



FEBRUARY 2017

Regional Performance Over Time

Case Study: The Bend-Redmond, Ore.,
Metropolitan Statistical Area

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MILKEN INSTITUTE
CENTER FOR JOBS AND HUMAN CAPITAL

ACKNOWLEDGMENTS

The authors are grateful for the insight and information shared with us by members of the Bend-Redmond community during our interviews. We are also indebted to Roger Lee and his team at Economic Development for Central Oregon for their introductions and other forms of valuable assistance. Thanks also to our Milken Institute colleagues Ross DeVol and Perry Wong, whose regional economics research is the foundation on which this program is built.

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1 Introduction

How a region copes with economic challenges is as important to its long-term prosperity as how it grows in good times. These challenges come in many forms—a drop in demand for a region’s core export, increased competition from abroad, or the loss of a major employer, for example. Although local leaders may anticipate some of them, regions cannot prevent or prepare for every potential risk to their economic base. Certain regions, such as the Bend-Redmond metropolitan statistical area (MSA) in Oregon, have been able to rebound more quickly from an economic downturn than their peers. What factors contributed to this revival, and are they unique to the region? Or are there approaches that could be adopted in peer cities? Examining the shared characteristics and strategies of resilient economies may offer insight into the practices that support sustained prosperity.

The Milken Institute has tracked and evaluated the success of metropolitan areas in its annual Best-Performing Cities (BPC) index since 1999, highlighting the urban regions that are outperforming peers on key measures of economic health, including total employment and wage growth.¹ Our scale includes a mix of one- and five-year indicators to capture recent momentum as well as achievement in the medium term. Building on the Best-Performing Cities index, the “Regional Performance Over Time” series of reports examines what sets resilient cities apart.

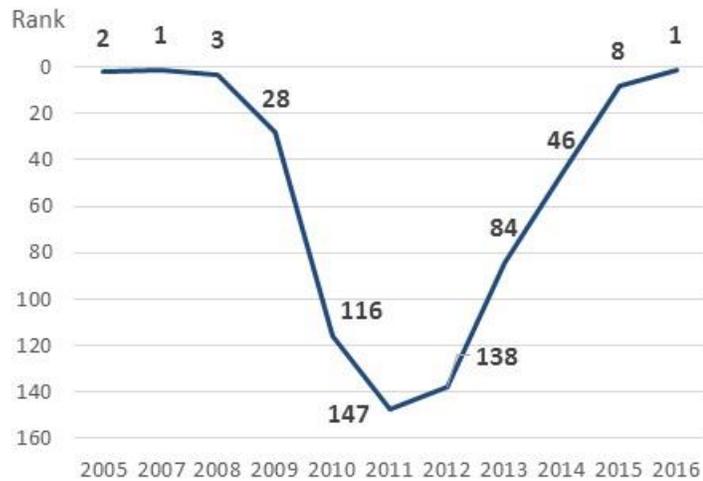
In an earlier paper,² we grouped cities with similar industrial profiles using a cluster analysis and evaluated performance over time on the Best-Performing Cities index within groups. This approach unveiled trends within each group and identified cities that outperformed their peers through the business cycle. These regions were noted as being worthy of further investigation to understand what enabled them to weather the same external shocks more effectively.

The Bend-Redmond MSA was grouped with other Retreats, our term for bedroom communities, travel destinations, and retirement havens characterized by concentrations in the leisure, hospitality, retail, and, to a lesser extent, construction industries. Like its peers, the Bend-Redmond MSA has benefited from the natural beauty of its setting, attracting tourists and residents interested in outdoor recreation to the region. Situated in central Oregon, east of the Cascade mountain range, its high desert location yields more dry days than the Oregon coast,³ drawing in vacationers from Portland and beyond. A portion of these visitors choose to make a permanent move, citing the lifestyle, the landscape, schools, and home prices as reasons for leaving more expensive coastal metros. The Bend-Redmond region has seen significant net in-migration, with its population growing by 50 percent between 2000 and 2015, although the pace slowed during the Great Recession.⁴ As in other Retreats, the housing market declined significantly between 2007 and 2011,⁵ and employment in the construction industry waned—driving down the metro’s rankings in the BPC index.

Unlike its peers, the Bend-Redmond MSA recovered quickly. The precipitous drop from placing in the top three best-performing small cities between 2005 and 2008 to its low of 147 in 2011 (Figure 1) was

mirrored by St. George, Utah, and Naples-Marco Island, Fla. But by 2015, the Bend-Redmond MSA was back in the top 10, and in 2016 it ranked first in our small cities index. The unemployment rate, once at 16.3 percent, is now down to 5.2 percent.⁶ Home prices have almost completed their rise back to levels reached during the pre-recession boom, and construction employment is rising as activity in the sector picks up the pace.⁷ The region is back to managing growth rather than managing decline.

Figure 1 Milken Institute Best-Performing Cities ranking for Bend-Redmond MSA (2005-2016)



Source: Milken Institute.

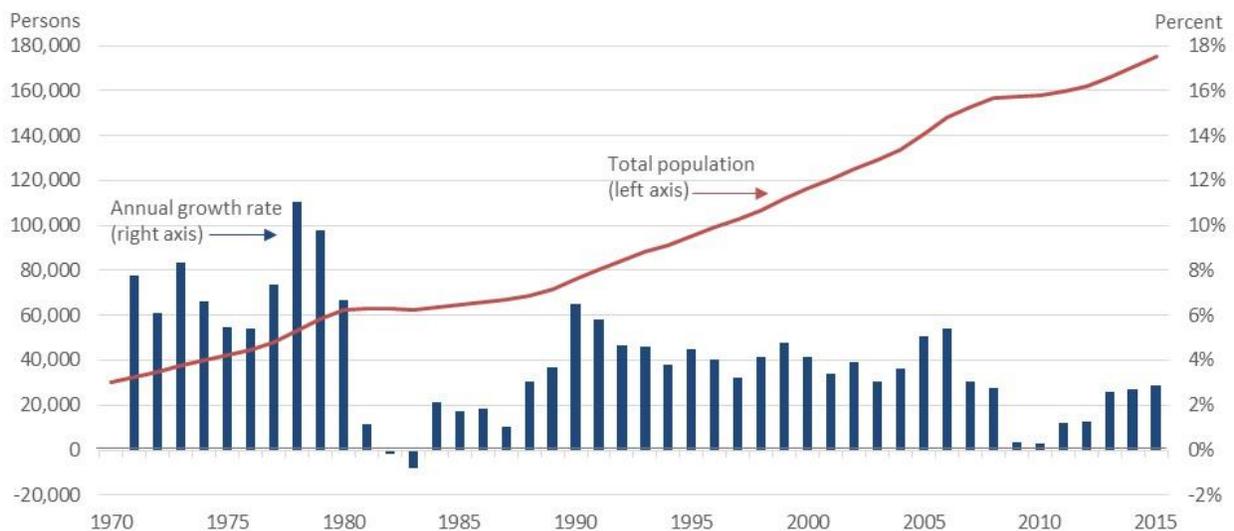
Based on the Bend-Redmond MSA's ability to recover faster than its peers, and indeed outperform every other small metro on our most recent index, this case study aims to illuminate the characteristics, choices, and strategies that contributed to its revival. While some of the strategies might be applicable only to a subset of U.S. metros—fellow Retreats with similar assets or smaller locales—others might be relevant to a broader set of cities. This case study, based on interviews, site visits, and independent research, is the first in a series by the Milken Institute examining the resilience of cities. The “Regional Performance Over Time” research aims to use the experiences behind the numbers to offer decision-makers in peer regions a suite of best practices to consider as they pursue robust, sustained prosperity for their communities.

2 Population, In-Migration, and Growth

One of the defining characteristics of the Bend-Redmond MSA is its population growth of recent decades, fueled primarily by in-migration. The composition of the community has changed as it has expanded, as have the core industries. Understanding the scale of this growth is necessary to appreciate the opportunities and risks the region faces as it tries to manage its effects.

The long-term population trend in the Bend-Redmond MSA is upward. Growth slowed in the 1980s, but the population has increased rapidly since the early 1990s, though it stalled during the last recession. Starting in 2011, the region gradually regained momentum, and the population reached 175,268 in 2015 (Figure 2).

