

# EMERGENCY MEDICAL SERVICES COUNTY SERVICE AREA MUNICIPAL SERVICE REVIEW FINAL

November 29, 2012

Prepared for the Local Agency Formation Commission of Alameda County by Baracco and Associates & Policy Consulting Associates, LLC

# TABLE OF CONTENTS

1. AGENCY OVERVIEW	2
Formation Boundary	2
Sphere of Influence Accountability and Governance Management and Staffing	6
GROWTH AND POPULATION PROJECTIONS	8
2. MUNICIPAL SERVICES	12
Emergency Medical Services	12
3. MSR DETERMINATIONS	17
4. SPHERE OF INFLUENCE UPDATE	

# 1. AGENCY OVERVIEW

The Emergency Medical Services County Service Area (EMS CSA) functions as Alameda County's lead agency responsible for local EMS system planning, paramedic training, paramedic service standards and EMS coordination. Under the regulatory watch of the State EMS Authority (EMSA), EMS CSA is responsible for the local EMS system plan for the delivery of emergency medical, ambulance transport, and hospital services.<sup>1</sup> The local EMS system plan affects all the emergency service providers in the County, including dispatch centers, public safety agencies, fire departments, ambulance services, hospitals and specialty care centers.

EMS CSA's mission is to ensure the provision of quality emergency medical services and prevention programs to improve health and safety in Alameda County.

The most recent municipal service review (MSR) for EMS CSA was adopted in September 2004.

# FORMATION

EMS CSA was created in 1983 to oversee and coordinate Alameda County's EMS system.

The principal act that governs EMS CSA is the County Service Area (CSA) law.<sup>2</sup> The principal act authorizes CSAs to provide a wide variety of municipal services, including street maintenance, fire protection, extended police protection, water and sewer services.<sup>3</sup> A CSA may only provide those services authorized in its formation resolution unless the Board of Supervisors adopts a resolution authorizing additional services. All districts must apply and obtain LAFCo approval to exercise latent powers or, in other words, those services authorized by the principal act but not provided by the district at the end of 2000.<sup>4</sup>

Additionally, EMS CSA is regulated by Title 22, Section 9 of the California Health & Safety Code, the National Emergency Medical System Act of 1973, and the Emergency Medical Services System and the Prehospital Emergency Medical Care Personnel Act (the Act), Health & Safety Code Division 2.5, which was last updated in January 2012. The intent of the Act is to provide the state with a statewide system for emergency medical services by

<sup>&</sup>lt;sup>1</sup> Overview of EMS Systems, Alameda County EMS website: http://www.co.alameda.ca.us/PublicHealth.

<sup>&</sup>lt;sup>2</sup> California Government Code §25210 et seq

<sup>&</sup>lt;sup>3</sup> California Government Code §25213.

<sup>&</sup>lt;sup>4</sup> Government Code §56824.10.

establishing within the Health and Welfare Agency the Emergency Medical Services Authority, which is responsible for the coordination and integration of all state activities concerning emergency medical services.<sup>5</sup> The act allows each county to develop an emergency medical services program<sup>6</sup> that has a full- or part-time licensed physician and surgeon as medical director to provide medical control and to assure medical accountability throughout the planning, implementation and evaluation of the EMS system.<sup>7</sup> Local EMS agencies are required to plan, implement, and evaluate an emergency medical services system (1797.204).<sup>8</sup> Local EMS agencies are responsible for implementation of advanced life support systems and limited advanced life support systems and for the monitoring of training programs.<sup>9</sup> They are also responsible for determining that the operation of training programs at the Emergency Medical Technician (EMT) – I, EMT – II, and EMT – P levels are in compliance with this act, and shall approve the training programs if they are found to be in compliance with this act.<sup>10</sup> Any local EMS agency may provide courses of instruction and training leading to certification as an EMT–I, EMT–II, EMT–P, or registered nurse.<sup>11</sup>

# BOUNDARY

The EMS CSA boundary is coterminous with the County's boundaries. Upon formation in 1983, EMS CSA originally excluded the City of Alameda from its bounds and SOI. The City was annexed into EMS CSA in 2011.

The total boundary area of EMS CSA is 821 square miles—737 square miles of land and 84 square miles of water.

## Extra-territorial Services

EMS CSA does not typically provide services outside of its boundaries. However, during a disaster event the CSA may be called upon by other counties or the State EMS Authority to provide an Ambulance Strike Team, which is five staffed ambulances and a leader in a

<sup>&</sup>lt;sup>5</sup> Health and Safety Code, Division 2.5, Ch. 1 §1797.1.

