Portland MSA Economic & Population Outlook October 2017

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Anniversaries generally take on more importance when they end in a “zero.” If all goes well, the U.S. economic expansion will celebrate its 100th month this October, and it is our position that both Oregon and the Portland MSA will be having their 93rd monthly anniversary at the same time, according to the latest jobs data. Our last publication discussed whether we are coming to the end of the expansion period. As of this fall, there does not appear to be any looming event that would precipitate a recession, at least during the next 12 months. However, in stating that, I am reminded of then-Chair of the Federal Reserve Board Ben Bernanke’s statement on February 14, 2008: “At present, my baseline outlook involves a period of sluggish growth, followed by a somewhat stronger pace of growth starting later this year...”. Later, the start of the Great Recession would be dated December 2007.

This installment of our forecast features two articles. Where’s Wtldo? An Economic Mystery examines the curious apparent stagnation of inflation and wages as the economy approaches full employment. Historically, this stage of the business cycle usually brings a noticeable increase in both as resources and labor markets tighten. Are we looking at flawed data, a flawed theory, both, or perhaps neither?

Our other article deals with a very old concept that seems to defy a precise description. From Utopia by Sir Thomas More in 1516 and New Atlantis by Sir Francis Bacon in 1627, to Lost Horizon and the fictional land of Shangri-La described by James Hilton in 1933, society has often tried to conceptualize the idyllic world. (With two Sirs, you know the topic is important.) In today’s more practical era, we use the word “prosperity” to describe the object of endeavor towards a societal state which, while not idyllic in the utopian sense, is the best achievable version. Although defining prosperity is difficult, the concept has great merit as we try to assess what will increase the well-being of an economy beyond simply more growth. What is Prosperity? briefly explores the broader concept, with an eye to Portland’s progress in the context of this view of well-being.

In addition to our 10-year short-run forecast, this report includes our annual release of a long-run employment forecast, out to 2057. The underpinnings for this long-run forecast are more supply-driven, based on projections for population growth and productivity, and reflect the capacity of the economy to grow. Now, if you have questions about this long-run forecast and happen to call me in the year 2057, I doubt I will answer the phone, but you will be assisted by a well-programmed AI robot.

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

Best Regards,

Tom Potiowsky

1 Bernanke, Ben S. (February 14, 2008.) The economy and financial markets. Testimony before the Committee on Banking, Housing, and Urban Affairs, US Senate. FederalReserve.gov.
MACROECONOMIC TRENDS: U.S. AND OREGON

As the United States’ economic expansion closes in on its 100th month, the path forward for both federal policy and the Federal Reserve is murky. While Oregon does not report dates for recessions and expansions, in terms of job growth Oregon completed its 93rd month of expansion in October. Labor force participations is continuing to rise, the Oregon unemployment rate is hovering around all-time lows and experts wonder how much lower the U.S. rate can go, and the full employment seems a reality. Gross domestic product (GDP) and employment data met but did not exceed expectations over the first two quarters of 2017, and although both average wage growth and inflation were lower than expected (a source of concern for some economists), it appears that performance nonetheless belies the epithet “wageless recovery” (see Where’s Wldo? An Economic Mystery on pg. 5 for the full story). Here are some other topics that are at the forefront for both the U.S. and Oregon economies.

The Federal Reserve is potentially poised for big changes in the coming months: there are current vacancies in four out of the seven seats on the Federal Reserve Board of Governors, and it is possible that Janet Yellen’s term may not be renewed. Given these factors, the nation may see a philosophical sea change in the nation’s central bank. Gridlock in Washington D.C. has, to date, stymied healthcare reform (meaning that said reform remains another source of economic uncertainty) and the next hot topic on the docket is the tax system. Big changes, touted by supporters as growth-spurring, are being proposed to both the corporate and income tax codes. However, the increase in the federal deficit that these changes would cause (without substantial associated spending cuts) may dampen the chances of passage. Unfortunately for analysts, potential changes to Federal Reserve policy and the tax code have far-reaching consequences, and it is difficult to predict future conditions without knowing whether or not they will occur. Policy change is a notable source of uncertainty in forecasting. While the futures of fiscal and monetary policy remain unclear, fundamental economic variables indicate a steadier path.

REAL GDP

How fast can the U.S. economy grow? This question is hotly debated among economists and policymakers. Most economists believe that the U.S. has already attained the milestones that most sharply enhance productivity (such as access to clean water and modern medicine), and coupling those achievements with a slowing labor force growth rate, predict 2% annual growth rate for real GDP in the proverbial long run. However, others think that those economists underestimate the nation’s technological ingenuity, which could perhaps be spurred with the right combination of tax cuts and deregulation, and suggest that the assumed rate should be closer to 3%. While the difference between these two rates may seem small, Einstein’s eighth wonder of the world (compound interest) suggests a monumental difference in U.S. output over the next few decades depending on which growth rate is assumed. In short, keen eyes are watching economic releases for signs of what is to come.

