



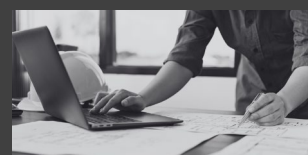
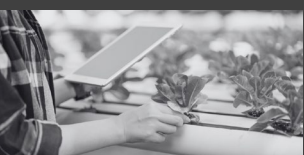
FOR LABOR MARKET RESEARCH

SOUTH CENTRAL COAST



South Central Coast Priority Sectors

REGIONAL INVESTMENT FRAMEWORK



**[bw] RESEARCH
PARTNERSHIP**

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Introduction

The State of California defines 13 Jobs First regions based on shared economic ties. This report outlines a regional investment framework for the South Central Coast (SCC)¹, focusing on five sectors that anchor regional innovation, investment, and workforce opportunity in the region:

- Aerospace & Defense
- Clean Economy
- High-Tech
- Life Sciences
- Working Lands & Water.²



Figure 1. Map of the South Central Coast Region

While these sectors do not constitute the entirety of the SCC economy, they collectively represent nearly one in five (18%) of jobs in the SCC region and generate over one-quarter (26%) of regional economic output.

In addition, they represent critical investment priorities due to their alignment with regional and statewide goals related to resilience, sustainability, long-term economic growth, job quality, and workforce mobility. The sectors also fuel innovation through R&D in emerging technology clusters across the region. Aligning education and training investments with cross-cutting needs across these sectors can thus expand access to higher-wage career pathways, strengthen regional talent pipelines, and help ensure that workforce constraints do not limit employer growth.

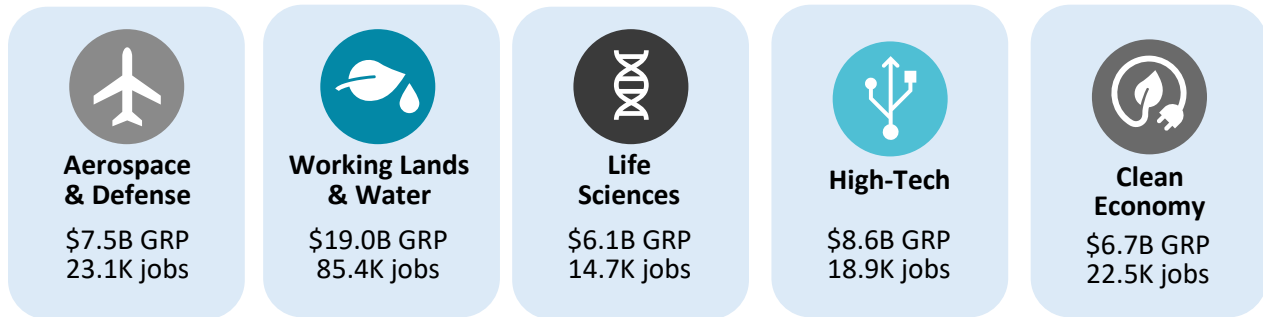
Table 1. Key Activities and Technologies of the SCC Priority Sectors

SCC Priority Sector	Key Activities and Technologies
Aerospace & Defense	Manufacturing, maintenance, and professional services for aircraft, space, and defense systems and components.
Clean Economy	Nuclear, wind, solar, and clean hydrogen generation and manufacturing; remediation; energy efficiency; environmental services; and grid modernization.
High-Tech	Software publishing, hardware manufacturing, platforms, and IT services, including AI/ML, advanced and quantum computing, robotics, and 3D printing.
Life Sciences	R&D in biotech, medical devices and diagnostics, pharmaceuticals, and therapeutics, including MedTech, genomics and proteomics.
Working Lands & Water	Traditional agriculture, Agriculture technology (AgTech), Blue technology (Blue Tech), land management, and natural resources.

¹ The SCC region includes San Luis Obispo, Santa Barbara, Ventura, and Northern Los Angeles Counties.

