

DATE: July 13th, 2015
TO: TriMet Board of Directors
FROM: Andrew Dyke, Senior Economist
SUBJECT: PORTLAND ECONOMIC RECOVERY ANALYSIS

Introduction

TriMet contracted with ECONorthwest to provide economic analysis for consideration by TriMet's Board of Directors in determining whether local economic conditions support an increase in the payroll and self-employment taxes levied by TriMet, consistent with provisions contained in Oregon Revised Statutes (ORS) 267.385 and 267.387.

As established in these statutes, regional employment and income growth constitute the factors to be considered in determining "that the economy in the district has recovered to an extent sufficient to warrant the increase in tax." In preparing this report, we also considered additional indicators of economic conditions, including ECONorthwest's regional employment forecast. We note that the indicators discussed below do not include every economically important indicator, and individual indicators do not necessarily deserve equal weight in informing the Board's decision.

Below, we briefly describe our data sources and methods and summarize our findings. This memorandum concludes with a detailed presentation of the data.

Data sources and methods

We analyzed data specific to the Portland region related to the following economic indicators:¹

- Total employment and employment in selected industries: manufacturing, construction, trade, FIRE (finance, insurance, and real estate), and government
- Unemployment rate and labor force participation
- Per capita personal income and per capita wage and salary income
- Single-family and multifamily residential construction permits

Table 1 identifies the source for economic indicator data. We derive most of the statistics presented below from the underlying historical data series identified in Table 1. In addition to these historical data, we summarize our current regional employment forecast.²

¹ Except where noted, the "Portland region" consists of the following counties: Clackamas, Columbia, Multnomah, Washington, and Yamhill.

² The employment forecast is derived from ECONorthwest's economic model of the Portland region, the same model used for our annual TriMet revenue forecasts. This model incorporates national and regional data from a variety of sources as documented in our forecasts. Additional detail is available upon request.

Table 1. Primary Data Sources

Data Series	Source
Personal Income, Wage and Salary, and Population, by local area	U.S. Bureau of Economic Analysis
Unemployment rate, Unemployment, Employment and Labor force	Bureau of Labor Statistics, Local Area Unemployment Statistics (LAUS) and Oregon Employment Department
Single-family and multifamily residential construction permits	U.S. Department of Urban Housing and Development

Summary of findings

- **Recent economic data suggest continued improvement in economic conditions.** Economic activity in the Portland region continues to outpace that across the rest of the state and, with the exception of anticipated slowing in employment growth early in 2016, will continue to produce steady increases in employment.
- **Total employment will continue to expand.** Between peak employment in 2007Q4 and the recessionary low in 2010Q1, employment fell by nearly 10% in the region. As of 2013Q4, the region had exceeded its pre-recession employment peak, and by 2015Q2 had regained more than twice the recessionary employment losses. Our baseline forecast anticipates slowing employment growth in 2016, accelerating to about 2% annual growth through 2019.
- **Employment growth will vary across major industrial sectors.** After additional quarters of declining employment, the highly cyclical construction sector will begin to grow again toward the end of 2016, reaching 90% of the pre-recession peak by 2019 driven by relatively robust growth from 2017 forward. Until very recently, the manufacturing and finance, insurance, and real estate (FIRE) sectors exhibited lackluster recoveries. After 2016 we anticipate slow but steady growth of less than one percent per year in these industries. Growing at about 1.5% annually throughout most of the forecast period, wholesale and retail trade combined will grow at close to the historical average for this sector throughout most of the forecast period.
- **Unemployment and labor force participation.** The Portland region's unemployment has largely fallen from its peak rate of 10.9% in 2009Q2, down to 5.32% in 2015Q1. The region has yet to reach the pre-recession average of 5.28%, though current employment estimates for April and May suggest a steady decline in the rate toward the pre-recession average. Additionally, growth in the labor force has recently exceeded the long-term average annual growth rate of 1.4%.
- **Personal income.** Consistent with national trends, regional real per capita personal income has recovered more slowly than employment. Within the region, per capita personal income is approaching pre-recession highs observed in 2000 and 2007, and as of 2013 had recovered 70% of the recessionary losses. Real per capita wage and salary remains below the pre-recession high, but has increased since 2009, and has recently

grown more quickly than real per capita personal income. In total, per capita wage and salary income has recovered 43% of the recessionary losses.

- **Residential construction permits.** Nationally and locally, residential construction has recovered from the recession relatively slowly. Construction of single-family housing in the region has recovered steadily since late 2010, but the rate of construction remains about half of the pre-recession average (3,851 permits in 2014 versus an annual average of about 7,600 permits prior to the recession). Multifamily construction accelerated much more quickly out of the recession, reaching levels not seen since at least 1997, with permits for construction of 6,232 multifamily units issued in 2014.

Detailed findings

Below, we present detailed findings from our analysis for each of the indicators.

Employment

As of 2015Q1, total local non-farm employment for the Portland region stood at 931,247 jobs, a gain of 2.4% (25,803 jobs) from 2014Q1 and up approximately 13% (106,913 jobs) from the recessionary low in 2010Q1 (see Figure 1), more than offsetting the loss in employment of approximately 10% during the recession (the region regained the 2007 peak in 2013).

Our baseline forecast anticipates that, by 2019, continued regional employment growth will on net have produced more than twice as many jobs as the number lost during the recession. We anticipate slowing employment growth in 2016, then acceleration to annual growth of about 2% through 2019. Figure 2 shows the year-over-year growth in total employment for the region. The figure underscores the depth of the recession as well as the relatively steady growth in employment since 2010.