For those reading the tea leaves, 2017 has given mixed messages. After a disappointing first quarter rate of 1.2%, real GDP grew at a seasonally adjusted annualized rate (SAAR) of 3.1%, over the second quarter. Real personal consumption expenditures, which account for close to 70% of the GDP, grew 3.3% in the second quarter. Real PCE growth in the first two months of the third quarter (2.75% SAAR in July, and -.85% in August) indicates that this strong growth may not last through the end of the year. Another factor in the strong second quarter was the 3.9% SAAR increase in gross private domestic investment, which accounts for close to 17% of GDP (and is much more cyclical than consumption). Much of this increase in investment is due to the recovery of gas and oil rigs: the Baker Hughes Rig Count—which has tracked the number of drilling rigs in use (either extracting or actively searching for oil or natural gas) in North America on a weekly basis since 1944—increased from 756 to 940 from the beginning of March to the end of June. However, the rig recovery does not look like it will continue. The most recent peak
happened in early August, at 954 rigs, and since then the count has fallen to 935. This is a stark difference in comparison to the counts of 1,500 to 2,000 observed from 2011 to 2015, and is closer to rates observed during the recent recession, as shown in Figure 1. Unless rigs continue their recovery, or residential investment picks up considerably, it is unlikely that private domestic investment will have a strong third quarter.

As of September 22, 2017 the Federal Reserve Bank of Atlanta’s GDPNow forecast for the third quarter sits at an SAAR of 2.3% — closer to the Federal Reserve’s long run GDP growth rate forecast of 1.8% than the 3.1% of the second quarter. So, despite a strong second quarter, it appears that predictions of a more moderate growth rate are likely on target, at least pending a change to fiscal policy. See Figure 2 for Real GDP with Federal Reserve forecasts.

EMPLOYMENT

As the Federal Reserve plans for future rate hikes, one area of particular concern is the U.S. labor market. Despite the lowest unemployment rate since 2000 (4.4% in August 2017), there still seems to be some remaining “slack” in the labor market. This is visible in the recent data: U.S. total nonfarm employment (Figure 3) grew at respectable 1.3% SAAR in the second quarter of 2017. However, the overall trend since mid-2014 has been a slowing growth rate. It remains to be seen how many more quarters can sustain a growth rate above 1% before the last bit of “slack”—meaning unemployed resources such as discouraged workers—is absorbed by employers and the rate slows.

When labor markets tighten, economic theory dictates that wage growth will follow; and when wages grow, inflation can’t be far behind. Yet, economists say that the unemployment rate is about as low as it can go and neither wage increases nor inflation are evident in the data. Explanations for this conundrum abound and like the legs of a table, each likely holds some weight. See Where’s Wtldo? An Economic Mystery on pg. 5 for a detailed discussion of this topic.

Oregon employment data has been particularly varied in 2017 thus far. The state added an average of more than 5,000 jobs over the first seven
months of the year, representing an exceptional rate of growth, before losing 9,500 in August. While a drop-off of this magnitude would typically be cause for concern, there are indications this has more to do with how the data is handled than a signal for a real world trend change. Specifically, the abnormally large gains over recent months were in more seasonal industries, such as local government education and leisure and hospitality, potentially indicating that the seasonal adjustment mechanism needs to be recalibrated. This adjustment will likely occur in future revisions, so month-to-month changes should not be overemphasized in the near term. As labor force participation growth begins to slow, Oregon’s employment growth will converge towards the national rate.

**HOUSING**

Building a home involves numerous economic activities: construction workers are hired, materials are purchased, and large amounts of money are borrowed. This is why housing permits act as such a reliable leading indicator — they signal future liveliness in a variety of different industries. At this point in the business cycle, housing construction was expected by many to provide a significant tailwind for the U.S. economy: rising wages and falling unemployment, demographic shifts, and decreasing levels of debt together indicate that the demand for new housing is present.

However, there is a supply problem. Restricted land supply, local regulations, affordability, and difficulty hiring laborers are just a few reasons why the growth in single family permits has begun to slow. This doesn’t indicate a preference shift from single family homes to multifamily ones. Multifamily permits, obeying the edicts of housing prognosticators, have leveled out over the past six months. These housing trends are short term. Over the coming years the housing market will overcome its supply-side problems due to mounting demand-side pressures.

**Figure 3: Total Nonfarm Employment, U.S. and Oregon**

YoY Growth Rate, Monthly, January 1991-September 2017

![Figure 3](image)

**Figure 4: U.S. Housing Permits by Type**

Thousands of units, Monthly, Seasonally Adjusted, January 1990-August 2017

![Figure 4](image)

**The Outlook**

The outlook for the U.S. housing, employment, and output can be described in a word: moderate. However, while the data do not suggest outstanding growth, they also do not suggest an imminent recession. The risks on that front are policy errors and natural disasters. While the Portland MSA generally tracks with the U.S., its unique combination of size, rate of growth, and industrial composition present different barriers and risks, discussed in *The Portland MSA* (pg. 8).
WHERE’S $W_πLDO$?
AN ECONOMIC MYSTERY

We know the recession story: following a shock, people lose jobs and wages stagnate. Then, after the trough is reached and the recovery begins, the nation’s firms begin to hire employees back. Average wages remain stagnant for a time—an individual worker’s bargaining power is low when thousands of unemployed citizens would gladly take any offer. Next, as employment reaches its upper limit again and nearly everyone who wants a job has one, workers finally begin to ask for more money. The paradigm flips, and workers competing for jobs become jobs competing for workers. As wages ($W$) rise, so does inflation ($π$), and the economy moves towards its next peak.

