



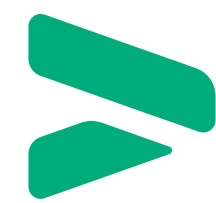
Public Safety

Regional Industry Advisory Meeting


Firefighting Careers



April 5th, 2023



Housekeeping

- ✓ Enable your video camera (optional)
- ✓ Please stay on  unless you are called on to ask a question
- ✓ Submit all questions and commentary using the chat function
- ✓ This meeting will be recorded and will be provided as part of the post-meeting materials

Welcome & Introduction

Hilary Tellesen, Valley Vision
Project Leader

Karen Hubbard, North Far North Regional Consortium
Assistant Director of Employer Partnerships for Health & Public Safety



Agenda

9:00 AM: Welcome and Introduction

9:05 AM: Keynote - Chief Felipe Rodriguez

9:20 AM: Labor Market & Trend Analysis

9:50 AM: Stretch Break

9:55 AM: Panel Discussion

10:50 AM: Program Offerings & College

Partnerships

11:20 AM: Conclusion

Thank you

to all of our supporters



Regional Fire Diversity Committee

Chief Felipe Rodriguez, Cosumnes Fire Department



Entry-level Firefighting Careers in California: A Labor Market Analysis

Sara Phillips, Regional Director, Far North Center of Excellence





ENTRY-LEVEL FIREFIGHTING CAREERS

IN CALIFORNIA

A labor market analysis

Sara Phillips, Director
Far North Center of Excellence



COE Team

Centers of Excellence for Labor Market Research

California Community Colleges, Economic and Workforce Development



Region	Director
San Diego/Imperial	Tina Bartel
Inland Empire/Desert	Michael Goss
Los Angeles	Luke Meyer
Orange	Jesse Crete
South Central	Adele Hermann
Central	Nora Seronello
Bay Area	John Carrese
North (Greater Sacramento)	Aaron Wilcher
Far North	Sara Phillips
Statewide	Laura Coleman

About this Report

- Methodology
- Firefighting Overview
- Training & Education Requirements
- Job Posting Analysis
- Workforce Size and Employment Demand
- Workforce Demographics
- Supply Analysis: Community College Programs
- Student Demographics
- Conclusions and Next Steps

IN THIS REPORT:

Firefighting entry-level positions defined and described

Labor market demand examined for entry-level fire firefighters

Analysis presented of postsecondary programs and awards leading to firefighting employment

Recommendations and next steps for moving forward

[Visit the COE website to access this report.](#)

Introduction

- **Occupations Studied:**

- • Firefighters
- • First-line supervisors of firefighting and prevention workers
- • Fire inspectors and investigators
- • Forest fire inspectors and prevention specialists

- **Supply/Demand Gap Analysis:**

- Near Parity Statewide
- Demand = 3,428 annual job openings
- Supply = 3,468 community college awards
- Difference = 40 (oversupply of awards)

Methodology

- **Quantitative analysis:**
- Employment and projected demand
- Wage data
- Workforce demographics
- Postsecondary supply analysis
- Student demographics

- **Qualitative analysis:**
- Literature review
- Subject Matter Expert (SME)
- Interviews:
 - Recruitment/retention challenges
 - Current program offerings



Training and Education Requirements

Examples of amount of pre-employment training required

Local/Municipal (Los Angeles Fire Department): 560 hours (14 weeks)

Cal Fire: 219 hours

Federal (Forest Service): 79 hours

Private Contractor (Grayback): 40 hours

Training and Education Requirements

Municipal/County

Training process for entry-level municipal/county firefighting positions

- A community college fire academy program (18-weeks) or a fire technology associate degree is preferred but not required.
- The completion of a community college fire academy program may not preclude a job candidate from being required to complete an agency's in-house fire academy.
- The program for an in-house academy may span 14 to 22 weeks.

Municipal/County Firefighter I Certification

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:

Coursework

- 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)

Certification Exams

- 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)

Source: "Fire Fighter I," Office of the State Fire Marshal, 2022, accessed June 20, 2022, <https://osfm.fire.ca.gov/divisions/state-fire-training/cfstes-professional-certification/fire-fighter-1-2019/>.

Training and Education Requirements: State (CalFire)

Cal Fire Firefighter I Certification

Required training for Firefighter I positions (an asterisk shows overlap with municipal/county fire department requirements for State Fire Marshal California Firefighter 1 Certification):

- 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)*

- FEMA IS-800: National Response Framework, An Introduction*

- CPR

- *Emergency medical services (EMS) qualifications (must have one):*

- Public Safety First Aid*
- Emergency Medical Technician (EMT)*
- Paramedic (EMT-P)*

-*Desirable Trainings:*

- 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*

Source: Cal Fire, "Seasonal FireFighter I Hiring," <https://www.fire.ca.gov/careers/>.

