

---

## EXECUTIVE SUMMARY

---

Alameda County is proud to share our Emergency Medical Services (EMS) System Plan based on the State of California EMS System Standards and Guidelines. The purpose of our system plan is to:

*Compare the Alameda County EMS District to both the minimum standards and the recommended goals as determined by the EMS Authority.*

*Determine how we might change our system as evaluated against the standards.*

*Educate EMS agency staff, system participants, elected officials and policy makers about the Alameda County EMS District.*

*Provide justification for maintaining the current service level and any proposed program changes or improvements.*

Below we show the assessment of Alameda County's EMS System, based on the guidelines.

### STRENGTHS:

- The Alameda County EMS system meets 90% of the minimum standards and implemented 78% of the recommended goals.
- A Special Assessment District funds the EMS System.
- A countywide trauma system celebrating its 10-year anniversary in January 1997.
- Integrated public/private Advanced Life Support (ALS) transport services and fire service ALS first responders in approximately 50% of the Fire Departments.
- A countywide Early Defibrillation program.

## **WEAKNESSES:**

- Lack of a comprehensive system-wide data collection system
- No countywide medical transportation ordinance.
- ALS first responder service has not yet implemented in our largest city. ALS service is not available in one city that chose not to join the assessment district.
- Emergency Medical Dispatch (EMD) and pre-arrival instructions are not available in five cities within the county.
- Inability to maintain an eight-minute response time requirement for transport providers based on the cost of providing the service.
- Lack of Receiving Hospital agreements.

## **OPPORTUNITIES:**

- The ability to implementation the EMS for Children program, as the result of obtaining a two-year grant from the EMS Authority.
- Initiating a plan to improve the relations between police agencies, fire departments, the transport provider industrial health teams and other responders.
- Embarking on a total EMS system redesign project, with the opportunity to improve current services in a cost efficient manner.

## **THREATS:**

- Managed Care and Government payers changing the payment structure without input from EMS.
- The passage of Proposition 218 that may affect District funding in the future.

We hope the information contained in this document is informative and useful. Please call Diane Akers, Director [(510) 873-6615] or Kris Helander-Daugherty, Prehospital Care Coordinator [(510) 873-6627], if you have any questions or comments

# EMS SYSTEM ASSESSMENT

**TABLE 1: Summary of System Status** - Items in Table 1 followed by an asterisk indicate resources and/or services that may be coordinated with other EMS agencies in meeting the standards.

Standards and Goals	Current Status		Description	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	

**PLANNING ACTIVITIES**

<p><b>1.05 System Plan</b>                      Standard: Each local EMS agency shall develop an EMS system plan, based on community need and utilization of appropriate resources, and shall submit it to the EMS authority. The plan shall:</p> <ul style="list-style-type: none"> <li>a) Assess how the current system meets these guidelines;</li> <li>b) Identify system needs for patients within each of the targeted clinical categories (identified in Section II); and, provide a methodology and time line for meeting these needs.</li> </ul>	✓		<p>► EMS System plan, updated annually, that identifies:</p> <ul style="list-style-type: none"> <li>1. Areas of compliance</li> <li>2. System needs, including a plan and time line for meeting needs.</li> </ul>				
<p><b>1.06 Annual Plan Update</b>                      Standard: Each local EMS agency shall develop an annual update to its EMS system Plan and shall submit it to the EMS Authority. The update shall:</p> <ul style="list-style-type: none"> <li>a) Identify progress made in plan implementation</li> <li>b) Changes to the planned system design.</li> </ul>				✓	✓		Review system plan annually. Identify <ul style="list-style-type: none"> <li>1. Implementation progress</li> <li>2. Changes from planned design</li> </ul>

July 1996

Current Status

Standards and Goals	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
					Annual	Long-range	
<p><b>1.07 Trauma Planning:</b> Standard: The local EMS agency shall plan for trauma care and shall determine the optimal system design for trauma care in its jurisdiction.</p>	✓		▶ Trauma System Plan				
<p><i>Goal: The local EMS agency should designate appropriate facilities or execute agreements with trauma facilities in other jurisdictions.</i></p>		✓	<i>Facilities designated in 1987. Current agreements for adult and pediatric trauma</i>				
<p><b>1.08 ALS Planning</b> Standard: The local EMS agency shall plan for eventual provision of advanced life support services throughout its jurisdiction.</p>	✓		ALS available county-wide since 1986.				
<p><b>1.09 Inventory of Resources</b> Standard: Each local EMS agency shall develop a detailed inventory of EMS resources (e.g., personnel, vehicles, and facilities) within its area and, at least annually, shall update this inventory.</p>	✓		▶ EMS Policy Manual.				
<p><b>1.10 Special Populations</b> Standard: Each local EMS agency shall identify population groups served by the EMS system which require specialized services (e.g. elderly, handicapped, children, non-english speakers)</p>	✓		▶ EMS Policy Manual Populations identified: • Children • Elderly				

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><i>Goal: Each local EMS agency should develop services, as appropriate, for special population groups served by the EMS system which require specialized services (e.g., elderly, handicapped, children, non-English speakers).</i></p>		✓	<p><b>Elderly:</b></p> <ul style="list-style-type: none"> <li>▶ Do not resuscitate policy.</li> <li>▶ Elder abuse reporting</li> </ul> <p><b>Children:</b></p> <ul style="list-style-type: none"> <li>▶ Child abuse reporting.</li> <li>▶ EMS for Children project.</li> <li>▶ Pediatric Trauma Center.</li> <li>▶ Pediatric policies</li> </ul> <p><b>Non-english speaking:</b></p> <ul style="list-style-type: none"> <li>▶ 9-1-1 video in 7 languages</li> <li>▶ language translation services</li> </ul>			✓	<p><b>Need:</b> Develop additional services for Handicapped and non-english speaking patients <b>Plan:</b> Include as part of the EMS System Redesign Project.</p>
<p><b>1.11 System Participants</b> Standard: Each local EMS agency shall identify optimal roles and responsibilities of system participants.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> </ul>				
<p><i>Goal: Each local EMS agency should ensure that system participants conform with their assigned EMS system roles and responsibilities through mechanisms such as written agreements, facility designations, and exclusive operating areas.</i></p>		✓	<ul style="list-style-type: none"> <li>▶ Contracts</li> <li>▶ Audits</li> </ul>				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<b>REGULATORY ACTIVITIES</b>							
<b>1.12 Review &amp; Monitoring</b> Standard: Each local EMS agency shall provide for review and monitoring of EMS system operations.	✓		<ul style="list-style-type: none"> <li>▶ Site visits</li> <li>▶ Audits</li> <li>▶ Data Collection</li> </ul>				
<b>1.13 Coordination</b> Standard: Each local EMS agency shall coordinate EMS system operations.	✓		<ul style="list-style-type: none"> <li>▶ EMS Council</li> <li>▶ Emergency Medical Oversight Committee</li> </ul>				
<b>1.14 Policy &amp; Procedures Manual</b> Standard: Each local EMS agency shall develop a policy and procedures manual which includes all EMS agency policies and procedures. The agency shall ensure that the manual is available to all EMS system providers (including public safety agencies, ambulance services, and hospitals) within the system.	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> </ul>				
<b>1.15 Compliance with Policies</b> Standard: Each local EMS agency shall have a mechanism to review, monitor, and enforce compliance with system policies.	✓		<ul style="list-style-type: none"> <li>▶ QI plans.</li> <li>▶ Policy review process.</li> <li>▶ Incident Review Process.</li> </ul>				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<b>SYSTEM FINANCE</b>							
<b>1.16 Funding Mechanism</b> Standard: Each local EMS agency shall have a funding mechanism which is sufficient to ensure its continued operation and shall maximize use of its Emergency Medical Services Fund.	✓		<ul style="list-style-type: none"> <li>▶ Assessment District</li> </ul>				
<b>MEDICAL DIRECTION</b>							
<b>1.17 Medical Direction*</b> Standard: Each local EMS agency shall plan for medical direction within the EMS system. The plan shall identify the optimal number and role of base hospitals and alternative base stations and the roles, responsibilities, and relationships of prehospital and hospital providers.	✓		<ul style="list-style-type: none"> <li>▶ Designation of Base Hospitals</li> <li>▶ Contracts</li> <li>▶ EMS Policy Manual</li> </ul>				
<b>1.18 QA / QI</b> Standard: Each local EMS agency shall establish a quality assurance/quality improvement program. This may include use of provider based programs which are approved by the local EMS agency and which are coordinated with other system participants.	✓		<ul style="list-style-type: none"> <li>▶ Provider based QI plans.</li> <li>▶ EMS Policy Manual.</li> <li>▶ EMS QI plan</li> </ul>				
<i>Goal: Prehospital care providers should be encouraged to establish in-house procedures which identify methods of improving the quality of care provided.</i>		✓	<ul style="list-style-type: none"> <li>▶ Trend identification.</li> <li>▶ Training based on trends.</li> <li>▶ Policy review.</li> </ul>				

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><b>1.19 Policies, Procedures, Protocols</b>                      Standard: Each local EMS agency shall develop written policies, procedures, and/or protocols including, but not limited to:                      a) triage; b) treatment; c) medical dispatch protocols; d) transport; e) on-scene treatment times; f) transfer of emergency patients; g) standing orders; h) base hospital contact; i) on-scene physicians and other medical personnel; j) local scope of practice for prehospital personnel.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> </ul>				
<p><i>Goal: Each local EMS agency should develop (or encourage the development of) pre-arrival/post dispatch instructions.</i></p>		✓	<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> <li>▶ Designated Emergency Medical Dispatch Centers.</li> </ul>				
<p><b>1.20 DNR Policy</b>                      Standard: Each local EMS agency shall have a policy regarding "DO NOT Resuscitate (DNR)" situations in the prehospital setting, in accordance with the EMS Authority's DNR guidelines.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> </ul>				
<p><b>1.21 Determination of Death</b>                      Standard: Each local EMS agency, in conjunction with the county coroner(s) shall develop a policy regarding determination of death, including deaths at the scene of apparent crimes.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> </ul>				

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><b>1.22 Reporting of Abuse</b> Standard: Each local EMS agency, shall ensure that providers have a mechanism for reporting child abuse, elder abuse, and suspected SIDS death.</p> <p><i>Goal: Develop a written policy for reporting SIDS death.</i></p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> </ul>				
		✓	<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> <li>▶ SIDS training</li> </ul>				
<p><b>1.23 Interfacility Transfer</b> Standard: The local EMS Medical Director shall establish policies and protocols for scope of practice of prehospital medical personnel during inter-facility transfers.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> </ul>				
<b>Enhanced Level: Advanced Life Support</b>							
<p><b>1.24 ALS Systems</b> Standard: Advanced life support services shall be provided only as an approved part of a local EMS system and all ALS providers shall have written agreements with the local EMS agency.</p>	✓		<ul style="list-style-type: none"> <li>▶ ALS Provider Agency Contracts</li> <li>Transport</li> <li>Non-transport</li> </ul>				
<p><i>Goal: Each local EMS agency, based on state approval, should, when appropriate, develop exclusive operating areas for ALS providers.</i></p>		✓	<p><i>Exclusive Operating Areas designated as part of the contract</i></p>				

July 1996

Current Status

Standards and Goals	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
					Annual	Long-range	

<p><b>1.25 On-Line Medical Direction</b>            Standard: Each EMS system shall have on-line medical direction, provided by a base hospital (or alternative base station) physician or authorized registered nurse/mobile intensive care nurse.</p>	✓		<ul style="list-style-type: none"> <li>▶ Designated Base Hospitals</li> <li>▶ Base Hospital Contracts</li> <li>▶ EMS Policy Manual</li> </ul>				
<p><i>Goal: Each EMS system should develop a medical control plan which determines:</i></p> <ul style="list-style-type: none"> <li>a) the base hospital configuration for the system;</li> <li>b) the process for selecting base hospitals, including a process for designation which allows all eligible facilities to apply;</li> <li>c) the process for determining the need for in-house medical direction for provider agencies.</li> </ul>		<ul style="list-style-type: none"> <li>✓</li> <li>✓</li> <li>✓</li> </ul>	<ul style="list-style-type: none"> <li>▶ Reevaluate as part of the EMS System Redesign Project</li> <li>▶ ALS Provider contract</li> </ul>				

**Enhanced Level: Trauma Care System**

<p><b>1.26 Trauma System Plan</b>            Standard: The local EMS agency shall develop a trauma care system plan, based on community needs and utilization of appropriate resources, which determines:</p> <ul style="list-style-type: none"> <li>a) the optimal system design for trauma care in the EMS area;</li> <li>b) the process which allows all eligible facilities to apply.</li> </ul>	✓		<ul style="list-style-type: none"> <li>▶ Trauma System Plan</li> </ul>				
--	---	--	--	--	--	--	--

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<b>Enhanced Level: Pediatric Emergency &amp; Critical Care System</b>							
<p><b>1.27 Pediatric System Plan</b>                      Standard: The local EMS agency shall develop a pediatric emergency medical and critical care system plan, based on community needs and utilization of appropriate resources which determines:                      a) the optimal system design for pediatric emergency medical and critical care in the EMS system, and;                      b) the process for assigning roles to system participants, including a process which allows eligible facilities to apply.</p>	✓		<ul style="list-style-type: none"> <li>▶ Trauma System Plan</li> <li>▶ EMSC project</li> </ul>				
<b>Enhanced Level: Exclusive Operating Areas</b>							
<p><b>1.28 EOA Plan</b>                      Standard: The local EMS agency shall develop, and submit for state approval, a plan based on community needs and utilization of appropriate resources, for granting of exclusive operating areas which determines:                      a) The optimal system design for ambulance service and advanced life support services in the EMS area, and                      b) The process for assigning roles to system participants, including a competitive process for implementation of exclusive operating areas.</p>	✓		<ul style="list-style-type: none"> <li>▶ As part of the Request for Proposal (RFP) process - 1989</li> </ul>				

July 1996

Current Status

Standards and Goals	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
					Annual	Long-range	

**B. STAFFING / TRAINING - LOCAL EMS AGENCY**

<p><b>2.01 Assessment of Needs</b>            Standard: The local EMS agency shall routinely assess personnel and training needs.</p>	✓		<ul style="list-style-type: none"> <li>▶ QI Plan</li> <li>▶ Incident Review</li> <li>▶ Ride-alongs</li> </ul>				
<p>Goal: 1) Develop on-going training programs based on trend identification through the CQI process</p>		✓	<ul style="list-style-type: none"> <li>▶ Helicopter policy revision and training (1996); Continuation of Care policy creation (1996) and training (1997)</li> </ul>				
<p>Goal: 2) Re-evaluate staffing requirements</p>		✓	<ul style="list-style-type: none"> <li>▶ EMS System Redesign Project</li> </ul>				
<p><b>2.02 Approval of Training</b>            Standard: The EMS authority and/or local EMS agencies shall have a mechanism to approve EMS education programs which require approval (according to regulations) and shall monitor them to ensure that they comply with state regulations.</p>	✓		<ul style="list-style-type: none"> <li>▶ CE Provider Approval process</li> </ul>				
<p>Goal: Approve CE providers, according to state guidelines, and monitor to ensure compliance.</p>		✓	<ul style="list-style-type: none"> <li>▶ 23 CE Providers approved (as of 7/96)</li> <li>▶ CE provider Audits (beginning Fall 1996)</li> </ul>				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><b>2.03 Personnel</b> Standard: The local EMS agency shall have mechanisms to accredit, authorize, and certify prehospital medical personnel and conduct certification reviews, in accordance with state regulations. This shall include a process for prehospital providers to identify and notify the local EMS agency of unusual occurrences which could impact EMS personnel certification.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMT-P and MICN Accreditation/EMT-1 Certification Process</li> <li>▶ Incident Review Process</li> </ul>				
<b>DISPATCHERS</b>							
<p><b>2.04 Dispatch Training</b> Standard: a) Public safety answering point (PSAP) operators with medical responsibility shall have emergency medical orientation. b) medical dispatch personnel (both public and private) shall receive emergency medical dispatch training in accordance with the EMS Authority's Emergency Medical Dispatch Guidelines.</p>	✓		<ul style="list-style-type: none"> <li>▶ Provider sponsored training at PSAPs</li> <li>▶ Encourage all PSAPs to train medical dispatch personnel according to EMSA guidelines.</li> </ul>				<p><b>NEEDS:</b> 1. EMD training for all medical dispatch personnel. 2. On-going training and testing at current EMD centers. <b>OBJECTIVE:</b> Work with Cities to provide EMD training and testing to all medical dispatch personnel. Part of the EMS System Redesign Project</p>
<p><i>Goal: Public safety answering point (PSAP) operators with medical dispatch responsibilities and all medical dispatch personnel (both public and private) should be trained and tested in accordance with the EMS Authority's Emergency Medical Dispatch Guidelines.</i></p>		✓ 70%	<ul style="list-style-type: none"> <li>▶ EMD training and testing provided at ALCO-CMED Oakland Fire Fremont Fire</li> </ul>			✓	

July 1996

Standards and Goals	Current Status			Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal	Description (How standard is met)		Annual	Long-range	
	<b>FIRST RESPONDERS (NON-TRANSPORTING)</b>						
<p><b>2.05 First Responder Training</b>            Standard: At least one person on each non-transporting EMS first response unit shall have been trained to administer first aid and CPR within the previous three years.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> <li>▶ First Responder contracts</li> </ul>				
<p><i>Goals: 1) At least one person on each non-transporting EMS first response unit should be currently certified at the EMT-I level and have available equipment commensurate with such scope of practice.</i></p> <p><i>2) At least one person on each non-transporting EMS first response unit should be currently certified to provide defibrillation and have available equipment commensurate with such scope of practice, when such a program is justified by the response times for other ALS providers.</i></p>		✓	<ul style="list-style-type: none"> <li>▶ First Responder contracts</li> <li>▶ First Responder contracts</li> </ul>		✓	<p><b>NEEDS:</b> All non-transporting first responder units certified to the EMT-1 level.</p> <p><b>PLAN:</b> Encourage the City of Oakland to upgrade certification level to EMT-1.</p>	

July 1996

Current Status

Standards and Goals	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
					Annual	Long-range	
<p><b>2.06 Response</b> Standard: Public safety agencies and industrial first aid teams shall be encouraged to respond to medical emergencies and shall be utilized in accordance with local EMS agency policies.</p>	✓		<p>► EMS Policy Manual Section 5000 - Law enforcement guidelines</p>			✓	<p><b>NEEDS:</b> 1) Update law enforcement guidelines. 2) Support the development of industrial first aid teams. <b>PLAN:</b> Work with: 1) the Police Chiefs Assoc. to update law enforcement guidelines. 2) Fire Chiefs Assoc. to develop industrial first aid teams.</p>
<p><b>2.07 Medical Control</b> Standard: Non-transporting EMS first responders shall operate under medical direction policies, as specified by the local EMS agency medical director.</p>	✓		<p>► EMS Policy Manual ► Executed agreements</p>				

July 1996

Standards and Goals	Current Status						Needs Assessment Action Plan
	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		
					Annual	Long- range	
<b>TRANSPORTING PERSONNEL</b>							
<b>2.08 EMT-I Training</b> Standard: All emergency medical transport vehicle personnel shall be currently certified at least at the EMT-I level.  Goal: If advanced life support personnel are not available, at least one person on each emergency medical transport vehicle should be trained to provide defibrillation.				✓		✓	<b>NEEDS:</b> Ensure all transport personnel are certified as EMT-1 and EMT-D. <b>PLAN:</b> Implement a county medical transportation ordinance
						✓	
<b>HOSPITAL</b>							
<b>2.09 CPR Training</b> Standard: All allied health personnel who provide direct emergency patient care shall be trained in CPR.				✓		✓	<b>NEEDS:</b> All personnel that provide emergency patient care are trained in CPR. <b>OBJECTIVE:</b> Implement Receiving Hospital contracts that require CPR training.
<b>2.10 Advanced Life Support</b> Standard: All emergency department physicians and registered nurses who provide direct emergency patient care shall be trained in advanced life support.				✓	✓		<b>NEEDS:</b> All personnel that provide emergency patient care are trained in ACLS. <b>OBJECTIVE:</b> Implement Receiving Hospital contracts that require ACLS training.

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><i>Goal: All emergency department physicians should be certified by the American Board of Emergency Medicine.</i></p>							
<p><b>Enhanced Level: Advanced Life Support</b></p>							
<p><b>2.11 Accreditation Process</b> Standard: The local EMS agency shall establish a procedure for accreditation of advanced life support personnel which includes orientation to system policies and procedures, orientation to the roles and responsibilities of providers within the local EMS system, testing in any optional scope of practice, and enrollment into the local EMS agency's quality assurance/quality improvement process.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> <li>▶ EMS Orientation</li> <li>▶ Optional scope of practice skills demonstration</li> <li>▶ EMS QI Plan</li> </ul>				
<p><b>2.12 Early Defibrillation</b> Standard: The local EMS agency shall establish policies for local accreditation of public safety and other basic life support personnel in early defibrillation.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> </ul>				
<p><b>2.13 Base Hospital Personnel</b> Standard: All base hospital/alternative base station personnel who provide medical direction to prehospital personnel shall be knowledgeable about local EMS agency policies and procedures and have training in radio communications techniques.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> <li>▶ EMS Orientation</li> <li>▶ EMS approved MICN Course</li> </ul>				

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	

**COMMUNICATIONS EQUIPMENT**

<p><b>3.01 Communication Plan*</b> Standard: The local EMS agency shall plan for EMS communications. The plan shall specify the medical communications capabilities of emergency medical transport vehicles, non-transporting advanced life support responders, and acute care facilities and shall coordinate the use of frequencies with other users.</p>	✓		<ul style="list-style-type: none"> <li>▶ 800 MHZ radio system</li> <li>▶ EMS Policy Manual</li> </ul>				<p><b>NEEDS:</b> Expand the use of satellite technology and cellular phones <b>PLAN:</b> 1. Encourage the use of satellite technology and cellular phones and include as part of the agencies communications plan. 2. Add Cell phone use to RFP for Ambulance service 1997.</p>
<p><i>Goal: The local EMS agency's communications plan should consider the availability and use of satellites and cellular telephones.</i></p>		✓	<ul style="list-style-type: none"> <li>▶ Cell phones and satellite technology utilized in some parts if the County</li> </ul>			✓	
<p><b>3.02 Radios</b> Standard: Emergency medical transport vehicles and non-transporting advanced life support responders shall have two-way radio communications equipment which complies with the local EMS communications plan and which provides for dispatch and ambulance-to-hospital communication.</p>	✓		<ul style="list-style-type: none"> <li>▶ 800 MHZ radio system</li> </ul>				

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><i>Goal: Emergency medical transport vehicles should have two-way radio communications equipment which complies with the local EMS communications plan and which provide for vehicle-to-vehicle (including both ambulances and non-transporting first responder units) communication.</i></p>		✓	<ul style="list-style-type: none"> <li>▶ 800 MHZ radio system</li> </ul>				
<p><b>3.03 Interfacility Transfer*</b> Standard: Emergency medical transport vehicles used for inter-facility transfers shall have the ability to communicate with both the sending and receiving facilities. This could be accomplished by cellular telephones.</p>	✓		<ul style="list-style-type: none"> <li>▶ 800 MHZ radio system if in county. Cell phones utilized by some provider agencies.</li> <li>▶ Receiving facilities notified by company dispatch or base hospital for out-of-county transfers.</li> </ul>	✓		✓	<p><b>NEEDS:</b> Ability to communicate with out-of-county facilities during transfers. <b>OBJECTIVE:</b> Encourage the use of cell phones. Implement a medical transportation ordinance Add to RFP for ambulance service 1997</p>
<p><b>3.04 Dispatch Center</b> Standard: All emergency medical transport vehicles where physically possible, (based on geography and technology), shall have the ability to communicate with a single dispatch center or disaster communications command post.</p>	✓		<ul style="list-style-type: none"> <li>▶ 800 MHZ radio system</li> </ul>				

July 1996

Current Status

Standards and Goals	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
					Annual	Long-range	

<p><b>3.05 Hospitals</b>            Standard: All hospitals within the local EMS system shall (where physically possible) have the ability to communicate with each other by two-way radio.</p>	✓		<ul style="list-style-type: none"> <li>▶ Telephone</li> <li>▶ via ALCO-CMED on 800 MHZ</li> <li>▶ HAM radio during disasters</li> </ul>				
<p><i>Goal: All hospitals should have direct communications access to relevant services in other hospitals within the system (e.g., poison information, pediatric and trauma consultation).</i></p>		✓	<ul style="list-style-type: none"> <li>▶ Telephone</li> <li>▶ via ALCO-CMED on 800 MHZ</li> <li>▶ HAM radio during disasters</li> </ul>				
<p><b>3.06 MCI/Disasters</b>            Standard: The local EMS agency shall review communications linkages among providers (prehospital and hospital) in its jurisdiction for their capability to provide service in the event of multi-casualty incidents and disasters.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> <li>▶ Disaster response plan</li> </ul>				