<sup>&</sup>lt;sup>6</sup> Health and Safety Code, Division 2.5, Ch. 4 §1797.200.

<sup>&</sup>lt;sup>7</sup> Health and Safety Code, Division 2.5, Ch. 4 §1797.202.

<sup>&</sup>lt;sup>8</sup> Health and Safety Code, Division 2.5, Ch. 4 §1797.204.

<sup>&</sup>lt;sup>9</sup> Health and Safety Code, Division 2.5, Ch. 4 §1797.206.

<sup>&</sup>lt;sup>10</sup> Health and Safety Code, Division 2.5, Ch. 4 §1797.208.

<sup>&</sup>lt;sup>11</sup> Health and Safety Code, Division 2.5, Ch. 4 §1797.213.

separate vehicle to support the impacted area. If requested by the State EMS Authority, EMS CSA would authorize Paramedics Plus to send these units, while not depleting the ambulance resources needed locally. Additionally, there is a Disaster Support Unit, which consists of a large vehicle and several Chempacks (medication caches) that could be sent to areas impacted by a disaster.

### Unserved Areas

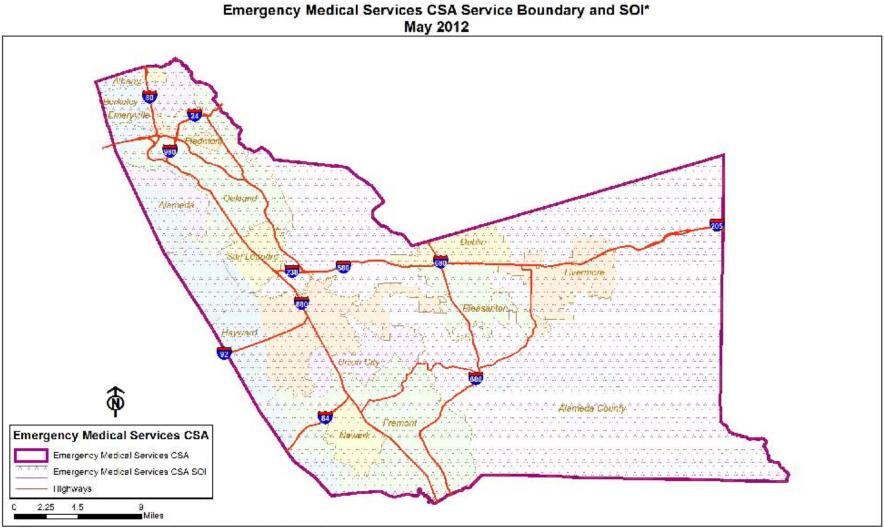
There are no areas within EMS CSA's bounds that lack emergency medical services.

# SPHERE OF INFLUENCE

EMS CSA's SOI is coterminous with the County boundaries. Originally, it excluded the City of Alameda, but in 1984, LAFCo amended EMS CSA's SOI to include the entire County of Alameda.

The sphere was affirmed by LAFCo in 2004, as generally coterminous with the boundaries of EMS CSA and including the City of Alameda. Upon annexation of the City of Alameda territory in 2011, the CSA's SOI became coterminous with its bounds. EMS CSA's existing bounds and SOI are shown in Figure 1-1.

#### Figure 1-1: Emergency Medical Services CSA Boundaries and SOI



\*Agency sphere equals the service area boundary

Created for Alameda LAFCo by the Alameda County Community Development Agency

# ACCOUNTABILITY AND GOVERNANCE

Accountability of a governing body is signified by a combination of several indicators. The indicators chosen here are limited to 1) agency efforts to engage and educate constituents through outreach activities, in addition to legally required activities such as agenda posting and public meetings, 2) a defined complaint process designed to handle all issues to resolution, and 3) transparency of the agency as indicated by cooperation with the MSR process and information disclosure.

EMS CSA was formed as a dependent special district with the Alameda County Board of Supervisors as its governing body. There are five members of the governing body of the CSA. The five supervisors are elected by district for four-year terms of office.

The governing body meets weekly. Agendas for each weekly meeting are posted by the Board Clerk on the Internet and at the County Administration building. Board actions and meeting minutes are available via internet. Through the County website, the public has access to live audio/visual webcasts and archived audio and/or visual webcasts of regular Board meetings for viewing online at their convenience. The agency also discloses finances, plans, and other public documents via the internet. Current board member names, positions, and term expiration dates are shown in Figure 1-2.

