Santa Rosa Junior College
Program Resource Planning Process

Fire Technology 2014

1.1a Mission

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The mission of the Department of Public Safety is to provide an education and training environment which fulfills the diverse needs found within the professions involved in public safety. This environment promotes the opportunity for intellectual, social and occupational growth in three major areas:

1) A comprehensive pre-employment curriculum leading towards an associate degree and/or transfer to a four year institution.;

2) Basic Academy programs for state and federal mandated certificate programs; and

3) In service training programs which provide current and professional course offerings reflecting the needs of the professions.

The mission of the Fire Technology Program is twofold; to offer the highest level of pre-service and advanced courses recognized by the State Board of Fire Services and to provide the opportunity for students to receive their Associate of Science Degree and/or a Certificate in Fire Technology. A degree from the program will enhance opportunities for future employment, and advancement in the Fire Service. To this end, the program is committed to recruiting and retaining faculty and staff who are recognized subject matter experts in their fields.

1.1b Mission Alignment

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The Fire Technology Program is Committed to:
• Serving the educational needs of our communities and Fire Technology students through programs and courses that maintain high academic standards with a respect for learning.
• Developing intellectual curiosity and integrity, and recognizing accomplishment in an atmosphere of academic freedom.
• Offering courses and programs which reflect academic excellence and integrity which serve the variety of needs and abilities of our students.
• Responding to economic, demographic, intellectual and technological changes through educational program development and staff development for our Fire Instructors.
• Helping students succeed in meeting their educational goals by providing comprehensive instructional and student support services, such as, counseling and Fire Service mentoring.

• Challenging students to participate fully in the learning process by teaching students to be responsible for their academic success, early on in our Introductory courses such as Fire 71 (Fire Protection Organization) and Fire 208 (Introduction to Fire Academy).
• Preparing our students for participation as citizens at the local, national and global levels.
• Promoting awareness and sensitivity to ethnic, cultural and gender diversity within our faculty, staff, administration, and student population.
• Promoting open access through actively eliminating barriers to college education.
• Providing an academic program that encourages and supports students who wish to pursue higher educational opportunities in the fire service. • Recruiting and retaining faculty and staff who are recognized subject matter experts in their fields.
• Practicing participatory governance within the institution through processes that are inclusive and respectful of all participants and in which, information and decision making are shared.
• Promoting and maintaining a safe learning and working environment.
• Reviewing our mission statement periodically with participation by students, faculty, staff and administration.

1.1c Description

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The Fire Technology program is taught by one full-time faculty (currently vacant), 38 adjunct faculty and 64 Professional Experts that are coordinated by a full-time Director and supported by a part-time Administrative Assistant and Fire Academy Coordinator. Assistance with logistical needs are provided by two Professional Experts who work as materials handlers on an "as-needed" basis. Courses are offered at Petaluma, Santa Rosa, and the Windsor campuses. Academy courses are offered at the Public Safety Training Center (PSTC) in Windsor.

The Fire Program is divided into three areas; the Fire Certificate/Degree program, the Firefighter I Academies and "In-service" courses for those already in the fire service seeking enhanced skills and training. The certificate and degree programs are centered around 6 "Core" which follow the Fire and Emergency Services Higher Education (FESHE) model developed by the National Fire Academy and adopted by the State Board of Fire Services. These courses are offered mainly at the Petaluma campus but also Santa Rosa and Windsor. "In-service" courses (which also serve as electives) are offered mostly at the PSTC. The Firefighter I Academies are offered in the extended format (Tuesdays and Thursdays 6PM-10PM and Saturdays and Sundays 8-5) in both the fall and spring semesters. In the spring, an "Intensive" academy is also conducted which occurs Monday through Friday, 8-5 over a 10 week period.

To assist students meet the experience component necessary to obtain a Firefighter I Certificate from the State Board of Fire Services, an Internship program has been established with the Work Experience Program. Through a cooperative working relationship with that program, Fire Adjunct Instructors who have an interest in supervising interns work as Adjuncts in that program as well. This provides an opportunity for Academy graduates who are not affiliated with a fire agency to be placed in a local fire department and complete the 1 year experience component required to obtain their Firefighter I Certificate.

The program also works with the Sonoma County Fire Department to deliver a Volunteer Fire Skills Academy and with the California Department of Forestry and Fire Protection (CALFIRE) to deliver a Wildland Firefighter Academy.

For those Fire Technology students who meet specific scholastic and economic criteria, scholarships are available. Those include the Victor Pozzi, the Chief Carl O. Heynen,, the Chief Winnfield Smith, the Brian Fletcher and the Women at Ground Zero Scholarships.

1.1d Hours of Office Operation and Service by Location

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The Fire Technology Program operates from 0800-2200 hours Monday through Friday and Saturday and Sunday 0800-1700. In-service courses are offered during the weekday and on Friday evenings and weekends. Firefighter I Academies are offered in two formats (M-F 0800-1700 hours and Tues, Thurs, 1800-2200 hours and Saturdays and Sundays from 0800-1700. All Fire Academies also include one 48 hour component to replicate the schedule used by fire departments throughout the state.

Semester length "Core" courses are offered both during business hours (0900-1200) and in the evening (1900-2200) to accommodate both full time students and those who work during the day.

Department office/administrative support are available at the PSTC from 0800-1630 hours Monday through Friday. The Director and the Administrative Assistant for Fire Technology have their offices at the PSTC. The Program full-time faculty at Petaluma has designated office hours Monday through Friday. Adjunct Faculty has designated office hours before their assigned classes at Petaluma, Santa Rosa and the PSTC.

1.2 Program/Unit Context and Environmental Scan

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From a Program Context and Environmental Scan perspective, there are several trends that have emerged in the last year that have impacted our program. They are the alignment process that is occuring at State Fire Training (SFT) and the expanded use of partnerships with local fire agencies.

As a Accredited regional Training Program (ARTP) through SFT, the program is required to adhere to the policies and curriculum developed by that institution. Accordingly, the Firefighter I Academy (FFI) and the vast majority of the "In-Service" courses we offer are those developed by the California Fire Service Training & Education System (CFESTES) under the auspices of SFT. Most of these courses serve a specific educational path for allow fire service personal to obtain certification as a Company Officer, Fire Inspector and Chief Officer to name but a few. Over the last 18 months the deman for these courses has increased significantly. The reasons for this are twofold.

The first is due to a major shift being implemented at SFT to align these paths with national standards. As the courses that create these new paths are adopted by SFT, it has also triggered a transition period to retire the existing ones. For those fire personnel who are in a currently path, it has become necessary for them to complete the required courses before they are retired or risk having to start the path again using the new curriculum.

It should also be noted that as these alignment efforts create new courses, the continued success of our program will rely on our ability to up-date our curriculum to stay current. Failure to do so will not only diminish the quality of the program, but jepordize our accrediation with SFT. This will be especially relevant in regards to the FFI academy which will be discussed in more detail below.

The second reason the increase in demand is due to a surge of retirements occuring in the fire service. This has created a corresponding increase of promotional opportunities and since most agencies require candidates to possess applicable SFT certifications to be eligible for promotional tests (i.e. Company Officer Certification for Fire Captain), the demand for these classes has increased. It is for these reasons that we have scheduled most of the courses required for the SFT Company Officer certification to be available to students within a single calendar year.

Partnerships with local agencies have always played an important role in the delivery of the fire program. Two years ago, the partnership we enjoyed for years with CALFIRE was renewed in order to deliver the wildland component of the Firefighter I academy. Since that time, this arrangement has proven to be so successful that the Sonoma County Fire Chief's inquired if this section of the acdemy could be opened to outside students. To that end, the curriculum was developed and approved as a "stand alone" course (Fire 206) which allows students to enroll in just this portion of the fire academy. Upon succesful completion, students receive a CALFIRE "Basic Firefighter Certificate" and become eligible for employment as Seasonal Firefighters. Since its inception, an average of 18% of the students have received jobs as Seasonal Firefighters making it one of the most successful offerings.

This year we expanded our use of partnerships by conducting our first offering of the Volunteer Fire Skills program which was delivered through a contract with the Sonoma County Fire Department. While the program had been in development for many years, at the request of local fire agencies, it was changed to a credit program before being offered. The companion course in the program is being held in the spring with this rotation continuing each year. Because a student must be a volunteer with a fire agency to attend, they are automatically eligible for up to $5,000 of funding through the Napa "Strive" scholarship. With most also receiving stipends for their volunteer response activities engaged in upon completion, the program serves as an effective path to part-time employment.

As mentioned above, of all the alignment efforts being undertaken by SFT, none will have more of an impact on our program than the changes that are occurring to the FFI curriculum. This can be attributed to two somewhat related forces that have come into play.

The first are the physical changes to the FFI curriculum that will go into effect on January 1,2016. While this is a relatively straight forward task, it will require significant modification to the curriculum, COR and Lesson Plans. It will also require the purchase of some specific equipment which will be addressed in more detail in other sections.

However, of more importance are the efforts of SFT to obtain reciprosity for FFI certification with two outside accreditation institutions: the International Fire Service Accrediatation Congress (IFSAC) and the National Board on Fire Service Professional Qualifications (Pro Board). As the two organizations that accredit fire programs in most of the other 49 states, SFT has long recognized the benefits of aligning their certificate programs with IFSAC & Pro Board. Some of these include; transportability for the students, expanding employment opportunities to a national level and promoting student success.

However, because of the rigorous examination process that will have to be followed to to meet IFSAC and Pro Board requirements, it is anticipated the labor costs for testing in FFI academy will rise (currently, there is no SFT skills testing process for FFI except that which has been developed internally). For example, to complete IFSAC/Pro Board certifcation testing, in addition to a written exam, students must successfully complete 23 skills tests over a three day period (we currently test 18 skills in a one day period). In addition, IFSAC/Pro Board require a minimum of 9 evaluators to implement their testing process (we currently use 6). Finally, because they both prohibit the instructor for a particular skill to also act as the evaluator for that skill, it will be necessary to expand our number of Professional Experts. While it would be premature to identify the exact costs associated with these changes, it is evident they will increase.

In addition to the costs to the college, because both IFSAC and Pro Board have certification fees, the costs to the student can expect to increase an additional $130-$150 (including a third party vendor SFT has contracted with to conduct the written on-line testing).