Training and Education Requirements: Federal Agencies and Private Contractors

- **Federal Agencies:**

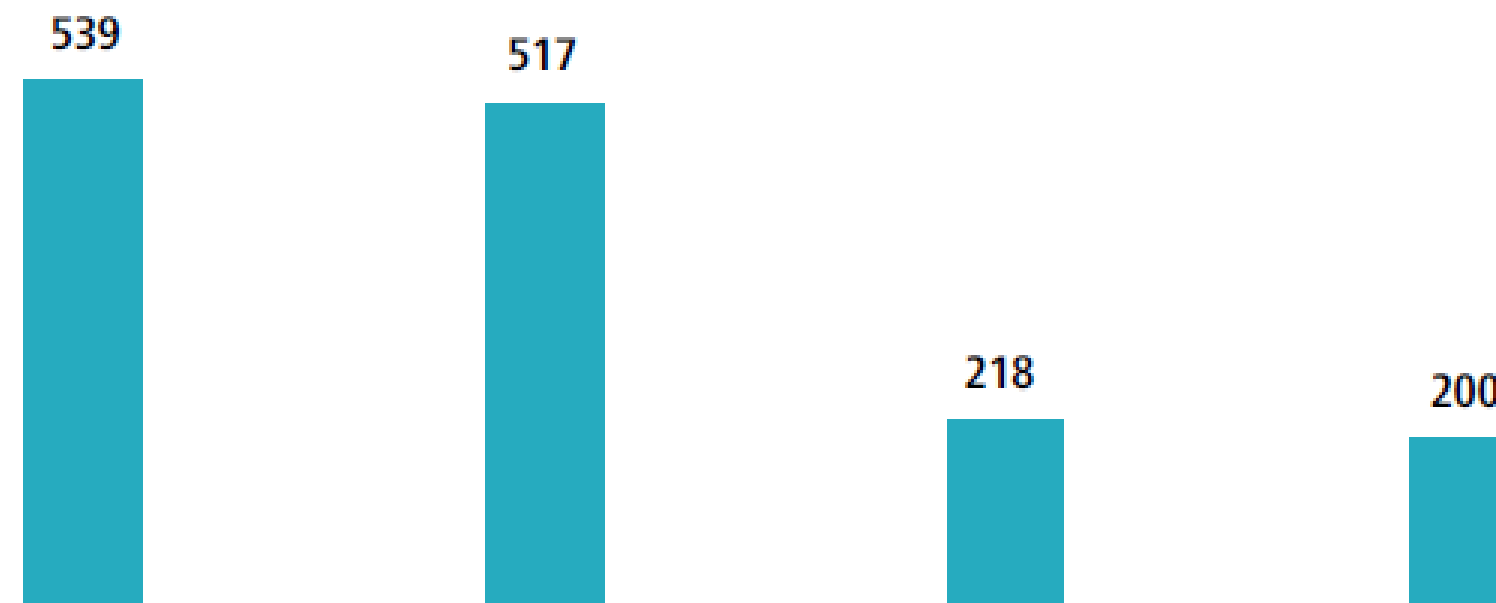
- 79 hours pre-employment training
- Fitness test/ Pack test
- Red Card

- **Private Contractors**

- 40 hours pre-employment training
- Fitness test/ Pack test
- Red Card

Job Postings Analysis: Key Findings

- Federal agencies advertise and hire through USAJOBS.
- Cal Fire does not typically advertise positions except through its website.
- City and county fire departments typically announce open positions as they become available on their websites and may advertise on national firefighting websites such as FireRescue1.com.
- Private contractors may post job ads on traditional online hiring websites and on their websites.



Workforce Size and Employment Demand:

Key Findings

- Staffing patterns show local agencies comprise 93% of firefighting employment in the state; other entities that hire firefighters are not reflected in statewide data.
- Firefighting employment declined slightly during the Covid-19 pandemic but is projected to rebound over the next five years.
- The largest occupation is firefighters with more than 32,700 workers in California.
- The median wage for firefighters is \$38.37/hour.

Workforce Size and Employment Demand

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

Demographics: Firefighting Workforce and Community College Students

- Typical worker employed in firefighting occupations is male, between 35-44 years old, and white
- Typical community college student enrolled in a firefighting program is male, between 20-29 years old, and white
- Statewide CTE student enrollment:
 - 51% female
 - 51% under the age of 24
 - 25% white

Postsecondary Supply Analysis: Community College Programs

TOP Code	TOP Description	Colleges conferring awards	Annual Awards 2018-19	Annual Awards 2019-20	Annual Awards 2020-21	3-Year Annual Awards Average
2133.00	Fire Technology	56	2,385	2,451	2,544	2,460
2133.50	Fire Academy	27	894	935	1,088	972
2133.10	Wildland Fire Technology	4	50	16	41	36
TOTAL			3,329	3,402	3,673	3,468

- Community college awards in fire programs are most heavily concentrated among the 16 to 30-semester units certificates and associate degrees categories

Recruitment and Retention Issues from Interviews

- Low pay and high burnout for federal wildland firefighters.
- CAL FIRE is losing firefighters to city and county agencies.
- Community college students who complete a fire academy program may have to wait a long time for a job.
- City/municipal requirements for firefighter/paramedics have been relaxed due to staffing shortages.
- Lack of diversity continues to be an issue.

Major Key Findings

- **A Need for Increased Workforce Diversity**
 - The study finds that more work on expanding diversity is needed within the firefighting workforce and among community college programs.
- **A Need to Assess Community College Program Delivery Models**
 - The study recommends further assessment of whether community college training is meeting workforce needs, as well as a deeper evaluation of hiring needs specific to entry-level positions at the federal and local levels.

Other Findings

- **A Need to Collect Targeted Workforce Data:**

- Existing employment data does not accurately represent the entirety of the state's firefighting workforce
- While this employment data is captured, municipal/county employers report experiencing specific workforce challenges. Migration of firefighters from lower-paid to higher-paid positions may exacerbate workforce demand.
- A statewide employer survey to gauge workforce size and training needs could prove valuable, in particular, to better clarify municipal/county and federal workforce needs.

- **A Need to Employ Coordination and Communication to Move Forward:**

- State's fire service leadership and community college discussions should address the most effective means of delivering training to meet workforce needs at the federal, state, and local levels
- This discussion could also explore how to improve the representation of women and students of color in firefighting programs and the firefighting workforce.

