

**John Slaughter, Chair**  
County Manager  
Washoe County

**Kevin Dick, Vice Chair**  
District Health Officer  
Washoe County Health  
District

**Steve Driscoll**  
City Manager  
City of Sparks

**WASHOE COUNTY  
HEALTH DISTRICT**  
ENHANCING QUALITY OF LIFE

**Andrew Clinger**  
City Manager  
City of Reno

**Dr. Andrew Michelson**  
Emergency Room Physician  
St. Mary's Regional Medical Center

**Terri Ward**  
Administrative Director  
Northern Nevada Medical Center

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## *MEETING NOTICE AND AGENDA*

### **Emergency Medical Services Advisory Board**

Date and Time of Meeting: Thursday, June 4, 2015, 9:00 a.m.  
Place of Meeting: Washoe County Health District  
1001 E. Ninth Street, Building B, South Auditorium  
Reno, Nevada 89512

All items numbered or lettered below are hereby designated **for possible action** as if the words “for possible action” were written next to each item (NRS 241.020). An item listed with asterisk (\*) next to it is an item for which no action will be taken.

- \*1. Call to Order**
- \*2. Roll Call and Determination of Quorum**
- \*3. Public Comment**  
Limited to three (3) minutes per person. No action may be taken.
- 4. Approval of Agenda**  
June 4, 2015 Meeting
- 5. Approval of Draft Minutes**  
March 5, 2015 Meeting
- 6. Presentation by Dr. Andrew Swanson regarding community committee called PMAC (Pre-Medicine Advisory Committee)**  
Christina Conti
- \*7. Program and Performance Data Updates**  
Christina Conti
- 8. Presentations on the utilization of System Status Management in an EMS system and REMSA's staffing model for the months June – September 2015**  
Christina Conti

9. **Discussion and possible approval of the project charter that outlines the process for revising the response zones within the Washoe County REMSA ambulance franchise service area**  
Christina Conti
10. **Presentation, discussion and possible approval for distribution of the Washoe County EMS Oversight Program Data Report for Quarter 3**  
Christina Conti
11. **Presentation, discussion and possible direction to staff to present the Fire EMS training framework to the District Board of Health**  
Brittany Dayton
12. **Discussion, approval and possible direction to staff to proceed with establishing a committee to develop a 5-year strategic plan to be presented to the Board for input and adoption**  
Christina Conti
13. **Discussion and possible approval to recommend REMSA present to the District Board of Health for approval the use of Omega Determinant Codes and the procedure of referring these callers to the Nurse Health Line prior to dispatching an ambulance**  
Jim Gubbels
14. **Presentation, discussion and possible approval of the process for external agencies requesting item(s) to be included on Regional EMS Advisory Board agendas**  
Brittany Dayton
15. **Presentation, review and possible direction on the Truckee Meadows Fire Protection District Emergency Medical Service Review from the Internal Audit Division to include responses from the Washoe County Health District and REMSA**  
Brittany Dayton
16. **Discussion and possible approval of a proposed schedule change to the Emergency Medical Services Advisory Board (EMSAB) regular meetings**  
Christina Conti
- \*17. **Board Comment**  
Limited to announcements or issues for future agendas. No action may be taken.
- \*18. **Public Comment**  
Limited to three (3) minutes per person. No action may be taken.
19. **Adjournment**

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Items on the agenda may be taken out of order, combined with other items, withdrawn from the agenda, moved to the agenda of a later meeting; or they may be voted on in a block. Items with a specific time designation will not be heard prior to the stated time, but may be heard later.

The Emergency Medical Services Advisory Board meetings are accessible to the disabled. Disabled members of the public who require special accommodations or assistance at the meeting are requested to notify Administrative Health Services at the Washoe County Health District, PO Box 1130, Reno, NV 89520-0027, or by calling 775.328.2415, at least 24 hours prior to the meeting.

**Time Limits:** Public comments are welcome during the Public Comment periods for all matters whether listed on the agenda or not. All comments are limited to three (3) minutes per person. Additionally, public comment of three (3) minutes per person may be heard during individual action items on the agenda. Persons are invited to submit comments in writing on the agenda items and/or attend and make comment on that item at the Board meeting. Persons may not allocate unused time to other speakers.

**Response to Public Comments:** The Emergency Medical Services Advisory Board can deliberate or take action only if a matter has been listed on an agenda properly posted prior to the meeting. During the public comment period, speakers may address matters listed or not listed on the published agenda. The Open Meeting Law does not expressly prohibit responses to public comments by the Emergency Medical Services Advisory Board. However, responses from the Board members to unlisted public comment topics could become deliberation on a matter without notice to the public. On the advice of legal counsel and to ensure the public has notice of all matters the Emergency Medical Services Advisory Board will consider, Board members may choose not to respond to public comments, except to correct factual inaccuracies, ask for Health District Staff action or to ask that a matter be listed on a future agenda. The Emergency Medical Services Advisory Board may do this either during the public comment item or during the following item: “Board Comments – Limited to Announcements or Issues for future Agendas.”

Pursuant to NRS 241.020, Notice of this meeting was posted at the following locations:

Washoe County Health District, 1001 E. 9th St., Reno, NV  
Reno City Hall, 1 E. 1st St., Reno, NV  
Sparks City Hall, 431 Prater Way, Sparks, NV  
Washoe County Administration Building, 1001 E. 9th St, Reno, NV  
Washoe County Health District Website [www.washoecounty.us/health](http://www.washoecounty.us/health)  
State of Nevada Website: <https://notice.nv.gov>

Supporting materials are available to the public at the Washoe County Health District located at 1001 E. 9th Street, in Reno, Nevada. Ms. Dawn Spinola, Administrative Secretary to the Emergency Medical Services Advisory Board, is the person designated by the Emergency Medical Services Advisory Board to respond to requests for supporting materials. Ms. Spinola is located at the Washoe County Health District and may be reached by telephone at (775) 328-2415 or by email at [dspinola@washoecounty.us](mailto:dspinola@washoecounty.us). Supporting materials are also available at the Washoe County Health District Website [www.washoecounty.us/health](http://www.washoecounty.us/health) pursuant to the requirements of NRS 241.020.

