Mountain-Valley
EMERGENCY MEDICAL SERVICES AGENCY

REQUEST FOR PROPOSALS

9-1-1 Emergency Ambulance Services with Advanced Life Support and Basic Life Support Transport

RFP# MVEMS-2018-12

The Mountain-Valley Emergency Medical Services Agency (MVEMSA) on behalf of the Stanislaus County Board of Supervisors, invites experienced and qualified organizations to submit proposals to provide 9-1-1 emergency ambulance services with advanced life support (ALS) and basic life support (BLS) transports. This RFP includes emergency medical dispatch as specified in this document for Stanislaus County's Ambulance Exclusive Operating Area (EOA) incorporating the ambulance response zone areas described as zones 1, 3, 8, B and C (Enclosure 1). MVEMSA is designated by the Stanislaus County Board of Supervisors, pursuant to California Health and Safety Code, Section 1797.200, as the County's Local EMS Agency by virtue of the County's membership in the Agency's Joint Powers Authority.

The successful Proposer will be granted a contract for exclusive market rights, as provided for in Section 1797.224 of the California Health and Safety Code, for 9-1-1 emergency ambulance services with ALS and BLS ambulance transport for an initial period of five years. The start date for the service will be January 1, 2020 at 00:01 AM, Pacific Time.

MVEMSA and Stanislaus County EMS system stakeholders are looking for a 911 emergency ALS and BLS ambulance transport partner to join their system and bring innovative solutions to enhance emergency medical systems of care focused on providing the highest quality patient care while recognizing the value of fire services as an integral part of the EMS response system. Future opportunities exist to maximize priority dispatch with a future tiered response protocol that may include a nurse triage system imbedded with a modern all-inclusive ACE Accredited emergency medical dispatch system.

To the extent achievable, the following schedule shall govern the review, evaluation and award of the proposal. MVEMSA reserves the right to modify the dates below in accordance with its review process.

Solicitation Number	**MVEMS-2018-12**	**Time**
Proposal Document Available	February 14, 2019	1:00 PM
Deadline for Written Questions	February 28, 2019	10:00 AM
Proposers Conference, Response to Questions, Amendments to RFP Released (if any)	March 8, 2019	2:00 PM
Letter of Intent Due (via email)	March 15, 2019	10:00 AM
Proposals Due	April 15, 2019	1:00 PM
Time and Place of Response Opening	April 15, 2019	2:00 PM
Oral Presentations	April 25, 2019	9:00 AM
Notice of Intent to Award	April 29, 2019	10:00 AM
Last Day to Protest	May 6, 2019	1:00 PM
Award to Provider	May 17, 2019	10:00 AM
Implementation of Service	January 1, 2020	00:01 AM
MVEMSA Mailing & Meeting Address *(for hard-copy communication, proposal submission and proposers conference location)*	Mountain-Valley EMS Agency 1101 Standiford Ave. Suite D1 Modesto, CA 95350	
Authorized Contact Person	Lance Doyle, MBA, EMT-P Executive Director Mountain-Valley EMS Agency	
Authorized Contact Person E-mail	StanRFP@mvemsa.com	

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SECTION I - INTRODUCTION AND BACKGROUND

1.1 INVITATION

The Mountain-Valley Emergency Medical Services Agency (MVEMSA) invites experienced and qualified Proposers to submit proposals to provide 9-1-1 emergency ambulance with ALS and BLS transport services including a plan for the provision of emergency medical dispatch as specified in this document for Stanislaus County's EOA zones 1, 3, 8, B and C, serving the greater Modesto, Ceres, Turlock and unincorporated areas within Stanislaus County.

The successful Proposer will be granted a contract for exclusive market rights, as provided for in Section 1797.224 of the California Health and Safety Code, for 9-1-1 emergency ALS and BLS ambulance transport services for five years. The start date for the service will be January 1, 2020, at 00:01 a.m., Pacific Time.

MVEMSA may extend the Contractor's agreement for a period of not to exceed 5 years, based on Contractor's performance in meeting and or exceeding the performance standards outlined in the Agreement over the initial term of the agreement.

1.2 SCOPE OF SERVICES

This Request for Proposal (RFP) and its provisions, attachments, addendums and exhibits constitute the RFP for the selection of a single provider of 9-1-1 emergency ambulance services with ALS and BLS transport emergency services for Stanislaus County ambulance EOA zones 1, 3, 8, B and C. The operation of 9-1-1 emergency ALS and BLS ambulance service in these zones shall be consistent with the provisions of this procurement process including staffing and performance. This procurement process includes the provision of all 9-1-1 emergency ambulance services with ALS and BLS ambulance transport and the operation of an authorized, ACE accredited emergency medical dispatch center or contracting with an existing authorized dispatch center. A dispatch center must meet the approval of MVEMSA and must be an approved emergency medical dispatch (EMD) center and 9-1-1 primary or secondary answering point.

The selected Proposer will receive exclusive market rights for all 9-1-1 emergency ambulance and all ALS and BLS ambulance transport within zones 1, 3, 8, B and C. All ALS and BLS emergency ambulance service (9-1-1 and seven-digit emergency response) transports originating in the EOA shall be referred to the Proposer, and Proposer shall provide all responses and ground transports.

The Proposers scope of service is summarized as follows:

- When a request for service is received by the Proposer at its dispatch center, an appropriately trained EMD dispatcher must answer that request promptly, must follow approved EMD dispatch procedures, offer planned pre-arrival assistance (as appropriate, per MVEMSA Medical Director) and must manage the appropriate EMS response, given the nature of the request, including timely backup ambulance coverage and the competing demands upon the system at that point and time, including, when appropriate, the notification of non-transport first responder and EMS air transport provider agencies.

- Ambulance response times must meet the response-time standards set forth herein, and every ambulance unit provided by the Proposer for emergency response must be at the ALS level. In the future, MVEMSA may establish a pilot project for a tiered BLS and ALS ambulance response system using priority dispatch protocols approved by MVEMSA Medical Director. Clinical performance must be consistent with all MVEMSA policies and approved medical standards. The conduct and appearance of Proposer's personnel must be professional and courteous at all times. Services will be provided according to the MVEMSA's Policies and Procedures as are or may be established or as developed or promulgated as part of this RFP.

- Services and care delivered must be evaluated by the Proposer's internal quality improvement program and as necessary, through the MVEMSA's quality improvement program in order to improve and maintain effective clinical performance. The Proposer, if awarded, must make an unrelenting effort to detect and

correct performance deficiencies and to continuously upgrade the performance and reliability of the entire EMS system. Clinical and response-time performance must be extremely reliable, with equipment failure and human error held to an absolute minimum through constant attention to performance, protocol, procedure, performance auditing, and prompt and definitive corrective action. This procurement process requires the highest levels of performance and reliability, and mere demonstration of effort, even diligent and well-intentioned effort, shall not substitute for performance results. The holder of an exclusive contract that fails to perform to the standards required may be found to be in breach of their agreement and promptly replaced in order to protect the public health and safety.

1.3 PROPOSED NEW EMS RESPONSE SYSTEM

In 2017 MVEMSA and the County of Stanislaus conducted an EMS Assessment and Strategic Plan (Enclosure 2). The following priorities were determined by the Stanislaus County EMS Policy Group and MVEMSA as important initiatives and will form the foundation for this RFP.

1. System focused on patient outcomes
2. Solid financial stability
3. Quality training for EMS providers
4. Partnerships with Fire First Responders

MVEMSA is focused on scientific evidence based clinical initiatives to enhance patient care. The intent of this RFP and any subsequent agreement is to implement a system dedicated to improving patient outcomes. This will require sufficient staff for performance improvement activities at all levels of patient interaction including inter-agency education and training. MVEMSA anticipates that the proposer will embrace data analytic programs such as FirstWatch surveillance platform, will be an active participant in the Cardiac Arrest Registry for Enhanced Survival CARES program, and will ensure standards identified in the EMS Authority's Core Measures program are adopted including any subsequent quality improvement initiative that improves patient outcomes.

To achieve a high performing EMS program, the system must be financially sustainable over the term of the agreement and subsequent extensions. MVEMSA intends to work closely with the awarded proposer and stakeholders to provide adequate oversight and monitoring utilizing the FirstWatch surveillance platform for EMS providers and Fire services for response time requirements. Any recommendations identified as part of this RFP must be paid for by Proposer.

Fire services are recognized as a valuable contributor to the EMS system. This RFP intends to outline opportunities to partner with fire services for their ability to respond and begin care and treatment of patients at the scene of emergency medical calls. The fire departments provide a combination of ALS, BLS and in the case of volunteer departments, emergency medical responder (EMR/First Aid) services. This RFP anticipates the proposer contracting with the fire departments in Stanislaus County and recognizing the value of the fire service in the delivery system. The savings in ambulance response times may go toward fire department reimbursement for these first response services. A chart of response times located in Enclosure 3, defines proposed new response time requirements. As part of any agreement, it is anticipated that the fire services will complete a patient record (i.e. trip ticket) or ePCR on all medical responses and be held to a response time compliance standard.

1.4 DESCRIPTION OF STANISLAUS COUNTY

Stanislaus County is located in the Central Valley of California with the City of Modesto as the County Seat. The County's abundant flatland and nearby sources of water (i.e., the San Joaquin River, Stanislaus River and Tuolumne River) support the County's agricultural economy. Stanislaus County is a mix of metropolitan and rural areas, covering 1,495 square miles of land.

There are nine incorporated cities. Five of the cities, Ceres, Modesto, Newman, Patterson and Turlock, administer fire agencies; the remaining cities and the unincorporated areas of the County are supported by Fire Protection Districts.

The following Table lists the populations of the cities, towns, communities, and the remaining unincorporated area of Stanislaus County as reported by the State of California Department of Finance as of May 1, 2018: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/

Stanislaus County Population Centers

Cities/Communities	Population
Ceres	47,754
Hughson	7,331
Modesto	215,080
Newman	11,165
Oakdale	22,711
Patterson	22,730
Riverbank	24,610
Turlock	72,879
Waterford	8,906
Balance of County	114,891
Total	**548,057**

According to the most recent demographic information available from the State of California Department of Finance for the 2017-year, Stanislaus County has a population of 548,057 (representing 1.39% of California 's population). Approximately 64% of the population of the county is between the ages of 18 and 65 years old. Approximately 79% of the county's population resides within the incorporated cities, with the remainder in the unincorporated area and townships.

There are five hospitals serving the County; two Tenet Health affiliates located in the cities of Modesto and Turlock; a Sutter Health affiliate located in the city of Modesto; a Kaiser Permanente affiliate located in the city of Modesto; and a hospital district located in the city of Oakdale. Of these five hospitals, two are designated as Level II Trauma Centers; three are designated as STEMI Receiving Centers; and three are designated as Primary Stroke Centers

1.5 DESCRIPTION OF THE EMS SYSTEM

MVEMSA is a Joint Powers Authority formed by the California Counties of Alpine, Amador, Calaveras, Mariposa and Stanislaus. MVEMSA is responsible for the planning, implementation, evaluation and regulation of the EMS system for each of its member counties.

Stanislaus County presently has a grandfather rights for Exclusive Operating Areas for ground ambulance services granted by the state EMS Authority. The largest contracting ambulance service, American Medical Response - West (AMR) provides emergency medical and ambulance services for the metropolitan area. There are three healthcare district ambulances serving the rural areas of the County: Westside Health Care District, Del Puerto Health Care District, and Oak Valley Hospital District. A fifth provider, ProTransport-1, is a private entity serving the remaining rural areas outside of the healthcare districts.

The County is divided into eight ambulance response zones, most of which are Exclusive Operating Areas. MVEMSA has elected to incorporate non-exclusive Zone B and C into the current exclusive EOA thereby creating a new exclusive EOA which requires a competitive process to award a new agreement. The new exclusive areas for this RFP are Zones 1, 3, 8, B and C. The remaining ambulance Zones are not part of this RFP and have existing ambulance providers through special districts.

Currently, all emergency ambulance dispatch is provided by Valley Regional Emergency Communications Center (VRECC), a division of American Medical Response. Fire first response agencies are dispatched by SR9-1-1, the City

of Ceres, and the City of Turlock. There are two air ambulance providers based in the county, PHI Air Medical and CALSTAR. Air mutual aid services are provided by REACH and Air Methods. Augmenting the EMS system are 16 fire departments, both paid and volunteer.

All emergency ambulances that respond to 911 calls are staffed with one paramedic and one EMT. The fire departments (both volunteer and paid) are predominantly staffed with BLS with the exception of Modesto Fire Department (MFD), Stanislaus Consolidated Fire Protection District (SCFPD), and Patterson City Fire Department, which provides some dedicated ALS (paramedic) engine companies.

Modesto Fire Department (MFD) has been providing ALS first response since 2001 and staffs three (3) ALS stations and seven (7) BLS staffed stations that provide 24/7/365 response. American Medical Response (AMR), entered into an ALS First Responder pilot program with Modesto City Fire in 2003, to provide equipment and medications to support their ALS program. Stanislaus Consolidated Fire Protection District has seven (7) BLS stations in the communities of Waterford, Empire, Modesto, and LaGrange and one (1) ALS station located in Riverbank. The Fire District is also contracted by the City of Oakdale and the Oakdale Rural Fire Protection District to provide all aspects of Fire Protection services to the constituents of the greater Oakdale area, which also includes the communities of Valley Home and Knights Ferry within North Eastern Stanislaus County. The Proposer shall enter into agreements with all fire departments responding within their zones.

In 2015 MVEMSA, working with AMR began a Community Paramedic pilot program through the State EMS Authority. This program focuses on behavioral health patients and alternative destinations. The successful Proposer is expected to continue this important Community Paramedic program as per MVEMSA policy.

The current ambulance contract period was originally May 1, 2013 through April 30, 2018. An approved extension was executed with each provider for the period of May 1, 2018 through November 1, 2019.

1.6 MEDICAL CONTROL

The Stanislaus County EMS system utilizes both on-line and off-line medical control. The County has five base hospitals providing medical direction. Stanislaus County operates primarily on standing orders with on-line medical control reserved for a few ALS interventions and physician consultation when required or needed.

MVEMSA contracts with a physician, with substantial experience in the practice of emergency medicine, 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).

1.7 ADVISORY COMMITTEES

- Stanislaus County Emergency Medical Services Committee (EMSC)
- System Status Committee
- Local Quality Improvement Group (LQIG)
- Trauma Advisory Committee (TAC)
- Regional Stroke and STEMI Committee

1.8 EMS PARTICIPANTS

A. Public Service Answering Points (PSAP) and Dispatch Centers

- Stanislaus Regional 9-1-1
- Valley Regional Emergency Communication Center (VRECC)

B. Fire Service Agencies

- Burbank Paradise Fire Department
- Ceres Fire Department
- Denair Fire Department
- Hughson Fire Protection District
- Keyes Fire District
- Modesto Fire Department

- Mountain View Fire Department
- Newman Fire Department
- Patterson City Fire Department
- Salida Fire Protection District
- Stanislaus Consolidated Fire Protection District
- Turlock Rural Fire District
- Turlock Fire Department
- West Stanislaus Fire District
- Woodland Avenue Fire District
- Westport Fire Protection District

C. Current Emergency and Non-Emergency Ground Ambulance Providers

- American Medical Response
- Oak Valley Hospital District Ambulance
- Patterson District Ambulance
- ProTransport-1
- Westside Ambulance

E. Current Non-Emergency Ground Ambulance (IFT) Providers

- NorCal Ambulance
- Sacramento Valley Ambulance
- Escalon Community Ambulance

D. Air Ambulance Providers

- CALSTAR Air Medical Services
- PHI Air Medical

E. Hospitals

- Doctors Medical Center
- Emanuel Medical Center
- Kaiser Hospital
- Modesto Memorial Medical Center
- Oak Valley Hospital

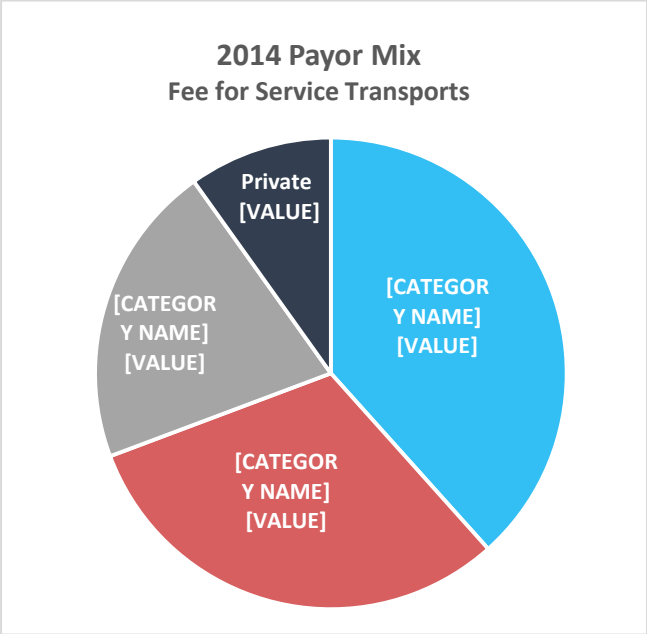
1.9 ESTIMATED EMS RESOURCES

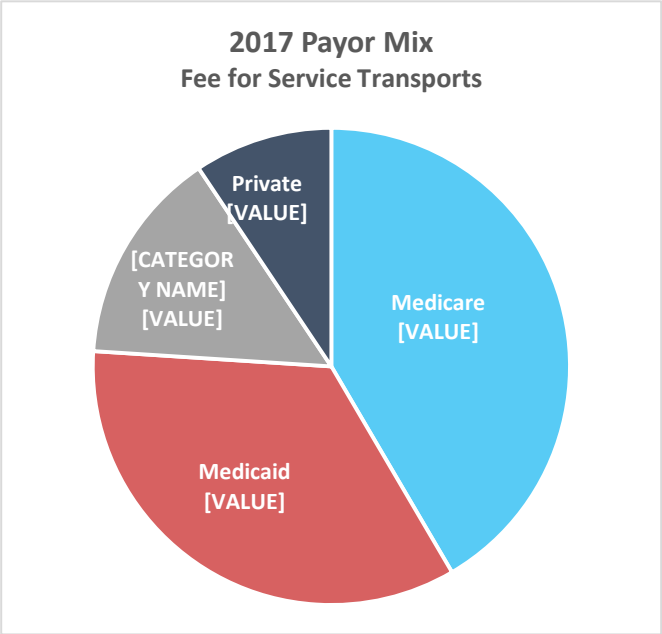
Historical collection rates, average charges, and transports.

Year	Collection Rate	Avg. Charge per Transport	Transports
FY 2014	16.75%	$2,818.38	48,597
FY 2015	16.545%	$3,107.05	49,838
FY 2016	16.15%	$3,230.15	49,540
FY 2017	15.97%	$3,253.59	52,558

Payor mix for 2014 and 2017

2014		2017	
Medicare	38.10%	Medicare	41.60%
Medicaid	30.70%	Medicaid	34.50%
Commercial	20.70%	Commercial	14.60%
Private Pay	9.8%	Private Pay	9.4%





SECTION II - INSTRUCTIONS FOR PROPOSERS

2.1 PRE-SUBMITTAL ACTIVITIES

A. Registration

Response must be received in the MVEMSA on or before 1:00 p.m. on date specified in this Request for Proposal. The time specified will be as defined by the Agency's official system time in the office of MVEMSA, 1101 Standiford Ave., Suite D1, Modesto, CA 95350. It is the sole responsibility of the submitting Proposer to ensure that its response is received before the submission deadline.

Response must be labeled as:
Mountain-Valley EMS Agency Request for Proposal # MVEMS-2018-2

B. Questions, Comments, Exceptions

Submit questions and/or comments including notifications of apparent errors, to:

Mountain-Valley EMS Agency
1101 Standiford Ave., Suite D1 Modesto, CA 95350
Attention: Lance Doyle, Executive Director
Email: StanRFP@mvemsa.com

(1) Request for changes

(a) If requesting changes to a part of this solicitation, identify the specific words or phrases and the sections and paragraphs in which they occur. State the reason for each request and provide alternative suggested language. Request for Exceptions to RFP requirements and Process Substitutions should be submitted by proposer no later than the proposers conference. Requests submitted after the deadline will not be accepted. MVEMSA's consideration of a suggestion does not imply acceptance. If sufficient proposals are received with no requested changes, the MVEMSA may reject those requesting changes.

(2) Request for Substitution of Specified Equipment, Material, or Process

(a) Unless otherwise stated in the solicitation, references to items or processes by trade names, models or catalog numbers are to be regarded as establishing a standard of quality and not construed as limiting competition.

(b) If requesting a substitution for a required item, submit requests by the Deadline for Questions and Comments. Furnish all necessary information required for the MVEMSA, in its sole judgment, to make a determination as to the comparative quality and suitability of any suggested alternatives. The MVEMSA's decision will be final. If alternatives are accepted, the MVEMSA will issue an addendum to the solicitation.

C. Revisions to the Solicitation

MVEMSA may cancel, revise, or reissue this solicitation, in whole or in part when the cancellation is in the best interest of MVEMSA or for any other reason including, but not limited to:

- Inadequate, ambiguous, or otherwise deficient specifications were cited in the RFP.
- The services are no longer required.
- All otherwise acceptable proposals received are at unreasonable prices.
- The proposals were not independently arrived at in open competition, were collusive, or were submitted in bad faith.
- No proposal is received which meets the minimum requirements of the RFP.
- The awarding agency determines after analysis of the proposals that its needs can be satisfied by a less expensive method.

Revisions will be posted as addenda on the MVEMSA website, http://mvemsa.org/resources3/documents. No other revision of this solicitation will be valid. Proposer's are responsible for ensuring that they have received all addenda from the MVEMSA website.

D. Contact with County Employees

Violation of the following prohibitions may result in a Proposer being found non-responsible, barred from participating in this or future procurements, and becoming subject to other legal penalties.

(1) As of the issuance date of this RFP and continuing until it is canceled, or an award is made, no Proposer or person acting on behalf of a prospective Proposer may discuss any matter relating to the RFP with any officer, agent, or employee of the MVEMSA, Stanislaus County, the Authorized Contact Person, or as outlined in the evaluation or protest procedures.

(2) Proposers may not agree to pay any consideration to any company or person to conduct lobbying activities to influence the award of a contract by the County or MVEMSA, nor engage in behavior that may be reasonably construed by the public as having the effect or intent of influencing the award of a contract. Nothing in this section precludes a proposer from engaging the services of a company or person to assist in the development of the response to the RFP.

E. Pre-proposal conference and site visits

If a pre-proposal conference or site visit is scheduled, answers to questions raised prior to and at the events will be posted on MVEMSA website.

2.2 PROPOSAL CONTENT REQUIREMENTS

A. Proposal Format

Number all pages of the proposal. Label and order each section as follow:

(1) Cover letter - no longer than one page, signed by an individual authorized to execute legal documents for the Proposer, identifying the materials submitted longer than one page, signed by an individual authorized to execute legal documents for the proposer, identifying the materials submitted.

(2) Authorized contacts - identify the name and title the person to contact regarding the proposal, as well as all other individuals authorized to represent the organization in contract negotiations.

(3) Table of Contents, listing all major topics and their respective page numbers.

(4) Technical Proposal

(5) Supplementary Documents, as requested

(6) Price Proposal

B. Technical Proposal Contents

(1) Explain responses so as to be understood by people unfamiliar with industry jargon. Use drawings, diagrams, schematics and illustrations as needed, but do not simply refer readers to an exhibit or other section of the proposal in lieu of a complete response.

(2) Addressing each requirement outlined in this solicitation in the order presented, describe how the requested goods and services will be provided.

(3) Include a project schedule with milestones, deliverables, dates, and a project management plan.

(4) Specify any needs for physical space or equipment that the County must provide during the engagement.

(5) Explain how work, equipment, and knowledge will be transitioned to the County or a new vendor at the end of the contract period.

C. Supplementary Documents

If additional documents and materials are appropriate, or have been requested by the County, provide in the following order as applicable:

(1) Minimum Qualifications, using County forms if provided.

(2) Organizational Capacity and Experience, describing work of a similar nature undertaken for a similar entity.

(3) Financial Documents.

(4) Samples, drawings, illustrations and related items.

(5) Attachments, certifications, and forms executed as applicable.

D. Price Proposal

(1) Place all cost and pricing data in a separate sealed envelope clearly marked "PRICE PROPOSAL"

(2) If forms and templates are provided for the Price Proposal, use them without modification. Failure to use the forms or templates provided, or modification of them, may result in rejection of the entire proposal.

(3) Include prices for the base period of service and if applicable, for each additional year including option years.

(4) Unless otherwise indicated, when applicable, in the price of an item, include all licenses required for operation, as well as upgrades and revisions to software over the term.

2.3 PROPOSAL SUBMISSION

A. Submit proposals as directed below.

(1) Submissions

Include the Proposer name and the RFP title and number in each filename. Submit proposals to MVEMSA attention: Lance Doyle, Executive Director, Mountain-Valley EMS Agency 1101 Standiford Ave., Suite D1 Modesto, CA 95350. All proposals received by MVEMSA will be date and time stamped and a number will be assigned. This will document the official submission time. MVEMSA will not be responsible for and may not accept proposals that are late.

(a) Nine hard copies are required along with an electronic copy on a jump drive.

(b) Submit proposals with all required documents in a sealed package to the designated County Mailing Address. All proposals received will be kept unopened and secured until officially accepted by the MVEMSA. Within the package, submit the Technical Proposal and the Price Proposal in separate envelopes. Clearly mark the following information on the outside of the package:

- Proposer name
- Return address
- Solicitation title
- Solicitation number

(c) Proposals will remain in effect for one year following submission to MVEMSA.

(2) Conflicts between Certain Requirements

Prior to the submission deadlines and solely relating to a determination of the timeliness of questions, comments, and proposal submissions, information displayed on the MVEMSA website will take precedence in the event of a discrepancy between that information and the information within the solicitation documents. For all other discrepancies, the information in the solicitation documents will take precedence.

(3) Hand--written responses will be rejected with the exception that signatures may be hand-written.

B. Errors in Proposals

MVEMSA will not be liable for any errors in proposals. Proposals may be rejected as unresponsive if they are incomplete, are missing pages or information, or cannot be opened for any reason. MVEMSA may waive minor irregularities and request Proposer cure such irregularity, but such waiver will not modify any remaining RFP requirements. A minor irregularity means that the defect is immaterial or inconsequential as to price, quantity, quality, or delivery when contrasted with the total costs or scope of the services being procured.

2.4 PROPOSER CERTIFICATIONS

By submitting a proposal, each proposer certifies under penalty of perjury that:

- Its submission is not the result of collusion or any other activity that would tend to directly or indirectly influence the selection process; and
- Proposer is able or will be able to comply with all requirements of this solicitation at the time of contract award; and
- Proposer certifies all statements in the response are true; and
- Neither Proposer, its employees, nor any affiliated firm providing the requested goods and services has prepared plans, specifications, terms or requirements for this solicitation, or has any other actual or potential conflict of interest; and
- Proposer is aware of the provisions of Section 1090 et seq. and Section 87100 et seq. of the California Government Code relating to conflict of interest of public officers and employees and is unaware of any financial or economic interest of any MVEMSA officer or employee relating to this solicitation.

2.5 WITHDRAWAL OF PROPOSALS

Proposals may be withdrawn, modified, or replaced and resubmitted as long as submittal is prior to the Due Date and Time. If a Proposer chooses to withdraw their proposal after the Due Date and Time it will be excluded from consideration.

2.6 NO COMMITMENT

Neither submission of a proposal nor the MVEMSA's receipt of proposal materials confers any right to the Proposer nor any obligation on the MVEMSA. This RFP does not commit the MVEMSA to award a contract, nor will the MVEMSA defray any costs incurred in preparing proposals or participating in any presentations or negotiation.

2.7 ESTIMATED QUALITIES

If the solicitation results in an indefinite quantity or a requirements Agreement, the goods and services requested by MVEMSA may be less than the maximum value of the Agreement and there is no guarantee, either expressed or implied, as to the actual quantity of goods and services that will be authorized under the Agreement. For example, the MVEMSA cannot guarantee a specific number of ambulance transports pertaining to this RFP.

2.8 SELECTION

At any time in the evaluation process, the MVEMSA may request clarifications from Proposers.

A. Determination of Responsiveness

A proposal conforms to the instructions set forth in this solicitation and any modifications to it. Non-responsive proposals will be rejected. MVEMSA, in its sole discretion, may waive non-consequential deviations if the deviations cannot have provided an advantage over other Proposers.

B. Proposal Evaluation

The MVEMSA will establish a non-biased Proposal Review Committee (PRC) which will evaluate responsive proposals based on the criteria specified in the solicitation. The committee may then recommend one or more top-ranked Proposers for final negotiation of contract terms or may invite one or more Proposers for oral presentations and demonstrations. After evaluating presentations, the committee may recommend one or more top-ranked Proposers for final contract term.

C. Determination of Responsibility

MVEMSA will make a determination of the responsibility of any Proposer under consideration for award, taking into consideration matters such as the Proposer's compliance with public policy and laws, past performance, fiscal responsibility, financial and technical resources, capacity, and experience to satisfactorily carry out its responsibilities. MVEMSA will notify any Proposer in writing what was found non-responsive and allow the finding to be contested.

2.9 CONTRACT AWARD

A. Notice of Intent to Award

Once a decision has been made to award a contract to one or more Proposers, MVEMSA will post a Notice of Intent to Award, notifying the remaining Proposers of their non-selection.

Contract negotiations are neither an offer nor an implicit guarantee that a contract will be executed. Award, if made, will be to the responsive, responsible Proposer offering the overall best value to the County for the services and goods described in this solicitation, or as applicable, for a specific portion of the services and goods described. Any agreement reached will be memorialized in a formal agreement using the attached Standard Agreement template.

B. Commencement of Performance

After all parties have signed the Agreement, MVEMSA will notify the Proposer and performance may proceed. Prior to MVEMSA execution of the Agreement, no MVEMSA employee may authorize work. Any work performed prior to that time may be uncompensated.

2.10 PROTESTS

Protests that do not comply with the protest procedures outlined below will be rejected.

A. Protest Eligibility, Format, and Address

(1) Objections to RFP requirements may be filed prior to January 4, 2019. Objections regarding, the content of any addenda must be filed within 5 days of the addenda being issued.

(2) Protests regarding the procurement process or the notice of intent to award must be filed prior to contract award.

(3) MVEMSA will only review protests submitted by an interested party, defined as an actual or prospective Proposer whose direct economic interest could be affected by MVEMSA's conduct of the solicitation.

(4) Submit protests to Lance Doyle, Executive Director (StanRFP@mvemsa.com), Mountain-Valley EMS Agency 1101 Standiford Ave., Suite D1 Modesto, CA 95350.

(5) Protest not resolved at this level maybe appealed to a higher-level authority by going to the MVEMSA Board of Director member unaffiliated with Stanislaus County.

B. Protest Deadlines

Submit protests with any supplemental materials by 5 p.m. PST, as appropriate, on the deadlines set forth on page 2 of this RFP. The date of filing is the date MVEMSA receives the protest, unless received after 5 p.m. PST, or on other than a Business Day, in which case the date of filing will be the next Business Day.

Failure to file by the relevant deadline constitutes a waiver of any protest on those grounds. Supplemental materials filed after the relevant deadline may be rejected by MVEMSA.

(1) If relating to the content of the solicitation or to addenda, file within five Business Days after the date MVEMSA releases the solicitation or addendum.

(2) If relating to any notice of non-responsiveness or non-responsibility, file within five Business Days after MVEMSA issues such notice.

(3) If relating to intent to award, file within five Business Days after MVEMSA issues notice of Intent to Award. No protests will be accepted once actual award has been made.

C. Protest Contents

(1) The letter of protest must include all of the following elements:

(a) Detailed grounds for the protest, fully supported with technical data, test results, documentary evidence, names of witnesses, and other pertinent information related to the subject being protested; and

(b) The law, rule, regulation, ordinance, provision or policy upon which the protest is based, with an explanation of the violation.

(2) Protests that simply disagree with decisions of the Evaluation Committee will be rejected.

D. Reply to Protest

MVEMSA will send a written response to the protesting party and to any other party named in the protest.

E. No Stay of Procurement Action during Protest

Nothing in these protest requirements will prevent MVEMSA from proceeding with negotiations or awarding a purchase order or contract while a protest is pending.

2.11 PUBLIC RECORDS

A. General

(1) All proposals, protests, and information submitted in response to this solicitation will become the property of MVEMSA and will be considered public records. As such, they may be subject to public review.

(2) Any contract arising from this RFP will be a public record.

(3) Submission of any materials in response to this RFP constitutes:

(a) Consent to MVEMSA release of such materials under the Public Records Act without notice to the person or entity submitting the materials; and

(b) Waiver of all claims against MVEMSA and/or its officers, agents, or employees that MVEMSA has violated a Proposer's right to privacy, disclosed trade secrets, or caused any damage by allowing the proposal or materials to be inspected; and

(c) Agreement to indemnify and hold harmless MVEMSA for release of such information under the Public Records Act; and

(d) Acknowledgement that MVEMSA will not assert any privileges that may exist on behalf of the person or entity submitting the materials.

(4) MVEMSA reserves the right to withhold any materials otherwise subject to the Public Records Act during the pendency of negotiation of the contract pursuant to *Michaelis, Montanari & Johnson v. The Superior Court of Los Angeles* (2006) 38 Cal.4th 1065.

B. Confidential Information

(1) MVEMSA is not seeking proprietary information and will not assert any privileges that may exist on behalf of the Proposer. Proposers are responsible for asserting any applicable privileges or reasons why a document should not be produced in response to a public record request.

(2) If submitting information protected from disclosure as a trade secret or any other basis, identify each page of such material subject to protection as "CONFIDENTIAL". If requested material has been designated as confidential, MVEMSA will attempt to inform the Proposer of the public records request in a timely manner to permit assertion of any applicable privileges.

(3) Failure to seek a court order protecting information from disclosure within ten days of MVEMSA's notice of a request to the Proposer will be deemed agreement to disclosure of the information and the Proposer agrees to indemnify and hold MVEMSA, its employees, officers and JPA Board of Directors harmless for release of such information.

(4) Requests to treat an entire proposal as confidential will be rejected and deemed agreement to MVEMSA disclosure of the entire proposal and the Proposer agrees to indemnify and hold MVEMSA its employees, officers and JPA Board of Directors harmless for release of any information requested.

(5) Trade secrets will only be considered confidential if claimed to be a trade secret when submitted to MVEMSA, marked as confidential, and compliant with Government Code Section 6254.7.

SECTION III - QUALIFICATIONS, EXPERIENCE, AND EVALUATION CRITERIA

3.1 MINIMUM QUALIFICATIONS

Proposals not meeting minimum qualifications will be disqualified. To qualify for evaluation by a Proposal Review Committee (PRC), a Proposer must meet the following minimum qualifications:

A. Experience:

(1) Five years continuously engaged in providing 911 ALS EMS transport services as required by a high-performance contract in the United States to a primary 911 Ambulance services provider at the ALS level for an operating area of population greater than 350,000, with size, geographical spread, population densities, and call volume appropriately similar to those of Stanislaus County.

(2) If the Proposer is organized as a legally formed partnership or limited liability company, each partner entity participating in the partnership or Limited Liability Company must have existed and continuously provided Prehospital ALS Emergency Medical Services, for a minimum of five years in the United States.

B. Financial Condition

(1) Financial Stability

Proposer shall provide evidence that clearly documents the financial history of the organization including financial interests in any other related business and demonstrates that it has the financial capability to manage the expansion (including implementation and start-up costs) necessitated by the award of the contract.

(a) Provide externally audited financial statements for the most recent five years. If the Proposer organization is a subsidiary of another corporation or is a dependent governmental entity, Proposer shall provide externally audited financial statements for the parent entity for the most recent five years. If financial statements of a parent entity are submitted, the Proposer organization's financial statements must either be separately shown as a part of those financial statements or submitted separately in the same format and for the same period. Such a parent entity shall be required to guarantee the performance of the Proposer. Failure to submit full financial statements may cause disqualification from this RFP process.

C. Demonstration of Additional Proposer Qualifications

Proposers must respond to each of the following additional criteria and demonstrate their qualifications. Proposers meeting the above Proposer Minimum Qualifications will be forwarded to the PRC for evaluation. Each response to the following additional Proposer qualifications will be evaluated and scored by on a pass/fail basis. Supporting documentation must be provided for the response to each requirement. For each criterion, required documentation is noted, or examples of supporting documentation have been identified.

Please note that all proposals will be public record. Scoring will be based on the content in the response, and the documentation provided in support of responses. Failure to provide supporting documentation or inadequate documentation may result in a failing score. Proposals receiving a failing score for any of the following criteria may be disqualified from further evaluation.

(1) Legal History

This item may be submitted in an electronic format, such as compact disc or USB drive. Proposer shall document its litigation history for the past five (5) years. Proposer may be disqualified if a final judgment was issued against Proposer or any affiliated organization for breach of contract or failure to competently and adequately perform ambulance or other emergency services. The proposal must include a listing of all resolved or ongoing litigation involving the Proposer's organization, including a narrative describing the claim or case and the resolution or status for the past five years. This listing shall include litigation brought against the Proposer's organization or affiliated organizations and any

litigation initiated by the Proposer's organization or affiliated organizations against any governmental entity or ambulance provider. For purposes of this litigation history, "affiliated organization" means any organization owned by Proposer, any organization for which Proposer is a successor entity, any organization that either merged with Proposer or divested from Proposer, or any organization which is a parent or subsidiary of Proposer. The term "litigation" includes disputes resolved by mediation or arbitration

(a) Documented proof of availability to measure and achieve compliance with fractile response time performance.

(b) Documentation that Proposer is legally authorized or eligible to do business in the State of California and or the ability to obtain such authorization prior to agreement start date.

(c) Documentation that Proposer is free of commitments that would impact Proposer's ability to obtain lines of credit, guarantor letters, or otherwise negatively affect the company's ability to perform the contract. (No existing obligations that might impact ability to provide services under the terms of this agreement).

(d) Proposer must submit a list or table of every 911 ALS EMS transport contract the Proposer currently serves and every contract it has served in the five years prior to submission of its proposal. Indicate:

(i) Type and level of service provided including the population served.

(ii) The contract period.

(iii) Whether the Proposer held exclusive market rights for emergency ambulance service under the contract.

(iv) Whether the contract was competitively awarded.

(v) The name, address, contact person and telephone number for the contract for reference purposes.

(vi) Gross revenue of services provided.

(vii) The name of the contracting agency.

(viii) The remaining term of the contract and the circumstances under which any contract was terminated, prior to expiration, the cause of failure or refusal to complete and any allegations of deficient service, if applicable.

3.2 ORGANIZATIONAL CAPACITY AND EXPERIENCE

Provide all the following regarding:

A. Organizational Capacity:

(1) Provide a description of the local management (including clinical management) team, roles and responsibilities and their backgrounds; include biographical information and attach resumes. MVEMSA reserves the right to approve or reject proposed local management.

(2) Titles and names of staff members who will be on the team responsible for the service, as well as the expected availability of the various individuals. Include the resume of a dedicated, full-time manager.

(3) All applicable licenses and license numbers relevant to delivery of services; the names of the holders of those licenses, and the names of the agencies issuing the licenses, excluding field personnel.

(4) The selected Proposer must self-perform the majority of 911 ambulance services and must directly employ all key personnel as well as EMT's and paramedics as described in this RFP. However, the

selected Proposer may subcontract ancillary services, such as billing; professional, legal, and advisory services; and fleet maintenance.

B. Experience

(1) Number of years the proposer has been in business under the present business name, as well as related business names.

(2) The number of years providing services as a 911 ALS provider.

(3) Details of any refusals to complete a contract.

(4) Whether the responder holds a controlling interest in any other organization or is owned or controlled by any other organization.

3.3 REFERENCES

A. Type and Format

Append five letters of reference specifically related to the organization's current and existing:

(1) Agreements and contracts

(2) Clinical performance as an ALS contractor

(3) Quality assurance/improvement program effectiveness

(4) Response-time performance

(5) Vehicle maintenance and replacement program

(6) Relationships with first responder agencies

(7) Organization's local and/or national reputation as a contractor of ALS service

(8) Relationship with labor organizations.

B. Letters of reference must include the following:

(1) Signed and dated by the author.

(2) Direct or indirect business or financial relationship between the author or organization and the Proposer.

(3) The extent to which the author/organization is familiar with the Proposer and the Proposer's work/performance. Letters of reference may not be supplied by or considered from Stanislaus County or MVEMSA staff members.

3.4 EVALUATION CRITERIA

Proposals will be evaluated in accordance with the evaluation criteria in Enclosure 4.

SECTION IV - INSURANCE

Provide evidence of insurance for each of the checked categories

☐	**General Liability** (Including operations, products and completed operations, as applicable.)	**$5,000,000** - per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, the general aggregate limit either must apply separately to this service or must be twice the required occurrence limit.
☐	**Automobile Liability**	**$10,000,000** – Aggregate $5,000,000 Motor Vehicle Liability Insurance per accident for bodily injury and property damage.
☐	**Workers' Compensation**	**As required by the State of California**
☐	**Employers' Liability**	**$1,000,000** - each accident, **$1,000,000** policy limit bodily injury by disease, **$1,000,000** each employee bodily injury by disease.
☐	**Professional Liability** (Errors and Omissions)	**$5,000,000** - per occurrence.
☐	**Cyber Liability**	**$5,000,000** per occurrence for Privacy and Network Security, **$1,000,000** per occurrence for Technology Errors and Omissions To be carried at all times during the term of the Contract and for three years thereafter.