Thank you!

Sara Phillips
Director, Far North COE
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www.coecc.net

Labor Market & Trend Analysis: Local Fire Tech Data

Ebony J. Benzing, MPA
Research Manager
North/Far North Center of Excellence
Los Rios Community College District





Firefighting and Prevention Jobs in Greater Sacramento

- Ebony J. Benzing, Research Manager
- North Far North Center of Excellence for Labor Market Research
- Hosted by Los Rios Community College District

Greater Sacramento's Firefighting and Prevention Jobs

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	--

Firefighting and Prevention Job Postings Analysis

Over the Last Three Years:

618

Unique Online Postings

5:1

Posting Intensity
(Regional Avg: 4:1)

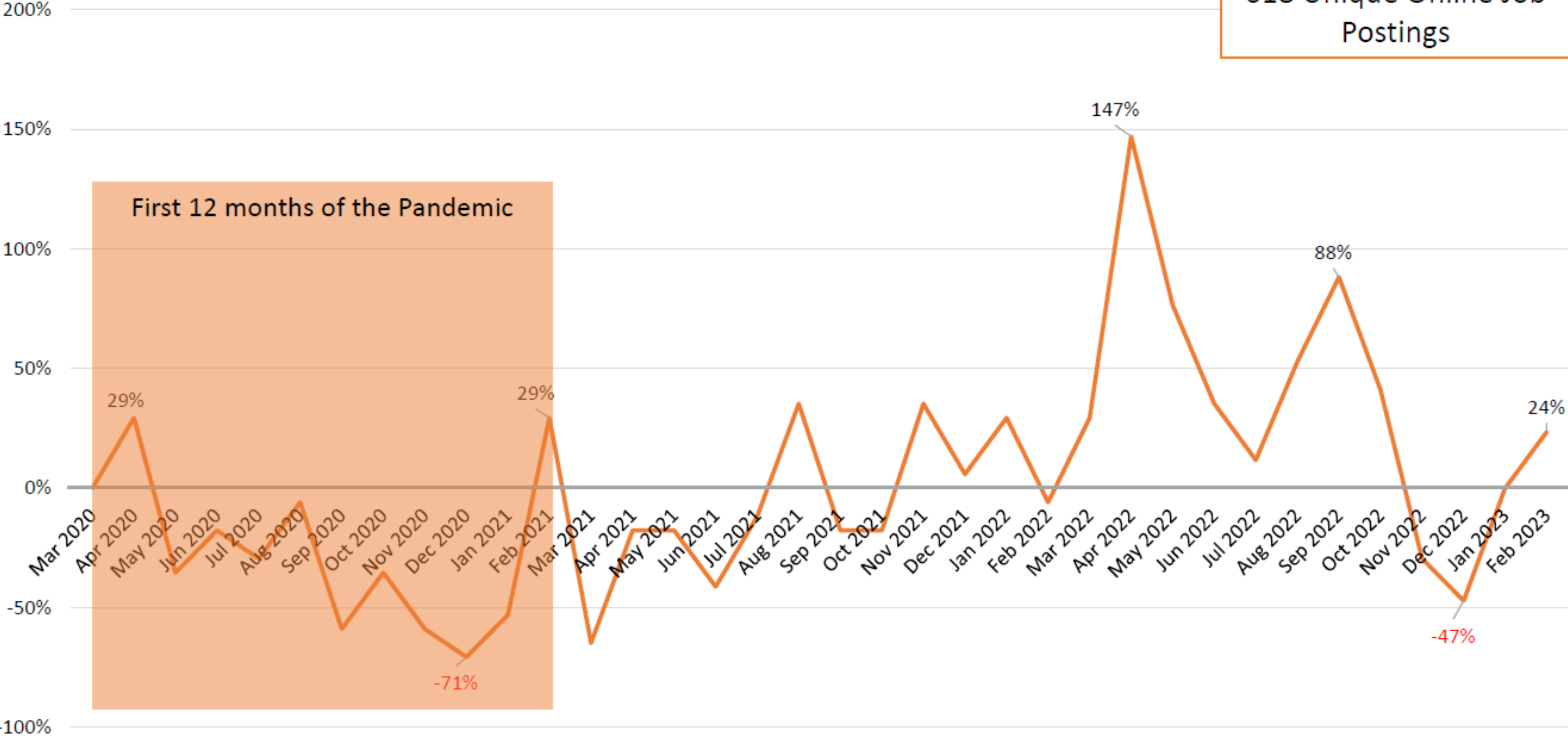
27 Days

Median Posting
Duration
(Regional Avg: 29 days)

- Online job postings for four firefighting and prevention occupations
- Last three years (Mar 2020 – Feb 2023)
- 7-county North (Greater Sacramento) area
- Focus on non-staffing companies, but includes recruiting organizations
- Includes jobs at all levels (entry-level +)
- *Important to note: one job posting ≠ one hire*

Percent Change in Sacramento's Firefighting and Prevention Jobs Indexed to Mar 2020

