

Table 1. Housing Demand in the Portland HMA* During the Forecast Period

	Portland HMA*		Portland Submarket		Beaverton-Hillsboro Submarket		Vancouver Submarket	
	Sales Units	Rental Units	Sales Units	Rental Units	Sales Units	Rental Units	Sales Units	Rental Units
Total demand	27,225	18,925	12,750	10,650	7,675	5,325	6,800	2,950
Under construction	2,810	6,995	1,050	4,900	820	970	940	1,125

*Portland-Vancouver-Hillsboro HMA.

Notes: Total demand represents estimated production necessary to achieve a balanced market at the end of the forecast period. Units under construction as of May 1, 2016. A portion of the estimated 20,700 other vacant units in the HMA will likely satisfy some of the forecast demand. The forecast period is May 1, 2016, to May 1, 2019.

Source: Estimates by analyst

Economic Conditions

Economic conditions in the Portland HMA are strong, with the rate of job growth having outpaced growth in the nation since 2011. Nonfarm payroll growth in the HMA averaged 2.6 percent a year from 2011 through 2015, far exceeding the national average of 1.7 percent. During the 12 months ending April 2016, job growth accelerated, increasing by an average of 35,200 jobs, or 3.2 percent, to 1.12 million

jobs compared with job gains during the 12 months ending April 2015 (Table 2). Job gains occurred in every nonfarm payroll sector during the past 12 months. The unemployment rate averaged 5.0 percent during the 12 months ending April 2016, down from 5.8 percent a year earlier, because growth in employment far outpaced growth in the labor force (Figure 1). Top employers in the HMA include Intel Corporation, Providence Health Systems, and Oregon Health & Science University, with 17,500, 15,239, and 14,616 employees, respectively (Table 3).

The economy of the HMA experienced two separate periods of substantial job losses during the 2000s—from 2001 through 2003, when the dot.com bubble burst, and from 2009 through 2010, when the economy experienced the nationwide economic recession and housing market collapse. The HMA is a regional center for the high-technology (hereafter, high-tech) industry, earning the region the nickname “Silicon Forest.” During the 1990s, the HMA experienced particularly strong economic

Table 2. 12-Month Average Nonfarm Payroll Jobs in the Portland HMA,* by Sector

	12 Months Ending		Absolute Change	Percent Change
	April 2015	April 2016		
Total nonfarm payroll jobs	1,087,700	1,122,900	35,200	3.2
Goods-producing sectors	176,100	180,100	4,000	2.3
Mining, logging, & construction	56,600	57,700	1,100	1.9
Manufacturing	119,500	122,400	2,900	2.4
Service-providing sectors	911,600	942,800	31,200	3.4
Wholesale & retail trade	167,300	171,200	3,900	2.3
Transportation & utilities	36,100	37,300	1,200	3.3
Information	23,700	25,100	1,400	5.9
Financial activities	64,800	67,200	2,400	3.7
Professional & business services	166,500	172,900	6,400	3.8
Education & health services	157,500	163,500	6,000	3.8
Leisure & hospitality	109,500	114,700	5,200	4.7
Other services	38,500	39,800	1,300	3.4
Government	147,800	151,100	3,300	2.2

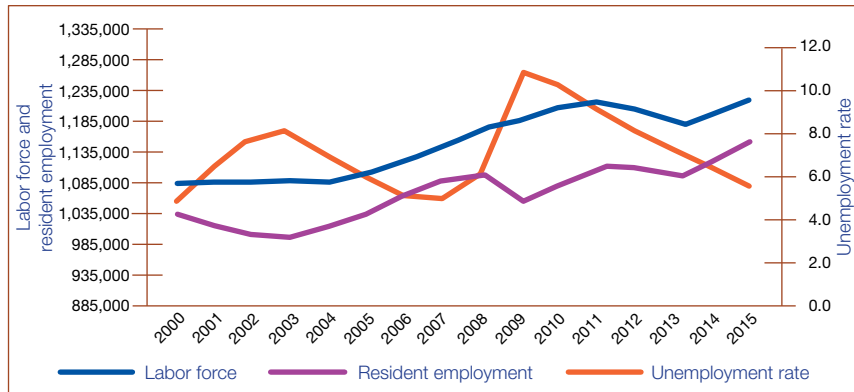
*Portland-Vancouver-Hillsboro HMA.

Notes: Numbers may not add to totals because of rounding. Based on 12-month averages through April 2015 and April 2016.

Source: U.S. Bureau of Labor Statistics

growth because the high-tech industry was expanding rapidly (referred to as the dot.com bubble); however, when the dot.com bubble burst, it disproportionately impacted firms in the high-tech industry, causing a more

Figure 1. Trends in Labor Force, Resident Employment, and Unemployment Rate in the Portland HMA,* 2000 Through 2015



*Portland-Vancouver-Hillsboro HMA.

Source: U.S. Bureau of Labor Statistics

Table 3. Major Employers in the Portland HMA*

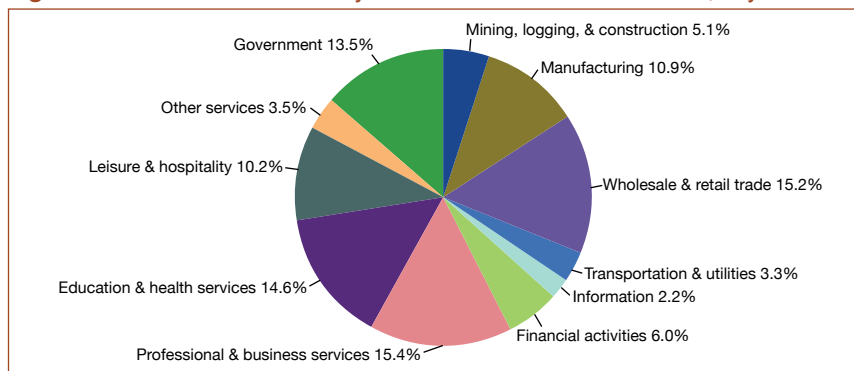
Name of Employer	Nonfarm Payroll Sector	Number of Employees
Intel Corporation	Manufacturing	17,500
Providence Health Systems	Education & health services	15,239
Oregon Health & Science University	Government	14,616
Kaiser Permanente	Education & health services	11,881
Legacy Health Systems	Education & health services	10,436
Fred Meyer Stores	Wholesale & retail trade	10,237
Nike, Inc.	Professional & business services	8,000
Wells Fargo & Co.	Financial activities	4,617
Portland State University	Government	4,153
U.S. Bank	Financial activities	4,000

*Portland-Vancouver-Hillsboro HMA.

Note: Excludes local school districts.

Sources: Moody's Economy.com; Portland Business Journal: Book of Lists 2015

Figure 2. Current Nonfarm Payroll Jobs in the Portland HMA,* by Sector



*Portland-Vancouver-Hillsboro HMA.

Note: Based on 12-month averages through April 2016.

Source: U.S. Bureau of Labor Statistics

severe downturn in the HMA compared with the economic downturn in the nation. From 2001 through 2003, payrolls in the HMA declined by an average of 13,300 jobs, or 1.4 percent, annually; nationwide, payrolls fell an average of 0.4 percent a year.

Economic growth returned from 2004 through 2007, with payroll gains averaging 25,500 jobs, or 2.6 percent, annually compared with the national rate, which averaged 1.4 percent a year. The national recession and housing market collapse subsequently caused economic conditions in the HMA to weaken. After reaching a plateau of 1.04 million jobs in 2007 and 2008, nonfarm payrolls fell by 60,000 jobs, or 5.8 percent, in 2009 and the unemployment rate spiked to 10.9 percent; national payrolls fell 4.3 percent. The weak economy caused a sharp reduction in planned spending, both from households and businesses, causing job losses in nearly every sector of the economy. Payrolls continued to decline in 2010, but at a much slower rate, down 4,200 jobs, or 0.4 percent, to 979,200 jobs.

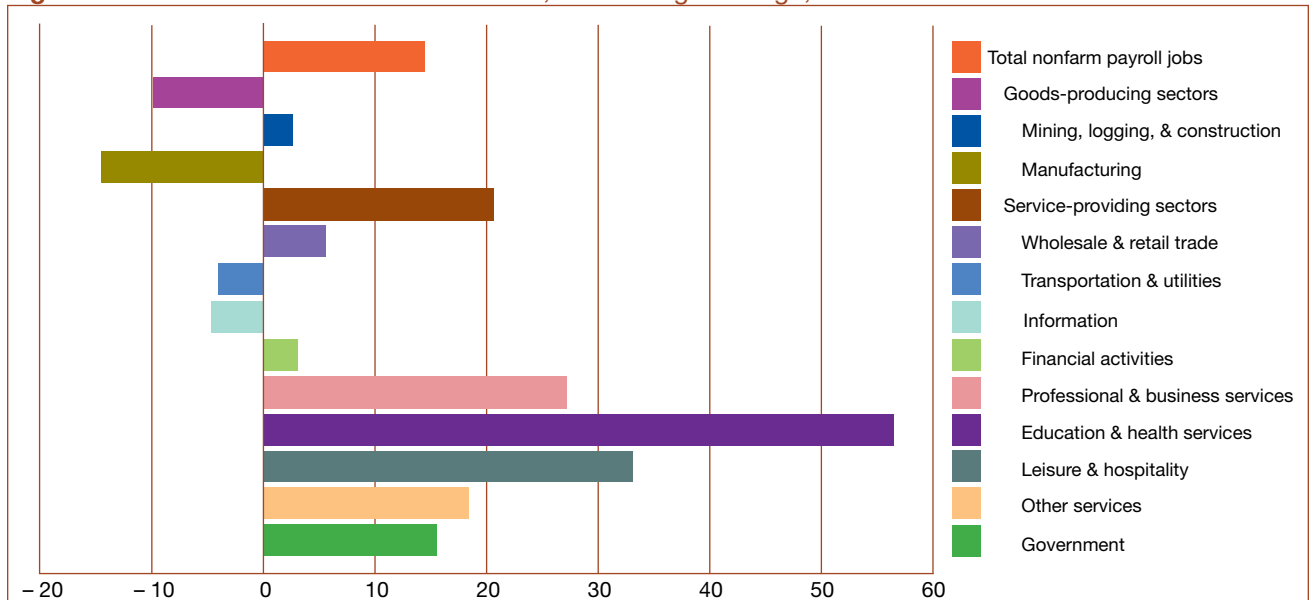
The professional and business services sector, the largest in the HMA economy, represents slightly more than 15 percent of total nonfarm payrolls (Figure 2). During the 12 months ending April 2016, the sector added more jobs than any sector, increasing by 6,400 jobs, or 3.8 percent, to 172,900 jobs, compared with an increase of 7,800 jobs, or 4.9 percent, during the previous 12 months. Growth in this sector has been boosted by hiring in the high-tech industry, including computer systems design and scientific, professional, and technical services, and also by increased administrative hiring with the presence of corporate headquarters such as adidas North America,