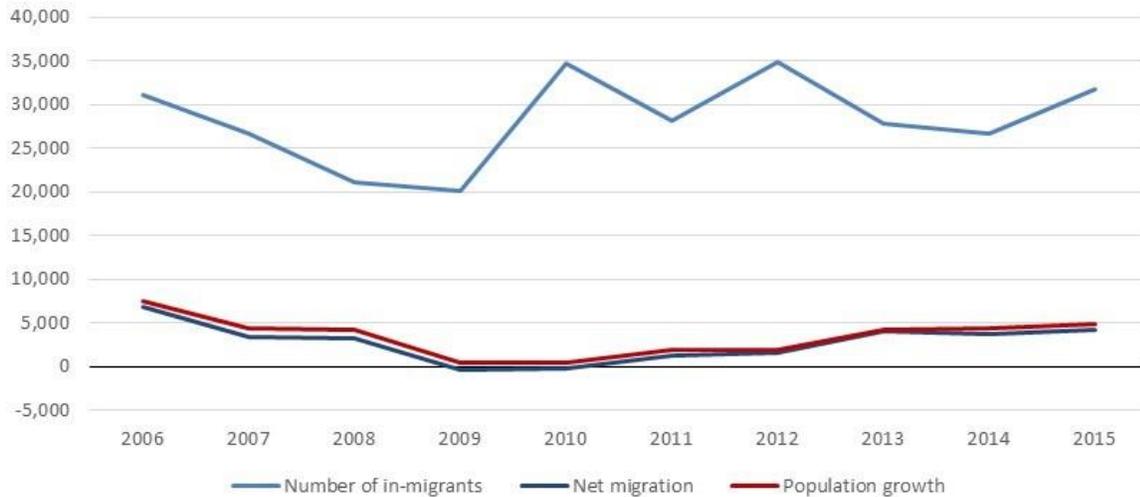
Figure 2 Total population and population growth in Bend-Redmond MSA, 1970-2015



Sources: U.S. Census Bureau, Milken Institute.

An examination of the migration statistics from the past decade (Figure 3) reveals that the net migration pattern is largely in line with population growth, confirming that the growth of this region can be primarily attributed to the inflow of migrants.

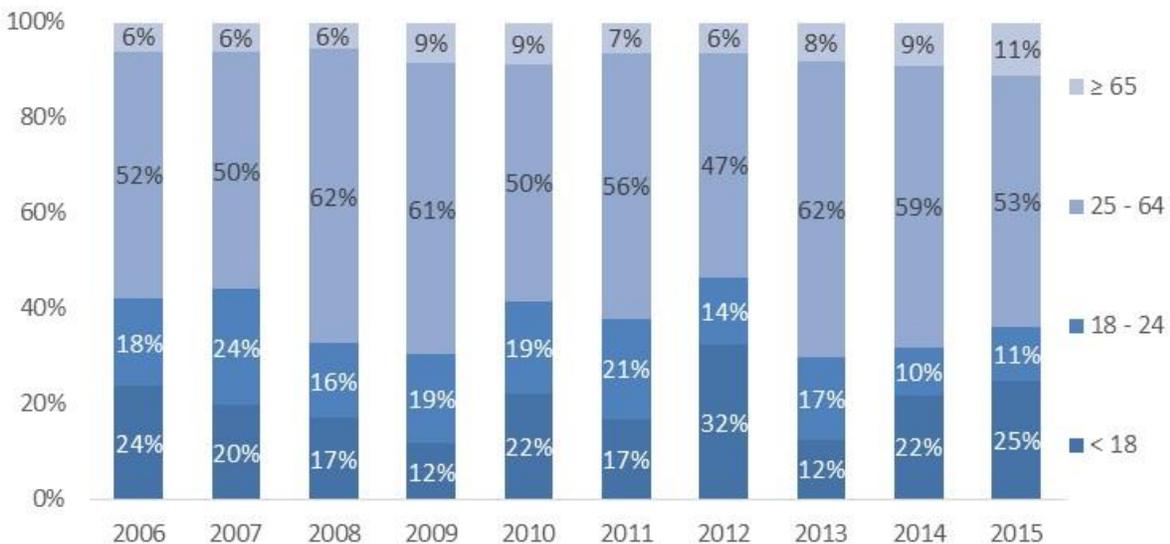
Figure 3 Migration and net migration to the Bend-Redmond MSA, 2006-2015



Sources: IPUMS USA ACS, U.S. Census Bureau, Moody’s Analytics, Milken Institute.

Over the last decade, the majority of in-migrants to the Bend-Redmond region have been of working age, belonging to the 25-to-64 age bracket (Figure 4). The percentage of in-migrants under 18 peaked in 2012 at 32 percent, plummeting to 12 percent in 2013 and steadily climbing back since then. The fact that the in-migrant cohort consists mainly of children under 18 and working-age people suggests that this region serves as a solid base for raising families. Older adults (65-plus) accounted for 6 percent to 11 percent of in-migrants to this metro during the decade. Although the share of college-age (18 to 24) in-migrants shrank in 2014 and 2015, accounting for approximately 10 percent of in-migrants, the Oregon State University (OSU) Cascades campus, which began offering a four-year degree in late 2015, may attract more college-age people to the region.

Figure 4 Age profile of in-migrants to Bend-Redmond MSA, 2006-2015

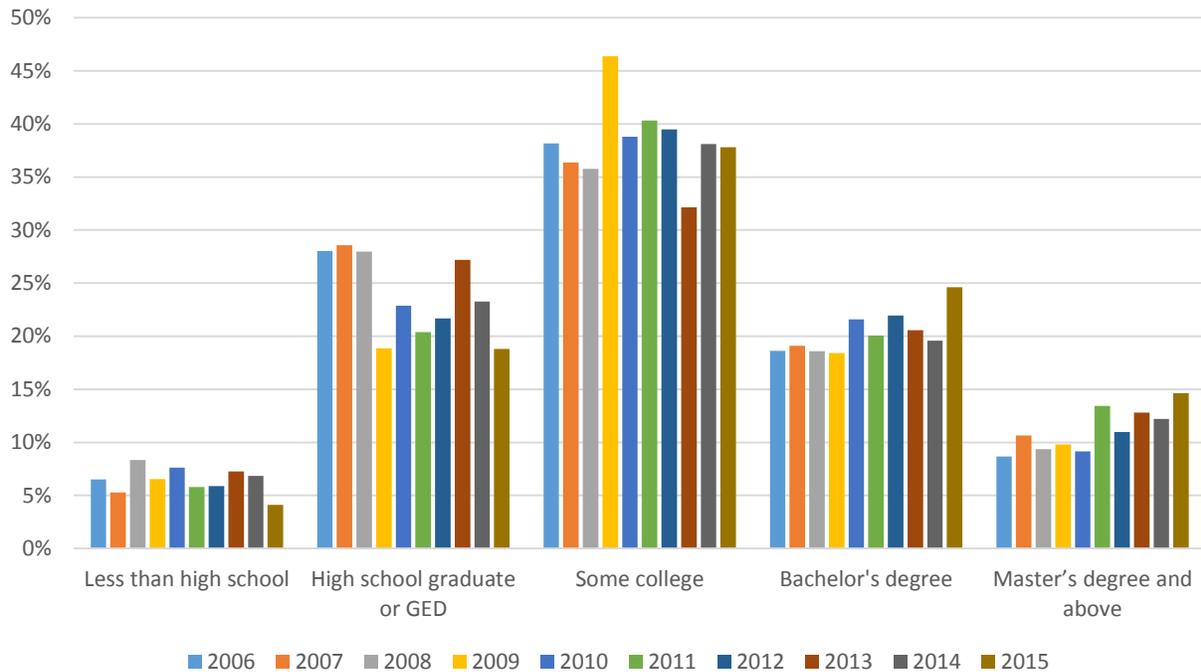


Sources: IPUMS USA ACS, Milken Institute.

Note: Figures may not sum to 100 percent due to rounding

When it comes to educational attainment among in-migrants, few have arrived with less than a high school diploma in the last decade and more possessed bachelor’s or master’s degrees (Figure 5). In addition, the proportion of in-migrants with at least a bachelor’s degree surpassed that of the total population in 2015. Overall, the educational level of people who moved to this region has risen.

Figure 5 Educational attainment of in-migrants aged 25 and above in Bend-Redmond MSA



Sources: IPUMS USA ACS, Milken Institute.

2.1 Key findings: population, in-migration, and growth

| Regional characteristics | Potential impact on resilience |
|--|--|
| Significant in-migration driving population growth | <ul style="list-style-type: none"> • Growing workforce • Increasing strain on infrastructure • Need to manage growth to maintain assets |
| Higher educational attainment among migrants | <ul style="list-style-type: none"> • Talent to staff high-skill industries |

3 Building on Strengths: Key Industries

Characterized as a Retreat economy, the Bend-Redmond MSA was booming leading up to the recession and hit hard once the national economy took a turn for the worse. Retreat-based industries are often thought to be made up of luxury goods and services, suggesting that it should be difficult to recover when consumer confidence is low and disposable incomes are hurting. However, the Bend-Redmond area's regionally unique characteristics and efforts to diversify its economy pulled the metro out of its decline quickly relative to peers.

