

Strong Workforce Program

Administration of Justice and Public Safety (ADJ) Sector

Regional Advisory Meeting Proceedings

Firefighting Careers

April 5, 2023

Online | Zoom

Introduction

The Los Rios Community College District, in partnership with Valley Vision, and in collaboration with Sierra, Yuba and Lake Tahoe Community College Districts, invests Strong Workforce funding to organize and convene Regional Advisories. The objectives of the Regional Advisories are to build strong relationships between employers, educators, and workforce that:

- Provide timely information on skills gaps and workforce needs, informing partners on major industry trend information;
- Improve the efficiency of the advisory process for educators and employers;
- Reflect a regional view of workforce needs and assets
- Provide opportunities for more systemic, ongoing engagement that includes workforce partners in key industry sectors.

Regional Advisory meetings help inform decisions on needed investments and enhancements for Career Education (CE) programs to help fill the growing demand for middle-skill positions. This meeting proceedings report includes key findings, best practices, and minutes from the Spring 2023 Firefighting Careers Advisory.

Valley Vision supports a robust talent pipeline through our multiple Workforce Development initiatives. We prepare our regional workforce for the future by addressing skills gaps, advancing research, aligning efforts, and strengthening systems. Valley Vision's workforce efforts are supported by the Sacramento Employment and Training Agency (SETA), Golden Sierra Workforce Board, North Central Counties Consortium, Yolo County Workforce Investment Board, local Community College districts, and others.

The Strong Workforce Program provides Career Education opportunities to increase social mobility and fuel regional economies with skilled workers.

Key Findings

- The Greater Sacramento region boasts a 7% job growth for firefighting positions, over double that of the state of California as a whole. The most commonly found positions for hire are firefighters, first line supervisors of firefighting and prevention workers. The employers with the most job postings were public institutions including the University of California system, state of California and municipalities, as well as private companies like wildfire defense systems, rural metro systems, and Chloeta.
- A recently completed study by the Center of Excellence on [Entry Level Firefighting Careers](#) found a severe shortage across California in both federal and municipal agencies and employer panelists reported the number of candidates they are receiving with the necessary qualifications for positions is very low.
- While panelists agreed experience is valued over education for ascending the career ladder, preliminary training is mandatory for any Entry-level Firefighting occupation across all employer groups. Individuals can be hired into entry-level positions with a Firefighter 1 and EMT or Paramedic Certification, along with a range of 219 to 560 hours of on-the-job experience as determined by the hiring agency. To gain on the job experience, those interested in the field can start out as a Reservist or Volunteer.
- Employer agencies have varying hiring requirements including training hours and education credentials. While local agencies typically require 560 training hours and a Community College Fire Academy program award or Associate's Degree for entry level employment, federal and state agencies, and private contractors have slightly different requirements.
- There is an increased need for diversity, both within the workforce and Community College training programs for firefighting occupations. Colleges can examine their educational delivery models to ensure they are meeting the access needs to train a diverse workforce for the industry.
- Forming partnerships between employer agencies and educational institutions or training programs is critical. This will allow students to smoothly transition from education to employment with accurate knowledge of each agency's application and hiring requirements. Additionally, employer agencies can assist training programs by ensuring sufficient in-field placements are available.
- Strong communication skills and physical fitness are necessary as firefighting is a team-based profession. Additionally, building math competency is essential for applicants to pass [testing](#) and perform required hydraulic calculations in the field.

Welcome and Overview

At the beginning of the advisory Hilary Tellesen, Project Leader of Valley Vision's 21st Century Workforce initiative, and Karen Hubbard, Assistant Director of Employer Partnership for Health and Public Safety at the North Far North Regional Consortium, introduced the focus on regional Firefighting Career opportunities.

The keynote Speaker, Fire Chief Felipe Rodriguez from the Cosumnes Fire Department, and current member and former chairperson of the Sacramento Regional Fire Diversity Committee, shared a personal narrative of his professional journey that illustrated the hard work and perseverance required of Firefighters in the Sacramento region. During the keynote address, Chief Felipe Rodriguez discussed the importance of diversity within the Fire Department in order to reflect the community it serves. Chief Rodriguez suggested early engagement as a solution and noted programs like Explore Camp, Girls Camp, and mentorship programs in his address. Chief Rodriguez's address directed participants to myfirecareer.org to view a strategic plan for diversity and creating a more inclusive Fire Department.

