COLLEGE OF THE CANYONS

SANTA CLARITA VALLEY
ECONOMIC DEVELOPMENT CORPORATION

HIGH ROAD TRAINING PARTNERSHIP

SCV Workforce Roadmap

Guiding Talent & Powering Growth for Advanced Technologies

ADVANCED TECHNOLOGY CENTER

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Project Background

Focus of HRTP

Led by the California Workforce Development Board, **High Road Training Partnerships** (HRTPs) are designed to address economic inequalities and adapt to the evolving nature of work by fostering collaboration across workers, labor organizations, and employers. The core purpose of HRTPs is to create economically resilient communities with a focus on equity, job quality, and climate resilience. This approach ensures that workers have access to family-sustaining wages, safe workplaces, and opportunities for advancement. Ultimately, HRTPs aim to establish an industry-led skills infrastructure that contributes to a more robust and equitable regional economy in California.

Grant Leadership: College of the Canyons

In 2023, **College of the Canyons** (COC), a public community college located in Santa Clarita, received an HRTP grant to develop a new model that creates opportunities for future technicians, technologists, and students in advanced technologies within the Santa Clarita Valley and the Greater Los Angeles area. COC collaborates closely with the Santa Clarita Valley Economic Development Corporation (SCVEDC) which serves as a primary industry connector for the HRTP initiative with local businesses, engaging local employers in partnership with COC to identify skills gaps and align training with real workforce needs.

As technology reshapes industries, COC is well-positioned to retool education to ensure today's students excel in tomorrow's jobs. Equipped with cutting-edge technology, COC's **Advanced Technology Center** (ATC) is purpose-built to provide hands-on training and ensure students are equipped for the world of Industry 4.0, which is marked by big data, robotics, system integration, automation/AI, cybersecurity, and the Internet of Things (IoT), in addition to traditional CNC Machining, Welding, and Network Technologies.

To ensure success with the HRTP grant, COC leveraged its community relationships that contributed to the build-out of the ATC and incorporated extensive feedback from both employers and employees in the advanced manufacturing sector. COC's HRTP model was designed to meet the changing needs of the Santa Clarita Valley.

Composition of the Santa Clarita Valley

According to the Santa Clarita Valley Economic Development Corporation's (SCVEDC) latest data, the Santa Clarita Valley (SCV) is the third-largest city in the Los Angeles area, spanning approximately 520 square miles, and is home to approximately 300,000 residents. This rapidly expanding region encompasses the City of Santa Clarita, including the neighborhoods of Canyon Country, Newhall, Saugus, and Valencia, as well as adjacent unincorporated communities such as Castaic, Stevenson Ranch, Sunset Pointe, Tesoro, Val Verde, Westridge, Newhall Ranch, and Aqua Dulce.

SCV's demographics highlight a well-educated, working-age population with a high median income. More than 72 percent of residents aged 25 and over have attended some college, and 38.53 percent hold a four-year degree or more. The majority of residents are of working age, with 64 percent of the population falling between the ages of 18 and 64. In addition, the area's working-age population seeks employment in the Greater Los Angeles area.

The median household income in the SCV is $139,000, notably higher than both Los Angeles County ($106,600) and California ($116,309), with 58 percent of SCV households earning over $100,000 annually. Consistently recognized as one of **the most business-friendly regions in Los Angeles County**, the SCV offers a high quality of life and is one of the fastest-growing locations in the United States. Its economy is diverse, encompassing industries like Aerospace & Defense, Medical Devices & Biotech, Advanced Manufacturing, Digital Media & Entertainment, and Information Technology. Manufacturing is one of the largest industries in the Santa Clarita Valley, contributing significantly to the local economy and requiring skilled labor, experienced leadership, and higher wages.

Connecting to HRTP's Core Components

The HRTP grants involve a systemic approach to workforce development, with an emphasis on developing an industry-led skills infrastructure, rather than just a program or curriculum. The essential elements of HRTP include the following: 1) industry-led problem solving, 2) an emphasis on the partnership itself, 3) incorporation of worker wisdom, and 4) industry-driven education and training solutions.

HRTPs are designed interventions for jobs and career pathways, ensuring customized worker training that is connected with an ecosystem of partners who convene regularly to identify pressing needs and solutions. This ecosystem includes the following:

- **Workers:** to ensure there is access to training, mentoring, career pathways, and economic security.
- **Employers:** to lend expertise in their needs around creating a high-performing workforce, improved productivity, and a competitive advantage.
- **Worker Organizations:** that set industry standards and secure higher wages.
- **Community Partners:** who focus on environmental and economic resilience and equitable employment.

