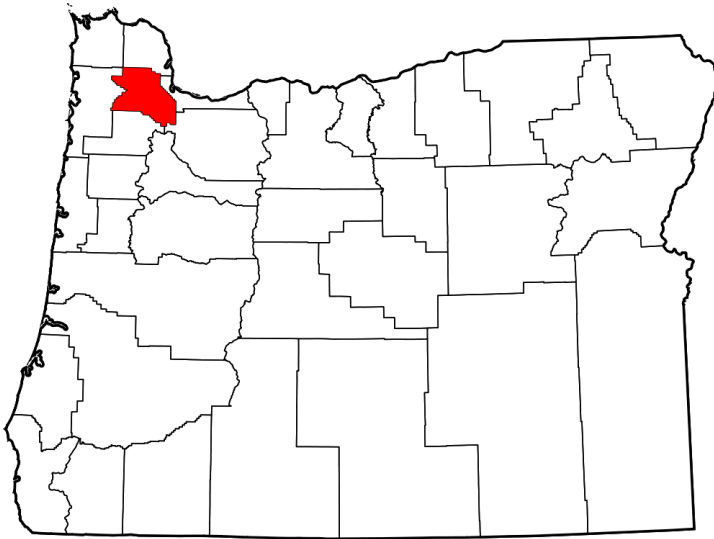


### HISTORIC AND FORECAST HOUSING PERMITS, SINGLE FAMILY AND MULTIFAMILY

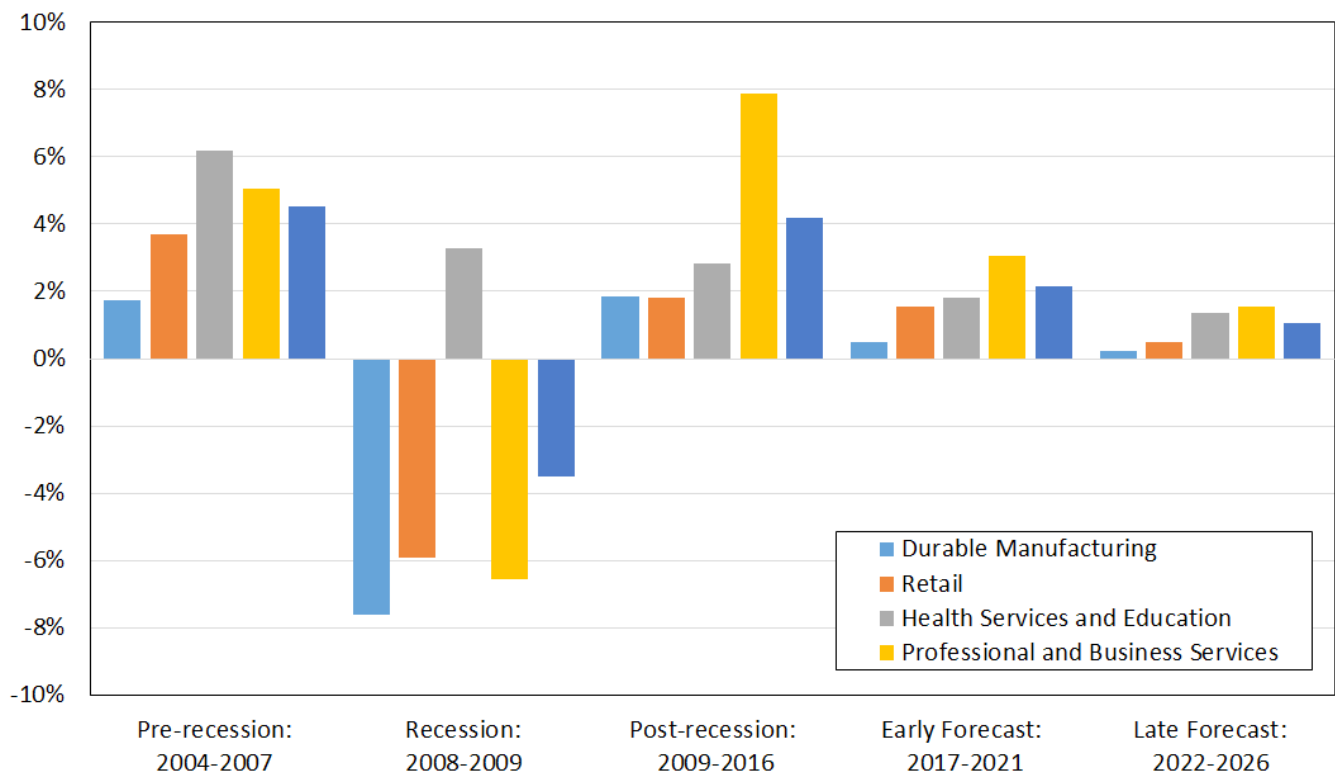