Labor Market Information Overview

Regional Director of the Far North Region's Centers of Excellence (COE), Sara Phillips, presented updated labor market information on Entry-level Firefighting Careers in California. Phillips gave an overview of a report from the COE that defines and describes Entry-level Firefighting positions, reviews labor market demand for Entry-level Firefighters, and analyzes postsecondary programs and awards leading to placement. The full report titled, Entry-Level Firefighting Careers in California from the COE can be found [here](#).

Phillips shared key findings and analysis on four specific firefighting occupations; Firefighters, First-line Supervisors of Firefighting and Prevention Workers, Fire Inspectors and Investigators, and Forest Fire Inspectors and Prevention Specialists. The report gathered information on the requirements, qualifications, and demand for these roles across a range of employers, including federal, state, local, and private entities.

Ebony Benzing, Research Manager for the North Far North Center for Excellence, then provided an overview of the local labor market and a trend analysis of job postings. Benzing's analysis focused on employer demand for Fire Fighting Prevention jobs in the Greater Sacramento region, which can be used by educators to tailor programs to the specific needs of the local job market. The Community Colleges can use this information to develop relevant coursework, hands-on training, support services, and ensure that students are job-ready upon graduation.

Industry Trends

The Centers of Excellence for Labor Market Research conducted a study to determine workforce demand for firefighting careers, and ascertain if Community Colleges are training enough workers to compete with current demand. The study analyzed data from four agencies that employ Firefighters: federal agencies, state agencies, local agencies, and private contractors. Philips' presentation highlighted the various training and education requirements between agencies (Figure 1.1). Federal agencies (ex: Forest Service, Bureau of Land Management, Park Service, Bureau of Indian Affairs) require 79 hours of training and mainly offer seasonal employment, while state agencies require 219 hours of training and offer promotion opportunities for those with an Associate's Degree. Local agencies require 560 hours of training and typically require a Community College Fire Academy program award or a Fire Technology AS for entry-level candidates. Private agencies follow federal training requirements and typically have in-house training programs for new hires.

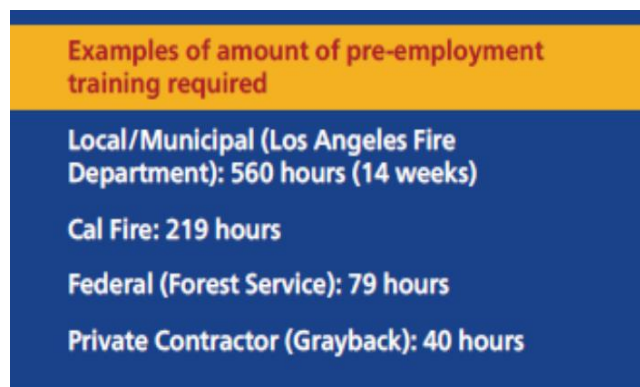


Figure 1.1 Training Process for Entry-level Figure

Philips asserted that across all agencies, experience is valued over education for ascending the career ladder, but preliminary training is mandatory for any Entry-level Firefighting occupation across all employer groups. Local level firefighters might start out as a Reservist or Volunteer and once they obtain a Firefighter 1 and EMT or Paramedic Certification they can be hired into entry-level positions. The top certifications listed for Entry-level Firefighting careers are Firefighter 1, EMT, and Wildland 1 certificate. Municipal and county agencies, along with Cal Fire require candidates to complete State Fire Marshal-approved coursework or have a Cal Fire basic Firefighter certificate, including Firefighter 1A (structure), Firefighter 1B (hazardous material awareness and operations), and Firefighter 1C (wildland), as referenced in figure 1.2.