The HRTP partners follow three core components, which are:

- Grounded in Equity, Job Quality, Climate Resilience principles
- Industry-Driven: Customized for industry needs and future demand
- Worker-centered: workers as invaluable members, shaping programs and afforded leadership

The project supported the COC in gaining a better understanding of the skills required for the advanced manufacturing sector, ensuring that students are well-prepared. This project enabled all voices to come to the table through the combined partnership of industry and education. The combination of research methods allowed for all voices to be heard, from workers to management, as well as C-suite executives.

Throughout the HRTP process, Industrial Energy Assessments were offered and performed by students and guided by faculty participation. The focus was to enhance energy efficiency performance and reduce emissions at small-and medium-sized manufacturing (SMMs) facilities and commercial buildings through the CREATE Energy Center at COC, part of a national network of community colleges funded by the National Science Foundation (NSF) to advance energy education and training.

Research Methodology & Results

To gain support across the SCV region through public-private partnerships, COC and SCVEDC initiated the HRTP project by convening key advanced manufacturers and community partners. These **convenings** provided essential insights that informed the next phase of the research, a quantitative survey.

The **quantitative survey** was designed to identify the concerns that key manufacturers had regarding four key areas that were consistently heard in the initial convenings: talent recruitment, workforce retention, technology and AI, and management.

Based on the results of the quantitative survey, COC and SCVEDC then developed detailed **interview questions** for three categories of employees in advanced manufacturing companies: incumbent workers, managers, and C-Suite executives, through separate interviews with each category.

The following pages present the findings from these three components.

Convening: Employer & Community Partners

A total of forty-four employer and community partners were originally contacted to participate in the HRTP convenings and activities. All organizations were in Advanced Manufacturing or Information and Communication Technologies, industries that are the focal point of COC's **Advanced Technology Center** skills training. Ranging in size from small, medium and large organizations, these partners had participated in COC's environment scans which supported the development of the Advanced Technology Center, both in 2019 and in 2024.

Quantitative Survey Results

An anonymous online survey was conducted via Google Forms between September 13 and October 18, 2024. Questions were informed by convening sessions, industry benchmarks, and best practices.

Research Methodology

Community Convenings

Quantitative Survey

Qualitative Interviews

Despite a small sample size (11), respondents represented a cross-section of advanced manufacturing companies, including one public sector partner, with varying years in business and workforce sizes (**HRTP Quantitative Survey - Zip Code Spread**).

The survey aimed to identify key themes for deeper exploration and focused on four areas: talent recruitment, workforce retention, technology & AI, and management.

Talent Recruitment

This section aimed to understand how employers prioritize efforts to recruit employees and build a pipeline of workers. It specifically explored their current recruitment practices, employer branding efforts for attracting top talent, use of work-based learning opportunities, and engagement with the community to meet their needs.

Recruiting skilled workers emerged as the top challenge, cited by 81 percent of respondents, with 45 percent facing persistent skill shortages. Employers reported difficulty finding candidates with both technical and soft skills, highlighting a need for education and training programs that align with industry demands.

Traditional recruitment methods, such as networking and online advertising, were widely employed, with an expressed need to explore innovative approaches to attract a broader pool of qualified candidates. For instance, while most respondents reported working closely with workforce and economic development organizations and education providers, public workforce services are underutilized for recruitment purposes.

Some employers also utilized work-based learning (WBL) as a recruitment tool, with 63.6 percent reporting that they speak to students at events and 54.5 percent offering internships.

Employer branding was also a central theme that emerged: all respondents invested in learning and development, 91 percent in competitive benefits, and 82 percent in positive workplace culture. When asked about creating an excellent workplace, 100 percent emphasized the importance of mission, vision, and core values; training and career development ranked second (91%)—work-life balance ranked lower, valued by fewer than half.

Workforce Retention

This section sought to establish a baseline understanding of how employers retain talent. Topics included onboarding processes, strategies for managing generational communication, and ensuring ongoing training and skill elevation for staff to advance within the company through clearly defined career pathways.

Relocation to a different company was the top driver of turnover (82%), followed by seeking better opportunities (73%) and higher salaries (55%). Nearly half cited work-life balance as a factor, reflecting shifting generational expectations.

