☑ ◀ Show All Possible Responses ▶

⊗ **Response is required**

1. PROGRAM OVERVIEW

⊗ **Program Title & Code**

Program Title

▏ Fire Technology
(Max chars: 100)

Program Code

▏ 2133
(Max chars: 100)

⊗ **1a. Select the Chaffey Goals that directly relate and are MOST relevant to your program.**

Goals are numbered for the purpose of making reference points so that PSR writers can identify and locate which Chaffey Goals relate to their program. Goal numbers do not represent priority numbers.

☑ Goal 1: Equity and Success--Chaffey College will be an equity-driven college that fosters success for all students.

☑ Goal 2: Learning and Completion--Chaffey College will ensure learning and timely completion of students' educational goals.

☑ Goal 3: Community Opportunities and Needs--Chaffey College will develop and maintain programs and services that maximize students' opportunities and reflect community needs.

☑ Goal 4: Technology--Chaffey College will optimize the use of technological tools and infrastructure to advance institutional efficiency and student learning.

☐ Goal 5: Efficiency--Chaffey College will efficiently and effectively manage systems, processes, and resources to maximize capacity.

☑ Goal 6: Agility--Chaffey College will responsively adapt to changes in students' academic and career needs.

☐ Goal 7: Professional Learning--Chaffey College will prioritize and align professional learning for all employees to support the achievement of Chaffey Goals.

⊗ **1b. Describe how your program aligns with the Chaffey Goals. Please provide supporting statements and/or examples.**

Refer back to the Chaffey Goals marked above (e.g., Goal 4: supporting statements of how program aligns with this goal).

Goal 1:

The Fire Technology program aligns with Chaffey College Goals through equity meeting the needs of students regardless of their race, gender, or socioeconomic background.

The Fire Technology program fulfills the college's mission to inspire hope and success for our diverse fire service students by offering curricula and programs of study that improves lives and our community in dynamic, supportive, and engaging environments of educational excellence through our offerings of career and transfer courses that lead to employment in fire services industries. Fire Technology curricula combine occupational preparedness with academic proficiencies and include all the components of the District's Student Core Competencies and the District's Mission Statement. We provide students with equal access to quality career technical and transfer programs in a learning centered environment. Through the Fire Technology curriculum, students develop skills, and competencies, and gain knowledge leading to success in the workplace. Education is a lifelong commitment requiring training and retraining to keep current in the workplace and is necessary for survival in the 21st century.

Goal 2:

We serve students who are seeking jobs, keeping jobs, advancing in jobs, transitioning in jobs, and/or seeking further formal education. Our population includes re-entry students, DPS, EOPS, ESL students, single parents, displaced homemakers, economically/educationally disadvantaged students, and under-represented minorities. Full-time and adjunct faculty reflects the culturally diverse population of the community.

Preparation for successful job performance in the Fire Service is demanded of our students. The Fire Service industry demands employees who are not only generalist and able to cross train quickly, responding to the changing workplace, but also employees who is expert in specific job skills. Our students must have, and therefore, gain through Fire Technology curricula critical/creative thinking

skills, be technologically literate, and have strong communication skills, language skills, interpersonal skills, and job skills.

Goal 3:

The Fire Technology program evaluates our effectiveness in meeting the college goals by multiple means including our program- and course-level CLOs and assessments. Additionally, we solicit feedback from students, our advisory committee, and local employers' national registry (ICEMA) on the content and rigor of our certificates and degrees. We regularly collaborate to develop strategies for improved instructional methods and improvements to our content with special focus leading students to develop skills competencies, and knowledge that will result in success in the workplace. These discussions have resulted in many revisions to our curriculum and pedagogical/andragogic approaches over the three-year period covered in this PSR report.

Identified through the evaluative process it was determined that Veterans needs were not being met which resulted in an equity gap. Returning Veterans were unable to utilize funds from the Government for education to complete the EMT 11 course, since it was not directly associated with a degree program. This equity gap has been closed by including EMT 11 in the Fire Technology: Professional Firefighter A.S. Degree. Another equity gap was identified, that at the beginning of the last PSR period not all of the Fire Technology courses were CSU transferable, which had a negative impact of students transferring to CSULA for the Fire Protection Administration B.S. Degree Program. Now all of the Fire Technology Core and Non-Core courses, and EMT 11 units are now CSU transferable closing the equity gap for all students desirous of transfer to CSULA.

Goal 4/6:

We firmly believe that a successful fire department needs to have an inclusive and diverse workforce. While we recognize that the fire and emergency medical services (EMS) have made significant strides to improve inclusion and diversity, there is still work to do. An inclusive workforce provides diverse life experiences and ideas that can help you craft solutions to long-standing problems. With more experiences and different ideas, a department becomes more flexible, proactive and better able to adapt to new challenges, and bridging the gap from the current reality to a desired state require a commitment to diversity and inclusion.

We continue to have as a PSR VIP Goal to increase the number of female students enrolled in the Fire Technology Program. Over the past three years we have enjoyed an 84.1% increase in the number of female students in the program, and over six years 55.8% increase. Although these numbers are encouraging, it is the Programs continued goal to increase the number of females to obtain equity with male students.

PRIOR VIP GOALS STATUS/PROGRESS

🟥 1c. Please list the program's VIP Goals from the last PSR cycle, and report on the progress (complete, ongoing, etc.).

Goal 1. Increase the number of Associate Degrees and Certificates awarded in the Fire Technology Program. (Ongoing)

Goal 2. Expand the fire technology program at the Fontana campus to include all core and non-core courses needed to meet the requirements of the Professional Firefighter: Certificate of Achievement, and Professional Firefighter: Associate of Science Degree in a school year to improve student success. (Ongoing)

Goal 3. Develop a Paramedic Training Program and a Fire Prevention Academy. (Not Complete)

Goal 4. Enhance and supplement instructor knowledge by attending Fire Service training seminars and conferences. (Complete)

Goal 5. Establish a Fire Academy Program. (Delayed by the Executive Team) (Ongoing)

OTHER RESOURCES REQUESTS

🟥 1d.1 At any point during the past PSR cycle (last three years), did you have "other resources requests" that were funded by the Resource Allocation Committee?

If yes, proceed to questions 1d.2. If no, skip to section 2.

If you have items that were funded by Strong Workforce and Perkins, please mark "yes."

🔘 Yes
⚪ No

1d.2 If yes, did those purchases meet the program's intended purpose. Please explain.

Various tools and equipment were purchased to enhance program instruction by allowing students to manipulate and examine various types of equipment that they would be utilizing and encounter in their future career as a Fire Fighter or Prevention Specialist. Equipment purchased by Perkins and STW was a (TIC) Thermal Imaging Camera, Commercial Sprinkler heads, Wildland hand tools of various types, and a live fire simulator fire box to demonstrate fire behavior, flashover and backdraft conditions.

The tools and equipment purchased have been utilized in several of the Core and Elective courses in the program, and met Chaffey Colleges Goals 1-4 and 6.

2. EVIDENCE--EQUITY

The evidence section comprises of the following three distinct subsections: equity, program data (includes CTE data), and learning outcomes.

"Equity" represents the first element of the EVIDENCE component of the PSR evaluation. Please reference the Equity Data file to evaluate the following areas.

2a.1 Concerning GENDER/IDENTITY, identify important EQUITY developments and trends.

Review data over the last six years.

