ONE ROGUE VALLEY
COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY

TIP strategies

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EXECUTIVE SUMMARY

In 2019, Southern Oregon Regional Economic Development, Inc. (SOREDI) engaged TIP Strategies to develop a comprehensive economic development strategy (CEDS) for Jackson and Josephine Counties to guide economic development efforts over the next 5 years. Funding for the plan came from over 30 regional partners that recognize the value of collaborative and inclusive planning. This CEDS is the first of this magnitude in over 20 years and although the plan focuses on strategies for the next 5 years, the impacts will extend well beyond that timeframe. This plan meets the requirements set forth by the US Economic Development Administration (EDA) to maintain Southern Oregon's Economic Development District (EDD).

In order to ensure a holistic approach, TIP deployed a three-phase planning process, beginning with the discovery phase. Over the course of six months, the TIP team worked closely with Southern Oregon leaders to identify the region's opportunities and challenges. In addition to extensive community feedback gathered from 38 roundtables and a community survey that yielded over 340 responses, a full quantitative data analysis was completed on Jackson and Josephine Counties. The results from these analyses can be found in the Economic Assessment in Appendix 1 in the final plan. Following the discovery phase, and armed with insights, the opportunity phase launched, where key themes and initiatives emerged, and the region aligned around a shared vision for the future. Strategies are organized under five initiatives, including business development, innovation and entrepreneurship, talent, tourism, and placemaking. Within each initiative, there are tactics that are currently being implemented in the region in addition to new strategies created to address the needs and challenges of the community. The final phase, or implementation phase, focuses on plan execution and strategy prioritization to ensure the region fulfills its shared vision.

ONE ROGUE VALLEY: CEDS

INITIATIVES

1. Business Development

2. Innovation and Entrepreneurship

3. Talent

4. Tourism

5. Placemaking

TIER 1: STRATEGIC GROWTH AREAS

- Specialty Agriculture
- Natural Resources
- Tourism
- Healthcare

TIER 2: ASPIRATIONAL NICHES

- Technology, Advanced Manufacturing, and Logistics

KEY PERFORMANCE METRICS

- Number of new firms
- Number of new jobs
- Startup businesses assisted
- SBIR/STTR grants
- Labor participation rate
- Average annual wage
- Bachelor's degree or higher
- Tourism funding
- Annual visitors
- Housing affordability index

Just as an impactful CEDS cannot be developed by a single entity, an effective CEDS cannot be implemented by a single entity. It is imperative that the entire Rogue Valley works collaboratively to implement the strategies set forth in the plan. In order to ensure CEDS implementation is on track, the One Rogue Valley Coalition, a partnership comprised of public sector and private sector leaders, will convene on a regular basis to address challenges and recognize achievements. Furthermore, because the CEDS is designed to be implemented over a 5-year period and economic conditions in the region will change during this time, the One Rogue Valley Coalition will be responsible for adjusting and refining priorities to ensure the plan meets the dynamic needs of the community.

ONE ROGUE VALLEY: CEDS

INTRODUCTION

The name "One Rogue Valley" embodies the vision for Southern Oregon that includes Jackson and Josephine Counties as a united region that prioritizes collaboration. The region contains two major geographic landmark valleys, the Illinois Valley in the western half of Josephine County and the Rogue Valley in the central part of Jackson County. Both valleys follow the watershed of the Rogue River, feeding the Illinois River, the Applegate River, and Bear Creek (which flows from Medford to Ashland). The "Rogue" name is synonymous with both counties, as the public sector and the private sector have adopted the name in everything from businesses to regional amenities. From Rogue Community College and Rogue Valley International-Medford Airport to Rogue Valley Door to Rogue Creamery, the region has embraced the river that unites the region.

The immense natural beauty and unique cultural amenities give the region a number of strategic economic advantages. Historically, the timber industry was the main economic driver for the region and although that sector represents a strong portion of the regional economy, the industry has been declining in recent years due to forest management policies and an aging workforce. However, the region is committed to strengthening and diversifying its economic base. The region is home to a vast array of industries, including many niche and artisanal businesses. Tourism is also a major economic driver for the region due to its world-renowned arts and culture amenities, including the Oregon Shakespeare Festival. This sector has the potential to grow, as the region continues to focus on outdoor recreational activities, including organized sports.

To reach its economic development and prosperity goals, the region has collaboratively committed to developing a comprehensive economic strategy to chart a course for the next 5 years and beyond. The strategy aligns with the standards outlined by the US Economic Development Administration (EDA) requirements to maintain an Economic Development District (EDD). The Southern Oregon EDD is managed by Southern Oregon Regional Economic Development Inc. (SOREDI) and the organization is responsible for maintaining an EDA-approved Comprehensive Economic Development Strategy (CEDS), which must be updated every 5 years to retain the EDD designation. The EDD designation allows the region to apply for economic development-related funding that aligns with the initiatives and priorities outlined in the CEDS.

The CEDS cannot be implemented by one organization alone, which is why the One Rogue Valley Coalition is vital to the success of the plan. The One Rogue Valley Coalition consists of both public sector and private sector leaders who have committed to carry out and follow through on the strategies and actions included in the CEDS. With this in mind, the One Rogue Valley Coalition developed a vision statement designed to focus and align efforts: Southern Oregon's Rogue Valley region values its unique communities while uniting to build sustainable economic success for all residents. The region thinks and acts boldly to attract, create, and keep businesses and jobs; it supports the development of its citizens; and prioritizes maintaining a healthy environment for families and industry. This statement is designed to be a touchstone that can be referenced during the course of CEDS implementation.

The CEDS is divided into five key initiatives: business development, innovation and entrepreneurship, talent, tourism, and placemaking. The strategies under business development focus on achieving the region's goals for ensuring thoughtful, sustainable, and equitable economic growth. Especially in the Rogue Valley, where commercial land is a premium and industry is so varied, the region cannot afford to operate without a targeted strategy. The region is also committed to recognizing and working toward the goals of the urban centers of the region and also those of

rural and traditionally underserved communities. The second initiative, innovation and entrepreneurship, focuses strategies on strengthening the entire innovation ecosystem. In addition to developing and formalizing resources for business and entrepreneurs, this initiative also lays a path to explore the development of a regional center of excellence for wildland firefighting. The third initiative, talent, is arguably the most important component of the plan, as without a skilled workforce, business and communities cannot prosper. This initiative prioritizes strategies that attract, equip, and retain workers in the region to meet the needs of current and future employers. The fourth initiative, tourism, highlights the region's diverse amenities, from the Oregon Shakespeare Festival to rafting the Rogue River. The region is committed to further developing the industry by expanding offerings to shoulder and traditional off-seasons and attracting visitors from new markets. The fifth initiative, placemaking, ensures that the region preserves its outstanding quality of life for all residents. Strategies under this initiative relate to issues ranging from workforce housing and commercial development to creating inclusive communities.

Although the CEDS will not address, and cannot address, every issue and challenge the region faces, the purpose of the plan is to build a resilient community that works collectively to build economic prosperity. The CEDS is designed to be a living, evergreen plan that can adapt and change based on the needs of the community. The One Rogue Valley Coalition's leadership team is responsible for making adjustments and updating actions as strategies are implemented. Although the plan is designed to be executed over the course of a 5-year period, the plan was designed from the perspective to meet the long-term needs of the region, and benefits will extend beyond 2025.

INITIATIVE 1. BUSINESS DEVELOPMENT

Ensure thoughtful, sustainable, and equitable economic growth by strategically promoting the region as a destination for business expansion and relocation.

The Rogue Valley is fortunate to have sophisticated and robust business development services available to assist traded and local sector businesses in the region, at all stages of the business cycle, from startups to established businesses. However, the Rogue Valley faces unique challenges to developing its economy and a thoughtful business development strategy is needed to ensure that investment occurs throughout the region. In addition to the major economic centers of Grants Pass, Medford, and Ashland, the region is home to a number of successful businesses in smaller and rural communities in the region. It is essential that the region's economic development practitioners understand the unique needs of all the communities in Josephine and Jackson Counties, so each community is positioned to achieve their economic development goals. The following framework outlines the strategies and actions that will need to occur to meet the business development priorities for the Rogue Valley.

STRATEGIES AND ACTIONS

1.1. Strengthen the region's business retention and expansion (BRE) program. A strong BRE strategy is essential for a successful economic development organization, as the bulk of job creation (and contraction) comes from established businesses.[1] Promote economic development and business support services throughout the region, including in rural and underserved communities.

    1.1.1. Increase the number of annual private sector business visits by economic development organizations.

- Conduct business visits by a range of economic development professionals, including those in business development, recruitment, entrepreneurship, and lending positions. Often leads for recruitment projects are uncovered during existing business visits and existing businesses offer valuable insight that can be relayed to the entrepreneurship community.

- Prioritize visits with companies in the region's target sectors and traded sector companies. Due to the diverse nature of businesses in the region, intensive groundwork is required to understand the needs of businesses and build connections.

- Ensure broad and diverse representation of private sector and public sector partners on SOREDI's BRE Committee. A business from each targeted industry (including aspirational targets) should be represented on the committee.

- Work with community partners to identify underserved traded sector businesses in the region; track the number of women-owned and minority-owned businesses that SOREDI serves.

    1.1.2. Structure business visits to achieve specified outcomes. The first visit should include an overview of regional economic development services, workforce development needs and programs, supply chain needs, and a discussion of the business's challenges and opportunities. Follow-up visits should be focused and project oriented.

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[1] Congressional Research Service, *Small Business Administration and Job Creation,* 11 September 2019, fas.org/sgp/crs/misc/R41523.pdf.

1.1.3. Coordinate business visits with regional partners, including workforce and technical assistance, such as the Oregon Manufacturing Extension Partnership (OMEP), based on identified needs of the business.

1.1.4. Maintain a comprehensive database with customer relationship management (CRM), such as Salesforce.com, Inc., with regional businesses and projects. Explore opportunities to share this platform with partners.

- Explore mapping programs or open databases with company information to encourage business to business connections in the region. This can assist with strengthening local supply chains (strategy 2.2), and expanding foreign direct investment (strategy 1.5). The New York State Energy Research and Development Authority (NYSERDA) maintains a sector specific supply chain database and mapping tool that companies can use to identity potential partners, which they use to increase their competitiveness with European counterparts.[2]

1.1.5. Develop a mergers and acquisitions (M&A) strategy. With so many boutique manufacturers in the region, the possibility of M&A activity is high, and it is critical to develop a strategy that will retain and grow businesses after an M&A event and also create an avenue for business recruitment.

- Discuss succession planning with business leadership during business visits. Continue events that focus on M&A, such as SOREDI's Launch|Talk: M&A 101—Buying and Selling a Business.

- Position SOREDI as a first resource to the new company, in the event of a merger or an acquisition.

- Proactively develop relationships with consultants in the M&A space to highlight regional amenities and benefits of doing business in Southern Oregon.

- Proactively recruit additional brands from major parent companies in the region, such as Cummins Inc. and 1-800-Flowers. A merger or acquisition provides valuable exposure for the region, especially from high-profile companies.

1.2. Focus the region's outbound business attraction efforts on target industries, which represent the best opportunities for new investment and employment growth.

1.2.1. Deepen knowledge of target industries (specialty agriculture, natural resources, healthcare, and tourism & recreation). Utilize industry publications and reports to monitor trends, understand supply chain needs, and identify potential recruitment markets. Examples of high-quality industry reports include Bain & Company "Industry Insights," Deloitte "Insights," EY "What we think," and McKinsey & Company "Industries."

- Expand event programming to highlight innovation within target sectors by bringing in panels or industry experts to discuss trends and offer industry insights (strategy 2.2.1).

1.2.2. Cultivate relationships and build networks of industry leaders in target sectors, including site selectors and location consultants.

1.2.3. Expand marketing efforts to reach new audiences. Marketing should be focused, asset driven, and leverage existing efforts (strategy 3.6.1 and strategy 4.1.2).

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[2] NYSERDA, "Supply Chain Database," 2019, www.nyserda.ny.gov/All-Programs/Programs/Offshore-Wind/Economic-Opportunities/Supply-Chain-Database.

1.3. Nurture a business-friendly environment where businesses can, and want to, thrive.

    1.3.1. Champion efforts to implement business-friendly policies and practices at the local level. Advocate for pro-business policies and practices at the state level. The region should pride itself on being nimble and creative to meet the needs of business.

- Leverage and reference the region's commitment to the Business Friendly Proclamation of Southern Oregon, which was developed by SOREDI.

    1.3.2. Identify and invest in new sites, buildings, and infrastructure to support the growth of existing employers and the attraction of new businesses, while leveraging existing real estate, transportation, and infrastructure assets (strategy 5.4).

- Form a Real Estate Advisory Committee (strategy 5.4.1) to take on tasks related to strategy 1.3.2.

- Explore opportunities to expand access to telecom infrastructure, especially in rural and underserved areas such as Butte Falls and Shady Cove, so they can grow and retain businesses.

1.4. Collaboratively develop and establish a regional brand and identity.

    1.4.1. Create a favorable brand and image for the region and launch an internal marketing campaign. Ensure all residents, members, and partners talk about the Rogue Valley in a consistent, positive way.

- Develop marketing materials, such as a logo, website, and regional quality-of-life video, that can be used on multiple platforms for tourism and talent/business attraction. In 2018, the Columbia River Economic Development Council (CREDC) in Clark County, Washington, launched a campaign called "Your Journey Starts Here," which features a video and serves as a one-stop site for information on business, tourism, and quality of life.[3]

- Utilize social media to build brand awareness.

    1.4.2. Unify internal and external messaging among partner organizations. Ensure all regional partners are sending the same message regarding the economic vision and goals.

- Consider developing key messages with partners that can be shared widely throughout the region (e.g., hospitality staff, cab drivers, retail outlets).

    1.4.3. Spread the message locally on the value of economic development through media channels, including SOREDI's blog, social media, and newspaper editorials.

- Strengthen and build relationships with local media partners to ensure economic development stories are shared. Local media will also be a critical partner in relaying information to the community on the progress of the CEDS implementation.

1.5. Develop a foreign direct investment (FDI) strategy to support the recruitment of international firms and investments and existing foreign-owned firms. An established FDI strategy will also strengthen local companies import and export programs. Focus on existing resources from SelectUSA and Business Oregon.

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[3] CREDC, "Your Journey Starts Here," 2018, www.credc.org.

1.5.1. Identify foreign-owned companies in the region (including parent companies) and companies with significant foreign imports and exports.

- Leverage international business development resources from partners, including destination marketing organizations (DMOs).

1.5.2. Identify three to five key foreign markets to target for import and export growth.

- Deepen knowledge of import and export resources. Utilize the expertise at the Export Council of Oregon, US Commercial Service Portland, and Business Oregon.

- Increase the number of Oregon State Trade and Export Promotion Program (STEP) grants awarded in the Rogue Valley.

1.5.3. Leverage the region's international tourist base as a potential avenue to highlight the merits of doing business in the region.

- Align with the marketing initiatives outlined in strategy 1.2.3.

INITIATIVE 2. INNOVATION AND ENTREPRENEURSHIP

Leverage regional assets to strengthen the innovation and entrepreneurship ecosystem in Southern Oregon.

The US is currently in the midst of the longest economic expansion in modern history; from June 2009 to June 2019, US gross domestic product (GDP) grew cumulatively by 25 percent and the unemployment rate dropped below 4 percent.[4] However, following every period of economic expansion eventually comes a contraction or recession and the memory of the 2007–2009 Great Recession is not that distant. For this reason, it is critical that communities have policies and strategies in place to strengthen economic resiliency. Although often overlooked, a recession often creates a positive impact for startups and innovation. A 2009 study from the Kauffman Foundation "found that more than half of the firms on the 2009 Fortune 500 list were launched during a recession or bear market, along with nearly half of the firms on the 2008 Inc. list of America's fastest-growing companies."[5] Furthermore, the research uncovered a broader economic trend that found job creation from startup companies proved to be less volatile and sensitive to economic downturns when compared with the overall US economy. With this research in mind, the CEDS outlines key strategies that will strengthen and provide stability to startups and existing companies during variable economic cycles.

STRATEGIES AND ACTIONS

2.1. Establish a wildland firefighting center of excellence (CoE) in the region. The region should position itself as an innovative leader in wildland firefighting, taking a comprehensive approach to wildland fire management, mitigation, and remediation.

    2.1.1. Form a taskforce of public sector and private sector partners to conduct a feasibility analysis to map the region's strengths and identify required resources.

    2.1.2. Research other centers of excellence in the US.

- The Colorado Center of Excellence for Advanced Technology Aerial Firefighting was established by the Colorado Legislature in 2014 to study and advance the technology related to wildland fire operations. While the CoE's title includes "Aerial Firefighting," the scope of CoE research is broader than just aerial firefighting efforts. As is recognized in the wildland firefighting community, aerial firefighting represents only one aspect, albeit a visible one, of wildland firefighting. Effective response to wildland fires requires an integrated effort that includes bringing multiple resources to the response. The CoE endeavors mirror that multifaceted approach. In addition, while the CoE is focused on wildland fire, many of the CoE's projects can and do support non-wildland fire response (e.g., structure, vehicle, HAZMAT) and other emergency operations, including law enforcement and emergency response.[6]

    ○ In January 2018, Honda partnered with the CoE to test its Autonomous Work Vehicle in wildland firefighting support scenarios. Honda later debuted the vehicle at the 2018 Consumer

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[4] *The Economist,* "America's Economic Expansion Is Now the Longest on Record," 2 July 2019, www.economist.com/graphic-detail/2019/07/02/americas-economic-expansion-is-now-the-longest-on-record.

[5] Dane Stangler, Kauffman Foundation, "The Economic Future Just Happened," 9 June 2009, www.kauffman.org/what-we-do/research/2009/08/the-economic-future-just-happened.

[6] Colorado Center of Excellence for Advanced Technology Aerial Firefighting, cofiretech.org.

Electronics Show (CES) in Las Vegas and at CES 2019, Honda and the CoE presented results of the test project.[7]

2.1.3. Identify funding partners and grant opportunities for master planning to overcome barriers identified during the feasibility analysis.

2.2. Support innovation within existing companies. Foster relationships among companies and encourage collaboration.

2.2.1. Ensure companies have the infrastructure and resources needed to explore new ideas and take them to market. This could include broadband infrastructure (strategy 1.3.2), makerspaces, and technical assistance.

- Support the development of makerspaces, tool libraries, and other platforms for utilizing shared technology and equipment.

- Expand events and speaker series to focus on innovation and improving business competitiveness. Increase promotion of existing events through a shared calendar. In 2017, Portland's tech community launched a unified calendar platform, Calagator, to share events within the tech industry. The system is managed by a group of volunteers and anyone is invited to import, create, and edit events.[8]

2.2.2. Promote and expand the use base of the SOREDI Bulletin Board, which allows businesses and entrepreneurs to connect with one another for supply chain or innovation needs.

- Set a monthly goal for business-to-business introductions.

2.2.3. Continue the SOREDI Industry Tours series to showcase businesses in Southern Oregon and encourage collaboration among businesses.

2.3. Connect and convene regional networks of entrepreneurs to foster a collaborative environment.

2.3.1. Explore physical and virtual platforms to connect groups throughout the region.

- Informal networking examples include Meetups and Facebook Groups, formal networking could include pitch competitions, "tech crawls", and SOREDI LAUNCH | Talk series.

2.3.2. Support the development of coworking spaces in the region, especially in urban centers, such as downtown Medford and Ashland.

- Although coworking spaces are often associated with startups, the most successful coworking spaces are anchored by existing businesses. Approximately 40 percent of WeWork members work for businesses with over 500 employees.[9] Established businesses or enterprise clients are WeWork's fastest-growing membership category and a key focus area for the company.[10] In

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[7] Colorado Division of Fire Prevention & Control, Department of Public Safety, "Honda and DFPC Join Forces to Improve Wildland Firefighter Safety," 11 January 2018, www.colorado.gov/pacific/dfpc/news/honda-and-dfpc-join-forces-improve-wildland-firefighter-safety.

[8] Calagator, https://calagator.org.

[9] Hannah Kozlowska and Alison Griswold, Quartz, "Forty Percent of WeWork's Members Work for Companies with More than 500 Employees," 14 August 2019, qz.com/1687299/wework-ipo-reveals-that-40-percent-of-its-members-work-for-companies-with-500-plus-employees.

[10] CBInsights, "WeWork's $47 Billion Dream: The Lavishly Funded Startup That Could Disrupt Commercial Real Estate," 2019, www.cbinsights.com/research/report/wework-strategy-teardown.

addition to supporting entrepreneurs, coworking spaces give existing businesses flexibility as they expand or contract.

2.4. Formalize the entrepreneurial technical support system. Define the roles of regional organizations and services in the startup and entrepreneurship sector; partners should convene on a regular basis to brainstorm and share best practices.

    2.4.1. Develop a regional entrepreneurship and innovation ecosystem asset map. In 2013, the Aspen Institute, in conjunction with nine global partners, developed an "Entrepreneurial Ecosystem Diagnostic Toolkit" for the purpose of evaluating the impact of an entrepreneurial ecosystem and advising on the framework for developing a holistic entrepreneurial system.[11] Forward Cities also has a comprehensive guide to asset mapping and policy alignment with case studies on successful projects.[12]

        • Review North Carolina's InnovateNC Community Innovation Asset Map and toolkit as a potential best practice.[13]

    2.4.2. Develop a mentorship program that links entrepreneurs to established professionals.

2.5. Expand the availability of startup capital by building on the Southern Oregon Angel Investment Network (SOAIN), formalizing access to existing venture funding in the region, and developing stronger ties to other sources of capital outside the area.

    • Support companies seeking US Small Business Innovation Research (SBIR) and US Small Business Technology Transfer (STTR) grants, especially during the application process for Phase II funding. SBIR and STTR awards require extensive paperwork and can be arduous for businesses—especially if the entrepreneur does not have a business background. Additional focus should also be given to entrepreneurs in underserved communities. SBIR and STTR awards are a good metric of innovation for a region and can be tracked against benchmarked cities.

    • Build relationships with venture capital firms in three key markets, Portland, Seattle, and San Francisco, to encourage more investment in, and give more exposure to, Southern Oregon companies.

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[11] The Aspen Institute, *Entrepreneurial Ecosystem Diagnostic Toolkit,* December 2013, assets.aspeninstitute.org/content/uploads/files/content/docs/pubs/FINAL%20Ecosystem%20Toolkit%20Draft_print%20version.pdf.

[12] Forward Cities, "Community Innovation Asset Map," 2019, www.forwardcities.org/toolkit/community-innovation-asset-map.

[13] InnovateNC, "InnovateNC Community Innovation Asset Map," 2017, innovatenc.org/toolkit/community-innovation-asset-map.

INITIATIVE 3. TALENT

Invest in the ecosystem that attracts, equips, and retains a strong pipeline of talent to meet the long-term needs of current and future employers.

Without a skilled and equipped workforce, businesses cannot succeed. Furthermore, access to a skilled workforce consistently ranks at the top of the list of site-selection factors ranked in *Area Development* magazine's Annual Survey of Corporate Executives.[14] Therefore, it is critical to invest in the systems that strengthen the regional workforce. Preparing young adults for the workforce through experiential learning and internship opportunities ensures that businesses have the talent they need and equips students with the experience they need to find a career after graduation. Furthermore, students are more likely to remain in a region after graduation if they have connections to the business community.[15] Additionally, there is a compelling need for expanded engineering programs in the Rogue Valley if the region wants to expand high tech and advanced manufacturing, including aviation and aerospace. The following framework outlines strategies that support workforce development, leverage the outstanding educational facilities in the region, and enhance collaboration between public sector and private sector.

STRATEGIES AND ACTIONS

3.1. Strengthen partnerships between the region's public sector and private sector, including economic development organizations, workforce development entities, and educational institutions, to ensure alignment of employer needs and training programs.

3.1.1. Ensure regular communication among groups in economic and workforce development (e.g., quarterly meetings).

3.1.2. Prioritize cross-organizational board representation between SOREDI and Rogue Workforce Partnership (RWP), at either the staff or board leadership level.

3.1.3. Set an annual goal for joint business visits between SOREDI and RWP.

3.2. Regularly convene an education committee with K–12, community colleges, and universities to address educational attainment and labor participation. Ensure students are prepared to enter the workforce and aware of opportunities and career pathways within the region. Focus on science, technology, engineering, arts, and mathematics (STEAM) initiatives (strategy 3.4.2).

3.2.1. Support programs such as the Business Education Partnership and SOREDI Quest!, which introduce high school students to companies and career pathways in the region. Leverage the Josephine County Youth Pathways Partnership as a potential model for the region.

3.3. Expand work-based learning and career exploration opportunities for higher education students. Students are more likely to remain in the region following graduation if they have employer connections in the region.

3.3.1. Grow existing internship programs at Klamath Community College (KCC), Rogue Community College (RCC), Oregon Institute of Technology (OIT), and Southern Oregon University (SOU). This

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[14] Geraldine Gambale, *Area Development,* "33rd Annual Corporate Survey & the 15th Annual Consultants Survey," Q1 2019, www.areadevelopment.com/Corporate-Consultants-Survey-Results/Q1-2019/33nd-annual-corporate-survey-15th-annual-consultants-survey.shtml.
[15] Richard Florida, CityLab, "The US Cities Winning the Battle against Brain Drain," 15 March 2016, www.citylab.com/life/2016/03/which-metros-are-best-at-keeping-their-college-graduates/473604/.

helps keep students in the region after graduation, equips them with on-the-job training, and prepares them to enter the workforce.

3.3.2. Support internship and career fairs at KCC, RCC, OIT, and SOU. Career fairs expose students to the opportunities and variety of industries in the region.

3.3.3. Support industry tours (e.g., Careers in Gear) to build student awareness of companies and career paths in the region. In addition to tours and open houses, employers could also present on campus.

3.4. Support expanded technical education and higher education programming, especially for in-demand fields, such as healthcare, high tech, and engineering.

3.4.1. Support the establishment of a physical presence of the Oregon Institute of Technology in the Rogue Valley. An example of a best practice would be OIT's Oregon Manufacturing Innovation Center in Scappoose.[16]

3.4.2. Support the expansion of the Southern Oregon Air Academy (SOAA), a nonprofit organization that offers aviation training through a science, technology, engineering, and math curriculum.

3.5. Build greater awareness of career opportunities in the region, especially middle skill positions, and in underserved and rural communities. This will build a resilient and adaptable workforce.

3.5.1. Support, and potentially expand, existing sector-specific workforce development initiatives, such as the Rogue Transportation & Logistics partnership.

3.5.2. Explore opportunities for worker share programs to engage seasonal workers year-round, especially in the outdoor recreation, agriculture, and hospitality industries. Encourage programs that cross-train employees in multiple positions.

3.6. Develop a toolkit of resources focused on talent attraction. This could include promotional videos on the region, stories about why people choose Southern Oregon, and relocation guides.

3.6.1. Leverage tourism marketing for talent attraction. Typically, the first time someone visits a new place, it is as a tourist. This is a critical market to attract potential talent (strategy 1.2.3 and strategy 4.5).

3.6.2. Centralize resources for trailing spouses/partners and remote workers. Highlight examples of coworking spaces, meetups/support system for remote workers, connectivity from the Rogue Valley International-Medford Airport (MFR), and community engagement opportunities.

- Examine Hello West Michigan, a membership-based nonprofit based in Grand Rapids. It offers comprehensive relocation support, including job search assistance, connections to local resources, and networking events for newcomers.[17]

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[16] OIT, "Oregon Manufacturing Innovation Center Research and Development," 2019, www.omic.us.
[17] Hello West Michigan, hellowestmichigan.com/about-hello-west-michigan.

INITIATIVE 4. TOURISM

Support the organizations and places that strengthen the tourism and experiential environment in Southern Oregon.

Tourism is a key economic driver in the Southern Oregon region, from renowned arts and cultural events, such as the Oregon Shakespeare Festival, to world-class outdoor recreation and high-quality sporting facilities. Southern Oregon is a gateway to Crater Lake National Park, the Oregon redwoods in the Rogue River–Siskiyou National Forest, and Oregon Caves National Monument and Preserve. Traditionally, the most popular tourism season is during the summer months, however, this has been affected by wildfires in recent years. Expanding activities in the shoulder and off-season months, and increasing promotion of these opportunities, will be critical to developing the Rogue Valley's tourism industry. Expanding the tourism season will also create greater resiliency in the local sector economy. In addition to strengthening recreational opportunities, the CEDS also outlines strategies for reaching new markets, including local and international, and expanding culinary and agritourism in the region. Furthermore, by boosting tourism and visitor attraction, these investments also enhance the community's appeal for existing and future residents.