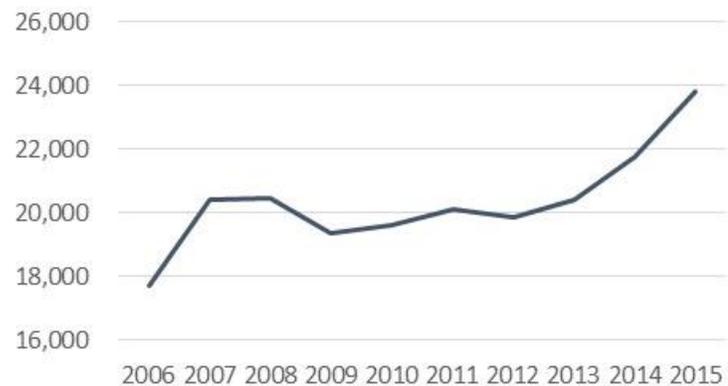
3.1 Tourism

Bend-Redmond is exceptional, even in Oregon, in that its natural geography lends itself to a multitude of recreational activities that attract tourism while the MSA remains isolated from larger cities. Home to Mount Bachelor, Deschutes National Forest, and a handful of golf courses, the region offers skiing, snowboarding, hiking, golfing, cycling, rock climbing, and even white-water rafting. This means even during a downturn Oregonians might trade in their plans for out-of-state or out-of-country vacations for a trip to Bend. Then when the economy improves, Bend is able to attract more interstate and international travelers again. For this reason, the MSA's tourism-related industries boom in the good times and are less affected during downturns. Even in recession years, employment in the arts, entertainment, and recreation industry grew 3.67 percent, putting it in the top five most recession-proof industries for employment.⁸ During recovery years Bend's accommodation and food services industry saw 32.49 percent employment growth, evidencing speedy gains.⁹

Bend's concentration in the tourism-related industries has remained extremely steady for 25 years. In 1981, tourism-related GDP accounted for 6.01 percent of the Bend-Redmond MSA's GDP and today that share is 6.11 percent, and those years in between have seen little variation.

Maintaining this share of GDP designates tourism as a stable component of the changing Bend-Redmond economy. Further evidence of the recession's lessened effects on Bend tourism is the 2006-2015 annual deplanement trend (Figure 6) at the Redmond Municipal Airport, the primary passenger facility for the metro. Deplanements maintained enough growth during the 2007 and 2008 recession years to afford a 5.41 percent drop in 2009 and still yield 9.34 percent growth from 17,717 deplanements in 2006 to 19,355 in 2009. After the recession, deplanements boomed with a 22.92 percent rise from 2009 to 2015. The final year of that period saw 23,792 deplanements.¹⁰

Figure 6 Redmond Municipal Airport deplanements, 2006-2015



Sources: Redmond Municipal Airport, Milken Institute.

3.2 Construction

Tourism in this MSA also has a catalytic effect on the housing market. Some current residents report visiting the area as tourists before relocating permanently. In the years leading up to the Great Recession, the population of central Oregon was booming and housing prices were inflating amid robust demand. Construction was following suit, and in 2006 the construction industry accounted for 11.66 percent of Bend-Redmond employment. Once the housing bubble burst and the recession intensified, the housing market plummeted. By 2012, the construction industry accounted for only 4.93 percent of the area's employment.¹¹ GDP from construction took a massive hit, sliding from close to \$710 million in 2006 to approximately \$265 million in 2011.¹²

The housing market recovered, and then the construction industry, but construction employment data suggest more caution this time. In 2015, construction accounted for 7.06 percent of the MSA's employment, and the industry's GDP was \$404.5 million.¹³ The construction industry's downfall during the recession and employment rebound afterward put it among Bend's top five for being worst hit and for post-recession growth (shown in Table 1 and Table 2).

Table 1 Five Bend industries hit worst by recession

| Industry | 2009 Non-farm employment | Percent change in employment 2006-2009 |
|--|--------------------------|--|
| Mining, quarrying, and oil and gas extraction | 61 | -57.17 |
| Construction | 3,938 | -51.75 |
| Manufacturing | 3,958 | -35.49 |
| Real estate and rental and leasing | 1,779 | -19.50 |
| Logging | 98 | -16.49 |

Sources: U.S. Bureau of Labor Statistics (BLS): Current Employment Statistics (CES), Quarterly Census of Employment and Wages (QCEW); Moody's Analytics.

Table 2 Five Bend industries with largest post-recession growth

| Industry | 2015 Non-farm employment | Percent change in employment 2009-2015 |
|---|--------------------------|--|
| Warehousing, storage, and transportation | 1,378 | 64.67 |
| Accommodation and food services | 9,555 | 32.49 |
| Construction | 5,210 | 32.30 |
| Educational services | 877 | 28.39 |
| Health care and social assistance | 10,863 | 27.75 |

Sources: U.S. Bureau of Labor Statistics (BLS): Current Employment Statistics (CES), Quarterly Census of Employment and Wages (QCEW); Moody's Analytics.

3.3 Health care

Located in the center of the state, Deschutes County serves as the health-care hub for much of rural Oregon as well as the more populated Bend-Redmond MSA. The health-care and social assistance industry has long been a major employer in the area. The industry continued to grow, though at a slower rate, during the recession years, proving to be more resistant than many other fields. After the recession, the industry's job growth landed it in the top five for post-recession expansion, as Table 2 shows. In 2015 the industry was responsible for 14.72 percent of the metro's employment, making it

vital to central Oregon's economy as well as the health of the region's people.¹⁴ Health-care and social assistance GDP has been on an upswing since 2010 and accounted for 12.72 percent of the Bend-Redmond MSA's GDP.¹⁵

3.4 Manufacturing

Mirroring national trends, manufacturing's share of the area's overall employment declined from the 1980s through the Great Recession. However, that metric seemed to bottom out in 2010 and has made gains through 2015. After losing 35.49 percent of its jobs from 2006 to 2009, manufacturing has seen a significant rebound from 2009 to 2015. The industry was responsible for 6.64 percent of the Bend-Redmond MSA's employment in 2015.¹⁶ Real GDP for manufacturing related to metals has done particularly well since 2010 and maintained a steady growth rate.¹⁷ This corroborates information that many locals shared about new and growing plants in the city of Redmond. Though advanced metals-related production seems to be in a nascent stage where employment is concerned, this part of the manufacturing industry seems poised for more growth with Redmond's relative abundance of available developable land and emerging industry cluster. Leaders such as BasX and PCC Schlosser are likely to attract more knowledge, funding, and companies to the area.

3.5 Beverage manufacturing

Home to Deschutes Brewery, central Oregon has created a stronghold for beer-making. Though the beverage industry suffered a severe drop in employment in 2007 and 2008, the industry saw dramatic growth in 2009 and after.¹⁸ Beverage manufacturing GDP has also been booming since 2010, growing a massive 77.27 percent in 2013 and remaining in the double digits since.¹⁹ In parallel, local job growth in the field far surpassed that at the state and national levels from 2011 to 2015. The industry's share of overall employment during those years burgeoned 159.2 percent, while beverage jobs in Oregon and the nation expanded their shares by 46.77 percent and 16.34 percent, respectively.²⁰

3.6 Technology

Industry rooted in technology found a new home in Bend after the recession as well. Ranking second in the number of high-tech industries in the [Milken Institute's 2016 "Best-Performing Cities"](#) small city index, Bend offers a wide range of services related to the field. Focusing on energy, there is H2 PowerTech, with more than 200 patents so far. Bend Research works in pharmaceutical delivery and development and boasts many patents as well, while G5 concentrates on data-driven marketing. Many Bendites attribute the area's speedy economic recovery to the entrepreneurial initiative of its people. Out of that inventive and resourceful culture came a startup ecosystem with many tech-based firms. Though not all tech labor needs are currently met by the local workforce, the new four-year OSU Cascades is making strides to satisfy this demand. Meanwhile, startups attract tech talent from outside the region by offering a rewarding life-work balance (Section 6).

3.7 Biotechnology

The newest focus of tech sector development is biotechnology. Having already attracted a planned Grace Labs location, the area hopes to create a biotech stronghold by connecting academic research from OSU Cascades with the private sector. With a strong medical industry operating in the MSA and favorable business conditions, we expect growth in this field.

3.8 Outdoor gear and apparel

Considering the natural playground that Bend-Redmond offers, which makes it so attractive to tourists, it is not surprising that outdoor gear and apparel companies would find a home here. Though employment in the category took a dip in 2009, employment in 2010 and onward has grown steadily.²¹ Real GDP in the sporting goods industry surpassed 10 percent annual growth from 2013 through 2015.²² The industry is still very small, which means that rate should be taken with a grain of salt. However, new outdoor companies seem to find ample advice and cooperation from more established peers in Bend’s supportive environment to help with expansion. Organizations like Bend Outdoor Worx are dedicated to connecting companies and enabling them to learn from one another’s successes and missteps. Though most Bend startups are not shy to tell you about the cooperative and friendly business environment, the outdoor gear and apparel business has arguably the most supportive environment. For example, industry newcomer Cairn obtained its office space from Ruff Wear, the outdoor gear and apparel company that owned the space, after the previous renter, outdoor company Hydro Flask, outgrew it.