Standards and Goals		Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
		Meets minimum standard	Meets goal			Annual	Long-range	
<b>PUBLIC ACCESS</b>								
<b>3.07 9-1-1 Planning/ Coordination</b> Standard: The local EMS agency shall participate in ongoing planning and coordination of the 9-1-1 telephone service.		✓		▶ EMS System Redesign Project				
Goal: The local EMS agency should promote the development of enhanced 9-1-1 systems.			✓	▶ Enhanced 9-1-1 available county-wide				
<b>3.08 9-1-1 Public Education</b> Standard: The local EMS agency shall be involved in public education regarding the 9-1-1 telephone service as it impacts system access.		✓		▶ EMS System Redesign Project ▶ Encourage PIE through first responder contracts				
<b>RESOURCE MANAGEMENT</b>								
<b>3.09 Dispatch Triage</b> Standard: The local EMS agency shall establish guidelines for proper dispatch triage which identifies appropriate medical response.		✓		▶ EMS Policy manual				<b>NEEDS:</b> County-wide integrated EMD program. <b>PLAN:</b> Continue working with cities that have not implemented EMD. Part of the EMS System Redesign Project
Goal: The local EMS agency should establish a emergency medical dispatch priority reference system, including systemized caller interrogation, dispatch triage policies, and pre-arrival instructions.			✓	▶ EMD and pre-arrival instructions utilized in 70% of the County	✓ 30% of county		✓	

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
	<p><b>3.10 Integrated Dispatch</b> Standard: The local EMS system shall have a functionally integrated dispatch with system-wide emergency services coordination, using standardized communications frequencies.</p> <p><i>Goal: The local EMS agency should develop a mechanism to ensure appropriate system-wide ambulance coverage during periods of peak demand.</i></p>	✓				<ul style="list-style-type: none"> <li>▶ 800 MHZ radio system</li> </ul>	
		✓	<ul style="list-style-type: none"> <li>▶ ALS Transport Provider contract</li> </ul>				
<b>RESPONSE AND TRANSPORTATION</b>							
<p><b>4.01 Service Area Boundaries*</b> Standard: The local EMS agency shall determine the boundaries of emergency medical transportation service areas.</p> <p><i>Goal: The local EMS agency should secure a county ordinance or similar mechanism for establishing emergency medical transport service areas</i></p>	✓		<ul style="list-style-type: none"> <li>▶ ALS Transport Provider Agreement</li> </ul>				
				✓		✓	<p>NEED: Medical Transportation ordinance. OBJECTIVE: Review ordinance developed in 1992. Part of the EMS System Redesign Project.</p>
<p><b>4.02 Monitoring</b> Standard: The local EMS agency shall monitor emergency medical transportation services to ensure compliance with appropriate statues, regulations, policies, and procedures.</p>	✓		<ul style="list-style-type: none"> <li>▶ ALS Transport Provider Agreement</li> <li>▶ Audits</li> <li>▶ Incident Review Process</li> </ul>				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><i>Goal: The local EMS agency should secure a county ordinance or similar mechanism for licensure of emergency medical transport services. These should be intended to promote compliance with overall system management and should, wherever possible, replace any other local ambulance regulatory programs within the EMS area.</i></p>				✓		✓	<p>NEED: Medical Transportation ordinance. OBJECTIVE: Review ordinance developed in 1992. Part of the EMS System Redesign Project.</p>
<p><b>4.03 Classifying Medical Requests</b> Standard: The local EMS agency shall determine criteria for classifying medical requests (e.g., emergent, urgent, and non-emergent) and shall determine the appropriate level of medical response to each.</p>	✓		<ul style="list-style-type: none"> <li>► Policy and Procedure Manual</li> <li>► EMS System Redesign Project</li> </ul>				
<p><b>4.04 Prescheduled Responses</b> Standard: Service by emergency medical transport vehicles which can be pre-scheduled without negative medical impact shall be provided only at levels which permit compliance with local EMS agency policy.</p>	N/A		Not applicable. (No pre-scheduled responses by EMS responders.)				

Standards and Goals	Current Status						
	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
					Annual	Long-range	
<p><b>4.05 Response Time Standard*</b>                      Standard: Each local agency shall develop response time standards for medical responses. These standards shall take into account the total time from receipt of the call at the primary public safety answering point (PSAP) to arrival of the responding unit at the scene, including all dispatch intervals and driving time.</p>	✓		<ul style="list-style-type: none"> <li>▶ ALS provider contracts.</li> <li>▶ Response time audits.</li> <li>▶ Financial penalties for non-compliance.</li> </ul>	✓	✓		<p><b>NEEDS:</b> Response time standards for dispatch and BLS responders.  <b>PLAN:</b> Part of the EMS System Redesign Project.</p>
<p><i>Goal: Emergency medical service areas (response zones) shall be designated so that, for ninety percent of emergent responses:</i></p> <p><i>a) the response time for a BLS and CPR capable first responder does not exceed:</i>                      Metro/urban--5 minutes                      Suburban/rural--15 minutes                      Wilderness--(AQAP);</p> <p><i>b) the response time for early defibrillation capable responder does not exceed:</i>                      Metro/urban--5 minutes                      Suburban/rural--(AQAP),                      Wilderness--(AQAP);</p>			<ul style="list-style-type: none"> <li>▶ Data not available to EMS.</li> <li>▶ Data not available to EMS.</li> </ul>	✓			<p><b>NEEDS:</b> Response time standards for BLS responders and a mechanism to track compliance.  <b>PLAN:</b> Part of the EMS System Redesign Project.</p>

July 1996

Current Status

Standards and Goals	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
					Annual	Long-range	
<p>c) the response time for an ALS <u>capable</u> responder (not functioning as the first responder) does not exceed:                      Metro/urban--8 minutes                      Suburban/rural--20 minutes                      Wilderness--(AQAP)</p>		✓	Average response time for ALS (ALS Ambulance and ALS First Responder) is 8 minutes.				
<p>d) the response time for an EMS transportation unit (not functioning as the first responder) does not exceed:                      Metro/urban--8 minutes                      Suburban/rural--20 minutes                      Wilderness--(AQAP).</p>		✓	▶ ALS transport provider contracts. (Suburban/rural and wilderness only).	✓ Metro urban			Due to cost, there is no plan to meet the 8 minute goal.
<p><b>4.06 Staffing</b>                      Standard: All emergency medical transport vehicles shall be staffed and equipped according to current state and local EMS agency regulations and appropriately equipped for the level of service provided.</p>	✓		▶ EMS policy manual				
<p><b>4.07 First Responder Agencies</b>                      Standard: The local EMS agency shall integrate qualified EMS first responder agencies (including public safety agencies and industrial first aid teams) into the system.</p>	✓		▶ ALS/ BLS first responder agreements ▶ EMS Policy Manual				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><b>4.08 Medical &amp; Rescue Aircraft*</b> Standard: The local EMS agency shall have a process for categorizing medical and rescue aircraft and shall develop policies and procedures regarding: a) authorization of aircraft to be utilized in prehospital patient care; b) requesting of EMS aircraft; c) dispatching of EMS aircraft; d) determination of EMS aircraft patient destination; e) orientation of pilots and medical flight crews to the local EMS system; and, f) addressing and resolving formal complaints regarding EMS aircraft.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> <li>▶ Aircraft agreements</li> <li>▶ Incident Review Process</li> </ul>				
<p><b>4.09 Air Dispatch Center</b> Standard: The local EMS agency shall designate a dispatch center to coordinate the use of air ambulances or rescue aircraft.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> </ul>				
<p><b>4.10 Aircraft Availability*</b> Standard: The local EMS agency shall identify the availability and staffing of medical and rescue aircraft for emergency patient transportation and shall maintain written agreements with aeromedical services operating within the EMS area.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> <li>▶ Written agreements</li> </ul>				
<p><b>4.11 Specialty Vehicles*</b> Standard: Where applicable, the local EMS agency shall identify the availability and staffing of all-terrain vehicles, snow mobiles, water rescue and transportation vehicles</p>	✓		<ul style="list-style-type: none"> <li>▶ Letter of variance with EMS approval</li> </ul>				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><i>Goal: The local EMS agency should plan for response by and use of all-terrain vehicles, snow mobiles, and water rescue vehicles in areas where applicable. This plan should consider existing EMS resources, population density, environmental factors, dispatch procedures and catchment area.</i></p>		✓	► By provider agency				
<p><b>4.12 Disaster Response</b> Standard: The local EMS agency, in cooperation with the local Office of Emergency Services (OES), shall plan for mobilizing response and transport vehicles for disaster.</p>	✓		► Disaster response plan				
<p><b>4.13 Inter-County Response*</b> Standard: The local EMS agency shall develop agreements permitting inter-county response of emergency medical transport vehicles and EMS personnel.</p>	✓		► Letters of agreement				
<p><i>Goal: The local EMS agency should encourage and coordinate development of mutual aid agreements which identify financial responsibility for mutual aid responses.</i></p>							<p><b>NEEDS:</b> Identify financial responsibility in mutual aid agreements. <b>OBJECTIVE</b> Coordinate with other County's</p>

July 1996

Alameda County EMS System Plan

Page 28

1995 - 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><b>4.14 Incident Command System</b> Standard: The local EMS agency shall develop multi-casualty response plans and procedures which include provisions for on-scene medical management, using the Incident Command System.</p>	✓		▶ EMS Policy Manual				
<p><b>4.15 MCI Plans</b> Standard: Multi-casualty response plans and procedures shall utilize state standards and guidelines.</p>	✓		▶ EMS Policy Manual				
<b>Enhanced Level: Advanced Life Support</b>							
<p><b>4.16 ALS Staffing</b> Standard: All ALS ambulances shall be staffed with at least one person certified at the advanced life support level and one person staffed at the EMT-I level.</p>	✓		▶ ALS Transport Provider Agreement ▶ EMS Policy Manual				
<p><i>Goal: The local EMS agency should determine whether advanced life support units should be staffed with two ALS crew members or with one ALS and one BLS crew members.</i></p>		✓	▶ Two ALS crew members required ▶ ALS Transport Provider Agreement ▶ EMS Policy Manual				
<p><i>Goal: On any emergency ALS unit which is not staffed with two ALS crew members, the second crew member should be trained to provide defibrillation, using available defibrillator.</i></p>		N/A	▶ Reevaluate as part of the EMS System Redesign Project				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
	<b>4.17 ALS Equipment</b> Standard: All emergency ALS ambulances shall be appropriately equipped for the scope of practice of its level of staffing.	✓				<ul style="list-style-type: none"> <li>▶ ALS Transport Provider Agreement</li> <li>▶ EMS Policy Manual</li> </ul>	
<b>Enhanced Level: Ambulance Regulations</b>							
<b>4.18 Compliance</b> Standard: The local EMS agency shall have a mechanism (e.g., an ordinance and/or written provider agreements) to ensure that EMS transportation agencies comply with applicable policies and procedures regarding system operations and clinical care.	✓		<ul style="list-style-type: none"> <li>▶ ALS Transport Provider Agreement</li> <li>▶ Audits</li> <li>▶ EMS Policy Manual</li> <li>▶ Incident Review Process</li> </ul>				
<b>Enhanced Level: Exclusive Operating Permits</b>							
<b>4.19 Transportation Plan</b> Standard: Any local EMS agency which desires to implement exclusive operating areas, pursuant to Section 1797.224, H&SC, shall develop an EMS transportation plan which addresses: a) minimum Standard for transportation services; b) optimal transportation system efficiency and effectiveness; and, c) use of a competitive process to ensure system optimization.	✓		<ul style="list-style-type: none"> <li>▶ RFP process for ALS transportation</li> </ul>				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><b>4.20 Grandfathering</b> Standard: Any local EMS agency which desires to grant an exclusive operating permit without use of a competitive process shall document in its EMS transportation plan that its existing provider meets all of the requirements for non-competitive selection ("grandfathering") under §1797.224, H&amp;SC.</p>	✓		<ul style="list-style-type: none"> <li>▶ The cities of Albany, Berkeley and Piedmont meet the requirement.</li> <li>▶ The City of Alameda does not meet the requirement.</li> </ul>				
<p><b>4.21 Compliance</b> Standard: The local EMS agency shall have a mechanism to ensure that EMS transportation and/or advanced life support agencies to whom exclusive operating permits have been granted, pursuant to §1797.224, H&amp;SC, comply with applicable policies and procedures regarding system operations and patient care.</p>	✓		<ul style="list-style-type: none"> <li>▶ Contracts</li> <li>▶ Audits</li> <li>▶ EMS Policy Manual</li> <li>▶ Incident Review Process</li> </ul>				
<p><b>4.22 Evaluation</b> Standard: The local EMS agency shall periodically evaluate the design of exclusive operating areas.</p>	✓		<ul style="list-style-type: none"> <li>▶ To be reviewed in 1996 prior to RFP release.</li> </ul>				
<b>E. FACILITIES / CRITICAL CARE</b>							
<p><b>5.01 Assessment of Capabilities</b> Standard: The local EMS agency shall assess and periodically reassess the EMS-related capabilities of acute care facilities in its service area.</p>	✓ Trauma Centers only		<ul style="list-style-type: none"> <li>▶ Trauma Audits</li> </ul>	✓			<b>NEED:</b> Written agreements with acute care facilities

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
Goal: <i>The local EMS agency should have written agreements with acute care facilities</i>		✓	▶ Trauma Contracts (Trauma Centers only)	receiving hospitals			<b>OBJECTIVE:</b> Execute receiving hospital agreements.
<b>5.02 Triage &amp; Transfer Protocols*</b> Standard: The local EMS agency shall establish prehospital triage protocols and shall assist hospitals with the establishment of transfer protocols and agreements.	✓		▶ EMS Policy Manual				
<b>5.03 Transfer Guidelines*</b> Standard: The local EMS agency with participation of acute care hospital administrators, physicians, and nurses shall establish guidelines to identify patients who should be considered for transfer to facilities of higher capability and shall work with acute care hospitals to establish transfer agreements with such facilities.	✓		▶ EMS Policy Manual ▶ EMS System Redesign Project				
<b>5.04 Specialty Care Facilities*</b> Standard: The local EMS agency shall designate and monitor receiving hospitals and, when appropriate, specialty care facilities for specified groups of emergency patients.	✓		▶ Trauma Centers. ▶ Base Hospitals ▶ Recognition of State designated burn centers.	✓		✓	<b>NEEDS:</b> Designate and monitor receiving hospitals. <b>PLAN:</b> Execute receiving hospital contracts. Include as part of the EMSC project.

July 1996

Alameda County EMS System Plan

Page 32

1995 - 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><b>5.05 Mass Casualty Management</b> Standard: The local EMS agency shall encourage hospitals to prepare for mass casualty management.</p>	✓		<ul style="list-style-type: none"> <li>▶ Periodic disaster drills</li> </ul>				
<p><i>Goal: The local EMS agency should assist hospitals with preparation for mass casualty management, including procedures for coordinating hospital communications and patient flow.</i></p>		✓	<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> <li>▶ Periodic disaster drills</li> </ul>				
<p><b>5.06 Hospital Evaluation*</b> Standard: The local EMS agency shall have a plan for hospital evacuation, including its impact on other EMS system providers.</p>	✓		<ul style="list-style-type: none"> <li>▶ Disaster preparedness plan</li> </ul>				
<b>Enhanced Level: Advanced Life Support</b>							
<p><b>5.07 Base Hospital Designation*</b> Standard: The local EMS agency shall, using a process which allows all eligible facilities to apply, designate base hospitals or alternative base stations as it determines necessary to provide medical direction of prehospital personnel.</p>	✓		<ul style="list-style-type: none"> <li>▶ Original designation process - 1982</li> <li>▶ Reevaluation - 1992</li> <li>Appointed committee</li> <li>▶ Reevaluation - 1996</li> <li>EMS System Redesign Project</li> </ul>				

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<b>Enhanced Level: Trauma Care System</b>							
<p><b>5.08 Trauma System Design</b>                      Standard: Local EMS agencies that develop trauma care systems shall determine the optimal system (based on community need and available resources) including, but not limited to: a) the number and level of trauma centers (including the use of trauma centers in other counties) b) the design of catchment areas (including areas in other counties, as appropriate), with consideration of workload and patient mix c) identification of patients who should be triaged or transferred to a designated center, including consideration of patients who should be triaged to other specialty care centers d) the role of non-trauma center hospitals, including those that are outside of the primary triage area of the trauma center e) a plan for monitoring and evaluation of the system</p>	✓		<ul style="list-style-type: none"> <li>▶ Trauma System Plan (Original plan completed 1985, operational 1987)</li> <li>▶ EMS Policy and Procedure Manual</li>   <li>▶ Reevaluation - 1996 EMS System Redesign Project (Trauma Planning Team)</li> </ul>				
<p><b>5.09 Public Input</b>                      Standard: In planning its trauma care system, the local EMS agency shall ensure input from both prehospital and hospital providers and consumers.</p>	✓		<ul style="list-style-type: none"> <li>▶ Policy Review Process</li> <li>▶ EMS System Redesign Project</li> </ul>				

July 1996

Current Status

Standards and Goals	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
					Annual	Long-range	

**Enhanced Level: Pediatric Emergency & Critical Care System**

<p><b>5.10 Pediatric System Design</b>            Standard: Local EMS agencies that develop pediatric emergency medical and critical care systems shall determine the optimal system, including: a) the number and role of system participants, particularly of emergency departments; b) the design of catchment areas (including areas in other counties, as appropriate), with consideration of workload and patient mix; c) identification of patients who should be primarily triaged or secondarily transferred to a designated center, including consideration of patients who should be triaged to other specialty care centers; d) identification of providers who are qualified to transport such patients to a designated facility; e) identification of tertiary care centers for pediatric critical care and pediatric trauma; f) the role of non-pediatric specialty care hospitals including those which are outside of the primary triage area; g) a plan for monitoring and evaluation of the system.</p>	<p>✓</p>		<ul style="list-style-type: none"> <li>▶ Trauma System Plan</li> <li>▶ EMSC Project (1996-97)</li> </ul>				
--	----------	--	--	--	--	--	--

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
	<p><b>5.11 Emergency Departments</b>                      Standard: Local EMS agencies shall identify minimum standards for pediatric capability of emergency departments including: a) staffing; b) training; c) equipment; d) identification of patients for whom consultation with a pediatric critical care center is appropriate; e) quality assurance/quality improvement; and, f) data reporting to the local EMS agency.</p> <p><i>Goal: Local EMS agencies should develop methods of identifying emergency departments which meet standards for pediatric care and for pediatric critical care centers and pediatric trauma centers.</i></p>						
		✓	<p>▶ EMS policy manual  <u>Children's Hospital:</u></p> <ul style="list-style-type: none"> <li>• Trauma center</li> <li>• Critical care center</li> <li>• Burn center</li> </ul> <p><u>Alta Bates:</u></p> <ul style="list-style-type: none"> <li>• 5150 receiving facility for adolescents</li> </ul>				
<p><b>5.12 Public Input</b>                      Standard: In planning its pediatric emergency medical and critical care system, the local EMS agency shall ensure input from both prehospital and hospital providers and consumers.</p>	✓		<p>▶ EMSC project                      ▶ Policy Review Process</p>				

July 1996

Standards and Goals	Current Status				Needs Assessment Action Plan	
	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame	
					Annual	Long-range
<b>Enhanced Level: Other Speciality Care System</b>						
<b>5.13 Speciality System Design</b> Standard: Local EMS agencies developing speciality care plans for EMS-targeted clinical conditions shall determine the optimal system for the specific condition involved including: a) the number and role of system participants; b) the design of catchment areas (including inter-county transport, as appropriate) with consideration of workload and patient mix; c) identification of patients who should be triaged or transferred to a designated center; d) the role of non-designated hospitals including those which are outside of the primary triage area; e) a plan for monitoring and evaluation of the system.	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual               <ul style="list-style-type: none"> <li>• Burn centers</li> <li>• 5150 facilities</li> </ul> </li> <li>▶ Incident Review Process</li> </ul>			
<b>5.14 Public Input</b> Standard: In planning other specialty care systems, the local EMS agency shall ensure input from both prehospital and hospital providers and consumers.	✓		<ul style="list-style-type: none"> <li>▶ Policy Review Process</li> </ul>			

July 1996

Current Status

Standards and Goals	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
					Annual	Long-range	

**F. DATA COLLECTION / SYSTEM EVALUATION**

<p><b>6.01 QA/QI Program</b>            Standard: The local EMS agency shall establish an EMS quality assurance/quality improvement (QA/QI) program to evaluate the response to emergency medical incidents and the care provided to specific patients. The programs shall:            a) address the total EMS system, including all prehospital provider agencies, base hospitals, and receiving hospitals.            b) address compliance with policies, procedures, and protocols and identification of preventable morbidity and mortality and shall utilize state standards and guidelines.            c) use provider based QA/QI programs and shall coordinate them with other providers.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> <li>▶ Incident Review Process</li> <li>▶ Trauma Audit Process</li> <li>▶ Provider QA plans</li> <li>▶ Data Collection Planning Team (1996-97)</li> </ul>				
<p><i>Goal: The local EMS agency should have the resources to evaluate the response to, and the care provided to, specific patients.</i></p>					✓		EMS System Redesign Project -
<p><b>6.02 Prehospital Records</b>            Standard: Prehospital records for all patient responses shall be completed and forwarded to appropriate agencies as defined by the local EMS agency.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> </ul>				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><b>6.03 Prehospital Care Audits</b> Standard: Audits of prehospital care, including both system response and clinical aspects, shall be conducted.</p> <hr/> <p><i>Goal: The local EMS agency should have a mechanism to link prehospital records with dispatch, emergency department, in-patient and discharge records.</i></p>	✓		<ul style="list-style-type: none"> <li>▶ Trauma Audits</li> <li>▶ Response time audits</li> <li>▶ Provider audits</li> <li>▶ Incident Review Process</li> </ul>			✓	EMS System Redesign Project - Computerized Data Base - 1997
<p><b>6.04 Medical Dispatch</b> Standard: The local EMS agency shall have a mechanism to review medical dispatching to ensure that the appropriate level of medical response is sent to each emergency and to monitor the appropriateness of pre-arrival/post dispatch directions</p>	✓		<ul style="list-style-type: none"> <li>▶ Incident Review Process</li> <li>▶ EMS System Redesign Project - Computerize and standardized EMD program - 1997</li> </ul>				
<p><b>6.05 Data Management System*</b> Standard: The local EMS agency shall establish a data management system which supports its system wide planning and evaluation (including identification of high risk patient groups) and the QA/QI audit of the care provided to specific patients. It shall be based on state standards.</p>				✓	✓ 1997		NEED: Data Management System PLAN: EMS System Redesign Project - Data Collection Planning Team

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<i>Goal: The local EMS agency should establish an integrated data management system which includes system response and clinical (both prehospital and hospital) data.</i>						✓	
<b>6.06 System Design Evaluation</b> Standard: The local EMS agency shall establish an evaluation program to evaluate EMS system design and operations, including system effectiveness at: a) meeting community needs, b) appropriateness of guidelines and standards, c) prevention strategies that are tailored to community needs, d) assessment of resources needed to adequately support the system. This shall include structure, process, and outcome evaluations, utilizing state standards and guidelines.	✓		▶ Emergency Medical Care Committee (1982- 1994) ▶ Fitch Report (1988) ▶ EMS Task Force (1994) ▶ EMS Council as part of the EMS System Redesign Project (1995 - )				
<b>6.07 Provider Participation</b> Standard: The local EMS agency shall have the resources and authority to require provider participation in the system wide evaluation program.	✓		▶ Provider contracts and agreements (ALS, Base Hospitals, Trauma Centers, First Responder, Early defibrillation). ▶ EMS Policy Manual				Dispatch and hospitals as part of the EMS System Redesign Project.

