

Santa Rosa Junior College

Program Resource Planning Process

Emergency Medical Care 2014

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 community that fulfills the robust and diverse requirements of the professions 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.

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 jobs, 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 goals and initiatives of the district are consistent with the goals and initiatives of the Department. The EMC department provides entry-level course offerings at regional high schools and articulates with an Introduction to Public Safety course which 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, Sebastopol and Windsor serving the needs of the students and EMS community members throughout the County.

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. 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.

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.

1.1c Description

The Emergency Medical Care program offers a number of entry-level, advanced level and continuing/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 (forthcoming)

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.

1.1d Hours of Office Operation and Service by Location



The program 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 0900 - 1530 hours on Monday, 0900 - 1400 hours Tuesday through Friday 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 and 1800 - 2200.

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

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

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

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

Friday Classes: 0800 - 1200 and 1800 - 2200.

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

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 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. 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 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. 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 is moving 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 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 an average headcount of 2133.5 students per annum with a median of 2123 and a standard deviation of 31.5 based on a 4 year average. The headcount was down approximately 30 students in 2013 versus 2012 (approximately -1.6%). Headcount 10 year average is 2075 which demonstrates a consistent yet small growth rate.

In general, headcount likely depends upon fluctuations in the economy where more individuals seek vocational and service industry jobs in times of a poor economy and fewer seek vocational and service industry jobs in good economic times. The combination of a variable latency period between economic trends and job (thus

training) seeking trends, and variable job availability make headcounts difficult to predict, and thus difficult to rationalize enrollment fluctuations.

Since the economic downturn following 2007, fewer students in general were seen in Public Safety programs. Yet, headcounts rose slightly and average class size remained virtually unchanged in Emergency Medical Care programs. This was a clear demonstration of demand for classes by students who are/were gravitating to industries that have growth potential even though the industry itself was not growing significantly.

Enrollment Efficiency:

Using a threshold of 86% (as determined by the approximate College average since summer of 2008), and an ideal of 95%, over the past 4 years the Department has an average enrollment efficiency of 73%. The Department realized an efficiency of 80.24% 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.

Average Class Size:

The 5 year average class size for EMC programs is 22 students (College-wide average 29). 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 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 precluded from increasing student to instructor ratios.

Instructional Productivity:

Using a threshold of 16 and an ideal of 18.7% FTES:FTEF, the program is consistently above the ideal (average 27% over a 3 year period and 23% for this reporting period). This must be viewed in context, however, because a significant amount of instruction is provided by Professional Expert employees. Instructors employed as Professional Experts. The Professional Expert category of instructional employee is not reflected in 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.

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 84 percentile with an average of 90% of students receiving a grade of D or better, and/or credit. This is well above the college average of 79%. Retention has been stable (at 90%) for the past five years.

Successful Course Completion:

On average, approximately 85% 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 (85% +/- 1%) has been stable for the past five years.

Recent changes in curricula and proficiency requirements which were instituted in 2013 were anticipated impact retention rates significantly (10%). Retention did decrease since the last reporting period; however the decrease was 1%.

Grade Point Average:

Grade point average for EMC students is skewed (average grade 2.59) due to what is clearly a data error reported for Summer sessions for students attending EMC programs beginning in 2009. Omitting the grades reported in error for that period, the average GPA would 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.

Ethnicity:

EMC programs attract a high number of White students (68%) and the fewest number of Black, Native American and Pacific Islander and Filipino (combined < 3%). These numbers are consistent with the population in the industry (EMS) though not the population of Sonoma County. Also of note is the number of Hispanic students served doubled from the 2012-13 reporting period.

Students Served by Ethnicity	2013-14	Percent	District Totals	%		
White	1012	67.69	20084	55.27		
Asian	31	1.98	1206	3.32		
Black	14	0.89	816	2.25		
Hispanic	294	18.74	6240	17.17		
Native American	7	0.45	431	1.19		
Pacific Islander	9	0.57	199	0.55		
Filipino	12	0.76	299	0.82		
Other Non-White	65	4.14	405	1.11		
Declined to State	75	4.78	6656	18.32		
Total	1569	100			36336	100

Gender:

The ratio of male to female students has remained consistent over the past 5 years. The program is male dominated with only approximately 30% female students (2% up from last calculation). 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.