The moment where this flip occurs in a given economic recovery is crucial. Economic theory dictates that this process should begin when “full employment” is reached (explaining economists’ seeming obsession with the phrase), but there is no simple value linked to that status. Since “full employment” is an abstract idea with no precise measurement, the point of time when it is reached is determined symptomatically—when the broad unemployment rates flatten, and wages and inflation begin to pick up. However, economists are currently faced with a conundrum: broad unemployment rates have flattened, and yet wages and inflation have shown few signs of life (see Figures 5, 6, and 7). It would seem that the real world slept through this particular lecture in ECON 101.

As it happens, we shouldn’t yet put this conventional knowledge of the recession-expansion cycle out to pasture. There is a subtlety to what is happening in labor markets that doesn’t lend itself to the dire thirty-second sound bites that the epithet “wageless recovery” invites. This is because there are multiple explanations for stagnant wages and inflation, and they need to be considered in unison for a complete picture.

One explanation has to do with demographics and average wages. There are currently two pigs in the demographic snake: baby-boomers and millennials. Baby-boomers, after working their way up the socio-economic ladder, are now leaving their relatively high wage jobs for retirement. Simultaneously, millennials—many of whom are in the nascent stage of their career—are more likely to find entry level positions than seats at the executives’ table. Therefore, higher-tier jobs are being replaced with entry level positions, putting downward pressure on aggregate wages. What would the data indicate if this phenomenon (the relatively sudden replacement of a substantial group of retirees with fresh-faced newbies) were controlled for? Well, according to research from the Federal Reserve Bank of San Francisco\textsuperscript{1}, that wage growth is alive and well—it’s just harder to see, given the current demographic trend. Score one for economic theory.

A second explanation is related to what economists are able to estimate about the labor market. While unemployment rates have seemingly have bottomed out, this does not necessarily indicate there is no slack left in the labor market. The labor force participation rate is down roughly 3% since 2008, and economists at the Federal Reserve Bank of Atlanta\textsuperscript{2} estimate that only half of that decrease is due to demographic trends. The other half is due to behavioral or cyclical trends that result in increased nonparticipation: disability or illness, school attendance, or marginal attachment to the work force (e.g. a worker that sought a job in the past year, but not the past four weeks)\textsuperscript{3}. Many of these people will still be joining the labor force over the coming years, which indicates that labor markets are not as tight as unemployment figures signify—the total labor force is still growing, beyond mere population increases. This, again, puts downward pressure on aggregate wages, which fall when the number of job-seekers increases.
There are many other explanations with equal merit:

- Even after full employment is reached, history shows a temporal gap before wages pick up significantly.
- With slower productivity growth, firms have a more difficult time raising wages significantly.
- Firms are now competing on a global market, meaning that goods need to be sold for less in order to be competitive on the larger stage and firms need to keep costs (such as wages) down.

The Portland MSA, having experienced many of these macro trends on a micro level, is beginning to pull out of its wage stagnation, along with other major West Coast cities (see Figure 6). A significant cost of living adjustment (based off the soon to be defunct Portland MSA CPI, see Data Note on pg. 13) should accelerate this trend. While the fate of the West Coast does not portend the fate of the nation, this type of growth in inflation and wages is what the Federal Reserve has been keeping an eye out for. The federal funds rate is due for a raise in December, and several times next year (see Figure 8); however, these expectations are based on a tight labor market. The Federal Reserve's decision will ultimately depend upon how convincing they find the arguments above.

Ultimately, economic theory is alive and well. Wages and prices are rising for pockets of the country, and there are sound explanations for the slow takeoff. Economists are just waiting for the facts to catch up.

3 There are clear demographic trends to disability rates or school attendance; however, the Federal Reserve Bank of Atlanta also controls for these.
While the country is entering its ninth year of expansion, the Portland MSA will be wrapping up its eighth year of employment expansion this December. As of August, the Year-to-Date (YtoD) job growth rate of 2.13% placed the MSA at 125th out 388 metro areas nationwide—not a low rate, but enough of a decrease to knock Portland a few notches down in the ranking from the fast job growth years of 2014 and 2015 where the MSA ranked 60th and 49th, respectively. This section will discuss employment, income, and housing activity in the MSA for the most recent period, and provide a near term outlook. This forecast release also produces long-run outlooks to 2057, discussed at the end of this section.