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><b>6.08 Reporting</b> Standard: The local EMS agency shall, at least annually report on the results of its evaluation of EMS system design and operations to the Board(s) of Supervisors, provider agencies, and Emergency Medical Care Committee(s).</p>	✓		<ul style="list-style-type: none"> <li>▶ "Annual Report" to the Board of Supervisors</li> <li>▶ EMS System Plan Update</li> </ul>				
<b>Enhanced Level: Advanced Life Support</b>							
<p><b>6.09 ALS Audit</b> Standard: The process used to audit treatment provided by advanced life support providers shall evaluate both base hospitals and prehospital activities.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS Policy Manual</li> <li>▶ Incident review Process</li> <li>▶ Provider QA plans</li> </ul>				
<p><i>Goal: The local EMS agency's integrated data management system should include prehospital, base hospital and receiving hospital data.</i></p>							System-wide data collection - 1997 (EMS System Redesign Project)
<b>Enhanced Level: Trauma Care System</b>							
<p><b>6.10 Trauma System Evaluation</b> Standard: The local EMS agency, with participation of acute care providers, shall develop a trauma system evaluation and data collection program, including: a) a trauma registry; b) a mechanism to identify patients whose care fell outside of established criteria; and, c) a process of identifying potential improvements to the system design and operation.</p>	✓		<ul style="list-style-type: none"> <li>▶ Bay Area Trauma Registry (1987-90)</li> <li>▶ Trauma 1 (1990)</li> <li>▶ Trauma audit process</li> <li>▶ Bi-county Trauma Audit Committee (with Contra Costa Co.)</li> <li>▶ Policy Review Process</li> </ul>				

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
	<p><b>6.11 Trauma Center Data</b> Standard: The local EMS agency shall ensure that designated trauma centers provide required data to the EMS agency, including patient specific information which is required for quality assurance/quality improvement and system evaluation.</p> <hr/> <p><i>Goal: The local EMS agency should seek data on trauma patients who are treated at non-trauma center hospitals and shall include this information in their quality assurance/quality improvement and system evaluation program.</i></p>	✓				<ul style="list-style-type: none"> <li>▶ Trauma Contract</li> </ul>	
		✓	<ul style="list-style-type: none"> <li>▶ Trauma audit process</li> <li>▶ Autopsy review</li> </ul>				
<p><b>G. PUBLIC INFORMATION AND EDUCATION</b></p>							
<p><b>7.01 Public Information Materials</b> Standard: The local EMS agency shall promote the development and dissemination of information materials for the public which addresses: a) understanding of EMS system design and operation; b) proper access to the system; c) self-help (e.g., CPR, first aid, etc.); d) patient and consumer rights as they relate to the EMS system; 3) health and safety habits as they relate to the prevention and reduction of health risks in target areas; and, f) appropriate utilization of emergency departments.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS video (in 7 languages) "Every Second Counts"</li> <li>▶ Phone First program</li> <li>▶ Injury Prevention Programs</li> <li>▶ EMS Brochure</li> <li>▶ Trauma System Chart</li> <li>▶ Grief Support Brochure</li> </ul>				

July 1996

Current Status

Standards and Goals	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
					Annual	Long-range	

<i>Goal: The local EMS agency should promote targeted community education programs on the use of emergency medical services in its service area.</i>		✓	▶ EMS System Redesign Project				
<b>7.02 Injury Control</b> Standard: The local EMS agency in conjunction with other local health education programs, shall work to promote injury control and preventive medicine.	✓		▶ Injury Prevention Program ▶ Trauma Program - Safe Streets (City of Oakland)				Part of the EMS System Redesign Project
<i>Goal: The local EMS agency should promote the development of special EMS educational programs for targeted groups at high risk of injury or illness.</i>		✓	▶ Trauma Program - "Backing-up injuries" article				
<b>7.03 Citizen Disaster Preparedness</b> Standard: The local EMS agency in conjunction with the local office of emergency services, shall promote citizen disaster preparedness activities.	✓		▶ Disaster preparation information packets available at EMS. ▶ Access to State OES library ▶ Disaster preparation lectures given upon request				
<i>Goal: The local EMS agency in conjunction with the local Office of Emergency Services (OES), should produce and disseminate information on disaster medical preparedness.</i>		✓	▶ Disaster response information, CCP manuals and training packets shared with State OES.				

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
	<p><b>7.04 First Aid &amp; CPR Training</b>                      Standard: The local EMS agency shall promote the availability of first aid and CPR training for the general public.</p> <hr/> <p><i>Goal: The local EMS agency should adopt a goal for training of an appropriate percentage of the general public in first aid and CPR. A higher percentage should be achieved in high risk groups.</i></p>	✓				<ul style="list-style-type: none"> <li>▶ Many of the provider agencies have citizen CPR and first aid training. Interested citizens are referred to these agencies</li> </ul>	
<p><b>H. DISASTER MEDICAL RESPONSE</b></p>							
<p><b>8.01 Disaster Medical Planning*</b>                      Standard: In coordination with the local Office of Emergency Services (OES), the local EMS agency shall participate in the development of medical response plans for catastrophic disasters, including those involving toxic substances.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMS disaster response plan</li> <li>▶ Region 2 disaster response group</li> <li>▶ Mutual aid agreements with nearby counties.</li> </ul>				
<p><b>8.02 Response Plans</b>                      Standard: Medical response plans and procedures for catastrophic disasters shall be applicable to incidents caused by a variety of hazards, including toxic substances.</p>	✓		<ul style="list-style-type: none"> <li>▶ All EMS disaster response plans are multi-hazard functional plans</li> </ul>				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<i>Goal: The California Office of Emergency Services' multi-hazard functional plans should serve as the model for the development of medical response plans for catastrophic disasters.</i>		✓					
<b>8.03 Haz/Mat Training</b> Standard: All EMS providers shall be properly trained and equipped for response to hazardous materials incidents, as determined by their system role and responsibilities.	✓		<ul style="list-style-type: none"> <li>▶ Haz/Mat training provided by employer</li> <li>▶ Annual Haz/Mat drill conducted to test plan.</li> <li>▶ EMS Policy Manual</li> </ul>				
<b>8.04 Incident Command System</b> Standard: Medical response plans and procedures for catastrophic disasters shall use the Incident Command System (ICS) as the basis for field management.	✓		<ul style="list-style-type: none"> <li>▶ All medical response plans include ICS.</li> <li>▶ Health Care ICS (HCICS) incorporated in the Operational Area Plan.</li> </ul>				
<i>Goal: The local EMS agency should ensure that ICS training is provided for all medical providers.</i>		✓	<ul style="list-style-type: none"> <li>▶ ICS training is provided in all disaster training and MCI critiques.</li> </ul>				
<b>8.05 Distribution of Casualties*</b> Standard: The local EMS agency, using state guidelines, shall establish written procedures for distributing disaster casualties to the medically most appropriate facilities in its service area.	✓		<ul style="list-style-type: none"> <li>▶ Disaster response plan</li> </ul>				

July 1996

Current Status

Standards and Goals	Meets minimum standard	Meets goal	Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
					Annual	Long-range	
<p><i>Goal: The local EMS agency, using state guidelines, and in consultation with Regional Poison Centers, should identify hospitals with special facilities/capabilities for receipt and treatment of patients with radiation/chemical contamination and injuries.</i></p>		✓	<ul style="list-style-type: none"> <li>▶ Disaster response plan</li> </ul>				
<p><b>8.06 Needs Assessment</b> Standard: The local EMS agency, using state guidelines, shall establish written procedures for early assessment of needs and shall establish a means for communicating emergency requests to the state and other jurisdictions.</p>	✓		<ul style="list-style-type: none"> <li>▶ EMSA and OES forms available at County EOC and other appropriate locations.</li> </ul>				
<p><i>Goal: The local EMS agency's procedures for determining necessary outside assistance should be exercised yearly.</i></p>		✓	<ul style="list-style-type: none"> <li>▶ Annual disaster exercise</li> </ul>				
<p><b>8.07 Disaster Communications*</b> Standard: A specific frequency (e.g., CALCORD) or frequencies shall be identified for interagency communication and coordination during a disaster.</p>	✓		<ul style="list-style-type: none"> <li>▶ 800 MHZ radio system</li> <li>▶ HAM radio</li> </ul>				
<p><b>8.08 Inventory of Resources</b> Standard: The local EMS agency, in cooperation with the local OES, shall develop an inventory of appropriate disaster medical resources to respond to multi-casualty incidents and disasters likely to occur in its service area.</p>	✓		<ul style="list-style-type: none"> <li>▶ Public Health Resource Directory</li> </ul>				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><i>Goal: The local EMS agency should ensure that emergency medical providers and health care facilities have written agreements with anticipated providers of disaster medical resources.</i></p>							
<p><b>8.09 DMAT Teams</b> Standard: The local EMS agency shall establish and maintain relationships with DMAT teams in its area.</p>	✓						
<p><i>Goal: The local EMS agency should support the development and maintenance of DMAT teams in its area.</i></p>		✓	<ul style="list-style-type: none"> <li>▶ Disaster Medical Health Coordinator Group</li> </ul>				
<p><b>8.10 Mutual Aid Agreements*</b> Standard: The local EMS agency shall ensure existence of medical mutual aid agreements with other counties in its OES region and elsewhere, as needed, which ensure that sufficient emergency medical response and transport vehicles, and other relevant resources will be made available during significant medical incidents and during periods of extraordinary system demand.</p>	✓		<ul style="list-style-type: none"> <li>▶ Medical Mutual Aid Plan.</li> <li>▶ Resource information provided to Region 2.</li> <li>▶ Member - Disaster Medical Health Coordinator Group</li> </ul>				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
<p><b>8.11 CCP Designation*</b> Standard: The local EMS agency, in coordination with the local OES and county health officer(s), and using state guidelines, shall designate casualty collection points (CCPs).</p>	✓		<ul style="list-style-type: none"> <li>▶ Disaster Response Manual - identifies CCP sites</li> </ul>				
<p><b>8.12 Establishment of CCPs</b> Standard: The local EMS agency, in coordination with the local OES, shall develop plans to establish CCPs and a means for communicating with them.</p>	✓		<ul style="list-style-type: none"> <li>▶ CCP manual - includes information on how to design, implement and operationalize a CCP</li> <li>▶ 800 MHz and HAM radio will be utilized for communicating with CCP sites.</li> </ul>				
<p><b>8.13 Disaster Medical Training</b> Standard: The local EMS agency shall review the disaster medical training of EMS responders in its service area, including the proper management of casualties exposed to and/or contaminated by toxic or radioactive substances.</p>	✓		<ul style="list-style-type: none"> <li>▶ Review of Hospital and Provider disaster plans.</li> <li>▶ Participate in planning and evaluating, as needed.</li> </ul>				
<p><i>Goal: The local EMS agency should ensure that EMS responders are appropriately trained in disaster response, including the proper management of casualties exposed to or contaminated by toxic or radioactive substances.</i></p>		✓	<ul style="list-style-type: none"> <li>▶ Haz/Mat training provided by employer.</li> <li>▶ EMS Policy Manual</li> <li>▶ Critique of actual incidents, as needed.</li> </ul>				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
	<p><b>8.14 Hospital Plans</b> Standard: The local EMS agency shall encourage all hospitals to ensure that their plans for internal and external disasters are fully integrated with the county's medical response plan(s).</p> <p><i>Goal: At least one disaster drill per year conducted by each hospital should involve other hospitals, the local EMS agency, and prehospital medical care agencies.</i></p>	✓				▶ Training to facilitate integration with County plan.	
		✓	▶ Annual disaster drill with hospitals, Cities providers, and County OES, to test internal and external disaster plans.				
<p><b>8.15 Inter-Hospital Communications</b> Standard: The local EMS agency shall ensure that there is an emergency system for inter-hospital communications, including operational procedures.</p>	✓		▶ 800 MHz and HAM radio tested and evaluated frequently.				
<p><b>8.16 Prehospital Agency Plans</b> Standard: The local EMS agency shall ensure that all prehospital medical response agencies and acute-care hospitals in its service area, in cooperation with other local disaster medical response agencies, have developed guidelines for the management of significant medical incidents and have trained their staffs in their use.</p>	✓		▶ Review of Prehospital and acute care hospital disaster plans.				

July 1996

Standards and Goals	Current Status		Description (How standard is met)	Does not currently meet standard	Time frame		Needs Assessment Action Plan
	Meets minimum standard	Meets goal			Annual	Long-range	
					✓	► Training offered to recommended providers	
<b>Enhanced Level: Advanced Life Support</b>							
<b>8.17 ALS Policies</b> Standard: The local EMS agency shall ensure that policies and procedures allow advance life support personnel and mutual aid responders from other EMS systems to respond and function during significant medical incidents.	✓		► EMS Policy Manual				
<b>Enhanced Level: Specialty Care Systems</b>							
<b>8.18 Specialty Center Roles</b> Standard: Local EMS agencies developing trauma or other specialty care systems shall determine the role of identified specialty centers during significant medical incidents and the impact of such incidents on day-to-day triage procedures.	✓		► EMS Policy Manual				
<b>8.19 Waiving Exclusivity</b> Standard: Local EMS agencies which grant exclusive operating permits shall ensure that a process exists to waive the exclusivity in the event of a significant medical incident.	✓		► Region 2 Medical Mutual Aid Plan.				

ALAMEDA COUNTY  
Emergency Medical Services District



PUBLIC HEALTH DEPARTMENT

**TABLE 2: SYSTEM RESOURCES AND OPERATIONS**  
**System Organization and Management**

**EMS System:** Alameda County **Reporting Year:** 1995-96

**TOTAL POPULATION** ..... **1,364,600**

Percentage of population served by each level of care by county:

(Identify for the maximum level of service offered.)

- a. Basic Life Support (BLS) City of Alameda (79,700) ..... 5.84%
- b. Limited Advanced Life Support (LALS) ..... N/A
- c. Advanced Life Support (ALS) Remaining areas of the County (1,284,900) .. 94.16%

**TYPE OF AGENCY:**

- Public Health Department
- County Health Services Agency
- Other (non-health) County Department
- Joint Powers Agency
- Private Non-profit Entity
- Other: \_\_\_\_\_

**THE PERSON RESPONSIBLE FOR DAY-TO-DAY ACTIVITIES OF EMS AGENCY REPORTS TO:**

- Director of Public Health
- Public Health Officer
- Health Services Agency Director/Administrator
- Board of Directors
- Other: \_\_\_\_\_

**INDICATE THE NON-REQUIRED FUNCTIONS WHICH ARE PERFORMED BY THE AGENCY:**

- Implementation of exclusive operating areas (ambulance franchising)
- Designation of trauma centers/trauma care system planning
- Designation/approval of pediatric facilities
- Designation of other critical care centers
- Development of transfer agreements
- Enforcement of local ambulance ordinance
- Enforcement of ambulance service contracts
- Operation of ambulance service
- Continuing education
- Personnel training
- Operation of oversight of EMS dispatch center
- Non-medical disaster planning
- Administration of critical incident stress debriefing (CISD) team

**Table 2 - System Organization & Management (cont.)**

- Administration of disaster medical assistance team (DMAT)
- Administration of EMS Fund [Senate Bill (SB) 12/612]

**EMS Agency Budget for FY: 1995 - 1996**

**EXPENSES:**

1. Salaries and benefits - all but contract personnel (1000) . . . . .	\$1,034,653
2. Contract Services - Medical Director, Diversified (3411) . . . . .	115,000
3. Operations (3816, 3851, 3871, 3881, 3111, 3231, 3426, 3551) . . . . .	242,588
4. Travel/Training (3351, 3361, 3362, 3831) . . . . .	21,490
5. Fixed assets (5311, 5312) . . . . .	534,000
6. Indirect expenses - overhead (4271, 4625, 4630, 4816, 3413) . . . . .	233,870
7. Ambulance subsidy - AMR, Berkeley, Albany, Piedmont (3411) . . . . .	1,728,215
8. EMS Fund (SB12/612) . . . . .	2,134,207
(553 - Discretionary [ALS] \$70,151, 426 - Uncompensated physician care, ACCMA Administration, Disproportionate care \$2,064,056)	
9. Dispatch center operations - non-staff (3391) . . . . .	821,000
10. Specialized Services . . . . .	599,000
Poison Center, EMS News, First Responder, System Evaluation, Computer Maintenance, Defibrillator Maintenance, EMS for Children, Communications (3811, 3411)	
11. Trauma Centers/Base Hospitals [-SB12/612 fund] (3411) . . . . .	7,574,232
12. Supplemental Assessment (3411) . . . . .	5,719,514
13. Injury Prevention (3411) . . . . .	95,000
14. Contingency . . . . .	6,458,890
<b>TOTAL EXPENSES</b>	<b><u>\$27,290,169</u></b>

**SOURCES OF REVENUE:**

15. Other local tax funds (e.g., EMS district) . . . . .	\$16,106,853
16. Certification fees . . . . .	6,250
17. Charges for Service . . . . .	195,178
18. Interest on investments . . . . .	330,000
19. EMS Fund (SB12/612) . . . . .	2,134,207
20. Available Fund Balance . . . . .	8,517,681
<b>TOTAL REVENUE</b>	<b><u>\$27,290,169</u></b>

**Table 2 - System Organization & Management (cont.)**

**Fee structure for FY: 1995-96**

First responder certification .....	\$ 0.00
EMS dispatcher certification .....	0.00
EMT-I certification .....	10.00
EMT-I recertification .....	10.00
EMT-defibrillation certification .....	10.00
EMT-defibrillation recertification .....	0.00
EMT-II certification .....	N/A
EMT-II recertification .....	N/A
EMT-P accreditation .....	25.00
Mobile Intensive Care Nurse (MICN) accreditation .....	25.00
MICN recertification .....	N/A
EMT-I training program approval .....	0.00
EMT-II training program approval .....	N/A
EMT-P training program approval .....	0.00
MICN training program approval .....	0.00
Base hospital application .....	0.00
Base hospital designation .....	0.00
Trauma center application .....	0.00
Trauma center designation .....	0.00
Pediatric facility approval .....	N/A
Pediatric facility designation .....	N/A
Other critical care center application .....	N/A
Ambulance service license .....	N/A
Ambulance vehicle permits .....	N/A

**Table 2 - System Organization & Management (cont.)**

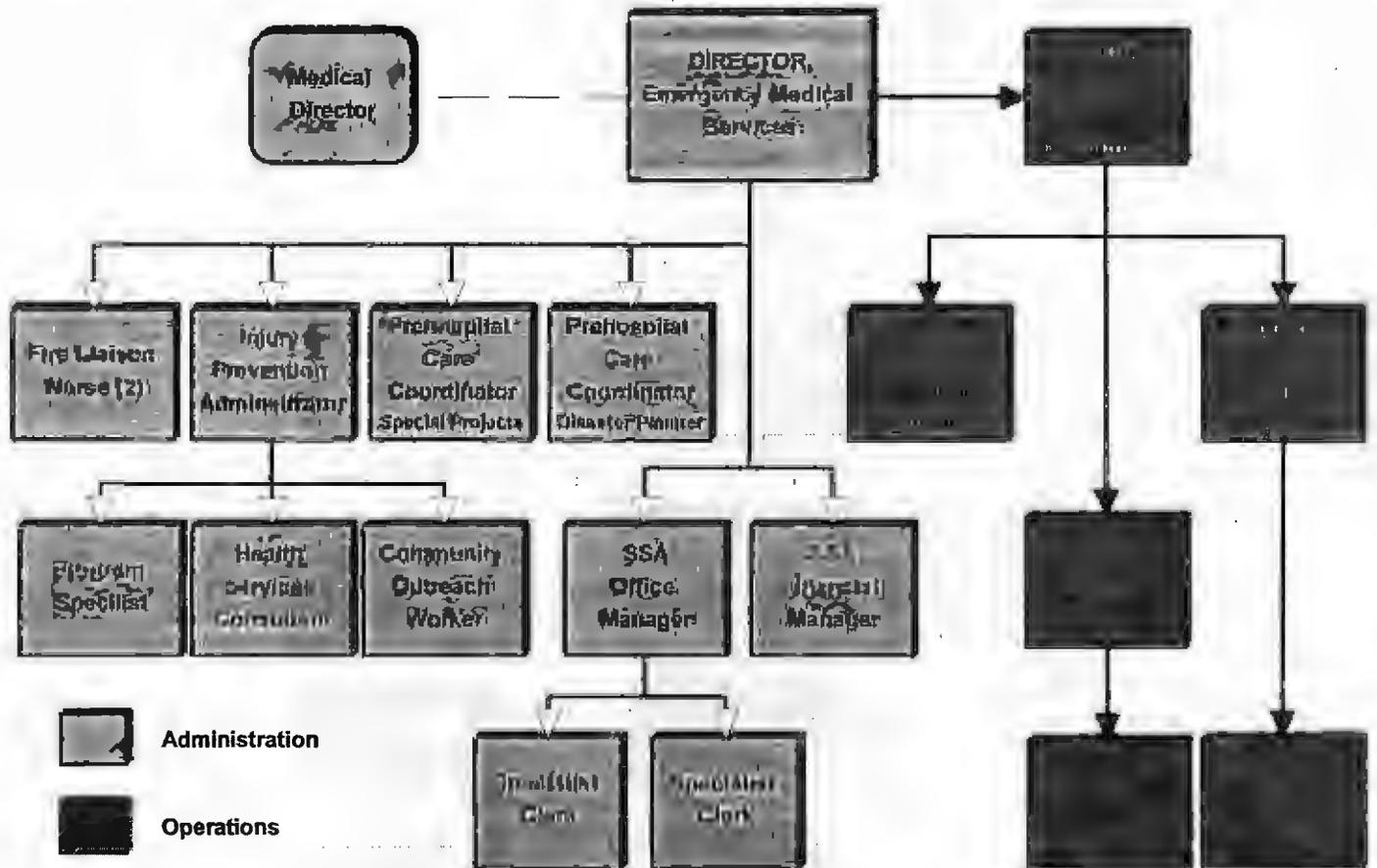
EMS System: Alameda County Reporting Year: 1995-96 (as of 3/2/96) Revision #1 [2/16/95]

CATEGORY	ACTUAL TITLE	FTE (EMS only)	TOP SALARY By Hourly Equivalent	BENEFITS (% of Salary)
EMS Administrator/ Coordinator/Director	Director, EMS	1	\$ 35.83	26%
Asst. Admin./Admin. Asst./Admin. Mgr.	Assistant Director, EMS	1	30.09	26%
Program Coordinator Field Liaison Non-clinical	Program Specialist - Prehospital Care Coordinator	3	25.76	26%
Trauma Coordinator	Clinical Nurse IV - Trauma Coordinator	1	31.86	26%
Medical Director	Medical Director	.5	69.00	
Disaster Medical Planner	Program Specialist - Prehospital Care Coordinator	1	25.76	26%
Data Evaluator/Analyst	Information Systems Spec	1	23.38	26%
Executive Secretary	Staff Services Assistant - Office Manager	1	19.88	26%
Other: Finances	Staff Services Assistant - Financial Manager	1	19.88	26%
Other Clerical	Medical Clerk Clerk II (frozen)	1 1	14.18 13.25	26%
Data Entry Clerk	Specialist Clerk	2	14.18	26%
Other: Clinical Nurse II	Fire Liaison Nurse	2	28.04	26%

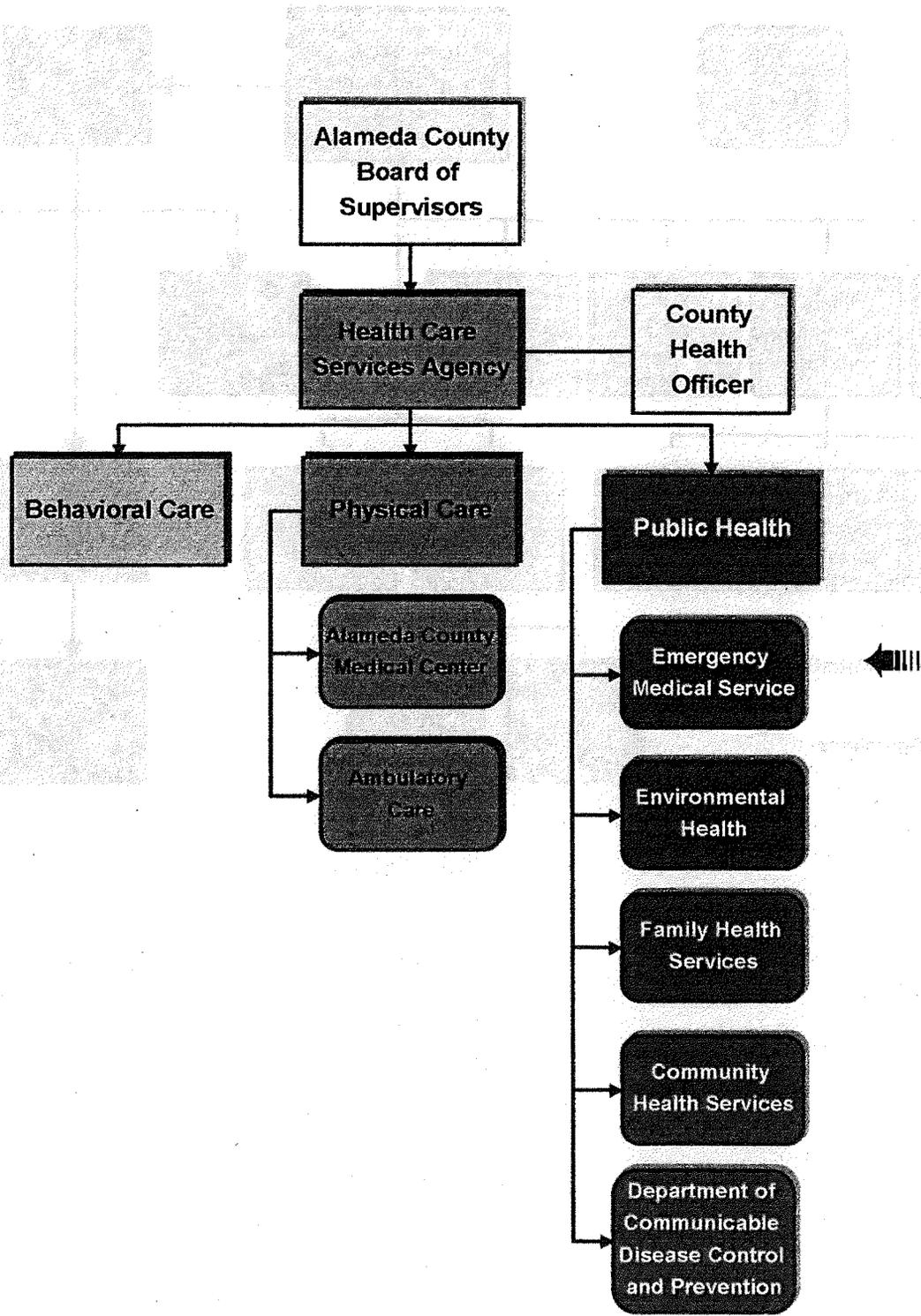
Organizational chart of the Local EMS Agency (page 57)