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To address retention, most companies (82%) provided training and development, and 64 percent actively obtained employee feedback. Others leveraged generational strengths, built diverse teams, and used technology to enhance engagement.

For onboarding, 82 percent used personalized content, while 55 percent set key performance indicators (KPIs) early in the onboarding process. To support advancement, 82 percent identified needed skills and 73 percent clarified career pathways.

Technology & AI

This section included questions related to labor-related automation and concerns surrounding the use, training, and implementation of new and modern technologies.

Most employers (82%) stated that they already used or planned to use AI/technology, primarily for administrative functions such as content creation (46%), recruiting (36%), and marketing (36%). Adoption in production and supply chain lags.

Barriers included data security/privacy (46%) and limited in-house expertise (36%). To address these, over half planned to emphasize open communication, while others stressed ethical guidelines and data protection.

Management

This section included questions about management goals and strategies, particularly regarding the production line, as well as the leadership vision identified by C-suite executives. It also explored how companies balance operational demands and the development of their workforce and workplace environment, focusing on communication between C-suite leaders and managers.

Most companies (82%) conducted frequent operational reviews to align management with the C-suite executives, while 73 percent kept managers informed of changes. Regular meetings were valued (64%) to foster alignment.

While just over half said there was sufficient time to discuss vision and evaluate change, all agreed on the importance of human sustainability—providing meaningful work, treating workers fairly, and fostering collaboration. Diversity, equity and inclusion (DEI) initiatives were cited by 73 percent of respondents as being important.

Summary

The survey confirmed that advanced manufacturing businesses in the region face pressing challenges in talent acquisition, retention, and training. More than 80 percent struggle to hire, citing shortages of both technical and soft skills. High turnover is often driven by factors such as relocation to a different company, competition, and wage pressures.

Companies are experimenting with branding, training, and work-based learning (WBL), but underutilize public workforce services. AI adoption is emerging in administrative areas, though slowed by security concerns and a lack of expertise. Management practices

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emphasize alignment and employee well-being; however, opportunities remain to strengthen communication and provide structured training.

The survey highlighted significant workforce challenges in the advanced manufacturing sector. Key pain points included:

- **Difficulty in finding and retaining hardworking talent.**
- **A lack of manufacturing training providers.**
- **The need to establish company training programs and set expectations amid rapid growth.**

The full survey results and analysis can be found in the Appendix.

Qualitative Interview Results

Building on the quantitative survey findings, COC and SCVEDC staff conducted in-depth interviews in 2025 with four advanced manufacturing companies in aerospace and consumer goods/products. One small-sized company had fewer than 50 employees, two medium-sized companies employed between 200 and 500 employees, and the fourth large company employed between 500 and 1,000 employees.

Employees were grouped by role (executives, managers, and workers), with tailored questions designed for each group, and responses were anonymized.

The interviews confirmed the quantitative survey results but revealed key nuances—**particularly differences in how executives, managers, and workers view the same issues**.

The full list of interview questions can be found in the Appendix.

Talent Recruitment

Across all groups, finding skilled labor emerged as the central challenge—but perspectives diverged. Executives framed talent recruitment as a systemic issue, managers pointed to immediate operational impacts, and workers emphasized wages and benefits as the deciding factor.

Executives highlighted an aging workforce and a shrinking pipeline of skilled tradespeople, attributing this to a societal trend favoring four-year degrees over skills-based trade education. They emphasized that the gap encompassed not only technical skills but also qualities such as patience, safety awareness, and teamwork. Precision machinists were cited as a prime example of a position that lacked “hands-on” talent.

Managers echoed concerns about unprepared candidates but added that resumes often overstated

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skills for specialized roles. They also identified low pay, minimum wage pressures, and demanding schedules as major recruitment barriers.

Workers expressed frustration that employers often misunderstood their motivations. Their priorities centered on wages and career development, with retention hindered by limited advancement opportunities and inadequate training for new systems. At one company, for instance, its executives reported satisfaction with retention, while workers and managers pointed to low pay and lack of growth as key issues.

When discussing recruitment strategies, executives view work-based learning (WBL) as a double-edged sword. They recognized its potential for developing in-house skills, enabling career progression, and retaining essential "tribal knowledge." However, they also acknowledged the considerable investment required and the risk of employees departing after receiving valuable training. This perspective aligns closely with that of managers who appreciated the experiential learning that comes from internships and on-the-job training (OJT), although they also expressed concern over the time commitment involved and the chance of losing interns to competitors. Workers, though not directly asked about WBL, described OJT as essential for building skills and adapting to workplace demands.