Columbia Sportswear Company, Daimler Trucks North America, Intel Corporation, and NIKE, Inc. Growth trends in this sector mirrored overall economic conditions in the HMA, with strong growth during the buildup of the dot.com bubble, followed by a sharp drop as it burst. The sector rebounded quickly, partially because business openings and expansions required increased administrative hiring, but also because of increased demand for computer systems design and information technology improvements. The onset of the nationwide economic recession caused a 1-year decline in sector payrolls, which fell by 11,600 jobs, or 8.0 percent, in 2009. Job growth in the professional and business services sector recovered faster than any sector in the HMA, and, from 2011 through 2014, payrolls increased by an average of 7,000 jobs, or 4.8 percent, annually. In April 2016, NIKE, Inc., announced a \$380 million expansion of its corporate headquarters campus in the Beaverton-Hillsboro submarket. With a target completion

date of 2018, the expansion will add approximately 3.2 million square feet of office, mixed-use, and parking facilities to the campus, with the potential to create thousands of jobs during the 3-year forecast period.

The manufacturing sector continues to play a significant role in the economy of the HMA, despite a decline in employment of 15.0 percent since 2000 (Figure 3). During the 12 months ending April 2016, manufacturing payrolls increased by 2,900 jobs, or 2.4 percent, to 122,400 jobs, compared with a gain of 3,200 jobs, or 2.5 percent, during the previous 12 months. Nearly 60 percent of the jobs in the manufacturing sector are in the computer and electronic product manufacturing or semiconductor and other electronic component manufacturing industries. Both these industries are considered part of the high-tech industry; consequently, the collapse of the dot.com bubble caused a major decline in manufacturing jobs. From 2001

Figure 3. Sector Growth in the Portland HMA,* Percentage Change, 2000 to Current



*Portland-Vancouver-Hillsboro HMA.

Note: Current is based on 12-month averages through April 2016.

Source: U.S. Bureau of Labor Statistics

through 2003, manufacturing sector payrolls declined by an average of 8,400 jobs, or 6.2 percent, annually, the largest payroll decline of any sector. Manufacturing payroll growth resumed from 2004 through 2006, during a period of economic expansion in the HMA, but the average growth of 2,800 jobs, or 2.3 percent, annually was not enough to compensate for all the job losses during the previous recession. The most recent economic recession caused payrolls to decline even further, losing an average of 4,900 jobs, or 4.1 percent, annually from 2007 through 2010. The manufacturing sector began to recover in 2011, when the high-tech industry began to expand; from 2011 through 2014, payrolls increased by an average of 2,800 jobs, or 2.5 percent, a year. This trend is expected to moderate during the forecast period because of planned layoffs at Intel Corporation, the largest employer in the HMA and in Oregon, which specializes in semiconductor manufacturing. In April 2016, the company announced plans to cut its global workforce by 11 percent, or 12,000 workers, beginning immediately. Already, nearly 800 employees have been laid off in Oregon, but that could climb to an estimated 2,150 jobs if the 11-percent cut is applied evenly across all locations. Reducing its workforce is not uncommon for Intel Corporation, however, and is not necessarily indicative of industry performance. It is likely that a large portion of these highly skilled workers will find employment at other high-tech firms that are expanding within the HMA.

During the past 5 years, the HMA has gained national attention for its lifestyle and culture, with numerous accolades, including being ranked number 1 in 2015 on the *Washington*

Post's list of "The 10 Best Food Cities in America." Recognition such as that has contributed to strong growth in the leisure and hospitality sector, which largely comprises jobs in the accommodations and food services industry. During the 12 months ending April 2016, sector payrolls increased by an average of 5,200 jobs, or 4.7 percent, to 114,700 jobs, compared with an increase of 3,900 jobs, or 3.7 percent, during the previous 12 months. Sector payrolls declined sharply in response to both economic downturns but have fully recovered, adding an average of 3,300 jobs, or increasing 3.3 percent, annually from 2011 through 2014. Part of this growth can be attributed the HMA's growing beer industry. The number of brewing companies in the HMA increased from 83 in 2014 to 91 in 2015, and the industry had an economic impact of \$2.83 billion in Oregon in 2014 (Oregon Craft Beer). Job growth in the leisure and hospitality sector is expected to continue at a strong pace during the forecast period as the HMA continues to be nationally highlighted, boosting population growth and tourism and elevating the demand for accommodations and drinking and dining establishments.

The recent and future growth in the local high-tech industry is expected to positively affect employment in the manufacturing and the professional and business services sectors. Other sectors, such as the leisure and hospitality and the wholesale and retail trade sectors, are expected to indirectly benefit from growth in core industries. Nonfarm payrolls are expected to increase at an average annual rate of 2.7 percent, or by 29,950 jobs, annually during the 3-year forecast period.

Population and Households

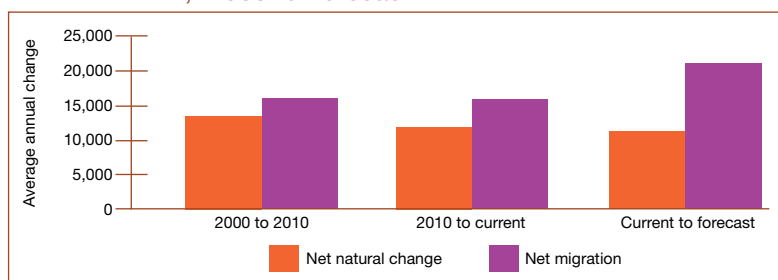
As of May 1, 2016, the population of the Portland HMA is estimated at 2.4 million, increasing at an average annual rate of 1.2 percent, or 27,800, since 2010, with net in-migration accounting for 15,800 people a year, or approximately 57 percent of the increase (Figure 4). Population growth averaged 1.5 percent a year from 2000 to 2004, despite the collapse of the dot-com bubble, with net in-migration accounting for 51 percent of the increase. Economic growth rebounded, and population growth accelerated moderately from 2004 to 2007, averaging 1.7 percent, or 35,050 people, annually; approximately 63 percent of the growth came from net in-migration. Population growth in the HMA slowed sharply in response to the nationwide economic recession that began in 2007, and, from 2007 to 2012, growth averaged 20,900 people, or 0.9 percent; net in-migration decreased, comprising 32 percent of the increase. Strengthening economic conditions boosted population growth to an average of 26,700 people, or 1.2 percent, from 2012 to 2013, because of increased net in-migration, which averaged 15,000 people and comprised 56 percent of the increase. Since 2013, population growth in the HMA has averaged 35,800 people, or

1.5 percent, annually, and strong labor market conditions helped boost net in-migration, which has accounted for nearly 69 percent of total population growth, or 24,800 people, annually. During the next 3 years, population growth is expected to slow slightly because of moderating economic growth, reaching an estimated 2.49 million people by May 1, 2019, reflecting an average annual increase of 32,000 people, or 1.3 percent, a year.

The Portland submarket is the most populous of the three submarkets in the HMA, with an estimated population of 1.24 million, followed by the Beaverton-Hillsboro submarket with an estimated population of 683,400, and the Vancouver submarket with approximately 472,200, increasing at average annual rates of 1.1, 1.4, and 1.3 percent, respectively, since 2010. Net in-migration in the HMA has averaged 15,800 people annually since 2010, with nearly 50 percent being in the Portland submarket, 28 percent in the Beaverton-Hillsboro submarket, and 22 percent in the Vancouver submarket. From 2000 to 2004, suburban growth was more prevalent, and net in-migration was strongest in the Vancouver submarket, which comprised 46 percent of total net in-migration to the HMA. The Vancouver submarket historically has been a bedroom community for the city of Portland, attracting new residents because of its relatively low cost of living compared with the other two submarkets. The Portland submarket captured approximately 32 percent of total net in-migration during this period, and the Beaverton-Hillsboro submarket accounted for 22 percent.

Population growth in the HMA increased from 2004 to 2007 because of strong economic conditions that

Figure 4. Components of Population Change in the Portland HMA,* 2000 to Forecast



*Portland-Vancouver-Hillsboro HMA.

Notes: The current date is May 1, 2016. The forecast date is May 1, 2019.

