

Instructional Program Review Report

Sierra College, 2016-17

Department/Program Name: Fire Technology

Date Submitted: 2/9/2017

Submitted By: Tim Palmer, Fire Technology Program Coordinator

Ideally, the writing of a Program Review Report should be a collaborative process of full-time and part time faculty as well as the appropriate educational administrator, instructional assistants, classified staff members and students who have an interest in the present and future vision of the program at all sites throughout the district. The Program Review Committee needs as much information as possible to evaluate the past and current performance, assessment, and planning of your program.

Please attach your Department Statistics Report (DSR) and your ePAR Report when sending in your Program Review.

1) Relevancy: This section assesses the program's significance to its students, the college, and the community.

1a) To provide context for the information that follows, describe the basic functions of your program.

The Fire Technology Program prepares students for a challenging career in the Fire Service and provides educational and training opportunities for in-service personnel, as well as professional development courses.

Students enroll in Fire Technology coursework to explore career opportunities, satisfy prerequisite requirements for admission into the Fire Academy, obtain the knowledge needed for entrance into fire and emergency service careers, career advancement, specialized courses, and/or to satisfy the requirements of an academic certificate of achievement, AA or AS degree or transfer to another institution of higher education.

Our Fire Academy is accredited by the California State Fire Marshal and, in partnership with the City of Roseville Fire Department, offers a state of the art training facility with accredited and experience teaching professionals/instructors. The Sierra College Fire Academy was the first academy in the state to offer Nationally Accredited Firefighter-1 curriculum and was the Beta test site for said curriculum. Currently, as an Accredited Regional Training Program, we are one of only a few State Fire Training Firefighter-I testing centers in the State to offer this stand-alone testing.

The Associate Degree and Certificate programs incorporate the standardized Fire Technology curriculum identified by the offices of the California State Chancellor and State Fire Marshal. Additionally, our curriculum follows the National Fire and Emergency Services Higher Education (FESHE) model. Student and career firefighters can learn guidelines and regulations to ensure the best possible public safety education.

Elective courses are those developed under the guidelines of related fire service training and educational programs such as CFSTES (California Fire Service Training and Education System), DOT (Department of Transportation), FEMA (Federal Emergency Management Agency), F.S.T.E.P. (Fire Service Training and Education Program) and NFA (National Fire Academy).

1b) How does your program support the district mission, as quoted below? Please include an analysis of how your program supports ISLOs (Institutional Student Learning Outcomes): Communication, Technology and Information Competency, Critical and Creative Thinking, and Citizenship?

“Sierra College provides an academic environment that is challenging and supportive for students of diverse backgrounds, needs, abilities, and goals with a focus on access, equity, student-centered learning, and achievement. The college is committed to practicing diversity and inclusion, and recognizes that a diverse and inclusive curriculum and workforce promotes its educational goals and values. Institutional learning outcomes guide the college’s programs and services, encouraging students to identify and expand their potential by developing knowledge, skills, and values to be fully engaged and contributing members of the global community. Sierra prepares students by offering Associate’s and transfer degrees, certificates, career and technical education, foundational skills, as well as lifelong learning and enrichment.”

The Fire Technology Program uses the District’s Mission Statement as a model for meeting both personal and professional student needs within the Fire Service.

The Fire Technology Program provides high quality education and training for individuals pursuing careers in the fire service and strives to enhance the knowledge, skills and abilities of those currently working in the fire service by offering a wide range of courses to meet the changing needs of the fire service. And, as a participant in the Fire Academy, our mission is to provide Students with the knowledge, skills and physical conditioning necessary to perform basic fire fighting, emergency medical and rescue duties, while instilling the values, work habits and discipline expected of a firefighter. We are striving to be the most comprehensive, competitive, innovative, and professional fire academy in the region.

The Program offers students a fully accredited fire academy, A.A. or A.S. degrees and/or Certificates, Specialized State Fire Training courses, Fire and Chief Officer courses and most are transferable. Our program courses are challenging, relevant and support student needs for both the student pursuing a career in the fire service and/or the career firefighter.

In the 2015/16 calendar year, a Sierra College Public Safety Club was formed to bring students together with common career goals. This very diverse group of students actively participates in many College functions, community outreach events, and supports many local and regional fire service agency events.

Recently, the Board of Governors awarded the 2016-17 Exemplary Program honorable mention award to Sierra College’s Fire Technology Program.

1c) Program offerings align with which of the following mission categories (check all that apply):

- Transfer Career Technical Education
 Basic Skills Personal Development/Enrichment Lifelong Learning

1d) Please analyze your department’s role and its success in supporting the mission categories marked in 1c above. Please provide evidence in support of this analysis. If any of the following apply to your program, please address them in your analysis.