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## *MEETING MINUTES*

### **Emergency Medical Services Advisory Board**

Date and Time of Meeting: Thursday, March 5, 2015, 9:00 a.m.  
Place of Meeting: Washoe County WCHD 1001 East Ninth  
Street, Building B, South Auditorium  
Reno, Nevada 89512

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The Emergency Medical Services Advisory Board met on Thursday, March 5, 2015, in the Health Department South Conference Room, 1001 East Ninth Street, Reno, Nevada.

#### **1. Call to Order**

**Chair Slaughter called the meeting to order at 9:00 a.m.**

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#### **2. Determination of Quorum**

The following members and staff were present:

Members present: John Slaughter, Manager, Washoe County, Chair  
Kevin Dick, District Health Officer, Vice Chair  
Steve Driscoll, Manager, City of Sparks  
Andrew Clinger, Manager, City of Reno  
Terri Ward, Hospital Continuous Quality Improvement  
Representative, Northern Nevada Medical Center

Members absent: Dr. Andrew Michelson, Emergency Room Physician, St. Mary's

Staff present: Leslie Admirand, Deputy District Attorney  
Dr. Randall Todd, Division Director, Epidemiology & Public Health  
Preparedness  
Christina Conti, EMS Program Manager  
Brittany Dayton, EMS Program Coordinator

### 3. Public Comment

**Chair Slaughter opened the public comment period.**

As there was no one wishing to speak, **Chair Slaughter closed the public comment period.**

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### 4. Approval of Agenda

March 5, 2015 Meeting

**Mr. Driscoll moved to approve the agenda as written. Mr. Clinger seconded the motion which was approved five in favor and none opposed.**

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### 5. Approval of Draft Minutes

December 4, 2014 Meeting

**Mr. Clinger moved to approve the minutes as submitted. Mr. Dick seconded the motion which was approved five in favor and none opposed.**

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### 6. Presentation, discussion and possible approval for the draft EMS Advisory Board (EMSAB) Bylaws, or possible direction to staff to make changes as discussed and bring back to Board for final approval.

Staff Representative: Ms. Dayton

Ms. Dayton presented the staff report. She noted the Bylaws had been presented to the Board at the December 4, 2014 meeting and the members had directed staff to make specific changes. Those had been incorporated into the current version.

**Mr. Dick moved to approve the EMS Advisory Board Bylaws. Ms. Ward seconded the motion which was approved five in favor and none opposed.**

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### 7. Program and Performance Data Updates

Staff Representative: Ms. Conti

Ms. Conti presented the staff report. She noted that after the EMSAB meeting of December 4, 2014, staff had met with Truckee Meadows Fire Protection District (TMFPD) as well as North Lake Tahoe Fire Protection District (NLTFPD) to outline special areas of interest so they could be included in the Quarter 2 report. Geographic Information Systems (GIS) had incorporated the data so that all calls within those areas were captured for the report. Ms. Conti pointed out the boundaries for the North Lake Tahoe/Mt. Rose corridor were still in the process of being clarified.

Ms. Conti introduced Heather Kerwin, the recently-hired dedicated statistician for the program. Ms. Conti thanked Elena Varganova, who had provided statistical support since the program's inception.

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Ms. Conti reported that Washoe County EMS (WCEMS) staff, Mr. Dick, Deputy District Attorney (DDA) Admirand and REMSA personnel had met to discuss the REMSA franchise map. This meeting occurs twice annually, for the purpose of reviewing special areas. Special areas are identified as areas that have been annexed and are being studied to be sure compliance can be met. Responses to calls from the last six months are reviewed so changes to the map can be made if necessary.

Ms. Conti stated the WCHD was recommending changes based on discussions from the meeting. A special meeting would be held in three months to redraw the map. Some of the changes would include changing Sparks Zone 5.1 from the current 20-minute zone to a 15-minute zone. Additionally, three streets just outside Zone 5.1 would become 8-minute zones. WCEMS has asked REMSA personnel how much time they require to change their system so that it appropriately reports those areas. When the timeline is known, the changes will be implemented. The goal is three months.

Ms. Conti went on to explain another change to the franchise map would be the boundary of the Mt. Rose corridor. In 1982, NLTFPD had been granted a special ambulance area outside of their fire protection district. Through the years the border of the area has fluctuated, and it is proposed that be made into a firm line between the two ambulance areas. WCEMS worked with GIS to overlay the boundary map from 1982 onto the existing franchise area map, and that information will be incorporated to create an updated map.

Mr. Dick noted that under the franchise agreement, in the past the map could be changed if the Health Officer and REMSA were in agreement, but the new franchise agreement specifies the map needs to be approved by the District Board of Health (DBOH). He suggested the proposal be provided in detail for the next EMSAB meeting so a recommendation could be made to present it to the DBOH. Ms. Conti stated it would be ready for the June EMSAB meeting.

Chair Slaughter noted that Washoe County code describes an exclusive franchise agreement established in 1973 for the Incline Village area. Ms. Conti explained the 1982 map described the area. DDA Admirand clarified that ordinance passed an exclusive franchise agreement to the ambulance company that serviced the area at the time, called Medic One. They operated for approximately a year then went into bankruptcy. Although the exclusive franchise is defunct, the boundaries remain the same.

Ms. Conti displayed a map showing the area in question with the current REMSA franchise area overlaid, demonstrating overlapping areas which were proposed to be identified and assigned to the appropriate agency.

Ms. Conti reiterated WCEMS would work with GIS and REMSA to create a draft map that would be brought back to the EMSAB in June for a recommendation to approve and forward to the DBOH.

Mr. Slaughter asked what input was being solicited from NLTFPD regarding the process. Ms. Conti explained Chief Brown had been informed it was occurring but they had not yet met so that he could be fully briefed. Chair Slaughter noted the NLTFPD Board would appreciate the opportunity to be engaged in the discussion. Ms. Conti explained the different boundaries on the map and their origins, as well as the new proposed boundaries.

Chair Slaughter asked if there was a legal description for the REMSA boundary. Chief Brown opined some key areas were being missed. The Mt. Rose Volunteer First Aid squad had been mentioned in the original franchise, they disbanded in 1994. There has never been discussion about that area being a shared area or a closest-agency area. The Board of County

Commissioners (BCC) had directed the boundaries to be in alignment with what made sense for service delivery and patient care.