**Employment**

While employment growth in the second half of 2016 and first quarter of 2017 slowed below the plus-3% rates observed in the previous three quarters, the second quarter of 2017 came roaring back with a seasonally adjusted annual rate (SAAR) of 4.2%. Especially strong contributors were construction at 14.3% SAAR, and manufacturing at 5.8% SAAR; the latter is most notable as manufacturing jobs had been declining since the second quarter of 2016. Also deserving of mention are Transportation, Warehousing, and Utilities at 7.2% SAAR, Health Services

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Regional Economic and Population Forecast October 2017

Notable Employment Events:

- **Amazon Fulfillment Centers**: Amazon plans to open two customer fulfillment centers, in the Rivergate area of North Portland and the Troutdale Reynolds Industrial Park (mentioned in our previous forecast). The centers are expected to open next year with a combined 2,500 full-time jobs.

- **Nike Layoffs**: Nike announced layoffs last June that may have culminated in eliminating 745 jobs by the end of September, mainly impacting Washington County.

Figure 12: Unemployment Rates by County, Portland MSA
Percent, 2007-2017 (WA counties seasonally adjusted manually)

Metro job growth is cooling down, but remains impressive as we close out the year. Figures 9, 10, and 11 show history and outlook employment growths for various industries relative to 2005. The groupings indicate forecast growth, rather than past performance.

After hitting a soft patch in the second half of 2014 and first half of 2015, construction job growth has been strong. From new single- and multifamily housing developments (mentioned in our April 2017 publication) to hotels and commercial buildings, construction has maintained a year-over-year (YoY) job growth greater than 5% since the fourth quarter of 2015. In fact, the industry may demand even more labor when implementation of the $5.3 billion Oregon transportation bill passed this July begins. Out of the seven MSA counties, Clark displayed the strongest construction job growth, hardly slowing in 2014 and 2015 - posting an average YoY growth rate of 10.1% from the fourth quarter of 2015 to the second quarter of 2017. The outlook for construction is still positive, but expect slower growth as we inch ever closer to full employment.

Manufacturing job growth was negative for most of 2016 and the first quarter of 2017, before jumping up to 5.8% SAAR in the second quarter. Most of the downturn was concentrated in the Computer and Electronic Product sector; some of the losses can be attributed to the Intel restructuring in 2016 that resulted in 784 layoffs and hundreds of buyouts. There was additional softness in Printing, Paper, Primary Metal, and Transportation Equipment. Nondurable goods manufacturing experienced some of the softness due to Printing and Paper, but continued to improve, led by the large Food sector. As international economies begin to improve, the manufacturing sector should see improved job growth.

and Education at 7.6% SAAR, and Leisure and Hospitality at 6.6% SAAR. Before jumping to the conclusion that we have returned to the fast growth rates observed eighteen months prior, it is important to note that the most recent employment numbers are subject to wide revisions and these numbers may be a bit cooler than initially reported. The same can be said for the latest monthly data for August, which reports a decline of 1,800 jobs in the MSA. We like having data sooner than later, but as is so often the case, alacrity comes at the cost of precision, and revisions often occur. NERC’s position is that Portland...
although at a slower rate than other sectors of the economy.

As previously mentioned, Transportation, Warehousing, and Utilities, Health and Education Services, and Leisure and Hospitality displayed strong recent growth. Transportation Services and Warehousing jobs increased due in large part to the opening of a large Amazon distribution center in Hillsboro. Another 2,500 Amazon jobs are expected when two new fulfillment centers open in 2018 in North Portland’s Rivergate Industrial District and the Troutdale Reynolds Industrial Park. Professional and Business Services (previously one of the fastest-growing sectors) has slowed considerably, with job growth of 1.5% YoY through the second quarter of 2017. With the announcement of layoffs at Nike in June and August, this sector will see some softness as we finish 2017 with the expected loss of 745 jobs (not a significant hit, given that the sector contains over 178,000 jobs). Growth in both Health and Educational Services and Professional and Business Services is expected to slow over the next several years, but said sectors are likely to remain among the strongest. Leisure and Hospitality is projected to slow, due to slower expected population growth and rising minimum wages.

Employment growth in three service sectors—Retail, Financial Activities, and Information (for which traditional publishing is the largest constituent subsector)—has recently slowed, although not to the extent that occurred in manufacturing. Some of this is a reflection of the increased market shares attained by e-commerce and fintech (although in the latter case it is possible that more jobs are added than lost), paired with the ongoing encroachment of digital media on traditional publishing. Retail may get a definitional boost as cannabis-related recreational businesses are moved from Other Services to Other Miscellaneous Store Retailers². The outlook for these sectors is continued growth, but at considerably slower rates in comparison to two or three years ago.

The Government sector is expected to grow in keeping with slower expected population growth. There will be seasonal spikes related to summer wildland firefighting in east Multnomah and Clackamas Counties, and of course the 2020 Decennial Census.