Response Legend:
1 = Increase   **2** = Decrease   **3** = No Change (plus or minus 2%)   **4** = No or Insufficient Data Available

	1	2	3	4
Number of enrollments by males	✔			
Number of enrollments by females	✔			
Success rate by males	✔			
Success rate by females	✔			
Retention rate by males	✔			
Retention rate by females	✔			

2a.2 Concerning RACE/ETHNICITY, identify important EQUITY developments and trends.

Review data over the last six years.

Response Legend:
1 = Increase   **2** = Decrease   **3** = No Change (plus or minus 2%)   **4** = No or Insufficient Data Available

	1	2	3	4
Number of enrollments by African American	✔			
Number of enrollments by Asian		✔		
Number of enrollments by Caucasian	✔			
Number of enrollments by Hispanic	✔			
Number of enrollments by other race/ethnicity		✔		
Success rate by African American	✔			
Success rate by Asian				✔
Success rate by Caucasian	✔			
	1	**2**	**3**	**4**
Success rate by Hispanic	✔			
Success rate by other race/ethnicity		✔		

	1	2	3	4
Retention rate by African American	✔			
Retention rate by Caucasian	✔			
Retention rate by Asian				✔
Retention rate by Hispanic	✔			
Retention rate by other race/ethnicity		✔		

⊞ 2a.3 Concerning AGE GROUP, identify important EQUITY developments and trends.

Review data over the last six years.

Response Legend:
1 = Increase   **2** = Decrease   **3** = No Change (plus or minus 2%)   **4** = No or Insufficient Data Available

	1	2	3	4
Number of enrollments by age group, 19 or younger	✔			
Number of enrollments by age group, 20-24	✔			
Number of enrollments by age group, 25-29		✔		
Number of enrollments by age group, 30-39	✔			
Number of enrollments by age group, 40-49	✔			
Number of enrollments by age group, 50 or older			✔	
Success rate by age group, 19 or younger	✔			
Success rate by age group, 20-24	✔			
	1	2	3	4
Success rate by age group, 25-29	✔			
Success rate by age group, 30-39				✔
Success rate by age group, 40-49				✔
Success rate by age group, 50 or older			✔	
Retention rate by age group, 19 or younger	✔			
Retention rate by age group, 20-24	✔			
Retention rate by age group, 25-29		✔		
Retention rate by age group, 30-39				✔
Retention rate by age group, 40-49				✔
Retention rate by age group, 50 or older			✔	

⊞ 2a.4 Concerning OTHER CHARACTERISTICS, identify important EQUITY developments and trends.

Review data over the last six years.

Response Legend:
1 = Increase   **2** = Decrease   **3** = No Change (plus or minus 2%)   **4** = No or Insufficient Data Available

	1	2	3	4

	1	2	3	4	5
Number of enrollments by students with disabilities				✔	
Number of enrollments by first generation	✔				
Number of enrollments by economically disadvantage	✔				
Success rate by students with disabilities	✔				
Success rate by first generation	✔				
Success rate by economically disadvantage	✔				
Retention rate by students with disabilities					✔
Retention rate by first generation		✔			
Retention rate by economically disadvantage	✔				

✪ 2a.5 Over the last three years, has the number of course sections offering zero-cost textbooks increased, decreased, or remained the same?

Response Legend: **1** = Increase **2** = Decrease **3** = No Change			
	1	**2**	**3**
Number of sections with zero-cost textbooks			✔

✪ 2b. Considering the evidence provided, elaborate on how the program is providing equity in educational opportunities or support to students and/or identify disparities in equity. Provide specific data that supports your answer.

If there is a disparity in equity, do not discuss responsive strategies in this section. This is addressed in the STRATEGIC PLANNING section (item 7d).

Over the three-year period covered in this PSR report, the Fire Technology Program has experienced an increase of 15.2% in total enrollments, and over the past six years an overall increase of 34.5% of all Races and Ethnicities. During the Covid-19 Pandemic a one year drop of 10% was observed, this reduction in enrollments has been observed College wide, for the past year the College had a decrease of -2.7% and -2.0% over the past three years.

The program continues create pathways by offering program courses which are CSU transferable to CSULA for the BS program Fire Protection Administration. The Program is has moved to 99% Online and Hybrid, in conjunction with Fast Track courses which creates a path for students to complete the core and elective program requirements within two semesters. Four FIRETEC courses could not be offered online due to restrictions from State Fire Marshall Training since Chaffey College is not an approved Area Regional Training Program. This has negatively impacted student success and completion. Students have left Chaffey and enrolled at other Colleges that can serve their needs for completion so they can apply for employment with the State Certificates received upon completion.

We have expanded our Dual Enrollment from EMT 11 to include FIRETEC 1 and FIRETEC 5 creating a pathway for High School students interested in the Fire Service as a career to begin their journey while still in High School. Our pathway includes recommendations for general education courses to be complete while still attending High School. The ongoing benefit of dual enrollment is students can enter Chaffey College with two core courses completed and numerous general education courses completed. The College will also benefit with an increase in enrollments and and the FTES that are generated.

During the Pandemic from March 2020 to the time of this PSR writing all face to face class meetings have been cancelled, this prevented the Fire Technology Program offering planned evening courses at the Fontana Campus as identified in our VIP Goals. Once normal face-to-face instruction resumes, offering evening courses will be re-evaluated.

Program retention increase slightly to 1.8% over all races and ethnicities enrolled in the program, and over the past two years the retention in the program remained unchanged at 95.3%. Student retention is directly connected to student success. The program instructors are not content with the 95% retention rate and will continue to work on various methods and strategies to improve student retention in all courses. We have planned to increase our communication with students by contacting students early if assignments are late or not being turned in by offering support and directing students to the appropriate student service. We feel by identifying a potential problem early we can assist the student to make adjustments to stay in the course. We have implemented this program wide and have been able to assist numerous students that would have dropped a course to complete successfully.

Enrollment by students with disabilities had a three year increase of 35.3% and first generation student enrollments also increased by 21.5% over the three year period. It was noted that economically disadvantaged students increased in the second year by 20.0% and then dropped -13.7% in the third year with an average increase of 3.5% over the three year PSR period. We feel this was due the many challenges faced by this student group during the Covid-19 Pandemic over the last year. As the economy begins to open again, we are hopeful that economically disadvantage students will begin to enroll into the Program. Retention of students with disabilities over the three year PSR period increased 21.4% with an 4.7% increase in success rate. The first generation students retention rate also increased slightly 4.0% and their success rate increased to 10.7%. Students that are economically disadvantaged had a 2.9% increase in retention and a 10.3% increase in their success rate.

The retention and success rates for the above groups although increases were enjoyed by the Program over three years, we feel these numbers should have been higher if not for the Covid-19 outbreak and the challenges that came with the Pandemic for our students even though the majority of courses were offered online.

The fire service is a predominately male dominated career, even with an increase of females entering this workforce, the equity gap between male and female is large. The male and female equity gap can also be seen at Chaffey College in the fire technology program. In the 2015-2017 cycles there were 716 male students and 63 female students enrolled in the program. The Program as identified in our VIP goals worked on increasing the number of female students enrolled in the program, and over the three years of the previous PSR the Program enjoyed an increase of 84.1% in female enrollments. Even with this increase there is still an 83.2% gap in equity between male and female enrollments, the program will continue to work on narrowing this disparity.

We have ethnically diverse faculty who are bilingual which leads us to better understanding of and connection to our diverse student populations. This allows us the ability to focus on reaching student populations that traditionally are marginalized and under represented. This is evident by the overall success rate increase of 7.1% for the Program. The one year success rate did decrease to -6.0% and was due in part to converting to Online asynchronous instruction along with the personal struggles that students faced during Covid-19 having to take care of sick family members, loosing employment and having to deal with varying degrees of isolation and depression.