Sources: 2000 and 2010–2000 Census and 2010 Census; current and forecast—estimates by analyst

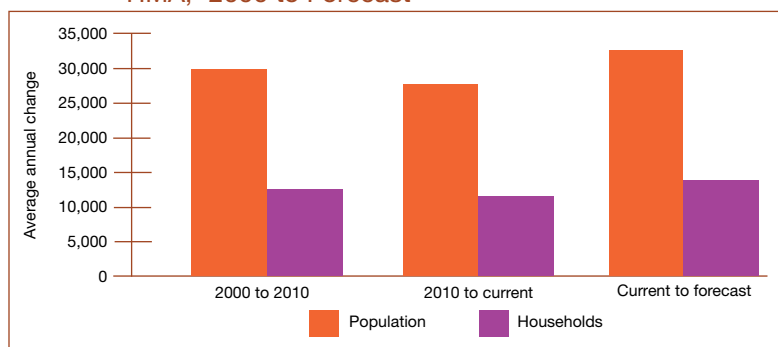
bolstered net in-migration, which averaged 22,150 people annually. During this period of economic expansion, household preferences shifted toward more urban areas that tend to be closer to job opportunities, and the share of net in-migration attributable to the Portland submarket increased from 32 to 43 percent. In the Beaverton-Hillsboro submarket, net in-migration increased, accounting for 30 percent of the total, largely a result of job growth in the high-tech industry, which is more concentrated in the submarket. Population growth slowed in the Vancouver submarket, and its share of net in-migration declined from 46 to 27 percent. The trend of moving into urban centers continued during the nationwide economic recession, although total population growth in the HMA slowed substantially and net in-migration declined to an average of 6,750 people annually from 2007 to 2012. The Portland submarket captured 52 percent of total net in-migration to the HMA during this time. The Beaverton-Hillsboro submarket accounted for 35 percent of all net in-migration, mainly because it has a stronger economic base than does the Vancouver submarket and it has easier access to the city of Portland, which is the economic center

for the HMA. The recession caused population growth in the Vancouver submarket to plummet and net in-migration fell to 13 percent of the HMA total from 2007 to 2012. Since 2013, improving economic conditions in the HMA have led to increased net in-migration, averaging 24,800 people annually, with the Portland, Beaverton-Hillsboro, and Vancouver submarkets comprising 47, 28, and 25 percent of the HMA total, respectively.

During the next 3 years, population growth is expected to accelerate slightly compared with the 2010-to-current period in the Portland submarket, increasing by an average of 15,350 people, or 1.2 percent, annually, reaching 1.29 million people by May 1, 2019. The population of the Vancouver submarket is also anticipated to grow at a faster rate than the 2010-to-current period, increasing by an average of 7,000, or 1.5 percent, annually, to 493,200, by May 1, 2019, largely because job growth in the submarket has been strong since 2013 and the cost of living continues to be relatively less than in the other two submarkets. Population growth in the Beaverton-Hillsboro submarket is anticipated to continue at the same rate, gaining 9,975 people, or 1.4 percent, a year, reaching 713,300 people by the end of the 3-year forecast period.

An estimated 936,700 households currently reside in the HMA, with 504,500, 254,800, and 177,350 being in the Portland, Beaverton-Hillsboro, and Vancouver submarkets, respectively. From 2010 to the current date, the number of households in the HMA increased by an average of 11,350, or 1.3 percent, annually compared with an average annual increase of 12,250 households, or 1.5 percent, from 2000 to 2010 (Figure 5). From 2000 to 2010,

Figure 5. Population and Household Growth in the Portland HMA,* 2000 to Forecast



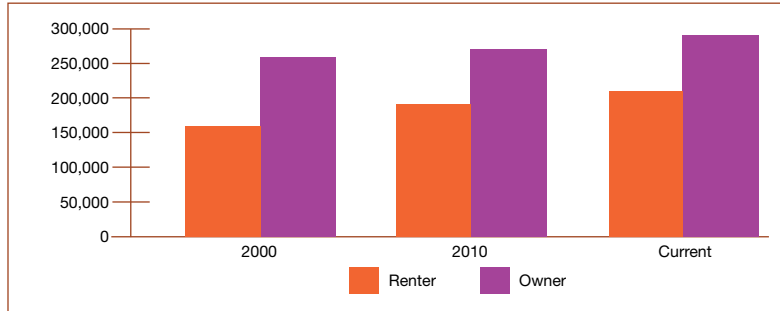
*Portland-Vancouver-Hillsboro HMA.

Notes: The current date is May 1, 2016. The forecast date is May 1, 2019.

Sources: 2000 and 2010–2000 Census and 2010 Census; current and forecast—estimates by analyst

Population and Households *Continued*

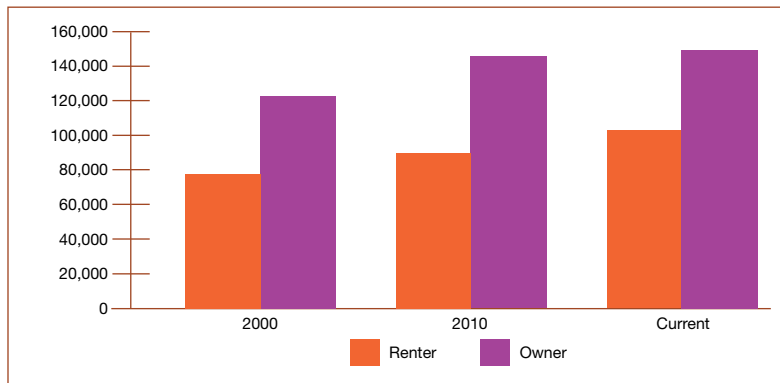
Figure 6. Number of Households by Tenure in the Portland Submarket, 2000 to Current



Note: The current date is May 1, 2016.

Sources: 2000 and 2010–2000 Census and 2010 Census; current—estimates by analyst

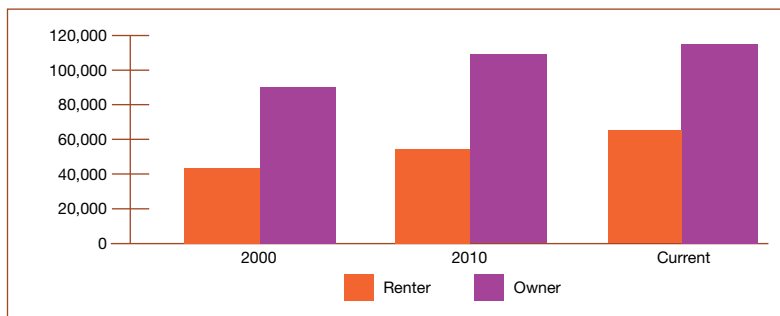
Figure 7. Number of Households by Tenure in the Beaverton-Hillsboro Submarket, 2000 to Current



Note: The current date is May 1, 2016.

Sources: 2000 and 2010–2000 Census and 2010 Census; current—estimates by analyst

Figure 8. Number of Households by Tenure in the Vancouver Submarket, 2000 to Current



Note: The current date is May 1, 2016.

Sources: 2000 and 2010–2000 Census and 2010 Census; current—estimates by analyst

the rate of household growth was highest in the Vancouver submarket, at 3,175 households, or 2.2 percent, followed by the Beaverton-Hillsboro submarket, at 3,775 households, or 1.8 percent, and the Portland submarket at 5,275 households, or 1.2 percent. Household growth slowed from 2010 to the current date in the Beaverton-Hillsboro and Vancouver submarkets because of the prolonged effects from the national recession and the shift toward urban living, with average annual increases of 3,150 households, or 1.3 percent, and 2,425 households, or 1.4 percent, respectively. The household growth rate in the Portland submarket remained unchanged, increasing by an average of 5,750 households, or 1.2 percent. During the 3-year forecast period, the number of households in the HMA is estimated to increase to 978,200, reflecting an average annual increase of 13,850 households, or 1.5 percent. The household growth rate is anticipated to increase in each submarket, reaching 525,400, 266,500, and 186,200 households in the Portland, Beaverton-Hillsboro, and Vancouver submarkets, respectively. Figures 6, 7, and 8 illustrate the number of households by tenure in each submarket from 2000 to the current date.

Housing Market Trends

Sales Market—Portland Submarket

Current sales housing market conditions in the Portland submarket are tight, with an estimated vacancy rate of 1.0 percent, down from 2.4 percent in April 2010 (Table DP-2 at the end of this report). The decline reflects increased demand because household finances and access to credit continue to improve, and much of the excess inventory that resulted from the foreclosure crisis has been absorbed.

During the 12 months ending March 2016, 24,300 existing single-family homes, townhomes, and condominiums (hereafter, existing homes) sold in the submarket, up 17 percent from a year ago (CoreLogic, Inc., with adjustments by the analyst). By comparison, existing home sales totaled 20,700 during the 12 months ending March 2015, representing a 9-percent increase from a year earlier. Existing home sales peaked from 2003 through 2005 during a period of strong economic expansion following the collapse of the dot.com bubble, averaging 28,650 sales annually. The nationwide recession and housing market collapse subsequently caused existing sales to decline at an average annual rate of 19 percent, or 4,525 homes sold, a year from 2006 through 2009, to a low of 13,750 homes sold. Existing sales increased modestly in 2010 when job losses moderated and again in 2011 when job growth gradually returned. As the economic recovery accelerated and access to credit improved, existing home sales increased, averaging 18,150 homes sold annually from 2012 through 2014. The average sales price of an existing home increased 9 percent, to \$356,000, during the 12 months ending March 2016 compared with the previous 12 months when the average

sales price increased 5 percent, to \$325,000. The current average sales price is approximately 9 percent higher than the previous peak of \$326,400 in 2007. The national recession caused a significant amount of strain on household finances and tighter mortgage lending standards. Combined, these two factors caused a sharp reduction in the number of potential homebuyers, and demand and prices fell quickly. From 2008 through 2011, the average sales price declined at an average annual rate of 6 percent, to a low of \$254,500. The average sales price began increasing in 2012 in response to increased demand as the economy improved, and, from 2012 through 2014, the average sales price increased at an average annual rate of 8 percent.