STRATEGIES AND ACTIONS

4.1.   Support initiatives to expand tourism in Southern Oregon.

    4.1.1.   Increase funding to Travel Southern Oregon and DMOs so they are more competitive with similar organizations in Oregon and the US.

    4.1.2.   Focus marketing and promotion efforts on shoulder and traditionally off-season months to expand the tourism season (strategy 4.4.2).

    4.1.3.   Strengthen international tourism to the region. Coordinate efforts with business development (strategy 1.2.3) and MFR.

       • Leverage organized tours to Crater Lake, which attract foreign tourists, and events such as the Oregon Shakespeare Festival (OSF).

    4.1.4.   Support the development of a multiuse aquatics and events center in Medford (strategy 5.2.4) that can hold meetings, conferences, and arts and cultural events.

       • Work collaboratively to attract conferences and small conventions from outside the region to hold events at the center, especially in the region's target sectors.

4.2.   Deepen partnerships among economic development and tourism.

    4.2.1.   Leverage the region's transportation assets and partners, such as the Rogue Valley International-Medford Airport (MFR).

4.3.   Leverage the region's thriving arts and culture industry to promote the region's amenities outside the Rogue Valley and also within the region.

    4.3.1.   Promote awareness of smaller arts and cultural events, such as the Sasquatch Wine, Art & Golf Festival in Cave Junction.

       • Encourage residents, as part of the shop-local campaign (strategy 5.2.3), to patronize events and activities in the region.

4.3.2. Support OSF and the Britt Music & Arts Festival initiatives to engage traditionally underserved communities with access to arts and cultural programming. Highlight arts and cultural career opportunities in student industry tours (strategy 3.2 and strategy 3.5).

4.4. Grow the region's outdoor recreation and organized sporting industries.

4.4.1. Support recreational facilities that draw tourism, such as the US Cellular Community Park in Medford and the development of an aquatics and events center (strategy 4.1.4).

4.4.2. Diversify outdoor recreation offerings to include shoulder, low-season, and off-season opportunities and promote tourism at lesser-known destinations, such as Butte Falls and Cave Junction.

- Support expansion of summer season activities, such as hiking and biking at Mt. Ashland, and work collaboratively to identify and overcome any barriers.

- Coordinate with DMOs to increase marketing of off-season tourism opportunities (strategy 4.1.2).

- Deepen relationships with recreation providers (e.g., rafting operations, fishing guides, mountaineering/hiking guides) to understand their needs and challenges. Increase student internships, especially during the summer, in the recreation industry to support the industry (strategy 3.3.1).

4.4.3. Support the development of facilities that encourage tourism and longer stays, including boutique hotels and sporting venues, such as the expansion of Grants Pass Downs racecourse. Cave Junction is the gateway to the Oregon redwoods; however, it lacks a full-service hotel to cater to tourists. Downtown Medford might be able to support an additional boutique hotel, especially with the proposed multiuse aquatics and event center and expanded downtown offerings.

- Develop relationships with local hospitality groups and partners to understand opportunities and overcome any barriers to development. Explore feasibility studies and reports to understand the local dynamics and market thresholds.

4.5. Grow the region's agritourism industry and promote the region's unique culinary experiences. Expand farm-to-table offerings and partnerships among producers (farms) and makers (chefs/artisans).

4.5.1. Highlight the region's renowned wineries and promote events such as wine and food tours. Support the Rogue Valley Vintners association and tourism organizations to promote awareness of local vineyards.

4.5.2. Support initiatives that promote the local culinary scene, such as Restaurant Week, and festivals, such as Battle of the Bones barbecue competition in Central Point. The region is home to award-winning restaurants, especially in Ashland and Jacksonville.

- Generate creative ideas to promote the local culinary industry, such as encouraging collaborations among restaurants and supporting temporary restaurant pop-ups.[18]

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[18] Emily Wimpsett, QSR Automations, "Pop-Up Restaurants: Everything You Need to Know," 21 November 2018, www.qsrautomations.com/blog/restaurant-management/pop-up-restaurants.

INITIATIVE 5. PLACEMAKING

Nurture an environment that preserves Southern Oregon's quality of life for residents, businesses, and visitors.

Placemaking is defined as "the process of making quality places."[19] Creating quality places is an essential component of building dynamic and vibrant communities, where people want to live. Although placemaking is typically associated with the physical or built environment, placemaking should also encompass the qualitative components that create a welcoming and inclusive community. Communities that can cultivate, retain, and attract talent have a significant advantage in the competitive landscape of economic development. Therefore, it is critical for the Rogue Valley to prioritize these investments. In addition to nurturing placemaking for the benefit of residents and visitors, the region also needs to be attentive to the needs of businesses. All the jurisdictions in the region signed a business proclamation, affirming the Rogue Valley's commitment to be the most business-friendly region on the West Coast, from ensuring an adequate supply of commercial and industrial land for businesses to expand and locate in the region to advocating for the policies and infrastructure needed to support businesses. The following recommendations tie together the strategies that strengthen the region's competitiveness across all five CEDS initiatives.

STRATEGIES AND ACTIONS

5.1. Ensure the region has an adequate supply of diverse and affordable housing options. Housing development has not kept pace with population growth in the region. Furthermore, the lack of executive housing and mid-priced houses has tightened the supply of traditionally entry-level homes. Although there is no one approach to solving this problem, there are numerous resources and best practices that have shown to improve housing affordability.

   5.1.1. Explore creative and nontraditional options to increase the supply of workforce housing in the region.

   - Identify potential sites for in-fill and redevelopment opportunities, especially in urban areas.

   - Understand and identify roadblocks to redevelopment and collaboratively work toward solutions.

   - Review best practices from other parts of the country on increasing housing supply. McKinsey & Company developed a toolkit for addressing housing challenges that includes best practices.[20] The city of Minneapolis is attempting to increase the supply of affordable housing in the Twin Cities region by changing zoning codes in the city's comprehensive plan.[21] Additionally, the National League of Cities, in partnership with TIP Strategies and the Mid-America Regional Council, produced a report addressing housing affordability, which includes strategies for preserving existing housing and increasing the housing supply.[22]

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[19] Project for Public Spaces, "What Is Placemaking?" 2018, www.pps.org/article/what-is-placemaking.
[20] McKinsey & Company, *A Blueprint for Addressing the Global Affordable Housing Challenge,* October 2014, www.mckinsey.com/~/media/McKinsey/Featured%20Insights/Urbanization/Tackling%20the%20worlds%20affordable%20housing%20challenge/MGI_Affordable_housing_Executive%20summary_October%202014.ashx
[21] Erick Trickey, *Politico Magazine,* "How Minneapolis Freed Itself from the Stranglehold of Single-Family Homes," 11 July 2019, www.politico.com/magazine/story/2019/07/11/housing-crisis-single-family-homes-policy-227265.
[22] National League of Cities, "First Suburbs Coalition Regional Housing Summit," November 2019, https://www.marc.org/Community/First-Suburbs-Coalition/Assets/NLCReportFINAL_2019-11-11.aspx

5.1.2. Advocate for transit-oriented development (TOD) and increased density in urban areas. TOD is a form of community development that includes a mixture of housing, office, retail, and other amenities integrated into a walkable neighborhood concentrated within a half mile of quality public transportation.[23]

- Prioritize multimodal transportation solutions, including walkable and bikeable developments and ensure development aligns with public transportation infrastructure (strategy 5.4.3).

5.1.3. Cultivate relationships with real estate developers, landowners, and community partners to address shortages in workforce housing.

5.1.4. Engage partners traditionally outside of economic development to work toward common goals, such as All in for Health in Jackson and Josephine Counties and ACCESS in Jackson County.

- Maintain a virtual presence where partners can find project information and updates, such as a website or through social media. Proactively reach out to organizations with significant project updates.

5.1.5. Leverage financing programs and investment incentives, such as Opportunity Zones (OZs) and Enterprise Zones (EZs), to encourage affordable housing, especially in underserved areas.

- Coordinate an outreach program to understand the needs and goals of the communities located in OZs and EZs. This should be done in conjunction with any active community organizations, such as neighborhood associations, if applicable.

- Develop an Opportunity Zones prospectus to highlight opportunities in the region. Accelerator for America created an Opportunity Zone Investment Prospectus Guide[24] that can be used as a template. The website also includes examples for other communities.

5.2. Support city-specific quality-of-place initiatives that contribute to the unique identity of Southern Oregon's communities and encourage the development of vibrant downtowns.

5.2.1. Support arts and cultural amenities, especially in downtowns. Encourage festivals like the Britt Music & Arts Festival and OSF to perform at alternative venues in the region (e.g., Holly Theatre in Medford). Events can also be held in the off-season to boost tourism resiliency (strategy 4.4).

- Support the modernization and revitalization of existing festival and event facilities in Southern Oregon, including the Jackson County Fairgrounds amphitheater.

5.2.2. Encourage tactical urbanism projects, such as pop-up shops in underutilized downtown spaces to encourage foot traffic and community engagement.[25]

- Bolster organizations that focus on downtown vitality, such as chambers of commerce, main streets, and downtown associations.

5.2.3. Support Rogue Valley shop-local initiatives and campaigns that highlight the region's craft and boutique industries, events, and arts and cultural amenities (strategy 4.3). In addition to supporting the local economy, buying local builds resilient downtowns and fosters a sense of a community.

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[23] Federal Transit Administration, "Transit-Oriented Development," 11 April 2019, www.transit.dot.gov/TOD.
[24] Accelerator for America, " Opportunity Zone Investment Prospectus Guide," October 2018, www.acceleratorforamerica.com/OZGuide
[25] Street Plans, *Tactical Urbanist's Guide to Materials and Design,* December 2016, tacticalurbanismguide.com.

- Leverage social media and the regional brand to promote the initiative (strategy 1.4).

5.2.4. Champion placemaking projects that create community amenities for residents, including youth, such as the Medford aquatics and event center (strategy 4.1.4).

5.2.5. Support the preservation and revitalization of historic and historically significant buildings, especially in underserved areas and urban renewal Districts.

- Collaborate with neighborhood groups and associations to ensure the needs of the community are being met, especially on adaptive reuse projects.

5.3. Spearhead initiatives that prioritize healthy, safe, and inclusive communities.

5.3.1. Streamline and coordinate communication on adverse air quality events in the region. Expand the Smokewise Ashland[26] platform to cover all of Josephine and Jackson Counties.

5.3.2. Increase public awareness about fostering and maintaining an inclusive community that is welcoming to all residents.

- Support implementation of SOU's strategic plan to create an inclusive community, especially Strategic Direction VII, Goal One: "SOU will be a resource and collaborative partner for the economic, cultural, artistic and social betterment of the region."[27]

- Endorse events and programs that educate and inform the community on issues related to diversity, equity, and inclusion, such as chamber leadership programs and Ashland's Juneteenth celebration.

5.4. Proactively preserve and advocate for industrial and commercial sites for employers that will ultimately provide high-quality jobs for the region. Ensure infrastructure development plans align to site readiness goals.

5.4.1. Maintain a database of large sites in the region. Indicate if the site is shovel ready and timelines to development, noting challenges to development.

- Form a taskforce of public sector and private sector representatives to keep inventory up to date. This should be a subgroup of the Real Estate Advisory Committee (strategy 1.3.2).

5.4.2. Form a taskforce of public sector and private sector representatives focused specifically on permitting and infrastructure readiness. This should be a subgroup of the Real Estate Advisory Committee (strategy 1.3.2).

- Build awareness about Business Oregon's Certified Shovel Ready[28] program with landowners in the region.

- Review permitting models from other parts of Oregon, including the city of Gresham.[29]

- Support the development of a local Oregon Department of Transportation (ODOT) office in Medford.

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[26] Smokewise, www.smokewiseashland.org.
[27] Southern Oregon University, "SOU's Commitment to an Inclusive Community," 2019, inside.sou.edu/diversity/index.html.
[28] Business Oregon, "Certified Shovel Ready," 2019, www.orinfrastructure.org/Infrastructure-Programs/Certified-Sites/.
[29] City of Gresham, "66-Day Industrial Land Use Application Review," 2019, greshamoregon.gov/66-Day-Industrial-land-use-Application-Review/.

- Understand the infrastructure needs in rural communities required to support businesses, especially in communities such as Gold Hill, Shady Cove, and Butte Falls. Identify the rural assets that are advantageous to business and align those with industries and potential business opportunities (strategy 1.3.2).

5.4.3. Advocate for key industrial and commercial sites in the region, such as MD-5/PH-5 and the River Road Preserve; support transit-oriented development (TOD) around areas with a high concentration of workers.

- Support the implementation of Rogue Valley Transportation District (RVTD) 2040 Transit Master Plan,[30] which will include plans to expand routes and service areas in the region, including underserved communities.[31]

- Communicate regularly among economic development and workforce development partners about employee transit needs with RVTD.

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[30] Rogue Valley Transportation District, "RVTD 2040 Transit Plan," 2019, www.RVTD2040transitplan.com.

[31] Damian Mann, *Mail Tribune,* "New Bus Routes Headed Your Way," 13 June 2019, mailtribune.com/news/top-stories/more-bus-routes-coming-to-the-greater-medford-oregon-area.

IMPLEMENTATION PLANNING AND NEXT STEPS

This plan is the culmination of a six-month strategic planning process, which sought input from diverse representatives throughout Josephine and Jackson Counties on a variety of issues. The CEDS provides a roadmap for Southern Oregon over the next 5 years, but the ultimate success of the recommendations will depend on the level of commitment from the One Rogue Valley Coalition in executing the strategies in this document. This is a pivotal point in the region's history. This strategic action plan is the first of its kind in over 20 years and is the most robust in the region's history.

The CEDS is designed to be a living, evergreen plan that can adapt and change based on the needs of the community. The One Rogue Valley Coalition's leadership team is responsible for making adjustments and updating actions as strategies are implemented. New investments and resources from public sector and private sector partners will be required to move this plan from concept to action, and no one organization is responsible for its implementation. This work will take dedication, leadership, collaboration, and patience across the region and in coordination with multiple partners.

It will be essential to maintain strong relationships across multiple jurisdictions and between the public sector and private sector to execute this plan. This is an exciting time for the region, as the Rogue Valley enters a new decade with ambitious goals for the future, anchored on regional collaboration and a shared vision.

APPENDIX A. ECONOMIC ASSESSMENT

INTRODUCTION

The Southern Oregon Regional Economic Development, Inc. (SOREDI) serves Jackson and Josephine Counties and is charged with providing a comprehensive approach to economic growth. Essential to this approach is an economic assessment that provides depth and context—not just through local data, but also through benchmarking against other regions of the country and in-depth conversations with community leaders. The benchmarking process gives unique insight into how the region compares to other regions with similar economic drivers and of similar size. The datapoints included in the comparison benchmarks and the data appendix should be updated as part of the comprehensive economic development strategy (CEDS) implementation and evaluation process. Insights gathered from qualitative and quantitative findings ultimately guided the recommendations and strategies found in the regional CEDS plan.

PURPOSE AND SCOPE

To provide a common framework for our recommendations, TIP Strategies conducted a demographic and economic assessment of Jackson and Josephine Counties. Team members began by compiling data on both counties with comparisons to the metro areas of Asheville, North Carolina; Bellingham, Washington; Bend, Oregon; Fort Collins, Colorado; Reno, Nevada; and Twin Falls, Idaho. As part of the assessment, TIP prepared an analysis of the region's strengths, weaknesses, opportunities, and threats (SWOT). Results of this analysis are presented in Figure 4. The purpose of the assessment is to understand the Jackson and Josephine Counties' relative economic positions and highlight the competitive advantages and disadvantages.

The findings presented in this section are based on the following elements.

- A review of relevant studies, plans, and other material provided by the SOREDI and its partners.
- A review of economic and demographic data from primary and secondary sources, including the US Census Bureau, the US Bureau of Labor Statistics, and Economic Modeling Specialists International (Emsi).
- Findings from community site visits, interviews, and focus groups with over 100 community representatives and stakeholders.
- TIP's 20 years of experience working with communities across the country and compiling best practices.

KEY FINDINGS

KEY FINDING 1: WAGES AND HOUSING
IMBALANCE BETWEEN AVERAGE WAGES AND MEDIAN HOME PRICES

One of the most striking datapoints to emerge from the assessment was the disproportional wages-to-home-prices balance. This imbalance is especially prominent in Josephine County. Furthermore, the problem has been exacerbated by strong population growth and housing stock not keeping pace. Even though the shortage of housing is most disruptive at entry-level homes or homes below the median price, the impacts are felt at all levels. There is a shortage of executive and high-end homes, which only puts additional pressure on the supply of homes at mid- to lower-price points. Although communities across the country are struggling with affordable housing, when the SOREDI region was compared to fast-growing peer markets in the benchmarking exercise, the affordability index

was significantly higher than all six of the benchmarked communities. Although there is no specific solution to address this issue, the CEDS will identify strategies to address the imbalance from a wage and job approach and also from a housing supply approach.

FIGURE 1. HOUSING AFFORDABILITY INDEX
RATIO OF MEDIAN HOME VALUE TO MEDIAN HOUSEHOLD INCOME*
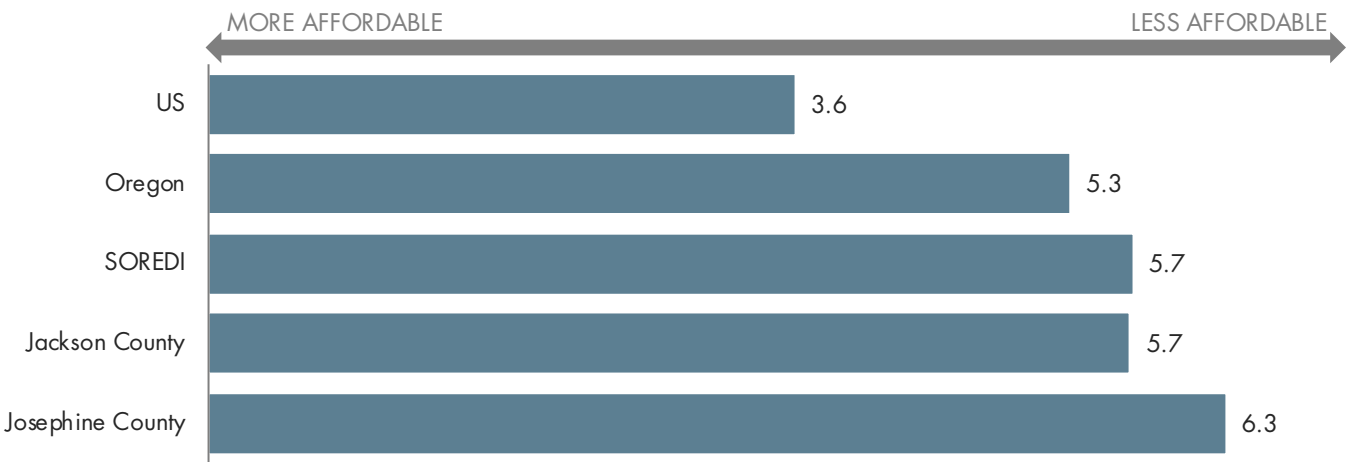
MORE AFFORDABLE ← → LESS AFFORDABLE

US	3.6
Oregon	5.3
SOREDI	5.7
Jackson County	5.7
Josephine County	6.3

*Can also be interpreted as the number of years of household income needed to buy a median-priced home.
Source: US Census Bureau, American Community Survey.
Note: 1-year average for 2017.

KEY FINDING 2: INNOVATION FUNDING
FEDERAL FUNDING INTO THE REGION IS RELATED TO PUBLIC LAND

A significant portion of the federal funding that is coming into the region is related to forest management. This information is significant because the CEDS will address strategies to leverage the funding that is coming into the region for forest management and also offer solutions on how to diversify and increase funding in the region. The SOREDI region is fortunate to have a strong higher education system, which can also be leveraged to increase innovation funding into the region and offer counseling to small businesses looking to secure US Small Business Innovation Research (SBIR) and US Small Business Technology Transfer (STTR) funding.

FIGURE 2. SBIR/STTR AWARDS IN THE SOREDI REGION, 2009–2018
BY AGENCY SOURCE OR SPONSOR

Award Grantors	2009–2013	2014–2018	All Years
Department of Health and Human Services	2,739,628	185,858	2,925,486
Department of Defense	1,271,632		1,271,632
Air Force	*298,026*		*298,026*
Army	*193,702*		*193,702*
Navy	*779,904*		*779,904*
Department of Energy	299,884		299,884
National Science Foundation	149,972		149,972
Total Awards	**4,461,116**	**185,858**	**4,646,974**

Source: US Small Business Administration.

KEY FINDING 3: REMOTE WORKERS
THE REGION HAS A HIGH PERCENTAGE OF REMOTE WORKERS

Remote workers are highly mobile, which is both an opportunity and a challenge. Typically, the first time someone visits a region is as a tourist and increasingly in modern society, people are choosing where they live first (as opposed to going where the jobs are). Remote workers typically choose their homes based on quality of life and amenities, so it is no surprise that Southern Oregon's population of remote workers is nearly double the national average. By creating resources and engaging remote workers, the Rogue Valley will retain their workforce and also have a toolkit that can be used to attract talent to the region.

FIGURE 3. WORKING AT HOME
PERCENT OF WORKERS AGE 16 OR OLDER

Region	Percent
US	5.2%
Oregon	7.4%
SOREDI	9.0%
Jackson County	10.0%
Josephine County	5.7%
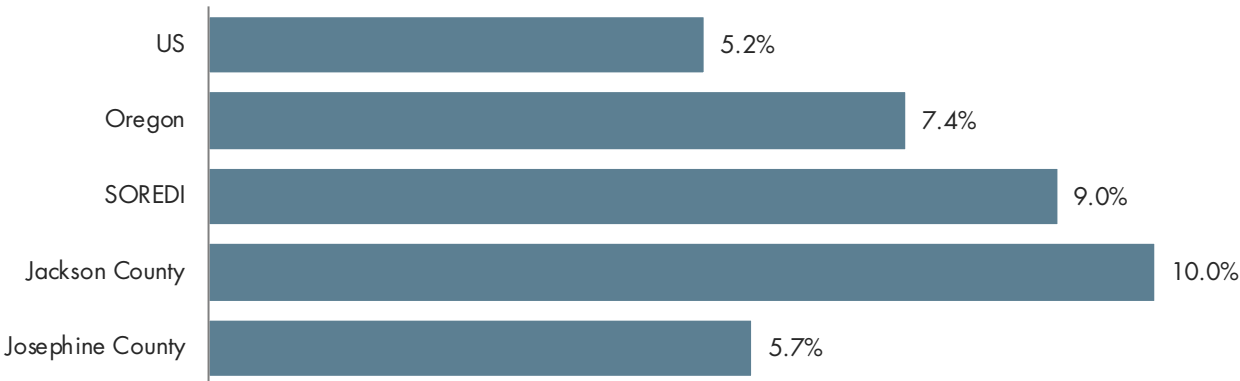
Source: US Census Bureau, American Community Survey.

BENCHMARKS

ASHEVILLE, NORTH CAROLINA

CASE STUDY

Asheville, North Carolina, occupies a unique place in the national dialogue. It has captured the imagination of Millennials and business leaders for its quality of life, regional amenities, and favorable business climate. The Asheville-Buncombe County Economic Development Coalition (EDC) leads the charge in growing the regional economy and the EDC's core activities are carried out through its business retention, expansion, and recruitment efforts. Asheville has a highly educated population, with over 37 percent of the population over the age of 25 having a 4-year degree or higher, which has helped fuel the growth in businesses over the past 10 years (2007–2017). During this time period (2007–2017), the Asheville metro population increased by over 10 percent, but the region isn't without its growing pains. Affordable housing is a concern for the region in addition to ensuring infrastructure keeps up with the pace of growth.

Source: TIP Strategies research.

		Medford–Grants Pass Oregon	Asheville North Carolina
DEMOGRAPHICS			
Metro area classification		CSA*	MSA*
Population	2017	303,831	456,145
Population	2007	280,898	411,842
Population, net change	2007-2017	22,933	44,303
Population, percent change	2007-2017	8.2%	10.8%
Share of population age 20–34	2017	17.2%	16.9%
Share of population age 65+	2017	22.5%	21.7%
Civilian veteran share of population age 18+	2017	10.5%	9.3%
Share of residents who were born out-of-state	2017	62.3%	49.0%
Most common shared ancestry of the local population	2017	German (19.8%)	English (15.5%)
EDUCATION AND INCOME			
Share of population currently enrolled in higher education	2017	19.9%	25.1%
Share of population age 25+ with a 4-year degree or more	2017	25.6%	37.1%
4-yr institutions w/ engineering programs in (or near) the MSA	2018	Oregon Institute of Technology (Klamath Falls)	none
Undergrad enrollment at 4-yr inst. w/ engineering programs in (or near) the MSA	2018	3,543	n/a
Graduation rate of 4-yr inst. w/ engineering programs in (or near) the MSA	2018	46%	n/a
Median household income	2017	$50,351	$50,015
Distribution of total personal income (earnings / investments / SS* & gov't)	2017	51% / 22% / 27%	53% / 24% / 23%
Per capita personal income	2017	$42,807	$43,235
Per capita personal income, indexed (US = 100)	2007	78	81
Per capita personal income, indexed (US = 100)	2017	80	81
WORKFORCE			
Working-age population (age 16+)	2017	248,840	383,698
Labor force	2017	135,560	230,328
Estimated labor force participation rate	2017	54.5%	60.0%
Establishment employment	2017	161,511	271,972
Establishment employment	2007	158,256	246,173
Establishment employment, net change	2007-2017	3,255	25,799
Establishment employment, percent change	2007-2017	2.1%	10.5%
Average commuting time (minutes)	2017	19	21
Self-employment rate	2017	12.4%	9.2%

		Medford–Grants Pass Oregon	Asheville North Carolina
INFRASTRUCTURE			
Interstate access in the metro area	2019	I-5	I-26, I-40
Class 1 railroads in the metro area	2019	none	Norfolk Southern
Primary metropolitan area airport	2019	Rogue Valley International	Asheville Regional
FAA* airport code	2019	MFR	AVL
Number of runways	2019	1	1
Maximum runway length	2019	8,800	7,001
HEALTH AND WELL-BEING			
Civilian noninstitutionalized population w/o health insurance coverage	2017	7.5%	11.2%
Households receiving food stamp/SNAP* benefits	2017	17.0%	8.3%
Civilian noninstitutionalized population age 18–64 with a disability	2017	14.5%	12.4%
Share of days out of the year when air quality is less than "good"	2018	31.0%	35.9%
Walkability rated 0 (lowest) to 100 (highest)	2019	37 (Medford) 40 (Grants Pass) 53 (Ashland)	36 (Asheville)
HOUSING MARKET			
Number of households	2017	126,194	190,004
Average number of persons per household	2017	2.37	2.35
Renters as a share of all occupied households	2017	35.9%	32.0%
Vacancy rate for all housing units	2017	6.2%	16.9%
Number of vacant units for seasonal, recreational, or occasional use	2017	2,535	18,207
Seasonal/recreational housing units as a share of all vacant units	2017	30.6%	47.1%
Share of housing stock built 2000 or later	2017	20.7%	24.3%
Median estimated existing home value	2017	$286,300	$220,900
Median listed asking home price per square foot	2018	$199	$186
Median age of inventory (in days) of listed homes	2018	66 (Medford) 76 (Grants Pass)	92
Median homeowner costs for mortgaged units	2017	$1,435	$1,274
Median estimated contracted rent	2017	$942	$891
Median listed asking rent for multifamily units	2018	$1,198	$1,345

*CSA is combined statistical area. MSA is metropolitan statistical area. SS is Social Security. FAA is Federal Aviation Administration. SNAP is Supplemental Nutrition Assistance Program.
Sources: US Office of Management and Budget; US Census Bureau, American Community Survey 2017 (1-year), TABLES DP02, DP03, DP04, DP05, and B25004; US Bureau of Economic Analysis, Series MAINC4 and CAINC5N; Zillow; Google Maps; Association of American Railroads; US Federal Aviation Administration, Airport/Facility Directory (as of 20 June 2019); US Environmental Protection Agency, Air Quality Index; US National Center for Education Statistics, Integrated Postsecondary Education Data System, College Scoreboard; Walkscore.com; TIP Strategies.

BELLINGHAM, WASHINGTON

CASE STUDY

Bellingham, Washington, is a thriving community located on the Puget Sound halfway between Vancouver, British Columbia, and Seattle, Washington. The community has certainly benefitted from Seattle's growth over the past decade and Bellingham saw its population increase by over 14 percent between 2007 and 2017. The Port of Bellingham has marine and air operations and provides critical connections to the region from domestic and international markets. Western Washington University has affected the high number of educated residents in the community—over 42 percent of the population over the age of 25 has a 4-year degree or higher. Cost of living and home prices remain a challenge for the community, largely resulting from the high costs in Vancouver and Seattle. Wages have not kept pace with rising housing costs and a high percentage of homes in the region are seasonal or recreational properties. The region also faces growth constraints due to state policy and geographic impediments being a coastal community.