Workforce Retention

Executives were acutely aware of the high costs of turnover, with some estimating losses in hundreds of thousands of dollars. Their retention strategies varied but often include competitive benefits, regular pay increases, performance or profit-sharing bonuses, and opportunities for skill development—alongside efforts to foster a supportive, family-like culture.

Managers echoed this perspective, emphasizing that investing in employees is crucial to career longevity. At one company, leadership training and culture-building were viewed as critical; at another, managers observed that while a family-like environment can support retention, low pay was also linked to increased turnover and absenteeism.

Workers were more direct: money was often the main motive for leaving. They voiced frustration over stagnant wages and expressed a preference for performance-based bonuses over uniform payments. While many appreciated a familial culture, some acknowledged that close personal ties could also create complications, such as how disagreements were handled and/or blurring of professional and personal boundaries.

Training & Development

Across all levels, training was dominated by on-the-job (OJT) methods and mentorship.

Executives saw a growing need for structured, classroom-based programs to build soft skills, emotional intelligence, root cause analysis, and management capacity. They evaluated training effectiveness by monitoring rework rates, product quality, lessons learned, and efficiency.

Managers reported relying almost entirely on OJT, often without formal training for themselves. Many felt burdened by the responsibility of training new employees and expressed the need for structured curricula, learning management systems (LMS), and better evaluation tools. Some companies were developing training programs with quizzes and surveys for feedback.

Workers frequently described their experience as "learn as you go" or "by doing," with limited formal options. They asked for training on new machinery and complex systems like Oracle and suggested video modules. Some noted that trainers were not compensated for their extra work, and a few felt managers lacked full understanding of the jobs they supervised.

Overall, all three groups agreed that OJT is necessary but insufficient. Workers reported the most frustration with disjointed or rushed training, managers felt unsupported in their roles as trainers, and executives emphasized the need for better systems and assessments—though implementation varied widely across companies.

Technology & AI

The adoption of AI and advanced technology varied significantly among those interviewed. Many companies reported minimal to no AI implementation in direct production roles, often due to the highly customized and delicate nature of their work, preferring human interaction and expertise. However, there was a trend towards digitalization of administrative and tracking systems (e.g., Enterprise Resource Planning or ERP, Human Resource Information System or HRIS, payroll systems), and some companies were implementing automation and robotic arms for manufacturing tasks.

Executives reported little to no AI use in production, expressing skepticism about its relevance to specialized, custom work. Current applications included CoPilot for emails, resume screening, survey sampling, and transitions to digital ERP and HRIS systems. Their long-term focus was on automation, data analytics, and potentially AI-enabled HRIS platforms.

Managers confirmed limited AI use in production but described broader reliance on digital systems like ADP, Paycom, Quantum, and Oracle. Some companies used AI-assisted staffing models (Workday) and telematics for fleet management. Managers cited employee resistance—particularly among older workers—and admitted varied levels of awareness regarding long-term AI goals.

Workers reported little direct impact from AI. Some used AI tools such as ChatGPT for drafting standard operating procedures (SOPs), while others noted machines went underutilized due to lack of training. However, there were significant concerns about job security stemming from AI and automation, such as the use of autonomous forklifts. Workers expressed fears about misinformation generated by AI and highlighted the need for clear policies regarding AI usage. Many hoped that AI would serve as a tool to assist rather than replace people, especially in creative roles. Overall, awareness of AI advancements was generally low on the production floor.

Across all groups, AI adoption was minimal in production. Executives viewed it strategically, managers focused on practical implementation and workforce adaptation, and workers expressed the greatest anxiety about displacement and ethical risks.

Management

Communication during Rapid Change

Executives emphasized structured communication channels—daily debriefs, monthly all-hands, town halls, visual boards, and anonymous feedback tools—highlighting the need for purposeful, consistent messaging.

Managers served as the communication bridge, relying on small group meetings, daily check-ins, and written updates to build trust and maintain close contact with teams. However, some noted that communication through multiple digital channels was overwhelming.

Workers valued approachable management, daily interactions, and collaborative environments. At one company, employees praised “over-communication” through the use of company intranets, TVs, and shift handoffs. In others, they described communication as fragmented, overly departmental, and lacking recognition from senior leadership.

All groups agreed clear communication is essential. Executives focused on setting strategy, managers implemented it directly, and workers’ experiences varied widely—from feeling well-informed to disconnected from corporate-level decisions.