² Note that some data limitations exist, as North American Industry Classification System (NAICS) codes lack granularity and may not accurately reflect emerging industries in these sectors. Appendix A presents a full list of NAICS codes included in the sector definitions.

Figure 2. Regional Impact of the SCC Priority Sectors



While these sectors differ in terms of wages, job quality, employment footprint, and regional concentration, each represents a strategic priority for the SCC due to their economic significance:

- **Aerospace & Defense:** Anchored by major employers and defense contractors in Ventura and Northern Los Angeles Counties, with space launch activities centered at Vandenberg Space Force Base in Santa Barbara County.
- **Clean Economy:** Supports statewide decarbonization and sustainability goals, with regional assets in emerging technologies such as nuclear (Diablo Canyon Power Plant) and offshore wind (Morro Bay) and growing opportunities associated with offshore oil and gas decommissioning.
- **High-Tech:** Supported by R&D assets in advanced materials, semiconductors, photonics, and quantum computing from UC Santa Barbara and Cal Poly, and a cluster of employers in the Goleta tech corridor.
- **Life Sciences:** Supported by R&D assets in biotech, neuroscience, and stem cells via UC Santa Barbara, and incubators at Cal Poly's Center for Innovation and Entrepreneurship (CIE) and the Conejo Valley.
- **Working Lands & Water:** Has a large regional employment footprint across agriculture, land management, AgTech and Blue Tech; and offers significant opportunities to upskill workers to higher-quality positions.

Key Findings

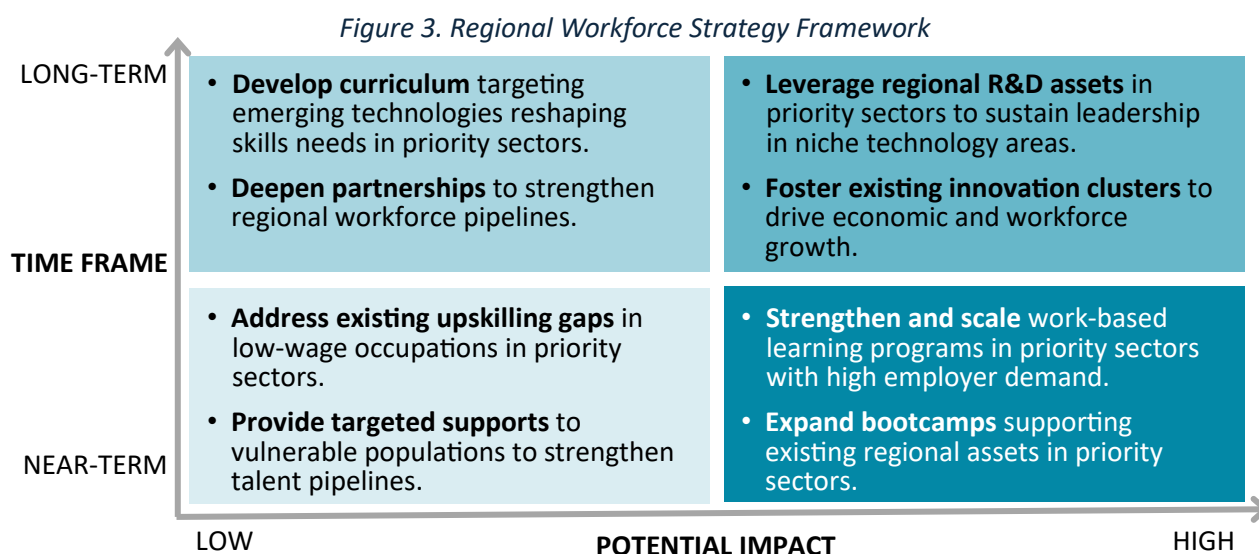
1. **Employers in the SCC region cite rising operating costs, rapid technological change, and talent attraction and retention as their most pressing challenges.** Regulatory barriers, including permitting and taxes also pose a significant challenge.
2. **Despite these headwinds, SCC employers in priority sectors anticipate employment growth over the next 12 to 36 months.** Two in three (67%) surveyed employers expect job growth over the next three years, driven by federal and state investments in advanced manufacturing, aerospace and defense, and clean energy.