4.1 SPECIAL INSURANCE REQUIREMENTS - CYBER LIABILITY

If the work involves services or goods related to computers, networks, systems, storage, or access to EMS Agency data or to any data that may, alone or in combination with other data, become Confidential Information or Personally Identifiable Information, the following insurance is required.

A. Privacy and Network Security

During the term of the Contract and for three years thereafter, maintain coverage for liability and remediation arising out of unauthorized use of or access to MVEMSA data or software within Contractor's network or control. Provide coverage for liability claims, computer theft, extortion, network breach, service denial, introduction of malicious code, loss of Confidential Information, or any unintentional act, error, or omission made by users of Contractor's electronic data or systems while providing services to MVEMSA. The insurance policy must include coverage for regulatory and PCI fines and penalties, crisis management expenses, and business interruption. No exclusion/restriction for unencrypted portable devices/media may be on the policy.

B. Technology Errors and Omissions

During the term of the Contract and for three years thereafter, maintain coverage for liabilities arising from errors, omissions, or negligent acts in rendering or failing to render computer or information technology services and technology products, including at a minimum, coverage for systems analysis, design, development, integration, modification, maintenance, repair, management, or outsourcing any of the foregoing.

4.2 PERFORMANCE SECURITY

The Proposer must be able to obtain and maintain in full force and effect, throughout the term of the Agreement a performance guarantee equivalent to three (3) months of operating expenses in the form of cash or letter of credit or performance security bond. Proposer shall describe how they meet this requirement, if different from the option below. This is one option:

- A performance bond issued by a bonding company, which is an Admitted Surety Insurer under the provisions of Title 14, Chapter 2, Article 6 of the Code of Civil Procedure, commencing with Section 995.610 et seq., and licensed to conduct the business of insurance in the State of California. Such performance bond, including the bonding company issuing the bond, shall be acceptable in form and content to the Agency.

SECTION V - STANDARD TERMS AND CONDITIONS

Proposer should be prepared to agree to all standard terms and conditions identified in MVEMSA contract template in Enclosure 5 or provide a statement as to why Proposer cannot comply with any standard terms. The final agreement will be based on this standard template, and subject to change based on services provided as part of this agreement.

The Proposer should be prepared to enter into an agreement which addresses all components necessary for implementing the provisions of this RFP, and proper oversight for the provision of 911 ambulance services. Please reference the current ambulance contract and amendment for an example of a final agreement of services. Examples include but not limited to language associated with opportunities to cure for minor and major breach, insurance requirements, lame duck clauses, etc.

SECTION VI - SCOPE OF WORK AND SPECIAL PROVISIONS

6.1 SUMMARY

MVEMSA has determined that the highest level of county-wide emergency medical response be provided by a system using a joint BLS and or ALS fire first responder and ALS ambulance system. On behalf of Stanislaus County, MVEMSA intends to award an initial five-year contract to the responsible Proposer whose proposal conforms to the RFP and whose proposal presents the greatest value to the residents and visitors in Stanislaus County. The PRC will evaluate all proposals based upon the evaluation criteria score sheet and as determined by achieving the highest score.

MVEMSA may extend the Contractor's agreement for a second five-year term. The extension will be based on Contractor's performance in meeting and or exceeding the performance standards outlined in the Agreement over the initial term of the agreement.

6.2 FINGERPRINTING AND BACKGROUND CHECKS

All EMS personnel must comply with the State of California Live Scan requirements for certification/accreditation.

6.3 SYSTEM REQUIREMENTS

MVEMSA utilizes the FirstWatch surveillance platform. The Online Compliance Utility (OCU) is a real-time web enabled tool for use by providers and agencies to simplify and manage response times based on providers real-time CAD data. The web-based tool provides interactive queues with consistent look and feel for both the provider and agency allowing on-line review of late runs based on system and business rules.

FirstPass provides the ability to monitor and analyze patient care data, identifying deviations rapidly, consistently and automatically. Combined with the Proposers ePCR program, data is collected and reviewed quickly without data loss due to entry errors. FirstPass alerts when a patient care report does not match the agency's protocols.

The Proposer will be required to pay the annual support and maintenance fees relevant to the EOA for the FirstWatch surveillance platform. Current yearly fees are $40,902 subject to annual increases. Proposer shall participate in future surveillance and technology initiatives undertaken by the MVEMSA. Proposer shall be financially responsible for any required data source integration to the First Watch surveillance platform.

Proposals must adhere to the following system requirements:

A. Response Time Standards and Compliance Incentives

Proposer will be held accountable from the time of dispatch, until the time the proposers dispatch center is notified by radio (or other reliable method) that the emergency ground ambulance arrives at the address site or at a designated or assigned staging area. In the case of significantly encumbered/restricted access to the patient, the term "On Scene" shall be understood to mean the time the emergency ground ambulance arrives at the restricted access point, e.g. staging area, at the gate of a closed gated community, or rendezvous point to be escorted to the patient by another individual. In all incidents where the crew fails to report their arrival on scene, contractor may submit GPS data to confirm on-scene time, otherwise next radio transmission is to be used. Response times shall be in whole minutes with seconds.

(1) Supply supporting documentation to demonstrate the Proposer's ability to meet the response time criteria. Such documentation shall contain procedures, including monitoring and verification procedures, to be used to record and analyze response time statistics.

(2) There will be fire service BLS and/or ALS first responder (if agreement in place) and ambulance response time standards. Response time standards vary for urban, suburban, rural, and wilderness. For the response time standards, see Enclosure 3.

(3) There are five response time compliance zones for this RFP (Enclosure 6). These zones may contain a mix of urban, suburban, rural, and wilderness areas. Proposals must evidence an ability to maintain response times with at least 90% compliance in each of these five zones based on area type (i.e. urban/suburban, rural, remote/wilderness). A measurement period defined as any complete month, or accumulation of months in which the total number of calls in a response area (i.e. Zone 1 Suburban) equals or exceeds 250 or a twelve-month period whichever is first. Measurement will be calculated separately for Code Two and Code Three calls. Zones will be reevaluated every 10 years based on current US Census population data.

B. Compliance Incentives

(1) Financial penalties provide incentive for maintaining excellent response time performance. Fines are levied for late responses for both Code 3 and Code 2 calls. For the anticipated fine schedule, see Enclosure.

C. Response Time Exemptions

(1) In some cases, late responses will be excused from financial penalty is and from response time compliance reports. Examples of current exemptions include:

(a) Multiple units to the same scene.

(b) Inclement weather conditions which impair visibility or create other unsafe driving conditions;

(c) Documented dispatch errors;

(d) Wrong address provided by the requesting party;

(e) Unavoidable delay caused by road construction

(f) Restricted roadway access

(g) Delays in transferring care to a hospital emergency department;

(f) All other exemption requests shall be for good cause only, as determined by the Agency. Exemptions shall be considered on a case-by-case basis. The burden of proof that there is good cause for an exemption shall rest with the Contractor, and the Contractor must have acted in good faith. The alleged good cause must have been a substantial factor in producing the excessive response time.

6.4 AMBULANCE DEPLOYMENT AND SYSTEM STATUS PLAN

A. Requirements

(1) Ambulance System Status and Deployment Plans will be approved by MVEMSA. The plan will describe:

(a) Proposed locations of ambulances and numbers of vehicles to be deployed during each hour of the day and day of the week.

(b) 24-hour and system status management strategies.

(c) Mechanisms to meet the demand for emergency ambulance response during peak periods or unexpected periods of unusually high call volume including disasters and other surge events, such as high flu season. Include a process that identifies how additional ambulance hours will be added by the Contractor if the response time performance standard is not met.

(d) Include a map identifying proposed ambulance station(s) and/or post locations within the geographic zones within the response time compliance areas as indicated in this RFP. Proposer is not required to provide ambulance stations unless staffing 24-hour shifts.

(e) Work force necessary to fully staff ambulances identified in the deployment plans.

(f) Any planned use of on-call crews.

(g) Ambulance shifts and criteria to be used in determining shift lengths.

(h) Any mandatory overtime requirements.

(i) Record keeping and statistical analyses to be used to identify and correct response time performance problems.

(j) Any other strategies to enhance system performance and/or efficiency through improved deployment/redeployment practices.

(2) Provide sufficient number of ambulances that are fully stocked to meet 133% of peak system demand. For example; if 25 ambulances are needed to meet peak demand, an additional 8 ambulances are required to be fully equipped and ready for utilization to meet this standard.

(3) The initial ambulance deployment plan unit hours shall not be decreased for the first six (6) months of operations.

B. Standby and Special Events

If an event sponsor desires a dedicated standby ambulance at an event, the provider may enter into a separate agreement in accordance with MVEMSA Special Event Policy, with the sponsor for the provision of standby and payment for such services. Proposer shall not utilize a 911 system ambulance to staff standby events.

6.5 VEHICLES

A. Ambulance Requirements

Ambulances must conform to the following requirements

(1) Industry standard Type I, Type II or Type III ambulances.

(2) Be identically configured.

(3) Meet or exceed Federal and State standards at the time of the vehicles' original manufacture, except where such standards conflict, in which case the State standards shall prevail.

(4) Meet or exceed the recommendations for ambulances by the Ambulance Manufacturers Division of the National Truck Equipment Association.

(5) Meet or exceed the equipment standards of the State of California.

(6) Ambulance shall be limited to a maximum mileage of 250,000. Any ambulance not new at the start of this agreement must include a list of brand name, model, age and maintenance records. The Proposal Review Committee will score proposals based on a blended mileage fleet to ensure ambulances do not reach maximum miles at the same time.

B. Bariatric Ambulance

(1) Proposer shall maintain a bariatric ambulance within the EOA. The ambulance must be designed to provide safe, dignified transport of the morbidly obese patient. The ambulance shall have the capacity to accommodate a patient weighing up to 1000 lbs. and shall include a bariatric stretcher and hydraulic lift.

(2) Contractor's personnel shall have training for the safe movement and transport of morbidly obese patients.

C. Proposer Supervisor Vehicle

(1) Provide specifications for any supervisor vehicles to be utilized by Proposer for use under this contract.

(2) Be able to carry all items contained in the MVEMSA LALS/ALS First Responder Equipment and Supply Inventory Policy.

(3) Supervisory vehicles must not exceed 200,000 miles.

(4) Meet Department of Transportation and National Fire Protection Association standards for Code 3 response.

D. Vehicle Maintenance Program

(1) Provide a copy of vehicle maintenance program. The vehicle maintenance program must be designed and conducted to achieve the highest standards of reliability appropriate to a modern emergency service.

(2) Submit a copy of vehicle maintenance records for any vehicles that are not new at the start of the agreement. Submit the qualifications of maintenance personnel to be utilized.

(3) Describe locations of maintenance services.

(4) Describe proposed automated or manual maintenance program record keeping system. The system should track both scheduled and unscheduled maintenance (by vehicle and by fleet) and shall track equipment failures during ambulance responses.

(5) Document your vehicle failure rate including units in route, at scene, or with a patient on board for the past three years.

E. Vehicle Safety Program

(1) Proposer must verify that it will have an emergency vehicle operator's course (EVOC) for all its field employees including on-going driver-training for ambulance personnel to promote safe driving and prevent vehicular crashes/incidents.

(2) Describe any other mechanism you use to promote safe ambulance driving and prevention of crashes/traffic incidents.

F. Equipment and supplies

Each ambulance must carry standardized equipment and supplies that meet federal, State, and local EMS Agency requirements, policies and procedures (Enclosure 8). Such equipment and supplies will be stored in the same location in all ambulances. Durable equipment does not need to be new at the beginning of the contract but will be required to meet all specifications and periodic maintenance as approved by MVEMSA.

Describe how equipment is selected for use and the procedures that ensure such equipment is properly maintained. Describe how upgrades to equipment will be handled, and funded, during the duration of the contract including items such as mechanical chest compression devises or other equipment as deemed appropriate by MVEMSA

All expendable supplies including medications and controlled substances must be restocked by the Proposer. All medical equipment shall always be in good repair and safe working order. Each ambulance will be fully stocked and there will be sufficient medical equipment and expendable supplies to accommodate replacement during repair and for times of excessive demand in the system.

(1) Provide a detailed list of durable medical equipment, communications equipment and medical supplies that will be carried on ambulances, including brand name, age (biomedical equipment only), and specifications of such equipment.

(2) Provide your supply/equipment inventory tracking and resupply process.

G. Communications Equipment

(1) Proposer will utilize a radio system for voice communications between the ACE accredited emergency medical dispatch center, ambulances, and hospitals. Current EMS dispatch and ambulance radio

communications utilize both VHF & UHF frequencies. Proposer will adhere to current MVEMSA communication policies.

(2) The fire service agencies are dispatched by SR9-1-1 utilizing a radio system that operates on VHF radio frequencies in the 114-179 MHz bandwidths.

(3) The Proposer must have AVL/GPS/MDC in place in ambulances and ambulance field supervisor vehicles. This equipment must be integrated with the authorized dispatch center.

(4) Proposer must equip each ambulance with appropriate emergency communications and alerting devices capable of being used to notify ambulance personnel of response needs. Every ambulance must be able to communicate at all times and locations with the authorized dispatch center, other ambulances and supervisor's vehicles, receiving hospitals, and fire agencies.

(5) Each ambulance must have a mobile radio in the front cab with the capability for hospital communication in the rear patient compartment.

(6) Each ambulance must have two portable radios, one for each crew for medical communication, and one portable capable of interoperability with fire channels.

(7) Each ambulance shall have a mobile computer with MDC capability, CAD access, mapping software, and ability to send electronic patient care records to the receiving hospital and to a centralized server via wireless technology. Each ambulance will be equipped with AVL and GPS fully interfaced to the CAD system for unit recommendation and System Status deployment purposes.

(8) Identify all communications equipment (type, brand, number) that will be carried on ambulances and supervisors' vehicles including, but not limited to:

(a) Radios

(b) AVL/GPS/MDCs

(c) Telephones

(d) Alerting devices

(e) Laptop computers for ePCR

6.6 PERSONNEL

A. Workforce and Diversity

(1) The Proposer shall establish a recruitment, hiring and retention system consistent with ensuring a quality workforce of clinically competent employees that are appropriately certified; licensed and/or accredited. Field personnel with bilingual skills reflecting the diversity of languages spoken in Stanislaus County are highly valued. Proposer is encouraged to describe its organization's practice ensuring diversity in the workforce and success addressing diversity alignment with its communities served.

B. Ambulance Work Schedules and Conditions

(1) At least 51% of the employers proposed schedule shall be Proposer's full-time employees. Proposer's work schedules and assignments will provide reasonable working conditions for ambulance personnel. Ambulance personnel cannot be fatigued to an extent that their judgment or motor skills might be impaired. Ambulance personnel must have sufficient rest periods to ensure that they remain alert and well rested during work periods.

(2) The maximum unit hour utilization for 24-hour ambulance units shall not exceed 0.40 without prior approval by MVEMSA.

(3) Provide work schedules, shift assignments, policies including those related to workload protection, and any audit criteria related to work schedules and working conditions.

(4) Provide methods that will be used to minimize the turnover rate among the Proposer's personnel.

(5) Provide how you measure workload and fatigue for ambulance crews.

(6) Provide your personnel recruitment and screening processes.

(7) Provide your employee retention program.

(8) Provide your organization's programs, policies and procedures for occupational health and safety and communicable disease control, including communicable diseases prevention.

(9) Provide your pre-employment and on-going physical and mental health ability evaluation processes.

(10) Submit completed copies of your compensation package for ambulance paramedics, and EMTs using the forms found in Enclosure 9.

C. Comfort Stations

(1) The Contractor is encouraged to provide "comfort stations" located at strategic posts that are accessible to on-duty field-based personnel 24/7. At a minimum, these facilities shall:

(a) Be climate controlled (air conditioning and heat);

(b) Have adequate and comfortable seating to accommodate a complete on-duty crew;

(c) Have at least one operable toilet, sink, and microwave as well as a desk, task chair;

(d) Have data capability to enable patient care charting; and

(e) Have adequate accommodations to meet the needs of nursing mothers.

(2) Compensation/Fringe Benefits

(a) Proposer should provide reasonable compensation and benefits to attract and retain experienced and highly qualified ambulance personnel. Proposer is encouraged to establish programs that result in successful recruitment and retention of personnel.

(3) Treatment of Incumbent Worker

(a) There are many dedicated, experienced, and highly proficient paramedics, EMTs and non-supervisory, ancillary staff (VST, mechanics) employed by the current emergency ambulance provider. Proposer will be encouraged to recruit from, and preferentially hire, the incumbent paramedic and EMT workforce. The Proposer will be expected to provide all incumbent paramedic and EMT personnel that are offered employment with the ability to retain their "seniority" status earned while working for the previous contractor for such purposes as shift bids.

(4) Ambulance Staffing

(a) Ambulances must be staffed with at least one paramedic. The second crew member may be another paramedic, or a California state certified EMT. Unless authorized by MVEMSA to participate in a tiered response pilot project that utilizes priority dispatch protocols to determine appropriate level of ambulance response (ALS or BLS).

(b) Provide the process for ensuring that ambulance staffing standards are met.

(5) Management and Supervision

(a) Proposer must have management and supervisory personnel to manage all aspects of emergency ambulance service including administration, operations, EMS training, clinical quality improvement, record keeping and field supervision. Such supervision shall be provided continuously 24 hours a day.

(b) Proposer must specifically explain their staffing model to show sufficient personnel that will monitor, evaluate, and improve clinical care provided by the Proposers personnel

and ensure that on-duty employees are operating in a professional and competent manner.

(c) Identify your key management staff for the Stanislaus County EOA. Include completed Investigative Authorization–Individual and Company forms (Enclosures 10 and 11).

(d) Provide the qualifications, including resumes and provide job descriptions for all management, clinical and supervisory personnel for the emergency ambulance service.

(6) Communicable Diseases, Safety, and Prevention

(a) The Proposer will have an MVEMSA approved Communicable Disease Policy that complies with all Occupational Safety and Health Administration (Cal-OSHA) requirements and other regulations related to prevention, reporting of exposure, and disposal of medical waste. All prehospital personnel shall be trained in prevention, personal protective equipment, and universal precautions.

(b) Provide your pre-employment and on-going physical ability evaluation processes.

(c) Provide your organization's communicable disease control and safety policies and procedures.

(d) Identify personal protective equipment provided to ambulance crews.

(e) Identify personnel protective equipment provided to fire service first responders.

(7) Employee Safety and Wellness

(a) The Proposer will have an employee wellness program to include activities such as company-sponsored exercise, weight-loss, educational seminars, tobacco-cessation programs and health screenings that are designed to help employees eat better, lose weight and improve their overall physical health.

(b) Proposer shall develop an infection prevention program that emphasizes aggressive hygiene practices and proactive personal protective equipment donning (e.g., eye protection, gloves, etc.). The Proposer shall maintain and strictly enforce policies for infection control, cross contamination, and soiled materials disposal to decrease the chance of communicable disease exposure and transmission.

(8) Critical Incident Stress Management and Employee Resilience Program

(a) Proposer shall establish a stress management and employee resilience program for its employees to include an on-going stress reduction program, a critical incident stress action plan, and reliable access to trained and experienced professional counselors through an employee assistance program.

(b) Provide the Critical Incident Stress Management program and Employee Assistance Program you plan to use in Stanislaus County.

D. Training and Continuing Education

(1) Requirements:

Proposer must provide a comprehensive training/education program for all paramedic and EMT personnel. Joint training sessions for ambulance and fire service first responders are expected. Such a program shall include, but not be limited to:

(a) Advanced training for EMT staffing ALS ambulances;

(b) Orientation to the MVEMSA System;

(c) Customer service and cultural sensitivity;

(d) Pre-accreditation field evaluation for paramedics;

(e) Post-accreditation education, supervision, evaluation;

(f) Continuing education that is linked to quality improvement activities, including skills, procedures, protocols, issues and other programs; and

(g) Other programs and activities to maintain uniform skill proficiency.

(h) Provide your comprehensive training and education program for ambulance personnel.

(i) Provide how you plan your integration of comprehensive training and education with fire service paramedic first responders.

(j) Describe how you plan to partner with MVEMSA to utilize its SimMan in the development of a mobile training program to benefit the region.

(k) Provide the training curriculum for EMTs staffing an ALS ambulance.

(l) Provide the orientation and other training and evaluation that is required for new paramedics.

(m) Provide the process for ensuring that ambulance paramedic and EMT personnel meet training requirements as specified by the MVEMSA Medical Director.

(n) Provide the process to ensure timely, accurate, and accountable communications with EMS personnel regarding changes in EMS system policies, procedures, protocols, or precautions.

(o) Provide the qualifications, job description and resume for your clinical leadership personnel.

(p) Provide the database system you will use for maintaining paramedic and ambulance EMT records including employment, certification/licensure, paramedic accreditation, required training programs, and on-going training.

(2) Paramedics must maintain current valid certifications for:

(a) Pediatric Advanced Life Support or Pediatric Emergencies for the Prehospital Provider;

(b) Prehospital Life Support or Basic Trauma Life Support or equivalent as determined by MVEMSA;

(c) Advanced Cardiac Life Support; and

(d) Cardiopulmonary Resuscitation.

(3) Incident Command System (ICS), Standardized Emergency Management System (SEMS), and National Incident Management System (NIMS) Training.

(a) Proposer's employees shall meet the MVEMSA Prehospital Training Standards Policy

(4) Continuing Education Provider (C.E. Provider)

Contractor must be approved as a MVEMSA Continuing Education Provider. Staff responsible for clinical education and clinical quality improvement must be able to meet the qualifications for EMS CE clinical direction in accordance with California Code of Regulations, Title 22, Division 9, Chapter 11, and MVEMSA policy.

(5) Communications to Personnel

Contractor must timely and accurately communicate with all personnel providing services under the contract to include any changes in MVEMSA policies, procedures, protocols, memorandums or precautions.

(6) Training Records

(a) Contractor must maintain a single electronic database for all clinical personnel. MVEMSA shall have electronic access to this database. The database will be continually updated so that records are current. The database will include, but not be limited to:

(i) Employment status (e.g., currently employed by, previously employed by);

(ii) Certification/licensure;

(iii) Paramedic accreditation;

(iv) Required certifications within the contract (e.g., ACLS, PALS, EVOC); and

(v) Any on-going training required by MVEMSA Medical Director (e.g., quarterly training).

6.7 HOPSITAL AND COMMUNITY REQUIREMENTS

A. Hospital

(1) There will be an electronic transmission of 12-lead EKG for suspected ST elevation myocardial infarction (STEMI) to the hospital prior to patient arrival and this 12-lead EKG will be included in the electronic copy of the medical record. The current system utilized by Stanislaus County receiving hospitals and ground ambulance providers is LIFENET.

(2) Describe how you will make 12-lead EKG for suspected STEMI patients available to the hospital prior to patient arrival.

(3) There will be early notification of incoming patients by the ambulance crew with all pertinent information presented in a concise and standardized format.

(4) The ePCR will be available to hospital personnel according to MVEMSA policy.

(5) The Contractor will sponsor quarterly educational events to support the integration of fire EMS first responders to new systems of care and new technologies that benefit patient outcomes.

(6) The Proposer will be able to have, and will describe what they propose for a user-friendly and effective system for hospitals to communicate with:

(a) Ambulance management and quality improvement staff.

(b) Ambulance paramedics and EMTs.

B. Community Involvement

(1) It is anticipated that the Proposer will plan and implement definitive community education programs, which shall include: identification of and presentations to key community groups which influence the public perception of the EMS system's performance, conducting citizen CPR training events, participation in EMS week and other educational activities involving prevention, system awareness, system access, and appropriate utilization of the EMS system.

(2) Provide your proposed community education and illness/injury program for Stanislaus County. Include timeline and measures.

(3) Contractor will report on these activities to MVEMSA on a periodic basis.

(4) Contractor will participate in community health initiatives (i.e. Focus on Prevention, homelessness prevention, etc.).

C. Diversity Program

(1) Define your organizational values, policies, and structures that will enable your staff to work effectively cross-culturally in Stanislaus County.

(2) Describe any provisions you will make to address linguistic access for non-English speakers.

6.8 DISASTER PREPAREDNESS

A. Multi-Hazard Disaster and Multi-Casualty Plans

(1) Proposer will have an internal multi-hazard disaster plan which includes, but is not limited to, triggers for activation, notifications, communications, staffing, vehicles, equipment and EMS surge supplies needed for at least 72 hours.

(2) Proposer must agree to house, maintain, manage, and staff the Emergency Medical Services Authority (EMSA) state issued Disaster Medical Support Unit (DMSU) as necessary. This includes deploying the DMSU when requested by the MVEMSA Director, or the MHOAC, via the MHOAC/RDMHS mutual assistance system. This vehicle shall not be used in routine, day-to-day operations, but shall be kept in good working order and available for emergency response to a disaster site or designated location. This vehicle may be used to carry personnel and equipment to a disaster site.

(3) Proposer will ensure field staff responding to an MCI, disaster, or other large-scale emergency are fully trained in the EMS system.

(4) Contractor will participate with MVEMSA in disaster planning. This includes: identifying local staff having responsibility for multi/mass-casualty and disaster planning and providing field personnel and transport resources for participation in any MVEMSA approved disaster drill in which the disaster plan/multi-casualty incident plan is exercised.

(5) Contractor may require that field and supervisory staff are familiar with, and trained in, the California Tactical Casualty Care Training Guidelines to respond as a medical support service provider to law enforcement incidents and provide field tactical medical care to casualties as necessary.

(6) Contractor shall participate in the Stanislaus County Healthcare Emergency Preparedness Coalition (SCHEPC).

B. Mutual Assistance

(1) To the extent units are available and consistent with its primary responsibility to provide ambulance and emergency medical services, with MVEMSA and/or MHOAC approval, Contractor will render “automatic aid” and “mutual assistance” to adjacent jurisdictions. Proposer will provide their process to render and receive “automatic aid” and “mutual assistance” to those providers of emergency medical services operating within adjacent areas in and out of Stanislaus County.

(2) Identify staff that will have primary responsibility for disaster preparedness, provide the job description, and any required specialized training.

(3) Provide an example of how your organization has participated in disaster exercises or in actual disasters. Include how the event was evaluated and corrective actions taken to improve future response.

(4) Contractor will participate in the Ambulance Strike Team (AST) program and must ensure that AST responders and AST Unit leaders have been appropriately trained and approved by MVEMSA.

6.9 QUALITY/PERFORMANCE

The Proposer will have a comprehensive quality improvement program and performance measures program. This program will include all operations and services and not be limited to clinical care. Data shall be presented to MVEMSA as part of the required online compliance utility program in a format approved by MVEMSA.

A. Quality Improvement Program

(1) The quality improvement (QI) program must meet the requirements of California Code of Regulations, Title 22, Chapter 12 (EMS System Quality Improvement) and MVEMSA policies and related guidelines.

The program must be an organized, coordinated, multidisciplinary approach to the assessment of prehospital emergency medical response and patient care for the purpose of improving patient care service and outcome.

(2) The program may not be limited to clinical functions alone. It must include methods to measure performance, identify areas needing improvement, development and implementation of improvement plans, and then evaluate the results. The program shall describe customer service practices.

B. Ongoing QI Requirement

(1) Review and submit the QI program annually for appropriateness to the provider's operation and revise as needed;

(2) Participate in MVEMSA's quality initiatives that may include making available relevant records for program monitoring and evaluation;

(3) Participate in MVEMSA clinical trials or pilot projects as approved by the MVEMSA Medical Director;

(4) Develop, in cooperation with appropriate personnel/agencies, a performance improvement action plan when the QI program identifies a need for improvement. If the area identified as needing improvement includes system clinical issues, collaboration is required with MVEMSA Medical Director or his/her designee;

(5) Submit a quarterly report to MVEMSA to show compliance with the approved plan and areas for improvement including key performance indicators for STEMI, stroke, advanced airway, cardiac arrest, trauma, sepsis, choking, childbirth, pain, customer satisfaction, pediatric skills, medication errors, complaint satisfaction, employee satisfaction, paramedic skill retention and safety;

(6) Provide MVEMSA with an annual update, from date of approval and annually thereafter, on the provider's QI program. The update shall include, but not be limited to, a summary of how the QI program addressed the program indicators.

C. Inquiries, Complaints, and Incident Report

(1) Contractor will develop a mechanism for internal and external customers to comment on the care provided by Proposer and will provide access to comments to MVEMSA.

(2) Contractor will provide prompt response and follow-up to inquiries and complaints at minimum of three business days, and report findings to MVEMSA.

(3) Contractor will have an accountability system to account for patient belongings.

(4) Contractor will cooperate with MVEMSA and/or the California EMS Authority in the investigation of an incident or unusual occurrence.

(5) Contractor will complete an incident or unusual occurrence report within 24 hours for personnel involved in an unusual occurrence. Contractor will immediately notify the MVEMSA of potential violations of the California Health and Safety Code, California Code of Regulations, or MVEMSA policy and protocols.

D. Electronic Patient Care Report (ePCR)

(1) Contractor will be required to provide electronic patient care report (ePCR) data, in a form and timeframe prescribed by MVEMSA, pursuant to California Health and Safety Code section 1797.227 and approved by EMS Medical Director, for patient documentation on all EMS system per MVMESA patient documentation policies. The ePCR shall be accurately completed to include all information required by MVEMSA and California Code of Regulations, Title 22, Division 9, Chapter 4, Section 100170 and 100171.

(2) The Contractor will make the ePCR product, including software, hardware and connectivity available at no cost to all fire department EMR, EMT and paramedic agencies participating in the first responder agreement.

(3) The ePCR system must have the capability of mobile data entry in Contractor's ambulances, fire first response vehicles and at the patient's bedside. The ePCR system shall comply with the current version of NEMSIS and CEMSIS. Compliant means a system that has been tested and certified "compliant" by NEMSIS. The ePCR System shall also comply with the current mapping standards and data dictionary, as promulgated by the California EMS Authority and MVEMSA. The ePCR system must be interoperable with other data systems, including the functionality to exchange electronic patient health information with other entities, such as the State EMS Authority and hospitals in an HL7 format. The ePCR system must have the capability to:

(a) Link with the CAD to import all data for all calls.

(b) Search a patient's health record for problems, medications, allergies, and end of life decisions to enhance clinical decision making in the field.

(c) Alert the receiving hospital about the patient's status directly onto a dashboard in the emergency department to provide decision support.

(d) File the Emergency Medical Services Patient Care Report data directly into the patient's electronic health record for a better longitudinal patient record.

(e) Reconcile the electronic health record information including diagnoses and disposition back into the EMS patient care report for use in improving the EMS system.

(4) MVEMSA approved ePCR must be completed for all patients in a timely manner according to MVEMSA policy. Contractor must provide access to patient care records at the receiving facilities in computer readable format and suitable for statistical analysis for all 911 ambulance responses. Records shall contain all information documented on the ePCR for all EMS system responses including patient contacts, cancelled calls, and non- transports. Contractor will provide electronic ePCR data to MVEMSA, and EMS Authority, in a form prescribed by MVEMSA, pursuant to California Health and Safety Code, Section 1797.227, within a reasonable timeframe specified by MVEMSA.

(5) Proposer must describe a process to demonstrate ePCR accountability through CAD reconciliation for every medical call.

(6) Proposer's ePCR must provide other data points that may be reasonably requested, including any needed modifications to support EMS system data collection.

(7) As health information systems evolve, the Contractor will agree to work with MVEMSA and local hospitals to establish, and/or participate in, a Health Information Exchange (HIE) with each receiving facility, with automated data sharing for purposes of enhancing EMS system-level treatment, payment and operations through continuous quality improvement activities including analysis of outcome data associated with individual patients. If the Contractor has experience with an HIE, proposals shall include the method and capacity for data exchange within the HIE.

(8) Identify the individuals who will be responsible for developing and implementing the electronic patient care record and record warehouse and provide a description of their qualifications.

(9) Provide a description of the structure of the electronic patient care record and the electronic record warehouse including the software, hardware, and general structure.

(10) Provide a description of computers (or equivalent), including its wireless communication capabilities, that will be provided to each ambulance and to each fire first response vehicle.

(11) Identify the unique patient identifier that will be used to link CAD data, ambulance data, first responder data, and hospital data.

(12) Provide a description of the data transfer protocols.

(13) Provide a description of how the patient care records will be made available to the receiving hospital at the time the patient is left at the hospital.

6.10 DISPATCH AND RADIO COMMUNICATION

The Proposer must submit a plan and will be required to operate an authorized, ACE accredited, emergency medical dispatch center or contract for services from an authorized center that is a 9-1-1 public safety answering point or secondary 9-1-1 public safety answering point for all of Stanislaus County. Proposers dispatch center must provide EMD services that meet National Academy of Emergency Medical Dispatch accreditation for all callers.

A. Current Ambulance Dispatch System (VRECC)

The Valley Regional Emergency Communications Center (VRECC) currently serves as the single secondary Public Safety Answering Point (PSAP) for Stanislaus and San Joaquin Counties providing emergency medical dispatch services for all 911 medical requests utilizing Central Square CAD software. VRECC dispatches all ambulance services in Stanislaus County including the hospital districts and provides fire dispatch services to San Joaquin County. VRECC serves as the Disaster Control Facility (DCF) and performs MCI hospital polling and patient distribution through EMResource. Additionally, as the DCF VRECC performs trauma destination support for all trauma patients transported to Doctors Medical Center or Modesto Memorial Medical Center. VRECC serves as the authorized County Air Resource Center (CARC).

Privately owned by AMR, VRECC is an Accredited Center of Excellence (ACE) in Emergency Medical Dispatching (EMD) and Emergency Fire Dispatch (EFD) with the International Academies of Emergency Dispatch and receives state 911 funding for the Secondary PSAP (911) infrastructure. VRECC is governed by a committee established at the direction of the Stanislaus County Board of Supervisors. The Dispatch Governance Committee is made up of representatives from each of the five (5) ALS ambulance providers who meet monthly to review dispatch operational policies and procedures.

B. County Dispatch Services (SR9-1-1):

SR9-1-1 – Stanislaus Regional 9-1-1 was formed through a Joint Powers Agreement between Stanislaus County and the City of Modesto and is directed by a Commission composed of representatives from each jurisdiction and the public safety agencies. SR9-1-1 provides Enhanced 911 and non-emergency call processing for fire and law enforcement in the unincorporated county areas and most of the cities except for the cities of Oakdale, Ceres, Newman, and Turlock.

Currently there is a CAD to CAD link project underway to join SR9-1-1 to VRECC. There is potential for SR9-1-1 to become a fully integrated, regional dispatch center in the future. There may be opportunity for Proposer to be part of this this integrated and regional dispatch center.

C. Dispatch Requirements

(1) The Proposer will explain how they will operate an authorized ACE accredited emergency medical dispatch center or contract for services from an authorized center that is a 9-1-1 public safety answering point or secondary 9-1-1 public safety answering point for all of Stanislaus County. The EMS dispatch center must be authorized by the MVEMSA to provide EMD dispatch services following MVEMSA communications policies for life threatening or non-life-threatening emergency requests for the dispatch of ambulances 24 hours a day during the term proposed for this RFP.

(2) Contractor shall obtain, install, and maintain in Proposer's ambulances all such communications equipment as is determined through MVEMSA policy to be necessary for the effective and efficient dispatch of ambulances. For ambulances responding to 911 calls, GPS Location Systems are required. GPS Location System equipment failures shall not result in an ambulance being "out of service," and Proposer shall make reasonable efforts to immediately seek repair of malfunctioning GPS Location System equipment.

(3) Contractor shall be financially responsible for installation, purchase, rental and maintenance of communication equipment in the ambulance provided in this proposal.

(4) Contractor shall establish policies that ensure that upon receipt of a private request for ambulance services, pertinent information including callback number, location, and nature of the incident is ascertained.

(5) Contractor shall ensure that a record of calls, as defined in Title 13 of the California Code of Regulations, Chapter 5, Article 1, Section 1100.7 is maintained. In addition, Contractor shall maintain a record of all requests for ambulance service.

(6) Contractor's agreement for dispatch services must be approved by MVEMSA.

If Proposer will contract for third party emergency medical dispatch services a letter of intent from said dispatch center must be provided with proposal submission.

Proposer will explain how they plan to achieve ACE accreditation and the timeline necessary to comply with this requirement.

(7) Proposer's dispatch center shall serve as a 24-hour contact point for MVEMSA's duty officer, Stanislaus County Medical Health Operational Area Coordinator (MHOAC) notification and Disaster Control Facility (DCF).

D. Radio Requirements

(1) Multiple frequencies and bandwidths are utilized for specific system needs; the current EOA provider in Stanislaus County, is dispatched via a VHF frequency. The current provider maintains the FCC license for this VHF frequency. MVEMSA maintains the FCC licensing for the UHF frequency utilized by the rural providers.

(2) Field to Hospital and to the designated Disaster Control Facility at VRECC also utilizes UHF Med channels.

(3) Proposer shall clearly outline its preferred radio communications for the purpose of this RFP with the understanding that all communication costs will be the responsibility of the proposer. Communication plan shall adhere to the Stanislaus County Operational Area Tactical Interoperability Communications plan.

Stanislaus						Function	Tower Location	Call Sign	Licensee
Channel	RX	PL	Brand	TX	PL	-	-	-	-
Stan VHF 1	152.4125 MHZ	TPL100.0	Narrow	157.6125 MHZ	DPL365	Stan EMS Dispatch Primary	OSO / Voted	WPVY844	AMR
Stan VHF 2	155.395 MHZ	TPL885	Narrow	155.2 95 MHZ	TPL88.5	Stan EMS Dispatch Backup	Reed/Voted	WPLS642	AMR
Med 1	463.000 MHZ	TPL179.9	Narrow	468.000 MHZ	TPL179.9	Hosp. to Abm.	Multiple/Voted	KNEJ838	MVEMSA
Med 10	462.975 MHZ	TPL123.0	Narrow	467.975 MHZ	TPL123.0	Rural EMS Provider Dispatch	Multiple/Voted	KNEJ838	MVEMSA
Stan BLS 1	463.500 MHZ	TPL107.2	Narrow	468.500 MHZ	TPL107.2	Stan BLS	Oso	WQFB320	Knox LaRue
Stan BLS 2	462.025 MHZ	DPL114	Narrow	467.025 MHZ	DPL114	Stan BLS	Oso	WQFA710	Knox LaRue

(4) Proposer requirements

Proposer will:

(a) Be responsible for the purchase, installation and programming of portable and mobile radios;

(b) Have AVL/ GPS and mobile data computers (MDCs) in ambulances and supervisor's vehicles;

(c) Be responsible for the ambulance deployment plan, or provide updates to selected third-party deployment software;

(d) Participate in any dispatch center user group established by MVEMSA or County;

(e) Ensure that supervisors and ambulance crews are appropriately knowledgeable of the ambulance deployment plan and dispatch procedure.

(f) Stanislaus County Operational Area Tactical Interoperability Communications plan requires Association of Public Communications Officials P25 feature set.

6.11 FINANCIAL AND ADMINISTRATIVE REQUIREMENTS

A. Patient Fees

(1) Current maximum patient fees are included as Enclosure 12. Proposers are encouraged to maintain or decrease these fees. The patient fees must be fixed for at least one year from the beginning of the contract.

(2) Submit the completed forms for "Proposed Ambulance Rates" including the two patient scenarios in Enclosure 13.

(3) To ensure the EMS Agency has resources necessary for equipment upgrades for emergency responders, $1.00 per mile will be added to patient billing with the goal of establishing a Technology and Equipment Upgrade Fund. The EMSC in coordination with the MVEMSA Executive or Medical Director will approve all expenditures from this fund.

B. Budgets

(1) Provide detailed information on the full costs of your proposed service including allocation of indirect costs.

(2) Provide a statement of the method of financing, attach any endorsement documents necessary, of all start-up and operational costs including, but not limited to, the initial ambulance fleet and equipment and facility leases that requiring to begin operations.

(3) Provide a statement of the amount of funding that will be dedicated to "Reserve for Contingencies".

(4) Proposer shall submit a financial statement of all financial, and/or in-kind corporate / parental entity support to show all sources of funding that will support the provision of 911 Ambulance Services within Stanislaus County.

(5) If the Proposer's corporate / parental structure is larger than only the provision of 911 Ambulance service for MVEMSA, this statement shall include disclosing the full cost allocation of all shared overhead services charged to the Stanislaus County 911 Ambulance Service EOA (including rationale). Typical overhead services include but are not limited to: risk management, insurance, purchasing, maintenance, legal and human resource, or other functions if those functions are not solely dedicated to 911 Ambulance Service in Stanislaus County.

(6) Proposers will disclose, if applicable, the interest or use rate at which the parent / corporate entity loans money or services to the subsidiary corporation providing 911 Ambulance Services to Stanislaus County.