Emergency Medical Services CSA								
District Contact Information								
Contact:	Karl Sporer, M.D. , Acting EMS Director							
Address:	1000 San Leandro Blvd., San Leandro, CA 94577							
Telephone:	(510)618-2055							
Fax	(510)618-2099							
Email/website:	www.acphd.org/ems							
Board of Directors								
Member Name	Position	Term Expiration	<b>Manner of Selection</b>	Length of Term				
Scott Haggerty	Supervisor, Dist. 1	January 2013	Elected	4 years				
Richard Valle	Supervisor, Dist. 2	January 2015	Elected	4 years				
Wilma Chan	Supervisor, Dist. 3	January 2015	Elected	4 years				
Nate Miley	Supervisor, Dist. 4	January 2013	Elected	4 years				
Keith Carson	Supervisor, Dist. 5	January 2013	Elected	4 years				
Meetings								
Date:	Every Tuesday at 9:30am.							
Location:	Meetings are held in the Baord Chambers at 1221 Oak Street, 5th floor in Oakland.							
Agenda Distribution:	Posted on internet and County Administration Building.							
Minutes Distribution:	Available on County website.							

#### Figure 1-2: Emergency Medical Services CSA Governing Body

EMS CSA is managed as a division of the Alameda County Health Care Services Agency, organized under the Public Health Department. EMS CSA responsible for overseeing all EMS providers in Alameda County, with the Board of Supervisors making the policy decisions affecting the CSA. There are also several advisory committees to the EMS Agency.

EMS CSA reported that one of its goals is to develop a comprehensive data collection system, for the purpose of enabling EMS CSA to evaluate countywide incident outcomes and provide statistics on EMS service levels on its website in 2012. Paramedics Plus has provided software on ruggedized laptop computers to all of the fire departments in the County to enable EMS CSA to have a standardized electronic patient care record and central repository managed by the CSA into which all patient care and dispatch records are uploaded.

As part of the Public Health Department, EMS CSA contributes to promoting health equity through its injury prevention programs, such as fall prevention and drive well training for seniors, car seat courses and check-up events, and involvement with the Safe Kids Coalition. EMS CSA's Camp Sweeney and EMS Corps programs help prepare young people from low income families for careers in healthcare. Additionally, EMS CSA provides CPR training for children in middle schools who then go home to train adults in their household. This program was reported to be very successful and expanding countywide. Additionally, EMS CSA makes available a newsletter as a direct communication tool with stakeholders, providers and EMS personnel.

EMS CSA established a reporting process for unusual occurences that is designed to address complaints filed by the public, field personnel, hospital personnel, physicians, etc. All complaints are investigated by CSA personnel. The EMS Director is responsible for handling complaints. EMS CSA reported that there were 36 investigations for unusual occurrences in 2011.

EMS CSA demonstrated accountability and transparency in its disclosure of information and cooperation with LAFCo during the MSR process. The agency responded to LAFCo's written questionnaires and other requests for information and cooperated with map inquiries.

# MANAGEMENT AND STAFFING

While public sector management standards vary depending on the size and scope of the organization, there are minimum standards. Well-managed organizations evaluate employees annually, track employee and agency productivity, periodically review agency performance, prepare a budget before the beginning of the fiscal year, conduct periodic financial audits to safeguard the public trust, maintain relatively current financial records, conduct advanced planning for future service needs, and plan and budget for capital needs.

The EMS director, who reports to the Director of Public Health and ultimately to the Board of Supervisors, oversees EMS CSA's operations. Frontline supervisors and some administrative staff report directly to the EMS director, but the majority of staff report to the frontline supervisors. There are several units within EMS CSA: 911 system oversight, injury prevention, community programs, and administration and support.

EMS CSA reported that it does not conduct regular staff evaluations and verbal evaluations of EMS provider groups, such as city fire departments. It does, however, investigate reports of unusual occurrences involving individuals employed by EMS

providers. The CSA conducts a self-evaluation entitled the EMS System Plan, in which it assesses its success in meeting minimum standards and suggested guidelines related to a wide variety of issues regulated by the California EMS Authority. Additionally, EMS CSA evaluates the EMS system as a whole by conducting surveys, analyzing data, and monitoring the performance of EMS provider agencies in order to ensure contract compliance and identify opportunities for improvement of the EMS system.