| Cal Fire Firefighter I Certification | Municipal/County Firefighter I Certification |
|--|---|
| <p><i>Required training for Firefighter I positions (an asterisk shows overlap with municipal/county fire department requirements for State Fire Marshal California Firefighter 1 Certification):</i></p> <ul style="list-style-type: none"> - CAL FIRE Basic Firefighter Certificate - California State Fire Marshal (SFM) Confined Space Awareness Certificate* - California SFM Hazardous Materials First Responder Operational Certificate* - Firefighter Survival (Structural)* - Federal Emergency Management Agency (FEMA) IS-100: Introduction to Incident Command System* - FEMA IS-700: An Introduction to the National Incident Management System (NIMS)* | <ul style="list-style-type: none"> - FEMA IS-800: National Response Framework, An Introduction* <ul style="list-style-type: none"> • CPR - Emergency medical services (EMS) qualifications (must have one): <ul style="list-style-type: none"> • Public Safety First Aid* • Emergency Medical Technician (EMT)* • Paramedic (EMT-P)* -Desirable Trainings: <ul style="list-style-type: none"> • SFM Accredited FFI Academy or equivalent FFI Academy taught at a California accredited institution of postsecondary education recognized by the American Council on Education* • SFM Firefighter I Certification* <p>Source: Cal Fire, "Seasonal FireFighter I Hiring," https://www.fire.ca.gov/careers/.</p> |
| | <p>To meet the requirements of the State Fire Marshal California for Firefighter 1 Certification, an applicant must complete one year as a volunteer or reserve firefighter, or 6 months as an intern/full-time paid firefighter with a California fire department; and also complete the following:</p> <p>Coursework</p> <ul style="list-style-type: none"> - Firefighter 1A: Structure (FEMA independent study courses IS-100, IS-200, IS-700, and IS-800 are required corequisites) - Firefighter 1B: Hazardous Materials - Firefighter 1C: Wildland - Confined Space Rescue Awareness (SFT or IAFF) <p>Certification Exams</p> <ul style="list-style-type: none"> - Cognitive & Psychomotor Exams - NFPA 1001: Firefighter 1 (SFT Firefighter 1A: Structure) - NFPA 1072: Awareness and Core Operations level: with Product Control and Personal Protective Equipment mission specific competencies - NFPA 1051: Wildland Firefighter 1 (SFT Firefighter 1C: Wildland) <p>Source: "Fire Fighter I," Office of the State Fire Marshal, 2022, accessed June 20, 2022, https://oefm.fire.ca.gov/divisions/state-fire-training/csttes-professional-certification/fire-fighter-1-2019/.</p> |

Figure 1.2 Training and Education Requirements

In terms of workforce size and employment demand, local agencies currently comprise 93% of firefighting personnel in California with over 32,700 firefighters employed in the state. However, federal and private employers also employ a significant number of firefighters in California. The medium wage for Entry-level Firefighters is \$38.37 an hour, and the industry is expected to grow by 2% by 2025 with 2,929 annual new job openings, primarily in

| Occupation | 2020 Jobs | 2025 Jobs | 2020-2025 Change | 2020-2025 % Change | Annual Openings |
|---|---------------|---------------|------------------|--------------------|-----------------|
| Firefighters | 32,737 | 33,467 | 730 | 2% | 2,929 |
| First-Line Supervisors of Firefighting and Prevention Workers | 2,943 | 3,061 | 119 | 4% | 286 |
| Fire Inspectors and Investigators | 842 | 878 | 36 | 4% | 126 |
| Forest Fire Inspectors and Prevention Specialists | 492 | 558 | 67 | 14% | 87 |
| TOTAL | 37,014 | 37,965 | 951 | 3% | 3,428 |

municipalities (Figure 1.3).

Figure 1.3 Workforce Size and Employment Demand

The COE report, [Entry-Level Firefighting Careers in California](#), found that there is a severe shortage of firefighters across California in both federal and municipal agencies, with

recruitment and retention issues due to low pay and high burnout rates for federal firefighters. Cal Fire is losing firefighters to city and county agencies, and Community College students who complete Fire Academy programs may have a lengthy waiting period before they can acquire a job in the field. As a result, federal and state requirements have been relaxed due to staffing issues in extreme fire seasons.

One of the major findings of the study is the need for increased workforce diversity, both within the workforce and Community College programs. The firefighting profession is predominantly comprised of male individuals, typically aged between 34 and 44 years old, and belonging to the white racial background. In contrast, firefighting enrollees in Community Colleges tend to be male, between the ages of 20 and 29, and of white ethnicity. However, when considering statewide career and technical education (CTE) student enrollment, there is a more diverse representation with 51% being female, 51% under the age of 24, and 25% identifying as white. The study suggests partnering with employers to help diversify the workforce and access Community College program delivery models to ensure they are meeting workforce needs.

Workforce Jobs Postings Findings – Occupations and Skills

The analysis shared by Ebony Benzing focused on the demand for firefighting and fire prevention positions in the Greater Sacramento region. The figure 1.4 shows the number of jobs in the area are growing, with an increase of 7% by 2026, adding nearly 2826 new jobs to the subregion. There will be an estimated 230 job openings expected each year for the next five years in the Greater Sacramento region.