(7) Using the forms provided in Enclosure 14, provide the above information for each year of the first three years of operation. Additionally, provide complete information on projected revenue from ambulance service billing for each of the first three years. If revenue from ambulance service billing does not cover expected costs of operations, document your projected source of revenue to offset loss and provide a projected timeframe to recoup losses. "Full Cost" means all costs attributable to provision of service.

C. Billing and Collection System

(1) Proposer will be responsible for humane billing and collection practices and must have a written Compassionate Care Policy. Proposer's collection practices shall be in accordance with all State collection laws and regulations. Proposer's accounts receivable management system will be capable of timely response to patient and third-party payer inquiries regarding submission of insurance claims, dates and types of payments made, itemized charges and other inquiries.

(2) The Proposer will have staff available at proposer's local headquarters, accessible via a toll-free phone number to provide an initial response to questions regarding patient bills. Proposer will provide for interpreter service, relative to billing and collections, to parties having limited English proficiency.

(3) Proposer will have a billing and collections system that is well-documented, easy to audit, customer friendly, assists in obtaining reimbursement from third party sources, and is capable of electronically filing Medicare and Medi-Cal billing claims.

(4) Direct patient billing statements will be itemized so that all charges are clearly explained. The accounts receivable management system will automatically generate Medicare and Medi-Cal billing forms electronically or paper.

(5) If a patient is initially billed directly, Proposer's first invoice will request third-party payment information and ask the patient to contact the billing office. A toll-free number and return envelope will be provided.

(6) If a patient has no third-party coverage, Proposer will have a liberal installment plan policy for payment arrangements. If the payment arrangements are not adhered to, the account may be assigned for collection.

D. Financial Hardship Policy

(1) Proposer shall have a written Financial Hardship/Compassionate Care Policy which shall apply to patients who do not have medical insurance and who have limited financial capacity.

(2) Proposer shall extend discounts to patients based upon such policy and such discounts will consider federal poverty level standards, ineligibility for Medi-Cal/Medicaid or other third-party coverage, as well as any extenuating circumstances.

(3) For patients who are medically cleared and require transport from a Stanislaus County receiving hospital for Behavioral Health hospitalization (WIC § 5150) within the County, the Proposer must submit a safe and efficient alternative non-ambulance transportation solution.

(4) Proposer will submit an annual customer satisfaction survey provided by an external agency approved by MVEMSA.

(5) Provide a description of your billing and collection system, including Spanish or other language preferences.

(6) Provide copy of your financial hardship policy.

(7) Provide a copy of a billing late notice.

(8) Provide a description of how your organization evaluates and improves the billing and collection system.

(9) Give at least one example of system improvement in the past year.

E. Annual Financial Audit

(1) Contractor shall make available a Year-end Financial Report to MVEMSA Executive Director for review. This report shall include annual financial statements reviewed by an independent public accounting firm in accordance with generally accepted accounting procedures. Statements shall be available to MVEMSA Executive Director on an annual basis within ninety (90) calendar days of the close of Contractor's fiscal year. If Proposer's financial statements are prepared on a consolidated basis, then

separate balance sheets and income statements for the Stanislaus County operation shall be required and shall be subject to the independent auditor's review. Contractor shall make all financial records for Stanislaus County contract services available to MVEMSA to audit as requested.

(2) Provide a statement agreeing to provide the County an annual audited financial statement according to Generally Accepted Accounting Principles (GAAP).

F. Payments and Fees

Contractor will pay the following service charges as estimated below:

Annual Services	
Stanislaus County Ordinance Fee	$144,286
EMS Agency Oversight & Monitoring Services	$256,165
FirstWatch	$40,902
First Responder Services (approx.)	$700,000
Total Services	$1,141,353

G. Profit

(1) The County's intent for this RFP is to provide a business model that will provide a high quality, stable, long term, and efficient and cost-effective emergency ambulance services with advanced life support (ALS) ambulance transport agreement.

(2) In the event that changes occur within the EOA service area that substantially impact the Contractor's cost of providing services, such that CPI-based rate adjustments do not compensate for the increased cost of operating the 911 ambulance service the Contractor may request an additional rate increase, which shall be subject to approval by the MVEMSA JPA Board of Directors after MVEMSA has completed a contract audit has been completed at the Contractor's expense.

H. Rate Adjustments

(1) The rates proposed in this RFP may be increased annually to adjust for inflation. No later than forty-five days prior to each adjustment date, the Contractor may request MVEMSA Executive Director consider approval of a user fee adjustment. In order to ensure a fair and appropriate cost to residents and visitors to the EOA service area the MVEMSA Executive Director will have the final authority to set the CPI rate adjustment. The MVEMSA Executive Director's decision will be informed by documentation submitted by the provider to substantiate the need for a rate increase. Such documentation may include but are not limited to audited financial statements, collection rate and payer mix.

(2) During the term of the agreement, the Contractor will be allowed opportunities for rate adjustments, which shall be based on the Bay Area Consumer Price Index (CPI) and/or other appropriate indexes reflecting increased costs of operations. The Contractor may propose rate changes to MVEMSA no more frequently than annually unless the Contractor can demonstrate to the satisfaction of MVEMSA that, due to extraordinary changes in reimbursement or the cost structure of the Contractor's operations which were beyond the control of the Proposer, an undue financial hardship would be placed on the Contractor in the absence of an immediate rate consideration. No rate increase will be considered for the first year of the contract.

(3) Any fees or service payment increases established due first responder services or other existing contract requirements will not exceed the Bay Area CPI index unless otherwise stated in contractual agreements.

6.12 OPPORTUNITIES WITH FIRE SERVICES (ALS AND BLS)

A. Background

(1) MVEMSA has determined that the highest level of county-wide emergency medical response is provided by a system using agreements between fire services EMR, EMT and paramedic and ambulance EMT and paramedic ambulance services. MVEMSA desires to provide this high level of service while also ensuring that patient fees are equivalent to other emergency ambulance service fees in the Central Valley area and are reimbursable under applicable regulations.

(2) Each proposer shall include fire first responders as an integrated part of its deployment plan able to meet the response time standards as outlined below.

Call Type	Fire First Responder Agreement	Ambulance with Fire First Responder Agreement	Ambulance without Fire Agreement
Urban Response to 90 percent of calls each month			
Code 3	7:00	11:59 (ALS)	7:59
		9:59 (EMT)	
		8:59 (EMR)	
Code 2	N/A	15:59	15:59
Suburban Response to 90 percent of calls each month			
Code 3	11:00	15:59 (ALS)	11:59
		13:59 (EMT)	
		12:59 (EMR)	
Code 2	N/A	19:59	19:59
Rural Response to 90 percent of calls each month			
Code 3	19:00	23:59 (ALS)	19:59
		21:59 (EMT)	
		20:59 (EMR)	
Code 2	N/A	25:59	25:59
Wilderness (Audit each call)			
Code 3	ASAP	ASAP	ASAP
Code 2	ASAP	ASAP	ASAP

(3) Fire services providing an EMR, EMT and paramedic first responder may meet response times as set forth in this RFP and enter into an agreement with the EOA contracted ambulance provider. Fire services interested in participating in this arrangement shall agree to the terms identified in the RFP including but not limited to:

(a) Assess all patients and begin treatments according to protocol

(b) Reduce incoming ALS ambulance to Code 2, if emergency response is unnecessary

(c) Complete an ePCR on all medical responses, or for EMR agencies complete NFIRS

(d) Participate in MVEMSA quality improvement program

(e) Accountability via First Watch surveillance platform (FirstWatch and FirstPass)

(4) The proposer shall develop agreements with fire first responders incorporating Volunteer fire departments (EMR), paid BLS fire departments (EMT) and paid ALS/BLS fire departments (Paramedic or EMT) based on the response time matrix above. Currently (2018), 10% of Code 3 responses receive an EMR first responder, 54% receive an EMT level fire response and 36% receive an ALS/Paramedic level response.

(5) Based on projected 2018 Code 3 response volume, first responding fire agencies will bring value through early response, initial patient assessment and treatment, reduction in ambulance response to Code 2 per MVEMSA policy when appropriate and lengthened response times to the Proposer. The projected minimum reimbursement rate for these services shall be $13.00 per fire response for EMR-level departments, $17.00 per fire response for EMT-level departments and $24.00 per fire response for ALS departments. Proposer shall describe the financial compensation for each fire responder level (e.g.; ALS fire provides $318,000 in first response, EMT fire provides $332,000 in first response and EMR fire provides $47,000 in first response). If the Proposer receives additional value in this agreement it is expected the savings will be reflected in the proposed reimbursement model to Fire agencies. In addition, when volunteer fire agencies participate in the integrated service model, and additional value is recognized, then this RFP contemplates recognizing that this additional value will be reflected in the proposed reimbursement model to volunteer fire agencies providing EMS services with limited financial resources.

(6) Fire agencies could increase their level of service during the term of the agreement, based on a need's assessment and with the approval of the MVEMSA Medical Director. The Proposer will adjust future reimbursement rates accordingly based on response time extensions made available as a result of fire service level changes.

(7) To raise the level of EMS clinical care in the Contractor's EOA, the Contractor will offer an EMT program twice a year at little to no cost to fire agencies located in the EOA. The program will be based on an evening and weekend schedule in order to accommodate a volunteer's work schedule.

(8) Proposer shall develop a process with fire agencies to restock/resupply disposable medical supplies at no cost to the fire agency.

(9) Fire first responder agreements may not be in place prior to implementation of this proposed ambulance EOA agreement. Until such time that a fire first responder agreement is in place Contractor must meet all response time requirements at 90% compliance, in all zone's accordance to table 6.12 (A,2).

(10) MVEMSA may reject any proposal that is inconsistent with these principles.

6.13 FUTURE OPTIONAL SYSTEM ENHANCEMENTS

(1) Community Paramedic Community Care Programs: In addition to the current MVEMSA Community Paramedic Program, Proposer may provide additional creative solutions to support the health and welfare of community members through utilization of fire and ambulance personnel to conduct programs such as, reduction of repeat hospital visits with patient home follow-up, transportation to sobering center and mental health facilities.

(2) MVEMSA is interested in exploring during the terms of a contract resulting from this RFP the efficacy and financial viability of a tiered response system. An ALS and BLS 911 emergency ambulance transport response pilot program will be based on priority dispatch through EMD protocols approved by MVEMSA's Medical Director and will need a strong evaluation process to assess patient outcomes to ensure patient safety.

(3) MVEMSA is interested in evaluating the value added of a highly functional dispatch center that utilizes alternative nurse level triage protocols when such system enhancements are recognized as a standard of care and acknowledged by third party payors. Such alternative system must take into consideration the goal of meeting the 911 caller's emergency medical needs to ensure that patient receive the best care for the nature of their medical emergency helping them access care, at the right level, time and place while ensuring the level of readiness of the EMS system would not be compromised.

(4) In the event a hospital district located in Stanislaus County providing emergency 9-1-1 ambulance services is unable to continue providing these services, contractor will be required to enter discussions and subsequent negotiations with that district for the provision of these services. It is understood all agreements will require approval of MVEMSA and that the zones serviced by the hospital district would not be included as part of the EOA created by this RFP.

SECTION VII - ENCLOSURES

ENCLOSURE 1 – Maps of Stanislaus County EOA's

ENCLOSURE 2 – Stanislaus County EMS System Assessment July 2017

ENCLOSURE 3 – Response Time Standards

ENCLOSURE 4 – MVEMSA Proposer Scoring Sheet

ENCLOSURE 5 – General Terms and Condition

ENCLOSURE 6 – Response Zone Description and Zone Maps; 1, 3, 8, B, C

ENCLOSURE 7– Financial Penalties

ENCLOSURE 8 – Medical Equipment and Supply Policy 407.00 and 409.00

ENCLOSURE 9 – Proposed Ambulance Compensation and Benefits

ENCLOSURE 10 – Investigative Authorization – Company

ENCLOSURE 11 – Investigative Authorization – Individual

ENCLOSURE 12 – Stanislaus County Ambulance Rates

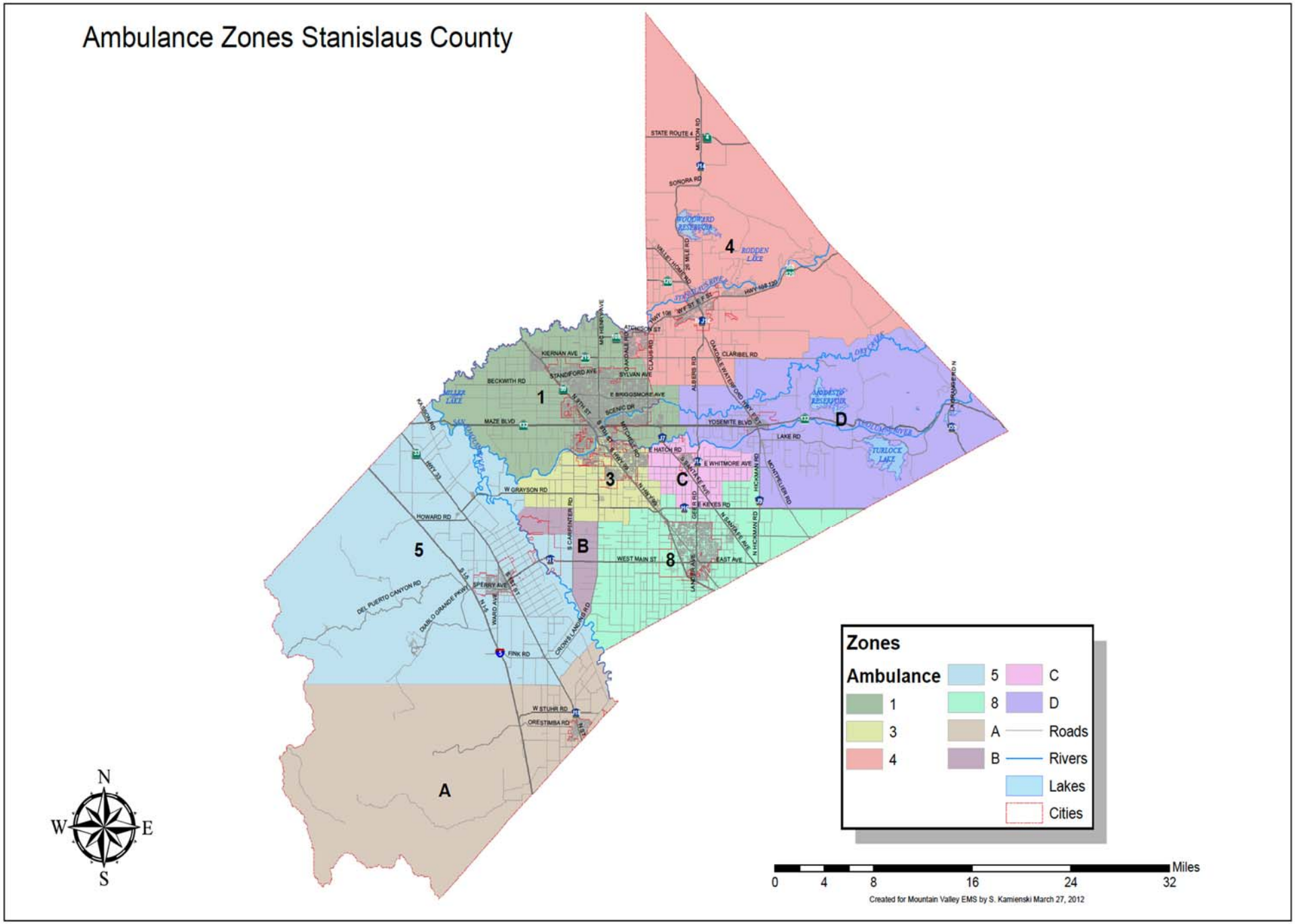
ENCLOSURE 13 –Proposed Ambulance Rates

ENCLOSURE 14 – Proposed Operating and Start-Up Budget

ENCLOSURE 15 - Assurance of Compliance with Section 504
of the Rehabilitation Act of 1973

ENCLOSURE 16 – Definition

ENCLOSURE 1: County Map of All EMS Zones



ENCLOSURE 2

STANISLAUS COUNTY
EMS SYSTEM ASSESSMENT

July 2017

Summary

Stanislaus County is focused on the continuous improvement of the EMS system through an integrated approach. The system assessment is part of Phase I in the strategic planning process. To evaluate the current Stanislaus County EMS platform, the system assessment includes data collection and analysis, review of best practices, and cost modeling.

Authors: Mountain Valley EMS Agency & Stanislaus County Health Services Agency

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Acknowledgements

This document would not have been completed without the diligent efforts of the staff at Mountain Valley Emergency Medical Services Agency (MVEMSA). MVEMSA compiled information and drafted the majority of the System Assessment. Staff from Stanislaus County Health Services Agency (HSA) assisted in the coordination and final development of the document.

Many agencies contributed to the completion of this document by providing data and input. The document would not represent a comprehensive overview of Emergency Medical Services (EMS) in Stanislaus County without the contributions provided by these agencies.

Participating Agencies and Providers

- Air Methods
- American Medical Response
- CalStar
- Ceres Fire Department
- Modesto Fire Department
- Mountain Valley Emergency Medical Services Agency
- Oak Valley District Ambulance
- Patterson City Fire Department
- Patterson District Ambulance
- PHI Air Medical
- ProTransport-1
- Stanislaus Consolidated Fire Protection District
- Stanislaus County Chief Executive Office
- Stanislaus County Health Services Agency / Public Health
- Stanislaus County Office of Emergency Services / Fire Warden
- Turlock Fire Department
- Westside Community Health District

Executive Summary

MVEMSA, in collaboration with Stanislaus County HSA, has taken an active step with the initiation of this emergency medical services (EMS) assessment and accompanying strategic planning process. EMS and the health care environment are changing quickly and the EMS system within Stanislaus County will either react to the changes or create a roadmap to prepare for such changes. The intent of this assessment is to deliver the EMS System within Stanislaus County into an era of innovation, thus embracing the opportunities available with the upcoming health care changes.

The following is a summary of the major system challenges identified after evaluation of the data received through First Watch and local stakeholders. In addition to the challenges listed there are several opportunities towards improvement.

1. High-Performance EMS System: A high-performance emergency ambulance service system is the delivery of clinical excellence, response-time reliability, economic efficiency, and customer satisfaction. Methodologies and processes are in place for MVEMSA to efficiently monitor contractual compliance measurements of the system. However, opportunities exist for improvement to the ambulance provider agreements (see pages 19-20).

Opportunities:

   a. Address a more comprehensive review of ambulance providers financials in order to justify financial sustainability;
   b. Consider performance-based ambulance provider agreements should address customer satisfaction surveys conducted by ambulance provider;
   c. Implement a process for auditing the ambulance provider's performance against other high-performance services;
   d. Require system features that ensure economic efficiency such as weekly demand analysis reports generated from First Watch to determine the right number of ambulances are deployed based on historical call demand.

2. Emergency Response Levels: In evaluating the EMS 911 response totals over the past three (3) years, it's evident there has been an increase in call volume responses. In 2016 an additional 5,841 EMS calls occurred compared to 2014, which equates to about 16 more calls per day. Many EMS systems across the United States attribute the increased call volume to the implementation of the Affordable Care Act (ACA) and more people having insurance coverage (see pages 23-26).

   When looking at the dispatch determinants from 2014-2016 the number of emergency calls that were dispatched with lights and sirens (Code 3) represented about 68-70% of the total call volume for Stanislaus County.

   The increase in call volume and shortage of paramedics nationwide provides for an opportunity to make changes within the Stanislaus County EMS System.

Opportunities:

   a. Research and develop a two-tier response level providing a system where Basic Life Support (BLS) ambulances respond to 911 low acuity calls as determined by Medical Priority Dispatch System (MPDS) Emergency Medical Dispatch (EMD) protocols and as

defined by MVEMSA. National standards of care and federal regulations support tiered EMS System deployment whereby the level of service dispatched is based upon medically valid, differential response determinants;

b. MVEMSA would require a 100% audit of 911 BLS responses for a prescribed period of time;

c. Research models used in EMS industry advocating stronger relationships/ collaboration with Advanced Life Support (ALS) fire for a two-tier response system.

3. Mutual Aid Responses: Mutual Aid is defined as an emergency ambulance service performed by a neighboring provider during periods of severe weather, multi-casualty incidents, disasters, or other extraordinary events that overwhelm existing resources.

   Mutual Aid has developed into a regular reliance on other providers in order to sustain compliance within the ambulance providers respective response area or exclusive operating area (EOA) resulting from a daily shortage of ambulances in the 911 EMS System (see pages 26-29).

Opportunities:

a. Re-evaluate and re-define the paramaters for mutual aid within the Stanislaus County EMS System Status Plan;

b. Develop new minimum deployment standards for ambulance providers based upon demand analysis and historical deployment data to increase units within the EMS System;

c. Utilize Emergency Medical Technician (EMT) / BLS ambulances to manage low acuity EMS calls.

4. Emergency Response Times: Response time standards continue to be a controversial topic in EMS where focus on response time measurements is embedded into contractual language and budgets instead of having response time standards based on clinical and outcome measures (see pages 29-34).

   Literature suggests there is no strong correlation between EMS response times and patient outcomes for the vast majority of medical conditions for which EMS is used.

Opportunities:

a. Research and work towards a fully evidence-based EMS system;

b. Research best practices from across California and the United States where systems response time standards are based on the patient's level of acuity which is determined through the EMD process.

5. Improve System Efficiency through Community Paramedicine and Community Partnerships: An excessive use of ambulance transports to hospital emergency rooms in Stanislaus County exists. On occasion, especially during the flu season, some hospital Emergency Departments (ED) are so impacted that it's very difficult to process patients through the hospital ED quickly enough to prevent a backload of ambulances waiting to unload their patients. The delay causes a ripple effect resulting in long delays in ambulance response to emergency calls thus delaying fire department crews on scenes for a lengthy period of time waiting for an ambulance to arrive.

   EMS systems are an essential part of the health care delivery system, but have historically not been well integrated into that delivery system. Community paramedic programs and

community partnerships can help mitigate the gap between demand for medical services and the limited workforce available to provide those services, decrease health care costs in Stanislaus County, and facilitate a better use of expensive emergency room services.

Opportunities:

a. Research the concept of using a Registered Nurse (RN) at the EMS dispatch center to handle nurse triage calls. Several locations arcross the United States are using a nurse answering station for non-urgent 911 calls in order to talk to patients 12 hours a day, seven days a week. The nurse triage is responsible for finding alternative destinations for the low acuity patients. The nurse triage program is paid for by local hospitals that see the program as a way of preventing unnecessary ED visits. Depending on the situation, nurses may counsel patients on self-care at home or make an appointment with a physician or urgent care clinic. The nurse also has the option to send a Community Paramedic to the patient's residence to arrange for transport via taxi, bus or BLS ambulance;

b. Research the use of ALS Fire or Community Paramedics for post-discharge follow up on patients discharged from the hospital in order to reduce re-admission;

c. Research the development of a Homeless Education and Response Team (HEART) to reduce the amount of non-emergency calls EMS responds to by using ALS Fire or Community Paramedics;

d. Research the program currently used by Fresno County EMS to reduce frequent 911 "super users" for unnecessary transports to the hospital. The program identified the heaviest users of the 911 system and developed a multi-disciplinary approach to reduce the frequency with which 911 was used.

6. Financial Sustainability of Ambulance Providers: The change in payor mix combined with a decrease in reimbursement rates by commercial insurers have resulted in an overall decrease in per-call revenue, making it difficult to maintain the financial solvency of the EMS System. In addition, since the beginning of the new ambulance provider agreements in 2013, EMS systems in California that have imposed contractually-mandated costs (e.g., subsidies, fees, or pass-through costs) on contracted 911 Exclusive Operating Areas (EOAs) ambulance providers have experienced significant financial shortfalls. These costs also greatly affect the per-call revenue that can be generated by providers.

Opportunities:

a. Research the strategic matching of emergency ambulance resources to patient needs and improve care to patients without undue financial or operational hardships to the EMS system and ambulance provider. Key modifications to the future contractual terms, specifications, and requirements will need to be reviewed and researched specifically as they relate to liquidated damages structure, response time requirements, response configurations, and the strategic deployment and dispatches of ambulances (two-tier response model).

Project Overview

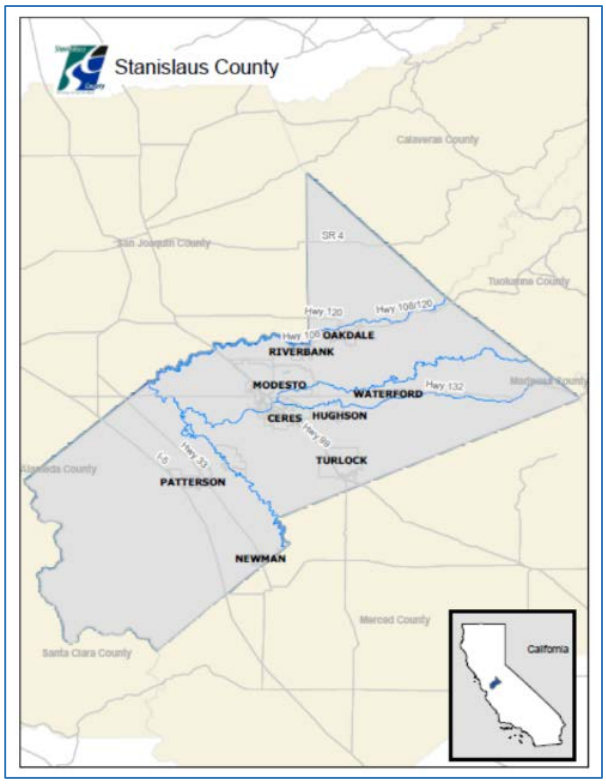
The Stanislaus County Board of Supervisors authorized the initiation of a strategic planning process that focused on continuous improvement through a more integrated approach to the EMS System. The process to develop the strategic plan was divided into three phases:

Phase I focused on the system assessment which included data collection and analysis, review of best practices and cost modeling. The EMS System Assessment is the document that was produced as part of the system assessment.

Phase II begins with the presentation of the EMS System Assessment to stakeholders on July 31, 2017. The stakeholder meeting includes an overview of the presentation of findings within the report and an opportunity for feedback. The strategic plan development and timeline will be initiated after the stakeholder meeting. The strategic plan will be completed at the end of Phase II.

Phase III focuses on the development of an implementation plan. This plan will prioritize the goals outlined in the strategic plan and identify tasks, steps and timeframes for each goal.

County Demographics



Stanislaus County is located in the heart of California's Central Valley, within 90 minutes of the San Francisco Bay Area, the Silicon Valley, Sacramento, the Sierra Nevada Mountains, including Yosemite National Park, and California's Central Coast. It is also within a five-hour drive of Los Angeles. Two of California's major north-south routes (Interstate 5 and Highway 99) intersect the area making the County one of the dominant logistics center locations on the west coast.

It is bordered on the north by San Joaquin County, the east by Mariposa, Tuolumne, and Calaveras Counties, the south by Merced County, and the west by Alameda and Santa Clara Counties. Established in 1854, Stanislaus County's total land area is 1,494 square miles. The County seat is the City of Modesto, located near the center of the County.

Stanislaus County has nine municipalities: The Cities of Ceres, Hughson, Modesto, Newman, Oakdale, Patterson, Riverbank, Turlock and Waterford. Additionally, there are thirteen unincorporated communities within the County. Modesto has the largest population within the County. Hughson is projected to be the fastest growing city, but all cities and the unincorporated areas were expected to see some growth. The estimated population for Stanislaus County was 538,388 as of January 2015. The State of California Department of Finance projects the population for Stanislaus County in 2020 will be 573,794. The population project for 2030 is 648,076. This represents a 13% increase in population by 2030.

State/County/City	2010 Census	2015 Census Estimate	% Increase
California	37,254,522	39,144,818	5.1%
Stanislaus	514,451	538,388	4.7%
Ceres	45,897	47,963	4.5%
Hughson	6,640	7,384	11.2%
Modesto	203,119	211,266	4.0%
Newman	10,219	10,899	6.7%
Oakdale	20,675	22,259	7.7%
Patterson	20,413	21,498	5.3%
Riverbank	22,682	24,122	6.3%
Turlock	68,549	72,292	5.5%
Waterford	8,456	8,824	4.3%

Source: United States Census Bureau

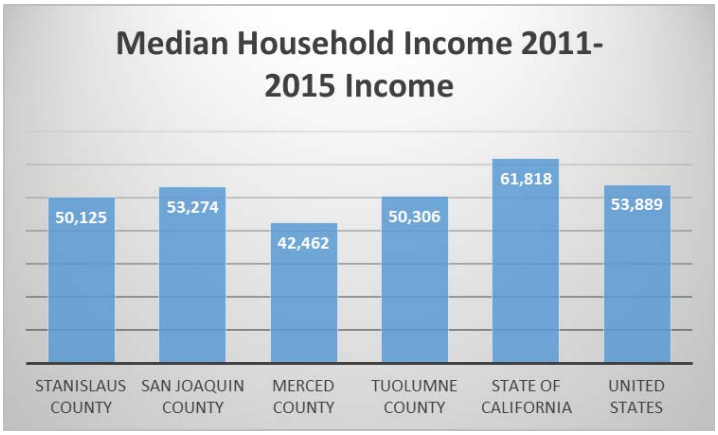
The largest population in terms of race in Stanislaus County in 2010 was white, comprising 47% of the population, followed by Hispanic or Latino at 42%. The chart shows the population growth by race/ethnicity from 2010 to 2020. The change projected from 2010 to 2020 is a 4% decrease in white population with a 3% increase in the Hispanic or Latino race and a 1% increase in Asian. There is not a significant change to any other race/ethnicity.

Stanislaus County Population Projections by Race/Ethnicity (2010-2030)				
Race	2010	Percent of Total 2010	2020	Percent of Total 2020
White	241,373	47%	245,552	43%
Black/African American	13,247	3%	15,083	3%
American Indian	2,929	1%	3,054	1%
Asian	25,203	5%	32,044	6%
Native Hawaiian & other Pacific Islander	3,263	1%	3,584	1%
Hispanic or Latino	216,474	42%	258,068	45%
Multi-Race	12,970	3%	16,409	3%
Total Population	515,459	100%	573,794	100%
Source: California Department of Finance				

Sex and Age 2015			
Sex	Stanislaus County	California	United States
Male	49.5%	49.7%	49.2%
Female	50.5%	50.3%	50.8%
Age			
< 5 Years	7.2%	6.4%	6.2%
<18 years	27.1%	23.3%	22.9%
>18 years	53.2%	57%	56%
>65 years	12.5%	13.3%	14.9%
Source: U.S. Census Bureau (V2015)			

The next table demonstrates the Sex and Age of Stanislaus County citizens in 2015 in comparison with the State and Country. Stanislaus County has a younger population than California and the United States. The largest age group is between 18 and 65 years at just over 53% of the population. The sex demographic is consistent with California and the United States with a slightly larger female population at 50.5%. The U.S. Census Bureau estimates show Stanislaus County's population grew 2% from 2010 to 2013, the growth for population 65 and older expanded by almost 12% during that period.

The median income for Stanislaus County is $50,125. It is lower than the United States, State of California and neighboring counties of San Joaquin and Tuolumne. Stanislaus County's median income is higher than Merced County. Major employers within Stanislaus County include Amazon, government, wineries, Con Agra Foods and Doctors Medical Center.



Health Insurance Coverage

Under the Affordable Care Act (ACA), individuals with health insurance increased from 2013 to 2016 (see chart below). In State Rankings of Uninsured, California (ranked #7) had 21.2% uninsured between 2010 and 2012. In comparison Texas, which ranked number 1, had an uninsured rate of 26.9% over that same time period. In 2015, after the implementation of the ACA, California's uninsured ranking decreased to 8.6% (ranked #29) while Texas maintained its number one ranking but decreased its rate of uninsured to 17.7%

Uninsured Comparison 2013 & 2016				
	2013 CA	2013 US	2016 CA	2016 US
Number of Uninsured	6.7	47.3	2.9	28.5
Adults (18 to 64)	5.8	40.7	2.6	24.6
Children (up to age 18)	0.9	6.6	0.3	3.9

Numbers in millions.
Source: Employee Benefit Research Institute estimates of Current Population Survey, 2013 March & 2016 March Supplements

Stanislaus County's uninsured rate fell by 68% under the ACA, from 18.0% in 2013 to 5.8% in 2015. It is estimated 64,000 residents who gained insurance coverage due to the ACA, may return to uninsured status if there is an ACA repeal. (Source: U.C. Berkeley Center for Labor Research and Education, December 2016)

Emergency Medical Services System

Stanislaus County Authority

Stanislaus County is responsible for the development of an EMS program. Counties have the option under the Health and Safety Code Section 1797.200 to designate the local EMS agency as the County Health Department, an agency established and operated by the County, an entity with which the County contracts for the purposes of local EMS administration or a joint powers agency (JPA) created for the administration of EMS services by agreement between counties and/or cities.

Stanislaus County elected to join a JPA that included Alpine, Amador, Calaveras and Mariposa Counties. The original JPA agreement became effective January 21, 1981. Stanislaus County and the other four counties within the JPA, contract with MVEMSA to administer local emergency medicals services agency (LEMSA) responsibilities.

The major responsibilities of the MVEMSA, on behalf of Stanislaus County, are to establish and ensure a safe, dependable and responsible pre-hospital emergency medical care system, to work collaboratively with the Public Health Officer in his/her role as the Medical Health Operational Area Coordinator (MHOAC), and to protect the County from exposure to liability in matters related to the provision of pre-hospital emergency medical services.

Through past studies (1999 and 2010) the benefits and challenges of Stanislaus County's participation within the JPA model have been examined. The 2009/2010 assessment of the JPA relationship and alternatives was considered by the Board of Supervisors and it was determined to continue within the existing structure.

Benefits for Stanislaus County to remain within the JPA structure include the following:

1. Allows MVEMSA to apply for matching funds on behalf of Stanislaus County and the participating member counties; and
2. The current leadership and staff of MVEMSA as high performing partners are integrated into many critical public health matters involving emergency medical services.

However, a major challenge exists with the voting of the JPA Board of Directors when Stanislaus County, with a population of over 530,000 residents, carries the same vote as a County with only approximately 1,100 residents.

Mountain-Valley EMS Agency

The MVEMSA was established in response to the EMS Act of 1981 (H&S Code 2.5; Section 1797-1799), which requires all counties with an ALS emergency response program (a paramedic level EMS system), to designate a local EMS agency.

Under the current JPA, the MVEMSA serves as the designated local EMS agency for the five counties of Alpine, Amador, Calaveras, Mariposa, and Stanislaus

The functions of the JPA are as follows:

1. Hire an Executive Director and Medical Director;
2. Create advisory committees as necessary, to study specific subjects or to carry out tasks or projects, and to bring back reports and recommendations to the Board, or to otherwise carry out the work of the Agency;

3. Approve financial reports, review the performance of the Agency, hear reports, and consider any matters that are brought to their attention;
4. Authorize all contracts, fees, equipment purchases, and any unbudgeted expenditures;
5. Approve the Agency's annual budget;
6. Approve all proposed policies, standards, protocols, and procedures relating to the EMS; and
7. Adopt policies and procedures relating to Agency operations and personnel matters.

MVEMSA follows the California EMS System Act model, which is similar to the model adopted at the federal level that identifies eight (8) components for EMS system development. The eight components are reported quarterly to the State EMS Authority by each California LEMSA. Those components are:

1. System Organization and Management;
2. Staffing and Training;
3. Communications;
4. Response and Transport;
5. Facilities and Critical Care;
6. Data Collection and System Evaluation;
7. Public Information and Education; and
8. Disaster Response.

The core responsibilities for MVEMSA, on behalf of Stanislaus County, are as follows:

1. Medical Director to provide:

    a. Clinical oversight through medical operational field treatment protocols;
    b. A Quality Improvement process for pre-hospital and regional Trauma, STEMI (ST Elevated Myocardial Infarction)/Stroke Systems of Care;
    c. Medical Direction and oversight for medical control of the EMS System
    d. Plan, Implement, Monitor and Evaluate the EMS System within Stanislaus County;
    e. Develop contractual agreements with non-emergency and emergency EMS providers, hospitals, specialty centers, and EMS dispatch centers;
    f. Develop and monitor a busy inter-facility transfer (IFT) system;
    g. Collect, analyze and disseminate EMS-related data;
    h. Analyze financial sustainability of contracted EMS providers;
    i. Establish policies/procedures for EMS System operations;
    j. Develop an EMS plan, Trauma plan, Quality Improvement plan, STEMI/Stroke plans (when regulations are developed) to the EMS Authority annually
    k. Designate and contract with specialty centers (Trauma centers, STEMI/Stroke centers, etc);
    l. Designate and contract with emergency and non-emergency dispatch centers;
    m. Designate a Disaster Control Facility (DCF);
    n. Develop guidelines, standards, and protocols for triage, pre-hospital treatment and transfer of emergency patients;
    o. Certify and accredit pre-hospital care personnel;
    p. Approve EMS personnel training programs; and
    q. Perform inspections, audits and investigations on EMS related issues.

2. Staffing for MVEMSA consists of the following personnel:
    a. Richard Murdock, Executive Director and Medical Health Operational Area Coordinator (MHOAC) (1.0 FTE);

b. Cindy Murdaugh, Deputy Director (1.0 FTE);
c. Lance Doyle, Quality Improvement and Trauma Systems Coordinator (1.0 FTE);
d. Thomas Morton, Data Analyst and Disaster Preparedness Coordinator (1.0 FTE);
e. Jim Whitworth, Facilities, Air Ambulance and Disaster Preparedness Coordinator (1.0 FTE);
f. Susan Watson, Financial Services Assistant and Executive Administrative Assistant (1.0 FTE);
g. Brenda Freese, Management Services Assistant (1.0 FTE)

3. Part-time and Independent Contractors:

a. Kevin Mackey, M.D., Regional Medical Director
b. Marilyn Smith, Response and Transport Coordinator (.6 FTE)

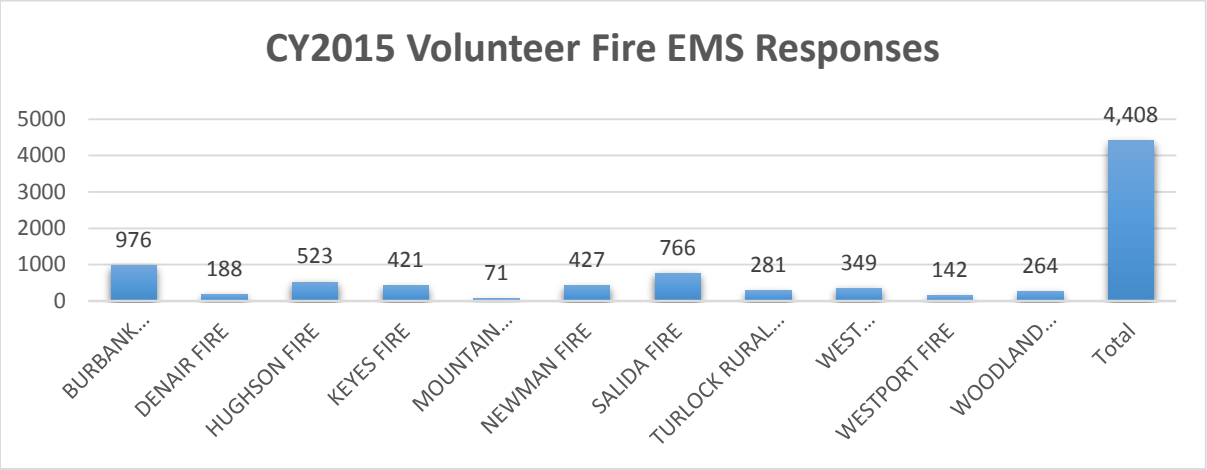
Fire First Responder Providers

Stanislaus County is served by a combination of sixteen (16) different fire agencies. The majority of fire first responder agencies are located in rural areas and are served by volunteers. Five (5) of the 16 agencies are served by paid personnel and are a combination of City Fire and Fire Districts, which are located in Stanislaus County.

Stanislaus County Volunteer Fire EMS Responses

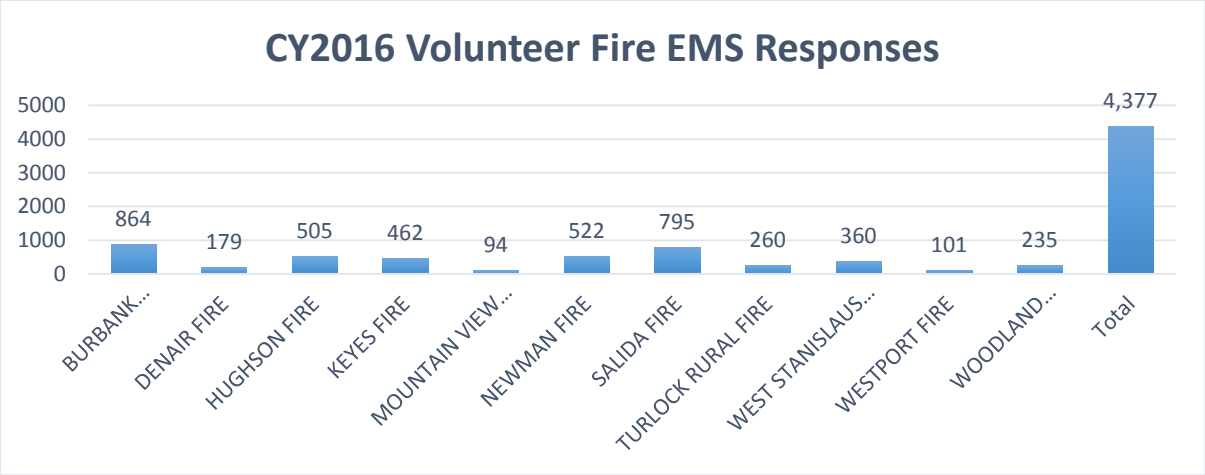
The responses listed in the graphs below are for EMS responses only and do not reflect the total call volume for each volunteer fire department. [1]

For 2015 there were a total of 4,408 EMS responses by the Volunteer Fire Agencies in Stanislaus County.