EMS CSA indicated that staff productivity is monitored on an individual basis. The CSA reports productivity indicators in preparing its EMS System Plan updates.

In its 1999 self-evaluation, EMS CSA indicated it was unable to obtain data to monitor response times of first responders other than American Medical Response (AMR). Starting in 2002, all 911 responders were monitored by EMS CSA for response times, cardiac arrest survival and intubation success rates. At that time, AMR was the only provider subject to response time penalties, should it fail to meet response times required in its contract. Beginning with the contracts executed in 2011, response time penalties and penalties for noncompliance with other contract requirements were established for all 911 provider agencies, including first responders. Prior to that, there were no penalties for noncompliance.

EMS CSA does not have a capital improvement plan. The CSA provides EMS system oversight in the form of planning, implementing and evaluating 911 system design. The direct EMS providers are responsible for capital improvements required for actual EMS system delivery.

EMS holds an annual EMS Week award luncheon where field providers and members of the community are recognized for outstanding performance or extraordinary service to the community. This award presentation has been in existence in one form or another since 2000 and has grown every year.

# **GROWTH AND POPULATION PROJECTIONS**

This section discusses the factors affecting service demand, such as land uses, and historical and anticipated population growth.

## Land Use

The CSA encompasses every land use designated by the County and the incorporated cities within its bounds.

## Existing Population

As of 2010, EMS CSA's boundary population was 1,510,271, with population density of 1,840 people per square mile.

# Projected Growth and Development

Based on Association of Bay Area Governments (ABAG) growth projections and EMS CSA's estimated population from the 2010 Census, the population of the area within EMS CSA is anticipated to reach 1,966,300 by 2035, with an average annual growth rate of one percent, which is equivalent to the growth projected countywide. From 2010 to 2035 the population of EMS CSA is estimated to grow by 27 percent.

The agency reported that the number of requests for 911 medical response have remained stable since 2005. There are approximately 120,000 calls per year, resulting in about 85,000 ambulance transports.

In the past decade, the growth within EMS CSA has been occurring in the east county cities of Dublin, Pleasanton and Livermore. According to ABAG growth projections, future growth is anticipated to be concentrated in the Cities of Dublin, Emeryville and Livermore over the next 25 years.

EMS CSA forecasts its service needs through first responders and ambulance providers that provide services to the CSA through contract. Service providers are responsible for meeting response time requirements, no matter the demand. If population growth results in greater demand, providers are responsible for adding enough resources to keep up with demand.

# FINANCING

The financial ability of agencies to provide services is affected by available financing sources and financing constraints. This section discusses the major financing constraints faced by EMS CSA and identifies the revenue sources currently available to the CSA.

EMS CSA reported that current financial levels were adequate to deliver services. Funding has remained relatively stable. The annual CPI increases allowed in Measure C have allowed EMS CSA to keep up with rising costs of service delivery. Additionally, the addition of the City of Alameda to EMS CSA in 2011 has compensated for previous shortfalls.

EMS CSA is facing an unanticipated cost in support of the Alameda County Regional Emergency Communication Center (ACRECC), which provides dispatch for Paramedics Plus and several of the fire departments. ACRECC is operated by Alameda County Fire Department. EMS CSA has historically provided about 52 percent of their budget, and they are passing on to EMS a shortfall in their budget. EMS CSA reported that the cost associated with the dispatch center may require an increase to the ambulance transport fees

#### Revenues

EMS CSA's revenue comes from several sources. The primary source of funding is from an EMS assessment tax. Additional sources include a pass-through from the contracted ambulance provider, for First Responder Advanced Life Support (FRALS) services provided by the fire departments within the Paramedics Plus service area, as described in more detail below.

EMS CSA's revenues in FY 10-11 were \$21.5 million. The CSA received 72 percent of its total income from assessments and 25 percent from the ambulance company, which is passed through to the fire departments. (This pass through financing is discussed in more detail below.) The other three percent was received from business licenses, donations, general fines and forfeitures, interest, other charges for services, and other licenses and permits.

Revenue for Paramedics Plus (the contract ambulance provider) services is collected through set fees for service from the patient's insurance company—Medicare, MediCal, and self-pay. Paramedics Plus collects the fees and passes on a portion to EMS CSA. In turn, the County has contracts with fire departments within the Paramedic Plus service area to provide first responder paramedics to 911 requests for services, prior to Paramedics Plus arriving on scene. The fire departments are compensated for this service by Paramedics Plus on a per-unit basis. The funds are provided to EMS CSA by Paramedics Plus as a pass-through to the fire departments.