Source: TIP Strategies research.

		Medford–Grants Pass Oregon	**Bellingham** Washington
DEMOGRAPHICS			
Metro area classification		CSA	MSA
Population	2017	303,831	221,404
Population	2007	280,898	192,837
Population, net change	2007-2017	22,933	28,567
Population, percent change	2007-2017	8.2%	14.8%
Share of population age 20–34	2017	17.2%	23.2%
Share of population age 65+	2017	22.5%	17.0%
Civilian veteran share of population age 18+	2017	10.5%	7.7%
Share of residents who were born out-of-state	2017	62.3%	48.6%
Most common shared ancestry of the local population	2017	German (19.8%)	English (11.5%)
EDUCATION AND INCOME			
Share of population currently enrolled in higher education	2017	19.9%	42.9%
Share of population age 25+ with a 4-year degree or more	2017	25.6%	35.8%
4-yr institutions w/ engineering programs in (or near) the MSA	2018	Oregon Institute of Technology (Klamath Falls)	Western Washington University
Undergrad enrollment at 4-yr inst. w/ engineering programs in (or near) the MSA	2018	3,543	14,876
Graduation rate of 4-yr inst. w/ engineering programs in (or near) the MSA	2018	46%	69%
Median household income	2017	$50,351	$61,186
Distribution of total personal income (earnings / investments / SS & gov't)	2017	51% / 22% / 27%	59% / 23% / 18%
Per capita personal income	2017	$42,807	$46,028
Per capita personal income, indexed (US = 100)	2007	78	84
Per capita personal income, indexed (US = 100)	2017	80	86
WORKFORCE			
Working-age population (age 16+)	2017	248,840	183,284
Labor force	2017	135,560	117,311
Estimated labor force participation rate	2017	54.5%	64.0%
Establishment employment	2017	161,511	125,148
Establishment employment	2007	158,256	114,493
Establishment employment, net change	2007-2017	3,255	10,655
Establishment employment, percent change	2007-2017	2.1%	9.3%
Average commuting time (minutes)	2017	19	22
Self-employment rate	2017	12.4%	6.7%

		Medford–Grants Pass Oregon	**Bellingham** Washington
INFRASTRUCTURE			
Interstate access in the metro area	2019	I-5	I-5
Class 1 railroads in the metro area	2019	none	BNSF Railway Company
Primary metropolitan area airport	2019	Rogue Valley International	Bellingham International
FAA airport code	2019	MFR	BLI
Number of runways	2019	1	1
Maximum runway length	2019	8,800	6,700
HEALTH AND WELL-BEING			
Civilian noninstitutionalized population w/o health insurance coverage	2017	7.5%	4.4%
Households receiving food stamp/SNAP benefits	2017	17.0%	12.4%
Civilian noninstitutionalized population age 18–64 with a disability	2017	14.5%	9.7%
Share of days out of the year when air quality is less than "good"	2018	31.0%	31.8%
Walkability rated 0 (lowest) to 100 (highest)	2019	37 (Medford) 40 (Grants Pass) 53 (Ashland)	49 (Bellingham)
HOUSING MARKET			
Number of households	2017	126,194	88,636
Average number of persons per household	2017	2.37	2.44
Renters as a share of all occupied households	2017	35.9%	38.4%
Vacancy rate for all housing units	2017	6.2%	8.3%
Number of vacant units for seasonal, recreational, or occasional use	2017	2,535	5,067
Seasonal/recreational housing units as a share of all vacant units	2017	30.6%	63.4%
Share of housing stock built 2000 or later	2017	20.7%	23.3%
Median estimated existing home value	2017	$286,300	$355,500
Median listed asking home price per square foot	2018	$199	$243
Median age of inventory (in days) of listed homes	2018	66 (Medford) 76 (Grants Pass)	66
Median homeowner costs for mortgaged units	2017	$1,435	$1,652
Median estimated contracted rent	2017	$942	$1,078
Median listed asking rent for multifamily units	2018	$1,198	$1,343

Sources: US Office of Management and Budget; US Census Bureau, American Community Survey 2017 (1-year), TABLES DP02, DP03, DP04, DP05, and B25004; US Bureau of Economic Analysis, Series MAINC4 and CAINC5N; Zillow; Google Maps; Association of American Railroads; US Federal Aviation Administration, Airport/Facility Directory (as of 20 June 2019); US Environmental Protection Agency, Air Quality Index; US National Center for Education Statistics, Integrated Postsecondary Education Data System, College Scoreboard; Walkscore.com; TIP Strategies.

BEND, OREGON

CASE STUDY

Bend, Oregon, has gone through an incredible transformation over the past decade—the region experienced over 22 percent population growth from 2007 to 2017. Furthermore, nearly 60 percent of the population was born outside of Oregon. Much of this growth is fueled by the high quality outdoor recreational in the region. From a world-class mountain biking scene to some of the best skiing in the Pacific Northwest, Bend is a mecca for outdoor enthusiasts. However, the region is not without its economic development challenges. The community lacks a major interstate and the closest airport, Redmond Municipal, is the smallest (by number of enplanements) of the four major airports in Oregon. It loses passengers to Portland International Airport. Bend is a magnet for entrepreneurs, and investment funding into the region has been steadily increasing over the past decade. The Bend Venture Conference has been a catalyst for driving investment in the region, and the program has been modeled as a best practice by communities throughout the country.

Source: TIP Strategies research.

		Medford–Grants Pass Oregon	Bend–Redmond Oregon
DEMOGRAPHICS			
Metro area classification		CSA	MSA
Population	2017	303,831	186,875
Population	2007	280,898	152,633
Population, net change	2007-2017	22,933	34,242
Population, percent change	2007-2017	8.2%	22.4%
Share of population age 20–34	2017	17.2%	17.0%
Share of population age 65+	2017	22.5%	19.2%
Civilian veteran share of population age 18+	2017	10.5%	9.2%
Share of residents who were born out-of-state	2017	62.3%	59.6%
Most common shared ancestry of the local population	2017	German (19.8%)	German (21.6%)
EDUCATION AND INCOME			
Share of population currently enrolled in higher education	2017	19.9%	18.6%
Share of population age 25+ with a 4-year degree or more	2017	25.6%	33.7%
4-yr institutions w/ engineering programs in (or near) the MSA	2018	Oregon Institute of Technology (Klamath Falls)	Oregon State University (Cascades campus)
Undergrad enrollment at 4-yr inst. w/ engineering programs in (or near) the MSA	2018	3,543	917
Graduation rate of 4-yr inst. w/ engineering programs in (or near) the MSA	2018	46%	n/a
Median household income	2017	$50,351	$66,273
Distribution of total personal income (earnings / investments / SS & gov't)	2017	51% / 22% / 27%	58% / 24% / 18%
Per capita personal income	2017	$42,807	$50,955
Per capita personal income, indexed (US = 100)	2007	78	89
Per capita personal income, indexed (US = 100)	2017	80	95
WORKFORCE			
Working-age population (age 16+)	2017	248,840	152,493
Labor force	2017	135,560	96,722
Estimated labor force participation rate	2017	54.5%	63.4%
Establishment employment	2017	161,511	118,159
Establishment employment	2007	158,256	102,267
Establishment employment, net change	2007-2017	3,255	15,892
Establishment employment, percent change	2007-2017	2.1%	15.5%
Average commuting time (minutes)	2017	19	20
Self-employment rate	2017	12.4%	9.3%

		Medford–Grants Pass Oregon	Bend–Redmond Oregon
INFRASTRUCTURE			
Interstate access in the metro area	2019	I-5	none
Class 1 railroads in the metro area	2019	none	BNSF Railway Company
Primary metropolitan area airport	2019	Rogue Valley International	Redmond Municipal
FAA airport code	2019	MFR	RDM
Number of runways	2019	1	1
Maximum runway length	2019	8,800	5,200
HEALTH AND WELL-BEING			
Civilian noninstitutionalized population w/o health insurance coverage	2017	7.5%	7.0%
Households receiving food stamp/SNAP benefits	2017	17.0%	11.5%
Civilian noninstitutionalized population age 18–64 with a disability	2017	14.5%	10.0%
Share of days out of the year when air quality is less than "good"	2018	31.0%	17.7%
Walkability rated 0 (lowest) to 100 (highest)	2019	37 (Medford) 40 (Grants Pass) 53 (Ashland)	33 (Bend)
HOUSING MARKET			
Number of households	2017	126,194	74,498
Average number of persons per household	2017	2.37	2.49
Renters as a share of all occupied households	2017	35.9%	34.8%
Vacancy rate for all housing units	2017	6.2%	16.3%
Number of vacant units for seasonal, recreational, or occasional use	2017	2,535	9,908
Seasonal/recreational housing units as a share of all vacant units	2017	30.6%	68.3%
Share of housing stock built 2000 or later	2017	20.7%	36.7%
Median estimated existing home value	2017	$286,300	$368,600
Median listed asking home price per square foot	2018	$199	$227
Median age of inventory (in days) of listed homes	2018	66 (Medford) 76 (Grants Pass)	n/a
Median homeowner costs for mortgaged units	2017	$1,435	$1,655
Median estimated contracted rent	2017	$942	$1,176
Median listed asking rent for multifamily units	2018	$1,198	$1,308

Sources: US Office of Management and Budget; US Census Bureau, American Community Survey 2017 (1-year), TABLES DP02, DP03, DP04, DP05, and B25004; US Bureau of Economic Analysis, Series MAINC4 and CAINC5N; Zillow; Google Maps; Association of American Railroads; US Federal Aviation Administration, Airport/Facility Directory (as of 20 June 2019); US Environmental Protection Agency, Air Quality Index; US National Center for Education Statistics, Integrated Postsecondary Education Data System, College Scoreboard; Walkscore.com; TIP Strategies.

FORT COLLINS, COLORADO

CASE STUDY

Fort Collins, Colorado, is a growing Denver suburb boasting outdoor recreation, sunny weather, and quality-of-life amenities. The population has nearly doubled in the past 30 years and is projected to keep growing. Known as Colorado's "Craft Beer Capital," Fort Collins has leveraged the region's beer and food culture to attract Millennial workers from Denver and throughout the United States. In 2011, Fort Collins created the first zero-energy district in the United States, which came about through a partnership among Fort Collins utilities and a number of public private partners, including Colorado State University and New Belgium Brewing Company. The US Department of Energy contributed $6.3 million in programmatic funding and local partners contributed an additional $5.1 million to launch the pilot project. Although the program formally ended in 2017, the region became known as an innovative leader in clean technology and can point to a number of transformative technologies as a result of the project. Today, Fort Collins remains a top metro in measures of innovation and is known for its tech talent.

Source: TIP Strategies research.

		Medford–Grants Pass Oregon	**Fort Collins** Colorado
DEMOGRAPHICS			
Metro area classification		CSA	MSA
Population	2017	303,831	343,976
Population	2007	280,898	286,112
Population, net change	2007-2017	22,933	57,864
Population, percent change	2007-2017	8.2%	20.2%
Share of population age 20–34	2017	17.2%	25.1%
Share of population age 65+	2017	22.5%	15.1%
Civilian veteran share of population age 18+	2017	10.5%	7.9%
Share of residents who were born out-of-state	2017	62.3%	60.5%
Most common shared ancestry of the local population	2017	German (19.8%)	German (26.0%)
EDUCATION AND INCOME			
Share of population currently enrolled in higher education	2017	19.9%	41.8%
Share of population age 25+ with a 4-year degree or more	2017	25.6%	47.9%
4-yr institutions w/ engineering programs in (or near) the MSA	2018	Oregon Institute of Technology (Klamath Falls)	Colorado State University
Undergrad enrollment at 4-yr inst. w/ engineering programs in (or near) the MSA	2018	3,543	23,804
Graduation rate of 4-yr inst. w/ engineering programs in (or near) the MSA	2018	46%	68%
Median household income	2017	$50,351	$69,102
Distribution of total personal income (earnings / investments / SS & gov't)	2017	51% / 22% / 27%	63% / 24% / 13%
Per capita personal income	2017	$42,807	$50,539
Per capita personal income, indexed (US = 100)	2007	78	91
Per capita personal income, indexed (US = 100)	2017	80	94
WORKFORCE			
Working-age population (age 16+)	2017	248,840	283,590
Labor force	2017	135,560	187,783
Estimated labor force participation rate	2017	54.5%	66.2%
Establishment employment	2017	161,511	232,282
Establishment employment	2007	158,256	190,983
Establishment employment, net change	2007-2017	3,255	41,299
Establishment employment, percent change	2007-2017	2.1%	21.6%
Average commuting time (minutes)	2017	19	25
Self-employment rate	2017	12.4%	6.1%

		Medford–Grants Pass Oregon	**Fort Collins** Colorado
INFRASTRUCTURE			
Interstate access in the metro area	2019	I-5	I-25
Class 1 railroads in the metro area	2019	none	BNSF, Union Pacific
Primary metropolitan area airport	2019	Rogue Valley International	Northern Colorado Regional
FAA airport code	2019	MFR	FNL
Number of runways	2019	1	2
Maximum runway length	2019	8,800	8,500
HEALTH AND WELL-BEING			
Civilian noninstitutionalized population w/o health insurance coverage	2017	7.5%	6.3%
Households receiving food stamp/SNAP benefits	2017	17.0%	6.1%
Civilian noninstitutionalized population age 18–64 with a disability	2017	14.5%	8.5%
Share of days out of the year when air quality is less than "good"	2018	31.0%	44.9%
Walkability rated 0 (lowest) to 100 (highest)	2019	37 (Medford) 40 (Grants Pass) 53 (Ashland)	36 (Fort Collins)
HOUSING MARKET			
Number of households	2017	126,194	134,709
Average number of persons per household	2017	2.37	2.48
Renters as a share of all occupied households	2017	35.9%	33.4%
Vacancy rate for all housing units	2017	6.2%	9.3%
Number of vacant units for seasonal, recreational, or occasional use	2017	2,535	7,460
Seasonal/recreational housing units as a share of all vacant units	2017	30.6%	53.9%
Share of housing stock built 2000 or later	2017	20.7%	28.4%
Median estimated existing home value	2017	$286,300	$359,800
Median listed asking home price per square foot	2018	$199	$236
Median age of inventory (in days) of listed homes	2018	66 (Medford) 76 (Grants Pass)	53
Median homeowner costs for mortgaged units	2017	$1,435	$1,673
Median estimated contracted rent	2017	$942	$1,233
Median listed asking rent for multifamily units	2018	$1,198	$1,353

Sources: US Office of Management and Budget; US Census Bureau, American Community Survey 2017 (1-year), TABLES DP02, DP03, DP04, DP05, and B25004; US Bureau of Economic Analysis, Series MAINC4 and CAINC5N; Zillow; Google Maps; Association of American Railroads; US Federal Aviation Administration, Airport/Facility Directory (as of 20 June 2019); US Environmental Protection Agency, Air Quality Index; US National Center for Education Statistics, Integrated Postsecondary Education Data System, College Scoreboard; Walkscore.com; TIP Strategies.

RENO, NEVADA

CASE STUDY

The foundation for the Reno, Nevada, recent economic boom was laid in the late 1990s, when investors snapped up more than 100,000 acres of ranch land outside Reno in Storey County with access to I-80, the Union Pacific railroad, and local power generation. The investors also struck a deal with the county that paved the way for preapproved developments and a permitting process that can be completed in a matter of days. The Tahoe Reno Industrial Center was born, and in the 20 years since, tenants have poured in from Silicon Valley and beyond. The park's tenants now include factories (Tesla), data centers (Google, Switch), and logistics facilities (Walmart). The region has seen a population increase of over 12 percent from 2007 to 2017, and the region has a strong labor force participation rate, estimated at just over 66 percent. Reno also benefits from a growing tourism economy, which ranges from outdoor recreation to nightlife and gaming.

Source: TIP Strategies research.

		Medford–Grants Pass Oregon	**Reno** Nevada
DEMOGRAPHICS			
Metro area classification		CSA	MSA
Population	2017	303,831	464,593
Population	2007	280,898	412,724
Population, net change	2007-2017	22,933	51,869
Population, percent change	2007-2017	8.2%	12.6%
Share of population age 20–34	2017	17.2%	21.4%
Share of population age 65+	2017	22.5%	16.1%
Civilian veteran share of population age 18+	2017	10.5%	9.0%
Share of residents who were born out-of-state	2017	62.3%	67.7%
Most common shared ancestry of the local population	2017	German (19.8%)	Mexican (19.1%)
EDUCATION AND INCOME			
Share of population currently enrolled in higher education	2017	19.9%	29.6%
Share of population age 25+ with a 4-year degree or more	2017	25.6%	31.0%
4-yr institutions w/ engineering programs in (or near) the MSA	2018	Oregon Institute of Technology (Klamath Falls)	University of Nevada, Reno
Undergrad enrollment at 4-yr inst. w/ engineering programs in (or near) the MSA	2018	3,543	17,930
Graduation rate of 4-yr inst. w/ engineering programs in (or near) the MSA	2018	46%	55%
Median household income	2017	$50,351	$61,360
Distribution of total personal income (earnings / investments / SS & gov't)	2017	51% / 22% / 27%	57% / 29% / 14%
Per capita personal income	2017	$42,807	$55,460
Per capita personal income, indexed (US = 100)	2007	78	109
Per capita personal income, indexed (US = 100)	2017	80	103
WORKFORCE			
Working-age population (age 16+)	2017	248,840	375,275
Labor force	2017	135,560	249,593
Estimated labor force participation rate	2017	54.5%	66.5%
Establishment employment	2017	161,511	302,609
Establishment employment	2007	158,256	286,859
Establishment employment, net change	2007-2017	3,255	15,750
Establishment employment, percent change	2007-2017	2.1%	5.5%
Average commuting time (minutes)	2017	19	23
Self-employment rate	2017	12.4%	5.2%

		Medford–Grants Pass Oregon	Reno Nevada
INFRASTRUCTURE			
Interstate access in the metro area	2019	I-5	I-80
Class 1 railroads in the metro area	2019	none	Union Pacific
Primary metropolitan area airport	2019	Rogue Valley International	Reno-Tahoe International
FAA airport code	2019	MFR	RNO
Number of runways	2019	1	3
Maximum runway length	2019	8,800	11,002
HEALTH AND WELL-BEING			
Civilian noninstitutionalized population w/o health insurance coverage	2017	7.5%	9.9%
Households receiving food stamp/SNAP benefits	2017	17.0%	10.1%
Civilian noninstitutionalized population age 18–64 with a disability	2017	14.5%	9.2%
Share of days out of the year when air quality is less than "good"	2018	31.0%	41.6%
Walkability rated 0 (lowest) to 100 (highest)	2019	37 (Medford) 40 (Grants Pass) 53 (Ashland)	38 (Reno)
HOUSING MARKET			
Number of households	2017	126,194	182,846
Average number of persons per household	2017	2.37	2.51
Renters as a share of all occupied households	2017	35.9%	41.6%
Vacancy rate for all housing units	2017	6.2%	8.2%
Number of vacant units for seasonal, recreational, or occasional use	2017	2,535	4,449
Seasonal/recreational housing units as a share of all vacant units	2017	30.6%	27.3%
Share of housing stock built 2000 or later	2017	20.7%	26.2%
Median estimated existing home value	2017	$286,300	$329,200
Median listed asking home price per square foot	2018	$199	$222
Median age of inventory (in days) of listed homes	2018	66 (Medford) 76 (Grants Pass)	52
Median homeowner costs for mortgaged units	2017	$1,435	$1,526
Median estimated contracted rent	2017	$942	$974
Median listed asking rent for multifamily units	2018	$1,198	$1,269

Sources: US Office of Management and Budget; US Census Bureau, American Community Survey 2017 (1-year), TABLES DP02, DP03, DP04, DP05, and B25004; US Bureau of Economic Analysis, Series MAINC4 and CAINC5N; Zillow; Google Maps; Association of American Railroads; US Federal Aviation Administration, Airport/Facility Directory (as of 20 June 2019); US Environmental Protection Agency, Air Quality Index; US National Center for Education Statistics, Integrated Postsecondary Education Data System, College Scoreboard; Walkscore.com; TIP Strategies.

TWIN FALLS, IDAHO

CASE STUDY

Twin Falls, Idaho, is a small, but growing, community in South Central Idaho, located on I-84 between Boise and Idaho Falls. Historically known for its agriculture, the region has done a phenomenal job of focusing on growing the entire agribusiness ecosystem, from food production to processing to research and development (R&D). Major brands such as Clif Bar and Chobani yogurt are significant employers in the region and Twin Falls' strategic location supports getting food products to market. The region has been noted for its business-friendly policies, including a streamlined permitting process that is predictable and efficient. In addition to a growing business economy, the region has prioritized workforce development and talent attraction initiatives to support the business community. The College of Southern Idaho has a robust internship program and collaborates with the US Small Business Development Center (SBDC) and workforce partners in the region to coordinate on-the-job and incumbent worker training.

Source: TIP Strategies research.

		Medford–Grants Pass Oregon	Twin Falls Idaho
DEMOGRAPHICS			
Metro area classification		CSA	Micro Area
Population	2017	303,831	108,751
Population	2007	280,898	94,310
Population, net change	2007-2017	22,933	14,441
Population, percent change	2007-2017	8.2%	15.3%
Share of population age 20–34	2017	17.2%	18.9%
Share of population age 65+	2017	22.5%	14.1%
Civilian veteran share of population age 18+	2017	10.5%	9.5%
Share of residents who were born out-of-state	2017	62.3%	47.3%
Most common shared ancestry of the local population	2017	German (19.8%)	Mexican (19.2%)
EDUCATION AND INCOME			
Share of population currently enrolled in higher education	2017	19.9%	15.4%
Share of population age 25+ with a 4-year degree or more	2017	25.6%	18.8%
4-yr institutions w/ engineering programs in (or near) the MSA	2018	Oregon Institute of Technology (Klamath Falls)	none
Undergrad enrollment at 4-yr inst. w/ engineering programs in (or near) the MSA	2018	3,543	n/a
Graduation rate of 4-yr inst. w/ engineering programs in (or near) the MSA	2018	46%	n/a
Median household income	2017	$50,351	$51,460
Distribution of total personal income (earnings / investments / SS & gov't)	2017	51% / 22% / 27%	63% / 18% / 19%
Per capita personal income	2017	$42,807	$38,288
Per capita personal income, indexed (US = 100)	2007	78	71
Per capita personal income, indexed (US = 100)	2017	80	71
WORKFORCE			
Working-age population (age 16+)	2017	248,840	81,642
Labor force	2017	135,560	53,626
Estimated labor force participation rate	2017	54.5%	65.7%
Establishment employment	2017	161,511	63,997
Establishment employment	2007	158,256	57,877
Establishment employment, net change	2007-2017	3,255	6,120
Establishment employment, percent change	2007-2017	2.1%	10.6%
Average commuting time (minutes)	2017	19	17
Self-employment rate	2017	12.4%	6.3%

		Medford–Grants Pass Oregon	Twin Falls Idaho
INFRASTRUCTURE			
Interstate access in the metro area	2019	I-5	I-84
Class 1 railroads in the metro area	2019	none	none
Primary metropolitan area airport	2019	Rogue Valley International	Joslin Field/ Magic Valley Regional
FAA airport code	2019	MFR	TWF
Number of runways	2019	1	2
Maximum runway length	2019	8,800	8,703
HEALTH AND WELL-BEING			
Civilian noninstitutionalized population w/o health insurance coverage	2017	7.5%	16.1%
Households receiving food stamp/SNAP benefits	2017	17.0%	8.6%
Civilian noninstitutionalized population age 18–64 with a disability	2017	14.5%	13.3%
Share of days out of the year when air quality is less than "good"	2018	31.0%	12.6%
Walkability rated 0 (lowest) to 100 (highest)	2019	37 (Medford) 40 (Grants Pass) 53 (Ashland)	37 (Twin Falls)
HOUSING MARKET			
Number of households	2017	126,194	38,764
Average number of persons per household	2017	2.37	2.82
Renters as a share of all occupied households	2017	35.9%	28.7%
Vacancy rate for all housing units	2017	6.2%	7.5%
Number of vacant units for seasonal, recreational, or occasional use	2017	2,535	n/a
Seasonal/recreational housing units as a share of all vacant units	2017	30.6%	n/a
Share of housing stock built 2000 or later	2017	20.7%	22.0%
Median estimated existing home value	2017	$286,300	$163,400
Median listed asking home price per square foot	2018	$199	$127
Median age of inventory (in days) of listed homes	2018	66 (Medford) 76 (Grants Pass)	65
Median homeowner costs for mortgaged units	2017	$1,435	$1,102
Median estimated contracted rent	2017	$942	$759
Median listed asking rent for multifamily units	2018	$1,198	$885

Sources: US Office of Management and Budget; US Census Bureau, American Community Survey 2017 (1-year), TABLES DP02, DP03, DP04, DP05, and B25004; US Bureau of Economic Analysis, Series MAINC4 and CAINC5N; Zillow; Google Maps; Association of American Railroads; US Federal Aviation Administration, Airport/Facility Directory (as of 20 June 2019); US Environmental Protection Agency, Air Quality Index; US National Center for Education Statistics, Integrated Postsecondary Education Data System, College Scoreboard; Walkscore.com; TIP Strategies.

ASSESSMENT DATA

BACKGROUND

FIGURE 4. SWOT ANALYSIS

⊕ STRENGTHS	⊗ WEAKNESSES
• Diversified industries throughout the region • Rogue Valley International-Medford Airport • Exceptional healthcare providers • History of economic development success • Higher education institutions • Philanthropic community • Engaged business community • Strong work ethic • Tourism and recreational amenities • Arts and culture festivals and venues	• Talent retainment and attraction • Career and technical programs not matching industry needs • High percentage of disengaged youth (not in school/work) • Segment of the population resistant to change • Lack of a common brand for the region • Marketing for the region • Access to capital, especially for startups • Workforce development, especially in rural areas
⊠ OPPORTUNITIES	⚠ THREATS
• Developing innovation ecosystem • Entrepreneurship community • Strengthen clusters and supply chains • Collaboration among higher ed and private sector • Tourism and experiential environment • Logistics corridor (I-5) • Large greenfield site for employment center	• Forest fires/smoke • Infrastructure keeping pace with growth • Changing agricultural industry • Affordable workforce housing • Limited real estate opportunities w/absentee land/building owners • Environmental impacts (earthquakes, landslides, snowpack) • Regulatory environment, including land use

DEMOGRAPHICS

FIGURE 5. SOREDI REGION POPULATION HISTORY AND PROJECTION
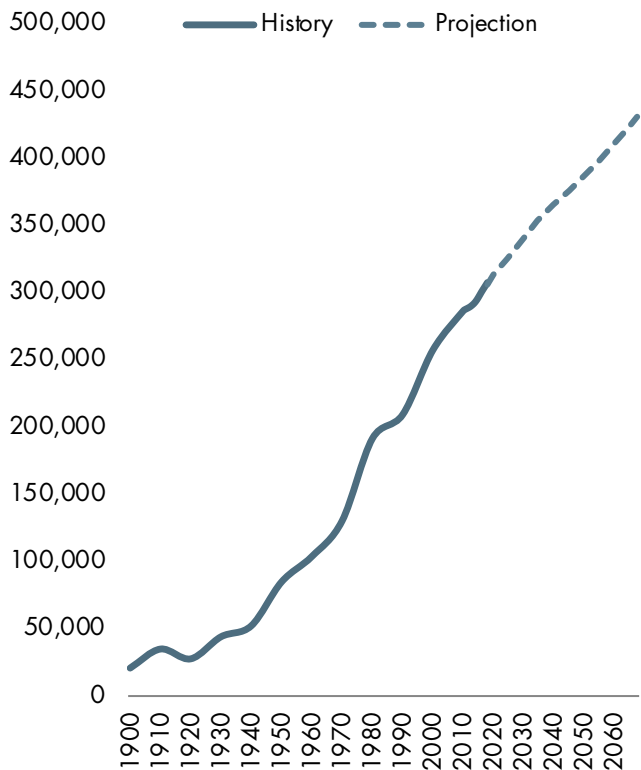
FIGURE 6. SOREDI REGION COMPONENTS OF POPULATION CHANGE
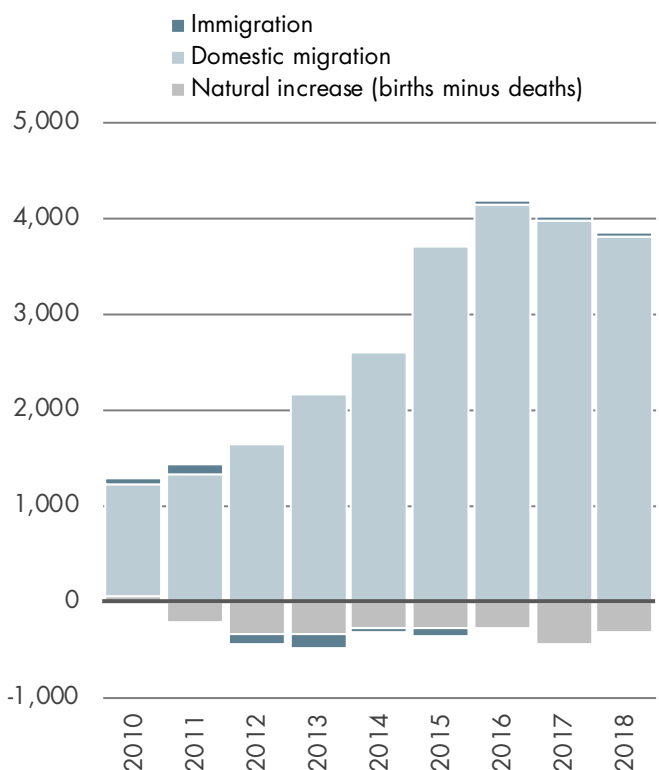
FIGURE 7. MEDIAN AGE

Sources: (Figure 5) US Census Bureau; Portland State University, Population Research Center; (Figure 6) US Census Bureau, Population Estimates Program; (Figure 7) US Census Bureau, American Community Survey.