For 2016 there were a total of 4,377 EMS responses by the Volunteer Fire Agencies in Stanislaus County.

[1] Data report provided by Stanislaus County Office of Emergency Services



Volunteer Fire Agencies determine the type of EMS call to which their respective department respond. MVEMSA does not dictate the response level or response type to EMS calls. The decision is made by the Fire Chief of each respective volunteer department.

Issues such as decreased funding, increased equipment costs, decrease in volunteer staffing, and increased in EMS calls produces critical challenges for volunteer fire agencies.

Opportunities exist if volunteer fire agencies continue in EMS response:

a) Ambulance providers could re-evaluate the current provider-fire partnership agreements to address reimbursement, equipment purchasing, and EMS training with volunteer fire agencies.

The volunteer fire first responders level of training, which is provided to a patient on an emergency 911 EMS call is either that of an Emergency Medical Responder (EMR) or Emergency Medical Technician (EMT).

EMS Personnel are certified or accredited at the following levels:

1. BLS
   a. First Responder – Provides BLS assessment and skill level. The hours of training are not less than forty (40).
   b. EMT – Provides BLS assessment and skill level. The hours of training are not less than 160 hours (136 hours in the classroom and 24 hours in the clinical setting).
2. ALS
   a. Paramedic – Provides Advanced Life Support assessment and skill level. The hours of training are not less than one thousand ninety hours (1,090) broken down in the following way:
      i. Hours in the classroom (didactic and skills lab);
      ii. Minimum 160 hours in hospital clinical setting;
      iii. Minimum 480 hours in field internship on an ambulance (as a third person) with a field training officer.

Stanislaus County's EMS response system requires an ALS ambulance response coupled with an ALS or BLS fire department first responder response for 911 calls. Fire agencies respond based upon the patient's level of acuity and they are not dispatched to every 911 EMS call.

All contractor 911 Emergency ambulances that respond to 911 dispatched calls are staffed with a paramedic and an EMT. The fire departments (both volunteer and paid) are predominantly staffed with BLS with the exception of Modesto Fire Department (MFD), Stanislaus Consolidated Fire Protection District (SCFPD), and Patterson City Fire Department, which provides some dedicated ALS (paramedic) engine companies.

The fire agencies do not transport patients. If there is a delay in the ALS ambulance responding to the scene, a fire department EMT or Paramedic (for those approved ALS First Response Fire Agencies) will attend to the patient's emergency care needs within the EMT's or Paramedic's scope of practice until the ALS ground ambulance arrives and the care of the patient can be transferred to the ALS ground ambulance crew.

There are a few exceptions when an ALS Fire First Response Engine is on scene prior to the ALS ground ambulance and the Paramedic on the Fire Engine assumes care of the patient and continues that care to the receiving hospital as the ground ambulance transports.

As of the date on this assessment, there are two (2) ALS Fire First Response Agencies within Stanislaus County: Patterson City Fire Department and MFD. The concept of ALS Fire First Response is to provide ALS skill and assistance to the ground ambulance paramedic when a 911 emergency necessitates advanced life support or to get an ALS to the patient's bed side fast when an ALS ground ambulance is delayed for any type of circumstance.

The ALS (Paramedic) Fire First Responder on scene is required to follow MVEMSA policy 412.20 ALS Patient Transfer of Care for transfer of care to an ALS emergency ground ambulance for transport.

Patterson City Fire Department

Patterson City FD[2] provides all-risk emergency services to the City of Patterson and, through an automatic-aid agreement, portions of the West Stanislaus Fire Protection District service area. The department provides a wide variety of services to an expanding and diverse population. These services include:

- Fire Suppression
- BLS
- ALS
- Hazardous Materials Mitigation
- Urban Search and Rescue
- Water Rescue
- Community Education
- Disaster Preparedness
- Fire Prevention and Code Compliance

Patterson City FD responses: (The data in the table reflect only EMS and Fire calls and not all of the services provided by Patterson City FD).

[2] http://www.ci.patterson.ca.us/526/Response-Statistics-ISO-Rating

Type of Call	2014	2015	% change from previous year	2016	% change from previous year
Medical Aid	969	1,064	9.8%	1,174	10.3%
Fire	86	104	21.0%	92	-12.0%

Patterson City ALS First Response is provided on a limited basis. Patterson is relatively new (2016) to ALS first response and provides one (1) 24/7 ALS staffed station and one (1) 24/7 BLS staffed stations.

Modesto Fire Department [3]

Modesto Fire Department (MFD) provides all-risk emergency services to the City of Modesto and neighboring agencies on automatic aid/mutual aid. The department provides a wide variety of services to an expanding and diverse population. These services include:

- Fire Suppression
- BLS
- ALS
- Hazardous Materials Mitigation
- Urban Search and Rescue
- Water Rescue
- Community Education
- Disaster Preparedness
- Fire Prevention and Code Compliance

ALS First Response Engine Responses	2014	2015	% change from previous year	2016	% change from previous year
Engine 1	1,922	3,089	61%	3,356	8.7%
Engine 2	2,138	2,364	11%	2,353	-0.46%
Engine 9	1,010	1,393	38%	1,487	6.7%
Total	**5,070**	**6,846**	**35%**	**7,196**	**5.1%**

ALS First Responder Maintained Patient Care to Hospital	2014	2015	% change from previous year	2016	% change from previous year
Engine 1	25	44		54	
Engine 2	99	90		74	
Engine 9	50	29		27	
Total	**174**	**163**	**-6.3%**	**155**	**-5.0%**

[3] Data provided by Modesto Fire Department

MFD has been providing ALS first response since 2001 and staffs three (3) ALS stations and seven (7) BLS staffed stations that provide 24/7/365 response.

MFD responded to a total of 17,453 EMS calls in 2016. Seven thousand one hundred and ninety-six (7,196) of those calls (41.2%) were ALS Engine companies (Engine 1, 2, and 9). The call volume in prior years was lower as evidenced by the data.

Of the 7,196 ALS Engine responses in 2016 the Fire Paramedic maintained patient care to the hospital 155 times, which is approximately 2%.

Concern:

The time it takes for a Fire Paramedic to start an advanced procedure is short and often times non-existent due to an ambulance arriving soon after fire department's arrival. The total EMS responses in CY 2016 for MFD's three (3) ALS Engines was 7,196, which provides a challenge for fire paramedics to maintain an advanced skill level

A number of fire paramedics for MFD work second jobs on an emergency 911 ambulance and maintain a high standard of skill. However, there are paramedics working for MFD who are not exposed to the number and type of EMS calls that keep paramedic skills above standard.

ALS providers need repeated exposure to advanced interventions to maintain skills.

Opportunities:

a. Establish frequent training with ALS fire agencies using a high fidelity mankin in order to provide needed repeated exposure to seldom used skills;
b. Encourage multi-agency EMS training between ALS fire and ambulance providers, which is based off of MVEMSA field treatment protocols;
c. Develop a transfer of care policy specifically between ALS Fire and transporting ambulance based on clinicial criteria established by MVEMSA medical director;
d. Encourage ALS fire agencies to be an active part of the Stanislaus County System Plan;
e. Research the use of using ALS fire agencies in conjuction with a two-tier response system.

Stanislaus Consolidated Fire Protection District[4]

SCFPD provides services to the communities of Riverbank, Waterford, Empire, Modesto, and LaGrange. The Fire District is also contracted by the City of Oakdale and the Oakdale Rural Fire Protection District to provide all aspects of Fire Protection services to the constituents of the greater Oakdale area, which also includes the communities of Valley Home and Knights Ferry within North Eastern Stanislaus County.

SCFPD currently has eight (8) fire stations with full-time staff personnel. Effective July 1, 2017 SCFPD will begin ALS First Response with Station 26 in Riverbank.

[4] Data provided by Stanislaus Consolidated Fire Protection District

Medical Aid by District	2014	2015	% change from previous year	2016	% change from previous year
SCFPD	2,541	2,718	7.0%	3,170	16.6%
OFD	1,030	1,182	14.8%	1,406	19.0%
ORFD	434	478	10.0%	224	-53.0%
TOTAL	4,005	4,378	9.3%	4,800	9.6%

Fire Response by District	2014	2015	% change from previous year	2016	% change from previous year
SCFPD	287	267	-7.00%	308	15.40%
OFD	77	64	-16.80%	84	31.25%
ORFD	95	96	1.05%	40	-58.30%
TOTAL	459	427	-7.00%	432	1.17%

2016 Paid Fire EMS Call Volume:

First Responder Agency	EMS Service Level	EMS Call Volume (2016 data)
Turlock City Fire	BLS	4,274
Stanislaus Consolidated Fire	BLS	5,169
Ceres Fire	BLS	3,754
City of Patterson	BLS/ALS	1,174
Modesto Fire	BLS/ALS	17,453
Total	BLS/ALS combined	**31,824**

Ground Ambulance Providers

911 Emergency Ground Ambulance Providers

911 Emergency Medical Services (EMS) are provided on a 24/7/365 basis to the citizens of Stanislaus County by five (5) emergency ground ambulance providers. The county is divided into nine (9) geographic/boundary operating areas. Five (5) of these areas are Exclusive Operating Areas (EOAs) and four (4) are Non-Exclusive Operating Areas (Non-EOA) (Appendix A - Stanislaus County Zone Map).

According to Health and Safety Code 1797.85 an “EOA” means an EMS area or subarea defined by the EMS plan for which a local EMS agency, upon the recommendation of a county, restricts operations to one or more emergency ambulance service providers of Limited ALS or ALS.

The creation of one or more EOAs in the development of an EMS plan must be granted exclusivity on the basis of competition, such as a Request for Proposal (RFP), or upon the “grandfather clause,” which is developed when the Local EMS Agency implements a local plan (EMS Plan) that continues the use of existing providers operating within a local EMS area in the manner and scope in which the services have been provided without interruption since January 1, 1981 (H&S Code 1797.224).

Stanislaus County is unique to EMS Systems in California because a “grandfathered” (EOA) exists for American Medical Response (AMR), Patterson District Ambulance (PDA) and Oak Valley District Ambulance (OVDA).

The majority of the county’s population is served by AMR, with a service area concentrated along the Highway 99 corridor.

Special district ambulance agencies serve the balance of the county. Oak Valley District Ambulance (OVDH), part of the Oak Valley Hospital District, responds in the northeast regions of the county. The Del Puerto Hospital District continues to run Patterson District Ambulance (PDA) and serve the majority of the west county’s population. Newman and the southern tip of Stanislaus County receive ambulance service from Westside Community Health District (WSCHD).

High-Performance EMS

In May 2013, the MVEMSA implemented a new contractual arrangement for the ambulance providers within the 911 EMS system. In prior years, the ambulance provider agreements were treated as “evergreen” contracts and accountability to response time compliance, clinical quality improvement, and inter-facility transports were managed poorly. The direction and intent of the new MVEMSA administration was to deliver an EMS system called “High Performance Emergency Ambulance Service” to the residents of Stanislaus County.

A high-performance emergency ambulance service system is the delivery of clinical excellence, response-time reliability, economic efficiency, and customer satisfaction – simultaneously.[5] High-performance systems must measure performance using high-performance standards and continual comparison to other high-performance emergency ambulance services using benchmark criteria. The American Ambulance Association lists five (5) hallmarks to ensure high-performance emergency ambulance service:

1. Hold the ambulance provider accountable:
    a) Performance-based ambulance provider agreements addressing the following;
        i) Clinical benchmarks and standards
        ii) Response-time standards
        iii) Economic efficiency and sustainability
        iv) Customer satisfaction
2. Establish an independent oversight entity:
    a) Promotes performance accountability (MVEMSA is the independent oversight entity for Stanislaus County and has the authority and tools to improve service or safely replace a non-performing provider);
    b) Responsible for monitoring and routinely reporting the provider’s performance and compliance in clinical excellence, response-time reliability, economic efficiency, and customer satisfaction;
    c) Periodic audits of the EMS provider’s performance against other high-performance services.
3. Account for all service costs:

[5] EMS Structured for Quality, Best Practices in Designing, Managing and Contracting for Emergency Ambulance Service. American Ambulance Association. 2008

   a) Emergency ambulance service system accounting for all costs – direct, indirect, and shared.
4. Require system features that ensure economic efficiency:
   a) The volume and location of medical emergencies vary by hour of day and day of week. Ambulance deployment should be based on geographically deploying the right number of ambulances according to historical call demand and redeploying as events occur;
   b) "Static" deployment or "fixed" locations are generally discouraged and should not occur other than in remote, low-volume locations;
   c) System design should allow the emergency ambulance service provider to offer inter-facility ambulance transports as appropriate to maximize economies of scale;
5. Ensure long-term high performance service:
   a) Contractually required performance standards should be established through effective competition for service rights; properly structured competition promotes the greatest quality for the optimum cost, which can be achieved in two ways:
      i) Benchmarking the clinical and financial performance standards of the current service against other recognized high-performance emergency ambulance services;
      ii) A competitive procurement process.
   b) An effective competitive process can create a level playing field for all potential providers and ensure that the best service for the community is obtained;
   c) Tying the first four (4) hallmarks together with an effective competitive process ensures long-term high performance service.

System Status Management

System Status Management (SSM) is a widely used model for managing EMS resources (ambulances) within an EMS system. There are two important definitions to understand with SSM[6] :

1. Dynamic Deployment
   Dynamic deployment is utilized once an ambulance is on shift. Depending on probability trending over time, the unit will be assigned a posting place to await for the next move by dispatch. The area for posting is considered to be in an area where there will be a demand in the immediate to near future for 911 services. As units are assigned calls and the day progresses, these posting locations will change with the probability of a need increasing or decreasing for a potential assignment nearby. A true dynamic system will see the fluid movement of units from posting to posting to ensure the entire area is covered with maximum statistical efficiency.

2. Peak Demand Staffing
   Peak demand staffing requires schedules that put the appropriate number of resources into the system to meet the anticipated demand for those resources. Demands on the system often dictate the schedule type and shift times for an ambulance provider agency.

   MVEMSA requires the ambulance providers to meet monthly to review the system status plan for Stanislaus County. Each ambulance provider is responsible for its own respective deployment and system status management of ambulances. Collectively, all of the ambulance providers work together on the system status plan for Stanislaus County. MVEMSA Executive Director chairs the System Status Committee meetings.

[6] ibid

Ambulance Deployment

The ambulance providers are currently responsible for managing their own deployment plan regarding staffing, number of ambulances on the street each hour, and posting locations.

The deployment model below is what each ground ambulance provider budgets for a weekly or monthly basis. **The deployment budget model does not always equate to the number of actual units staffed daily.** The budgeted unit deployment numbers are provided to MVEMSA in the quarterly and annual reports.

"Actual hours" provide a more accurate picture of how many units are on the street daily providing 911 response readiness.

1. Westside Community Health District
   - Deploys (2) 911 ALS ground ambulances 24 hours/day and (1) 911 ALS Quick Response Vehicle (QRV) as staffing permits
   - Ambulances are stationed at the following locations:
   - Station 1 – 151 S. Hwy 33, Newman
   - Station 2 – 151 S. Hwy 33, Newman (2200 – 1000) and 1541 M Street, Newman (1000-2200).

2. Patterson District Ambulance
   - Deploys (2) 911 ALS ground ambulances 24 hours/day (336 deployed unit hours/week) and (1) 911 ALS Quick Response Vehicle (QRV) as staffing permits
   - Both units are deployed from 875 E Street, Patterson

3. Oak Valley District Ambulance
   - Deploys (3) 911 ALS ground ambulances (OV1, OV2, W71) 24 hours/day
   - Deploys (2) ALS ground ambulances 12 hours/day (OV3 - 0800-2000) and (OV4 - 1000-2200)
   - Ambulances are stationed at the following locations:
     - Station 1 – Corner of H street and Oak street in Oakdale
     - Station 2 – Sante Fe and Claus street in Riverbank
     - Waterford station – Corner of Main street and E street

4. ProTransport-1
   - Deploys (1) 911 ALS ground ambulance
   - Deploys (1) IFT ground ambulance
   - Ambulances are stationed at the following locations:
     - 2633 Tully Road Suite A-1, Hughson

5. American Medical Response
   - Deployment for Modesto:
     - (23) 911 ALS ground ambulances, which is based upon peak demand staffing. In other words – there are not (23) ground ambulances on the street all at once.
     - (2) ALS Inter-facility transfer (IFT) ground ambulances
     - (6) BLS ground ambulances
     - (2) Critical Care Transport (CCT) ground ambulances
     - (2) QRV units
   - Deployment for Turlock:

- (6) 911 ALS ground ambulances, which is based upon peak demand staffing. (see above)
- (1) BLS ground ambulance

Peak demand staffing requires schedules that put the appropriate number of resources into the system to meet the anticipated demand for those resources. Demands on the system often dictate the schedule type and shift times for an ambulance provider agency.

Emergency Care and Hospital Data/Projections

There are five (5) licensed acute care hospitals in Stanislaus County with Emergency Departments (EDs): Doctors Medical Center (DMC), Emanuel Medical Center (EMC), Kaiser Foundation Hospital, Memorial Medical Center (MMC) and Oak Valley Hospital District (OVHD). The largest ED is MMC with 44 treatment stations and the second largest is Kaiser with 36 treatment stations. The busiest ED in the county is DMC with 106,374 ED visits in 2016.

Stanislaus County Hospital Emergency Department Visits - 2016

Hospital	Location	EMSA Trauma Center	Total ED Traffic	Treatment Stations	ED Visits per Station	Percent Stanislaus Co. EMS
Doctors Medical Center	Modesto	Level II	106,374	33	3,223	33%
Emanuel Medical Center	Turlock	N/A	68,291	32	2,134	21%
Kaiser Foundation Hospital	Modesto	N/A	49,227	36	1,367	15%
Memorial Hospital Medical Center	Modesto	Level II	76,969	44	1,749	24%
Oak Valley Hospital District	Oakdale	N/A	26,135	12	2,178	8%
		Total	**326,996**	**157**	**2,083**	**100%**

Source: OSHPD Annual Utilization Report of Hospitals

There were 326,996 ED visits within Stanislaus County in 2016. DMC saw 33% of the ED traffic followed by MMC with 24% of visits. Both DMC and MMC are designated with Level II trauma centers by MVEMSA. A summary of the ED visits is included in the chart below. The number of treatment stations totaled a high of 160 in 2012. There were 157 ED treatment stations in 2016.

Over a five-year period from 2011 to 2015, Stanislaus County ED visits increased by 25.12%. The average number of annual visits during this period was 279,997. Each year, there has been an increase in ED traffic as illustrated in the historical comparison. The difference in number of ED visits between 2015 and 2016 is a 5.50% increase in ED traffic.

ED Historical Comparison 2011-2015

Year	Total ED Traffic	% Change from previous year
2015	309,924	3.25%
2014	300,165	8.34%
2013	277,035	4.47%
2012	265,170	7.05%
2011	247,692	
Total	**1,399,986**	

Source: OSHPD Annual Utilization Reports

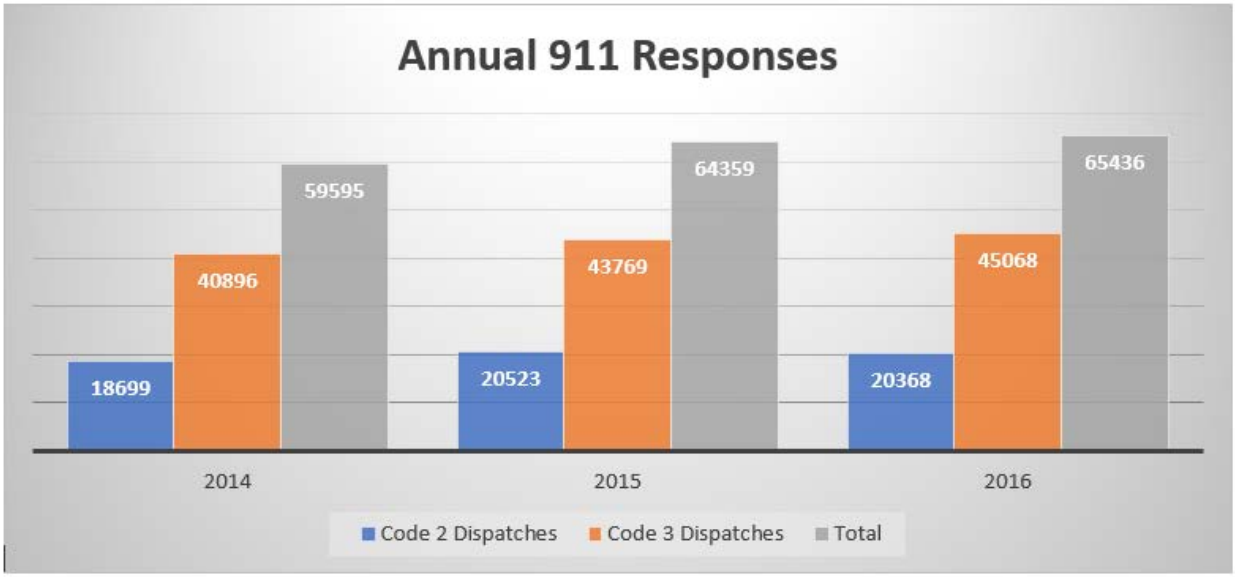
Stanislaus County 911 EMS Responses

Annual EMS Response Totals

As represented by the table and graph below, annual EMS response call volume has increased since 2013. May 1, 2013 was the beginning of the new ambulance provider contracts for Stanislaus County.

The response level to an emergency 911 call is either a Code 2 or Code 3 dispatch. A Code 2 dispatch is an ambulance responding without lights and sirens and a Code 3 dispatch is an ambulance responding with lights and sirens.

Annual 9-1-1 EMS Response Totals (Ground Ambulances)					
Year	2014	2015	% Change from Previous Year	2016	% Change from Previous Year
Code 2 Dispatches	18,699	20,523	9.75%	27,271	-0.75%
Code 3 Dispatches	40,896	43,769	7.0%	38,165	3.00%
Total	**59,595**	**64,359**	**8.0%**	**65,436**	**1.70%**



Levels of Response

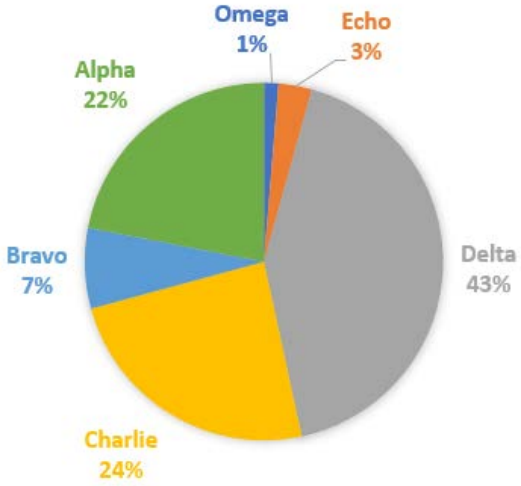
The National Academy of Emergency Medical Dispatch uses the determinant categories indicated below once the Emergency Medical Dispatcher identifies the level of concern using the answers to key questions posed to the 911 caller. Dispatch determinants have to do with how any responders will go, which levels of expertise are needed, and how rapidly they are needed. Priority dispatch promotes the concept of using the most appropriate resources.[7]

[7] Determinant Codes versus Response, Understanding How It Is Done, excerpts from: The Principles of Emergency Medical Dispatch. Third Edition (v11.1). Jeff J. Clawson, MD. Kate Boyd Dernocoeur, EMT-P. National Academy of Emergency Medical Dispatch

In Stanislaus County, AMR provides EMD (VRECC) for all 911 ground ambulances. The data below identify cumulative determinants for all 911 ground ambulance calls in Stanislaus County, which is based upon three (3) calendar years:

Levels of Response			
Determinant Categories / Level	**Definition**	**CY 2014-2016 %**	**CY 2014-2016 Total**
(E) Echo	• Indicative of imminent death situations. • First responders and EMS respond lights and sirens.	3%	3,443
(D) Delta	• Indicative of a critical trauma/medical situation. • First Responders and EMS respond lights and siren.	43%	48,367
(C) Charlie	• High acuity trauma medical situations. • Depending on local protocols, first responders and EMS may have different response criteria.	24%	27,605
(B) Bravo	• Low acuity trauma/medical situations. Usually EMS only response. • No first responder required, except if outlined in local protocol.	7%	8,320
(A) Alpha	• Basic low level trauma/medical situations. • Usually EMS only response. No lights and siren response.	22%	25,104
(Ω) Omega	• Referral request/assistance. • No EMS response.	1%	1,488

Based upon the response determinants not all Emergency 911 responses and transports require ALS (Paramedic care). It has been recognized that the vast majority of 911 calls do not require an ALS intervention (less than 5%), that patients in cardiac arrest account for less than 1-2% of calls, and that fewer than 15% of patients require any type of ALS procedure or even ALS-level monitoring by ALS personnel. [8] [9] Many operations across California are re-evaluating their respective systems to support a tiered EMS response



[8] Pepe PE, Mattox KL, Fischer RP, Matsumoto CM. Geographical patterns of urban trauma according to the mechanism and severity of injury. J Trauma. 1990;30:1125-32

[9] For a discussion of the advantages and disadvantages of both an all ALS tiered response ambulance system see Stout J, Pepe PE and Mosesso VN. *All-Advanced Life Support vs Tiered-Response Ambulance System.* Prehospital Emergency Care. January/March 2000, Vol. 1, No.4.

using BLS / EMT ambulances to respond and transport low acuity level calls.

Tiered EMS response has long been recognized as an industry standard of care that medically-validated dispatch protocols with differential ALS-BLS response determinant can safely and effectively support tiered EMS system deployment. The current system in Stanislaus County is already in place to allow for tiered EMS response, however performance standards will need to be addressed in future agreements to capture the benefits of a tiered response system.

Responses by City

The table below depicts the total number of Code 2 and Code 3 responses by city.

Code 2 and Code 3 Responses by City								
	2013*		2014		2015		2016	
	#	%	#	%	#	%	#	%
Ceres	2,892	7.92%	4,790	8.04%	4,981	7.74%	4,868	7.43%
Crows Landing	65	0.18%	123	0.21%	134	0.21%	159	0.24%
Denair	202	0.55%	341	0.57%	323	0.50%	311	0.48%
Empire	317	0.87%	556	0.93%	525	0.82%	566	0.86%
Farmington	7	0.02%	9	0.02%	30	0.05%	24	0.04%
Grayson	27	0.07%	31	0.05%	40	0.06%	34	0.12%
Hickman	62	0.17%	66	0.11%	109	0.17%	89	0.14%
Hughson	141	0.39%	974	1.63%	1,010	1.57%	971	1.5%
Keyes	280	0.77%	483	0.81%	470	0.73%	393	0.60%
La Grange	25	0.07%	59	0.10%	58	0.09%	47	0.07%
Modesto	22,395	61.34%	36,187	60.72%	38,571	59.93%	39,499	60.36%
Newman	577	1.58%	916	1.54%	1,004	1.56%	1,062	1.62%
Oakdale	1,731	4.74%		4.48%	3,006	4.67%	3,112	4.75%
Patterson	1,130	3.10%	1,856	3.11%	2,113	3.28%	2,158	3.29%
Riverbank	1,059	2.90%	1,573	2.64%	1,731	2.69%	1,782	2.72%
Salida	470	1.29%	776	1.30%	986	1.53%	977	1.49%
Turlock	4,588	12.57%	7,340	12.32%	8,269	12.85%	8,390	12.82%
Vernalis	13	0.04%	31	0.05%	30	0.05%	32	0.05%
Waterford	492	1.35%	755	1.27%	930	1.45%	931	1.42%
Westley	23	0.06%	48	0.08%	34	0.05%	20	0.07%
Other/ Unknown	13	0.04%	14	0.02%	5	0.01%	11	0.01%
Total	**36,509**	**100.00**	**59,595**	**100.00**	**64,359**	**100.00**	**65,436**	**100.00**
**Reporting period of May through December 2013*								

Mutual Aid

Mutual Aid occurs when an emergency ambulance service is provided by a neighboring provider during periods of severe weather, multi-casualty incidents, disasters, or other extraordinary events that overwhelm existing resources.

The tables below represent the data MVEMSA collects regarding mutual aid services provided by each ground ambulance provider in Stanislaus County:

- Mutual Aid RECEIVED into the ambulance providers respective Exclusive Operating Area (EOA) or Non-Exclusive Operating Area (Non-EOA)
- Mutual Aid provided to Stanislaus County Providers by the contracted ambulance provider
- Mutual Aid provided outside of Stanislaus County (neighboring county) by the contracted provider

American Medical Response				
Calendar Year	Mutual Aid **Received** into AMR's EOA	Mutual Aid provided to Stanislaus County Providers	Mutual Aid provided outside of Stanislaus County	Total Mutual Aid **Provided** by AMR
2013	686	501	409	910
2014	1,029	260	228	488
2015	954	328	488	816
2016	1,068	321	75	396

Key Take-Aways:

- In 2013 AMR was provided more mutual aid by other providers than they received.
- In 2014-2016, AMR received substantially more mutual aid than they provided.
- Reasons for receiving substantially more mutual aid:
  - Not staffing enough units on the street;
  - Staff paid time off affecting number of ambulance units on the street;
  - Increase in call volume, putting additional strain on staff/units;
  - ER bed delays causing a delay in response.
- Concerns:
  - Rural providers do not have the resources to run additional calls daily into AMRs EOA;
  - Cost (Unit Hour Utilization) associated with increased call volume for rural providers can be substantial;
  - AMR's actual unit hours hasn't kept up with the increase in call volume since 2013 (budgeted hours vs. actual hours).

Oak Valley Ambulance				
Calendar Year	Mutual Aid **Received** into Oak Valley's EOA	Mutual Aid provided to Stanislaus County Providers	Mutual Aid provided outside of Stanislaus County	Total Mutual Aid **Provided** by OVA
2013	253	251	70	321
2014	266	362	83	445
2015	347	355	95	450
2016	300	417	29	446

Key Take-Aways:

- Oak Valley District Ambulance provided more mutual aid to other Stanislaus County Ambulance Providers than they received;
- The majority of Oak Valley District Ambulance's responses are into AMR's EOA.
- Concerns:
  - Oak Valley has limited resources and providing mutual aid when unnecessary leaves Oak Valleys EOA short on ambulances;

- The majority of all mutual aid responses are to providers within Stanislaus County.

Patterson District Ambulance				
Calendar Year	Mutual Aid **Received** into Patterson's EOA	Mutual Aid provided to Stanislaus County Providers	Mutual Aid provided outside of Stanislaus County	Total Mutual Aid **Provided** by PDA
2013	246	102	13	115
2014	193	138	30	168
2015	180	124	48	172
2016	268	160	23	183

Key Take-Aways:

- Patterson District Ambulance consistently received more mutual aid than they are provided;
- Causes:
  - Majority of mutual aid received is from Westside Community Health District, which is due to:
    - Long transport times for Patterson District Ambulance;
    - Multiple calls taking place in Patterson's first in area within a short time period;
    - Not staffing enough units on the street.

ProTransport				
Calendar Year	Mutual Aid **Received** into ProTranport's contracted (Non-EOA) area	Mutual Aid provided to Stanislaus County Providers	Mutual Aid provided outside of Stanislaus County	Total Mutual Aid **Provided** by ProTransport
2013	108	409	1	410
2014	131	595	1	596
2015	132	676	1	677
2016	139	706	0	706

Key Take-Aways:

- ProTransport-1 provides a substantial amount of mutual aid to the providers within Stanislaus County;
- The majority of mutual aid responses are into AMRs EOA
  - Reasons:
    - AMR has a reduced number of units on the street;
    - ER bed delays causing delay in response.

WestSide Ambulance				
Calendar Year	Mutual Aid **Received** into WestSide's contracted (Non-EOA) area	Mutual Aid provided to Stanislaus County Providers	Mutual Aid provided outside of Stanislaus County	Total Mutual Aid **Provided** by WestSide Ambulance
2013	64	224	8	232
2014	66	184	10	194
2015	85	155	13	168
2016	84	229	931	1,160

Key Take Aways:

- WSCHD provided a substantial amount of mutual aid responses outside of Stanislaus County into Merced County;
- There was a significant increase in mutual aid supporting providers inside and outside of the County in 2016;
- Merced County's EOA is the responsibility of Riggs Ambulance. WSCHD subcontracts with Riggs Ambulance to provide service for the health care district citizens living on the west side of Merced County;
- Often both WSCHD ambulances are used to provide aid into Merced County leaving the Stanislaus County side of the health care district uncovered with reliance on PDA or AMR as mutual aid;
- There were several incidents where WSCHD has provided response deep into Merced County on calls in Delhi, Hilmar, Livingston and Atwater.

Concerns:

- Not staffing enough units on the street;
- Additional demand placed on Patterson District Ambulance to cover Westside's district when both WSCHD ambulances are unavailable;
- Health care district citizens paying a special tax assessment for delivery of EMS services by Health care district owned ambulance;
  - Special Tax Assessment Amounts, which generates roughly $372,083/year:
    - Residential property - $40.00 per residential unit;
    - Commercial property - $95.00 per parcel;
    - Industrial property - $250.00 per parcel;
    - Agriculture Property - $40.00 per residential unit plus $0.10 per acre.

Response Time Standards

Response time analysis and standards continues to be a controversial topic in EMS. In recent years, an effort to focus on clinical and outcome measures has led many to argue that response time measures are outdated and irrelevant. However, response time is still an important measure for any EMS system, as it is critical in certain, rare situations (such as cardiac arrest), and response time goals are often embedded in contracts and budgets.

Many systems across California and the nation measure response times differently thus causing a lack of consistency, which can lead to unrealistic expectations that often impact budget and resource allocation decisions.

For example, a survey conducted by EMS1.com[10] found that 26% of respondents started the clock for response time when the phone was answered in a dispatch center, while 47 percent (%) started measuring when the unit was notified. About two-thirds of the organizations surveyed said they measure 90th percentile times, while the rest measured average response times, which provides a lack of consistency leading to unrealistic expectations.

In Stanislaus County**, the response time clock starts at the time the unit is dispatched and stops when the responding unit arrives at the scene**. Currently, the response times in Stanislaus County are the second strictest response time standards in all of California with the strictest response times located in San Joaquin County. The response area definitions and response times are on the following chart:

Response Area Definitions	
Response Area	**Population Density**
Urban	Population density of greater than 100 persons per square mile
Suburban	Population density of greater than 51 to 99 persons per square mile
Rural	Population density of 7 to 50 persons per square mile
Wilderness	Response grid that doesn't meet the urban, suburban, or rural criteria

Response Time Standards				
Response	**Urban**	**Suburban**	**Rural**	**Wilderness**
Code 2*	15 minutes	20 minutes	25 minutes	ASAP
Code 3**	7.5 minutes	11.5 minutes	19.5 minutes	ASAP
*If a Provider ALS First Response Vehicle arrives on scene prior to the transporting ambulance, the transporting ambulance has an additional 5 minutes to arrive.				
**If a Provider ALS First Response Vehicle arrives on the scene prior to the transporting ambulance the transporting ambulance has an additional 3.5 minutes to arrive.				

The ambulance provider shall ensure that an ALS ambulance is on the scene of all 911 dispatched calls at the ninetieth percentile as measured within the geographic service area(s).

[10] EMS1.Com 2016 EMS Trend Report. The forces shaping the present and future of EMS in the U.S.

Response Times

Response times are the most easily documented and evaluated of all parameters of emergency ambulance service performance and have gained wide public recognition as a key measure of quality and service. High-performance emergency ambulance services have developed advanced technology that accurately measures response times, including Computer Aided Dispatch (CAD) systems, Automatic Vehicle Location (AVL) systems and expert management techniques.

Types of Response Time Measurements

1. Measuring and reporting average response times

It has been a common practice with many agencies to report response times by using averages. Calculating response time averages is an easy to understand methodology that calculates response times by adding all applicable response times together and then dividing the total number of minutes by the total number of responses to come up with an average. Measuring and reporting average response times is inadvisable because one-half of the patients may receive the required response time, while the bottom half do not.

The use of average response times also can raise concerns about ambulance deployment practices. If a pre-determined average response time goal has been set, the placement of the ambulances may be centered to respond to a geographic area that can be easily reached in that time or that has a higher-than-normal call volume, potentially leaving the rest of the service area unprotected.

The use of average response times in Rural and Suburban areas can be a cause for even greater concern because just one short response time can be used to offset several longer ones, with the result being resident or patient complaints about the inequity of service.

Ambulance providers in Stanislaus County are NOT measured by using average response times. The ambulance provider's contracts use a method called "Fractile Response-Time Measurement or 90th percentile."

2. 90th percentile or Fractile Response-Time Measurement

In Stanislaus County, the methodology used and accepted for ambulance providers, regarding compliance measurement in order to ensure service equality to all patients, is fractile distribution reported to the 90th percent.

This methodology places each response within the minute it is achieved and stacks the minutes in ascending order to establish a fractile response-time distribution. The point at which the fractile response time crosses the 90th percentile measures the point of the service's response-time reliability.

In the figure below is an example of a report commonly used to measure response-time reliability. The report shows that the system achieved response time reliability of eight minutes or less, 95.2% of the time, for the month shown. It's also important to note that the 50th percentile is achieved between the fourth and the fifth minute.

Minutes	Number of Responses	Cumulative Percentage	Frequency of Occurrence
0	62	2.4%	2.4%
1	60	4.7%	2.3%
2	221	13.2%	8.5%
3	248	26.5%	13.4%
4	489	45.3%	18.8%
5	467	63.3%	17.9%
6	374	77.6%	14.4%
7	270	88.0%	10.4%
8	**188**	**95.2%**	**7.2%**
9	52	97.2%	2.0%
10	28	98.3%	1.1%
11	21	99.1%	0.8%
12	11	99.5%	0.4%
13	6	99.7%	0.2%
14	2	99.8%	0.1%
15	5	100.00%	0.2%
Total:	2604		

While the best standard would require a response within the established response time 100% of the time, this is not reasonable or economically affordable in today's (2017) market. Consequently, a 90% requirement typically is used. The fractile method also assures equality of service to all area residents. To achieve 90% reliability, different deployment patterns and management techniques should be used. Times of calls, road systems, shape of service areas, traffic patterns, and population fluctuations should all be considered on a regular basis to ensure the reliability is achievable on a regular basis and within the service's operation budget.

Per minute for Metro Agreement (AMR)

In 2013 the contracts were developed and implemented using industry standards. In addition to the non-compliance for 90% fractile response the Metropolitan Ambulance Provider Agreement (AMR) included fines for each response that exceeded the response time standard regardless if 90% fractile response was met. In essence, the contract required AMR to be on scene to all calls 100% of the time, which is an impossible feat.

In recent articles, publications and consultant reports it is not reasonable or economically affordable in today's (post ACA) market to establish a standard of being on time to all 911 emergency calls (Code 2 or Code 3) 100% of the time.

The majority of all fines received from AMR are the result of the fines for each call that exceeds the response time standard regardless if the 90% fractile was met.

Due to the concern of financial sustainability and ambulance staffing (paramedic) shortages it is not recommended to keep the per minute fine structure within future agreements.

Monitoring and Reporting Response Time Compliance

According to "EMS Structured for Quality – Best Practices in Designing, Managing and Contracting for Emergency Ambulance Services" published by the American Ambulance Association the following are important consideration when determining how to measure and report EMS response-time compliance:

- **Response-times should be monitored and reported on a monthly basis**. Reporting response-time compliance on a monthly period provides adequate volume for reporting to be meaningful and is a short enough time to provide timely recognition and correction of response-time performance.
- **Responses in low volume areas should be aggregated.** In rural or other low-volume areas that do not generate a minimum number of responses per month (e.g., 100 responses), additional month(s) responses should be aggregated until there are at least 100 responses to be measured. Once this volume has been achieved, the aggregate responses can be reported in the subsequent month's report and the response count reset to zero. An alternative approach is to establish a longer reporting period based on historical data, such as quarterly rather than monthly, during where there are consistently a minimum of 100 responses.
- **Response-time performance based on complete responses**. All responses that result in ambulance arriving at the location to which they were requested should be measured.
- **First-arriving ambulance stops the response time clock**. In a multiple-ambulance response to a single incident, the first-arriving ambulance stops the response-time clock. Only a fully staffed, transport-capable ALS ambulance can stop the ambulance response-time clock.
- **Response-time performance is reported separately for each EMS system component.** Response-times are established for each component of the EMS System, such as the co-response provider and the emergency ambulance service provider, and are monitored and reported separately to the oversight entity (EMS Agency).