Assessments have been imposed since 1983, when they were approved by the voters with passage of Measure C.

In 2011, EMS CSA adopted a new fee structure for certification and training of emergency medical technicians and paramedics. EMT certification and recertification fees were raised from \$35 to \$50. The paramedic accreditation fee went up from \$25 to \$50. EMS CSA established a \$15 late EMT application fee, a \$15 certificate and accreditation card replacement fee, and a \$15 fee for the EMS Policy Manual. A \$2,000 EMS review fee is assessed for the quadrennial EMS review and approval of a private education institution's EMT training program or of a private education institution's continuing education program. A \$3,000 EMS review fee is assessed for the quadrennial EMS review and approval of a private education institution's continuing education program. A \$3,000 EMS review fee is assessed for the quadrennial EMS review and approval of a private education institution's paramedic training program.<sup>12</sup> There is also a fee for a permit as part of the ambulance ordinance. The fees for non-emergency BLS and CCT-RN are \$3,000 for a two year certificate of operation and \$250 for each ambulance permitted (again valid for two years). Public safety agencies get 50 percent off those rates. CCT-P is \$10,000 and then \$50 per call after the first 200 calls.

<sup>&</sup>lt;sup>12</sup> For all of the fees cited, community colleges, hospitals, and public safety agencies that provide training programs pay 50 percent of the stated fees.

# Expenditures

In FY 10-11, EMS CSA had about \$15.4 million in current expenditures, which consisted of discretionary services and supplies, such as a trauma center subsidy, FRALS payments, dispatch center payments, and other costs (76 percent), salary payments (18 percent), and non-discretionary services and supplies (six percent). Additionally, EMS CSA had \$6.9 million in encumbrances (committed contract payments) at the end of FY 10-11. In FY 10-11, expenditures exceeded revenues by \$774,238.

Almost \$17 million of EMS CSA's budget (or 78 percent of its revenues) consists of passthrough revenues to fire departments and other providers offering first-responder ALS units, trauma hospitals, and the medical dispatch system. The three trauma centers receiving funds include the County's Highland Hospital in Oakland, the Eden Medical Center in Castro Valley, and Children's Hospital Oakland. EMS CSA spends about \$1 million annually on subsidies to the four cities providing ambulance transport services directly. In FY 10-11, EMS CSA pass-thru contract payments amounted to \$9.2 million for the trauma center, \$4.7 million for the first responder ALS units, and \$2.9 million for the dispatch center.

## Liabilities and Assets

EMS CSA does not have any long-term debt.

As of June 30, 2011, EMS CSA had an available fund balance of \$8,084,258, and has no assets or liabilities.

## **Financing Efficiencies**

EMS CSA engages in joint financing efforts related to insurance. Alameda County receives excess workers compensation and liability coverage through the California State Association of Counties Excess Insurance Authority—a joint powers authority.

# 2. MUNICIPAL SERVICES

# **EMERGENCY MEDICAL SERVICES**

### Service Overview

EMS CSA provides key functions in the provision of countywide emergency medical services , including:

- Monitoring and approving EMT-1 training and certification programs
- Accrediting paramedic personnel to work in Alameda County,
- ✤ Authorizing advanced life support programs,
- Establishing and enforcing policies for medical control of the EMS system (including dispatch) and patient care,
- Regulation of ambulance services, such as monitoring and enforcement of response times,
- Collecting response time and patient outcome data for regulation purposes and to identify necessary improvements in the EMS system.
- Monitoring contracts with EMS system providers, including the county-contracted ambulance provider and fire departments and trauma centers, and
- Offering community educational services, such as CPR and EMS training for children, mentorship and career exposure for minority youth, unintentional injury prevention outreach, and providing resources to establish a public defibrillation program.

EMS CSA selected a new ambulance transport provider following a competitive bid process. Paramedics Plus took over as the County-contracted provider on November 1, 2011. EMS CSA contracts with Paramedics Plus to provide ambulance transport services in the entire unincorporated area and most cities in the County except for the cities of Albany, Alameda, Berkeley, and Piedmont, which provide ambulance services in their respective cities. EMS CSA also has contracts with fire departments to provide first responder advanced life support throughout the County,. Such contracts were in place in 1999, renewed in 2005, and renewed again in November, 2011. In addition, the three trauma centers have been providing services to EMS CSA and the entire County since 1987. The most recent renewals for these contracts were executed in 2012.