### Income

The recent release of Census data from the American Community Survey (ACS) reveals some strong income growth in a relatively short period of time. As Josh Lehner reports in his recent Portland in Transition report, “[Recent] gains place Portland’s [MSA] rising income as the 4th best since 2007. Portland now has the 19th highest median household income among the large metros. In 2007 Portland ranked 32nd highest.”³ The ACS also shows a rapid rise in educational attainment, a characteristic often associated with higher incomes. As population growth slows and housing affordability starts to be more of a problem, the outlook is for personal income growth to average 4.4% over the next five years, about a percentage point lower than the last five-year average and considerably less than the 6.7% average of 2014-15. Still, this growth is significant when compared to the historical range, considering the approaching attainment of full

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employment and the expected wage increases associated with tighter labor markets.

**HOUSING**

Our previous forecast publication in April 2017 covered housing to a greater extent than would be useful in this release, which follows by only six months. While housing affordability is still a hot issue for Portland, there has been some cooling in both the single and multifamily housing markets, but this is hardly an autumn chill and might be better considered as a movement from “volcanic” to “boiling”. In Figure 14, the S&P Core Logic Case-Shiller City Composite Home Price NSA Index for Portland and Seattle shows decelerating growth for home prices in Portland from the double-digits in 2016 to around 7.5% for the first quarter of 2017, with Seattle remaining on a firm upwards trajectory. In Figure 15, NERC’s Fundamental Housing Price Index is beginning to show signs of overvalued housing. As described in our last publication, the Fundamental HPI has a range of error and the most recent measure is well within that range. The recent slowing of price increases reflects the Fundamental HPI’s hint of overvaluation, as economic forces suggest that price rises should abate as the housing market veers towards unaffordability.

As noted in previous forecasts, housing permits are particularly difficult to forecast, and some irregular behavior occurred in Multnomah County prior to the February 2017 implementation of inclusionary zoning regulations: specifically, a “bunching” was observed, as developers moved multifamily projects into permitting earlier than usual in order to
skirt the deadline for mandatory affordable units. We present our projections in Figure 16. Relative to our last forecast, single family permits are largely unchanged, and we note and incorporate the housing developments underway in Washington County. Multifamily permits were a bit stronger than we predicted, with major differences in Multnomah and Clark Counties. Single family house price and rent growth decreases, combined with a slower projection for population growth, suggest slower housing permit growth over the next few years.

### Population

There are no changes to the population outlook since our last publication. Population growth outlooks can be found in Comparing Across the Counties (pg. 18) and the individual county profiles (pgs. 20-33).

**Figure 16: Population Growth in Portland MSA by County**

<table>
<thead>
<tr>
<th>County</th>
<th>2015-2016 Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clackamas</td>
<td>1.91%</td>
</tr>
<tr>
<td>Clark</td>
<td>1.50%</td>
</tr>
<tr>
<td>Columbia</td>
<td>0.80%</td>
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<tr>
<td>Multnomah</td>
<td>1.70%</td>
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<tr>
<td>Skamania</td>
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<tr>
<td>Washington</td>
<td>2.29%</td>
</tr>
<tr>
<td>Yamhill</td>
<td>1.31%</td>
</tr>
</tbody>
</table>

**Headwinds and Tailwinds**

Figure 18 compares employment projections for the Portland MSA in our previous three forecasts. Our perspective has changed slightly from a year ago: here is a brief sample of events and consultations that have influenced our forecast over the ensuing months:

- World and US economic performance, outlook, and policy changes
- Oregon economic outlook from the Oregon Office of Economic Analysis
- Passage of Inclusionary Zoning by Portland City Council at the end of 2016
- Oregon Legislature passes new minimum wage rate increases to commence in July 2017 thru 2023
- Intel and Nike layoff announcements
- Rivergate Industrial District Amazon fulfillment center
- Oregon Transportation Bill (HB 2017)
- Reviews and feedbacks from our Technical Advisory Group
- Comments and suggestions from our many stakeholders

Back in the 1950’s, the Holiday Inn hotel slogan was “the best surprise is no surprise”. That pretty much sums up our October 2017 forecast compared to our previous one. With slightly stronger growth than projected as we finished 2016 and entered 2017, our near term outlook is pushed up, with little change after 2018. The Portland MSA economy is either at or approaching full employment, housing affordability remains an issue, and population growth is expected to slow. All these elements translates into a slower-growth economy over the next few years.

One has to recognize that, despite careful consideration of factors like the above, forecasts are ceteris paribus in nature, and real economic outcomes are often determined in
part by unpredictable shocks and forces. On our radar are the following potential headwinds and tailwinds:

- Federal fiscal policy (spending and taxes)
- Federal Reserve interest rate policy
- Oregon State budget problems
- Further housing policies both in and outside of Multnomah County
- Canadian wood product tariffs (could be a positive for local wood product producers but possible Canadian retaliation against other Oregon exports)
- Immigration regulation that could impact forestry, agriculture, and nurseries, warehousing (seasonal distribution centers), and high technology

If we extend the range of our radar, we definitely would include climate change, income inequality, cyber security and geo-political risks.