- Degrees, certificates, and/or licenses your department has generated:
 - The alignment of these awards with the district’s mission and/or strategic goals. (See the district “Awards Data File, available from Research and Planning, for your numbers).
- Job placement or labor market information for your program’s awards and licenses.
- The contribution your program makes to student transfer.
- Participation in basic skills programs.

Awards:

	2013-14	2014-15	2015-16	3 Yr Avg
Associate of Arts (A.S.) degree	9	8	12	9.67
Associate of Science (A.A.) degree	19	12	21	17.33
Certificate requiring 30 to < 60 semester units	8	15	17	13.33
Total	36	35	50	40.33

Fire Academy Graduates:								
	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016
Total # Enrolled	35	25	37	40	37	36	35	39
Total # Finished	27	19	30	25	31	31	30	35
Fire Academy Certifications:								
	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016	Fall 2016
Number of Students	27	19	30	25	31	31	33	35
Total Issues	405	285	420	350	465	465	495	525

Certifications by Title:

- Introduction to the Incident Command System – IS 100*
- National Incident Management System (NIMS) IS 700a*
- Confined Space Awareness*
- Hazardous Materials First Responder - Awareness/*
- Hazardous Materials First Responder - Operations Decon*
- Fire Control 3B*
- Firefighter Survival*
- Vehicle Extrication*
- CAL FIRE Basic Wildland Firefighter*
- CAL FIRE Firefighter Safety and Survival Level 1*
- S-130 Basic Wildland Firefighter*
- S-190 Beginning Fire Behavior*
- L-180 Human Factors in the Wildland Fire Service*
- S-134 LCES*
- EMT Refresher*
- EMT CE Cert*

The charts above show a dramatic increase in students attending the fire academy and the number of industry certifications obtained upon completion of the fire academy.

Individual State Industry Standard Certifications

	2014/15	2015/16	2016/17
Fire 150- Command 1A	30	42	Discontinued
Fire 151- Command 1B	31	48	Discontinued
Fire 152- Command 1C	31	68	Discontinued
Fire 154- Investigation 1A	28	70	27
Fire 155- Investigation 1B	0	24	Discontinued
Fire 157- Mgmt/Supv	0	62	Discontinued
Fire 158- Fire Prev 1	29	56	Discontinued
Fire 165- Training Instructor 1A	30	67	Discontinued
Fire 166- Training Instructor 1B	28	64	Discontinued
Fire 167- Trainig Instructor 1C	17	22	Discontinued
Fire 170- Haz Mat- Opr Level			Cancelled
Fire 171- S-190	0	15	0
Fire 172- S-290	0	13	0
Fire 173: Haz Mat- IC	0	0	0
Fire 241- I-200: ICS	0	0	0
Fire 242- I-300: Int. ICS	0	15	0
Fire 243- I-400: Adv. ICS	0	0	0
Fire 634- Driver Op 1A	25	19	0
Fire 635- Driver Op 1B	18	21	0
Fire 638- Low Angle Rope Rescue	0	18	31
Fire 639- Ethical Leadership	17	18	22
Fire 640- Haz Mat 1A	0	0	18
Fire 641- Haz Mat 1B	0	0	15
Fire 642- Haz Mat 1C	0	0	0
Fire 643- Haz Mat Tech 1D	0	0	0
Fire 644- Haz Mat 1F	0	0	0
Fire 645- Haz Mat 1G	0	0	0
Total:	284	642	113

The Chart above represents the number of Industry certifications received by students during the given time period (not including the fire academy). Several state courses have been discontinued and replaced by updated curricula based on a National model. It is believed that many fire service professional completed the older curricula prior to it being phased out and replaced with new state standards. All our program curriculum has been updated to reflect State changes and it is believed that there may be a time period before industry professionals begin taking the new courses.

Employment:

	Regional Jobs		7.1.15-6.30.16	CA Jobs		7.1.15-6.30.16
Fire Technology			94			960
Firefighters (332011)	109	\$ 25,750	\$ 58,115	1.50%	510	900
First-Line Supervisors of Fire Fighting Workers (331021)	20	\$ 61,984	\$ 96,949	2.20%	30	100
Fire Inspectors (332021)	4	\$ 48,027	\$ 79,435	**	**	**