It should however, be noted that with these changes, there is a benefit. As reciprosity will make it more difficult for smaller agencies to conduct FFI certification testing, it creates an opportunity for SRJC to offer the testing (and preparation component) as a "stand alone" class and become a regional testing center open to local fire agencies (for a fee) which presents a significant marketing opportunity. While much of the activity surrounding the reciprosity continues, the Fire program intends to stay actively involved (including observing the BETA test) to make the transition as seamless as possible.

The last item relative to this section involves the re-accrediditation of our program. As an ARTP, the program is accredited by SFT and as the first step in the reaccreditation process, a Self-Study document was completed and submitted to SFT with the endorsements of the Marin and Sonoma County Training Officer and the Marin and Sonoma County Fire Chief's Associations last July. Due to a back log at the State, in early fall, a team from SFT will conduct a site visit and prepare a recommendation to the State Fire Marshal. Because one of the reaccreditation criteria will focus on our efforts to align ourselves with the new curriculum being developed by SFT, it reinforces the need to stay current with that process.

We continue to maintain a good relationship with local fire agencies (employers) to run our programs. In addition to using them as an integral part of our Fire Academies, 15 agencies participate in our

Internship program where academy graduates serve terms with local departments to provide supplemental staffing (also see below).

2.1a Budget Needs

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The budget of the Fire Technology program is broken down into the three Categories; the 2000, 4000 and 5000.

Budget Category 23333

The 2333 category covers the costs of the Fire Academy Coordinator, Professional Experts (formally STNC's) and Recruit Training Officers (RTO's). The Fire Academy Coordinator is responsible for the overall operation of the Fire Academy including scheduling, testing, discipline, conduct and securing the resources necessary to conduct instruction. Professional Experts act as Safety Officers and conduct instructional support during manipulative skills testing for up to 36 students which is crucial to our Firefighter I Academies to maintain safety and continuity while performing required activities such as, Auto Extrication, Physical Training and Live Fire training. RTO's are responsible for monitoring the conduct of recruits, their adherence to academy rules, as well as administering counseling and discipline as required. Over the last four year period the amount budgeted in this account has remained flat at $46,192.

In 2012/13, the expenditures in this category exceeded the budgeted amount by 59% which can be attributed to several factors. The first is because this last year marked the first time an individual has been solely dedicated to serve as the Academy Coordinator. Prior to 2012/13, this position was filled by an Adjunct who spent minimal time in this capacity, requiring the Fire Tech Director to devote an disproportionate time addressing logistical functions. Fortunately, now that we have an individual who can devote 100% of his energies to the program, it has lead to an enormous improvement to the operation of the academy and very positive feedback from the students.

Other reasons for the overun include the one-time activities by Professional Experts to make the improvements necessary to bring the academy to the PSTC and resumption of the live training burn for which it is necessary to fill certain positions as required by NFPA 1403 (Standard for Live Fire Training Evolutions). The last is the time needed to meet the day to day equipment needs of the academy (using Prof. Experts who work as Materials Handlers). These positions are necessary to maintain the large inventory needed to operate a fire academy.

Because of the legitimate need for a Fire Academy Coordinator, to support the costs of the Materials Handlers and the necessity to provide staff for the live burn exercise (required under the new FFI curriculum), a $25,000 increase in funding is requested for the 2333 (to $71,192) which would be consistent with our expenditure in the 2012/13 FY.

It should be noted that another option to offset this increase would be to fund a permanent Instructional Assistant as requested in sections 2.2d & e.

Budget Category 4000

The 4000 category covers the costs of instructional supplies and is broken down into the following accounts: 4110-textbooks, 4111-textbooks (fee based), 4390-other supplies, 4391 instructional supplies (fee based), 4510-graphic arts, 4511-graphic arts (fee based). The amount budgeted in 2012/13 was $81,210 which was down 5% from $85,310 in 2011/12.

In this category, the account that is central to the operation of the academy and is most utilized is the 4390. Uses for this account include vehicles for auto extrication class and wood products used for the Ventilation, Forcible Entry unit andlive fire exercise. That this account was the only one in the 4000 category to exceed the budgeted amount (31%) speaks to the need for these materials. It should be noted that the balance of accounts averaged 16% under budget.

To that end, there are several changes are being requested. For the vehicles used for auto extrication we use a vendor who charges $25 per vehicle (to cover the fuel and labor for delivery). With 21 cars needed each year, the amount budgeted is $525. To permit the delivery of additional vehicle for use during the Day Under the Oaks demonstration, $550 (a $25 increase) is requested.

Another cost is the wood products used for the Foricble Entry, Ventilation and Live Burn units. For the Vent unit, 90 sheets of Oriented Stand Board (OSB) at approx. $17 a sheet for a total of $1700 (including tax and delivery) are needed. For the four door props used in the Foricble Entry unit, approx. $700 in stakes and 2x6's are needed. Lastly, approx. $300 is requested for plywood that is used to line the interior of the burn room to extend the life of burn panels which cost over $200 (a sheet of plywood is $25). To cover these costs, an increase of $2950 is requested.

New to our program this year is the addition of the Vehicle Fire prop required as part Passenger Vehicle Fire unit in the new Firefighter I curriculum. To that end another funding item from this account will be the propane needed to fuel this prop. At approx. $2 a gallon and a 500 gallon tank, $1000 is requested. Including the other costs identified above, the amount requested for this the 4390 is $7,725, up 85% from the $4,000 budgeted in 2012/13.

Despite this increase, because we have remained under budget in theother 4000 accounts, the total request for this category the same as was budgeted in 2012/13 level (or $84,935).

Budget Category 5000

The 5000 category covers the costs of guest lectures, consultants, equipment maintenance, leases and rentals and is broken into the following accounts: 5110-lecturers/speakers/etc., 5190-other consultant services, 5191-consultant services (fee based), 5630-equipment rental/leases, 5640-facilities rental/leases and 5659-other equipment repair. For the first time in over 7 years, this budget category was increased from $27,182 to $38,822 (a 41% increase). This has permitted the program to conduct required safety testing and make considerable strides playing "catch-up", particularly with our breathing apparatus and ladders.

For example, for the first time in the history of our program, we were able to inspect and test our entire ladders inventory (as required by NFPA standard 1932 section 7.1.6). To continue to maintain compliance, it is requested this figure be increased from $1335 to $1500 to fund any repairs identified in the inspection.

Breathing apparatus (SCBA's) are required by section 173.34(e) of Title 49 of Code of Federal Regulations (CFR) to undergo hydrostatic testing every 5 years. With 150 bottles and a test price of $20 per bottle, the costs to test our inventory are approximately $3000. The good news is in 2012/13, 60 bottles were due and subsequently tested leaving approximately 40 for the next calendar year. To that end, $800 is requested for this activity.

It should be noted that the program continues to aggressively seek donations and grants to offset the extensive equipment needs for the Fire I Academies. We have been fortunate to have many Fire Agencies donate fire apparatus and equipment. One recent example is the January donation of an engine from Marin County which will allowed us to surplus another experiencing mechanical problems that has also disrupted instruction.

In last year's PRPP, i reported over 70 breathing apparatus (SCBAs) had been donated to the program by San Luis Obispo Fire. I am happy to share that these have been fully incorporated into the academy which has also allowed us to donate our older obsolete units to a fire department in Mexico. We have also been fortunate to receive a compressor through the Facility's & Operations department to re-fill air (SCBA) bottles. Because Title 8 requires quarterly testing of breathing air compressors, it is requested that $2,000 is budgeted to provide this service.

Maintenance of our fire apparatus also remains a top priority of the program. As the most expensive capital equipment we own and DMV mandates to maintain commercial vehicles, this is not only a matter of protecting our investment, but also a compliance issue. To that end, $5700 is requested ($1900 per engine).

Extrication equipment represents the last major line item requiring maintenance. Whereas its use is characterized by long periods of storage, followed by 8-10 hours of intensive use, routine maintenance is essential to its longevity. A quote supplied by a qualified maintenance firm is $750. Whereas repairs could sharply increase this figure (a set of cutter blades is approx $600), $1500 is requested.

Lastly for the 5659 account, to account for unexpected equipment and repair problems that arise, it is requested that $1500 is added to purchase any associated materials required to effect these repairs.

The 5630 category covers the cost of equipment rentals and includes the rental of chain saws, lighting and other instructional equipment for the fire academy. To account for inflation, it is requested the $900 budgeted in 2012/13 be increased to $1000 (11%).

For the 5190 account, a one-time cost that can be anticipated is the fee that is charged as part of the State Fire Training Re-Accreditation site visit. This fee is set at a not to exceed amount of $2000. With a current budget of $2,150, it is requested that amount be increased to $4,150. Because this is only incurred every five years, the budget can return to the $2,150 in 2014/15.

The 5640 category covers the cost of the lease for the Santa Rosa Fire Department training facility for use of the Firefighter I Academies and Fire Academy Introduction course. For the last three years, this amount has been underfunded at $19,172.00 (the lease amount during the same period was $25, 237 creating an annual deficit of $6,065). In addition, during the 2011/12 year, we were not invoiced by Santa Rosa Fire and as a result, the invoice carried over to the 2012/13 year resulting in a $44,544 charge. The good news is that due to more instruction occuring at the PSTC, the contract amount for

2014/15 will drop to $19,600 (a 23% savings). To that end, it is recommended $19,600 be budgeted in this category.

To remain current with changes in State and FESHE curriculum and accreditation requirements, travel funding of $1,000 is requested for the 5210 category to attend the quarterly meetings of the State Fire Technology Director's Association and remain active in that organization.

Given the requests identified above, the amount requested for the 5000 category is $36,600.00 (a 13% decrease), reflecting the following changes from 2013/2014:

- $1000 for chain saw and lighting rentals (5630)
- $19,600 for the SRFD Training Facility Contract (5640)
- $5,700 for apparatus inspection and maintenance (5659)
- $1,500 for ladder inspections and repairs (5659).
- $800 for breathing apparatus hydrostatic tests and repairs (5659).
- $1,500 for Extrication equipment servicing (5659).
- $2,000 to test breathing air and conduct compressor maintenance (5659).
- $1,500 for materials to conduct misc. repairs (5659).
- $2,000 for the reaccreditation site visit fee (5190)
- $1,000 for travel to State Curriculum meetings (5210).