Figures 3 and 4 present historical and forecast growth rates of employment for selected industries, specifically manufacturing, construction, trade, FIRE (finance, insurance, real estate), and government. For the most part, recent trends qualitatively resemble those observed for total employment, though the timing and magnitude varies across sectors. Figure 3 displays actual and forecast growth rates for the identified private-sector industries, providing additional insights into regional employment. Figure 4 illustrates observed and forecast growth in government employment.

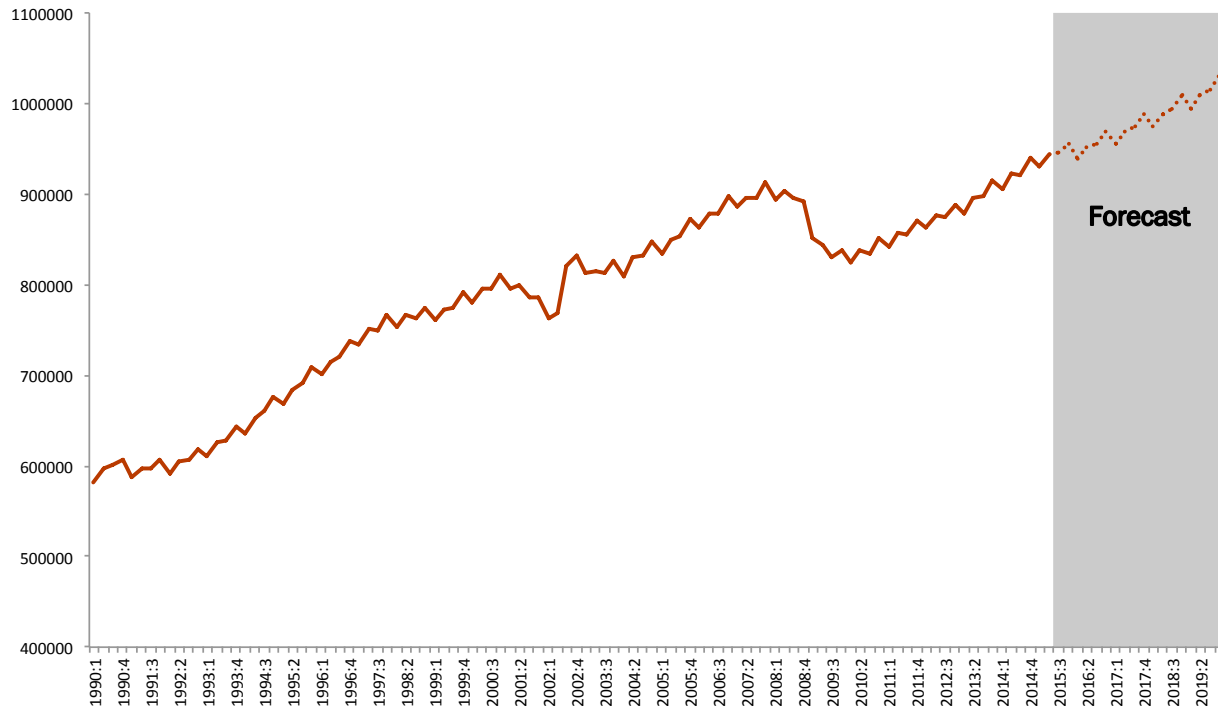
As suggested by Figure 3:

- Employment in the highly cyclical construction industry had recovered considerably through 2014, although we anticipate recent declines to continue for several quarters before the industry begins to grow modestly again.
- Manufacturing employment growth will likely stall, leaving regional employment in this sector close to the last peak in 2007, but still somewhat below the levels observed in the early 2000s.

- Employment in wholesale and retail trade had returned to the pre-recession peak in 2014. We anticipate continued employment growth in this sector of one to two percent annually in the coming years.
- The more stagnant FIRE sector, with current employment at about 90% of the pre-recession peak, will continue to demonstrate incremental growth of less than one percent per year after slightly faster growth in 2015.

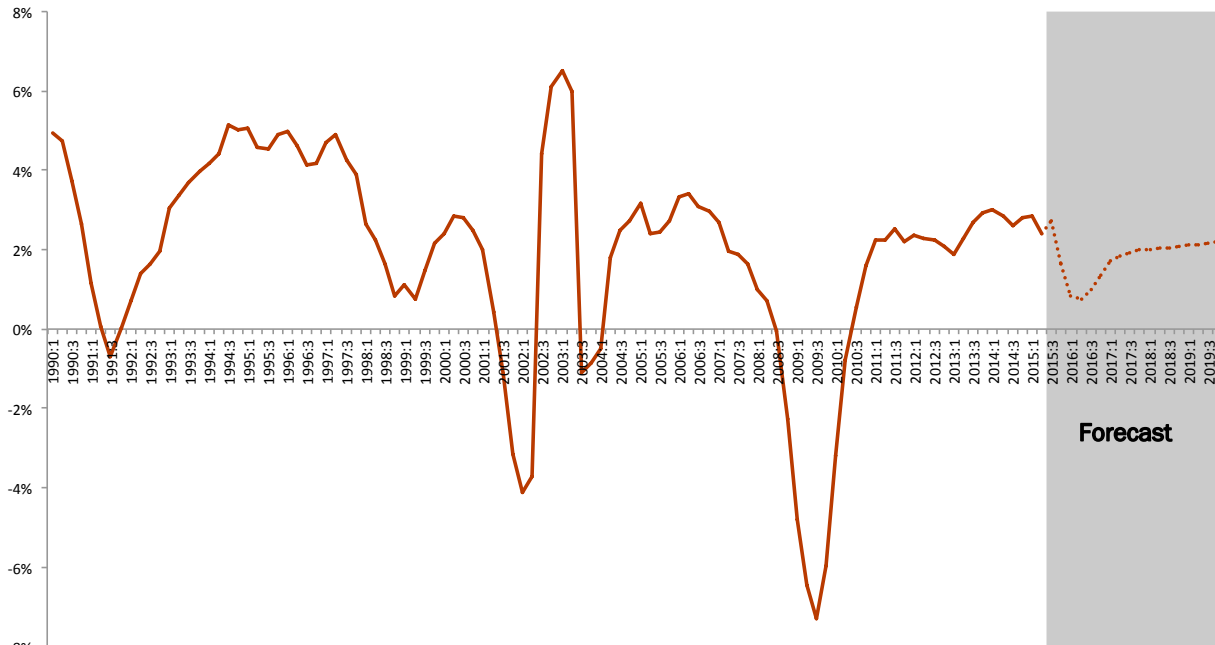
Our forecast anticipates very slight declines in federal employment and growth in state and local government employment of about 1.5% per year, a bit higher than anticipated population growth of about 1.1% per year (population forecast not shown).

