

404180000—Emergency Medical Services

Health Services

Greg Diederich, Health Care Services Director

General Fund	2017-2018 Actual	2018-2019 Adjusted	2019-2020 Requested	2019-2020 Recommended	Increase/ (Decrease)
Expenditures					
Salaries & Benefits	\$1,251,783	\$1,641,313	\$1,909,161	\$1,909,161	\$267,848
Services & Supplies	646,647	1,174,051	1,252,032	1,252,032	77,981
Centrally-Budgeted Expenses	59,747	57,755	(13,081)	(13,081)	(70,836)
Operating Transfers Out	2,097,000	0	0	0	0
Total Appropriations	\$4,055,177	\$2,873,119	\$3,148,112	\$3,148,112	\$274,993
Earned Revenues By Source					
Licenses/Permits/Franchises	\$1,016,439	\$906,740	\$970,782	\$970,782	\$64,042
Aid From Other Governments	440,059	401,025	272,549	272,549	(128,476)
Charges For Services	546,047	425,800	484,850	484,850	59,050
Miscellaneous Revenues	2,055,821	560,000	551,000	551,000	(9,000)
Operating Transfers In	0	25,000	325,000	325,000	300,000
Total Revenues	\$4,058,366	\$2,318,565	\$2,604,181	\$2,604,181	\$285,616
Net County Cost	(\$3,189)	\$554,554	\$543,931	\$543,931	(\$10,623)
Staffing					
Allocated Positions	11.0	11.0	11.0	11.0	0.0
Temporary (Full-Time Equivalent)	0.0	0.0	0.4	0.4	0.4
Total Staffing	11.0	11.0	11.4	11.4	0.4

Purpose

EMS monitors and enforces more than 35 contracts for the provision of Advanced Life Support (ALS) emergency ambulance services, ALS and Basic Life Support (BLS) non-emergency ambulance services, ALS and BLS first response services, base hospital medical direction, receiving hospital services, trauma services, training programs, and other services. EMS also administers the Hospital Preparedness Program (HPP) grant, which provides funds for disaster planning, including hospital surge capacity, mass fatality management, emergency communications, and advanced registration of medical volunteers. EMS serves as lead agency for all Continuous Quality Improvement activities throughout the EMS system. EMS maintains an on-call EMS Duty Officer, 24 hours a day, 7 days per week to respond to mutual aid requests, coordinate disaster medical operations, and assist hospitals and providers in managing the EMS system. EMS ensures accountability to the public through detailed system reports on the EMS website and the ability to attend quarterly EMS Liaison Committee meetings, which include representatives from all EMS system participants.

EMS funding is provided through the collection of contract revenue, fees, grants, General Fund allocation, accumulated reserves from ambulance performance penalties, and Maddy EMS Funds.

Major Budget Changes

Salaries & Employee Benefits

- \$57,263 Salary and benefits adjustments.
- \$160,000 Funding for partial-year cost of proposed new position.
- \$50,585 Increase in extra-help.

Services & Supplies

- \$300,000 Replacement facility planning costs.
- \$47,400 Increase in data consulting services.
- \$45,959 Increase in costs for County Counsel legal services.

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- \$30,000 Technology improvements for EMS classroom.
- (\$150,000) One-time purchase of training equipment in 2018-2019.
- (\$90,000) One-time auditing costs in 2018-2019.
- (\$55,462) Decrease in HPP grant expenditures.
- (\$30,823) Decrease in software costs.
- (\$28,000) Decrease in regional EMS costs.

Centrally-Budgeted Expenses

- (\$33,228) Decrease in radio maintenance costs.
- (\$40,498) Addition of Countywide Cost Allocation Plan charges.

Revenues

- \$300,000 Reimbursement from Maddy EMS Fund for replacement facility planning costs.
- \$51,022 Increase in ambulance contract monitoring fees.
- \$25,000 Increase in stroke center revenue.
- \$23,550 Increase in training fee revenue.
- \$17,004 Increase in Emergency Medical Technician certification revenue.
- (\$120,000) Elimination of Regional Disaster Medical Health Specialist funding.

Program Discussion

The 2019-2020 recommended budget for EMS totals \$3,148,112, which is an increase of \$274,993 from the 2018-2019 adjusted budget. This change mainly reflects salary and benefits adjustments, estimated funding for a proposed EMS Coordinator position, increased costs for extra-help staff to assist in monitoring the delivery of specialty care services, and replacement facility planning costs, offset by one-time purchases of training equipment and auditing costs that occurred in 2018-2019, and a decrease in HPP grant expenditures.

The recommended budget provides estimated funding to offset costs of a proposed new EMS Coordinator position,

pending completion of a classification review by the Human Resources Division. This position would assist the EMS Administrator in the development of policies, procedures, and medical protocols governing the EMS system and pre-hospital care programs. Human Resources will review the results of the classification study with the Department prior to bringing recommendations to the Board of Supervisors for consideration.

In 2019-2020, EMS will work with the General Services Department to initiate planning efforts for an EMS replacement facility to accommodate office space, training/meeting space, and medical supply storage needs. Funding for the work will be provided from Maddy EMS funds that the Board authorized for use towards EMS capital facility needs (B-18-329). In addition to EMS space needs, the planning workscope will also include an evaluation of Health Care Services Administration space needs.