Data compiled by Sierra College Research Department

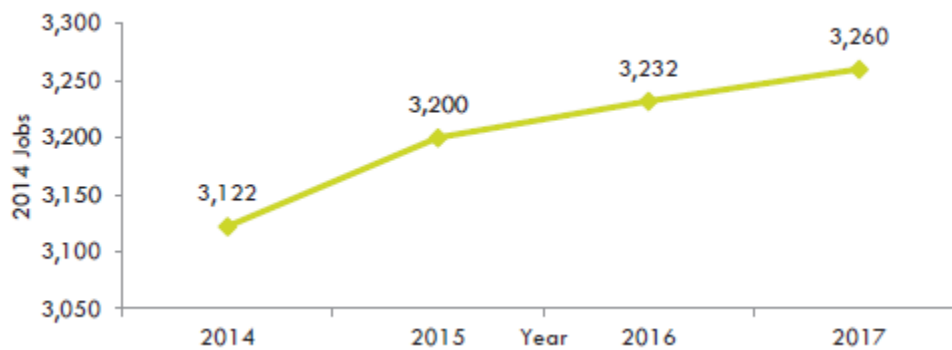
Fire Service Employment Projections, 2014 - 2017

Description	2014 Jobs	2017 Jobs	New Jobs	Replacements	Total Openings
First-Line Supervisors of Fire Fighting and Prevention Workers	316	333	17	43	60
Firefighters	2,687	2,803	116	227	343
Fire Inspectors and Investigators	96	100	4	9	13
Forest Fire Inspectors and Prevention Specialists	23	24	1	<10	<10
Total	3,122	3,260	138	281	419

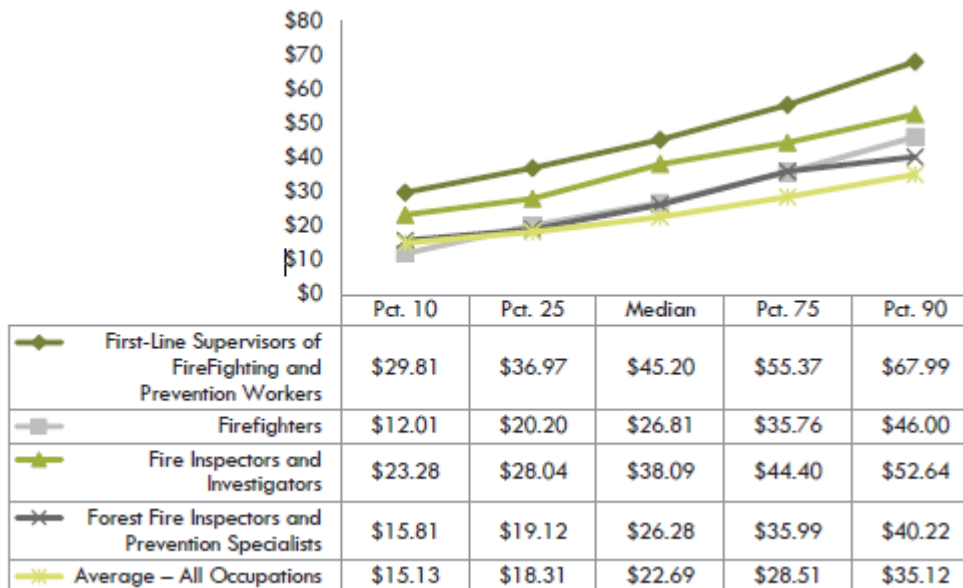
¹ Source: O*NET, www.onetonline.org

² 2014.3 – EMSI: QCEW Employees, Non-QCEW Employees, and Self-Employed.

Fire Service Percentile Earnings, Sacramento Region, including Placer, Sutter, Yolo and El Dorado



Fire Service Percentile Earnings, Sacramento Region, including Placer, Sutter, Yolo and El Dorado



The charts above indicate there is still a high demand for Fire Service Jobs in the region and that earnings are on the rise.

- 1e) Optional Additional Data: Comment on any other relevant contributions of your program to the district mission, goals, outcomes, and values not incorporated in the answers above. Examples include but are not limited to contributions to student equity and success, diversity, campus climate, cultural enrichment, community ties, partnerships and service, etc. Include specific data and examples.

The department meets regularly with the Fire Advisory Committee, a group consisting of Fire representatives from Placer and Nevada Counties, Instructors, Counselors, CTE and State Fire Training representatives, Deans and Associate Deans, Career Educational Liaisons and students. This active Advisory Committee provides professional input to the Fire Technology Program. The department also meets monthly with both the Placer and Nevada County Fire Chiefs and Training officers. Their professional input continues to help the Fire Technology Program prosper.

As active members of the CTE (Career and Technical Education) committee, program staff are active with in and out-reach programs and has participated in many meetings during the review period. These include: 911 Run to Remember, 911 Stair Climb, College and High School Career Day events, Advisory and department meetings, Training Officer and Fire Chief meetings, classroom presentations and MDA Fill-the-Boot events to name a few.

Fire Technology Staff are active on many committees and/or participate in various industry committee meetings. These include: California Fire Technology Directors Association, State Training and Educational Advisory Committee, Sierra College Academic Senate, Reengineering for Sierra College (R4S), Curriculum Committee, and the Facility Master Plan Task Force.