Strategic Planning & KPIs

The existence and communication of strategic plans varied considerably by company:

- One company reported a simple annual budget and business plan, reviewed biannually by the CEO with owners and monthly for financial performance, with

an ongoing transformation from a family business to a professional organization. Workers had limited awareness of these documents.

- Another company utilized a five-year strategic plan, updated annually and reviewed monthly with corporate entities, focused on market trends, new business, sales, and forecasts. Managers were informed about these plans, and workers were well-informed about clients through quarterly meetings. Comprehensive KPIs (sales, orders, safety, on-time delivery, staffing) were tracked weekly and updated daily.
- A third company had seven annual goals that were reviewed monthly, used to set employee goals, and included a business continuity and people strategy. Managers reviewed these quarterly, aligning them with individual performance. Workers were aware of the strategic plan, noting its linkage to performance management and monthly reviews, and accessibility via an app.
- A fourth company had a strategic plan for sales reviewed monthly to account for seasonal demand, and a long-term vision around health/wellness, OEM readiness, and efficiency. However, managers reported no awareness of a comprehensive strategic plan and expressed a desire for one, while worker awareness was mixed, with office staff generally aware but production floor workers largely unaware.

Generally, alignment between operational and strategic goals was often monitored through business performance and customer feedback, with some companies utilizing specific KPIs to measure success. Overall, the C-suite executives set direction and KPIs, managers operationalized and monitored progress, and workers' awareness ranged from high engagement to significant disconnects—highlighting gaps in communication and alignment across levels.

Research Analysis

The results of the market research align with current secondary research and provide additional nuances to the key themes of **Talent Recruitment, Workforce Retention, Technology & AI, and Management**. By capturing perspectives from C-suite executives, managers, and incumbent workers, COC/SCVEDC's qualitative interviews provided context and explained the "why" behind the survey findings.

According to the World Economic Forum's ***The Future of Jobs Report 2025***, the US manufacturing sector alone could need 3.8 million new employees by 2033. Yet, nearly half of these roles are at risk of going unfilled unless manufacturers improve the attractiveness of the sector and address skills gaps. Most of the Santa Clarita Valley surveyed companies echoed these recruitment challenges.

The need for training is also a necessity, as the World Economic Forum report indicates skills gaps as a top obstacle to industry transformation. Approximately **40 percent of the core skills** in the manufacturing and supply chain sectors will change in the next three to five years, and, as a result, more than 54 percent of incumbent workers will need additional training by 2030.

Talent Recruitment

Attracting skilled labor remains a primary challenge for manufacturers, impacting organizational stability, productivity, and team dynamics. A 2024 report, ***What's Holding Manufacturers Back***, highlights these key challenges, finding that 81 percent of manufacturers experiencing plant disruptions attributed them to high turnover, 75 percent noted a shortage of skilled workers in the market, and 46 percent reported significant resignations.

COC's survey results and qualitative interviews corroborated these findings, confirming that attracting skilled labor remains a primary challenge—**but revealed differing reasons across roles**. Executives pointed out an aging workforce and a societal shift away from skills-based trade education, leading to candidates

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with strong theoretical knowledge but insufficient hands-on experience. This aligns with the Santa Clarita Valley EDC's **2022 Business Survey**, which found that 67 percent of manufacturers ranked industry-specific technical skills—such as assembly, electronics, quality, and machine operations—as top workforce development needs.

Managers in COC's qualitative interviews highlighted gaps between resumes and practical abilities, as well as challenges tied to compensation. Workers emphasized evolving motivations, particularly wages and career development opportunities, pointing to a disconnect between management assumptions and employee priorities.

Additionally, those interviewed do not take advantage of the public workforce system, a network of agencies and programs designed to connect job seekers with employment, career training, and education, while also assisting employers in finding qualified talent and supporting economic development. Authorized by the Workforce Innovation and Opportunity Act (WIOA), the system includes services found at **America's Job Centers** (or One-Stop Career Centers) and aims to build a skilled and competitive workforce.

There is a need to bring together the public workforce system, education, and economic development leaders to increase awareness about public resources and elevate the opportunities in advanced manufacturing. Employers using staffing or temp agencies have an additional financial burden and instead could tap into public resources to bring relief to their bottom lines. Additionally, there is a perception by workers interviewed

in this project that being hired by a temp agency translates to a temporary job, and that perhaps more people would be interested in working for a company if it were a direct hire.