In 2018, the County Counsel's Office hired Fitch and Associates, a consulting firm, to assess the EMS System and provide recommendations on EMS best practices. The consultant's report was accepted by the Board in October 2018 (B-18-664). In 2019-2020, EMS will continue to address the consultant's recommendations, including, but not limited to: expanding the role and availability of the medical director; implementing performance metrics and performance incentives for ALS and BLS service providers; enhancing data analytics and reporting; ensuring improved functionality in the communications interface between the Stockton Fire Department Communications Center and Valley Regional Communications Center; and exploring the potential for stakeholder outreach through innovative digital platforms such as a learning management software system and on-line application processing for EMS personnel.

EMS will continue to monitor implementation of agreements for emergency ambulance services, including ALS interfacility transfers and critical care transport. Performance requirements include response time standards for Code 3 (red lights and siren) and Code 2 (without red lights and siren), as well as other measures. EMS will continue negotiations to revise, update, and evaluate Exclusive Operating Area (EOA) ambulance agreements with Escalon Community Ambulance and the Ripon Consolidated Fire Protection District, and begin discussions with American Medical Response on the renewal of their EOA ambulance agreement. EMS will also continue to negotiate service agreements as needed with ALS first response providers, BLS first response providers, and air ambulance service providers.

In 2019-2020, EMS will work closely with Health Care Services Agency information technology staff on the implementation of analytics software to enhance monitoring

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of the EMS system including the creation of data dashboards as recommended in the Fitch and Associates report.

EMS will continue implementation and enforcement of Assembly Bill 1129 that requires local EMS agencies to adopt and implement electronic patient care records requirements for all pre-hospital care providers, including BLS fire departments. As part of this implementation and other State requirements, EMS is required to enhance monitoring and oversight of the delivery of BLS service.

Stroke, Cardiac, and Trauma Systems

On July 1, 2018, EMS implemented a well-received system of care tailored to patients who have experienced a stroke, including the designation of qualified hospitals as “stroke centers” to focus on rapid identification, treatment, and under specific circumstances, transfer to hospitals outside the County. EMS will continue to work collaboratively with the acute care hospitals designated as primary stroke centers to evaluate system performance and implement adjustments as needed.

EMS will continue implementation of the national Cardiac Arrest Registry to Enhance Survival (CARES) data registry administered by Emory University. CARES assists local communities in identifying and tracking cases of cardiac arrest and identifying opportunities for improvement in the treatment of out-of-hospital cardiac arrest.

EMS will also continue monitoring and evaluating the County’s trauma system, including oversight of San Joaquin General Hospital’s performance as a designated Level III trauma center, and adherence to benchmarks and standards of care.

Ambulance Patient Offload Delays

In 2019-2020, EMS will place an emphasis on addressing the problem of Ambulance Patient Offload Delays (APOD) at receiving hospitals. APOD continues to cause extensive wait times for arriving ambulance patients, while also negatively impacting the availability of ambulances for emergency responses occurring throughout the County. As acknowledged in the Fitch and Associates report, the “EMS system and ambulance services are adversely impacted by area hospitals’ inability to manage reception of patients” and have a “carryover impact on ambulance services’ ability to

provide non-emergency and Critical Care Transport service requested by hospitals.”

EMS has adopted technology that will measure APOD and enables real-time tracking of delays by hospitals, ambulance providers, public safety dispatch centers, and other system participants. These tools will assist in meeting State mandates for tracking and reporting APOD data.

As the County’s lead agency for medical response to multiple casualty incidents, EMS developed a plan in cooperation with law enforcement and fire service agencies for a coordinated response to active shooter events and other tactical situations. This plan was exercised and tested during 2016-2017 and 2017-2018 as part of an annual Statewide medical/health exercise. The overarching goals of the plan are the safety of responders and the rapid assessment, treatment, and transport of patients to trauma centers and receiving hospitals.

In 2018-2019, EMS discontinued serving as the lead agency for disaster medical planning and coordination for the 11 counties comprising the Office of Emergency Services Mutual Aid Region IV. Nonetheless, as noted above, EMS remains actively engaged in the planning, operations, and evaluation of disaster medical services.

Maddy EMS Funds

Maddy EMS funds are generated from court fines, penalties, and forfeitures, and also a portion of violator traffic school fees. Monies collected are distributed by formula for fund administration; to physicians and surgeons for uncompensated emergency services; to hospitals providing disproportionate trauma services; and to other emergency medical services as determined by the County, including capital projects supporting EMS.

As of March 31, 2019, Maddy EMS fund balances were:

Maddy EMS	Fund No.	Amount
<i>Administration</i>	20801	\$193,977
<i>Physician Services</i>	20802	\$239,850
<i>Hospital Services</i>	20803	\$486,480
<i>Other EMS</i>	20804	\$3,601,187

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Workload Data

	-----Actual-----			Est./Act. 2018-2019	Projected 2019-2020
	2015-2016	2016-2017	2017-2018		
<i>9-1-1 EMS Patient Contacts</i>	58,160	59,022	60,177	57,148	59,000
<i>Major Trauma Patients</i>	2,262	2,120	3,878	4,150	4,555
<i>Cardiac STEMI Patients</i>	147	257	297	230	250
<i>Acute Stroke Patients</i>	935	920	985	1,301	1,350
<i>EMS Personnel Applications</i>	762	692	752	697	680
<i>EMS Training and Continuing Education Program Applications</i>	4	6	4	6	4