3. **The SCC competes with larger regions, including Los Angeles and the Bay Area, for R&D investments and skilled workers.** However, the SCC benefits from strong R&D assets related to materials science, photonics, and quantum technologies at UC Santa Barbara, Cal Poly, and other applied research centers.
4. **Hiring and job retention challenges constrain growth.** Nearly two in five (38%) surveyed SCC employers cite workforce attraction and retention as their most pressing challenge, driven by regional affordability issues.³
5. **Historical growth is uneven and lags statewide and national averages.** From 2020 to 2025, SCC employment grew by 11%, compared to the statewide and national averages of 13%. Some industries, such as Biotech R&D and Platforms (+33% job growth) and Aircraft, Space, and Marine Systems (+22% job growth), have grown robustly. However, historical growth cannot reliably predict future growth trajectories, particularly in emerging industries with rising demand drivers.
6. **Annual wages trail statewide and national averages.** On average, SCC workers earn \$70,054 per year, 24% less than the statewide average of \$92,592 and 7% less than the national average of \$75,653. SCC average annual wages are also 37% lower than the regional living wage of \$111,034.
7. **Occupational churn is accelerating across the SCC.** AI, automation, policy shifts, and evolving supply chains are driving significant skills change across occupations, underscoring the need for industry-aligned curricula supporting foundational job readiness skills and transferable skills that allow jobseekers to access career pathways and ladders to higher-wage opportunities.
8. **SCC employers are highly interested in partnering with community colleges to recruit, hire or train.** Approximately 90% of SCC employers expressed interest in partnerships to support work-based learning and/or job readiness programs, yet less than half (48%) currently partner with community colleges. The SCC's shrinking K-12 population also highlights a growing need to develop adult learners, incumbent workers, and re-entry populations as key sources of talent through flexible, aligned, work-based learning models.
9. **While employers across the SCC face shared workforce challenges, local workforce needs and training access vary.** For example, education and training programs are highly concentrated in Ventura County (236 programs) and Santa Barbara County (211 programs), and noticeably sparser in San Luis Obispo County (115 programs), creating uneven access to high-value career pathways.
10. **Cross-cutting skills needs present shared opportunities for regional investment.** Priority sectors share occupational and skills needs that represent high-impact opportunities for SCC community colleges (e.g., data analysis, troubleshooting and diagnostics; hands-on mechanical, electrical, and electronics skills; precision assembly; safety protocols; AI literacy and digital skills).

³ The SCC has a higher concentration of low-wage jobs (57%) compared to the state (54%) and the nation (52%).

Regional Workforce Priorities

The SCC's regional workforce strategy must weigh short-term employer needs against long-term growth priorities. In addition, the region's assets (R&D hubs, educational institutions, and industry clusters) should anchor prioritization. Figure 3 presents a framework for assessing potential regional workforce strategies by time horizon (near-term to long-term) and potential impact (low to high).



Each strategy offers a distinct value proposition based on employer demand, training capacity, and industry maturity. Thus, this framework helps the SCC prioritize workforce investments based on feasibility, demand, and potential long-term economic impact. The strategic priorities outlined above directly inform the regional and community college-specific recommendations that follow.

The following strategies translate the framework in Figure 3 to actionable priorities:

1. **Strengthen regional coordination** to minimize overlaps in program design, build shared talent pipelines, and ensure curriculum relevance amidst rapid technological change.
2. **Develop cross-regional pathways** with Silicon Valley, Monterey Bay, and Los Angeles R&D hubs to support apprenticeships, internships, and shared training facilities.
3. **Invest in training programs that build cross-cutting skills and support emerging technologies** to maximize investment impact and build regional capacity.
4. **Expand access to opportunity** through targeted supports to underserved populations to strengthen access to higher-wage career pathways.
5. **Strengthen regional workforce intelligence** by building on existing COE efforts to regularly monitor and update assessments of changing employment, skills, and job requirements, ensuring education programs remain aligned with the evolving world of work.