Figure 1: Actual and forecast regional employment, 1990Q1 – 2019Q4



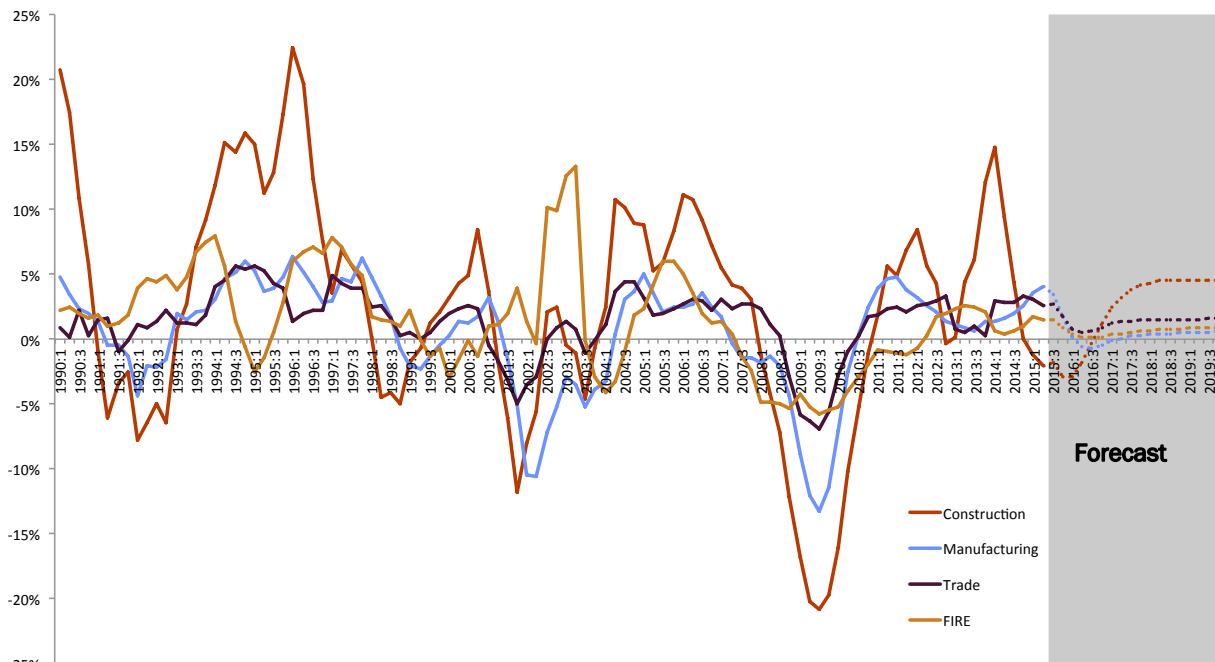
Source: ECONorthwest/Bureau of Labor Statistics and Oregon Employment Department

Figure 2: Actual and forecast regional employment quarterly growth rate, 1990Q1 – 2019Q4



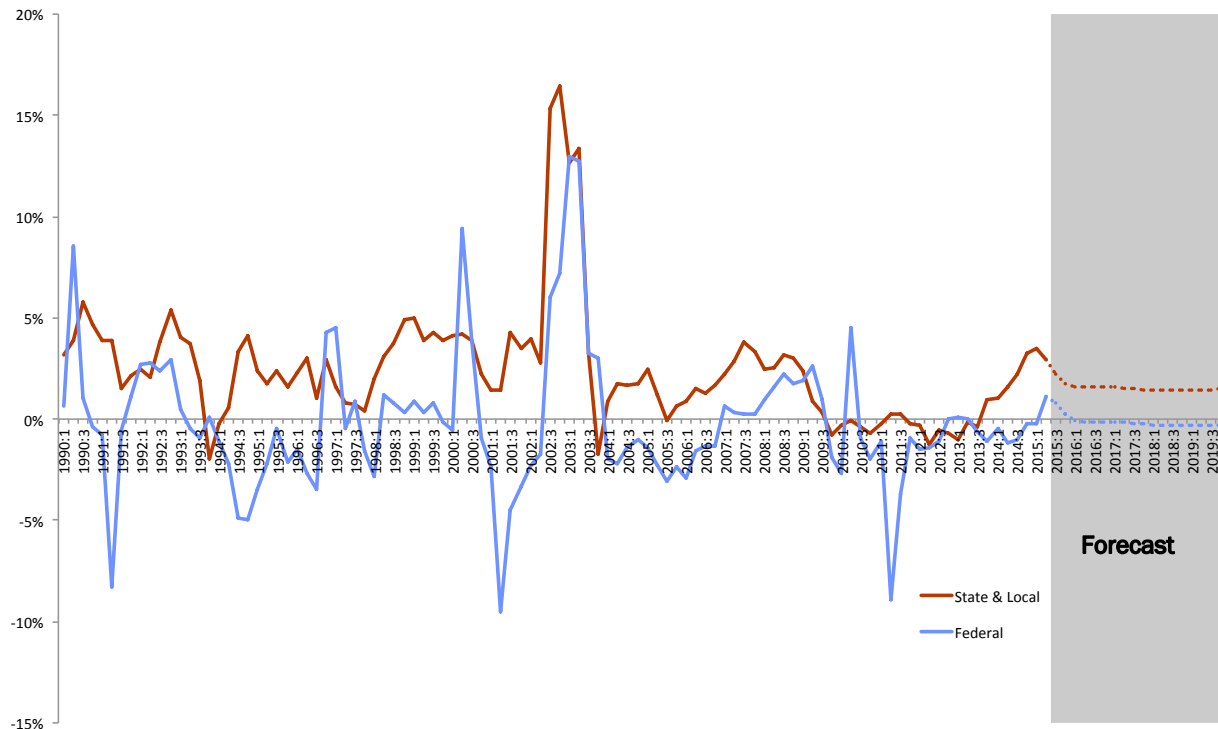
Source: ECONorthwest/Bureau of Labor Statistics and Oregon Employment Department