County organizational chart indicating how the Local EMS Agency  
fits within the county structure (page 58)

# ALAMEDA COUNTY EMS DISTRICT Office Organization 1995 - 96



# ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY



**TABLE 3: SYSTEM RESOURCES AND OPERATIONS**  
**Personnel/Training** Revision #3 [2/16/95]

EMS System: Alameda County

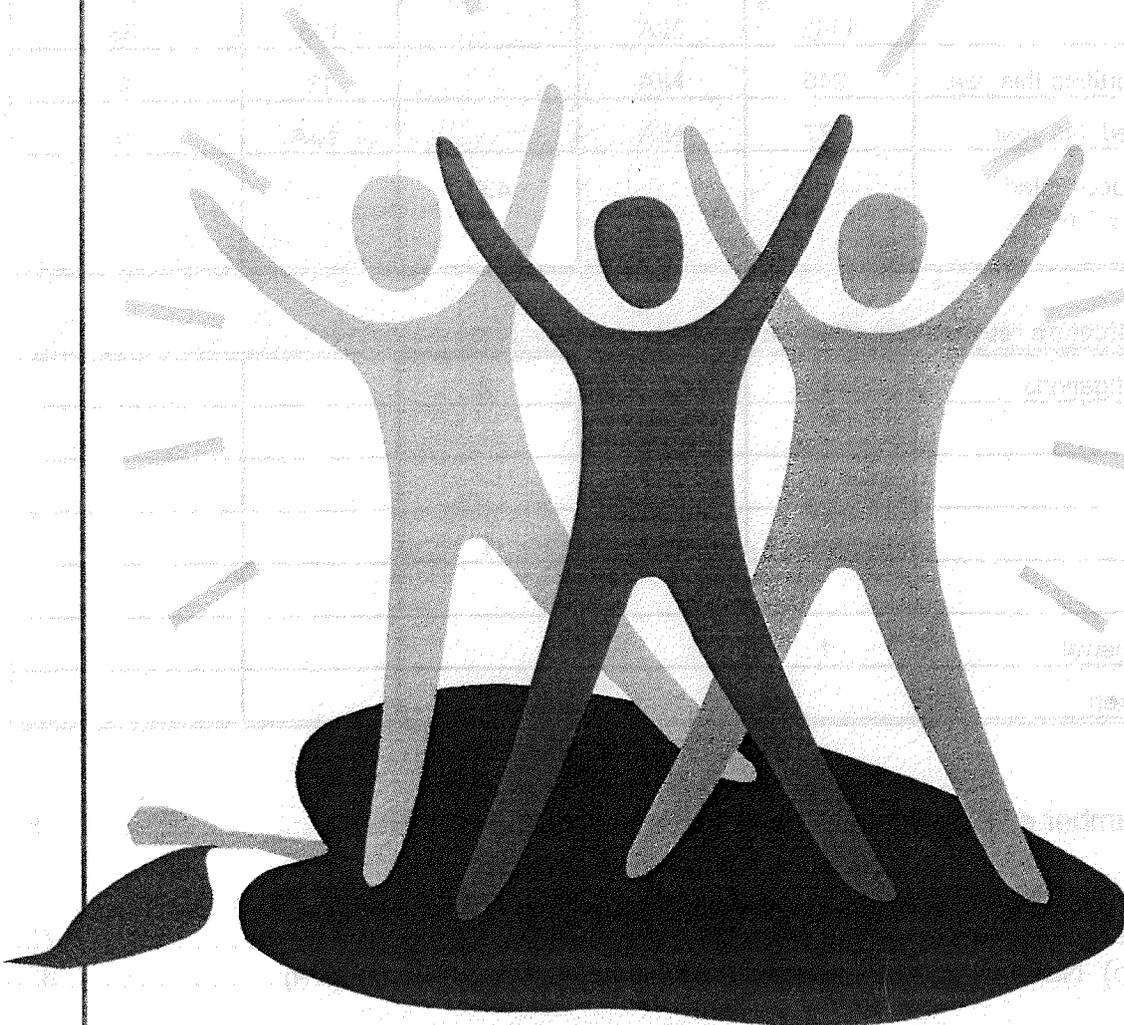
Reporting Year: 1995 - 1996

	EMT - Is	EMT - IIs	EMT - Ps	MICNs	EMS Dispatchers
Total certified	1143	N/A		103	63
Number newly certified this year	245	N/A		13	0
Number recertified this year	577	N/A		N/A	0
Total number of accredited personnel on July 1 of the reporting year			438		
<b>Number of certification reviews resulting in:</b>					
a) formal investigations	1		3		
b) probation					
c) suspensions					
d) revocations			1		
e) denials					
f) denials of renewal	1				
g) no action taken					

1. Number of EMS dispatchers trained to EMSA standards: ..... 63
2. Early defibrillation:
  - a) Number of EMT-I defibrillation certified ..... 732
  - b) Number of public-safety defibrillation certified (non-EMT-I) ..... 325
3. Do you have a first responder training program?  yes  no

# ALAMEDA COUNTY

## Emergency Medical Services District



PUBLIC HEALTH DEPARTMENT



# ALAMEDA COUNTY

## Emergency Medical Services District



PUBLIC HEALTH DEPARTMENT

**TABLE 5: SYSTEM RESOURCES AND OPERATIONS**  
**Response/Transportation** Revision #1 [2/16/95]

EMS System: Alameda County

Reporting Year: 1995 - 1996

**TRANSPORTING AGENCIES:**

	Albany Fire	AMR	Berkeley Fire	Piedmont Fire
1. Number of Exclusive Operating Areas (EOA)	1	<i>one area only</i> 45	1	1
2. Percentage of total population covered by EOAs	1.4	88.94	9.9	0.76
3. Total number responses:	627	90,826	5,784	543
a) Number of emergency responses (Code 3: lights & sirens)	627	72,475	5,784	543
b) Number non-emergency responses (Code 2: expedient)	0	18,361	0	0
4. Total number of transports:	591	64,473	4,853	377
a) Number of emergency transports (Code 3: lights and siren)	not available	52,192	not available	not available
b) Number of non-emergency transports (Code 2: expedient)	not available	12,281	not available	not available

**EARLY DEFIBRILLATION PROVIDERS**

- 5. Number of public safety defibrillation providers:
  - a) Automated ..... 25
  - b) Manual ..... 0
- 6. Number of EMT-Defibrillation providers:
  - a) Automated ..... 732
  - b) Manual ..... 0

**AIR AMBULANCE SERVICES: (CALStar, Life Flight, East Bay Regional Parks, CHP)**

7. **Total number of responses:** ..... **290**

a) Number of emergency responses ..... not available

b) Number of non-emergency responses ..... not available

8. **Total number of transports:** ..... **90**

a) Number of emergency transports ..... not available

b) Number of non-emergency transports ..... not available

**SYSTEM STANDARD RESPONSE TIMES (90TH PERCENTILE)**

Enter the response times in the appropriate boxes.

	<b>METRO/ URBAN/SUBUR BAN</b>	<b>RURAL</b>	<b>WILDERNESS</b>
1. BLS and CPR capable first responder	5 minutes	As quick as possible	As quick as possible
2. Early defibrillation responder	5 minutes	As quick as possible	As quick as possible
3. Advanced life support responder**	5 minutes	As quick as possible	As quick as possible
4. Transport Ambulance**	10 minutes	16 minutes	25 minutes

\*\* By contract

**TABLE 6: SYSTEM RESOURCES AND OPERATIONS  
Facilities/Critical Care**

Revision #1 [2/16/95]

EMS System: Alameda County Reporting Year: 1995 - 1996

**A. Trauma**

- 1. Number of patients meeting trauma triage criteria: ..... 4,277
- 2. Number of major trauma victims transported directly to a trauma center by ambulance: ..... 3,643
- 3. Number of major trauma patients transferred to a trauma center .... N/A
- 4. Number of patients not treated at a trauma center who were later identified as a major trauma patient: ..... 80
- 5. Number of patients meeting triage criteria who weren't treated at a trauma center ..... 635

**B. Emergency Departments**

- 1. Total number of emergency departments ..... 12
- 2. Number of referral emergency services ..... 0
- 3. Number of standby emergency services ..... 0
- 4. Number of basic emergency services ..... 12
- 5. Number of comprehensive emergency services ..... 0

**C. Receiving Hospitals**

- 1. Number of receiving hospitals with written agreements ..... 0
- 2. Number of base hospitals with written agreements ..... 3

# ALAMEDA COUNTY

## Emergency Medical Services District



PUBLIC HEALTH DEPARTMENT

**TABLE 7: SYSTEM RESOURCES AND OPERATIONS --  
Disaster Medical**

Revision #1 [2/16/95]

EMS System: Alameda County Reporting Year: 1995 - 1996

**A. SYSTEM RESOURCES**

**1. Casualty Collections Points (CCP)**

- a. Where are your CCPs located? 52 potential sites have been selected
- b. How are they staffed? Personnel from evacuating hospitals
- c. Do you have a supply system for supporting them for 72 hours?  yes  no  
[Additional information on the Disaster Response plan is available from the EMS Office]

**2. CISD**

- a. Do you have a CISD provider with 24 hour capability?  yes  no

**3. Medical Response Team**

- a. Do you have any team medical response capability  yes  no
- b. For each team, are they incorporated into your local response plan? N/A
- c. Are they available for statewide response? N/A
- d. Are they part of a formal out-of-state response system? N/A

**4. Hazardous Materials**

- a. Do you have any HazMat trained medical response teams?  yes  no
- b. At what HazMat level are they trained? \_\_\_\_\_
- c. Do you have the ability to do decontamination in an emergency room?  yes  no
- d. Do you have the ability to do decontamination in the field?  yes  no

**B. OPERATIONS**

- 1. Are you using a Standardized Emergency Management System (SEMS) that incorporates a form of Incident Command System (ICS) structure?  yes  no
- 2. What is the maximum number of local jurisdiction EOCs you will need to interact with in a disaster? 20 (estimated)

3. Have you tested your MCI Plan this year in a:  
a. real event?  yes  no  
b. exercise?  yes  no

4.\*\* List all counties with which you have a written medical mutual aid agreement.

5.\*\* Do you have formal agreements with hospitals in your operational area to participate in disaster planning and response?

6.\*\* Do you have a formal agreements with community clinics in your operational areas to participate in disaster planning and response?

7. Are you part of a multi-county EMS system for disaster response?  yes  no

8. If your agency is not in the Health Department, do you have a plan to coordinate public health and environmental health issues with the Health Department?  N/A  yes  no

**[\*\* Not applicable - SB 1481 (SEMS legislation) has made formal agreement unnecessary. Hospitals and Clinics participate on a regular basis without the need for formal agreements.]**

**TABLE 8: RESOURCES DIRECTORY -- Providers**

EMS System: Alameda County

Reporting Year: 1995 - 1996

<b>Name and Address:</b> Berkeley Fire Department 2121 McKinley Street Berkeley, Ca 94703			<b>Primary Contact:</b> Warren Davis (510) 644-6665		
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water <input checked="" type="checkbox"/> Transport <input type="checkbox"/> Non-Transport	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> <u>76</u> BLS <u>110</u> EMT-D <u>34</u> ALS	
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 3

<b>Name and Address:</b> Oakland Fire Department 250 Fallon Street Oakland, CA 94607			<b>Primary Contact:</b> Reginald Garcia Jean English (510) 238-6725		
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water <input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> <u>325</u> PS-Defib <u>425</u> BLS <u>100</u> EMT-D	
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 0

**TABLE 8: RESOURCES DIRECTORY -- Providers**

EMS System: Alameda County

Reporting Year: 1995 - 1996

<b>Name and Address:</b> Alameda County Fire Department 1426 164th Avenue San Leandro, CA 94578			<b>Primary Contact:</b> Sheldon Gilbert (510) 618-3485		
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water <input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> <u>197</u> BLS <u>197</u> EMT-D <u>13</u> ALS	
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain	<b>If Public:</b> <input type="checkbox"/> City; <input checked="" type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 0

<b>Name and Address:</b> Piedmont Fire Department 120 Vista Avenue Piedmont, CA 94611			<b>Primary Contact:</b> Dave Swan Scott Barringer (510) 420-3030		
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water <input checked="" type="checkbox"/> Transport <input type="checkbox"/> Non-Transport	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> <u>11</u> BLS <u>10</u> ALS	
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 1

**TABLE 8: RESOURCES DIRECTORY -- Providers**

EMS System: Alameda County

Reporting Year: 1995 - 1996

<b>Name and Address:</b> Dougherty Regional Fire Authority 9399 Firecrest Lane San Ramon, CA 94583				<b>Primary Contact:</b> Jim Call (510) 829 - 2333	
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water <input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> 33 BLS 33 EMT-D 1 ALS	
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input checked="" type="checkbox"/> city; <input type="checkbox"/> county; <input type="checkbox"/> state; <input type="checkbox"/> fire district; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b>

<b>Name and Address:</b> Pleasanton Fire Department P.O. 520(510) 484-8114 Pleasanton, CA 94566				<b>Primary Contact:</b> Glen Hendal (510)	
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Transport <input type="checkbox"/> Air <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> auxiliary rescue <input type="checkbox"/> air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> 45 BLS 45 EMT-D 12 ALS	
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 0

**TABLE 8: RESOURCES DIRECTORY -- Providers**

EMS System: Alameda County

Reporting Year: 1995 - 1996

<b>Name and Address:</b> Hayward Fire Department 25151 Clawiter Road Hayward, CA 94545			<b>Primary Contact:</b> Steve Falk (510) 293-8690		
<b>Written Contract:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Transport <input type="checkbox"/> Air <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> auxiliary rescue <input type="checkbox"/> air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> 115 BLS 115 EMT-D	
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 0

<b>Name and Address:</b> Lawrence Livermore National Lab P.O. Box 5505 (L-388) Livermore, CA 94566			<b>Primary Contact:</b> Randy Bradley (510) 422-3980		
<b>Written Contract:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Interim Mou Only	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Transport <input type="checkbox"/> Air <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> auxiliary rescue <input type="checkbox"/> air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> 26 BLS 26 EMT-D 14 ALS	
<b>Ownership:</b> <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input checked="" type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 1

**TABLE 8: RESOURCES DIRECTORY -- Providers**

EMS System: Alameda County

Reporting Year: 1995 - 1996

<b>Name and Address:</b> Newark Fire Department 37101 Newark Blvd Newark, CA 94560			<b>Primary Contact:</b> Brian Cominada (510) 793-1400		
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Transport <input type="checkbox"/> Water <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> Air	<b>Air classification:</b> <input type="checkbox"/> auxiliary rescue <input type="checkbox"/> air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> 36 BLS 36 EMT-D 6 ALS	
<b>Medical Director:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 0

<b>Name and Address:</b> Alameda Fire Department 1300 Park Street Alameda, CA 94501			<b>Primary Contact:</b> Mike Hoag/ Bob Buell (510) 522-4100		
<b>Written Contract:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Transport <input type="checkbox"/> Air <input type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> auxiliary rescue <input type="checkbox"/> air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> 96 BLS 96 EMT-D	
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b>

**TABLE 8: RESOURCES DIRECTORY -- Providers**

EMS System: Alameda County

Reporting Year: 1995 - 1996

<b>Name and Address:</b> Naval Supply Center Fire Department Building 410 - W- Code 70-F Oakland, Ca 94625		<b>Primary Contact:</b> Lorin Grayes (510) 263-3276			
<b>Written Contract:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Transport <input type="checkbox"/> Air <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> auxiliary rescue <input type="checkbox"/> air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue		<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> BLS EMT-D
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input type="checkbox"/> Fire <input type="checkbox"/> Law <input checked="" type="checkbox"/> Other - Federal Gov't	<b>If Public:</b> <input type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input checked="" type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b>

<b>Name and Address:</b> Emeryville Fire Department 2333 Powell Street Emeryville, CA 94608		<b>Primary Contact:</b> Rick Hurtado (510) 596-3700			
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Transport <input type="checkbox"/> Air <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> auxiliary rescue <input type="checkbox"/> air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue		<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> <u>25</u> BLS <u>25</u> EMT-D <u>6</u> ALS
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 0

**TABLE 8: RESOURCES DIRECTORY -- Providers**

EMS System: Alameda County

Reporting Year: 1995 - 1996

<b>Name and Address:</b> Albany Fire Department 101 Marin Avenue Albany, CA 94706				<b>Primary Contact:</b> Jeff Keary (510) 528-5771	
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Transport <input type="checkbox"/> Air <input type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> auxiliary rescue <input type="checkbox"/> air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue		<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> <u>12</u> BLS <u>12</u> EMT-D <u>6</u> ALS
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b>

<b>Name and Address:</b> Dept of Forestry and Fire 11345 Pleasanton - Sunol Road Pleasanton, CA 94566				<b>Primary Contact:</b> Mike Martin (510) 862-2197	
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no Through Alameda County Fire	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Transport <input type="checkbox"/> Air <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> auxiliary rescue <input type="checkbox"/> air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue		<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> <u>13</u> BLS
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input checked="" type="checkbox"/> Other Fed Govt	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input checked="" type="checkbox"/> State; <input type="checkbox"/> Fire District; <input checked="" type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 0

**TABLE 8: RESOURCES DIRECTORY -- Providers**

EMS System: Alameda County

Reporting Year: 1995 - 1996

<b>Name and Address:</b> Fremont Fire Department 39100 Liberty Street Fremont, CA 94537			<b>Primary Contact:</b> Jerry Fogel (510) 494-4290		
<b>Written Contract:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no Letter of Agreement	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Transport <input type="checkbox"/> Air <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> ? BLS 48 ALS	
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 0

<b>Name and Address:</b> Lawrence Berkeley Lab Fire Department No. 1 Cyclotron Road, Bldg. 48 Berkeley, CA 94720			<b>Primary Contact:</b> Stacey Cox (510) 843-2231		
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Transport <input type="checkbox"/> Air <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> Not reported	
<b>Ownership:</b> <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 0

**TABLE 8: RESOURCES DIRECTORY -- Providers**

EMS System: Alameda County

Reporting Year: 1995 - 1996

<b>Name and Address:</b> Livermore Fire Department 4550 East Avenue Livermore, CA 94550				<b>Primary Contact:</b> Stu Gary (510) 737-5463	
<b>Written Contract:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no <b>Letter of Agreement</b>	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Transport <input type="checkbox"/> Air <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue		<b>If Air:</b> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> 33 BLS 33 EMT-D 12 ALS
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other	<b>If Public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b> 0

<b>Name and Address:</b> East Bay Regional Park District P.O. Box 5381 Oakland, CA 94605				<b>Primary Contact:</b> Joseph Rubini (510) 881-1833 Andrew White (helo)	
<b>Written Contract:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Transport <input checked="" type="checkbox"/> Air <input checked="" type="checkbox"/> Non-Transport <input checked="" type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input checked="" type="checkbox"/> BLS rescue		<b>If Air:</b> <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> BLS 4 EMT-D
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input checked="" type="checkbox"/> Fire <input checked="" type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input type="checkbox"/> City; <input type="checkbox"/> County; <input checked="" type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input checked="" type="checkbox"/> no - helo 12 hrs	<b>Number of ambulances:</b> 0

**TABLE 8: RESOURCES DIRECTORY -- Providers**

EMS System: Alameda County

Reporting Year: 1995 - 1996

<b>Name and Address:</b> California Highway Patrol 2700 Airport Road Napa, CA 94558				<b>Primary Contact:</b> Mark Mulgrew	
<b>Written Contract:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Service:</b> <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Transport <input checked="" type="checkbox"/> Air <input type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input type="checkbox"/> Air ambulance <input checked="" type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> 4 ALS	
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input type="checkbox"/> Fire <input checked="" type="checkbox"/> Law <input type="checkbox"/> Other	<b>If Public:</b> <input type="checkbox"/> City; <input type="checkbox"/> County; <input checked="" type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Number of ambulances:</b> 0

<b>Name and Address:</b> CALSTAR California Shock Trauma Air Rescue 20876 Corsair Blvd Hayward, CA 94545				<b>Primary Contact:</b> Susie Mautz (800) 252-5050	
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Transport <input checked="" type="checkbox"/> Air <input type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input checked="" type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b> 23 ALS	
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other	<b>If Public:</b> <input type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b>

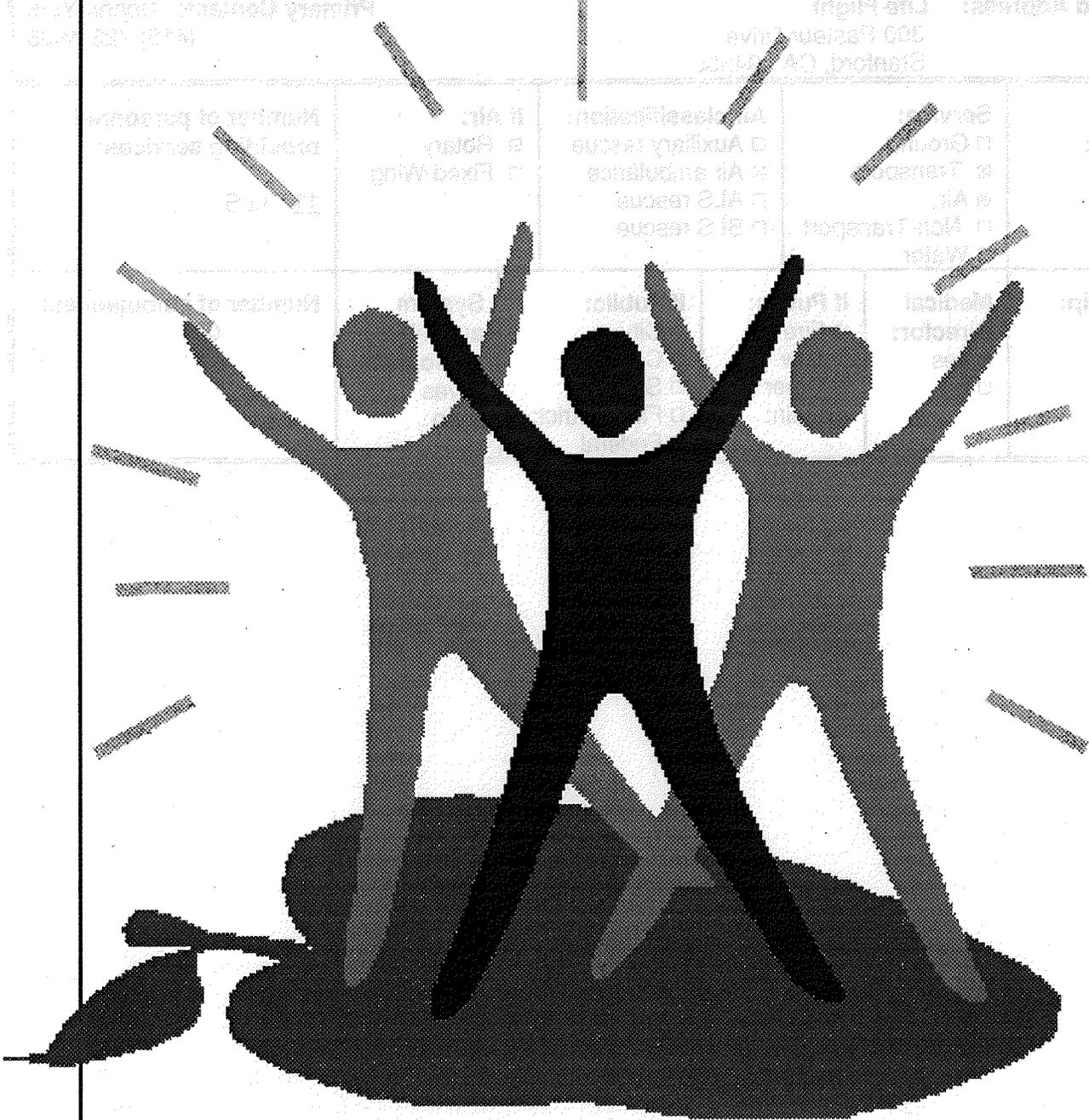
**TABLE 8: RESOURCES DIRECTORY -- Providers**