Age:

The highest percentage of students enrolling in EMC programs is in the group aged 21 to 25 years with 31.10% of all student ages falling into this category. 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.

2.1a Budget Needs

The EMC department had expenditures of \$0.650 million which comprises 0.6% of the district total. This is down almost 2% over the previous year. Faculty payroll was \$0.398 million (0.93% of the district total). This is down 3.6% over last year. Classified payroll was \$0.071 million (0.39% of the district total). This is up 4.5% over last year. The total Salary/Benefit cost of \$0.563 million (0.64% of the district total). This represents a reduction on average of 2.14% over last year. Total Non-Personnel Cost of 1 million which is 0.85% of the district total and is down over 5% from last year.

Yearly, this Department has a headcount of approximately 2,000 although down slightly from last year, the Department 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 was a decrease in reported number of students served over last year. 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 supplies showed marginal increases over last year and exam glove expenditures increased 40% which offset other cost containment and expenditure reductions made by the Department and may account for the relatively small (2%) reduction in expenditures.

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 cuts which affected the recent fiscal years detrimentally affected the 4390 budget and continues to be difficult. With the rising costs of medical supplies, that 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 next item to be eliminated will be examination gloves.

The 4510 and 4511 categories have remained stable and adequately meet the Department needs despite being plagued by incorrect charges.

The 5000 category has remained stable, but chronically underfunded (approximately \$300 - \$500) in the 5630 category due to increased cost of compressed oxygen and cylinder rental. Since this budget category did not receive adequate funds for the 08-09 or 09-10 years, the Department was forced to discontinue the use of compressed gasses including compressed air which runs simulation manikins. The Department was able to garner funding through CTEA monies for an oxygen generator. The oxygen generator allows adequate oxygen useage by EMC classes at a fraction of the cost of purchasing compressed oxygen. Assuming no change in functionality, or additional repair or maintenance cost, the oxygen generator will reach the break-even point in 4 years.

Effective April 1, 2013, increases in student contact hours mandated by CA Title 22, accreditation, and local regulatory requirements increased instructional costs. The Department estimates that an additional \$30,000.00 will be required to satisfy mandated instructor/student ratios and increased instructional hours for the EMC 100, EMC 104, and EMC 130(series) classes.

Lastly, 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 anually in new fees to the local regulatory agency for oversight of the EMC core programs which fall under their regulatory authority.

2.1b Budget Requests

Rank	Location	SP	M	Amount	Brief Rationale
0001	Windsor	00	00	\$4,000.00	Cover supply cost increases (non-latex based materials)
0001	Windsor	00	00	\$30,000.00	Cover cost needed to meet mandated instructional support: student ratio requirements.
0003	Windsor	00	00	\$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
Instructional Assistants Sr	40.00	12.00	Coordinates EMC laboratory (ALS, BLS and In-Service, processes inventory and supply. Assists with instruction. Position approved needs to be filled

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
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Professional Expert (25)	41.23	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.
Instructional Aide (2)	5.07	12.00	Counsels students regarding professional matters; supervises and monitors student discipline; supervises other temporary staff members as needed. Demonstrates subject matter skills; supervises students in practical labs; tutors students on problem areas related to subject matter.
Recruit Training Officer (RTO) (1)	12.00	10.00	Responsible for explanation, demonstration, supervision, evaluation and documentation of discipline specific subject matter and related skills under the direct supervision of instructor of record for EMS Academy (EMC 105).

2.2d Adequacy and Effectiveness of Staffing

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 In the past 4 years, the Department has achieved an average headcount of 2133 students per annum with a median of 2123. Overall, the Department decreased headcount approximately 1.6% from 2012 to 2013, and observed a 0.45 percent increase in FTES .

Employee Categories:

There was no change in existing classified staffing, STNC workers, contract faculty or Department Coordinator/Chair.

Employee FTE Totals:

The Department's FTES:FTEF, as reported (33.19). This is well above the district value (27.03). For the 2010 - 2011 academic year, the Department's FTES:FTEF ratio decreased 18.56% and represents 122.77% of the district total. FTEF decreased 8.97% (1.16% of district) and FTE-AF decreased 14.13% (1.23% of district total). There was no change in any other FTE category.

Narrative:

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 2144 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.

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 the optimum support level as the Department grows. 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 4.4 which is more than double the District ratio of 1.90.