Enrollments by age group illustrated that an increase was enjoyed over the three year PSR period. Students 19 and younger increased to 34.8%, 20-24 year old increased to 16.5%, 30-39 year old student increased 111.8%. A decrease of -32.% in the 25-29 year old age was observed, and 40-49 year old students also decreased -86.7% over the three year period. It was noted that the number of students of this age group has been consistently reducing. These students have established careers and are returning to enroll into specific courses related to their employment. Retention for these groups increased slightly except for the 25-29 year old group experienced a slight decline of -2.8%. The success rate for the 19 and younger group dropped slightly to -1.4%. This slight decrease the program feels is in part to the dual enrollment of High School student group being affected by School closures and accessibility to Wi-fi and a computer .

Enrollments by African American increased 15.15% from year one to year two, but declined -10.5% in the third year, but over the course of the PSR period there was a 3.0% increase. Enrollments by Hispanic students into the Program increased from year one to year two 36.7%, but then declined from year two to year three -12.3%. Overall the program enjoyed a 19.9% increase in Hispanic enrollments over the PSR period.

Retention for African American students declined -3.0% over the three year PSR period, however, from the second year to the third year the program enjoyed an increase of 5.1% in retention. Students of Hispanic ethnicity had an increase of 3.0% in retention or the PSR period.

Success Rate for African American students increased 5.8% over the PSR period, and students of Hispanic ethnicity increased by 12.3% over the PSR Period.

Even though the program enjoyed increases in enrollment, retention, and success of African American students, the program feels there is still a need to support men and women of color as they enter the program. The retention and success rates should be by the same value, yet they are not the same. The program will actively work with African American students providing support to ensure retention will equal success.

One ethnic group has traditionally been under represented in the Fire Technology Program, that is the Asian student. This group is under represented in the Fire Service due to cultural and family guidance and is evident in the Fire Technology Program. Often Asian students are encouraged by family to pursue different careers other than service careers.

Caucasian students enrollments has increased 3.5% over the three year PSR period with retention increasing slightly 0.1% and success reduced by -4.4%. These numbers indicate that the program has focuses on other race/ethnicity groups and needs to display equity by providing the same support to ALL students in the program no matter what their race/ethnicity. The program will ensure courses are meeting the needs of students and instructors will regularly communicate with all students with the goal of ensuring student retention and success are equal.

First Generation students increased 21.5% over the three year PSR period. Retention over the same three year period increased by 4.0% and their success rate increased to 10.7%. The figures for first generation students indicate that the program has enjoyed an increase yet the retention rate has increased only slightly. There could be a number of factors that affect this number, students may enter the program and then decide to pursue another pathway and leave the program. Students may enroll into the program and do not continue and drop. The difference between the enrollment and retention is decline of -81.39%. As with the other groups, instructors within the program must be diligent in communicating early and regularly with students of first generation attending College. These students could be from any of the identified race/ethnicity groups, how much more important it is to support All students focusing on them as an individual, in that way we will have true inclusion within the Fire Technology Program.

In an effort to reduce cost of textbooks for students the Fire Technology Program now only requires digital textbooks for students, which has reduced the cost below $90.00 for students. The National Fire Academy FESHE (Fire and Emergency Services Higher Education) Model Curriculum Associate's Core and Non-Core identify which core and non-core courses need to be completed to obtain an A.S. Degree. The approved text for the Core and Non-Core curriculum is identified by the NFA. At this time zero cost textbooks are not available. It is our hope that the NFA will move in a direction that is guided by student needs and approve zero cost textbooks in the future.

We feel that the current success rates in enrollment, retention, and success although encouraging does not reflect the ongoing struggles and needs of our ethnically diversified student population enrolled in the fire technology program. Students attending Chaffey College are diverse and come from various socioeconomic backgrounds. Taking advantage of Faculty Success Center, Canvas Training, and other activities has provided the Fire Technology program with numerous strategies to enhance instruction which in turn encourages student learning. Implementation of the values of 'PRIDE' and 'Hope', 'Engage', and 'Succeed' in the Fire Technology program has had a positive impact with the quality of instruction and with student learning. The Fire Technology Program values are "COURAGE" "INTEGRITY" "PROFESSIONALISM", these values are the same values our students will need when entering the Fire Service, and will use throughout their lives and while here at Chaffey College. The Fire Technology program meets regularly to discuss program currency which includes strategies and methods that could improve student outcomes. These strategies, once implemented, are reviewed to identify outcomes weather positive or negative with modifications being made as needed which will bridge gaps in equity and reduce disparities.

Participating in campus-wide committees and shared governance enables FIRETEC/EMT instructors to gather information helpful for curriculum development, to become knowledgeable about initiatives affecting all programs and students, and to collaborate with other programs and management. FIRETEC/EMT faculty members stay informed on various college issues and provide input into decision processes. These professional development opportunities provide us with innovative learning ideas, as well as the understanding of issues and services that lead students to succeed and enter into careers and/or transfer to further education. In addition, we stay up-to-date in order to achieve our department goals.

It is the Fire Technology program intent to continue to provide quality service, and better serve those communities served by Chaffey College by offering Fire Technology courses with the implementation of enhanced instructional methods such as presenting equipment that is utilized in the fire service which are not limited to; thermal imaging cameras, nozzles, adapters, weather measurement devices, and building construction models. Adjustments in scheduling and the continued use of Fast Track and Hybrid courses will provide students the prospect to obtain their Associates Degree in two years.

3. EVIDENCE--PROGRAM DATA

"Program Data" represents the second element of the EVIDENCE component of the PSR evaluation. Please reference the Program Data file to evaluate the following areas.

⊞ **3a. Identify important PROGRAM developments and trends.**

Review data over the last six years.

Response Legend: **1** = Increase **2** = Decrease **3** = No Change (plus or minus 2%) **4** = N/A **5** = No or Insufficient Data Available					
	1	**2**	**3**	**4**	**5**
Overall Enrollment	✔				
Overall Retention	✔				
Overall Course Success	✔				
FTES	✔				
All ADT degrees awarded				✔	
All AA degrees awarded				✔	
All AS degrees awarded	✔				
All degrees awarded	✔				
	1	**2**	**3**	**4**	**5**
All Certificate Completion	✔				
Average units earned, ADT degree				✔	
Average units earned, AA degree				✔	
Average units earned, AS degree	✔				
Average units earned, all degrees	✔				
Average units earned by certificate(s)	✔				
Overall average # of semesters to award degree(s)		✔			
Overall average # of semesters to award certificate(s)		✔			

⊞ **3b. Considering the evidence provided, explicitly identify specific program strengths and provide data/evidence that supports your answer.**

This is an assessment of your program's health. Be sure to address any items marked "increase" and/or "no change," if "no change" is a positive reflection of the program (e.g., provide data for stable or increased enrollment, retention, success patterns, or data for increase number of certificates/degrees).

Programs may provide additional information or data that has not been included in their IR files.

The Fire Technology Program continues to recognize the need to increase our outreach to diverse/ethnic groups, including women, and continue with outreach programs to potential student sources (high schools, area events that focus on the high school population. More outreach through the District's Marketing Department, articulation meetings with local-area feeder high schools, our Career Technical Education Counselors and Chaffey's counseling department, etc.

The Fire Technology Program has observed the benefits of pursuing the above items. Over the past three years we have enjoyed an increases in enrollments, retention, and success rates. As mentioned previously in this PSR the Fire Technology Program feels that these three areas would have had higher numbers, but with the Pandemic had a negative impact on the program with increases being noted.