2.1b Budget Requests

Rank	Location	SP	M	Amount	Brief Rationale
0001	ALL	00	00	$71,192.00	Professional Experts/Instructional Assistants, Fire Academy Coordinator, Materials Handlers
0001	ALL	00	00	$84,935.00	Textbooks and other instructional supplies.
0001	ALL	00	00	$36,600.00	Equipment manitenance/repairs, rentals, lectures, speakers, other equipment, travel

2.2a Current Classifed Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Administrative Assistant III	24.00	12.00	Provides detailed administrative and clerical support for Director/chair. Manages complex projects as assigned such as contributing to the budget development process, monitoring budgets and faculty load monitoring. Prepares curriculum outlines and documents. Administrative Assistant III provides administrative support for payroll utilizing .40 FTE.

2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Director of Fire Technology	50.00	12.00	Under the direction of the Dean of the Public Safety Training Center, is responsible for coordinating the Certificate/Degree course work at the Petaluma and Santa Rosa campuses and entry level/in-service programs at the PSTC Windsor. Additionally, the Director manages and supervises fire academies at the Santa Rosa Fire Department Training Tower and is responsible for curriculum development and continued currency of courses in the Fire Technology program.

2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties
64 Evaluators (Professional Experts)	45.90	12.00	Responsible for explanation, demonstration, supervision, evaluation and documentation of discipline specific subject matter and related skills under the direct supervision of lead instructor.
7 Fire Recruit Training Officers	7.00	10.00	Counsels recruits regarding professional matters; supervises and monitors recruit discipline; supervises other Professional Experts as needed.
Fire Academy Coordinator	18.00	9.00	Provide the scheduling, oversight, discipline and physical resources necessary to operate the Fire Academy.
2 Materials Handlers	20.00	10.00	Maintain acdemy equipment, refill air bottles, delier instructional upplies, re-build instructional props, repair hose and other fire equipment, etc.

2.2d Adequacy and Effectiveness of Staffing

2.2d Adequacy and Effectiveness of Staffing

Currently, the Fire Technology Program consists of a Director, a Part Time Administrative Assistant (.60FTE), a Full-time Instructor, a Part Time Fire Academy Coordinator, 40 Adjunct Faculty, 7 Recruit Training Officers and approximately 64 Professional Experts (2 of whom also serve as Materials handlers). With this staffing, we operate 3 Fire Academies and average 27 course sections each semester.

The Fire Technology Program and specifically the Fire Academies are not staffed adequately for the size and scope of our Program. This is due to several reasons; (1) the number of academies we operate each year, (2) the necessity to conduct some portions at a remote location 8 miles from the PSTC, (3) the lack of a F/T Administrative Assistant and (4) F/T Academy Coordinator.

For our AA, it is a significant challenge for her to conduct her duties given .40 of her time is dedicated to performing payroll for the PSTC. This frequently results in the Program Director addressing clerical functions that are better suited to her skill set.

A full time FFI Academy Coordinator would greatly help us manage our program. Although we have made enormous strides with a Coordinator funded through the 2333 (Prof. Expert) account, it has resulted in a significant overun (as explained in 2.1a). To that end, an Instructional Assistant III would probably be the most appropriate classification for his position (also see section 6.3a) which would allow us to remedy this problem. It should be noted that almost all Community Colleges that operate fire academies possess a dedicated Coordinator’s and F/T AA position. We are fortunate in that it is only though the dedication of our part-time AA and existing Coordinator that the program is successful.

It is also recommended that the Professional Experts that serve as Materials Handlers be increased to .75 FTE to realistically meet the workload created by the academies (reflected in the Instruction Assistant request in 2.2e).

As discussed in this section in the 2013/14 PRPP, the only F/T instructor in our program retired at the end of the Fall 2013 semester. As of this writing, funding for the postion has been approved and a recruitment is in process.

2.2e Classified, STNC, Management Staffing Requests

Rank	Location	SP	M	Current Title	Proposed Title	Type
0001	Windsor	00	00	New	Lab Assistant III	Classified
0002	Windsor	00	00	New	Instructional Assistant	STNC

2.3a Current Contract Faculty Positions

Position	Description
FT Fire Tech	Contract Faculty - The program budgeted one, full-time faculty member. The program is currently conducting a recruitment for this position which is authorized for a 100% load.

2.3b Full-Time and Part-Time Ratios

Discipline	FTEF Reg	% Reg Load	FTEF Adj	% Adj Load	Description
Fire Technology	1.0000	34.0000	1.9600	66.0000	Adequate - (providing the F/T position currently under recruitment is filled)

2.3c Faculty Within Retirement Range

2.3c Faculty within Retirement Range

The program continues to go through a period of transition. Following the retirement of 3 long serving Adjunct Faculty (12, 25 & 28 years respectively) in 2011/12, in 2012/13, our longest serving Adjunct (27 years) also retired. This was followed in December of 2013 by the retirement of our one F/T faculty as well as one of our on-line instructors who delivered both Fire 71 and 74. This has obviously had a tremendous adverse impact on the program. Fortunetly, funding for the F/T faculty was approved and we are currently recruiting for the position. I have also been able to find Adjuncts to temporarily cover the load so as to maintain a continuity of course offerings.

Of the vacancies created by these retirements, the most difficult to fill has been the replacement of the on-line instructor. Because the position not only requires an individual with subject matter expertise on the topic, but also the technical ability to develop, obtain approvals and deliver the course, it has created a significant challenge. However, I am pleased to report that I have hired an adjunct who possesses both these abilities and is currently instructing Fire 71 and is in the process of developing Fire 74.

It should also be noted that in the last year, we have been working closely with the Work Experience Program to fill the position of an Adjunct Instructor to oversee Interns in the Fire Internship Program (Fire 991). After a recent retirement and am also pleased to report that as of January 2014, that position has been filled.

2.3d Analysis of Faculty Staffing Needs and Rationale to Support Requests

2.3d Analysis of Faculty Staffing Needs

The Program interviews annually to maintain our adjunct faculty pool and to anticipate retirements. For example, within the last year, we interviewed and hired three instructors qualified in the fields of breathing apparatus, fire protection systems, fire prevention and fire service orientation. However, as alluded in 2.3c, our greatest challenges is to attract qualified On-line instructors. With this segment of instructions representing the largest areas of growth, there has been a concerted effort to seek qualified on-line developers/instructors. Despite adding three to the program in 2010/11, two have resigned. In their place two more have been hired with one currently delivering an approved on-line class and developing a second. the second has only recently completed MOODLE training and is in the process of starting to develop a building construction class (Fire 76).

Last year, the program was extremely fortunate this year to have hired Kim Thompson as our Fire Academy Coordinator, replacing Jason Simmons who served 5 years in the position. As a retired Battalion Chief from CalFire with experience in an academy setting and a longtime Adjunct faculty, Chief Thompson has exceled in providing the organizational and leadership skills needed for the position. Having an individual with these attributes greatly enhances the quality of the program and illustrates how critical it is that this position be specifically funded (addressed in section 2.3e).

As mentioned in 2.2d, the logistics involved in securing equipment and instructional aids, we have two Professional Experts who work to fill this need. This has been of tremendous help in that it has relieved the Director of using his time to address these tasks. It has however, increased the payroll of the 2330 account used to cover as illustrated in section 2.1a.

While we usually can provide an adequate pool of Adjuncts and Professional Experts, during fire season (May – October) staff are often unavailable due to being committed to major campaign fires. For example, last fall we came very close to being unable to deliver two units of our fire academy because staff were committed to the Rim fire at Yosemite (the 3rd largest fire in California history). This is one reason CALFIRE requested we conduct the Wildland component of our Fire Academies at the end of the Fall semester (December) and before May during the Spring semesters. However, in the midst of a third drought year, I have grave concerns that if fire activity begins early (April/May), it may well jeopardize our ability to run the academy.

Although not a faculty position, the Fire Program Administrative Assistant has announced her intention to retire at the end of June. While this will necessitate the need to re-train an individual, it also presents an opportunity to full dedicate the position's responsibility to transfer payroll duties and dedicate it 100% to the fire program.

2.3e Faculty Staffing Requests

Rank	Location	SP	M	Discipline	SLO Assessment Rationale
0001	ALL	00	00	Fire Academy Coordinator	

2.4b Rational for Instructional and Non-Instructional Equipment, Technology, and Software

2.4b Rational for Instructional Equipment

Given the accelerated use our materials receive in the instructional setting, there is a constant need to replace or up-grade our equipment not only for wear, but to meet updated industry NFPA and OSHA safety requirements. Our Fire Academy is labor intensive and requires a variety of equipment necessary to conduct the manipulative skills. It is not unusual for some of our equipment to need replacement after only two semesters of use. Please refer to the list of equipment needs below which is identified in order of priority.

1. **Wildland Firefighting Personal Protective Equipment (PPE):** Fire Shelters, web gear, Jackets, and pants have been used in our academies for in excess of 10 years and are subsequently in poor condition. Of particular concern are our the fire shelters. As a critical element of wildland fire training, it is essential to possess an adequate number of practice shelters that meet existing standards. Several years ago, the model in our inventory was retired because they did not meet the new OSHA safety standard. This has created a need to purchase the practice shelters that are used today. The fact that the largest loss of firefighter's lives (19) occurred in a 2012 wildfire in Arizona attests to the importance if having current safety equipment to train on.

2. Self-Contained Breathing Apparatus (SCBA) Air Bottles: While we have been fortunate to have received generous donations of SCBA's from fire agencies, it does come with a built-in problem. For the last 20 years, most manufacture's of SCBA's have transitioned from steel and aluminum air bottles to composites for their weight savings. However, because of their design, composite bottles have a service life of 15 years. Since almost every bottle that is donated to the program already has at least 10 years of use, they very quickly become unusable. To that end, over the next 3 years, it will be necessary to replace our entire inventory of composite bottles (over 70). As a unit required to meet our accreditation with State Fire Training, it is essential these are replaced in a timely manner so this training is not interrupted.

3. Power Tools: Under the new Firefighter I curriculum adopted by State Fire Training (SFT) a greater emphasis has been placed on the proper use and maintenance of power equipment used in firefighting operations (Unit 4-2 - Hand and Power Tools and Unit 4-4 Maintenance). Because the program has never owned any power equipment, it will be necessary to obtain the items identified in these units as well as the required course materials section. More specifically they include: chain saws, a circular saw, smoke ejector and misc. maintenance and replacement equipment. To provide each student with adequate exposure to operate and maintain each unit, at least 8 chain saws (for a class of 35 students) will be necessary. To meet OSHA requirements, it will also be necessary to purchase chain saw "chaps" and hearing/eye protection. One benefit to obtaining the saws is that they can be used in the ventilation unit to conduct ventilation practice which will avoid us from having to rent them in the future. Giving students the opportunity to become more familiar with chain saw operation *before* the ventilation unit will also provide for a safer vent class and enhance the learning experience.