2.2e Classified, STNC, Management Staffing Requests

Rank	Location	SP	M	Current Title	Proposed Title	Type
0001	Windsor	00	00	Professional Expert (27 hr/wk) (25 positions)	Professional Expert-(41.23 hr/wk) (31 positions)	STNC
0002	Windsor	00	00	IA Senior (100%)	IA Senior (2-19 hr becomes 1 FTE)	Classified
0003	Windsor	00	00	AA II (.65 FTE)	AA II 1.0 FTE	Classified
0005	Windsor	00	00	None	Recruit Training Officer 8hr/w	STNC
0006	Windsor	00	00	None	Student Worker (10 hrs/wk)	Student

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 104 and EMC 100 courses. Qualified to direct (per CA CoR Title 22) EMC 104

2.3b Full-Time and Part-Time Ratios

Discipline	FTEF Reg	% Reg Load	FTEF Adj	% Adj Load	Description
EMC	3.0000	40.0900	4.4800	59.9100	The Department is significantly below the college average FTE-AF: FTEF-CF (1.49 Department: 1.31 District)

2.3c Faculty Within Retirement Range



2 Regular Faculty and 3 Adjunct Faculty are currently within retirement range. This means that 2/3 of the Regular Faculty and approximately 10% 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.

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

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 job market, and, therefore, will increase the demand on our courses. The Department needs to maintain a diverse, current, instructional pool to meet these student and employment market needs.

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 31 compared to the district total of 28.

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.

2.3e Faculty Staffing Requests

Rank	Location	SP	M	Discipline	SLO Assessment Rationale
0001	Windsor	00	00	1 FTEF	

2.4b Rational 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.

Another area that is equipment intensive is basic CPR training. Every 5 years the standard for CPR (basic life support) and advanced cardiac life support changes to keep pace with current resuscitation science. The changes in these standards requires replacement or update/upgrade of most of the existing equipment (e.g. AED units, etc.) The Department must anticipate routine expenditures for the purpose of compliance with these updates. The Department must replace 20 Automated Defibrillation units this year due to changes in standards of AED use, and the age/viability of the units.

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.

This Department and others in Public Safety extensively utilize complex psychomotor skill 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/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, College and students would tremendously benefit by moving to an expanded electronic format for data collection and analysis. For the cost of expansion of existing wireless technology and the development of data collection instruments (electronic check sheets) the Department could save thousands of dollars annually in printing costs and materials.

The Department has moved most cognitive testing to paperless (online) testing format. In addition, the Department successfully moved the recording of psychomotor testing for EMC 104 students final skill examination online. In order to accomplish the goal of becoming paperless for examinations (and much of the former paper supplemental

ed. delivery i.e. handouts, policies, etc.) the Department requires additional laptop style computers. The existing number of portable computers is inadequate to support the 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.