2) Currency: This category assesses the currency of program curricula as dictated by Title 5 and the currency of efforts in meeting accreditation standards as well as improving pedagogy and engaging in professional development.

- 2a) Curriculum: Comment on the currency of your program's curricula, including discussion of any recent or projected changes. Please describe your process for evaluating and revising curriculum, including the use of SLOs.

All Fire Technology Curricula are current, and we are scheduled for Curriculum Review in Fall 2017/18.

The Department follows Title-V requirements for curriculum review. Each course is reviewed every six (6) years, at a minimum, and as needed to meet Federal and State curriculum changes. The Department also meets monthly with Regional Partners to ensure course curriculum and program offerings are up-to-date and meeting industry standards.

- 2b) Student Learning Outcomes Assessment: Analyze your program's assessment of course outcomes, analysis of results, and improvements/changes made to the program as a result of this assessment. Please provide specific data and analysis in the space provided.

Course Outcomes	# of Active Courses	# Courses Assessed	# Active Learning Outcomes	Outcomes Assessed
	34	26	225	36

Program Outcomes	# of Program Outcomes	Outcomes Assessed	Results	Actions
	5	61	59	37

Active Course = Taught during the previous 3 years
Active Learning Outcomes = Active Course outcomes
Course Assessed = Course assessed and SAA submitted during the previous 3 years
Outcomes Assessed = Outcomes assessed during the previous 3 yrs
Program Outcomes = Active Program Level Outcomes

Program, Course and Student Outcomes are updated annually and Department and Program Assessment meetings are held bi-annually to discuss Student Learning Assessments. SLO's have been directly linked to Instructor course delivery improvement and student success which leads to overall program success. All assessments focus on a specific student Outcome as it ties into the course outcomes and ultimately Program and Institutional Outcomes.

In the space below, please describe or attach the cycle you have developed for outcomes assessment.

Following a six-year plan, established by the College, the department will continue to assess each CSLO for all Fire Technology courses every 3 years. The department realizes the importance of the assessment process and its impact on student success. Assessment Plan Attached.

2c) Professional development: Please describe how your department's individual and group activities and professional development efforts serve to improve teaching, learning and scholarship.

In an effort to stay abreast of current trends and industry needs, department representatives actively attend Placer and Nevada County Fire Chief and Training Officer meetings, Fire Advisory Meetings, California Fire Technology Directors Association meetings (CFTDA), and State Fire Training meetings. Additionally, we have a representative from State Fire Training attend our Department and Fire Advisory meetings.

Department members facilitate and/or attend Program and Assessment meetings, Divisional and Departmental meetings, WebCMS, Canvas and CTE meetings. The Program Coordinator and staff are active members of the CTE, Curriculum Committee and are a members of the CFTDA and CFSA.

The participation of department members in these activities, committees and/or meetings directly enhances professional development and serves to improve knowledge of the institution and procedures, Fire Service Trends, modern and/or changing practices, and builds relationships. The departments commitment to these activities directly and/or indirectly enhances our ability to teach, inform and educated students, peers, and professional partners.

In addition to the involvement of activities and committees listed above, staff also participated in the 21st Century Skills training in Spring 2017, attended the Curriculum Institute in 2016, the Northern California

Fire Technology Summit in Spring 2016, the Institutional Effectiveness Partnership Institute in Fall 2016 and many other educational/professional development activities.

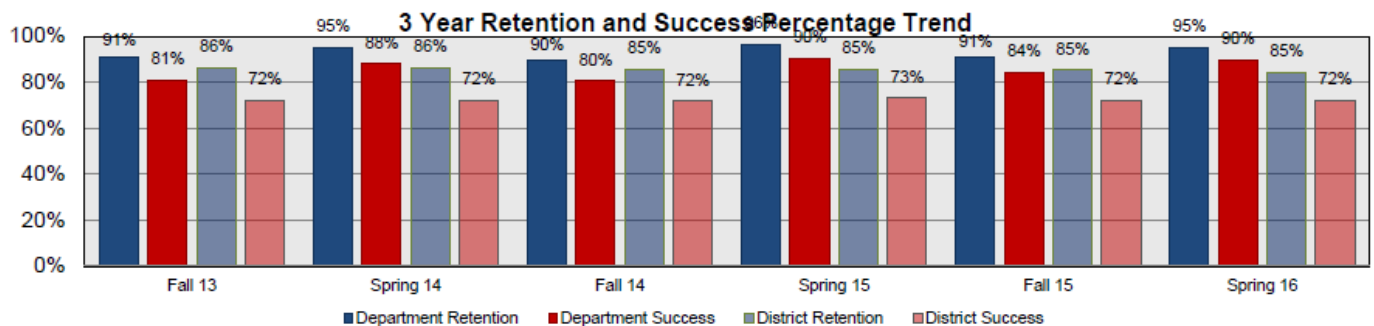
2d) Optional Additional Data: Enter additional data here that you believe to be an indicator of your program’s effectiveness and explain why.

