

2017

# Washoe County EMS Oversight Program Annual Report FY17



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## Washoe County EMS Oversight Program

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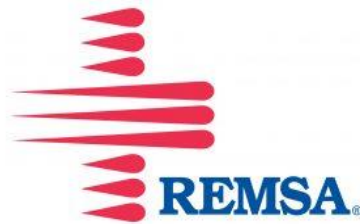
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## Acknowledgements

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- ❖ Washoe County GIS Technological Services/Regional Services for creating the maps contained within this document.
- ❖ Regional partner agencies for providing their highlights and accomplishments.



Pyramid Lake  
Fire Rescue  
EMS



## **When to call 9-1-1**

- ✓ Life threatening medical emergencies such as heart attack, stroke, or cardiac arrest.
- ✓ Crimes in progress.
- ✓ A serious crime that just occurred.
- ✓ Suspicious activity occurring.
- ✓ Any fire - if you know the location!

## **When NOT to call 9-1-1**

- ☒ Medical emergencies that do NOT require emergency department care.
- ☒ For information or directions.
- ☒ Earthquakes or power outages.
- ☒ Crimes when you have NO suspect information.
- ☒ Crimes that occurred hours or days before.
- ☒ Noise disturbances or parties.
- ☒ Lost or injured pets.
- ☒ Complaints against neighbors or businesses.

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The Emergency Medical Services (EMS) Oversight Program Annual Report contains a summary of the Washoe County regional EMS system from July 1, 2016 through June 30, 2017 (FY17). Within the report there are seven sections highlighting the EMS system within Washoe County, to include EMS response agencies and their jurisdictional boundaries, regional performance data, as well as regional EMS accomplishments and goals for FY18.



## **About the Washoe County EMS Oversight Program**

An assessment of the Washoe County EMS system was conducted in 2012 by a public safety consulting firm, TriData; this study resulted in 36 recommendations to the region for the improvement of EMS services, including the establishment of a Regional EMS Oversight Program (Program). On August 26, 2014 an Interlocal Agreement (ILA) for Emergency Medical Services Oversight was fully executed between the City of Reno (RENO), City of Sparks (SPARKS), Washoe County Board of Commissioners (WASHOE), Washoe County Health District, and Truckee Meadows Board of Fire Commissioners (FIRE). The ILA created the Program, the purpose of which is to provide oversight of all emergency medical services provided by Reno, Sparks, Washoe, Fire, and Regional Emergency Medical Services Authority (REMSA).

The Program is staffed with the equivalent of 3 full-time employees; a full-time Program Manager, a full-time Program Coordinator, a part-time Program Statistician, and a part-time Office Support Specialist. Additionally, the establishment of the ILA and the Program created specific duties and expectations of the signatories. A summary of the eight duties of the Program, and seven duties of the signatory partners, as designated per the ILA, are provided below.

The Program is tasked with the following:

1. Monitoring the response and performance of each agency providing EMS in the region
2. Coordinate and integrate medical direction
3. Recommending regional standards and protocols
4. Measure performance, system characteristics, data and outcomes for EMS to result in recommendations
5. Collaboration with partners on analyses of EMS response data and formulation of recommendations for modifications or changes of the regional Emergency Medical Response Map
6. Identification on sub-regions to be analyzed and evaluated for recommendations regarding EMS response
7. Provide an annual report on the state of EMS to contain measured performance of each agency and compliance with performances measures established by the Program for each agency
8. Create and maintain a five-year strategic plan to ensure continued improvement in EMS to include standardized equipment, procedures, technology training and capital investments

The signatory partners are tasked with the following:

1. Provide information, records and data on EMS dispatch and response for review, study and evaluation by the EMS Program
2. Participate in working groups for coordination, review, evaluation and continued improvement of EMS
3. Participate in the establishment and utilization of computer-aided-dispatch (CAD)-to-CAD interface<sup>1</sup>
4. Work cooperatively with the EMS Program to provide input on the five-year strategic plan and ensure two-way communication and coordination of EMS system as future technologies, equipment, systems and protocols evolve
5. Participate in the EMS Advisory board
6. Strive to implement recommendations of the EMS Program or submit recommendations to their respective governing bodies for consideration and possible action
7. Submitting recommendations regarding the EMS system to the EMS Program for implementation or consideration and possible action by the District Board of Health

The ILA also created an Emergency Medical Services Advisory Board (EMSAB), comprised of the following members:

- a. City Manager, Reno
- b. City Manager, Sparks
- c. County Manager, Washoe County
- d. District Health Officer
- e. Emergency Room Physician (DBOH Appointment<sup>2</sup>)
- f. Hospital Continuous Quality Improvement (CQI) Representative (DBOH Appointment<sup>2</sup>)

The EMSAB was established to provide a concurrent review of topics within the EMS system. The purpose of the EMSAB is to review reports, evaluations and recommendations of the Program, discuss issues related to regional emergency medical services and make recommendations to respective jurisdictional boards and councils.

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<sup>1</sup> CAD-to-CAD is a two-way interface with allows for call-related information to be transferred between all agencies involved with an incident to have access to live updates and incident status information.

<sup>2</sup> DBOH is the Washoe County District Board of Health; the governing board which oversees health-related issues within Washoe County.