3.9 Aerospace

With a Federal Aviation Administration-authorized drone testing area in the MSA²³ and an aviation program at Central Oregon Community College (COCC), aerospace has garnered attention as well. In two years at COCC, a student can earn a commercial pilot certificate. Aerospace product and parts manufacturing GDP was hit extremely hard during the recession, contracting more than 30 percent each year from 2008 to 2010. The Bend-Redmond aviation sector also has an experimental aircraft subset, adding to the innovation base within the industry. In Redmond, RDD is working on the research, design, and development side while Lancair in Redmond and Epic Aircraft in Bend manufacture experimental aircraft kits.²⁴ As fast as the industry’s GDP dropped, it rebounded, expanding almost 27 percent annually in 2011 through 2015.²⁵

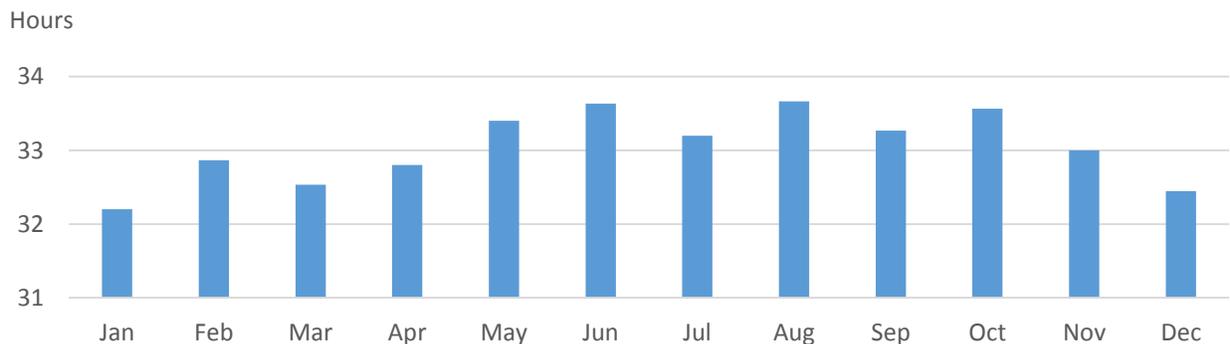
3.10 Key findings: key industries

| Regional characteristics | Potential impact on resilience |
|--|---|
| Several key industries are cyclical | <ul style="list-style-type: none"> • Diversification needed to avoid crashes |
| Emerging industries serve different markets | <ul style="list-style-type: none"> • Lower risk of coinciding downturns |
| Attractive natural setting and remote location | <ul style="list-style-type: none"> • Transportation to market challenging for some products • Attracts visitors, new residents, and businesses that value outdoor recreation • In the absence of neighboring metros to draw from, workforce must either be local residents or relocate |
| Collaborative culture | <ul style="list-style-type: none"> • Avoids duplication of effort and reduces conflict • Speeds technology adoption and human capital accumulation |

4 Employment and Opportunity

Dramatic job growth coming out of the recession was a large part of what propelled the Bend-Redmond MSA to the top of our index in 2016, but the seasonality of work in tourism and tourism-related industries remains a challenge. The area has seen the jobless rate drop to 5.2 percent in September 2016, far from its Great Recession high of 16.3 percent.²⁶ Previously, the economy was focused on tourism and real estate, and these sectors have enjoyed a resurgence amid regional growth after the downturn. A hint of central Oregon's power of attraction as a lifestyle choice can be seen in average hours worked data. The labor force works one fewer hour per month than Portland residents and almost 1.5 hours less than the national average.

Figure 7 Average hours worked in Bend-Redmond, weekly, 2014-2016



Sources: U.S. Bureau of Labor Statistics Current Employment Statistics, Milken Institute.

Currently, tourism and related services are expanding, with construction underway on four new hotels and 12.9 percent of the working population employed in hospitality services.²⁷ One issue associated with this business is that the metro's employment growth has not been matched by wage growth. Most of the region's service-sector jobs pay low wages, providing less income than jobs in manufacturing in Redmond or the high-tech sector developing in Bend. In the accommodations subsector, the wage per worker is \$29,642, just over \$9,000 more than the average in the other industries that support tourism. Wage per worker in food and drink services is \$20,233, and it is \$20,326 in the recreation business.²⁸ This difference is most likely attributable to the seasonal nature of the Bend economy.

The construction and real estate sectors also recovered from 2010 through 2015. During this time the metro has seen a 79 percent increase in employment in the construction of buildings.²⁹ The real estate sector employed 1,270 people in 2015, 100 fewer than in 2010 and 140 fewer than in 2008. In construction, the wage per worker is \$28,756. Wages in real estate lag slightly behind that at \$27,562. Employment in that field grew 27 percent from 2010 through 2015.³⁰

The last pillar of the metro's traditional industries health care and social assistance, which employed 10,860 people in 2015, a 24 percent increase since 2009. The regional hospital, St. Charles Medical Center, is the largest employer in the area.³¹ Wages per worker in this sector have grown 19.5 percent over five years starting in 2010, to \$54,357 in 2015. The health-care industry has been a source of higher-wage employment, which has been more stable than jobs in the region's two other major sectors. Together, these industries have contributed substantially to the metro's growth.

Broadly speaking, Bend’s population growth is based on place rather than employment opportunities. New residents who relocated during the beginning of the recovery have faced the challenge of finding employment, but that dynamic has driven a wave of entrepreneurship,³² with collaboration a central aspect of how people do business. Interpersonal networks allow people to point talent to others, even competitors, who are interested in hiring. This network is a strength, but scalability may be a challenge as more people migrate to the area. Yet the business community is motivated to maintain the cycle of collaboration. The phrase “paying it forward” describes the network and how the community operates in general.

Wage cuts have been common and generally accepted by those relocating to Bend-Redmond, according to people interviewed for this report. While quality of life can prove a potent draw for some, Bend-Redmond’s ability to recruit talent is sometimes hindered by the scarcity of fallback options should an employer fail. That in turn can hinder the expansion of higher-wage jobs if talent remains wary of relocation, which could stem from a spouse’s need for employment. Median wages in the metro are \$36,298 per worker while the average is \$54,286, indicating that the larger portion of the metro’s population receives lower wages.³³ However, employment in the higher-wage professional, scientific, and technical services category grew 26 percent from 2010 to 2015, which will reduce this gap.³⁴ The wage differential between Bend-Redmond and other metros with similar concentrations of professional and scientific employment will continue to hinder the recruitment of highly skilled workers (Table 3).

Table 3 Professional, scientific, and technical services wages per worker, 2015

| Wages per worker | |
|---------------------|-----------|
| Bend-Redmond | \$63,730 |
| Portland | \$79,173 |
| Seattle | \$99,878 |
| Denver | \$102,561 |
| San Jose | \$156,371 |

Sources: Moody’s Analytics, Quarterly Census of Employment and Wages, Milken Institute.

4.1 Key findings: employment and opportunity

| Regional characteristics | Potential impact on resilience |
|--|--|
| Seasonal employment in tourism industry | <ul style="list-style-type: none"> • Lower, less stable earnings for service employees |
| Collaborative culture | <ul style="list-style-type: none"> • Open networks make incorporating new residents easier |
| Attractive natural setting and remote location | <ul style="list-style-type: none"> • In-migrants attracted by high quality of life • Willingness to accept lower pay for desirable lifestyle |

5 Business Climate

A region's business climate can substantially affect whether it is able to realize the opportunities afforded by its comparative advantages. While taxes and regulations are the typical focus of discussions about business climate, these do not fully address private sector concerns. The availability of suitable real estate and the quality of the workforce factor in, as does access to markets and the supply chain. But culture, attitudes, and support organizations also form vital parts of the business climate, though they may be harder to change (and measure) than taxes and regulations. However, the pain of the last recession crystallized the need for economic change in the region and brought business concerns into the foreground.

5.1 Business taxes

Oregon is one of five states with no sales tax and uses single sales factor apportionment for state corporate taxes. Its corporate income tax has two brackets: 6.6 percent on profits below \$1 million and 7.6 percent above this threshold. Business contributes 37.6 percent of state and local tax revenue in Oregon, equivalent to \$4,300 in business taxes per employee per year.³⁵ The state provided \$6.3 billion in expenditures for fiscal year 2014 that benefit businesses, including incentives and 11 other state economic development programs.³⁶ Two of the largest state programs fund infrastructure and special industry assistance.³⁷ Measure 97, the state's effort to expand funding for government services with a tax on corporate sales, was rejected by Oregon voters in November 2016, with 66 percent opposing the measure in the Bend-Redmond MSA.³⁸

5.2 Property taxes and bonds

In 2014 the Deschutes County permanent property tax, which applies to land, buildings, improvements, machinery, and office furniture and equipment, was \$1.28 per \$1,000 in assessed value, and the county bond rate was \$0.18 per \$1,000.³⁹ The revenue collected from property taxes was \$26.8 million in fiscal year 2014.⁴⁰ Efforts to increase taxes in the metro have had mixed results, and the bonds that succeed with voters presumably indicate what the region values. An example of its priorities can be seen in the Bend Parks and Recreation District's ability to effectively pass bonds. Taxes that benefit schools have also succeeded, but the fortunes of taxes for water, transportation, and public safety have been mixed. This has made it more difficult for the city of Bend to secure funding for investments to support its long-term growth.

5.3 Commercial and industrial space

The expansion of new industries and the associated growth have caused two increasingly common side effects: the limited availability of space and higher living costs (Section 2 & 7).

For the eight quarters starting in the fourth quarter of 2014, there was a decrease in Bend's available office space (down 51.6 percent), retail space (down 33.2 percent), and industrial space (down 14.8 percent). Redmond saw a 56.2 percent decrease in industrial space over that period. Total industrial square footage in the Bend-Redmond MSA has increased 2.1 percent and 3.7 percent respectively, as commercial and residential stock decline.⁴¹

As companies continue to grow, space becomes a more pressing issue. Expansions of the urban growth boundaries (UGBs) in Redmond and Bend, planned with each city's economic makeup in mind, should provide more space for developers to meet commercial demand. State regulations and the pace of growth are likely to continue to pressure the supply of commercial space, in part by design. Redmond

has the capacity to meet industrial demand despite an industry trend toward purchasing larger parcels of land. Bend is looking to balance land use to support expanding businesses while increasing density in some areas to boost the supply of affordable housing. The residential rental vacancy rate in town is under 2 percent (Figure 10).