Figure 3: Actual and forecast regional employment for selected industries, quarterly growth rate, 1990Q1 – 2019Q4



Source: ECONorthwest/Bureau of Labor Statistics and Oregon Employment Department

Figure 4: Actual and forecast regional employment by governmental sector, quarterly growth rate, 1990Q1 – 2019Q4



Source: ECONorthwest/Bureau of Labor Statistics and Oregon Employment Department

Unemployment and labor force participation

The Portland region’s unemployment rate has steadily declined from the peak of 10.9% in 2009Q2. By 2015Q1, the unemployment rate had fallen to 5.3% in 2015Q1, essentially equal to the pre-recession average unemployment rate of 5.3% observed between 1990 and 2007 (see Figure 5). According to estimates for April and May, we will observe continued improvement in the quarterly unemployment rate in 2015Q2.

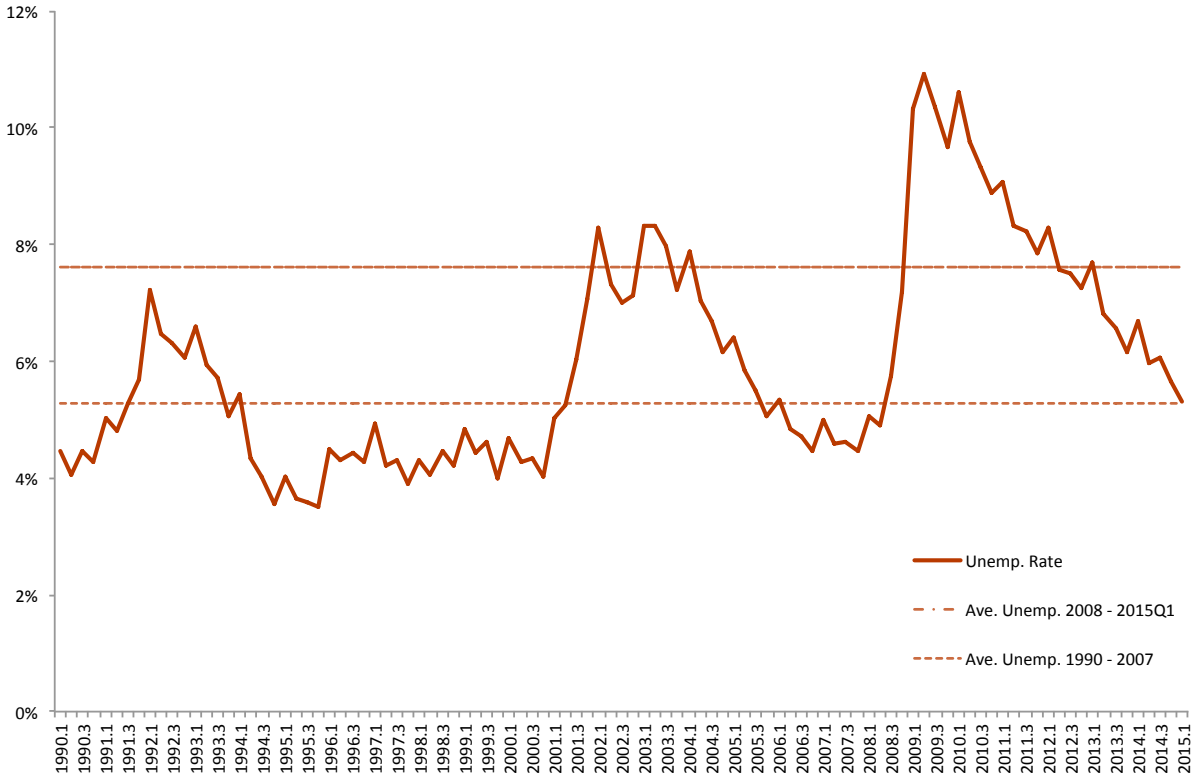
We note, however, that recent improvements in the unemployment rate reflect a combination of job creation and reductions in labor force participation, as suggested in Figure 6, which shows the size of the labor force of the Portland region (local labor force participation rate data are not readily available). The first quarter of 2008 suggests regional stagnation in labor force participation followed by a quick increase perpetuating through the remaining three quarters. Participation reached a peak of 999,725 persons in 2011Q3, subsequently declining 37,119 people by 2013Q1, coincident with the additional decline in unemployment during this period illustrated in Figure 5. As of 2015Q1, the region’s labor force falls just short of its 2011Q3 levels, by about one percent.