Enrollments: Three year increase, 15.2% and six year increase 34.5%.

Retention: Three year increase, 1.8% and six year increase 2.3%.

Success: Three year increase, 7.1% and six year increase 24.4%.

Total FTES: Three year increase, 12.4%, and six year increase 29.5%.

The increases enjoyed have been the result of the hard work by program instructors to provide a quality product (courses) to our customers (students). This has been accomplished in part by obtaining and presenting tools and equipment utilized in the fire service such as but limited to; thermal imaging camera, nozzles, adapters, weather measurement devices manual and electronic, live fire behavior box, and building construction models. The instructional aids have created a connection from the subject being covered in the text to real world application. It creates an excitement with the students what they can look forward to utilizing in their future career in the Fire Service.

The Fire Technology Program has worked consistently with Dual Enrollment to provide FIRETEC courses to High School students providing a Pathway for success. It is the intent of the Fire Technology Program to make available through Dual Enrollment additional course to other High Schools Districts in the Chaffey Service Area. The three year increase in FTES of 12.4% is reflective of dual enrollment.

The conversion to online instruction has been positive over all for most students allowing them to complete course work at their own pace during the course. Preliminarily, program faculty have observed an increase in student success with higher grades being awarded than when some of the courses were conducted face-to-face.

The FIRTEC programs continue to work closely with our Advisory Committee which is comprised of Fire Departments and Ambulance Companies. The Advisory Committee's guidance on trends within the Fire Service and EMS continues to shape and guide the program. Unfortunately, the College cannot satisfy the request of local Fire Departments to meet State Fire Training directives, provide Professional Development, thus failing to meet their needs. The Advisory Committee does guide the FIRETEC courses provided at the College in conjunction with the National Fire Academy (FESHE) Core and Non-Core course list, which ensures program currency.

The Fire Technology Program continues to be active in local Advisory Committee meetings with BVROP and Fontana Unified School District. These meetings are an opportunity to share observations of students entering Fire Technology Program from the High Schools, by providing recommendations to better prepare students entering Community College.

The FIRETEC program continues to work with the CTE counselors, Counseling, Veterans Center keeping them informed with program changes so they can better serve students and future clients. Program wide students meet virtually with CTE Counselors to discuss Ed Plan balance, Fire Academy requirements (other Colleges), and graduation information. We have also worked with the GPS Center on numerous occasions on better ways to assist students in pursuing a career in the Fire Service and as a Paramedic. The Library has worked with the FIRETEC program to make available online resources for both EMT and FIRETEC magazines for research. The FIRETEC program continues to work with the Multi-Disciple Center when budget allow to provide a subject mater tutoring, which has been inconsistent. It is the programs hope that we can again have a student tutor to assist current and future FIRETEC students.

The FIRETEC program already enjoys diversity and representation in various areas, but there is institutionally low enrollment of African Americans, Native American, Middle Eastern and Asian American students and especially female students from these groups. The program continues to advertise and inform students of the program and future benefits of a career as a Fire Fighter or Prevention Specialist.

The fire service is a predominately male dominated career, even with an increase of females entering this workforce, the equity gap between male and female is large. The male and female equity gap can also be seen at Chaffey College in the fire technology program. In the 2015-2017 cycles there were 716 male students and 63 female students enrolled in the program. As identified in our VIP goals, the Program has worked to increase the number of female students enrolled in the program. Over the three years of the previous PSR, the Fire Technology Program enjoyed an increase of 84.1% in female enrollments. Even with this increase there is still an 83.2% gap in equity between male and female enrollments, the program will continue to work on narrowing this disparity, but was pleased to see such a large increase.

Degrees and Certificates of Achievement

The Fire Technology: Professional Firefighter AS Degree increased from year one (12) to 27 year two and three an increase of 125%. The program was surprised to see no change from year two and three, we regularly remind students to have a transcript review and submit all needed form for graduation in a timely manner. It is unclear what affect Covid-19 had on A.S. Degree awards, but the one year decrease experienced during the Pandemic had an impact.

The Fire Technology: Professional Firefighter Certificate of Achievement increased from year one (15) to twenty (20) year two and twenty-eight (28) year three, a 40.0% increase. A total increase of 133.33% was enjoyed by the program over the three year PSR period. Some students in the program only pursue the Certificate of Achievement which is needed to attend various area Fire Academies. Instructors emphasize the importance of obtaining a Degree which increases the base wage of a Firefighter.

The Fire Prevention Inspector Certificate of Achievement had three (3) awarded in the first year of being available. Year two, six (6) were awarded, and in year three (4) were awarded. From year one a 100.0% increase and from year two to year three and a decrease of -33.33%. This reduction was due to the FIRETEC 420-423 courses being cancelled due to Covid-19 College restriction to in person class meetings. These courses utilize the State Fire Training Curriculum, State Fire Training will not allow Chaffey College to offer these courses online because Chaffey College is not an approved Area Regional Training Program (ARTP). As a result our students could not complete these courses at Chaffey College and enrolled to other Colleges that are ARTP's to complete these courses in order to purse employment opportunities. It is the continued hope of the Program that Chaffey College will move forward becoming an ARTP, which would open numerous avenues to offer courses.

Total Degrees and Certificates combined that were awarded by the Fire Technology Program enjoyed an increased of 96.66% over the three year PSR period. Year one to year two had an increase of 76.66%, and from year two to year three reflected an increase of 11.32%. As the College begins to move back to some normalcy, the program expects these numbers to increase over the next PSR period.

Average Units by Professional Firefighter Degree

2017-2018: 70.9 Units

2018-2019: 79.0 Units

2019-2020: 72.9 Units

The data indicates that the amount of Units taken to complete has increased from year one through year two. This increase would support the increase in retention and success rates of students in the program. The third year decrease also supports the one year decline in enrollments and retention due to the affects of the Pandemic. With the new change for the AS Degree now including EMT 11 to provide equity for our Veterans the number of Units completed will increase in total. The program also noted that students returned to Chaffey to change career paths. Most of these students had been awarded an AS and BS degree from other Colleges but would support the increase of all units above what is needed to graduate. Additionally, student have completed the AS Degree requirements but also pursued additional Certificates of Achievement in Fire Prevention and Emergency Medical Provider Certificates of Achievement. The Fire Prevention Certificate of Achievement became available in 2017/2018.

Average Units by Professional Firefighter Certificate of Achievement

2017-2018: 61.6 Units

2018-2019: 64.5 Units

2019-2020: 63.8 Units

Over the PSR period the there was an increase in total Unit accrual of 3.57%. From year one to year two, and an increase of 4.70%, however, from year two through year three a slight decrease was experienced of -1.08%. The program was experiencing an increase each year until 2019/2020. The decrease of -1.08% was due in large part to the effects of the Pandemic with the decline of enrollments of new students and returning students to the program.

Average Units by Fire Prevention Inspector Certificate of Achievement

2017-2018: 59.3 Units

2018-2019: 73.9 Units

2019-2020: 73.5 Units

From year one through year three we enjoyed an increase of 23.94%. The increase from year one to year two was 24.62% and from year two through year three was a slight decrease of -0.54%.

In the 2017/2018 school year was when the Fire Prevention Inspector Certificate of Achievement became available and students began working towards completing in the Spring. The primary courses for the FPICA are offered in the Spring semesters, and with Covid-19 restrictions adopted by the College two semesters, Spring 2020 were cancelled. The Fire Prevention Certificate could not be awarded since students were unable to complete the required courses due to College restrictions on class meetings. As mentioned in a previous section, students left Chaffey College and enrolled into other Programs to complete these courses in order to pursue employment opportunities as essential workers.