Table 4 Vacancy rates for commercial and industrial space

| Place and space type | 2014 Q4 vacancy rates (percent) | 2016 Q3 vacancy rates (percent) | 2-year average vacancy rates (percent) |
|---------------------------|---------------------------------|---------------------------------|--|
| Bend office | 10.5 | 5.1 | 7.3 |
| Bend retail | 6.7 | 4.5 | 5.4 |
| Bend industrial | 6.7 | 5.5 | 5.7 |
| Redmond industrial | 10.5 | 4.6 | 6.3 |

Source: Compass Commercial.

5.4 The role of economic development and civic organizations

As discussed earlier, cooperation is a hallmark of the regional economy. Agencies work in tandem to raise the efficiency of their development efforts. The best example of such a partnership is Economic Development for Central Oregon, or EDCO. The organization is based in Bend but has offices in six surrounding municipalities that provide points of contact for businesses interested in the region. The coordination between EDCO and local governments allows for clear roles in development efforts. Recruitment of businesses is run through EDCO until contact is made with the relevant public office.

EDCO’s recruitment efforts are a driver of the region’s economic diversification, and the organization is credited with connecting and convening the right people in productive discussion. It has tried to develop a well-rounded high-tech sector and promote the beer and cider industry while facilitating the growth of the outdoor goods sector. Each municipality in central Oregon is represented on its board of directors. The rest of the board is composed of business stakeholders from education, finance, utilities, employment services, and real estate.

EDCO’s focus on traded sectors leaves local chambers of commerce free to support other businesses and tackle issues like workforce training or street revitalization that are relevant to their communities. Such cooperation does not exist in a vacuum. VisitBend, the Central Oregon Visitor Association (COVA), and Travel Oregon have clearly defined roles and targets. These organizations represent Bend, central Oregon and the state’s efforts to promote tourism. VisitBend focuses on in-state tourism, COVA targets interstate tourism, and Travel Oregon handles international promotion. The city of Bend has taken steps to provide a direct line of communication by setting up a full-time business advocate position.

Clearly, local leaders are motivated to facilitate communication, define roles, and effectively delegate resources and responsibilities. In this collaborative atmosphere, EDCO plays a defining role in shaping the overall business climate.

5.5 Business culture

The region’s business culture is often attributed to the mindset of the people who have moved to the region over the decades and the commitment to active engagement. After the decline of the logging industry, employment in central Oregon relied largely on tourism and services for retirees and visitors. Other new residents, still in the workforce but either able to commute or unrestrained by location, chose to move to the region for the quality of life. Still others arrived, then looked for employment or

created opportunities for themselves. This community of choice has been manifested in several ways. One is an emphasis on entrepreneurship. The second is an observable camaraderie gained through common experience and similar goals. The accountability that the size of the community brings causes people to care more about how they are viewed, helping to enforce norms. Together, this has helped focus the business community on shared goals and increased its influence. This represents a new state of affairs—before the Great Recession, there was a lower level of connection and communication within the business community as well as between it and others in the region.

5.6 Entrepreneurial culture

The enthusiasm for entrepreneurship in the Bend-Redmond MSA since the recession grew out of both choice and necessity. Compared with the previous five years, Bend saw a 42 percent increase in the number of businesses started between 2010 and 2014. First-year failure rates have stayed relatively constant over that period at around 27 percent, an indicator of the region's ability to sustain new businesses.⁴² Of the 2,521 businesses started since 2008, 705 failed in the first year.⁴³

At an aggregate level, the implications of the failure rate are open to interpretation. A high rate might indicate poor support structures for startups or an intrepid willingness to take on high-risk, high-reward ventures. The failure of a business might mean the idea was unsustainable, and its closure might enable resources to be directed toward an idea that can succeed. Alternatively, such a failure can increase an entrepreneur's human capital through the experience of trying and failing, making him or her more effective in the next enterprise.

The centralized nature of the network in this metro speeds up these effects. As the metro economy grows, so will the size of the network, and scaling up the current entrepreneurial infrastructure to include more people may prove challenging. However, as more companies and entrepreneurs recognize the region as a potential location, firms could expand their access to expertise in the network. Despite the benefits of this environment, the region's first-year failure rate is still 1.23 percent higher than the national average over the same period.⁴⁴

5.7 Entrepreneurial capital

An issue for the metro's continued development is access to capital. Bend has a well-developed traditional financial sector that largely serves the real estate market. It includes large banks and regional institutions, totaling 16. This sector has supported area breweries as well, but as the metro economy has diversified, the financial industry has been hesitant to invest. There are two venture funds in the area, Cascade Angels and Seven Peak Ventures, but the startup sector has expressed a desire for more sources of venture funding.

The region has taken action to address this issue. EDCO hosts the Bend Venture Conference, which awarded \$3.7 million to Oregon startups in 2016. Organizers hope that this event, at which tech firms compete for funding, helps to establish Bend as a place for innovation. A social startup category was recently added to its lineup. The Tech Alliance hosts a precursor event, the Unconference, which is designed to be more inclusive of entrepreneurs and offers another opportunity for business networking. The metro recently started to host the Venture Out Festival, which focuses on funding the emerging outdoor products and services sector.

Beyond funding events, organized networking opportunities like PubTalk, mentoring programs through groups like EDCO, Opportunity Knocks, and the Outdoor Roundtable also provide support for businesses

and entrepreneurs. These programs and events amplify the benefits of the metro’s small size, supporting a collaborative environment that is atypical of the private sector. Reinforcing the networking opportunities is access to expert knowledge facilitated by these organizations. These experts provide intellectual resources and solutions to tangible problems faced by businesses as they develop. Mentorship programs run by EDCO and other groups allow for these networks to be formalized and facilitate access (Section 6).

5.8 Key findings: business climate

| Regional characteristics | Potential impact on resilience |
|--------------------------------|--|
| Collaborative culture | <ul style="list-style-type: none"> • Reduces duplication of effort and conflicts • Speeds technology adoption and human capital accumulation • Organizations spur economic diversification • Open networks make incorporating new residents easier • Common goals |
| Entrepreneurial attitude | <ul style="list-style-type: none"> • Generates new ideas and new companies |
| Supportive business climate | <ul style="list-style-type: none"> • Resources available to aid business development • Attractive to relocating businesses |
| Constrained real estate supply | <ul style="list-style-type: none"> • Difficulty finding appropriate/appealing space • Firms’ geographic dispersal possibly diminishes clustering benefits as region grows • Higher operating costs |
| | |

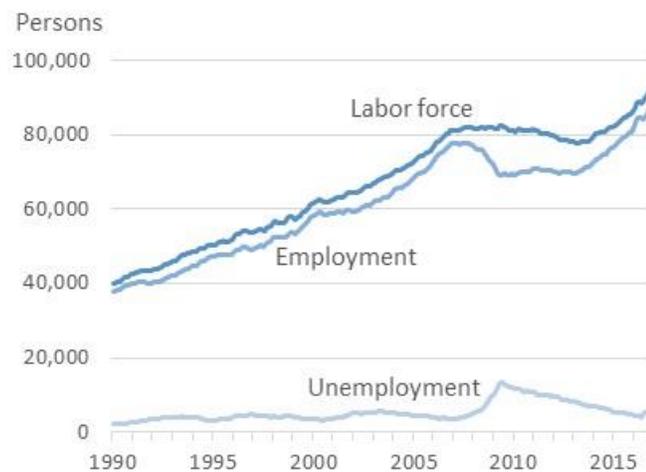
6 Cultivating Talent: Education, Workforce, and Skill Development

6.1 Need for a labor force to fuel growth

As the regional economy diversifies and expands beyond its traditional strengths, the availability of a local workforce with the skills needed to staff target industries becomes increasingly important. While firms might recruit nationally for top positions, local workers—who do not need to be relocated or helped to find housing in a tight market—are preferred for entry-level skilled jobs. In the technology sector, for example, software engineers in West Coast hubs command much higher wages than those in the Bend-Redmond area, and while many are eager to trade off a lower wage against a higher quality of life, a more collaborative environment, and easy access to outdoor recreation, others are wary of moving to a smaller city with fewer opportunities for future jobs. Educating residents with the skills that local firms need would broaden the region’s appeal to businesses and expand opportunities for residents.

The size of the Bend-Redmond labor force has doubled since 1990, with growth plateauing only during the period around the recession. The region had a labor force of approximately 91,000 in October 2016 and a 5.4 percent unemployment rate.⁴⁵ This workforce growth has been fueled largely by in-migration, which has swelled the population of the region over the same period (Section 2).

Figure 8 Labor force growth in the Bend-Redmond MSA, 1990-2016



Sources: U.S. Bureau of Labor Statistics, Milken Institute.