EMS System: Alameda County

Reporting Year: 1995 - 1996

<b>Name and Address:</b> Life Flight 300 Pasteur Drive Stanford, CA 94305		<b>Primary Contact:</b> Donna York (415) 723-4696			
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Transport <input checked="" type="checkbox"/> Air <input type="checkbox"/> Non-Transport <input type="checkbox"/> Water	<b>Air classification:</b> <input type="checkbox"/> Auxiliary rescue <input checked="" type="checkbox"/> Air ambulance <input type="checkbox"/> ALS rescue <input type="checkbox"/> BLS rescue	<b>If Air:</b> <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<b>Number of personnel providing services:</b>  11 ALS	
<b>Ownership:</b> <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If Public:</b> <input type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other explain:	<b>If Public:</b> <input type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>System available 24 hours?</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Number of ambulances:</b>  0

# ALAMEDA COUNTY



PUBLIC HEALTH DEPARTMENT

**TABLE 9: RESOURCES DIRECTORY**  
**-- Approved Training Programs**

Revision #1 [2/16/95]

<b>Training Institution Name / Address:</b> East Bay Regional Parks 11500 Skyline Blvd Oakland, CA		<b>Contact Person/ Telephone:</b> Lucy Wooschleger (510) 635-0135 X2517
<b>Student Eligibility:</b> * East Bay Regional Park Employees	<b>Cost of Program:</b> Basic <u>    0    </u>  Refresher <u>    0    </u>	<b>Program Level:**</b> FIRST RESPONDER <b>Number of students completing training per year:</b> Initial training: Refresher: Cont. Education Expiration Date: 4/97
		<b>Number of courses:</b> Initial training: ANNUAL Refresher: Cont. Education:

<b>Training Institution Name / Address</b> Oakland Fire Department 2500 Fallon Street Oakland, CA 94607		<b>Contact Person/Telephone:</b> Jean English (510) 238-3790
<b>Student Eligibility: *</b> FIRE FIGHTERS (OFD GIVEN PRIORITY)	<b>Cost of Program</b> Basic <u>    0    </u>  Refresher <u>    0    </u>	<b>Program Level:**</b> FIRST RESPONDER <b>Number of students completing training per year:</b> Initial training: AS NEEDED BASIS Refresher: AS NEEDED BASIS Cont. Education AS NEEDED BASIS Expiration Date: 8/97
<p>* Open to general public or restricted to certain personnel only.                  ** Indicate whether EMT-I, EMT-II, EMT-P, or MICN; if there is a training program that offers more than one level complete all information for each level.</p>		<b>Number of courses:</b> Initial training: AS NEEDED Refresher: AS NEEDED Cont. Education: AS NEEDED

**TABLE 9: RESOURCES DIRECTORY**  
**-- Approved Training Programs** Revision #1 [2/16/95]

<b>Training Institution Name / Address</b> San Francisco School For EMS 2829 California Street San Francisco, CA 94115		<b>Contact Person/ Telephone:</b> Kim E. Johanson (415) 922-9400
<b>Student Eligibility: *</b> OPEN	<b>Cost of Program:</b> Basic <u>\$750.00</u> Refresher <u>\$175.00</u> Challenge Course <u>\$100.00</u>	<b>Program Level:** EMT - I</b> <b>Number of students completing training per year:</b> Initial training: Refresher: Cont. Education Expiration Date: <u>3/97</u>
		<b>Number of courses:</b> Initial training: 2 PER YEAR MONTH Refresher: 1 PER Cont. Education:

<b>Training Institution Name / Address</b> Chabot College 25555 Hesperian Blvd. Hayward, CA 94545		<b>Contact Person/Telephone:</b> Bob Wood (510) 786-6903												
<b>Student Eligibility: *</b> OPEN	<b>Cost of Program:</b> <table border="0"> <tr> <td></td> <td><b>EMT-I</b></td> <td><b>EMT-P</b></td> </tr> <tr> <td>Basic</td> <td><u>\$40.00</u></td> <td><u>\$40.00</u></td> </tr> <tr> <td>Books</td> <td><u>\$150.00</u></td> <td></td> </tr> <tr> <td>Uniforms and supplies</td> <td></td> <td><u>\$100.00</u></td> </tr> </table>		<b>EMT-I</b>	<b>EMT-P</b>	Basic	<u>\$40.00</u>	<u>\$40.00</u>	Books	<u>\$150.00</u>		Uniforms and supplies		<u>\$100.00</u>	<b>Program Level:** EMT-I EMT-P</b> <b>Number of students completing training per year:</b> Initial training: Refresher: Cont. Education Expiration Date: 11/30/97
	<b>EMT-I</b>	<b>EMT-P</b>												
Basic	<u>\$40.00</u>	<u>\$40.00</u>												
Books	<u>\$150.00</u>													
Uniforms and supplies		<u>\$100.00</u>												
<p>* Open to general public or restricted to certain personnel only.                  ** Indicate whether EMT-I, EMT-II, EMT-P, or MICN; if there is a training program that offers more than one level complete all information for each level.</p>		<b>Number of courses:</b> Initial training: ANNUAL Refresher: Cont. Education:												

**TABLE 10: RESOURCES DIRECTORY**

Revision #1 [2/16/95]

**- Facilities**

EMS System: Alameda County

Reporting Year: 1995

<b>Name and Address: Alameda Hospital</b> 2070 Clinton Ave. Alameda, CA 94501			<b>Primary Contact: Art Glaser, MD</b>	
Written Contract <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Referral emergency service	<input type="checkbox"/>	Base Hospital: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
	Standby emergency service	<input type="checkbox"/>		
	Basic emergency service	<input checked="" type="checkbox"/>		
	Comprehensive emergency service	<input type="checkbox"/>		
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:****

<b>Name and Address: ValleyCare Medical Center</b> 5575 W. Los Positas Blvd. Pleasanton, CA 94588			<b>Primary Contact: Dennis Alfaro, MD</b>	
Written Contract <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service	<input type="checkbox"/>	Base Hospital: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
	Standby emergency service	<input type="checkbox"/>		
	Basic emergency service	<input checked="" type="checkbox"/>		
	Comprehensive emergency service	<input type="checkbox"/>		
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:****

- \* Meets EMSA Pediatric Critical Care Center (PCCC) Standards.
- \*\* Meets EMSA Emergency Departments Approved for Pediatric (EDAP) Standards.
- \*\*\* Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards.
- \*\*\*\* Levels I, II, III and Pediatric.

**TABLE 10: RESOURCES DIRECTORY**  
**-- Facilities**

Revision #1 [2/16/95]

<b>Name and Address: St. Rose Hospital</b> 27200 Calagora Avenue Hayward, CA 94545			<b>Primary Contact: Carol Boynton, PN</b>	
Written Contract <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Referral emergency service	<input type="checkbox"/>	Base Hospital: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
	Standby emergency service	<input type="checkbox"/>		
	Basic emergency service	<input checked="" type="checkbox"/>		
	Comprehensive emergency service	<input type="checkbox"/>		
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:****

<b>Name and Address: Eden Hospital</b> 20103 Lake Chabot Road Castro Valley, CA 94546			<b>Primary Contact: Rose Corcoran, RN</b>	
Written Contract <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service	<input type="checkbox"/>	Base Hospital: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
	Standby emergency service	<input type="checkbox"/>		
	Basic emergency service	<input checked="" type="checkbox"/>		
	Comprehensive emergency service	<input type="checkbox"/>		
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	If Trauma Center, what Level:**** Level II

\* Meets EMSA Pediatric Critical Care Center (PCCC) Standards.

\*\* Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.

\*\*\* Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards.

\*\*\*\* Levels I, II, III and Pediatric.

**TABLE 10: RESOURCES DIRECTORY**  
**-- Facilities**

Revision #1 [2/16/95]

<b>Name and Address: Children's Hospital</b> 747 52nd Street Oakland, CA 94609			<b>Primary Contact: Ellen Bair, RN</b>	
Written Contract <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service <input type="checkbox"/> Standby emergency service <input type="checkbox"/> Basic emergency service <input checked="" type="checkbox"/> Comprehensive emergency service <input type="checkbox"/>	Base Hospital: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Burn Center: <input checked="" type="checkbox"/> yes no	Trauma Center: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	If Trauma Center, what Level:**** Level II

<b>Name and Address: Highland General Hospital</b> 1411 E - 31st. Street Oakland, CA 94602			<b>Primary Contact: Jim Devitt</b>	
Written Contract <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service <input type="checkbox"/> Standby emergency service <input type="checkbox"/> Basic emergency service <input checked="" type="checkbox"/> Comprehensive emergency service <input type="checkbox"/>	Base Hospital: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** NICU <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	If Trauma Center, what Level:**** Level II

\* Meets EMSA *Pediatric Critical Care Center (PCCC) Standards.*

\*\* Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.

\*\*\* Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards.

\*\*\*\* Levels I, II, III and Pediatric.

**TABLE 10: RESOURCES DIRECTORY**  
**-- Facilities**

Revision #1 [2/16/95]

<b>Name and Address: Alta Bates Medical Center</b> 2450 Ashby Avenue Berkeley, CA 94705			<b>Primary Contact: Alex Hardy, RN</b>		
<b>Written Contract</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Referral emergency service <input type="checkbox"/> Standby emergency service <input type="checkbox"/> Basic emergency service <input checked="" type="checkbox"/> Comprehensive emergency service <input type="checkbox"/>	<b>Base Hospital:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Pediatric Critical Care Center:*</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no		
<b>EDAP:**</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>PICU:***</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Burn Center:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Trauma Center:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>If Trauma Center what Level:****</b>	

<b>Name and Address: San Leandro, Hospital</b> 13855 East 14th Street San Leandro, CA 94578			<b>Primary Contact: Karen Lemelin, RN</b>		
<b>Written Contract</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Referral emergency service <input type="checkbox"/> Standby emergency service <input type="checkbox"/> Basic emergency service <input checked="" type="checkbox"/> Comprehensive emergency service <input type="checkbox"/>	<b>Base Hospital:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Pediatric Critical Care Center:*</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no		
<b>EDAP:**</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>PICU:***</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Burn Center:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>Trauma Center:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>If Trauma Center what Level:****</b>	

\* Meets EMSA *Pediatric Critical Care Center (PCCC) Standards.*

\*\* Meets EMSA *Emergency Departments Approved for Pediatrics (EDAP) Standards.*

\*\*\* Meets California Children Services (CCS) *Pediatric Intensive Care Unit (PICU) Standards.*

\*\*\*\* Levels I, II, III and Pediatric.

**TABLE 10: RESOURCES DIRECTORY**  
**-- Facilities**

Revision #1 [2/16/95]

<b>Name and Address: Washington Hospital</b> 2000 Mowry Avenue Fremont, CA 94538		<b>Primary Contact: Martha Guilbeaux, RN</b>		
Written Contract <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Referral emergency service <input type="checkbox"/> Standby emergency service <input type="checkbox"/> Basic emergency service <input checked="" type="checkbox"/> Comprehensive emergency service <input type="checkbox"/>	Base Hospital: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:****

<b>Name and Address: Kaiser Hospital, Oakland</b> 280 West Mac Arthur Blvd. Oakland, CA 94611		<b>Primary Contact: Susan Shapiro, RN</b>		
Written Contract <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Referral emergency service <input type="checkbox"/> Standby emergency service <input type="checkbox"/> Basic emergency service <input checked="" type="checkbox"/> Comprehensive emergency service <input type="checkbox"/>	Base Hospital: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:****

<b>Name and Address: Kaiser Hospital, Hayward</b> 27400 Hesperian Blvd. Hayward, CA 94545		<b>Primary Contact: Jay Goldman, MD</b>		
Written Contract <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Referral emergency service <input type="checkbox"/> Standby emergency service <input type="checkbox"/> Basic emergency service <input checked="" type="checkbox"/> Comprehensive emergency service <input type="checkbox"/>	Base Hospital: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:****

- \* Meets EMSA *Pediatric Critical Care Center (PCCC) Standards.*
- \*\* Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.
- \*\*\* Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards.
- \*\*\*\* Levels I, II, III and Pediatric.

**TABLE 10: RESOURCES DIRECTORY**  
**-- Facilities**

Revision #1 [2/16/95]

<b>Name and Address:</b> <b>Summit Medical Center</b> 350 Hawthorne Street Oakland, CA 94609			<b>Primary Contact:</b>	
Written Contract <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Referral emergency service <input type="checkbox"/>	Standby emergency service <input type="checkbox"/>	Base Hospital: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
	Basic emergency service <input checked="" type="checkbox"/>	Comprehensive emergency service <input type="checkbox"/>		
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:****

<b>Name and Address:</b> <b>San Ramon Regional Medical Center</b> 6001 Norris Canyon Rd. San Ramon, CA 94623			<b>Primary Contact:</b> Paul Luehrs	
Written Contract <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Referral emergency service <input type="checkbox"/>	Standby emergency service <input type="checkbox"/>	Base Hospital: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Pediatric Critical Care Center:* <input type="checkbox"/> yes <input checked="" type="checkbox"/> no
	Basic emergency service <input checked="" type="checkbox"/>	Comprehensive emergency service <input type="checkbox"/>		
EDAP:** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	PICU:*** <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Burn Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	Trauma Center: <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	If Trauma Center what Level:****

- \* Meets EMSA *Pediatric Critical Care Center (PCCC) Standards.*
- \*\* Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards.
- \*\*\* Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards.
- \*\*\*\* Levels I, II, III and Pediatric.

**TABLE 11: RESOURCES DIRECTORY**  
**-- Dispatch Agency**

Revision #1 [2/16/95]

EMS System: Alameda County

Reporting Year: 1995

<b>Name and Address:</b> Alameda County - Central Medical Dispatch (ALCO-CMED) 2000 150th Ave., San Leandro, CA 94578		<b>Primary Contact:</b> Robert Bassett (510) 667-7776		
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Day-to-day <input checked="" type="checkbox"/> Air <input checked="" type="checkbox"/> Disaster <input checked="" type="checkbox"/> Water	<b>Number of Personnel providing services:</b> <u>32</u> EMD		
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>If public:</b> <input type="checkbox"/> Fire <input checked="" type="checkbox"/> Law <input type="checkbox"/> Other- explain:	<b>If public:</b> <input type="checkbox"/> City; <input checked="" type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>Number of Ambulances:</b> <u>0</u>

<b>Name and Address:</b> Oakland Fire Department		<b>Primary Contact:</b> Jean English		
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Day-to-day <input type="checkbox"/> Air <input checked="" type="checkbox"/> Disaster <input checked="" type="checkbox"/> Water	<b>Number of Personnel providing services:</b> <u>21</u> EMD		
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If public:</b> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other	<b>If public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>Number of Ambulances:</b> <u>0</u>

**TABLE 11: RESOURCES DIRECTORY**  
**-- Dispatch Agency**

Revision #1 [2/16/95]

<b>Name and Address:</b> Fremont Fire Department 39100 Liberty Street Fremont, CA 94538		<b>Primary Contact:</b> Larry Andersen (510) 494-4275		
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Day-to-day <input type="checkbox"/> Air <input checked="" type="checkbox"/> Disaster <input type="checkbox"/> Water	<b>Number of Personnel providing services:</b> 10 EMD		
<b>Ownership:</b> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<b>Medical Director:</b> <input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<b>If public:</b> <input checked="" type="checkbox"/> Fire <input checked="" type="checkbox"/> Law <input type="checkbox"/> Other	<b>If public:</b> <input checked="" type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>Number of Ambulances:</b> 0

<b>Name and Address:</b> American Medical Response - West 41300 Christy St. Fremont, CA 94537		<b>Primary Contact:</b> Dennis Jackson (510)657-9999		
<b>Written Contract:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>Service:</b> <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Day-to-day <input type="checkbox"/> Air <input checked="" type="checkbox"/> Disaster <input type="checkbox"/> Water	<b>Number of Personnel providing services:</b> EMD		
<b>Ownership:</b> <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	<b>Medical Director:</b> <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<b>If public:</b> <input type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other	<b>If public:</b> <input type="checkbox"/> City; <input type="checkbox"/> County; <input type="checkbox"/> State; <input type="checkbox"/> Fire District; <input type="checkbox"/> Federal	<b>Number of Ambulances:</b>

## PLAN DEVELOPMENT PROCESS

**1. BACKGROUND** The Alameda County Emergency Medical Services (EMS) District, a division of the Public Health Department, is a regulatory agency responsible for planning and monitoring prehospital emergency care. The EMS system responds to over 90,000 requests for service a year. Alameda County, with a population of approximately 1,356,000, covers 737.5 square miles east of San Francisco Bay.

In 1994, in response to the increased penetration of managed care health insurance, the Alameda County Emergency Medical Services (EMS) District launched a five-year plan to reinvent the practice and delivery of prehospital care while maintaining the integrity and financial viability of the emergency response system for those who need our service. This health care crisis is not unique to Alameda County but was felt here early-on as the result of a string of events:

- The creation of non-emergency phone numbers by managed care providers decreasing the number of insured users of the EMS system.
- An increasing number of indigent and/or self-pay users of the system.
- Legislative, funding and reimbursement limitations imposed on the EMS system.
- A 2.5 million dollar loss by the primary contract ambulance provider in 1994.

The Alameda County Board of Supervisors took some interim steps during the crisis; then commissioned a task force to re-engineer EMS for the future.

**2. PLANNING DESIGN** As a result of the vision established by the Task Force, an innovative, multi-disciplinary approach to analyze system changes has been established. Strategic Planning (Figure 1) was adopted to address the Task Force recommendations and establish a data-driven process to evaluate system changes.

An EMS Council, a Medical Oversight Committee and Planning Teams (consisting of the many stakeholders in the EMS system), were formed. (Figure 2) The EMS Council, appointed by the Board, is responsible for:

- 1) Determining the feasibility of implementing the EMS Task Force recommendations;

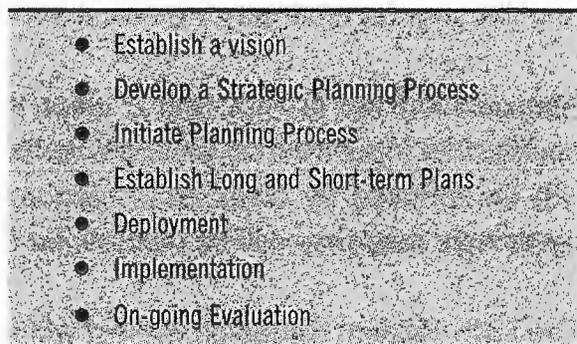


Figure 1 EMS System Redesign Strategic Planning Process

- 2) Overseeing the development of an implementation plan for the EMS system redesign project;
- 3) Making recommendations to the Board regarding proposed changes.

A physician-based Medical Oversight Committee, also Board appointed, will review the implementation plans to determine their medical appropriateness.

The EMS Council established several Planning Teams to analyze the Task Force recommendations, identify opportunities for system improvement and assist with the development of an implementation plan.

The Council developed a 6-step planning process (Figure 3) for use by the planning teams. The teams are to analyze the Task Force recommendations, identify opportunities for system improvement and assist with the development of an implementation plan.

### 3. EMS SYSTEM REDESIGN PROJECT

The survival of the medical 9-1-1 system is at risk, and without it, care and transport of the sick and injured will not be available to those in need. Major changes to the provision of, and funding for, emergency medical service is urgently needed.

Approaching the project with a clear vision and a structured process allows for the appropriate input from all groups who have a stake in the system. Overall system costs will be reduced by distributing resources more effectively. At the same time, rapid paramedic response will be maintained for all patients with true emergencies.

The EMS System Redesign Project will focus on the following target areas:

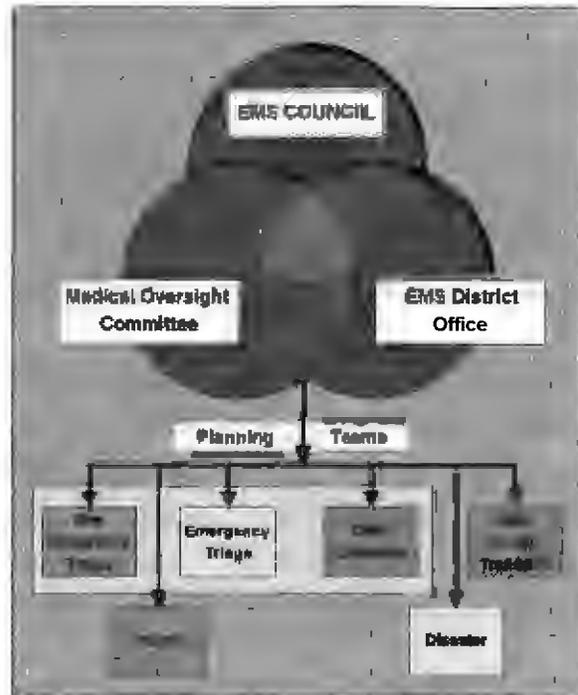


Figure 2 EMS System Redesign - EMS Council, Medical Oversight Committee and Planning Teams.

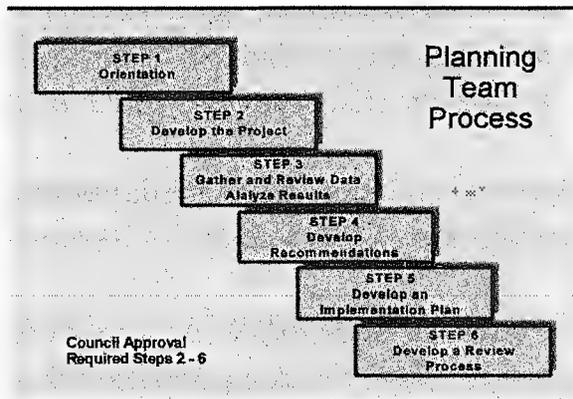


Figure 3 Planning Teams 6 step Planning Process

## Planning and Implementation

- ▶ **Strategic Planning.** All changes to the EMS system must be: 1) medically appropriate; 2) operationally feasible; 3) cost effective; 4) be supported by data; and, 5) integrate into the overall system plan. As part of the redesign process, all planning team recommendations must be reviewed by the Medical Oversight Committee, the EMS District and approved by the EMS Council before being presented to the Board of Supervisors.
- ▶ **Increase the financial capabilities to fund system changes and adequately reimburse system providers.** An equitable, viable funding/ reimbursement system must be developed. Additional funding sources will be needed for planning and implementation.

## Emergency and Non-Emergency Triage

- ▶ **Develop new and innovative dispatch protocols to categorize 9-1-1 calls as either an emergency or non-emergency.** The 9-1-1 system was developed to handle life threatening emergencies. In reality, only 20% of 9-1-1 calls are true emergencies. 9-1-1 and the EMS system have become a safety-net for patients who need medical care, including social services and mental health. Emergency Medical Dispatch (EMD) was developed to identify medical emergencies and dispatch personnel to the scene. Our challenge is to: 1) investigate the possibility of identifying non-emergent medical problems at the dispatch level; and, 2) develop a process to refer the patient to the appropriate service. Telephone referral agencies currently exist that refer patients for non-emergent care. These services are usually associated with a health insurance plan. Our goal is to link these two services.
- ▶ **Change the current concept of patient disposition to incorporate transport of patients to an alternate source of care.** New protocols need to be developed to allow transport to destinations other than an acute care hospital. (e.g. an urgent care center, clinic, etc.). This goal requires promoting transport options with regulatory agencies, insurance companies and the EMS community.

## Data Collection

- ▶ **A system-wide data collection system must be designed and operationalized.** In order to ensure that approved changes achieve our goals, a data collection system, that produces meaningful, usable data, must be implemented. This will involve: 1) the purchase of computer hardware and software; and, 2) technical support prior to, during and after implementation.