Seriously delinquent (90 or more days delinquent or in foreclosure) loans and real estate owned (REO) properties have become a less significant part of the sales market in the submarket than they were during the worst of the housing crisis from 2009 through 2012. During March 2016, 2.2 percent of mortgages were seriously delinquent or had transitioned into REO status, down from 3.1 percent in March 2015, but still above the average rate of 1.2 percent from 2000 through 2007 (CoreLogic, Inc.). By comparison, the delinquency rate averaged 5.4 percent from 2009 through 2012. During the 12 months ending March 2016, REO sales totaled 1,175, comprising 5 percent of all existing sales. By comparison, REO sales accounted for 21 percent of total existing sales from 2009 through 2012 and only 3 percent from 2000 through 2007. The average sales price of an REO home was \$225,000 during the

Housing Market Trends

Sales Market—Portland Submarket *Continued*

12 months ending March 2016, approximately 38 percent less than the sales price of a regular resale home.

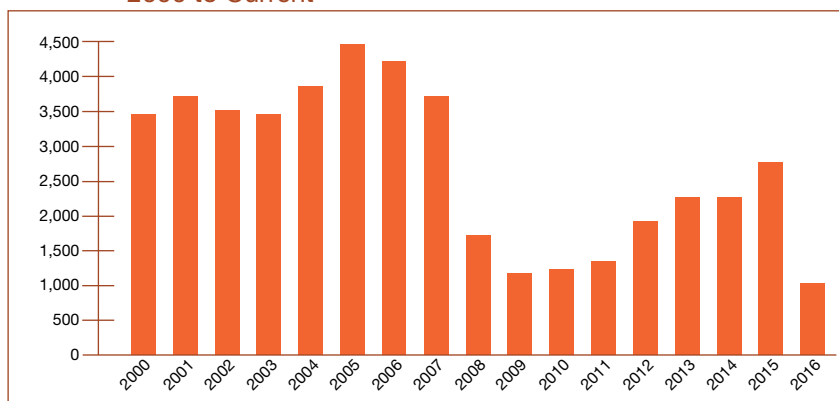
Approximately 2,175 new single-family homes, townhomes, and condominiums (hereafter, new homes) sold during the 12 months ending March 2016, up 18 percent from the 1,850 new homes sold during the previous 12 months (CoreLogic, Inc., with adjustments by the analyst). New home sales averaged 4,075 homes sold annually from 2001 through 2006, before declining at an average annual rate of 25 percent from 2007 through 2011 to a low of 1,275 new homes sold, a direct result of the nationwide recession and housing market crisis. As the economic recovery strengthened, the demand for new homes returned; sales increased an average of 25 percent a year from 2012 through 2014, averaging 1,600 homes sold annually. During the 12 months ending March 2016, the average sales price of a new home increased 5 percent from a year ago, to \$401,200, surpassing the previous peak of \$361,500 in 2008 by more than 11 percent. Sales prices increased at an average annual rate of 9 percent from 2003 through 2008 and, as a result of the national

recession, subsequently declined by an average of 10 percent a year in 2009 and 2010, to a low of \$295,100. Strong economic conditions from 2011 through 2014 led to an increase in the demand for new homes, and the average sales price increased at an average annual rate of 6 percent during this time.

New home construction, as measured by the number of single-family homes permitted, was relatively stable from 2000 through 2004, despite the economic impact of the dot.com bubble collapse; an average of 3,600 new homes were permitted annually (Figure 9). The buildup during the growth of the housing market bubble was fairly mild in the submarket, with new home construction increasing to an average of 4,150 homes permitted a year in 2005 and 2006; the limited amount of developable land in the submarket helped to constrain the amount of new home construction during this time. Conversely, the nationwide recession and housing crisis had a severe impact on new home construction in the submarket, causing permitting activity to decline an average of 35 percent annually from 2007 through 2009, to a low of 1,150 homes in 2009. New home construction stabilized in 2010 and increased gradually from 2011 through 2014, averaging 1,925 single-family homes permitted annually. During the 12 months ending April 2016, 2,725 single-family homes were permitted, up 11 percent from the 2,450 homes permitted during the 12 months ending March 2015 (preliminary data).

Nearly all new home construction in the Portland submarket is in smaller subdivisions with fewer than 50 homes, because available land is becoming harder to acquire. As

Figure 9. Single-Family Homes Permitted in the Portland Submarket, 2000 to Current



Notes: Includes townhomes. Current includes data through April 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

Housing Market Trends

Sales Market—Portland Submarket Continued

the average sales prices continues to climb, the most common target market for new single-family homes is second- and third-time homebuyers looking to upgrade into a larger home, rather than the first-time homebuyer demographic that was most prevalent during the early stage of the housing market recovery (local developers). Numerous communities are under construction throughout the submarket, mainly concentrated in suburban cities that surround the city of Portland, and prices range considerably. New homes are typically priced higher in the city of

Portland; for example, home prices in the new subdivision of Cedar Mills in northwest Portland start in the mid-\$600,000s, whereas new homes in Legend at Villebois in Wilsonville in the southeastern part of the submarket start in the high \$200,000s. In the city of Happy Valley in the eastern portion of the submarket, two communities have new homes for sale, both with starting prices in the high \$300,000-to-mid-\$400,000 range.

During the 3-year forecast period, demand is expected for 12,750 new homes in the Portland submarket (Table 1). The 1,050 homes currently under construction and a portion of the 13,000 other vacant units that may return to the market will satisfy some of the forecast demand. Table 4 illustrates the estimated demand for new sales housing in the submarket by price range. Demand is expected to increase modestly during each year of the forecast period as economic conditions remain strong and as household finances and access to credit improve.

Table 4. Estimated Demand for New Market-Rate Sales Housing in the Portland Submarket During the Forecast Period

Price Range (\$)		Units of Demand	Percent of Total
From	To		
200,000	299,999	1,525	12.0
300,000	399,999	3,175	25.0
400,000	499,999	3,175	25.0
500,000	599,999	2,550	20.0
600,000	699,999	1,275	10.0
700,000	and higher	1,025	8.0

Notes: The 1,050 homes currently under construction and a portion of the estimated 13,000 other vacant units in the submarket will likely satisfy some of the forecast demand. The forecast period is May 1, 2016, to May 1, 2019.

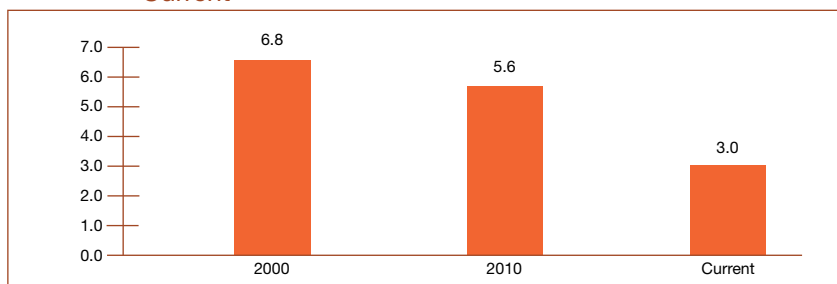
Source: Estimates by analyst

Rental Market—Portland Submarket

The current rental housing market in the Portland submarket is tight, with an overall estimated vacancy rate of 3.0 percent, down from 5.6 percent

in April 2010 (Figure 10). Along with increasingly high sales prices, strong economic growth and net in-migration in the submarket since 2010 have contributed to increased demand for rental housing. The apartment market is also tight, despite the addition of an estimated 3,200 units since the first quarter of 2015 (MPF Research). By comparison, approximately 1,125 units were added to the inventory during the first two quarters of 2014, and only 510 units during the first two quarters of 2015. Within the seven MPF-defined areas (hereafter areas) in the Portland

Figure 10. Rental Vacancy Rates in the Portland Submarket, 2000 to Current



Note: The current date is May 1, 2016.

Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by analyst

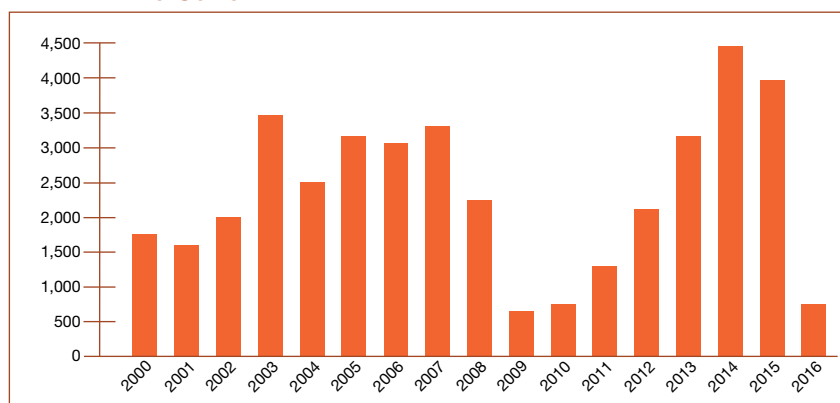
submarket, the apartment vacancy rates range from a high of 4.4 percent in the Central Portland area, up from 3.0 percent a year ago, to a low of 1.9 percent in the Gresham area, up from 1.4 percent a year ago. The increase in the vacancy rate in the Central Portland area is mainly because it is the location of more than one-third of the recently completed units in the submarket. Multifamily construction has been relatively limited in the Gresham area, contributing to the very low vacancy rate. Of the 3,200 units completed in the submarket during the past year, approximately 42 percent, or 1,325 units, were in the East Portland area, which reported a vacancy rate of 3.8 percent during the first quarter of 2016, up from 2.0 percent a year ago. Since 2010, the only area to have a vacancy rate above 5.0 percent was Central Portland during the first quarter of 2011.

Rent growth occurred in each MPF-defined area from the first quarter of 2015 to the first quarter of 2016. Except for the Central Portland area, which reported rent growth of 9 percent, all other areas in the submarket reported increases of more than 10 percent, with the largest increase in the Gresham area, at 17 percent.