Workforce Retention

High turnover rates significantly affect employee retention, leading to the loss of valuable talent and costly recruitment and training. According to the **Society for Human Resource Management (SHRM)**, replacing a mid-level employee costs an average of six to nine months' salary. Interview respondents corroborated this, noting that training for some roles can take 5-8 months, while highly skilled positions can require about a year. COC's interviews reinforced survey findings regarding the high costs of turnover and common drivers such as relocation to a different company and pursuit of better opportunities. Executives and managers expressed concern about losing trained employees to competitors, which makes the significant investment in training a core challenge.

The COC interview data also highlighted the heavy reliance on OJT (on-the-job training) and the demand for more structured programs, particularly in soft skills and management. Managers reported feeling overburdened as trainers, while workers expressed frustration with informal, uncompensated training.

This aligns with Deloitte's **2024 Global Human Capital Trends** research, which identifies increasing work stress, and its impact on mental health, as a top concern among employees. While some companies implement structured onboarding lasting "weeks to months," learning is often continuous and nuanced.

Employees at all the companies interviewed expressed a desire to understand the pathways to career advancement. Some employees expressed that they actually changed departments within the same company after realizing that their skill set fits better in another area of the company. One company shared its Career Pathway Map that outlines, within each department, a clearly articulated pathway for advancement.

The role of work-based learning (WBL) and, in particular, internships, are critical to the recruitment and retention challenges uncovered in this project. One company that was interviewed engages in "rotational internships" in which the intern actually works in several departments as an intern. This allows the prospective employee to determine the best fit within the organization as well as to better understand the career pathways in the organization; simultaneously, it allows the employer to assess if they want to offer a direct hire position once the internship is completed.

As noted in **McKinsey & Company Generative AI Report**, "Skills learned through work experience are an even bigger determinant for people without educational credentials who start out in lower-wage work."

Technology & AI

COC's survey and interviews indicated minimal AI integration in direct production, with current use focused on administrative tasks. Interviews, however, surfaced critical human factors: resistance to new technologies (particularly among older workers), fears of job loss due to automation, and concerns about misinformation. Workers stressed the need for clear policies and hoped AI would serve as a supportive tool rather than a replacement.

Accenture predicts that artificial intelligence in business operations is expected to double the efficiency of the workforce and boost profitability by an average of 38 percent by 2035. However, MIT Technology Review recently found that AI use-case development is hampered by inadequate data quality (57%), weak data integration (54%) and weak governance (47%), impacting the scaling of AI solutions within industrial environments.

COC's research results are in line with these viewpoints, as well as a recent Lucidworks report, which found that "manufacturers face unique technical and operational challenges that contribute to their hesitation in adopting Gen AI, such as the need to integrate AI into existing manufacturing systems while minimizing data quality concerns."

McKinsey & Company Generative AI Report noted that improvements in job quality, pay, benefits, a stronger promise of career advancement, or a higher level of automation may be necessary to resolve labor shortages. One of the key highlights in this report was that businesses will need to think through how jobs and responsibilities could evolve, and workers need to see these tools not as job destroyers but as work enhancers. When machines take over dull or unpleasant tasks, people can be left with more interesting work that requires creativity, problem solving, and collaborating with others.

Management

Only half of COC's survey respondents indicated that they have a written strategic plan that aligns with the company's vision (54.5%) and that their meeting agendas allowed time to discuss the pros and cons of potential changes in the company (45.5%).

Interviews revealed how these efforts play out day to day. Executives described structured communication systems, managers acted as the central hub for cascading information, and workers' experiences varied widely—from praising "over-communication" to lamenting fragmented, departmental messaging and lack of recognition. Similarly, strategic plan awareness was high among office staff but uneven on the production floor, revealing gaps in cascading communication and alignment.

The **Center for Strategic Leadership** notes that strategic planning and effective communication are part of a focus on purpose-driven leadership — with managers who help direct reports find meaning in their work and connect their personal values to the organization's — have a better chance of attracting, engaging, and retaining talent.

Deloitte aligns with these concepts through their human sustainability models (Figure 1) which are defined as "the degree to which the organization creates value for people as human beings, leaving them with greater health and well-being, stronger skills and greater employability, good jobs, opportunities for advancement, progress toward equity, increased belonging, and heightened connection to purpose."

While advanced manufacturers are facing major challenges within their industry, it's clear that the management style and communication skills of its leadership directly relate to long-term competitiveness.