4. **Rescue Struts:** Over the last few years, the use of struts (know as Rescue Struts) has emerged as an intergal component in auto extrication practices. To make our curriculum current, our

instructional staff includes a component on the use of this equipment in our auto extrication module. However, we lack the specific equipment necessary to conduct the lab (psychomotor) training. Having this equipment would greatly enhance our instruction in this area and make this unit current with what occurs in the profession.

It is worth noting that we continue to be very fortunate in obtaining equipment donations that have enhanced our program and minimized our equipment costs. For example, in January we received a 1991 Fire Engine from Marin County Fire Department which allowed us to surplus a engine which otherwise would of required repairs to its starter. In addition, last summer we finished placing in service over 75 SCBA received from San Luis Obispo Co Fire Department which eliminated the SCBA request made in section 2.4c in the 2011/12 PRPP.

2.4c Instructional Equipment and Software Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Windsor	01	01	Wildland Fire Shelters and Wildland PPE Ensemble	45	$300.00	$13,500.00	R.Collins	N/A	R.Collins
0002	Windsor	01	01	Chain Saws, Support supplies & PPE	10	$300.00	$3,000.00	R.Collins	N/A	R.Collins
0002	Windsor	01	01	SCBA Air Bottles	60	$200.00	$12,000.00	R. Collins	N/A	R. Collins
0003	Windsor	00	00	Rescue Struts	16	$98.32	$1,573.12	R. Collins	N/A	R. Collins

2.4d Non-Instructional Equipment, Software, and Technology Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Windsor	00	00	Garage/Carport for 3 Fire Engines w/ Solar Charger	2	$7,500.00	$15,000.00	R. Collins	PSTC	R. Collins

2.5a Minor Facilities Requests

Rank	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
0001	Windsor	00	00	Urgent	PSTC	Adjacent to Warehouse	$15,000.00	Garage/Carport for 3 fire engines for FF1 Academies
0002	Windsor	00	00	1 Year	PSTC	Lawn area west of Bld 400	$25,000.00	Roof/Ventilation Prop for Fire Academies
0004	Windsor	00	00	Urgent	PSTC	Lawn area west of Bld 400	$25,000.00	Concrete Auto Extrication pad and shed to house extrication equipment
0005	Windsor	00	00	Urgent	PSTC	Training Tower	$14,000.00	Installation of sheeting on fire tower to allow use for ladder training
0006	Windsor	00	00	1 Year	PSTC	Lawn area west of Bld 400	$6,000.00	Concrete pads to install physical training props

2.5b Analysis of Existing Facilities

2.5b Analysis of Existing Facilities

In our analysis of the existing facilities, the greatest need that has been identified is to make those site improvements necessary to conduct all Firefighter I Academies at the PSTC.

Thanks to the support of the Board Facilities Committee and the Facilities /Operations Department (Fac/Ops), improvements are steadily being made at the PSTC that will allow this to occur. For example, in the past year, three of the facilities requests made in last year's PRPP have been accomplished. They include:

- Installation of a 500 gallon propane tank to operate our car fire prop.
- Installation of a 40 foot shipping container to store instructional equipment.
- Delivery of a Bauer Air Compressor to re-fill SCBA bottles.

To that end, they have been removed from section 2.5a.

I am also pleased to share that of the items that remained on the list, some progress has been made on installing them at the PSTC as follows:

- **Auto Extrication Pad and Storage Shed**: A Request for Bids (RFB) has been prepared along with a site schematic illustrating the scope of work. In a recent meeting with the Facilities Manager, he indicated he will schedule a bid walk with contractors to begin this work.
- **Ventilation Roof Prop:** On January 28, drawings for this structure were approved for submittal to the office of the State Architect (DSA). It is anticipated they will be approved by DSA in May and hopefully, a bid can be awarded and construction begin shortly thereafter.
- **Carport for Engines and Hose Storage:** Bids have received and a purchase order has been approved for this project at the end of February.
- **Rappel Wall:** Similar to the Auto extrication Pad, an RFB has been prepared and the program is in the process of waiing for a bid walk to be scheduled by the Fac/Ops.

It should be noted that prominent in this section of the 2013 PRPP was the goal of moving the operation of the Fire Academy from the Santa Rosa Fire Department Training Tower (SRFDTT) to the PSTC. I am please to report that with the exception of the Physical Training, the Ventilation, and the Auto extrication units, we have accomplished this goal. Although we are still encumbered to enter into a contract with the City for this year, because of the reduced use, we have re-negotiated the 2014/15 contract to $19,600 (a 25% decrease). Before terminating the contract, it will be necessary to complete the four bullet points identified above.

While not included here, it is evident that conducting all fire academy instruction will result in an increased demand for classroom space at the PSTC. This limitation has only become more acute as the popularity of our programs has grown and with the introduction of new ones such as the Homeland Security Academy and the Volunteer Fire Skills Program. Because this need has already

been articulated in the *Public Safety Training Center Advanced Laboratory and Office Complex* report dated May, 2005, the reader is encouraged to reference that document for additional information relative to the need for classroom facilities.

3.1 Develop Financial Resources

3.1 Diversity Funding - Grants/Contracts

Future and Current Grant Funding

Among the programs in Fire Technology, the one which grant funding plays an integral role is the Fire Academy. As a CTE program that trains individuals to become firefighters, it is necessary to maintain the same body of equipment required by not only a municipal fire agency, but a wildland fire department as well. That has made the success of the program extremely dependent upon grants and donations.

While donations far remain the largest source of our equipment, in the future we will continue to rely on Perkins (CETA) funding to purchase that we cannot obtain through donations. However, we will also explore other potential oportunities such as the *Institutional Education and Library Materials (IELM)* grants for which we were successful in obtaining two forcible entry door props in 2013.

3.2 Serve our Diverse Communities

3.2 Cultural Competency/Faculty and Staff Diversity

As a program that has only one F/T faculty and 40 adjuncts, the vast majority of our courses are instructed by adjuncts. Because these are almost all senior fire service personnel, their demographic is subsequently representitive of the those who entered the fire service 20 to 30 years ago (predominently white males). Despite this, the program does actively strive to recurit faculty sensitive to the diversity of our students.

For example, we are curently in the process of hiring our F/T faculty and in an effort to be sensitive to the diverse needs of our students, one of the five criteria established in our application selection rubric is diversity.

Among the best practices used to attract a diverse pool of candidates include advertising our Job Announcement (JA) on the following websites (HR Dept. Fall 2013 Recruiting Sources doc):

- AsiansinHigherEd.com
- BlacksinHigherEd.com
- HispanicsinHigherEd.com
- LGBTinHigherEd.com, and
- California Community Colleges Faculty and Staff Diversity Registry

Other methods the program uses to promote cultural competence and responsiveness among faculty and staff is to review the District's Diversity and Harrassment Policies with staff annually.

I am pleased to share that the program has been very successful recruiting female instructors which now comprise 20% of our adjunct staff (as compared to representing only 3% of F/T firefighters in Sonoma County).

The overall break down of the background of our staff is as follows:

We presently (Spring 2014) have 38 Fire Technology Instructors employed:

1 FT Instructor – (Recruitment underway)

30 Male Adjunct Instructors – 26 White, 2 Latinos, 1 Asian, 1 Pacific Islander

Female Adjunct Instructors - 8 White

The ages of our Adjuncts faculty ages range from the 20's, 30's, 40's, 50's to the early 60's.

3.3 Cultivate a Healthy Organization

3.3 Classified Staff Development

The one classified staff working .60 FTE) in the Fire Program is frequently encouraged to participation in workshops that promote development for which I often participate as well. For example, in the past year, I have attended with her workshops on Data Mining, Escape software, PRPP development, Disaster Preparedness and the Feb 13, PDA day. As a member of the California Fire Technology Director's Association, I have also had Classified Staff attend our meetings when offered locally.

3.4 Safety and Emergency Preparedness

3.4 Safety and Emergency Preparedness

Injury, Illness and Prevention Program (IIPP): Over the last year, we have reviewed the IIPP and developed a *Respiratory Protection Plan* appendix for the document as required by 29 CFR 1910 and Title 8, 5144 (this follows the *Heat Illness Prevention Plan* that was developed and implemented last year).

The genesis for these plans came when live fire training was reinstituted in the fire academy and the students are exposed to both products of combustion and and high heat conditions.

Both documents are know to instructional staff who conduct live fire activities and are reviewed as part of a safety briefing that is conducted before these trainings are initiated.

Annual trainings (safety) conducted at the PSTC include:

- Fire Extinguisher training with live fire, and
- Evacuation to an approved meeting place (for fire, earthquake and plane crash scenarios (we lie in the flight path of the Sonoma County airport).

We are currently developing an "Active Shooter" scenario as well.

The Building coordinators for the PSTC are Randy Collins as primary and Charisse Arnold (alternate). This includes all buildings 100-900 at the PSTC.

One enhancement to the safety of staff at our facility relates to the location the Annex accross the street from PSTC. Given there is no cross walk and a posted speed limit of 40 MPH, it can be hazardous to negotiate a crossing. To enhance the safety of staff, it would be highly beneficial to have a crosswalk established. To that end, on August 27, I met with Windsor Public Works Director Richard Burtt to inquire into this matter. He indicated he would conduct a traffic feasibility study and contact me upon it's completion.

3.5 Establish a Culture of Sustainability

3.5 Sustainable Practices

Since August of 2010, the following sustainable practices have been implemented in the program:

- All print materials surplused in the program are recycled when possible. Assignments, handouts, tests and other documents have been reformatted and printed two sided to use less paper.
- Begining in Spring of 2014, all of the student materials for our "In-Sevice" State Fire Training Classes (SFT) have become available electronically. This has allowed us to have the students download them to their laptops, I-pads or other electronic readers (students still have the option of printing a hard copy). The classes account for between 30 and 40% of our offerings each semester.
- Most academy classes are conducted at the PSTC which has eliminated the trips that need to be made to the Santa Rosa Fire Department Training Tower (16 mile round trip) and those that are made are done when travel is being conducted for another purpose (except for emergencies). In addition, the Director uses a hybrid vehicle for transportation purposes.
- The program is also in the process of transitioning to aluminum SCBA air bottles that have an indefinite service life as opposed to the composite cylinders currently used that must be disposed of after 15 years and cannot be recycled (the only reason composite bottles are used in the first place is because they have been donated).