Numerous economic and demographic factors (e.g., increased post-secondary enrollment by adults during the recession; retirement of the baby-boom generation and delayed entry into the labor force among the young) have contributed to the declining labor force at the national, state, and local level. However, quantifying the relative magnitude of these factors is difficult at the local level, and debate continues regarding the specific drivers of falling labor force

participation even at the national level. In general, increasing labor force participation would suggest increasing confidence about employment prospects among potential job seekers.

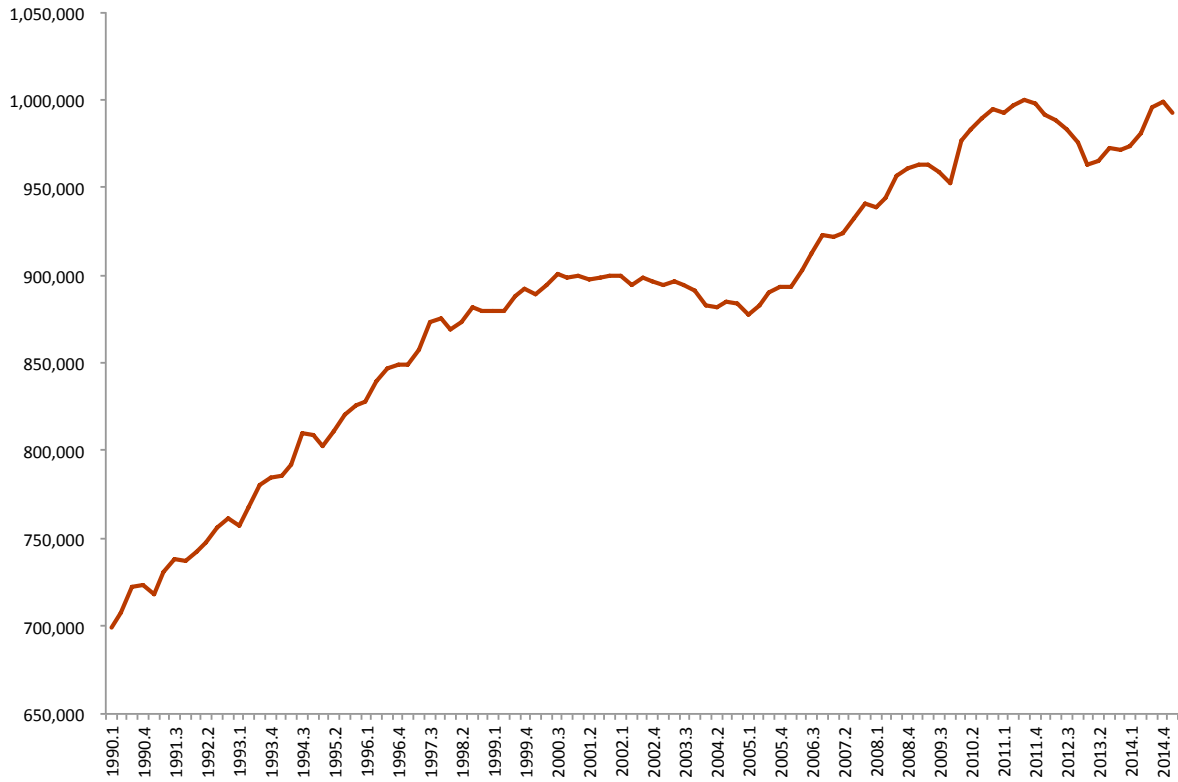
Figure 7 below displays the quarterly growth rate of the labor force, further illustrating the trends described above. From a peak quarterly growth rate of 4.5% in 2010Q4, the Portland region experiences a sharp decline of 2.9 percent in 2013Q1. Immediately following this valley, the region grew 2.9% in 2014Q4, moving beyond the 1991Q1 – 2015Q1 average growth rate of 1.4%.

Figure 5: Unemployment rate for the Portland Region (not seasonally adjusted), 1990Q1 – 2015Q1



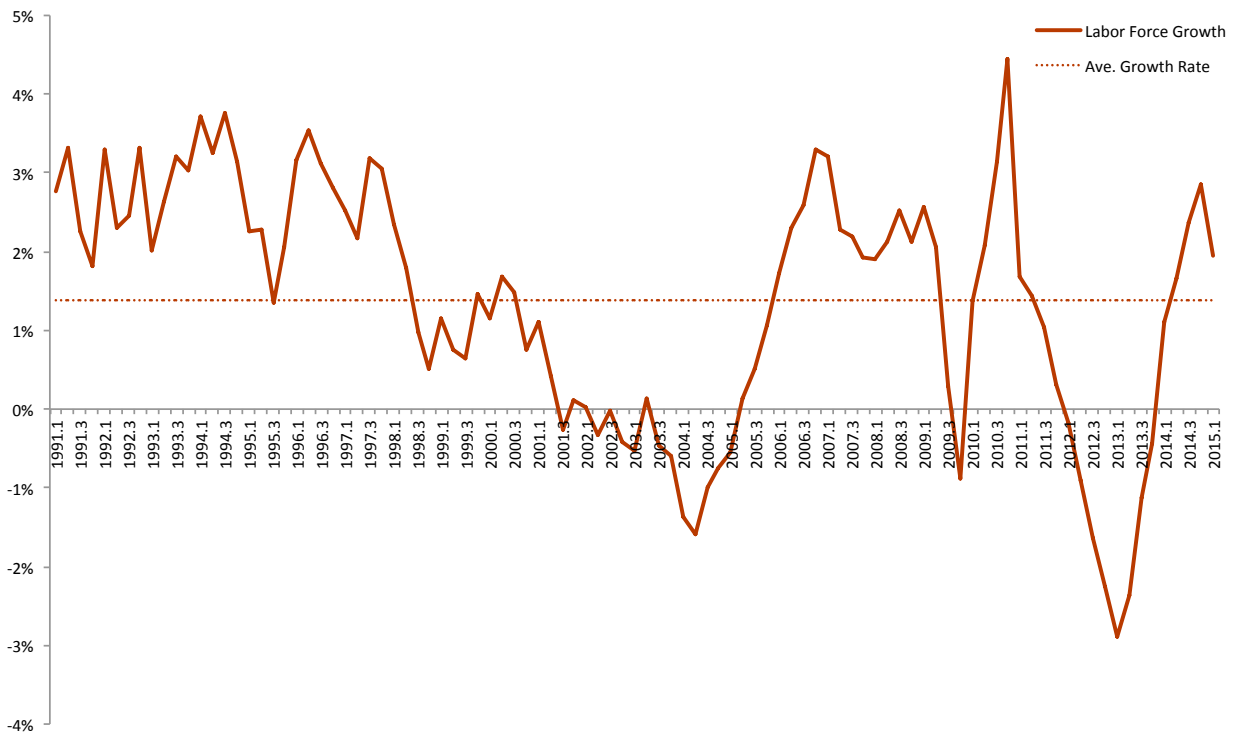
Source data: ECONorthwest/U.S. Bureau of Economic Analysis