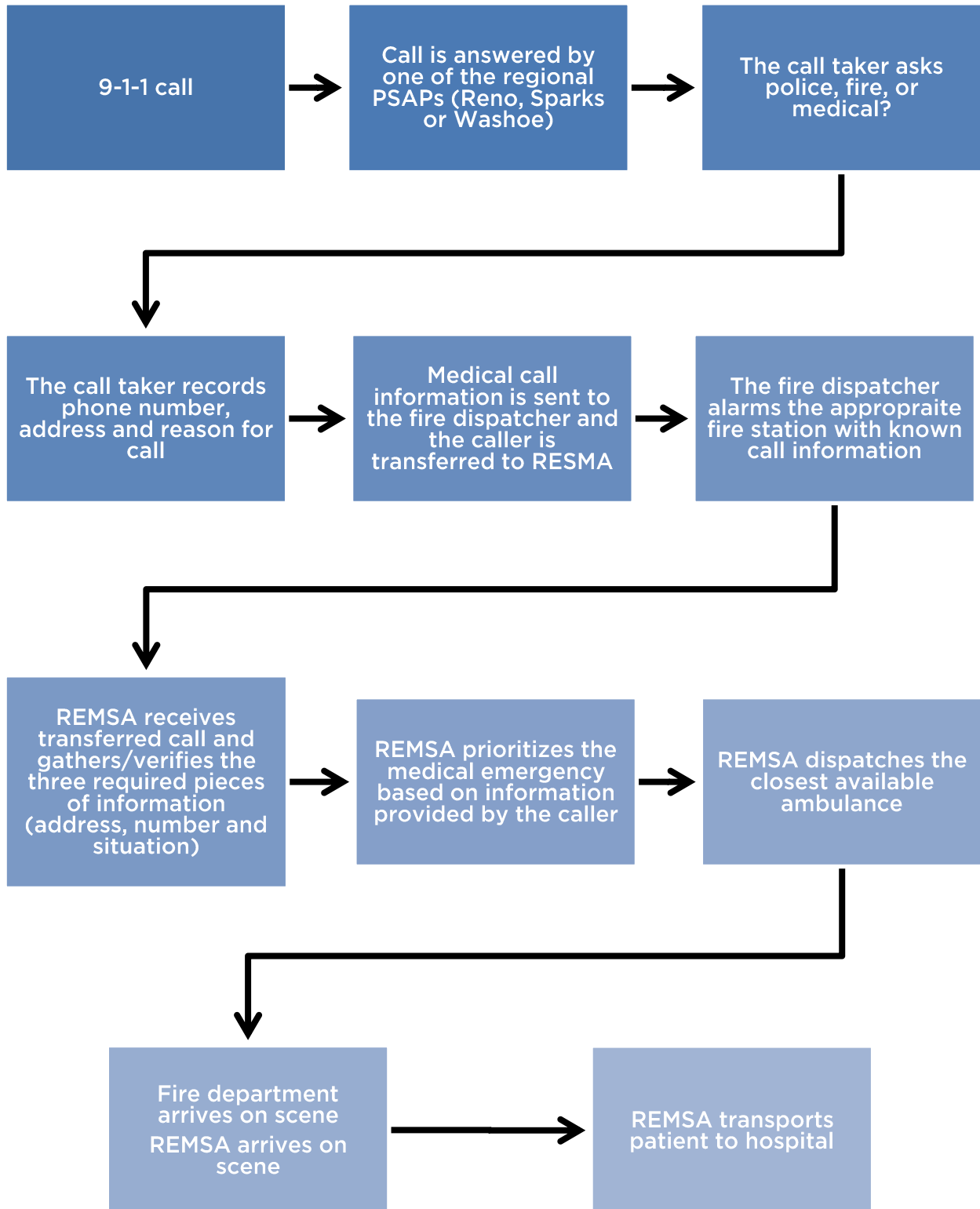
## **Washoe County's 9-1-1 and EMS System**

Washoe County has a two-tiered response system to emergency medical calls. A 9-1-1 call is received at a Public Safety Answering Point (PSAP), to determine if a caller is requesting police, medical or fire response. If medical is requested or needed, the caller is transferred to REMSA for Emergency Medical Dispatch (EMD).

The two-tiered system is designed so that a fire agency is dispatched first to a medical EMS incident in their jurisdiction, since fire stations are located within neighborhoods throughout the region. While fire is being dispatched, the caller is questioned by REMSA to determine the call priority and dispatch their closest ambulance. The performance of the EMS System within Washoe County is dependent on all parties working together.

Figure 1 illustrates how a 9-1-1 call is transferred through the EMS system. Starting from the initial call coming into the PSAP, to the call taker questioning, dispatch of fire, transferring the 9-1-1 call to REMSA, REMSA dispatching an ambulance, EMS (Fire and REMSA) responders arriving on scene, and REMSA transporting the patient to a hospital.

**Figure 1: 9-1-1 Call Routing in Washoe County**



## **Washoe County EMS Partner Agencies**

The EMS system within Washoe County is comprised of multiple partner agencies. These agencies work together daily to ensure the needs of the community are met. These EMS partner agencies include:

- City of Reno<sup>3</sup>
- City of Reno Fire Department
- City of Reno Public Safety Dispatch
- City of Sparks<sup>3</sup>
- City of Sparks Fire Department
- City of Sparks Public Safety Answering Point
- Gerlach Volunteer Fire Department
- North Lake Tahoe Fire Protection District
- Pyramid Lake Fire and Rescue
- Reno-Tahoe Airport Authority Fire Department
- REMSA
- Truckee Meadows Fire Protection District<sup>3</sup>
- Washoe County<sup>3</sup>
- Washoe County Health District<sup>3</sup>
- Washoe County Sheriff's Office

### **Jurisdictional Response and Station Maps**

Emergency Medical Services in Washoe County are provided by the following career fire agencies: Reno Fire Department, Sparks Fire Department, Truckee Meadows Fire Protection District, North Lake Tahoe Fire Protection District, Reno Tahoe Airport Authority Fire Department, and Pyramid Lake Fire and Rescue. The City of Reno and City of Sparks Fire Departments' jurisdictions encompass the city limits of their respective cities (Figure 2), while Truckee Meadows Fire Protection District's jurisdiction encompasses the more rural areas of unincorporated Washoe County north to the Rural Fire Boundary (Figure 3). The southwest corner of Washoe County falls under the jurisdiction of North Lake Tahoe Fire Protection District (NLTFPD). NLTFPD provides fire and ambulance coverage and transport for the residents of Incline Village, Crystal Bay and surrounding communities. Pyramid Lake Fire and Rescue's jurisdiction includes the Pyramid Lake Tribal Land reservation boundaries.