Exemptions and Request for Exemptions

MVEMSA worked with Stanislaus County stakeholders in early 2013 to develop exemption requests that were minimal and outside the ambulance providers' reasonable control. In contracts prior to 2013, the ambulance provider contracts allowed many exemptions placing no burden of proof on the ambulance providers for the exemption request. In addition, there was no internal process at MVEMSA for providing response time compliance oversight and accountability.

Ambulance services should be exempt from the response-time requirement for certain predetermined types of calls or periods of time as specified in the performance-based contract. Recommendations of exemptions by the American Ambulance Association "EMS Structured for Quality: Best Practices in Designing, Managing and Contracting for Emergency Ambulance Service" is as follows:

- Periods of severe weather conditions;
- Extraordinary events causing system overload (e.g., a predetermined number of emergency calls simultaneously in progress as specified by the contract);
- A declared disaster.

Other circumstances outside the provider's reasonable control cause EMS-system overload and longer ambulance response times. These include periods when hospital staffing shortages or patient overcrowding cause extended ambulance turn-around times in the emergency department. [11]

Adding a minute or two to the time the ambulance is out of service produces a negative impact on the system which directly leads to increased response times and decreased system efficiencies.

Response-time exemptions should also be considered when the delay is outside of the ambulance provider's reasonable control.

Response-time exemptions are the responsibility of the ambulance provider. The burden of proof that there is good cause for an exemption shall rest with the ambulance provider and the ambulance provider must have acted in good faith. The following timeline is in the ambulance provider contract:

- Ambulance provider submits time edits to VRECC no later than the third calendar day of each month for the previous month responses;
- VRECC will complete the time edits no later than 5 p.m. on the seventh calendar day of each month for the previous month responses;
- Ambulance provider will submit exemption requests to MVEMSA no later than 12 p.m. (noon) on the 15th calendar day of each month for the previous month responses.

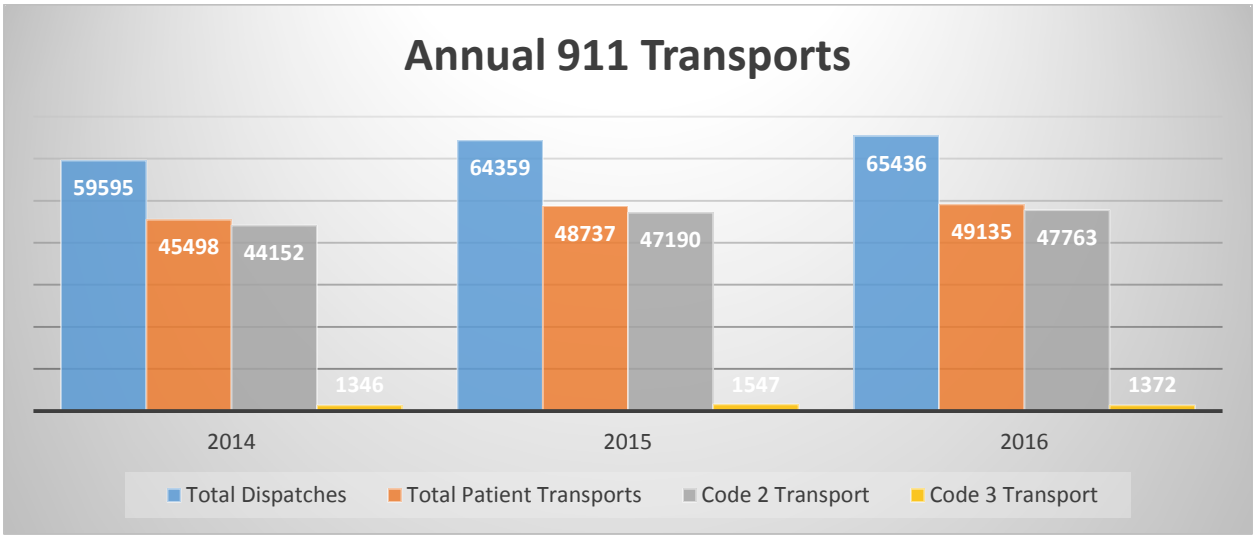
Future agreements need to continue on the same course as the current ambulance provider agreement with regards to the process for requesting exemptions and the type of exemption that may be requested by the ambulance provider.

Stanislaus County Ground Ambulance Transport Data

An increase in 911 Emergency Ambulance responses over the three-year period (2014-16) has resulted in an increase in transports to the hospital Emergency Room (ER). Currently, the California Code of Regulations only authorize an emergency 911 ambulance to transport the patient from a 911 scene to a licensed acute care facility (Hospital ER). A 911 emergency ambulance cannot transport the patient to any other type of facility therefore the numbers below are transports to an ER only.

[11] General Accounting Office (US) [GAO]. Hospital emergency departments: crowded conditions vary among hospitals and communities. Washington, DC: U.S. General Accounting Office; 2003 Mar 2. GAO-03-460. P 3.

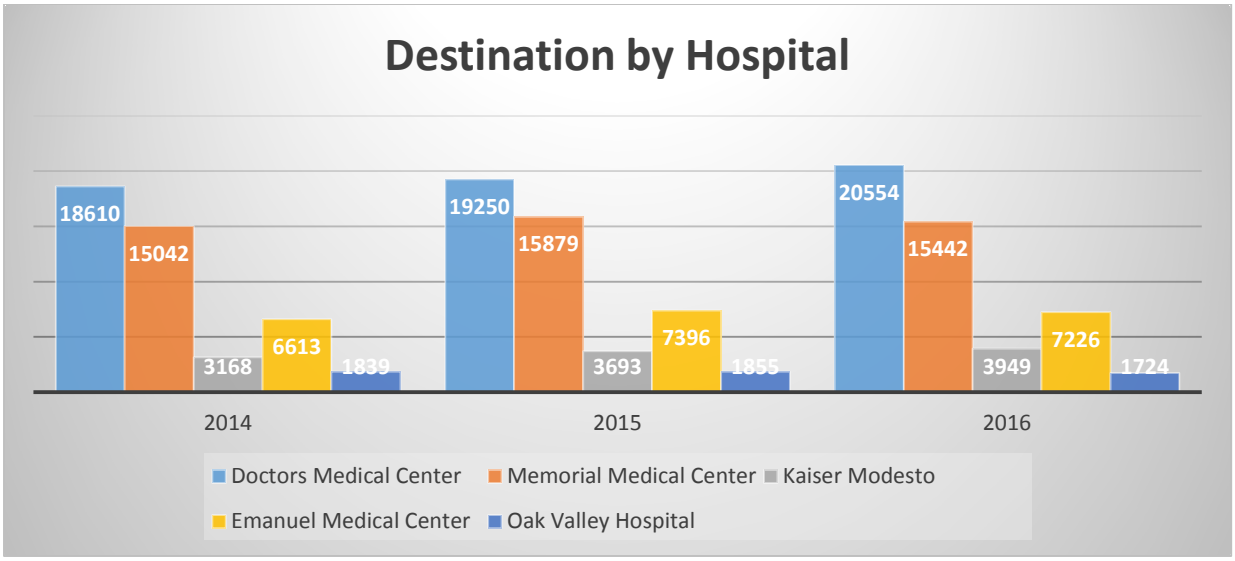
Annual 911 EMS Transport Totals (Ground Ambulances)			
Year	2014	2015	2016
Total Dispatches	59,595	64,359	65,436
Canceled (No transport)	(14,097)	(15,622)	(16,301)
Total Patient Transports	45,498	48,737	49,135
Code 2 Transport	44,152	47,190	47,763
Code 3 Transport	1,346	1,547	1,372



Transports by Hospital					
Hospitals	2014	2015	% change from previous year	2016	% change from previous year
Doctors Medical Center	18,610	19,250	3.4%	20,554	6.8%
Memorial Medical Center	15,042	15,879	5.6%	15,442	-2.8%
Kaiser Modesto	3,168	3,693	16.5%	3,949	6.9%
Emanuel Medical Center	6,613	7,396	11.8%	7,226	-2.3%
Oak Valley Hospital	1,839	1,855	0.9%	1,724	-7.0%

How does an ambulance attendant determine which hospital to transport the patient?

- Closest appropriate for a critical patient;
- Patient's choice;
- Specialty center triage and destination policies;
- Directed by Disaster Control Facility (e.g., Multi-Casualty Incident).



Air Ambulance

Stanislaus County is home base for two EMS Air Ambulance providers – Air Methods and PHI. Air Methods was based on the helipad located at Memorial Medical Center and provides response to 911 scene calls and IFTs. PHI is based at the Modesto Airport and provides response to 911 scene calls and IFTs.

Air Methods Ambulance EMS Volume			
Year	**2014**	**2015**	**2016**
Responses to 911 Scene	622	652	906
Transports	82	83	240
% Transported	13%	13%	26%

PHI Air Medical Ambulance EMS Volume			
Year	**2014**	**2015**	**2016**
Responses to 911 Scene	227	263	264
Transports	35	58	46
% Transported	15%	22%	17%

In early 2017 contractual changes were made between Memorial Medical Center and Air Methods, which resulted in a new air ambulance contract with CalStar. CalStar is currently based at MMC and provides IFTs as well as response/transport from 911 scene calls.

Key Ambulance Provider Contributions

American Medical Response

- Community Paramedic Pilot Project
  - AMR has been a key component of the Community Paramedic Pilot Project Study. One of the main reasons pilot projects have failed in California has to do with funding.

  - AMR has contributed all of the staff time for training and implementation of the program without having the opportunity to bill for services.
  - The cost to AMR has been approximately $235,000.00 dollars per year. The cost increases approximately 3-5% per year.
- Disaster Control Facility (DCF)
  - MMC terminated their contract with MVEMSA as the DCF for Stanislaus County on April 11, 2017 at noon.
  - VRECC agreed to move the DCF operations to their facility with a "go live" date of April 11, 2017.
  - Agency provided a week long training for VRECC staff on the functionality of a DCF
  - VRECC is providing the service to Stanislaus County at no cost. The training cost estimate to AMR (VRECC) was $5,500.00 dollars.
- Public Education
  - AMR was pivotal in providing CPR education to 7,000+ citizens over a 3-year period
  - In addition, AMR worked with Modesto Fire to provide pit crew CPR to EMS First Responders and Ambulance Provider personnel.

Rural Ambulance Providers

- Public Education (CPR, ROP Ride Along, School Programs)
- Education and Training with Paid and Volunteer Fire Agencies

Specialty Care Centers

Stanislaus County is home to three types of specialty care centers – Trauma, Stroke, and ST-Elevated Myocardial Infarction (STEMI). In California, a LEMSA is responsible for designating a specialty center.

There are two (2) level II trauma centers in Stanislaus County – DMC and MMC. The catchment area for both trauma centers includes a large geographical area that includes all of Stanislaus County, parts of San Joaquin County, Merced County, Calaveras County, Tuolumne County and Mariposa County. The following are strengths and/or accomplishments of the trauma program in Stanislaus County:

- The Trauma Audit Committee (TAC) meetings have a primary emphasis on reviewing and sharing information related to system functions and performance;
- Both trauma centers are committed to patient care and system performance and participate in system initiatives and education;
- Current trauma system works well with and supports mutltiple counties (Merced, Tuolunme, Calaveras, Alpine, Amador, Mariposa and San Joaquin);
- There is strong communication and cooperation with MVEMSA as well as with EMS providers regarding education and feedback;
- Both trauma centers participate in Total Quality Improvement Programs (TQIP), are verified through American College of Surgeons (ACS) as Level II Trauma Centers and participate in the Regional Trauma Care Committee;
- Both trauma centers participate in outreach to surrounding referral hospitals when needed;
- Both trauma centers submit data to the state trauma registry;
- Both MVEMSA and trauma centers provide support and participate in Merced County's Trauma Advisory Committee.

Three (3) STEMI Receiving Centers have been designated in Stanislaus County – DMC, MMC and EMC. The STEMI Receiving Facilities were designated in 2011 and all three facilities provide excellent care with great outcomes. The following are strengths and/or accomplishments of the regional STEMI program in Stanislaus County:

- Benchmark times/data are excellent and often exceed the standards set by national associations and accrediting bodies;
- All three STEMI Receiving Centers are accredited with the Society of Chest Pain Centers (SCPC);
- All three STEMI Receiving Centes work closely with MVEMSA and attend the quarterly meetings hosted by MVEMSA
- Paramedics perform 12-lead ekgs in the pre-hospital setting and transmits the ekgs directly to the ED Physician and Chest Pain Center prior to transporting the patient;
- The paramedic can activate a "STEMI alert" from the pre-hospital environment, which activates the cardiac catheterization lab team to decrease the time it takes for reperfusion of the heart;
- The facilities work closely with STEMI Referral Centers from Calaveras County, Mariposa County, Tuolumne County and Merced County.

The Primary Stroke Center (PSC) designation formally began in late 2016 with the "go live" date of March 1, 2017 for Stanislaus County. Three (3) hospitals have achieved PSC designation form MVEMSA – DMC, MMC and Kaiser Hospital of Modesto. The PSC centers and MVEMSA are developing a regional PSC committee in order to develop benchmarks and monitoring criteria through best practice research and system improvements.

Opportunities:

Further specialty care opportunities exist that could benefit the EMS system. Example(s) include the following:

- Develop a regional Primary Stroke Center (PSC) systems of care committee
- Develop PSC benchmarks to measure/monitor within Stanislaus County
- Research best practices for implementing pre-hospital stroke scale to recognize large vessel occlusion in stroke patients
- Data analysis and benchmarking for trauma systems of care needs to enhance in order for our trauma systems of care to align with regional and state trauma initiatives
- Improve referrel hospital education to align trauma centers directly with referrel hospitals for education, expedite patient transfers and real-time physician support.
- Research and develop an implementation of an air vs. ground transport decision matrix to address long air transport times from the scene of an incident.
- Explore the collaborative formation of a Trauma Quality Improvement Program (TQIP)

Financial Strategy and Sustainability

The objective is to look at how a high-performance emergency ambulance service system achieves the highest levels of clinical performance and response-time reliability while maximizing economic efficiency and customer satisfaction.

Emergency Ambulance Service Costs

California Health and Safety Code section 1797.224 authorizes the Local EMS Agency to issue Exclusive Operating Rights to an ambulance provider. Under current contract terms, the County does not pay the provider for ambulance services. Instead, ambulance services are funded entirely by fee-for-service revenue from third-party payors or clients or special tax assessment (created only in the hospital district owned ambulances).

Historically, this contractual arrangement between MVEMSA (acting on behalf of the County) and private provider has shown mutual benefit, enabling the ambulance provider to generate adequate revenue from direct client service while also allowing the County to guarantee emergency medical response for residents calling 911. **But new market and policy conditions have emerged, chiefly a change in payor mix and implementation of health care reform, that call into question the ability of ambulance providers generating enough revenue to provide sustainable, high quality ambulance services. These challenges are not unique to Stanislaus County, and are being faced by other local governments across California and the United States.**

Throughout California, EMS Systems, and especially ambulance providers, are facing unprecedented economic pressures. During the past several years, large populations have shifted from higher-paying commercial insurance plans to lower-paying government plans. Many commercial insurance plans are also decreasing payment rates for ambulance transport. In total, more people are insured due to federal health care reform, but the average insurance payment rate has significantly decreased for ambulance care, causing some of Northern California's largest EMS systems and ambulance providers to lose millions of dollars annually, threatening their short- and long-term financial solvency. Four of the most significant factors influencing aggregate ambulance reimbursement rates are: (1) the increase in number of Medi-Cal insured; (2) Medicare (3) the decreased reimbursement rates by commercial insurance companies; and (4) the increased number of high deductible health insurance plans[12] .

1. Medi-Cal

Medi-Cal (California's version of Medicaid) reimburses ambulance providers at rates significantly less than the cost of providing ambulance services. Medi-Cal's average payment is approximately $130 to $150, which is approximately 15% to 25% of the cost of an ambulance transport[13] [14]. California law prohibits ambulance companies from billing the patient for the difference between the ambulance cost and Medi-Cal reimbursement, causing ambulance companies to write off this difference as a contractual allowance to accept Medi-Cal payments.[15]

2. Medicare

Medicare sets its allowable payment rate through the Medicare Ambulance Fee Schedule, allowing charges only for an ambulance transport base rate and mileage charges to a hospital.

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[12] Independent Financial Review of Elements Related to the County's Ambulance RFP. County of Contra Costa, Ca. CityGate Associates, LLC, Management Consultants.
[13] "Medi-Cal Rates as of April 25, 2017." *California Department of Health Care Services, Medi-Cal.* 25 April 2017. Web. Accessed 25 April 2017. https://files.medi-cal.ca.gov/pubsdoco/rates/rateshome.asp
[14] "California's Ground Emergency Ambulance Transportation (GEMT) Certified Public Expenditure." *California Ambulance Association.* 17 July 2013. Web. Accessed 25 April 2017. www.the-cass.org
[15] MVEMSA interviews with ambulance providers

Medicare will pay 80% of its allowable rates, regardless of the charges by the ambulance company, causing the ambulance company to write off the difference of its billed rate and Medicare's allowable rate. The patient or the patient's supplemental insurance must pay the remaining 20% balance between Medicare's allowable rate and the Medicare payment. Medicare's average transport payment is approximately $540 to $600 and thus is also below the full cost of a transport for both the BLS or ALS level of care.[16]

3. Commercial Insurance Plans

Historically, commercial (private) insurance companies paid 80% or greater of an ambulance company's billed charges, and the population covered by commercial insurance was much larger. Thus, commercial insurance helped transport providers cover losses generated by the lower paying government insurance providers, such as Medi-Cal and Medicare. [17]

Commercial insurance rates of reimbursement are also decreasing. Rather than paying the traditional 80% of the rate charged by ambulance companies, many commercial insurance companies now pay either Medicare rates, rates they unilaterally determine as "reasonable and customary," or charges based on a region's average rate structure. Many insurance companies also review ambulance records, routinely determine that a patient's condition did not warrant an ambulance, and disallow the entire charge.[18]

4. High Deductible Health Plans (HDHP)

Covered California, the state's health care exchange, provides four insurance plan levels, commonly called the "metal plans or metals" using labels such as platinum, gold, silver, and bronze and are based on how the patient and his or her insurance plan split costs**. Categories have nothing to do with quality of care.[19]** Two of the four, along with many commercial plans, are HDHP. Such HDHP plans have a minimum individual deductible of $1,300, but the average deductible for an individual HDHP is $2,098, and 20% of workers have a deductible of at least $3,000. Other plans are offered with $4,000-$5,000 deductibles. Enrollment in employer-sponsored HDHP plans had rapidly and significantly increased from 4% in 2006 to 20% of covered workers in 2014.[20] The rate of growth of HDHP plans will continue to dramatically rise. Many people purchase HDHP plans because of their less expensive premiums, but cannot pay the prohibitively high deductible following a medical emergency[21] [22]

The change in payor mix combined with a decrease in reimbursement rates by commercial insurers have resulted in an overall decrease in per-call revenue, making it difficult to maintain the financial solvency of the EMS System. In addition, since the beginning of the new ambulance provider agreements in 2013, EMS Systems in California that have imposed contractually-mandated costs (e.g., subsidies, fees, or pass-through) on contracted 911 EOA

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[16] "Ambulance Fee Schedule Public Use Files." *Centers for Medicare and Medicaid Studies.* April 2015. Web. Accessed 25 April 2017. <http://kff.org/health-reform/state-indicator/total-monthly-medicaid-and-chip-enrollment/>

[17] AMR billing

[18] Ambulance Providers

[19] https://www.healthcare.gov/glossary/health-plan-categories/

[20] Renter, Elisabeth. "Should You Roll the Dice on a High Deductible Health Plan?" *US News and World Reports.* 10 November 2014. Web. Accessed 25 April 2017. http://health.usnews.com/health-news/health-insurance/articles/2014/11/10/should-you-roll-the-dice-on-a-high-deductible-health-plan

[21] "Understanding High Deductible Health Plans." *Fair Health Consumer.* n.d. Web. Accessed 25 April 2017. http://fairhealthconsumer.org/reimbursementseries.php?id=48$terms=understanding-high-deductible-health-plans

[22] http://files.kff.org/attachment/ehbs-2014-abstract-summary-of-findings

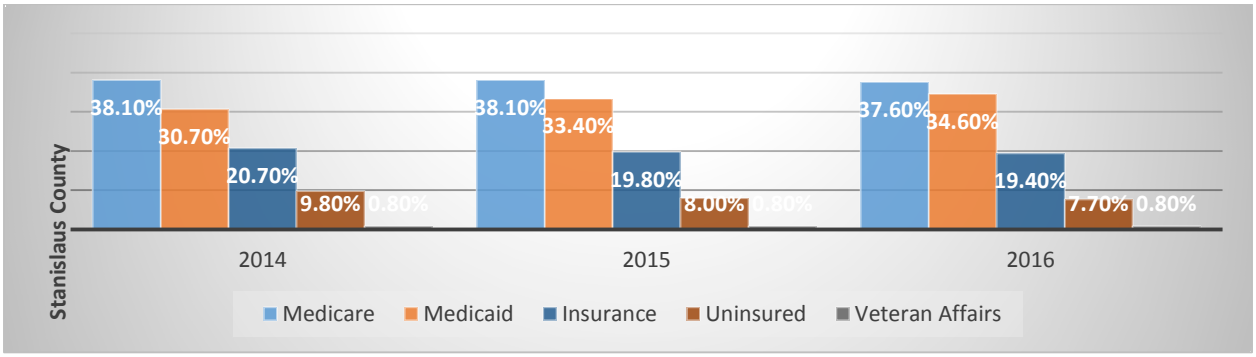
ambulance providers have experienced significant financial shortfalls. These costs also greatly affect the per-call revenue that can be generated by providers.

Research strategic matching of emergency ambulance resources to patient needs, and improve care to patients without undue financial or operational hardships to the EMS system and ambulance provider. Key modifications to the future contractual terms, specifications, and requirements will need to be reviewed and researched specifically as it relates to liquidated damages structure, response time requirements, response configurations and the strategic deployment and dispatches of ambulances (two-tier response model).

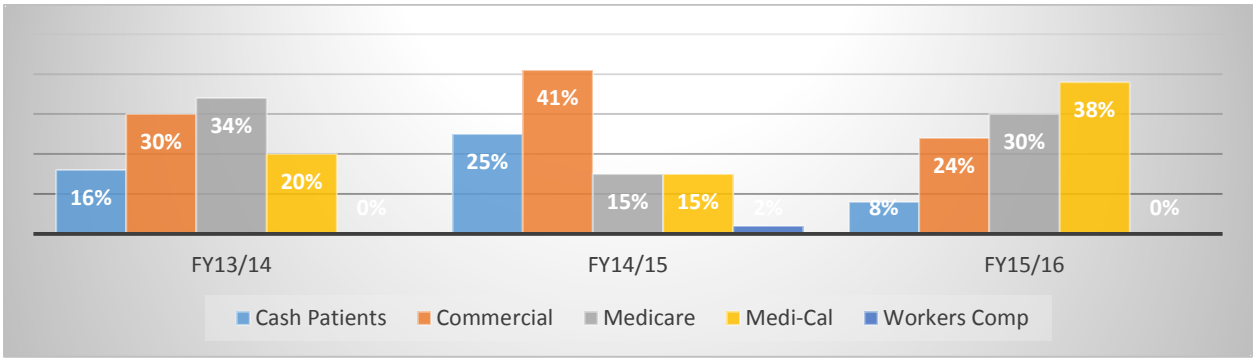
911 Emergency Ground Ambulance Providers Payor Mix

(Appendix B – Ambulance Provider Financials)

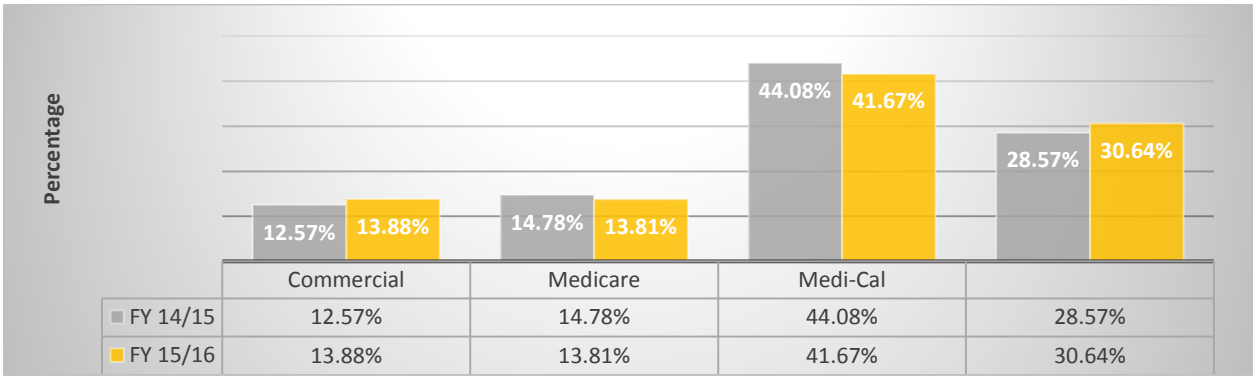
1. American Medical Response (AMR)



2. Patterson District Ambulance (PDA)

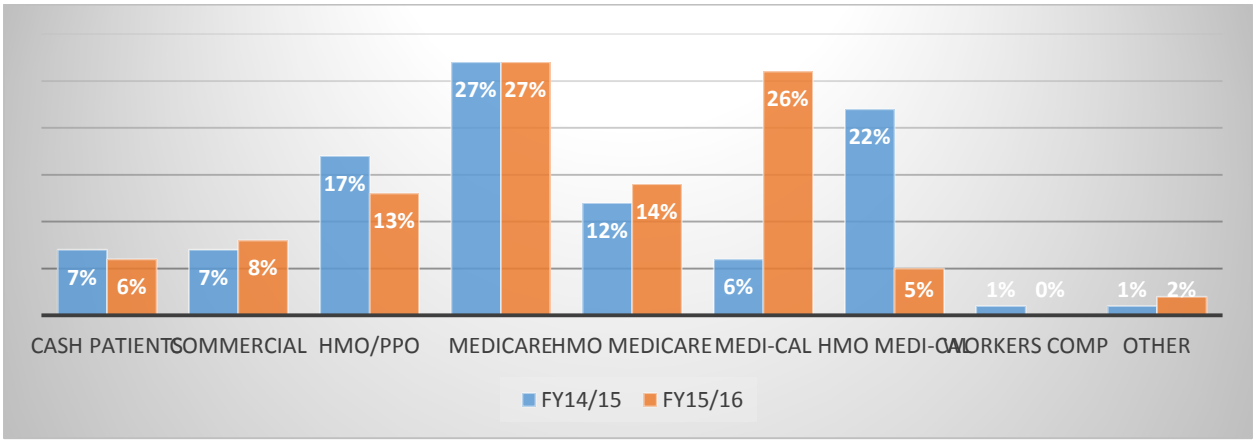


3. Westside Community Health District

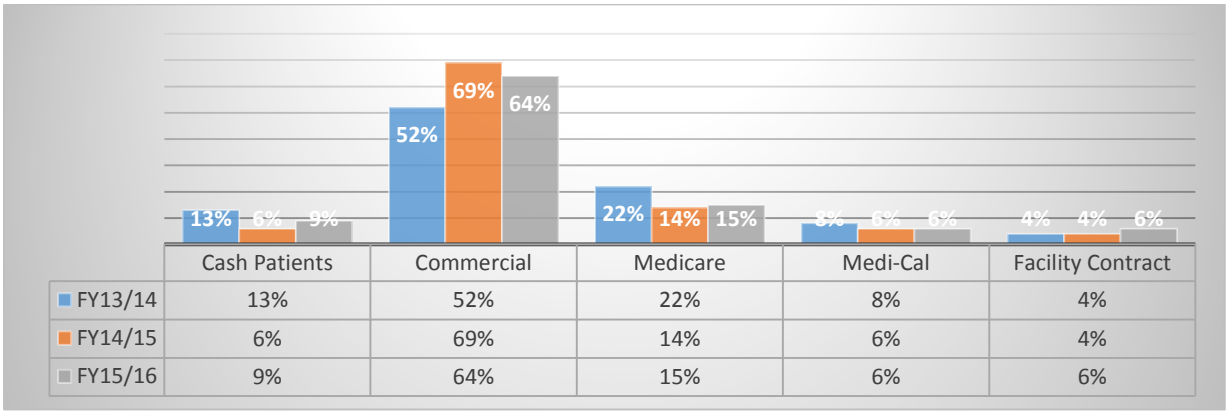


	Commercial	Medicare	Medi-Cal	
FY 14/15	12.57%	14.78%	44.08%	28.57%
FY 15/16	13.88%	13.81%	41.67%	30.64%

4. Oak Valley District Ambulance (OVDA)



5. ProTransport-1



	Cash Patients	Commercial	Medicare	Medi-Cal	Facility Contract
FY13/14	13%	52%	22%	8%	4%
FY14/15	6%	69%	14%	6%	4%
FY15/16	9%	64%	15%	6%	6%

Continuous Quality Improvement

The EMS Medical Director, in coordination with the Quality Improvement/Trauma Coordinator and individual county Local Quality Improvement Groups (LQIG) develop, monitor and evaluate the Quality Improvement (QI) program throughout the year. A formal QI review is conducted annually, as required by California Code of Regulations (CCR), Title 22, Chapter 12, et seq., which precedes the development of the Annual Update. The QI plan defines the system participants, expectations, policies and procedures of MVEMSA and key-performance indicators. The plan also describes the responsibilities of the ambulance providers QI program and the data submission requirements, frequency of data collection and education on seldom used skills.

The following are strengths and/or accomplishments of the QI Program in Stanislaus County:

- Purchased High-Fidelity Manikin with System Enhancement Funds

  Developed a process to provide scenario testing on field treatment protocols for future accredited paramedics with MVEMSA. Process decreases time and costs in obtaining accreditation card

- Public CPR Education

  Developed a community CPR education program in all counties to bring “Hands Only” CPR to the citizens of each community within the region.

- Dispatch

  Evaluated the current performance of all dispatch centers in relation to dispatch-assisted CPR (DA-CPR). Specifically, established baseline data and developed benchmarks for Cardiac Arrest recognition and “hands on chest.”

- First Responder Fire

  Evaluated the current state of High Performance-Cardiopulmonary Resuscitation (HP-CPR) education and proficiency of first responder agencies. Developed a program to increase the use of HP-CPR on cardiac arrest calls, increase efficiency of CPR on resuscitations and provide feedback to responders regarding CPR/resuscitation performance.

- ALS First Response Fire and Ambulance Providers

  Evaluated the current state of HP-CPR education and proficiency at ALS Provider agencies. Developed a program to increase the use of HP-CPR on cardiac arrest calls, increased efficiency of CPR on resuscitations and provide feedback to responders regarding CPR/resuscitation performance.

- Receiving Hospitals

  Evaluated the current state of Therapeutic Hypothermia (TH) utilization by all Base Hospitals within the MVEMSA region and provided support to the TH program as needed.

- Sepsis

  Implemented a pre-hospital sepsis treatment protocol in April of 2016. The Local Quality Improvement Groups actively monitor pre-hospital recognition, treatment and Sepsis Alerting to receiving hospitals.

- QI Program Audits

  Conducted quality improvement program audits for all six ALS providers in the county. These audits were an opportunity to learn more about the providers QA/QI programs as well as share best practices.

- STEMI Transfer Poster

  Implemented a STEMI transfer poster for use by referral hospitals within the region’s catchment area. The transfer poster outlines a process for expedited door-in to door-out (DIDO) times for critical STEMI patients. The SRCs as well as the Agency track DIDO times and we have seen improvement by the facilities utilizing the poster.

- Cardiac Arrest Survivors Group

  Conducted cardiac arrest survivor recognition and reunification events as needed and established a cardiac arrest survivors group.

Opportunities:

Further QI Program opportunities exist that could benefit the EMS system. Example(s) include the following:

- Increase engagement and commitment by system providers to the quality improvement process;
- Improve Out of Hospital Cardiac Arrest (OOHCA) survival. OOHCA survival is a key indicator of the region's clinical performance and is tracked through the Cardiac Arrest Registry for Enhanced Survival (CARES) to which MVEMSA has been contributing since 2012;
- Develop training/education process for Advanced Life Support Fire First Responders in order to mitigate skill degradation;
- Support the regionalization of hospital cardiac arrest survival initiatives by conducting refresher high-performance cardiopulmonary resuscitation (HP-CPR) training to all fire agencies and ambulance providers – specifically focusing on compression rate, compressions per minute and pre/post shock pauses.

EMS Patient Outcomes

For most EMS Agencies, getting patient outcome data from hospitals has been difficult, if not impossible. But that is slowly changing as version three of the National EMS Information System (NEMSIS), combined with a national push to make health care data systems interoperable at all levels, has given momentum to the effort to integrate EMS data with other health care data.

However, MVEMSA has been successful working with specialty hospital stakeholders and ambulance providers to obtain vital outcome data for Cardiac Arrest and STEMI.

STEMI Receiving Centers Data

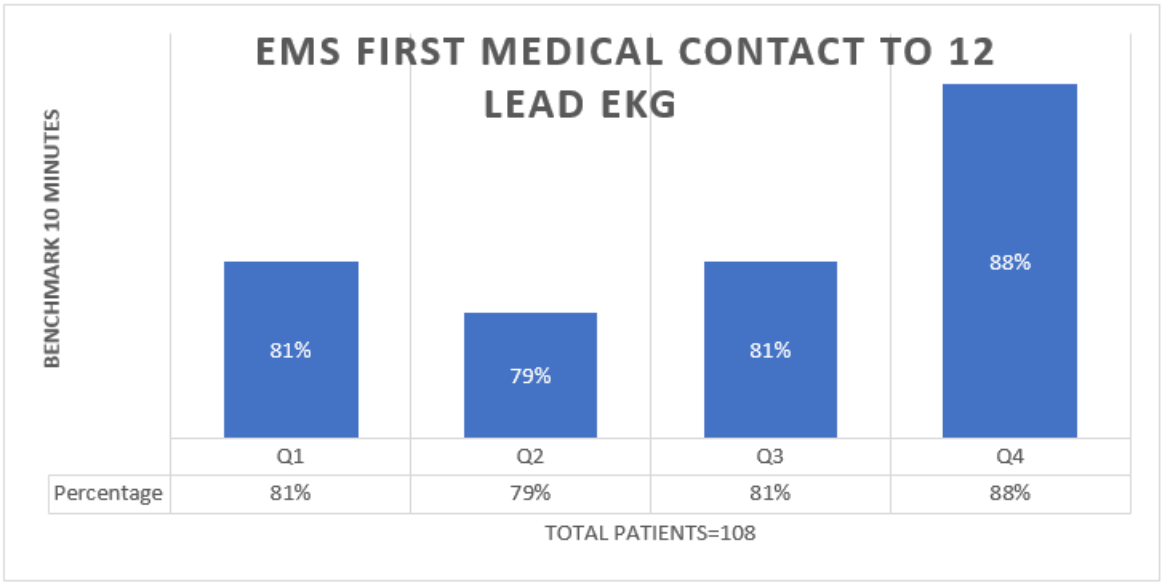
The data collected is aggregated from the three (3) STEMI Receiving Centers in Stanislaus County, which are: DMC, EMC and MMC.

The ability of MVEMSA to evaluate the STEMI system relies upon data collection and measuring the performance of pre-hospital and hospital timeliness and adherence to the policies and procedures set forth by MVEMSA.

Pre-Hospital Indicators Measured

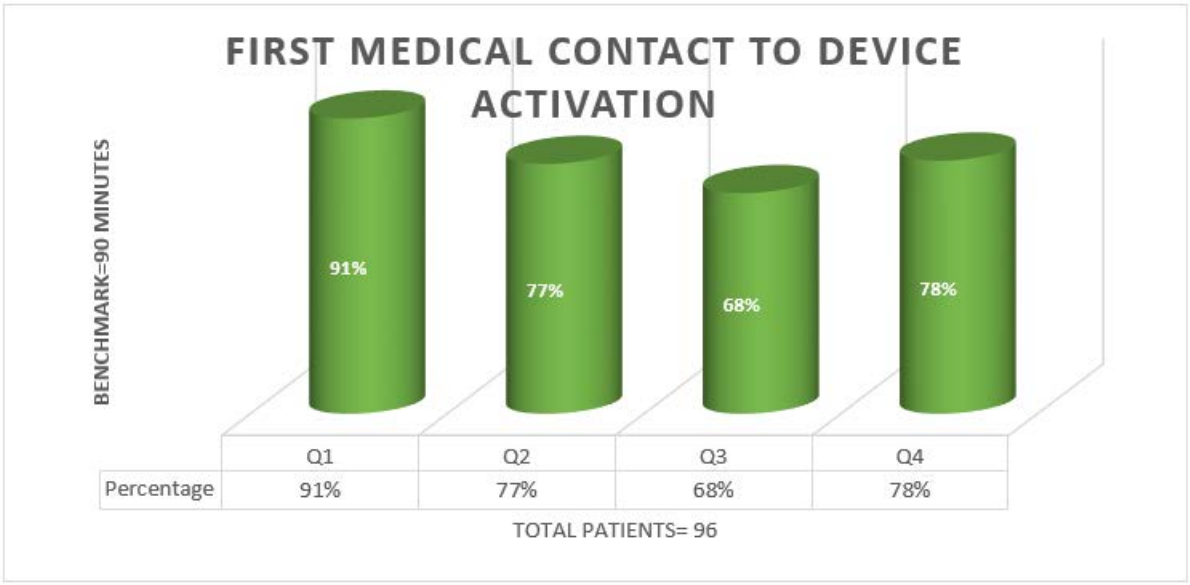
- First Medical Contact to capture a 12 lead EKG (Benchmark of 10 minutes)

  The Chart below represents the percentage of time in which a 12 lead EKG was performed within 10 minutes of patient contact by EMS personnel where a STEMI was identified on the first EKG taken. Examples of outliers may include: 1. Non-cardiac symptoms, 2. Unable to obtain clean EKG tracing, or 3. Access to patient.

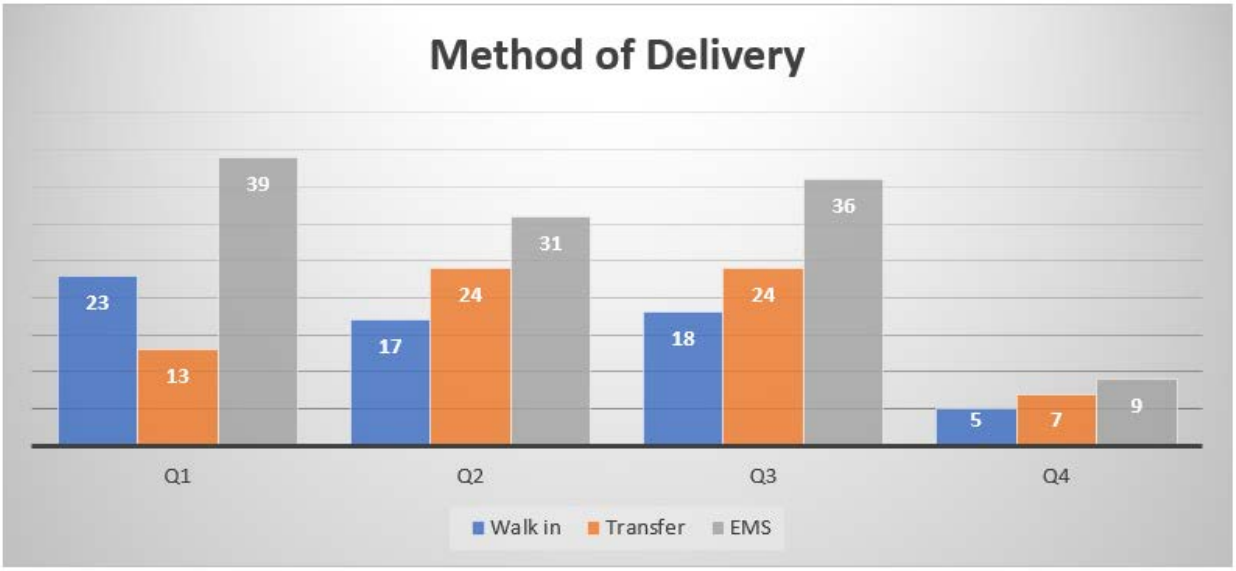


- First Medical Contact to device activation (Benchmark of 90 minutes)

The chart below represents the percentage of time that EMS made contact with the patient, performed the first EKG, identified it as a STEMI and the patient received intervention (stent or balloon) at the STEMI Receiving Center within the 90-minute benchmark. Examples of outliers may include: 1. Interfacility transfer, 2. Subsequent EKG's, or 3. Transport distance.



The chart below shows the deliver method to the STEMI Receiving Center. Consistently the majority of identified STEMI patients are delivered or recognized by pre-hospital EMS and are transported to the closest STEMI Receiving Center.