6.2 Educational institutions as a partner in workforce development

The region’s two major institutions of higher learning are Central Oregon Community College (COCC) and the Oregon State University (OSU) branch in Bend, OSU Cascades, which was co-located with COCC before moving to a campus of its own in 2016.

OSU Cascades expanded to a four-year university in 2015 and now serves more than 1,100 undergraduate and graduate students.⁴⁶ With plans to expand to as many as 5,000 students, the school is considered crucial to expanding the skill set of the local labor force, attracting companies that seek educated workers, and bolstering the region’s innovation economy.⁴⁷

Serving six counties in the region, COCC enrolled almost 17,000 students in the 2014-15 academic year, with about two-thirds pursuing courses for credit.⁴⁸ These students pursue multiple objectives at the college, with 40 percent aiming to transfer to a four-year program and 32 percent participating in career technical education (CTE) courses.⁴⁹ The CTE courses prepare graduates for employment based on the skills they acquire during their course work at COCC.

As with other goals, the needs of business and regional economic development are aligned with the contributions of educators through partnership. EDCO aims to link both COCC and OSU’s curricula with private-sector workforce needs, and leaders from both institutions serve on EDCO’s board.⁵⁰ The recent addition of a computer science degree at OSU-Cascades is a result of these efforts and was developed

with input from local software firms.⁵¹ Another is the equipment that local manufacturers donated to COCC, whose Manufacturing and Applied Technology Center at the Redmond campus helps students acquire real-world skills on industry-appropriate machines so they're ready to work on day one of their employment upon graduation.

The community has expressed its support for education through voter-approved bond measures and private donations. When OSU Cascades needed to demonstrate the community's desire for its continuing presence in Bend, it was able to obtain more than \$1.5 million in commitments from more than 50 donors within two months. At COCC, the Jungers Culinary Center, which opened in 2011, was funded mainly by private donations, and the Health Careers Center and Science Center were funded by voter-approved bond measure.⁵²

This support for education is also evident at the primary and secondary level. A \$96 million school bond was approved by voters in 2013, while other proposals were unsuccessful—for example, a vehicle fuel tax increase to fund infrastructure failed in Bend in 2016.⁵³ High-quality schools⁵⁴ were cited among the reasons that moving to the Bend-Redmond metro appealed to professionals with young families, and immigration has fueled demand for increased classroom capacity and new schools.⁵⁵ In Redmond, both high schools offer CTE courses, providing training for skilled professions.⁵⁶ The CTE courses span a range of subjects, including culinary arts, engineering, robotics, and manufacturing technology. The latter program covers welding and computer-aided design, preparing students for entry-level positions at manufacturing firms.⁵⁷

In addition to training the future workforce, the area's educational institutions contribute indirectly to broader economic gains. Research has shown that wage increases associated with a more educated population also accrue to less educated workers due to the positive externalities of human capital.⁵⁸ Author and urban studies theorist Richard Florida, who has long argued that jobs will follow the creative class and that quality places that can attract people will succeed in the innovation economy, identifies the university as a creative hub and a facilitator of the technology, talent, and tolerance essential for a creative community.

6.3 Educational institutions as facilitators of innovation and entrepreneurship

One of the reasons businesses and people value regions with universities is that they can stimulate innovation and entrepreneurship, generating patents and creating companies in addition to educating the workforce of the future. OSU Cascades is embracing this role, developing the Innovation Center for Excellence, which will house startup firms and give student interns the opportunity to learn about entrepreneurship firsthand. Local leaders are supporting the effort, sharing their expertise and offering funding to firms. To aid entrepreneurship, the Small Business Development Center at COCC provides training, advice, and services, including market research to startups and small firms.⁵⁹ The business administration department also offers an Entrepreneurship Certificate.⁶⁰

Longer-term aspirations include building an innovation campus adjacent to OSU Cascades that would allow innovative firms to co-locate, collaborating more easily with the university and one another. This would also make small industry clusters—such as biotech—more visible, and could help maintain the current collaborative and supportive business culture as the region continues to grow. Preserving the advantages created by regional connections, information flow, and trust among firms is an important goal.

6.4 Community efforts to build human capital

In addition to the contributions of formal education, informal community efforts to share information and know-how support the region’s entrepreneurial culture. They span networking events—like EDCO’s monthly Pub Talk, where companies network, pitch, and present, to Opportunity Knocks, a membership organization that supports peer-learning groups.⁶¹ These can speed the dissemination of expertise in a business culture where poaching employees from other local firms is frowned upon and job hopping is less common than elsewhere. The sense that all companies in the region would benefit from their cluster’s gaining in size and recognition results in sharing information to accelerate growth. The visibility of these networking events online, in addition to high-profile events like the Bend Venture Conference, also may assure potential residents that they can join an active business community upon arrival.

The region also tries to involve residents who may have retired or work elsewhere but are willing to share their business acumen to assist local firms. EDCO has a Stable of Experts, partly drawn from this community, who are willing to advise entrepreneurs pro bono. Retired residents who have had successful careers are a potential asset not just as mentors, but as investors, board members, and executives. Together, these efforts support the dissemination of the region’s business culture to new entrants, who can integrate relatively quickly and are then encouraged to offer the same support to the next wave of in-migrants.

Research into the benefits of large clusters indicates that the concentration of firms in a geographic region spurs innovation and the adoption of new skills and technologies.⁶² However, the archetype of a person who moves to the Bend-Redmond region—entrepreneurial, seeking work-life balance, and willing to engage with his or her community—was presented by many of our interviewees as a competitive advantage that mitigates the downside of smaller-size industries. Because they have these values in common, participants are willing to share information and develop solutions together.

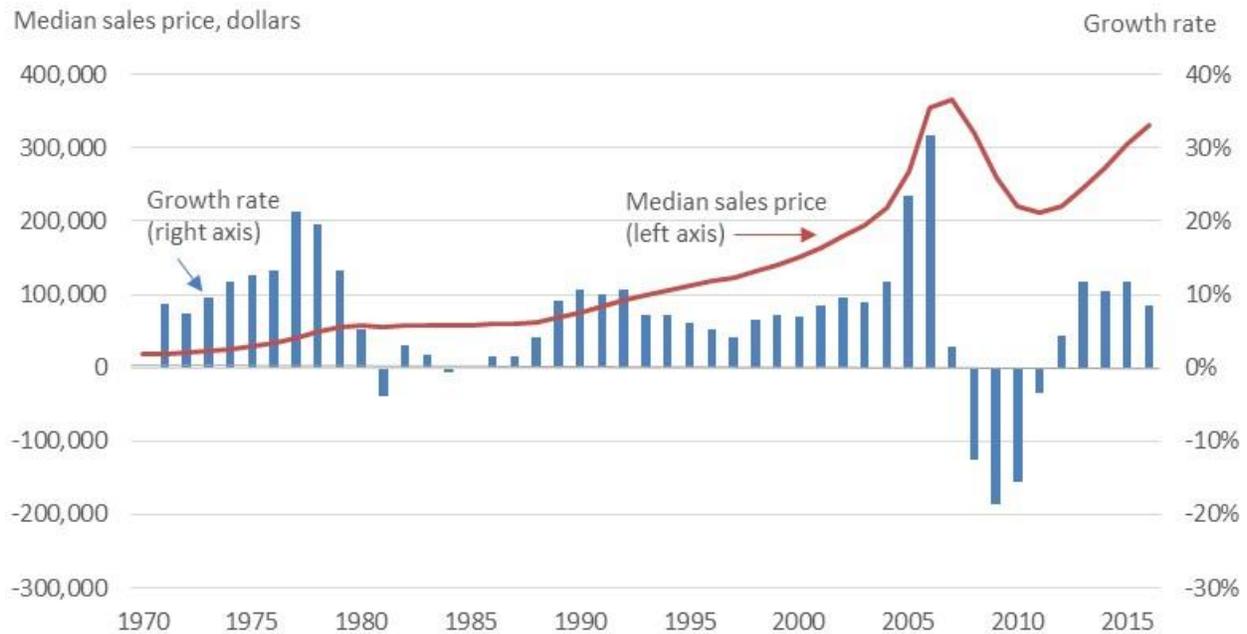
6.5 Key findings: education, workforce, and skill development

| Regional characteristics | Potential impact on resilience |
|---|---|
| In-migration fuels population growth | <ul style="list-style-type: none"> • Larger, more educated labor force available |
| Collaborative culture | <ul style="list-style-type: none"> • Willingness to support higher education institutions • Alignment between education providers and workforce needs |
| OSU Cascades and COCC offer local higher education opportunities | <ul style="list-style-type: none"> • Increased opportunities for residents • Innovation and entrepreneurship anchored by institutions of higher education • Businesses and residents attracted by regions with four-year universities • Potential facilitators of cluster development |
| Strong community and networking organizations supportive of continuing learning | <ul style="list-style-type: none"> • Faster dissemination of expertise in the network • Simulation of a larger cluster’s benefits • Faster growth of more stable companies • Reinforcement of collaborative norms |

7 Housing Affordability

Thanks largely to the consistent population growth in the Bend-Redmond metro, home prices have risen for most of the past few decades (Figure 9). Those attracted to the region from higher-cost metropolitan areas typically are able to pay more for housing than residents of less vibrant parts of Oregon. Between 2013 and the first half of 2016, the median home price in the metro climbed at a roughly 10 percent annual rate. For single-family homes, the median reached \$331,475 in the first half of 2016.

