

# Santa Rosa Junior College

## Program Resource Planning Process

### Emergency Medical Care 2019

#### 1.1a Mission

##### 1.1a Mission

The mission of the Emergency Medical Care department is to provide an education and training environment consistent with the expectations of the Emergency Medical Services (EMS) community that fulfills the robust and diverse requirements of the EMS professions represented in the community with special emphasis on entry-level basic training, advanced level training, continuing education and in-service education. The EMC department's goal is to provide excellence in education for Career and Technical programs which relate to Emergency Medical Services.

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#### 1.1b Mission Alignment

##### 1.1b Mission Alignment

The Emergency Medical Care Department is completely aligned with the tenets of the district's mission. EMC provides Career and Technical education from entry-level through advanced and continuing education for Emergency Medical Services (EMS) professions. We provide access to a career path for students desiring to enter the healthcare professions and provide an academic path for acquiring a college degree (AS Emergency Medical Care). Education and training provided by the department enables graduates to enter direct service, administrative and regulatory positions at the local, State and National levels.

The department is committed to maintaining an exceptionally high (but realistic) academic standard and employs an "academy" approach to training in its core class offerings. Students learn strong leadership skills which promote respect and integrity both personally and professionally. Faculty and staff maintain the professional standard expected of the EMS community and are active and respected members of that community. We are dedicated to providing the most comprehensive, effective and current teaching methodologies, technological applications and facilities to support student learning and development.

The department objective is to provide well prepared individuals who can transition smoothly into jobs with EMS providers - our stakeholders in the EMS industry. Our goal is produce graduates who demonstrate competency in cognitive, psychomotor and affective domains. This concept is reflected in the Student Learning Objectives in our EMC programs.

The goals and initiatives of the district are consistent with the goals and initiatives of the department. The EMC department provides entry-level course offerings which serve as an excellent introduction to Public Safety and promotes awareness of all Public Safety professions. As part of the North County Instructional/Student Services plan, the Petaluma Ed Plan, and the West County Instructional/Student Services plan, EMC offers courses in Petaluma and Windsor serving the needs of the students and EMS community members throughout the County. Plans are underway to establish EMC training programs that better serve the Hispanic communities and to introduce Public Safety career options to these communities. By establishing EMC training programs in locations such as the Southwest Center, it is also the aim of the department to engender a better relationship between Public Safety entities and the Hispanic community as a whole.

As part of a Multi-Campus plan for Coordination, EMC maintains an active relationship with administration and faculty on the Petaluma, Santa Rosa and Windsor campuses with discussion underway for program development at the Southwest Center. Many faculty members teach on multiple campuses and the administration of EMC is actively involved in each of these areas. This serves to maintain a current link between facilities.

EMC participates in continual self-study efforts to maintain accreditation standards in each aspect of the program disciplines. National accreditation for Paramedic is cyclical as is local level accreditation for EMT (Emergency Medical Technician). Each require self-study and review by accreditation teams for maintenance of approval to provide these courses.

EMC curricula are learning objective driven. Program Student Learning Outcomes are complete and are reviewed periodically for relevancy pursuant to the changing climate of the industries EMC serves. Program graduate performance on National certifying examinations statistics are reviewed twice each year and results are shared with our community stakeholders at our Advisory Committee meetings.

The department as a whole recognizes the evolution in student preparation and motivation entering the EMS careers as well as the preparation, motivation and needs of the continuing education and in-service student. The department recognizes and responds to trends in student populations, demographics, ethnicity, gender, and cultural aspects. The department seeks the most highly qualified staff and faculty who not only represent the student populations, but understand the unique challenges faced by our students.

Of great concern to the department is the relatively high attrition rates in our EMT and Paramedic programs. Our analysis has shown that attrition rates are disproportionate across cultural/ethnic lines. The department is working to identify what cultural and other factors are affecting this trend and seeking solutions or, otherwise, processes to mitigate.

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## 1.1c Description

### 1.1c – Description

The Emergency Medical Care Department offers a number of entry-level, advanced level and continuing education/in-services courses. These courses are constructed to meet or exceed minimum Federal, State and local level mandates. Several of the offerings demand pre-requisite training and education also mandated by Federal, State and local regulatory entities. The courses offered by the department include (but are not limited to):

Emergency Medical Responder (formerly First Responder) (Nationally accepted curriculum, locally approved)

Emergency Medical Technician - Basic/Emergency Medical Technician - 1 (National level curriculum, locally approved). This course is considered a capstone course.

Emergency Medical Technician - Paramedic / Paramedic Academy (National level curriculum, National Accreditation, State and locally approved). This course is considered a capstone course.

The EMC department also offers continuing education courses (Federal, State and Local mandates) and In-Service courses (also Federal, State and Local mandates). Continuous Education and In-Service course offerings include but are not limited to:

Advanced Cardiac Life Support, Advanced Cardiac Life Support Re-recognition

Pediatric Advanced Life Support, Pediatric Advanced Life Support Re-recognition

International Trauma Life Support

Lesser Used Skills (Advanced Life Support Update and Review)

Advanced EMT, Community Paramedic (pending legislation/regulations)

Basic Arrhythmia Recognition

12-Lead EKG Interpretation

Emergency Medical Technician Refresher

Emergency Vehicle Operations

## Emergency Medical Services Academy

Together, these courses comprise the requirements for entry-level, advanced and ongoing training and education for Emergency Medical Services personnel and provide avenues to allow SRJC EMC graduates to be more competitive in the workforce.

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### 1.1d Hours of Office Operation and Service by Location

#### 1.1d – Hours of Operation and Service by Location

The Department operates from 0800 - 2200 hours Monday through Friday. Saturday and Sunday classes are held between 0800 and 1700 hours as scheduled each week that school is in session. The department offers two 2 unit classes during each of the summer sessions and conducts many short-term in-service classes throughout the calendar year. Department office/administrative support is available from 0800 - 1315 hours on Monday, Wednesday and Friday, 0730 - 1230 hours Tuesday and Thursday except for holidays (subject to change).

Hours of instruction are as follows:

#### Fall Semester

Public Safety Training Center (PSTC/Windsor):

Monday Classes: 0800 - 1700 and 1300 - 1600, and 1900 - 2200.

Tuesday Classes: 0900 - 1200 and 1300 - 1600, and 1900 - 2200.

Wednesday Classes: 0800 - 1700 and 1300 - 1600, and 1900 - 2200.

Thursday Classes: 0900 - 1200 and 1300 - 1600, and 1900 - 2200.

Friday Classes: 0800 - 1700.

Saturday Classes: 0800 - 1700.

Sunday Classes: 0800 - 1700.

#### Petaluma Campus

Monday Classes: None.

Tuesday Classes: None.

Wednesday Classes: None.

Thursday Classes: None.

Friday Classes: 0900 - 1200.

Saturday/Sunday Classes: None

#### Santa Rosa Campus

Monday Classes: None

Tuesday Classes: 1900 - 2200

Wednesday Classes: None

Thursday Classes: 1900 - 2200

Friday Classes: None

Saturday/Sunday Classes: None

#### Off-Campus Locations

Monday Classes: 0800 - 1700.

Tuesday Classes: 0800 - 1700.

Wednesday Classes: 0800 - 1700.

Thursday Classes: 0800 - 1700.

Friday Classes: 0800 - 1700.

Saturday/Sunday Classes: None

#### Spring Semester

Public Safety Training Center (PSTC/Windsor):  
Monday Classes: 0800 - 1200, and 1300 - 1600, and 1900 - 2200.  
Tuesday Classes: 0900 - 1200 and 1300 - 1600, and 1900 - 2200.  
Wednesday Classes: 0800 - 1200, and 1300 - 1600, and 1900 - 2200.  
Thursday Classes: 0900 - 1200 and 1300 - 1600, and 1900 - 2200.  
Friday Classes: 0800 - 1700.  
Saturday Classes: 0800 - 1700.  
Sunday Classes: 0800 - 1700.

Petaluma Campus  
Monday Classes: None.  
Tuesday Classes: None.  
Wednesday Classes: None.  
Thursday Classes: None.  
Friday Classes: 0900 - 1200.  
Saturday/Sunday Classes: None

Santa Rosa Campus:  
Monday Classes: None  
Tuesday Classes: 1900 - 2200  
Wednesday Classes: None  
Thursday Classes: 1900 - 2200  
Friday Classes: None  
Saturday/Sunday Classes: None

Off-Campus Locations  
Monday Classes: 0800 - 1700.  
Tuesday Classes: 0800 - 1700.  
Wednesday Classes: 0800 - 1700.  
Thursday Classes: 0800 - 1700.  
Friday Classes: 0800 - 1700.  
Saturday/Sunday Classes: None

Summer Sessions: (PSTC/Windsor location only)  
Public Safety Training Center  
Monday Classes: 0800 - 1500  
Tuesday Classes: 0800 - 1500, 1900 - 2200  
Wednesday Classes: 0800 - 1500  
Thursday Classes: 0800 - 1500, 1900 - 2200  
Friday Classes: None  
Saturday/Sunday Classes: None  
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## 1.2 Program/Unit Context and Environmental Scan

### 1.2 – Program/Unit Context and Environmental Scan

#### **General Information:**

The department faces unique challenges with respect to offering high quality, competitive courses. EMS education and evaluation relies heavily on technology and equipment and is highly labor (mandated instructor/student ratios) intensive. Simulation is absolutely required in order to educate and evaluate students adequately. Students must be able to use the technology and equipment that is currently in use in the field. In addition, department personnel are utilized in a variety of ways that are unique to this type of education. Strong oversight from faculty is required as students enter clinical education venues. Much of the advanced training

provided by the department is in the form of on-site instruction and supervision (e.g. Hospital and Ambulance internships for Paramedic students). This is an example of only one area that challenges and taxes the department's resources, and it is only one example of why SRJC is distinguished among a host of competitor EMS educational programs.

### **Labor Market:**

Changes in the labor market reflect the general trend in the economy and unemployment; however, the EMS industry as a whole has not suffered the typical cutbacks in labor force. Governmental regulations require a certain minimum labor force, but the trend is that more workers are staying in their jobs longer. Attrition rates are dropping which decreases the need for new workers, but at the same time, economic changes steer more prospective candidates to prepare themselves for service industry jobs. According to the CA EDD web site (<http://www.labormarketinfo.edd.ca.gov>). Approximately 990 new jobs for EMTs and Paramedics will open per annum (2010 - 2020) or approximately 42% growth in the same time period. Similarly, based on TOP6 code for Emergency Medical Services (125000), the three year average labor demand is approximately 1,400 (2015 – 2018). The department is redoubling its efforts to better prepare its graduates so they will be more desirable candidates and better competitors for jobs. The development and refinement of the EMS Academy (EMC 105) and the development of the Advanced EMT and Community Paramedic programs address the demands for more highly trained professional Emergency Medical Responders and better prepares SRJC graduates for careers in Emergency Medical Response.