Chief Brown went on to say that NLTFPD would like there to be discussions around what makes sense for the closest appropriate agency when it comes to response. They have been providing data to compile an overview that they can present that makes sense for the boundaries. He indicated his appreciation for the work being done to clarify the map.

Jim Gubbels, President of REMSA, agreed with Chief Brown's statements and noted they had had discussions over the years about this topic. They had engaged in a Mutual Aid Agreement in 2008 and had recently discussed updating it. He indicated REMSA was willing to work with Chief Brown and the WCEMS on the map. The key for both REMSA and NLTFPD was to service the needs of the people.

Ms. Conti noted a discussion had occurred at the December EMSAB meeting regarding the inquiry process and how the WCEMS had recommended the EMS regional partners work together to solve discrepancies prior to bringing them to the WCEMS for investigation. She reviewed three investigations that had been conducted by WCEMS since the last meeting and all had been handled appropriately. Additionally, there had been three instances in which the agencies had handled issues between themselves.

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## **8. Presentation, discussion and possible approval of the Washoe County EMS Oversight Program final data report for Quarter 2 (Q2).**

Staff Representative: Ms. Conti

Ms. Conti reviewed the changes made to the Q2 report based on lessons learned from the previous quarter as well as the updated layout. She highlighted specific items and explained some of what was being considered for Q3. (Power Point presentation attached Exhibit B, Q2 report attached Exhibit C).

Mr. Dick noted the large volume of information contained in the report. He asked if any of the agencies had provided feedback regarding other information that should be addressed.

Chair Slaughter expressed curiosity about the reason for cancelled calls, particularly in areas where there is a mutual aid agreement that might be overlapping. Ms. Conti explained the data only showed that they were cancelled in route, so it would be necessary for staff to examine the records. She agreed it would be valuable information, because only certain entities can cancel each other.

Chair Slaughter asked how the incidents on Tribal lands were handled. Ms. Conti stated staff could request the data.

Mike Hernandez, Reno Fire Chief, expressed his thanks to Ms. Conti for reaching out to them prior to finalizing the report. They felt it was a much more accurate report but noted there were still opportunities for improvement. He opined the data currently being amassed was of excellent quality and provided the support necessary to make good recommendations and analysis.

Chief Hernandez noted the City of Reno is dissected into two response districts. He requested an overlay of their engine company response districts with REMSA response zones. That provides the City with the data they need to analyze to see specifically which district is under performing or over performing.

Chief Hernandez opined data fundamental to the analysis is the number of available resources. If Reno has an engine company that is tied up on a call and an EMS provider is coming from a longer distance to respond to that call and then they get a second call in that same district, that engine company will be coming from a farther distance point. That will skew that data from that perspective district. Having the number of available ambulances during a given period of time would assist in completing the data picture, because it does impact fire response data.

Tom Garrison, City of Sparks Fire Chief, stated that he appreciated the data, felt it was providing transparency, and noted it had been anticipated that it would identify potential problems across the agencies. The data identified important concerns about Sparks Fire. The first is that the alarm time that has been reported is not the accurate first notification time in the Public-Safety Answering Point (PSAP). Staff is working with the PSAP data managers to try to get more accurate time stamping for that at the 911 call. The second is the dispatching of REMSA before fire. Discussions will be held with the dispatch supervisors and manager to see exactly what the protocols are on EMS calls coming into their PSAP.

Chief Garrison requested the time stamps for the City of Sparks and the time stamps from REMSA so that he could review the calls of concern and see if they originated as 911 calls or with REMSA and were then paged back to Sparks. He stated they were willing to adjust their procedures and expressed his hope that REMSA would be as well.

Chief Garrison stated concern with the suggestion that Zone 5.1 was going to be adjusted to a 15-minute zone. He had had no opportunity to offer input and was not happy with that. He also noted he did not know what criteria was used to make this change, whether it was density, call volume or to appease the City of Sparks. He suggested that when a map meeting was held all partners be invited.

Charlie Moore, TMFPD Fire Chief, complimented Ms. Conti on the report and opined it contained excellent data. He focused the Board's attention on the data that showed TMFPD as being alarmed second. His staff notified him, sometimes on a daily basis, that REMSA was in route within TMFPDs jurisdiction prior to them being notified of a problem. They would like to know why that occurs. The goal should be to dispatch fire and REMSA as simultaneously as possible therefore hopefully eliminating the time between the two. Particularly concerning to him was the number of Priority 1s that are involved in that dispatch delay because they are closer and have Advanced Life Support (ALS) capability. Delays of 2-3 minutes, particularly for cardiac and breathing, is a patient care issue he felt should be studied further.

Jim Gubbels, President of REMSA, noted they were actively reviewing the information. He reiterated Priorities do make a difference in terms of severity and urgency. He pointed out the compliance zones on the map had to do with compliance, not response. The median response times indicate it does not take REMSA the full amount of compliance time allowed to arrive. He opined things were moving in the right direction as each agency was not being viewed independently, but the overall EMS response system and how they work together to meet the needs of the patients was being reviewed as a whole.

Mr. Slaughter asked if data from the Airport Authority was reported separately. Tom Nelson, Airport Authority Fire Chief stated he would get that information to Ms. Conti as soon as possible. Ms. Conti recommended the airport be viewed as a special study area, as they make up a portion of the calls that did not match up with REMSA data and the other fire

districts. Mr. Nelson stated they did not respond to calls outside the boundaries of the airport except in cases where mutual aid is requested.

Don Pelt, Pyramid Lake Fire, Rescue, EMS offered to answer questions. Chair Slaughter noted 27 calls on Tribal lands and requested confirmation they had been addressed and that the Tribe did not require assistance from Washoe County or REMSA. Mr. Pelt explained most were handled by Tribal EMS, some in conjunction with their partnership with REMSA or an off-line county. All calls on Tribal lands were being addressed as timely as possible.