Figure 9 Median sales price and growth of single-family homes in Bend-Redmond MSA



Notes: Data are seasonally adjusted; data for second half of 2016 unavailable.

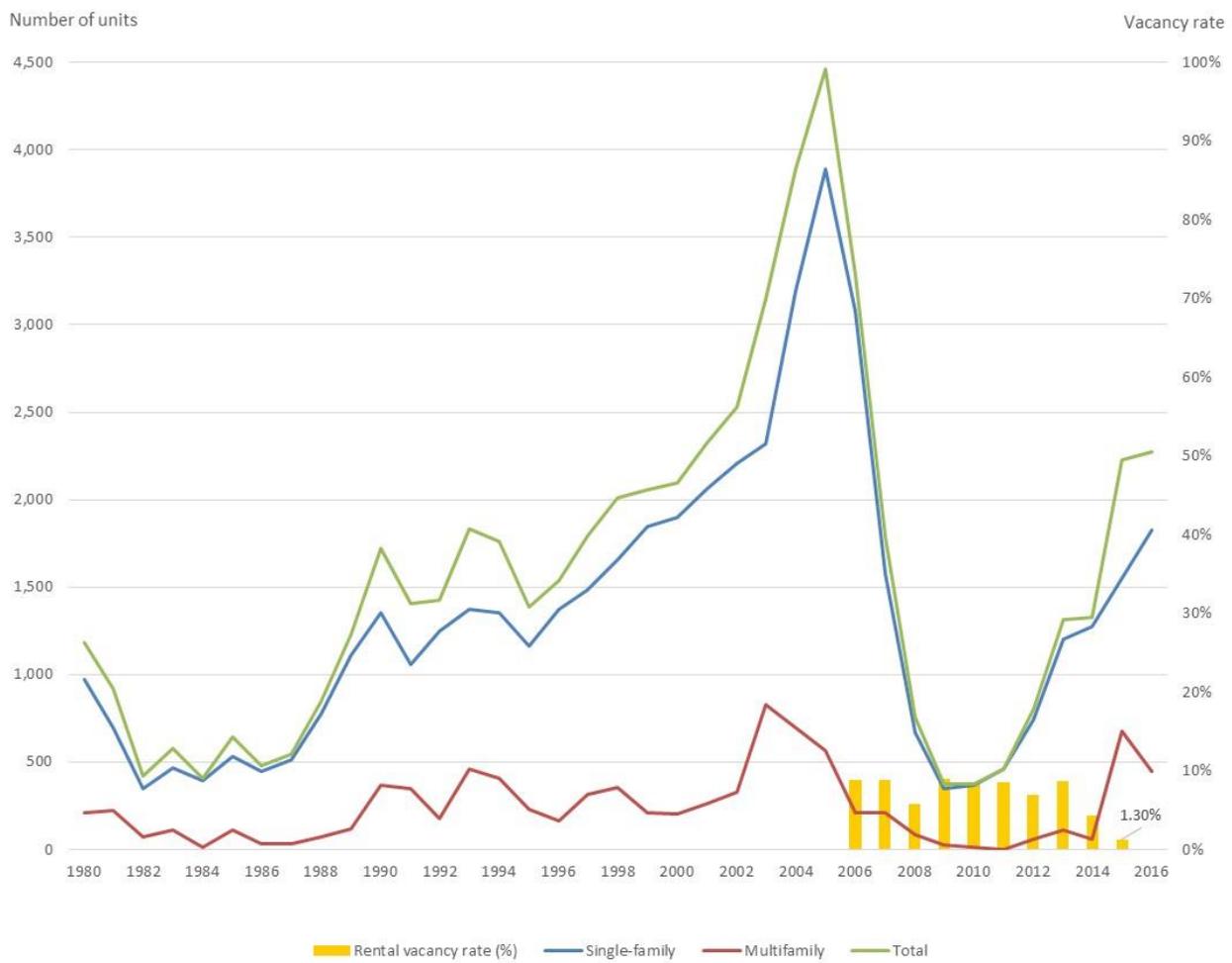
Sources: National Association of Realtors, Moody's Analytics Estimated, Milken Institute.

As more people move to the Bend-Redmond area, the supply of housing is not keeping up with demand. Shortly after the Great Recession, the rental vacancy rate stood between 7 percent and 9 percent, then plummeted. The current rate is around 1 percent (Figure 10).⁶³

Rising home prices coupled with the low rental vacancy rates mark housing affordability as an emerging issue of public concern. It has contributed to a worsening of homelessness, even though the displaced population seems to have contracted slightly in 2015.⁶⁴ Overall, the number of residential unit permits issued has climbed since 2009, but the single-family home segment comprises most of the new housing supply. Despite an uptick in 2015 with 677 permits, the supply of multifamily units in the region has been limited since the recession (Figure 10).

Quite a few interviewees suggested that the region needs a wider variety of housing options. Recently there have been efforts to address this shortfall, such as the First Place project in southeast Bend, which will provide more affordable housing as it is built over the next five years.⁶⁵ Without the creation of substantially more multifamily units, however, affordability may become a more critical problem for people who would like to continue living in or relocate to this metro.

Figure 10 Residential permits and rental vacancy rate in Bend-Redmond MSA



Notes: Data for residential permits are seasonally adjusted; November and December 2016 data unavailable.
 Sources: U.S. Census Bureau, Moody's Analytics Estimated, Milken Institute.

Figure 11 shows the housing affordability index, which illustrates whether a median-income family can afford the principal and interest on a median-priced home. A value of 100 indicates that a typical household has enough income to qualify for an 80 percent mortgage in the median-priced category.⁶⁶ The larger the index value, the more affordable a home is. As the exhibit indicates, housing in the Bend-Redmond MSA became more affordable starting in 2007. That measure peaked in 2012, and affordability has declined since then.

Figure 11 Housing affordability index for Bend-Redmond MSA



Sources: National Association of Realtors, U.S. Census Bureau, Moody's Analytics Estimated, Milken Institute.

7.1 Key findings: housing affordability

| Regional characteristics | Potential impact on resilience |
|-------------------------------------|--|
| Significant in-migration | <ul style="list-style-type: none"> • Rising strain on existing infrastructure • Need to manage growth to maintain assets |
| Low rental vacancy rate | <ul style="list-style-type: none"> • Difficulty obtaining housing for residents and in-migrants |
| Home prices close to historic peaks | <ul style="list-style-type: none"> • Speculation attracts external capital • Dropping affordability puts low- and middle-wage earners at risk • Homeowners able to obtain credit for entrepreneurial activity • Construction activity increasing |

8 Land use and infrastructure

Managing development and funding infrastructure while maintaining the qualities that residents value and visitors seek out is the subject of ongoing discussion in the Bend-Redmond region. Economic and population growth creates demand for additional development. In part, the area's affordable housing shortage has been attributed to urban growth boundary regulations. UGBs, as they're called, aim to curb urban sprawl to preserve agricultural or rural lands, forests, open spaces, and natural resources. Although Redmond and Bend have expanded their UGBs, the expansion process can be long, and by design, limit the possible types of growth.

UGBs are a tool used in managing urban growth. They encourage infill, mixed-use, and denser development, with less dependence on cars and more public transit systems. In addition to facilitating sustainability, the goals include spurring economic development and encouraging affordable housing close to jobs.

This tool has been used both internationally (e.g., Melbourne, Australia) and in the United States. A number of U.S. localities and three states—Oregon, Washington, and Tennessee—have adopted UGBs. In 1973, Oregon approved the Land Conservation and Development Act, which set statewide UGB requirements. UGBs fixed the growth trajectories of Oregon cities for the next 20 years. Though their boundaries can be expanded to accommodate growth, many people argue that expansion approvals typically take too long to keep up with the demand.

The city of Bend established its UGB in 1981.⁶⁷ Since then, there have been several amendments. It was not until December 2016 that Bend's first major UGB expansion was approved by the Oregon Department of Land Conservation and Development, as the result of a planning process started in 2004.⁶⁸ Due to Bend's fast population and economic growth, the restriction of land supply has contributed to its high housing costs and low rental vacancy rate. On the other hand, Redmond's UGB expansion process was shorter than that of Bend, taking around 18 months. The ability to supply more land gives Redmond a competitive advantage in attracting businesses that require space for expansion.

Bend's population growth and the recent expansion of UGBs are likely to pose a series of challenges and opportunities. Securing sufficient investment in infrastructure for new developments will be an ongoing difficulty, given the scale of the need. The local match of 20 percent of the cost of any infrastructure project required to obtain federal money is a significant obstacle. For Bend, the expansion of the public transit and water/waste systems are likely to be the costliest projects. Redmond will be focused on the road and water infrastructure necessary to connect more industrial land as the city develops. That city's need for a larger transportation network may become a more pressing concern as the workforce grows, but it is not a current priority for the municipality.