- The program is also making use of 3-5 gallon water coolers for student hydration to minimize the use of bottled water (for a summary of the problems go to: http://greenliving.nationalgeographic.com/water-bottle-pollution-2947.html)

For future practices, the program is examining the possibility of implementing a computerized (paperless) testing system similar to what is used in the Police Academy and EMC program. However, it is hindered by the operation of the fire academy at a remote location which makes implementing such a program unlikely. This represents another benefit of moving the academy to the PSTC and why this project remains a high priority.

4.1a Course Student Learning Outcomes Assessment

4.1a Course Level Student Learning Outcomes (SLOs)

At the time of the last PRPP preparation, all existing courses in the fire program have been updated and possess SLOs. In addition, over the past year, the following courses (with SLO's) have been updated:

- Fire 204A, Command 1A (Strucutre Fire Command Operations for the Company Officers)
- Fire 204C, Command 1C (WUI Command Operations for the Company Officer),
- Fire 107B, Advanced Volunteer Fire Skills (approved)
- Fire 74, Fire Protection Equipment Systems, and
- Fire 71, Fire Protection Organization
- Fire 208.1, Fire Academy

With these additions, all courses are current and possess SLO's. This will help our Certificates and Degree programs, but will also make our "In-Service" program consistent with State Fire Training and facilitate our re-accreditation process with that institution.

The assessments of our SLO's have had a generally positive impact (see section 4.1c for progress in this area). For example, in several classes we discovered students already possessed a cognitive understanding of many of the objectives covered in the class through either their job environments or by having the material covered in another related class. Using this knowledge, we now query each class as to their background and if we find certain material already covered (as found in the COR), we alter the schedule to devote more time on other topics that are found to challenge the students.

In a similar light, this has also identified a redundancy in the prerequisite relationship with some of our courses, in particiular those developed by State Fire Training (known as California Fire Service Training and Education System or CFSTES courses). Coincidentally, as of this writing, SFT is in the midst of an alignment process where they are being re-written to be consistent with National Standards which will correct this.

In terms of progress with our assessments, of the 25 courses in our program, twelve (52%) have had all their SLO's assessed. Of the remainder, six are being assessed this spring (26%) and five are not currently being offered (22%). Once the semester ends, this will conclude the six year cycle and the program

calendar will repeat the process in 2019. In the meantime, if any of the five not currently being offered are scheduled, their SLO's will be assessed.

4.1b Program Student Learning Outcomes Assessment

4.1b Program Level Student Learning Outcomes (SLOs)

In 2013, SLO's for our three certificate programs (Fire Tech Degree, Certificate and Firefighter I Academy) were completed and approved by the curriculum committee. With this accomplishment, we have met all SLO requirements and deadlines establishing by the College and the Project Learn committee.

4.1c Student Learning Outcomes Reporting

Type	Name	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented
Course	Fire 107A - Vol Fire Skills	Fall 2014	Fall 2014	N/A
Course	Fire 107B Ad Vol Fire Skills	Spring 2015	N/A	N/A
Course	Fire 200.1- Training Inst. 1A	Spring 2014	Spring 2014	N/A
Course	Fire 200.2- Training Inst. 1B	Spring 2014	Spring 2014	N/A
Course	Fire 200.3 - Training Inst. 1C	Spring 2015	N/A	N/A
Course	Fire 201 Fire Prev for Co Offi	Fall 2013	Fall 2013	Spring 2014
Course	Fire 202 - Ethical Leadership	N/A	N/A	N/A
Course	Fire 203 - Fire Management	Fall 2013	Fall 2013	N/A
Course	Fire 204.A- Fire Command 1A	Spring 2013	Fall 2013	Spring 2014
Course	Fire 204.B- Fire Command 1B	Fall 2013	Fall 2013	Spring 2014
Course	Fire 204.C - Fire Command 1C	Fall 2013	Fall 2013	Spring 2014
Course	Fire 206- Wildland Fire Acad	Spring 2014	Spring 2014	N/A
Course	Fire 208 - Intro to FFI Acad	Spring 2014	Summer 2014	N/A
Course	Fire 208.1 - FF1 Academy	Spring 2013	Spring 2013	Fall 2013
Course	Fire 209 Investigation 1A	Spring 2014	Spring 2014	N/A
Course	Fire 212 - Rescue Systems	N/A	N/A	N/A
Course	Fire 241 - Driver Operator 1A	Spring 2014	N/A	N/A
Course	Fire 258 - Driver Operator 1B	Spring 2014	Spring 2014	N/A
Course	Fire 259 ICS 200	N/A	N/A	N/A
Course	Fire 56 - Fire Hydraulics	N/A	N/A	N/A
Course	Fire 61 - Fire Investigation	Spring 2014	Spring 2014	N/A
Course	Fire 71 - Fire Protection Org	Spring 2013	Spring 2013	Fall 2014
Course	Fire 72 - Fire Behavior	Spring 2013	Fall 2013	Spring 2014
Course	Fire 73 - Fire Prevention Tech	Spring 2014	Spring 2014	N/A
Course	Fire 74 - Fire Prot Sys& Equip	Spring 2013	Spring 2013	Fall 2013
Course	Fire 76 - Building Constructio	Spring 2013	Spring 2013	Fall 2013
Course	Fire 77 - Haz Mat	Fall 2013	Spring 2013	Fall 2013
Course	Fire 78 - Fire Safety & Surviv	Fall 2013	Fall 2013	Spring 2014

4.2a Key Courses or Services that address Institutional Outcomes

Course/Service	1a	1b	1c	2a	2b	2c	2d	3a	3b	4a	4b	5	6a	6b	6c	7
FIRE 107A		X		X		X		X	X		X		X		X	X
FIRE 107B		X		X		X		X	X		X		X		X	X
FIRE 200.1	X	X	X	X	X		X	X	X	X	X	X		X	X	X
FIRE 200.2	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X
FIRE 200.3	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X

FIRE 201		X	X	X	X		X	X	X	X	X	X	X	X	X	X
FIRE 202			X	X		X	X	X	X	X	X	X	X	X	X	X
FIRE 203	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 204.A	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 204.B	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 204.C	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X
FIRE 206	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 208	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 208.1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 209		X	X		X	X		X	X	X	X	X	X			X
FIRE 241		X	X	X	X		X	X	X	X	X	X	X	X	X	X
FIRE 258	X	X	X	X	X		X	X	X	X	X	X				X
FIRE 259		X	X	X	X			X	X	X	X	X	X	X	X	X
FIRE 56	X	X	X	X			X	X		X	X	X				X
FIRE 61	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 71	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 72	X	X	X	X	X		X	X	X	X	X	X	X			X
FIRE 73	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 74	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 76	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 77	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
FIRE 78	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

4.2b Narrative (Optional)

4.2b Narrative (Optional)

In response to a request by Kris Abrahamson, the following Assessment Plan was deleveloped for inclusion into this document in August 2014. Please note this data is more current and supercedes the table identified in section 4.1c.

Fire Program 6-Year Cycle SLO Assessment Plan

Course	SLO #s	Participating Faculty	Semester Initiated or to Be Initiated	Semester Completed	Comments	Year of Next Assessment
Fire 56	1,2,3,4		N/A		Not Currently Being Offered	
Fire 61	1,2,3,4	Stan Fernandez	Spring 2014	Spring 2014		Spring 2020
Fire 71	1,2,3	Jeff Allen/Mike Angeli/Ken Sebastiani	Spring 2013	Spring 2013		Spring 2019
Fire 72	1,2,3,4,5	Tzahal Avraham	Spring 2013	Spring 2013		Spring 2019
Fire 73	1,2,3	Paula Dueweke/Curt Newsom	Fall 2013	Fall 2013		Fall 2019
Fire 74	1,2,3	Michael Angeli/Curt Newsom	Fall 2013	Fall 2013		Fall 2019
Fire 76	1,2	Curt Newsom	Fall 2013	Fall 2013		Fall 2019
Fire 77	1,2,3,4,5	Eleanor Ratliff/Linda Collister	Fall 2013	Fall 2013		Fall 2019
Fire 78	1,2,3,4	Michael Haberski	Spring 2013	Spring 2013		Spring 2019

Fire 107A	1,2,3	Dan Bull	Fall 2014	Fall 2014	Contract Class thru So. Co.	Fall 2020
Fire 107B	1,2,3,4	Dan Bull	Spring 2015		Contract Class thru So. Co	Spring 2021
Fire 200.1	1,2	Ken Sebastiani	Spring 2014	Spring 2014		Spring 2020
Fire 200.2	1,2	Ken Sebastiani	Spring 2014	Spring 2014		Spring 2020
Fire 200.3	1,2,3	Curt Newsom	Fall 2015		Cancelled 2014 low enrollment	Fall 2020
Fire 201	1,2,3	Paula Dueweke	Spring 2013	Spring 2013		Spring 2019
Fire 202	1,2,3		N/A		Not Currently Being Offered	
Fire 203	1,2,3,4	Jack Piccinini	Spring 2013	Spring 2013		Spring 2019
Fire 204A	1,2,3	Jack Piccinini	Spring 2013	Spring 2013		Spring 2019
Fire 204B	1,2,3	Jack Piccinini	Spring 2013	Spring 2013		Spring 2019
Fire 204C	1,2,3	Kim Thompson	Fall 2012	Spring 2013		Spring 2019
Fire 206	1,2,3	Randy Collins	Spring 2014	Spring 2014		Spring 2020
Fire 208	1,3	Gina Caruso/Cori Rickert	Spring 2014	Spring 2014		Spring 2020
Fire 208	2	Gina Caruso/Cori Rickert	Spring 2014	Summer 14		Summer 20
Fire 208.1	1,2,3,4,5	Randy Collins	Spring 2013	Spring 2013		Spring 2019
Fire 209	1,2,3	Stan Fernandez	Spring 2014	Spring 2014		Spring 2020
Fire 212	1,2,3,4		N/A		Not Currently Being Offered	
Fire 241	1	Sean Grinnell	Spring 2014	Spring 2014		Spring 2020
Fire 241	2,3,4,5	Sean Grinnell	Fall 2014			Fall 2020
Fire 258	1,2,3	Sean Grinnell	Spring 2014	Spring 2014		Spring 2020
Fire 259					Course Inactive	
Fire 260					Course Inactive	

Fire 708	1	Jeff Snow	Spring 2014	Spring 2014	Course used only by EMC	Spring 2020

5.0 Performance Measures

5.0 Performance Measures

One of the unique aspects we bring to the Firefighter I Academies is our ability to provide certifications for a variety of firefighting skills above and beyond what is required for a Firefighter I certificate. This is conducted not only to enhance the skill level of the students, but to make them more marketable in what is generally considered a very competitive job environment. It also helps our program stand out among those offered at other community colleges. Most of these certifications are Fire Service Training Education Program (FSTEP) and National Wildfire Coordinating Group (NWCG) courses. A list of the certificates not required for Firefighter I but included in the program are:

- Incident Command System (ICS) 200 (FSTEP)
- Auto Extrication (16 Hr FSTEP)
- Confined Space Awareness (8 Hr FSTEP)
- Hazardous Materials First Responder Operational (20 Hr Calif. Specialized Training Institute).
- S-130 (NWCG)
- S-131 (NWCG)
- L-180 (NWCG), and
- S-190 (NWCG)
- CalFire Basic Firefighter Certificate

Because the CalfFire basic firefighter certificate is a prerequiste for employment as a Seasonal Firefighter with Cal Fire (the largest fire agency in the State), this represents a significant enhancement in that any fire academy graduate can immediately be hired by that agency (seven were hired following our Spring 2013 academies).