**LONG-RUN OUTLOOK**

For every October forecast release, we include a long-run projection, as requested by some of our stakeholders. Included with our usual ten-year outlook, projections are assessed out an additional 40 years, or out to 2057. For this long-run view, the forecast relies more heavily on long-term trends in population and productivity. Growth is tied to the capacity of the region to grow. In other words, we move from a demand-side orientation to one more related to supply. Figure 19 shows the long-run growth projection for employment in the Portland MSA. More detailed sectors and county projection numbers are available to our subscribers.

**DATA NOTE**

As of 2018, The US Bureau of Labor Statistics will be discontinuing the Portland-Vancouver-Hillsboro Consumer Price Index (CPI) as part of a restructuring of the geographic area samples. Unfortunately, the Portland MSA falls under the new population threshold, along with several other MSAs, including Pittsburgh PA, Cincinatti and Cleveland OH, and Milwaukee WI.
What does a prosperous area look like? Certain images spring to mind: a bustling economic center, clean streets, healthy citizens, and a hopeful future all indicate that an area is doing well. Dictionaries use terms like “flourishing” or “wealthy,” but such a definition is of little practical use. More tailored efforts require narrowing the scope of the term to factors like gross domestic product (GDP) or health outcomes, and by necessity fall short in capturing all of the contributors that a practical understanding of the term would require. The question posed in the title, while appealing in its simplicity, is not practical. Prosperity is a general state of wellbeing, and it is the “how,” rather than the “what,” that holds the greatest practical salience. Obviously, these pages won’t answer that question either, but will provide a starting point for a broader consideration. Specifically, the topics at hand are productivity, equity, and industry growth and resilience.

Historically, countries and states have often been compared on the basis of their gross domestic product, or GDP. This straightforward measure describes the entire output of an area—what it brings to the larger stage. One of the reasons that GDP is so valuable to economists is that this productive capacity is thought to constitute a useful proxy: an area with highly productive residents likely enjoys a number of other advantages, including health, wealth, and a stable environment. Note the qualifying word, however: “likely” just isn’t good enough when designing policy. Economic definitions of prosperity hinge around this concept of productivity for good reason: a well-managed productive area is situated to use the wealth it generates to address problems within its bounds. However, if productivity is the key to prosperity, therein is a separate puzzle—some areas produce at a higher rate, while others with similar attributes flounder, struggling to remain competitive. The relative nature of this puzzle, which rests on the comparison of different areas, provides another insight to the meaningful consideration of prosperity: absolute levels are all but meaningless, practically speaking. What matters most to a region’s success is performance in comparison to peer areas, or a larger containing area. In order to constructively address discrepancies, regulators and lawmakers need to accomplish two things: first, to identify the components of productivity that lag behind comparable regions; and second, to select from within said factors those that can in fact be addressed.

By considering GDP per capita, the raw productive power of an entity is separated from its size, lending greater meaning to the measure. However, GDP per capita is not without flaws: in a 2015 article for the Federal Reserve Bank of St. Louis’ Economic Synopses series, economist Ana Maria Santacreu argues that a better measure is GDP per hour worked1 (see sidebar on pg. 16 for why this is).

So, how does the Portland MSA fare from a prosperity perspective? The results are, as always, mixed. First, in terms of absolute productivity2, the Portland metropolitan statistical area, which is the 25th largest in the nation by population, appears at 20th place in absolute terms out of 382 metropolitan areas total3. On a per-capita basis, the MSA ranks 25th. By the most basic and traditional measure of prosperity, we are doing well. However, a large portion of this productivity derives from a single source: Intel. It’s no secret that an outsized amount of Portland’s metropolitan area GDP can be attributed to Intel, which may skew averaging measures—such as per capita—which do not account for distribution.

As we all know, the Portland MSA is on the rise, and has been for some time. Bolstered by a healthy local job market, relatively affordable cost of living (in comparison to other West Coast metropolises), and a certain “je ne sais quoi,” Portland has enjoyed above-average migration. Notably, we see many young college-educated professionals moving into the area, indicating its desirability and continuing potential for growth. While many large metro areas have not yet fully recovered from the Great Recession, Portland incomes have grown by 9% over pre-recession levels4. Our problems...
are those associated with strong growth—housing affordability, overwhelmed traffic infrastructure, and displacement are frequent subjects of lament in the local press, and our ability to address these challenges will inform our ability to continue to thrive. While it is not possible to explicitly define a concept as broad and multifaceted as prosperity, we can say that it is not only more than productivity, but more than income level, educational attainment, or any of the other factors that make for more gratifying local headlines. In other words, the job is never really done, and our favorable standing does not preclude further improvement. It falls to local decision-makers to continue to explore recent data and craft strategies to improve relevant factors.

One of the most notable aspects of an inclusive definition of prosperity is equity. A society where gains are only realized by a select few cannot be considered prosperous—it is important from both an economic and a moral perspective that at least some portion of accumulated wealth go to the poor and disadvantaged. Traditionally, the degree of inequity in a society is measured in economics using the Gini coefficient, which expresses the dispersion of wealth in a society: i.e., the percent of wealth controlled by a percent of the population. In a hypothetical egalitarian society, where everyone makes exactly the same income, the value of the Gini coefficient is zero, while in a society in which one individuals holds all of the wealth, the value would be one. In a 2014 ranking from of the 102 largest U.S. metropolitan statistical areas, Portland falls below the average with the 32nd-lowest score, at 0.448 (Oregon takes the 22nd place among U.S. states, with a Gini of 0.449). It appears that Portland (and Oregon) display more equitable income distributions that the nation at large (which has a Gini coefficient of 0.47).