Washoe County citizens also are served by the following volunteer fire agencies: EMS coverage north of the Rural Fire Boundary is covered by Gerlach Volunteer Ambulance and Fire Department, their jurisdiction includes the towns of Gerlach,

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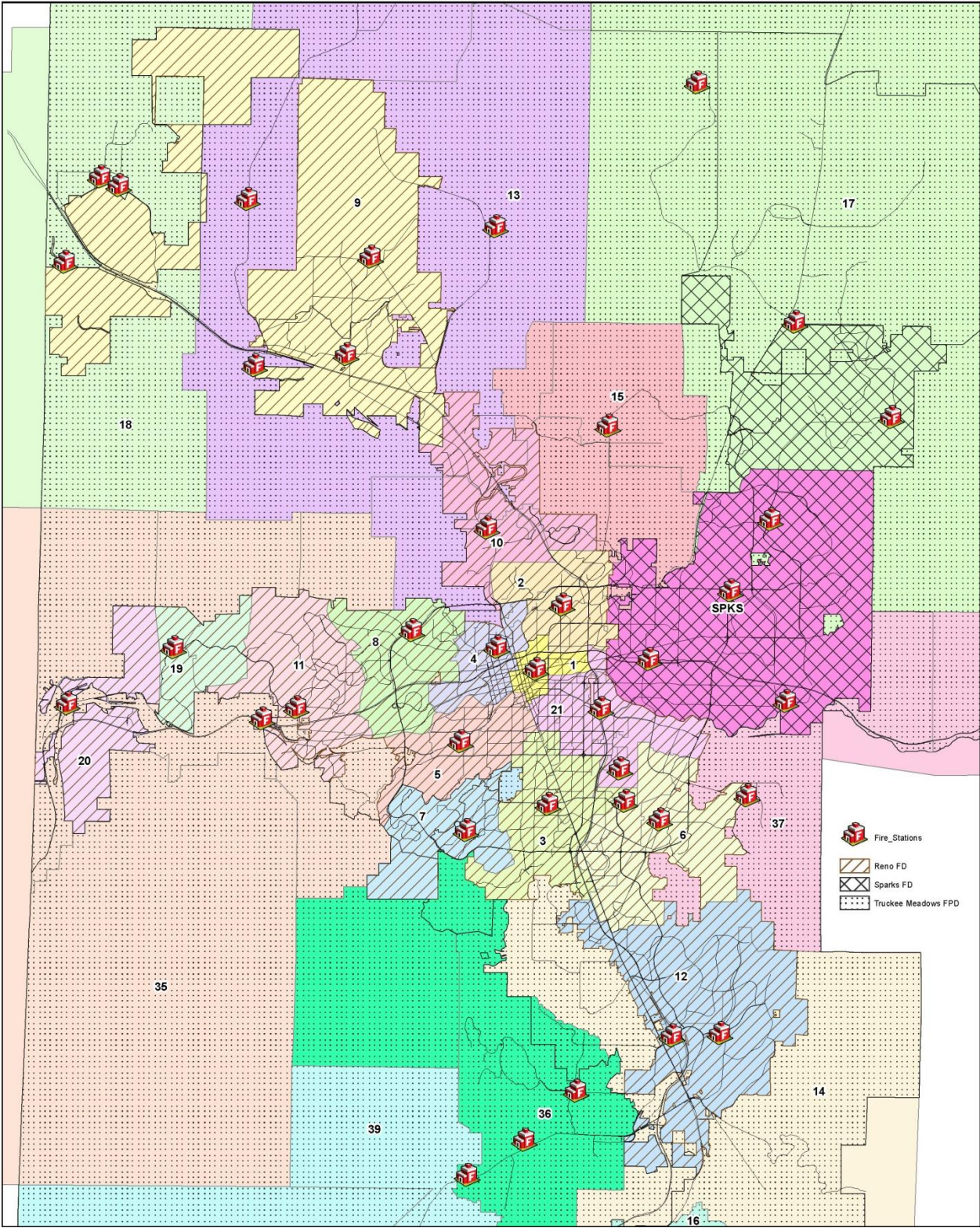
<sup>3</sup> Signatory of the ILA.

Empire, and surrounding rural region. The Red Rock Volunteer Fire Department serves a rural area north of Reno supplemented by Truckee Meadows Fire Protection District.

The private ambulance company, REMSA, is responsible for the transport of patients within their designated Franchise response area. REMSA's response area extends from the southern border of Washoe County, north to the border of the Pyramid Lake Paiute tribal lands, east to Wadsworth and west to the border of California (Figure 3).