# WASHINGTON COUNTY

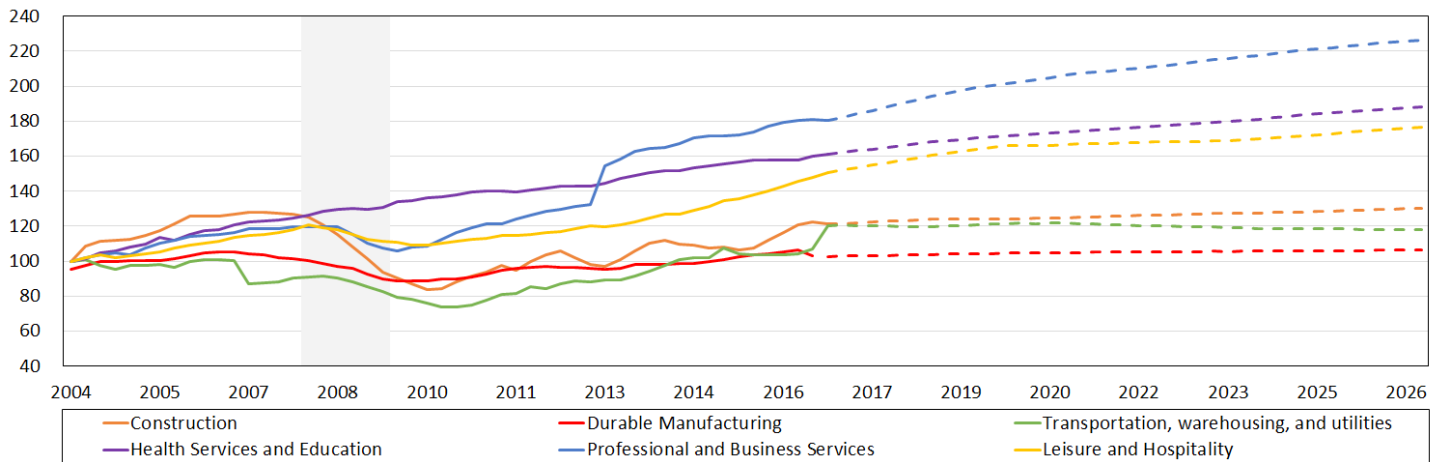
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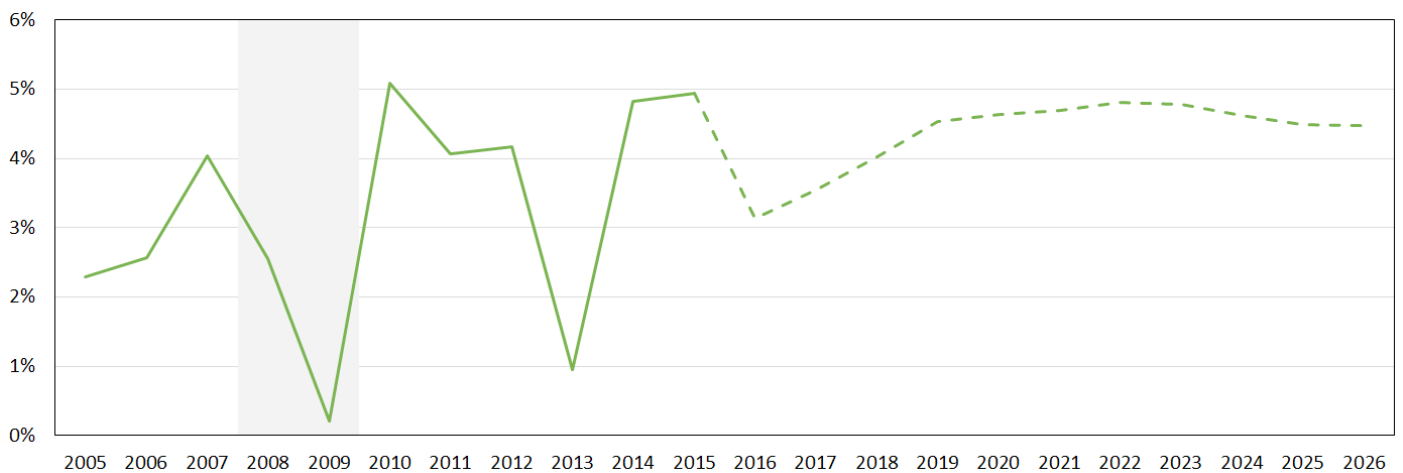
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