The highest average asking rent was \$1,506 in the Central Portland area. Average asking rents by unit type were \$1,066 for a studio unit, \$1,406 for a one-bedroom unit, \$1,961 for a two-bedroom unit, and \$2,341 for a three-bedroom unit. The lowest average asking rent was \$1,037 in the Gresham area, where asking rents by unit type were \$867 for a studio unit, \$878 for a one-bedroom unit, \$1,067 for a two-bedroom unit, and \$1,296 for a three-bedroom unit. Average rent growth was more moderate in the submarket from 2011 through 2014, with no area reporting average annual rent growth above 10 percent. Properties offering concessions were more common in 2011 and 2012, when market conditions were not as tight; as of the first quarter of 2016, the Southwest Portland area was offering the most in concessions, at slightly more than 2 percent.

Because of job losses and reduced rental demand in the Portland submarket, multifamily construction, as measured by the number of multifamily units permitted, slowed to an average of 710 units a year in 2009 and 2010 compared with an average of 3,100 units permitted annually from 2003 through 2007, when economic growth was strong (Figure 11). Multifamily permitting began to increase after 2010 in response to increased rental demand, partially because the foreclosure crisis caused households to shift toward renting, but also because of rapidly increasing net in-migration. From 2011 through 2015, multifamily permitting increased at an average annual rate of 39 percent, averaging 3,000 units permitted each year. During the 12 months ending April 2016, approximately 4,775 multifamily units were permitted, up 25 percent

Figure 11. Multifamily Units Permitted in the Portland Submarket, 2000 to Current



Notes: Excludes townhomes. Current includes data through April 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

from the 3,825 units permitted during the previous 12 months (preliminary data). Since 2010, condominium construction has comprised less than 8 percent of total multifamily construction compared with the peak period of 2000 through 2007, when approximately 37 percent of multifamily construction was intended for condominiums. Currently under construction is the 28-story condominium tower Cosmopolitan On the Park, which will feature 150 units in downtown Portland's most popular neighborhood, the Pearl District. The development is expected to be complete in August 2016, with sales prices ranging from the low \$400,000s for a one-bedroom/one-bathroom unit to \$3.8 million for the largest penthouse suites.

Within the submarket, apartment development is most popular in areas close to the downtown Portland core, including the Central Portland and the East Portland areas. Examples of developments currently under construction include the three-tower, 657-unit Hassalo on Eighth in the East Portland area and the 267-unit Modera Pearl apartments, in the Central Portland area. The first tower of Hassalo on Eighth opened in the summer of 2015, and the other two

are preleasing, with expected completion dates in late 2016 and early 2017; asking rents range from \$990 to \$1,809 for studio units, \$1,680 to \$3,225 for one-bedroom units, \$2,380 to \$3,850 for two-bedroom units, and \$3,043 to \$3,722 for three-bedroom units. Unit rents for Modera Pearl apartments are not available yet, because it will not be finished until late 2017. At the 244-unit Waterline Apartments, which was recently completed in the Central Portland area, asking rents are \$1,469 for studio units and range from \$1,560 to \$1,883 for one-bedroom units and from \$1,945 to \$2,422 for two-bedroom units.

During the 3-year forecast period, demand is expected for 10,650 new market-rate rental units in the Portland submarket (Table 1). The 4,900 units estimated to be under construction will satisfy part of the forecast demand. Demand is expected to be strongest in the first year of the forecast period and moderate in the second and third years as the new inventory is absorbed and market conditions become more balanced. Table 5 shows the estimated demand by rent level and number of bedrooms for new market-rate rental housing in the submarket during the forecast period.

Table 5. Estimated Demand for New Market-Rate Rental Housing in the Portland Submarket During the Forecast Period

Zero Bedrooms		One Bedroom		Two Bedrooms		Three or More Bedrooms	
Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand
1,000 to 1,199	470	1,100 to 1,299	1,275	1,300 to 1,499	1,675	1,500 to 1,699	230
1,200 to 1,399	530	1,300 to 1,499	1,700	1,500 to 1,699	2,150	1,700 to 1,899	85
1,400 or more	180	1,500 or more	1,275	1,700 or more	960	1,900 to 2,099	65
						2,100 or more	45
Total	1,175	Total	4,275	Total	4,800	Total	430

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 4,900 units currently under construction will likely satisfy some of the estimated demand. The forecast period is May 1, 2016, to May 1, 2019.

Source: Estimates by analysts

Sales Market—Beaverton-Hillsboro Submarket

The current sales housing market in the Beaverton-Hillsboro submarket is tight as the demand for homes increases and prices continue to appreciate, a trend that has been sustained since 2012. The current estimated sales vacancy rate is 1.0 percent, down from 2.1 percent in April 2010 (Table DP-3 at the end of this report). During the 12 months ending March 2016, 12,650 existing homes sold in the submarket, up 29 percent from a year ago (CoreLogic, Inc., with adjustments by the analyst). By comparison, existing home sales totaled 10,100 homes sold during the 12 months ending March 2015, up 13 percent from a year earlier. The high-tech industry recovered from the dot.com bubble collapse, and the submarket experienced strong job growth from 2004 through 2005, which resulted in strong household growth. An average of 14,750 homes sold annually from 2004 through 2005. Although existing home sales remained elevated in 2006, it marked the first year of declining sales; from 2006 through 2009, existing home sales fell by an average of 28 percent annually, to a low of 6,000 homes sold. Existing home sales increased modestly in 2010, boosted by the first-time homebuyers tax credit program, but fell again in 2011 when the program expired. The economic recovery accelerated from 2012 through 2014, causing household finances to improve and banks to ease their lending standards, which resulted in increased demand for homes; an average of 9,400 homes sold annually.

The average sales price of an existing home increased 8 percent, to \$318,300, during the 12 months

ending March 2016, exceeding the previous peak of \$309,600 in 2007 by nearly 3 percent. By comparison, the average sales price increased 3 percent, to \$295,100, during the 12 months ending March 2015. The national recession caused the demand for homes to drop substantially, which put downward pressure on sales prices. From 2008 through 2011, the average sales price declined at an average annual rate of 6 percent to a low of \$241,400. Housing market conditions started to improve as the economic recovery accelerated, and, from 2012 through 2014, the average sales price increased 7 percent a year.

During 2005 and 2006, before the housing market downturn, the rate of home loans that were seriously delinquent or had transitioned into REO status in the submarket averaged 0.5 percent, and REO sales accounted for 1 percent of all existing home sales (CoreLogic, Inc.). The foreclosure crisis that resulted from the national recession had a damaging impact on the housing market, however, and the percentage of home loans that were seriously delinquent or in REO status averaged almost 5.0 percent from 2009 through 2011, and REO sales accounted for 23 percent of total existing home sales. By comparison, the delinquency rate averaged 0.9 from 2000 through 2007, during a period of strong housing market conditions, and REO sales accounted for only 2 percent of existing home sales. Housing market conditions have improved consistently since 2011 as a result of the strong economic recovery, and, as of March 2016, 1.9 percent of home loans in the submarket were seriously delinquent or in REO status, down from 2.8 percent in

Housing Market Trends

Sales Market—Beaverton-Hillsboro Submarket *Continued*

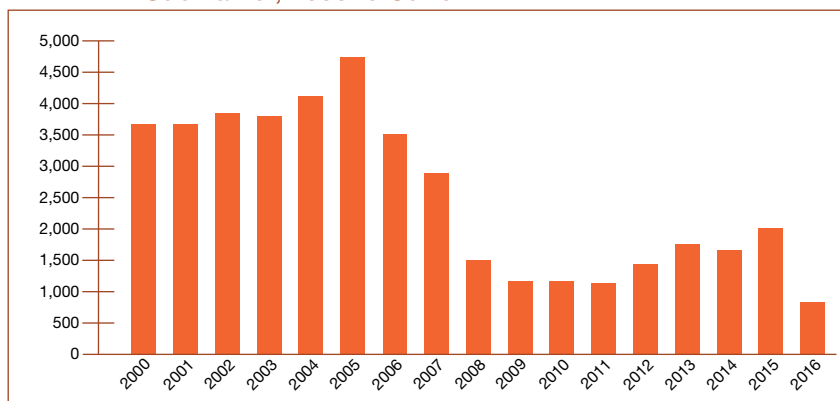
March 2015, and REO sales totaled 850, falling to 7 percent of all existing home sales. The average sales price of an REO home was \$226,500 during the 12 months ending March 2016, approximately 30 percent less than the sales price of a regular resale home.

The volume of new home sales in the submarket increased 14 percent, to 1,675 homes sold during the 12 months ending March 2016. By comparison, new home sales totaled 1,475 homes sold during the 12 months ending March 2015, up 3 percent from a year earlier. The economic expansion that occurred in the HMA from 2004 through 2007 especially benefited the submarket because of the relatively large number of rapidly expanding high-tech firms located in the submarket. New home sales peaked at an average of 4,125 homes sold annually in 2004 and 2005 and declined to an average of 3,300 homes sold a year in 2006 and 2007. Sales declined further as the housing market crisis worsened, averaging 1,335 homes sold a year from 2008 through 2010, before reaching a record low of 1,000 homes sold in 2011. The number of new home sales increased to an annual average of

1,375 homes sold from 2012 through 2014 because of strong economic growth. During the 12 months ending March 2016, the average sales price of a new home increased 4 percent from a year ago, to \$382,700, exceeding the previous peak of \$339,400 in 2008 by 13 percent. By comparison, the average sales price increased 16 percent during the 12 months ending March 2015 compared with prices during the previous 12 months. New home sales prices increased at an average annual rate of 9 percent from 2004 through 2008 and subsequently declined by an average of 5 percent a year from 2009 through 2012, to a low of \$277,200. Strong job growth and access to mortgage financing boosted the demand for new homes, causing prices to increase at an average annual rate of 13 percent from 2012 through 2014.