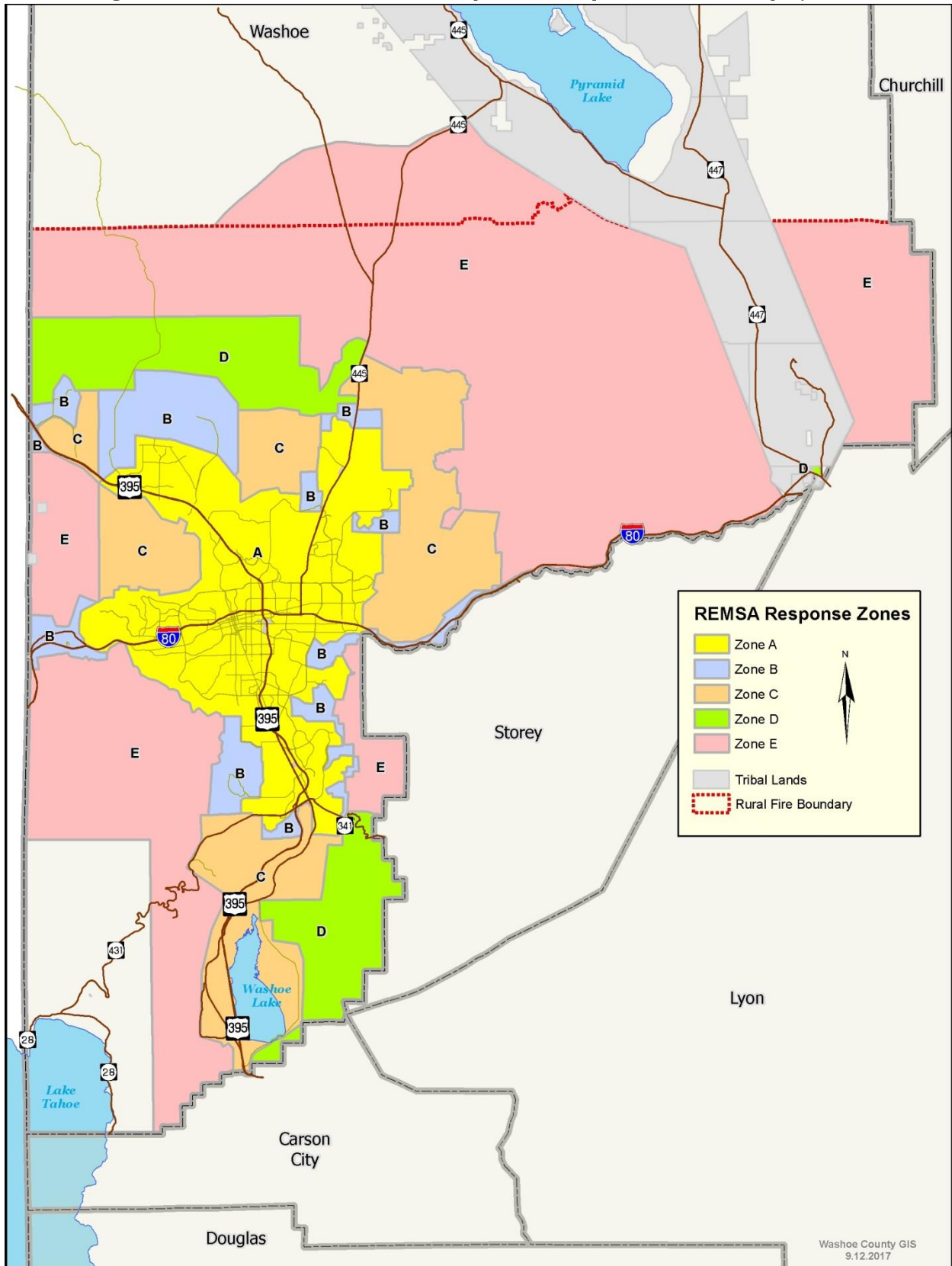


**Figure 2: Jurisdictional Boundaries and Fire Station Locations for Reno Fire Department, Sparks Fire Department and Truckee Meadows Fire Protection District**





**Figure 3: REMSA Franchise Response Map Effective July 1, 2016**



## Regional EMS Performance Analyses

EMS related calls are reported by three fire agencies in Washoe County: City of Sparks, City of Reno, and the Truckee Meadows Fire Protection District (unincorporated Washoe County), all of which are signatories of the Interlocal Agreement, as well as REMSA. The reported EMS related fire calls are matched to REMSA calls for service to allow for an evaluation of system performance on EMS incident response, from the initial 9-1-1 call through each agency arriving on scene. The purpose of matching fire call data with REMSA call data is to better understand how the EMS system is functioning in our region and determine if implemented protocols are impacting response times and patient outcomes. Additionally it allows the region to review if there are opportunities for improvement.

The analyses presented in this section are representative of the EMS calls for service during July 1, 2016-June 30, 2017. The number used in each analysis is dependent on the time stamp validity for variables used in each table.

**Table 1 - Total number and percent of Fire calls matched to REMSA calls by REMSA priority.**

REMSA Priority	#	%
1	24,136	47.0%
2	18,942	36.9%
3	7,943	15.5%
9	351	0.7%
<b>Total</b>	<b>51,372</b>	<b>100.0%</b>

**Table 2 - Travel time for fire (time from when fire agency goes en route to fire agency arrival on scene) median, mean (average), and 90th percentile. Only REMSA priority 1 and 2 calls were used for this analysis.**

Fire Travel Time: En Route to Arrival		
Median	Mean	90 <sup>th</sup> Percentile
04:07	04:56	07:42
Used N = 39,675		

**Table 3 - Travel time for REMSA (time from when REMSA goes en route to arrival on scene) median, mean (average), and 90th percentile. Only REMSA priority 1 and 2 calls were used for this analysis.**

REMSA Travel Time: En Route to Arrival		
Median	Mean	90 <sup>th</sup> Percentile
05:26	06:20	10:13
Used N = 41,261		

**Table 4 - Median time a patient is waiting from the initial call to the first arriving unit on scene by REMSA priority.**

REMSA Priority	Patient's Perspective
1	06:08
2	06:37
3	07:39
9	08:13
All	06:30
<i>Used N = 49,806</i>	

## Jurisdictional Performance

The Washoe County EMS Five-Year Strategic Plan includes Objective 2.4 “Define a measurement for EMS Tier 1 response agencies, to support recommendations for system improvements, by March 31, 2017.” Sparks Fire Department and Truckee Meadows Fire Protection District have adopted Tier 1 standards to measure performance. Those performance metrics are presented within this section.

### Sparks Fire Department

A responding fire captain designates 911 calls as a Priority 1, high acuity, or a Priority 3, low acuity. The following analyses only include those Sparks Fire Department calls that were designated a Priority 1 per the responding captain.

The National Fire Protection Association (NFPA) creates and maintains private copyrighted standards and codes for usage and adoption by local governments.

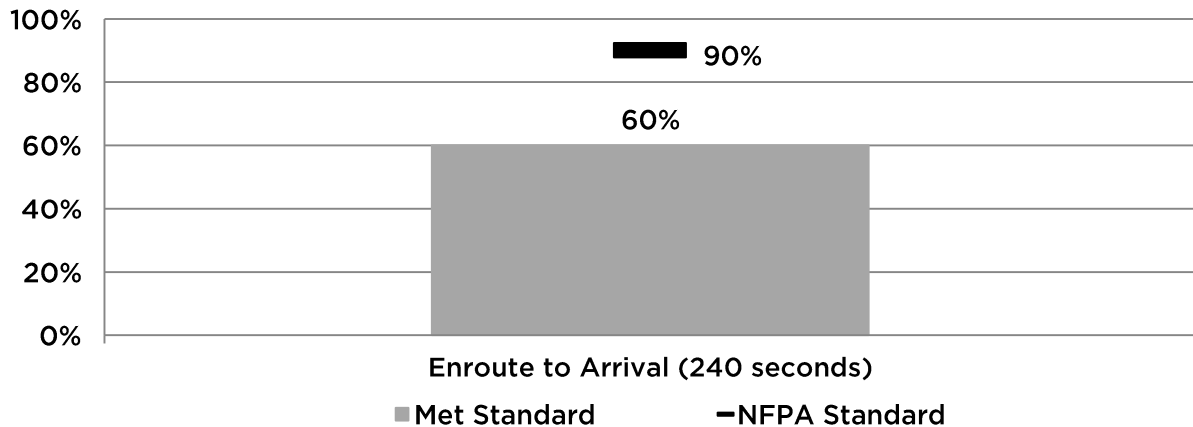
*Per NFPA 1710 4.1.2.1 A fire department shall establish the following “240 second or less travel time for the arrival of a unit with automatic external defibrillator (AED) or higher level capacity at an emergency medical incident.”*