Community College Priorities

Community colleges play a key role in operationalizing the SCC's regional workforce strategy by building and maintaining programs aligned to employer demand in priority sectors, building and strengthening career pathways and career lattices into priority sectors, and ensuring access to opportunity for student jobseekers. The strategies below represent opportunities for community colleges to best support workforce growth:

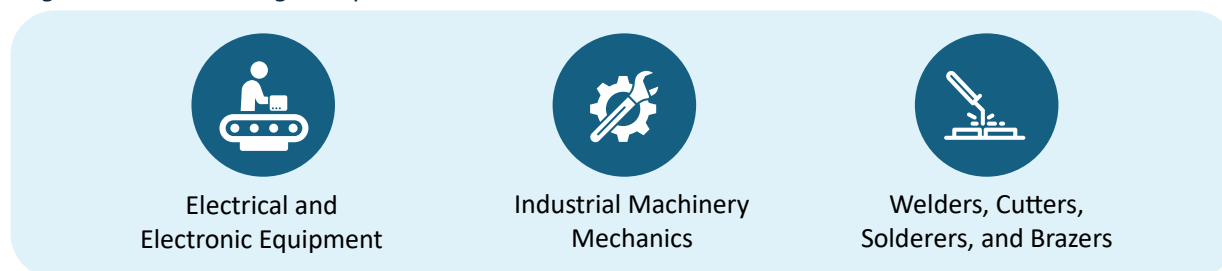
- **Strengthen programs supporting pathways with clear career progression**, particularly in priority occupations with strong advancement potential and/or high wages at entry and a significant regional employment footprint.
- **Support job quality through intentional program design**, such as certifications tied to wage tiers and work-based learning opportunities that build awareness of, and access to, high-wage roles in priority sectors.
- **Develop accessible training programs** that incorporate wraparound supports and flexible delivery models that reduce barriers to participation for adult learners, incumbent workers, and re-entry populations.
- **Future-proof the workforce** by incorporating AI literacy and cross-cutting foundational skills into existing programs to help students build transferable skills and leverage emerging technologies.
- **Scale high-value programs in the trades and technical occupations** where employer demand, advancement potential, and existing training capacity are high.
- **Offer a foundational job readiness skills course as a prerequisite for work-based learning** to help address cross-cutting entry-level skill gaps related to workforce readiness across sectors and industries. Emphasize foundational learning skills that allow students to continue learning following course or program completion.
- **Facilitate regional advisory structures** to streamline and unify employer outreach and engagement, strengthening feedback loops and supporting ongoing curriculum relevance to employer needs.

While the region is well-positioned to support growth in the SCC Jobs First sectors, several constraints may limit the impact of these strategies. Permitting hurdles, regulatory uncertainty, and funding challenges affect project timelines, shaping when and how employers hire and train workers. Uncertain development paths for emerging industries also make it more difficult for education and training providers to plan new curricula. Legacy workers transitioning out of industries facing rapid skills changes also face upskilling challenges, underscoring the need for stronger employer-educator feedback loops and greater awareness of high-wage priority-sector career pathways.

Occupational Priorities for Community Colleges

Identifying the occupations that offer the strongest opportunities for advancement and long-term regional impact is critical to operationalizing the strategies outlined above via targeted training investments and workforce partnerships. Based on job advancement potential, and a large regional employment footprint, the following occupations were identified as **cross-cutting priorities**.

Figure 4. Cross-Cutting Occupational Priorities



Electrical Technicians were also identified as an emerging cross-cutting occupational priority and may warrant more targeted workforce development efforts as these sectors evolve.