#### Ambulance Transport Services

In 1990, Regional Medical Systems, which was one of the original companies which merged to form American Medical Response (AMR), became the sole private ambulance provider countywide with the exception of the cities of Alameda, Albany Berkeley and Piedmont. These cities provide ambulance and first responder services within their cities. EMS CSA is responsible for contract negotiations. The contract with AMR was renewed in 1999 with several contract extensions. In 2009, EMS CSA began a competitive request for proposal process for ambulance transport services as required by law. Two proposals were submitted, and following a rigorous process, Paramedics Plus, LLC. was chosen as the new ambulance service provider. Paramedics Plus began providing service on November 1, 2011.

Ambulances are staffed with one paramedic and one EMT. An additional paramedic is provided through the fire departments serving as first responders to 911 calls.

#### First Responder Services

As described previously, the County has contracts with fire departments within the Paramedic Plus service area to provide first responder paramedics to 911 requests for services. The fire departments are compensated for this service by Paramedics Plus on a per-unit basis. The funds are provided to EMS CSA by Paramedics Plus as a pass-through to the fire departments.

#### **Dispatch Services**

Paramedics Plus is dispatched by the Alameda County Regional Emergency Communications Center (ACRECC), which is administered by Alameda County Fire Department. Ambulance personnel can communicate with the first responders who are already on scene with the patient. Paramedics Plus uses a sophisticated system to anticipate requests for service to strategically position ambulances throughout their service area.

EMS CSA audits response times of first responders and ambulances, as well as the quality of pre-arrival instructions provided by the Emergency Medical Dispatch (EMD) centers in the County. EMD centers provide prearrival instructions to 911 callers by asking pre-established questions and providing instructions to the caller regarding CPR, emergency childbirth, choking, bleeding, and other medical emergencies. Prioritizing 911 calls in this way makes it possible to ensure that the sickest patients get ambulances in the shortest period of time. Certified dispatchers also provide instructions to the caller for what to do before 911 responders arrive for certain medical conditions, including emergency childbirth, choking, bleeding, and CPR for cardiac arrest.

# Demand for Services

EMS CSA reported that requests for services have not increased appreciably. In 2011, EMS CSA reported the following use of its services:

- Initial EMT Certifications: 281
- EMT Recertification's: 365
- Paramedics Accredited: 62
- Applications Processed: 708
- Investigations: 43 (5 Paramedics, 38 EMT's)
- EMTs Denied: 1
- AMR, Paramedics Plus and Contract City Responses: 138,998
- ✤ AMR and Paramedics Plus Transports: 92,760
- Trauma Patients Treated and Transported: 5,199

The transporting city fire department of Piedmont currently does not provide their data to EMS CSA as it is on a paper system. However, efforts are underway for the city to transition to an electronic format, which will enable easier sharing of demand data with EMS CSA.

# Infrastructure and Facilities

EMS CSA's office is located in San Leandro, and there are no other facilities used directly by the agency.

Facilities used in the provision of emergency medical services throughout the County include fire stations, hospitals, and trauma centers. There are 13 receiving hospitals, two adult trauma centers and one pediatric trauma center. A medical helicopter is available from several different providers, including Advanced Life Support (ALS) air ambulances, ALS rescue aircraft, and Basic Life Support rescue aircraft.

# Infrastructure Needs or Deficiencies

The 2004 MSR identified challenges faced by the agency, which included enforcement of response times among fire departments, and challenges in producing data to link prehospital EMS service with patient outcomes. These two challenges have since been overcome. The County has established a data collection system that, when fully implemented, combines data from the dispatch center, ambulances and fire departments for each patient. Data is also available to the receiving hospitals. While EMS CSA has been receiving fire department data on response times, cardiac arrests, and endotracheal intubation since 1999, the new data collection system will provide automated data collection in real time, with a more comprehensive data set. EMS CSA noted that there are challenges linking with the hospital report data, but a consultant has been hired to finalize the set up. EMS CSA did not identify any infrastructure needs or deficiencies.

# Shared Facilities and Regional Collaboration

EMS CSA recently worked with Paramedics Plus and the cities of Alameda, Albany, Berkeley, and Piedmont to establish ambulance mutual aid agreements.

EMS CSA participates in the following regional plans and programs: Bay Area Urban Area Securities Initiative, Bay Area Regional Trauma Coordinating Committee, EMS Administrators Association of California, EMS Medical Directors Association of California, Emergency Management Agency Region II Medical/Health Disaster Coordinators and Northern California EMS Coordinators Committee.