Figure 6: Portland Region labor force participation (not seasonally adjusted), 1990Q1 - 2015Q1



Source data: ECONorthwest/U.S. Bureau of Economic Analysis

Figure 7: Portland Region labor force growth (not seasonally adjusted), 1991Q1 - 2015Q1



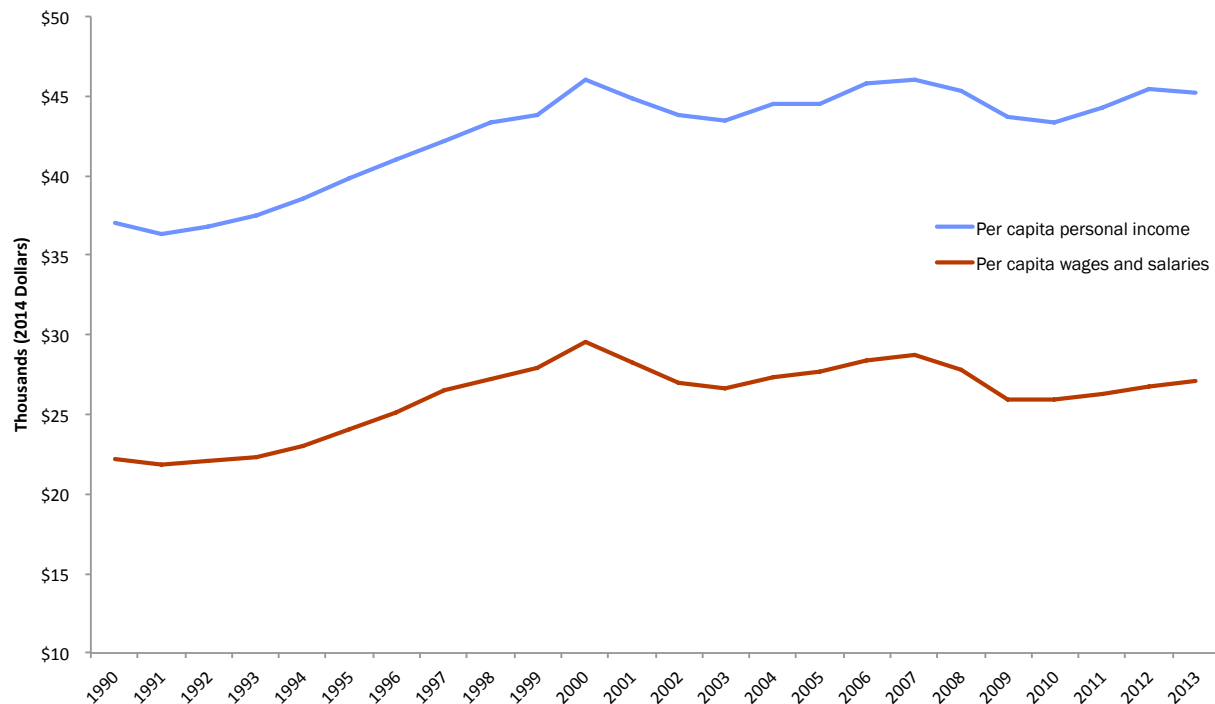
Source: ECONorthwest/U.S. Bureau of Economic Analysis

Personal income

Figure 8 illustrates the historical trends for the region in real per capita personal income and in real per capita wage and salary income (an important component of personal income). For these indicators also, regional trends resemble national trends, with close to zero growth in real terms since the early 2000s, although we observe a slight upward trend in recent years. At the pre-recession peak in 2007, annual real per capita personal income and wage and salary income were \$46,039 and \$28,785, respectively.

Per capita personal income reached its post-recession low of \$43,323 in 2010, a decline of \$2,716 from its pre-recession peak. From 2010, per capita income had recovered \$1,912 to \$45,235 in 2013 (exceeding the region's 2005 levels), or 70% of the losses incurred during the recession, although the pre-recession peak in 2007 was approximately the same as that in 2000. Per capita wage and salary income had declined \$2,873 from its pre-recession peak in 2010. In 2013, per capita wage and salary had recovered \$1,236 to \$27,148 (just above 2003 levels), only 43% of the losses since the recession. We anticipate 2014 and 2015 data will indicate additional growth due to the observed employment growth, and qualitatively similar trends during the forecast period as employment and economic activity more generally continues to increase.