In addition, ten occupations were identified as **sector-specific priorities**. While some of these occupations are cross-cutting and support multiple sectors in the SCC, each occupation is listed under the sector in which it exhibits the strongest direct strategic relevance.

Table 2. Sector-Specific Priority Occupations

Occupation	SCC Sector	Advancement Potential ⁴	Sectoral Employment ⁵
Agricultural Equipment Operators	Working Lands & Water	Moderate	2,143
Aircraft Mechanics and Service Technicians	Aerospace & Defense	*	333
CNC Tool Operators and Programmers	Aerospace & Defense	*	401
Carpenters	Clean Economy	High	5,758
Computer User Support Specialists	High-Tech	High	640
Dental Laboratory Technicians	Life Sciences	High	191
Electricians	Clean Economy	High	2,936
HVAC Technicians	Clean Economy	High	1,659
Medical and Clinical Laboratory Technicians	Life Sciences	High	181
Phlebotomists	Life Sciences	Moderate	224

⁴ BW Research's Job Advancement Index measures workers' potential to advance to higher-paying job opportunities. Advancement potential is not applicable for occupations that already pay high wages at entry, which are denoted by an asterisk in Table 2.

⁵ While occupations span multiple sectors, the employment values reported here reflect sector-specific totals within the specified Jobs First sectors. Regional employment counts exceed the sector-specific counts shown here.

SCC stakeholders also identified the following **emerging occupations** with growing demand that community colleges are well-positioned to support. These roles require less than a four-year degree at entry, offer clear opportunities for advancement, and are essential for growth in the five priority sectors:

- **Aerospace & Defense:** Airframe and Powerplant Technicians, Aviation Maintenance Technicians, and Avionics Technicians;
- **Clean Economy:** Electrical Technicians, Energy Auditors, Environmental Remediation Technicians, and Solar Panel Maintenance and Recycling Technicians;
- **High-Tech:** Computer Network Support Technicians;
- **Life Sciences:** Medical Assistants;
- **Working Lands & Water:** Farm Equipment Technicians.

Skills Needs Across Priority Occupations

Understanding the skills needed within these priority occupations is essential for developing relevant training and education programs. In the SCC, surveyed employers in the five Jobs First sectors report considerable shifts in the knowledge, skills and abilities needed by workers due to evolving technologies, market conditions, and/or employer expectations.

Cross-cutting skills needs reported by surveyed employers and interviewed stakeholders include:

- Data Analysis and Problem-Solving;
- Hands-On Mechanical Skills;
- Safety and Compliance Protocols;
- Precision Assembly;
- Troubleshooting and Diagnostics;
- Hands-On Electrical/Electronic Technical Skills;
- Communication Skills;
- AI Literacy and Digital Skills.⁶

As skills requirements continue to evolve, automation plays a significant role in reshaping the tasks and competencies needed across priority occupations. To date, this has been the primary impact of automation across the SCC, rather than worker displacement.

In the SCC region, nearly three in four (72%) jobs are moderately to highly affected by automation, similar to statewide and national averages; of these, approximately 20% are highly affected, while 52% are moderately affected. Potential automation effects vary significantly by sector, with three in five (60%) of Working Lands & Water jobs expected to be highly impacted by automation, compared to less than one in five (18%) Clean Economy jobs.

⁶ Since survey responses were limited, these findings should be interpreted directionally rather than as strict quantitative findings.

These sector-specific automation impacts highlight the need for training programs that can adapt quickly to changing industry demands. The following section explores the current education and training landscape in the SCC.