The Fire Technology Program’s effectiveness is directly due to the innovation of department members, instructors, college staff and fire service professionals. Through their efforts, the department has continued to enhance several key components to the Fire Academy and program which have a direct benefit to the student. Some of these include: The Academy Staff Manual, annual Fire Academy staff training, development of a new-hire fire instructor training task book, Academy Heat Stress/Injury guidelines, Evals.net, Fire Academy After Action Report, Marketing, Facebook page, Web Page, Posters and flyers. We believe these enhancements have contributed to the success of the fire academy, which continues to have a wait-list of students for the past 2 years.

It is also believed that our Fire Academy format has been beneficial to all who may attend by offering the academy in an evening and weekend format which allows students and working adults to work while pursuing an education in the Fire Service.

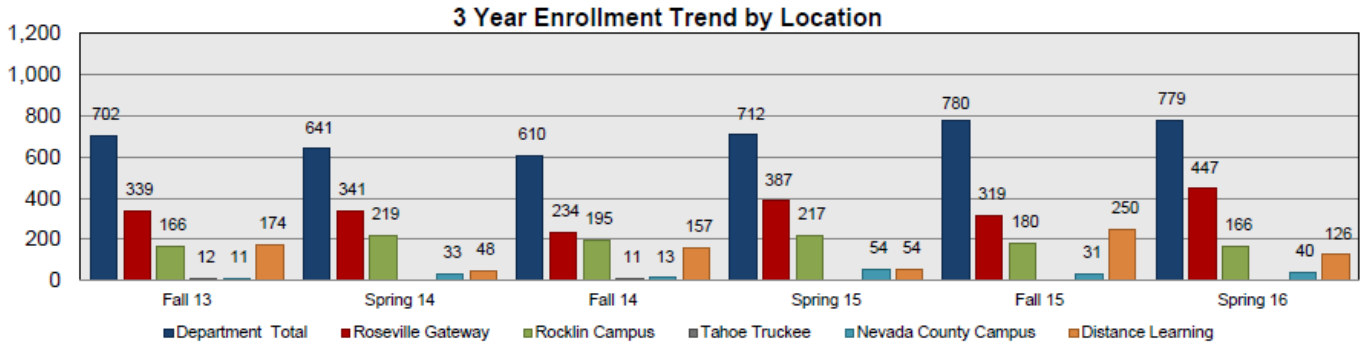
3) Effectiveness: This section assesses the effectiveness of the program in light of traditional measurements.

3a) Retention and Success: Identify and explain the three-year trends in your program’s data contained in the DSR. Address separately the data for on ground and on-line course. Evaluate the significance of the trends, including any challenges experienced by the program and any relevant data/analysis from your course and program outcomes assessments. If applicable, please analyze any significant trends related to student equity and success. If you determine that you need to improve the program’s performance, please describe how you plan to achieve this goal. Please include the results of your outcomes assessments, as appropriate.



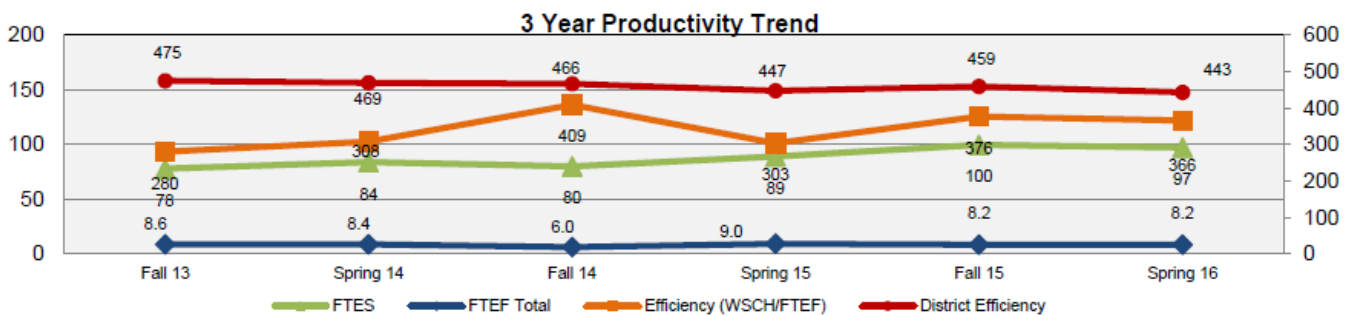
The Fire Technology has consistently maintained very high retention and success rates, and exceeded district percentages during each of the past 3 years. Over the past 3 years, the department has recognized an average retention rate of 93%, and an average success rate of 86%.