### Service Adequacy

This section reviews indicators of service adequacy, including response times, complaints, staffing levels, training and costs.

With the contracts established in 2011, EMS CSA established response time standards and related penalties and penalties for noncompliance with other contract requirements. In urban areas the response time for arrival of paramedic level care, also known as advanced life support or ALS, is eight minutes and thirty seconds and ten minutes and thirty seconds for ambulance response for the most critical patients (Echo and Delta) from the time the call is received by the provider agency. It should be noted that the CSA had response time standards prior to 2011, but no penalties for failure to meet those requirements. Response time requirements for Paramedics Plus are shown below in Figure 1-3. Response time requirements differ for the fire department first responders and ambulance personnel.

Personnel and Response Time Requirements						
Medical Priority Dispatch System Category	Sub Area: Personnel Configuration:	Metro/Urban	Suburban/Rural	Wilderness		
Echo	2 Paramedics	08:30 min.	14:00 min.	18:00 min.		
Delta	1 Paramedic 1 EMT	10:30 min.	16:00 min.	22:00 min.		
Charlie	1 Paramedic 1 EMT	15:00 min.	25:00 min.	28:00 min.		
Bravo	2 EMTs	15:00 min.	25:00 min.	28:00 min.		
Alpha	2 EMTs	30:00 min.	40:00 min.	40:00 min.		

Response times to requests for service are rigorously monitored for compliance and penalties are assessed for failure to meet pre-established response time requirements for

metro/urban, suburban and rural areas for the County. Both, ambulance response and first responder response times are monitored. Thus far, Paramedics Plus has been meeting the requirements. Generally, the first responder agencies met the response time requirements in 2011. For Paramedics Plus these parameters were not fully in effect until the contract was complete, which means that operations with respect to these contract parameters for Paramedics Plus were only monitored for two months in that year. More recently, EMS CSA reported that Paramedics Plus's overall monthly compliance rate has been as high as 98 percent, and has never fallen below 90 percent.

EMS CSA is staffed by 42 employees based at the administrative office in San Leandro. The CSA delivers unique services as a regulatory agency, and additionally provides injury prevention and community programs not provided by other EMS agencies, as such its staffing level is not comparable to other agencies in Alameda County or the State.

EMS CSA's operating expenses in FY 10-11 were \$15.4 million. On a per capita basis of the countywide population, operating expenses were \$10. It should be noted that not all of our staff and projects are funded by the CSA revenues. Due to its unique services, costs are not comparable to other agencies.

# 3. MSR DETERMINATIONS

# Growth and Population Projections

- ✤ As of 2010, the population within Emergency Medical Services County Service Area (EMS CSA) was 1,510,271.
- Based on ABAG growth projections the population of EMS CSA is anticipated to be 1,966,300 by 2035.

Location and Characteristics of Any Disadvantaged Unincorporated Communities Within or Contiguous to the Sphere of Influence

Using Census Designated Places, Alameda LAFCo determines that there are no disadvantaged unincorporated communities that meet the basic state-mandated criteria within the County. Alameda LAFCo recognizes, however, that there are communities in the County that experience disparities related to socio-economic, health, and crime issues, but the subject of this review is municipal services such as water, sewer, and fire protection services to which these communities, for the most part, have access.

Present and Planned Capacity of Public Facilities and Adequacy of Public Services, Including Infrastructure Needs and Deficiencies

- EMS CSA reported that the number of requests for 911 medical response have remained stable since 2005.
- Direct service providers, such as Paramedics Plus and fire departments, are responsible for meeting response time requirements and providing adequate resources to keep up with demand.
- EMS CSA has overcome infrastructure challenges previously identified in the 2004 MSR related to linking pre-treatment and outcome data on patients served.
- ✤ No significant infrastructure needs were identified for EMS CSA, which operates entirely out of an administrative office in San Leandro.
- EMS CSA does not have a capital improvement plan. The direct EMS providers are responsible for capital improvements required for actual EMS system delivery.

Most ambulance transport services in Alameda County are provided by Paramedics Plus, which increases capacity based upon service demands. Exceptions are the cities of Alameda, Albany, Berkeley and Piedmont, which individually develop capacity plans. EMS CSA has authority over Paramedics Plus and the four cities in terms of service availability and capacity planning for EMS purposes. The mutual aid agreements are aimed at capacity planning, which had been informal between agencies.