Notes: (Figure 5) Decennial census 1900–2010; intercensal estimates 2011–2018; projection trend series 2018–2068. (Figure 6) The components for 2010 are estimated based on a 12-month projection of the second quarter (the period between the census and the mid-year estimate) that has not been seasonally adjusted. Total population change includes a residual—a change in population that cannot be attributed to any specific demographic component—-which is not shown here. As a result, the sum of the components of change might not equal net population change. (Figure 7) 1-year average for 2017.

FIGURE 8. POPULATION DIVERSITY

White · Hispanic/Latino · Black · Asian · Other

	White	Hispanic/Latino	Black	Asian	Other
US	61%	18%	12%	6%	4%
Oregon	76%	13%		4%	5%
SOREDI	82%	11%			5%
Jackson County	81%	13%			5%
Josephine County	87%	7%			5%
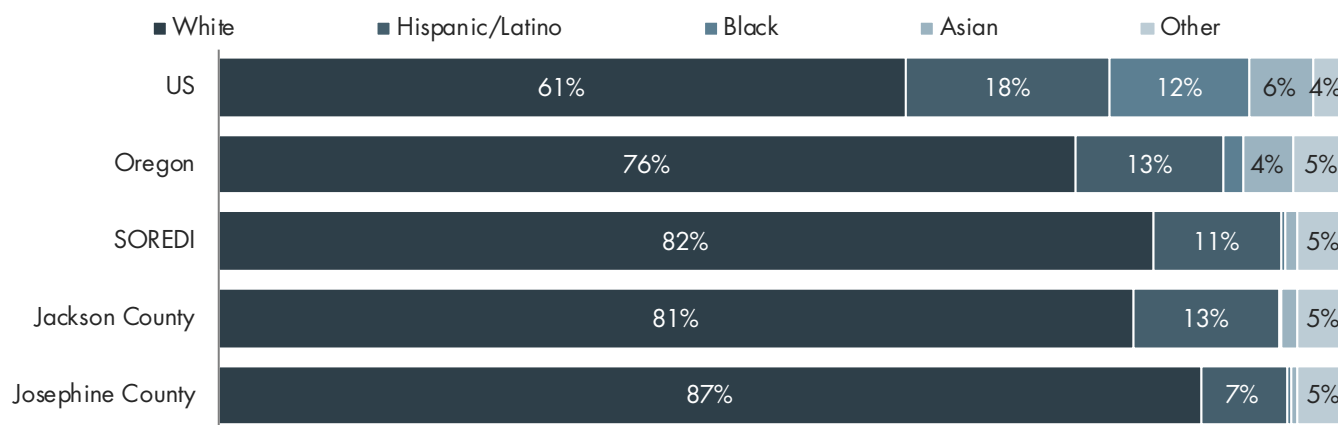
FIGURE 9. SCHOOL ENROLLMENT
AS A PERCENT OF POPULATION AGE 3+

Nursery/kindergarten · Elementary · High school · College or grad school

	Nursery/kindergarten	Elementary	High school	College or grad school
US	3%	10%	5%	7%
Oregon	2%	9%	5%	6%
SOREDI	2%	9%	5%	4%
Jackson County	2%	10%	5%	4%
Josephine County	2%	9%	4%	3%
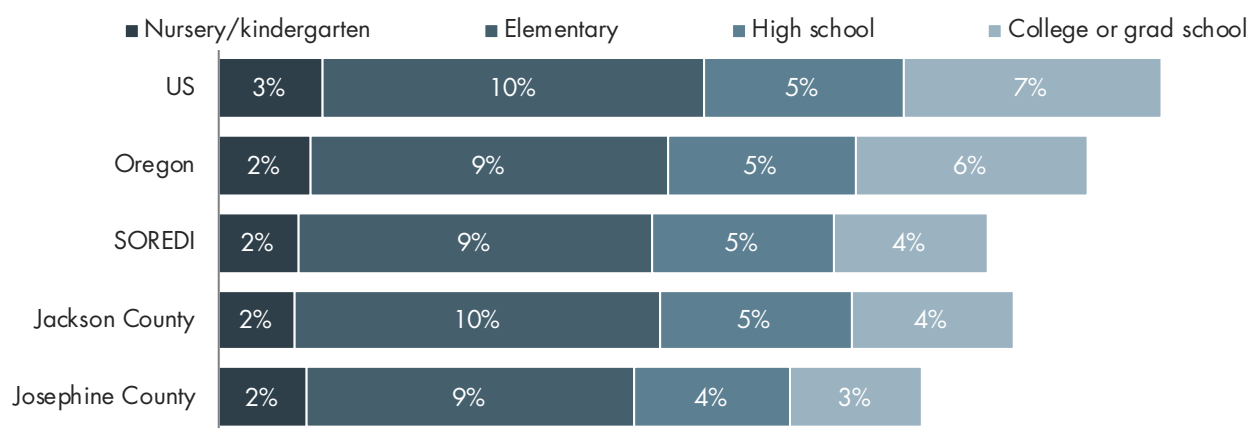
FIGURE 10. MEDIAN HOUSEHOLD INCOME

US	$60,336
Oregon	$60,212
SOREDI	$50,351
Jackson County	$51,409
Josephine County	$44,426

Source: (figures this page) US Census Bureau, American Community Survey.
Notes: (figures this page) 1-year average for 2017; (Figure 8) Hispanics might be of any race. All other racial categories represent non-Hispanics.

FIGURE 11. VETERAN STATUS
PERCENT OF CIVILIAN POPULATION AGE 18 OR HIGHER

	US	Oregon	SOREDI	Jackson County	Josephine County
	7.3%	8.5%	10.5%	8.7%	14.7%
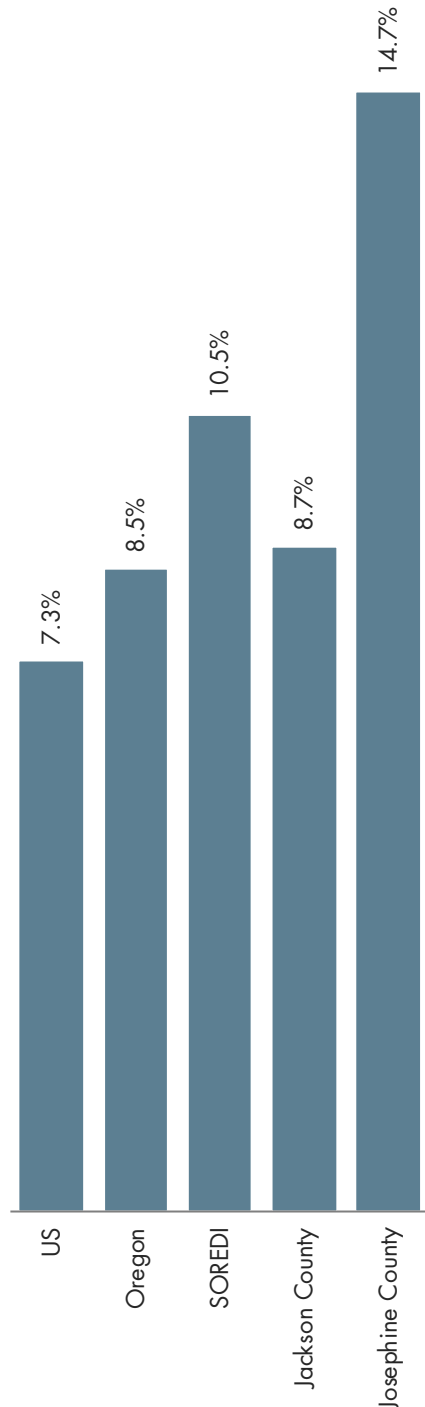
FIGURE 12. OVERVIEW OF THE VETERAN POPULATION IN THE SOREDI REGION, 2017

	Veteran Population	Adult Population (Age 18+)	Veteran Share (%)
Total	**25,274**	**241,493**	**10.5%**
Male	23,470	115,734	20.3%
Female	1,804	125,759	1.4%
AGE			
18–34	1,176	57,863	2.0%
35–54	3,653	69,656	5.2%
55–64	4,259	45,490	9.4%
65–74	9,142	40,991	22.3%
75+	7,044	27,493	25.6%
WAR SERVICE			
Gulf War (2001)	2,793	—	—
Gulf War (1990)	3,694	—	—
Vietnam War	11,656	—	—
Korean War	3,155	—	—
World War II	963	—	—
EDUCATION			
Not a high school graduate	1,081	19,332	5.6%
High school or GED	6,931	59,792	11.6%
Some college, <4 years	9,632	83,311	11.6%
Bachelor's degree or higher	7,195	55,868	12.9%
MEDIAN INDIVIDUAL INCOME			
Total	$38,870	$26,350	147.5%
Male	$39,179	—	—
Female	$33,608	—	—
IN THE LABOR FORCE BUT CURRENTLY UNEMPLOYED BY AGE			
18–34	35	—	—
35–54	123	—	—
55–64	89	—	—
NOT IN LABOR FORCE BY AGE			
18–34	323	—	—
35–54	1,153	—	—
55–64	1,768	—	—
DISABLED BY AGE			
18–34	560	—	—
35–54	926	—	—
55–64	1,208	—	—
65–74	5,970	—	—

Source: (figures this page) US Census Bureau, American Community Survey.
Notes: (Figure 11) 1-year average for 2017. (Figure 12) 1-year average for 2017, based on calculations from Tables B21001, B21003, B21004, B21005, and B21007. Active service totals might not add; not all veterans were in service during war years, and some with career military service served in multiple wars. Smaller sample sizes tend to have higher margins of error, so data should be interpreted with caution.

HOUSING

FIGURE 13. MEDIAN MONTHLY RENT
RENTER-OCCUPIED UNITS

US	$1,012
Oregon	$1,079
SOREDI	$942
Jackson County	$958
Josephine County	$861

FIGURE 14. MEDIAN HOME VALUE
OWNER-OCCUPIED UNITS

US	$217,600
Oregon	$319,200
SOREDI	$286,300
Jackson County	$291,600
Josephine County	$278,000

FIGURE 15. HOUSING AFFORDABILITY INDEX
RATIO OF MEDIAN HOME VALUE TO MEDIAN HOUSEHOLD INCOME*
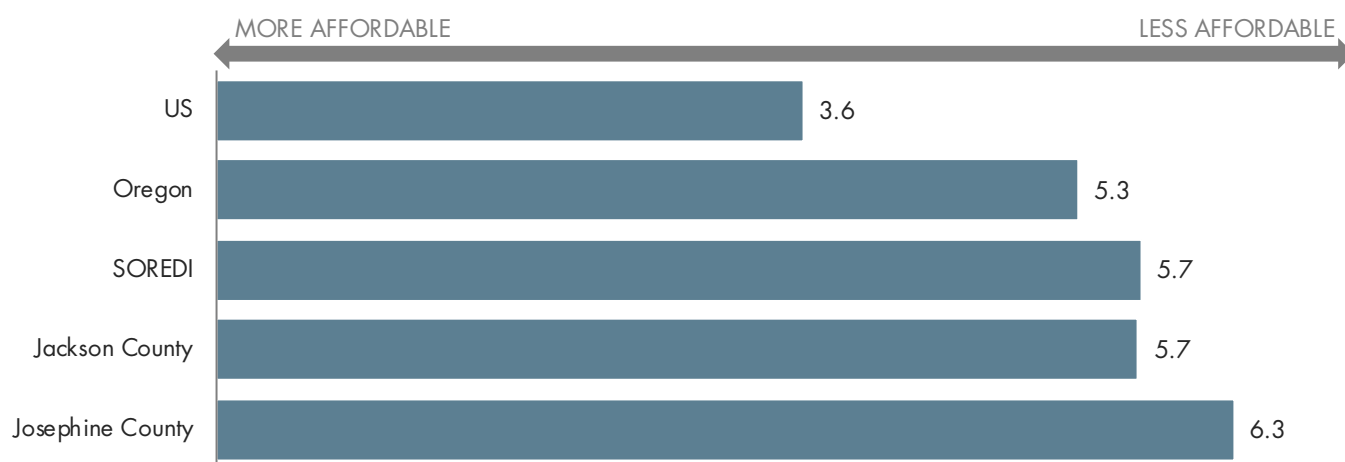
MORE AFFORDABLE ← → LESS AFFORDABLE

US	3.6
Oregon	5.3
SOREDI	5.7
Jackson County	5.7
Josephine County	6.3

*Can also be interpreted as the number of years of household income needed to buy a median-priced home.
Source: (figures this page) US Census Bureau, American Community Survey.
Note: (figures this page) 1-year average for 2017.

MOBILITY AND CONNECTIVITY

FIGURE 16. WORKING AT HOME
PERCENT OF WORKERS AGE 16 OR OLDER

US	5.2%
Oregon	7.4%
SOREDI	9.0%
Jackson County	10.0%
Josephine County	5.7%
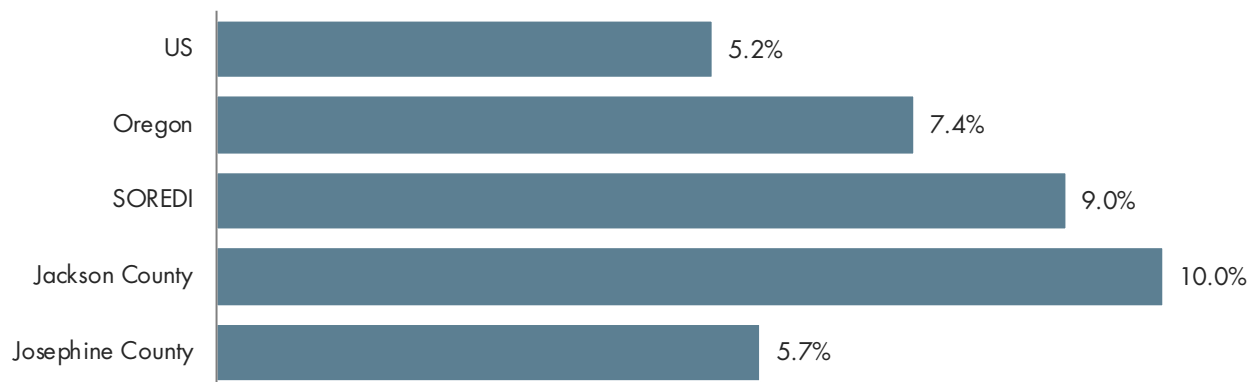
FIGURE 17. AVERAGE TRAVEL TIME TO WORK IN MINUTES

US	27
Oregon	24
SOREDI	19
Jackson County	18
Josephine County	22

FIGURE 18. COMMUTER INFLOW/OUTFLOW FOR THE SOREDI REGION, 2015
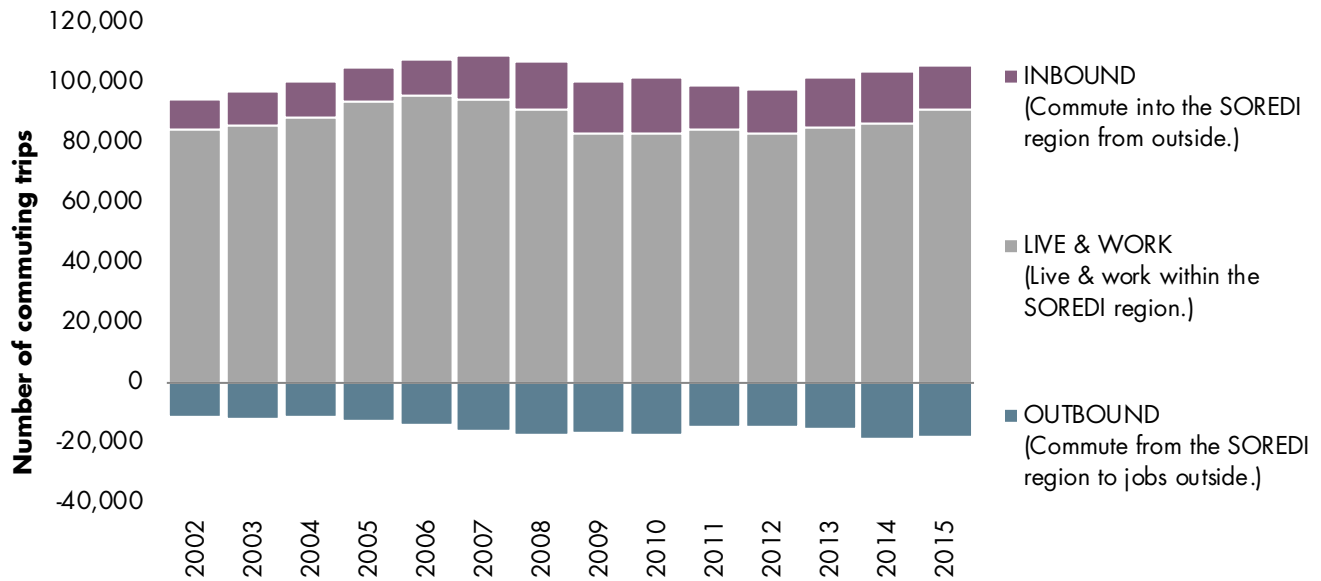FLOW OF WORKERS TO/FROM THE AREA

14,519

Commute to jobs in the SOREDI region from outside.

Of the 108,978 residents employed in 2015, 16 percent commuted to jobs outside the area.

91,245 Live and work within the SOREDI region.

Of the 105,764 workers who held jobs in the SOREDI region in 2015, 14 percent lived outside the area.

Live in the SOREDI region and commute to jobs outside.

17,733

Sources: (Figure 16, Figure 17) US Census Bureau, American Community Survey; (Figure 18) US Census Bureau, Local Employment Dynamics. Notes: (Figure 16, Figure 17) 1-year average for 2017. (Figure 18) Overlay arrows are for illustrative purposes and do not indicate directionality of worker flow between home and employment locations.

FIGURE 19. COMMUTING FLOWS, 2002–2015

- **INBOUND** (Commute into the SOREDI region from outside.)
- **LIVE & WORK** (Live & work within the SOREDI region.)
- **OUTBOUND** (Commute from the SOREDI region to jobs outside.)

FIGURE 20. NET COMMUTING FLOWS BY NAICS* INDUSTRY SECTOR

Net flows = **inbound** - **outbound** flows

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Information & media	-25	+14	-20	-2	+157	+175	+191	+114	+151	+62	+77
Accommodation & food services	-156	-178	-82	-30	+146	+243	+228	+175	+311	+239	+30
Manufacturing	-289	-282	-227	-225	-139	-86	-165	-51	+13	-143	-10
Utilities	-12	-37	-21	-33	+55	+20	-9	-5	-8	-12	-19
Property sales & leasing	-63	-21	-66	-89	-3	-13	-3	-17	-13	-55	-21
Regional & corporate operations	+19	+1	-56	+4	+17	+46	+49	+52	+75	-44	-27
Arts, entertainment, & recreation	+11	-19	-42	+3	+45	+10	+37	+8	+65	-27	-33
Oil, gas, & mining	+10	+16	+23	+18	+20	-4	-9	-30	-4	-31	-35
Personal & other services	-9	-37	-75	-142	-14	+12	-52	-6	+27	+1	-58
Education	-236	-205	-273	-285	-143	-141	-167	-147	-149	-200	-128
Finance & insurance	-28	-25	+6	-3	+143	+75	+49	-63	+79	+23	-134
Healthcare	+95	+243	+136	+308	+545	+495	+341	+227	+457	+154	-203
Retail trade	+201	-21	+452	+555	+1,116	+1,569	+658	+658	+944	+768	-212
Construction	-22	+19	+23	-163	-98	-103	-102	-110	-31	-281	-244
Professional services	-167	-117	-235	-144	-154	-204	-91	-76	-144	-319	-252
Transportation & warehousing	-282	-351	-326	-385	-121	-51	-118	-172	-117	-268	-255
Wholesale trade	-165	-277	-279	-251	-258	-106	-95	-219	-87	-175	-317
Agriculture	-187	-203	-126	-172	-55	-278	-116	-223	-187	-309	-328
Government	-253	-268	-274	-232	-221	-314	-348	-324	-390	-415	-504
Administrative services	-227	-155	-273	-244	-70	-147	-198	-225	-184	-319	-541

*NAICS is North American Industry Classification System, used for classifying businesses.
Source: (figures this page) US Census Bureau, Local Employment Dynamics.

FIGURE 21. LEADING NET FLOWS OF COMMUTERS BY COUNTY

Net flows = **inbound** - **outbound** flows

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Josephine County, OR	+1,726	+1,825	+1,809	+2,034	+1,830	+1,576	+1,517	+1,772	+1,397	+1,121
Douglas County, OR	-202	+112	+108	+793	+672	+438	+509	+515	+620	+413
Klamath County, OR	+6	+85	+293	+37	+129	+354	+448	+368	+415	+392
Coos County, OR	+241	+416	+457	+487	+561	+534	+409	+462	+358	+356
Malheur County, OR	+163	+248	+240	+203	+205	+195	+208	+204	+206	+211
Siskiyou County, CA	+14	-157	-131	+266	+236	+184	+209	+155	+265	+182
Lassen County, CA		+2	+1	+80	+108	+114	+121	+127	+142	+153
Curry County, OR	-2	-230	-161	+126	+214	+209	+195	+233	+284	+137
Clark County, WA		+162	+199	+205	+214	+103	+69	+124	+111	+109
Del Norte County, CA	-90	-102	-96	+32	+57	+109	+97	+112	+151	+97
Humboldt County, CA	-49	-61	-48	-36	-48	-21	+25	+10	+7	-53
Yakima County, WA		-21	-4	+0	-38	-34	-33	-56	-61	-83
Linn County, OR	+245	+288	+267	+281	+102	-93	-145	-137	-18	-102
Lincoln County, OR	+105	+92	+1	+87	+13			-180	-66	-152
Clackamas County, OR	-691	-873	-771	-760	-755	-289	-329	-187	-595	-606
Washington County, OR	-803	-711	-844	-752	-425	-352	-460	-215	-424	-766
Marion County, OR	-313	-274	-280	-103	-142	-346	-452	-244	-660	-799
Jackson County, OR	-1,726	-1,825	-1,809	-2,034	-1,830	-1,576	-1,517	-1,772	-1,397	-1,121
Lane County, OR	-509	-984	-619	-726	-782	-1,654	-1,850	-1,907	-1,615	-1,546
Multnomah County, OR	-1,159	-1,026	-1,013	-829	-811	-729	-1,135	-782	-1,383	-1,683

Source: US Census Bureau, Local Employment Dynamics.

EMPLOYMENT AND SECTOR DYNAMICS
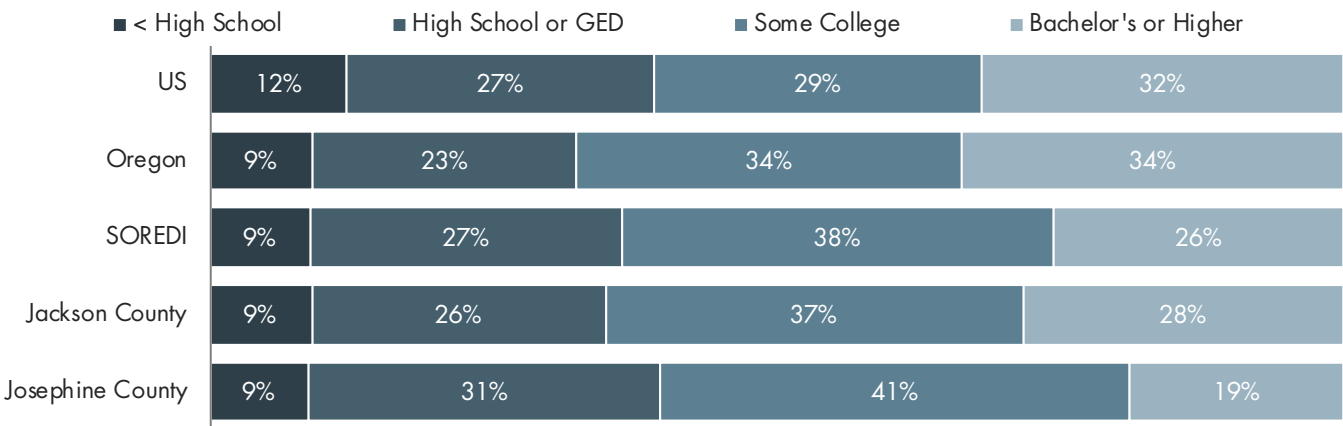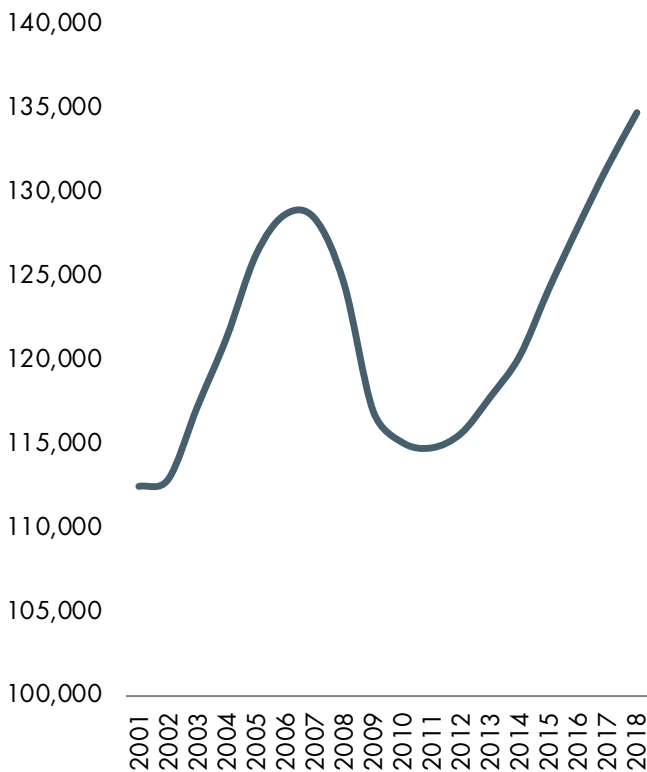
FIGURE 22. EDUCATIONAL ATTAINMENT

	■ < High School	■ High School or GED	■ Some College	■ Bachelor's or Higher
US	12%	27%	29%	32%
Oregon	9%	23%	34%	34%
SOREDI	9%	27%	38%	26%
Jackson County	9%	26%	37%	28%
Josephine County	9%	31%	41%	19%

FIGURE 23. SOREDI REGION EMPLOYMENT

FIGURE 24. COMPARATIVE ANNUAL JOB GROWTH (PERCENT)

Sources: (Figure 22) US Census Bureau, American Community Survey; (Figure 23, Figure 24) Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed.
Note: (Figure 22) 1-year average for 2017.