Similar to the enhancements received in the Fire Academy, completion of our Volunteer Fire Skills program also allows students to receive the following certificates:

- Incident Command System (ICS) 200 (FSTEP)
- Confined Space Awareness (8 Hr FSTEP)
- Hazardous Materials First Responder Operational (20 Hr Calif. Specialized Training Institute).
- S-130 (NWCG)
- S-131 (NWCG)
- L-180 (NWCG), and
- S-190 (NWCG)

5.1 Effective Class Schedule: Course Offerings, Times, Locations, and Delivery Modes (annual)

5.1 Effective Class Schedule: Course Offerings, Times, Locations, and Delivery Modes (annual)

The Fire Technology provides a balanced class schedule convenient to students with day, evening, Friday, and weekend courses. A list of our offerings is shown below:

Summer 2014 Schedule

Fire 208 - 1 section (2 SAT & SUN 8am-5pm) Fire 71 – 1 section (M & W 5:30-10:30 PM) Fire 991 - 2-3 sections by appointment

Spring 2014 Schedule:

Fire 61 - 1 section (W 7-10pm)
Fire 71 – 3 sections (M 7-10pm,T 7-10,F 9am-12pm,TBA On-Line)
Fire 72 – 2 sections (TH 7-10pm, and On-line)
Fire 73 – 1 section (T 7-10pm)
Fire 74 – 1section (M 7-10pm) Fire 76 – 1 section (TH 9am-12pm)
Fire 77 – 1 section (W 7-10pm cancelled low enrollment)
Fire 78 – 2 sections (M 7-10 & W 7-10) Fire 107A - 1 section (W 7-10, Sat 8-5)
Fire 200.1 – 1 section (F 8:30am-5pm) Fire 200.2 - 1 section (F 8:30am-5 pm) Fire 201 - 1 section (F 8:30am- 5 pm)
Fire 203 – 1 section (M-F 8am-5pm)
Fire 204A – 1 section (F 6-10pm, S 8am-5pm, SUN 8am-5pm)
Fire 204B – 1 section (F 6-10pm, S 8am-5pm, SUN 8am-5pm)
Fire 204C – 1 section (M-F 8-5)
Fire 206 – 2 sections (M-F 8-5)
Fire 208 – 2 sections (2 SAT & SUN 8AM-5PM)
Fire 208.1 – 2 sections (Int 8am-5pm M-F & Ext T & TH 6-10pm, SAT 8am-5pm, SUN 8am-5pm) Fire 209 - 1 section (M-F 8-5) Fire 241 – 1 section (F 6-10pm, S 8am-5pm, SUN 8am-5pm) Fire 258 – 1 Section (F 6-10pm, S 8am-5pm, SUN 8am-5pm) Fire 991 - 3 to 5 sections by appointment

Fall 2013 Schedule

Fire 71 - 3 sections (M 7-10 pm, F-9am-12pm, TBA On-line)
Fire 72 - 2 sections (TH 7-10 pm, TBA On-line)
Fire 73 - 2 sections (T 9am-12pm, W 7-10pm)
Fire 74 - 2 sections (M 7-10pm, W 7-10pm)
Fire 76 - 1 section (TH 3-6 pm)
Fire 77 - 1 section (W 7-10pm)
Fire 78 – 1 section (T 7-10) Fire

107A - 1 section (W 7-10, Sat 8-5) Fire
201- 1 section (F 8-5) Fire 200.3 –
(W 8-5) Fire
204A - 1 section (M-F 8am-5pm)
Fire 204B - 1 section (M-F 8am-5pm)
Fire 204C – 1 section (M-F 8am-5pm) Fire
208 - 2 sections (2 SAT & SUN 8am-5pm)
Fire 208.1 1- section (T & TH 6-10pm, SAT & SUN 8-5pm) Fire
209 - 1 section (F 6-10, Sat, Sun 8-5) Fire 241 – 2
sections (F,S,S & T) Fire 991 - 3 to 5
sections by appointment Fire 708 – 1 section (By
appointment)

To provide a balanced offering for working students, almost all core courses required for the degree or certificate program are offered both during the day and evening. Conversely, for "In-service" courses, because our primary population is working firefighters, these are offered during the day. The one exception to this is for our Fire 204 A & B courses which we also offer in the evening/weekend to serve volunteer fireifighters and not conflict with their employment.

In regards to their geographic distribution, all degree and certificate core courses are offered both at Petaluma and in Windsor. Most "In-service" courses are offered in Windsor with two offered in Petaluma

Currently, we offer Fire 71 and 72 both Distance Ed (DE-On-line) and classroom versions. One instructor is currently developing Fire 76 for DE delivery. After the retirement of our DE instructor for Fire 74 and 71, an instructor was hired and is currently developing these for DE. As identified in section 3, it is one of our goals to make all of our core courses available on-line within 3 years.

In terms of our ability to serve our students, I feel we do a decent job balancing the hours, location and format. Eighteen months ago, we updated our 5 Year Course Plan and suggested sequence of courses to clearly identify a two year articulation path for our degree and certificate students.

Please refer to sections 5.2a & b for a record of student headcounts for the last three years.

5.2a Enrollment Efficiency

5.1 Student Headcounts .

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Tech (FIRE)	11	96	91	17	80	183	10	153	161	14	160

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Tech (FIRE)	39	276	309	34	244	279	23	185	197	33	183

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013

Fire Tech (FIRE)	50	367	449	72	432	403	62	329	403	79	339

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Tech (FIRE)	100	739	849	123	756	865	95	667	761	126	682

5.2a Enrollment Efficiency

Over the last 4 years, the program has averaged an enrollement efficiency of 84.7% (not including summer). In the writer's opinion, one reason why this has not been higher is due to a lack of on-line courses which have always been popular. As discussed in 2.3d, the program continues to agressively seek on-line instructors but has been challenged by a lack of response.

It is also apparent that their has been a general downward trend in our efficicency. On reason attributed to this has been a marked increase in the number of course offerings, particularly in the California Fire Service Training and Education System (CFSTES) classes. For example, since Fall of 2010, our course offerings have increased 47% . As "In-Service" classes required for specialized certifications, there has been a strong but limited demand from career firefighters who wish to promote and we have been asked by our local fire agencies to offer them in order to provide a qualified pool of candidates to fill the vacancies of those retiring from the profession. It is expected for this demand to be met by this fall and our offerings of these courses to be curtailed, subsequently reversing this trend.

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Tech (FIRE)	0.0%	102.5%	81.3%	0.0%	86.3%	79.5%	0.0%	81.2%	67.5%	0.0%	71.4%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Tech (FIRE)	86.7%	106.2%	93.6%	75.6%	93.8%	88.6%	51.1%	86.0%	73.0%	73.3%	73.2%

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Tech (FIRE)	88.3%	96.6%	84.8%	84.6%	95.0%	78.4%	75.7%	85.0%	73.1%	88.6%	74.3%

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Tech (FIRE)	87.6%	101.1%	87.9%	80.9%	93.6%	82.0%	66.1%	84.4%	71.9%	82.6%	73.3%

5.2b Average Class Size

5.2b Average Class Size

As can be observed by the tables below, our average class size has trended slightly downward.

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Tech (FIRE)	0.0	82.0	65.0	0.0	69.0	39.8	0.0	46.0	33.8	0.0	37.5

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013

Fire Tech (FIRE)	39.0	46.0	38.6	34.0	40.7	34.9	23.0	37.0	28.1	33.0	30.5

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Tech (FIRE)	26.5	34.3	27.6	27.5	30.1	22.7	26.5	26.2	21.9	31.0	21.4

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Tech (FIRE)	30.7	41.7	33.0	29.7	35.5	28.9	25.3	32.2	25.3	31.7	26.4

5.3 Instructional Productivity

5.3 Instructional Productivity (annual)

As can be seen by the figures below, the program has consistently exceed the college goal of 18.7 for Instructional Productivity. Much of this can be attributed to the attendence in the Fire Academies which are almost always reach capacity.

Santa Rosa Campus

Fire Tech (FIRE)		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
	FTES	0.70	9.60	9.03	1.17	8.17	17.93	0.63	15.50	15.87	0.93	16.20
	FTEF	0.00	0.30	0.20	0.00	0.30	0.80	0.00	0.60	0.80	0.00	0.80
	Ratio	**0.00**	**32.00**	**45.17**	**0.00**	**27.22**	**22.42**	**0.00**	**25.83**	**19.83**	**0.00**	**20.25**

Petaluma Campus (Includes Rohnert Park and Sonoma)

Fire Tech (FIRE)		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
	FTES	4.46	27.60	30.90	3.69	24.40	27.90	2.47	18.50	19.70	3.55	17.43
	FTEF	0.21	1.20	1.62	0.21	1.20	1.60	0.21	1.00	1.40	0.21	1.15
	Ratio	**21.26**	**23.00**	**19.13**	**17.60**	**20.33**	**17.44**	**11.79**	**18.50**	**14.07**	**16.91**	**15.17**

Other Locations (Includes the PSTC, Windsor, and other locations)

Fire Tech (FIRE)		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
	FTES	6.82	42.89	56.30	6.65	49.50	64.66	3.30	44.19	65.51	2.10	47.93
	FTEF	0.00	1.10	1.86	0.00	1.46	1.44	0.21	1.27	1.86	0.03	1.40
	Ratio	**0.00**	**38.82**	**30.24**	**0.00**	**33.81**	**44.81**	**16.04**	**34.69**	**35.19**	**82.50**	**34.26**

ALL Locations (Combined totals from ALL locations in the District)

Fire Tech (FIRE)		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
	FTES	11.98	80.09	96.23	11.51	82.07	110.50	6.40	78.19	101.08	6.57	81.55
	FTEF	0.21	2.60	3.68	0.21	2.96	3.84	0.42	2.87	4.06	0.23	3.35
	Ratio	**57.14**	**30.75**	**26.17**	**54.89**	**27.69**	**28.75**	**15.42**	**27.21**	**24.89**	**27.97**	**24.36**

5.4 Curriculum Currency

5.4 Curriculum Currency (annual)

I am pleased to report that effective last Spring, all curriculum has been updated and are current.