3b) Enrollment Trends: Identify and explain the three-year enrollment trends in your program’s DSR data. Address separately the data for on ground and on-line, as well as the data at the various centers in which your program may operate. Evaluate the significance of the trends including any challenges experienced by the program. If applicable, please analyze any significant trends related to student equity and success. If you determine that you need to improve the program’s performance in any way, please describe how you plan to achieve this goal.



Overall enrollment has increased over the past 3 years. This is particularly evident at the Rocklin/Gateway campuses. However, Tahoe and Nevada campus enrollment continues to struggle. Staff continues to be involved with in and outreach events in hopes to increase enrollment. We are also looking at partnering with local High Schools in these areas that may want to take part in the Dual enrollment process.

3c) Productivity: Comment on how the program contributes to overall district productivity. Evaluate the significance of the trends including any challenges experienced by the program. If you believe the statistical trends need improvement, and can be affected by your actions, If you determine that you need to improve the program’s performance in any way, please describe how you plan to achieve this goal.



The Department’s productivity parallels the district with the exception of a slight dip in the Spring of 2015. The department’s FTES has experienced a decrease since Spring 2015 which has since started to increase. This is believed to be in-part to increased enrollment in the Fire Academy and the additional of course offerings.

3d) Analysis and Planning: Referring to your ePAR Report of Goals, Strategies, Actions, and outcomes assessment cycle and relevant assessments/evaluations, please describe your program's plans to maintain or increase its effectiveness and analyze and evaluate your efforts to achieve these goals.

Within ePar we have identified six department goals and developed strategies for each. Our plan is to update goals, strategies and actions bi-annually in an effort to maintain and improve effectiveness.

In addition to enhanced marketing, the department plans to continue meeting with industry partners and leaders through the department's Advisory Committee, and the Placer and Nevada County Fire Chief and Training Officer Association to identify current trends within the Fire Service and adjust course offerings and curriculum as needed.

3e) Optional Additional Data: Enter additional data here that you believe to be an indicator of your program's effectiveness and explain why.

4) Resources: This category assesses the adequacy of current resources available to the program and describes and justifies the resources required to achieve planning goals by relating program needs to the assessments above. (Refer to the bottom row of your DSR in your response to this category. You may include budget information if you have it.)

4a) Please describe the future direction and goals of your program for the next three years in terms of sustaining or improving program effectiveness, relevance, and currency. Please incorporate analysis of any relevant outcome or other data in this description.

Our goal continues to be to enhance overall program effectiveness. This can be accomplished through maintaining and enhancing community, regional, county and state partnerships, enhancing marketing and outreach programs, and involvement with state wide curriculum changes.

The District has recently contracted with the City of Roseville to lease a new space at 316 Vernon Street for all Public Safety Training programs. Our move-in date is scheduled for June 2017. Our goal is to move into the new space and provide for a smooth transition for faculty, staff and students.

We continue looking for instructors who work in the industry from more diverse parts of our region to enhance our instructional diversity.

4b) Equipment and Technology: Comment on the adequacy of the program's equipment and technology funding level for the District as well as for specific sites, including a projection of equipment and technology needs for the next three years. Please provide a justification for these needs, incorporating relevant assessments of the data above in this explanation.

The department currently utilizes "Smart Classroom" technology in each of the dedicated classrooms at all campuses.

We continue to upgrade all our academy equipment through CTE and/or district funds. The department will continue to upgrade academy and course training equipment, as needed, to ensure students have access to the most current and relevant training equipment and materials.

In April 2014 and May 2015, respectively, the Fire Technology program acquired 2 additional Fire engines that have enhanced our program by giving students higher quality training opportunities. We have since surplused the 1985 International Harvester fire engine. We have also, via district funds, purchased a new Phase-1 burn prop that gives students the ability to watch fire start, grow and spread to include flashover in a controlled environment. A new air compressor was also purchased to teach students how to fill breathing air bottles. This purchase also allows for staff to fill bottles without relying on partnering agency resources.