### **Certification and Licensure Programs:**

The department offers courses and programs designed to make graduates eligible for certification as an Emergency Medical Technician, and licensure as a Paramedic. The EMT and Paramedic programs are accredited and authorized to provide training through three regulatory agencies. At the national level, the Paramedic program is accredited through CoEMSP (Commission on accreditation of EMS Professions). At the state level, the Paramedic and Emergency Medical Technician programs are authorized to provide training by the Emergency Medical Services Authority of California and these same programs are locally approved through the Coastal Valleys Regional EMS Agency. The requirements/mandates of the department to provide these programs are outlined in CA Code of Regulations Title 22.

### **Industry Trends:**

Trends in the industry suggest an increasing demand for more advanced level training. Amendments to the scope of practice for Paramedic, Emergency Medical Technician and Emergency Medical Responder (formerly First Responder) require these emergency workers to be trained in the latest technological applications (capnography, advanced level ECG interpretation, etc.) as well as the current trend in the educational model (differential for diagnosis, development of critical thinking skills, etc.) for these students. These changes impact the department in terms of obtaining and utilizing the latest equipment (e.g. simulation manikins, 12-lead ECG capable monitors, simulators, capnographic monitoring equipment, etc.), modifying the curriculum to keep pace with the trends in the current educational model, and re-training faculty to facilitate the instruction.

In addition to the aforementioned, with the advent of National Healthcare, there is even more emphasis placed on expanded scope of practice for existing service providers, and expansion of their role within the healthcare system. Two new service levels now exist where they did not before. Advanced EMT is a service level which is designed to better serve rural areas but is being implemented primarily in urban areas to reduce the burden of the advanced emergency healthcare providers (Paramedic). Community Paramedic is also a new trend in the industry. Community Paramedic is designed to reduce the non-urgent, non-emergency patient census of the hospital Emergency Departments. Community Paramedics can provide in-home post-surgical, follow-up or other follow-up (medication efficacy, compliance, etc.) as well as typical 'well care' or other clinical care.

The department has readied curricula and other training needs for the Advanced EMT and is currently exploring and developing curricula for the Community Paramedic.

**Regulation:**

Additional changes relate to regulatory requirements. Trends in terms of regulation will require graduates to demonstrate additional certifications in order to be able to practice. As an example, many EMS jurisdictions are now requiring evidence of CPR proficiency for Emergency Medical Technicians and Paramedics in order to certify or license initially, and again to renew the certificate or license. The department must provide for these new requirements in order to remain competitive and to be able to provide the required training for its students. New changes in EMT and Paramedic regulation require additional training hours. The department has updated the curricula to reflect these new requirements.

**Partnerships and Stakeholders:**

The department partners with local EMS provider agencies to offer required certifications for Paramedics and EMTs. The local American Medical Response (Sonoma Life Support) relies on the department to assist in providing advanced level in-service courses which meet the standard as required by the State and local regulatory agencies for its employees. Local Nursing program graduates utilize advanced level in-service courses which meet the standards required by many hospitals for Emergency Department, Telemetry, ICU/CCU, Neonatal Care and others. In addition to regular Advisory Committee meetings, the department regularly communicates with our stakeholders and community supporters and continually solicits feedback from our industry partners to better prepare graduates for the current demands. Training First Responders (EMR) and EMTs for over 30 years, and Paramedics for over 20, has allowed the department to forge very strong bonds within our community. The department and SRJC is synonymous with Public Safety training.

**New Career Pathways:**

A change in legislation enabled a change in the current career path for Emergency Medical workers. Whereas EMT is a potential career terminus, many EMTs return to medical education to move to the Advanced EMT or Paramedic level. Most EMTs who take advantage of this path do so within 5 years of becoming an EMT. Once at the Paramedic level, workers who wished to continue to even more advanced levels of medical practice (e.g. R.N.) were required to "start over" with their education. With new changes in legislation, Paramedics now have the opportunity to "bridge" to nursing without having to start at the beginning in terms of their education. The department anticipates partnering with an established Nursing program in order to provide Paramedics with this opportunity. Additionally, as described above, the department has moved ahead with the development of Advance EMT and Community Paramedic curricula.

**Outside Funding Resources:**

Due to changes in the economy, the small amount of outside funding that had been available (donations, etc.) has virtually ceased. The department's equipment budget does not allow the department to keep up with the current technology and equipment requirements and there is no budget for maintenance and repair of existing equipment and technology. CTEA awards have been the only source which has allowed the department to remain in compliance and to keep pace with trends in the industry. The department now sponsors a symposium (Off the Vine <https://www.facebook.com/events/903372376384659>) yearly each summer. It is done in effort to make the department even more visible in the State EMS system and to provide an ongoing income source in the process. Still other outside funding sources must be identified in order to meet the department demands.

The department is developing mechanisms to garner regular and ongoing donations from private industry and other private sources to support its ever changing technology and equipment needs. In addition, new funding sources must be identified to assist with student tuition and fees.

**Department Statistics Overview:**

### **Student Headcount:**

As of this report, the department has achieved a 4 year average headcount of approximately 1900 students per annum.

The headcount was up slightly for the current reporting year and the percentage change is small (1%), but the growth is the the second positive year in the last five. Additionally, the department was forced to cut course offerings over the reporting period.

A typical cycle for EMS program enrollments is approximately 5 years. The department expects enrollments to grow over the next 3 to 5 years. Over the past two years, the department reduced the number of offerings of EMC 103 (EMT) to better the efficiency. Reducing the number of options available to students to enroll has negatively impacted enrollment numbers over the last 5 years. The headcount 10 year average is over 2000 with a small standard deviation which demonstrates a consistent volume of students despite a downward trend in recent years.

In general, headcount likely depends upon fluctuations in the economy and labor market (job availability). The combination of a variable latency period between economic trends, job (thus training) seeking trends, and variable job availability make headcounts difficult to predict, and thus difficult to rationalize enrollment fluctuations, however, generally, enrollment peak and valleys follow a 5 year cycle.

Program responses to enrollment fluctuation have included such strategies as offering a greater number of online and hybrid courses, and to increase the amount of online hours within the hybrid courses. Offering intensive academies such as the Paramedic Academy on back-to-back weekdays (Tuesday and Wednesday) with eight hours of online content each week should have been more attractive to Paramedic students who are currently working, but student surveys do not reflect this. Student feedback suggests that schedule is not as important as program reputation. EMT training will likely follow a different path, because students enrolled in EMT programs tend to select programs which offer schedules more conducive to normal work schedules. If this is true, the EMT enrollment numbers should benefit from having more night classes, weekend offerings and having a more robust online component. Offering more content online should be more attractive to working students and help reduce some labor costs. Since the economic downturn following 2007, fewer students in general were seen in Public Safety programs; however, that trend has reversed in Law Enforcement and Fire Tech programs. Trends in Emergency Medical Care job availability and education seeking behaviors generally trail Law Enforcement and Fire by one to two years. Law Enforcement and Fire programs have seen steady increases in enrollment numbers, and the department believes that EMC numbers should continue increasing..

### **Enrollment Efficiency:**

The department overall realized an efficiency of approximately 79% average over 10 years, and 78% for the current reporting period. This demonstrates that class size adjustments should be made to improve posted efficiency expectations. It is important to note that class size was increased in 2004 to accommodate a groundswell of interest in Emergency Medical Services careers. Two of the department's programs (EMT, Paramedic) are required to maintain certain student to instructor ratios in the classrooms which precludes complete flexibility in terms of adjusting class sizes. Additionally, the department conducts several in-service courses which have traditionally small class enrollments compared to capacity, but do not carry a significant, if any, faculty load. A deeper analysis of individual classes' efficiencies is needed to determine what, if any, change is truly needed, but since the department has approximated steady-state enrollments, it is prudent to reduce class sizes to pre-2004 levels.

### **Average Class Size:**

Short term classes which are offered multiple times each semester and are traditionally lower enrolled, skew the data toward smaller class sizes. There are inadequate facility resources to support a greater number of offerings at the PSTC, and an inadequate amount of staff to support a summer session at the Petaluma campus. Most short term classes are offered because they are required by local regulatory agencies for field personnel or demanded by local

stake-holders. In addition, due to regulatory requirements, the department is prevented from increasing student to instructor ratios.

### **Instructional Productivity:**

There is an upward trend in the FTES:FTEF ratio as a whole (averaging Spring, Summer and Fall semesters together) from the previous year. This; however, must be viewed in context because a significant amount of instruction is provided by Professional Expert employees. The Professional Expert category of instructional employee is not reflected in instructional productivity data. Professional Expert Instructors are utilized as faculty due to regulatory agency mandates for instructor to student ratios. The cost of maintaining these mandated ratios using regular and or adjunct faculty is prohibitive.

Since data mining techniques currently employed fail to capture these data points, the department estimates that between 800 and 1,200 hours of instructional time is spent yearly (historically) which is not represented in the data provided to the department for analysis. Recent changes to regulations governing instructional hours (Paramedic, EMT and EMR classes) have doubled the number of hours of instruction being provided by STNC/Professional Experts.

### **Retention:**

Retention is above the 85th percentile with an average of 89% of students receiving a grade of D or better and/or credit. This exceeds the college average. Retention has declined slightly for the past five years. This is largely due to changes in curriculum demanded by changes in National Standard Curriculum, the move toward emphasis on critical/differential thinking and changes in licensure examination model.

### **Successful Course Completion:**

On a ten year average, approximately 90% of EMC students successfully complete their course of study (83% for this reporting period). This average is above the college average of 75%. When combined with retention data, this indicates that the vast majority of students who are enrolled at the time of census go on to complete their courses. Most students enrolling in EMC programs do so with a purpose to gain certification or equivalent status and successfully complete in order to be competitive for EMS jobs. The exception to this is the entry level (Emergency Medical Responder) courses where a larger number of students are 'surveying' the EMS field.

The average Successful Course Completion (85% +/- 1%) has been stable for the past five years.