2.4c Instructional Equipment and Software Requests

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Windsor	00	00	12 lead Task Trainer	1	\$8,299.00	\$8,299.00	Snow	604	Snow
0001	Windsor	00	00	Replacement Headskin with Airways and Teeth	6	\$679.00	\$4,074.00	Snow	604	Snow
0001	Windsor	00	00	PhysioControl Automated External Defibrillator	20	\$500.00	\$10,000.00	Snow	604	Snow
0001	Windsor	00	00	Hand Held Radios, mic, charger, belt clip	36	\$595.65	\$21,443.40	Snow	204	Snow
0001	Windsor	00	00	12-lead Arrhythmia Simulator	1	\$932.10	\$932.10	Snow	604	Snow
0001	Windsor	00	00	E-Z IO Trainers with Bones	4	\$500.00	\$2,000.00	Snow	604	Snow
0001	Windsor	00	00	Laerdal Infant Airway Management Trainers TR-250	6	\$535.00	\$3,210.00	Snow	604	Snow
0001	Windsor	00	00	N-65 Pulse Oximeter ITEM PO-65	10	\$642.00	\$6,420.00	Snow	604	Snow
0001	Windsor	00	00	Lifepak 15 Monitor with AC Power	6	\$18,600.00	\$111,600.00	Snow	604	Snow
0001	Windsor	00	00	Tuff Kelly Head with Hook #101-03250	2	\$310.00	\$620.00	Snow	604	Snow
0001	Windsor	00	00	Nonin Response Capnography Monitor 2721-1	8	\$2,023.00	\$16,184.00	Snow	604	Snow
0001	Windsor	00	00	Spider Straps Multi-Color # SX-5622	5	\$82.00	\$410.00	Snow	604	Snow
0001	Windsor	00	00	SOF Tactical Tourniquet #TQ-31	6	\$28.50	\$171.00	Snow	604	Snow
0001	Windsor	00	00	MAT Mechanical Advantage Tourniquet # TQ-01	6	\$34.00	\$204.00	Snow	604	Snow
0002	Windsor	00	00	Wireless microphone power amplifier	2	\$1,500.00	\$3,000.00	Snow	400	Snow
0002	Windsor	00	00	Outer Shoulder Flange	10	\$18.00	\$180.00	Snow	604	Snow
0002	Windsor	00	00	SimBaby Manikin main product	1	\$26,995.00	\$26,995.00	Snow	604	Snow
0002	Windsor	00	00	Media Enhanced Classroom Upgrade	1	\$21,000.00	\$21,000.00	Snow	604	Snow
0002	Windsor	00	00	Advanced Video System	1	\$7,995.00	\$7,995.00	Snow	604	Snow
0002	Windsor	00	00	Regulator #381220	1	\$746.00	\$746.00	Snow	604	Snow
0002	Windsor	00	00	ADC Standard Blood Pressure Units	20	\$13.40	\$268.00	Snow	604	Snow
0002	Windsor	00	00	Simulaid OB Manikin ITEM TR-180	6	\$558.00	\$3,348.00	Snow	604	Snow
0002	Windsor	00	00	Complete Airway Kit LY-4600	12	\$250.00	\$3,000.00	Snow	604	Snow
0002	Windsor	00	00	Danny Smith Heart Model #HE2000	2	\$357.00	\$714.00	Snow	604	Snow
0002	Windsor	00	00	S-Scort "TEN" with Shelf # OK-2100S	10	\$1,120.00	\$11,200.00	Snow	604	Snow
0002	Windsor	00	00	Oximax n-65 Pulse Oximeters Case Item# PO-40C	10	\$64.00	\$640.00	Snow	604	Snow
0002	Windsor	00	00	Wireless headset microphone	4	\$500.00	\$2,000.00	Snow	400	Snow
0002	Windsor	00	00	AMBU Smart-baby CPR training manikin	5	\$3,200.00	\$16,000.00	Snow	604	Snow
0003	Windsor	00	00	LIFEPAK 12 FP11 w/o fuel guage B11170#73844	20	\$82.59	\$1,651.80	Snow	604	Snow
0003	Windsor	00	00	Pneumothorax Replacement skin	5	\$93.70	\$468.50	Snow	604	Snow
0003	Windsor	00	00	Life/form Skin and vein replacement kit	5	\$92.00	\$460.00	Snow	604	Snow
0003	Windsor	00	00	SAGER Traction Splint	10	\$405.00	\$4,050.00	Snow	604	Snow
0003	Windsor	00	00	UNI-MED Airway Pack	12	\$146.95	\$1,763.40	Snow	604	Snow
0003	Windsor	00	00	Oxygen Cylinder	15	\$50.25	\$753.75	Snow	604	Snow
0003	Windsor	00	00	Combo Cot Patient Lifting Device	10	\$210.00	\$2,100.00	Snow	604	Snow
0003	Windsor	00	00	Digital Stopwatch # 4TM11	40	\$23.23	\$929.20	Snow	604	Snow
0003	Windsor	00	00	Conterra MCI Kit # RD-4011	2	\$217.00	\$434.00	Snow	604	Snow

0003	Windsor	00	00	Conterra Triage Flag Kit # RD-4051	1	\$92.90	\$92.90	Snow	604	Snow
0003	Windsor	00	00	SAM Sling # SP556M	6	\$64.50	\$387.00	Snow	604	Snow

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

Rank	Location	SP	M	Item Description	Qty	Cost Each	Total Cost	Requestor	Room/Space	Contact
0001	Windsor	00	00	Type 2 equip. described in classroom/lab expansion	2	\$25,000.00	\$50,000.00	Jeff Snow	TBD	Jeff Snow
0001	Windsor	00	00	Multiplexd audio/video recording system	1	\$25,000.00	\$25,000.00	Jeff Snow	Bldg. 800	Jeff Snow
0002	Windsor	00	00	Ambulance	1	\$50,000.00	\$50,000.00	Jeff Snow	TBD	Jeff Snow