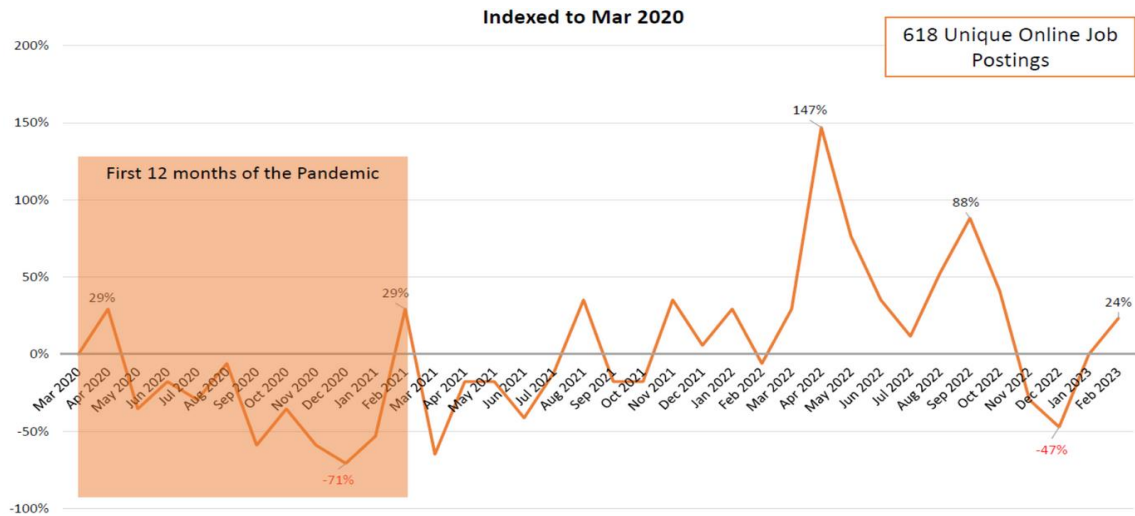
| Occupations | 2021 Jobs | 2026 Projected Jobs | 2021 - 2026 Projected Change | 2021 - 2026 Projected % Change | 5-Yr Average Annual Openings | 25 th Pct. Hourly Wages |
|---|--------------|---------------------|------------------------------|--------------------------------|------------------------------|------------------------------------|
| Firefighters | 2,101 | 2,236 | 135 | 6% | 187 | \$30.10 |
| First-Line Supervisors of Firefighting and Prevention Workers | 375 | 403 | 28 | 7% | 30 | \$39.90 |
| Fire Inspectors and Investigators | 107 | 117 | 10 | 9% | 13 | \$27.82 |
| Forest Fire Inspectors and Prevention Specialists | 62 | 70 | 8 | 13% | 8 | \$37.39 |
| North (Greater Sacramento) Totals | 2,646 | 2,826 | 181 | 7% | 238 | – |

Figure 1.4 Greater Sacramento's Firefighting and Prevention Jobs

Between March 2020 and February 2023, there were 618 unique job postings for firefighter and prevention specialist positions in the seven county Greater Sacramento region (Figure 1.5). The average job posting duration for firefighting jobs is 27 days, which is shorter than the regional

average of 29 days. The COVID-19 pandemic impacted the job market, with fire job postings declining in the first 12 months of the pandemic. However, by April 2022, job postings had risen up to 150%, which signaled more effort in filling these roles.

Figure 1.5 Percent Change in Sacramento’s firefighting and Prevention Jobs



Some cities had longer than average job posting durations, including Roseville, South Lake Tahoe, Mather, Grass Valley, Placerville, and Truckee as referenced in figure 1.6. The employers with the most job postings over the last 3 years were public institutions such as UC, the state, and municipalities, as well as private companies like wildfire defense systems, rural metro systems, and Chloeta. Recruiter agencies such as Daily Dispatch also posted job openings.