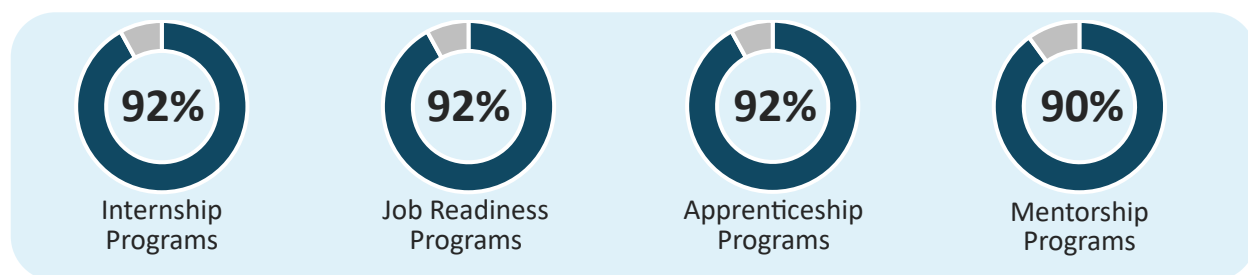
Training Landscape

Several priority occupations are already well-served by existing training programs across the SCC, particularly those with a strong traditional employment footprint. However, other occupations, particularly those tied to emerging technologies, have more limited training coverage.

Overall, the SCC offers 750 training programs that serve the five priority sectors.⁷ ⁸ Nearly two-thirds of programs (65%) are offered by community colleges, including 247 credit-bearing certificate programs and 175 associate degree programs. Training opportunities are distributed throughout the region, with some county-specific concentration. Ventura County offers the highest number of training opportunities, with 236 programs, followed by Santa Barbara County with 211 and Los Angeles County with 188. San Luis Obispo County trails with 115 training programs.

Surveyed SCC employers reported strong interest in additional training partnerships to strengthen workforce pipelines. Nearly all employers expressed interest in partnerships to hire, recruit, or train workers through internship programs (92%), job readiness programs (92%), apprenticeship programs (92%), and mentorship programs (90%).

Figure 5. SCC Employer Interest in Partnerships to Recruit, Hire, or Train Workers⁹



Despite high levels of interest, less than half (48%) of SCC employers report partnering with community colleges to recruit, hire, and train workers. Partnerships with four-year colleges (63%) and high school, technical, or vocational schools (56%) are more common among SCC employers. These findings suggest a compelling opportunity for community colleges to further support the expansion of internships, job readiness programs, mentorships, and apprenticeship programs to help address persistent technical and foundational skills gaps reported by SCC employers.

⁷ The training inventory reflects major public institutions and a sample of private and union programs and does not constitute a comprehensive list of all providers in the region.

⁸ Some training programs serve multiple sectors due to cross-cutting occupational and skills needs.

⁹ Source: 2026 SCC employer survey. See Appendix B for additional details.

Potential Metrics

As the SCC contemplates expanding employer partnerships around internship and apprenticeship programs, identification of potential metrics will be critical to tracking and evaluating program effectiveness. Clear metrics can also help regional partners assess the relative strengths and opportunities to improve pilot programs, improving efficiency of program administration and funding allocations.

Potential metrics to explore for internship/apprenticeship programs include:

- Enrollments (total; and by demography);
- Completions (total; and by demography);
- Conversion rates (to full-time employment);
- Competency attainment (where relevant – certificates, etc.);
- Placement rates (employment in a relevant field within 6-12 months of program completion);
- Wage growth and earnings (comparison of pre- and post-participation earnings);
- Employer participation and retention rates (number of employers; and retention percentage);
- Employer and/or student feedback (perceived program effectiveness).

While these metrics can help administrators and partners track and assess program effectiveness, potential constraints exist that may limit the ability of administrators to collect the required data, including:

- Limited funding and limited staff capacity.
- Privacy laws that limit access to data.
- Low response rates for employer and/or student satisfaction surveys.
- Difficulty monitoring noncredit experiences (e.g., exposure and awareness series).

Some of these data collection constraints can be addressed through intentional program design, such as:

- Designing processes to collect regular feedback from employers via formal advisory structures.
- Requiring survey completion to earn course credit, to boost student response rates.
- Regular reporting of program outcomes to support growth tracking in new sectors and to provide valuable insights on access within underserved populations.