Changes in curricula and proficiency requirements which were instituted in 2013 were anticipated to negatively impact retention rates significantly. Though retention rates did decline, the impact was not as great as anticipated.

### **Grade Point Average:**

Grade point average for EMC students is skewed (average grade 2.39) due to what is clearly a data error reported for summer sessions for students attending EMC programs beginning in 2009. The reported GPA for summer students (all locations) is 0.95. Omitting the grades reported in error for that period, the average GPA are skewed slightly high (3.15). Competency levels of 2.0 or less are not adequate to pass the licensure examination requirements for EMT or Paramedic levels and due to local mandates, a student must achieve 80% (3.0) final examination score to be considered eligible for a course completion certificate. Additionally, the average GPA demonstrates that few students are able to achieve a grade level of 4.0. This is due to the fact that the 80% level is considered minimum passing level, and grade distributions are adjusted upward accordingly.

### **Ethnicity:**

EMC programs attract a high number of White students (67%), Hispanic (18%) and the fewest number of Native American, Pacific Islander and Filipino (combined < 1%). These numbers are consistent with the population in the industry (EMS) though not consistent with the general

population of Sonoma County. Also of note: The number of Hispanic students served doubled from the 2012-13 reporting period to the 2013-14 period and has increased marginally since.

### **Gender:**

The ratio of male to female students has remained consistent over the past 5 years. The program is male dominated with only approximately 31% female students. This is also consistent with the industry as a whole. The EMC department employs more males than females (55:45); however, the ratio is much different than the student (and industry) population. Of note is the increase in students who do not state male or female as their gender (unknown = 2.4%).

### **Age:**

The highest percentage of students enrolling in EMC programs is in the group aged 21 to 25 years with 30% of all student ages falling into this category. 55% of all students are between 21 and 30 years of age. It is likely that EMC jobs are not as attractive as a 'second' career. The physical demands and relatively low pay make these positions less attractive to the older candidate. Federal, State and local mandates preclude graduates under 18 years of age from certification/licensure which explains relatively lower numbers of students in that age group. JPS 2019

## **2.1a Budget Needs**

### **2.1a – Budget Needs**

Yearly, the department has a headcount of approximately 1,500 students. Although trending downward slightly over the past three years, largely due to institution imposed mandatory cuts, the department has seen only a marginal decrease in student numbers (-6%) in the current reporting period and has maintained headcounts at this level for several years. This total represents approximately 6% of the district total served, or 1.6 % of the district total FTES. There are discrepancies in the data reported to the department compared to numbers collected by the department showing the number of students served.

Textbooks and other supply costs showed marginal increases over last year. Exam glove, and other soft supplies expenditures increased 40% which when added to other cost containment measures made by the department may account for the relatively small (1%) increase in overall expenditures (unrestricted and restricted funds).

These figures demonstrate that the department's budget is used effectively; however, the department routinely faces budget shortfalls in certain, specific categories within the major budget codes. The overall budget is managed well. Small budget overruns are offset by other categories where spending was reduced.

### **Budget Code 3000:**

4% increase in benefits 2017-18 to 2018-19 budget cycle. This was due to increase benefit costs.

### **Budget Code 4000:**

Though there are no data supplied to the department for this category for this report period, budget cuts which affected the recent fiscal years detrimentally affected the 4390 budget and continues to be difficult. With the rising costs of medical supplies, this budget category no longer meets the needs of the department. Last year, this report indicated a need for a 40%

increase in that category, and further stated that the department would not be able to maintain adequate instructional supplies without it. Unfortunately, the department did not realize the sought after increase in this category but has continued to conduct classes without some much needed supplies. It is anticipated that budgeting trends will remain consistent or decrease over the next two to five years. The department will continue cutting back on supplies as needed.

The 4510 and 4511 categories have remained stable and adequately meet the department needs.

**Budget Code 5000:**

No data were available for this reporting period.

**Additional budgetary considerations:**

Effective January 1, 2019, student contact hours mandated by CA Title 22, accreditation, and local regulatory requirements will increase. This may lead to increased instructional costs. The department projects \$30,000.00 over existing budget level will be required to satisfy mandated instructor/student ratios and increased instructional hours for the EMC 100, EMC 103, and EMC 130 (series) classes.

**EMC Clinical Coordinator:**

The EMC 130 series classes utilizes adjunct faculty and regular faculty to function in the role of Clinical Coordinator. This fragmented system is already problematic and will cease to be effective in the very near future. The department hired a single adjunct to serve as clinical coordinator for the EMC 130 (Paramedic) courses. This allows the department to expand the role of the Clinical Coordinator to better facilitate placement of students, tracking of student progress and better the relationships the program has with our stakeholder agencies. The Clinical Coordinator position is a required role per accreditation bodies for EMC 130 (Paramedic).

EMC 103 sections also utilize a Clinical Coordinator. Until recently, the program's Administrative Assistant was able to fulfill the role of Clinical Coordinator; however, recent changes to the program regulations require credentialed personnel to fulfill that role. This change increases the work load of the Clinical Coordinator. Either more time must be allocated to the faculty fulfilling this responsibility, or the responsibilities must be split and shared between more than one individual.

**Anticipated expenditures:**

Changes in State law allow for regulatory agencies to charge fees for oversight of training programs. The department must plan for the eventuality of paying \$8750.00 annually in new fees to the local regulatory agency for oversight of the EMC core programs which fall under their regulatory authority.

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**2.1b Budget Requests**

Rank	Location	SP	M	Amount	Brief Rationale
0001	Windsor	01	01	\$20,000.00	Instructional Equipment budget increase to cover needed equipment expenses.
0002	Windsor	08	07	\$40,000.00	Cover cost needed to increase AAI position from 0.65 - 1.0
0003	Windsor	01	01	\$40,000.00	Cover cost needed to meet mandated instructional support: student ratio requirements.

0004	Windsor	01	07	\$40,000.00	Cover cost needed to meet mandated instructional support: Clinical Coordinator Paramedic Program, EMT Program
0005	Windsor	01	01	\$5,000.00	Cover supply cost increases (non-latex based materials)
0006	Windsor	01	07	\$8,750.00	Cover cost of regulatory agency proposed oversight fee

## 2.2a Current Classified Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Administrative Assistant II	26.00	12.00	Assistant to Department coordinator, regular faculty, adjunct faculty, STNC, students, is contact point for partners/stakeholders, processes all administrative actions
Laboratory Assistant	40.00	12.00	Coordinates EMC laboratory (ALS, BLS and In-Service), processes inventory and supply. Assists with instruction.

## 2.2b Current Management/Confidential Positions

Position	Hr/Wk	Mo/Yr	Job Duties
No employees	0.00	0.00	

## 2.2c Current STNC/Student Worker Positions

Position	Hr/Wk	Mo/Yr	Job Duties
Professional Expert (25)	40.00	12.00	Responsible for explanation, demonstration, supervision, evaluation and documentation of discipline specific subject matter and related skills under the direct supervision of instructor of record.
IA RTO	12.00	10.00	Counsels students, ensures student demeanor, conduct and performance is as expected. Models professional behavior. Is responsible for demonstration, supervision, evaluation and documentation of student performance.

## 2.2d Adequacy and Effectiveness of Staffing

### 2.2d Adequacy and Effectiveness of Staffing

The department has maintained an average student headcount of approximately 2000 students yearly. Despite a small downward trend over the past 5 years, the department has seen an increase of approximately 4% last reporting period and 1% in student headcount for this year report period.

#### Employee Categories:

There were no changes in the classified staffing (one 0.65% AAI), STNC workers, contract faculty or department Coordinator/Chair. Adjunct faculty staffing increased following a recent hiring.

#### Narrative:

Classified staffing is not currently supporting the needs of the department. Increasing the classified staff (Admin. Asst.) to 100% time (compared to 65%) will be necessary to achieve and maintain an adequate support level. Computing a "support index" for the department is difficult considering that STNC/Professional Expert is utilized by the department differently than the College norm as explained above; however, ignoring the STNC component, the department has a ratio of FTE-F (including adjunct and regular

faculty) to classified (FTE-C) of 14 which is more than seven times the District ratio of 1.6.

The department is unique among College departments in how it uses personnel to meet the demands placed upon the programs by State and local requirements. In order to remain in compliance with regulatory requirements, the department must maintain certain mandated instructor to student ratios. The department utilizes qualified professional experts hired in an STNC capacity in order to meet the statutory demand, and at the same time keep personnel costs down. Because these instructional hours are documented under a master PAF and are not collected through regular datamining, the FTEF figure reported does not take into account the significant amount of instructional time provided by Professional Experts. Instructional time including STNC/Professional Expert which is not accounted for through regular datamining approximates 2500 hours per annum.

To report this department's total FTEF as the sum of the reported FTEF and the FTEF calculated by STNC/Professional Expert hours is inaccurate in two ways. One, is that STNC employees are being utilized in an instructional support capacity, but accounted as non-instructional employees, therefore the calculation demonstrating the FTE-ST simply does not accurately reflect instructional time. Second is that if STNC hours were counted as regular instruction (FTEF), the ratio of FTES:FTEF would be inappropriately skewed.

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## 2.2e Classified, STNC, Management Staffing Requests

Rank	Location	SP	M	Current Title	Proposed Title	Type
0001	Windsor	01	02	AA II (.65 FTE)	AA II (1.0 FTE)	Classified
0002	Windsor	01	02	Clinical Coordinator (40hr/wk) (1 position)	Clinical Coordinator (40 hr/wk) (1 position)	STNC
0003	Windsor	01	02	Professional Expert (27 hr/wk) (25 positions)	Professional Expert-(40 hr/wk) (30 positions)	STNC

## 2.3a Current Contract Faculty Positions

Position	Description
1 FTEF	50% teaching load with 50% release time for Department coordination. Qualified to teach EMC130
1 FTEF	100% Instructional. Anchor position for EMC130. Qualified to direct (per CA CoR Title 22) EMC130-Paramedic
1 FTEF	100% Instructional. Anchor position for EMC 103 and EMC 100 courses. Qualified to direct (per CA CoR Title 22) EMC 103 EMT

### 2.3b Full-Time and Part-Time Ratios

Discipline	FTEF Reg	% Reg Load	FTEF Adj	% Adj Load	Description
EMC	3.0000	33.2600	6.0200	66.7400	The Department is significantly above the college average FTE-AF: FTEF-CF (2.01 Department: 1.31 District)

## 2.3c Faculty Within Retirement Range

### 2.3c - Faculty and Staff within Retirement Range

Two Regular Faculty and 8 Adjunct Faculty are currently within retirement range. This means that 2/3 of the Regular Faculty and approximately 30% of Adjunct Faculty are within retirement range. If those eligible for retirement within the next three years retire without immediate replacement, the impact to the department would be crippling.