⊗ 3c. Considering the evidence provided, explicitly identify specific areas in which the program can improve over the next three years. Provide specific data/evidence that supports your answer.

Be sure to address any items marked "decrease" and/or "no change," if "no change" reflects an area needing improvement (e.g., provide data for decreased enrollment patterns or the number of certificates/degrees earned). You are only be asked to identify areas of improvements. You will be asked to address the strategies that the program plans to implement in the STRATEGIC PLANNING section (item 7d).

Programs may provide additional information or data that has not been included in their IR files.

It is the Fire Technology program's intent to continue to provide quality service, and better serve those communities served by Chaffey College by offering Fire Technology courses by implementing enhanced instructional methods to enabled students who have secular employment to attend Fire Technology courses without having to adjust work schedules to attend day courses and those who are unable to come to and attend courses on campus. These adjustments will also serve those students desirous of transfer to California State University and provide the prospect to obtain their Associates Degree in a reduced amount of time.

The following is a list of proactive measures we will use to increase our enrollment, retention, and success rates:

- The Fire Technology faculty meets regularly to discuss methods to implement to enhance communication and connectivity as well as supplemental instruction for all types of learners. This platform serves to support students who may not have ordinarily become 'completers.' By continued evaluation and re-evaluation of methods and techniques for student success, we have seen an increase. However, even though the Fire Technology Program has had an increase in enrollments, retention, and success rates we will continue to work toward strategies that lead to

increasing student retention and success. As mentioned in the retention section, we are going to make it a priority to 'talk' with the student informally to develop a rapport and a line of communication that will encourage support. Without communication, we will only be guessing why a student is missing class, or not turning in assignments.

- Fire Technology faculty have discussed student success, professional development, curriculum, student learning outcomes and assessments, new trends in technology, and successes and needed changes. Fire Technology will proactively work with the strategies developed within Chaffey's Strategic Planning Model as the District learns of ways to reach under represented populations.

- We are also going to make it a priority to 'talk' with the student informally to develop a rapport and a line of communication that will encourage support. Without communication we will only be guessing why a student is missing class, not turning in assignments etc.

- The program will be utilizing Social Media as another way to communicate what is going on within the Program and Chaffey College. Information will be provided for testing opportunities to enter the Fire Service either with a municipal Fire Department or as a Wildland Firefighter. Within the community it is not common knowledge that Chaffey College has a Fire Technology Program, it is the programs goal to change this misconception.

- The Fire Technology Program proposes to offer; (1) Online and Hybrid courses, (2) Fast-Track course, (3) Online Synchronous courses.

- The Fire Technology Programs continues to recognize the need to increase our outreach to diverse/ethnic groups, including women, and continue with outreach programs to potential student sources (high schools, area events that focus on the high school population. More outreach through the District's Marketing Department, Social Media, articulation meetings with local-area feeder high schools, our Career Technical Education Counselors and Chaffey's counseling department, etc.

- The fire service is a predominately male career, even with an increase of females entering this workforce, the ratio male to female is large. The male and female gap can also be seen at Chaffey College in the fire technology program. In the 2015-2017 cycles there were 716 male students and 63 female students enrolled in the program. The Program as identified in our VIP goals worked on increasing the number of female students enrolled in the program, and over the three years of the previous PSR, the Program enjoyed a significant increase of 84.1% in female enrollments. Even with this increase there is still an 83.2% gap between male and female enrollments, the program will continue to work on narrowing this disparity promoting inclusion. What will be the benefit of the inclusion of females with a fire department? An inclusive workforce provides diverse life experiences and ideas that can help craft solutions to long-standing problems. With more experiences and different ideas, a fire department becomes more flexible, proactive and better able to adapt to new challenges. When the makeup of a fire department reflects the makeup of your community, the department can provide a higher level of service because your personnel better understand community needs.

- It is the Fire Technology program intent to continue to provide quality service, and better serve those communities served by Chaffey College by offering Fire Technology courses with the implementation of enhanced instructional methods such as presenting equipment that is utilized in the fire service which are not limited to; thermal imaging cameras, nozzles, adapters, weather measurement devices, and building construction models. Adjustments in scheduling and the continued use of Fast Track and Hybrid courses will provide students the prospect to obtain their Associates Degree in two years.

- A current VIP Goal for this PSR is to establish an AS-T or AA-T with CSULA for Fire Technology, currently, there is no AS-T or AA-T on record with the Chancellor's Office. It will be good for the Fire Technology Program and our students if the Program at Chaffey College will be the first. When successful, this would complete a three part "Pathway" for our students. The first leg of the journey would be "Dual Enrollment" followed by receiving a "Degree for Transfer" at Chaffey College, and finally completing at CSULA with a B.S. Degree in Fire Protection Administration. This pathway would provide a student the knowledge and skills to become a Firefighter and then take advantage of promotional opportunities as they become available.

We predict that the items listed above will help with retention and success rates for all students in the Fire Technology Program.

4. EVIDENCE--Career & Technical Education (CTE)

✴ 4a. Is this a CTE program?

If yes, proceed to questions 4b-4e. If no, skip to section 5.

● Yes ○ No

Labor Market Information (LMI): Regional Job Outlook (If Applicable)

4b. Identify important CTE PROGRAM developments and trends.

Response Legend: 1 = Middle Skill 2 = Above Middle Skill		
	1	2
CTE: Projected Occupational Growth		✔

4c. Please reflect on projected occupational growth. Are entry-level and median hourly earnings 10% below or 10% above regional living

wages? Please explain and provide specific data that supports your answer.

This is an opportunity to discuss middle and above middle occupations and whether these occupations are projected to grow or decline.

Programs may provide additional information or data that has not been included in their IR files.

In 2018, there were 2,992 jobs in the fire academy occupational group in the Inland Empire/Desert Region (IEDR). This group is projected to increase employment by 4% by 2026. Employers are projected to have 159 annual job openings to fill new jobs and backfill jobs that workers are permanently vacating (includes occupational transfers and retirements) in the Inland Empire.

Los Angeles County (LA County) had two and a half times more fire academy occupation group jobs than the IEDR in 2018. LA County employment will increase by 8.3% by 2026 and is expected to have 649 annual job openings over the next five years. The projected occupations growth for Fire Inspectors/Investigator in Southern California area is 7.7%.

The entry-level wages for the occupations in this group are above the $25.00 per hour and vary by county. In the IEDR the entry level wage is $28.95 an hour with an average annual wage of $60,195.00. In Los Angeles County the entry level wage is $40.12 an hour, with an average annual wage of $83,441.00. In Orange County the starting hourly wage is $38.12 an hour, with an average annual earnings of $79,286.00.

These figures indicate that the future job potential for students is available, and the Fire Technology Program will provide the needed training which will enable students to be competitive entering the work force as a Firefighter, Fire Inspector or Prevention Specialist.

The Fire Service industry demands employees who are not only generalist and able to cross train quickly, responding to the changing workplace, but also employees who is expert in specific job skills. Through the Fire Technology curriculum, students develop skills, and competencies, and gain knowledge leading to success in the workplace.

External Oversight: Advisory Committee Information (If applicable)

Programs that have an active advisory committee must complete this section.

4d. Does your program have an active Advisory Committee (whether on campus or external) that informs the direction and/or operations of the department? If "Yes" Advisory Committee meeting minutes within the LAST 6 MONTHS must be included as an attachment to this form.