Of course, the Gini coefficient can hide important social dynamics—Portland is not a very racially diverse city, and to the extent that socioeconomic disparities exist, they are masked by the sheer imbalance of groups. The average median household income in Portland across racial groups varies to a troubling degree: see Figure 20. Illustrations of educational attainment, homeownership status, and housing cost burden show similar disparities—all of the above, and more, can be explored at the website Greater Portland Pulse at PortlandPulse.org, which is provided by the Institute of Portland Metropolitan Studies to allow easy perusal of data from the US Census and other sources. In a thriving city, we are perhaps better-equipped than most to address areas of disparity, which offer the greatest opportunities for improvement.


Returning to the point raised early in this article, what is it that drives Portland’s productivity (metropolitan area GDP) in relation to other, similar areas? One substantial piece of the puzzle comes to us courtesy of the concept of comparative advantage—we enjoy healthy traded sectors that are well-situated for the current national and international economic
climate. Traded sectors (or to use a more apt term, traded clusters, as multiple industry sectors interact in production) are areas of industry more prevalent in a given region than in other areas, which export goods and services on either a domestic or international basis. It is crucial to the concept that the good is consumed outside of the region in which it is made, an important distinction between local sectors and traded sectors. Such clusters tend to flourish in areas with a climate well-suited to their unique needs. Traded clusters offer distinct advantages: they are relatively more resilient in the face of recessions, because they interact with a wider market; they tend to be internally competitive, which drives growth, productivity, and wages; and they direct money into the area out of which they operate, to the benefit of public and private interests alike. Their profits, which generate tax revenue, come from sources external to the local economy. While discussing the reasons why certain industries thrive in Portland falls beyond the scope of this article, we can identify them: the MSA displays higher-than-average concentrations of:

- Activewear and Outdoor Equipment
- Clean Technology and Sustainable Industries
- Renewable Energy and Energy Efficiency
- Software and Electronics
- Traditional and Advanced Manufacturing

These sectors have strong potential in today’s economy, where energy use is shifting away from traditional sources, experiences are increasingly consumed over luxury goods, and computers and software become ever more intrinsic to daily life.

Imagine comparing GDP per capita in a society where half of the population is employed, versus a society in which only a third is actively engaged in production. The former will have a higher GDP per capita, regardless of whether or not individuals are in fact more productive. GDP per capita strives to get around the limitation of a gross measure, but in doing so neglects to consider demographic attributes. Considering GDP on an hourly basis gets to the actual productive rate, based in technology and efficiency. As Santacreu points out, using this measure reveals that many European nations produce at a rate much closer to that of the U.S., but have a lower rate of labor utilization (for example, shorter workweeks and four to six weeks of paid vacation) that negatively impacts GDP per capita. On the other hand, many Asian countries, which have approached or surpassed the U.S. in terms of GDP per capita, display higher rates of labor utilization—the author cites the case of Singapore, where workers exceed US labor hours by 41%—and therefore lag the U.S in hourly GDP. While this measure is not yet available at more granular levels, it provides insight into ways in which productivity (and therefore prosperity) can be complicated to assess.

While every region wishes to reach the prosperity associated with enhanced productivity, attaining a healthy economy with gains that are equitably distributed is no simple matter. Most efforts, both here and in other areas, focus on improving social equity and feeding unique strengths by emphasizing disadvantaged groups and supporting trade cluster industries. While a prosperous area is better-suited to address any challenge by virtue of greater wealth, there is no clear path to that status. Here in Portland, we enjoy considerable advantages, but as every college student laments, growth brings its own challenges. Addressing inequity and ensuring that our traded clusters continue to thrive and generate revenue and opportunity will be key to our continued progress.

2 Real GDP by metropolitan area (chained 2009 dollars)
Comparing Across the Counties

Population

Total Population (2016)

<table>
<thead>
<tr>
<th>County</th>
<th>Total Population (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clackamas</td>
<td>404,980</td>
</tr>
<tr>
<td>Clark</td>
<td>461,010</td>
</tr>
<tr>
<td>Columbia</td>
<td>50,795</td>
</tr>
<tr>
<td>Multnomah</td>
<td>790,670</td>
</tr>
<tr>
<td>Skamania</td>
<td>11,500</td>
</tr>
<tr>
<td>Washington</td>
<td>583,595</td>
</tr>
<tr>
<td>Yamhill</td>
<td>104,990</td>
</tr>
</tbody>
</table>

Share of Portland MSA (2016)

- Clackamas: 404,980 (17%)
- Clark: 461,010 (24%)
- Columbia: 50,795 (19%)
- Multnomah: 790,670 (33%)
- Skamania: 11,500 (4%)
- Washington: 583,595 (11%)
- Yamhill: 104,990 (2%)