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

### 2.3d – Analysis of faculty staffing needs

The students enrolled in our programs seek employment in Emergency Medical Service and related (Public Safety) careers. The Public Safety industry as a whole is currently experiencing an increase in vacancies due to a large amount of personnel retiring. This is creating a demand on the labor pool, and, therefore, will increase the demand for our courses. The department needs to maintain a diverse, current, instructional pool to meet these student and employment market needs. Additionally, the department is expanding course offerings to better serve the Hispanic community.

Classified staffing needs of the department are growing significantly, and are anticipated to continue growing over the next two to three years. The department anticipates a significant increase in student services as we work to better serve our Hispanic communities and improve relationships with Public Safety. We already have an increased workload for classified staff with the additional regulatory requirements placed on Paramedic students collecting important data during didactic and clinical training. The annual symposium alone accounts for an approximate increase of 30% workload for classified staff over traditional levels.

The classified staff workload increase is due to:

- Increased student services: clinical education scheduling for over 200 EMT students
- Increased data collection and analysis for Paramedic students to ensure compliance with regulatory agency demands.
- Institution of annual symposium “Off the Vine” for EMS providers
- New employees
- Payroll and general accounting (expenditures, personnel, textbooks, etc.)

Faculty staffing needs are driven largely by requirements set forth in CA Title 22 and other regulatory requirements (e.g. American Heart Association instructor:student ratios).

The demand on our faculty is high with the student/faculty ratio of approximately 26.15. Compared to the district total of 26.93, the department FTE-S:FTE-F is quite similar. Still, mandated Student to Faculty ratios in many EMC programs drive affect the efficiency value.

Adjunct faculty are utilized to offset the additional load that would be placed on regular faculty. An open pool is maintained by the department and advertisement mailings are done biannually. Interviews are held for our adjunct faculty pool as applications are received.

The majority of adjunct instructors prefer to work short courses, or share a course offered at the Public Safety Training Center instead of a semester-length course since they are still employed

full-time in the Public Safety system and semester length courses produce too many schedule conflicts.

It is very difficult to find qualified adjunct to fill the positions and as fill-in or replacement when another adjunct is ill or their work schedule conflicts with their teaching assignment.

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### 2.3e Faculty Staffing Requests

Rank	Location	SP	M	Discipline	SLO Assessment Rationale
0000	Windsor	01	02		

## 2.4b Rationale for Instructional and Non-Instructional Equipment, Technology, and Software

### **2.4b – Rationale for Instructional and Non-Instructional Equipment Technology and Software**

In the industry, there is a stronger emphasis being placed on simulation training. This is to ensure that trainees (graduates) are better equipped to deal with emergencies they may have never seen before in practice. Simulation allows for better experiential learning and development of critical thinking skills. This department must keep pace with the growing trend toward simulation training and expand its simulation component in all educational areas.

Also in the industry, there have been tremendous increases in use of and dependence on technology. Virtually all patient care records are electronic, reports, and even evaluations (job performance, feedback, etc.) are online. The department strives to keep pace with industry as is demanded by employers and accrediting bodies and has made many inroads to broaden and strengthen our connections within the industry. Last year, the department was able to negotiate free use of an electronic patient care reporting system that is in use in many areas of the County and the State as a whole. Other technology has been offered to support the educational process of our students, but the department lacks the infrastructure (digital radio system, tablet computers, etc.) necessary to fully exploit these initiatives.

Most durable equipment has a life expectancy of approximately 5 years. Much of the existing equipment requires replacement since repair materials and monies are no longer available and new technology and equipment makes equipment over 5 year old nearly obsolete.

This department and others in Public Safety extensively utilize complex psychomotor skill training and testing to include scenario performance evaluation. Students are evaluated in simulation and scenario in a variety of critical situations and are expected to perform at certain competency levels. This evaluation requires extensive use of checklists and performance matrices (rubrics) which are compiled by trained evaluators. Typically the evaluation process of a single EMC student requires gathering performance data, comparing the performance to a given standard, determining if competencies were or were not met and overall analysis of class and program level data for accreditation/regulatory compliance reporting. This utilizes a large amount of staff time, compiling and analyzing the data, as well as large amounts of printed materials. It is estimated that the evaluation process alone requires 750 - 1250 sheets of printed materials per student. The department has moved most traditionally printed material to electronic format which has resulted in savings of thousands of dollars annually in printing costs and materials.

The department has moved most cognitive testing to paperless (online) testing format and in 2015, entered an agreement with Sonoma County which allows EMC students to create an electronic version of a Prehospital Care Report (ePCR). The ePCR program is over 1 million dollar investment. The department is very fortunate to be afforded this opportunity for EMC students at no cost. In addition, the department successfully moved the recording of psychomotor testing for EMC 103 students' final skill examination online. The optimum platform for recording psychomotor testing and ePCR use is the tablet computer. The existing number of tablet computers is inadequate to support this paperless initiative.

The department anticipates the addition of two classrooms and one learning laboratory. To be functional, the laboratory will require a complement of emergency training equipment.

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## 2.4c Instructional Equipment Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Santa Rosa	01	01	Sprinter or Transit style Ambulance	6	\$75,000.00	\$450,000.00	Snow	ALL	Snow
0001	ALL	01	01	ID Card Printer	1	\$2,500.00	\$2,500.00	Snow	604	Snow
0002	Windsor	04	07	Media Enhanced Classroom Upgrade	1	\$21,000.00	\$21,000.00	Snow	604	Snow
0002	Windsor	01	01	EVOC Vehicle	4	\$50,000.00	\$200,000.00	Snow	604	Snow
0003	Windsor	04	07	Advanced Video System	1	\$7,995.00	\$7,995.00	Snow	604	Snow
0003	Windsor	01	01	Smartman CPR Manikin	6	\$2,500.00	\$15,000.00	Snow	604	Snow
0004	Windsor	01	01	Power Cot	4	\$20,000.00	\$80,000.00	Snow	604	Snow
0005	Windsor	02	01	Human Simulator SimBaby	1	\$50,000.00	\$50,000.00	Snow	604	Snow
0006	Windsor	04	07	Conex Storage Container	1	\$6,000.00	\$6,000.00	Snow	800	Snow
0007	Windsor	01	01	CAT tourniquet	50	\$30.00	\$1,500.00	Snow	604	Snow
0008	Windsor	01	01	Conterra MCI Kit # RD-4011	2	\$217.00	\$434.00	Snow	604	Snow
0008	Windsor	01	01	Conterra Triage Flag Kit # RD-4051	1	\$92.90	\$92.90	Snow	604	Snow
0009	Windsor	01	01	Whiteboard	2	\$500.00	\$1,000.00	Snow	604	Snow
0010	Windsor	01	01	ADC Standard Blood Pressure Units	20	\$13.40	\$268.00	Snow	604	Snow
0011	Windsor	01	01	E-Z IO Trainers with Bones	4	\$515.00	\$2,060.00	Snow	604	Snow
0012	Windsor	01	01	SAM Sling # SP556M	6	\$79.00	\$474.00	Snow	604	Snow
0013	Windsor	01	01	SAM Sling # SP556L	4	\$79.00	\$316.00	Snow	604	Snow
0014	Windsor	01	01	Graham Mega Mover PTU	10	\$25.25	\$252.50	Snow	604	Snow
0015	Windsor	01	01	Graham Mega Mover Transport Chair	10	\$18.50	\$185.00	Snow	604	Snow
0016	Windsor	01	01	KED Extrication Device	10	\$124.00	\$1,240.00	Snow	604	Snow
0017	Windsor	01	01	Fernotrac traction splint	10	\$369.00	\$3,690.00	Snow	604	Snow
0018	Windsor	01	01	Oxygen Cylinder size D	10	\$76.95	\$769.50	Snow	604	Snow
0019	Windsor	01	01	O2 Max CPAP System	10	\$70.00	\$700.00	Snow	604	Snow
0020	Windsor	01	01	Digital Stopwatch # 4TM11	20	\$23.23	\$464.60	Snow	604	Snow
0021	Windsor	01	01	Adult BVM	3	\$160.20	\$480.60	Snow	604	Snow
0022	Windsor	01	01	ECG Simulator iSimulate	3	\$5,000.00	\$15,000.00	Snow	604	Snow
0023	Windsor	01	01	Human Simulator SimNewB	1	\$31,000.00	\$31,000.00	Snow	604	Snow
0024	Windsor	01	01	ALS Equipment Bag	6	\$450.00	\$2,700.00	Snow	604	Snow
0025	Windsor	01	01	Oxygen Regulator with DSS valve	6	\$59.95	\$359.70	Snow	604	Snow
0026	Windsor	01	01	Multi-channel Digital Radio Units	36	\$500.00	\$20,000.00	Snow	604	Snow
0027	Windsor	01	01	SAM splint (case)	1	\$126.60	\$126.60	Snow	604	Snow
0028	Windsor	01	01	Pneumothorax Replacement skin	5	\$93.70	\$468.50	Snow	604	Snow
0029	Windsor	01	01	Life/form Skin and vein replacement kit	5	\$92.00	\$460.00	Snow	604	Snow
0030	Windsor	01	01	Posey Twice as Tough Restraints SX 2750	3	\$30.25	\$95.75	Snow	604	Snow
0030	Windsor	01	01	Posey Twice as Tough Restraints SX 2755	3	\$30.25	\$95.75	Snow	604	Snow
0030	Windsor	01	01	Pediatric BVM	1	\$160.20	\$160.20	Snow	604	Snow
0032	Windsor	01	01	Smartboard/interactive TV	3	\$3,000.00	\$9,000.00	Snow	604	Snow
0033	Windsor	01	01	IV Trainer	4	\$800.00	\$1,600.00	Snow	604	Snow
0034	Windsor	01	01	Stethoscopes	40	\$20.00	\$800.00	Snow	604	Snow
0035	Windsor	01	01	Pulse oximeters	40	\$20.00	\$800.00	Snow	604	Snow
0036	Windsor	01	01	Glucometers	40	\$25.00	\$1,000.00	Snow	604	Snow
0037	Windsor	01	01	Penlight	144	\$2.00	\$288.00	Snow	604	Snow
0038	Windsor	01	01	Shears	100	\$2.50	\$250.00	Snow	604	Snow

0039	Windsor	01	01	Trauma response kit	50	\$100.00	\$5,000.00	Snow	604	Snow
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## 2.4d Non-Instructional Equipment and Technology Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
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## 2.5a Minor Facilities Requests

Rank	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
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## 2.5b Analysis of Existing Facilities

### 2.5b – Analysis of Existing Facilities

Petaluma Campus: The facility is ADA compliant. Additional 200 sqft of storage space is required.