2.5a Minor Facilities Requests

Rank	Location	SP	M	Time Frame	Building	Room Number	Est. Cost	Description
0001	Windsor	00	00	Urgent	PSTC	All classrooms	\$10,000.00	Install chair rails on perimeter walls to buffer walls from table and chair damage. This modificat
0001	Windsor	00	00	Urgent	PSTC	Bldg. 400	\$5,000.00	Install wireless portable (headset type) microphone for use in gymnasium
0001	Windsor	00	00	Urgent	PSTC	Bldg. 800	\$25,000.00	Install multiplex digital audio/video recording system for documentation of skill performance.
0002	Windsor	00	00	1 Year	PSTC	600	\$50,000.00	Late model, equipped Dodge Sprinter ambulance. Needed for safety for EVOC courses, fleet replacement.
0002	Windsor	00	00	1 Year	PSTC	Skid Pad	\$600,000.00	The skid pad is improperly sloped and needs recycle system for water. The surface needs to be repaved.

2.5b Analysis of Existing Facilities

Petaluma Campus: The facility is ADA compliant.

PSTC Campus: Facility is inadequate for storage space. Additional weatherproof securable space is required for instructional equipment. The facility is ADA compliant. The campus expansion project is on hold, but is urgently needed.

3.1 Develop Financial Resources

The Department has two initiatives which are currently being implemented.

Each year the Department sponsors a symposium on EMS. Last year the symposium produces 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

As part of the ongoing hiring process for all adjunct and regular faculty, emphasis is placed on selection criteria which demonstrate 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 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

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.

3.4 Safety and Emergency Preparedness

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

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 104 (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 dependant 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 project.

4.1a Course Student Learning Outcomes Assessment

All EMC courses have completed and up-to-date Student Learning Outcomes and are on a regular cycle for review.

For EMC 103 and EMC 130 series, performance (assessment of SLO efficacy) is easily measured. Upon completion of EMC 103 and EMC 130, students take National level standardized examination. 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. Four years ago, EMC 103 (EMT) had a success rate 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 success result is approximately 91%. 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.

4.1b Program Student Learning Outcomes Assessment

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 in 2016

For EMC 103 and EMC 130 series, performance (assessment of SLO efficacy) is easily measured. Upon completion of EMC 103 and EMC 130, students take National level standardized examination. 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. Four years ago, EMC 103 (EMT) had a success rate 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 success result is approximately 91%. 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.

We have begun a regular cycle of assessment in our department 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 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.

Department 6-Year Cycle SLO Assessment Plan

Course	SLO #s	Participating Faculty	Semester Initiated or to Be Initiated	Semester Completed	Comments	Year of Next Assessment
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EMC 100	All	Snow	Fall 2014	Spring 2014		2020
EMC 104	All	Snow	Fall 2014	Spring 2014	Discontinued course ID. Renumbered	N/A
EMC 104.1	All	Snow	Spring 2014	Spring 2014		2016
EMC 105	All	Snow	Fall 2014	Spring 2014		2016
EMC 108	All	Snow	Fall 2014	Spring 2014		2020
EMC 114	All	Snow	Spring 2014	Spring 2014		2018
EMC 116	All	Snow	Spring 2014	Spring 2014		2016
EMC 116.1	All	Snow	Spring 2014	Spring 2014		2016
EMC118	All	Snow	Fall 2014	Spring 2014		2016
EMC 119	All	Snow	Fall 2010	Spring 2014		2016
EMC 124	All	Snow	SPRING 2014	Spring 2014		2020
EMC 130 series	All	Hsieh/Snow	Fall 2010	Fall 2014		2016
EMC 131 series	All	Hsieh/Snow	Fall 2014	Spring 2014		2016
EMC 132	All	Hsieh/Snow	Fall 2014	Spring 2014		2016
FIRE 708	All	Snow	Spring 2014	Spring 2014		2020
EMC 103	All	Snow/Snyder	Spring 2014	Spring 2014		2020

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	X
EMC104		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	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
EMC114		X		X	X	X	X	X	X	X						
EMC130	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

4.2b Narrative (Optional)



In each core EMC 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.