FIGURE 25. SOREDI REGION EMPLOYMENT BY SECTOR, 2018

Sector	Employment
Healthcare	24,614
Retail trade	19,122
Accommodation & food services	13,438
Manufacturing	11,339
Education	8,166
Construction	8,031
Personal & other services	7,138
Administrative services	6,396
Professional services	4,702
Agriculture	4,541
Local government	4,148
Transportation & warehousing	4,138
Finance & insurance	3,391
Wholesale trade	3,309
Arts, entertainment, & recreation	2,573
Property sales & leasing	2,314
Information & media	1,668
Federal government (civilian)	1,601
Regional & corporate operations	1,505
State government	1,369
Federal government (military)	700
Utilities	296
Oil, gas, & mining	169

Source: Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed.
Note: Public sector employment in education (e.g., public schools, colleges, and universities), healthcare, and the US Postal Service are included with applicable private sector industry totals rather than government.
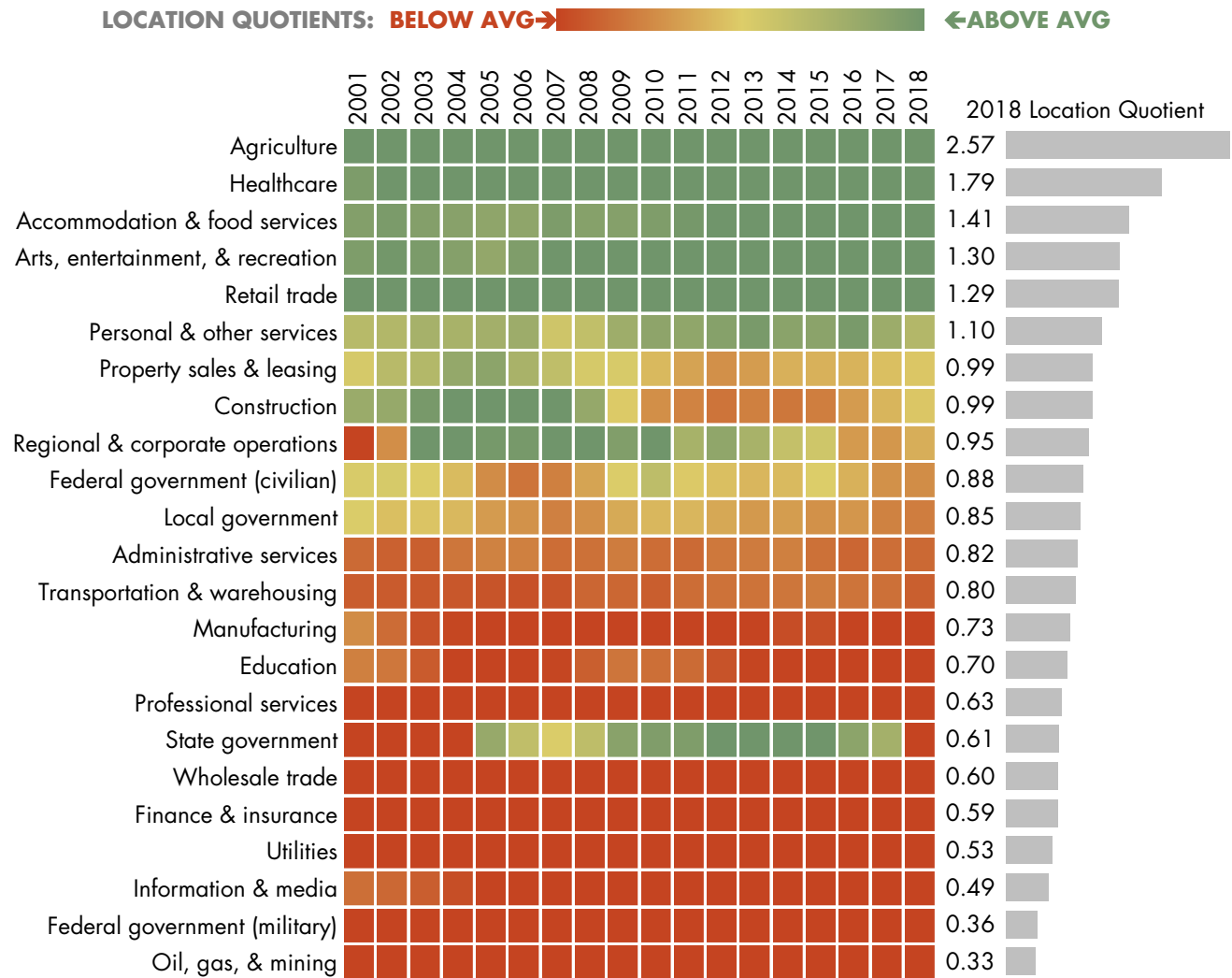
FIGURE 26. UNEMPLOYMENT RATE (PERCENT)
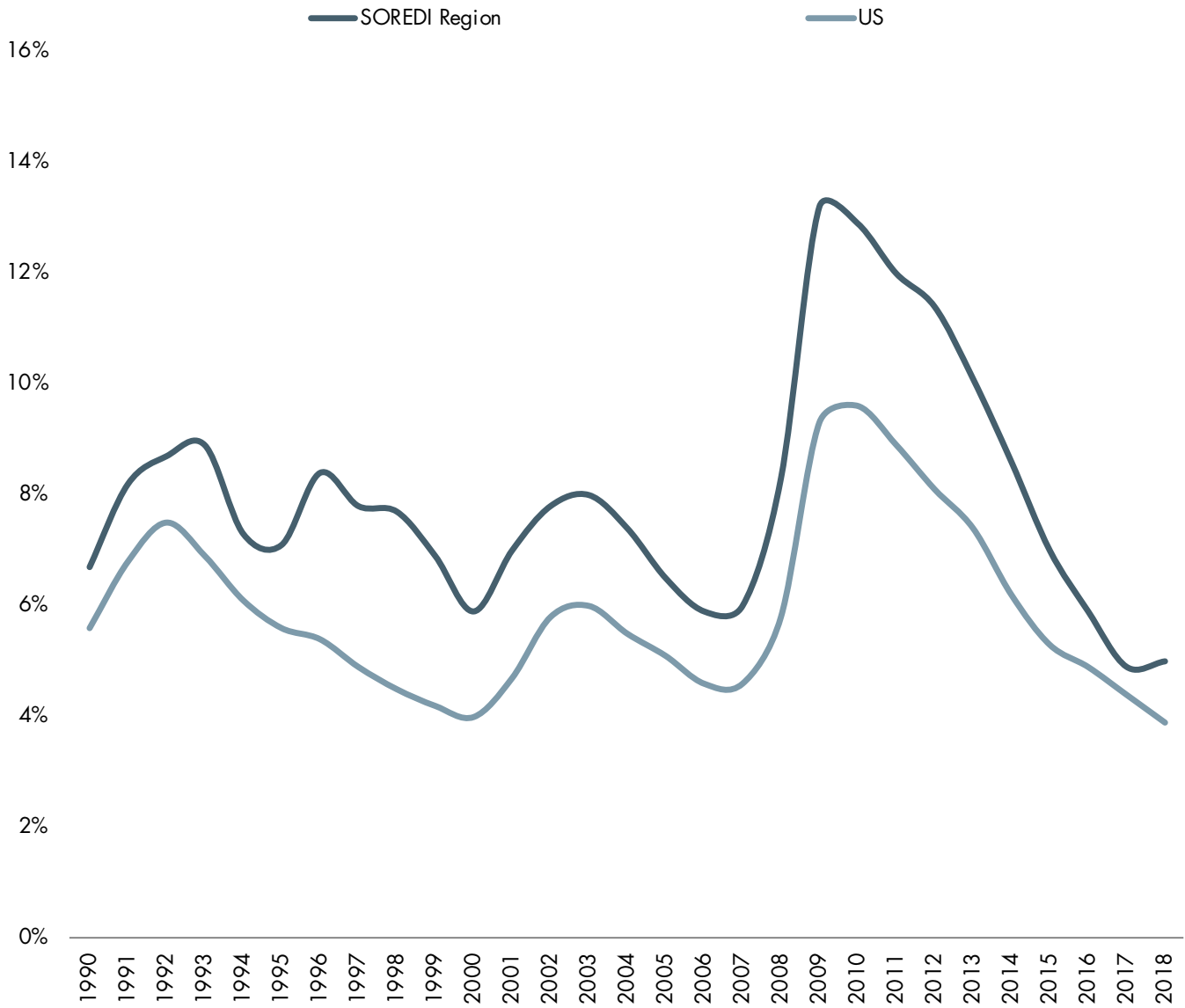
Source: US Bureau of Labor Statistics.

FIGURE 27. EMPLOYMENT DISTRIBUTION ACROSS SECTORS, 2018
SOREDI REGION VS. US
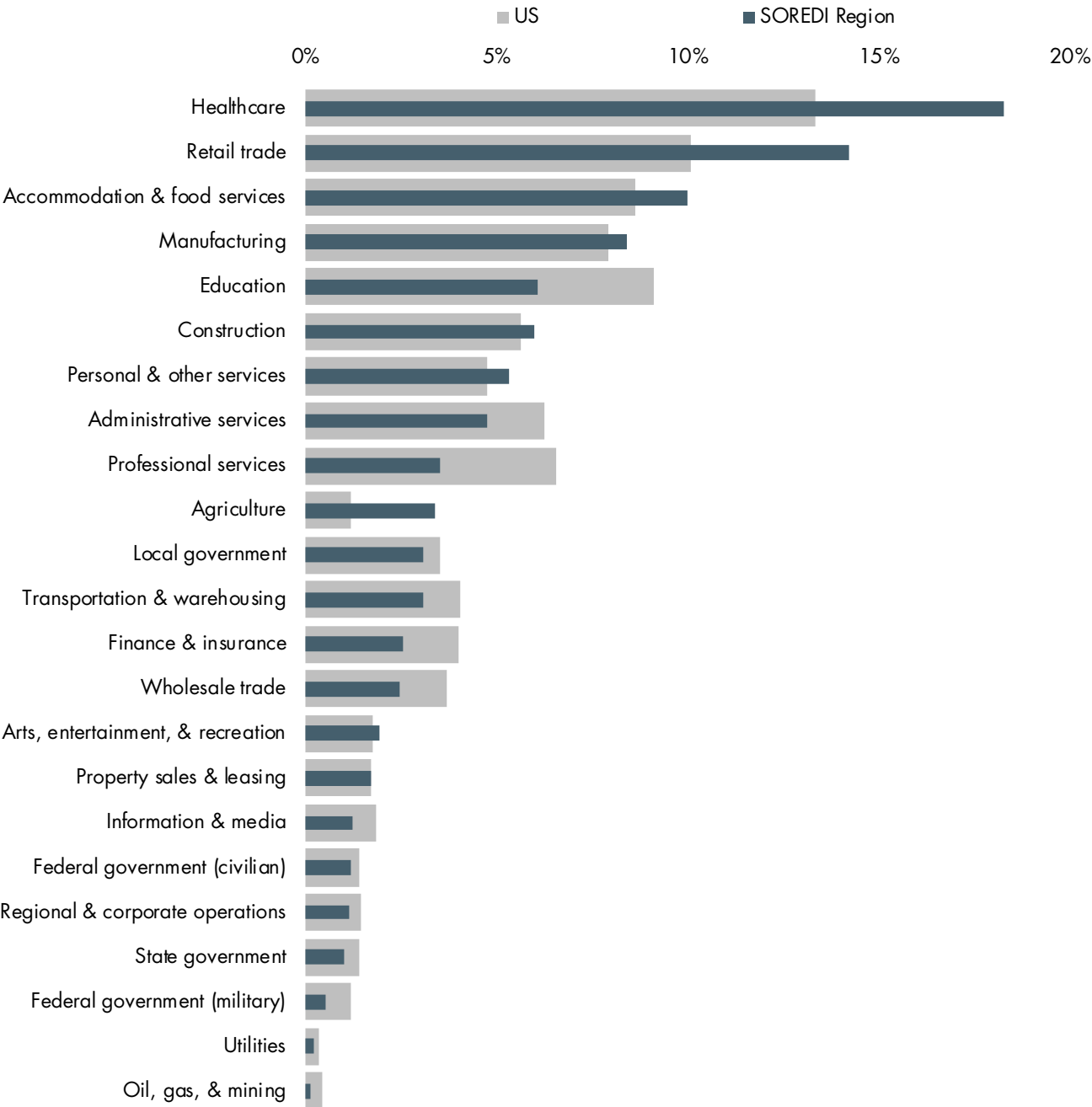
Source: Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed.
Note: Public sector employment in education (e.g., public schools, colleges, and universities), healthcare, and the US Postal Service are included with applicable private sector industry totals rather than government.

FIGURE 28. SOREDI REGION 10-YEAR NET JOB GROWTH BY SECTOR, 2008–2018
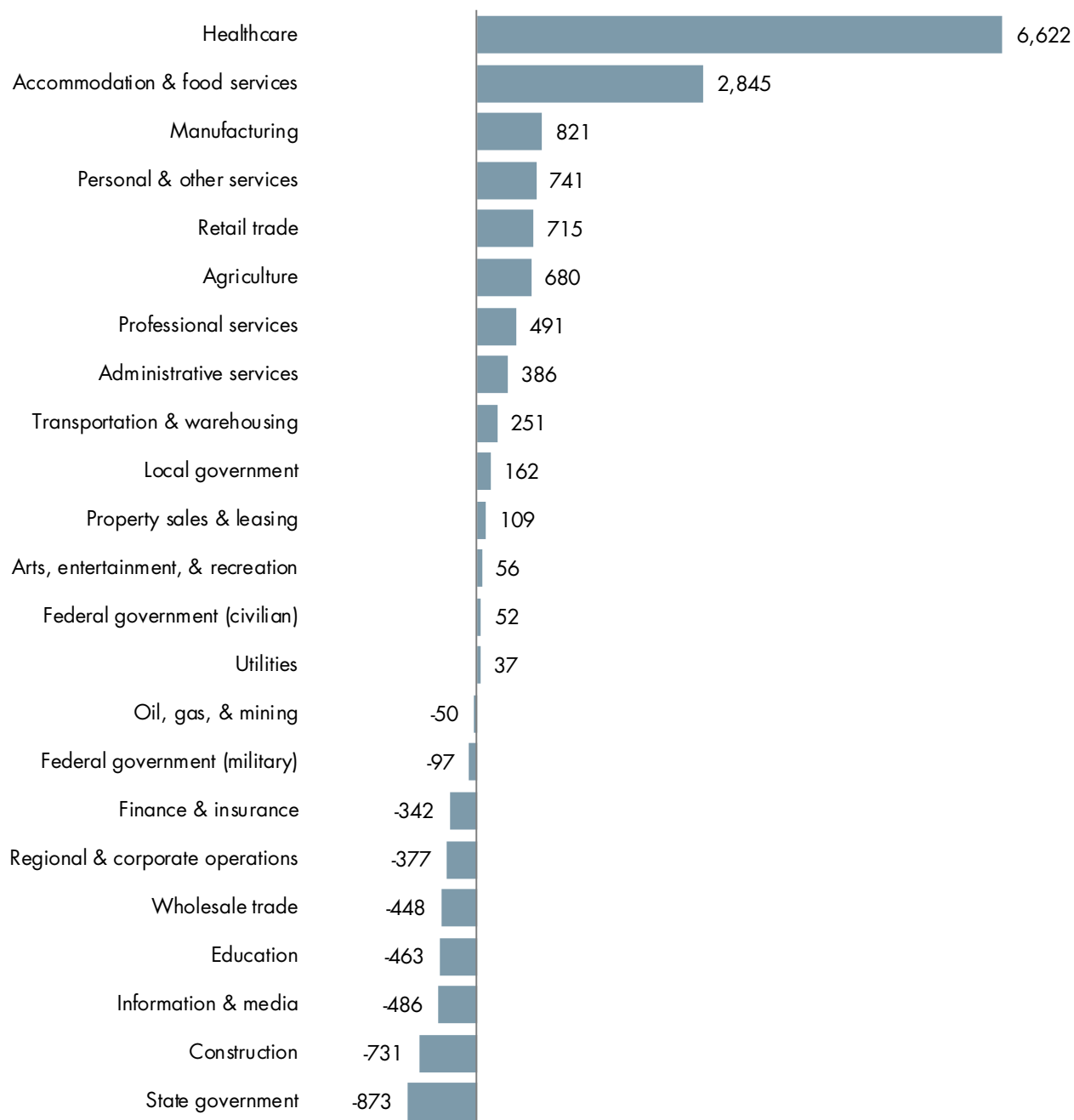
Sector	Net Job Growth
Healthcare	6,622
Accommodation & food services	2,845
Manufacturing	821
Personal & other services	741
Retail trade	715
Agriculture	680
Professional services	491
Administrative services	386
Transportation & warehousing	251
Local government	162
Property sales & leasing	109
Arts, entertainment, & recreation	56
Federal government (civilian)	52
Utilities	37
Oil, gas, & mining	-50
Federal government (military)	-97
Finance & insurance	-342
Regional & corporate operations	-377
Wholesale trade	-448
Education	-463
Information & media	-486
Construction	-731
State government	-873

Source: Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed.
Note: Public sector employment in education (e.g., public schools, colleges, and universities), healthcare, and the US Postal Service are included with applicable private sector industry totals rather than government.
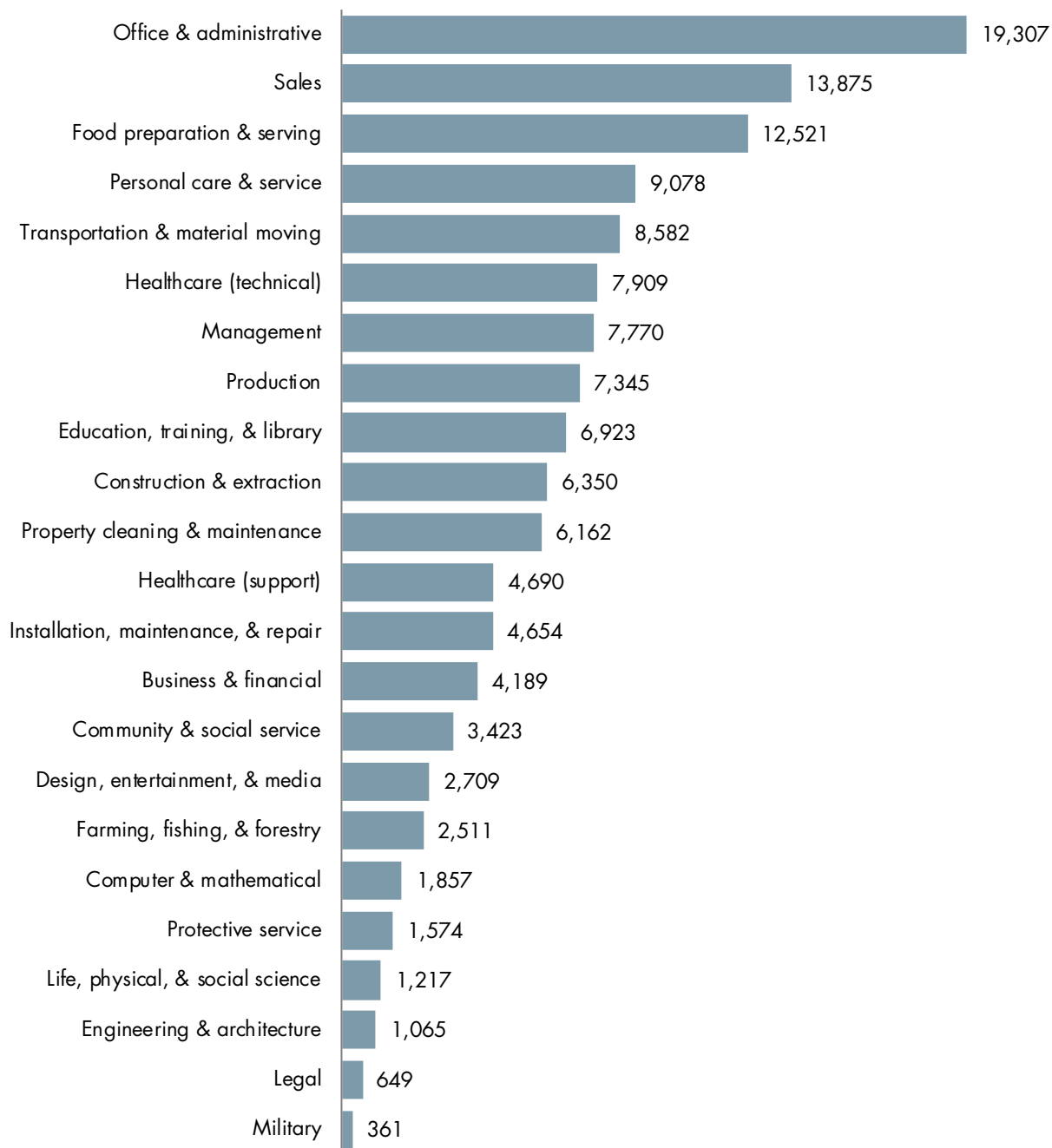
FIGURE 29. SOREDI REGION PROJECTED 5-YEAR NET JOB GROWTH BY SECTOR, 2018–2023
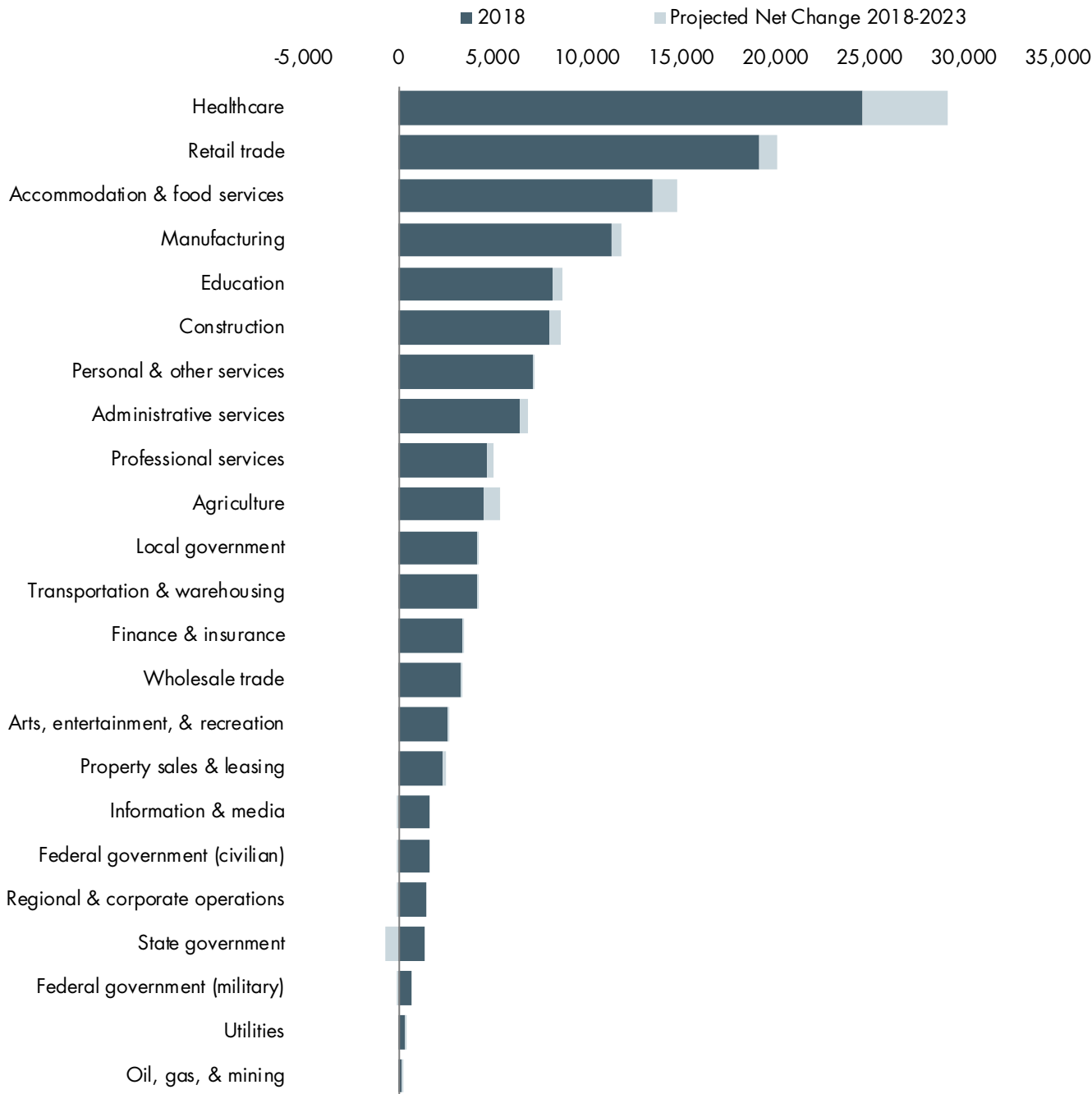
Source: Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed.
Note: Public sector employment in education (e.g., public schools, colleges, and universities), healthcare, and the US Postal Service are included with applicable private sector industry totals rather than government.

FIGURE 30. SOREDI REGION HISTORICAL SECTOR CONCENTRATION
AS SHOWN BY LOCATION QUOTIENTS (LQS)

LOCATION QUOTIENTS: **BELOW AVG**➜   ⬅**ABOVE AVG**

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018 Location Quotient
Agriculture																			2.57
Healthcare																			1.79
Accommodation & food services																			1.41
Arts, entertainment, & recreation																			1.30
Retail trade																			1.29
Personal & other services																			1.10
Property sales & leasing																			0.99
Construction																			0.99
Regional & corporate operations																			0.95
Federal government (civilian)																			0.88
Local government																			0.85
Administrative services																			0.82
Transportation & warehousing																			0.80
Manufacturing																			0.73
Education																			0.70
Professional services																			0.63
State government																			0.61
Wholesale trade																			0.60
Finance & insurance																			0.59
Utilities																			0.53
Information & media																			0.49
Federal government (military)																			0.36
Oil, gas, & mining																			0.33

Source: Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed
Note: Public sector employment in education (e.g., public schools, colleges, and universities), healthcare, and the US Postal Service are included with applicable private sector industry totals rather than government.

ABOUT LOCATION QUOTIENTS (LQS)

Location quotient analysis is a statistical technique used to suggest areas of relative advantage based on a region's employment base. LQs are calculated as an industry's share of total local employment divided by the same industry's share of employment at the national level.

$$\frac{(local\ employment\ in\ industry\ x\ /\ \underline{total\ local\ employment-all\ industries})}{(national\ employment\ in\ industry\ x\ /\ total\ national\ employment-all\ industries)}$$

If the local industry and national industry are perfectly proportional, the LQ will be 1.00. LQs greater than 1.25 are presumed to indicate a comparative advantage; those below 0.75 suggest areas of weakness but also point to opportunities for expansion or attraction.

OCCUPATIONAL PATTERNS

FIGURE 31. SOREDI REGION EMPLOYMENT BY OCCUPATIONAL GROUP, 2018

Occupational Group	Employment
Office & administrative	19,307
Sales	13,875
Food preparation & serving	12,521
Personal care & service	9,078
Transportation & material moving	8,582
Healthcare (technical)	7,909
Management	7,770
Production	7,345
Education, training, & library	6,923
Construction & extraction	6,350
Property cleaning & maintenance	6,162
Healthcare (support)	4,690
Installation, maintenance, & repair	4,654
Business & financial	4,189
Community & social service	3,423
Design, entertainment, & media	2,709
Farming, fishing, & forestry	2,511
Computer & mathematical	1,857
Protective service	1,574
Life, physical, & social science	1,217
Engineering & architecture	1,065
Legal	649
Military	361

Source: Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed.