5.5 Successful Program Completion

5.5 Successful Program Completion (annual)

To complete the Fire Technology program with either a Certificate or Major, most students pursue an option that includes the Fire Academy (Fire 208.1). Although this route provides for a very balanced and thorough learning experience, it does create some logistic challenges due to the need to complete the 3 Academy prerequisite courses including Fire 208 before the enrollment deadline for the Fire Academies of June 1st and October 1st (well before the normal enrollment deadlines for Fall and Spring). One scheduling change we have made in 2011 was to realign the Fire 208 prerequisite to occur very early in the semester. This allows the student who successfully completes the course to immediately enroll in the fire academy. Prior to this change, the deadline had elapsed and the student had to wait another 6 months before being eligible to enroll.

In addition to the resources available to our students, with 36 Adjunct instructors (most of whom are employed in the fire service) available to provide guidance and counseling, it is not unusual for them to assist the students out of the normal class hours. For example, instructors routinely offer the use of the facilities of their local fire agencies to provide remediation opportunities. The Fire Technology program takes a tremendous amount of pride on this high level of colaboration.

Fire Technology Certificates awarded in 2013 are 60, up from 45 in 2012

Firefighter I Academy Certificates awarded in 2013 are 92, up from 84 in 2012 (15%).

Major/Degrees (AS Degree in Fire Technology) awarded in 2013 are 39, up sharply (300%) from 13 in 2012.

5.6 Student Success

5.6a Retention

The retention rate for the FT Program is 83.4% which is significantly higher than the overall District rate. This can be attributed to several factors. First, the passing grade for the Firefighter I Academy is 80% which raises most student's GPA's. In addition, many students are already employed in the field and their prerequiste knowledge of the subject matter is higher. Lastly, many are sponsored by fire agencies or have scholarships that have set high minimum academic standards to qualify. For a breakdown of retention by semester, please refer to the tables below.

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	90.9%	79.2%	70.8%	94.1%	67.9%	80.0%	80.0%	72.5%	68.3%	71.4%	71.9%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	100.0%	83.4%	83.7%	87.1%	79.4%	88.0%	100.0%	85.9%	82.7%	97.0%	84.2%

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	92.5%	84.5%	81.1%	81.5%	86.3%	93.0%	65.4%	87.7%	87.3%	90.3%	89.0%

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	95.1%	83.3%	80.9%	85.3%	81.7%	88.4%	76.5%	83.5%	81.8%	89.9%	83.4%

5.6b Successful Course Completion

The successful course completion rate for the FT program over the last three years has averaged 82.5% (down slightly from 84% average for the previous 3 year average). Compared to the District success rate of 70.3% the FT success rate is significantly higher.

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	90.9%	70.8%	64.0%	88.2%	64.1%	76.6%	80.0%	71.2%	67.7%	71.4%	69.4%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	100.0%	81.5%	81.0%	87.1%	76.5%	85.8%	100.0%	84.3%	79.7%	97.0%	80.3%

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	92.5%	81.3%	79.6%	75.9%	84.9%	92.1%	63.5%	83.6%	86.5%	88.7%	87.7%

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	95.1%	79.9%	78.3%	81.4%	79.5%	86.5%	75.3%	80.8%	80.4%	89.0%	81.0%

5.6c Grade Point Average

The Grade Point Average for Fire Technology over the last three years has been 2.77 (down slightly from 2.78 for the previous 3 year period). Our FFI Academies GPA tend to trend higher as the minimum pssing grade is 3.00. It should be noted that these figures are influenced by the 200 series classes (State Fire Training Courses) which are all Pass/Fail.

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	3.29	2.87	2.38	2.60	2.20	3.11	3.81	3.00	3.08	3.00	2.93

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	4.00	3.09	3.20	3.13	2.96	3.24	3.83	3.13	2.90	3.13	2.69

Other Locations (Includes the PSTC, Windsor, and other locations)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	0.82	2.95	3.08	0.79	2.69	2.53	3.02	2.67	2.55	2.66	2.19

ALL Locations (Combined totals from ALL locations in the District)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Fire Technology (FIRE)	2.47	2.99	3.05	1.97	2.72	2.86	3.40	2.88	2.73	2.97	2.49

5.7 Student Access

5.7 Student Access (every third year)

5.7a Ethnicity

With the exception of White and Latino students in the program, the ethnicity in Fire Tech (FT) trends to two percentage points to the District as a whole. For example, at the District level, White students comprise 56% of the student population, whereas within the FT program, the percentage is 69% (up slightly from 2012). The second largest group is the Latino at 19% which is up significantly from 11% in 2012 and is trending with the increases seen in the general student population.

ALL Locations (Combined totals from ALL locations in the District - Source 2012 Fact Book))

Fire Tech (FIRE)	Ethnicity	2010-11	Percent	2011-12	Percent	2012-13	Percent	2013-14	Percent
	White	1076	70.8%	1156	72.4%	958	68.5%	997	69.3%
	Asian	29	1.9%	25	1.6%	26	1.9%	22	1.5%
	Black	15	1.0%	14	0.9%	18	1.3%	17	1.2%
	Hispanic	91	6.0%	126	7.9%	152	10.9%	278	19.3%
	Native American	15	1.0%	9	0.6%	8	0.6%	13	0.9%
	Pacific Islander	8	0.5%	7	0.4%	6	0.4%	5	0.3%
	Filipino	7	0.5%	13	0.8%	6	0.4%	4	0.3%
	Other Non-White	0	0.0%	0	0.0%	0	0.0%	59	4.1%
	Decline to state	278	18.3%	247	15.5%	224	16.0%	44	3.1%
	ALL Ethnicities	**1519**	**100.0%**	**1597**	**100.0%**	**1398**	**100.0%**	**1439**	**100.0%**

5.7b Gender

The percentage of students enrolled by gender within the Fire Tech (FT) program is nearly the opposite as that of the District as a whole. The District's numbers indicate females outnumber males approximately 54 to 45% while in the FT program, males comprise 88.4% of the population (down from 90% in 2012) and females 7.3% (down from 9.3% in 2012). These numbers reflect an industry that has a male dominated work force. This has long been recognized in the industry as well as the in FT programs throughout the California Community College system and is being continually evaluated for improvement.

In the FT program, two strategies have been implemented to help foster a change to this trend. First, as alluded in Section 3.2, a significant number of our instruction staff are female (20%)with the rationale it will make the program more attractive to female students. The second is a concerted effort being made to promote female enrollment by attending Career Fairs at local high schools. For example, in 2013, FT personnel attended Career Fairs at Elsie Allen High, Bolinas High School, Sonoma State and Roseland Middle School.

ALL Locations (Combined totals from ALL locations in the District)

Fire Tech (FIRE)	Gender	2010-11	Percent	2011-12	Percent	2012-13	Percent	2013-14	Percent
	Male	1382	91.0%	1453	91.0%	1256	89.8%	1272	88.4%
	Female	122	8.0%	125	7.8%	130	9.3%	105	7.3%
	Unknown	15	1.0%	19	1.2%	12	0.9%	62	4.3%
	ALL Genders	**1519**	**100.0%**	**1597**	**100.0%**	**1398**	**100.0%**	**1439**	**100.0%**

5.7c Age students in each Discipline at first census broken down by age .

ALL Locations (Combined totals from ALL locations in the District)

Fire Tech (FIRE)	Age Range	2010-11	Percent	2011-12	Percent	2012-13	Percent	2013-14	Percent
	0 thru 18	169	11.1%	116	7.3%	118	8.4%	151	10.5%
	19 and 20	351	23.1%	352	22.1%	295	21.1%	317	22.0%
	21 thru 25	543	35.7%	579	36.3%	497	35.6%	481	33.4%
	26 thru 30	259	17.1%	317	19.9%	267	19.1%	251	17.5%
	31 thru 35	105	6.9%	113	7.1%	130	9.3%	125	8.7%
	36 thru 40	56	3.7%	63	3.9%	40	2.9%	47	3.3%
	41 thru 45	22	1.4%	39	2.4%	26	1.9%	35	2.4%
	46 thru 50	5	0.3%	7	0.4%	13	0.9%	17	1.2%

	51 thru 60	9	0.6%	10	0.6%	11	0.8%	14	1.0%
	61 plus	0	0.0%	1	0.1%	1	0.1%	1	0.1%
	ALL Ages	**1519**	**100.0%**	**1596**	**100.0%**	**1397**	**100.0%**	**1438**	**100.0%**

5.8 Curriculum Offered Within Reasonable Time Frame

5.8 Curriculum Offered Within Reasonable Time Frame (respond every third year)

The Fire Technology Program at SRJC offers all of its required Core classes each semester – Fire 71, Fire 72, Fire 73, Fire 74, Fire 76, Fire 77 and Fire 78. In addition, during the summer we offer Fire 71. We also we offer in the Fall and Spring semesters such electives as, Fire Command, Training Instructor, Fire Investigation, Fire Management and Driver Operator for students who are currently employed with fire agencies.

The total number of sections offered is 30 for the Spring semester and 26 for the Fall for an average of 28 (an increase of approx. 40% since 2010). Each semester includes the Firefighter I Academies (2 sections offered in the Spring semester and 1 Section offered in the Fall) and Fire Technology Occupational Work Experience Internships.

Recently, a fire year rotational plan (with two optional paths) was updated to ensure course offerings were sufficient to allow a student to complete our certificate and degree programs within two years.

5.9a Curriculum Responsiveness

5.9 Curriculum Responsiveness (every third year)

The Fire Technology major at SRJC provides practical and technical instruction to meet the requirements of various fire service agencies at the local, state, and federal levels. The Course Curriculum meets the State Fire Marshals requirements for the Accreditation as a Regional Fire Academy. Our Core classes (Fire 71, 72, 73, 74, 76, 77 and 78) meet current transfer requirements at CSU as well as align with the Fire and Emergency Services Higher Education (FESHE) model.