Current and Forecast Population Growth Rate

Historic Net Migration by County
Historic and Forecast Income Per Capita (Thousands of Dollars)

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

MAJOR INDUSTRIES: TOTAL JOBS 2017Q2

AVERAGE ANNUALIZED EMPLOYMENT GROWTH IN MAJOR INDUSTRIES
CLARK COUNTY

MAJOR INDUSTRIES: TOTAL JOBS 2017Q2

AVERAGE ANNUALIZED EMPLOYMENT GROWTH IN MAJOR INDUSTRIES

NORTHWEST ECONOMIC RESEARCH CENTER
COLUMBIA COUNTY

MAJOR INDUSTRIES: TOTAL JOBS 2017Q2

- Durable Manufacturing: 1,158
- Local Government: 1,794
- Retail: 1,506
- Health Services and Education: 1,195
- Leisure and Hospitality: 2,237
- Other Industries: 3,243

AVERAGE ANNUALIZED EMPLOYMENT GROWTH IN MAJOR INDUSTRIES

Pre-recession: 2004-2007
Recession: 2008-2009
Post-recession: 2009-2017Q2
Early Forecast: 2017Q3-2021
Late Forecast: 2022-2027
Employment in Notable Fast- and Slow-Growth Industries, Indexed to 2005Q1

Historic and Forecast Average Annualized Nonfarm Wage Growth

Historic and Forecast Housing Permits, Single Family and Multifamily
MULTNOMAH COUNTY

MAJOR INDUSTRIES: TOTAL JOBS 2017Q2

- Retail: 44,471
- Health Services and Education: 75,928
- Professional and Business Services: 80,066
- Local Government: 58,228
- Leisure and Hospitality: 57,424
- Other Industries: 191,285

AVERAGE ANNUALIZED EMPLOYMENT GROWTH IN MAJOR INDUSTRIES

Pre-recession: 2004-2007
Recession: 2008-2009
Post-recession: 2009-2017Q2
Early Forecast: 2017Q3-2021
Late Forecast: 2022-2027

- Retail
- Health Services and Education
- Professional and Business Services
- Leisure and Hospitality
- Local Government
Employment in Notable Fast- and Slow-Growth Industries, Indexed to 2005Q1

Historic and Forecast Average Annualized Nonfarm Wage Growth

Historic and Forecast Housing Permits, Single Family and Multifamily
SKAMANIA COUNTY

Major Industries: Total jobs 2017Q2

- Manufacturing: 313
- Trade, transportation, and utilities: 211
- Leisure and Hospitality: 646
- Local Government: 485
- Other Industries: 581

Average Annualized Employment Growth in Major Industries

Pre-recession: 2004-2007
Recession: 2008-2009
Post-recession: 2009-2017Q2
Early Forecast: 2017Q3-2021
Late Forecast: 2022-2027
**Employment in Notable Fast- and Slow-Growth Industries, Indexed to 2005Q1**

![Graph of employment in notable fast- and slow-growth industries, indexed to 2005Q1.]

**Historic and Forecast Average Annualized Nonfarm Wage Growth**

![Graph of historic and forecast average annualized nonfarm wage growth.]

**Historic and Forecast Housing Permits, Single Family and Multifamily**

![Graph of historic and forecast housing permits, single family and multifamily.]

*Northwest Economic Research Center*
WASHINGTON COUNTY

MAJOR INDUSTRIES: TOTAL JOBS 2017Q2

- Durable Manufacturing: 41,868
- Retail: 31,729
- Health Services and Education: 35,799
- Professional and Business Services: 53,939
- Leisure and Hospitality: 26,141
- Other Industries: 98,427

AVERAGE ANNUALIZED EMPLOYMENT GROWTH IN MAJOR INDUSTRIES

- Durable Manufacturing
- Retail
- Health Services and Education
- Professional and Business Services
- Leisure and Hospitality

Pre-recession: 2004-2007
Recession: 2008-2009
Post-recession: 2009-2017Q2
Early Forecast: 2017Q3-2021
Late Forecast: 2022-2027
Employment in Notable Fast- and Slow-Growth Industries, Indexed to 2005Q1

Historic and Forecast Average Annualized Nonfarm Wage Growth

Historic and Forecast Housing Permits, Single Family and Multifamily
YAMHILL COUNTY

MAJOR INDUSTRIES: TOTAL JOBS 2017Q2

- Manufacturing: 6,412
- Retail: 3,723
- Health Services and Education: 7,323
- Leisure and Hospitality: 3,442
- Local Government: 3,814
- Other Industries: 9,080

AVERAGE ANNUALIZED EMPLOYMENT GROWTH IN MAJOR INDUSTRIES

Pre-recession: 2004-2007
Recession: 2008-2009
Post-recession: 2009-2017Q2
Early Forecast: 2017Q3-2021
Late Forecast: 2022-2027

Manufacturing
Retail
Health Services and Education
Leisure and Hospitality
Local Government
IMAGE SOURCES

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