FIGURE 32. EMPLOYMENT DISTRIBUTION ACROSS OCCUPATIONAL GROUPS, 2018
SOREDI REGION VS. US
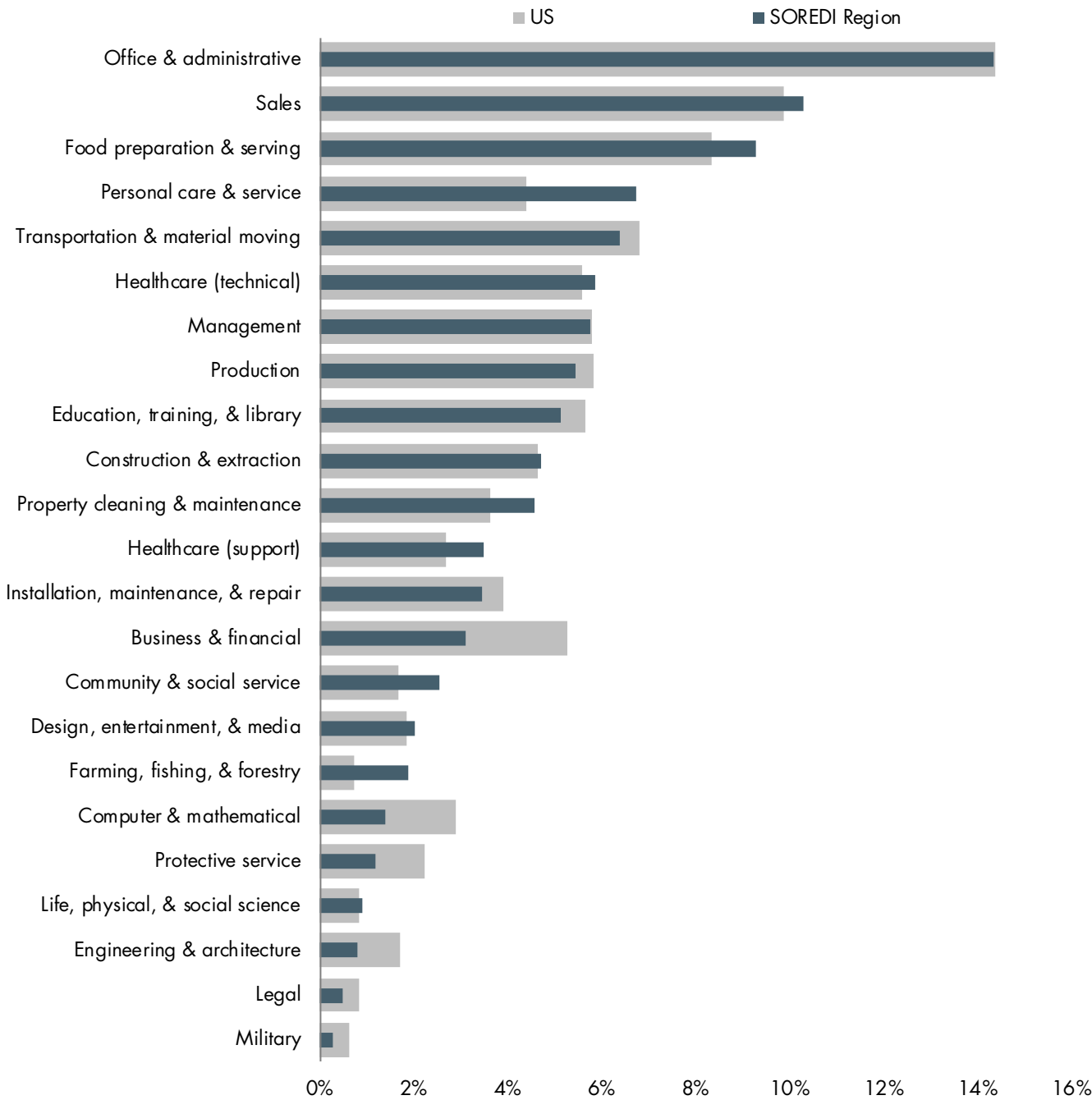
Source: Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed.

FIGURE 33. SOREDI REGION 10-YEAR NET JOB GROWTH BY OCCUPATIONAL GROUP, 2008–2018

Occupational Group	Net Job Growth
Personal care & service	3,452
Food preparation & serving	2,360
Management	1,426
Healthcare (technical)	1,381
Community & social service	813
Property cleaning & maintenance	428
Healthcare (support)	403
Business & financial	391
Computer & mathematical	320
Education, training, & library	311
Installation, maintenance, & repair	231
Farming, fishing, & forestry	134
Production	104
Sales	102
Life, physical, & social science	77
Transportation & material moving	58
Design, entertainment, & media	46
Protective service	-9
Military	-55
Engineering & architecture	-72
Legal	-80
Office & administrative	-701
Construction & extraction	-990

Source: Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed.

FIGURE 34. SOREDI REGION PROJECTED 5-YEAR NET JOB GROWTH BY OCCUPATIONAL GROUP, 2018–2023

■ 2018   ■ Projected Net Change 2018-2023
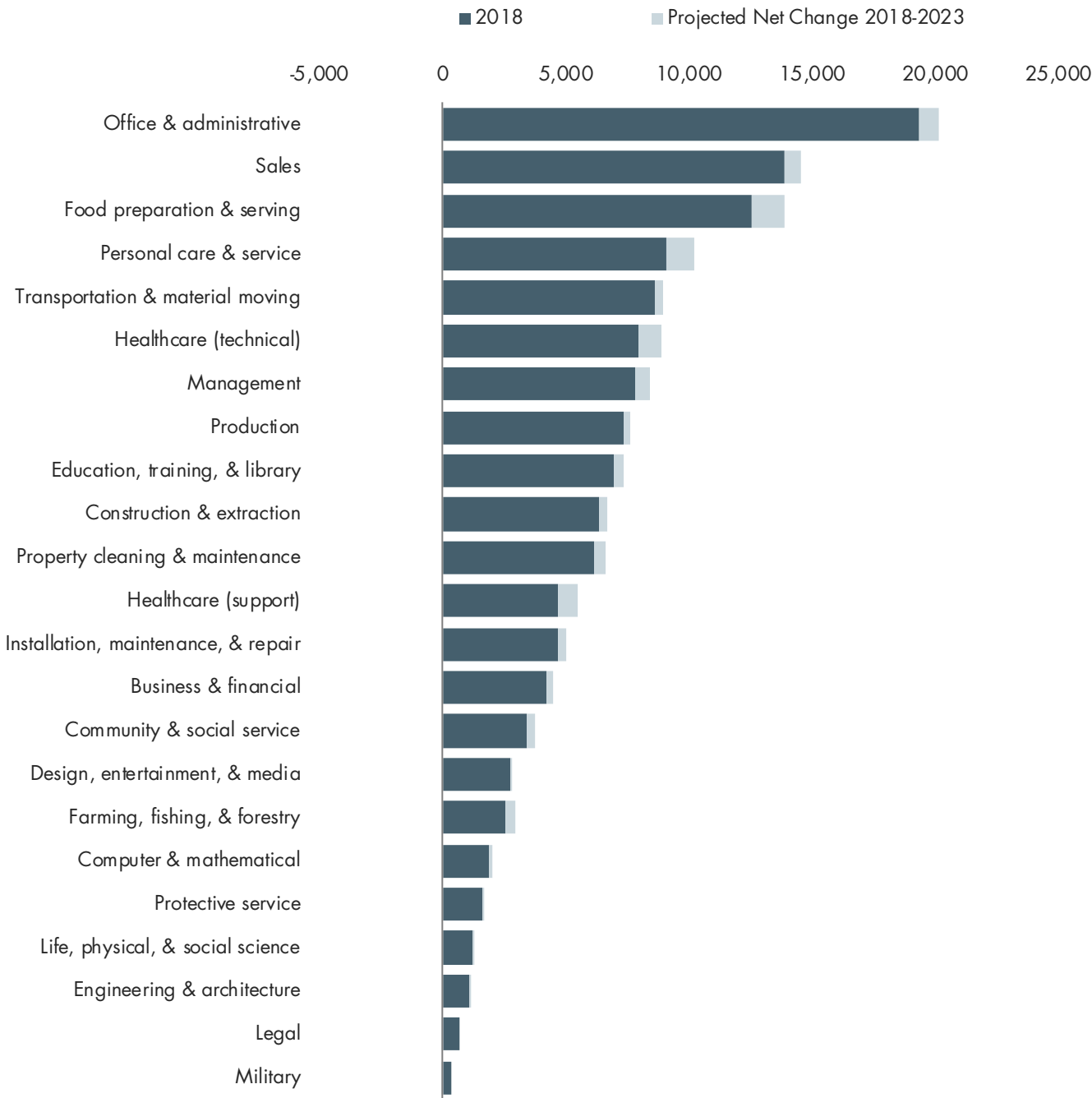
Source: Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed.

FIGURE 35. SOREDI REGION HISTORICAL OCCUPATIONAL CONCENTRATION
AS SHOWN BY LOCATION QUOTIENTS (LQS)

LOCATION QUOTIENTS: **BELOW AVG➔** ◀**ABOVE AVG**

	2018 Location Quotient
Personal care & service	2.40
Farming, fishing, & forestry	2.40
Community & social service	1.81
Healthcare (support)	1.56
Healthcare (technical)	1.35
Food preparation & serving	1.31
Design, entertainment, & media	1.24
Life, physical, & social science	1.21
Property cleaning & maintenance	1.21
Management	1.13
Sales	0.97
Education, training, & library	0.94
Construction & extraction	0.88
Transportation & material moving	0.87
Office & administrative	0.84
Installation, maintenance, & repair	0.81
Business & financial	0.76
Production	0.67
Legal	0.63
Computer & mathematical	0.62
Protective service	0.54
Engineering & architecture	0.42
Military	0.41

Source: Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed.
Note: Public sector employment in education (e.g., public schools, colleges, and universities), healthcare, and the US Postal Service are included with applicable private sector industry totals rather than government.

EXTERNAL FUNDS

FIGURE 36. PRIME FEDERAL CONTRACT AWARDS BY PLACE OF PERFORMANCE
FISCAL YEARS 2014–2019

GRANTING AGENCY	2014–2018
Department of Agriculture	282,238,304
Forest Service	*281,651,615*
Department of Veterans Affairs	133,916,028
Department of Defense	89,062,257
Department of the Interior	56,935,299
General Services Administration	5,724,433
Department of Transportation	3,628,256
Department of Homeland Security	3,084,695
Department of Health and Human Services	1,450,539
Department of Commerce	992,365
Social Security Administration	851,360
Environmental Protection Agency	835,478
Department of Justice	703,157
National Aeronautics and Space Administration	630,983
Department of Energy	579,517
Department of State	231,084
Department of The Treasury	65,840
Department of Education	32,581
Department of Housing and Urban Development	1,900
Total Prime Contracts	**580,964,076**

FIGURE 37. SBIR/STTR AWARDS IN THE SOREDI REGION, 2009–2018
BY AGENCY SOURCE OR SPONSOR

AWARD GRANTORS	2009–2013	2014–2018	ALL YEARS
Department of Health and Human Services	2,739,628	185,858	2,925,486
Department of Defense	1,271,632		1,271,632
Air Force	*298,026*		*298,026*
Army	*193,702*		*193,702*
Navy	*779,904*		*779,904*
Department of Energy	299,884		299,884
National Science Foundation	149,972		149,972
Total Awards	**4,461,116**	**185,858**	**4,646,974**

Sources: (Figure 36) US Department of the Treasury, USAspending.gov. (Figure 37) US Small Business Administration.
Notes: (Figure 36) For this figure, the place of performance is the two-county SOREDI region.

FIGURE 38. SBIR/STTR AWARDS IN THE SOREDI REGION, 2009–2018
BY COMPANY / AWARDEE

AWARDEES	2009–2013	2014–2018	ALL YEARS
Flourish, LLC		185,858	185,858
Sky Research, Inc.	1,721,488		1,721,488
The Blindsight Corp.	1,840,302		1,840,302
Tree Star, Inc.	899,326		899,326
Total Awards	**4,461,116**	**185,858**	**4,646,974**

Source: US Small Business Administration.

APPENDIX B. TARGET INDUSTRY ANALYSIS

INTRODUCTION

Southern Oregon has a diverse composition of industries—from Harry & David, a premium food gift company business that began as a family-owned orchard that has grown into a gift basket empire, to Rogue Creamery, an innovative food manufacturer that has collaborated with brands from artisanal chocolates to craft beer, to Boise Cascade, a legacy business that nods to the once ubiquitous timber industry in the region. Although the forestry today is not what it was 20 years ago, the Rogue Valley has proved it is resilient and is pioneering its way toward a strong economic future. A diverse economy is a critical element of resiliency and the ability to withstand economic cycles. However, despite the vast variety of industry in the region, the depth of these sectors is shallow, which makes companies more vulnerable to economic shifts. The stronger an industry cluster, the larger the surrounding ecosystem; everything from supply chain (raw materials, suppliers, and end users), to talent pool, and the availability of specialized professional expertise (such as legal and financial services). Data shows that there are four strong existing clusters in the region and three aspirational clusters that with the right long-term strategy could make an impact on the future regional economy. Each of the existing clusters is anchored by at least one significant employer and has a developing ecosystem that supports the growth of the industry, including workforce and talent development. This industry analysis dives deeper into the data for each sector and builds a portfolio that can be leveraged to better understand the composition of the industry, future growth trends, and additional resources to deepen knowledge about the sector.

FIGURE 39. THE TARGETING APPROACH

QUANTITATIVE
What can the data tell us?

QUALITATIVE
What have we learned about the region's assets and challenges?

STRATEGIC
What trends, relationships, etc., will influence opportunities going forward?

In identifying target sectors, the TIP team examined detailed data to identify which industries are well-established in the region, how they performed in recent years, and how they are expected to perform in the near term. For this analysis we looked at factors including strategic assets, existing initiatives, critical mass, competitive advantage, growth prospects, and cross-sector synergies.

In the first phase of this project—the economic assessment—we reviewed employment using standard NAICS industry classifications. For the targeting analysis, we take this a step further by filtering employment within an industry "cluster" framework developed by the US Economic Development Administration in conjunction with the Institute for Strategy and Competitiveness at Harvard Business School.

FIGURE 40. EMPLOYMENT CLUSTERS—TRADED VS. LOCAL
EMPLOYMENT IN 2017 BASED ON CLUSTER TYPE
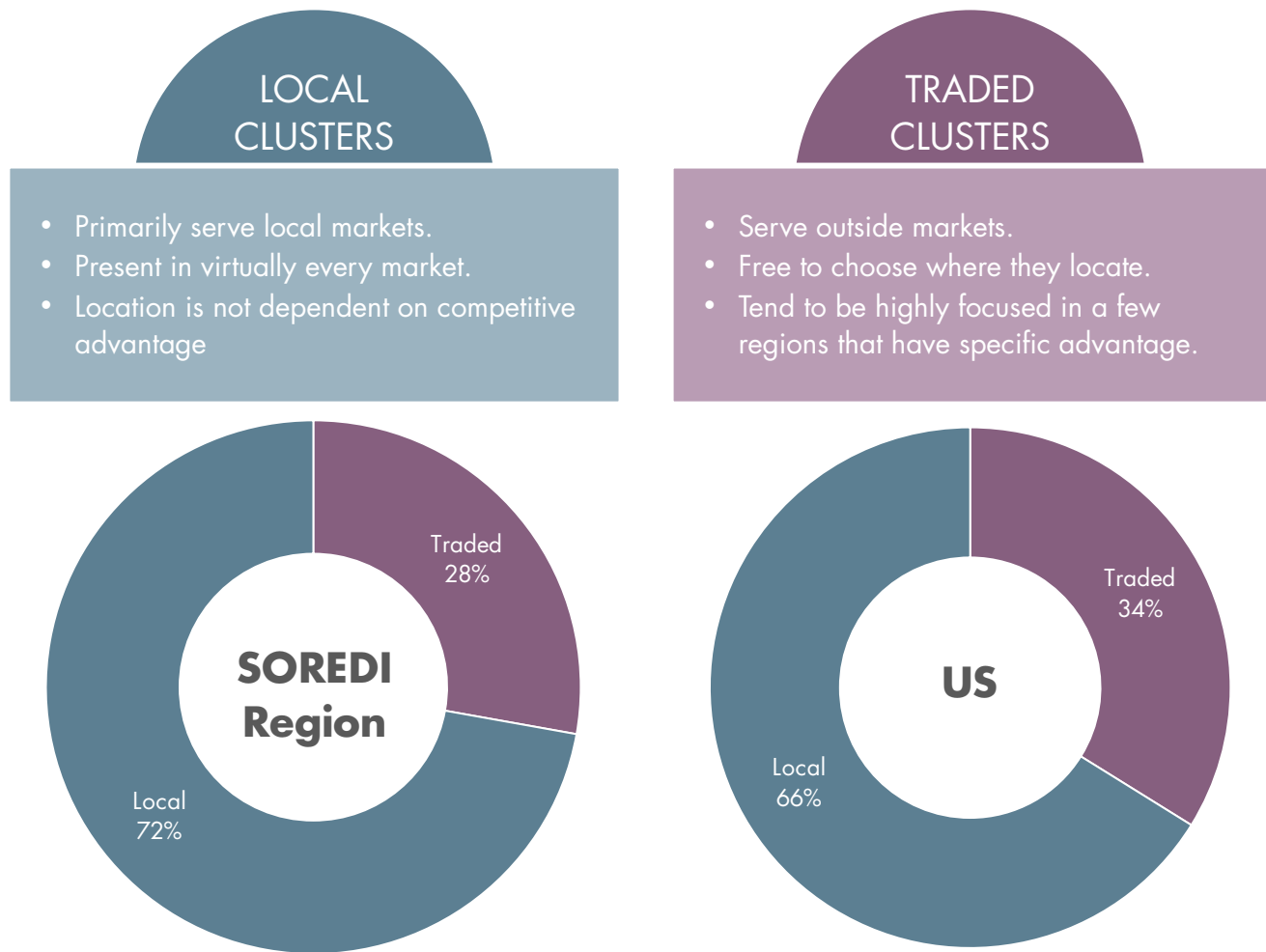
LOCAL CLUSTERS

- Primarily serve local markets.
- Present in virtually every market.
- Location is not dependent on competitive advantage

TRADED CLUSTERS

- Serve outside markets.
- Free to choose where they locate.
- Tend to be highly focused in a few regions that have specific advantage.

SOREDI Region
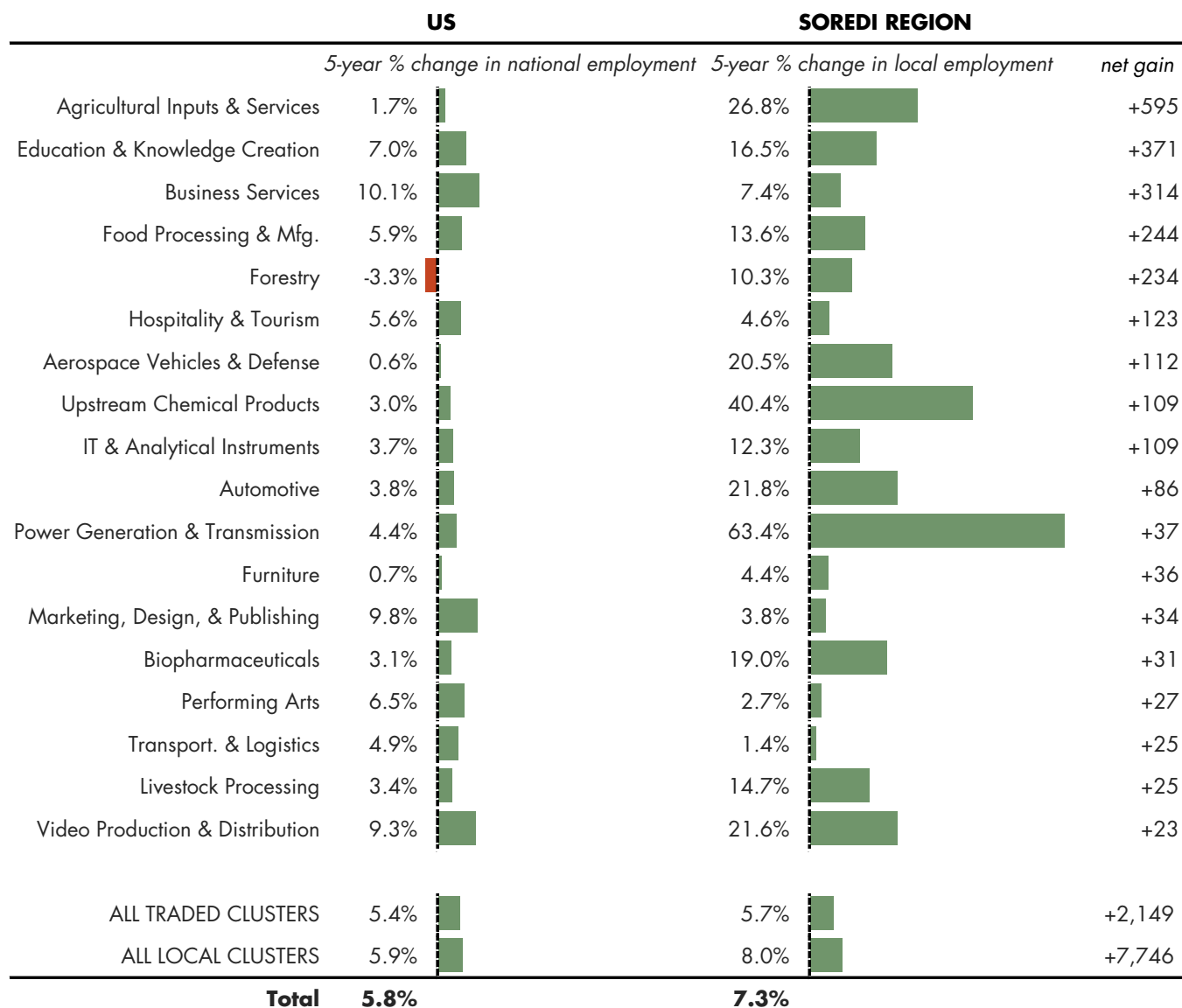
Traded 28%

Local 72%

US

Traded 34%

Local 66%

Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness, Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

WHY IT MATTERS

Increasing the ratio of traded-to-local clusters is a common strategy for enhancing economic prosperity. Traded clusters are emphasized by economic developers because they include industries and firms that typically produce goods and services for customers beyond the local region. These traded activities are thus more likely to produce externally generated revenues, which can, in turn, help boost local tax coffers. As an example, a dentist's office might serve local customers exclusively, while a manufacturing plant, a data center, or a hotel would typically serve paying customers beyond the local area. The ability of traded clusters to serve larger markets also presents greater opportunity for employment growth, whereas a dentist's office might face more finite geographic limits to expansion.

FIGURE 41. EMPLOYMENT CLUSTERS—WEIGHT (SIZE AND CONCENTRATION)
TRADED CLUSTERS EMPLOYING THE MOST WORKERS LOCALLY IN 2017

LOCATION QUOTIENTS: BELOW AVG➔   ⬅ABOVE AVG

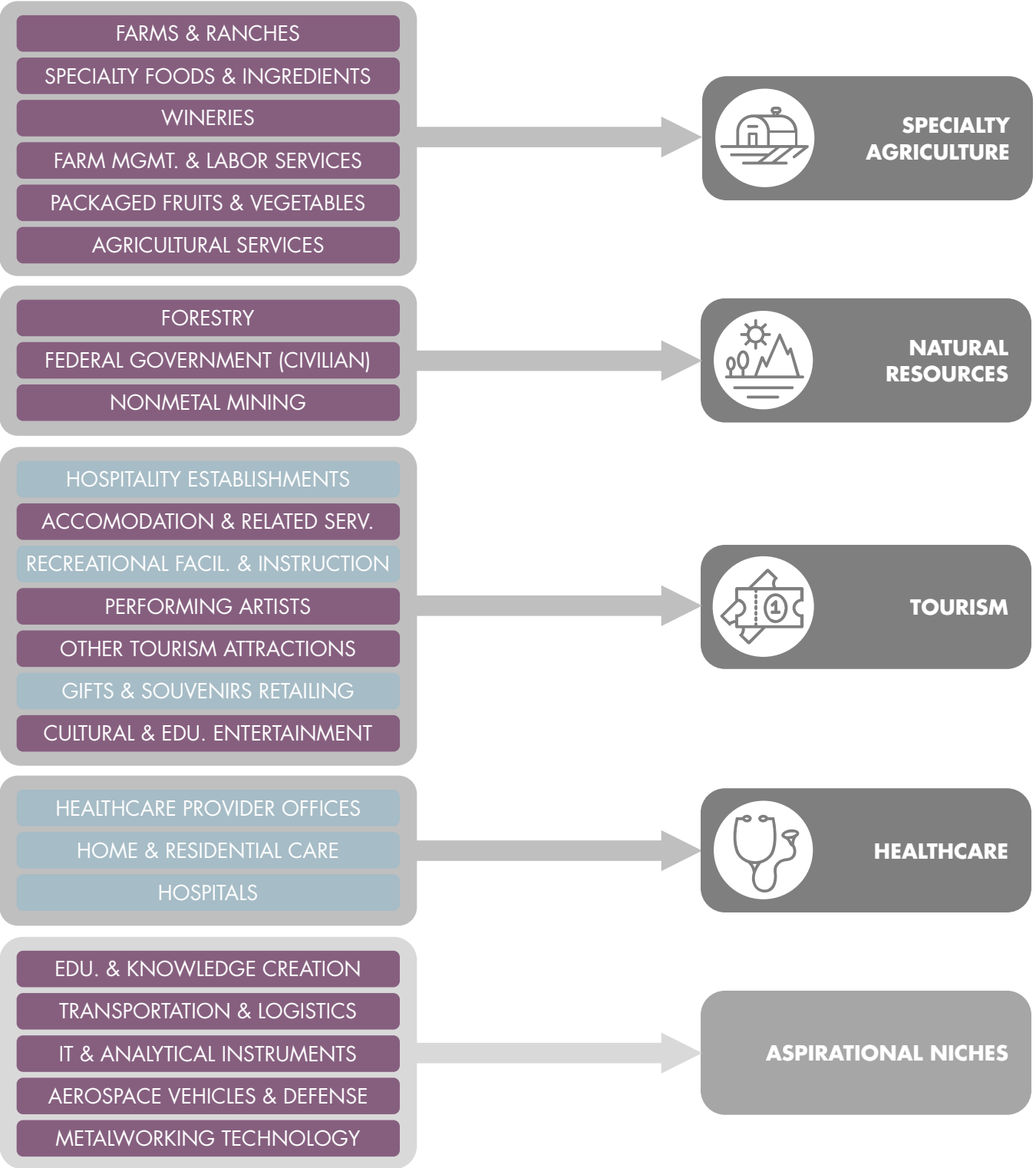|	US	SOREDI REGION	
	% of national employment	% of local employment	LQ
Distribution & E-commerce	3.7%	3.6%	0.98
Business Services	6.1%	3.1%	0.52
Wood Products	0.2%	2.0%	8.13
Hospitality & Tourism	2.1%	2.0%	0.95
Forestry	0.1%	1.7%	28.69
Education & Knowledge Creation	4.1%	1.7%	0.41
Agricultural Inputs & Services	1.1%	1.7%	1.50
Transport. & Logistics	1.3%	1.4%	1.04
Food Processing & Mfg.	0.7%	1.3%	1.86
Federal Government (civilian)	1.4%	1.2%	0.85
Performing Arts	0.4%	0.7%	1.86
Marketing, Design, & Publishing	1.1%	0.7%	0.59
IT & Analytical Instruments	0.8%	0.7%	0.83
Furniture	0.2%	0.6%	2.45
Financial Services	1.3%	0.5%	0.41
OTHER TRADED CLUSTERS	9.2%	5.0%	
ALL LOCAL CLUSTERS	66.2%	72.2%	
Total	**100.0%**	**100.0%**	

Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness, Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

WHY IT MATTERS

While local clusters (such as dentist offices) typically account for a similar share of employment across communities of varying size, the share of total employment represented by traded clusters (such as automotive assembly plants) might differ dramatically from one community to the next. Traded clusters that account for a larger-than-average share of total employment can suggest areas of competitive advantage. Figure 3 compares the distribution of employment by cluster in the US (first column) with the local area (second column). The third column uses location quotients (LQs) to convey the intensity of employment locally relative to the US. If a traded cluster represents 1 percent of US employment and 5 percent of local employment, its LQ would be 5.0, meaning that the traded cluster in the local area is five times as large as would be expected based on national patterns.

FIGURE 42. EMPLOYMENT CLUSTERS—PROJECTED GROWTH
TRADED CLUSTERS WITH THE HIGHEST PROJECTED LOCAL JOB GAINS, 2017–2022

	US	SOREDI REGION	
	5-year % change in national employment	*5-year % change in local employment*	*net gain*
Agricultural Inputs & Services	1.7%	26.8%	+595
Education & Knowledge Creation	7.0%	16.5%	+371
Business Services	10.1%	7.4%	+314
Food Processing & Mfg.	5.9%	13.6%	+244
Forestry	-3.3%	10.3%	+234
Hospitality & Tourism	5.6%	4.6%	+123
Aerospace Vehicles & Defense	0.6%	20.5%	+112
Upstream Chemical Products	3.0%	40.4%	+109
IT & Analytical Instruments	3.7%	12.3%	+109
Automotive	3.8%	21.8%	+86
Power Generation & Transmission	4.4%	63.4%	+37
Furniture	0.7%	4.4%	+36
Marketing, Design, & Publishing	9.8%	3.8%	+34
Biopharmaceuticals	3.1%	19.0%	+31
Performing Arts	6.5%	2.7%	+27
Transport. & Logistics	4.9%	1.4%	+25
Livestock Processing	3.4%	14.7%	+25
Video Production & Distribution	9.3%	21.6%	+23
ALL TRADED CLUSTERS	5.4%	5.7%	+2,149
ALL LOCAL CLUSTERS	5.9%	8.0%	+7,746
Total	**5.8%**	**7.3%**	

Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness, Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

FIGURE 43. TARGETING FRAMEWORK

TRADED and **LOCAL** clusters and subclusters emerge from the analysis . . .