618 Unique Online Job Postings



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

Cities with the Most Postings

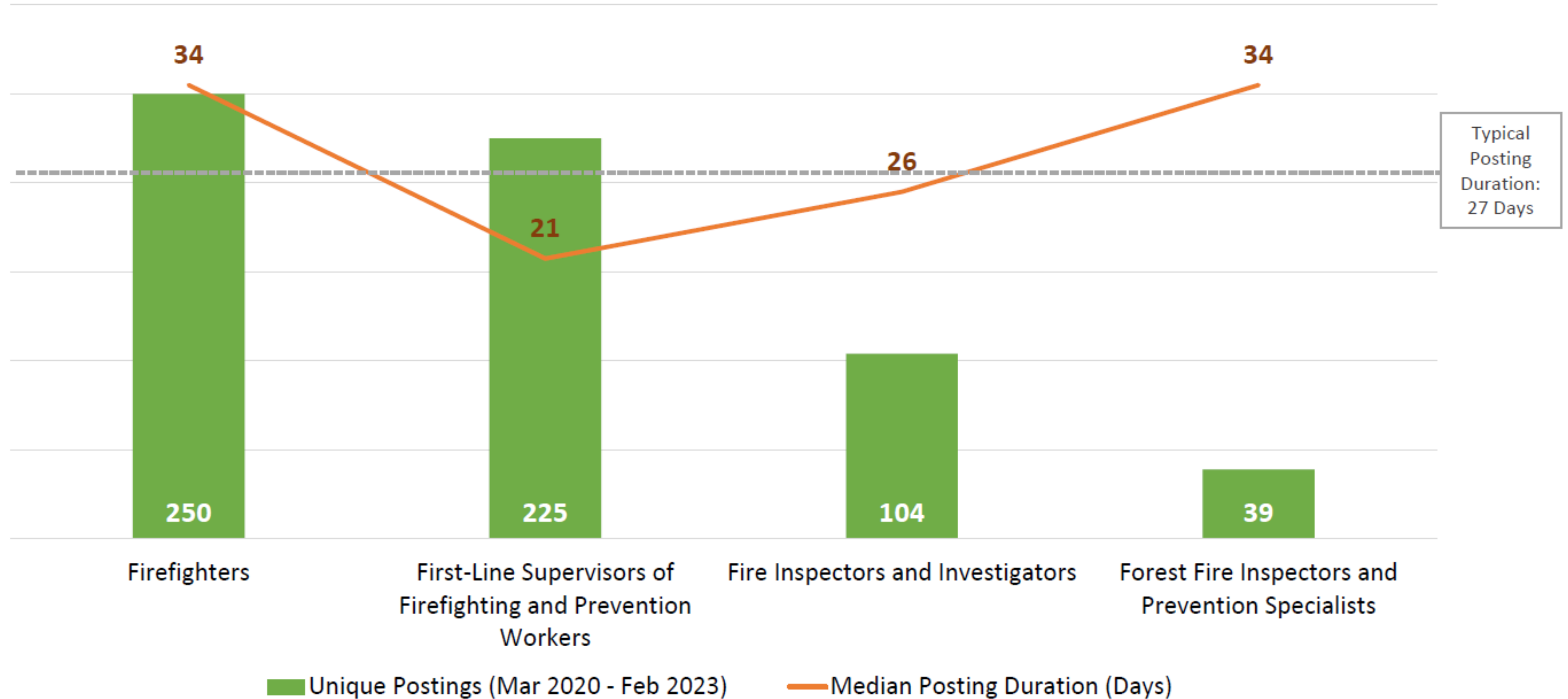
City	No. of Job Postings	Median Posting Duration
Sacramento, CA	248	20 days
Davis, CA	44	16 days
Roseville, CA	44	29 days
South Lake Tahoe, CA	23	37 days
Mather, CA	19	37 days
Grass Valley, CA	17	39 days
El Dorado Hills, CA	15	20 days
Placerville, CA	15	31 days
Truckee, CA	14	38 days
Tahoe City, CA	13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

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

Employers with the Most Postings

	Employer	No. of Job Postings	Median Posting Duration
Public	UC System (inclds 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
Rural Metro Corporation		36	31 days
Chloeta* ("Shuh-lay-tuh")		10	12 days
Recruiter	Daily Dispatch	19	23 days