**Table 5 - SFD travel time performance per NFPA Standards. Travel time is the time the responding unit leaves the station, or is en route to the incident, to the time of arrival on scene. Only SFD Priority 1 calls were used for this analysis.**

Measurement	Standard	Expected	Calls Used	Met Standard		Median Time	Average Time
		%	#	#	%		
Fire en route to arrival	240 seconds or less (4:00 minutes)	90%	5,875	3,538	60%	3:38	3:58



### Performance Relative to NFPA Standards, FY17



### Truckee Meadows Fire Protection District

A Regional Standards of Cover study was conducted by Emergency Services Consulting International (ESCI) for the Washoe County area. Study recommendations were presented in April 2011 during a joint meeting of Reno City Council, Washoe County Board of County Commissioners, Sierra Fire Protection District, and the Truckee Meadows Fire Protection District Board of Fire Commissioners. The language outlining the response standards adopted by TMFPD is provided below.

#### Regional Standards of Cover Response Time Recommendations

**Turnout Time:** Fire Dispatch → Fire En route

*For 85 percent of all priority responses, the Region fire agencies will be en route to the incident in 90 seconds or less, regardless of incident risk type.*

**Travel Time:** PSAP Created → Fire Arrival on Scene

#### **First-Due Service Tier One**

*Urban: The first unit response capable of initiating effective incident mitigation should arrive within 8 minutes, 85 percent of the time from receipt of the call.*

*Suburban: The first unit response capable of initiating effective incident mitigation should arrive within 10 minutes, 85 percent of the time from receipt of the call.*

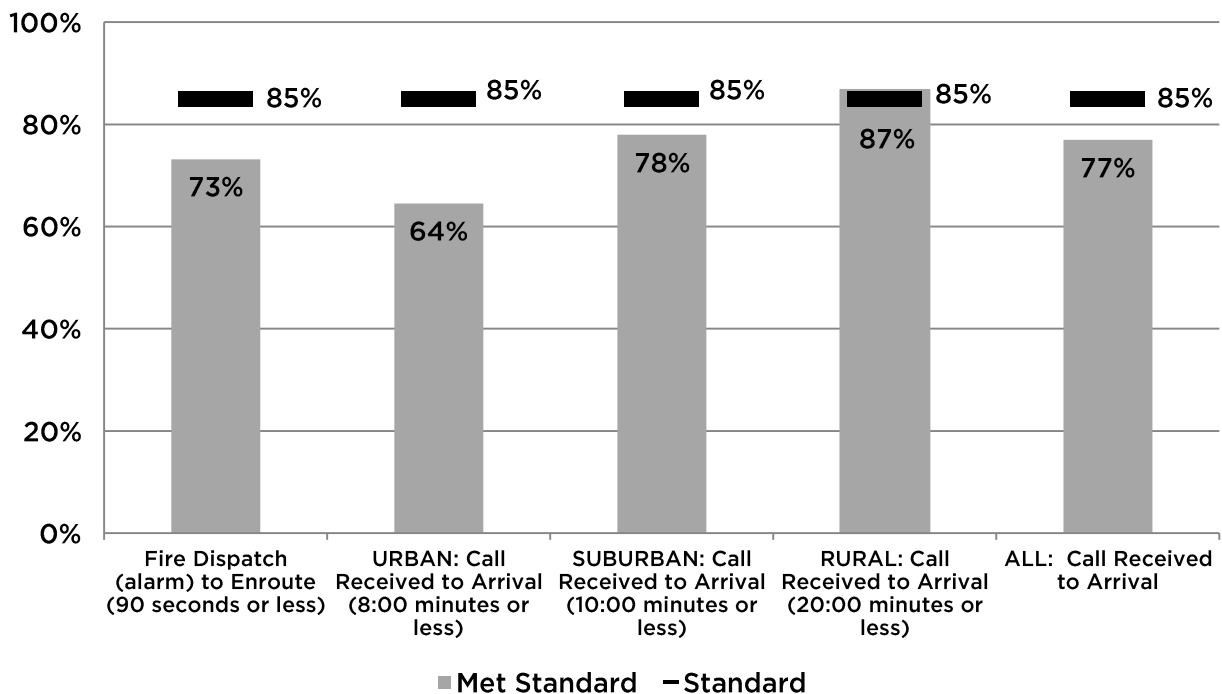
*Rural: The first unit response capable of initiating effective incident mitigation should arrive within 20 minutes, 85 percent of the time from receipt of the call.*

*Frontier: The first unit response capable of initiating effective incident mitigation should arrive as soon as practical based on the best effort of response forces.*

**Table 6 - TMFPD performance per Regional Standards of Cover Tier One. Only REMSA priority 1 and 2 calls were used for this analysis.**

Measurement	Standard	Expected	Calls Used	Met Standard		Median Time	Average Time
		%	#	#	%		
Fire Dispatch (alarm) to En route	90 seconds or less	85%	5,416	3,966	73%	1:05	1:18
<b>Response Time Call Received to Arrival</b>							
URBAN	8:00 minutes or less	85%	762	489	64%	6:52	7:43
SUBURBAN	10:00 minutes or less	85%	4,088	3,190	78%	7:29	9:06
RURAL	20:00 minutes or less	85%	615	538	87%	11:20	12:53
All calls	~	85%	5,465	4,217	77%	7:43	9:23

**TMFPD Performance Relative to Standards of Cover Standards Tier One, REMSA Priority 1 & 2 Calls, FY17**



## **EMS Oversight Program Accomplishments FY17**

### **Regional Five-Year Strategic Plan**

Within the ILA there are eight duties outlined for the EMS Oversight Program. One of the items explicitly tasked the EMS Oversight Program to “Maintain a Five-Year Strategic Plan to ensure the continuous improvement of Emergency Medical Services in the area of standardized equipment, procedures, technology training, and capital investments to ensure that proper future operations continue to perform including Dispatching Systems, Automated Vehicle Locations Systems, Records Management Systems, Statistical Analysis, Regional Medical Supply and Equipment, and other matters related to strategic and ongoing Emergency Medical Services and approved by RENO, SPARKS, WASHOE and FIRE.”