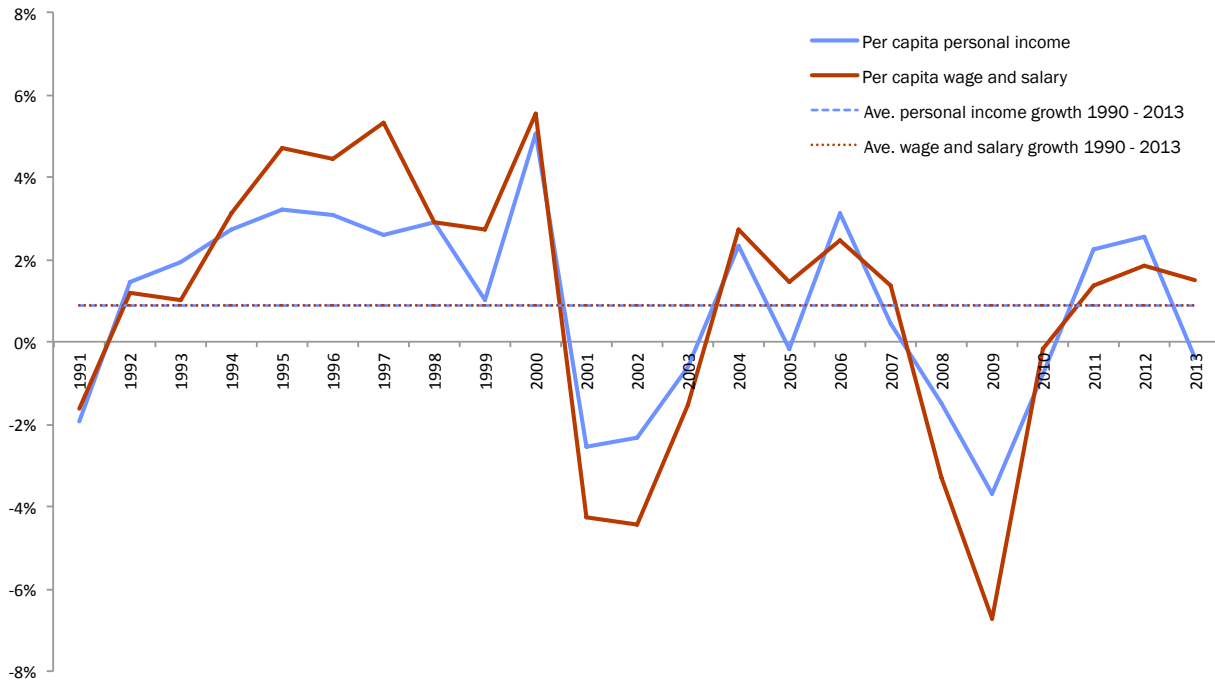
Figure 8: Selected components of real per capita personal income in the Portland Region, 1990 - 2013



Source: ECONorthwest/U.S. Bureau of Economic Analysis

Figure 9 displays the growth rate of the per capita income measurements identified in Figure 8. In 2013, the Portland Region experienced a negative growth rate of 0.41 percent from 2012 in its per capita personal income measurement, falling below the post-recession (2008 – 2013) annual growth rate of -0.05%. Wages and salaries grew at a rate of 1.5% in 2013, slower than the previous year’s 1.8% growth, staying above the 1990 – 2013 long-term average growth rate of 0.9%.

Figure 9: Growth rates for selected components of real per capita personal income in the Portland Region, 1990 – 2013