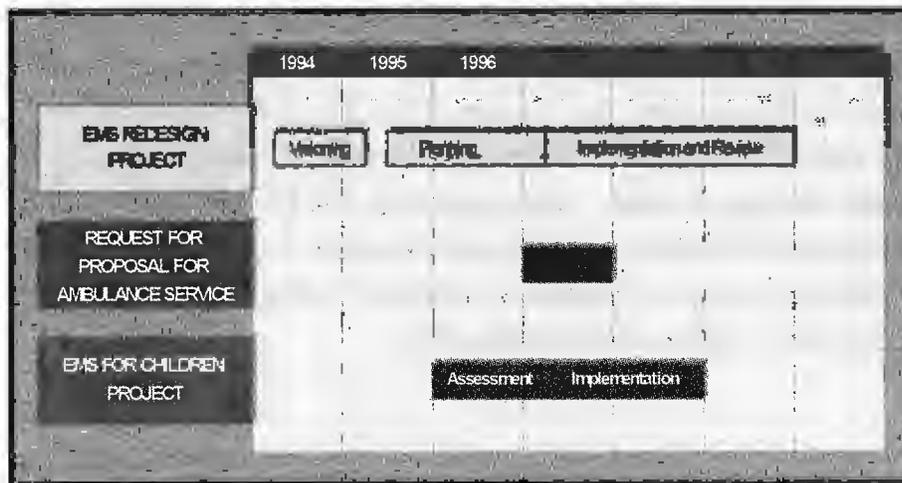
## Trauma and Disaster Planning

- ▶ **Maintain the Trauma system.** Reevaluate the trauma triage criteria to minimize cost without compromise to patient care.
- ▶ **An integrated county-wide catastrophic disaster plan.** As part of the multi-casualty plan, consider the patients managed care provider, if practical, when making transport decisions.

**4. SUMMARY** The task of reinventing Emergency Medical Services in Alameda County is a monumental, but essential undertaking. The synthesis of these programs into a comprehensive and integrated system is not currently being done anywhere. Data driven decision-making is relatively new in the EMS industry. Based on quantitative data analysis, our goals are the continuous evaluation of the quality of care delivered and system changes.

Our vision has generated a great deal of interest and support, both in our local community, managed care providers and EMS systems nationwide. Our *Task Force Report on the Future of EMS* has been cited as a visionary approach by speakers at EMS conferences, and is still being widely distributed.

## 5. EMS SYSTEM PLAN - PROJECT TIME LINE



*(Information about the Strategic Planning Process, the EMS Council or Planning Teams may be obtained from the EMS Office.)*



HEALTH CARE SERVICES AGENCY  
EMERGENCY MEDICAL SERVICE DISTRICT

ALAMEDA COUNTY

**STRATEGIC  
PLANNING  
PROCESS**  
for the future of  
**EMERGENCY  
MEDICAL  
SERVICES**

EMERGENCY MEDICAL SERVICES

**Diane Akers, Director**  
**Kristyn Helander-Daugherty, Prehospital Care Coordinator**  
**Nancy Osburn, EMS Consultant**



EMERGENCY MEDICAL SERVICE DISTRICT  
55 Santa Clara Avenue, Suite 200  
Oakland, California 94610  
(510) 268-7355  
FAX (510) 763-2323

January 1995

Dear Colleague:

With the advent of managed health care, EMS systems must change. If this change is planned and administered with foresight, we can insure that *all* of the citizens of Alameda County continue to receive high quality prehospital medical care. This planning process represents the **first step** toward planning and implementing the changes recommended by the EMS Task Force.

Why won't our current system work well with the expansion of managed care? When a citizen calls 9-1-1 for an illness or injury, it activates a chain of events in a system designed to get him or her to an acute care hospital as rapidly as possible, **whether the patient needs it or not**. The resulting ambulance bill reflects the expense of insuring that the ambulance can arrive within ten minutes or less, and is staffed and equipped with paramedics and equipment to provide prehospital advanced life support, **whether the patient needs it or not**.

The critical patient whose life is saved by the EMS System rarely complains about the bill. However, private pay patients and insurance companies have always been reluctant to pay large ambulance bills for medical conditions that could have been treated at a clinic, or referred to Social Services.

As managed care providers grow in size and number, they will become less tolerant of a prehospital EMS system that generates what they see as unnecessary expense. It is only a matter of time before it will become more cost-effective for them to establish their own system of medical transportation -- one that will follow their rules, control their costs, and serve their customers. Managed care subscribers would then use the 9-1-1 system for only life threatening medical emergencies.

The public EMS system would be left with the responsibility of providing expensive Advanced Life Support equipment and personnel, but most of the remaining patients would be uninsured. With a much lower call volume and a higher percentage of uncollectables, the system would no longer be able to support the quality EMS system our citizens have available to them today. EMS response would be fragmented, with long response times and varying levels of prehospital care.

EMS has always been the safety net for people in need who don't know who else to call. We want to continue in this role. We also want to improve our ability to get our patients the services they really need, in the most appropriate and cost-effective way. The recommendations of the EMS Task Force met these tough issues head on. With the help of the other organizations that make up the EMS system, it is our job now to translate their recommendations into a plan for change. This document creates the structure and sets the stage for the planning to begin.

Sincerely,

Diane Akers  
Provisional Director, Alameda County EMS

## ACKNOWLEDGMENTS

We wish to express our appreciation to the following groups or individuals:

**The members of the EMS Task Force** for their innovative thinking in creating the vision for the future of EMS in Alameda County.

**The Alameda-Contra Costa Medical Association (ACCMA)** and the **Alameda County City Managers Association**, for their invaluable insights into issues that must be considered as we address the task force recommendations.

**The Alameda County Board of Supervisors** for taking a proactive role in determining the future of prehospital emergency medical care in Alameda County.

**Joel Klutch and Ruth Shane** of the **Health Care Services Agency (Management Services)**, for their time and expertise in editing this document.

**The Juran Institute, Inc.**, (Wilton, Connecticut) for permission to use their strategic quality planning model.

## TABLE OF CONTENTS

**SECTION I: Executive Summary** ..... Page 1

**SECTION 2: Strategic Quality Planning Process**

- I. Overview ..... Page 3
- II. The Vision ..... Page 4
- III. Planning Process ..... Page 5
- IV. Input Opportunities ..... Page 6
- V. Planning Team Oversight Committee Membership .. Page 7

**SECTION 3: Appendix**

- A. Summary of EMS Task Force Process  
and Recommendations ..... Page 9
- B. Overview of Alameda County ..... Page 15
- C. Glossary of Terms ..... Page 17

# Section 1

## EXECUTIVE SUMMARY

Anyone who read the "Task Force Report on the Future of EMS\*" may have been left wondering how Alameda County plans to implement the proposed changes to the Emergency Medical Services (EMS) system. This document outlines the first step in the planning process.

During the development of this Strategic Planning Process, it was found that most of the EMS Task Force Recommendations involved either integration of the EMS system with managed care (Health Care Integration), Dispatch, Triage or Field Protocols. As a result, the task force recommendations were regrouped under these four categories.

Multidisciplinary *Planning Team* will be established for each category. Each team will plan how to best implement the task force recommendations in their category. *Key strategies* and *strategic planning goals* will be identified for each group as they begin their work. The EMS District office staff will facilitate the teams and coordinate team proposals to insure that their plans will fit together into an overall implementation plan that is feasible from an operational standpoint.

A Steering Committee and a Medical Oversight Committee will also be established to review and approve Planning Team proposals. Task force recommendations not assigned to a Planning Team were assigned to one of these groups. The Medical Oversight Committee will insure that all proposed changes are consistent with high-quality medical care. The Steering Committee will coordinate the work of the teams, insure that proposed changes are cost-effective and make regular progress reports to the Board of Supervisors (see Table 3: Planning Teams and Oversight Committee Structure on page 6).

If the task force recommendations represent the *blueprint* for change, this Strategic Planning Process constructs the *foundation*. The Planning Teams will create the *framework* for change over the next year, but it will take all system participants to do the *construction*, as the new system is implemented over the next three to five years.

Planning Teams will take the first step toward operationalizing the Task Force Recommendations by assessing the current system and designing strategies for change. Team members will serve as vital communication links between the organizations they represent, the evolving EMS system, and the community we serve.

This document is designed to stand alone as a process for planning changes in the EMS system in Alameda County based on the findings of the EMS Task Force. It does not include information on the methodology used by the Task Force or the rationale behind each recommendation. That information is available from Alameda County EMS for \$0.00. Please request "A Task Force Report on the Future of Emergency Medical Services." For a brief overview of the Alameda County EMS District, see Appendix B.

In order for this process to be successful, Planning Teams will need information from the medical community, the EMS community, and citizen groups. Toward that end, teams will hold Focus Groups, or open forums, for all interested parties to express ideas and concerns about the projects of each team. Other opportunities for input include (but are not limited to) surveys, written comments, and public testimony.

Recommendations that can be operationalized quickly and easily will not be held up by other unrelated recommendations that may be more complex and time consuming. While some projects can be planned by a single team, others require a series of steps that involve more than one team. The Steering Committee, with assistance from EMS staff, will coordinate the movement of interrelated steps from team to team.

All aspects of system planning will consider the needs and expectations of both the patient and the payer, including cost-effectiveness. The anticipated expansion of managed care requires us to look into alternatives to the traditional approach to Emergency Medical Services. Planning Teams will employ principles of Total Quality Management to insure that changes are based on a systematic approach to data collection and analysis.

Implementation of the task force recommendations will cause fundamental changes in the delivery of EMS in Alameda County. To achieve our objectives, we must engage the cooperation of all agencies that interact with the EMS system. While we recognize this as a monumental undertaking, the ultimate improvement in services delivered to our citizens will be well worth the effort.

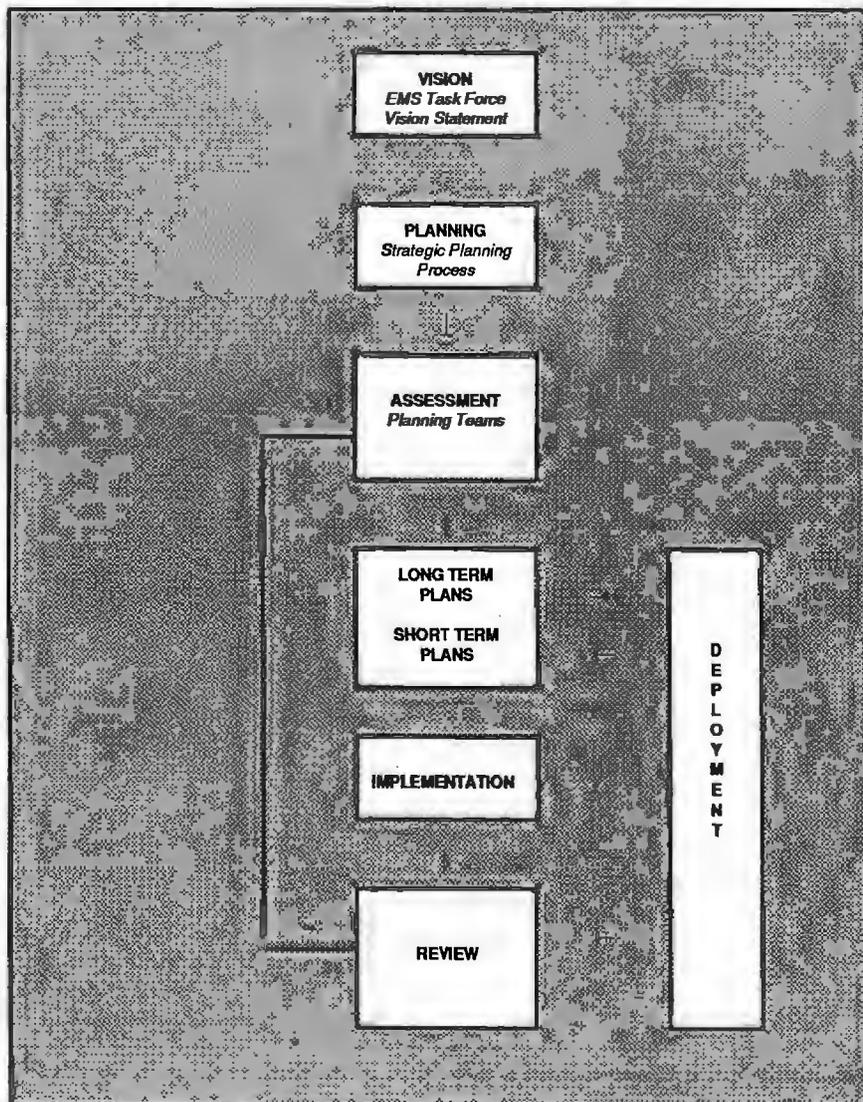
## Section 2

# QUALITY PLANNING PROCESS

### I. OVERVIEW:

Most strategic planning models share a certain common structure. It starts with a **vision** of what the organization desires to become and **planning** to develop a plan. The current performance and environment are **assessed** and compared with the vision. This assessment leads to **long-term plans**, which are the basis of **short-term plans** or annual operating plans. Both long- and short-term plans must be **deployed** --- that is, shared with specific teams, organizations and/or individuals, negotiated, revised and supported with resources. Finally, the plans are **implemented** and the results **reviewed**. The reviews provide an update of the assessment that drives updates of the plans.

TABLE 1: Strategic Quality Planning Process



## II. THE VISION:

Strategic Quality Planning starts with a vision. The vision is what we would like to accomplish or what we would like the system to be like sometime in the future. Good visions are: customer-focused; doable; compelling; and, shared throughout the organization. Vision statements by themselves are little more than wish lists. Converting a vision statement into action is accomplished through the strategic quality planning process. The vision for this project was developed from the EMS Task Force mission statement.

### VISION STATEMENT

***"To be an Emergency Medical Service system for Alameda County that provides quality patient care in a cost-effective manner and integrates Emergency Medical Services with Health Care Delivery Systems."***

Once the vision has been established, objectives for accomplishing the vision should be developed. The primary objectives, established by the Task Force, and the means required for meeting the objectives can be found in Table 2.

**TABLE 2: Objectives and Means**

OBJECTIVE	MEANS
1. Develop new and innovative dispatch protocols	<ul style="list-style-type: none"><li>• Categorize 9-1-1 calls as either emergency or non-emergency.</li><li>• If prioritized as an emergency, dispatch a paramedic.</li><li>• Develop a non-emergency triage center to receive calls prioritized as non-emergent.</li></ul>
2. Add fire service paramedic first responders.	<ul style="list-style-type: none"><li>• Work with cities and the Alameda County Fire Chiefs Association to train personnel as first responder paramedics.</li><li>• Optimize the contract and accreditation process to facilitate this change.</li></ul>
3. Change the current concept of patient disposition to incorporate transport of patient to an alternate source of care.	<ul style="list-style-type: none"><li>• Work to change laws and regulations that limit transport options.</li><li>• Develop pilot programs to implement changes prior to changes in the law.</li><li>• Seek out grant funds for funding innovative changes to the EMS system.</li></ul>

### III. PLANNING PROCESS:

The next step in converting the vision into achievable long-term plans is to develop *Key Strategies* and establish *Strategic Quality Goals*. Key strategies are broad long-term approaches which: make a change from the present; contribute to the vision; are needed to achieve the vision; and, make fundamental choices regarding the future. Strategic goals guide the organization's efforts toward the achievement of each key strategy.

The following Planning Teams and Oversight Committees will be formed to insure operational feasibility, medical appropriateness and cost-effectiveness of proposed system changes guided by the key strategies and strategic goals:

#### A. PLANNING TEAMS

- Health Care Integration
- Dispatch
- Triage
- Field Protocols

#### B. OVERSIGHT COMMITTEES

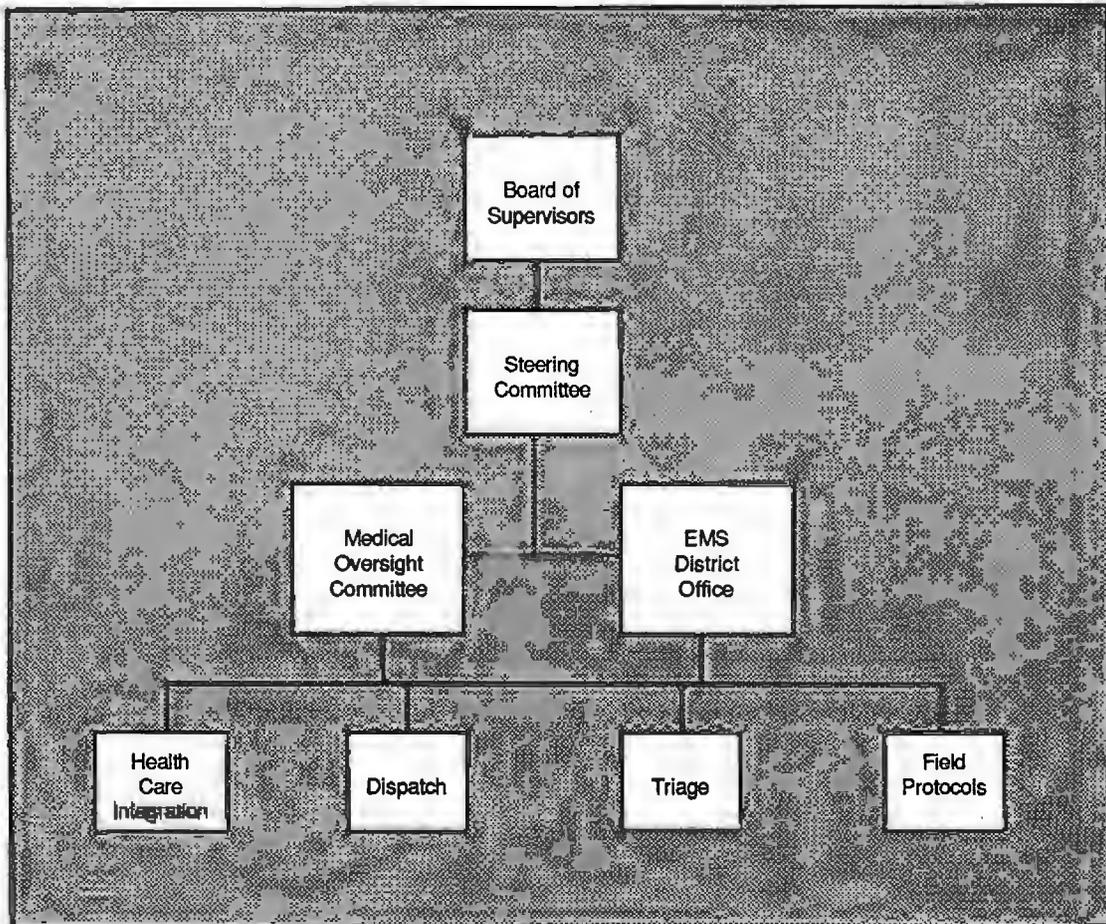
- **Medical Oversight:** To ensure that proposed system changes are medically correct, a medical oversight committee will be formed. This committee will be physician-based and represent different medical specialties and system perspectives. All Planning Team implementation plans must be reviewed and approved by the Medical Oversight Committee for medical appropriateness before being presented to the Steering Committee. The medical oversight committee will review research proposals, monitor system compliance and hold system participants accountable.
- **EMS District Office:** EMS Office staff will facilitate the strategic planning process and develop internal teams to implement changes specific to the EMS Office. All Planning Team implementation plans must be reviewed and approved by the EMS District Office for operational feasibility before being presented to the Steering Committee.

Three subcommittees will also be formed: *(recommended by the Task Force report)*

- Trauma subcommittee  
*(review trauma triage criteria)*
- Disaster subcommittee  
*(develop a county-wide catastrophic disaster plan)*
- Base Hospital subcommittee  
*(reevaluate the role of the base hospital)*

- **Steering Committee:** A Steering Committee will be established to: coordinate Planning Teams activities; ensure that all system participants provide data to the system; and, make reports to the Board of Supervisors. To facilitate communication between teams, each Planning Team Leader will serve as a member of the Steering Committee. Additional Steering Committee members will be appointed as needed. All Planning Team implementation plans must be reviewed and approved by the Steering Committee for cost effectiveness before being presented to the Board of Supervisors.

**TABLE 3: Planning Teams and Oversight Committee Structure**



**IV. INPUT OPPORTUNITIES**

Throughout the Strategic Quality Planning Process input will be solicited from the entire EMS community and the cities. Table 4 summarizes the many opportunities that will be available for offering opinions and providing information.

**TABLE 4: Input Opportunities**

Process Steps	Input Opportunities
Planning Teams	<ul style="list-style-type: none"> <li>• Focus Groups</li> <li>• Open Forum meetings</li> <li>• Surveys</li> <li>• Site Visits</li> <li>• Ride-alongs</li> <li>• Public Testimony</li> </ul>
Deployment Process	<ul style="list-style-type: none"> <li>• Negotiations</li> <li>• Open Forum meetings</li> <li>• Public Testimony before the Planning Teams and Steering Committee</li> </ul>
Implementation Plan	<ul style="list-style-type: none"> <li>• Written Comment (<i>draft</i>)</li> </ul>
Review Process:	<ul style="list-style-type: none"> <li>• Audits/Surveys</li> <li>• Open Forum meetings</li> <li>• Public Testimony to Planning Teams and Steering Committee</li> </ul>
Approval by Cities	<ul style="list-style-type: none"> <li>• Negotiations with City Managers</li> <li>• Public Testimony at City Councils</li> </ul>
Approval by Board of Supervisors	<ul style="list-style-type: none"> <li>• Written Comments (<i>final</i>)</li> <li>• Public Testimony at Board of Supervisors</li> </ul>

**V. PLANNING TEAM AND OVERSIGHT COMMITTEE MEMBERSHIP**

Planning Team and Oversight Committee members will be appointed by the Board of Supervisors based on representative organization affiliation. These organizations will be requested to nominate individuals who will best represent the organization and communicate planning team or committee activities back to the organization. Additional Planning Team and Oversight Committee members may be appointed as needed. A summary of proposed membership can be found in Table 5.

**TABLE 5: Planning Team and Committee Representation**

Representative Organization	Steering Committee	Medical Oversight Committee	Health Care Integration Team	Dispatch Team	Triage Team	Field Protocols Team	Total
Alameda/Contra Costa Medical Assoc.	1	1					2
County Health Alliance	1	1 (MD)					2
Emergency Dept. Physician Assoc.	1	2◆					3
Health Care Delivery Systems	1	1 (MD)	3				5
City Managers Assoc.	2			1 (dispatch)	1 (dispatch)		4
Fire Chiefs Assoc.	2		1	1			4
IAFF (Firefighters Union)	1		1	1	1	1	5
Transport Provider	1		1	1			3
SEIU (Paramedic Union)	1		1	1	1	1	5
Emergency Nurses Assoc.	1	1	1			1	4
EMS District	1	1				1	3
Consumer	1		1	1	1	1	5
East Bay Hospital Conference	1		1				2
County Administrators Office	1						1
Board of Supervisors	1						1
Alameda County Sheriff's Dept.	1			1 (ALCO-CMED)	1 (ALCO-CMED)		3
<b>Total:</b>	<b>22▲</b>	<b>7</b>	<b>10</b>	<b>7</b>	<b>7</b>	<b>5</b>	

▲ Includes Planning Team Leaders

◆ 1 Base Hospital MD; 1 Receiving Hospital MD

## **Section 3 APPENDIX**

### **APPENDIX A. - Background: EMS Task Force Process/Recommendations**

In January 1994, Alameda County received a wake-up call when its contract ambulance provider (responding to 90% of emergency calls county wide) sought relief from a 2.5 million-dollar loss. As a stopgap measure, the Board of Supervisors approved changes in ambulance subsidies, performance standards, and fees.

The following issues were identified as having immediate or impending impact on the financial viability of the present EMS system in Alameda County:

1. Decreasing revenues reported by the contracted private ambulance provider.
2. The expansion of managed care and forthcoming national health care reform.
3. Alameda County's planned managed care service for Medi-Cal patients.
4. Increasing provision of prehospital Advanced Life Support by fire-service personnel.
5. Use of the 9-1-1 system to transport patients with non-emergent problems.
6. Fragmentation of the system, with over seventy agencies involved throughout the county (including seventeen 9-1-1 answering points and twenty-three fire departments).
7. Creation of alternate non-emergency phone numbers by several managed care providers.

In April 1994, the Board of Supervisors convened a multidisciplinary Task Force to examine the current system and explore long term solutions to these problems. Organizations with key roles in the EMS system were asked to appoint individuals to represent their interests and provide expertise. Members were appointed from fire departments, private ambulance providers, labor unions, emergency and primary-care physicians, private hospitals, managed care providers, city and county government and consumers.

The Task Force met with an experienced meeting facilitator nine times, putting in eight-hour days between May and September 1994. They were asked to use innovative thinking to create a new vision of the EMS system that would address the difficult issues at hand, while maintaining high quality medical care standards.

In as much as this was a visionary process, the task force did not rely on data or seek information from the EMS community at large. The Task Force was specifically instructed not to address details of implementation or feasibility. The Board of Supervisors required completion

of the Task Force product by October 1994.

Assessment of the current system and resource allocation will be addressed in the next stage of the project. Feasibility of implementation, medical appropriateness and cost effectiveness will be explored for each of the Task Force recommendations. All changes will be based on data analysis and input from physician groups, city managers, hospital representatives and all other interested parties in the EMS community. The Task Force recommendations can be found in Table 6.

The findings of the EMS Task Force were published in "A Task Force Report on the Future of Emergency Medical Services," which was received by the Alameda County Board of Supervisors at a public hearing in January 1995. Copies are available from the Alameda County EMS District for \$8.00.