Data collection drives improvement to the STEMI system of care within Stanislaus County and outside member counties of MVEMSA. Quarterly, the Regional STEMI Committee members meet to discuss the previous quarter's data to identify gaps and ways to improve outcomes of our patients as a collaborative effort.

Since the designation of STEMI Receiving Centers in 2013, the ability to transmit 12 lead EKGs to the STEMI Receiving Center was implemented to help with the reduction of false positive STEMI alerts. The system is consistently monitored by MVEMSA and the STEMI Receiving Centers.

The objective is to close the patient care loop: dispatchers know if they correctly assessed the chief complaint; EMTs and paramedics know if their assessment and treatments were appropriate; the receiving facility knows exactly what happened in the field; and finally, when the patient is discharged, all the pieces are communicated to all parties involved in the patient's treatment. The patient care loop is closed and that information can now be used for QI.

CPR Education

Stanislaus Heart Outcome Consortium (SHOC) was founded in 2012 with the mission to increase cardiac arrest survival through Public CPR Education, HP-CPR and advance resuscitation science within Stanislaus County. The group is comprised of representatives from Stanislaus County hospitals, pre-hospital and dispatch providers. Prior to 2015 SHOC had trained 4,504 lay people in compression only CPR. In 2015, the group trained 1,884 people in compression only CPR. In 2016, through meetings with the Stanislaus County Schools Superintendent and the MVEMSA Medical Director, we were able to gain approval to teach compression only CPR in all middle schools within Stanislaus County. The coordinated effort led to training 7,514 citizens in compression only CPR in 2016, which gives us a grand total of 13,902 citizens trained in compression only CPR!

Dispatch – VRECC

The year 2015 provided continued data collection and Quality Improvement at VRECC by adopting the benchmarks used by the Seattle Medic One Foundation (as presented at the

Resuscitation Academy in Seattle) as a starting point for data collection (Baseline Data Collection):

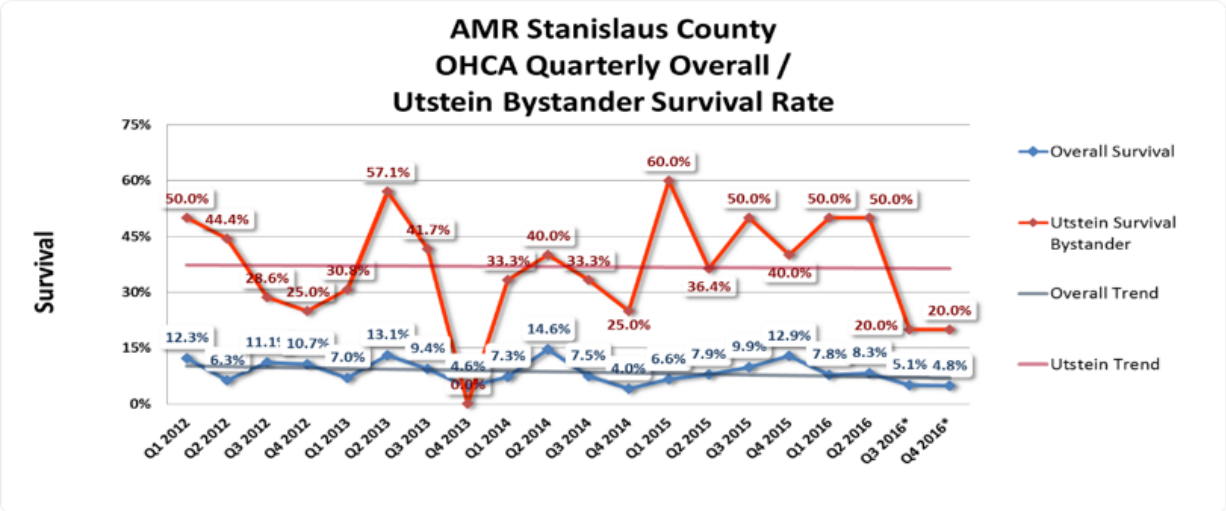
- Recognition of cardiac arrest in 95% of cases in which the dispatcher has the opportunity to assess consciousness and breathing;
- Recognition of cardiac arrest within one minute of address verification;
- Delivery of Dispatcher Assisted CPR chest compressions in 75% of cases where the dispatcher has the opportunity to assess consciousness and breathing and bystander CPR is not already in progress;
- Delivery of the first Dispatcher Assisted check compression within two minutes of address verification.

The year 2016 provided continued improvements in all dispatch assisted CPR benchmarks. The VRECC QI Supervisor continues to review all cardiac arrest calls and Dispatch Supervisors continue to review these calls with front line employees.

Cardiac Arrest

Prior to 2015, the EMS Medical Director and AMR Continuing Education Supervisor established an aggressive HP-CPR campaign, engaging all First Responder and ALS providers in the county. As of the end of 2014, 100% of the EMS providers had been trained and were using HP-CPR when treating an adult cardiac arrest victim. Based on initial training, the *Utstein Survival rate for victims of Out of Hospital Cardiac Arrest (OOHCA) increased from a low of 25% (Q4, 2012) to a high of 50% (Q2, 2013); however, survival dropped to an average of 28% from Q3, 2013 through Q4, 2014. We believe this can be partially attributed to a lack of ongoing refresher training in HP-CPR. Through increased emphasis on training, metronome use and CodeStat feedback to field crews the county's OOHCA survival rate increased beginning Q1, 2015 through mid-2016. Beginning mid-2016, Stanislaus County saw a precipitous drop in survival which we believe is partially attributed to a gap in refresher training and field provider feedback due to the vacancy of key clinical education personnel. (*Utstein Survival = Witnessed cardiac arrest, bystander CPR and Automatic External Defibrillator (AED) used on a shockable cardiac rhythm.)

<u>AMR Out of Hospital Cardiac Arrest Survival Rate</u>



Rural Ambulance Provider Out of Hospital Cardiac Arrest Survival Rate

Rural Provider OOHCA Overall and Utstein Survival

Provider	County	2013 Overall*	2014 Overall*	2015 Overall*	2013 Utstein*	2014 Utstein*	2015 Utstein*
Patterson Ambulance	Stanislaus	11.1% (18)	10% (10)	0% (10)	100% (2)	100% (1)	0% (0)
Westside Ambulane	Stanislaus	0% (12)	0% (7)	28.6% (7)	NA	NA	0% (1)
ProTransport	Stanislaus	0% (1)	57.1% (7)	12.5% (8)	NA	100% (1)	100% (1)
Oak Valley Ambulance	Stanislaus	3.7% (27)	8.3% (12)	18.9% (37)	0% (3)	0% (1)	40% (10)
American Legion Ambulance	Calaveras/Amador	7% (71)	11.7% (60)	9.4% (64)	50% (4)	60% (5)	25% (8)
Ebbetts Pass Fire	Calaveras/Amador	100% (2)	60% (5)	0% (6)	NA	100% (2)	0% (0)
Mercy Ambulance	Mariposa	7.7% (13)	0% (5)	9.1% (11)	50% (2)	0% (1)	100% (1)

*Percentage survival (eligible arrests)

The below System of Care Initiatives were implemented in Stanislaus County by MVEMSA with the goal of increasing out of hospital cardiac arrest survival:

- Public CPR Education;
- Dispatch – VRECC baseline data collection;
- High Performance (Pit-Crew) CPR training with all EMS field providers;
- Mandatory on-line training to all EMS field crews regarding 12-lead EKG transmittal;
- Developed Cardiac Arrest Benchmarks for EMS field providers:
  - Compression rate >90%;
  - Compression rate 100-120;
  - Compressions/minute 100-120;
  - Pre-charge monitor prior to defibrillation;
  - 12-lead EKG post Return of Spontaneous Circulation (ROSC);
  - Pre-, Post- & Total Pause during Defibrillation.
- Receiving Hospitals;
  - Incorporation of Therapeutic Hypothermia for the treatment of post-ROSC cardiac arrest.
- Cardiac Arrest Survivors Group;

Ambulance Patient Offload Times (APOT)

National data revealed an average increase in patient offload times from 20 minutes to more than 45 minutes over a ten-year period.[23] The costs associated as a result from delays in offloading a patient from an ambulance gurney is significant and quantifiable and is considered to be a negative subsidy (for example – ambulance crew members are required to remain with patients prior to the ED staff assuming care, the hospital can employ fewer staff and rely upon the prehospital personnel to maintain responsibility for the patient until the hospital has a bed ready for the transfer of patient care). In addition, a trickle-down effect occurs due to ambulance patient offload delays causing fire first responders to stay on scene with the patient for longer period of times.

The Centers for Medicare and Medical Services (CMS) has indicated that when patients are located on an ambulance gurney inside the hospital ED waiting for a hospital bed offload can result in a violation of the Emergency Medical Treatment and Active Labor Act. In July 31,

[23] Toolkit to Reduce Ambulance Patient Offload Delays in the Emergency Department, California Hospital Association, August 2014.

2006, a memo from the Director of CMS Center for Medicaid and State Operations to State Survey Agency Directors regarding "Parking of EMS Patients in Hospitals," was distributed.[24]

Health and Safety Code 1797.120 now requires the California Emergency Medical Service Authority to develop a standard methodology for calculation of, and reporting by, a LEMSA of ambulance patient offload time.

Health and Safety Code 1797.225 establishes that a LEMSA may adopt policies and procedures for calculating and reporting ambulance offload time. Those policies and procedures must be based on the statewide standard methodology developed pursuant to 1797.120. LEMSAs that adopt patient off-loading policies and procedures must also establish criteria for reporting and quality assurance follow-up for a patient offload time that exceeds the standard.

Opportunities:

MVEMSA currently does not have policies and procedures adopted for calculating and reporting ambulance offload times. Often times, ambulances are delayed at the hospital EDs due to patient offloads. MVEMSA has an opportunity to work with FirstWatch in creating a dashboard and monitoring tool specifically aimed at ambulance patient offload times.

IFTs by Ground Ambulances

The transfers of patients from one medical facility to another has become a national issue for EMS. Patient transfers between facilities or between facilities and a specialty care resource have increased as a result of regionalization, specialization, and facility designation by payors. The emergence of specialty centers/systems (e.g., STEMI, Stroke and Trauma) often determines the ultimate destination of patients rather than proximity of facility. Transfer may be necessary if payors provide reimbursement only for specific facilities within their own plans.

IFT is provided by a variety of levels and types of personnel and agencies. Key issues include the IFT infrastructure, including the qualifications of those delivering the care. Meeting patient needs and maintaining continuity of care are only two of the many issues related to IFTs.

The three core functions of public health, published by the Institute of Medicine[25] provide a useful model for the process of analysis. These three functions are:

- Assessment – to collect, assemble, analyze, and make available relevant facts and figures including existing data, identified needs, and epidemiologic and other applicable information;
- Policy Development – efforts to serve the public interest in the development of comprehensive policies by promoting the use of a scientific knowledge base as a basis for decision-making, and leading in developing comprehensive policies;
- Assurance – efforts to assure that services necessary to achieve agreed-upon goals are provided either by encouraging actions by other entities, by requiring such action through regulation, or by providing services directly.

[24] https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationsGenInfo/downloads/SCLetter06-21.pdf

[25] The Future of Public Health. (1988). Committee for the Study of the Future of Public Health. Division of Health Care Services. Institute of Medicine. Washington, D.C. National Academy Press.

Assessment

The IFT system in Stanislaus County is not exclusive to the EOA ambulance providers serving the 911 EMS System therefore a private ambulance company can negotiate with a local hospital to manage IFTs that originate from the respective hospital. Hospital contracts place requirements on ambulance companies with regards to response times, level of care for the transport, contractual rates and penalties. However, the responsibility for oversight and patient transport/management falls within the scope for a LEMSA. Currently MVEMSA is working towards the following strategies:

- Education and training of providers;
- Legal status/legal authority of providers;
- Medical oversight, including more detailed IFT protocols;
- Cost reimbursement, and funding for services;
- Integration of IFT services into the existing health care system;
- Increasing surveillance using FirstWatch.

Policy Development

Assessment of the current IFT system and gap analysis strategies will be developed to bridge the gap between the current status and the desired state. Policy and planning will include:

- Informing, educating, and empowering people about IFT issues;
- Mobilizing community and stakeholder partnerships to identify and solve IFT problems;
- Develop policies and plans that support individual and community efforts to improve IFTs.

Assurance

Before strategies are deployed, performance measures should be established, which can be used to measure progress. As the implementation process moves forward, several surveillance methods can be used to evaluate achievements:

- Data collection;
- Evaluation of effectiveness, accessibility, and quality of IFT services and the infrastructure that supports IFT;
- Enforcement of laws and regulations;
- QI;
- Ongoing system modification based on data;
- Feedback loops.

In 2015, the MVEMSA staff implemented the IFT Division within Stanislaus County. The purpose of the implementation was to eliminate ambulance providers from using 911 EMS System ambulance to run BLS or ALS Inter-Facility Transports. The exception is when a hospital calls 911 for an emergency IFT to another hospital located in Stanislaus County. For example, Kaiser Modesto will call 911 when a patient having an STEMI needs to be transported urgently to a specialized center capable of re-profusion the heart with interventional methods, which are performed at one of the three designated STEMI Receiving Centers.

Disaster Preparedness

MVEMSA assists the Public Health Officer in his/her role as the Medical Health Operational Area Coordinator (MHOAC). MVEMSA ensures that all operational procedures associated with medical/health mutual aid are carried out along with participating in the planning, implementation and evaluation of the County's emergency medical disaster program.

Health care preparedness for all-hazard emergencies is coordinated through the Stanislaus County Health Emergency Preparedness Council (SCHEPC). MVEMSA actively participates in the SCHEPC as do some County EMS provider agencies. Participating agencies in the SCHEPC also include hospitals, behavioral health, emergency management, public health, long-term care, skilled nursing facilities and other health care providers within the County. The SCHEPC addresses pertinent topics and issues through work groups, plan development, exercises and recommendations for expenditures of federal grants.

The ability to capture data to determine system efficiencies has been increased through the use of local, system enhancement and federal grant funding. NEDOCS, EMResource and HAvBED are systems that capture emergency room and EMS data. This data provides a barometer on emerging threats at any given time. The acquisition of the data analytics tool, First Watch, enables the analysis of EMS and fire agency response and service on emergency medical calls. The data captured by First Watch contributes to the quality of the overall system analysis and information used for this document.

Workgroups with representatives from EMS, hospitals, Public Health and OES developed Patient Tracking/Family Reunification policy for Operational Area to use during mass casualty incidents. The group also developed and updates the Seasonal Surge Plan. SCHEPC members also develop and participate in exercises that involve the breadth of the health care community, which includes the annual Statewide Medical Health Exercise, exercises with local emergency management, and, as of recent, a tabletop focused on the evacuation of a skilled nursing facility.

Data Management

The ability to successfully manage, evaluate and improve a high-performance EMS system requires a comprehensive and integrated data management system. This platform must meld disparate data sources (CADs, Emergency Medical Dispatch performance, electronic Patient Care Report applications) into a central data repository available to meet the myriad of responsibilities and requirements necessary for supporting and sustaining the EMS System.

MVEMSA recognized in 2012 that data collection and management in current practice was fragmented, incomplete, and un-validated. The Agency depended on provider self-reporting. After performing a gap analysis, the Agency recognized the fundamental functions that data system needed to provide:

- Data integration from multiple sources and providers on disparate systems;
- Scalable for new data source identification and integration;
- Web-based, electronic notification of user-defined data;
- Independent validation of data with transparent logical methodology;
- Electronic Patient Care Reporting;
- Surveillance of Operational Area Medical Health Activities;

- Adhere to industry standards for security and privacy;
- Data Mining for:
  - EMS System Performance, Trending, and Reporting;
  - Contractual Compliance Monitoring;
  - Continuous Quality Improvement activities and initiatives;
  - Mandatory Reporting Requirements;
    - NEMSIS;
    - EMS Plan and Workflow Indicators;
    - EMS Transportation Plan;
    - Ad Hoc Reporting.
  - Provider access to own data and reports.

Recognizing the scope of activities needing validated data supported by defensible and reproducible data management methodologies, the Agency made the decision to partner with First Watch to implement a comprehensive data system that would meet the current and future needs of MVEMSA in its role as Regulatory Agency for EMS.

Current Gaps and Opportunities:

- Incomplete integration of all ground ambulance ePCR platforms, (estimated completion summer 2017);
- No First Watch interface with Air Ambulance Dispatch or ePCR data;
- First Pass CQI implementation dependent on completed ePCR interfaces, (estimated completion Fall 2017);
- Incomplete and Inconsistent Emergency Department log submission;
- Specialty Center Data collection is non-standardized and non-centralized between disciplines (Trauma, STEMI, Stroke, Cardiac Arrest);
- IFT data: Stanislaus providers are in VRECC CAD, patients coming in from other providers are not captured in this data;
- IFT data: ePCR data may or may not be included in current data interfaces, need to evaluate and create reporting standards;
- No HIE yet implemented in the County.

Communications System

Overview

The VRECC serves as the single secondary Public Safety Answering Point (PSAP) for Stanislaus County, providing emergency medical dispatch services for all 911 medical requests. VRECC also provides medical and fire dispatch services to San Joaquin County.

VRECC is privately owned by AMR and receives state 911 funding for the Secondary PSAP (911) infrastructure. VRECC is governed by a committee established at the direction of the Stanislaus County Board of Supervisors. The Dispatch Governance Committee is made up of representatives from each of the five (5) ALS ambulance providers who meet monthly to review dispatch operational policies and procedures.

The National Academies of Emergency Dispatch (NAED) officially recognized VRECC as an Accredited Center of Excellence (ACE) in Emergency Medical Dispatching in 2005. They were the 100th center to receive the NAED Center of Excellence designation and have maintained

the ACE standards to date. VRECC was also recognized as an Accredited Center of Excellence in Emergency Fire Dispatch (EFD).

VRECC staffs a total of 43 full-time employees and 11 part-time employees, 12.5 FTE's are assigned specifically to Stanislaus county dispatch operations, however 6-8 additional staff members provide backup to Stanislaus County during peak volume. Currently all staff work 12-hour shifts, however within the third quarter of 2017, both 8 and 10 hour shifts will be added to cover peak call volume. VRECC management and oversight – 1 General Manager, 1 Communications Director, 4 Communication Supervisors, 1 Training Supervisor, 1 Quality Improvement (QI) Supervisor and 1 Data Analyst.

100% of staff receive Emergency Medical Dispatch (EMD) and Emergency Fire Dispatch (EFD) training and are required to maintain certification with the NAED. This training allows the staff to provide backup to each position based on call volume and system needs. Daily staffing consists of four (4) functional positions, 911 call takers, non-emergency call takers, a non-emergency dispatcher and two (2) Stanislaus County 911 dispatchers, AMR (metro) and Rural Ambulance dispatch. (Appendix D provides the following: staffing costs, dispatch operations cost, cost to support EMD certification and maintenance, and cost to support Accredited Center of Excellence.)

Citizens dialing 911 with a medical need are initially answered at the Primary PSAP, generally a law-enforcement center, who subsequently transfers the caller to the Secondary PSAP (VRECC) in order to initiate an ambulance response.

PSAP	Fire Dispatch	Law-enforcement Dispatch	Ambulance Dispatch	EMD Provider
SR911	X	X	N/A	N/A
Ceres PD	N/A	X	N/A	N/A
Oakdale PD	N/A	X	N/A	N/A
Turlock PD/Fire	X	X	N/A	N/A
VRECC	N/A	N/A	X	X

Using the NAED protocols, VRECC determines the appropriate response level of Echo, Delta, Charlie, Bravo, Alpha or Omega through the answers to key questions and the additional information. (Response levels are defined on page 25.) Dispatch determinants do not indicate the severity of a situation. That is, the E-D-C-B-A-Ω levels are not related in a linear sense of becoming progressively worse. Rather, they have to do with how many responders will go and (when there are tiers of capability), which levels of expertise are needed, and how rapidly they are needed. EMD allows for customization of the level of service needed, ALS or BLS, as well as response mode, Code 3 or Code 2. It is the responsibility of the MVEMSA Medical Director to review and approve all EMD determinate response modes prior to implementation.

Medical 9-1-1 Volume			
Year	2014	2015	2016
Total Dispatches	59,595	64,359	65,436
Canceled	(14,097)	(15,622)	(16,301)
Total Patient Transports	45,498	48,737	49,135
Code 2 Transport	44,152	47,190	47,763
Code 3 Transport	1,346	1,547	1,372

(Also see Appendix D – call taking / process times)

Coordination between the Stanislaus County Primary PSAPs and VRECC for ambulances requests are primarily through phone lines with the inability for data sharing between the communication centers. The lack of electronic connectivity results in the need for physical telephone contact between the dispatchers and a manual re-entry of incident data. In some cases, this increases call processing times and resource response times due to the manual verification and duplicate entry. Currently there is a CAD-to-CAD project underway to link the CAD systems between the Stanislaus County Regional 911 center, and VRECC. Call data will be shared electronically and decrease the current processing time necessary to dispatch an ambulance and relay subsequent data or information between the communication centers. In addition to real-time data flow, the connectivity will provide a method of linking the two call records together to retrospectively evaluate medical requests from the initial 911 receipt through to patient transfer of care at the hospital. This project is scheduled for 2017 implementation.

Computer Aided Dispatch System (CAD)

The current CAD system utilized by VRECC is provided by the vendor Tritech. The Tritech CAD system, INFORM, is a robust CAD historically proven to be a stable platform with the ability for multi-discipline dispatching capability. The Tritech CAD provides GIS mapping, automated vehicle location data, digital communication with paging and mobile data devices and records management.

Medical Priority Dispatch System (Emergency Medical Dispatch)

The VRECC utilizes the latest version of the Medical Priority Dispatch System (MPDS) software, ProQA Paramount, for pre-arrival medical instructions in determining the appropriate response mode (e.g., lights and siren) and the need for additional resources to be requested (e.g., law-enforcement and/or Fire). VRECC adheres to the National Academy of Emergency Dispatch (NAED) standards, code of conduct, and code of ethics.

VRECC has a quality assurance (QA) program modeled on NAED standards to ensure that dispatchers are accurately following the EMD protocols. A designated EMD-Q coordinates QA activity. A statistical sampling of a calculated percentage of all calls allows for the review of EMD performance by staff. The software application AQUA allows for sampling and quantitative analysis of call taking performance and adherence to ACE accreditation standards. EMD performance is one facet to the QA process; dispatcher performance, ECHO call taking performance and wrong address dispatches are additional components in the VRECC QA program.

Radio Communications

Multiple frequencies and bandwidths are utilized for specific system needs; The Stanislaus County metro ambulance provider, AMR, is dispatched via a VHF frequency of which they maintain the FCC license. The rural ambulance providers; Oak-Valley, Patterson, ProTransport-1 and Westside Community Health District are dispatched on one of the UHF frequencies of which the EMS Agency maintains the FCC licensing. Field to Hospital and to the designated Disaster Control Facility at VRECC also utilizes UHF Med channels.

Stanislaus						Function	Tower Location	Call Sign	Licensee
Channel	RX	PL	Band	TX	PL	-	-	-	-
Stan VHF 1	152.4125 MHz	TPL100.0	Narrow	157.6125 MHz	DPL365	Stan EMS Dispatch Primary	OSO / Voted	WPVY844	AMR
Stan VHF 2	155.395 MHz	TPL88.5	Narrow	155.295 MHz	TPL88.5	Stan EMS Dispatch Backup	Reed / Voted	WPLS642	AMR
Med 1	463.000 MHz	TPL179.9	Narrow	468.000 MHz	TPL179.9	Hosp to Amb	Multiple / Voted	KNEJ838	MVEMSA
Med 10	462.975 MHz	TPL123.0	Narrow	467.975 MHz	TPL123.0	Rural EMS Provider Dispatch	Multiple / Voted	KNEJ838	MVEMSA
Stan BLS 1	463.500 MHz	TPL107.2	Narrow	468.500 MHz	TPL107.2	Stan BLS	Oso	WQFB320	Knox LaRue
Stan BLS 2	462.025 MHz	DPL114	Narrow	467.025 MHz	DPL114	Stan BLS	Oso	WQFA710	Knox LaRue

Radio Interoperability

In an effort to facilitate and improve interoperable communications between our stakeholders; ambulance providers, dispatch centers, hospitals, and public safety agency's (law-enforcement and fire), the Agency has acquired, through grant funding, the following communication equipment;

- UHF and VHF – Portable Radio Cache
  - A total of 61 handheld portables were programmed and distributed to the Stanislaus County ambulance providers and VRECC (43 UHF and 18 VHF).
- UHF and VHF - Portable Radio Cache
  - A total of 20 handheld portables were programmed and are maintained at MVEMSA (10 UHF and 10 VHF).
  - A total of 4 Multiband portable radios were programmed and are in use by Agency personnel.
- A satellite phone is maintained and accessible in the MVEMSA Duty Officer equipment inventory.
- A base UHF radio is programmed and maintained at MVEMSA
- An Amateur radio (Ham) is programmed and maintained at MVEMSA. ARES has dedicated a radio tech to be deployed to MVEMSA in the event of radio communication failure.

- The Agency has three Mobile Data Terminals, one is functional however all three have reached end of life by the manufacturer.

Opportunities:

1. Streamline call intake process;
   a. A thorough review of the call taking process, at the Primary and Secondary PSAP, should be performed to identify and eliminate any barriers contributing to delayed resource assignment and delayed provision of pre-arrival instructions.
2. Evaluation of the Stanislaus Regional 911/VRECC CAD-to-CAD interface once implemented.
   a. Evaluate for efficiency and decreased time on task.
   b. Reporting capabilities; the ability to evaluate EMS performance from initial call intake to patient transfer of care at hospital.
3. Radio communication interoperability
   a. To maximize inter-agency communication by identifying and eliminating barriers.
   b. Establish standard operating procedures (SOPs) for interoperability frequencies.

Glossary of Terms

D

Demand analysis: Is a statistical chart showing historical call volumes and demand fluctuations for each hour of the day and each day of the week.

Deployment plan: Is the formal plan used to maximize ambulance coverage for a designated service area

E

Exclusive Operating Area (EOA): Means an EMS area or sub area defined by the emergency medical services plan for which a local EMS agency, upon the recommendation of a county, restricts operations to one or more emergency ambulance providers of limited advanced life support or advanced life support (Health & Safety Code 1797.85).

P

Post: Is a designated location for ambulance placement within the system status plan. Depending on its frequency and type of use, a post may be a facility with sleeping quarters or day rooms for crews, or simply a street corner or parking lot location to which units are deployed.

S

System Status Management: Is the science of matching the production capacity of an ambulance provider to the changing patterns of call demand, including managing the system's resources before and between calls.

System Status Plan: Is a planned protocol governing the deployment and event-driven redeployment of ambulance resources, both geographically and by time of day and day of week

U

Unit Hour: Is one hour of service by a fully equipped and staffed ambulance assigned to a call or available for dispatch

Unit Hour Utilization (UHU) Ratio: Is a measure of how efficiently the ambulance provider manages and deploys unit hours as calculated by dividing the number of transports (not calls) performed during a given period by the number of unit hours produced during the same period. Units involved in long-distance transfer work, special events coverage, and certain other classes of activity are excluded from these calculations.

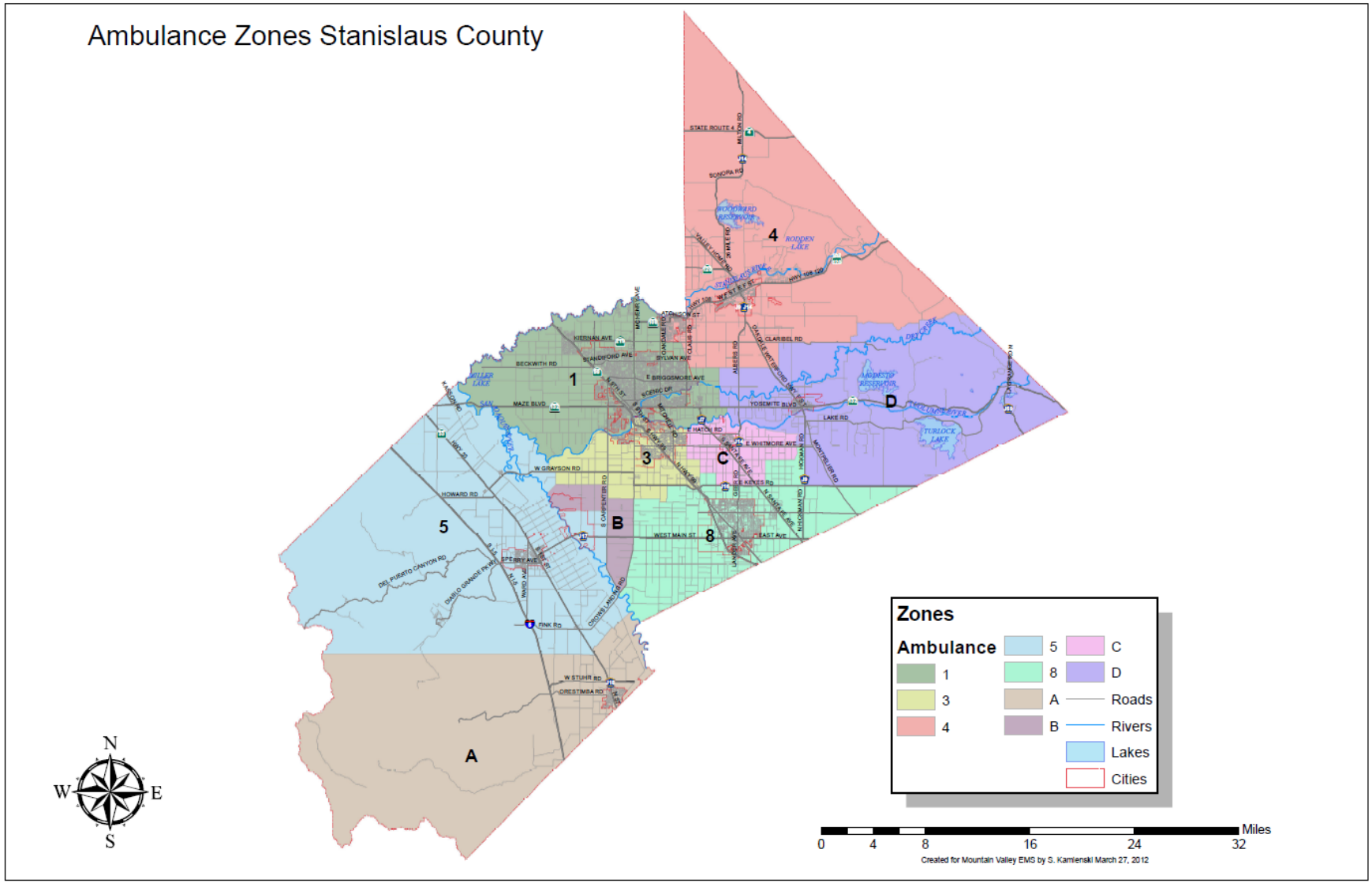
List of Acronyms

ACA	Affordable Care Act
ACE	Accredited Center of Excellence
ACS	American College of Surgeons
ALS	Advanced Life Support
AMR	American Medical Response
APOT	Ambulance Patient Offload Times
ARES	Amateur Radio Emergency Service
AVL	Automatic Vehicle Location
BLS	Basic Life Support
CAD	Computer Aided Dispatch
CARES	Cardiac Arrest Registry for Enhanced Survival
CE	Continuing Education
CCR	California Code of Regulations
CCT	Critical Care Transport
CMS	Centers for Medicare and Medical Services
CPR	Cardiopulmonary Resuscitation
DA-CPR	Dispatch Assisted Cardiopulmonary Resuscitation
DCF	Disaster Control Facility
DIDO	Door-in to door-out
DMC	Doctors Medical Center
ED	Emergency Department
EFD	Emergency Fire Dispatch
EKG	Electrocardiogram
EMC	Emanuel Medical Center
EMD	Emergency Medical Dispatch
EMS	Emergency Medical Services
EOA(s)	Exclusive Operating Area(s)
ePCR	Electronic Patient Care Reporting
FCC	Federal Communications Commission

FD	Fire Department
FTE	Full time equivalent
GIS	Geographic Information System
IFT	Inter-facility transfer
H&S Code	Health and Safety Code
HEART	Homeless Education and Response Team
HDHP	High Deductible Health Plans
HIE	Health Information Exchange
HP-CPR	High Performance-Cardiopulmonary Resuscitation
HSA	Health Services Agency
JPA	Joint Powers Agency
LEMSA	Local Emergency Medical Services Agency
LQIG	Local Quality Improvement Groups
MFD	Modesto Fire Department
MPDS	Medical Priority Dispatch System
MMC	Memorial Medical Center
MHOAC	Medical Health Operational Area Coordinator
MVEMSA	Mountain Valley Emergency Medical Services Agency
NAED	National Academies of Emergency Dispatch
NEMSIS	National Emergency Medical Services Information System
OOHCA	Out of Hospital Cardiac Arrest
OVDA	Oak Valley District Ambulance
PSAP	Public Safety Answering Point
PSC	Primary Stroke Center
PDA	Patterson District Ambulance
QA	Quality Assurance
QI	Quality Improvement
QRV	Quick Response Vehicle
ROSC	Return of Spontaneous Circulation
ROP	Regional Occupational Programs

RFP	Request for Proposal
SCFPD	Stanislaus Consolidated Fire Protection District
SCPC	Society of Chest Pain Centers
SHOC	Stanislaus Heart Outcome Consortium
SRC	STEMI Receiving Centers
SSM	System Status Management
STEMI	ST-Elevated Myocardial Infarction
TAC	Trauma Audit Committee
TH	Therapeutic Hypothermia
TQIP	Total Quality Improvement Programs
UHF	Ultra High Frequency
UHU	Unit Hour Utilization
VHF	Very High Frequency
VRECC	Valley Regional Emergency Communications Center
WSCHD	Westside Community Health District

Appendix A – Ambulance Zones Stanislaus County



Appendix B – Ambulance Provider Financials

American Medical Response (AMR)			
	2014	2015	2016
Total Transports	48,597	49,838	49,540
Operating Revenue	$23,311,083	$24,403,863	$24,821,385
Operating Expenses	$20,430,428	$24,054,909	$25,296,194
Collection Rate	16.80%	16.50%	16.10%

Stanislaus County Financial Analysis					
	2013	2014	2015	2016	2017 Est
Cash/Tx	492.89	480.62	490.91	475.32	422.46
Cost/Tx	435.73	435.59	482.66	512.59	501.19
Cost/UH	149.47	158.74	165.48	176.20	170.47
Cash/TX: The cash AMR actually receives for the transport					
Cost/TX: The cost to AMR to transport a patient (supplies, gas, etc.)					
Cost/UH: The cost to AMR to have a unit sitting around for an hour					

2017 Ambulance Provider Rates					
	AMR	ProTransport-1	Oak Valley	Patterson	Westside
ALS Emergency	$2,637.53	$3,139.50	$2416 (ALS 1)	$2865. (ALS 1)	$3,000.00
			$3359 (ALS 2)	$3000. (ALS 2)	(ALS 1 & 2)
ALS Non-Emergency	$2,637.53	$2,320.50	$2,473.00	$2490. (ALS 1)	$3,000.00
				$2660. (ALS 2)	
BLS Emergency	$1,879.77	$2,121.21	$1,764.00	$1,870.00	$2,000.00
BLS Non-Emergency	$1,161.75	$1,426.50	$1,440.00	$1,700.00	$1,500.00
CCT	$4,883.17	$4,725.00			

(Appendix B continued)

Patterson District Ambulance			
	FY 13/14	FY 14/15	FY 15/16
Total Transports	1145	1393	1398
Operating Revenue	$994,945.27	$1,507,992.06	$1,416,303.10
Operating Expenses	$1,323,491.09	$1,471,257.86	$1,653,951.20
Earnings from Operations	($328,545.82)	$36,734.20	($237,648.10)
Net Income	($291,582.60)	$14,321.48	($10,784.76)
Accounts Receivable – Gross	$334,079.93	$426,556.43	$674,877.00
Collection Rate	26.80%	28%	27%

Westside Community Health District				
	FY 12/13	FY 13/14	FY 14/15	FY 15/16
Total Transports		1,352	1,664	1,713
Operating Revenue	1,168,968	1,849,460	1,235,145	1,036,012
Operating Expenses	2,115,418	2,883,794	1,812,914	2,123,719
Earnings from Operations	(946,450)	(1,034,334)	(577,769)	(1,087,707)
Net Income	(315,749)	(395,216)	308,996	(417,304)
Accounts Receivable – Gross	311,525(net)	1,783,328	936,282	620,652
Collection Rate			28%	24%

Oak Valley District Ambulance		
	FY 14/15	FY 15/16
Total Transports		21,184
Operating Revenue	16,425,717	16,564,287
Operating Expenses	12,977,959	13,239,835
Earnings from Operations	3,447,758	3,324,452
Collection Rate	20.99%	20.07%

(Appendix B continued)

ProTransport-1			
	FY13/14	FY14/15	FY15/16
Total Transports	1975	1886	1828
Operating Revenue	$1,116,762	$1,561,193	$1,550,192
Operating Expenses	1,245,000	1,555,000	1,512,000
Earnings from Operations	(128,238)	6,193	38,192
Net Income	(134,915)	(9,884)	(3,669)
Accounts Receivable – Gross	$416,145	$464,179	$517,286
Collection Rate	12.24%	15.54%	13.70%

May 2013 – April 2017 Non-Compliance Fine Amounts				
Ambulance Provider	**Below 90%**	**Per Minute**	**Consecutive Out of Compliance**	**Total**
American Medical Response	$385,000.00	$3,937,506.50	$150,000.00	$4,472,506.50
Oak Valley Hospital District	$40,000.00	$58,150.00	$-	$98,150.00
Patterson District Ambulance	$-	$-	$-	$-
ProTransport-1	$-	$-	$-	$-
West Side Healthcare District	$11,500.00	$11,200.00	$-	$22,700.00
Total	**$436,500.00**	**$4,006,856.50**	**$150,000.00**	**$4,593,356.50**

Appendix C – VRECC's Costs

Includes staffing costs, dispatch operations cost, cost to support EMD certification and maintenance, and cost to support Accredited Center of Excellence (ACE)

FY 2017 Forecast- $2,901,518

- AMR $2,571,800
- Rural Providers $329,718

Salaries/Benefits: $2,103,006*

- AMR $1,864,028
- Rural Providers $238,978

Operating Costs: $798,512*

- AMR $707,772
- Rural Providers $90,740

*EMD Supporting Costs are included. This includes, however not limited to:

- Medical Director Salary
- Licensing and Software Costs
- Training (initial and ongoing)
- IT Support
- Annual Maintenance Fees
- Accreditation Fees (Center and employees)

The startup fees to replicate VRECC for EMD/FIRE ACE for Stanislaus only would be between $220-240k.

Appendix D – VRECC Call Taking/Processing Times

2016 Average Call Processing time to Queue by determinant	
Row Labels	**Average time**
ALPHA	0:02:18
BRAVO	0:02:19
CHARLIE	0:02:10
DELTA	0:01:55
ECHO	0:01:33
OMEGA	0:02:19
Grand Total	**0:02:07**

ENCLOSURE 3: Response Time Standards

Call Type	Fire First Responder with Public/Private Partnership Agreement	Ambulance with Public/Private Partnership Agreement	Ambulance without Public/Private Partnership Agreement
Urban Response to 90 percent of calls each month			
Code 3	7:00	11:59 (ALS)	7:59
		9:59 (EMT)	
		8:59 (EMR)	
Code 2	N/A	15:59	15:59
Suburban Response to 90 percent of calls each month			
Code 3	11:00	15:59 (ALS)	11:59
		13:59 (EMT)	
		12:59 (EMR)	
Code 2	N/A	19:59	19:59
Rural Response to 90 percent of calls each month			
Code 3	19:00	23:59 (ALS)	19:59
		21:59 (EMT)	
		20:50 (EMR)	
Code 2	N/A	25:59	25:59
Wilderness (Audit each call)			
Code 3	ASAP	ASAP	ASAP
Code 2	ASAP	ASAP	ASAP

Proposer Scoring Sheet

To qualify for further evaluation by a Proposal Review Committee (PRC), a Proposer must meet the following minimum qualifications with a passing score in all categories.