Beginning in August 2015, the EMS Program Manager worked with regional partners to develop a five-year regional strategic plan. The stakeholders participating in the development of the plan included representatives from each jurisdiction and REMSA from dispatch and operations, as well as a regional communications representative. Over the course of 11 months, the workgroup identified the components that would be included in the strategic plan. The final document of the strategic plan, accepted by the EMS Advisory Board and District Board of Health in October 2016, shows the efforts of the region in creating a path forward to improve the EMS system within Washoe County and outlines goals and objectives to be completed over the course of the next five years.

### **Regional Response Heat Map**

Beginning in October 2016, the EMS Program Statistician conducted meetings with representatives of partner jurisdictions to provide insight on areas to be measured and how best to provide those data. The meetings resulted in the development of an online regional response heat map. The heat map utilizes the EMS response time from the patient’s perspective, measured as the difference between the initial 911 call to the first arriving agency on scene. The map currently contains data from July 1, 2015 through June 30, 2017, and will be updated quarterly. The online regional response heat map serves to inform regional performance regardless of which agency arrived first. The regional heat map can be accessed at [https://www.washoecounty.us/health/programs-and-services/emergency-medical-services-oversight-program/ems\\_response.php](https://www.washoecounty.us/health/programs-and-services/emergency-medical-services-oversight-program/ems_response.php)

## **Regional Protocols**

The Washoe County EMS 5-Year Strategic Plan Goal #5 is to design an enhanced EMS response system through effective regional protocols and quality assurance. An element of Goal 5 is the development of regional protocols (objective 5.1). EMS Program staff began this project by selecting a contractor, EMS Consultant Group, to review the current EMS protocols utilized by each jurisdiction, identify variances and provide recommendations for evidence-based best practices. The contractors developed 129-page analysis which was presented to the Pre-hospital Medical Advisory Committee (PMAC) in December 2016. Afterward, the PMAC moved to establish a task force with two personnel from each agency to begin developing regional protocols. The task force formed in February 2017 and met regularly to discuss and develop protocols that could be implemented region wide. The project will continue into the first quarter of the next fiscal year.

## **PSA for 911 Education**

Nationwide, there is growing concern related to the misuse of the 911 system. Locally, excessive non-emergent calls have placed a strain on PSAP personnel and first responders and could impact callers who have life-threatening emergencies. The region held a press conference May 23, 2017, during which leadership from dispatch, law enforcement, fire, EMS and local hospitals provided insight on the impact of the misuse of 911. The goal of the press conference was to educate the community on when and when not to call 911. Three regional partners, Sparks Police Department, Sparks Fire Department, and the Carson City Sheriff's Office developed Public Service Announcements that address the implications of the over utilization and inappropriate use of the 911 system. The public service announcements can be accessed here [https://www.washoecounty.us/health/programs-and-services/emergency-medical-services-oversight-program/911\\_Education.php](https://www.washoecounty.us/health/programs-and-services/emergency-medical-services-oversight-program/911_Education.php)

## **Mutual Aid Evacuation Annex (MAEA) Evacuation Training Video**

The feedback from full-scale hospital evacuation exercise included the need for a short just-in-time training video on the MAEA to serve as a quick process reminder for hospital staff. The VA Sierra Nevada Healthcare System donated their hospital and personnel to film a short training video. The video will be provided to regional hospitals to use for internal trainings.

### **Full-Scale Exercise of a Hospital Evacuation**

In an effort to ensure the Washoe County Health District's Mutual Aid Evacuation Annex (MAEA) is an effective plan, the EMS Program conducted a full-scale evacuation exercise on October 19, 2016. The exercise scenario involved a complete evacuation of Tahoe Pacific Hospital - South Meadows due to a power outage and malfunction of the back-up generator system. The exercise included more than 80 staff and volunteers from 13 regional agencies and community partners.

### **MCIP Trainings for Regional Leadership**

The EMS Program offers training on the Multi-Casualty Incident Plan (MCIP) to the leadership of agencies which would be involved in an MCI response, including EMS, fire, law enforcement and hospitals. The training is designed to provide a high-level overview of the plan and offer leadership personnel an understanding of the duties fulfilled by field-level staff during an MCI response, the communication elements necessary to work with other agencies and a summary of the Incident Command System (ICS).

### **Inclusion of Additional Facilities in the MAEA**

An additional improvement to the MAEA was the inclusion of skilled nursing, memory care and long term care facilities in the plan. Historically, the MAEA had only included acute care facilities in Washoe County. Over the past year, the EMS and Public Health Preparedness (PHP) Program have worked to introduce the plan to additional facilities throughout the county and have on-boarded five skilled nursing/long term care facilities to the plan.

## **Partner Agency EMS Highlights & Accomplishments FY17**

Partner agencies provided their EMS related highlights for FY17, which include accomplishments such as awards and national recognition, increased capacity in terms of scope of work, increased staffing levels, newly hired personnel, updates to protocol and equipment upgrades. These are instrumental in assuring the best level of care is provided to the citizens and visitors of Washoe County.

### **City of Reno Fire Department Highlights for FY17**

The Reno Fire Department has seen a steady increase in call volume and is trending to respond to over 41,000 calls over the current calendar year. Over 70% of those calls are EMS related.

During FY17 RFD conducted a recruit academy which resulted in the hiring of 14 new EMTs, AEMTs, and Paramedics. During this same time period, the department added three full time ALS units in effect doubling our paramedic response capabilities.