New home construction, as measured by the number of single-family homes permitted, has increased in the Beaverton-Hillsboro submarket since 2011 but remains below historical averages. During the 12 months ending April 2016, 2,250 single-family homes were permitted, a 36-percent increase from the 1,650 new homes permitted during the previous 12 months (preliminary data). New home construction was strong from 2000 through 2004, averaging 3,775 homes permitted annually despite the economic downturn that resulted from the collapse of the dot.com bubble, and permitting peaked in 2005, when 4,700 homes were permitted (Figure 12). Single-family home construction fell at an average annual rate of 30 percent from 2006 through 2009, to a low of 1,125 homes permitted, as a result of weakening housing market conditions and job losses brought on by the national recession.

Figure 12. Single-Family Homes Permitted in the Beaverton-Hillsboro Submarket, 2000 to Current



Notes: Includes townhomes. Current includes data through April 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

Housing Market Trends

Sales Market—Beaverton-Hillsboro Submarket Continued

From 2010 through 2014, an average of 1,400 new homes were permitted annually. New home construction in the submarket has generally concentrated in the cities of Beaverton and Hillsboro. The most common target

market for new single-family homes is second- and third-time homebuyers looking to upgrade into a larger home or new families earning high-tech industry wages that are typically much higher than the Area Median Income (local real estate agents).

Table 6. Estimated Demand for New Market-Rate Sales Housing in the Beaverton-Hillsboro Submarket During the Forecast Period

Price Range (\$)		Units of Demand	Percent of Total
From	To		
150,000	249,999	770	10.0
250,000	349,999	1,925	25.0
350,000	449,999	2,300	30.0
450,000	549,999	1,525	20.0
550,000	649,999	770	10.0
650,000	and higher	380	5.0

Notes: The 820 homes currently under construction and a portion of the estimated 3,800 other vacant units in the submarket will likely satisfy some of the forecast demand. The forecast period is May 1, 2016, to May 1, 2019.

Source: Estimates by analyst

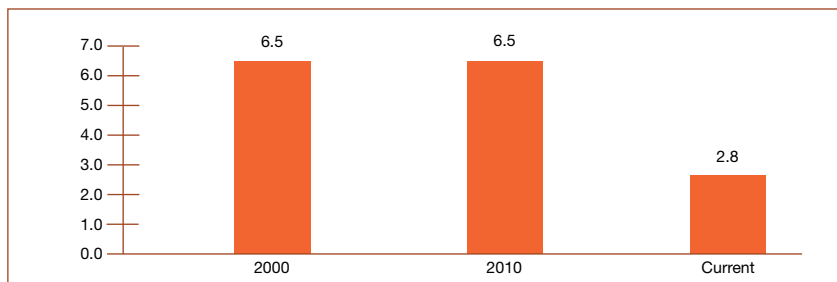
Demand is expected for 7,675 new homes in the Beaverton-Hillsboro submarket during the next 3 years (Table 1). The 820 homes currently under construction and a portion of the 3,800 other vacant units that may return to the market will satisfy some of the forecast demand. Table 6 illustrates the estimated demand for new sales housing in the submarket by price range. Demand is expected to be evenly distributed during each year of the forecast period.

Rental Market—Beaverton-Hillsboro Submarket

As a result of increased population growth since 2010, the rental housing market in the Beaverton-Hillsboro submarket remains tight, with an overall estimated vacancy rate of 2.8 percent compared with 6.5 percent in April 2010 (Figure 13). Despite a spike in multifamily rental construction since 2012, the apartment market has also remained tight. MPF Research defines three areas in the Beaverton-Hillsboro submarket: East

Beaverton, Aloha/West Beaverton, and Hillsboro. The apartment vacancy rate increased from 2.4 to 2.9 percent in the East Beaverton area and from 3.0 to 4.8 percent in the Hillsboro area, largely because household preferences have shifted toward the Aloha/West Beaverton area, which has experienced the largest gain in new inventory during the past 3 years and is closest to the Intel Corporation and NIKE, Inc. campuses. Of the 1,900 new units that have entered the market since the first quarter of 2014, 1,200 have been in the Aloha/West Beaverton area, but the vacancy rate has continued to decline and is estimated at 2.4 percent during the first quarter of 2016, down from 3.3 percent in the first quarter of 2015. Since 2010, the vacancy rates in all three areas have remained below 5.0 percent.

Figure 13. Rental Vacancy Rates in the Beaverton-Hillsboro Submarket, 2000 to Current



Note: The current date is May 1, 2016.

Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by analyst

Housing Market Trends

Rental Market—Beaverton-Hillsboro Submarket *Continued*

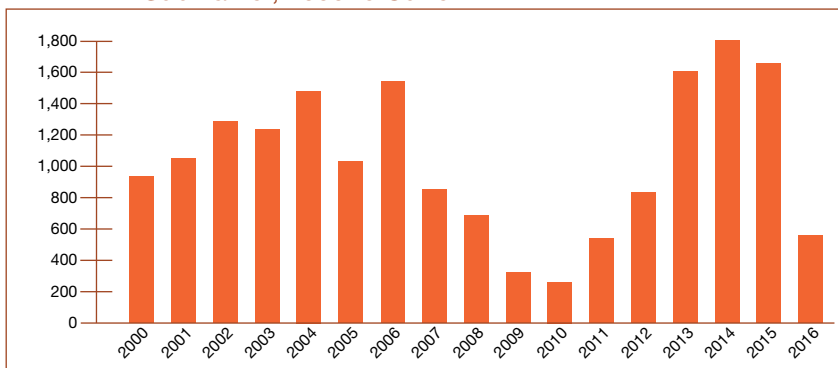
In percentage terms, the submarket has reported the strongest rent growth in the HMA from the first quarter of 2015 to the first quarter of 2016. The fastest rate of rent growth occurred in the East Beaverton area, at 19 percent, to an average of \$1,128; asking rents averaged \$848 for a studio unit, \$989 for a one-bedroom unit, \$1,182 for a two-bedroom unit, and \$1,411 for a three-bedroom unit. The average asking rent in the Hillsboro area increased 16 percent, to \$1,383, despite an increase in the vacancy rate; rents averaged \$1,180 for studio units, \$1,187 for one-bedroom units, \$1,425 for two-bedroom units, and \$1,719 for three-bedroom units. The smallest rent growth recorded in the submarket was in the Aloha/West Beaverton area, up 12 percent to \$1,226; rents averaged \$1,239 for studio units, \$1,081 for one-bedroom units, \$1,275 for two-bedroom units, and \$1,499 for three-bedroom units. Rent growth in the Aloha/West Beaverton area averaged 10 percent annually from the first quarter of 2013 through the first quarter of 2015. The East Beaverton and Hillsboro areas experienced milder average annual rent increases of 2 and 9 percent, respectively, during the same time. Studio units are most popular in newer developments,

with three-bedroom units taking the longest to lease (local property managers).

An average of 1,175 multifamily units were permitted in the Beaverton-Hillsboro submarket annually from 2000 through 2005, during a period of strong population growth (Figure 14). Multifamily permitting peaked in 2006, at 1,525 units, but subsequently declined at an average annual rate of 37 percent through 2010, to a low of 250 units permitted, because weak economic conditions resulted in reduced demand for condominiums and rental units. The foreclosure crisis fueled an increased demand for rental units, and multifamily permitting increased, averaging 670 units permitted a year in 2011 and 2012. As rental market conditions tightened further, builders responded by increasing multifamily building activity, which averaged 1,700 units annually in 2013 and 2014. During the 12 months ending April 2016, multifamily permitting decreased 6 percent, to 1,650 units permitted, compared with the number permitted during the previous 12 months (preliminary data). From 2004 through 2007, condominium construction peaked at nearly 40 percent of all multifamily building activity, as measured by the number of multifamily units permitted, in the submarket. The housing market collapse, however, caused a shift in preferences toward renting, increasing the demand for new apartment construction, and, since 2010, condominiums have comprised less than 10 percent of all multifamily units permitted.

Rental developments currently under construction or recently completed in the submarket include both affordable

Figure 14. Multifamily Units Permitted in the Beaverton-Hillsboro Submarket, 2000 to Current



Notes: Excludes townhomes. Current includes data through April 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

Housing Market Trends

Rental Market—Beaverton-Hillsboro Submarket Continued

and market-rate apartment projects. Sunset View Apartments is currently under construction with an expected completion date in the summer of 2016. The development will consist of 236 affordable apartment units close to the NIKE, Inc. headquarters campus in the city of Beaverton. The 352-unit Amberglen West apartments in the Aloha/West Beaverton area is currently under construction and expected to be complete in August 2017; asking rents will range from \$1,266 to \$1,598 for one-bedroom units, \$1,352 to \$2,033 for two-bedroom units, and \$1,904 to \$1,961 for three-bedroom units. Construction of the 255-unit Rowlock Apartments was completed in August 2015 in the Hillsboro area, with rents starting at

\$1,425 for studio units and ranging from \$1,425 to \$1,580 for one-bedroom units and from \$1,915 to \$2,070 for two-bedroom units.

During the next 3 years, demand is expected for 5,325 new market-rate rental units in the Beaverton-Hillsboro submarket (Table 1). The 970 units under construction will meet a portion of the forecast demand. Demand is expected to be strongest in the first year of the forecast period and moderate in the second and third years as the new inventory is absorbed and the market becomes more balanced. Table 7 shows the estimated demand by rent level and number of bedrooms for new market-rate rental housing in the submarket during the forecast period.