◉ Yes   ○ No

4e.1 Has the Advisory Committee recommended changes to your program that align with a current or emerging industry?

◉ Yes   ○ No

4e.2 If yes, what are the recommendations?

All Career Technical Education (CTE) programs, including Fire Technology are required to have yearly Advisory Committee meetings to ensure currency and rigor within individual programs. These committees are made up of knowledgeable and committed professionals from the Rancho Cucamonga Fire Department, San Bernardino County Fire Department, Chino Valley Fire Department, Ontario Fire Department, and other Emergency Service Agencies. The annual meeting was not held during 2020 due to the Pandemic. A meeting is scheduled for March 29, 2021.

The FIRETEC/EMT Advisory Committee acts as a steering committee, informing FIRETEC/EMT of the current and future needs of industry and educational groups. Our impressive advisory committee is made up of knowledgeable and committed volunteer professionals from local businesses and industries and educational institutions. We meet annually to discuss trends in the workforce and employment and employability standards. Using Labor Market studies and projections and individual experiences, these professionals offer advice and support that contribute significantly to FIRETEC/EMT's program improvement. Together the faculty and other committee members develop best practices for measuring our curriculum effectiveness and currency. Among topics routinely discussed are skills assessments and recommended course and curriculum improvements. Routinely but especially over the three-year period covered in this PSR report we have updated and developed courses, certificates, and degree programs. FIRETEC/EMT is pleased that our Advisory Committee commends the department in its content and approach for training students for industry essential employment, maintenance and upgrading of job skills, and competencies necessary for upward mobility. The committee routinely provides recommendations on topics from specific to course/subject material important to their industry to internships and training programs available to our students.

Together the faculty and committee members develop best practices for measuring our curriculum effectiveness and currency. Among topics routinely discussed are skills assessments and recommended course and curriculum improvements. Routinely but especially over the three-year period covered in this PSR report we have updated and developed courses, certificates, and degree programs. Their contributions have provided valuable partnership and diverse exchange of ideas, information, and feedback concerning the needs of the fire service and emergency medical industry. The dialog from these meetings will assist the Fire Technology and Emergency Medical Technician Programs to identify potential changes.

At the past Advisory Committee Meeting our local Fire Department partner Rancho Cucamonga Fire Department was directed by California State Fire Training to align with a Community College for a Fire Academy (ARTP). The Rancho Cucamonga Fire Department then approached Chaffey College with this partnership and laid out the mutual benefits. The ARTP would meet the needs of our students to become trained Firefighter I and II utilizing the Rancho Cucamonga state of the art Training Facility. The Academy Director position was to be a shared cost with the College and Joint Powers. Professional development of local Fire Departments which would have potentially included Rancho Cucamonga, Ontario Fire Department, Chino Valley Fire Department and provided funds

directly to the college. The College would have enjoyed an increase in FTES form Students attending the Academy and for Professional Development. As an ARTP the Fire Technology Program could offer State Fire Training Curriculum in Online format. This was an opportunity to plan for the future but was destined to stay in the past.

The College did not meet the needs of our Students, Local Fire Departments, Fire Technology Program, and Curriculum growth by not moving forward with the Program Initiation and deferred to an unknown future date, truly a missed opportunity. As a result of the deferral, the Rancho Cucamonga Fire Department will move forward alone and align with another College for Professional Development.

5. External Oversight: External Regulations (If applicable)

External regulations apply to areas with outside accrediting agencies. If you DO NOT have external regulations, answer "no" on question 5a and skip 5b.

⊗ 5a. External Agency

Does the program have external regulations?

◉ Yes   ○ No

5b. External Agency Information

If yes, please provide the following information:
a) Name of Agency
b) Date of last review
c) Recommendations made
d) Any budgetary or institutional impacts from the recommendations
e) Progress on recommendations
f) Date of next review
*Note: more than one external agency can be added in the same field if needed.

National Fire Academy FESHE (Fire and Emergency Services Higher Education) Model Curriculum Associate's Core and Non-Core identify which core and non-core courses need to be completed to obtain an A.S. Degree. The Fire Technology Program is not audited by the NFA. Recommendations are made by committee or through updates via the U.S. Fire Administration

U.S. Fire Administration

16825 S. Seton Ave., Emmitsburg, MD 21727USA

800-238-3358
301-447-1000

https://www.usfa.fema.gov/training/prodev/model_courses.html

6. EVIDENCE--LEARNING OUTCOMES

"Learning Outcomes" represents the third element of the EVIDENCE component of the PSR evaluation.

⊗ 6a. Please identify which of the following MANDATORY components have been completed by checking the appropriate boxes.

The Outcomes and Assessment Committee will verify if mandatory components have been fulfilled.
If you have any questions about learning outcomes, please refer to Chaffey College's Outcomes and Assessment website or email Jo Alvarez at jo.alvarez@chaffey.edu

☑ Current COURSE LOs for every course have been entered into Taskstream's "Course Learning Outcomes (CLOs) Workspace" for each course.

☑ Current COURSE LOs have been mapped to Institutional Learning Outcomes into Taskstream's "Course Learning Outcomes (CLOs) Workspace."
☑ Current PROGRAM LOs have been entered into Taskstream's "Program Learning Outcomes (PLOs) Workspace."
☑ Current PROGRAM LOs have been mapped to Institutional Learning Outcomes in the "Program Learning Outcomes (PLOs) Workspace."
☑ Current PROGRAM LOs have been mapped to align courses to Program LOs (Curriculum Map) in Taskstream's "Program Learning Outcomes Workspace."

✖ 6b. Have you uploaded a current Chronological Assessment Plan (CAP) into the "Program Learning Outcomes (PLOs) Workspace?"

A CAP is a learning outcomes assessment schedule.

"Current" is defined as two assessment cycles. This means CAPs should project out at least SIX YEARS.

● Yes
○ No
○ Comment: [   ]

✖ 6c. Three-year cycle

Do you evaluate all courses within the three-year period?

● Yes
○ No
○ Other: [   ]

✖ 6d. Are all COURSE LO assessment results from fall 2017 through fall 2020 entered into Taskstream?

● Yes
○ No
○ Other: [   ]

ASSESSMENT REFLECTION

Look over your learning outcomes assessment results for the various COURSES in your program(s).

✖ 6e. Based on learning outcomes assessment results, explicitly identify program strengths. Provide specific data that supports your answer.

Pay special attention to learning outcomes that HAVE been met.

> The Fire Technology program meets regularly to discuss program currency which includes strategies and methods that could improve student outcomes. These strategies, once implemented, are reviewed for effectiveness and to identify outcomes whether positive or negative with modifications being made as needed. We regularly collaborate to develop strategies for better teaching and improvements to our content with special focus leading students to develop skills competencies, and knowledge that will result in success in the workplace. These discussions have resulted in many revisions to our curriculum and pedagogical/andragogic approaches over the three year period covered in this PSR report.

> The program has met the Learning Outcomes established for the Program and Courses,

✖ 6f. Based on learning outcomes assessment results, explicitly identify areas in which the program(s) can improve. Provide specific data that supports your answer.

Pay special attention to learning outcomes that HAVE NOT been met.

> Fire Technology faculty regularly discuss student success, curriculum, course learning outcomes and assessments. Recent and ongoing discussions have centered on the best way to assess outcomes since we are not meeting face-to-face in the classroom, and all courses are Online. The current method of evaluation is by the use of a Knowledge Review given to the students on the first day of

class and at the end of the course. With course being online we see the completion rate for this assessment is good, however the scores are higher than usual, which indicated students are using their textbook to find the answers. This obviously gives an artificially inflated success rate for the first outcome assessment and the second outcome assessment often mirrors the first. The only variable is the number of students that complete the assessment.