**TABLE 6: EMS Task Force Recommendations**

**PRE-ACCESS**

**P-1** A county-wide public education program should be developed which teaches when to call 9-1-1 and when to call a health care delivery system, based on appropriate medical standards and oversight.

**P-2** Alameda County EMS must work with health care delivery systems and other health care systems to develop a coordinated system of public education/information.

**P-3** Alameda County EMS should reeducate EMS providers, physicians, the media, elected officials, allied agencies, and insurance companies on the appropriate use of 9-1-1.

**ACCESS**

**A-1** Alameda County EMS should work with cities and public agencies to consolidate the multiple PSAPs.

**A-2** All emergency triage centers must have personnel trained in call prioritization/pre-arrival instructions.

**DISPATCH/RESPONSE**

**DR-1** Establish state-of-the-art, consolidated, centralized Emergency Triage Center(s) to avoid fragmentation.

**DR-2** Coordinate PSAP consolidation with future fire dispatch consolidation.

**DR-3** Use preestablished medical protocols and priority dispatch to decide if a call is emergent and requires immediate medical response.

**DR-4** If prioritized as non-emergent, the call must be transferred to the Non-Emergency Triage Center.

**DR-5** Develop medical protocols to determine the level of service required. An on-scene assessment must remain an option if telephone triage is insufficient.

**DR-8 DR-6** The Non-Emergency Triage Center is still part of the EMS System. It should be overseen by Alameda County EMS and function according to County EMS protocol, with input from health care systems.

**DR-7** Immediate reaccess to the Emergency Triage Center by the Non-Emergency Triage Center must occur if an emergency exists.

A paramedic must be dispatched if the patient is prioritized as emergent by dispatch protocols.

**DR-9** Participating health care delivery systems must agree to the standardized definition of "emergency" and "non-emergency" and participate in the development of the new triage criteria.

**DR-10** A 24-hour-access telephone number, to receive calls from the Emergency Triage Center, must be provided by a health care delivery system if it wants to benefit from this new 9-1-1 system .

**DR-11** A medical oversight group should be formed. This group should represent each component of the EMS system to develop triage standards.

### **ASSESSMENT/TREATMENT**

**AT-1** Following an assessment which reveals that a non-emergent situation exists, the paramedic will call the Non-Emergency Triage Center directly to arrange for appropriate medical care and/or transport.

**AT-2** Direct on-line medical control must be available, but the role of the base hospital and the MICN must be reevaluated. Technological advances in communications, changes in laws that regulate the practice of prehospital medicine and EMS system changes have already changed the role of the base hospital.

**AT-3** The trauma system should be maintained; the triage criteria and their related cost-effectiveness should be reevaluated; and Health care delivery systems and the trauma system should form a strong partnership.

**AT-4** The Do-Not-Resuscitate and Grief-Support programs should be maintained; and patients and health care providers should be educated to prevent a negative financial impact on the system and depletion of resources.

**AT-5** Changes to transport protocols and related funding be made to ensure reimbursement when paramedics are called to an emergency scene and determine that transport to an acute care facility is not necessary.

### **TRANSPORT**

**T-1** A single transport provider be engaged.

**T-2** All jurisdictions must join the EMS assessment District. Jurisdictions wishing to enhance its level of service or those who choose not to participate at the recommended level of service may incur additional costs.

**T-3** Revised protocols be developed to allow a stable patient to be transported to the most appropriate facility. (e.g. the patient's managed care facility, an out-of-county facility or an alternate care facility.) The goal being to get the patient to the right facility the first time.

**T-4** Emergent interfacility transfers to a higher level of care be included in the EMS system and requests for an ALS ambulance should be coordinated through an emergency dispatch center.

**T-5** Managed care providers are responsible for non-emergent transfers of their members through preestablished contracts with transport providers.

**T-6** Explore alternate disposition and develop protocols for: 1) minors without legal capacity to consent, and 2) others without legal capacity to consent.

**T-7** Refer non-emergent patients to the Non-Emergency Triage Center to arrange for alternate transportation .

**T-8** Develop a mechanism to recover payment for services rendered, including an assessment fee if the patient is not transported.

## **EMS ADMINISTRATION AND SYSTEM PLANNING**

### **Research**

**E-1** All system changes must be based on appropriate medical standards and supporting data. No element of the new system should be implemented without data supporting the decision.

**E-2** System participants must be responsible for providing data to the system.

**E-3** A research committee should be established to evaluate research requests that will benefit the system.

### **Funding**

**E-4** Reimbursement for services must be a coordinated effort and designed to maintain the integrity of the whole system.

**E-5** There should be no duplicate billing by multiple providers. The most efficient and cost-effective billing system should be selected and Alameda County EMS should negotiate fees with all interested parties.

**E-6** Payment options should be evaluated (fee for service vs. capitate system).

**E-7** Additional costs offsetting any additional system costs as a result of a jurisdiction varying from the recommended standards, be passed on to those jurisdictions.

### **Liability and Risk Management**

**E-8** A mechanism for "risk sharing" must be developed in which participating health care delivery systems, through written agreements, on-line consultation, protocol development and retrospective medical control share new risk.

### **Indigent Care (unable to pay for services and does not qualify for Medi-Cal )**

**E-9** EMS should work with appropriate agencies to determine ways to make the financial burden of caring for the indigent more equitable.

### **Multi-casualty Incidents and Disasters**

**E-10** During a multi-casualty incident, transport decisions should consider the patient's managed care provider where practical.

**E-11** A task force should be established to investigate the feasibility of developing a county-wide integrated response to a catastrophic disaster.

### **Continuous Quality Improvement (CQI)**

**E-12** A comprehensive multi-disciplinary system must be developed and implemented to maintain and improve the quality of services provided. Alameda County EMS must monitor this system and should hold system participants accountable.

**E-13** A statistically reliable, results-oriented data collection system must be developed to evaluate outcome data in order to provide access to system-wide outcome data.

**E-14** Alameda County EMS should contact other EMS systems with successful data collection programs to learn from them and incorporate their best ideas.

### **Independent vs. Separate Local EMS Agencies**

**E-15** The Task Force is not recommending combining agencies. Agencies should work together using the same protocols whenever possible.

## **APPENDIX B - Overview of Alameda County**

Alameda County provides the border for much of eastern San Francisco Bay. It can be characterized by its diversity. Its 743 square miles encompass dense urban communities, sprawling suburban municipalities, mountainous wilderness, and a large portion of the Bay itself. Its fourteen incorporated communities provide the homes for a multitude of ethnic groups and a wide array of industrial and commercial entities. In 1994, the population of Alameda County is estimated at 1.3 million people.

The Emergency Medical Services District was created in 1983 by a special ballot measure. The formation of the district included a dedicated benefit assessment fee for paramedic services. This was accomplished through the annexation of all the Alameda County communities and unincorporated areas, except the City of Alameda (which chose not to participate).

EMS was in its infancy in the State of California in the 1980's, and the Alameda County system developed rapidly. By 1986 prehospital emergency care was delivered throughout the District by paramedics receiving orders from Mobile Intensive Care Nurses and Base Hospital Physicians at designated base hospitals.

The Trauma System was established in 1987, with three designated Trauma Centers, including the only Pediatric Trauma Center in Northern California. This milestone was followed by First Responder/EMT-Defibrillation in 1988 and Emergency Medical Dispatch in 1990.

Alameda County also helped pioneer other concepts in EMS in California, including:

- Standing Orders for paramedics
- Performance Based provider contracts
- First Responder contracts
- Quality Improvement Pilot Project
- Prehospital Do Not Resuscitate advance directives
- Grief Support by field supervisors

The EMS system in Alameda County is as diverse as the communities it serves. In most areas (90% of the county's emergency calls), firefighters respond with the single private Paramedic provider. The level of training of firefighters ranges from First Responder to Paramedic, with most departments responding with EMT-I(D) personnel. The cities of Berkeley, Piedmont and Albany have paramedic transport units staffed by firefighter paramedics. The City of Alameda, still functioning outside the District, has EMT-Defibrillation personnel on its municipal ambulances.

The fourteen receiving hospitals are privately run, except district hospitals in Castro Valley and Fremont and Highland Hospital, the county hospital in Oakland. Each has under 250 beds.

Two of the hospitals are Kaiser (managed care) facilities. Seven local hospitals have closed in the past ten years. Critical care bed capacity has decreased resulting in ambulance diversion, which is allowed only when all critical care beds are full. John George Pavilion, which functions under the license of the county hospital, is the only receiving facility for mental health patients.

With the reduction of U.S. Navy facilities in the Bay Area, the EMS system falls heir to additional response areas and added responsibilities for hazardous materials incidents. Response on the bridges over San Francisco Bay must be coordinated with adjoining counties. The trauma system and disaster response must also be coordinated with adjoining counties.

While Alameda County has been progressive in disaster planning since 1987, the Loma Prieta earthquake of 1989 and the Oakland-Berkeley Hills fire of 1991 have taken a toll on the community's resources. Ambulance rates are kept artificially low by county ambulance subsidies. Fire departments also receive nominal financial support for their First Responder services.

Authority over EMS systems is established by state law. EMS consultant, James Page, JD, writes: "California's 'Local EMS Agency' structure and authority is unique in the U.S. Through adoption of Division 2.5 of the Health and Safety Code in 1980 (*The Emergency Medical Services System and Prehospital Emergency Medical Care Personnel Act*) the state legislature apparently intended for the state agency (the California EMS Authority) to 'coordinate and integrate' all state activities concerning emergency medical services. Apparently the legislature intended for the California EMS Authority to achieve the desired coordination and integration through a network of local EMS agencies organized on a regional basis."

In Alameda County, the EMS District is charged with EMS system planning and management. According to EMS consultant, Richard Narad, DPA, EMS systems are made up of multiple autonomous organizations that have interdependent roles in the delivery of emergency medical care. While coordination within a single organization can be achieved through its authority structure, coordination of the EMS system depends on the voluntary cooperation of the system participants.

Joseph Morales, MPA, the physician director of the California EMS Authority, has noted that the best way to ensure cooperation is to identify common goals and come to consensus on how to achieve them. The willingness of the organizations that make up the EMS community to make the necessary sacrifices to improve the prehospital care system for the citizens of Alameda County is implicit in the Task Force recommendations. Alameda County EMS is looking forward to implementing these ground-breaking ideas.

## **APPENDIX C - Glossary of Terms**

**Acute Care Hospital:** a hospital licensed under chapter 2 of Division 2, with a permit for basic emergency service. (Health and Safety Code § 1797.88)

**ACCMA:** Alameda-Contra Costa Medical Association.

**Alameda County EMS:** the branch of the County Health Care Services Agency designated by the Board of Supervisors as the County's "local EMS agency" and responsible for planning, implementing, and evaluating the local EMS system. (Health & Safety Code § 1797.204)

**Advanced Life Support (ALS):** special services designed to provide definitive prehospital emergency medical care, including, but not limited to, cardiopulmonary resuscitation, cardiac monitoring, cardiac defibrillation, advanced airway management, intravenous therapy, administration of specified drugs and other medicinal preparations, and other specified techniques and procedures administered by authorized personnel under the direct supervision of a base hospital as part of a local EMS system at the scene of an emergency, during transport to an acute care hospital, during interfacility transfer, and while in the emergency department of an acute care hospital until responsibility is assumed by the emergency or other medical staff of that hospital. (Health & Safety Code § 1797.52)

**Alternate Disposition:** the ability of a paramedic to transport a patient to a facility other than an acute care hospital.

**Alternate Facility:** a facility other than an acute care hospital (e.g. dialysis center, urgent care center, psychiatric facility).

**Base Hospital:** one of a limited number of hospitals which, upon designation by the local EMS agency and upon completion of a written contractual agreement with the local EMS agency, is responsible for directing the advanced life support system assigned to it by the local EMS agency. (Health & Safety Code § 1797.58)

**Basic Life Support (BLS):** emergency first aid and cardiopulmonary resuscitation procedures which, at a minimum, include recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life without invasive techniques until the victim may be transported or until advanced life support is available. (Health & Safety Code § 1797.60)

**Call Prioritization:** the determination by an authorized dispatcher, through the use of key questions, whether a call is a life-threatening or non-life-threatening medical emergency.

**Capitation:** a payment system in which fees are paid to a provider on a per person (or per capita) basis. The provider is then financially responsible for coordinating patient care within the fee (or capitated) rate. The provider is given a maximum amount of money per person, no matter how many or how few services are used.

**Continuous Quality Improvement (CQI):** a system by which all processes are reviewed and improved on continuously based upon the needs of the customer.

**County Health Alliance:** an insurance agency created by Alameda County to administer the Medi-Cal program as a managed care system.

**Do-Not-Resuscitate Program:** the program developed by Alameda County EMS, in accordance with State Guidelines, allowing prehospital emergency medical personnel to forego resuscitative attempts in accordance with the patient's written advance directive to that effect.

**Emergency:** a condition or situation in which an individual has a need for immediate medical attention, or where the potential for such need is perceived by emergency medical personnel or a public safety agency. (Health & Safety Code § 1797.70)

**Emergency Services:** those services required for alleviation of severe pain, or immediate diagnosis and treatment of unforeseen medical conditions, which, if not immediately diagnosed and treated, would lead to disability or death. (Title 22 CCR § 51056(a))

**Emergency Medical Dispatch (EMD):** a system of training for dispatchers that allows for call prioritization, pre-arrival instructions, and call screening.

**Emergency Triage Center (ETC):** Dispatch center where 9-1-1 calls are received.

**EMS:** emergency medical services.

**EMS Medical Director:** a physician, with substantial experience in the practice of emergency medicine, designated by the County to provide medical control and to assure medical accountability throughout the planning, implementation, and evaluation of the local EMS system. (Health & Safety Code § 1797.202)

**EMS System:** a specially organized arrangement which provides for the personnel, facilities, and equipment for the effective and coordinated delivery of medical care services under emergency conditions. (Health & Safety Code § 1797.78)

**EMT-I (Emergency Medical Technician - 1):** an individual trained in all facets of basic life support and possessing a valid certificate. (Health & Safety Code § 1797.80)

**EMT-I(D):** an EMT-I who is authorized to operate a semi-automatic defibrillator.

**EMT-P (Emergency Medical Technician - Paramedic or Paramedic):** an individual whose scope of practice to provide advanced life support is according to standards prescribed [in division 2.5, Health and Safety Code] and who has a valid certificate. (Health and Safety Code § 1797.84.)

**First Responder:** 1) an individual trained in basic first aid and authorized by the local EMS agency; 2) the initial provider of first aid at the scene of a prehospital medical emergency.

**First Responder Defibrillation Program:** the program, developed by Alameda County EMS in accordance with State regulations, allowing specially trained First Responders and EMT-Is to perform cardiac defibrillation using automated equipment.

**Grief-Support Advisor:** an individual who has completed the approved Alameda County grief-support training and is authorized by Alameda County EMS to assist the family in dealing with the death, or anticipated death, of a patient.

**Grief-Support Program:** the program, developed by Alameda County EMS, which provides grief support to the families of deceased individuals who are not transported from the field.

**Health Care Delivery System (HCDS):** individuals and organizations (e.g. managed care provider, insurance payer etc.) working together to provide medical care.

**Higher Level of Care:** defined services at a transfer facility that are not available to the patient at the present facility.

**Managed Care:** an organized system of integrated health care services, facilities and products which provides efficient medical care by containing cost, and eliminating waste and fragmentation.

**Mobile Intensive Care Nurse (MICN):** a registered nurse authorized by the EMS Medical Director to issue radio or telephone instructions to prehospital emergency medical care personnel within an EMS system according to protocols developed by the local EMS agency. (Health & Safety Code § 1797.56.)

**Non-Emergency Triage Center (Non-ETC):** a dispatch center where advice staff are available to arrange for non-emergent care and/or transportation.

**Paramedic:** see *EMT-P*.

**Pre-arrival Instructions:** medical instructions (preestablished by the EMS Medical Director) provided by specially trained dispatchers to telephone callers before the arrival of First Responders at the scene of a prehospital medical emergency.

**Priority Dispatch:** a method of evaluating a medical call in order to send only those responders needed and at the appropriate code.

**Public Safety Answering Point (PSAP):** a dispatch center where 9-1-1 calls are answered, primarily by police dispatchers.

**Quality Improvement:** See *Continuous Quality Improvement*.

**Receiving Hospital:** an acute care hospital which receives patients from the EMS system.

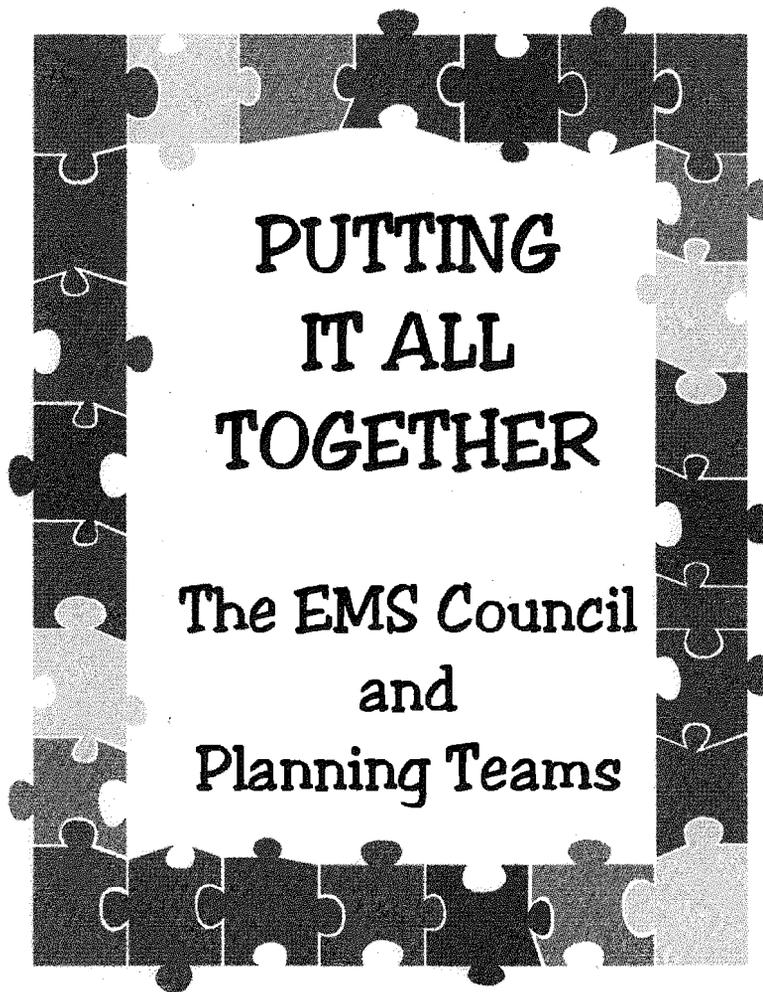
**Standing Orders:** Pre-established policies, approved by the EMS Medical Director, which

authorize paramedics to perform advanced life support procedures with contacting a base hospital.

**Trauma Audit Committee:** A physician based quality assurance committee which reviews trauma cases in accordance with Alameda County EMS Policies.

**Trauma System:** a formally organized arrangement of health care resources, that has been described in writing by a local EMS agency, by which major trauma patients are triaged, transported to, and treated at designated trauma care hospitals. (Title 22 CCR § 100249.)

**Triage:** the screening and classification of sick or injured persons to determine treatment priorities.



Alameda County  
Emergency Medical Services District

**EMS SYSTEM  
REDESIGN PROJECT UPDATE**  
January 1997

Diane Akers, Director  
E. Pat Gary, MD, Medical Director  
55 Santa Clara Ave., Suite 200 • Oakland, CA 94610  
(510) 268-7355

# ALAMEDA COUNTY EMERGENCY MEDICAL SERVICES SYSTEM REDESIGN PROJECT UPDATE - January 1997

**1. BACKGROUND** The Alameda County Emergency Medical Services (EMS) District, a division of the Public Health Department, is a regulatory agency responsible for planning and monitoring prehospital emergency care. The EMS system responds to over 90,000 requests for service a year. Alameda County, with a population of approximately 1,356,000, covers 737.5 square miles east of San Francisco Bay.

For more than two years, the challenge presented to the EMS Agency has been to reinvent the practice and delivery of prehospital care while maintaining the integrity and financial viability of the emergency response system for those in need of immediate medical intervention. This health care crisis is not unique to Alameda County but was felt here early-on as the result of a string of events:

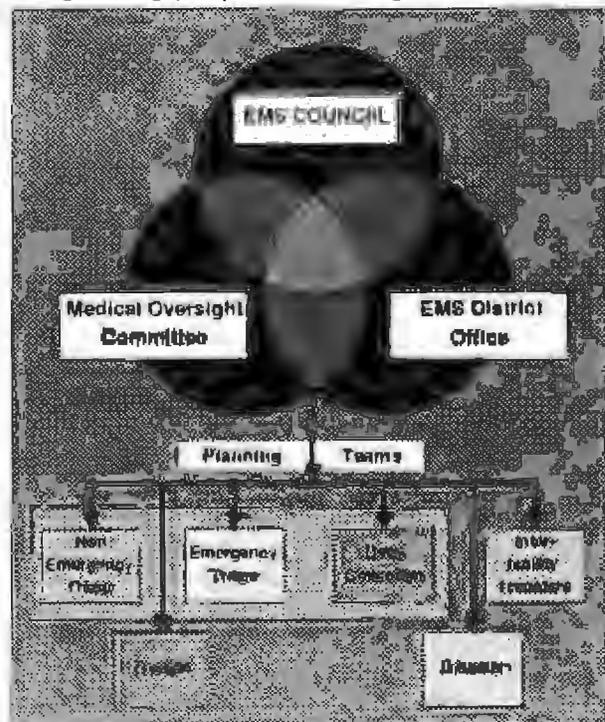
- Extensive penetration of managed-care health insurance.
- The creation of non-emergency phone numbers by Managed Care Organizations (MCOs) decreasing the number of insured users of the EMS system.
- An increasing number of indigent and/or self-pay users of the system.
- Legislative, funding and reimbursement limitations imposed on the EMS system.
- A 2.5 million dollar loss by the primary contract ambulance provider in 1994.

In response, the Alameda County Board of

Supervisors took some interim steps by approving changes in ambulance: 1) fees; 2) subsidies; and, 3) performance standards. A task force was then commissioned to redesign EMS for the future.

An EMS Council, a Medical Oversight Committee and Planning Teams (consisting of the many stakeholders in the EMS system), were formed. (Figure 1) The EMS Council, appointed by the Board, is responsible for:

- 1) Determining the feasibility of implementing the EMS Task Force recommendations;
- 2) Overseeing the development of an implementation plan for the EMS system redesign project;
- 3) Making recommendations to the Board regarding proposed changes.



**Figure 1 EMS System Redesign - EMS Council, Medical Oversight Committee and Planning Teams.**

A physician-based Medical Oversight Committee, also Board appointed, will review the implementation plans to determine their medical appropriateness.

The EMS Council established several Planning Teams to analyze the Task Force recommendations, identify opportunities for system improvement and assist with the development of an implementation plan.

All recommendations made by the planning teams must be reviewed by the Medical Oversight Committee, the EMS District and approved by the EMS Council before being presented to the Board of Supervisors. All changes to the EMS system must be:

- ▶ Medically appropriate
- ▶ Operationally feasible
- ▶ Cost effective
- ▶ Supported by data
- ▶ Integrate into the overall system plan.

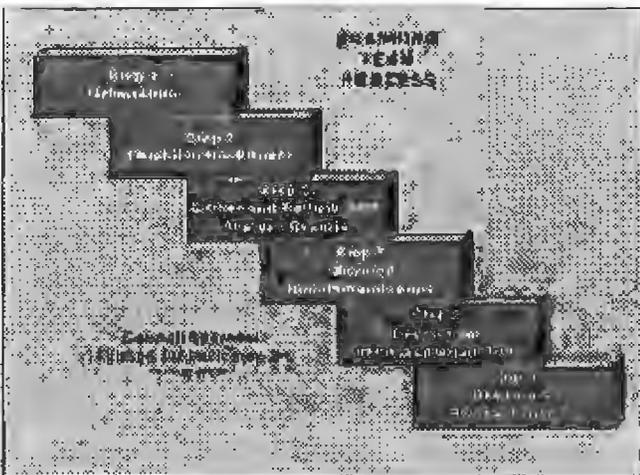


Figure 2 Planning Teams 6-step Planning Team Process

The Council developed a 6-step planning process for use by the planning teams. (Figure 2) The teams are to analyze the Task

Force recommendations, identify opportunities for system improvement and assist with the development of an implementation plan.

### 3. EMS SYSTEM REDESIGN PROJECT

The survival of the medical 9-1-1 system is at risk, and without it, care and transport of the sick and injured will not be available to those in need. Major changes to the provision of, and funding for, emergency medical service is urgently needed.