Chair Slaughter noted Wadsworth was a situation where there was mutual aid and several responders involved and he would be interested in knowing who was responding. Ms. Conti explained she had reached out to Lyon County to find out how often they were responding to calls within Washoe County's jurisdiction. To date she has not received a response and welcomed any assistance from the partners. Mr. Pelt noted the Lyon County Fire Chief has reduced the number of responses due to economic restrictions unless they are Priority 1. They have an agreement with Lyon County as well but try not to utilize it unless urgently needed.

Chair Slaughter stated he viewed the input as topics for enhancements of future reports. He noted he had the same questions about southern Washoe Valley and would like to see information about the interactions and mutual aid agreement with Carson City as well.

**Mr. Driscoll moved to approve the Washoe County EMS Oversight Program final data report for Quarter 2. Ms. Ward seconded the motion.**

Mr. Driscoll suggested the Board approve the report and ask that the additional data points be considered in the next reporting period. He stated he would like to change his motion to include his request. Ms. Ward agreed.

**The motion passed five in favor and none opposed.**

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**9. Presentation by Chief Moore, discussion and possible direction to staff regarding the licensure of a transport ambulance for Truckee Meadows Fire Protection District.**

Staff Representative: Ms. Conti

Chief Moore explained the Board of Fire Commissioners had acted on a recommendation to license an ambulance to the TMFPD fleet as an additional resource for the district. He explained he would describe how they had arrived at the recommendation and ask the EMSAB for some consideration and further analysis of how the ambulance might be used.

Chief Moore opined that if there were a disaster in Washoe County the resources would be significantly taxed, to include fire, police and ambulance. The ambulance has been in their fleet for many years but it has never been used as a transport. TMFPD felt it should be utilized to its maximum potential to be available during a system overload. They had received support from Carson City, Storey County, NLTFPD and other regional partners who might need another ambulance in the case of a disaster.

Chief Moore requested the Board conduct further analysis of how that ambulance could be utilized during a situation where there is a system overload within Washoe County. It had been licensed by the state. It was only planned to be launched in mutual aid requests to one of the fire partners.

Ms. Conti noted that WCEMS was very willing to work with Chief Moore on the study. Their understanding was that the license approval from the BCC was for declared

emergencies. WCEMS would be very interested in researching the potential of other assistance in Washoe County and if that is something beneficial for the county in general or if the declared emergencies would be really where the benefit would be.

Chief Brown applauded Chief Moore and his staff. He noted that having another ambulance available increases the service delivery that can be provided. By working together on these types of programs, they will set an example for the rest of the state that shows a true cooperative effort between all the agencies ensures they are providing the best services possible.

Chair Slaughter reiterated this was a non-action item.

Mr. Gubbels noted the motion made by the TM Fire Board was that the ambulance was to be used for declared emergencies and to authorize staff to offer the ambulance for mutual aid resources to REMSA and other regional agencies. He noted Chief Moore had brought up an unusual wind event, and big events also impact fire first response and their ability effectively provide that portion of the two-tiered system due to other emergencies happening during that time. He noted he and Chief Moore had not yet discussed the topic and that he looked forward to that discussion so they can study how the resource could be utilized.

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**10. Presentation, discussion and possible direction to staff to work with REMSA and regional fire agencies to develop a Fire EMS training calendar to be presented to the District Board of Health for possible approval.**

Presented by Ms. Dayton

Ms. Dayton noted the item was being presented to the Board in accordance with the Amended and Restated Franchise Agreement for Ambulance Service. She explained the Board was tasked with recommending trainings from among those that available to all regional fire and EMS agency staff through REMSA. She highlighted that although this was the first time this topic had been presented to the Board, REMSA is currently in compliance, as they have been providing opportunities that are available to regional agencies. The most recent training that was available to all regional agencies had been in February and was distributed through state EMS.

Ms. Dayton recommended the Board direct staff to work with REMSA and the fire agencies to develop a training calendar. She noted she had provided examples pulled from other regions.

**Mr. Clinger moved to direct staff to work with REMSA and regional fire agencies to develop a Fire EMS training calendar to be presented to the District Board of Health for possible approval. Mr. Driscoll seconded the motion which passed by a vote of five in favor and none opposed.**

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**11. Presentation, discussion and possible approval or direction to staff regarding REMSA exemption guidelines.**

Staff Representative: Ms. Conti

Ms. Conti stated that, in the interest of transparency, staff had decided to bring the exemption guidelines to the Board. The exemptions given during the wind event had attracted interest to the process.

Ms. Conti provided an overview of the history of the exemptions and proceeded to

provide specific information about the System Overload exemptions. Previously, staff had only had experience with weather exemptions and had found the description for System Overload to be unclear.

Ms. Conti explained WCEMS was proposing to change the description so it is more intuitive. If staff looked at the entire year to arrive at an average, that number could be increased by two standard deviations and established as the threshold. That would provide a means to visually be notified if the threshold was reached at any point in a day. It was important to clarify that the threshold could be hit and the request may not be made to the WCHD for an exemption. Sustainment of a level of activity above threshold would be more likely to trigger it.

Ms. Conti noted two charts were included with the staff report. One showed the proposal to assist with visualization. The top one represented February 6, the day of the wind event. At 10 a.m. the upward climb started happening above the average. The average is in green, the blue is the actual events. The red line is the threshold, so that would be where the alert would happen. The calls started climbing at 10 a.m., the alert happened at noon, and the request to the WCHD for that overload exemption came in at 3 p.m. so the call level was well above the threshold for three hours and then had already begun surging two hours prior to that. She pointed out the exemption request came in five hours after the overloading was already started and reiterated it was not a commonly-used exemption.

Ms. Conti pointed out the exemption ended at 1800 hours, when they were still above the threshold. The exemption would expire when the system is able to maintain and sustain the responses in the region. The call level was not back down to average and under the threshold, but REMSA was able to handle the volume of the system at that point and so the exemption stopped.

Ms. Conti explained the chart below the first represented what a normal day might look like. Triggers would be built in so that the minute the threshold happened notifications would be sent to the REMSA personnel so they could notify EMS oversight staff to start letting the regional partners know. Staff feels like this would be a better exemption description and a better formula for the region that everybody can understand and plan accordingly for.