Figure 1: Deloitte - Human Sustainability Expected Outcomes

Community Partner Input

Three community partners were interviewed in phone conversations based on the qualitative interview results, including a chamber, school district, and an industry association. These partners confirmed what the industry partners highlighted in the interview process.

Observation #1: Focus on Generational Workplace Differences

The future of the employment pipelines is of top concern, and for the most part our industry partners are at a loss as to how to work across generational differences. For example, the new Gen Z workforce has different goals and objectives, and they will not adapt to "the boss's way;" they will just leave. There is a need to now begin to understand Gen Alpha so we can appropriately respond to the recruitment and retention challenges associated with this demographic.

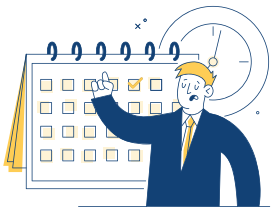
Observation #2: Quick Access to Institutional Knowledge & Workforce Readiness

In terms of on-the-job training, everyone has the most effective tool at their disposal which is their mobile phones. Managers can pass on institutional knowledge through quick videos posted on YouTube. This is essential as Gen Z not only wants to know the how, but also the why.

The nature of work is changing as multiple job responsibilities are required for everyone. Formal education training, in particular, must focus on soft skills or better termed, essential workforce-ready skills. At the top of the list is effective, engaged communication skills.

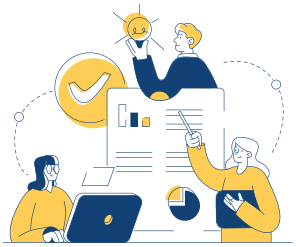
Observation #3: Work-based Learning is a Positive Strategy

Those industries that are engaging students through WBL and internships are doing better than those who do not. When these opportunities are offered to K12 students, it allows for parents to become aware that there are viable career pathways in advanced manufacturing.



Observation #4: Embrace Automation & AI

Automation and AI are no longer future concepts — they are current realities reshaping businesses across industries. Industry must embrace it and figure out how it contributes to its strategic operations. It is a mindset change, and we need to educate and train everyone in the organization on how to effectively embrace it, to stay competitive and prevent job displacement.



Observation #5: Strengthen Public-Private Partnerships

SCV is a great community, and the partnerships are strong and highly engaged. We must continue to strengthen our partnerships to stay relevant and sustainable. We just don't want to survive but to thrive. Our students, workers, and employers win if we do this.

Recommendations

Central to the focused deliverables of this grant was to identify "learn and earn" models that would benefit employee recruitment and retention efforts. While the conventional wisdom is to look at apprenticeship models, the reality is that most of the advanced manufacturing employers in the SCV are not unionized; this makes an apprenticeship model more difficult to design.

Instead, given the need for both student and incumbent worker skill development, the "rotational internship model" is a better fit for this region. In this model, the student/incumbent worker is supported by working in several departments in sequence for a fixed period of time to learn the skills required for employment and to assess best fit in terms of career goals. One of the key recommendations is that COC work with advanced manufacturers to offer rotation internships to help strengthen the employment pipeline for both recruitment and retention.

The data for this strategy has been promising. **According to a July 2025 report from the Society for Human Resource Management**, companies that have engaged in rotational internships experienced a 33% increase in engagement and a 43% improvement in retention rates, setting the stage for a highly effective work-based learning (WBL) strategy.

This is likely due to the fact that this approach provides interns with broad exposure to different facets of a business, helping them discover their passions, and allowing companies to assess intern skills for potential full-time roles. It benefits both the intern, by developing a diverse skill set and career clarity, and the company, by distributing work across departments and identifying high-potential talent.

Key Model Characteristics

- Multiple Rotations: Interns cycle through various departments, such as marketing, IT, or finance, gaining experience in different functions.
- Structured Schedule: Each rotation has a predetermined duration, allowing interns to gain meaningful experience within a specific timeframe.
- Broad Exposure: Interns get a holistic view of the company's operations and understand how different departments work together.
- Skill Development: The varied assignments help interns build a diverse set of skills and adapt to different work environments.
- Career Exploration: It functions as a "speed-dating" process for career paths, helping interns find their niche and passions within the company.

Benefits for Interns

- Career Direction: Exposure to different roles helps interns uncover their true calling and identify their ideal career path.
- Enhanced Skill Set: Interns develop a comprehensive range of skills, making them more versatile and valuable to future employers.
- Networking Opportunities: Rotations provide the chance to build relationships with professionals across various departments.
- Faster Career Progression: By providing broad experience, rotational programs can accelerate an intern's growth into a full-time employee.