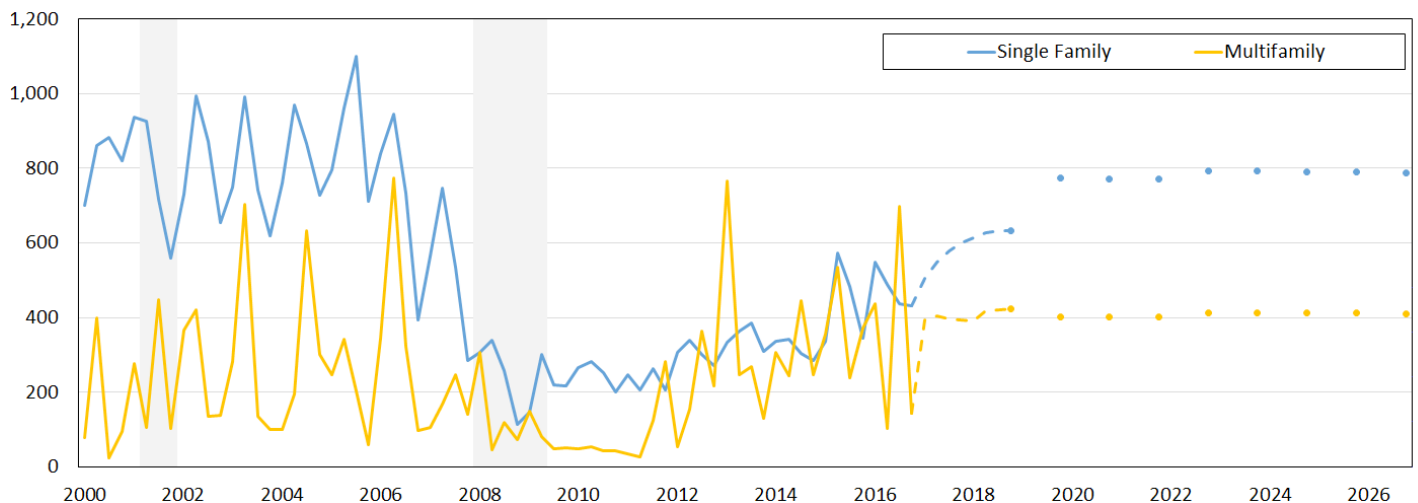
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### HISTORIC AND FORECAST AVERAGE ANNUALIZED NONFARM WAGE GROWTH