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 95% success rate.

Current statistics for EMT-Basic (EMC 104) show 88% success rate.

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

The Department offers courses every weekday and 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 104 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. The Department anticipates utilizing two more classrooms in the future to accommodate additional sections of these classes. Though hybrid and online instruction alternatives are being discussed, 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. The Department will pilot a hybrid course for Advanced EMT next school year.

5.2a Enrollment Efficiency

Enrollment Efficiency:

Using a threshold of 86% (as determined by the approximate College average since summer of 2008), over the past 6 years the Department has consistently remained at 84%. This demonstrates that class size adjustments which were made in 2005 were on target for expected efficiency; however, 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. The efficiency in any year for any semester including summer sessions has not been below 65% and the standard deviation computed since 2003 is 8.5% . The Department therefore is above the expectation, but below the point of being impacted.

The Department faces constant pressure to offer more course sections for EMC 100, EMC 104, and EMC 116; however, staffing difficulties preclude the Departments ability to do so. The Department responded to increasing demand for classes by increasing the class size. 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..

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

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

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	289	873	1105	305	835	983	267	821	964	279	792

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

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

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	85.1%	79.8%	86.2%	83.2%	77.2%	75.7%	79.0%	70.6%	75.2%	74.9%	66.2%

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 26.62 with an average retention rate of over 87% based on statistics gathered by the Department.

Classes	average size	count	Retention
100	30.50	6	91.50
104	32.25	4	92.14
104.1	29.67	3	97.80
105	30.00	1	75.00
108	22.40	5	100.00
114	41.33	3	87.32
115	23.00	1	76.67
109	23.00	1	58.97
110	16.00	2	94.12
299.12	18.00	5	100.00
Average	26.62		87.35

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

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

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	21.2	21.3	23.6	22.2	20.6	20.6	19.6	18.8	20.5	18.6	17.6

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 22% over a 6 year period). 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).

Santa Rosa Campus

Emergency Medical Care		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
	FTEF	0.00	3.08	6.16	2.89	2.58	5.09	2.01	2.64	4.59	1.89	2.33
	FTEF	0.00	0.13	0.25	0.13	0.25	0.25	0.13	0.13	0.25	0.13	0.13
	Ratio	0.00	24.50	24.50	23.00	10.25	20.25	16.00	21.00	18.25	15.00	18.50

Petaluma Campus (Includes Rohnert Park and Sonoma)

Emergency Medical Care		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
	FTEF	0.00	5.73	6.66	0.00	4.53	4.67	0.00	3.47	4.96	0.00	4.27
	FTEF	0.00	0.21	0.29	0.00	0.21	0.21	0.00	0.22	0.31	0.00	0.26
	Ratio	0.00	27.16	23.18	0.00	21.47	22.11	0.00	15.71	16.20	0.00	16.49

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

Emergency Medical Care		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
	FTEF	22.43	115.27	120.21	26.50	123.58	103.01	22.36	97.34	98.48	23.80	101.49
	FTEF	0.75	3.34	4.75	0.76	5.41	5.68	0.61	3.24	5.01	0.63	5.62
	Ratio	29.64	34.52	25.33	34.73	22.83	18.13	36.73	30.04	19.65	37.93	18.06

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

Emergency Medical Care		X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
	FTEF	22.34	124.09	133.03	29.39	130.69	112.77	24.37	103.31	108.03	25.68	108.08
	FTEF	0.75	3.68	5.28	0.89	5.88	6.14	0.73	3.58	5.57	0.75	6.00
	Ratio	29.64	33.76	25.17	33.07	22.24	18.36	33.18	80.15	19.40	34.11	18.00

5.4 Curriculum Currency

All courses in the Department are current with the exception of EMC 104.1, EMC108 and EMC115. Since there have been no changes to the curriculum, it is expected that these courses will be updated by the conclusion of Spring semester 2014.

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 110 A, B, C) 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 encourage graduates to apply for and obtain certificates.

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.

Academic success indicator for certificate courses

Analysis:

The Department examines and trends results from National Registry Examination for EMC 104 and EMC 110 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 104 and 110 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 110 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 104 over the course of the next program review period.