. . . to provide a foundation for **TARGET SECTORS.**

FARMS & RANCHES SPECIALTY FOODS & INGREDIENTS WINERIES FARM MGMT. & LABOR SERVICES PACKAGED FRUITS & VEGETABLES AGRICULTURAL SERVICES	**SPECIALTY AGRICULTURE**
FORESTRY FEDERAL GOVERNMENT (CIVILIAN) NONMETAL MINING	**NATURAL RESOURCES**
HOSPITALITY ESTABLISHMENTS ACCOMODATION & RELATED SERV. RECREATIONAL FACIL. & INSTRUCTION PERFORMING ARTISTS OTHER TOURISM ATTRACTIONS GIFTS & SOUVENIRS RETAILING CULTURAL & EDU. ENTERTAINMENT	**TOURISM**
HEALTHCARE PROVIDER OFFICES HOME & RESIDENTIAL CARE HOSPITALS	**HEALTHCARE**
EDU. & KNOWLEDGE CREATION TRANSPORTATION & LOGISTICS IT & ANALYTICAL INSTRUMENTS AEROSPACE VEHICLES & DEFENSE METALWORKING TECHNOLOGY	**ASPIRATIONAL NICHES**

Sources: US Economic Development Administration; Institute for Strategy and Competitiveness, Harvard Business School; TIP Strategies.

TIER 1: STRATEGIC GROWTH AREAS

Four key strategic growth areas emerged from an in-depth analysis of the region's labor and industry data, and during conversations with regional leaders, as being primary focus areas for the Rogue Valley. The **specialty agriculture** growth area is derived from six strong sectors in the region: farms & ranches, specialty foods & ingredients, wineries, farm management & labor services, packaged fruits & vegetables, and agricultural services. The Rogue Valley has long been known for its fertile land and ideal climate, but in today's modern culture there is an opportunity to go beyond traditional agriculture and further develop niche and artisanal products. From large-scale food processors. such as Amy's Kitchen and Harry & David, to dairy products from Rogue Creamery and Rising Sun Farms, to fine wines and desserts from Naumes Family Vineyards and Lillie Belle Farms Artisan Chocolates, this sector has depth and potential to expand.

Natural resources is a legacy cluster in the region comprised of three subsectors, including forestry, federal government (civilian), and nonmetal mining. Although this sector is anchored by major employers, such as Boise Cascade, there are a number of small, independent companies, such as Armadillo Mining Shop, which support the region's boutique mining industry. The third strategic growth area focuses on the **tourism** industry. This sector is predominantly comprised of local sector industries, including hospitality and retail, but draws significant outside money into the region from visitors. Southern Oregon's tourism economy has been steadily growing over the past 10 years, largely from its world-renowned arts and cultural events, such as the Britt Music & Arts Festival and the Oregon Shakespeare Festival. In addition to cultural assets, the region has phenomenal outdoor recreation amenities and organized sporting at facilities such as the US Cellular Community Park. The fourth strategic growth area, **healthcare**, is anchored by some of the largest employers in the region, including Asante Health System and Providence Health & Services. The healthcare industry is almost entirely driven by the local economy, but the strong reputation of the providers in the region attracts people from outside the Rogue Valley to seek care at these facilities. Furthermore, in 2021, Asante will open a $64 million outpatient cancer center, which will increase the region's competitiveness as a leader in healthcare.

A concise profile for each of the strategic growth areas, including data points and industry resources, can be found on the following pages.

TIER 2: ASPIRATIONAL NICHES

In addition to the core target sectors, three areas were identified as aspirational niches for the region, including **technology**, **advanced manufacturing**, and **logistics**. Although the region does not meet the location quotient thresholds to be considered as having a strategic advantage in these sectors, the region has a foundation for these industries to grow. The CEDS plan includes strategies for workforce development, infrastructure readiness, and supply chain growth, which will give these aspirational niche industries the support they need to mature. Aspirational targets require a long-term strategy, and it is important to recognize that development will take time. A combined profile with industry and employment data points can be found in the "Technology, Advanced Manufacturing, and Logistics section. This profile will serve as important resource to track the development of these industries and data numbers should be updated on an annual basis as part of metric reporting.
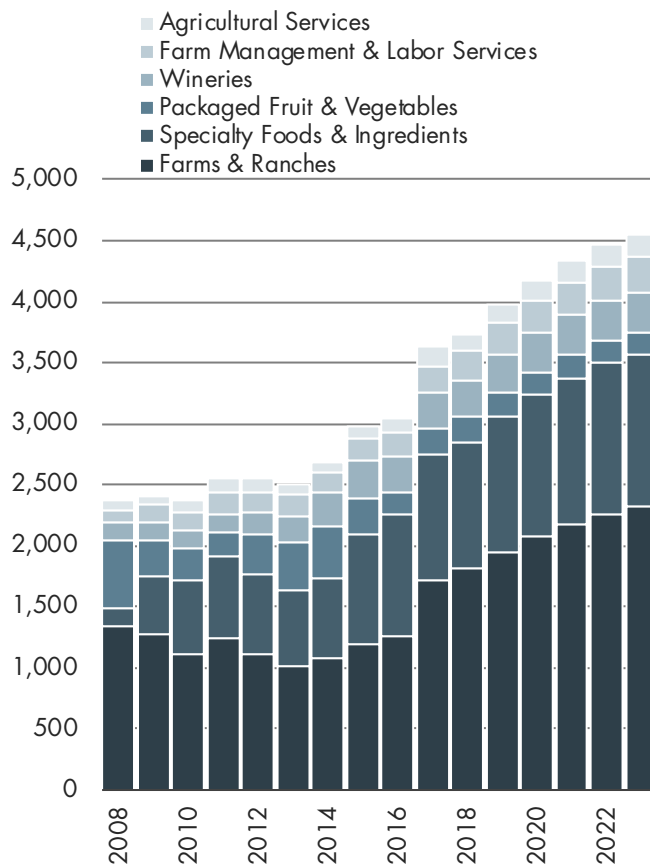
SPECIALTY AGRICULTURE

FIGURE 44. TARGET SNAPSHOT

SOREDI REGION	TOTAL	TARGET
2018 Payrolled Business Locations	10,315	290
2018 Employment	134,719	3,735
Net Chg., 2008–2018	+10,130	+1,369
Pct. Chg., 2008–2018	+8.1%	+57.8%

FIGURE 46. EMPLOYMENT OUTLOOK

US OVERALL	TOTAL	TARGET
Net Chg., 2018–2023	+9,424,267	+57,001
Pct. Chg., 2018–2023	+5.8%	+2.6%
SOREDI REGION	TOTAL	TARGET
Net Chg., 2018–2023	+9,895	+810
Pct. Chg., 2018–2023	+7.3%	+21.7%

FIGURE 45. TARGET CONCENTRATION
LOCATION QUOTIENT TREND

FIGURE 47. TARGET COMPONENTS
ANNUAL EMPLOYMENT

Legend:
- Agricultural Services
- Farm Management & Labor Services
- Wineries
- Packaged Fruit & Vegetables
- Specialty Foods & Ingredients
- Farms & Ranches
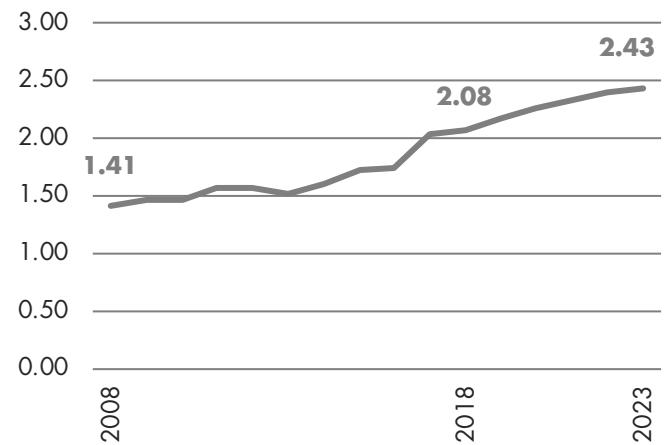
FIGURE 48. TARGET GROWTH
ANNUAL PERCENT CHANGE IN EMPLOYMENT
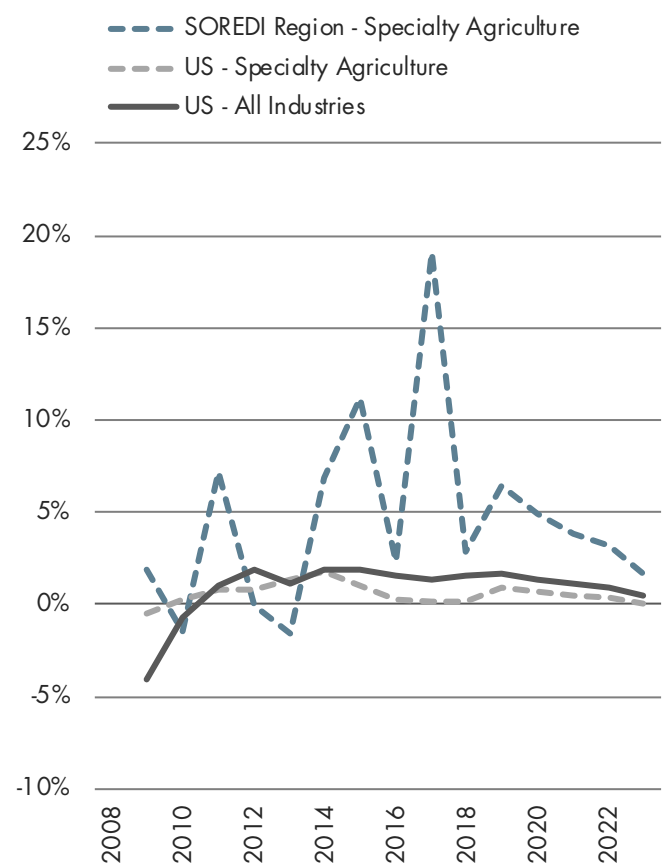
Legend:
- SOREDI Region - Specialty Agriculture
- US - Specialty Agriculture
- US - All Industries

Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

FIGURE 49. TARGET STAFFING PROFILE
LQ & RELATIVE EARNINGS: **BELOW AVG**➔ ➔ ➔ ⬅**ABOVE AVG**

STANDARD OCCUPATIONAL CLASSIFICATION		EMPLOYMENT			EARNINGS	
		2018 Jobs	% of Target	LQ (US= 1.00)	Local Hourly Median	Relative to US (US=1.00)
Code	Description					
45-2092	Farmworkers & Laborers, Crop & Greenhouse	658	15.2%	0.59	16.08	1.38
11-9013	Farmers, Ranchers, & Other Agricultural Mgrs.	547	12.7%	0.57	23.36	1.13
45-2093	Farmworkers, Animals (Incl. Aquaculture)	215	5.0%	0.81	13.27	1.05
51-9111	Packaging & Filling Machine Workers	160	3.7%	1.43	15.56	1.07
51-3092	Food Batchmakers	149	3.4%	2.05	12.08	0.85
45-2099	Agricultural Workers, All Other	121	2.8%	0.92	13.59	0.96
45-2091	Agricultural Equipment Operators	80	1.9%	0.79	14.86	0.99
51-3093	Food Cooking Machine Workers	80	1.9%	4.55	18.22	1.26
53-7051	Industrial Truck & Tractor Operators	76	1.8%	1.39	19.05	1.14
45-1011	First-Line Supvsr., Farming, Fishing, & Forestry	70	1.6%	0.98	21.05	0.94
49-9041	Industrial Machinery Mechanics	70	1.6%	2.58	25.56	1.02
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers	54	1.3%	1.33	17.59	0.95
53-3032	Heavy & Tractor-Trailer Truck Drivers	54	1.3%	1.04	21.80	1.04
53-7064	Packers & Packagers, Hand	54	1.2%	0.78	13.08	1.11
45-2041	Graders & Sorters, Agricultural Products	52	1.2%	0.74	12.06	1.03
53-7061	Cleaners of Vehicles & Equipment	49	1.1%	2.65	12.52	1.06
49-9071	Maintenance & Repair Workers, General	47	1.1%	1.48	16.57	0.90
51-1011	First-Line Supvsr., Production & Operating Workers	44	1.0%	1.56	25.18	0.87
51-9012	Separating, Filtering, & Precipitating Machine	43	1.0%	2.88	17.19	0.88
51-9199	Production Workers, All Other	41	1.0%	2.35	13.06	0.90
41-4012	Sales Reps., Whls. & Mfg., Exc. Tech. & Scientific	39	0.9%	1.37	24.30	0.87
53-7062	Laborers/Freight, Stock, & Material Movers, Hand	39	0.9%	0.74	14.98	1.10
39-2021	Nonfarm Animal Caretakers	39	0.9%	1.41	12.02	1.04
11-1021	General & Operations Managers	37	0.9%	1.50	36.53	0.76
43-3031	Bookkeeping, Accounting, & Auditing Clerks	35	0.8%	1.19	17.68	0.91

Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

WHY IT MATTERS

Each target industry is underpinned by its workforce, making the occupational composition of each target worthy of further analysis. Figure 11 shows each target's largest occupational contributors. The number of local jobs for each occupation is shown along with the occupation's weight (in percentage terms) within the target. The LQ compares the occupation's local weight to its national weight within this target. An LQ that exceeds 1.00 indicates a local occupation employed more heavily by the local target industry than national patterns might imply, while an LQ below 1.00 indicates relatively lighter local reliance on the occupation. Median local hourly earnings accompany the occupations shown in the exhibit. Wage ratios exceeding 1.00 indicate higher pay than the same occupation might expect nationally, while ratios below 1.00 suggest relatively lower compensation than the national level.

FIGURE 50. TARGET INDUSTRY INTELLIGENCE

SPECIALTY AGRICULTURE	
TRADE ASSOCIATIONS	
International Fruit Tree Association (IFTA)	www.ifruittree.org
US Apple Association	usapple.org
Winegrape Growers of America	www.winegrapegrowersofamerica.org
Wine Market Council	winemarketcouncil.com
American Vineyard Foundation (AVF)	www.avf.org
American Society for Enology and Viticulture (ASEV)	www.asev.org
Oregon Association of Nurseries (OAN)	www.oan.org
Oregon Winegrowers Association	www.oregonwinegrowers.org
Rogue Valley Vintners	www.rvv.wine
Rogue Valley Winegrowers Association	rvwinegrowers.org
RELEVANT CONFERENCES/EVENTS	
Sustainable Ag Expo & International Sustainable Winegrowing Summit	
11–13 November 2019	San Luis Obispo, CA	www.sustainableagexpo.org
Grape, Nut & Tree Fruit Expo	
19 November 2019	Fresno, CA	agexpo.biz/gntfexpo
2020 Unified Wine & Grape Symposium	
4–6 February 2020	Sacramento, CA	www.asev.org/unified-wine-grape-symposium
2020 IFTA Annual Conference and Tours	
9–12 February 2020	Grand Rapids, MI	www.ifruittree.org/ifta-events
2020 Oregon Wine Symposium	
11–12 February 2020	Portland, OR	industry.oregonwine.org/education/oregon-wine-symposium
World Ag Expo	
11–13 February 2020	Tulare, CA	www.worldagexpo.com
2020 Winegrowers Convention & Trade Show	
2–5 March 2020	Kennewick, WA	www.wawinegrowers.org/page/20TradeShow
Summer Fancy Food Show	
28-30 June 2020	New York, NY	www.specialtyfood.com/shows-events/summer-fancy-food-show
TRADE PUBLICATIONS	
American Vineyard	americanvineyardmagazine.com
Digger	www.oan.org/page/diggersubscriptions
American Journal of Enology and Viticulture	www.asev.org/american-journal-enology-and-viticulture-ajev
Pacific Nut Producer	pacificnutproducer.com
Agroecology and Sustainable Food Systems	www.tandfonline.com/loi/wjsa20
International Journal of Agricultural Sustainability	www.tandfonline.com/toc/tags20/current

NATURAL RESOURCES

FIGURE 51. TARGET SNAPSHOT

SOREDI REGION	TOTAL	TARGET
2018 Payrolled Business Locations	10,315	175
2018 Employment	134,719	4,043
Net Chg., 2008–2018	+10,130	-18
Pct. Chg., 2008–2018	+8.1%	-0.4%

FIGURE 53. EMPLOYMENT OUTLOOK

US OVERALL	TOTAL	TARGET
Net Chg., 2018–2023	+9,424,267	+43,296
Pct. Chg., 2018–2023	+5.8%	+1.7%
SOREDI REGION	TOTAL	TARGET
Net Chg., 2018–2023	+9,895	+228
Pct. Chg., 2018–2023	+7.3%	+5.6%

FIGURE 52. TARGET CONCENTRATION
LOCATION QUOTIENT TREND

FIGURE 54. TARGET COMPONENTS
ANNUAL EMPLOYMENT
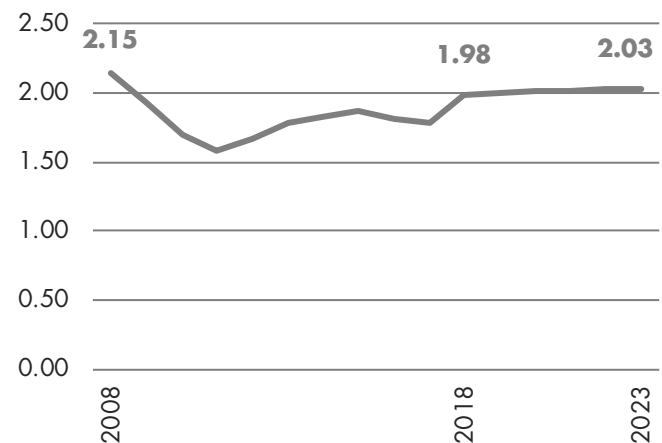
FIGURE 55. TARGET GROWTH
ANNUAL PERCENT CHANGE IN EMPLOYMENT
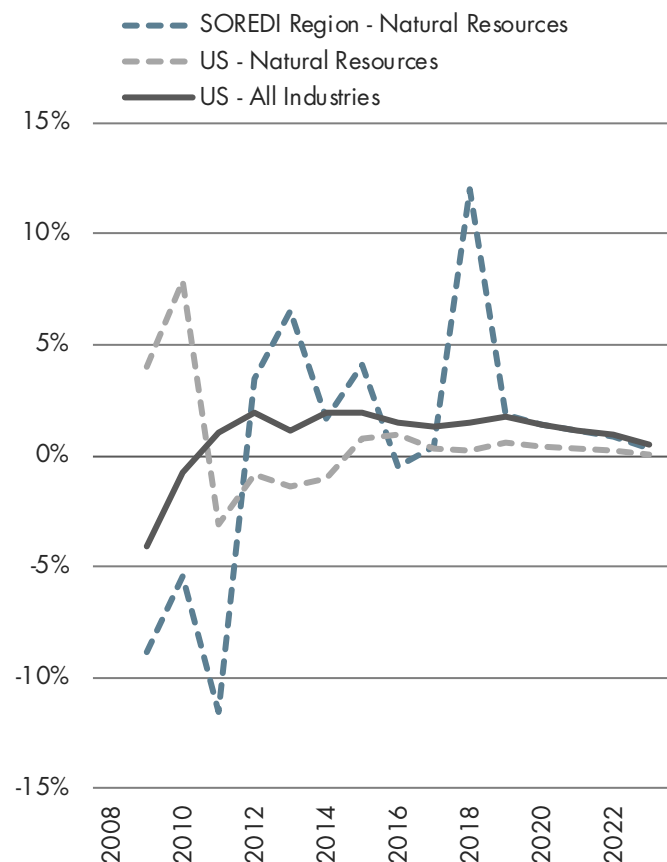
Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

FIGURE 56. TARGET STAFFING PROFILE

LQ & RELATIVE EARNINGS: **BELOW AVG→** ▬▬▬▬▬▬▬▬▬▬ **←ABOVE AVG**

STANDARD OCCUPATIONAL CLASSIFICATION		EMPLOYMENT			EARNINGS	
		2018 Jobs	**% of Target**	**LQ (US= 1.00)**	**Local Hourly Median**	**Relative to US (US=1.00)**
Code	**Description**					
45-4011	Forest & Conservation Workers	439	10.9%	40.34	14.96	1.13
45-1011	First-Line Supvsr., Farming, Fishing, & Forestry	213	5.3%	16.55	21.05	0.94
45-4022	Logging Equipment Operators	187	4.6%	3.65	20.08	1.09
43-4199	Information & Record Clerks, All Other	147	3.6%	1.55	16.18	0.82
19-4093	Forest & Conservation Technicians	133	3.3%	3.54	18.10	1.01
11-9013	Farmers, Ranchers, & Other Agricultural Mgrs.	124	3.1%	31.82	23.36	1.13
53-3032	Heavy & Tractor-Trailer Truck Drivers	116	2.9%	3.59	21.80	1.04
53-7062	Laborers/Freight, Stock, & Material Movers, Hand	111	2.7%	5.96	14.98	1.10
13-1199	Business Operations Specialists, All Other	106	2.6%	0.36	26.62	0.79
45-2092	Farmworkers & Laborers, Crop & Greenhouse	84	2.1%	34.78	16.08	1.38
37-3011	Landscaping & Groundskeeping Workers	74	1.8%	27.40	13.63	1.00
19-1031	Conservation Scientists	74	1.8%	5.64	27.79	0.95
45-4021	Fallers	70	1.7%	8.44	39.13	1.95
29-1141	Registered Nurses	68	1.7%	0.48	41.32	1.20
51-9199	Production Workers, All Other	64	1.6%	18.18	13.06	0.90
21-1029	Social Workers, All Other	59	1.5%	2.16	23.95	0.79
43-6014	Secretaries/Admin. Asst., Exc. Legal, Med., & Exec.	59	1.5%	2.00	16.69	0.95
11-9199	Managers, All Other	57	1.4%	0.44	26.17	0.68
19-1032	Foresters	49	1.2%	11.42	33.81	1.15
47-2073	Operating Eng. & Other Constr. Equip. Operators	48	1.2%	1.91	25.19	1.10
43-3031	Bookkeeping, Accounting, & Auditing Clerks	46	1.1%	1.54	17.68	0.91
19-1029	Biological Scientists, All Other	46	1.1%	1.56	15.42	0.40
43-9061	Office Clerks, General	45	1.1%	0.74	15.83	1.01
43-9199	Office & Admin. Support Workers, All Other	44	1.1%	1.98	15.46	0.92
15-1199	Computer Occupations, All Other	40	1.0%	0.30	33.70	0.78

Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

FIGURE 57. TARGET INDUSTRY INTELLIGENCE

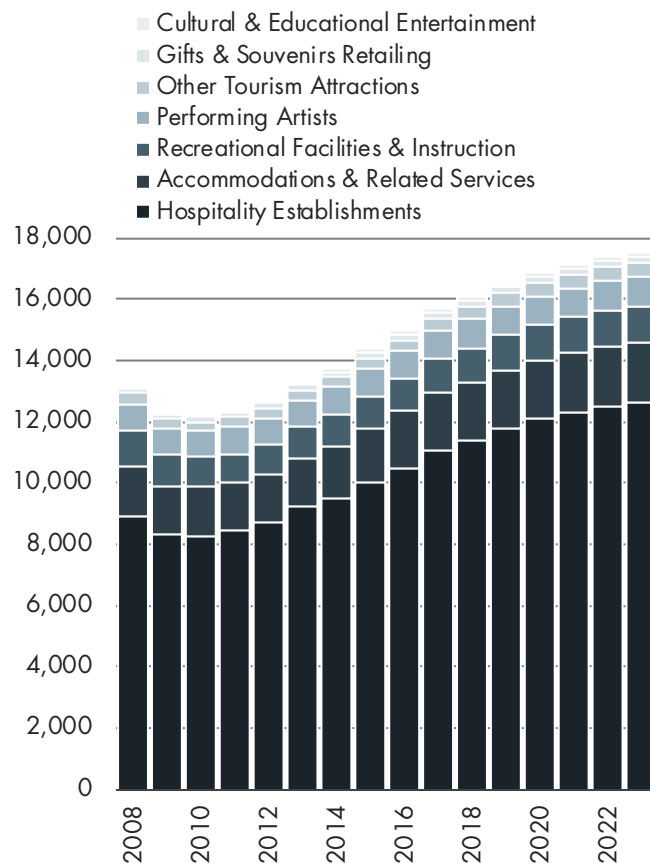| NATURAL RESOURCES		
TRADE ASSOCIATIONS		
International Society of Arboriculture (ISA)		www.isa-arbor.com
Tree Care Industry Association (TCIA)		www.tcia.org
American Forest Resource Council (AFRC)		amforest.org
Society of American Foresters (SAF)		www.eforester.org
National Association of University Forest Resources Programs (NAUFRP)		naufrp.org
Forest Products Society		forestprod.org
Western Wood Products Association (WWPA)		www.wwpa.org
Oregon Small Woodlands Association (OSWA)		www.oswa.org
Oregon Forest & Industries Council (OFIC)		www.ofic.com
Associated Oregon Loggers, Inc. (AOL)		www.oregonloggers.org
Forest Landowners Association (FLA)		www.forestlandowners.com
North American Wholesale Lumber Association (NAWLA)		www.nawla.org
National Association of State Foresters (NASF)		www.stateforesters.org
Oregon Forest Resources Institute		oregonforests.org
American Forest Foundation		www.forestfoundation.org
Sustainable Forestry Initiative (SFI)		www.sfiprogram.org
RELEVANT CONFERENCES/EVENTS		
Forest Vegetation Management Conference		
14–16 January 2020	Anderson, CA	www.fvmc.org
TCI Winter Management Conference		
9-13 February 2020	Puerto Vallarta, MX	wmc.tcia.org
2020 NAWLA Leadership Summit + WWPA Annual Meeting		
8–10 March 2020	Palm Desert, CA	www.nawla.org/leadershipsummit
Forest Innovation Reviews (FIRz)		
Fall 2020 (Date TBA)	Corvallis, OR	www.usendowment.org/what-we-do/innovation/forest-innovation-reviews-firz/
NASF 2020 Annual Meeting		
21–24 September 2020	Pittsburgh, PA	www.stateforesters.org/event/nasf-2020-annual-meeting
2020 SFI Annual Conference		
October 2020 (TBA)	TBA	sficonference.org
2020 SAF National Convention		
28 Oct–1 Nov 2020	Providence, RI	www.eforester.org/Safconvention
TRADE PUBLICATIONS		
Forest Science	academic.oup.com/forestscience	
Forest Products Journal	www.forestprodjournals.org	
Journal of Forestry	www.eforester.org/Main/Library/Journal_of_Forestry.aspx	
Tree Care Industry Magazine	tcimag.tcia.org/publication/?i=604336	
Woodland Magazine	www.forestfoundation.org/woodland-magazine-publication-for-forest-owners	
Forest Ecology and Management	www.journals.elsevier.com/forest-ecology-and-management	
Oregon Family Forests News	www.oswa.org/blog/oregon-family-forests-news	

TOURISM

FIGURE 58. TARGET SNAPSHOT

SOREDI REGION	TOTAL	TARGET
2018 Payrolled Business Locations	10,315	1,008
2018 Employment	134,719	16,054
Net Chg., 2008–2018	+10,130	+2,886
Pct. Chg., 2008–2018	+8.1%	+21.9%

FIGURE 60. EMPLOYMENT OUTLOOK

US OVERALL	TOTAL	TARGET
Net Chg., 2018–2023	+9,424,267	+1,150,947
Pct. Chg., 2018–2023	+5.8%	+7.0%
SOREDI REGION	TOTAL	TARGET
Net Chg., 2018–2023	+9,895	+1,447
Pct. Chg., 2018–2023	+7.3%	+9.0%