For mentorship programs, additional metrics may include:

- Mentor participation and repeat engagement (number of mentors; retention percentage);
- Mentee participation (mentee attendance and/or participation rates);
- Mentee and/or mentor feedback (perceived value of the program).

Together, these metrics and design considerations underscore the importance of ongoing monitoring and evaluation as the SCC's workforce needs evolve and provide a foundation for the broader considerations explored in the following section.

Considerations and Questions to Build Upon



Automation
and Artificial
Intelligence



Evolving Supply
Chains and
Trade Policy



Energy
Demand and
Infrastructure



Immigration
Patterns and
Policies



Other
Emerging
Technologies

A broad assessment of the five sectors and their related occupational analyses generates both conclusions and questions about how to best support businesses in these sectors and how to prepare students and jobseekers for the related employment opportunities. The findings from the research led to the following key conclusions:

1. **Regional employers in the five sectors are generally optimistic about growth and hiring expectations** even despite recent and anticipated challenges. Regional employers within the five sectors cite increasing costs of doing business, challenges finding and retaining talent, and emerging and evolving technologies as top-of-mind. Even despite those challenges, a strong majority of employers expect to grow and hire additional workers over the next 12 and 36 months. Moving forward, it is important to track whether employers' current growth expectations align with actual outcomes.
2. **Automation and artificial intelligence are reshaping the employment landscape of the five sectors.** While automation and AI do not appear to be displacing large percentages of jobs at this point, they are affecting employers' skills needs, particularly in technology-related roles. This raises a critical question that must be tracked over time: How is automation and AI impacting both overall hiring expectations by industry and occupation, and perhaps more importantly, how are they affecting the skills and abilities that employers seek?
3. **Other potential employment disruptors should also be examined and tracked over time.** Although each sector will likely be impacted differently, several potential challenges were identified that warrant further consideration:
 - a. **Evolving and emerging supply chains and trade policies** affect each of the sectors, which, in many cases, rely on imported intermediary goods and/or export final goods. As such, shifts in trade policy and supply chains can have significant impacts on sector performance.
 - b. **Energy demand, expenses and infrastructure** remain pressing concerns for employers, who face rising energy costs. Energy demand is expected to grow, raising questions about whether the region's infrastructure is sufficiently equipped to accommodate that demand and the increasing mix of energy sources needed to do so.

- c. **Immigration and migration patterns and policies** will likely impact each of the sectors differently. For example, the Working Lands and Water sector will continue to rely upon lower-wage workers to support regional agricultural and facility construction, while the High-Tech sector will continue to rely upon highly skilled researchers and academics to support the development of emerging technologies.
- 4. The five sector studies offer detailed insights into the occupational employment opportunities and the skills and training needed to succeed in those roles. Community colleges can play a pivotal role in helping the regional workforce ecosystem advance the following core workforce priorities:
 - a. **Develop strong foundational skills in students and jobseekers** that enable continuous learning, helping them develop and master new skills, areas of expertise, and technologies. In rapidly evolving industries, employer needs will continue to shift, and workers must be able to adapt. Thus, continuous learning must represent a central pillar of workforce development strategies.
 - b. **Balance exposure to emerging technologies with development of fundamental competencies.** Students and jobseekers require opportunities to build AI literacy skills while strengthening foundational skills in reading, writing, and numeracy. It will be critical to monitor how employers' expectations regarding technology and foundational skills continue to evolve over time.
 - c. **Provide early insights into shifting employer expectations and support more proactive curriculum alignment** by integrating skills intelligence into the existing COE occupational dashboard. While the COE's current data dashboard provides robust insights into occupations, wages, and entry-level education requirements, integration of a skills data component will allow the SCC to better monitor emerging and declining skills needs across cross-cutting roles foundational to multiple sectors, such as project managers, data analysts, and other administrative staff.