Benefits for Companies

- Talent Identification: The program helps companies identify and cultivate high-potential candidates for permanent positions.
- Cross-Departmental Understanding: Rotational interns can act as a bridge between departments, fostering a better understanding of company-wide goals.
- Flexible Workforce: The model allows for the distribution of work across different teams, providing support where needed.
- Stronger Employer Brand: Offering comprehensive rotational programs can attract top talent and improve the company's reputation.

Future Focused

Advanced manufacturers in the Santa Clarita Valley have very similar challenges that are mirrored in global research. The COC and the SCVEDC will continue this work by establishing a High Road Training Partnership task force. The task force will continue with regular convenings for the purpose of communication and will focus on further developing the rotational internship model.

The task force will establish a baseline for the KPIs in the curriculum through the Business and Industry Leadership Team (BILT) model, a proven method for strategic employer engagement supported by the National Science Foundation Advanced Technological Education program. BILT is a Business Advisory Council that focuses on having a deep relationship with employers in which the employer voice is at the center of creating curriculum. This allows for employers to be more engaged in the learner journey and their talent outcomes while decreasing the time needed for training on the job.

What is the role of employers?

- Employers will vote on the most desired knowledge, skills, and abilities (KSAs) for their future talent
- Engage new talent and have a pipeline for work experience
- Share industry trends to update curriculum based on yearly changes

What are the benefits to employers?

- Relationship with College of the Canyons staff and community partners to engage with advanced manufacturing workforce leaders
- Prioritize for talent recruitment and working together to provide on-the-job training
- Up-to-date training equipment and technology to provide hands-on experience
- Opportunity to align training programs with current BILT member entry-level staff

BILT Commitment

- Yearly voting on knowledge, skills, and abilities (KSA's) for entry level employees
- Recommit to the BILT each year
- After voting, validate KSA's as a group and discuss any other trends College of the Canyons should be considering when updating their curriculum
- Join industry trend meetings and networking meetings

As opportunities present themselves, the task force will also consider apprenticeship opportunities as they align with employer needs.

Replication Checklist

For those workforce and education organizations that seek to replicate this type of work, noted below is a replication checklist to support your efforts.

- √ Establish employer partnership list. Demonstration of prior participation with the College in such activities as advisory board membership or internship facilitators is a good indicator.

- √ Establish community partnership list which should include workforce development organizations such as the economic development corporation, the chamber, valley industry associations, and educational partners at both the K-12 level and the university level.

- √ Sponsor a face-to-face convening to explore the objectives of the partnership as they relate to retention and recruitment.

- √ Survey and/or interview partners to better understand their opportunities and challenges as it relates to recruitment, retention, training, and career pathways toward economic and social mobility.

- √ Implement the BILT model. It is critical that skills curriculum and training be industry-driven in partnership with the faculty. In essence, provide an environment for employers and faculty to function as co-educators.

- √ Experiment with work-based learning (WBL) and learn and earn models. There needs to be several options to best serve the challenges of individual employers.

- √ Collect the data.

- √ Data has to drive the decision-making of implemented activities.

Thank You

This project assumed the premise of already existing partnerships with our industry and community partners, and we were not disappointed!

The SCV Economic Development Corporation has been instrumental in the development and implementation of this project. In addition, Goodwill Southern California has been instrumental in the implementation of the establishment of the Business and Industry Leadership Team for Advanced Manufacturing.

While we are still in the preliminary stages of this implementation, we are looking forward to a much stronger partnership with industry as we develop the required skills competency framework for advanced manufacturing.

To all of our industry and community partners who participated in this project, we appreciate your time and consideration in committing to building Santa Clarita's model for a high road training partnership.

We are looking forward to the continued partnership as we build out this model to benefit our workforce and community.

COLLEGE OF THE CANYONS

SANTA CLARITA VALLEY
ECONOMIC DEVELOPMENT CORPORATION

Appendices

Click on the links below to access various resources.

Project Background

HRTP Fact Sheet
HRTP Essential-Elements

SCVEDC Business Survey
SCV Quick Facts

Quantitative Survey Details

COC HRTP Quantitative Survey Results Toplines
COC HRTP Quantitative Survey Results Analysis and Recommendations

Qualitative Interview Details

COC HRTP Company Interview Questions.docx

THANK YOU TO OUR PARTNERS!

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