5.6 Student Success

Retention:

Retention for all Department courses is 90.12% 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 = 85.28% 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 (average grade 2.59) due to what is clearly a data error reported for Summer sessions for students attending the Public Safety Training Center beginning in 2009. Omitting the grades reported in error for that period, the average GPA would 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 104 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 104 and 75% do so. Of the approximately 250 annual graduates of the EMC 104 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, or CR in each discipline (duplicated headcount).

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	0.0%	81.3%	81.3%	82.2%	82.5%	79.0%	90.3%	66.7%	75.0%	90.0%	75.0%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	0.0%	62.8%	86.8%	0.0%	61.8%	80.0%	0.0%	76.9%	84.9%	0.0%	56.3%

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

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	95.7%	88.6%	89.6%	97.7%	83.3%	88.1%	94.5%	88.7%	87.7%	93.3%	88.0%

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

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	95.7%	84.2%	88.7%	95.5%	83.3%	88.1%	94.5%	87.2%	86.6%	92.9%	86.1%

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	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	0.0%	75.0%	78.1%	80.0%	77.5%	76.5%	87.1%	52.4%	72.2%	83.3%	69.4%

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	0.0%	62.8%	82.4%	0.0%	61.8%	77.1%	0.0%	76.9%	84.9%	0.0%	56.3%

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

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	80.1%	78.1%	83.8%	88.3%	74.8%	83.4%	84.6%	84.9%	81.7%	80.6%	84.4%

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

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	80.1%	77.2%	83.2%	87.1%	74.4%	82.6%	84.9%	82.9%	81.1%	80.9%	82.6%

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

Santa Rosa Campus

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	0.00	3.02	3.11	3.12	2.95	3.08	3.60	2.35	2.95	3.36	2.64

Petaluma Campus (Includes Rohnert Park and Sonoma)

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	0.00	2.59	2.02	0.00	2.79	3.03	0.00	3.00	2.12	0.00	2.28

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

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	0.78	2.08	2.59	1.26	2.07	2.41	1.50	2.67	2.27	1.29	2.76

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

Discipline	X2010	F2010	S2011	X2011	F2011	S2012	X2012	F2012	S2013	X2013	F2013
Emergency Medical Care	0.78	2.13	2.60	1.57	2.11	2.47	1.69	2.67	2.31	1.46	2.75

5.7 Student Access

Ethnicity:

EMC programs attract a high number of White students (71%) 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.

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

Emergency Medical Care	Ethnicity	2010-11	Percent	2011-12	Percent	2012-13	Percent	2013-14	Percent
	White	1500	71.2%	1218	72.85%	1160	68.92%	1062	67.7%
	Asian	33	1.6%	21	1.26%	29	1.72%	31	2.0%
	Black	24	1.1%	13	0.78%	30	1.78%	14	0.9%
	Hispanic	151	7.2%	142	8.49%	164	9.74%	294	18.7%
	Native American	16	0.8%	11	0.66%	13	0.77%	7	0.4%
	Pacific Islander	7	0.3%	2	0.12%	4	0.24%	9	0.6%
	Filipino	17	0.8%	20	1.20%	17	1.01%	12	0.8%
	Other Non-White	0	0.0%	0	0.00%	0	0.00%	65	4.1%
	Decline to state	360	17.7%	245	14.65%	266	15.81%	75	4.8%
	ALL Ethnicities	2108	100.0%	1672	100.0%	1683	100.0%	1569	100.0%

Gender:

The ratio of male to female students has remained consistent over the past 5 years. The program is male dominated with only approximately 29% 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.

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

Emergency Medical Care	Gender	2010-11	Percent	2011-12	Percent	2012-13	Percent	2013-14	Percent
	Male	1458	69.2%	1149	68.72%	1176	69.88%	1023	65.2%
	Female	620	29.4%	497	29.72%	474	28.16%	475	30.3%
	Unknown	30	1.4%	26	1.56%	33	1.96%	71	4.5%
	ALL Genders	2108	100.0%	1672	100.0%	1683	100.0%	1569	100.0%

Age:

The highest percentage of students enrolling in EMC programs is in the group aged 21 to 25 years and 62% 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.