Firefighting and Prevention Job Postings by Occupation



Firefighting and Prevention Job Postings by Role

Firefighting Job Postings

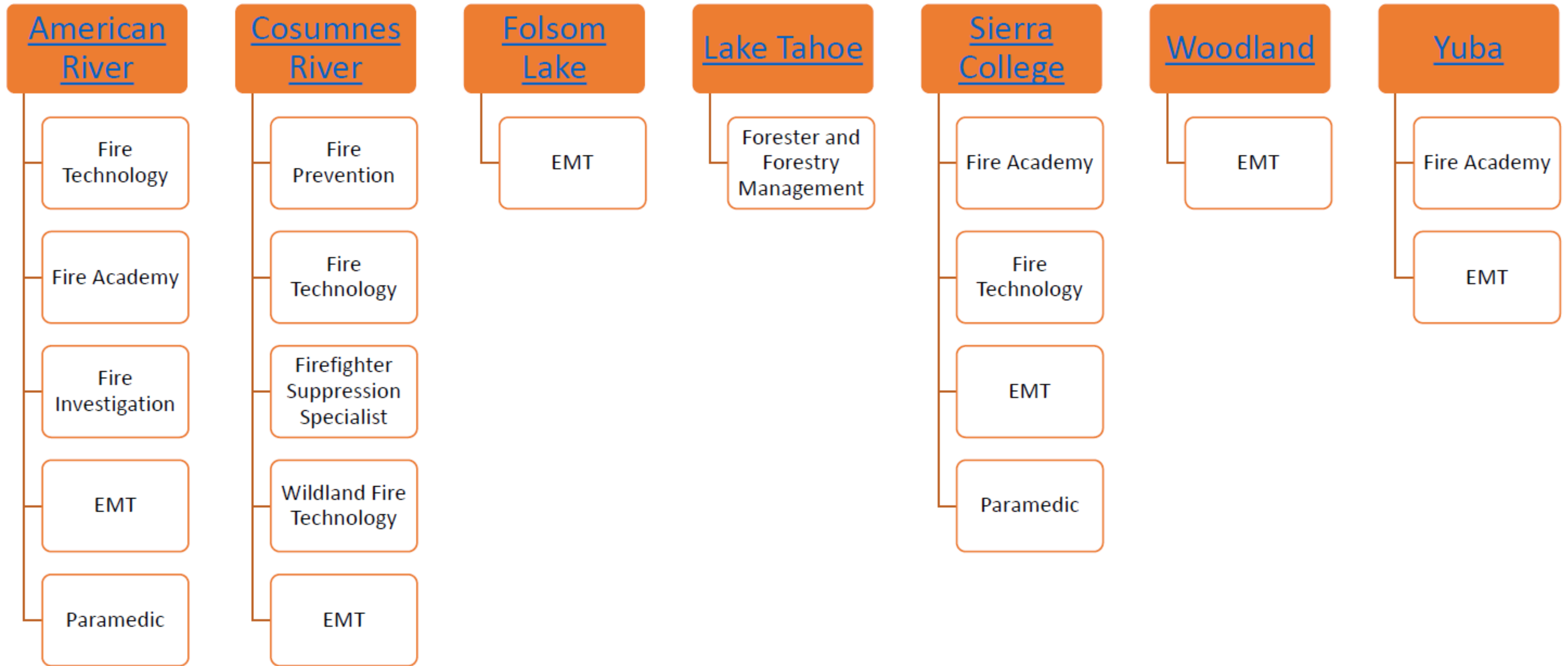
Role	Job Titles Included	No. of Job Postings	Median Posting Duration
Wildland Firefighting	Wildland Firefighters	91	27 Days
Firefighters	Municipal Firefighters	96	28-34 Days
	Reserve Firefighters		
	Airport Firefighters		
EMS Firefighters	Firefighter/Paramedic	54	37-39 Days
	Firefighter/First Responder		
Fire Officers	Captains	50	31 Days
	Lieutenants		
	Company Officer		
Equipment Operations	Engine Boss	16	9-45 Days
	Fire Apparatus Operators		

Fire Prevention Job Postings

Role	Job Titles Included	No. of Job Postings	Median Posting Duration
Inspection & Prevention	Fire Inspectors	60	14-26 Days
	Fire Prevention Specialist		
Fire Marshals	Deputy Fire Marshals	53	13-47 Days
	Assistant Fire Marshals		
Land Management	District Foresters	30	9-44 Days
	Wilderness Rangers		
	Terrain Managers		
Fire Response & Coordination	Fire Management Officers	9	17 Days
	Incident Commanders		
	Response Force Leaders		

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/>

Greater Sacramento Community College Programs related to Fire Training



Thank You!

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Visit our website for recent COE reporting across the state: <https://coecc.net/>

Related reports include:

- [Entry-level Firefighting Careers in California](#)
- [Firefighting in Greater Sacramento](#)
- [Wildland Firefighting in Greater Sacramento](#)
- [EMTs and Paramedics in Greater Sacramento](#)
- [Public Safety Dispatchers in the NFN](#)
- [Forest Management and Protection in the Far North](#)

Stretch Break

Take a 5 minute stretch break and join us for an exciting panel discussion!



Panel Discussion

Renee John, Valley Vision
Director of Workforce Development



» Industry Panel Discussion



Christopher
McCandless
US Forest Service
District Fuels Specialist



Julie Rider
Cosumnes Fire
Department
Fire Captain



Tim White
Sac Metro
Firefighter



Arianna Duran
CAL FIRE
Associate Governmental
Program Analyst



Lawrence Whang
Sacramento Fire
Department
Fire Captain

➤ Program Offerings and College Partnerships



Jason Hemler
Sierra College



Ken Kwong
American River College



Cameron Whitfield
Handshake



Richard Haas
Cosumnes River College



Dale Vogelsang
Yuba College

Handshake

Hiring Los Rios Community College Student

*Cameron Whitfield, Internship Developer
Work Experience and Internship Program
Cosumnes River College*



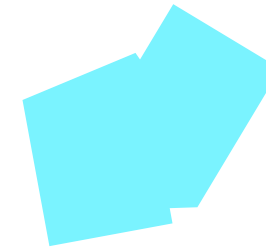
Handshake is the nation's #1 college-to-career network

- The goal is **to help every student find a great job** and build the foundations of a meaningful career, no matter who they are, where they're from, or who they know.

Los Rios Data



- Launched August 2020 with 26,600 currently activated students (and growing)



- Connected with 6,000 employers



- Over 5,500 jobs currently posted



- Accounts are available for all students - **they just need to login to activate!**

Get students career-ready, all in one place!