Mr. Clinger noted the chart was quite helpful. For the record for clarification, he asked if the red line would be the threshold. Ms. Conti stated it would. Mr. Clinger then asked if at any time the actual calls crossed that red line was when the exemption would take place. Ms. Conti explained that was when the notification would occur that the threshold had been reached and is being observed. If it were to continue above the threshold an exemption request might come through. Mr. Clinger asked if there were specifics in the recommendation on how long it has to be sustained before the exemption applies. Ms. Conti replied there were not but that that could be discussed.

Mr. Driscoll asked if there any rules that additional resources be added to the current flow. Fire and police agencies take that step when they see potential sustainability issues. Ms. Conti explained it was not a part of the REMSA exemption but is part of their standard operating procedures. Every time an ambulance or a new unit or personnel is added to the system they are time stamped. Mr. Clinger asked if it would make sense to include those in the system overload declaration time period once that threshold is crossed and sustained. Ms. Conti opined that could be reviewed.

Aaron Abbott, Director of Operational Services for REMSA, stated system overload

should not only be measured quantitatively but also qualitatively. REMSA's proposed definition includes several of those qualitative observations. The graph included in the packet is an automated graph that is compiled in real time with data that came out of their Computer Aided Design (CAD) system. This alert trigger is constantly monitoring for certain data elements, similar to the flu trigger that REMSA has in place for the DBOH. In this specific case, it measures call volumes and incident assignments. It creates a threshold. The threshold you see on the red line is the average events plus two times standard deviation. That is a common value used to develop an upper control limit for many applications and it is commonly used in EMS systems.

Mr. Abbott explained that what they were viewing on the graph is the point in time where REMSA's call volume has exceeded that threshold. This can be configured to send a potential surge in volume alert to REMSA management. He stressed that just because they have a trigger alert does not necessarily mean they are in system overload. He cautioned against trying to define system overload by this one data element, but rather to use it as confirmation that there was unusually high EMS activity during that time period.

Ms. Conti asked if there would be a way to establish that the volume needs to be sustained for a specific number of calls or specific number of hours before requesting the WCHD for the exemption. Mr. Abbott stated he would be hesitant to do that because they manage things pretty well and it is a very rare occurrence. They put additional units on and do have a surge capacity policy procedure that goes into effect automatically at the supervisor level before it even gets to a manager or director level. This data element is confirmation that there is unusual activity. However, the rest of the definition includes an overall assessment of the EMS system and sometimes those are not just sheer numbers of calls but actually natures of calls.

Mr. Dick opined that going with a two-time standard deviation approach seemed to be an improvement to the previous language. The language he had used in the exemption letter provided to REMSA on February 6 was what had existed for quite some time. He compiled it to formalize what the exemption would be under the new franchise agreement and was actually removing a fairly significant exemption from that. He opined there had been good points made about REMSA staffing additional ambulances to respond and suggested some other criteria could be built that could be looked at in granting an exemption. While the two-time standard deviation would be one trigger and justification for an overload exemption, it didn't make it automatic. REMSA would need to request that from the WCHD, and if other parameters were in place it could better form the decision process regarding granting that exemption. He recommended the item be brought back with some additional provisions.

Mr. Clinger stated he would agree with Mr. Dick's thoughts. Although the item was agendaized for action he was not prepared to do so, he preferred to speak to his staff about it first.

Mr. Driscoll stated he was in that same position. He wanted to speak with his resources to better understand how it operationally affects Sparks and other jurisdictions when they stretched resources, and the cause and effect across the entire system, not necessarily just EMS, but other parts of it on the fire rescue side and maybe even law enforcement. Additionally he wanted to understand what that exemption does, what it means, and how it affects what is going on in the field. He noted that at the end of the day it is the patient who is going to suffer if the agencies are not able to respond quickly

Ms. Conti requested clarification that the formula and the definition itself was acceptable but the process should be explored and clarified further regarding how it would work up and to when the notification happens and what happens afterwards.

Mr. Abbott noted the current language in the exemption letter was obviously confusing to all parties and very difficult to measure. He asked how the Board would like REMSA to handle any possible system overloads between today and the approval of the new definition. Mr. Dick proposed that during that interim this decision would be made by the WCHD after a request was submitted.

Mr. Abbott reviewed the events of February 6, explaining the region experienced a very unexpected and potentially disastrous wind event that created a high call volume in the region. REMSA had added several additional ALS ambulances, supervisors, dual ALS ambulances and Care Flight staff on a ground ambulance to assist a patient condition that was occurring during a major vehicle accident extrication. They also responded to mutual aid requests during that time period.

Kevin Romero, Vice President of Operations, reiterated that additional resources had been deployed during the event. Regarding the utilization of the Care Flight staff, he explained that a single resource is very good in these types of events because they can be placed further down south, up north, east and west, where some of the wind events are taking place. He explained the system overload trigger is different than what REMSA sees in just volume or number of calls or what the fire first responders are seeing. One of the things that affects them in system overload is the amount of patients that they are transporting per call. Typically they run a call and transport one patient. On this particular day they had approximately 130 transports of 177 people. What that does for the overall system means a longer turn time at the hospitals, longer scene times, placing more people in the back of an ambulance from a traffic collision, and at the hospital they have to rotate those people in, do more patient care records, do more reports to the nurses, and things of that nature. Those are the types of things that apply to system overload on the EMS side rather than just to calls.

Chief Garrison stated he did not know what an exemption protocol was. He appreciated that Ms. Conti had notified him that REMSA had launched this exemption protocol and that possibly Sparks Fire could be experiencing long on-scene times with patients because REMSA was not able to meet the response time standards. He felt that the communication to the fire departments was good. He and his staff had asked how long it would go on, what it was, and what REMSA was doing about bringing in additional resources. They needed to know if they were going to be on scene standing by with a patient awaiting REMSA and how many ambulances are being staffed up. He appreciated that they had been contacted by REMSA to say that this exemption was over about two hours into it. The most important issue to him is more transparency, and from the process, more notification of what REMSA is doing. In emergencies it is important to know if there is one ambulance available or 15.

Chief Garrison explained their biggest concern was whether or not they needed to call in reserve apparatus even though they had yet to be impacted. Not knowing what REMSA's staffing model was going to be, he could not make those decisions. He encouraged the Board to establish more exception guidelines into REMSA's medical surge procedure.