**New EMS Captain and Training Agenda:** The EMS Division assigned Paramedic Nathan Goins as its new EMS Captain. The Department completed two EMS Division level trainings during this period emphasizing treatment of pediatric emergencies and handling documentation of patients refusing medical care. Additionally, the department reinstated its quarterly station to station training. The initial class provided hands on retraining to all crews in advanced airway management and CPAP and mechanical ventilation. The purchase of a new “premature-infant” manikin was used for umbilical cannulation and airway training.

**American Heart Association Training Site:** RFD has aligned with AMRG’s (American Medical Response Group) AHA Training Center, as an approved AHA Training Site. We conducted BLS/ACLS/PALS instructor courses for eight of our paramedics with the intention of holding future classes internally and for the public. Additionally, RFD is on schedule to replace all of its ZOLL M series AED’s with the newer more capable ZOLL Pro series model.

**Vaccination “POD” Training:** The majority of our advanced level medical personnel were trained and/or re-trained in vaccination administration in conjunction with the City of Reno’s and Washoe County’s emergency POD (Point of Distribution) training.

**QA/QI:** Improved upon the department’s Quality Assurance/ Quality Improvement (QA/QI) using ZOLL Analytics to filter EMS calls for review.

**MCI Drill Exercise:** Participated in the regional “Broken Propeller” Mass Casualty Incident drill assuming the roles of; Incident Command, fire suppression, scene safety, patient triage, Triage Unit Leader, patient movement and patient treatment.

**Policies & Procedures:** RFD has revised its EMS Policies and Procedures with regards to medical documentation and refusal of care, Fire Line Medic resources, Working Fire Rehabilitation. Smoke Inhalation treatment protocol was updated with the implantation of Cyano-Kits (cyanide antidote) on all of the Paramedic response units.

**Community Participation:** RFD EMS Division is actively involved in the Regional Protocol Committee, the Committee on Omega and low acuity calls, Inter-local Hospital Coordinating Council, Physicians Medical Advisory Committee, Nevada EMS Advisory Commission, Nevada Fire Chiefs EMS Committee, and Northern Nevada EMS Chiefs Consortium.

### **City of Sparks Fire Department Highlights for FY17**

- Completed analysis and received City Council Approval to implement Paramedic Services
- Developed and implemented new EMS Protocols for ILS and ALS Services
- Procured 3 Zoll X-Series Monitors with ETCO<sub>2</sub>, 12-lead EKG, Pacing, Defibrillation and Cardioversion Capabilities
- Received AFG Grant to procure four additional Zoll X-series Monitors
- Provided 40 hour in-service and validated 15 of SFD's current Paramedics
- Initiated Paramedic Level Services at Station 4 & Station 5 on April 3, 2017
- Hired five Firefighter/Paramedics
- Participated in Regional Protocol Process
- Implemented RMA and AMA procedures
- Participated in joint EMS Training with REMSA
- Began process to upgrade Patient Care Reporting program
- Worked with SPD on Hostile (Active Assailant) MCI response
- Deployed MEDL and Line EMT/PMs on numerous wild land fire assignments throughout the West

### **Truckee Meadows Fire Protection District Highlights for FY17**

**Expanded Chest Compression Device utilization:** All 11 TMFPD stations are now equipped with mechanical chest compression devices which work as a force-multiplier during the treatment of cardiac arrest patients. These devices also allow the safe performance of chest compressions during ambulance transport, as well as enhance the overall crew efficiency and lower rescuer fatigue.

**Division Chief positions filled:** The TMFPD has increased its Administrative Staff with the additions of Joe Kammann as Division Chief of EMS and Matt Loughran as Division Chief of Training.

**Acquired new cardiac monitors:** The District has purchased and implemented new Zoll X-series cardiac monitors on all Type 1 engines and ambulances. These new devices are lighter, more efficient, and increase the physiological parameters that can be monitored during patient care.

**79 Certified Paramedics now on staff:** In a continual process of providing the most trained employees possible to the citizens of the Truckee Meadows Fire Protection District, the current count of State of Nevada certified Paramedics has increased to 79 personnel in various ranks throughout the District. The ability to have paramedics serving in multiple positions in a station has greatly increased the training and mentorship capabilities within the TMFPD.

**Hazardous Material Toxicology Paramedic Program:** The TMFPD is proud to be the first Fire Department in the area to design and implement an Advanced Life Support HAZMAT Paramedic program. This unique program will allow trained TMFPD Paramedic Hazardous Materials Technicians to treat responders and civilians that become exposed to chemical hazards in the prehospital environment.

**New Patient Care Reporting system:** As an upgrade to the current reporting system, the TMFPD has purchased licensing, equipment, and had a server built to allow conversion to the Zoll EPCR charting program. This new system will ensure consistent agency reporting of information, as well as allow a seamless integration of the Zoll monitors, PCR, and QA/QI program.

**Expanded Mutual Aid Agreement with REMSA:** REMSA and the TMFPD have been able to modify their existing Mutual Aid Agreement to allow for a more streamlined process for the purchase and response of TMFPD ambulances. The additional ambulances will be available to respond during disasters, MCIs, or as needed to assist with ALS response capabilities during times that our partner agencies become overwhelmed. The new agreement also allows the TMFPD to staff special events within our jurisdiction and provide them with Advanced Life Support services. TMFPD and REMSA have already been able to successfully join forces and staff the 2017 Barracuda Championship as a result of this new agreement.



**QA/QI Process Goals:** The Quality Assurance / Quality Improvement process implemented at the TMFPD has resulted in a 100 percent chart review system. The QA/QI Committee has been responsible for several improvements to patient care throughout the department. One example was the rate of successful advanced airway placements. By suggesting the addition of training intubation manikins at each station, a comprehensive airway training program, and with the availability of both Grandview laryngoscope blades and Mcgrath video laryngoscopes at every station, TMFPD has seen a very high prehospital intubation success rate.

**Purchase of new ambulances:** The District has purchased 2 additional ambulances to be used for mutual aid response within the TMFPD. This brings the total to 3 ambulances within the TMFPD fleet. The additional ambulances will be available to be placed in service the first quarter of FY18.

## **REMSA & Care Flight Highlights for FY17**

**REMSA ALS Bike Team:** REMSA implemented an ALS bike team to provide the community early access to ALS intervention in densely populated areas. Specially trained Paramedics and A-EMTs can now maneuver through congested areas during busy weekends or special events in downtown Reno or Sparks.