Table 7. Estimated Demand for New Market-Rate Rental Housing in the Beaverton-Hillsboro Submarket During the Forecast Period

Zero Bedrooms		One Bedroom		Two Bedrooms		Three or More Bedrooms	
Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand
1,000 to 1,199	160	1,150 to 1,349	930	1,250 to 1,449	1,325	1,550 to 1,749	370
1,200 or more	110	1,350 to 1,549	470	1,450 to 1,649	800	1,750 or more	160
		1,550 or more	370	1,650 or more	400		
Total	270	Total	1,775	Total	2,525	Total	530

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 970 units currently under construction will likely satisfy some of the estimated demand. The forecast period is May 1, 2016, to May 1, 2019.

Source: Estimates by analysts

Sales Market—Vancouver Submarket

The current sales housing market in the Vancouver submarket is tight, with an estimated vacancy rate of 1.0 percent, down from 2.1 percent in 2010 (Table DP-4 at the end of this report). Similar to trends in the other two submarkets, housing market conditions in the submarket have tightened rapidly since the economic recovery began, and most of the excess vacancies that resulted from the housing market collapse have been absorbed.

During the 12 months ending March 2016, 9,450 existing homes sold in the submarket, up 22 percent from a year ago, marking the largest number of existing homes sold since 2006 (CoreLogic, Inc., with adjustments by the analyst). From 2003 through 2005, relatively affordable sales housing in the submarket attracted new households, with an average of 11,950 existing homes sold annually. Existing home sales fell 22 percent in 2006, when economic growth began

to slow, and, from 2007 through 2010, existing home sales fell by an average of 17 percent a year, to a low of 4,925 homes sold. Economic conditions moderated in 2010, and new home sales remained unchanged. Growth in existing home sales resumed as the economy fully recovered, and, from 2011 through 2014, an average of 6,400 existing homes sold annually. The average sales price of an existing home increased 8 percent, to \$283,300, during the 12 months ending March 2016, approximately 20 and 10 percent less than the average existing home sales prices in the Portland and Beaverton-Hillsboro submarkets, respectively. The current average sales price remains 2 percent less than the peak sales price of \$289,400 in 2007. From 2008 through 2011, the average sales price declined at an average annual rate of 8 percent, to a low of \$210,500, because substantial job losses caused a sharp drop in the demand for sales homes. When job growth recovered and the demand for homes increased, the average sales price increased an average of 8 percent annually from 2012 through 2014.

Strong job growth and increasing home values during the past 3 years helped reduce seriously delinquent loans and REO properties in the Vancouver submarket and the HMA. During March 2016, 1.8 percent of all home loans in the submarket were seriously delinquent or had transitioned into REO status, down from 2.6 percent in March 2015, and REO sales declined from 6 to 4 percent of total existing home sales (CoreLogic, Inc., with adjustments by the analyst). By comparison, the delinquency rate, including homes in REO status, averaged approximately 7.0 percent from 2009 through 2011, during the

worst of the foreclosures crisis, and REO sales comprised almost one-fourth of all existing home sales. By comparison, from 2000 through 2007, the delinquency rate averaged 1.3 percent and REO sales accounted for less than 2 percent of existing home sales. The average sales prices of an REO home sale in the submarket was \$232,000 during the 12 months ending March 2016, approximately 18 percent less than the sales price of a regular resale home.

The new home sales market has improved dramatically since 2011, with home sales increasing an average of 25 percent annually. During the 12 months ending March 2016, new home sales totaled 1,700 homes sold, up 32 percent from the 1,300 new homes sold during the 12 months ending March 2015. An average of 2,875 new homes sold annually from 2003 through 2005, when economic conditions were strong and access to financing was more readily available. Following the national and regional trend, however, new home sales declined with the onset of the recession, and, from 2006 through 2011, new home sales fell at an average annual rate of 23 percent, to a low of 650 homes sold. The average sales price of a new home increased 10 percent, to \$328,400, during the 12 months ending March 2016 compared with a 7-percent increase during the previous 12 months. Sales prices increased at an average annual rate of 3 percent from 2004 through 2006 and subsequently declined an average of 9 percent a year from 2007 through 2009, to a low of \$237,600. Prices increased at an average annual rate of 5 percent from 2010 through 2014, when economic conditions improved and demand for new homes returned.

Housing Market Trends

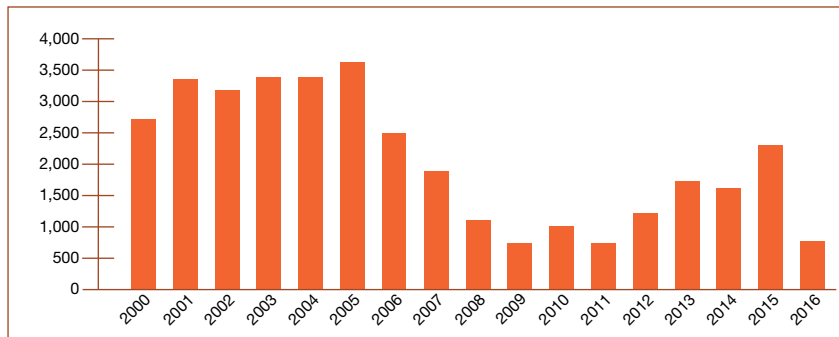
Sales Market—Vancouver Submarket Continued

Strong housing demand and increasing sales prices have led to an increase in new home construction in the Vancouver submarket since 2011. During the 12 months ending April 2016, 2,525 single-family homes were permitted, up 45 percent from the 1,750 homes permitted during the previous 12 months (preliminary data). Single-family homebuilding was robust from 2000 through 2005, when population growth in the submarket was strongest, and an average of 3,250 single-family homes were permitted annually (Figure 15). Homebuilding dropped dramatically following the onset of the national

recession as net in-migration to the submarket plummeted. From 2006 through 2009, homebuilding activity declined at an average annual rate of 33 percent, to a low of 720 single-family homes permitted. After the economic recovery was fully under way, homebuilding increased and an average of 1,525 new single-family homes were permitted a year from 2012 through 2014. Most buyers are second- and third-time homebuyers looking to upgrade to larger homes; however, more first-time homebuyers are purchasing in the Vancouver submarket than in the Portland or Beaverton-Hillsboro submarkets because housing in the submarket is still relatively affordable (local developers and real estate agents). Single-family development is concentrated in Ridgefield in the northeastern portion of the submarket and in Camas in the eastern section of the submarket. In Ridgefield, new home prices range from the mid-\$200,000s to the upper \$600,000s. New homes in Camas start in the mid-\$300,000 range and increase to the mid-\$900,000s.

Demand is expected for 6,800 new homes in the Vancouver submarket during the next 3 years (Table 1). The 940 homes currently under construction and a portion of the 3,900 other vacant units that may return to the market will satisfy some of the forecast demand. Table 8 illustrates the estimated demand for new sales housing in the submarket by price range. Demand is expected to be evenly distributed during each year of the forecast period.

Figure 15. Single-Family Homes Permitted in the Vancouver Submarket, 2000 to Current



Notes: Includes townhomes. Current includes data through April 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

Table 8. Estimated Demand for New Market-Rate Sales Housing in the Vancouver Submarket During the Forecast Period

Price Range (\$)		Units of Demand	Percent of Total
From	To		
150,000	249,999	680	10.0
250,000	349,999	1,350	20.0
350,000	449,999	2,375	35.0
450,000	549,999	1,350	20.0
550,000	649,999	680	10.0
650,000	and higher	340	5.0

Notes: The 940 homes currently under construction and a portion of the estimated 3,900 other vacant units in the submarket will likely satisfy some of the forecast demand. The forecast period is May 1, 2016, to May 1, 2019.

Source: Estimates by analyst

Rental Market—Vancouver Submarket

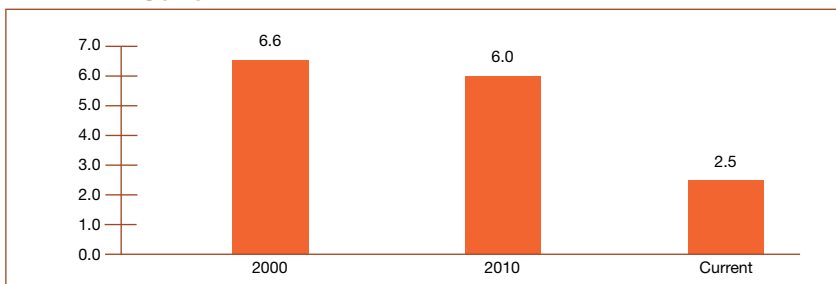
The current rental housing market in the Vancouver submarket is tight, with an overall estimated vacancy rate of 2.5 percent, down from 6.0 percent in April 2010 (Figure 16). The nationwide recession and housing market collapse caused a decrease in homeownership and a surge in demand for rental units since 2011. Although apartment construction has increased substantially during the past several years, it has not been strong enough to compensate for the record low level of construction from 2008 through 2012, and market conditions remain tight, with an estimated apartment vacancy rate of 2.5 percent during the first quarter of 2016, up from 1.7 percent a year ago (MPF Research). During the same time, the average asking rent in the submarket increased 10 percent, to \$1,068,

despite the uptick in the vacancy rate. Rents averaged \$777 for studio units, \$919 for one-bedroom units, \$1,150 for two-bedroom units, and \$1,294 for three-bedroom units. By comparison, rent growth averaged 8 percent annually from the first quarter of 2011 through the first quarter of 2014.

An average of 570 multifamily units were permitted annually in the Vancouver submarket from 2000 through 2007 (Figure 17). The national recession and housing market collapse caused multifamily construction to plummet from 2008 through 2011, when an average of 150 multifamily units were permitted annually. With increased rental demand stemming from the effects of the housing market crisis, the apartment market began to tighten quickly, and builders responded by increasing apartment construction 35 percent in 2012, to 370 units permitted. Apartment construction spiked in 2013, when 1,250 units were permitted, followed by a drop to 660 units permitted in 2014. During the 12 months ending April 2016, 1,050 multifamily units were permitted, up 33 percent from the 790 units permitted during the 12 months ending April 2015 (preliminary data). Condominium construction has accounted for less than 5 percent of total multifamily building activity in the submarket since 2010. By comparison, from 2004 through 2007, when financing was easier to obtain, condominium construction peaked at 37 percent of all multifamily building activity, as measured by the number of multifamily units permitted in the submarket.