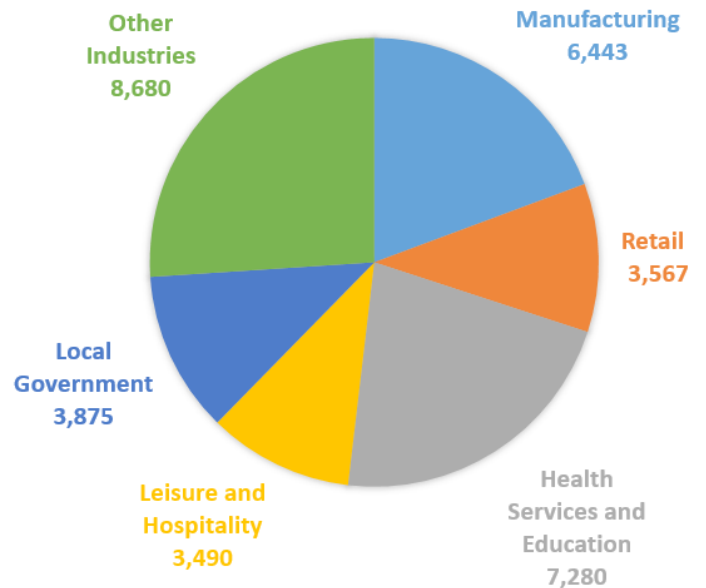
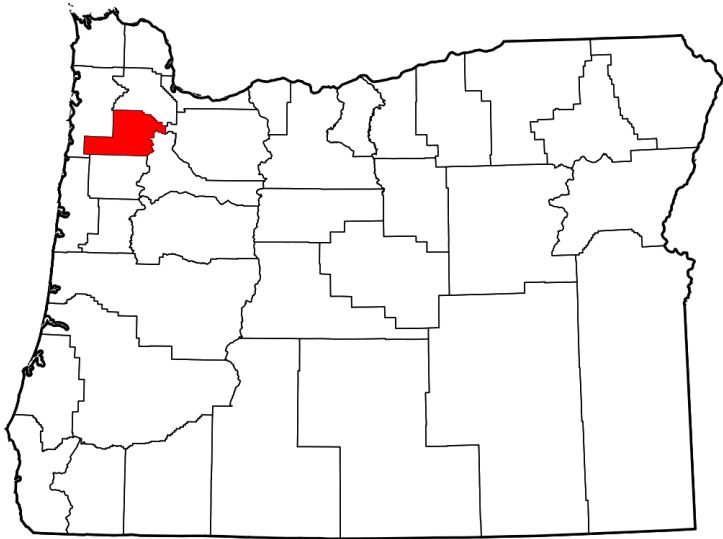
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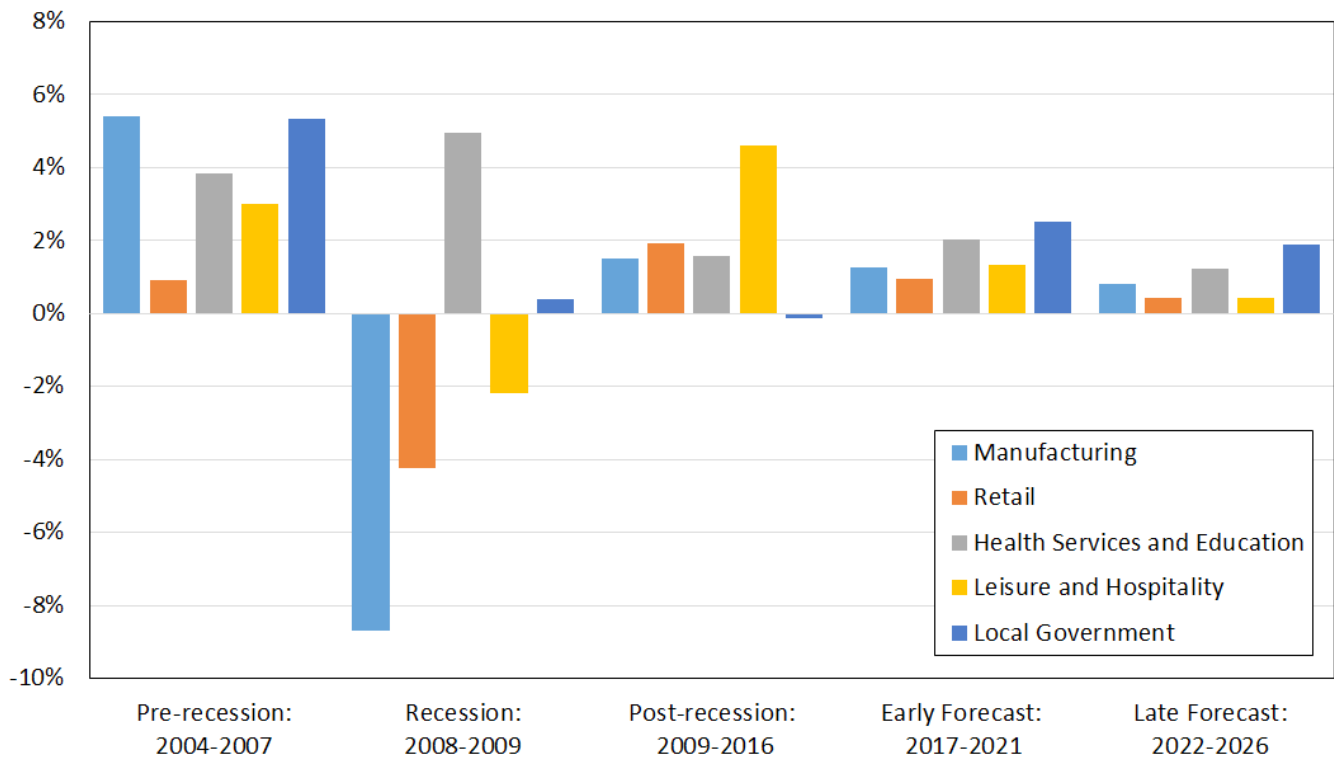