- Job Postings



- Employer Network



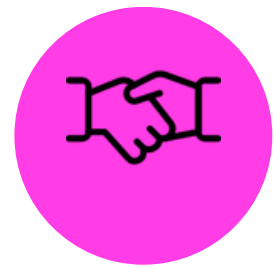
- Employer Messaging



- Interviews & Info Chats



- Peer-to-Peer Messaging



- Events & Career Fairs



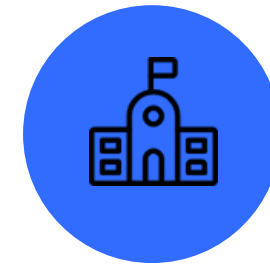
- Virtual Recruiting



- Company Reviews



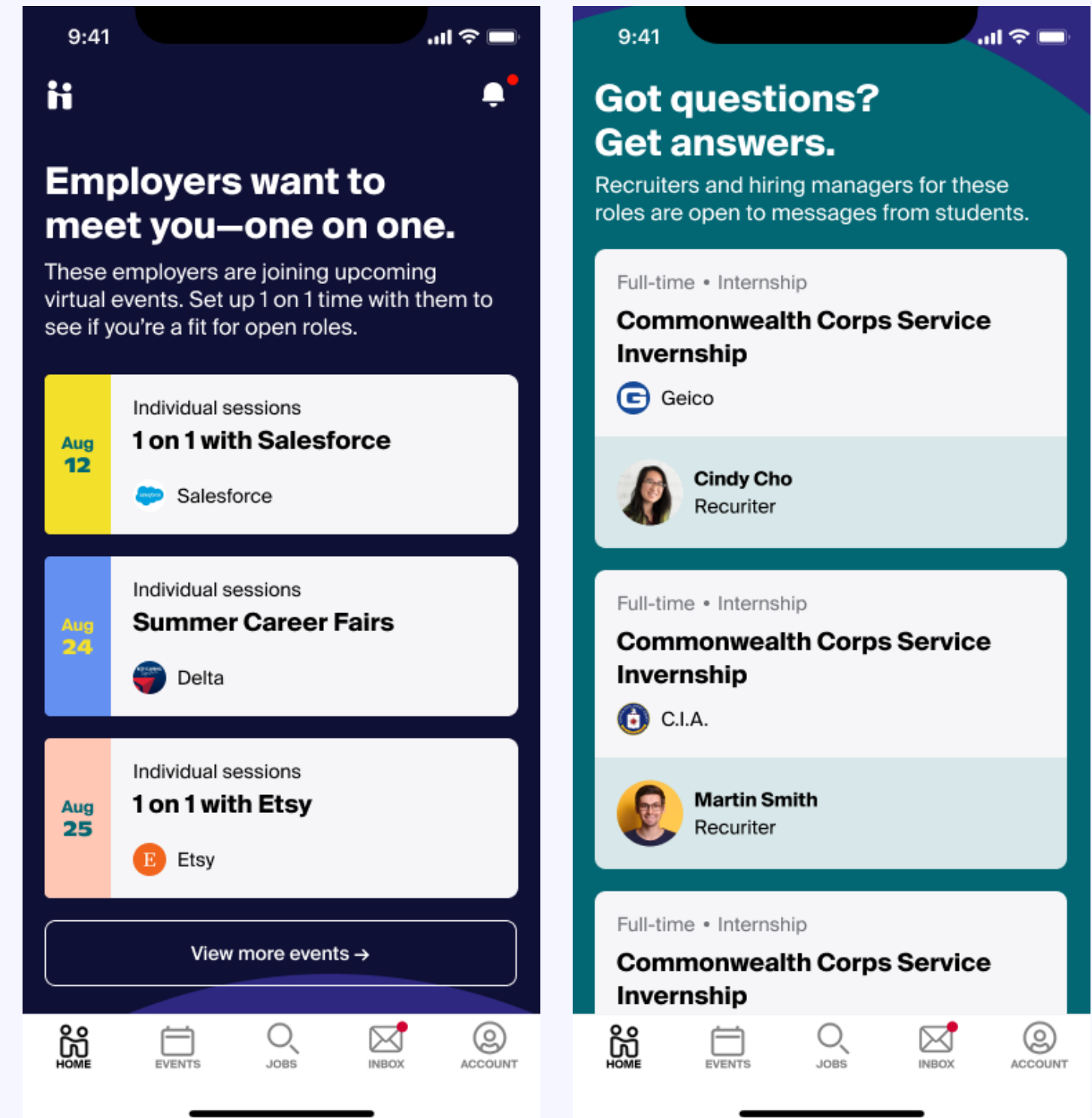
- Career Profile



- On-Campus Jobs

Student experience sneak peek

- Students login with **single sign-on**
 - Fill out their profile with their career interests*
 - Browse recommended jobs and events
 - Message directly with employers
 - Apply for jobs and get interviews
 - Get hired!
- *Students are **5x more likely** to be contacted by an employer if their profile is complete



Screenshots from the Handshake Mobile App

Creating a Handshake Account

1. Create your User Account

- https://app.joinhandshake.com/employer_registrations/new

• 2. Join Existing Company or Create New One

- You will need to be connected to your company profile on Handshake prior to taking any actions with schools. Your company should pull up based on the domain of your email address, if it is already in Handshake.