Source: ECONorthwest/U.S. Bureau of Economic Analysis

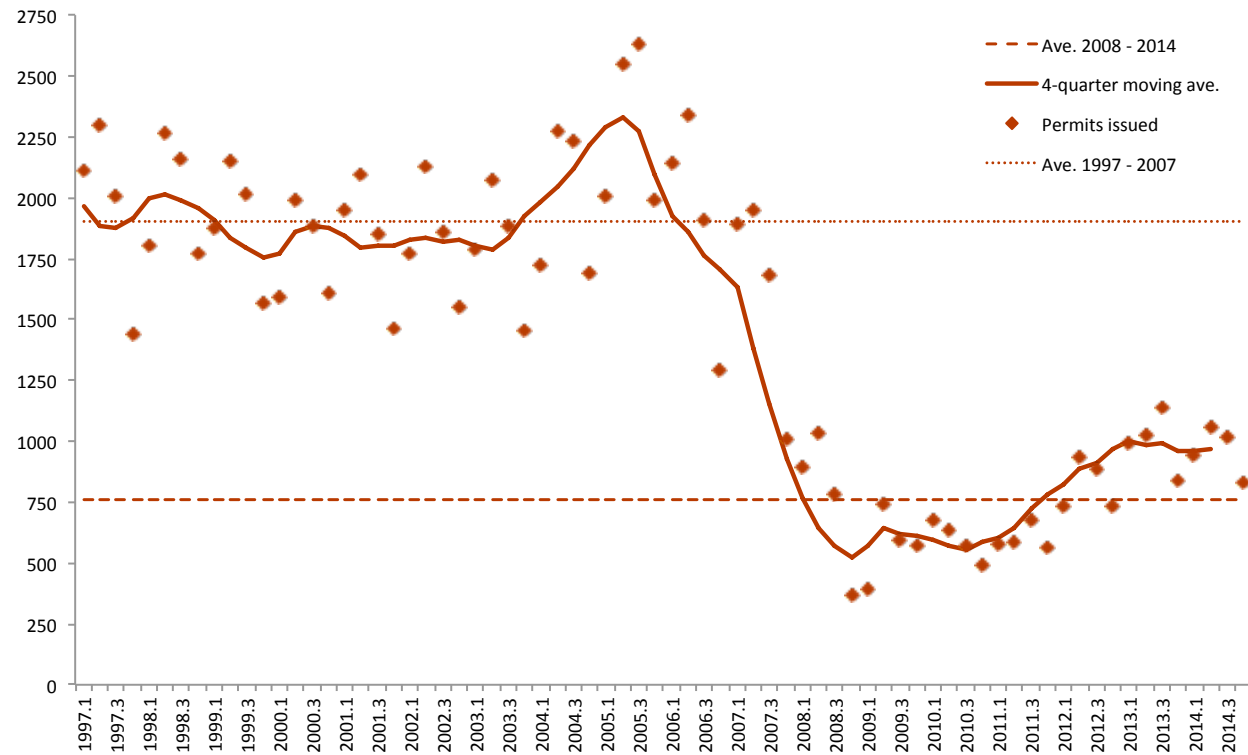
Residential housing permits

Below, we consider single and multifamily construction permits issued in the region. Qualitative trends in permit activity follow those at the national level, with steep declines attributable to the recession producing lows in activity around 2010, with modest recovery since then. Within the region, multifamily

In 2014, the Portland region saw a total of 3,851 single-family housing permits issued, an increase of 32 percent over the 2,922 permits issued in 2009, the year with the smallest number of permits since 1997, but well below pre-recession levels of about 7,600 permits annually (about 1,900 per quarter). Following the recession in 2008, the annual average is approximately 3,000 annually, about 750 permits each quarter (see Figure 10). Thus, single-family construction in the region exceeds the post-recession average, but remains far below pre-recession levels.

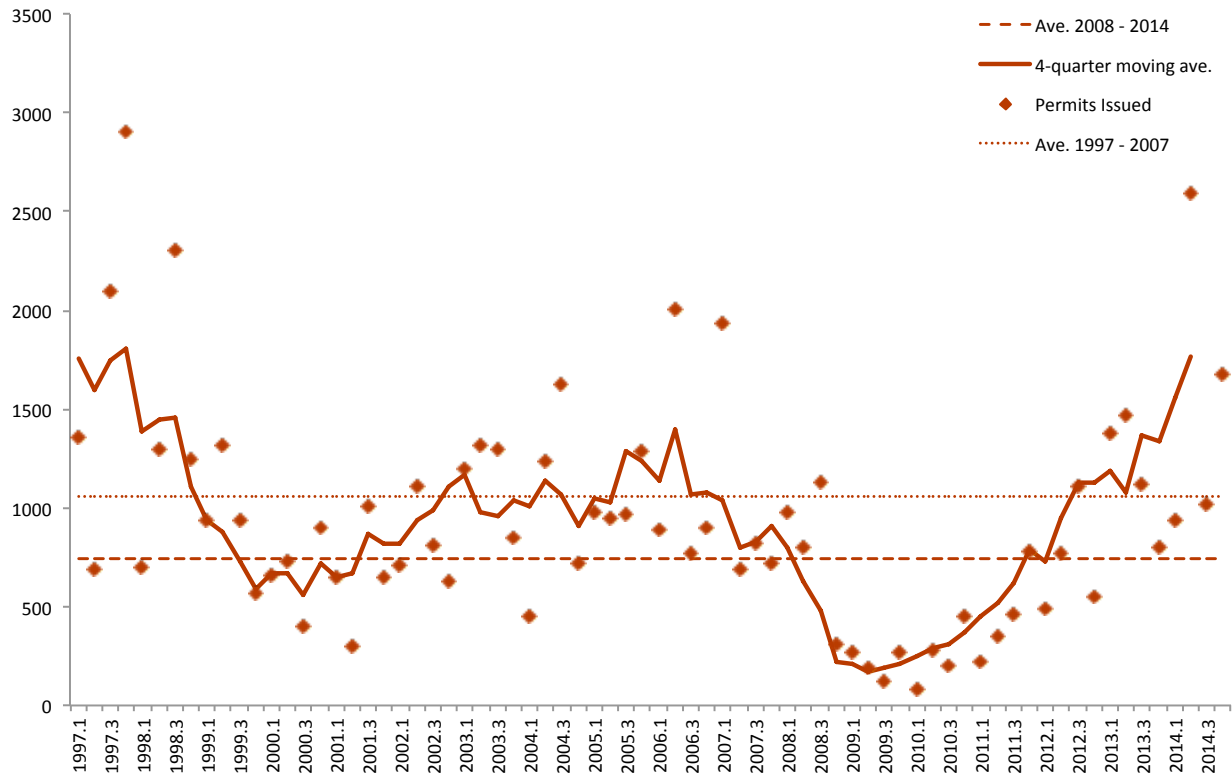
Figure 11, below, shows the more rapid acceleration in multifamily construction in the region. From 1997 to 2007, the region averaged permits for over 4,000 units annually. In the depths of the recession, annual totals fell to 859 in 2009 and 1,010 in 2010, matching the timing of the decline in single-family construction illustrated in Figure 10, above. As illustrated in Figure 11, however, permitting activity accelerated from these lows, exceeding the pre-recession annual average in 2013, and by 2014 reaching levels not seen since at least 1997, with 6,232 units permitted (an average of 1,558 per quarter).

Figure 10: New single-family residential construction permits in the Portland Region, 1997Q1 - 2014Q4



Source: ECONorthwest/U.S. Department of Housing and Urban Development

Figure 11: New multifamily residential construction permits in the Portland Region, 1997Q1 - 2014Q4



Source data: ECONorthwest/U.S. Department of Housing and Urban Development