State laws that allow for every step of public projects to be litigated if there is a concern over private property rights can act as a meaningful brake on development. A potential source of volatility for Bend is that a large portion of construction and housing development is owned and funded by non-residents. Another factor contributing to uncertainty is a vocal community with varied agendas, both social and economic, which makes land development a controversial issue. Typically, taxes for infrastructure expansion in the metro do not get approved, making further public investment impossible. Revenue bonds and fees have had some success with voters but cannot fill funding gaps alone. Finding the revenue to expand water, sewer, and transportation systems at the necessary scale will clearly be an

uphill battle. The current Bend budget sets aside slightly more than \$60 million for all infrastructure projects between 2015 and 2017.⁶⁹

Beyond obtaining community buy-in, another challenge to infrastructure expansion is geology. The ground is mainly basalt rock, raising the costs of development and slowing its pace. This is a major problem for investment in water systems to connect in new real estate developments. Raising sufficient funding has been a constraint on development in general, but a clear example is Juniper Ridge. This public-private project was meant to house a research park but stalled due to the inability to find money. The city of Bend has raised \$3.7 million in urban renewal bonds for the project and has a \$6 million line of credit, but that still leaves a funding gap. The remaining cost is slated to be covered by land sales.⁷⁰ Without the funding, the Oregon Department of Transportation would not allow the city to rezone the area and overhaul U.S. Route 97.⁷¹

The Redmond airport is controlled by the city, not a port authority. This focuses local leaders’ agenda on making the airport both a commercial and passenger transportation hub (Section 3.1). The facility has helped to make up for the lack of a major interstate highway connecting central Oregon to the West Coast and other points, which has limited the scalability of industries like beer and outdoor apparel. Consequently, companies have to expand outside the area or choose more costly methods of transporting goods. Deschutes Brewery is opening its second location in Roanoke, Va., to reduce shipping costs to East Coast markets. Ruffwear originally did its warehousing in Bend but has been forced to move that operation to Portland. Sudara has maintained split shipping because other options are not cost-effective. As the region’s companies and population increase in size, the problem of logistical inefficiency is likely to worsen. The increasing scale of operations boosts demand for a locally based third-party logistics provider to serve businesses that want to ship products.

8.1 Key findings: land use and infrastructure

| Regional characteristics | Potential impact on resilience |
|---|--|
| Significant in-migration driving population growth | <ul style="list-style-type: none"> • Growing workforce available • Rising strain on existing infrastructure • Need to manage growth to maintain assets |
| Urban Growth Boundaries define development patterns | <ul style="list-style-type: none"> • Cities have to plan for growth • Lower flexibility to adapt to new opportunities • Requires increased density to address growth • Requires discussions that aid community alignment and understanding of future |
| Attractive natural setting and remote location | <ul style="list-style-type: none"> • Transportation to market challenging for some products • Good air service given size of local market |

9 Quality of Life

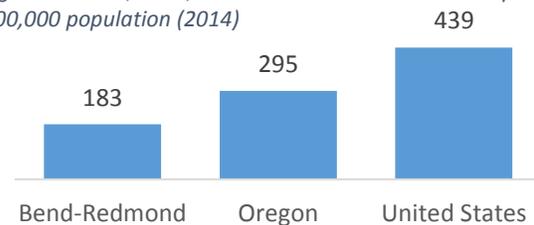
Many of the attractions that draw tourists to the Bend-Redmond MSA also improve the quality of life for residents. Bendites can get through workweeks knowing they can enjoy many outdoor activities during their weekends. Some companies even allow employees to work longer hours some days followed by several days off so they can do the things that brought them to Bend-Redmond. This work/life balance is difficult to achieve elsewhere. However, partly because Bend attracts like-minded people who envision a particular lifestyle, ethnic diversity remains an issue, as it does for most of Oregon.

There is a familial aura about the area that makes it seem as though everybody knows everybody, and newcomers often find a warm reception. This adds to the cooperative, helping-hand character of the region, which reverberates into the business climate. Many people cherish this aspect of Bend-Redmond and fear that its growth may lead to the loss of that friendly, small-town feel. In a highly engaged community, expansion efforts can meet resistance at times.

The area is blessed with a rare mix of city amenities and restful isolation that may prove difficult to hold on to. Most residents will say there are several communities in the region, each with its own distinct atmosphere. People are able to choose a location based on the environment they prefer. People who like downtown areas can choose downtown Bend and enjoy the charming center with eateries and shops or downtown Redmond for its rustic feel. Others might seek the convenience of being near large stores like Costco on Bend’s east side. Golfers may choose the Awbrey Butte neighborhood, which is home to several country clubs, while those who favor an Old West ambience or want to be closer to the elements can choose Sisters. The community has a Western-themed downtown and hosts the headquarters for a portion of the Deschutes National Forest. In sum, the Bend-Redmond MSA offers a variety of locales that people can choose from to suit their pace of life.⁷²

People, especially those of retirement age, can be hesitant to locate in small cities because they need access to high-quality, plentiful medical care. Bend-Redmond offers the slower speed of a small town but has the medical centers necessary for an aging population. For families, the area’s very low violent crime rate⁷³ (Figure 12) and highly regarded school system are important advantages. Though low crime rates are common in small cities, high-quality health care and education are not as prevalent, making Bend-Redmond well-equipped to attract and retain residents who will contribute to its community and economy.

Figure 12 Local, state, and national violent crime rate per 100,000 population (2014)



Sources: Federal Bureau of Investigation, Milken Institute.

9.1 Key findings: quality of life

| Regional characteristics | Potential impact on resilience |
|--|---|
| Significant in-migration driving population growth | <ul style="list-style-type: none"> • Growing workforce available • Rising strain on existing infrastructure • Need to manage growth to maintain assets |
| Attractive natural setting and remote location | <ul style="list-style-type: none"> • Attracts visitors, new residents, and businesses that value outdoor recreation |

10 Lessons from Bend-Redmond

The MSA suffered substantial losses in employment and property values during the last recession. As it emerged from the downturn, gains came quickly, faster than in peer regions. But amid the recovery, Bend-Redmond has not simply returned to previous form. The economy has changed, and there are signs that the MSA may be better prepared for the next economic challenge and other cities may be able to learn from its experience. Some of the strategies that build resilience are relevant only to metros that have similar assets—natural beauty, for example. Other lessons have wider applicability and could benefit metros with strong industry specialization.

Diversification comes in many forms, but successful efforts build on existing strengths. In the Bend-Redmond region, ongoing efforts to expand the industrial base have focused on areas where a small concentration has substantial growth potential or where the relevant expertise exists in a closely related industry. The ability to attract entrepreneurial professionals drawn to a high quality of life also factors into the choice of target industries. In the tourism field, branching out to broader geographies and coordinating marketing efforts among agencies have increased visitor numbers during the shoulder season and aided resilience during the downturn. Overall, the clear assignment of responsibilities among development and marketing organizations has helped the region maximize the impact of these efforts.

Effective collaboration can help a small region achieve big things. Despite the large proportion of transplants in the population, a shared sense of community and strong organizational partnerships have yielded a united effort to build on the region's assets. This has led to the establishment of a four-year program at the university branch campus, created the largest angel investment conference in the Pacific Northwest, and narrowed the gap between education and business—creating more opportunity for graduates entering the workforce. Networking and mentoring programs have spread expertise that might otherwise be hard to find in a smaller metro, supporting the growth and robustness of new businesses. The small size and connectedness of the business community helps to enforce norms and integrate in-migrants, but this may become difficult to maintain as the metro grows.

There is more to an attractive business climate than competitive tax rates and limited regulations. The combination of a collaborative culture, a supportive attitude among government and economic development agencies, and a location that attracts talent at a discount all help the area compete. Bend-Redmond's entrepreneurial environment encourages firms to learn from one another. Local business owners recognize that expanding their sectors benefits all constituents by reassuring investors that the region is a solid headquarters location and by attracting a larger talent pool with the assurance that prospective residents can find a career, not just a single job. Keeping pace with the demand for infrastructure and real estate remains a challenge. A willingness to address issues and work together toward common goals generates a sense of purpose for all stakeholders.

Quality of place can be leveraged to yield more than tourists and holiday homes. Economic growth in the region has been fueled in part by the in-migration of people who use their capital, skills, and entrepreneurial energy to create an opportunity for themselves. Their purchasing power and patronage have supported the construction and year-round service industries, and their human capital enriches the workforce. For new as well as longtime residents, quality of life and quality of place are assets that must be preserved even as more people move to the region. There is a shared understanding, therefore, that growth must be managed carefully, despite varying views of the correct approach.

While the attributes of the MSA that create a high quality of life may not be easily replicated in other regions, the policies and strategies we identified in this report have strengthened its economic resilience. To establish whether these are broadly applicable, we will conduct additional case studies in the coming year as part of our “Regional Performance Over Time” research.

11 About the Authors

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1. For a more detailed methodology, see www.best-cities.org or Ross DeVol, Joe Lee, and Minoli Ratnatunga, "Best-Performing Cities 2016: Where America's Jobs Are Created and Sustained." Milken Institute, December 2016.
 2. Michael C.Y. Lin, Minoli Ratnatunga, and Perry Wong, "Regional Performance Over Time: Thriving and Reviving Amid Economic Challenges." Milken Institute, August 2016.
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