• 3. Request to Connect with Schools

- Add Los Rios Community College District

4. Post Jobs & Events

After approval from Handshake, you can now post your job



YUBA COLLEGE
FIRE TECHNOLOGY

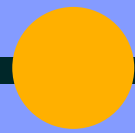
2022 - 2023 Update



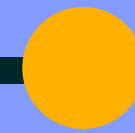
Program Overview



Fire Academies



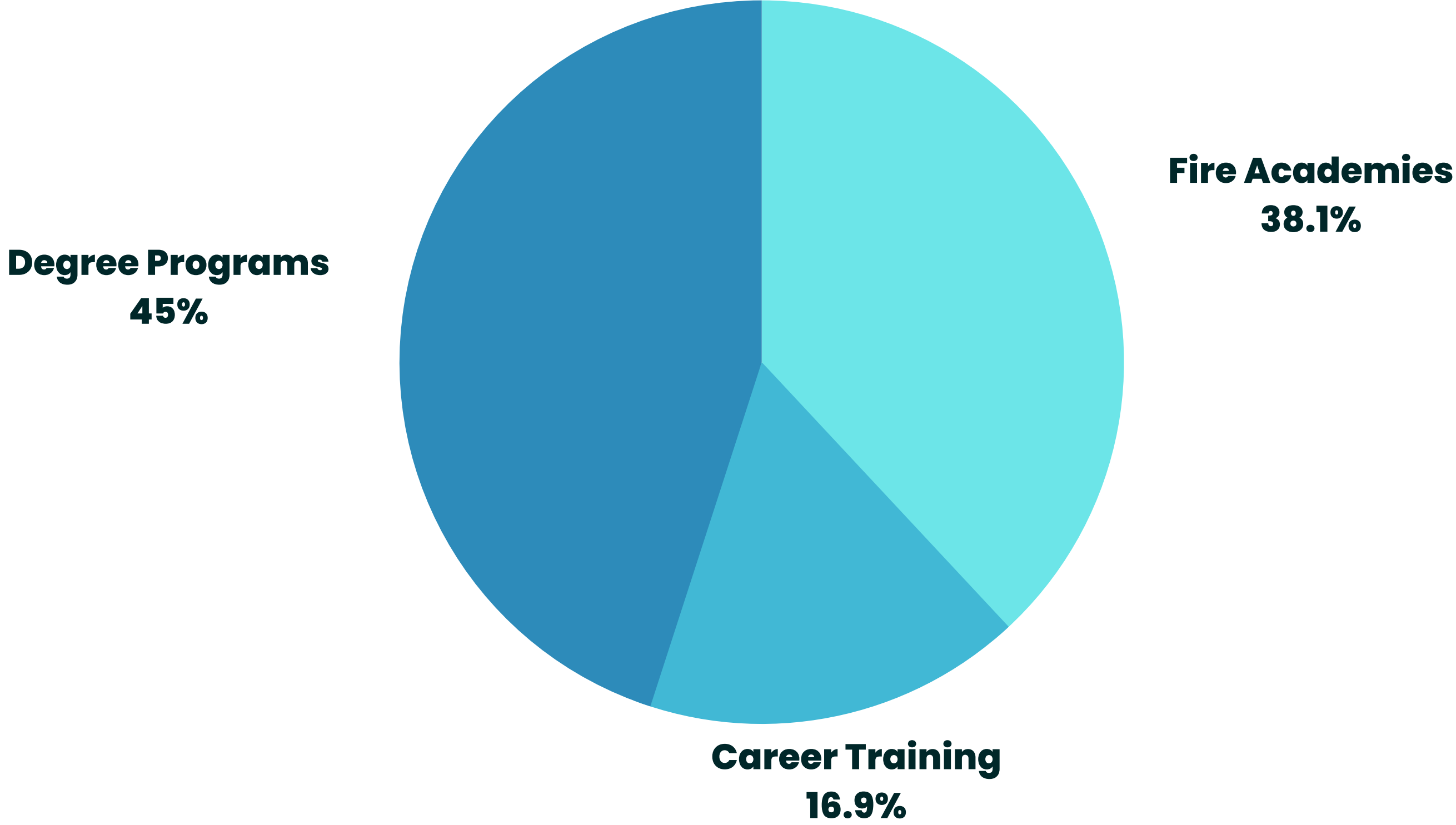
Degree and Certificate Programs



Career Training and Dual Enrollment



Students by Program Area 2019-2021



Fire Academies

Firefighter I

Offered as a M-F academy in Fall and Spring

Includes one with EMT 1 and one without

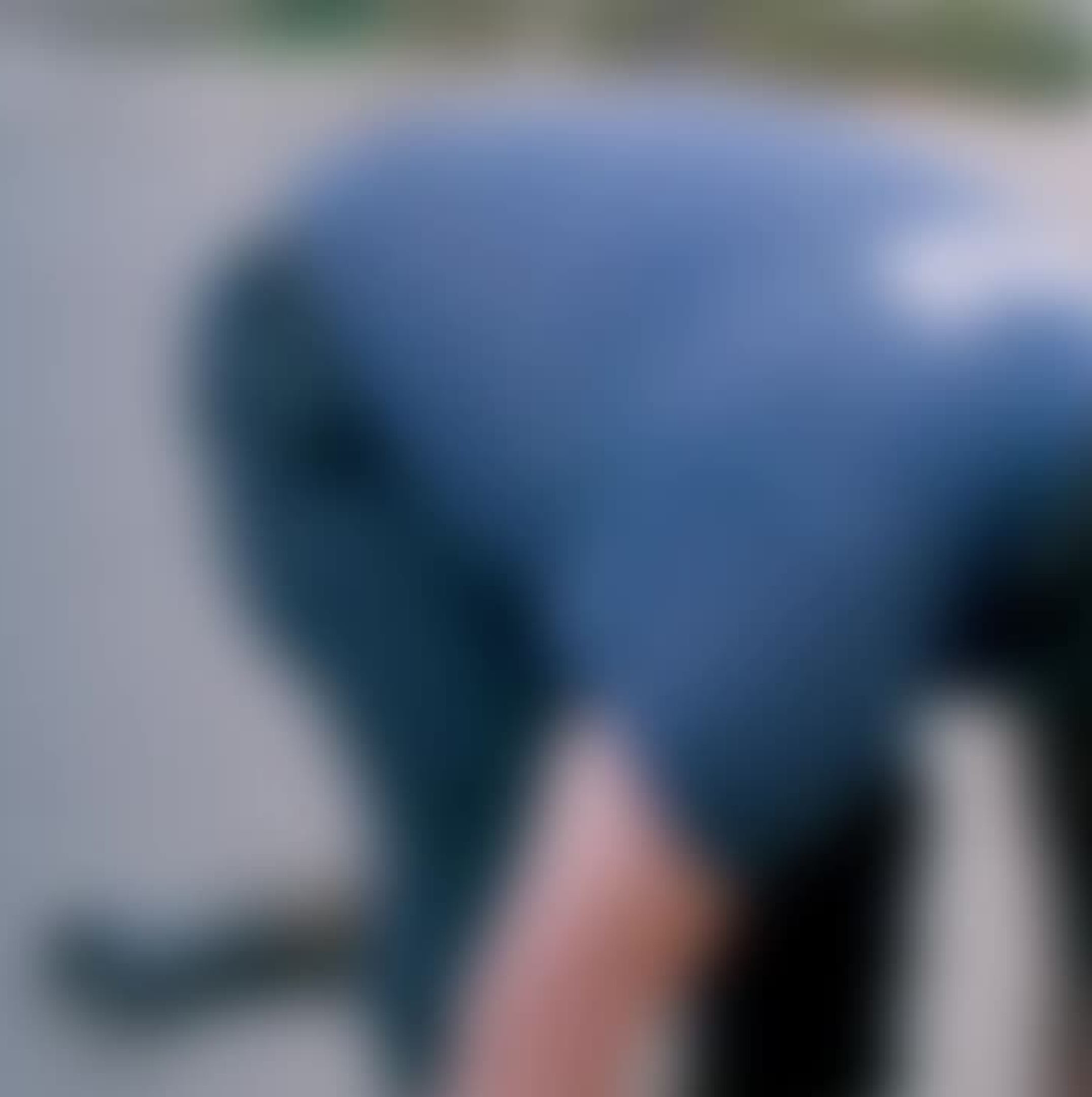
Basic Wildland (FF1C)

Offered as a Friday - Sunday academy in Fall and Spring

Firefighter II

Offered in Spring only after the Firefighter I academy





Degrees and Certificates

AS & Cert. In Fire Technology

Includes six FESCHE core classes plus electives

AS & Cert. In Fire Academy

Includes Firefighter I academy plus electives

Career Training

Driver Operator

Offered as M-F courses in Summer, Fall and Spring

HAZMAT

FRO/Decon and HMIC offered in Fall and Spring

Company Officer

SFM courses and prerequisites offered Fall and Spring

Offered in a hybrid format