FIGURE 59. TARGET CONCENTRATION
LOCATION QUOTIENT TREND

FIGURE 61. TARGET COMPONENTS
ANNUAL EMPLOYMENT
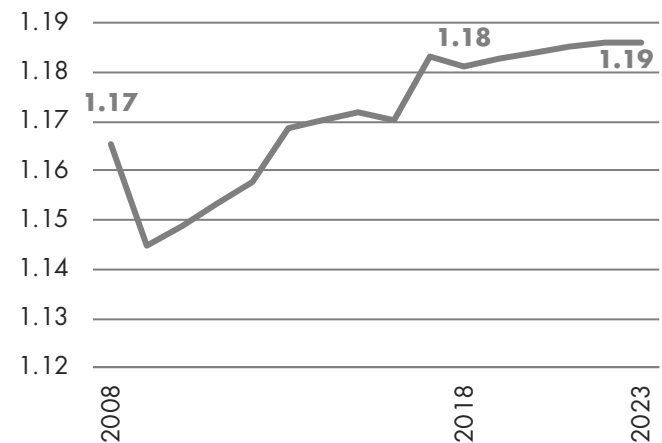
FIGURE 62. TARGET GROWTH
ANNUAL PERCENT CHANGE IN EMPLOYMENT
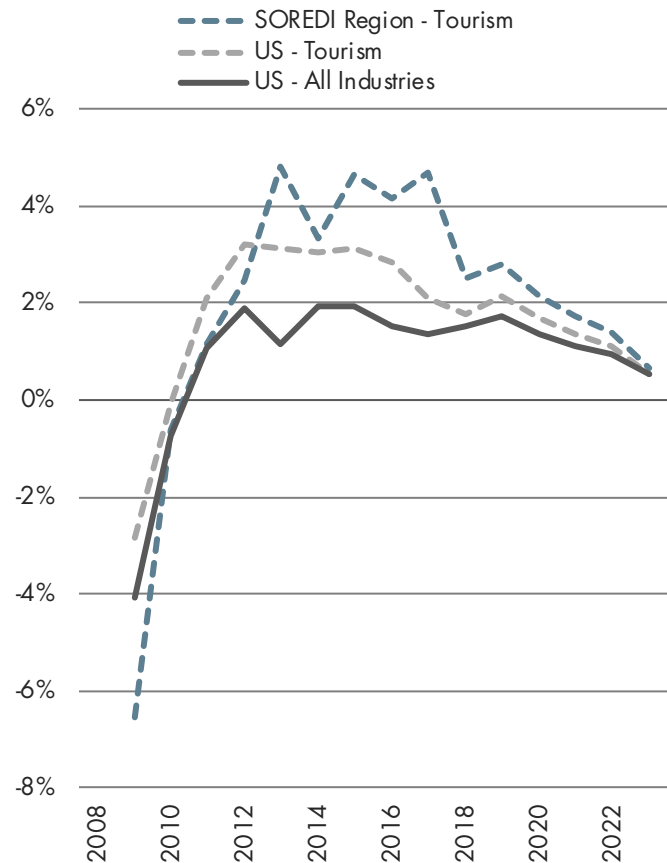
Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

FIGURE 63. TARGET STAFFING PROFILE

LQ & RELATIVE EARNINGS: BELOW AVG→ ←ABOVE AVG

		EMPLOYMENT			EARNINGS	
STANDARD OCCUPATIONAL CLASSIFICATION						
Code	**Description**	**2018 Jobs**	**% of Target**	**LQ (US= 1.00)**	**Local Hourly Median**	**Relative to US (US=1.00)**
35-3021	Combined Food Prep. & Servers, Incl. Fast Food	2,890	18.0%	0.93	11.63	1.14
35-3031	Waiters & Waitresses	2,106	13.1%	0.87	12.02	1.15
35-2014	Cooks, Restaurant	1,400	8.7%	1.10	14.01	1.10
35-3022	Counter Attendants, Cafeteria, & Concession	803	5.0%	2.56	11.62	1.08
37-2012	Maids & Housekeepers	698	4.4%	1.50	12.10	1.07
35-1012	First-Line Supvsr., Food Prep. & Servers	657	4.1%	0.81	14.42	0.93
35-2021	Food Preparation Workers	582	3.6%	1.24	12.34	1.08
35-9021	Dishwashers	501	3.1%	1.13	11.85	1.08
35-3011	Bartenders	447	2.8%	0.83	11.89	1.10
41-2011	Cashiers	438	2.7%	1.02	11.87	1.10
35-9031	Hosts & Hostesses	415	2.6%	1.06	11.91	1.12
43-4081	Hotel, Motel, & Resort Desk Clerks	363	2.3%	1.51	12.12	1.06
39-9031	Fitness Trainers & Aerobics Instructors	291	1.8%	1.16	17.29	0.90
53-3031	Driver/Sales Workers	288	1.8%	1.39	15.53	1.31
35-2011	Cooks, Fast Food	253	1.6%	0.54	12.74	1.19
35-9011	Attendants & Bartender Helpers	243	1.5%	0.63	11.81	1.10
11-9051	Food Service Managers	196	1.2%	0.80	17.75	0.75
11-1021	General & Operations Managers	150	0.9%	1.02	36.53	0.76
35-1011	Chefs & Head Cooks	134	0.8%	1.16	21.05	0.94
41-2031	Retail Salespersons	132	0.8%	1.00	12.86	1.10
37-3011	Landscaping & Groundskeeping Workers	132	0.8%	1.23	13.63	1.00
27-2011	Actors	119	0.7%	4.23	13.02	0.70
37-2011	Janitors & Cleaners, Exc. Maids & Housekeepers	119	0.7%	0.96	13.77	1.10
25-3021	Teachers, Self-Enrichment Educ.	114	0.7%	1.23	15.51	0.81
27-2022	Coaches & Scouts	107	0.7%	1.20	12.72	0.78

Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

FIGURE 64. TARGET INDUSTRY INTELLIGENCE

TOURISM		
TRADE ASSOCIATIONS		
American Hotel & Lodging Association (AHLA)	www.ahla.com	
National Restaurant Association	www.restaurant.org	
US Farm Stay Association (USFSA)	farmstayus.com	
Oregon Travel Information Council	oregontic.com	
Oregon Destination Association (ODA)	oregondmo.com	
Oregon Restaurant & Lodging Association (ORLA)	www.oregonrla.org	
Oregon Outdoor Alliance	oregonoutdooralliance.org	
Oregon Bed & Breakfast Guild (OBBG)	www.obbg.org	
Oregon Tour & Travel Alliance	oregontourandtravelalliance.com	
Oregon Business Travel Association (OBTA)	obta.org	
Oregon Convention and Visitor Services Network	oregoncvb.com	
Travel Southern Oregon	www.southernoregon.org	
Oregon-California Trails Association	www.octa-trails.org	
Oregon Wine Board	www.oregonwine.org	
Oregon Farmers Markets Association	www.oregonfarmersmarkets.org	
RELEVANT CONFERENCES/EVENTS		
Restaurant Innovation Summit 2019		
5–6 November 2019	*Cleveland, OH*	www.restaurant.org/Events/Calendar/Restaurant-Innovation-Summit
2020 ODA Annual Conference		
21–23 January 2020	*Sunriver, OR*	oregondmo.com/conferences
Northwest Food Show		
19–20 April 2020	*Portland, OR*	www.nwfoodshow.com
Rural Tourism Conference		
26–28 April 2020	*Sunriver, OR*	industry.traveloregon.com/opportunities/events/conferences
ORLA Hospitality Conference		
28–29 September 2020	*Ashland, OR*	www.orlahospitalityconference.com
Oregon Governor's Conference on Tourism		
11–13 April 2021	*Portland, OR*	industry.traveloregon.com/opportunities/events
TRADE PUBLICATIONS		
Oregon Restaurant & Lodging Association Magazine	bit.ly/ORLAmag	
Food & Wine	www.foodandwine.com	
Lodging	lodgingmagazine.com	
Restaurant Hospitality	www.restaurant-hospitality.com	
Oregon Wine Press	www.oregonwinepress.com	
Oregon Business	www.oregonbusiness.com	

HEALTHCARE

FIGURE 65. TARGET SNAPSHOT

SOREDI REGION	TOTAL	TARGET
2018 Payrolled Business Locations	10,315	838
2018 Employment	134,719	18,353
Net Chg., 2008–2018	+10,130	+3,801
Pct. Chg., 2008–2018	+8.1%	+26.1%

FIGURE 67. EMPLOYMENT OUTLOOK

US OVERALL	TOTAL	TARGET
Net Chg., 2018–2023	+9,424,267	+1,792,642
Pct. Chg., 2018–2023	+5.8%	+10.6%
SOREDI REGION	TOTAL	TARGET
Net Chg., 2018–2023	+9,895	+2,680
Pct. Chg., 2018–2023	+7.3%	+14.6%

FIGURE 66. TARGET CONCENTRATION
LOCATION QUOTIENT TREND

FIGURE 68. TARGET COMPONENTS
ANNUAL EMPLOYMENT

FIGURE 69. TARGET GROWTH
ANNUAL PERCENT CHANGE IN EMPLOYMENT

Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

FIGURE 70. TARGET STAFFING PROFILE

LQ & RELATIVE EARNINGS: **BELOW AVG→** ←**ABOVE AVG**

STANDARD OCCUPATIONAL CLASSIFICATION		EMPLOYMENT			EARNINGS	
					Local	Relative
					Hourly	to US
		2018	% of	LQ	Median	(US=1.00)
Code	Description	Jobs	Target	(US= 1.00)		
29-1141	Registered Nurses	2,339	12.7%	0.84	41.32	1.20
39-9021	Personal Care Aides	1,577	8.6%	1.68	13.18	1.14
43-6013	Medical Secretaries	1,130	6.2%	1.93	16.67	0.97
31-9092	Medical Assistants	1,063	5.8%	1.54	17.75	1.10
31-1014	Nursing Assistants	759	4.1%	0.54	14.90	1.09
31-1011	Home Health Aides	745	4.1%	1.08	11.98	1.03
43-4171	Receptionists & Information Clerks	559	3.0%	1.09	14.60	1.04
31-9091	Dental Assistants	470	2.6%	1.32	21.07	1.13
37-2012	Maids & Housekeepers	409	2.2%	1.59	12.10	1.07
29-2021	Dental Hygienists	377	2.1%	1.63	42.09	1.17
29-1069	Physicians & Surgeons, All Other	329	1.8%	0.86	117.42	1.22
21-1018	Substance Abuse & Behavioral Disorder Counselors	306	1.7%	1.57	20.25	0.94
11-9111	Medical & Health Services Managers	304	1.7%	0.96	48.79	1.03
43-9061	Office Clerks, General	257	1.4%	0.83	15.83	1.01
29-2061	Licensed Practical/Vocational Nurses	235	1.3%	0.36	24.55	1.11
29-2018	Clinical Laboratory Technologists and Technicians	229	1.2%	0.97	28.97	1.15
29-2034	Radiologic Technologists	223	1.2%	1.13	34.98	1.22
43-3021	Billing & Posting Clerks	222	1.2%	1.04	18.54	1.02
29-1123	Physical Therapists	210	1.1%	0.88	41.49	0.99
29-1171	Nurse Practitioners	186	1.0%	1.03	55.85	1.09
35-3041	Food Servers, Nonrestaurant	178	1.0%	1.07	12.29	1.10
29-1021	Dentists, General	178	1.0%	1.16	74.04	1.00
31-9097	Phlebotomists	178	1.0%	2.13	17.09	1.03
39-9099	Personal Care & Service Workers, All Other	166	0.9%	16.75	14.07	1.11
21-1093	Social & Human Service Assistants	159	0.9%	1.45	18.14	1.12

Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

FIGURE 71. TARGET INDUSTRY INTELLIGENCE

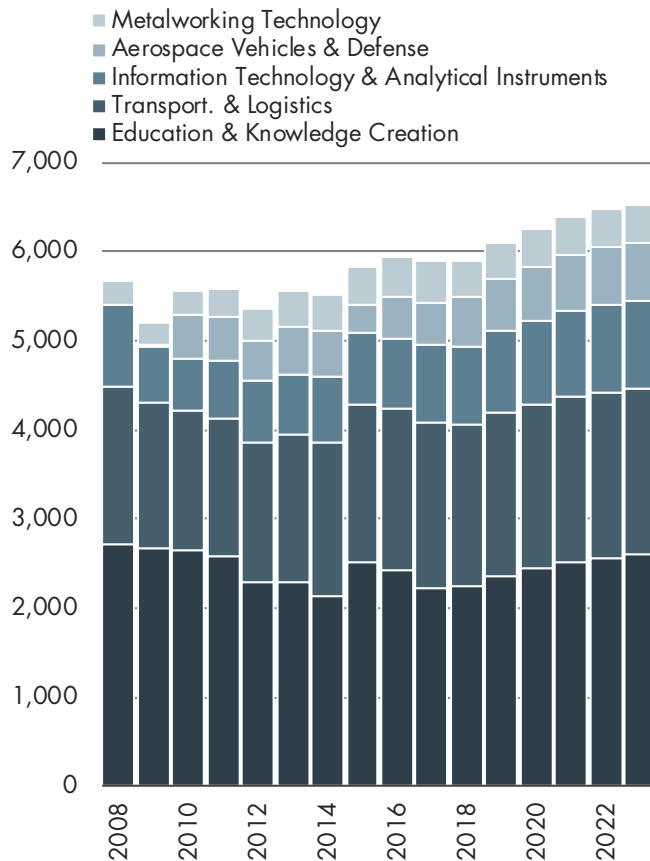| HEALTHCARE		
TRADE ASSOCIATIONS		
American Medical Association	www.ama-assn.org	
American Health Care Association (AHCA)	www.ahcancal.org	
American Hospital Association (AHA)	www.aha.org	
National Rural Health Association	www.ruralhealthweb.org	
Oregon Rural Health Association (ORHA)	orha.wildapricot.org	
Oregon Primary Care Association (ORPCA)	www.orpca.org	
Oregon Health Care Association (OHCA)	www.ohca.com	
Oregon Medical Association (OMA)	www.theoma.org	
AMSUS, The Society of Federal Health Professionals	www.amsus.org	
Population Health Alliance	populationhealthalliance.org	
RELEVANT CONFERENCES/EVENTS		
OHCA Annual Convention		
19–20 November 2019	Portland, OR	www.ohca.com/events/annual-convention
2019 AMSUS Annual Meeting		
2–6 December 2019	National Harbor, MD	www.amsus.org/events/annual-meeting-2
AHA Rural Health Care Leadership Conference		
2–5 February 2020	Phoenix, AZ	www.aha.org/rural-conference
VA Healthcare 2020		
11–13 May 2020	Washington, DC	www.idga.org/events-veteransaffairshealthcare
Rural Hospital Innovation Summit		
19–22 May 2020	San Diego, CA	www.ruralhealthweb.org/events/event-details?eventId=19
2020 OMA Annual Conference		
Fall 2020 (TBA)	TBA	www.theoma.org
71st AHCA/NCAL Convention & Expo		
4-7 October 2020	Austin, TX	www.ahcancal.org/events
TRADE PUBLICATIONS		
The American Journal of Medicine	www.amjmed.com	
American Journal of Life Sciences	www.sciencepublishinggroup.com/j/ajls	
The Journal of Rural Health	www.ruralhealthweb.org/news/the-journal-of-rural-health	
Provider	www.providermagazine.com	
HealthCare: The Journal of Delivery Science and Innovation	www.journals.elsevier.com/healthcare-the-journal-of-delivery-science-and-innovation	
Oregon Caregiver	www.ohca.com/news/publications	
Military Medicine	academic.oup.com/milmed	

ASPIRATIONAL NICHES

FIGURE 72. TARGET SNAPSHOT

SOREDI REGION	TOTAL	TARGET
2018 Payrolled Business Locations	10,315	313
2018 Employment	134,719	5,907
Net Chg., 2008–2018	+10,130	+244
Pct. Chg., 2008–2018	+8.1%	+4.3%

FIGURE 74. EMPLOYMENT OUTLOOK

US OVERALL	TOTAL	TARGET
Net Chg., 2018–2023	+9,424,267	+624,121
Pct. Chg., 2018–2023	+5.8%	+5.5%
SOREDI REGION	TOTAL	TARGET
Net Chg., 2018–2023	+9,895	+620
Pct. Chg., 2018–2023	+7.3%	+10.5%

FIGURE 73. TARGET CONCENTRATION
LOCATION QUOTIENT TREND

FIGURE 75. TARGET COMPONENTS
ANNUAL EMPLOYMENT

- Metalworking Technology
- Aerospace Vehicles & Defense
- Information Technology & Analytical Instruments
- Transport. & Logistics
- Education & Knowledge Creation
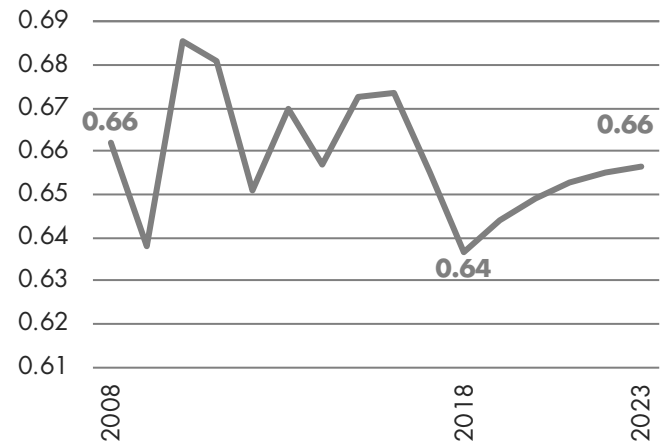
FIGURE 76. TARGET GROWTH
ANNUAL PERCENT CHANGE IN EMPLOYMENT
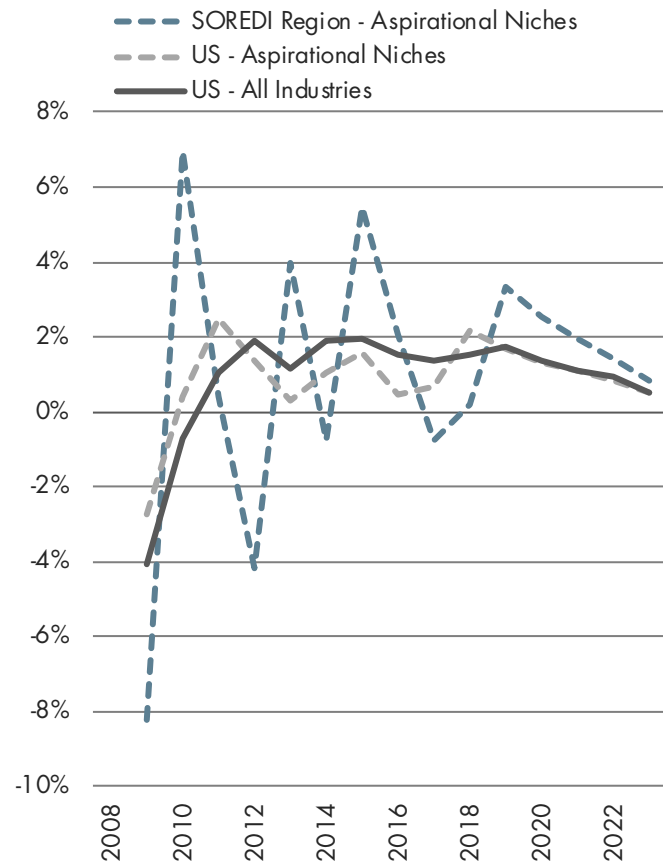
- - - SOREDI Region - Aspirational Niches
- - - US - Aspirational Niches
— US - All Industries

Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.

FIGURE 77. TARGET STAFFING PROFILE

LQ & RELATIVE EARNINGS: **BELOW AVG→** ▬▬▬▬▬▬ **←ABOVE AVG**

STANDARD OCCUPATIONAL CLASSIFICATION		EMPLOYMENT			EARNINGS	
		2018 Jobs	% of Target	LQ (US= 1.00)	Local Hourly Median	Relative to US (US=1.00)
Code	Description					
25-1099	Teachers, Postsecondary	777	13.2%	1.05	33.70	1.01
53-3032	Heavy & Tractor-Trailer Truck Drivers	642	10.9%	2.27	21.80	1.04
43-9061	Office Clerks, General	226	3.8%	0.73	15.83	1.01
43-5011	Cargo & Freight Agents	157	2.7%	4.31	23.50	1.13
43-6014	Secretaries/Admin. Asst., Exc. Legal, Med., & Exec.	147	2.5%	0.62	16.69	0.95
51-2028	Electrical & Electronic Equip. Assemblers	130	2.2%	2.10	18.67	1.15
49-3011	Aircraft Mechanics & Service Technicians	123	2.1%	2.41	27.13	0.90
25-9041	Teacher Assistants	110	1.9%	2.15	14.01	1.08
11-1021	General & Operations Managers	103	1.7%	1.49	36.53	0.76
43-4181	Reservation & Transp. Ticket Agents & Travel Clerks	96	1.6%	2.13	13.86	0.78
11-9033	Education Administrators, Postsecondary	95	1.6%	1.34	40.97	0.91
25-3097	Teachers & Instructors, All Other	87	1.5%	1.32	12.73	0.66
43-3031	Bookkeeping, Accounting, & Auditing Clerks	86	1.5%	1.36	17.68	0.91
15-1132	Software Developers, Applications	77	1.3%	0.88	35.93	0.72
15-1151	Computer User Support Specialists	75	1.3%	0.99	22.92	0.94
51-4041	Machinists	74	1.2%	1.68	20.24	0.97
53-7062	Laborers/Freight, Stock, & Material Movers, Hand	72	1.2%	0.74	14.98	1.10
37-2011	Janitors & Cleaners, Exc. Maids & Housekeepers	71	1.2%	0.54	13.77	1.10
25-3021	Teachers, Self-Enrichment Educ.	69	1.2%	1.24	15.51	0.81
43-9199	Office & Admin. Support Workers, All Other	68	1.2%	1.38	15.46	0.92
51-4011	CNC Machine Operators, Metal/Plastic	63	1.1%	3.32	16.05	0.83
43-5032	Dispatchers, Except Police, Fire, & Ambulance	63	1.1%	2.99	17.47	0.92
25-9099	Educ., Training, & Library Workers, All Other	63	1.1%	2.42	17.50	0.86
51-9061	Inspectors, Testers, Sorters, Samplers, & Weighers	53	0.9%	1.32	17.59	0.95
43-4051	Customer Service Representatives	53	0.9%	0.75	13.75	0.85

Sources: US Bureau of Labor Statistics; Emsi 2019.3—QCEW Employees, Non-QCEW Employees, and Self-Employed; US Economic Development Administration; Institute for Strategy and Competitiveness at Harvard Business School; TIP Strategies.
Note: The cluster methodology developed at Harvard Business School has been adjusted by TIP Strategies to align with the six-digit NAICS classifications used by Emsi.
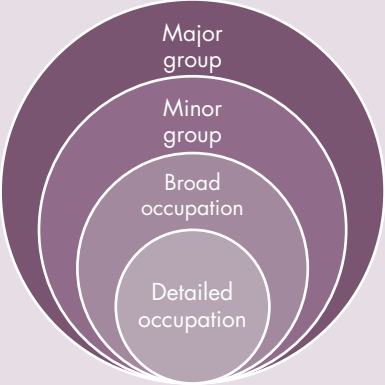
APPENDIX C. DATA AND METHODOLOGY
CLASSIFICATION SYSTEMS

Much of the analysis presented in this report relies on three separate classification systems. An overview of each follows.

The **Standard Occupational Classification (SOC)** system is used by federal statistical agencies to classify workers into categories for the purpose of collecting, calculating, or disseminating data. This system groups all occupations in which work is performed for pay or profit according to the type of work performed and, in some cases, on the skills, education, or training needed to perform the work at a competent level. Under the 2018 SOC system, workers are classified into one of 867 detailed occupations, which are combined to form 459 broad occupations, 98 minor groups, and 23 major groups. Federal agencies began implementing the newly updated SOC system in 2018.
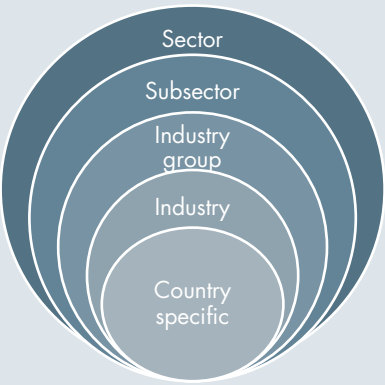
STANDARD OCCUPATIONAL CLASSIFICATION (SOC) SYSTEM STRUCTURE AND EXAMPLE

EXAMPLE: Major group 51-0000 Production Occupations

- **Minor group 51-2000** Assemblers and Fabricators
  - **Broad occupation 51-2090** Miscellaneous Assemblers and Fabricators
    - **Detailed occupation 51-2092** Team Assemblers

The **North American Industry Classification System** (**NAICS**, pronounced *nakes*) was developed under the direction and guidance of the Office of Management and Budget (OMB) as the standard for use by federal statistical agencies in classifying business establishments for the collection, tabulation, presentation, and analysis of statistical data describing the US economy. The classification system was developed jointly with government agencies in Canada and Mexico to allow for a high level of comparability in business statistics among the North American countries. NAICS classifies industries into 20 sectors based on production processes. These sectors are broken into subsectors, industry groups, and individual industries, with an additional level of detail to accommodate industry codes specific to the three countries. The most recent version, 2017 NAICS, was finalized in 2016 and will continue to be implemented by agencies over the next several years.

NORTH AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) STRUCTURE AND EXAMPLE

EXAMPLE: Sector 31-33 Manufacturing
- **Subsector 336** Transportation Equipment Manufacturing
  - **Industry group 3361** Motor Vehicle Manufacturing
    - **Industry 33611** Automobile and Light Duty Motor Vehicle Manufacturing
      - **Country-specific 336111** Automobile Manufacturing

The **Classification of Instructional Programs (CIP)** is the accepted federal government statistical standard on instructional program classifications. Developed in 1980 by the National Center for Education Statistics (NCES), the CIP is used by state agencies, national associations, academic institutions, and employment counseling services for collecting, reporting, and analyzing instructional program data. The 2010 CIP is the current version of this classification system.

The CIP titles and program descriptions are intended to be generic categories into which program completion data can be placed and are not exact duplicates of specific majors or field of study titles used by individual institutions. The vast majority of CIP titles correspond to academic and occupational instructional programs offered for credit at the postsecondary level. These programs result in recognized completion points and awards, including degrees, certificates, and other formal awards. The CIP also includes other types of instructional programs, such as residency programs in various dental, medical, podiatry, and veterinary specialties that might lead to advanced professional certification, personal improvement and leisure programs, and instructional programs that lead to diplomas and certificates at the secondary level only.

DATA SOURCES

EMPLOYMENT

The industry and occupational data presented in this report were prepared using Emsi's foundational dataset, which integrates economic, labor market, demographic, and education data from over 90 government and private sector sources, creating a comprehensive and current database that includes both published data and detailed estimates with full coverage of the United States.

For a complete list of Emsi US data sources, see: www.economicmodeling.com/data-sources.

The company's core data consists of jobs (historical and projected) and earnings (current year) by industry and occupation for every ZIP Code, metropolitan statistical area (MSA), and county in the United States. Emsi data are annual averages of jobs (not workers); full-time and part-time jobs are counted equally. There are three classes of workers that are included in the core dataset.

- QCEW Employees: A form of the US Bureau of Labor Statistics Quarterly Census of Employment and Wages (BLS QCEW) dataset that has been modified slightly by Emsi. Suppressions have been removed, public sector employment has been reorganized, and county and NAICS changes have been modified in past years for consistency. This dataset is designed to match QCEW in almost all cases and should be used in analyses where it is important to match official sources.

- Non-QCEW Employees: Attempts to cover jobs that fall under an employer-employee relationship but are not covered by QCEW. The major types of employment covered in this set include military jobs, railroad jobs, many nonprofit and religious workers, certain salespersons, miscellaneous federal government, and some other government workers.

- Self-Employed: Covers people who, when responding to US Census Bureau surveys, consider self-employment to be a significant part of their income or time spent working. Most people normally considered self-employed would fall into this dataset.

With occupational data, beginning with its 2017.3 data run, Emsi uses the new BLS occupational separations methodology in its calculation of replacements and therefore openings. The BLS updated its methodology for calculating replacements because the old methodology (known as the replacements methodology) significantly undercounted the number of workers leaving occupations. This resulted in an artificially low number of replacements and openings. The BLS new methodology corrects the problem and provides a better estimate of true replacement needs. See kb.economicmodeling.com/how-does-emsi-calculate-job-openings/.

REAL-TIME LABOR MARKET INFORMATION/JOB POSTING ANALYTICS

Gartner's TalentNeuron is an online talent market intelligence portal with real-time labor market insights, including custom role analytics and executive-ready dashboards and presentations. Supply-and-demand data is gathered by location, occupation, skill set, which competitors are hiring, and what roles are being posted most often. This data aggregates more than three million weekly job ads collected by TalentNeuron from over 25,000 websites (excludes staffing agencies and anonymous employers).

EDUCATION AND TRAINING

Under the Higher Education Act of 1965, every college, university, and vocational or technical institution that participates in federal financial student aid programs, such as Pell Grants or federally backed student loans, is required to report annually to the US Department of Education on a range of indicators. Data are collected through a system of interrelated surveys and are made available through the Integrated Postsecondary Education Data System (IPEDS).

Each fall, institutions report on the number of awards conferred for credit by field of study, by award level, and by the gender and race or ethnicity of the recipient. These data are referred to as completions. Data on completions for the most recent academic year available was downloaded from IPEDS for all schools in the region that participate in IPEDS surveys, except for schools in which training was limited to cosmetology.