Chief Hernandez stated he would like to echo Chief Garrison's comments. When they received notification that there was an exception notice, they had evaluated how many reserve apparatus they had and what their call volume was. He thanked the REMSA organization for notifying Ms. Conti and Ms. Conti for pushing it out to them immediately.

He explained the exemption did have some significant dollar consequences, as they had started to recall personnel to staff reserve apparatus. They were in the process of initiating crews to come back because they did not know how long the exception was going to last.

Chief Hernandez noted there are times when exceptions should be granted. He suggested the review of system status overload exemption should include the entire exemption process holistically. They could generate a more inclusive document that takes into consideration the concerns of the City of Reno, TMFPD and City of Sparks. It impacts how they provide service delivery.

Mr. Romero also echoed what both the Chiefs had to say. He opined the fire component of this should be taken into consideration as well. When there is a three-alarm fire or a wild land fire or something else that affects fire first response, that should be incorporated into the notification in as well so that all agencies are on the same page with regards to what they should do for EMS.

Chair Slaughter noted the staff report indicated that during the fiscal year to date there had been 23 exemptions. Ms. Dayton explained they had occurred between July and January, so that number did not include the February wind event. She stated it was important to note that those 23 exemptions are exemptions that REMSA is allowed to make without involving the WCHD. The guidelines specify a breakdown for what WCHD approves and what REMSA can approve. WCEMS receives monthly reports of exemptions from REMSA. There were 11 isolated weather events in December. Those are different than the blanket weather incidents WCHD would need to approve for those calls to be exempt.

Mr. Clinger requested the Board members be provided a report on the 23 exemptions. He felt it would be helpful for them to understand what they were and why were they were exempted.

Chair Slaughter agreed that would be valuable information. For clarification, he asked if there are exemptions that are created automatically. Ms. Dayton stated that was correct. She noted the guideline letter from Mr. Dick was broken down into two categories, the ones that REMSA reviews and the ones that are to be reviewed by the WCHD. Mr. Slaughter asked if the 23 are the ones the HD reviews. Ms. Dayton replied they were not, they were the exemptions that could be reviewed by REMSA. As an example, three of those calls were a result of the Discovery incident in September, which had been declared a Mass Casualty Incident (MCI), so they were exempt under the MCI guidelines.

Ms. Conti stated staff could make an adjustment to the program report every month and include a section that lists the exemptions that have occurred. She clarified that automatic is not a clear term in this example. None of the exemptions are automatic, there is always review by one of the two agencies.

**Mr. Driscoll moved that the item be continued until the next meeting to allow staff to deal with all of the different issues that had been brought up. Mr. Clinger added staff be requested to meet with the fire agencies and REMSA to refine this for the next meeting. Mr. Driscoll agreed with the amended motion, Mr. Clinger seconded and the motion passed five in favor and none opposed.**

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## **\*12. Board Comment**

Mr. Driscoll noted he was pleased with the discussion, the detail, the obvious analysis work that had been done and the reporting. He opined that what was contemplated by his organization

as they were going through the negotiations and interlocal agreements was being accomplished. He stated the WCEMS are meeting that goal and he realized that it takes a lot of time to do what they were doing, so the group was doing phenomenal work. He thanked them for that.

Mr. Dick noted that one of the items within the ILA specifies that the EMS Program is tasked with developing the 5-year strategic plan. He noted that is a very large task that is looming and proposed that the next agenda include a discussion with staff about the approach to develop that plan.

Mr. Dick stated that one other thing that they had not discussed was what the process is if EMS agencies want to bring something to the agenda for this advisory board. He proposed they discuss that, whether it should be something that comes through the jurisdictional member on the board, through the EMS program or potentially another method.

Chair Slaughter announced that the TMFPD Board of Fire Commissioners (BoFC) had made a request to Washoe County internal audit staff to prepare an audit report related to TMFPD and EMS. It had been presented to the BoFC, but at that meeting there were several interested parties that asked for time to review the report. It is scheduled to come back for discussion on March 24. The report is available through the Office of the County Manager and is also contained in the Feb. 10 TMFPD Board packet.

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**\*13. Public Comment**

As there was no one wishing to speak, **Chair Slaughter closed the public comment period.**

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**14. Adjournment**

**At 11:04 a.m., Mr. Clinger moved to adjourn. Mr. Driscoll seconded the motion which was approved five in favor and none against**

Respectfully submitted,

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Dawn Spinola, Administrative Secretary  
Recording Secretary

Approved by Board in session on \_\_\_\_\_, 2015.

**STAFF REPORT**  
**EMS ADVISORY BOARD MEETING DATE:** June 4, 2015

**TO:** Regional EMS Advisory Board Members  
**FROM:** Christina Conti, EMS Program Manager  
775-326-6042, [ccconti@washoecounty.us](mailto:ccconti@washoecounty.us)  
**SUBJECT:** **Presentation by Dr. Andrew Swanson regarding community committee called PMAC (Pre-Medicine Advisory Committee).**

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**SUMMARY**

The purpose of this agenda item is to allow Dr. Andrew Swanson to speak with the EMS Advisory Board about PMAC.

PMAC is comprised of physician representatives from regional fire agencies, hospitals and REMSA. The committee meets on a quarterly basis and is focused on patient care. The PMAC is a non-profit organization; each agency pays a fee that is then utilized for scholarships in our community.

**PREVIOUS ACTION**

No action has been taken by this Board on this agenda item.

**BACKGROUND**

During the first two EMS Advisory Board meetings, PMAC came up as a potential partner with the EMS Oversight Program. PMAC is a relatively unknown committee within our community. Dr. Swanson was contacted to discuss the committee and how PMAC and the EMS Oversight Program can work together.

Christina Conti and Dr. Swanson spoke about the PMAC in preparation of the June Advisory Board meeting. The committee is currently reconfirming a mission and believes that a partnership with the EMS Oversight Program would be a fit. PMAC has had a reduction of membership attendance but would like to see the committee become valuable to the community. Topics on quarterly agendas include items like backboard protocols and intubation. PMAC's current committee meeting schedule is in line with the EMS Advisory Board, but the current schedule is to meet the following weeks. PMAC is open to discussing possibly changing their meeting dates and times to meet prior to the EMS Advisory Board meetings to allow for updates to the Board on PMAC activities.