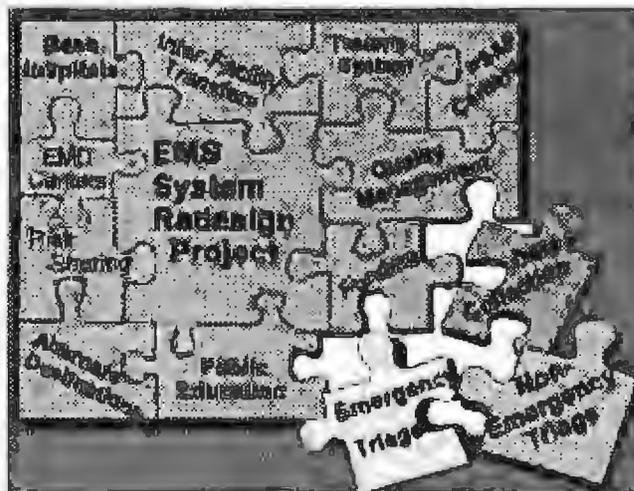


Figure 3 EMS System Redesign Project

Approaching the project with a clear vision and a structured process allows for the appropriate input from all groups who have a stake in the system. Overall system costs will be reduced by distributing resources more effectively. At the same time, rapid paramedic response will be maintained for all patients with true emergencies. Figure 3 shows the issues that are being addressed as part of the EMS system redesign project.

Several of the projects focus on the planning and implementation of: 1] an Emergency Triage and Dispatch system; 2] a Non-

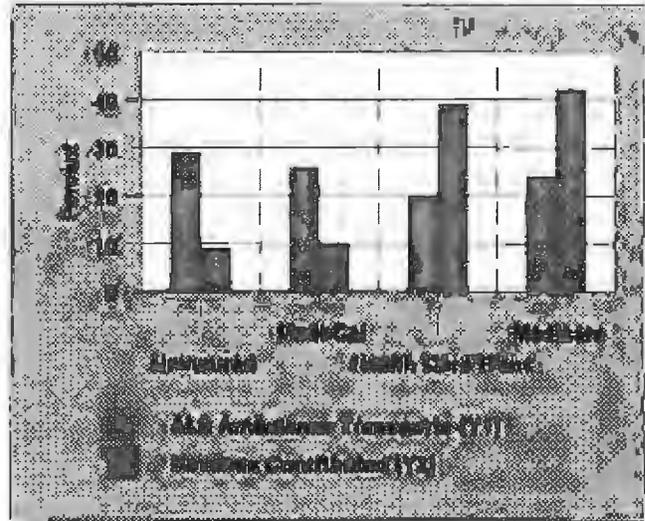
Emergency Triage system; and, 3] a data collection system, compatible with the EMS data management system (currently in development).

#### 4. ISSUES TO BE ADDRESSED/

**URGENCY OF NEED** The medical 9-1-1 system was designed to get paramedics to the scene rapidly, provide emergency medical care and transport patients to an acute care hospital regardless of the patient's geographic location or ability to pay. To do this a certain level readiness must be maintained, requiring "built-in" duplications of service along with the corresponding increased expense and relative inefficiency. In contrast, Managed Care Organizations focus on prevention, health maintenance and the optimal use of resources.

The medical 9-1-1 system has also evolved as a "safety net" for patients in need of non-emergent, social service and/or mental health care. It is this secondary role that is problematic for MCOs, since managed care emphasizes the coordination of care through specific contracted providers. When MCO members access the 9-1-1 system for non-emergent care, the MCO does not have an opportunity to provide medical services to the patient. The MCO may end up "paying twice"; once through the prearranged payment and again to the non-plan provider who rendered 911 service.

Figure 4 points out that Medical and uninsured patients constitute 55% of the users and contribute only 19% of the revenue. Medicare reimbursements are fixed and are



**Figure 4:** Percent of ALS Ambulance Transports vs. Revenue  
Generated by payor (1994)

not impacted by increased fees. In the past, while representing only 20% of the transports, health care plans contributed almost 40% of the revenue.

These third party payors have traditionally compensated for the gap between the fees charged for ambulance transport and the amount collected. The number of insured users of the EMS system has decreased through the use of nurse advice and other non-emergency referral phone services.

It is the work of the EMS Council to redesign EMS services and develop collaborative relationships to coordinate with, and compliment the needs of MCOs. Simultaneously, proposed new models must reflect adequate levels of funding to preserve access, quality and integrity of the 9-1-1 system. The EMS Redesign Project will maintain the safety-net while continuing to provide access to the most appropriate level of care for all patients.

## 5. DESCRIPTION OF THE PROJECTS

By using a more effective method of triage at the dispatch level, specific needs can be recognized and patients can be referred to the most appropriate service available. In order to evaluate the impact of changes in the dispatch process an integrated data management system must be in place. Implementation of these two projects will decrease the overall cost of the system, prevent fragmentation, maintain the 9-1-1 system for the sick and injured and provide timely access to appropriate levels of care.

### Emergency/Non-Emergency Triage

By implementing an integrated emergency and non-emergency dispatch system:

- Those with emergent problems, or those where the acuity level cannot be assessed over the phone, will continue to receive an rapid response by highly trained prehospital care providers.
- Those with non-emergent problems will be referred to a Non-Emergency Triage Center for additional screening and a definitive disposition. The NET Center may be accessed at the dispatch level or by on-scene paramedics.



Figure 5 Examples of Non-Emergency Disposition Options

Non-emergent telephone referral services

currently exist but are usually associated with health insurance plans. Our goal is to strengthen the existing dispatch system through a direct link with a designated referral service. Specific disposition options will be established for patients who are not covered by a health care plan to ensure that no one *falls through the cracks* (Figure 5).

**Data Collection** A data management system is being developed to evaluate the overall quality and cost effectiveness of prehospital emergency medical care in the community. Ongoing improvements to the EMS system must be based on objective data. This will be possible only when reliable data are available on all phases of patient care, from access to 9-1-1 through discharge from the hospital or other definite care center.

The data management system will be fully automated. Data will be entered at the point of service and downloaded into a central repository maintained by the EMS District. This will require interface with the various software systems in use by fire departments, receiving hospitals, and transport providers.

A core data set will be collected on each patient and integrated into a single case. EMS will publish regular reports based on identified system trends. In addition, system participants will benefit through access to data for specific audits and research studies. The software for the central repository must be non-proprietary and flexible, so that report formats, and data fields can be updated in response to continually evolving system needs.

**Interfacility Transfers (IFT)** The policies and monitoring processes were reviewed for compliance with current statutes, and given a good report card by this team. Hospital compliance with IFT policies is high, with very few incidents identified. Concerns regarding the inappropriate use of paramedic units on interfacility transfers were not supported by the data.

The team recommended that: 1] the IFT policies be "fine-tuned" to clarify some specific language in the law; and, 2] the processes be reviewed regarding the need to forward a copy of the IFT form to EMS.

**Trauma Team** began meeting in October 1996. No data was available at the time of this report.

**Disaster Team** had not begun to meet at the time of this report.

**6. ESTIMATED TIME-LINE FOR PROJECT COMPLETION** The overall EMS System Redesign Project is estimated to take five years (Figure 6).

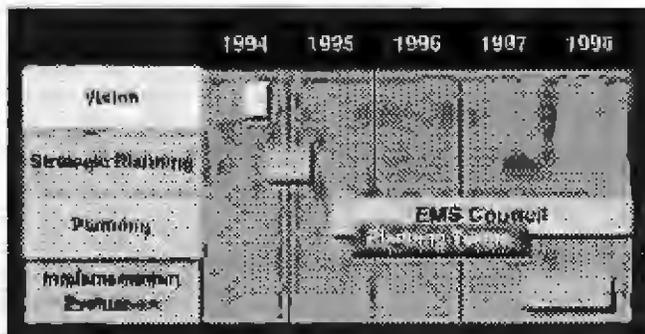
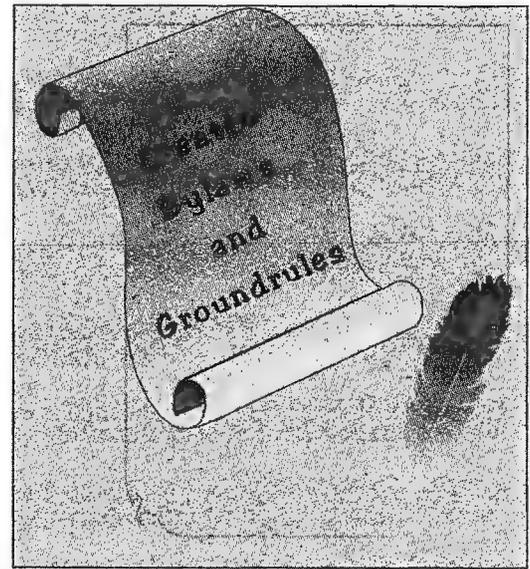


Figure 6 System Redesign time-line

- **Planning** for an Emergency/Non-Emergency Triage system and a Data Collection system has begun, and is targeted for completion in December 1997.
- **Implementation and Review** is scheduled to begin in early 1998.

**7. SUMMARY** The task of reinventing Emergency Medical Services in Alameda County is a monumental, but essential undertaking. The synthesis of these programs into a comprehensive and integrated system is not currently being done anywhere. Data driven decision-making is relatively new in the EMS industry. Based on quantitative data analysis, our goals are the continuous evaluation of the quality of care delivered and system changes.

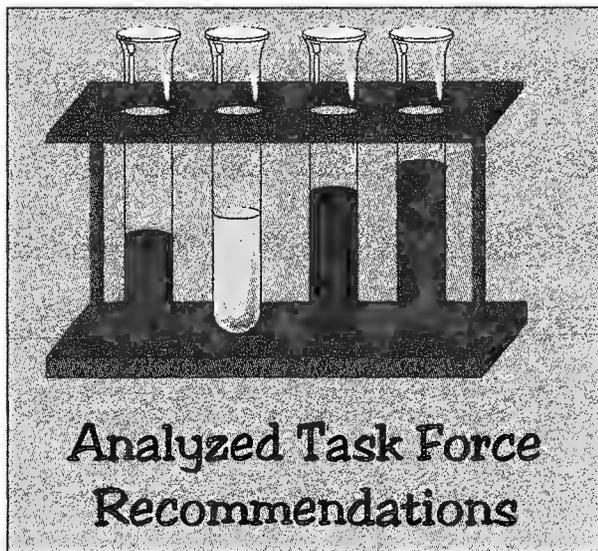
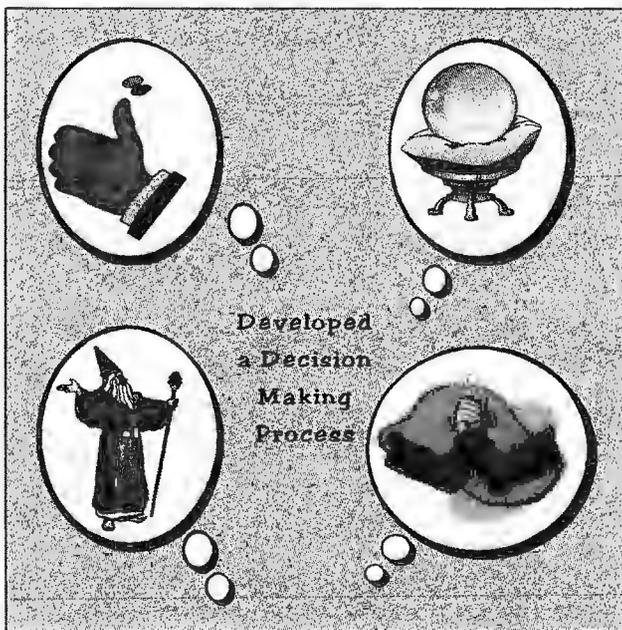
Our vision has generated a great deal of interest and support, both in our local community, managed care providers and EMS systems nationwide. Our *Task Force Report on the Future of EMS* has been cited as a visionary approach by speakers at EMS conferences, and is still being widely distributed.



# EMS Council

## ... the first year

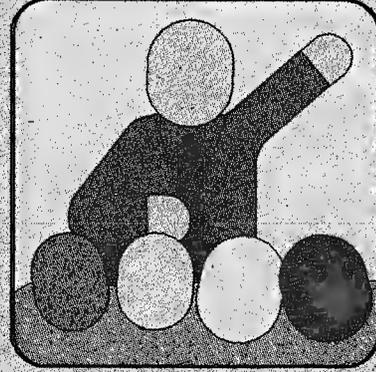
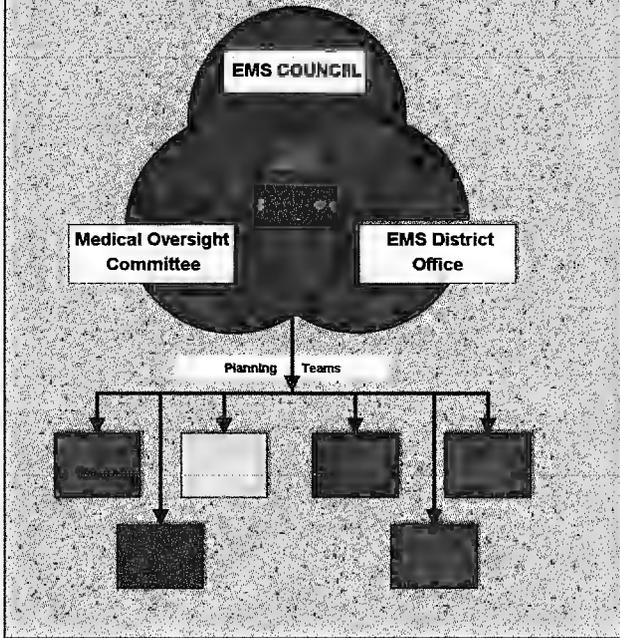
May 1995 - May 1996



44 Recommendations	Planning
13 Key Strategies	Teams

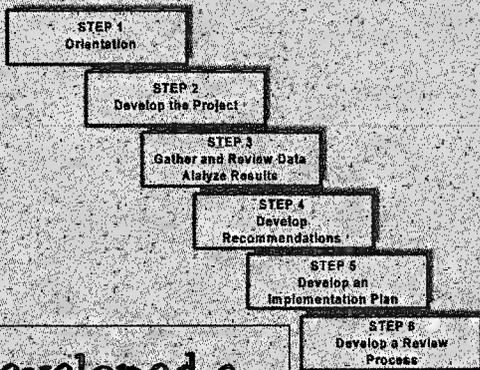
- ➡ Developed Key Strategies
- ➡ Operationalized 7 Planning Teams

## Created an Organizational Structure

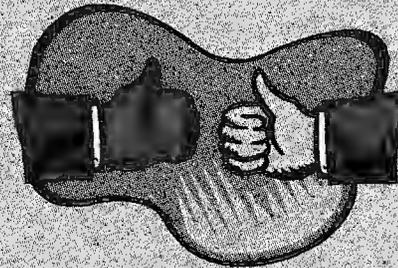


Participated in Planning Team Orientation

# EMS Council ... the first year



Developed a Planning Team Process



- Provided Leadership and Support
- Approved Team Plans

VISION

STRATEGIC PLANNING PROCESS - EMS Council

Task Force Recommendations

Key Strategy

Strategic Goal

**Public Education and Information**

- EMS must work with healthcare delivery systems and other health care systems to develop a coordinated system of public education/information. P-2
- A County-wide public education program should be developed which teaches when to call 9-1-1 and when to call a health care delivery system, based on appropriate medical standards and oversight. P-1
- EMS should reeducate EMS providers, physicians, the media, elected officials, allied agencies and insurance companies on the appropriate use of 9-1-1. P-3
- The Do-Not-Resuscitate and Grief Support programs should be maintained and patients and healthcare providers should be educated to prevent a negative financial impact on the system and depletion of resources. AT-4

**Funding and Reimbursement**

- A single transport provider be engaged. T-1
- All jurisdictions must join the EMS assessment district. Jurisdictions wishing to enhance its level of service or those who choose not to participate at the recommended level of service may incur additional costs. T-2
- Additional costs offsetting any additional system costs as a result of a jurisdiction varying from the recommended standards be passed on to those jurisdictions. E-7
- Payment options should be evaluated (fee-for-service vs. a capitated system). E-6
- Changes to transport protocols and related funding be made to insure reimbursement when paramedics are called to an emergency scene and determine that transport to an acute care facility is not necessary.
- Reimbursement for services must be a coordinated effort and designed to maintain the integrity of the whole system. E-4
- Develop a mechanism to recover payment for services rendered, including as assessment fee if the patient is not transported. T-8
- There should be no duplicate billing by multiple providers. The most efficient and cost-effective billing system should be selected and EMS should negotiate fees with all interested parties. E-5
- EMS should work with appropriate agencies to determine ways to make the financial burden of caring for the indigent more equitable. E-9

**Risk Sharing**

- A mechanism for "risk sharing" must be developed in which participating health care delivery systems, through written agreements, on-line consultation, protocol development and retrospective medical control, share new risks. E-8

KS-1: Develop a coordinated system of education and information.

KS-9: Develop recommendations for adequately funding the EMS system and appropriately reimbursing EMS system providers, which address the following:

1. System changes contained in the EMS Task Force Recommendations which the EMS Council recommends to the Board of Supervisors;
2. Reimbursement mechanism which: a) maximizes the efficiency, quality and effectiveness of the EMS system, b) appropriately reimburse the provider of the service, c) minimizes its costs to those who pay for the system.
3. The appropriate level of financial responsibility attributable to the parties which benefit from the system, including but not limited to: a) health plans, b) patients, c) tax payers, d) local governments and other government jurisdictions.
4. Establishment of a system which makes these funding and reimbursement mechanisms publicly accountable.
5. The feasibility of engaging a single transport provider.
6. Mechanisms which will encourage jurisdictions to be part of the EMS system and discourage fragmentation.

KS-14: Develop mechanisms for operational, financial and liability risk sharing among the system participants.

*Strategic goals had not been established at the time of this report.*

*Identify EMS system providers and the costs components of the EMS system. STG-9a*

*Develop a model that adequately funds the system. STG-9b*

*Strategic goals had not been established at the time of this report.*

VISION	STRATEGIC PLANNING PROCESS - Emergency Triage/	
Task Force Recommendations	Key Strategy	Strategic Goal
<p align="center"><b>Emergency Triage Centers / Emergency Telephone Triage / Level of Service</b></p> <ul style="list-style-type: none"> <li>■ Establish state-of-the-art, consolidated, centralized Emergency Triage Center(s) to avoid fragmentation. DR-1</li> <li>■ A medical oversight group should be formed. This group should represent each component of the EMS system to develop triage standards. DR-11</li> <li>■ Develop medical protocols to determine the level of service required. An on-scene assessment must remain an option if telephone triage is insufficient. DR-5</li> <li>■ All emergency triage centers must have personnel trained in call prioritization and pre-arrival instructions. A-2</li> <li>■ Participating health care delivery systems must agree to the standardized definition of "emergency" and "non-emergency" and participate in the development of the new triage criteria. DR-9</li> <li>■ Use preestablished medical protocols and priority dispatch to decide if a call is emergent and requires immediate medical response. DR-3</li> <li>■ A paramedic must be dispatched if the patient is prioritized as emergent by dispatch protocols. DR-8</li> </ul> <p align="center"><b>Public Safety Answering Points (PSAPs)</b></p> <ul style="list-style-type: none"> <li>■ EMS should work with cities and public agencies to consolidate the multiple PSAPs. A-1</li> <li>■ Coordinate PSAP consolidation with future fire dispatch consolidations. DR-2</li> </ul>	<p>KS-3: Design and implement state-of-the-art emergency triage center and dispatch centers, suitable in number and location for Alameda County.</p> <p>KS-4: Develop operating systems to identify and provide the appropriate level of service required, to include but not be limited to the following:</p> <ul style="list-style-type: none"> <li>a) Emergency Medical Dispatch <ul style="list-style-type: none"> <li>▸ Assessment protocols</li> <li>▸ Screening and priority dispatch protocols</li> <li>▸ Pre-arrival instructions</li> </ul> </li> <li>b) Personnel training</li> <li>c) Medical oversight</li> </ul> <p>KS-2: Review the rational and configuration of the current PSAPs, in relation to other models and, if appropriate, develop methods to achieve greater efficiency for this service.</p>	<p><i>STG-4: Recommend optimal Emergency Triage and Dispatch Center(s). STG-3</i></p> <p><i>Establish standards for emergency triage and dispatch that will determine the appropriate level of service.</i></p> <p><i>STG-2: Develop and design an efficient system of PSAPs in Alameda County.</i></p>

VISION	STRATEGIC PLANNING PROCESS - Interfacility Transfers	
Task Force Recommendations	Key Strategy	Strategic Goal
<p align="center"><b>Patient Disposition and Transport</b></p> <ul style="list-style-type: none"> <li>■ Emergent interfacility transfers to a higher level of care be included in the EMS system, and; requests for an ALS ambulance should be coordinated through an emergency dispatch center. T-4</li> <li>■ Managed care providers are responsible for non-emergent transfers of their members through preestablished contracts with transport providers. T-5</li> </ul>	<p>KS-8: Develop policies and procedures to manage emergent and non-emergent interfacility transfers.</p>	<p><i>STG-8a: Ensure compliance with existing statutes.</i></p> <p><i>STG-8b: Optimize use of ALS units on interfacility transfers.</i></p>



VISION	STRATEGIC PLANNING PROCESS - Data Collection/CQI	
Task Force Recommendations	Key Strategy	Strategic Goal
<p><b>Data Collection and CQI</b></p> <ul style="list-style-type: none"> <li>■ All system changes must be based on appropriate medical standards and supporting data. No element of the new system should be implemented without data supporting the decisions. E-1</li> <li>■ A statistically reliable, results-oriented data collection system must be developed to evaluate outcome data in order to provide access to system-wide outcome data. E-13</li> <li>■ EMS should contact other EMS systems with successful data collection programs to learn from them and incorporate their best ideas. E-14</li> <li>■ System participants must be responsible for providing data to the system. E-2</li> <li>■ A research committee should be established to evaluate research requests that will benefit the system. E-3</li> </ul> <p><b>System Oversight</b></p> <ul style="list-style-type: none"> <li>■ A comprehensive multi-disciplinary system must be developed and implemented to maintain and improve the quality of services provided. EMS must monitor this system and should hold system participants accountable. E-12</li> </ul>	<p>KS-12: Operationalize a data collection, analysis and management system.</p> <p>KS-13: Develop mechanisms to monitor and evaluate the system on an on-going basis so that improvements can be identified and incorporated as required.</p>	<p>STG-12a: Develop a model for supporting recommendations with data. (E-1)</p> <p>STG 12b: Develop a data collection system for systemwide outcome data (E-13)</p> <p>12c: Develop a plan for insuring that system participant provide data to the system. (E-2)</p> <p>STG-13a: Optimize Quality Assurance processes.</p> <p>STG-13b: Optimize Quality Improvement processes</p> <p>STG-13c: Optimize Quality Planning processes.</p>

VISION	STRATEGIC PLANNING PROCESS - Disaster Planning	
Task Force Recommendations	Key Strategy	Strategic Goal
<p><b>Disaster Planning</b></p> <ul style="list-style-type: none"> <li>■ A task force should be established to investigate the feasibility of developing a county-wide integrated response to a catastrophic disaster. E-11</li> <li>■ During a multi-casualty incident. Transport decisions should consider the patient's managed care provider where practical. E-10</li> </ul>	<p>KS-11: Develop an integrated county-wide catastrophic disaster plan.</p>	<p><i>Strategic goals had not been established at the time of this report</i></p>

# Alameda County Emergency Medical Services



**EMERGENCY MEDICAL SERVICES AUTHORITY**

1930 9TH STREET  
SACRAMENTO, CA 95814-7043  
(916) 322-4336 FAX: (916) 324-2875



March 25, 1999

Michael Harris  
EMS Administrator  
Alameda County EMS Agency  
1000 Broadway, Suite 5024  
Oakland, CA 94607

Dear Mr. Harris:

We have completed our review of the *Alameda County's Emergency Medical Services Plan*, and have found it to be in compliance with the *EMS System Standards and Guidelines and the EMS System Planning Guidelines*.

Our reviewers raised some concerns regarding certain sections of the plan. I have listed those sections along with the specific comment below.

SECTION	COMMENT
2.09 CPR Training	All personnel that provide emergency patient care are not trained in CPR. Alameda County EMS will implement contracts with receiving hospitals that require CPR training. A time frame needs to be identified.
4.18 Compliance	Plan should include ALS transport provider agreement or outline in policies and procedures.

These comments are for your information and may be addressed in your annual update. If you have any questions regarding the plan review, please call Michele Tripp at (916) 322-4336, extension 415.

Sincerely,

A handwritten signature in cursive script that reads "Daniel R. Smiley for".

Richard E. Watson  
Interim Director