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

Emergency Medical Care	Age Range	2010-11	Percent	2011-12	Percent	2012-13	Percent	2013-14	Percent
	0 thru 18	131	6.3%	115	6.88%	134	7.96%	165	10.6%
	19 and 20	265	12.7%	304	18.18%	252	14.97%	232	14.9%
	21 thru 25	653	31.3%	512	30.62%	521	30.96%	488	31.4%
	26 thru 30	410	19.7%	291	17.40%	343	17.40%	264	17.0%
	31 thru 35	205	9.8%	158	9.45%	152	9.03%	156	10.0%
	36 thru 40	139	6.7%	102	6.10%	101	6.00%	90	5.8%
	41 thru 45	108	5.2%	74	4.43%	79	4.69%	68	4.4%
	46 thru 50	70	3.4%	38	2.27%	35	2.08%	31	2.0%
	51 thru 60	103	4.9%	63	3.77%	52	3.09%	60	3.9%
	61 plus	24	1.2%	15	0.90%	14	0.83%	15	1.0%
	ALL Ages	2108	100.0%	1672	100.0%	1683	100.0%	1569	100.0%

5.8 Curriculum Offered Within Reasonable Time Frame

Student Headcount:

In the past 4 years, the Department has achieved an average headcount of 2133 students per annum with a median of 2123 and a standard deviation of 31.52. Headcounts likely depend upon fluctuations in the economy where more individuals seek vocational and service industry jobs in times of a poor economy and fewer seek vocational and service industry jobs in good economic times. The combination of a variable latency period between economic trends and job (thus training) seeking trends, and variable job availability make headcounts difficult to predict, and thus difficult to rationalize enrollment fluctuations.

Average Class Size:

The 5 year average class size for EMC programs is 21.5 students based on Department gathered statistics at first census. Class size on average for all EMC programs is skewed by a lack of offerings in summer sessions at the Petaluma location, and far fewer summer offerings at the Public Safety Training Center (PSTC). The statistics are further skewed toward smaller class sizes because the Department offers a fairly large number of classes which are designed to meet in-service needs for Paramedics, EMTs and Emergency Medical Responders. These are classes which are mandated by regulatory agencies and/or employers. There is inadequate staff to support a greater number of offerings at the PSTC or a summer session at the Petaluma campus.

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.

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.

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.

5.10 Alignment with Transfer Institutions (Transfer Majors ONLY)

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

5.11a Labor Market Demand (Occupational Programs ONLY)

The demand for educated and trained emergency medical employees remains in spite of the economic slow down 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/cgi/databrowsing/occExplorerQSDetails.asp?searchCriteria=Emergency+Medical+Technician&careerID=&menuChoice=&geogArea=0601000000&soccode=292041&search=Explore+Occupation>

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.

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	Improve technology resources	Purchase 64 laptop computers and 30 tablet computers, storage and charging.		completed
0001	Windsor	00	00	Replace outdated instructional equipment	Purchase 20 AED trainers	6 mo.	Financial support through grant (CTEA) or general fund
0001	Windsor	00	00	Restructure EMC 105	Align program objectives with current employer objectives for employees		completed
0001	Windsor	00	00	Stock ambulance fleet	Achieve 12 fully stocked ambulances	6 mo.	Order supplies and equipment needed to stock 8 ambulances (4 are already stocked)
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.

6.2a Program/Unit Conclusions

Location	Program/Unit Conclusions
Windsor	The Public Safety Training Center 12,500 square feet of additional advanced lab/classroom was scheduled for completion in 2009, however, due to budget restraints, the project was placed on hold. The expansion of the PSTC will be required to meet the demand for classes beginning 2014
Windsor	The Department must double its classroom space and laboratory facilities in order to keep pace with projected increases in demand for training.
Windsor	The Department, in order to continue to fulfill its mission of quality instruction must increase its 2000 budget category funds significantly.

6.2b PRPP Editor Feedback - Optional

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 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 104 section feasible. A feasibility study should be accomplished in order to determine the viability of such a plan.

6.3a Annual Unit Plan

Rank	Location	SP	M	Goal	Objective	Time Frame	Resources Required
0001	Windsor	00	00	Replace outdated instructional equipment	Purchase 20 AED trainers	6 mo.	Financial support through grant (CTEA) or general fund
0001	Windsor	00	00	Stock ambulance fleet	Achieve 12 fully stocked ambulances	6 mo.	Order supplies and equipment needed to stock 8 ambulances (4 are already stocked)
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.