Two of the larger developments currently under construction in the submarket are the 155-unit Columbia

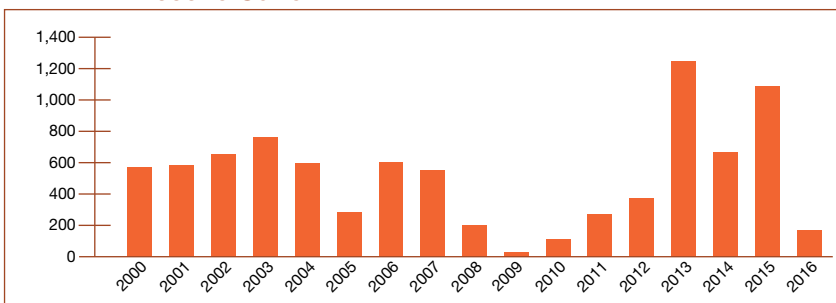
Figure 16. Rental Vacancy Rates in the Vancouver Submarket, 2000 to Current



Note: The current date is May 1, 2016.

Sources: 2000 and 2010—2000 Census and 2010 Census; current—estimates by analyst

Figure 17. Multifamily Units Permitted in the Vancouver Submarket, 2000 to Current



Notes: Excludes townhomes. Current includes data through April 2016.

Sources: U.S. Census Bureau, Building Permits Survey; estimates by analyst

Housing Market Trends

Rental Market—Vancouver Submarket Continued

View Apartments Phase 2 and the 156-unit Four Seasons Central. The mix of units for the Columbia View Apartments includes one-, two-, and three-bedroom units; the anticipated completion date is in late 2017, and asking rents are unavailable. Construction of the Four Seasons Central is expected to be complete in October 2016; asking rents range from \$1,199 to \$1,575 for one-bedroom units and from \$1,544 to \$1,699 for two-bedroom units and are \$1,705 for three-bedroom units.

During the next 3 years, demand is expected for 2,950 new market-rate rental units in the Vancouver submarket (Table 1). The 1,125 units under construction will meet a portion of the forecast demand. Demand is expected to be evenly distributed during each year of the forecast period. Table 9 shows the estimated demand by rent level and number of bedrooms for new market-rate rental housing in the submarket during the forecast period.

Table 9. Estimated Demand for New Market-Rate Rental Housing in the Vancouver Submarket During the Forecast Period

Zero Bedrooms		One Bedroom		Two Bedrooms		Three or More Bedrooms	
Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand	Monthly Gross Rent (\$)	Units of Demand
800 to 999	95	850 to 1,049	580	1,100 to 1,299	1,050	1,350 to 1,549	190
1,000 or more	50	1,050 or more	310	1,300 or more	570	1,550 or more	100
Total	150	Total	890	Total	1,625	Total	300

Notes: Numbers may not add to totals because of rounding. Monthly rent does not include utilities or concessions. The 1,125 units currently under construction will likely satisfy some of the estimated demand. The forecast period is May 1, 2016, to May 1, 2019.

Source: Estimates by analysts

Data Profiles

Table DP-1. Portland HMA* Data Profile, 2000 to Current

	2000	2010	Current	Average Annual Change (%)	
				2000 to 2010	2010 to Current
Total resident employment	1,031,816	1,084,124	1,179,000	0.5	1.6
Unemployment rate	4.5%	10.2%	5.0%		
Nonfarm payroll jobs	981,500	979,200	1,123,000	0.0	2.6
Total population	1,927,881	2,226,009	2,395,000	1.4	1.2
Total households	745,531	867,794	936,700	1.5	1.3
Owner households	469,156	535,433	559,500	1.3	0.7
Percent owner	62.9%	61.7%	59.7%		
Renter households	276,375	332,361	377,200	1.9	2.1
Percent renter	37.1%	38.3%	40.3%		
Total housing units	790,876	925,076	974,100	1.6	0.9
Owner vacancy rate	2.2%	2.2%	1.0%		
Rental vacancy rate	6.7%	5.9%	2.9%		
Median Family Income	\$52,400	\$70,000	\$73,300	2.9	0.9

*Portland-Vancouver-Hillsboro HMA.

Notes: Numbers may not add to totals because of rounding. Employment data represent annual averages for 2000, 2010, and the 12 months through April 2016. Median Family Incomes are for 1999, 2009, and 2014. The current date is May 1, 2016.

Sources: U.S. Census Bureau; U.S. Department of Housing and Urban Development; estimates by analyst

Table DP-2. Portland Submarket Data Profile, 2000 to Current

	2000	2010	Current	Average Annual Change (%)	
				2000 to 2010	2010 to Current
Total population	1,042,437	1,160,677	1,239,000	1.1	1.1
Total households	416,674	469,513	504,500	1.2	1.2
Owner households	258,366	281,474	294,100	0.9	0.7
Percent owner	62.0%	60.0%	58.3%		
Rental households	158,308	188,039	210,400	1.7	1.9
Percent renter	38.0%	40.0%	41.7%		
Total housing units	443,087	502,475	527,000	1.3	0.8
Owner vacancy rate	2.2%	2.4%	1.0%		
Rental vacancy rate	6.8%	5.6%	3.0%		

Notes: Numbers may not add to totals because of rounding. The current date is May 1, 2016.

Sources: U.S. Census Bureau; U.S. Department of Housing and Urban Development; estimates by analyst

Table DP-3. Beaverton-Hillsboro Submarket Data Profile, 2000 to Current

	2000	2010	Current	Average Annual Change (%)	
				2000 to 2010	2010 to Current
Total population	530,334	628,903	683,400	1.7	1.4
Total households	197,894	235,660	254,800	1.8	1.3
Owner households	122,467	146,604	152,800	1.8	0.7
Percent owner	61.9%	62.2%	60.0%		
Rental households	75,427	89,056	102,000	1.7	2.3
Percent renter	38.1%	37.8%	40.0%		
Total housing units	209,183	249,560	263,100	1.8	0.9
Owner vacancy rate	2.3%	2.1%	1.0%		
Rental vacancy rate	6.5%	6.5%	2.8%		

Notes: Numbers may not add to totals because of rounding. The current date is May 1, 2016.

Sources: U.S. Census Bureau; U.S. Department of Housing and Urban Development; estimates by analyst

Table DP-4. Vancouver Submarket Data Profile, 2000 to Current

	2000	2010	Current	Average Annual Change (%)	
				2000 to 2010	2010 to Current
Total population	355,110	436,429	472,200	2.1	1.3
Total households	130,963	162,621	177,350	2.2	1.4
Owner households	88,323	107,355	112,600	2.0	0.8
Percent owner	67.4%	66.0%	63.5%		
Rental households	42,640	55,266	64,750	2.6	2.6
Percent renter	32.6%	34.0%	36.5%		
Total housing units	138,606	173,041	184,000	2.2	1.0
Owner vacancy rate	2.0%	2.1%	1.0%		
Rental vacancy rate	6.6%	6.0%	2.5%		

Notes: Numbers may not add to totals because of rounding. The current date is May 1, 2016.

Sources: U.S. Census Bureau; U.S. Department of Housing and Urban Development; estimates by analyst

Data Definitions and Sources

2000: 4/1/2000—U.S. Decennial Census
 2010: 4/1/2010—U.S. Decennial Census
 Current date: 5/1/2016—Analyst’s estimates
 Forecast period: 5/1/2016–5/1/2019—Analyst’s estimates

The metropolitan statistical area definition in this report is based on the delineations established by the Office of Management and Budget (OMB) in the OMB Bulletin dated February 28, 2013.

Demand: The demand estimates in the analysis are not a forecast of building activity. They are the estimates of the total housing production needed to achieve a balanced market at the end of the 3-year forecast period given conditions on the as-of date of the analysis, growth, losses, and excess vacancies. The estimates do not account for units currently under construction or units in the development pipeline.

Other Vacant Units: In the U.S. Department of Housing and Urban Development’s (HUD’s) analysis, other vacant units include all vacant units that are not available for sale or for rent. The term therefore includes units rented or sold but not occupied; held for seasonal, recreational, or occasional use; used by migrant workers; and the category specified as “other” vacant by the Census Bureau.

Building Permits: Building permits do not necessarily reflect all residential building activity that occurs in an HMA. Some units are constructed or created without a building permit or are issued a different type of building permit. For example, some units classified as commercial structures are not reflected in the

residential building permits. As a result, the analyst, through diligent fieldwork, makes an estimate of this additional construction activity. Some of these estimates are included in the discussions of single-family and multifamily building permits.

For additional data pertaining to the housing market for this HMA, go to huduser.gov/publications/pdf/CMARtables_Portland_Vancouver_HillsboroOR_WA_16.pdf.

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This analysis has been prepared for the assistance and guidance of HUD in its operations. The factual information, findings, and conclusions may also be useful to builders, mortgagees, and others concerned with local housing market conditions and trends. The analysis does not purport to make determinations regarding the acceptability of any mortgage insurance proposals that may be under consideration by the Department.

The factual framework for this analysis follows the guidelines and methods developed by HUD’s Economic and Market Analysis Division. The analysis and findings are as thorough and current as possible based on information available on the as-of date from local and national sources. As such, findings or conclusions may be modified by subsequent developments. HUD expresses its appreciation to those industry sources and state and local government officials who provided data and information on local economic and housing market conditions.

For additional reports on other market areas, please go to huduser.gov/portal/ushmc/chma_archive.html.