PSTC Campus: Facility is inadequate for storage space. Additional weatherproof securable space (approximately 500 sqft) is required for instructional equipment. The facility is ADA compliant. The campus expansion project is urgently needed.

JPS 2019

## 3.1 Develop Financial Resources

### 3.1 Develop Financial Resources

The department has two initiatives which are currently being implemented.

Each year the department sponsors a symposium on EMS (Off the Vine). Last year the symposium produced revenues which resulted in a profit of approximately \$2,500.00. This year it is expected to double the revenue/profit.

The department has reached out to community stakeholders through the SRJC Foundation and has solicited an ongoing donation stream from REACH Air Ambulance Service. Additionally, REACH founder Dr. John McDonald's scholarship for Paramedic students has been expanded and the award levels increased.

## 3.2 Serve our Diverse Communities

### 3.2 Serve our Diverse Communities

As part of the department's mission to promote cultural equity, we anticipate offering entry level EMC courses (EMC 100) at the Southwest Center. The aim of this program is to increase exposure of Public Safety related career opportunities to the Hispanic community and to help improve relationships.

The ongoing hiring process for all adjunct and regular faculty, emphasizes a prospective candidate's sensitivity, and understanding of the cultural and gender diversity of our population both in terms of our student body and the society which we serve.

The program promotes awareness and sensitivity to diversity through ongoing instructor development. Instructors and staff are encouraged to learn more about our students as individuals as well as representatives of the great variety of cultural backgrounds, and utilize our students as a learning laboratory for our improved awareness and sensitivity.

The department recognizes and responds to trends in student populations, demographics, ethnicity, gender, and cultural aspects. The department seeks the most highly qualified staff and faculty who not only represent the student populations, but who understand the unique challenges faced by our students.

EMC programs attract a high number of White students (approx. 70%) and the fewest number of Native American and Pacific Islander (< 2%). These numbers are consistent with the population in the industry (EMS) though not necessarily the population of Sonoma County. Our instructional staff approximates these percentages; however, it has a greater percentage of females than the student population. The department believes that with more female role models, perhaps the number of female students may increase. The department is aware of the growing population of Hispanic/Latino ethnicities. The department will be promoting existing bilingual faculty to help with recruitment and retention.

## 3.3 Cultivate a Healthy Organization

### 3.3 Cultivate a Healthy Organization

The department encourages and supports the participation of classified staff in all professional development activities that are applicable or of interest. The department makes allowances for classified employees to participate freely in these activities. Examples of professional development activities completed by classified staff include workshops in Microsoft Office products, InDesign, Adobe products, curriculum review, SLO workshops, data mining techniques, etc.

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### 3.4 Safety and Emergency Preparedness

#### **3.4 Safety and Emergency Preparedness**

April Chapman and Timothy Bell. Department Safety Leader training was completed.

JPS 2019

### 3.5 Establish a Culture of Sustainability

#### **3.5 Establish a Culture of Sustainability**

Beginning fall of 2010, the department took the initiative to reduce paper use. Since the initiative began, the department has successfully moved the vast majority of cognitive testing to the online domain and has moved the psychomotor testing (recording of results) online for EMC 103 (average 150 students per semester, approximately 500 sheets of paper saved per student). Additionally, the department is primarily using the online domain as a repository for syllabi, instructional supplements (handouts, etc.), policy memoranda and a host of other educational materials (practice quizzes, etc.).

The department is exceptionally equipment dependent and with average life expectancies for durable equipment being 5 years, the department must establish other funding resources in order to maintain (not even moving forward) existing equipment. The department is evaluating two prospective grants (one Federal, one State) to fund the Advanced EMT and Community Paramedic projects.

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## 4.1a Course Student Learning Outcomes Assessment

### 4.1a Course Student Learning Outcomes

All EMC courses and up-to-date Student Learning Outcomes due for review have been or are scheduled for completion within the current period. All courses are on a regular cycle for review.  
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## 4.1b Program Student Learning Outcomes Assessment

### 4.1b Program Student Learning Outcomes

All EMC courses have completed and up-to-date Student Learning Outcomes and are on a regular cycle for review. All Learning Outcomes have been assessed. The next course, program and certificate assessment will occur later this year (2016).

For EMC 103 and EMC 130 (133) series, performance (assessment of SLO efficacy) is easily measured. Upon completion of EMC 103 and EMC 130, students take National level standardized examinations. Pass rates for all institutions are a matter of public record. Success on these examinations is a clear indicator that all Learning Outcomes have been achieved. Five years ago, EMC 103 (EMT) had a success rate on the National Registry of EMTs Certifying Examination of approximately 65%. The department looked at changing the way the curriculum was delivered and what influence textbook and other materials may have on the outcome. After changing the textbook, the composite (within three attempts) success result is approximately **95%**. The department continues to review these statistics and measure student success. The department regularly surveys graduates and EMS provider agencies soliciting feedback for making recommendations in course changes.

All EMC Programs and Courses participate in a regular cycle of assessment per the recommendations of the District and Project Learn. The department has been assessing graduate performance on National level certifying examinations on all programs/courses which conclude in this manner. Other courses which do not conclude with a third party examination have been assessed by analyzing final examination (cumulative, comprehensive or summative) performance.

A spreadsheet has been set up for tracking which courses have been assessed. Once all courses SLO's are assessed, the cycle will start over in order to complete the next assessment within the 6 year cycle.

### 4.1c Student Learning Outcomes Reporting

Type	Name	Student Assessment Implemented	Assessment Results Analyzed	Change Implemented
Course	EMC 130 A	Fall 2004	Fall 2013	N/A
Course	EMC 130 B	Fall 2004	Fall 2013	N/A
Course	EMC 130 C	Fall 2004	Fall 2013	N/A
Course	EMC 100	Spring 2014	Spring 2014	N/A
Course	EMC 131	Fall 2012	Fall 2014	N/A
Course	EMC 103	Fall 2009	Spring 2014	N/A
Course	EMC 104.1	Spring 2014	Spring 2014	Fall 2014
Course	EMC 105	Fall 2013	Spring 2014	N/A
Course	EMC 108	Fall 2013	Spring 2014	N/A
Course	EMC 109	Spring 2014	Spring 2014	N/A
Course	EMC 114	Spring 2014	Spring 2014	N/A
Course	EMC 115	Fall 2013	Spring 2014	N/A
Course	EMC 116	Spring 2014	Spring 2014	N/A
Course	EMC 116.1	Spring 2014	Spring 2014	N/A
Course	EMC 299.12	Fall 2013	Spring 2014	N/A
Course	EMC 329.1	N/A	N/A	N/A

### 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
EMC 109	X		X		X		X	X	X	X	X	X		X		
EMC 115		X	X	X				X	X	X	X		X	X		X
EMC 116	X	X	X	X	X		X	X	X	X	X			X		
EMC 116.1	X	X	X	X	X		X	X	X	X	X			X		
EMC100		X		X	X	X	X	X	X	X	X		X	X	X	X
EMC103		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
EMC104.1		X		X	X	X	X	X	X	X	X	X	X	X	X	
EMC105		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
EMC108		X		X	X	X	X	X	X	X	X					X
EMC114		X		X	X	X	X	X	X	X	X					
EMC130 (EMC 133)	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 each core EMC program and course, students are taught not only the rote detail, but the value of communication, professionalism, critical thinking, personal integrity, responsibility, time management, cultural awareness and sensitivity to diversity. Students must grasp these complex concepts and incorporate these as fundamental to success in training and, more importantly, in job success. Though certain specific institutional learning outcomes are not demanded in every EMC course, elements of each are represented in all courses. There is particular emphasis placed on responsibility, honesty and leadership.

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### **5.0 Performance Measures**

The department measures performance of its core programs/courses by evaluating student success. Because there are National standard examinations for EMT and EMTP (Paramedic Academy), the department is able to obtain a report on student performance on these examinations.

Current statistics for EMT-P (EMC 130 series) show 100% success rate on first attempt.

Current statistics for EMT-Basic (EMC 103) show 95% success rate on first attempt.

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

The department offers courses every weekday, most Saturdays, and approximately 4 Sunday offerings (short courses) per semester excluding summer session. Courses are offered mornings (0800 – 1200), afternoon (1300 – 1700) and evening (1800 – 2200) to accommodate student school, work, and family schedules. Courses are offered at the PSTC, Santa Rosa and Petaluma campuses.

Course demands are analyzed for each class offering every semester (and summer session) to determine efficiency of scheduling. The department regularly polls students about preferred class times and uses these data in determining additions to the class schedules.

The evening offerings for EMC 103 and EMC 100 are the most popular, however, we already offer these courses Monday through Thursday from 1900 – 2200. There is no facility available to accommodate an additional evening class at the current time without pursuing another location. The department anticipates utilizing two more classrooms in the future to accommodate additional sections of these classes.

Hybrid instruction alternatives are being utilized in the EMC 130 (Paramedic) series. The nature of the instruction for most EMC courses require direct observation of students and feedback about affect and professionalism as well as observation and feedback about complex skill performance therefore it is unlikely that EMC will develop completely online offerings of any of the core courses/programs.

The EMC department anticipates new construction at the PSTC and has already taken steps to prevent logistical issues associated with construction (parking, noise, etc.). The department eagerly awaits the addition of classroom space which will be occupied with additional EMC classes and the simulation laboratory project. These facilities will be required with the addition of Fire Tech classes being offered at the PSTC

The department faces the biggest challenge in the area of increased costs, and decreased 2000 budgets. The department will seek alternatives to STNC direct instructional support and anticipates delivering some curriculum online or in other ways in an effort to conserve; however, it must be pointed out that National, State and local mandates require that certain instructor to student ratios and direct contact hours be met. The department is entertaining the idea of re-structuring classes in such a way as to combine course sections for lecture/ academic presentation, and distribute the laboratory components. This may prove to be a significant cost saving measure. That being stated, the department will require approximately 40,000 – 45,000 additional dollars to find instructional costs directly attributable to regulatory requirements (mandated student/teach ratios for instruction and testing).