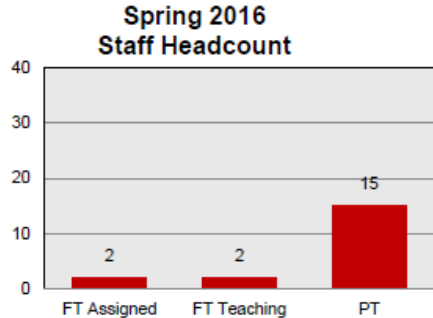
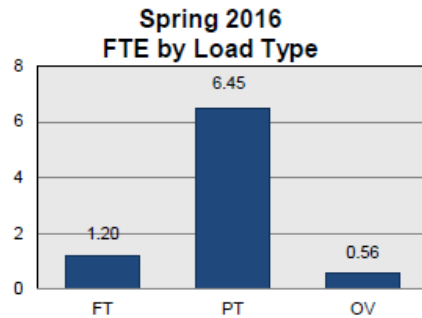
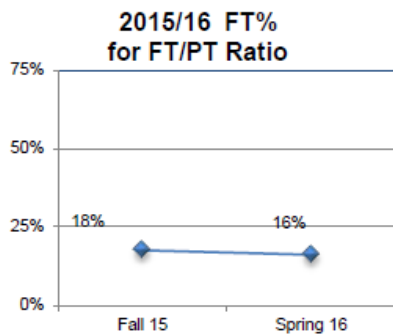
With CTE funds, the department recently erected a modern salvage and overhaul prop. This prop, located on the Roseville Fire Training grounds allows students to demonstrate modern salvage and overhaul techniques.

In the past 2 years, the department began using a web based video platform that allows students to view and save State firefighting training videos and skills. This tool has dramatically affected success and retention rates and has given instructors better consistency in teaching. Instructors also use the video to capture student performance during skill practice, which allows students to review their performance immediately or at home later. The video is also used during certification testing, so without dispute, students know exactly why they may have failed and/or successfully passed a critical skills examination. These videos are saved on the students profile for years should they ever want to refresh a skill.

4c) Staffing: Comment on the adequacy of your program's faculty, classified, and student help staffing levels for the overall District as well as specific sites, including a projection of staffing needs for the next three years. Please provide a justification for these needs, incorporating relevant assessments of the data above in this explanation.

Instructional FTEF by Load Type	Fall 13	Spring 14	Fall 14	Spring 15	Fall 15	Spring 16	3 Yr Avg
FT	1.41	1.52	1.95	2.10	1.39	1.20	1.59
PT	7.16	6.74	5.04	7.55	6.30	6.45	6.54
OV	0.00	0.16	0.25	0.03	0.48	0.56	0.25
Total FTEF	8.58	8.42	7.24	9.67	8.17	8.21	8.38

FT/PT Ratio (FT%)	Fall 13	Spring 14	Fall 14	Spring 15	Fall 15	Spring 16	3 Yr Avg
Dept	16%	18%	28%	22%	18%	16%	20%
Rocklin	17%	17%	20%	12%	9%	9%	14%
NCC	0%	0%	0%	0%	0%	0%	0%
RG	28%	31%	48%	47%	33%	18%	34%
TT	0%		0%				0%
DL	0%	0%	17%	0%	29%	67%	19%

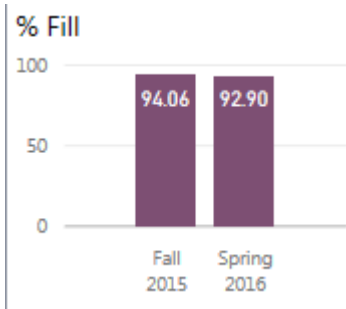


Staff Headcount	Fall 13	Spring 14	Fall 14	Spring 15	Fall 15	Spring 16	3 Yr Avg
FT Assigned	2	2	1	2	2	2	1.83
FT Teaching	2	2	1	2	2	2	1.83
PT	31	34	36	39	14	15	28.17

The Fire Technology Program has two full-time positions and 40 part-time instructors. The Fire Technology Coordinator has 60% release time for program coordination and 40% release time for serving as the Curriculum Committee Chair. The Fire Technology Instructor teaches an 80% load and has 20% release time for serving on R4S. Of the 80% teaching load, 20% is dedicated to the Drill Master duties at the fire academy (Fire 100).

It is believed that the department has adequate full-time teaching staff, however due to increasing demands on the program, the addition of an Instructional Assistant would truly benefit the department. Currently, the Instructional Assistant is a shared position between AJ, Fire and Health Science and the work load is quite significant for one person, particularly with program growth. To truly enhance Public Safety Programs and allow for growth, a dedicated Instructional Assistant for each has been requested.

4d) Facilities: Comment on the program’s fill rate and the adequacy of the facilities for the District as well as specific sites, including a projection of facility needs for the next three years. Please provide a justification for these needs, incorporating relevant assessments of the data above in this explanation.



The Fire Technology Program’s fill rate is slightly below the district’s fill rate. Ideally, the Fire Technology Program would most benefit by having District owned and operated Public Safety Training Facility for all Public Safety Programs. Interim leased office and classroom space may be satisfactory for a time; however program effectiveness is ultimately tied to a college owned state-of-the art facility. Currently, the Fire Academy training grounds, in partnership with the City of Roseville, meets industry needs and instructional needs. It should be noted however, that if true program growth and enhancements are to occur, a modern fire training center should be developed with the next 5-10 years.