Figure 1.6 Cities and Employers with the Most Postings

| City | No. of Job Postings | Median Posting Duration |
|----------------------|---------------------|-------------------------|
| Sacramento, CA | 248 | 20 days |
| Davis, CA | 44 | 16 days |
| Roseville, CA | 44 | 29 days |
| South Lake Tahoe, CA | 23 | 37 days |
| Mather, CA | 19 | 37 days |
| Grass Valley, CA | 17 | 39 days |
| El Dorado Hills, CA | 15 | 20 days |
| Placerville, CA | 15 | 31 days |
| Truckee, CA | 14 | 38 days |
| Tahoe City, CA | 13 | n/a |

| | Employer | No. of Job Postings | Median Posting Duration |
|-----------|---|---------------------|-------------------------|
| Public | UC System (incls UCD, ANR, etc.) | 43 | 13-22 days |
| | State of California | 39 | 14 days |
| | Sacramento Metro Fire | 21 | 47 days |
| | County of Sacramento | 11 | n/a |
| | California Public Utilities Commission (CPUC) | 11 | 14 days |
| | Wilton Fire Protection District | 9 | N/A |
| | City of Roseville | 9 | 17 days |
| | City of Sacramento | 9 | N/A |
| Private | Wildfire Defense Systems | 77 | 25 days |
| | Rural Metro Corporation | 36 | 31 days |
| | Chloeta* ("Shuh-lay-tuh") | 10 | 12 days |
| Recruiter | Daily Dispatch | 19 | 23 days |

Places and employers in the orange text have longer than typical posting durations.

Source: Lightcast Job Posting Analytics, March 2020 – February 2023. The search included 4 fire occupations and covered the 7-county North (Greater Sacramento) subregion. <https://lightcast.io/>

The most common job postings are for firefighters and first line supervisors of firefighting and prevention workers, and are up for 27 days on average (Figure 1.8). From 2020 to 2023, the job titles and occupations with the most postings in the Greater Sacramento area were Wildland Firefighting, Firefighter, EMS Firefighter, Fire Officer, and Equipment Operation. Fire prevention job postings included Fire Inspection and Prevention Specialists, Fire Marshals, Land Management, and Wilderness Ranger. Fire Response and Coordination had 9 jobs posted, lasting 17 days. Overall, the job market for firefighting and prevention in the Greater Sacramento area is strong and growing.

| Firefighting Job Postings | | | | Fire Prevention Job Postings | | | |
|---------------------------|-----------------------------|---------------------|-------------------------|------------------------------|----------------------------|---------------------|-------------------------|
| Role | Job Titles Included | No. of Job Postings | Median Posting Duration | Role | Job Titles Included | No. of Job Postings | Median Posting Duration |
| Wildland Firefighting | Wildland Firefighters | 91 | 27 Days | Inspection & Prevention | Fire Inspectors | 60 | 14-26 Days |
| | Municipal Firefighters | | | | Fire Prevention Specialist | | |
| | Reserve Firefighters | | | 53 | 13-47 Days | | |
| Airport Firefighters | Deputy Fire Marshals | | | | | | |
| Firefighters | Firefighter/Paramedic | 54 | 37-39 Days | Land Management | District Foresters | 30 | 9-44 Days |
| | Firefighter/First Responder | | | | Wilderness Rangers | | |
| EMS Firefighters | Captains | 50 | 31 Days | Fire Response & Coordination | Terrain Managers | 9 | 17 Days |
| | Lieutenants | | | | Fire Management Officers | | |
| Fire Officers | Company Officer | 16 | 9-45 Days | Response Force Leaders | Incident Commanders | | |
| | Engine Boss | | | | | | |
| Equipment Operations | Fire Apparatus Operators | | | | | | |

Figure 1.8 Firefighting and Prevention Job Postings by Role

Employer Panel Discussion

The panel discussion highlighted the urgent need for specialized and highly qualified paramedics in the firefighting industry. However, the number of candidates with the necessary qualifications is low. To address this issue, Community Colleges were identified as playing a crucial role in providing relevant coursework, hands-on training, and support services to those pursuing a career as a paramedic. The panel also recommended hosting career fairs that showcase a variety of opportunities available in the firefighting profession, including federal agencies. Additionally, information and assistance with the application requirements and hiring process is needed to help applicants persevere, particularly diverse applicants who are less familiar with the field. The panelist was as follows:

- Christopher McCandless, District Fuels Specialist, US Forest Service
- Arianna Duran, Associate Governmental Program Analyst, California Department of Forestry and Fire Protection/Cal Fire

- Julie Rider, Fire Captain, Cosumnes Fire Department
- Tim White, Firefighter, Sacramento Metropolitan Fire Department
- Lawrence Whang, Fire Captain, Sacramento Fire Department

Growing Need for Skilled Paramedics

There is a continued and increased demand for paramedics in the firefighting industry, far exceeding the need for EMTs. Responders must be able to meet every need that the community calls 911 for, and paramedics possess the most specific skill set for the job. Despite the high demand for paramedics, the number of candidates with the necessary qualifications is low. The panelists stressed the importance of Community Colleges in addressing this issue. Paramedic training can be challenging for some, especially the math and physical requirements. Many individuals become overwhelmed at the application and hiring processes of various jurisdictions and would benefit from navigation assistance and support.