**Care Flight Plumas County Ground Operations:** As of July 1, 2017, Care Flight Ground Operations successfully completed its first year of integrated EMS operations in partnership with Plumas District Hospital in Quincy, CA. In addition to getting Quincy designated as the first rural HEARTSafe community in California, we created an efficient and reliable rural EMS system that has greatly improved EMS and healthcare delivery in that area of Plumas County.

**Care Flight Critical Care / Fixed Wing:** Over the past year, Care Flight has started a Critical Care Ground Transport service in January and in March 2017, Care Flight added a fixed wing operations based out of Reno Tahoe International Airport, staffed twenty-four hours a day seven days a week.

**CAMTS:** July 2017, the Commission on Accreditation of Medical Transport Services (CAMTS) reaccredited Care Flight for a full three-year accreditation. This full accreditation includes all three platforms, Helicopter, CCT, and Fixed Wing. Care Flight has maintained continuous CAMTS accreditation for 15 years.

**24 Hour Post Implementation:** In order to provide faster, more consistent coverage to the outlying areas of Reno/Sparks/Washoe County, REMSA established the first three fixed stations.

- **Mt Rose and Wedge:** This is a 16-hour post that covers Mt. Rose Hwy, Arrowcreek, Damonte Ranch, Toll Road, Pleasant Valley, and Washoe Valley.
- **Eagle Canyon and Pyramid Hwy:** This is a 16-hour post that covers the North Pyramid Hwy area. This includes Spanish Springs and Wingfield Springs.
- **Red Rock and 395:** This is a 24-hour post that covers Stead, Red Rock, and Cold Springs.

We have seen a noticeable decrease in our response times to these areas of the County. Future plans include the possible expansion of the 16 hour stations to 24-hour coverage within the next year.

**Tri-Annual International Airport Disaster Drill:** On April 27<sup>th</sup> 2017 REMSA participated in a full scale Mass Casualty Incident (MCI) exercise held at the Reno Tahoe International Airport (RTAA). The RTAA is required to conduct a “full scale “exercise every three years. This exercise usually includes a MCI and includes area first responders from Police, Fire and EMS.

This year’s scenario involved an Improvised Explosive Device (IED) that went off in the cargo hold of an international passenger jet as the passengers were deplaning. REMSA participated in dozens of preliminary meetings to assist with exercise design, realistic play and first responder integration. REMSA initially responded to the incident with four ALS units and five EMS Supervisors. We integrated with Airport Fire and the Reno Fire Department as Medical Branch providing Triage, Treatment and Transport for the patients. Our Communications Center coordinated the transports and provided communication with all area hospitals. A total of 99 patients were contacted on scene with 89 patients transported in 92 minutes. REMSA also provided an evaluator to the EMS component of the exercise.

**30 / 35 Years Celebration:** REMSA celebrated 30 years of providing EMS service to the region. Beginning on 1986 with a small staff and only a few ambulances, REMSA has grown to over 500 employees, a fleet of 44 ambulances, and a fully integrated health system that continues to strive for real regional partnerships that enhance the delivery of medical care to patients across our region.

**TEMS National Tactical Medic Competition:** May 2017, REMSA Tactical Paramedics participated in the 2nd Annual *National Tactical Medic Competition* in Charlotte, North Carolina. The competition was created to allow tactical medical providers from around the country, the opportunity to collaborate and compete in a community of peers. Candidates were evaluated on physical fitness, critical decision making in multiple casualty incidents, and clinical proficiency. REMSA Tactical Paramedics placed 4th overall.

**American Heart Association-Mission Life Line Gold Plus Award:** REMSA was awarded the American Heart Association's Mission-Lifeline Gold Plus award for implementing quality improvement measures for the treatment of patients who experience heart attacks. The Gold Plus award is given for achieving 75 percent or higher adherence for 24 months on all Mission: Lifeline EMS quality measures. REMSA is the only private EMS agency in the state to achieve the Gold Plus recognition.

### **Gerlach Volunteer Fire & EMS Department Highlights for FY17**

The small department greatly increased activity in FY17, thanks to continued assistance from Truckee Meadows Fire Protection District (TMFPD) and the State of Nevada. The emphasis this year for the station was training volunteers. Seven volunteers received their Ambulance Driver's License from the State of Nevada, four graduated from the EMR program, and six passed the State-sponsored skills test for EMT (five are currently awaiting testing dates from Pearson). It has emerged stronger and more sustainable as a Combination Fire Department, with two full-time employees, several Intermittent Employees, and a strong Volunteer base. Additional volunteers are being recruited, and regular service calls are being conducted by the two ambulances stationed at the Gerlach Department. The coverage area remains almost 5,000 square miles and the department responded to 102 calls this year, with call spikes during the annual Burning Man festival.

### **Pyramid Lake Fire Rescue EMS Highlights for FY17**

The Pyramid Lake Fire Rescue EMS (PLFREMS) agency responds to calls for service in a 742.2 square mile area. They have two career firefighter/EMT's, two firefighter AEMTS's, and twenty volunteers which also include four AEMT's, two EMT's and seven EMRs. During calendar year 2016 the volunteers responded to over 708 calls for service. PLFREMS successfully established Memorandum of Understanding with

both REMSA and Gerlach Volunteer Fire Department. The MOUs work to ensure appropriate resources are being dispatched to incidents rather than always dispatch two agencies. A great accomplishment for PLFREMS is the development of the EMT Training program within the High School setting. PLFREMS is only the second government agency within Nevada to have this program, which will begin during the 2017-2018 school year.

## **EMS Oversight Program Goals for FY18**

The EMS Oversight Program is aiming work with regional partners to achieve the following goals within the next fiscal year.

1. Re-establish the Emergency Department Consortium
2. Develop protocols for low acuity/priority 3 calls
3. Establishment of a CAD-to-CAD interface
4. Implementation of regional protocols
5. Expansion of Multi-Casualty Incident Plan to include emergency planning for large scale, multiple incident location emergency response.
6. Work on improving continuity of care through regional processes relating to information flow.