# YAMHILL COUNTY

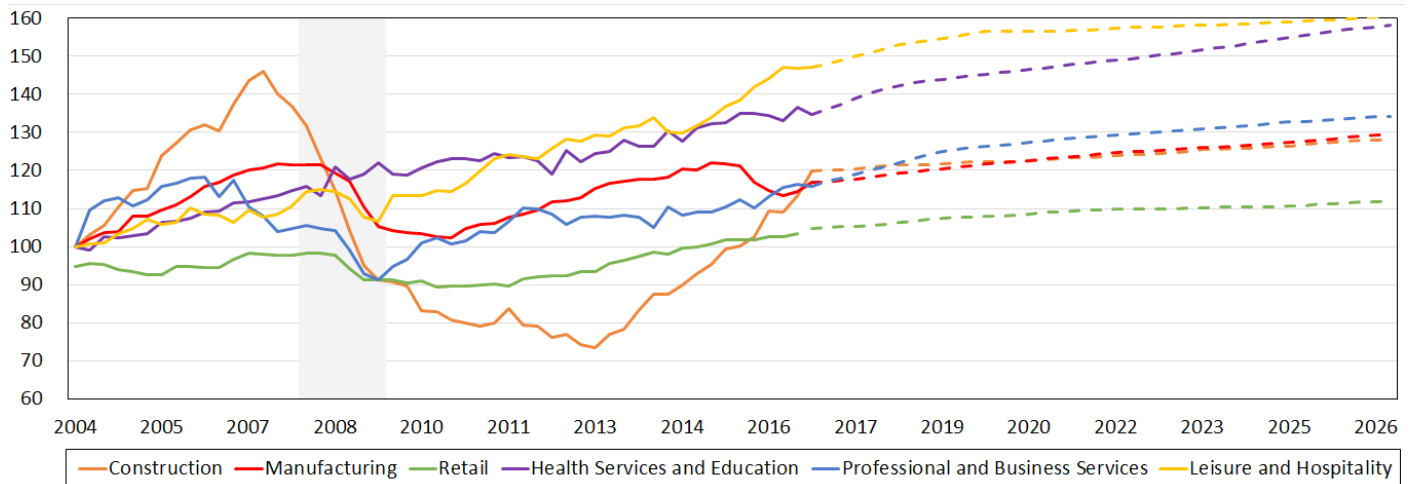
## MAJOR INDUSTRIES: TOTAL JOBS



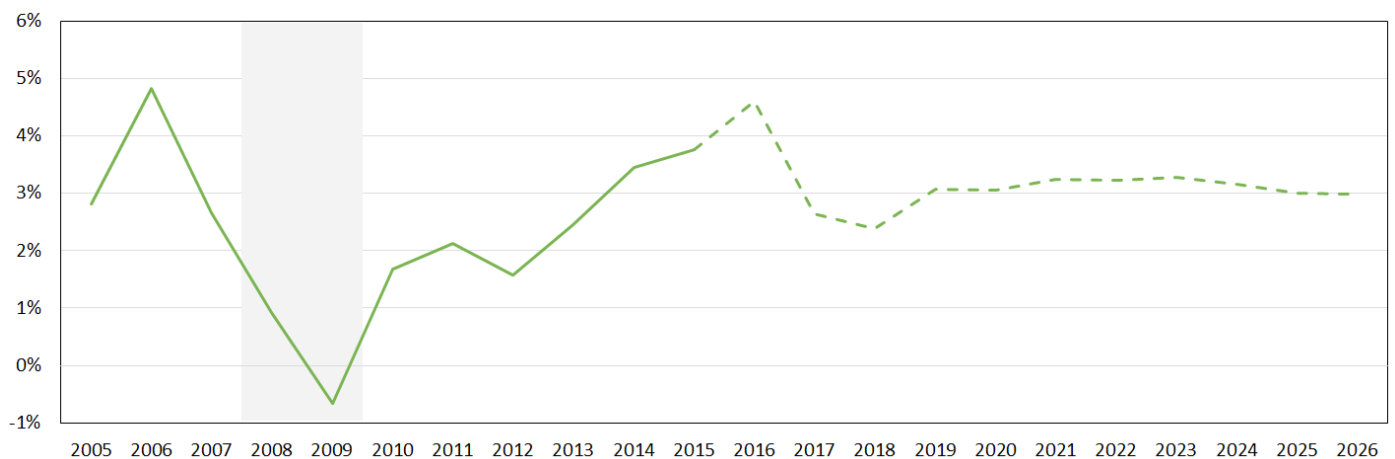
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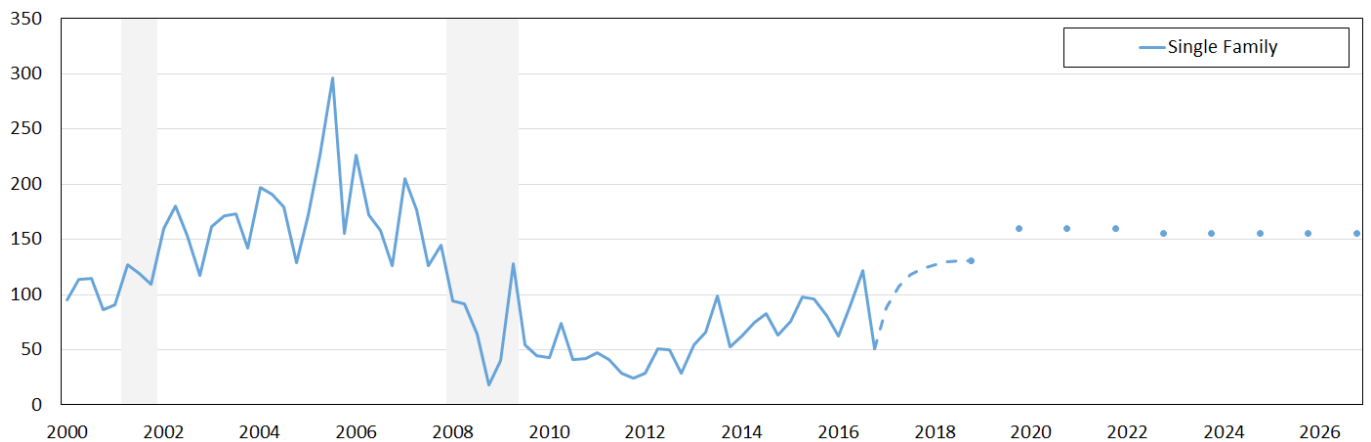
### EMPLOYMENT IN NOTABLE FAST- AND SLOW-GROWTH INDUSTRIES, INDEXED TO 2004Q1



### HISTORIC AND FORECAST AVERAGE ANNUALIZED NONFARM WAGE GROWTH



### HISTORIC AND FORECAST HOUSING PERMITS, SINGLE FAMILY AND MULTIFAMILY



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**Pg. 15** Mailboxes: By Beate Meier (Own work) (mailbox collection) [CC BY-SA 2.0 (<https://creativecommons.org/licenses/by-sa/2.0/>)], via Wikimedia Commons

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**Pg. 33** Tulips: By Sarah McD from Oregon, USA (Popping up Purple Uploaded by X-Weinzar) [CC BY 2.0 (<http://creativecommons.org/licenses/by/2.0/>)], via Wikimedia Commons