**FISCAL IMPACT**

There is no fiscal impact to the Board on this agenda item.

Subject:  
Date:  
Page 2 of 2

**RECOMMENDATION**

Staff recommends the Board accept presentation by Dr. Swanson on community committee PMAC.

**POSSIBLE MOTION**

Should the Board agree with staff's recommendation, a possible motion would be:

“Move to accept presentation by Dr. Andrew Swanson regarding community committee called PMAC.”

**EMERGENCY MEDICAL SERVICES OVERSIGHT PROGRAM  
EMS ADVISORY BOARD STAFF REPORT**

**DATE:** June 4, 2015  
**TO:** EMS Advisory Board Members  
**FROM:** Christina Conti, EMS Program Manager  
775-326-6042, cconti@washoecounty.us  
**SUBJECT:** Program and Performance Data Updates

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**Meetings with Partner Agencies:**

EMS Program Statistician met with Aaron Abbott with REMSA on March 10<sup>th</sup> to learn about their dispatch process, the OCU database, data review and internal quality assurance processes. All processes were walked through and demonstrated for the statistician to gain thorough understanding of an EMS call from REMSA's perspective and how different variables were time stamped in the OCU system.

EMS Program Manager and Coordinator met with Pyramid Lake Paiute Tribe Emergency Manager, Don Pelt, on March 11<sup>th</sup>. The purpose of the meeting was to learn more about PLPT and their EMS response capabilities. During the meeting, Mr. Pelt provided copies of documents to help GIS know tribal properties versus unincorporated Washoe County.

EMS Program staff met with a representative from the Office of Traffic Safety on March 11<sup>th</sup>. Ben West discussed traffic data that is currently being collected from agencies throughout Nevada through accident reports. Mr. West is interested in partnering with the Washoe County EMS Oversight Program to begin looking at the accident from start – hospital, with all the elements of assistance included. Currently his data has the police information and the hospital information, the addition of our Program would provide the fire/REMSA data points. This would be a pilot project for the State. Christina attended the TRCC meeting (Traffic Records Coordinating Committee) on April 22<sup>nd</sup>. The meeting focused on the Brazos system the State is using and the data collection available. Based on meeting content and committee needs, Heather Kerwin will be the EMS Program representative.

EMS Program staff participated in the UNR Full Scale exercise on March 19<sup>th</sup>. EMS Coordinator participated as the Medical Unit Leader and conducted patient tracking for the exercise, working with REMSA for patient transport information and the hospitals. EMS Program Manager and Statistician observed the actual exercise as a training opportunity and participated in the hot-wash discussions.

From March 24 - 26 the EMS Coordinator attended the 2015 Preparedness, Emergency Response and Recovery Consortium and Expo (PERRC). This was a quality conference for both networking and gathering data/information about critical care/mass transport during a disaster, hospital evacuations and federal initiatives concerning data collection by HHS.

EMS Program staff met with EMS Advisory Board member Terri Ward on March 26<sup>th</sup>. During the meeting staff provided Ms. Ward with several documents related to EMS and the current system within our region.

EMS Program staff met with REMSA on April 2<sup>nd</sup> to review the proposed compliance checklist. The purpose of the meeting was to ensure all requested items were collectable. The draft checklist was included on the District Board of Health April agenda for possible approval. The agenda item was not heard and will be heard at the May meeting, allowing jurisdictions the opportunity to review. EMS Program staff met with City of Sparks representatives on April 28<sup>th</sup> to discuss concerns and recommended changes. The offer to meet with City of Reno and Washoe County representatives was extended.

EMS Program Statistician conducted a conference call with Dr. Kuhls and Nadia Fulkerson from UNLV to determine the possibility of collaborating on a project to explore patient outcomes specific to trauma patients whose injuries were a result of traffic related incidents. During the call it was determined the UNLV staff has access to all trauma registry data for traffic related incidents and would be able to potentially match patient outcome data to EMS data without sharing personal identifiers. There is a significant delay in trauma data and the details of the project have to be further explored, however this type of data match and resulting analysis could result in a demonstration pilot project for the rest of the state.

EMS Program staff met with Aaron Abbott with REMSA on April 13<sup>th</sup> to discuss the exemption process for system overload to build the process out more. During the meeting, it was determined that a checklist should be developed that will be shared with the region. This checklist will indicate all actions taken prior to the exemption request occurring. This would allow regional partners to understand what has occurred with surge planning and response, to be able to anticipate how they can internally plan. This checklist is currently being developed so exemptions are recommended to remain as they currently are until the checklist is developed and further discussion with the partners can occur.

EMS and dispatch partners met on April 15<sup>th</sup> to discuss the franchise service area map and exemptions. During the meeting the partners recommended leaving the map in its current form and spending the time developing a new franchise area response map that focuses on both census data and call volume. A project charter has been developed and distributed to the partners for approval on the process and timeline for developing the draft map. The EMS Program is striving to have a draft available for review at the September 2015 EMS Advisory Board meeting.

EMS Program staff conducted a conference call on April 20<sup>th</sup> with George Molnar, the Nevada Statewide Interoperability Coordinator to learn more about the NDIP and NCORE projects and their current status. During the meeting we discussed the possibility of George coming to

Washoe County and providing training on NDIP and dispatch to dispatch communication so the region can begin using the tools provided by the State.

EMS Program Manager and Coordinator participated in a Family Assistance Center Full Scale Exercise in Carson City on April 28<sup>th</sup>. Carson City Emergency Management and Washoe County Health District partnered in planning the exercise. The purpose was to train the identified Carson City team on FAC operations. The structure of the exercise had the Washoe County personnel taking the lead first. After a designated time frame, the Carson City personnel took the lead. It also provided an opportunity for the Washoe County personnel to practice what it look like provide mutual aid support to another jurisdiction.