Proposal Meets Minimum Qualifications Pass/Fail

Category	**Pass**	**Fail**
Experience		
Financial Condition		
Demonstration of Additional Qualifications		

Proposer Scoring Sheet

Evaluator: _____ Date: _____

Evaluator Rating Descriptions	Points Awarded
Excellent: The proposal successfully addresses all relevant aspects of the element being evaluated. Any shortcomings are minor and the element contributes appropriately to the meeting the requirements of the criterion.	**100%**
Good: The proposal addresses the element well; although, certain improvements are possible in relation to meeting the overall criterion.	**75%**
Fair: The proposal broadly addresses the element; however, there are significant weaknesses that would need additional clarification or justification in relation to meeting the overall criterion.	**50%**
Poor: The proposal has inherent weaknesses with respect to the element being evaluated and does not materially support the criterion.	**25%**
Fail: The proposal fails to address the element in all aspects and its relationship to supporting the criterion.	**0%**

Proposal Section	Evaluator Rating					Points Possible	Total Points
	Excellent	Good	Fair	Poor	Fail		
Credentials, Experience, and Local Management Team						50	
System Requirements						50	
Ambulance Deployment						30	
Vehicle						20	
Personnel						20	
Hospital & Community						20	
Disaster						20	
Quality Performance & ePCR						50	
Dispatch						30	
Financial & Administration						40	
Additional Requirements						20	
Total						**350**	

ENCLOSURE 4 – Proposer Scoring Sheet

Percent and Calculation of Points:

100% of (any number) is that number
75% of 50 points = 37.5 points
75% of 40 points = 30 points
75% of 30 points = 22.5 points
75% of 20 points = 15 points
50% of 50 points = 25 points
50% of 40 points = 20 points
50% of 30 points = 15 points
50% of 20 points = 10 points
25% of 50 points = 12.5 points
25% of 40 points = 10 points
25% of 30 points = 7.5 points
25% of 20 points = 5 points
0% of 0 points = 0 points

Agreement No. _____

AGREEMENT BETWEEN THE MOUNTAIN-VALLEY EMS AGENCY AND [Contractor name]

This Agreement is entered into this _____ day of _____ , 20_____, by and between the **Mountain-Valley EMS Agency**, hereinafter called "Agency," and **[Insert contractor legal name here]**, hereinafter called "Contractor."

* * *

Whereas the California Emergency Medical Services System and the Prehospital Emergency Medical Care Personnel Act, California Health and Safety Code Sections 1797, *et seq.*at Sections1797.224 and Section 1797.85, allows the local EMS agency to create Exclusive Operating Areas to restrict operations to one or more providers of emergency ambulance services and Advanced Life Support Services in the development of a local plan through a competitive bid process or without a competitive bid process if the area has been served in the same scope and manner without interruption since January 1, 1981; and

Whereas, pursuant to California Health and Safety Code, Section 1797.200, the Agency of Stanislaus has designated the AGENCY to be the local EMS agency and to develop a written agreement with any qualified Paramedic Service Provider that wishes to participate in the Advanced Life Support program in the Agency of Stanislaus; subject to the rights of providers who are granted Exclusive Operating Areas ("EOAs") and

Whereas, Title 22 California Code of Regulations Section 100167(b) (4) requires Paramedic Service Providers to have a written agreement with the local EMS Agency to provide advanced life support; and

Whereas, Section 6.70.030 of Stanislaus Agency Code "Ambulance Ordinance" establishes that Exclusive Operating Areas and/or Non-exclusive Operating Areas shall be designated; and Section 6.70.040 establishes that those providing ambulance services must have an Ambulance Provider Agreement with the local EMS agency, and Section 6.70.060 establishes that the Ambulance Provider Agreement shall address minimum standards.

Now, therefore, it is agreed by the parties to this Agreement as follows:

1. Exhibits and Attachments

The following exhibits and attachments are attached to this Agreement and incorporated into this Agreement by this reference:

Exhibit A—Services
Exhibit B—Payments and Rates
Attachment H—HIPAA Business Associate Requirements
Attachment I—§ 504 Compliance
Attachment IP – Intellectual Property

2. Services to be performed by Contractor

In consideration of the payments set forth in this Agreement and in Exhibit B, Contractor shall perform services for Agency in accordance with the terms, conditions, and specifications set forth in this Agreement and in Exhibit A.

3. Term

Subject to compliance with all terms and conditions, the term of this Agreement shall be from [Month and day] , 20[last 2 digits of start year], through [Month and day] , 20[last 2 digits of end year], with an option for an additional 5 year extension as determined by the Agency.

4. Termination

Either party may terminate this Agreement at any time for cause or for Major Breach of its provisions consistent with the provisions herein.

Agency may terminate this Agreement for cause. In order to terminate for cause, Agency must first give Contractor notice of the alleged breach. Contractor shall have five business days after receipt of such notice to respond and a total of ten calendar days after receipt of such notice to cure the alleged breach. If Contractor fails to cure the breach within this period, Agency may immediately terminate this Agreement without further action. The option available in this paragraph is separate from the ability to terminate without cause with appropriate notice described above. In the event that Agency provides notice of an alleged breach pursuant to this section, Agency may, in extreme circumstances, immediately suspend performance of services and payment under this Agreement pending the resolution of the process described in this paragraph. Agency has sole discretion to determine what constitutes an extreme circumstance for purposes of this paragraph, and Agency shall use reasonable judgment in making that determination.

5. Contract Materials

At the end of this Agreement, or in the event of termination, all finished or unfinished documents, data, studies, maps, photographs, reports, and other written materials (collectively referred to as “contract materials”) prepared by Contractor under this Agreement shall become the property of Agency and shall be promptly delivered to Agency. Upon termination, Contractor may make and retain a copy of such contract materials if permitted by law.

6. Relationship of Parties

Contractor agrees and understands that the work/services performed under this Agreement are performed as an independent contractor and not as an employee of Agency and that neither Contractor nor its employees acquire any of the rights, privileges, powers, or advantages of Agency employees.

7. Hold Harmless

a. General Hold Harmless

Contractor shall indemnify and save harmless Agency and its officers, agents, employees, and servants from all claims, suits, or actions of every name, kind, and description resulting from this Agreement, the performance of any work or services required of Contractor under this Agreement, or payments made pursuant to this Agreement brought for, or on account of, any of the following:

(A) injuries to or death of any person, including Contractor or its employees/officers/agents;

(B) damage to any property of any kind whatsoever and to whomsoever belonging;

(C) any sanctions, penalties, or claims of damages resulting from Contractor's failure to comply, if applicable, with the requirements set forth in the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and all Federal regulations promulgated thereunder, as amended; or

(D) any other loss or cost, including but not limited to that caused by the concurrent active or passive negligence of Agency and/or its officers, agents, JPA Board, employees, or servants. However, Contractor's duty to indemnify and save harmless under this Section shall not apply to injuries or damage for which Agency has been found in a court of competent jurisdiction to be solely liable by reason of its own negligence or willful misconduct.

The duty of Contractor to indemnify and save harmless as set forth by this Section shall include the duty to defend as set forth in Section 2778(3) of the California Civil Code.

b. Intellectual Property Indemnification

Contractor hereby certifies that it owns, controls, and/or licenses and retains all right, title, and/or interest in and to any intellectual property it uses in relation to this Agreement, including the design, look, feel, features, source code, content, and/or other technology relating to any part of the services it provides under this Agreement and including all related patents, inventions, trademarks, and copyrights, all applications therefor, and all trade names, service marks, know how, and trade secrets (collectively referred to as "IP Rights") except as otherwise noted by this Agreement.

Contractor warrants that the services it provides under this Agreement do not infringe, violate, trespass, or constitute the unauthorized use or misappropriation of any IP Rights of any third party. Contractor shall defend, indemnify, and hold harmless Agency, employees and JPA Board from and against all liabilities, costs, damages, losses, and expenses (including reasonable attorney fees) arising out of or related to any claim by a third party that the services provided under this Agreement infringe or violate any third-party's IP Rights provided any such right is enforceable in the United States. Contractor's duty to defend, indemnify, and hold harmless under this Section applies only provided that: (a) Agency notifies Contractor promptly in writing of any notice of any such third-party claim; (b) Agency cooperates with Contractor, at Contractor's expense, in all reasonable respects in connection with the investigation and defense of any such third-party claim; (c) Contractor retains sole control of the defense of any action on any such claim and all negotiations for its settlement or compromise (provided Contractor shall not have the right to settle any criminal action, suit, or proceeding without Agency's prior written consent, not to be unreasonably withheld, and provided further that any settlement permitted under this Section shall not impose any financial or other obligation on Agency, impair any right of Agency, or contain any stipulation, admission, or acknowledgement of wrongdoing on the part of Agency without Agency's prior written consent, not to be unreasonably withheld); and (d) should services under this Agreement become, or in Contractor's opinion be likely to become, the subject of such a claim, or in the event such a third party claim or threatened claim causes Agency's reasonable use of the services under this Agreement to be seriously endangered or disrupted, Contractor shall, at Contractor's option and expense, either: (i) procure for Agency the right to continue using the services without infringement or (ii) replace or modify the services so that they become non-infringing but remain functionally equivalent.

Notwithstanding anything in this Section to the contrary, Contractor will have no obligation or liability to Agency under this Section to the extent any otherwise covered claim is based upon: (a) any aspects of the services under this Agreement which have been modified by or for Agency (other than modification performed by, or at the direction of, Contractor) in such a way as to cause the alleged infringement at issue; and/or (b) any aspects of the services under this Agreement which have been used by Agency in a manner prohibited by this Agreement.

The duty of Contractor to indemnify and save harmless as set forth by this Section shall include the duty to defend as set forth in Section 2778 of the California Civil Code.

8. Assignability and Subcontracting

Contractor shall not assign this Agreement or any portion of it to a third party or subcontract with a third party to provide services required by Contractor under this Agreement without the prior written consent of Agency. Any such assignment or subcontract without Agency's prior written consent shall give Agency the right to automatically and immediately terminate this Agreement without penalty or advance notice.

8.2 General Subcontracting Provisions

All subcontracts of Contractor for provision of services under this Agreement shall be notified of Contractor's relationship to Agency.

A. First Responder Relationships

1. Contractor shall support the development and integration of the fire first response component of the EMS System and shall cooperate and support the expansion of ALS fire first response.

2. Contractor shall ensure that its personnel work professionally and collaboratively with the fire first responders in the transition of patient care at the scene.

B. Subcontracts

1. Contractor is responsible for the comprehensive services necessary for medical emergency response and transport. To the extent supportive services are desired from others such as fire entities in order to provide medical response and transport, written subcontracts must be entered into advance and requires prior approval of the Agency Contract Administrator. At no time however would response by an entity other than Contractor satisfy the response time requirement.

   a. Contractor agrees to commence negotiations within 90 calendar days from the date of this agreement with fire agencies within their Exclusive Operating Areas. The agreement must be completed by INSERT DATE. **Upon mutual agreement between Contractor and fire agency, the Agency Contract Administrator may extend the agreement timeline up to 12 months.**

   b. Contractor may be subject to Major Breach unless the Contractor is working in good faith with fire agencies in producing an agreement or an extension was given by the Contract Administrator.

C. The Contractor shall provide clear evidence that the scope of service designed for the Subcontractor(s) will enhance system performance capability and provide a cost savings for the EMS System.

D. If the subcontract(s) and associated scope of service is approved, the Contractor shall be accountable for the performance of the Subcontractor(s).

E. The inability or failure of any Subcontractor to perform any duty or deliver contracted performance will not excuse the primary Contractor from any responsibility under this Agreement.

F. The Contractor shall designate a management liaison to work with the Agency in monitoring compliance of Subcontractors with contractual and system standards.

9. Insurance

Contractor, at its sole cost and expense, shall obtain, maintain, and comply with all Agency insurance coverage and requirements. Such insurance shall be occurrence based or claims made with tail coverage or shall be in a form and format acceptable to Stanislaus County Counsel and Stanislaus County Risk Management and shall be primary coverage as respects County.

A. Insurance

1. Without limiting the County of Stanislaus or the Agency's right to obtain indemnification from the Contractor or any third parties, subject to the Contractor's right to seek subrogation for indemnification paid to the County of Stanislaus and Agency under the Agreement and to the extent such indemnification is paid pursuant to this paragraph, the Contractor, at its/their sole expense, shall maintain or cause to be maintained in full force and effect the following insurance throughout the term of the Agreement:

    a. For the Contractor's local operation in Stanislaus County - combined public liability, general liability, bodily injury and property damage liability insurance in amount of not less than five million dollars ($5,000,000) in coverage for each occurrence;
    b. Medical liability insurance and automobile liability insurance, in an amount of not less than one million dollars ($1,000,000) in coverage for any injury or death arising out of any one (1) occurrence, and each of said insurance coverage shall have an annual aggregate limitation of not less than $2,000,000.
    c. Worker's compensation insurance providing full statutory coverage, in accordance with the California Labor Code, for any and all of the Contractor's personnel who will be assigned to the performance of the Agreement by the Contractor in accordance with the California Labor Code.
    d. $5,000,000 per occurrence for Private and Network Security, $1,000,000 per occurrence for Technology Errors and Omissions to be carried at all times during the term of the Contract and for three years thereafter.

2. Such insurance policies shall name the County of Stanislaus, its officers, agents, and employees, and the Agency, its officers, agents and employees, as an additional named insured (except for worker's compensation insurance). Such coverage for said additional named insured shall be primary insurance and any other insurance, or self-insurance, maintained by the County of Stanislaus, its officer, agents, and employees, the Agency, its officers, agents and employees, shall be secondary and excess only and not contributing with insurance provided under the Contractor's policies herein. This insurance shall not be canceled or changed to restrict coverage without a minimum of thirty (30) calendar day's written notice given to the Agency and the County Risk Management Division. If such insurance policies have a deductible, or if a Self-Insured Retention has a deductible, such deductible shall be in an amount not more than ten thousand dollars ($10,000) per occurrence unless approved by Contract Administrator. For Workers' Compensation Insurance, the insurance carrier shall agree to waive all rights of subrogation against the Agency, the County, and their respective officers, officials and employees for losses arising from the performance of or the omission to perform any term or condition of this Agreement by the Contractor.

3. Contractor shall provide certificates of insurance on the foregoing policies as required herein to the Agency annually, which state or show that such insurance coverage has been obtained and is in full force and effect.

4. Contractor's obligation to defend, indemnify, and hold the Agency and the County of Stanislaus, and their agents, officers, and employees harmless under the provisions of the paragraphs in this section is not limited to or restricted by any requirement in this Agreement for Contractor to procure and maintain a policy of insurance.

10. Compliance With Laws

All services to be performed by Contractor pursuant to this Agreement shall be performed in accordance with all applicable Federal, State, Agency, and municipal laws, ordinances, and regulations, including but not limited to the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Federal Regulations promulgated thereunder, as amended (if applicable), the Business Associate requirements set forth in Attachment H (if attached), the Americans with Disabilities Act of 1990, as amended, and Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of disability in programs and activities receiving any Federal or Agency financial assistance. Such services shall also be performed in accordance with all applicable ordinances and regulations, including but not limited to appropriate licensure, certification regulations, provisions pertaining to confidentiality of records, and applicable quality assurance regulations. In the event of a conflict between the terms of this Agreement and any applicable State, Federal, Agency, or municipal law or regulation, the requirements of the applicable law or regulation will take precedence over the requirements set forth in this Agreement.

Contractor will timely and accurately complete, sign, and submit all necessary documentation of compliance.

11. Non-Discrimination and Other Requirements

a. General Non-discrimination

No person shall be denied any services provided pursuant to this Agreement (except as limited by the scope of services) on the grounds of race, color, national origin, ancestry, age, disability (physical or mental), sex, sexual orientation, gender identity, marital or domestic partner status, religion, political beliefs or affiliation, familial or parental status (including pregnancy), medical condition (cancer-related), military service, or genetic information.

b. Equal Employment Opportunity

Contractor shall ensure equal employment opportunity based on objective standards of recruitment, classification, selection, promotion, compensation, performance evaluation, and management relations for all employees under this Agreement. Contractor's equal employment policies shall be made available to Agency upon request.

c. Section 504 of the Rehabilitation Act of 1973

Contractor shall comply with Section 504 of the Rehabilitation Act of 1973, as amended, which provides that no otherwise qualified individual with a disability shall, solely by reason of a disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination in the performance of any services this Agreement. This Section applies only to contractors who are providing services to members of the public under this Agreement.

d. Compliance with Agency's Equal Benefits Ordinance

Contractor shall comply with all laws relating to the provision of benefits to its employees and their spouses or domestic partners, including, but not limited to, such laws prohibiting discrimination in the

provision of such benefits on the basis that the spouse or domestic partner of the Contractor's employee is of the same or opposite sex as the employee.

e. Discrimination Against Individuals with Disabilities

The nondiscrimination requirements of 41 C.F.R. 60-741.5(a) are incorporated into this Agreement as if fully set forth here, and Contractor and any subcontractor shall abide by the requirements of 41 C.F.R. 60–741.5(a). This regulation prohibits discrimination against qualified individuals on the basis of disability and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified individuals with disabilities.

f. History of Discrimination

Contractor certifies that no finding of discrimination has been issued in the past 365 days against Contractor by the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or any other investigative entity. If any finding(s) of discrimination have been issued against Contractor within the past 365 days by the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or other investigative entity, Contractor shall provide Agency with a written explanation of the outcome(s) or remedy for the discrimination prior to execution of this Agreement. Failure to comply with this Section shall constitute a material breach of this Agreement and subjects the Agreement to immediate termination at the sole option of the Agency.

g. Reporting; Violation of Non-discrimination Provisions

Contractor shall report to the Agency the filing in any court or with any administrative agency of any complaint or allegation of discrimination on any of the bases prohibited by this Section of the Agreement or the Section titled "Compliance with Laws". Such duty shall include reporting of the filing of any and all charges with the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or any other entity charged with the investigation or adjudication of allegations covered by this subsection within 30 days of such filing, provided that within such 30 days such entity has not notified Contractor that such charges are dismissed or otherwise unfounded. Such notification shall include a general description of the circumstances involved and a general description of the kind of discrimination alleged (for example, gender-, sexual orientation-, religion-, or race-based discrimination).

Violation of the non-discrimination provisions of this Agreement shall be considered a breach of this Agreement and subject the Contractor to penalties, to be determined by the Agency Manager, including but not limited to the following:

i. termination of this Agreement;
ii. disqualification of the Contractor from being considered for or being awarded a Agency contract for a period of up to 3 years;
iii. liquidated damages of $2,500 per violation; and/or
iv. imposition of other appropriate contractual and civil remedies and sanctions, as determined by the Agency Manager.

To effectuate the provisions of this Section, the Agency Manager shall have the authority to offset all or any portion of the amount described in this Section against amounts due to Contractor under this Agreement or any other agreement between Contractor and Agency.

12. Retention of Records; Right to Monitor and Audit

(a) Contractor shall maintain all required records relating to services provided under this Agreement for three (3) years after Agency makes final payment and all other pending matters are closed, and Contractor shall be subject to the examination and/or audit by Agency, a Federal grantor agency, and the State of California.

(b) Contractor shall comply with all program and fiscal reporting requirements set forth by applicable Federal, State, and local agencies and as required by Agency.

(c) Contractor agrees upon reasonable notice to provide to Agency, to any Federal or State department having monitoring or review authority, to Agency's authorized representative, and/or to any of their respective audit agencies access to and the right to examine all records and documents necessary to determine compliance with relevant Federal, State, and local statutes, rules, and regulations, to determine compliance with this Agreement, and to evaluate the quality, appropriateness, and timeliness of services performed.

13. Merger Clause; Amendments

This Agreement, including the Exhibits and Attachments attached to this Agreement and incorporated by reference, constitutes the sole Agreement of the parties to this Agreement and correctly states the rights, duties, and obligations of each party as of this document's date. In the event that any term, condition, provision, requirement, or specification set forth in the body of this Agreement conflicts with or is inconsistent with any term, condition, provision, requirement, or specification in any Exhibit and/or Attachment to this Agreement, the provisions of the body of the Agreement shall prevail. Any prior agreement, promises, negotiations, or representations between the parties not expressly stated in this document are not binding. All subsequent modifications or amendments shall be in writing and signed by the parties.

14. Controlling Law

This Agreement shall be interpreted under California law and according to its fair meaning and not in favor of or against any party.

15. Notices

Any notice, request, demand, or other communication required or permitted under this Agreement shall be deemed to be properly given when both: (1) transmitted via facsimile to the telephone number listed below or transmitted via email to the email address listed below; and (2) sent to the physical address listed below by either being deposited in the United States mail, postage prepaid, or deposited for overnight delivery, charges prepaid, with an established overnight courier that provides a tracking number showing confirmation of receipt.

In the case of Agency, to:

Name/Title:	[insert]
Address:	[insert]
Telephone:	[insert]
Facsimile:	[insert]
Email:	[insert]

In the case of Contractor, to:

Name/Title: [insert]
Address: [insert]
Telephone: [insert]
Facsimile: [insert]
Email: [insert]

16. Electronic Signature

Both Agency and Contractor wish to permit this Agreement and future documents relating to this Agreement to be digitally signed in accordance with California law and Agency's Electronic Signature Administrative Memo. Any party to this Agreement may revoke such agreement to permit electronic signatures at any time in relation to all future documents by providing notice pursuant to this Agreement.

17. Payment of Permits/Licenses

Contractor bears responsibility to obtain any license, permit, or approval required from any agency for work/services to be performed under this Agreement at Contractor's own expense prior to commencement of said work/services. Failure to do so will result in forfeit of any right to compensation under this Agreement.

* * *

IN WITNESS WHEREOF, the parties have executed this Agreement the date first written above:

ATTEST:

Clerk of the Board of Supervisors of the County of Stanislaus State of California

By: _____
Clerk of the Board
Stanislaus County, State of California

COUNTY OF STANISLAUS, a political subdivision of the State of California

By: _____
Chairman, Board of Supervisors

APPROVED:

CONTRACTOR

By: _____

MOUNTAIN-VALLEY EMS AGENCY

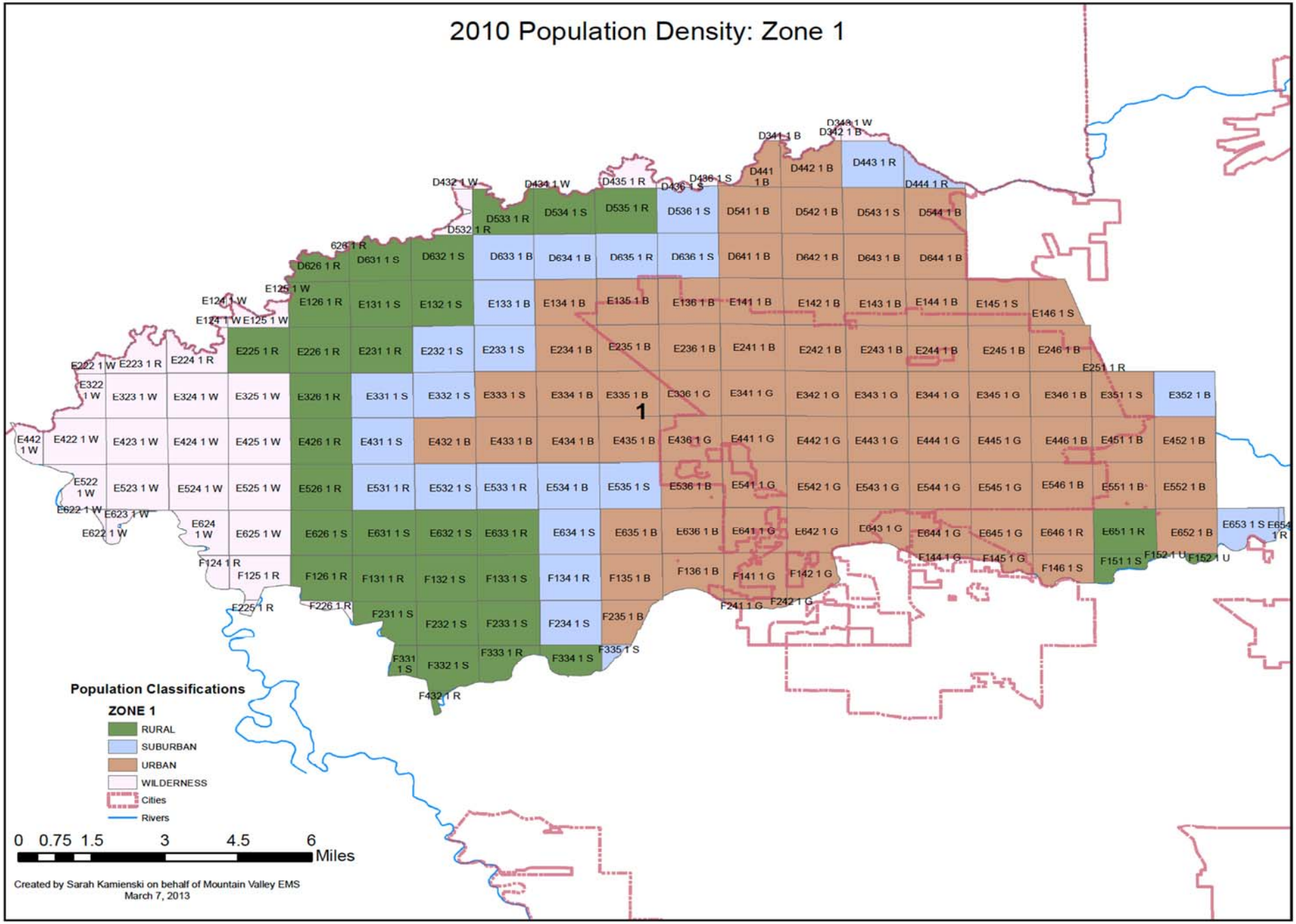
By: _____
Lance Doyle
Executive Director/Contract Administrator

APPROVED AS TO FORM:

By: _____
Stanislaus County Counsel

Exhibit A

Exhibit B


2010 Population Density: Zone 1
1
Population Classifications
ZONE 1
RURAL
SUBURBAN
URBAN
WILDERNESS
Cities
Rivers
0 0.75 1.5 3 4.5 6
Miles
Created by Sarah Kamienski on behalf of Mountain Valley EMS
March 7, 2013

ZONE 1

Zone 1 is in north central Stanislaus County encircling the City of Modesto. It is depicted on the map attached as Exhibit A and is specifically described as follows:

Commencing at a point directly north of Oakdale Road on the border of Stanislaus county adjacent to San Joaquin County northwest of the City of Riverbank, the line proceeds west southwesterly along the county line to the confluence of the San Joaquin River and the Tuolumne river; southeasterly along the Tuolumne River and continuing east northeasterly along the Tuolumne River to a point south of Goodwin Road; northerly to Yosemite Blvd; westerly along Yosemite Blvd to Wellsford Road; northerly along Wellsford Road to Milnes Road; northwesterly along Santa Fe tracks to Claribel Road; westerly along Claribel Road to Oakdale Road; then northerly along Oakdale Road to the Stanislaus County line adjacent to San Joaquin County northwest of the City of Riverbank at a point directly north of Oakdale Road.

DEMOGRAPHIC ZONE GRID DESCRIPTIONS

URBAN

D441 – D442, D541 – D544, D641 – D644, E134 – E146, E234 – E251, E333 - E351, E432 – E452, E536- E553, E635 - E646, E652, F135 - F142, F144 - F146, F235, F241 – F242

SUBURBAN

D443-D444, D536, D633 – D636, E133, E232 - E233, E331 – E332, E352, E431, E531 - E535, E453 E634, E653 - E654, F134, F234,

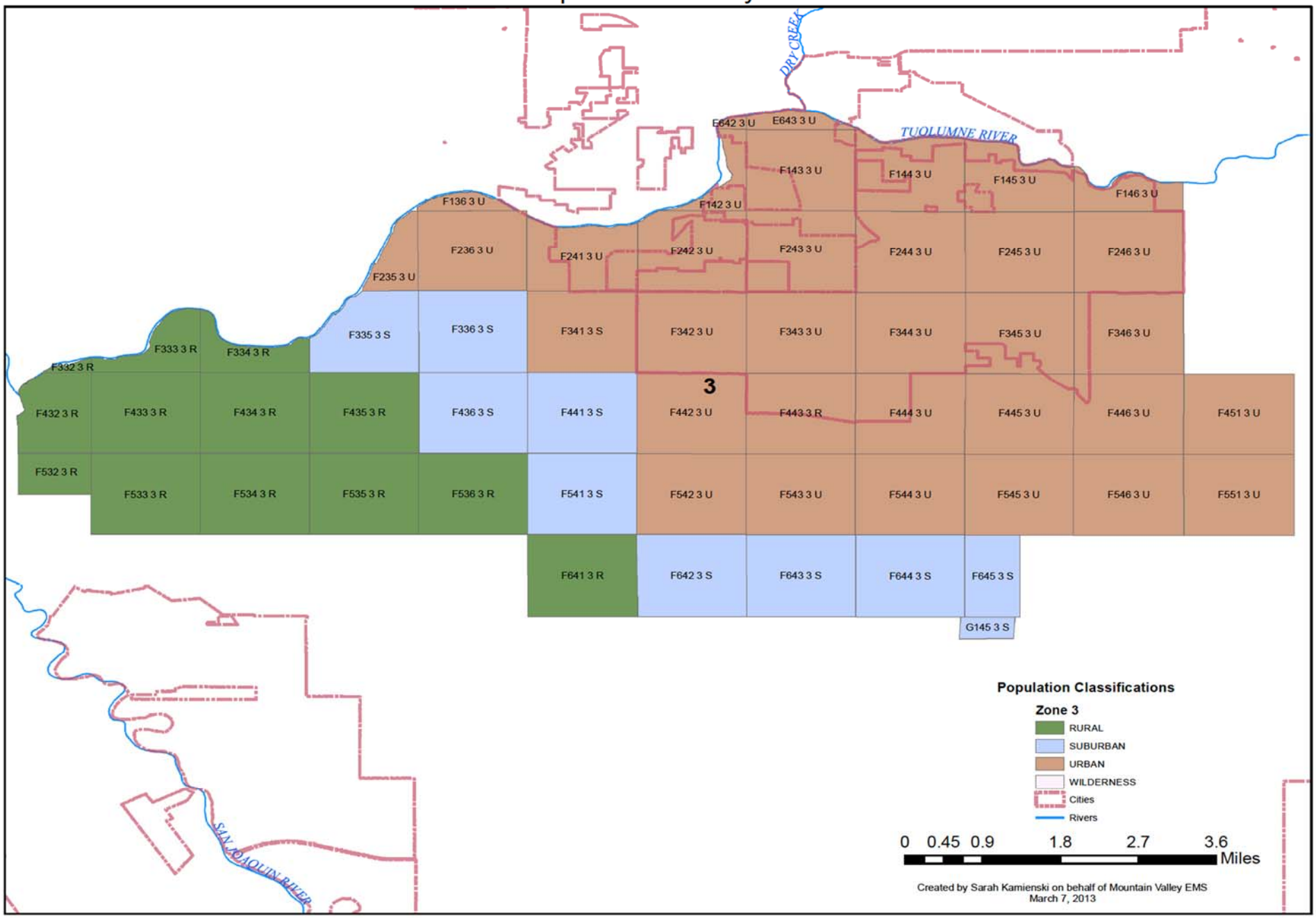
RURAL

D533 - D535, D626 - D632, E126 - E132, E225 – E231, E326, E426, E526, E353, E626 - E633, E651, F126 - F133, F151 - F152, F231 – F233, F 331 - F334, F432

WILDERNESS

D341 - D343, D432-D433, D435 – D436, D532, E124 - E125, E222 – E224, E322 – E325, E422– E425, E522 – E525, E622 - E625, F124 - F125, F225 - F226

2010 Population Density: Zone 3



ZONE 3

Zone 3 is in the central area of Stanislaus County encircling the City of Ceres. It is depicted on the map attached as Exhibit A and is specifically described as follows:

Commencing at Carpenter and Taylor Roads; then easterly on Taylor Road to Moffet Road; then northerly on Moffett Road to Keyes Road; then easterly on Keyes Road to Washington Road; then northerly on Washington Road to Service Road; then westerly on Service Road to Faith Home Road; then northerly on Faith Home Road to the Tuolumne River; then westerly along the Tuolumne River to a point just northwest of Broyle Road; then south to Grayson Road; then easterly on Grayson Road to Laird Road; then southerly on Laird Road to Keyes Road; then easterly on Keyes Road to Carpenter Road; then southerly on Carpenter Road to Taylor Road.

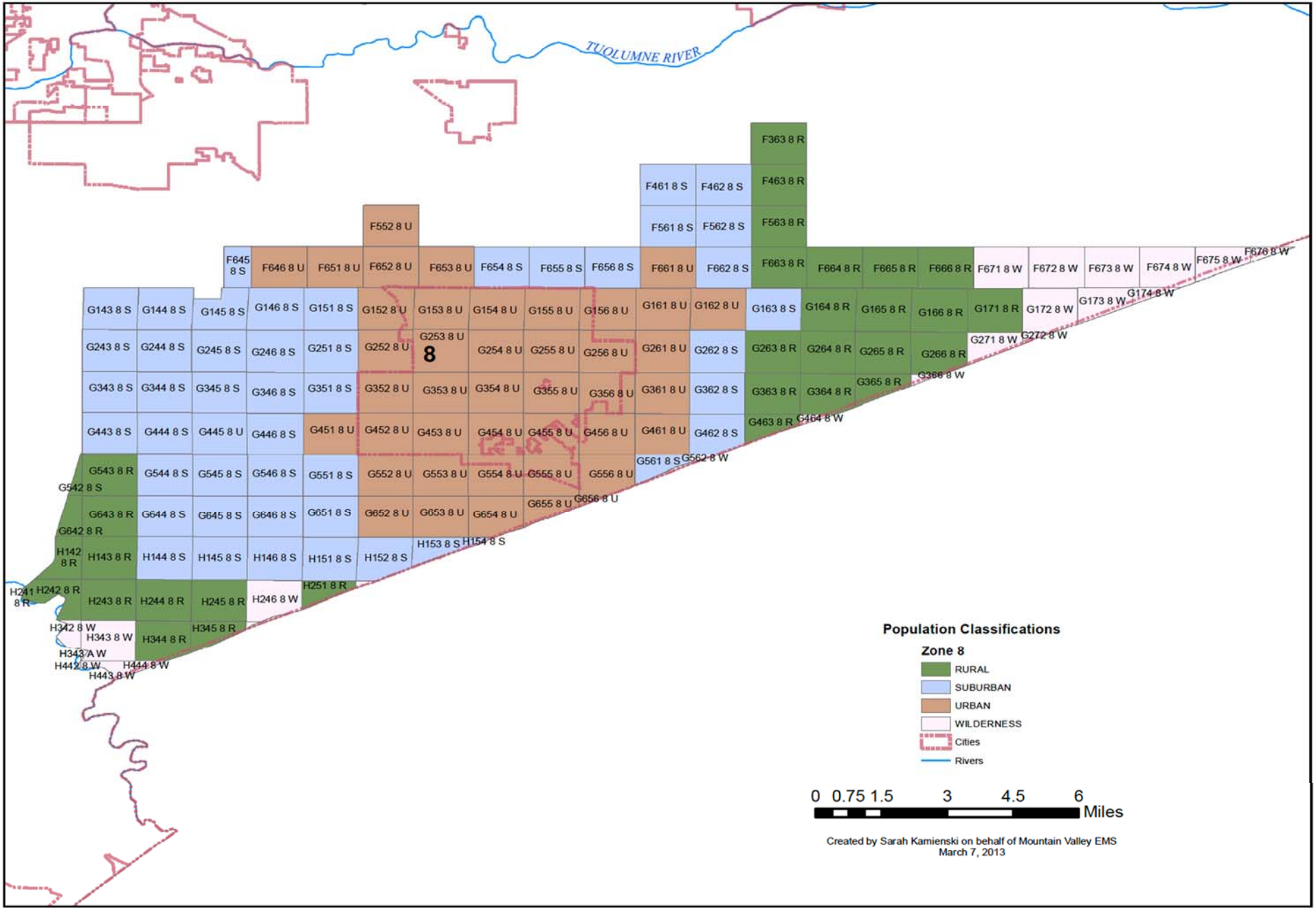
DEMOGRAPHIC ZONE GRID DESCRIPTIONS

URBAN
E642-E643, F136, F142-F146, F235-F246, F341-F346, F442-F451, F542-F551

SUBURBAN
F335-F336, F436 – F441, F541, F642-F645, G145

RURAL
F332 - F334, F432 - F435, F532 - F536, F641

2010 Population Density: Zone 8



ZONE 8

Zone 8 is in the south-central area of Stanislaus County encircling the City of Turlock. It is depicted on the map attached as Exhibit A and is specifically described as follows:

Commencing on the border of Stanislaus County adjacent to Merced County where the San Joaquin River enters the County; then northeasterly along the County line to a point where Keyes Road exits the County; then westerly along Keyes Road to Hickman Road; then northerly along Hickman Road to Whitmore Road; then westerly along Whitmore Road to a point just east of Downie Road; then southerly to a point east of Service Road; then westerly along Service Road to Waring Road; then southerly along Waring Road to Keyes Road; then westerly along Keyes Road to Mountain View Road; then northerly along Mountain View Road to Grayson Road; then westerly along Grayson Road to Washington Road; then southerly along Washington Road to Keyes Road; then westerly along Keyes Road to Moffet Road; then southerly along Moffet Road to Taylor Road; then westerly along Taylor Road to Crows Landing Road; then southerly along Crows Landing Road to the San Joaquin River; then southerly along the San Joaquin River to the County line.