The Program will continue to discuss options for outcome assessment that will provide an accurate representation of student learning. The Program will also reach out to other Programs that have been conducting Online instruction and inquire what methods they are using to assess course learning outcomes. The Fire Technology Program then can implement various formats and then evaluate which method provides accurate outcome assessment.

Although the Fire Technology has enjoyed positive outcomes in our courses, the percentage of improvement should be much higher than what is being recorded. This directly relates to instructor methodologies with instruction, but also indicates to us that our students are not putting in the needed time to be successful in our courses. The Fire Technology courses are rigorous in content and the program's goal is to establish a "solid foundation" for our students to build on while in the program and after they leave Chaffey College to purse a career in the Fire Service. To enter the Fire Service students need to develop determination and the drive to be successful. This mean they have to be will to do what is needed to succeed, which would includes personal accountability for completing course work, and becoming knowledgeable in the subject being instructed.

The FIRETEC 420-423 courses outcomes have not been met since their start in 2017-2018. Initially these courses were cancelled due to low enrollment. The courses have completed but this does not provide the Program with enough information to adequately assess outcomes. Recently, with the Pandemic these courses have been cancelled after beginning due to State Fire Training restrictions prohibiting these courses from being offered online, since Chaffey College is not an approved ARTP. These courses are usually offered in the Spring semester and the Program is hopeful that we will be able to return to face-to-face instruction in spring 2021.

We predict that the items listed above will help with retention and success rates for all students in the Fire Technology Program.

7. STRATEGIC PLANNING

⊗ 7a. Do you have any plans to modify a degree or certificate in your program?

☑ Yes
☐ No

⊗ 7b. Are you planning to initiate a new program?

☑ Yes
☐ No

OVERALL IMPROVEMENT
To help answer 7c and 7d, review the following subsections:

Subsection 2: EVIDENCE--Equity
Subsection 3: EVIDENCE--Program Data
Subsection 4: EVIDENCE--Learning Outcomes

⊗ 7c. Identify specific reasons for "why" improvement is needed. Use an evidence-based approach to support your answer.

To help guide your thinking, consider framing improvement in more tangible ways: orientations for new faculty, inefficiencies in office processes, communication gaps (with adjuncts or other departments), tracking errors,
budgeting processes that are not as timely or efficient, coordination with other related areas in other educational units, resource management of supply budgets.

Fire Technology is a healthy and vibrant program and enjoys an 81.1% success rate for 2019/2021 and an overall 24.4% increase over six years. Success College wide for 2019/2020 was 72.7% and over six years increase 1.3%. The Fire Technology Program exceeds the college average success rate for 2019/2020 by 11.7%.

Why is improvement needed? Even with afore mentioned noteworthy numbers, the program recognizes that we can continue to improve, not being satisfied with above average, but seeking excellence in all aspects of enrollment, success, and completion. Improvement in enrollment, retention, and success will improve the Fire Technology Program as a whole by increasing Degree's awarded and Certificate of Achievement awards. We will improve by providing new and updated concepts to existing part time and full time faculty, and provide in depth orientation for new faculty to the program. This will reduce inefficiencies that occur, such as late census, grade reports, and not submitting Syllabi prior to a course start date. Support with Canvas course creation, course updates, and course design are important to student success, and completion. Student enrollment will increase by word of mouth to fellow students.

The Fire Technology Program has learned in order to improve, additional help will be needed, despite our pro actively taking steps to assist students. It's our intention to help student retention and success with additional study sessions, and study groups no matter which instructional method is being utilized to instruct the course. Based on the platform being used, this will need to be adapted by the instructor to optimize the benefits of the additional study opportunities. Communication gaps have been identified with instructors and students. The program has instituted a communication plan to be utilized by all faculty in their courses, weather Online, Hybrid, or Fact-to-Face. Additionally, the program has increased group communications with faculty several times throughout the semester rather than just during Flex. Communication via email has increased as well, send group emails to part time and full time faculty providing updates and pertinent information from the program or the college.

Factors that will have a positive effect on change includes to be more proactive with teamwork and support groups within our classrooms, Online, Hybrid, face-to-face. Availability to students by instructors through weekly meetings and office hours. Although we have only one full-time faculty member for Fire Technology, he plans his office hours at times that allow him to be available to tutor and otherwise assist students in the Fire Technology program. Part-time faculty have also increased their availability with Online instruction to have open class meetings that are recorded for all students.

The program will hold regular discussions dealing with student success, professional development, curriculum, course learning outcomes and assessments, new trends in technology, successes and needed changes. We have enhanced the required reading materials for the course, by bundling textbook(s), workbook(s), and study sheets. We are looking for text that are no cost to students and, if available, will adopt the text. Until we find zero cost textbooks, the program has adopted low cost digital textbooks for student use, which has significantly reduced cost.

Program instructors continue to work with students by providing information of the various student services that are available. Assignments have been created to have students meet with a CTE Counselor, which will allow the a student to become more comfortable in accessing various student services. Program retention is very important, for the 2019/2020 year the program enjoyed a 95.3% retention rate and an overall increase over six years 2.3%. The College success rate was 91.4% and experienced a decline over six years of -0.3%. The Fire Technology as a healthy and vibrant program exceeded the College average of retention, however, we can continue to improve not being satisfied with above average, but seeking excellence in increasing and stabilizing retention of our valuable students. Course instructors can influence retention within their courses. By being proactive, watching student trends, activity in a course, falling behind in submitting assignments the instructor can communicate with a student, and have a discussion with them, with the purpose of assisting where possible. This one on one attention is very important to our students and provides a sense of belonging and investment in a course.

🔲 7d. What is your program's plan to make improvements? An effective plan is descriptive and has well-defined steps. Explain your answer in order of priority; rank highest priority first, followed by second highest priority, and so on.

If there is a disparity in equity, the strategies for implementation should be included in the plan.

The following is a list of proactive measures we will use to successfully increase our outcomes assessment figures, along with enrollment, retention, and success rates for our students in the program:

The Fire Technology faculty meets regularly to discuss methods to implement to enhance communication and connectivity as well as supplemental instruction for all types of learners. This platform serves to support students who may not have ordinarily become 'completes.' By continued evaluation and re-evaluation of methods and techniques for student success, we have seen an increase. However, even though the Fire Technology Program has had an increase in enrollments, retention, and success rates we will continue to work toward strategies that lead to increasing student retention and success. As mentioned in the retention section, we are going to make it a priority to 'talk' with the student informally to develop a rapport and a line of communication that will encourage support. Without communication, we will only be guessing why a student is missing class, not turning in assignments.

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The fire service is a predominately male career, even with an increase of females entering this workforce, the ratio of male to female is large. The male and female gap can also be seen at Chaffey College in the fire technology program. In the 2015-2017 cycles there were 716 male students and 63 female students enrolled in the program. The Program as identified in our VIP goals worked on increasing the number of female students enrolled in the program, and over the three years of the previous PSR, the Program enjoyed a significant increase of 84.1% in female enrollments. Even with this increase there is still an 83.2% gap between male and female enrollments, the program will continue to work on narrowing this disparity promoting inclusion. What will be the benefit of the inclusion of females with a fire department? An inclusive workforce provides diverse life experiences and ideas that can help craft solutions to long-standing problems. With more experiences and

different ideas, a fire department becomes more flexible, proactive and better able to adapt to new challenges. When the makeup of a fire department reflects the makeup of your community, the department can provide a higher level of service because your personnel better understand community needs.