College Fairs with Representation from All Employer Branches

The panelists discussed the need for Community Colleges to host more than one agency at their career fairs, showcasing various employment opportunities and agencies in the field. Federal agencies were noted as an option to gain a wide range of experience, but at the expense of low pay. Minimum requirements for different agencies vary, so inviting representatives from different departments to career fairs would help clear up any confusion. The panelists stressed the importance of accurate information delivery and pathway support, so that students can make informed decisions about their future careers.

Bridging the Knowledge Gap

The panel discussion centered around the importance of Career Technical Education (CTE) programs to support access to diverse talent. Several speakers highlighted the challenges faced by candidates including representation, cultural barriers, cost, and a lengthy application process. The panelists stressed the need for early exposure and engagement in training programs preferably at the high school level.

Furthermore, they explained that firefighting is a team-based profession requiring strong communication skills and physical fitness. Extra attention to building math competency is also necessary as firefighters use mathematics to perform hydraulic calculations. The [Cal-JAC website](#) is an excellent resource explaining the skills needed, hiring process, and additional information. The panelists discussed the need to educate students about the varied and

lengthy application processes of each agency, including the different testing requirements and job posting periods for openings throughout the year. Industry experts agree close partnerships are necessary between fire agencies and Community Colleges to bridge the gap and support a more diverse workforce in these industries.

Community College Spotlight

This section of the advisory featured education representatives highlighting programs across the North region as follows:

- Jason Hemler, Sierra Fire Program, Fire Technology Coordinator
- Ken Kwong, American River College Program
- Dale Vogelsang, Yuba College, Public Safety Fire Technology Instructor
- Rick Haas, Cosumnes Fire Program, Interim Fire Tech Coordinator
- Cameron Whitfield, Internship Developer, Cosumnes River College

The representatives from each college presented their respective program offerings and partnerships during the panel discussion. Yuba College provides Fire Academies with 38% of the coursework dedicated to Firefighter 1, offered in both Fall and Spring semesters, along with EMT 1 training embedded or without. The college also offers Wildland basic training and degree and certification programs in Fire Technology, including Associates Degrees and certificates in Fire Tech and in Fire Academy. Additionally, Yuba College provides career training, dual enrollment, and teaching high school students Fire Technology 1 and 2. Meanwhile, Sierra College mirrors Yuba's program offerings, including EMT training, Firefighter 1 and 2, Firefighter Certification, and degrees in Firefighting, with the added bonus of cadets being hired before graduating the program.

Other colleges, like Cosumnes River College, also provide Fire Academies, multiple degrees and certificates in Fire Technology, and actively reach out into high school classes. The college has a unique program called "Our Internship" that provides spots in fire stations to students who have completed Firefighter 1 training. During the Firefighter 2 training, students alternate weekly between a 24-hour shift in an ambulance or a firetruck for a year and a half. Similarly, American River College offers a Fall semester Fire Academy, Fire Academy completion certificate, and a Fire Investigator course that allows students to earn a certificate. One advantage of American River College's program is its availability online, which makes it more accessible to students who may not be able to attend in-person classes.

In addition to the descriptions of the fire academies, the career platform Handshake was highlighted for employers to connect directly to students in the Greater Sacramento Region. Handshake services 26,000 students, 6000 employers, and currently has 5000 job postings. The mission is to help every student find a great job and build the foundations of a meaningful career.

Conclusion

Email contact information was shared for the Associate Director of Employer Partnerships, Karen Hubbard, and Valley Vision, listed below:

- Karen Hubbard, Associate Director of Employer Partnerships, Los Rios Community College District - HubbarKE@arc.losrios.edu
- Hilary Tellesen, Project Leader, Valley Vision - hilary.tellesen@valleyvision.org