# Financial Ability of Agency to Provide Services

- EMS CSA reported that its financing was generally adequate to deliver services.
- In FY 10-11, EMS CSA's revenues exceeded expenses.
- EMS CSA does not have any long-term debt.
- EMS CSA's certification and training fees were last updated in 2011.

# Status and Opportunities for Shared Facilities

- EMS CSA is a member of the Advisory Committee for ACRECC.
- EMS CSA worked with Paramedics Plus and the cities of Alameda, Albany, Berkeley, and Piedmont to establish ambulance mutual aid agreements.
- EMS CSA participates in multiple regional plans.
- EMS CSA engages in joint financing efforts related to insurance.

# Accountability for Community Services, Including Governmental Structure and Operational Efficiencies

- EMS CSA is governed by the Alameda County Board of Supervisors. The Board updates constituents, broadcasts its meetings, solicits constituent input, discloses its finances, and posts public documents on its website.
- ✤ In 2011, EMS CSA annexed the City of Alameda and its boundaries became coterminous with the County of Alameda boundaries.
- ✤ No alternative governance structure options with regard to EMS CSA were identified.
- EMS CSA demonstrated accountability in its cooperation with the LAFCo information requests.

# 4. SPHERE OF INFLUENCE UPDATE

# Existing Sphere of Influence Boundary

EMS CSA's existing SOI is coterminous with its boundary and includes the entire territory of Alameda County.

During the 2004 SOI updates, the Commission elected to retain EMS CSA's coterminous SOI, relying on erroneous information that the CSA's boundary was coterminous with the County boundaries. However, EMS CSA's boundary area did not, at that time, include the entire County. In 2011, EMS CSA became countywide when it annexed the City of Alameda. Therefore, prior to the annexation, the SOI was larger than the boundary area. After the annexation took place, the EMS CSA's SOI became coterminous with its boundaries.

## SOI Options

One option was identified with respect to EMS CSA's SOI.

#### Option #1 – Maintain coterminous SOI

Should the Commission wish to continue to reflect an existing service boundary, then a coterminous SOI would be appropriate.

# Recommended Sphere of Influence Boundary

Given the fact that the boundary area includes the entire territory of Alameda County and no reduction in service area or boundary area is proposed, it is recommended that the Commission maintain a coterminous SOI for the EMS CSA.

# Proposed Sphere of Influence Determinations

#### Nature, location and extent of any functions or classes of services

The Emergency Medical Services County Service Area (EMS CSA) functions as Alameda County's lead agency responsible for local EMS system planning, paramedic training, paramedic service standards and EMS coordination throughout the County.

#### Present and planned land uses, including agricultural and open-space lands

- EMS CSA encompasses every land use designated by the County and the incorporated cities within its bounds, including agricultural and open space land.
- The EMS CSA SOI is countywide, and does not conflict with existing or planned land uses.
- Emergency medical services are needed in all areas, and do not, by themselves induce or encourage growth on agricultural or open space lands. The recommended SOI will not adversely affect agricultural or open space land or be growth inducing.

#### Present and probable need for public facilities and services

- Services are currently being provided and need to be continued.
- Based on the existing level of demand, there is a present need for emergency medical services.
- EMS CSA's population is expected to grow by five percent in the next five years, and the demand for emergency medical services is likely to reflect the anticipated population increase throughout the County.
- The share of senior citizens will continue to grow, further increasing the need for emergency medical services and injury prevention services and programs.

#### <u>Present capacity of public facilities and adequacy of public services that the agency</u> <u>provides or is authorized to provide</u>

- EMS CSA delivers unique services as a regulatory agency.
- EMS CSA conducts a self-evaluation, and assesses its success in meeting minimum standards and suggested guidelines relating to issues regulated by the California EMS Authority.
- EMS CSA meets the minimum standards and appears to provide adequate services.
- EMS CSA reviews quarterly response time reports from all first responder ALS providers.

- EMS CSA periodically reviews growth in formerly rural areas to ensure that response time standards in newly urbanized areas are consistent with expected urban area response time standards.
- The State and federal governments regulate most of the services provided by EMS CSA.

#### Existence of any social or economic communities of interest

- EMS CSA was primarily formed to serve residents of Alameda County. All County residents benefit from services provided by EMS CSA.
- The growing County senior population will have the greatest need for paramedic, ambulance transport, and other emergency medical services.
- EMS CSA works to provide an adequate level of emergency medical services for residents and visitors in the County.