We strive to respond to the changing needs of our students and industry. For example, in 2012, we increased our offerings of those classes required to obtain a State Fire Training (SFT) Company officer Certificate when it was learned SFT was retiring the existing program in 2014. This created a demand for those currently in it to complete their coursework before the deadline. In 2011, we began offering Driver Operator 1A after DMV regulations changed to make this course a requirement to obtain a license to operate a fire apparatus. We also began offering Fire Command 1C in 2011 after receiving numerous requests from local fire agencies.

Another curriculum path we have pursued is the implementation of a Volunteer Fire Skills certificate program. Given the large number of Volunteer Firefighters in the County, there is a genuine need for such a path. To that end, the Sonoma County Dept. of Fire and Emergency Services agreed to partner with our program to deliver to their 15 Volunteer Fire Companies and we are now in the second semester offering the program. It should also be noted that an outline of this program has been adopted by the California State Firefighter's Association to deliver to other Volunteer Fire departments outside of the County so our program in many ways has been a leader in this field at the statewide level.

Amongst the composition of the Fire Technology Advisory Committee, of the fourteen members, all are employed in the fire service in Sonoma, Marin, Mendocino or Napa Counties. Of these members, five also serve as adjunct faculty and two are female.

At our meetings, we review the changes to our course offering (including curriculum) and receive the approval of the committee prior to implementing any changes and bringing them to the Curriculum Committee for their approval. For example, at our November 2013 meeting, the committee voted to keep the units of Auto Extrication, ICS-200, Low Angle Rope Rescue and the expanded Wildland Fire Academy in the Firefighter I academy although they were removed from the newly adopted curriculum.

5.9b Alignment with High Schools (Tech-Prep ONLY)

5.9b Alignment with High Schools (Tech-Prep ONLY every third year)

Fire 71 can be taken by High School Students through their enrichment program and is available on-line. Marin and Sonoma counties host Explorer Programs that are also linked with our Firefighter I Academy curriculum. Articulation does occur with our prerequisite courses to enter our Firefighter I Academy, such as EMS 100 – First Responder, CPR and Advanced First Aid.

While a dialogue has also been initiated with the Napa High school ROP program (of which the Fire Tech Director sits as a member of their Advisory Committee), it appears the on-line Fire 71 on-line course may prove the best venue for maintaining a nexus with the program.

5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)

5.10a Alignment with Transfer Institutions (Transfer Majors ONLY, every third year)

Our Fire Technology 70 series courses all transfer to lower division units at CSU Sacramento, Long Beach and Los Angeles (Fire Administration Degrees). Columbia Southern on-line program (www.columbiasouthern.edu), Brandman University (www.brandman.edu/irvine), Southern Illinois University (www.siufire@siu.edu) and Kaplan University represent private have on-line programs that also accept our core Fire Technology units as lower division transfer units towards a Bachelor's degree in Fire Science.

5.11a Labor Market Demand (Occupational Programs ONLY)

5.11a Labor Market Demand (Occupational Programs ONLY, every second year)

Over the past 5 years there has been a surge of Fire service retirements throughout California. This is due in part to the retirement package known as 3% at age 50 which allows firefighters to retire at age 50 with up to 90% of their current salary. This has opened the application process to many of our graduates and it appears that this trend will continue for the next few years.

According to the labor market web site www.labormarketinfo.edd.ca.gov California's labor market projections (2010-2018), the Fire Service will experience a 10% growth in employment with the Bureau of Labor and Statistics projecting the nationwide number of firefighter openings to increase 18% by 2018, despite the fact most agencies are slowly returning to fiscal health. One encouraging statistic is the fact that approximately 70% of our Academy students serve as volunteer firefighters which often lead to a paid positions.

However, one of the most encouraging statistics is that with the recent curriculum changes to the Fire Academy (Fire 208.1), students now receive a *Calfire Basic Firefighter* certificate upon successful completion of the academy. This has led to 18% of the graduates in the last three academies being hired by Cal Fire. In addition, Santa Rosa Fire department recently hired six academy graduates which supports the above mentioned trend.

Within our region (North Bay/Sacramento), Solano, American River and Sierra College also offer degrees in the same discipline.

5.11b Academic Standards

5.11b Academic Standards (every third year)

Our program continues to struggle with the need to adopt higher standards for reading and writing skills. Recently, we have revised the fire academy screening course (Fire 208) to include a more rigorous English component in order to acquire an adequate amount of data to convince the District Curriculum Committee to permit a prerequisite of English 100 for the Fire Academy (Fire 208.1) It is interesting to note that this was dropped as a prerequiste several years ago for lack of this very data.

It was with great interest to learn that this spring the Curriculum Review Committee has approved the expansion of their prerequisite pilot to allow adding Basic Skills courses without the burdensome statistical valaidation process. To that end, we will be pursuing requesting English 100 as a prerequisite for the Fire Academy.

6.1 Progress and Accomplishments Since Last Program/Unit Review

Rank	Location	SP	M	Goal	Objective	Time Frame	Progress to Date
0001	ALL	00	00	Hire a F/T Faculty to replace one retiring Dec 2013.	Obtain Admin Approval, begin recruitment process, conduct interviews, make selection, complete background process	By June 1, 2014	Position has been funded, hiring committee has been identified and trained, Committee has met and established application selection criteria and interview questions
0002	Windsor	07	06	Complete all facility Improvements to operate Academy at the PSTC	Conduct Bid walks with contractors and award bids, obtain DSA approval for those needed their review	August 1, 2014	Improvements requiring DSA approval have been prepared by Kwok Architects for submittal. RFB's have been prepared for all other work and submitted to Fac/OPs. Waiting for construction bid walk
0004	ALL	00	00	Obtain State Fire Training reaccreditation	Submit Self-Study, Schedule site visit	Dec 1 2014	Self Study & fee submitted, site visit is scheduled for Fall 2014
0005	ALL	00	00	Epand Voluntter Fire Skills with other Sonoma County Fire Agencies	Begin promotional program with Sonoma Co. Chief's Association	March 1 2014	Program with Sonoma Co Fire is been conducted as a pilot to demonstrate viability.
0006	ALL	00	00	During each calendar year, offer all courses required for State Fire Officer Certificate	Obtain Curriculum Committee approval for new courses and schedule	Met Fall 2013	All required courses have been approved by CC and have been offered effective Fall 2013
0007	ALL	00	00	Hire min. one Adjunct to develop On-line course(s)	Query existing Adjunct pool & other Fire Tech Directors of recruitment, conduct interviews, make selection, complete background process	Met Fall 2013	Adjunct has been hired , has taken required college training and is developing the class (Fire 76)

6.2a Program/Unit Conclusions

Location	Program/Unit Conclusions
Windsor	As identified in previous PRPPs, one of the main goals of the Fire Program is to make those improvements needed at the PSTC to operate the fire academy at this location. Since last year, five Request for Bids (RFB's) have been prepared and approved by Facilities Planning and are in the process of being implemented. Among the conclusions reached were that based on the bids provided the cost of the improvements were an estimated $150,000 and that given an annual contract cost of $26,000 a year to use the SRFDTT, the improvements would pay for themselves in 6 years.

6.2b PRPP Editor Feedback - Optional

6.2b Supervising Administrator/Manager Planning Conclusions

The program is continuing to go through a very dramatic period of change. Examples of some of the events that illustrate this include:

1. Replacement of our single F/T instructor who retired in December 2013. 2. Continued facility improvements to the PSTC to permit all academy instruction to occur at this location including: installation of a propane tank to fuel our Car Fire trainer, purchase of a compressor to fill our SCBA bottles and shipping contaniner to store our equipment, approval to purchase a carport to shelter our fire engines, hose and ladders, and approval to construct a concerte pad to conduct auto extrication and Roof Vent Prop to conduct ventilation training. 3. Continued expansion of our DE offerings including restoring Fire 74 (after the retirement of one of our on-line instructors) and developing Fire 76 to offer on-line in spring of 2015. 4. Updating and aligning the FFI academy to be consistent with the newly adopted State curriculum including any/all certification testing associated with the IFSAC/Pro-Board reciprosity agreements. 5. Replacement of the program Administrative Assistant (retiring on July 1 2014) . 6. Successfully completing our reacreditation with State Fire Training. 7. Promote the newly implemented Volunteer Fire Skills program for use as a training and screening tool for the agencies in Sonoma County that use Volunteer Firefighters.

It should also be noted that by consolidating instruction to the PSTC as identified in 2 above, consistency with the following District Initiatives is promoted including:

- Re-Engineering: It will reallocate existing resources to generate funding.
- Institutional Effectiveness: It uses planning as a tool to consolidate and refine the program we offer to improve institutional effectiveness and student learning
- Integrated Environmental Planning: By reducing travel between sites, it promotes best environmental practices by saving energy and resources.

6.3a Annual Unit Plan

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
0001	ALL	00	00	Hire a F/T Faculty to replace one retiring Dec 2013.	Obtain Admin Approval, begin recruitment process, conduct interviews, make selection, complete background process	By July 1, 2014	Admin approval & HR support
0001	Windsor	01	02	Hire a replacement Admin Assistant for the Fire Program	submit request to AA	July 1, 2014	Approval of Dean
0002	Windsor	00	00	Finish those site improvements needed to operate academy at the PSTC	Obtain DSA approval (for DSA projects) and award contracts for all RFB's prepared	Dec 31, 2013	Admin approval, support of Facilities Dept.
0004	ALL	00	00	Obtain reaccreditation as a regional training center with SFT	Arrange site reaccreditation visit	Dec 31, 2013	Time (ideally created by a F/T Fire Academy Coordinator)
0005	ALL	00	00	Expand offerings of Volunteer Skills with other So. Co. Fire Agencies	Begin program to promote with Fire Chief's Association	Dec 31, 2013	Approval of Business Services to expand program
0006	ALL	00	00	During each calendar year, continue to offer all courses required for State Fire Officer Certificate	Obtain CC approval for any courses updated by State Fire Training	Dec 31, 2013	Admin approval to offer additional courses
0007	ALL	00	00	Hire min. one Adjunct to develop On-line course(s)	Query existing Adjunct pool & other Fire Tech Directors of recruitment, conduct interviews, make selection, complete background process	Dec 31, 2013	Admin approval & HR support