South county course offerings for EMC 100 have been successful, and with increased student populations in the Petaluma area, the demand for additional course offerings may make implementation of additional EMC 100 sections and possibly the addition of an EMC 100 section at the Southwest Center.

**5.1 Student Headcounts** The number of students enrolled in each Discipline at first census (duplicated headcount).

**Santa Rosa Campus**

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	27	43	53	21	34	44	22	36	56	21	34	

**Petaluma Campus** (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	0	32	24	0	21	27	0	24	24	0	21	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	175	626	670	202	541	673	258	530	712	214	542	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	202	701	747	223	596	744	280	590	792	235	597	

## 5.2a Enrollment Efficiency

### 5.2a Enrollment Efficiency

#### Enrollment Efficiency:

The department realized an efficiency of approximately 70% for the current reporting period. This demonstrates that class size adjustments should, potentially be made to improve posted efficiency expectations. It is important to note; however, that many of the department's programs (EMT, Paramedic) are required to maintain certain student to instructor ratios in the classrooms which precludes complete flexibility in terms of adjusting class sizes. Additionally, what has a significant impact on enrollment efficiency are the numerous short term classes the department offers which have class maximum sizes of 30 or 35 but typically enroll 10 to 15 students. These courses have no instructional (faculty) cost to the department.

Using a threshold of 86% (as determined by the approximate College average since summer of 2008), over the past 3 years the department has consistently remained below 80% level though has decreased over the past few years. This demonstrates that class size adjustments which were made in 2005 that were on target for expected efficiency in that time period are no longer efficient. The department will seek to change the class size for EMC 103 and EMC 100 courses back to the pre 2005 level which were more in keeping with the student:faculty ratios as required by accrediting and regulatory bodies. The department's programs (EMT, and Paramedic) are required to maintain certain student to instructor ratios in the classrooms which precludes complete flexibility in terms of adjusting class sizes.

While the department is below the efficiency expectation on overall data analysis, it is important to note that if the in-service courses are excluded from the data analysis, the efficiency is on par with the College expectation.

The department faces constant pressure to offer more course sections for EMC 100, EMC 103, and EMC 116; however, staffing and facilities difficulties preclude the department's ability to do so. The department responded to increasing demand for classes by increasing the class size (in 2005). Increased class sizes has allowed more students to enroll, and the attrition rates have not increased significantly, but the absolute numbers of drops and withdrawals did rise. The department has analyzed the impact that larger numbers of student in lecture/lab environments has on attrition. The department has found the optimum class sizes and will return to smaller class size limits in the future.

Another factor which has a possible impact is the recent implementation of a standardized certification examination for EMT and Paramedic students. EMT students often enroll without any understanding of the certification process which lies beyond course completion and find the idea of a perceived difficult certification examination daunting. In a recent survey of students who did not take the certifying examination, 20% of students responded that they were concerned that they would not pass as the reason they did not take the certifying examination. The department is preparing a series of seminars, and eventually courses designed to demystify the certification examination and to build confidence in test taking abilities and better prepare students to be successful when taking the certifying examination.

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**5.2a Enrollment Efficiency** The percentage of seats filled in each Discipline at first census based on class limit (not room size).

**Santa Rosa Campus**

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	108.0%	95.6%	53.0%	84.0%	75.6%	44.0%	88.0%	80.0%	56.0%	84.0%	75.6%	

**Petaluma Campus** (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	0.0%	120.0%	113.3%	0.0%	96.7%	96.7%	0.0%	96.7%	96.7%	0.0%	100.0%	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	69.8%	65.9%	73.6%	66.2%	64.3%	74.2%	58.7%	64.8%	76.0%	60.0%	70.0%	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	73.1%	68.4%	72.8%	67.4%	65.7%	72.1%	60.2%	66.4%	74.8%	61.5%	71.2%	

**5.2b Average Class Size**

**Average Class Size:**

The department routinely analyzes the impact of class size on student success and faculty/staff workload/satisfaction. Largely through trial and error, class sizes are approaching the optimum for student success and faculty workload. Where the average class size reported for all EMC courses is 22 students, that number is inaccurate. Average class size for EMC courses overall for the most recent past academic year was 21 with an average retention rate of over 88% based on statistics gathered by the department.

**5.2b Average Class Size** The average class size in each Discipline at first census (excludes cancelled classes).

**Santa Rosa Campus**

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	27.0	43.0	26.5	21.0	34.0	22.0	22.0	36.0	28.0	21.0	34.0	

**Petaluma Campus** (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	0.0	36.0	34.0	0.0	29.0	29.0	0.0	29.0	29.0	0.0	30.0	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	18.5	18.7	19.7	17.9	18.3	19.9	16.5	18.2	20.5	16.8	19.8	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	19.3	19.8	20.4	18.2	19.0	20.2	16.8	19.0	21.0	17.1	20.5	

**5.3 Instructional Productivity**

**Instructional Productivity:**

Using a threshold of 16 and an ideal of 18% FTES:FTEF, the program is consistently above the ideal average at 20%. This must be viewed in context, however, because a significant amount of instruction is provided by Professional Expert employees. Instructors employed as Professional Experts meet or exceed all minimum qualifications for instructors in the EMC disciplines as dictated by Federal, State and local regulations.

Professional Expert Instructors are utilized in this way due to regulatory agency mandates for instructor to student ratios. The cost of maintaining these mandated ratios using regular and or adjunct faculty is prohibitive.

STNC are only used as direct instructional support personnel and because the District lacks the ability to calculate hours from the Master PAF, this fact skews the data in several areas. Since data mining techniques currently employed fail to capture these data points, the department estimates that between 700 and 1,000 hours of instructional time is spent yearly which is not represented in the data provided to the department for analysis.

There is no specific policy or philosophy used to maintain the productivity. The department believes that this level is inherent in the way in which courses are conducted, and the fact that most students enroll in EMC courses with specific goals in mind (certification and licensure).

**5.3 Instructional Productivity** The ratio of Full-Time Equivalent Students (FTES) to Full-Time Equivalent Faculty (FTEF) in each Discipline at first census.

**Santa Rosa Campus**

Emergency Medical Care		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
	<b>FTES</b>	1.70	2.46	3.33	1.44	2.14	2.77	1.38	2.26	3.52	1.44	2.14	
	<b>FTEF</b>	0.14	0.14	0.25	0.14	0.14	0.25	0.14	0.13	0.26	0.14	0.14	
	<b>Ratio</b>	<b>12.37</b>	<b>18.17</b>	<b>13.25</b>	<b>10.50</b>	<b>15.58</b>	<b>11.00</b>	<b>10.08</b>	<b>18.00</b>	<b>13.39</b>	<b>10.50</b>	<b>15.58</b>	

**Petaluma Campus** (Includes Rohnert Park and Sonoma)

Emergency Medical Care		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
	<b>FTES</b>	0.00	3.22	2.42	0.00	1.93	2.41	0.00	2.47	2.28	0.00	2.25	
	<b>FTEF</b>	0.00	0.21	0.21	0.00	0.21	0.22	0.00	0.22	0.22	0.00	0.22	
	<b>Ratio</b>	<b>0.00</b>	<b>15.25</b>	<b>11.48</b>	<b>0.00</b>	<b>9.14</b>	<b>11.05</b>	<b>0.00</b>	<b>11.32</b>	<b>10.44</b>	<b>0.00</b>	<b>10.30</b>	

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

Emergency Medical Care		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
	<b>FTES</b>	11.78	92.17	84.52	15.70	89.26	66.58	17.61	87.13	82.77	31.98	88.45	
	<b>FTEF</b>	1.07	5.98	7.04	1.07	5.95	7.13	1.84	6.24	6.83	1.42	6.65	
	<b>Ratio</b>	<b>10.96</b>	<b>15.41</b>	<b>12.01</b>	<b>14.63</b>	<b>15.00</b>	<b>9.33</b>	<b>9.56</b>	<b>13.95</b>	<b>12.11</b>	<b>22.59</b>	<b>13.31</b>	

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

Emergency Medical Care		X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
	<b>FTES</b>	13.47	97.84	90.27	17.14	93.33	71.75	18.99	91.86	88.57	33.42	92.84	
	<b>FTEF</b>	1.21	6.33	7.50	1.21	6.30	7.60	1.98	6.59	7.31	1.55	7.00	
	<b>Ratio</b>	<b>11.12</b>	<b>15.46</b>	<b>12.03</b>	<b>14.16</b>	<b>14.82</b>	<b>9.44</b>	<b>9.60</b>	<b>13.94</b>	<b>12.11</b>	<b>21.52</b>	<b>13.26</b>	

## 5.4 Curriculum Currency

### 5.4 Curriculum Currency

All courses in the department are current for this reporting period.

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## 5.5 Successful Program Completion

### 5.5 Successful Program Completion

The EMC department faculty routinely instruct students regarding certificate completion. However, certificates are not required for job eligibility and so are regularly ignored by students. There are no trends to identify.

The recommendation by department faculty is to make certificate completion automatic so that upon successful completion of terminal classes a certificate is generated and awarded. In this way, the certificate completion rate would equal the course completion rate.

The department supports student completion of certificates and majors by offering courses at a variety of times and days, and at a variety of locations when applicable. All faculty members keep regular office hours and meet with students whenever possible. The courses offered by the department are governed by national, state and local regulatory agencies, which manage course completion requirements. Therefore upon completion of a given course, a student has the credential necessary.

On average, approximately 86% of EMC students successfully complete their course of study. This well exceeds the college average of 75%. When compared to retention, it also indicates that the vast majority of students who are enrolled at the time of census go on to complete their courses. Most students enrolling in EMC programs do so with a purpose to gain certification or equivalent status and successfully complete in order to be competitive for EMS jobs. The exception to this is the entry level (First Responder) courses where a larger number of students are 'surveying' the EMS field.

The average Successful Course Completion (86%) has been stable for the past four years.

When compared to retention, it also indicates that most students who are enrolled at the time of census go on to pass their courses. Most students enrolling in EMC programs do so with a purpose to successfully complete in order to be competitive for EMS jobs. The exception to this is the entry level (First Responder) courses where a larger number of students are ‘surveying’ the EMS field. The program with the highest degree of success in achieving the learning objectives is the paramedic academy (EMC 130 series) where success rate (students employed as paramedics) is approximately 95%.

Students in the EMC department completed two A.A. degrees on average for the past four years. Historically, EMC students complete or obtain very few certificates (2 certificates awarded in 2006-2007). This is likely due to the fact that EMC graduates do not need a certificate in order to begin work. The department has identified a process strategy to now automatically award certificates to graduates and the department went from being among the departments with fewest certificates awarded to one of the departments with the highest number of certificate awards..