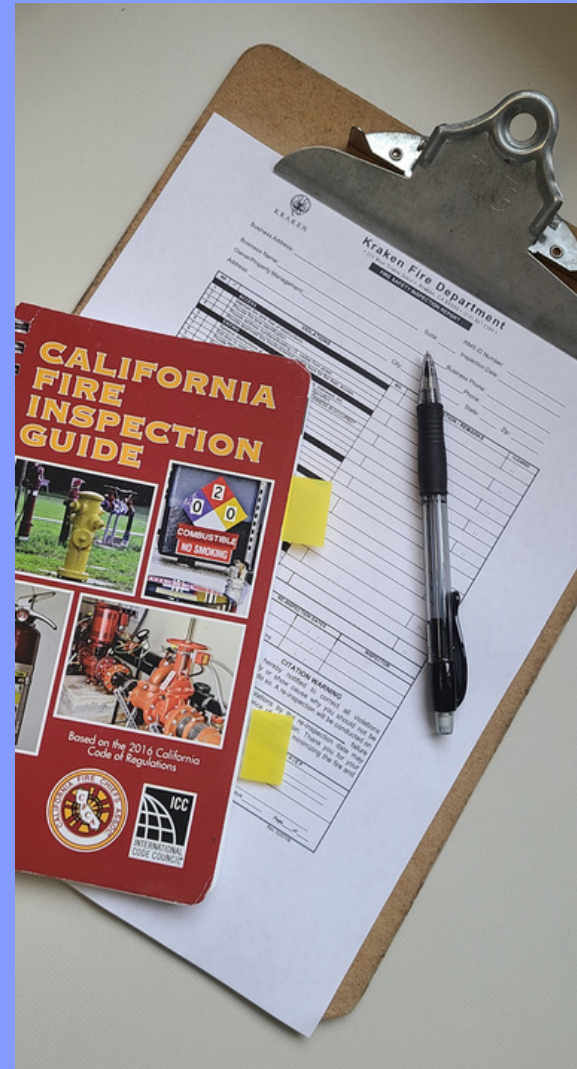
Dual Enrollment

Two cohorts across two school districts

Instructor travels to their campus

First year focusses on Core Classes

New format will include two courses designed for dual enrollment students



Changes for 2023-24



Yuba
College



Firefighter 1 Academy

Will continue without EMT included. Discussions ongoing with advisory group regarding FFII



Career Advancement Courses

Driver Operator and Company Officer courses will continue



Dual Enrollment Courses

Designed two new courses designed for high school students
Intro to Public Safety Careers and Introduction to Dispatch



Questions?

A photograph of a person's hands typing on a laptop keyboard in a cafe setting. The person is wearing a blue and white striped shirt. The background shows a wooden table with a laptop, a coffee cup, and some papers. The image is overlaid with a semi-transparent teal color.

➤ Thank you for joining!

For more information, please contact:

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Hilary Tellesen, Project Leader, Valley Vision
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Renee John, Director of Workforce Development, Valley Vision
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