In an effort to address the need for a College owned Public Safety Training Center, Fire Technology staff have been actively involved on the Facility Master Plan Task Force. Through our involvement with other faculty and staff, a site for a new Public Safety Training Center has been identified on the Facility Master Plan which is planned for Board approval in November 2017.

Staff continues to look for ways to enhance/improve the NCC Public Safety Training site. This 3 acre training grounds still lacks improvements that limit program growth for the region. Said improvements include: Fire Training Tower, Apparatus Storage, Classroom space, Training Props and Equipment. Because of this need, staff presented a proposal to the Strong Workforce Task Force for \$700,000 of the grant money to enhance the NCC training grounds. Said enhancements would allow the college to schedule another fire academy on a Monday-Friday format to meet industry needs. See attached.

4e) Please check the appropriate boxes in the chart below indicating the general reasons for the resource requests described above (please check all that apply):

Function/Role	Maintenance	Development	Growth	Safety	Outcomes	Other success measures	No Requests
X	X	X	X	X	X		

5) Summary/Closing

5a) Based on the analysis above, briefly summarize your program’s strengths, weaknesses, opportunities, and challenges.

The Fire Technology Program is ever changing to meet Federal, State and local fire service needs. The students are our first priority as we address strengths, weaknesses, opportunities and Challenges within the program. While we continue to look for innovative ways to meet student and industry needs, we are also cognizant of the areas that need improvement. Although each area of the program is important, one area that continues to be of concern is that of a permanent facility to meet immediate and future program needs.

FIRE TECHNOLOGY PROGRAM

STRENGTHS	WEAKNESSES
Customer “Student” Service Focused	Inadequate Facilities to enhance or grow program
Experience and Professional Faculty	Limited Budget
Recognized and Accredited Program	Loss of Funds due to Non Repeatability of in-service training course
Enhanced Marketing and Out-reach	Lack of Support Staff, additional Instructional Assistant needed
Strong Collaborative Fire Advisory Committee	Coordinator not a Direct Supervisor
Partnership Enhancement through participating in regional Fire Chief and Training Officer Meetings	Performance Evaluations
Program Staff actively involved with: Academic Senate, CTE Committee, Curriculum, R4S, FMP Task Force, CFTDA, STEAC	

OPPORTUNITIES	CHALLENGES
New Public Safety Training Facility	Loss of Funding
Formation of additional Partnerships	Enrollment at new Vernon Street Location
Program Enhancements	Loss of training facility and/or contract with the City of Roseville
New energetic and enthusiastic staff	Lose Accreditation
Market is poised for Growth	Changing Regulations
Changes in Local Government	Lack of Interest at Local Level
	State Fire Training Curriculum Changes

5b) How has the author of this report integrated the views and perspectives of stakeholders in the program?

Faculty and members of the Fire Advisory Board have all taken part in the preparation of this report. The Fire Technology Program continues to look at key trends within the fire service and overall program. The chart below outlines some key trends, goals and needs to meet ongoing challenges.

KEY TRENDS

Trend	Goal	Need
Program and Enrollment Growth Fluctuations	Expand or build new facilities to keep pace with growth	Public Safety Training Center near main campus. Enhance NCC PSTC
Economic Shifts and regional economy create need for change in programs.	Create, review, modify and redefine curriculum and learning environment that are responsive to changing needs and employment trends.	Adaptable space; reconfigure certain existing space; additional funding for facilities and technology.
	Upgrade learning environments and approaches to keep pace with technological changes and occupational shifts.	
Societal changes effecting new delivery methods and more relevant education.	Continue to infuse hands-on, project-based learning in courses.	Flexible meeting/conference space for students and faculty.
	Offer more online hybrid courses in appropriate areas.	Overall network infrastructure to support on-line learning.
Technology is changing at a pace that is difficult to keep up with.	Seek industry partners. Seek outside space and equipment with community.	Continual funding for faculty.
Program-based, team-oriented operations	Create regional based courses and programs. Partner with workforce when development opportunities arise	Shared Facilities.
Changes in SFT curriculum to meet National standards	Update curricula as needed	Time

The Fire Technology Coordinator and staff continue to work closely with full and part-time instructors and Sierra College staff on program enhancements and growth. This is done through Program Assessment days, department meetings, and countless discussions with students. Additionally, program staff is very active in Fire Advisory Committee meetings, Placer and Nevada County Fire Chiefs and Training officer Association meetings, and the CFTDA.

The views, perspectives, insight, wisdom and experience of all of these students and career professions have aided in the development of this report. The feedback has been invaluable and has created a positive

dynamic and direction for growth with the Fire Technology Program.

Fire Technology Program staff are proud of the accomplishments made over the past several years. See attached.