**5.6b Successful Course Completion** The percentage of students receiving a grade of A,B,C, or CR in each Discipline (duplicated headcount).

**Santa Rosa Campus**

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	96.2%	72.1%	75.0%	95.2%	70.6%	81.8%	76.2%	69.7%	78.2%	85.0%	60.6%	

**Petaluma Campus** (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	0.0%	50.0%	41.2%	0.0%	41.4%	41.4%	0.0%	51.7%	37.9%	0.0%	43.3%	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	84.3%	71.5%	76.2%	80.9%	75.0%	75.4%	70.2%	75.2%	77.7%	77.6%	80.2%	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	85.8%	70.5%	74.7%	82.2%	73.4%	74.6%	70.7%	73.9%	76.4%	78.2%	77.6%	

EMC programs attract a high number of White students (72%) and the fewest number of Native American and Pacific Islander (< 2%). These numbers are consistent with the population in the industry (EMS) though not the population of Sonoma County or the student population of the College.

The highest percentage of students enrolling in EMC programs is in the group aged 21 to 25 years. It is likely that EMC jobs are not as attractive as a 'second' career, but perhaps does capture some 'early' career changes. The physical demands and relatively low pay make these positions less attractive to the older candidate. Federal, State and local mandates preclude graduates under 18 years of age from certification/licensure.

The two largest ethnic groups participating in our programs are White and Hispanic students. While the percentage of White students is above the district average, the percentage of Hispanic students is below the average. We are observing a slight trend since 2003-2004 of an increase in Hispanic students being served.

**5.7a Students Served - by Ethnicity** The number of students in each Discipline at first census broken down by ethnicity (duplicated headcount).

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

Emergency Medical Care	Ethnicity	2015-16	Percent	2016-17	Percent	2017-18	Percent	2018-19	Percent
	White	1206	74.3%	1093	70.4%	1075	66.2%	826	60.4%
	Asian	28	1.7%	34	2.2%	49	3.0%	29	2.1%
	Black	17	1.0%	29	1.9%	9	0.6%	12	0.9%
	Hispanic	236	14.5%	235	15.1%	267	16.4%	316	23.1%
	Native American	17	1.0%	11	0.7%	15	0.9%	5	0.4%
	Pacific Islander	4	0.2%	4	0.3%	1	0.1%	6	0.4%
	Filipino	18	1.1%	5	0.3%	14	0.9%	5	0.4%
	Other Non-White	58	3.6%	61	3.9%	78	4.8%	75	5.5%
	Decline to state	40	2.5%	81	5.2%	117	7.2%	94	6.9%
	<b>ALL Ethnicities</b>	<b>1624</b>	<b>100.0%</b>	<b>1553</b>	<b>100.0%</b>	<b>1625</b>	<b>100.0%</b>	<b>1368</b>	<b>100.0%</b>

**Academic success indicator for certificate courses**

**Analysis:**

The department examines and trends results from National Registry Examination for EMC 103 and EMC 130 courses. Determine success rates based upon 'pass on first attempt' data.

Currently the success rate for EMC 130 is 95%, significantly above the National average of 80%. EMC 104 currently has a success rate of 85% which is also above the National average of 70%.

**Recommendations:**

Institute computer adaptive testing in the EMC 103 and 130 classrooms which will provide a model for students that approximates the National standard.

Emphasize examination questions based on National standard curriculum objectives and less on course specific objectives.

Re-organize practical examination format for EMC 130 to include evaluation of the affective domain.

Conclusion:

While the sample size for the analysis is still small and the process for data collection is not yet perfected, it is the conclusion of the department that the program is meeting its goals and objectives in student performance. The department will strive to improve the performance in all classes, but will emphasize enhancing the result for EMC 103 over the course of the next program review period.

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## 5.6 Student Success

### 5.6 Student Success

#### **Retention:**

Retention for all department courses is 88% compared to the district retention rate of approximately 75%. It is likely that the career oriented student which the EMC department serves is most likely to continue to successful completion of their courses. Of those who fail, drop or withdraw from the core EMC courses, a very high percentage repeat the course in the subsequent semester with successful outcomes.

#### **Student Success:**

Success = passing with Credit, Grade C or better = 80% compared to the district success rate of approximately 70%. This well exceeds the college standard. When compared to retention, it also indicates that the vast majority of students who are enrolled at the time of census go on to complete their courses. Most students enrolling in EMC programs do so with a purpose to gain certification or equivalent status and successfully complete in order to be competitive for EMS jobs. The exception to this is the entry level (First Responder) courses where a larger number of students are 'surveying' the EMS field.

#### **GPA:**

Grade point average for EMC students is skewed due to what is clearly a data error reported for summer sessions for students attending the Public Safety Training Center beginning in 2009. Additionally, EMC students who do not complete the program of study often do not withdraw from their classes prior to the last date to drop with a "W" grade hoping to benefit from additional instruction upon re-attempting their course in subsequent semesters. Omitting the grades reported in error for that period, the average GPA should be skewed slightly high (3.15) due to the grading policy in one of the EMC programs where students cannot achieve the passing standard with a grade of 2.0. Competency levels of 2.0 or less are not adequate to pass the licensure examination requirements for EMT or Paramedic levels and due to local mandates, a student must achieve 80% (3.0) final examination score to be considered eligible for a course completion certificate. Additionally, the average GPA demonstrates that few

students are able to achieve a grade level of 4.0. This is due to the fact that the 80% level is considered minimum passing level, and grade distributions are adjusted upward accordingly.

**Capstone Course Completion:**

Capstone course completion is a subject difficult to present in a clear manner. The department has essentially two capstone courses - EMC 103 which is Emergency Medical Technician (EMT), and EMC 130 series which is the Emergency Medical Technician - Paramedic, or Paramedic (EMTP). Although it is required for an individual to be EMT certified before matriculation into EMTP training, EMT is considered one endpoint on a career path.

The success rate for EMC 104 (EMT) is approximately 90% and the success rate for EMC 130 series is approximately 68%. Annually, approximately 350 EMC 100 students are eligible to matriculate into EMC 103 and 75% do so. Of the approximately 250 annual graduates of the EMC 103 classes approximately 10% enroll in EMC 130.

These statistics compare with California labor market data which demonstrate that of approximately 1,000 EMS (EMT and EMTP) new jobs approximately (42% growth in this area) 10% are EMTP.

**5.6a Retention** The percentage of students receiving a grade of A,B,C,D,CR, or I in each Discipline (duplicated headcount).

**Santa Rosa Campus**

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	96.2%	72.1%	78.8%	95.2%	82.4%	86.4%	76.2%	69.7%	78.2%	85.0%	66.7%	

**Petaluma Campus** (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	0.0%	63.9%	41.2%	0.0%	41.4%	41.4%	0.0%	51.7%	55.2%	0.0%	46.7%	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	91.9%	78.1%	87.2%	92.1%	81.5%	83.4%	96.2%	83.1%	84.9%	88.1%	83.8%	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	92.4%	77.1%	84.7%	92.4%	79.8%	82.0%	94.7%	81.0%	83.5%	87.9%	81.3%	

**5.6b Successful Course Completion** The percentage of students receiving a grade of A,B,C, or CR in each Discipline (duplicated headcount).

### Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	96.2%	72.1%	75.0%	95.2%	70.6%	81.8%	76.2%	69.7%	78.2%	85.0%	60.6%	

### Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	0.0%	50.0%	41.2%	0.0%	41.4%	41.4%	0.0%	51.7%	37.9%	0.0%	43.3%	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	84.3%	71.5%	76.2%	80.9%	75.0%	75.4%	70.2%	75.2%	77.7%	77.6%	80.2%	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	85.8%	70.5%	74.7%	82.2%	73.4%	74.6%	70.7%	73.9%	76.4%	78.2%	77.6%	

### 5.6c Grade Point Average The average GPA in each Discipline (UnitsTotal / GradePoints).

#### Santa Rosa Campus

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	3.35	2.90	3.11	3.57	2.84	3.51	2.90	3.18	3.38	3.65	2.96	

#### Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	0.00	1.84	1.96	0.00	1.76	1.44	0.00	2.00	1.58	0.00	1.95	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	1.12	2.22	2.13	1.47	2.45	2.04	0.84	2.36	2.35	1.53	3.03	

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

Discipline	X2015	F2015	S2016	X2016	F2016	S2017	X2017	F2017	S2018	X2018	F2018	S2019
Emergency Medical Care	1.46	2.24	2.18	1.65	2.45	2.10	0.95	2.37	2.38	1.67	3.00	

## 5.7 Student Access

### 5.7 Student Access

#### Ethnicity:

EMC programs attract a high number of White students (68%) and the fewest number of Native American and Pacific Islander (1%). These numbers are consistent with the population in the industry (EMS) though not the population of Sonoma County.

#### 5.7a Students Served - by Ethnicity

The number of students in each Discipline at first census broken down by ethnicity (duplicated headcount).

#### ALL Locations

(Combined totals from ALL locations in the District)

Emergency Medical Care	Ethnicity	2015-16	Percent	2016-17	Percent	2017-18	Percent	2018-19	Percent
	White	1206	74.3%	1093	70.4%	1075	66.2%	826	60.4%
	Asian	28	1.7%	34	2.2%	49	3.0%	29	2.1%
	Black	17	1.0%	29	1.9%	9	0.6%	12	0.9%
	Hispanic	236	14.5%	235	15.1%	267	16.4%	316	23.1%
	Native American	17	1.0%	11	0.7%	15	0.9%	5	0.4%
	Pacific Islander	4	0.2%	4	0.3%	1	0.1%	6	0.4%
	Filipino	18	1.1%	5	0.3%	14	0.9%	5	0.4%
	Other Non-White	58	3.6%	61	3.9%	78	4.8%	75	5.5%
	Decline to state	40	2.5%	81	5.2%	117	7.2%	94	6.9%
	<b>ALL Ethnicities</b>	<b>1624</b>	<b>100.0%</b>	<b>1553</b>	<b>100.0%</b>	<b>1625</b>	<b>100.0%</b>	<b>1368</b>	<b>100.0%</b>

#### Gender:

The ratio of male to female students has remained consistent over the past 5 years. The program is male dominated with only approximately 31% female students. This is also consistent with the industry as a whole. The EMC department employs more males than females (55:45); however, the ratio is much different than the student (and industry) population. The program philosophy is one that emphasizes role modeling. With more female role models, perhaps the number of female students may increase.