DEMOGRAPHIC ZONE GRID DESCRIPTIONS

URBAN

F552, F646 – F653, F661, G152 – G162, G252 – G261, G352 – G361, G451 – G461, G552 – G556, G652- G656

SUBURBAN

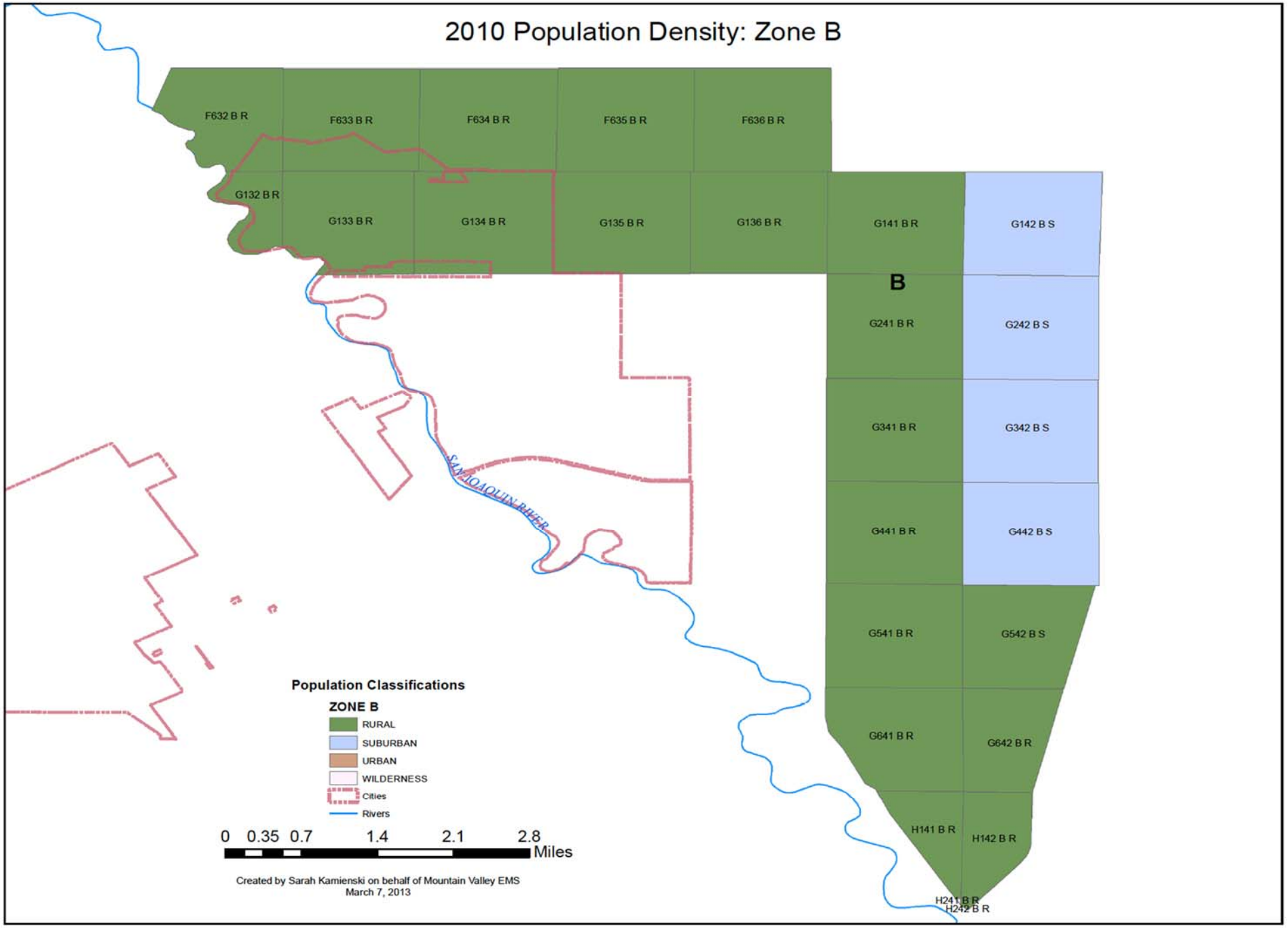
F461 - F462, F561 – F562, F645, F654 – F656, F662, G143 – G151, G163, G243 – G251, G262, G343 - G351, G362, G443 - G446, G462, G544- G551, G561, G644 - G651, H144– H154

RURAL

F363, F463, F563, F663 - F666, G164 - G171, G263 – G266, G363 - G365, G463, G542 - G543, G642 - G643, H142 - H143, H242 – H245, H251, H344 - H345

WILDERNESS

F671 - F676, G172 - G174, G271 – G272 G366, G464, G562, H246, H252, H342 -


2010 Population Density: Zone B
F632 B R
F633 B R
F634 B R
F635 B R
F636 B R
G132 B R
G133 B R
G134 B R
G135 B R
G136 B R
G141 B R
G142 B S
B
G241 B R
G242 B S
G341 B R
G342 B S
G441 B R
G442 B S
G541 B R
G542 B S
G641 B R
G642 B R
H141 B R
H142 B R
H241 B R
H242 B R
SAN JOAQUIN RIVER
Population Classifications
ZONE B
RURAL
SUBURBAN
URBAN
WILDERNESS
Cities
Rivers
0 0.35 0.7 1.4 2.1 2.8
Miles
Created by Sarah Kamienski on behalf of Mountain Valley EMS
March 7, 2013

ZONE B

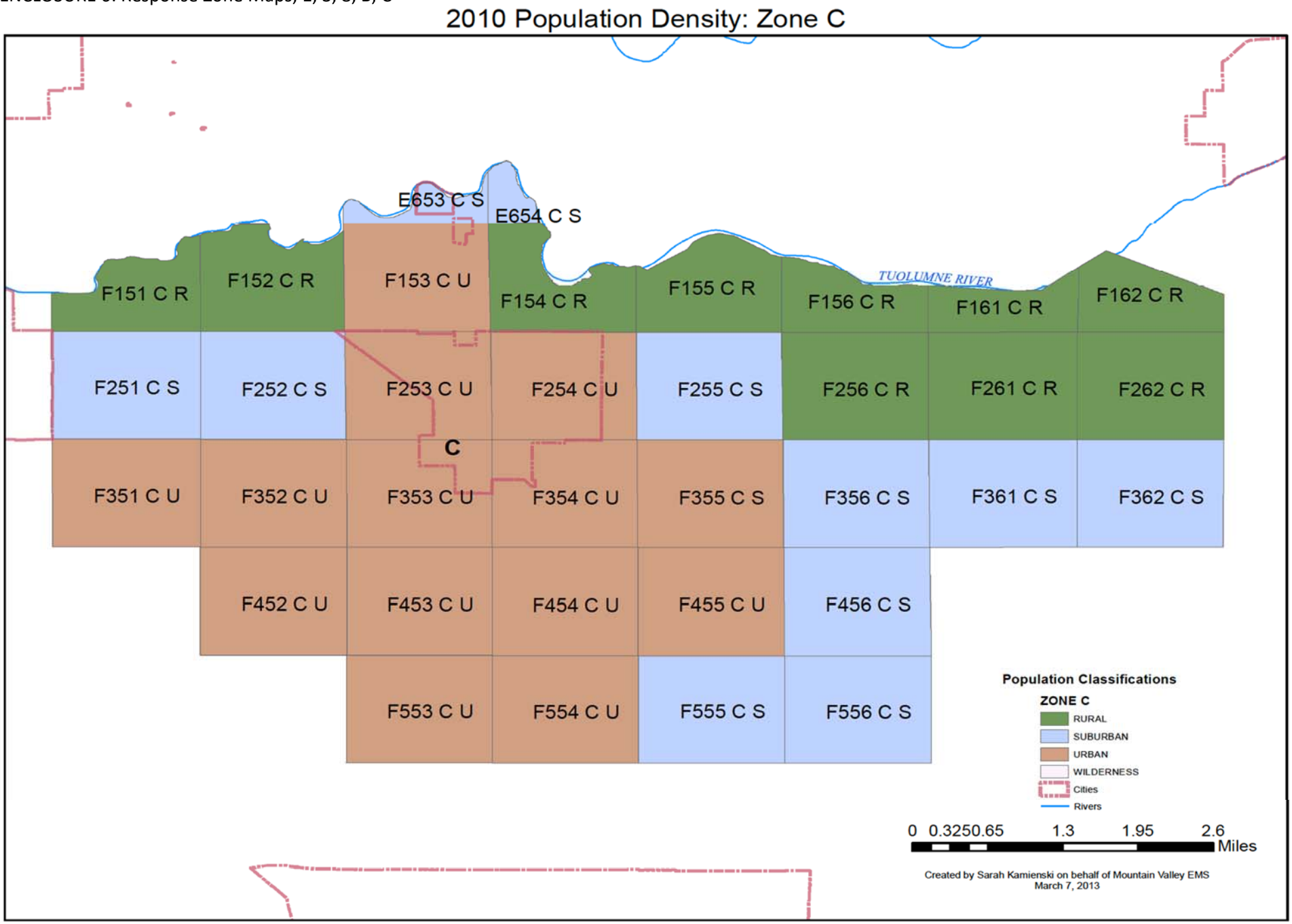
Zone B is an area of approximately twenty square miles located in a lightly populated area shaped like an upside down inverted “L” which is nearly equidistant to the cities of Turlock in the east, Patterson in the west, and Ceres in the north. Its boundaries are specifically described as follows:

Commencing in northwestern corner at the junction of Laird Road and Keyes Road, east to Carpenter Road; south on Carpenter Road to Taylor Road; east on Taylor Road to Crows Landing Road; south on Crows Landing Road to Carpenter Road; north on Carpenter Road to Monte Vista Road; west on Monte Vista Road to the end of the road and continue in a straight line to the San Joaquin River; north east along the San Joaquin River to the Del Puerto Creek confluence; northeasterly to the Keyes Road and Laird Road Juncture.

GRID RESPONSIBILITY:

SUBURBAN
G142, G242, G342, G442

RURAL
G542, G642, H142, H242


2010 Population Density: Zone C
E653 C S
E654 C S
F151 C R
F152 C R
F153 C U
F154 C R
F155 C R
F156 C R
F161 C R
F162 C R
TUOLUMNE RIVER
F251 C S
F252 C S
F253 C U
F254 C U
F255 C S
F256 C R
F261 C R
F262 C R
C
F351 C U
F352 C U
F353 C U
F354 C U
F355 C S
F356 C S
F361 C S
F362 C S
F452 C U
F453 C U
F454 C U
F455 C U
F456 C S
F553 C U
F554 C U
F555 C S
F556 C S
Population Classifications
ZONE C
RURAL
SUBURBAN
URBAN
WILDERNESS
Cities
Rivers
0 0.3250.65 1.3 1.95 2.6
Miles
Created by Sarah Kamienski on behalf of Mountain Valley EMS
March 7, 2013

ZONE C

Zone C is in the east central area of Stanislaus County encircling the City of Hughson. It is depicted on the map attached as Exhibit A and is specifically described as follows:

Commencing at the corner of Grayson and Washington Roads; then easterly on Grayson Road to Mountain View Road; then southerly on Mountain View Road to Keyes Road; then easterly on Keyes Road to Waring Road; then northerly on Waring Road to Service Road; then easterly on Service Road to a point east of Downie Road; then northerly parallel and east of Downie Road to a point northeast of Lyon and Virginia Road; then curving westerly across the northern end of Swanson Road to the Tuolumne River; then westerly along the Tuolumne River to a point north of Faith Home Road; then southerly along Faith Home Road to Service Road; then easterly along Service Road to Washington Road; then southerly along Washington Road to Grayson Road.

Demographic Zone Grid Descriptions

URBAN

F153, F253 - F254, F351-F355, F452-F455, F553-F554

SUBURBAN

E653 - E654, F251 - F252, F255, F356-F362, F456, F555 – F556

RURAL

F151 - F152, F154 - F162, F256 – F262

Response Time Measurement and Financial Penalties

1. Measurement of Response Time

EMS Dispatch CAD data and the First Watch Online Compliance Utility (OCU) will be used to calculate response times. Calculation of response times shall begin at the time the following information, at a minimum, is transmitted to the vehicle crew:

- Call priority
- Exact address with map coordinates or descriptive location such as building or landmark.

A secondary voice broadcast and or an MDC transmission will generally follow the initial broadcast, and may contain the following elements:

- Chief complaint
- Pertinent patient information
- Status of first responders
- Other events occurring at the scene of the call.

In the event that no ambulance is available at the time that the dispatcher is ready to dispatch an ambulance, the ambulance response time shall begin at the time that the dispatcher notes in the automated dispatch system record that no ambulance is available. The arrival on-scene shall be identified as the time that the response unit notifies the dispatch center that it is at the location where the response unit shall be parked during the incident, or GPS locator places unit on scene, or in the event that staging is necessary for personnel safety, at the time the response unit arrives at a staging area. The time of the next communication from the crew or other on-scene personnel to the dispatch center that indicates that the response unit has already arrived at the scene shall be used as the arrival on-scene time.

A compliance period is defined as any complete month, or accumulation of months in which the total number of calls in a response area (i.e. Zone 1 Suburban) equals or exceeds 250 or a twelve-month period whichever is first. Measurement will be calculated separately for Code Two and Code Three calls.

2. Applicable Calls

All calls that are designated as Code 3 and Code 2 are subject to the response time standards above and ensuing penalties for late response will be applied. Each incident shall be counted as a single paramedic first response and a single ambulance response regardless of the number of ambulances and other vehicles that were actually utilized. The first responding fire apparatus (if public/private partnership agreement in place) OR the first arriving ambulance's times (no public/private partnership agreement) will be applicable. If a response is canceled, or downgraded to a lower priority, financial penalties may be assessed if response time standards are exceeded at the time of cancellation or downgrade. If a call is "upgraded" again, or there is more than one priority change in a given call, then Contractor is not subject to any financial penalties for that call, provided the upgrade or second change in priority does not occur after the passage of a response time penalty threshold.

In some cases, late responses will be exempted from financial penalties and from response time compliance reports. These exemptions will be for good cause only, as reasonably determined by MVEMSA. The burden of proof that there is good cause for the exemption shall rest with the Contractor. Contractor must file a request for each response time exemption on a monthly basis with

MVEMSA within 15 days of the end of the previous month. Such request shall be submitted through the First Watch OCU with proper documentation supporting the exemption request.

Response Time Fine Structure

Failure to meet response time standards or performance standards in the delivery of service, except as otherwise exempted, contractor shall be assessed penalties in the following amounts:

1. The structure for assessed penalties shall be:

Extended Response (per each incident)

Extended Response Time over specific zone requirement.	10-15:59 min over	$500
	>16:00 min over	$750

Failure to meet 90% in Compliance Period

89-89.99%	$1,000
88-88.99%	$1,500
87-87.99%	$2,500
86-86.99%	$4,000
85-85.99%	$6,000
<85 %	$8,000

Additional Penalty Assessment (per incident)

Preventable mechanical failure with patient on board ambulance (if vehicle is out of compliance with proposer's maintenance schedule, exceeds mileage or age limits, or empty fuel tank, etc.)	$500
Failure of crew to report response times at-scene and at-scene time is not verifiable by other pre-agreed reliable means	$250

2. Phase-In Period (Discovery Period)

For the first three (3) months after the agreement is implemented, (beginning November 1, 2019 through January 31, 2020) response time requirements specified herein shall be enforced but the penalty assessment will be waived to allow for adjustments in system status management. For the remainder of the Agreement period, response time requirements must be met, and penalties will be assessed for non-compliance.

Upon recommendation of MVEMSA the phase-in period may be extended to accommodate implementation of the new dispatching system to allow adequate system status management and data acquisition.

3. Other Repercussions

If MVEMSA with recommendation of the Emergency Medical Services Committee (EMSC) or other oversight committee designated by MVEMSA Executive Director, determines that Proposer has failed to maintain a

response compliance level described in this section, for three consecutive compliance periods and/or more than 6 compliance periods in a single zone in any rolling 12-month period, the MVEMSA may determine that there is a breach.

4. Payments and Use of Penalty Assessment Penalties

The MVEMSA will make the final penalty determination based on this section and will inform the Proposer of the incidents and penalties incurred on a monthly basis. Proposer shall pay MVEMSA all penalties within 45 days of receipt of the notification to be designated as Stanislaus County EMS System Enhancement Funds.

Penalties collected will be designated System Enhancement Funds and will be utilized per MVEMSA Stanislaus County EMS System Enhancement Funds policy.

Penalty assessment example

PENALTY SUMMARY	
INTERVAL:	October 2019

	ON-TIME COMPLIANCE				
	EMS RESPONSE ZONE GROUP				
	1	2	3	4	5
CODE 3	91.20%	90.40%	88.30%	89.40%	95.20%

TYPE	PENALTY	QTY	TOTAL
MONTHLY COMP			
89-89.99%	$1,000.00	1	$1,000.00
88-88.99%	$1,500.00	1	$1,500.00
87-87.99%	$2,500.00		$0.00
86-86.99%	$4,000.00		$0.00
85-85.99%	$6,000.00		$0.00
<85%	$8,000.00		$0.00
EXTENDED RESP			
EXT RESP 10-15	$500.00	2	$1,000.00
EXT RESP >15	$750.00		$0.00
OTHER			
MECH FAILURE	$500.00		$0.00
FAIL RPT ON SCENE	$250.00	3	$750.00

PENALTY BREAKOUT	
PROPOSER	
COMPLIANCE	$2,500.00
EXT RESPONSE	$1,000.00
OTHER	$750.00
TOTAL	**$4,250.00**

In this example of a monthly penalty report, showing infractions in each category of penalties.

Monthly Compliance:
In the monthly response compliance, contractor scored an on-time compliance of 89.40% in Zone #4, resulting in a $1,000 penalty and 88.3% compliance in Zone #3. Therefore $1,500 penalty is assessed.

Extended Response:
Contractor had one call with an extended emergency response time of 12 minutes over limit and one call 13 minutes over limit resulting in $1,000 in penalties.

Other:
On three occasions this month, contractor ambulances failed to notify dispatch or indicate their arrival "on-scene" resulting in a $750 penalty.

Penalty Breakout:
The total monthly penalties for the Proposer are shown on the right-hand side and reflect the amount of payment that will be paid directly to MVEMSA as Stanislaus County EMS System Enhancement Funds.

MVEMSA provides the minimum equipment and supplies to be carried on ambulances on its website:

http://www.mvemsa.org/policies/p400-response-transport/151-407-00-equipment-and-drug-inventory

http://www.mvemsa.org/policies/p400-response-transport/628-409-00-lals-and-als-first-responder-unit-equipment-and-supply-inventory

In addition, the California Highway Patrol inspects each non-government ambulance for safety and basic equipment and issues ambulance permits, and also conducts ambulance driver testing and issues ambulance driver certificates.

Paramedic compensation package

Proposer

	New Employee	After 2 Years	After 5 Years
Hourly Wage (straight time):			
Lowest			
Highest			
Median			
Average number of hours per week for full-time EMT-Ps:			
Average gross earnings per week for full-time EMT-Ps:			
Paid Vacation (days per year)			
Paid Holidays (days per year)			
Sick Leave (days per year)			
Paid Cont. Ed. (hours per year)			
Uniform Allowance (per year)			
Tuition Reimbursement (per year)			

Health Care

Medical			
% Covered			
$ Deductible			
Dental			
% Covered			
Optical			
% Covered			

Describe any of the following that are provided:

• Stock Options • Profit sharing • Day Care Services • Career Development • Pension Plan	

EMT-I compensation package

Proposer

	New Employee	After 2 Years	After 5 Years
Hourly Wage (straight time):			
Lowest			
Highest			
Median			
Average number of hours per week for full-time EMT-Ps:			
Average gross earnings per week for full-time EMT-Ps:			
Paid Vacation (days per year)			
Paid Holidays (days per year)			
Sick Leave (days per year)			
Paid Cont. Ed. (hours per year)			
Uniform Allowance (per year)			
Tuition Reimbursement (per year)			

Health Care

Medical			
% Covered			
$ Deductible			
Dental			
% Covered			
Optical			
% Covered			

Describe any of the following that are provided:

• Stock Options • Profit sharing • Day Care Services • Career Development • Pension Plan	

The undersigned organization, a prospective Proposer to provide emergency advanced life support ambulance service for the Mountain-Valley EMS Agency in Stanislaus County, recognizes that public health and safety requires assurance of safe, reliable, and cost-efficient ambulance service. That assurance will require inquiry into aspects of company operations deemed relevant by MVEMSA, or its agents. The Proposer specifically agrees that MVEMSA or its agents may conduct an investigation into, but not limited to the following matters:

1. The financial stability of the company, including its owners and officers, any information regarding potential conflict of interests, past problems in dealing with other clients or cities where the company has rendered service, or any other aspect of the company operations or its structure, ownership, or key personnel which might reasonably be expected to influence MVEMSA's selection decision.
2. The company's current business practices, including employee compensation and benefits arrangements, pricing practices, billing and collections practices, equipment replacement and maintenance practices, in-service training programs, means of competing with other companies, employee discipline practices, public relations efforts, current and potential obligations to other buyers, and general internal personnel relations.
3. The attitude of current and previous customers of the company toward the company's services and general business practices, including patients or families of patients served by the company, physicians or other health care professionals knowledgeable of the company's past work, as well as other units of local government with which the company has dealt in the past.
4. Other business in which company owners and/or other key personnel in the company currently have a business interest.
5. The accuracy and truthfulness of any information submitted by the company in connection with such evaluation.

This authorization shall expire one year from the date of the signature.

AUTHORIZATION FOR SUCH INVESTIGATION IS HEREBY EXPRESSLY GIVEN BY THE COMPANY:

_____

_____

Date

_____

Organization

_____

By: Signature (authorized representatives)

_____

Name(s) (printed)

_____

Title

State of _____

County of _____

On this _____day of _____2018 before me, the undersigned, a Notary Public in and for the said County and State, personally appears_____ to me known to be the person described herein and who executed the foregoing Affirmation Statement and acknowledged that s/he executed the same has her/his free act and deed.

Witness my hand and Notary Seal subscribed and affixed in said County and State, the day and year above written.

_____

Notary Public

(Seal)

My Commission Expires _____

ENCLOSURE 11 – Investigative Authorization – Individual

The undersigned, being_____(title) for_____ (Company), which is a proposer to provide emergency and advanced life support ambulance service to the Mountain-Valley EMS Agency, Stanislaus County, recognizes that public health and safety requires assurance of safe, reliable, and cost- efficient ambulance service. In order to judge this bid, it is necessary to require an inquiry into matters which are deemed relevant by MVEMSA or its agents, such as, but not limited to, the character, reputation, and competence of the company's owners and key employees.

The undersigned specifically acknowledges that such inquiry may involve an investigation of his or her personal work experience, educational qualifications, moral character, financial stability, and general background, and specifically agrees that MVEMSA, or its agents, may undertake a personal investigation of the undersigned for the purpose stated. This authorization shall expire six (6) months from the signature date.

AUTHORIZATION FOR SUCH INVESTIGATION IS HEREBY EXPRESSLY GIVEN:

_____
Date

_____
Signature

_____
Individual Name (typed)

State of _____

County of _____

On this _____day of _____2018 before me, the undersigned, a Notary Public in and for the said County and State, personally appears _____to me known to be the person described herein and who executed the foregoing Affirmation Statement, and acknowledged that s/he executed the same has her/his free act and deed.

Witness my hand and Notary Seal subscribed and affixed in said County and State, the day and year above written.

_____
Notary Public

(Seal)

My Commission Expires _____

ENCLOSURE 12 - Stanislaus County AMR Emergency Ambulance Rates as of July 1, 2017

Schedule of Charges 9-1-1 Emergency Response	**7/1/2017**
ALS Base Rate	$2,901.28
ALS Mileage	$60.52
BLS Base Rate	$2,067.75
BLS Mileage	$55.02
Oxygen	$251.55

The current contract caps the patient charges and permits annual increase as follows:

The rates proposed in this RFP may be increased annually to adjust for inflation. No later than forty-five days prior to each adjustment date, the Proposer may request MVEMSA Executive Director consider approval of a user fee adjustment. In order to ensure a fair and appropriate cost to residents and visitors to the EOA service area, the MVEMSA Executive Director will have the final authority to set the CPI rate adjustment. The MVEMSA Executive Director's decision will be informed by documentation submitted by the provider to substantiate the need for a rate increase. Such documentation may include but are not limited to audited financial statements, collection rate and payer mix.

During the term of the agreement, the Proposer will be allowed opportunities for rate adjustments, which may be based on the Bay Area Consumer Price Index (CPI) and/or other appropriate indexes reflecting increased costs of operations. The Proposer may propose rate changes to MVEMSA no more frequently than annually unless the Proposer can demonstrate to the satisfaction of MVEMSA that, due to extraordinary changes in reimbursement or the cost structure of the Proposer's operations which were beyond the control of the Proposer, an undue financial hardship would be placed on the Proposer in the absence of an immediate rate consideration. No rate increase will be considered for the first year of the contract.

Proposer	

Proposed ambulance rates

(Use this form to create three examples of projected ambulance rates for years 1,2 & 3 based on allowable rate increases as described in the RFP)

Base Rate	
Night charge	
Oxygen	
Mileage	
Technology and Equipment Upgrade Fund	$1.00 per mile

Attach a list of any other specific charges proposed.

Medicare

Do you accept Medicare assignment? _____Yes _____No

Definition: Reference: HCFA – 460 form

Medicare Participating Physician or Supplier Agreement

Meaning of Assignment - For purposes of this proposal, accepting assignment of the Medicare Part B payment means requesting direct Part B payment from the Medicare program. Under an assignment, the approved charge, determined by the Medicare carrier, shall be the full charge for the service covered under Part B. The participant shall not collect from the beneficiary or other person or organization for covered services more than the applicable deductible and coinsurance.

_____
Date

_____
Responding organization

_____
By: Signature (authorized representative)

_____
Name (printed)

_____
Title

Charge scenarios

Proposer	

Charges are to be based on the rate schedule submitted in this proposal. If an item is included in the base rate, or if there is no charge for an item, indicate this on the form. Identify additional specific charges (e.g., charges to perform any of the identified skills) or routine charges (e.g., infection control charge) in the blanks provided. The total shall reflect all specific and routine charges that a patient in this type of scenario would be billed.

SCENARIO #1: A 56-year-old male is complaining of chest pain. This call occurs at 2:00 a.m. and the patient's home is 12 miles from the receiving hospital.

Total	$
Base rate	$
Emergency response	$
Night charge	$
12 miles transport	$
Oxygen	$
Oxygen administration equipment	$
I.V. administration equipment	$
Cardiac monitor	$
Nitroglycerin gr. 1/150 s.l.	$
Morphine Sulfate 4 mg. I.V.	$
Aspirin	$
	$
	$
	$
	$
	$

Charge scenarios - Continued

SCENARIO #2: A 25-year-old unconscious diabetic is treated with glucose and refuses treatment signing out AMA. Field personnel spend 45 minutes on this call prior to clearing.

Total	$
Base rate	$
Emergency response	$
Oxygen	$
I.V. administration equipment	$
I.V. solution	$
Glucose	$
Narcan	$
Cardiac monitor	$
	$
	$
	$
	$
	$
	$

ENCLOSURE 14: Proposed Operating and Start-Up Budget

Proposer: _____

	Start-Up	*Year 1*	*Year 2*	*Year 3*
REVENUES				
Private payments				
Medicare				
Medi-Cal				
Other third-party payments				
Other (describe)				
Total Revenues				
EXPENSES				
Personnel				
Paramedic wages				
Paramedic benefits				
EMT wages				
EMT benefits				
Other personnel wages				
Other personnel benefits				
Other (describe)				
Subtotal personnel				
Vehicles				
Fuel				
Repairs & maintenance				
Equipment lease				
Other (describe)				
Subtotal vehicles				
Medical equipment & supplies				
Supplies				
Equipment lease				
Repairs & maintenance				
Other (describe)				
Subtotal medical equip. & supplies				
Facilities				
Rent/Lease				
Property taxes				
Insurance				
Utilities				
Other (describe)				
Total Expenses				
NET INCOME (LOSS)				

Basis for Revenue Projections

	Annual # of Transports	*%*	*Average Payment per Transport*	*Annual Revenue*
Source of Payment:				
Private				
Medi-Cal				
Medicare				
Other (describe)				
No payment				
Total		100%		

ENCLOSURE 15 - Assurance of Compliance with Section 504 of the Rehabilitation Act of 1973, as Amended

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The undersigned (hereinafter called "Contractor(s)") hereby agrees that it will comply with Section 504 of the Rehabilitation Act of 1973, as amended, all requirements imposed by the applicable DHHS regulation, and all guidelines and interpretations issued pursuant thereto.

The Contractor(s) gives/give this assurance in consideration of for the purpose of obtaining contracts after the date of this assurance. The Contractor(s) recognizes/recognize and agrees/agree that contracts will be extended in reliance on the representations and agreements made in this assurance. This assurance is binding on the Contractor(s), its successors, transferees, and assignees, and the person or persons whose signatures appear below are authorized to sign this assurance on behalf of the Contractor(s).

The Contractor(s): (Check a or b)

☐ a. Employs fewer than 15 persons.

☐ b. Employs 15 or more persons and, pursuant to section 84.7 (a) of the regulation (45 C.F.R. 84.7 (a), has designated the following person(s) to coordinate its efforts to comply with the DHHS regulation.

Name of 504 Person:	
Name of Contractor(s):	
Street Address or P.O. Box:	
City, State, Zip Code:	

I certify that the above information is complete and correct to the best of my knowledge

Signature:	
Title of Authorized Official:	
Date:	

*Exception: DHHS regulations state that: "If a recipient with fewer than 15 employees finds that, after consultation with a disabled person seeking its services, there is no method of complying with (the facility accessibility regulations) other than making a significant alteration in its existing facilities, the recipient may, as an alternative, refer the handicapped person to other providers of those services that are accessible."

DEFINITIONS

ACE Accredited Emergency Medical Dispatch - Accredited Center of Excellence (ACE) by the National/International Academies of Emergency Dispatch. Accredited centers share common goals to improve public care and maximize the efficiency of 9-1-1 systems; and the NAED, through its College of Fellows, established a high standard of excellence for emergency dispatch, providing the tools to achieve the standard at both the dispatcher level through certification, and at the communications center level through the ACE program.

Advanced Life Support (ALS) – Special services designed to provide definitive pre-hospital emergency medical care as defined in Health and Safety Code Section 1797.52, 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.

ALS Unit – An ambulance especially equipped to provide advanced life support services, staffed by at least one EMT and one EMT-P.

Ambulance – Any vehicle specially constructed, modified or equipped and used for transporting sick, injured, infirmed or otherwise incapacitated person and capable of supporting BLS or a higher level of care.

Ambulance Ordinance - Section 6.70.030 of Stanislaus County Code "Ambulance Ordinance" 32 establishes that Exclusive Operating Areas and/or Non-exclusive Operating Areas shall be designated; and Section 6.70.040 establishes that those providing ambulance services must have an Ambulance Provider Agreement with the local EMS agency, and Section 6.70.060 establishes that the Ambulance Provider Agreement shall address minimum standards. The complete ordinance can be found at: http://qcode.us/codes/stanislauscounty/?view=desktop&topic=6-6_70-6_70_010

Ambulance Unit – An ambulance staffed with qualified personnel and equipped with appropriate medical equipment and supplies.

Automated External Defibrillation (AED) – A procedure to delivery electrical shock and convert specific heart rhythms back to normal; used by the public, public safety, and BLS providers.

Ambulance Service – The furnishing, operating, conducting, maintaining, advertising, or otherwise engaging in or professing to be engaged in the transportation of patients by ambulance. Taken in context, it also means the person so engaged or professing to be so engaged.

At Scene – The time when a unit communicates to dispatch that it has arrived at the address of the call. Normally, this is when the vehicle is put into park. If staging is required for crew safety, at scene is determined when the unit reaches a safe distance from the call and waits for law to determine it is safe to enter. If off-road location, such as a park or private road with gated access, at scene is determined by reaching the end of paved roadway or closed gate.

AVL – Automatic vehicle locator.

Bariatric Ambulance - A bariatric ambulance is an ambulance vehicle modified to carry the severely obese. They have extra-wide interiors and carry "bariatric stretchers" and specialized lifting gear that is capable of carrying very large patients.

Basic Life Support (BLS) – As defined in Health and Safety Code Section 1797.60.

BLS Unit – As defined in Health and Safety Code Section 1797.60. Emergency first aid and cardiopulmonary resuscitation procedures which, as a minimum, include recognizing respiratory and cardiac arrest and

starting the proper application of cardiopulmonary resuscitation to maintain life without invasive techniques until the patient may be transported or until advanced life support is available.

Business Day - Monday through Friday except for holidays as observed per the California Government Code 6700 et seq.

California Division of Occupational Safety and Health Agency (CAL/OSHA) – State agency that protects and improves the health and safety of working men and women in California.

Call Reception – The process of answering the telephone and processing information for the caller in an emergency dispatch center.

Call Prioritization – A process in which requests for service are prioritized based on predefined and audited criteria.

Cardio-Pulmonary Resuscitation (CPR) – An emergency procedure that combines chest compressions often with artificial ventilation in an effort to manually preserve intact brain function.

CARES - The Cardiac Arrest Registry to Enhance Survival or CARES was initiated in 2004 as an agreement between the Center for Disease Control and Prevention and the Department of Emergency Medicine at Emory University. CARES was developed to help communities determine standard outcome measures for out-of-hospital cardiac arrest locally allowing for quality improvement efforts and benchmarking capability to improve care and increase survival.

Code-2 Call – Any request for service designated as non-life threatening by dispatch personnel in accordance with County policy and pre-established dispatch protocols, requiring the immediate dispatch of an ambulance without the use of lights and sirens.

Code-3 Call – Any request for service for a perceived or actual life-threatening condition, as determined by dispatch personnel, in accordance with County policy and pre-established dispatch protocols, requiring immediate dispatch with the use of lights and sirens.

Computer-Aided Dispatch (CAD) – A system consisting of but not limited to associated hardware and software to facilitate call taking, system status management, unit selection, ambulance coordination, resource dispatch and deployment, event time stamping, creation and real time maintenance of incident database, and providing management information.

Continuous Quality Improvement (CQI) – Approach to quality management that builds upon traditional quality assurance methods by emphasizing the organization and systems.

Contract Materials - Finished or unfinished documents, data, studies, maps, photographs, reports, specifications, lists, manuals, software, and other written or recorded materials produced or acquired by the Contractor pursuant to the Contract for or on behalf of the County, whether or not copyrighted.

Contract - The agreement between Mountain-Valley EMS Agency, Stanislaus County and Contractor awarded pursuant to this solicitation.

Contractor - The person or other entity awarded a Contract in conformance with the terms of this solicitation and any subsequently-agreed upon terms.

County Data - All information, data, and other content, including Confidential Information and other information whether or not made available by Mountain-Valley EMS Agency, Stanislaus County or Stanislaus County's agents, representatives or users, to a Contractor or potential Contractor or their employees, agents, or representatives, and any information, data and content directly derived from the foregoing, including data reflecting user access or use.

County Systems - The information technology infrastructure of Stanislaus County or any of its designees, including computers, software, databases, networks, and related electronic systems.

County - Stanislaus County

Critical Incident Stress Management (CISM) – Adaptive, short-term psychological helping-process that focuses solely on an immediate and identifiable problem.

Demand Analysis – The deployment of ambulances in a specific service area based on experience and the predicted likelihood of requests for service in that area at the time deployed.

Deployment – The procedures by which ambulances are distributed throughout the service area. Deployment includes the locations at which the ambulances are placed (or posted) and the number of ambulances placed in service for the particular time period.

Dispatch Time – Common unit of measurement from receipt of a call until a unit has been selected and notified it has an assignment.

Electronic Patient Care Report (ePCR) – A document that records patient information, assessment, care, treatment, and disposition by prehospital personnel.

Emergency – Any real or self-perceived event which threatens life, limb or well-being of an individual in such a manner that a need for immediate medical care is created.

Emergency Air Ambulance – An aircraft with emergency medical transport capabilities.

Emergency Ambulance – Any vehicle meeting California regulatory standards that is equipped or staffed for emergency transportation.

Emergency Call – A real or self-perceived event where the EMS system is accessed by the 9-1-1 emergency access number, or an interfacility transfer where the patient's health or well-being could be compromised if the patient is held at the originating facility.

Emergency Department (ED) – An approved receiving department within a licensed hospital.

Emergency Medical Dispatch (EMD) – Personnel trained to state and national standards on emergency medical dispatch techniques including call screening, call and resource priority and pre-arrival instruction.

EMS Agency – The Mountain-Valley Emergency Medical Services Agency

Emergency Medical Services (EMS) – This refers to the full spectrum of pre-hospital care and transportation (including interfacility transports), encompassing bystander action (e.g. CPR), priority dispatch and pre- arrival instructions, first response and rescue service, ambulance services, and on-line medical control.

EMResource - A web-based program designed to address resource management needs providing users the ability to understand the operational status of a hospital or emergency department in order to make critical operational decisions.

EMS System – The EMS System consists of those organizations, resources and individuals from whom some action is required to ensure timely and medically appropriate response to medical emergencies.

Emergency Medical Technician (EMT) – An individual trained in all facets of basic life support according to standards prescribed by the California Code of Regulations and who has a valid certificate issued pursuant to that code.

Emergency Medical Technician-Paramedic (EMT-P) – Individual whose scope of practice to provide advanced life support is according to the California Code of Regulations and whom has a valid license issued pursuant to California Health and Safety Code.

En Route Time (Out of Chute) – The elapsed time from unit alert to unit en route. For emergency requests, an out- of-chute standard of 60 seconds maximum is not uncommon.

Fire First Responder – BLS and ALS Fire departments in the Stanislaus County.

First Responder – An agency with equipment and staff (e.g. fire department, police or non-transporting ambulance unit) with personnel capable of providing appropriate first responder pre-hospital care.

Force Majeure - An event or circumstance not caused by or under the control of a party, and beyond the reasonable anticipation of the affected party, which prevents the party from complying with any of its obligations under the Contract, including acts of God, fires, floods, explosions, riots, wars, hurricane, sabotage, terrorism, vandalism, accident, governmental acts, and other events.

Fractile Response – A method of measuring ambulance response times in which all-applicable response times are stacked in ascending length. Then, the total number of calls generating response within eight minutes (for example) is calculated as a percent of the total number of calls. A 90th percentile, or 90 percent, standard is most commonly used. When a 90th percentile response time standard is employed, 90 percent of the applicable calls are arrived at in less than eight minutes, while only 10 percent take longer than eight minutes.

Geographical Information Systems (GIS) – A framework for gathering, managing and analyzing data.

Global Positioning System (GPS) – A system that utilizes satellite data to determine location.

Health Insurance Portability and Accountability Act (HIPAA) – legislation that provides data privacy and security provisions for safeguarding medical information.

Incident Command System (ICS) – Standardized approach to the command, control, and coordination of emergency response providing a common hierarchy within which responders from multiple agencies can be effective.

Inter-Facility Transports (IFT) – Ambulance transports between healthcare facilities, typically non-emergency.

Key Employee - Employees of the Contractor jointly identified by Mountain-Valley EMS Agency and the Contractor as possessing unique skill and experience that was a material consideration in Mountain-Valley EMS Agency's decision to award a contract.

LEMSA – Local EMS Agency

LIFENET - The LIFENET® System is a comprehensive cloud-based platform that helps teams work more efficiently. Share critical patient data to help care teams reduce time-to-treatment for STEMI patients. Request a remote cardiology consult through the dedicated LIFENET Consult app. Rapidly distribute post-event review data to crews immediately after a code. Manage LIFEPAK device software and configuration fleet wide from a single website. The LIFENET System provides innovative tools to help teams work as efficiently as possible.

Medical Priority Dispatch System (MPDS) – A set of established protocols utilized by dispatchers to determine the level of response necessary.

MDC – Mobile data computer

Multi-Casualty Incident (MCI) – An event has taken place that results in more victims than are normally handled by the system. The event takes place within a discrete location and does not involve the entire community. It is expected that the number of victims would range from 6 to 50 and that the system would be stressed, including delays in treatment of patients with relatively minor injuries or illnesses.

Medical Base Hospital – The source of direct medical communications with and supervision of the immediate

field emergency care performance by EMTs or EMT-Paramedics.

Medical Director – shall mean the Mountain-Valley EMS Agency Medical Director, contracted to oversee the medical control and quality assurance programs of the EMS System.

Medical Protocol – Written standards for patient medical assessment and management.

Mutual Aid/Mutual Assistance – shall refer to: 1) responses into the Stanislaus County EOA from a ground transport provider outside the EOA for the purpose of assisting the Contractor with emergency and/or non-emergency requests for service; 2) responses by the Contractor to service areas outside the Stanislaus County EOA for the purpose of assisting the ground transport provider in an adjacent service area.

MVEMSA- The Mountain-Valley Emergency Medical Services Agency

National Incident Management System (NIMS) – A systematic, proactive approach to guide departments and agencies at all levels of government, nongovernmental organizations, and the private sector to work together seamlessly.

Occupational Safety and Health Agency (OSHA) – Federal agency that protects and improves the health and safety of working men and women.

Online Compliance Utility (OCU) – Software that interprets real-time CAD and ePCR data in order to produce reports and online tools to track EMS system effectiveness and compliance.

Paramedic – An individual trained and licensed to perform advanced life-support (ALS) procedures under the direction of a physician. Also, known as an EMT-P.

Paramedic Unit – An ambulance staffed and equipped to provide advanced life support at the scene of a medical emergency and during transport in an ambulance. The minimum standard for a paramedic unit in Stanislaus County shall be one (1) EMT-P and one (1) EMT-1.

Peak-Load Staffing – The design of shift schedules and staffing plans so that coverage by crews matches the System Status Plan's requirements. (NOTE: peak-load demand will trigger peak-load staffing coverage.)

Post – A designated location for ambulance placement within the System Status Plan (SSP). Depending upon its frequency and type of use, a "post" may be a facility with sleeping quarters or day rooms for crews, or simply a street-corner or parking lot location to which units are sometimes deployed.

Priority Dispatching – A structured method of prioritizing requests for ambulance and first responder services, based upon highly structure telephone protocols and dispatch algorithms. Its primary purpose is to safely allocate available resources among competing demands for service.

Productivity – The measures of work used in the ambulance industry that compare the used resources (unit-hours) with the production of the work product (patient transports). Productivity is expressed and calculated by determining the number of transports per unit-hours.

Proposal Review Committee (PRC) – A committee consisting of professional subject matter experts with experience in healthcare delivery models and government procurement procedures, to evaluate responsive proposals based on the criteria specified in the solicitation. PRC members shall be bound by the terms of a conflict of interest statement and confidentiality agreement.

PST - Pacific Standard Time, including Pacific Daylight Time when in effect

Public Access Defibrillation (PAD) – A program that place automatic external defibrillators throughout communities.

Public Safety Answering Point (PSAP) – A government operated facility that receives emergency calls for assistance through the E-9-1-1 system or over private telephone lines.

Release at Scene (RAS) – Patients refusing treatment and/or transport when the paramedic agrees there is no need for care.

Response Time – The actual elapsed time between receipt by the Contractor of a call that an ambulance is needed and the arrival of the ambulance at the requested location.

SR9-1-1 – Stanislaus Regional 9-1-1 was formed through a Joint Powers Agreement between Stanislaus County and the City of Modesto and is directed by a Commission composed of representatives from each jurisdiction and the public safety agencies.

ST-Elevation Myocardial Infarction (STEMI) – A heart attack caused by the complete blockage of a heart artery.

Standardized Emergency Management System (SEMS) – A structure for coordination between the government and local emergency response organizations.

System Standard of Care – The combined compilation of all priority-dispatching protocols, pre-arrival instruction protocols, medical protocols, protocols for selecting destination hospitals, standards for certification of pre-hospital personnel, as well as standards governing requirements for on-board medical equipment and supplies, and licensing of ambulance services and first responder agencies. The System Standard of Care simultaneously serves as both a regulatory and contractual standard.

System Status Management - A management tool to define the "unit hours" of production time, their positioning and allocation, by hour and day of week to best meet demand patterns.

System Status Plan (SSP) – A planned protocol or algorithm governing the deployment and event-driven redeployment of system resources, both geographically and by time of day/day of week. Every system has a system status plan. The plan may or may not be written, elaborate or simple, efficient or wasteful, effective or dangerous.

Transport Volume – The actual number of requests for service that result in patient transport.

Unit Activation Time – The time interval on an ambulance call measured from the time the ambulance crew is first notified to respond until it is actually enroute to the scene.

Unit Hour – One hour of service by fully equipped and staffed ambulance assigned to a call or available for dispatch.

Unit Hour Utilization (UHU) Ratio – A measurement of how hard and how effectively the system is working. It is calculated by dividing the number of responses initiated during a given period of time, by the number of unit hours (hours of service) produced during the same period of time. Special event coverage and certain other classes of activity are excluded from these calculations.

Utilization – A measure of work that compares the available resources (unit-hours) with actual time that those unit-hours are being consumed by productive activity. The measure is calculated to determine the percentage of unit-hours actually consumed in productivity with the total available unit-hours.

VRECC - Valley Regional Emergency Communications Center, an ACE accredited dispatch center for emergency ambulance and fire services located in Modesto, CA. VRECC is a division of American Medical Response.

Workload – measure of work performed by on-duty units during any given period of time.