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CURRICULUM IMPROVEMENT

As we move toward Guided Pathways, curriculum serves as a central catalyst for the movement. Reflect and provide information on questions 7e and 7f.

Information will be forwarded to the Curriculum Office. There is NO SCORING on curriculum improvement questions, 7e and 7f.

7e. How does (or will) your program incorporate experiential learning components into your curriculum?

It is the goal of the FIRETEC program to establish additional dual enrollment programs at various High Schools with FIRETEC 1 and FIRETEC 5. These two courses will help students learn about the fire service and fire prevention, that will provide a pathway to fire fighting or fire prevention. It is the goal of the program to increase the number of courses offered Online as dual enrollment. These pathways will provide equity and a direct path for students to enter Chaffey College.

Currently there does not exist official pathways mapping within the High Schools. The Fire Technology Program is a member of the Dual Enrollment Committee and are working on developing curriculum pathways mapping for High School students prior to entering Chaffey College. Upon entry into the College the students will have completed General Education and program specific courses while still in High School.

How can the program assist students to complete in two years? The program continues create pathways by offering program courses which are CSU transferable to CSULA for the BS program Fire Protection Administration. The program has the Core and Non-Core FIRETEC courses approved for Online instruction. The program has established Fast Track courses which creates a pathway for students to complete the core and elective program requirements within two semesters.

The FIRETEC program already enjoys diversity and representation in various areas, but there is institutionally low enrollment of African Americans, and Asian American students and especially female students from these groups. The program continues to advertise and inform students of the program and future benefits of a career as a Fire Fighter or Prevention Specialist.

(Max chars: 5,000)

7f. How does (or will) your program incorporate career exploration into early courses in your degrees and/or certificates?

The FIRETEC program continues to work with the CTE counselors, Counseling, Veterans Center keeping them informed with program changes so they can better serve students and future clients. We have also worked with the GPS Center on numerous occasions on better ways to assist students in pursuing a career in the Fire Service. The Library has worked with the FIRETEC program to make available online resources for both EMT and FIRETEC magazines for research.

The Fire Technology Program incorporates career exploration into the beginning course FIRETEC 1 and continues to do so emphasizing career goals though all FIRETEC courses. Part of career exploration includes; application completion, resume' development and updating, life choices, and what are the requirement to become a Fire Fighter or Fire Inspector.

The career exploration directly is connected with the program core values of "INTEGRITY" "COURAGE" "PROFESSIONALISM".

(Max chars: 5,000)

✖ 7g. Do you have any recommendations for a professional development workshop(s) that will help you or your program execute future plans?

Type N/A in the response field if you are not making any recommendations for professional development.
Information will be forwarded to the Faculty Success Center for future professional development planning. NO SCORE is assigned.

1. Creating a Program Proposal.
2. CLO assessment for Online instruction.
3. Incorporating groups and group assignments in Canvas, Online instruction.

8. VIP GOALS

⊞ **8a. What are your Three-Year Visionary Improvement Plan Goals (1-3 goals recommended)?**

Perhaps the most important piece in the PSR process is the creation of the Visionary Improvement Plan (VIP). The VIP is an opportunity for all program members (not just primary writers) to get together to analyze data, discuss the overall self-study, and identify program improvement goals for the next three years.

VIP Goals should align with the Chaffey Goals, and should be clear, specific, measurable, action-oriented, realistic, and time bound.

> VIP Goal-1. Establish an Fire Technology AS-T or AA-T with Cal State LA. (CSLA)
>
> VIP Goal-2. Increase the number of Associate Degrees and Certificates awarded in the Fire Technology Program.
>
> VIP Goal-3. Increase the number of female students enrolled in the Fire Technology Program.
>
> VIP Goal-4. The Fire Technology Program be recognized by Fire and Emergency Services High Education (FESHE) recognition program.

⊞ **8b. Select the Chaffey Goals that directly relate and are MOST relevant to your VIP GOALS (please select all that apply):**

VIP goals should relate to Chaffey Goals.

☑ Goal 1: Equity and Success--Chaffey College will be an equity-driven college that fosters success for all students.
☑ Goal 2: Learning and Completion--Chaffey College will ensure learning and timely completion of students' educational goals.
☑ Goal 3: Community Opportunities and Needs--Chaffey College will develop and maintain programs and services that maximize students' opportunities and reflect community needs.
☐ Goal 4: Technology--Chaffey College will optimize the use of technological tools and infrastructure to advance institutional efficiency and student learning.
☐ Goal 5: Efficiency--Chaffey College will efficiently and effectively manage systems, processes, and resources to maximize capacity.
☑ Goal 6: Agility--Chaffey College will responsively adapt to changes in students' academic and career needs.
☐ Goal 7: Professional Learning--Chaffey College will prioritize and align professional learning for all employees to support the achievement of Chaffey Goals.

⊞ **8c. Explain the rationale that led your program to develop each VIP Goal. How does each VIP Goal align with the Chaffey Goals?**

VIP Goal 1--Rationale and how it aligns with the Chaffey Goals
VIP Goal 2--Rationale and how it aligns with the Chaffey Goals
VIP Goal 3--Rationale and how it aligns with the Chaffey Goals

> VIP Goal - 1. (Chaffey Goal 1:)There are no other Community Colleges that have established an AS-T with CSLA. The Fire Technology Program at Chaffey College is inspired to be the first by working with CSLA and Curriculum to make the AS-T available to students by the end of this PSR period. The AS-T will promote equity and success for all students that aspire to complete their B.S. Degree in Fire Protection Administration. By creating this pathway to CSLA students will be able to complete and meet their future needs within the Fire Service in the form of advancement. The Fire Technology program is committed to continue providing quality service, and better serve those communities served by Chaffey College. Through the Fire Technology curriculum, students develop skills, and competencies, and gain knowledge leading to success in the workplace.
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> VIP Goal - 2. (Chaffey Goal 2) Ensure that students enrolled in Fire Technology courses are aware of the available educational assistance and benefits of support services such as Success Centers, and Counseling. With the help of Fire Technology Staff and the Career Technical Education (CTE) counselors, will ensure that students are aware of the availability and benefits of completion of an Associate's Degree prior to transfer, and of the Certificates of Achievement that are available to pursue, available internships, and other industry programs prior to employment. We plan to work closely with our ROP and Dual Enrollment partners. This partnership will benefit not only local High Schools and Chaffey College, but also students by making it possible to complete their Degree and Certificate of Achievement while attending High School.
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> VIP Goal - 3. (Chaffey Goal 3)We will actively recruit through various methods an ethnically diverse female group into the fire technology program. There exist a gap of female students 88.23% to male students enrolled in the fire technology program. Modernization of the Fire Technology program and by expanding will directly enhance student enrollment, retention, and success. Implementation of the values of 'PRIDE' and 'Hope', 'Engage', and 'Succeed' in the Fire Technology program has had a positive impact with the quality of instruction and with student learning, success and completion.

VIP Goal - 4. (Chaffey Goal 6) The Fire and Emergency Services Higher Education (FESHE) Recognition certificate is an acknowledgement that a collegiate emergency services degree program meets the minimum standards of excellence established by FESHE professional development committees and the National Fire Academy (NFA). FESHE concentrates on degree programs that emphasize fire fighting response, fire prevention, fire administration and Emergency Medical Services management.