#### 5.7b Students Served - by Gender

The number of students in each Discipline at first census broken down by gender (duplicated headcount).

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

Emergency Medical Care	Gender	2015-16	Percent	2016-17	Percent	2017-18	Percent	2018-19	Percent
	Male	1084	66.7%	1076	69.3%	1111	68.4%	965	70.5%
	Female	509	31.3%	440	28.3%	474	29.2%	370	27.0%
	Unknown	31	1.9%	37	2.4%	40	2.5%	33	2.4%
	<b>ALL Genders</b>	<b>1624</b>	<b>100.0%</b>	<b>1553</b>	<b>100.0%</b>	<b>1625</b>	<b>100.0%</b>	<b>1368</b>	<b>100.0%</b>

**Age:**

The highest percentage of students enrolling in EMC programs is in the group aged 21 to 25 years and 67% of students being between the ages of 19 and 30. It is likely that EMC jobs are not as attractive as a 'second' career. The physical demands and relatively low pay make these positions less attractive to the older candidate. Federal, State and local mandates preclude graduates under 18 years of age from certification/licensure.

**5.7c Students Served - by Age** The number of students in each Discipline at first census broken down by age (duplicated headcount).

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

Emergency Medical Care	Age Range	2015-16	Percent	2016-17	Percent	2017-18	Percent	2018-19	Percent
	0 thru 18	124	7.6%	103	6.6%	102	6.3%	133	9.7%
	19 and 20	180	11.1%	147	9.5%	184	11.3%	228	16.7%
	21 thru 25	478	29.4%	441	28.4%	441	27.1%	418	30.6%
	26 thru 30	341	21.0%	385	24.8%	350	21.5%	237	17.3%
	31 thru 35	178	11.0%	164	10.6%	182	11.2%	151	11.0%
	36 thru 40	88	5.4%	92	5.9%	130	8.0%	59	4.3%
	41 thru 45	72	4.4%	74	4.8%	69	4.2%	38	2.8%
	46 thru 50	51	3.1%	68	4.4%	62	3.8%	41	3.0%
	51 thru 60	84	5.2%	62	4.0%	71	4.4%	42	3.1%
	61 plus	28	1.7%	17	1.1%	34	2.1%	21	1.5%
	<b>ALL Ages</b>	<b>1624</b>	<b>100.0%</b>	<b>1553</b>	<b>100.0%</b>	<b>1625</b>	<b>100.0%</b>	<b>1368</b>	<b>100.0%</b>

5.8 Curriculum Offered Within Reasonable Time Frame

5.8 Curriculum Offered Within Reasonable Time Frame

**Course Offerings:**

The department offers courses at the Petaluma, Santa Rosa campuses and the Public Safety Training Center as well as off campus locations. All courses (except EMC 130 series) are offered each semester in the locations with highest demand with the exception of Summer Session. The department lacks faculty and classified staff resources necessary to conduct more courses than currently being offered in any location other than the Public Safety Training Center. Currently the department only offers one course (EMC 100) during summer, with either two or three sections depending on demand.

Since all courses (except EMC 130 series) are offered each semester and in the locations of highest demand, there is no rotation system.

In regards to EMC 130 series, this course is offered once a year at the Public Safety Training Center with 130A being conducted in the fall semester, completing in the spring semester, and 130 D 131 and 132 being conducted in the spring semester and completing during the summer session.

**Course Offering Time Frame:**

Department course offerings for sequential courses are arranged such that a student who wishes to begin the process and eventually complete the capstone courses, they can complete their course of study in one (culminating with EMC 104) or two (culminating in EMC 130 series) years. The EMC major requires two years of academic work with a suggestion that during the process students obtain one year of work experience.

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## 5.9a Curriculum Responsiveness

**5.9a Curriculum Responsiveness**

The department philosophy dictates that instruction will be student centered. All department faculty regularly gather feedback from students regarding program success, perceived difficulties with curriculum, and adequacy of preparation. The department also gathers statistics on student success from National and State level testing outcomes. This information drives changes in curricula delivery and course organization.

EMC advisory committees (EMTP Academy committee, and EMC Advisory committees) are comprised of representatives from local hospitals, ambulance service, fire departments and other EMS personnel employers as well as representatives from EMS regulatory agencies and training staff. Of the committee members, not including SRJC faculty and staff, 90% are EMS employers and 10% are from regulatory agencies.

Approximately 25% of the members are also adjunct faculty.

EMS employers have direct access to program faculty and staff and regularly provide feedback regarding the SRJC "product" and how graduates are or are not fulfilling employer expectations. Regulatory agency personnel also provide feedback regarding the certification/licensure process and

graduate success. Department access to EMS employers allows us to solicit information regarding graduate performance well beyond initial hire and through several re-certification/licensure cycles. This information is utilized to inform the decisions regarding adjustments in the various programs.

The department's programs are continually reviewed for currency, accuracy and application of the latest educational standards. The programs are mandated to remain current with any change in the established curricula.

The department anticipated the major revision to the curricula and educational standard which went into effect July 1, 2010. The department has made all the mandatory changes to the affected programs.

JPS 2019

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

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

The department participated in a program to introduce Public Safety careers to high school students. The department offered four entry-level courses (EMC 100) in four separate high schools in the County. These high schools were developing CTE programs and attempting to introduce Public Safety as a career choice. The program lasted two years before funding/budget constraints forced the termination of the "High School First Responder" program. The department is prepared to once again offer these programs to high schools when funding streams are restored.

JPS 2019

## 5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)

### **5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)**

This section does not apply to EMC. There are no transfer majors in this department.

JPS

## 5.11a Labor Market Demand (Occupational Programs ONLY)

### 5.11a Labor Market Demand (Occupational Programs ONLY)

The demand for educated and trained emergency medical employees remains in spite of the economic slowdown that is impacting the local and regional economies. Public safety employees in general remain in relatively high demand because the agencies who employ them must provide basic services in their respective jurisdictions.

The First Responder program, Emergency Medical Technician and Paramedic Academy programs operate in accordance with national and state-mandated training requirements. Graduates of these programs meet state certification requirements for employment in their respective fields.

The certificate programs in the department provide students with foundational knowledge to assist them in preparing for careers. The certificates are useful in demonstrating to prospective employers that the student has a basis of knowledge in their chosen field. The student's education serves as a foundation for additional state mandated training.

The department's EMC degree program demonstrates to the prospective employer that a student has foundational knowledge in the out of hospital field. Prospective employers in the emergency medical field are more apt to hire students who have earned a degree because candidates who have earned a degree are less likely to be the subject of misconduct complaints; are more likely to successfully complete a career, are more likely to be successful in assignments that require critical analysis and are more apt to be successful in management and education positions.

California Labor statistics indicate that there are approximately 15,900 EMS jobs, 6,700 new jobs in the time period in the State with approximately 990 job openings annually. Of the 15,900 EMS jobs approximately 90% are EMT-1 jobs and 10% EMTP (Paramedic).

Changes in the labor market reflect the general trend in the economy and unemployment; however, the EMS industry as a whole has not suffered the typical cutbacks in labor force. Governmental regulations require a certain minimum labor force, but the trend is that more workers are staying in their jobs longer. Attrition rates are dropping which decreases the need for new workers, but at the same time, economic changes steer more prospective candidates to prepare themselves for service industry jobs. According to the CA EDD web site

(<http://www.labormarketinfo.edd.ca.gov>). Approximately 990 new jobs for EMTs and Paramedics will open per annum (2010 - 2020) or approximately 42% growth in the same time period (revised from 780 new jobs for EMTs and Paramedics for the time period as listed last year).

The department is redoubling its efforts to better prepare its graduates so they will be more desirable candidates and better competitors for jobs.

The development and refining of the EMS Academy (EMC 105) and the development of the Advanced EMT program address the demands for more highly trained professional Emergency Medical Responders, and better prepares SRJC graduates for careers in Emergency Medical Response.

Source:

<http://www.labormarketinfo.edd.ca.gov/cqi/databrowsing/occExplorerQSDetails.asp?searchCriteria=Emergency+Medical+Technician&careerID=&menuChoice=&geogArea=0601000000&soccode=292041&search=Explore+Occupation>

JPS 2019

### 5.11b Academic Standards

### 5.11b Academic Standards

Academic standards are regularly discussed in open dialogue with faculty and advisors. Much of the department's academic standards are mandated by State or National accrediting bodies or regulatory agencies. The department keeps pace with any change to the standards or methodologies. All faculty are either certified, licensed EMS professionals, or recognized subject matter experts. Currency in matters that affect EMS professionals is mandatory.

The most current plans for altering the academic standards are as follows:

- Implement the EMS 2010 curricula and educational standards. This has been completed in all applicable areas, however no additional funding has been made available to the department for staffing/instructional costs.
- Review student success data, provide analysis and make recommendations for alterations in curricula and testing methods. This is an ongoing process.
- Review student feedback, provide analysis and make recommendations for alteration in delivery methodologies. This is an ongoing process.

JPS 2019

### 6.1 Progress and Accomplishments Since Last Program/Unit Review

Rank	Location	SP	M	Goal	Objective	Time Frame	Progress to Date
0001	Windsor	00	00	Increase classroom and laboratory space	Add two classrooms and one laboratory for EMC	24 mo.	Re-approve PSTC facility expansion project.
0001	Windsor	08	07	Improve ambulance fleet, increase maintenance budget including tools	Purchase ambulances and tools for diesel engine maintenance	12 mo.	Identify funding source

## 6.2b PRPP Editor Feedback - Optional

The program performance reporting process is of tremendous benefit to department faculty, staff and administration; however, inaccurate and incomplete data which drive the report detracts significantly from the value of the report. In order to provide a more accurate report, and better description of the overall health of the programs within it, this department has collected its own statistics whenever possible. This process has not insignificantly impacted staff time. This editor believes that if a comprehensive program performance report were generated on a two or three year interval, and more emphasis was placed on collecting accurate data, the process as a whole would have far greater value to the College and departments.

JPS 2019

### 6.3a Annual Unit Plan

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
0001	Windsor	00	00	Increase classroom and laboratory space	Add two classrooms and one laboratory for EMC	24 mo.	Re-approve PSTC facility expansion project.
0001	Windsor	08	07	Improve ambulance fleet, increase maintenance budget including tools	Purchase ambulances and tools for diesel engine maintenance	12 mo.	Identify funding source