EMS Program staff had quarterly meeting with State EMS program staff on April 29<sup>th</sup>. These meetings continue to establish a working relationship and information sharing. During the meeting, we discussed the role of the State EMS in relation to clinical complaints on calls. There is a possible partnership available for investigations that come to the EMS Oversight Program. Additionally, it was identified through discussion that State EMS would be a valuable partner for drafting a new franchise response area map.

On May 2<sup>nd</sup> EMS Program Staff and REMSA personnel provided a mass-casualty incident (MCI) and triage training to the Air National Guard medical team. Approximately 25 individuals were trained on their possible response to an MCI and the triage system used in Washoe County.

In coordination with regional hospitals, the EMS Coordinator organized a Mutual Aid Evacuation Annex (MAEA) functional drill at Saint Mary's Regional Medical Center. The drill will be held on May 15, 2015 and will test the current hospital evacuation processes as well as an evacuation process developed by Disaster Management Systems (DMS).

EMS Program Manager and Coordinator will be participating in the Reno-Tahoe Airport Authority tabletop exercise on May 20<sup>th</sup>. This is part of the RTAA annual requirements for exercises. The role of the Medical Unit Leader at the Emergency Operations Center is primarily filled by EMS staff, which makes the participation in the TTX important. Regional hospitals have accepted the invitation to participate as well as the Medical Examiner's Office.

#### **Investigations conducted by the EMS Oversight Program:**

<b>Date Received</b>	<b>Individual/Organization Requested Investigation</b>	<b>Reason for Request</b>	<b>Investigation Outcome</b>
3/31/15	Commissioner Berkbigler	Determine what happened with a call, per a citizen complaint, when mutual aid was utilized.	EMS Program Manager spoke with the three involved agencies to learn about the call and the process for requesting mutual aid. While improvements could be made, no

			performance issues were noted.
3/2015	Kevin Dick	Supply reimbursement is an item in the franchise agreement and through the TMFPD audit it was stated that reimbursement is not occurring. EMS Program was to determine if the terms of the franchise are being met.	There were some identified challenges in the process but both organizations have worked through it to come up with a plan. This plan includes reimbursement to TMFPD by REMSA retro to January 2015 and the establishment of a base-cost that will be reimbursed quarterly in the future.
5/2015	Jim Gubbels	A fire agency requested mutual aid without notifying REMSA dispatch.	Investigation currently in process.
5/2015	Jim Gubbels	REMSA did not receive any notification of an MVA call until a responding unit contacted REMSA dispatch for an ETA of their arrival.	Investigation currently in process.

**Inquiries made agency to agency: (as known by the EMS Oversight Program)**

Date Received	Agency Requesting and to Whom the Request was Made	Reason for Request	Inquiry Outcome
2/9/15	TMFPD to REMSA	Information regarding a delay in transfer from REMSA to ECOMM	EMS Oversight Program was not made aware of the outcome.
4/15/15	RFD to REMSA	Details regarding no ambulances available to respond to a call.	Information given to DC Cochran on system usage during that hour.

**Legislative Information Relating to EMS:**

EMS staff is currently watching the following bill drafts/bills:

**SB 327** (BDR 1017): Sponsored by Senator Farley. Revises certain provisions governing air ambulances. Passed Senate, sent to Assembly and referred to Committee on Health and Human Services

**AB 463** (BDR 1020): Sponsored by Assembly Committee on Health and Human Services. Revises provisions relating to emergency medical services. Exempt status 4/6/15, referred to Committee on Ways and Means

**SB 296** (BDR 3-940): Sponsored by Senate Majority Leader. Revises provisions relating to punitive damages awarded in certain civil actions. Waiver granted effective 4/10/15

**SB 300** (BDR 3-938): Sponsored by Senate Majority Leader. Revises provisions relating to comparative negligence. Waiver granted effective 4/8/15

**AB 308** (BDR 40-798): Sponsored by Assemblywoman Woodbury. Revises provisions governing emergency medical services. Passed Assembly, sent to Senate and referred to Committee on Health and Human Services

**SB 318** (BDR 833): Sponsored by Senator Kieckhefer. Revises provisions relating to fire districts. Passed Senate, sent to Assembly and referred to Committee on Government Affairs

**AB 425** (BDR 40-702): Sponsored by Assembly Committee on Health and Human Services. Revises provisions governing emergency medical services. Passed Assembly, sent to Senate and referred to Committee on Health and Human Services

**AB 176**: Sponsored by Assemblyman Armstrong. Establishes a program to provide first responders with critical medical information relating to victims of motor vehicle emergencies. (Nevada Yellow Dot Program.) Passed Assembly, sent to Senate and referred to Committee on Transportation

**AB 333** (BDR 42-650): Sponsored by Assemblyman Kirner. Provides for the merger of certain fire protection districts in certain counties. Enrolled and sent to the Governor 5/1/15

**SB 273** (BDR 589): Sponsored by Senator Hardy. Revises provisions relating to medical records. Passed Senate, sent to Assembly and referred to Committee on Commerce and Labor

**AB 220** (BDR 577): Sponsored by Assembly Committee on Health and Human Services. Makes various changes related to the provision of health care services and network adequacy. April 11, 2015, no further action allowed

**SB 102**: Sponsored by Legislative Committee on Public Lands (NRS 218E.510). Creates a nonprofit Rangeland Fire Protection Association in each county in Nevada. Referred to Committee on Government Affairs. April 11, 2015, no further action allowed

**AB 36:** Sponsored by Clark County. Revises provisions governing requirements for hospitals to provide emergency services and care. Referred to Committee on Health and Human Services. April 11, 2015, no further action allowed

**SB 36:** Sponsored by Division of Conservation and National Resources. Provides exemption from state business license requirement for businesses assigned to provide vehicles or equipment as responders to wildland fires, floods, earthquakes and other emergencies. Passed Senate, sent to Assembly and referred to Committee on Judiciary

**AB 34:** Sponsored by Division of Conservation and National Resources. Reorganizes provisions relating to fire protection districts. Passed Assembly, sent to Senate and referred to Committee on Government Affairs

**AB 305 (BDR 40-167):** Sponsored by Assemblyman Oscarson. Revises provisions governing community paramedicine programs. Passed Assembly, sent to Senate and referred to Committee on Health and Human Services

**SB 185 (BDR 42-121):** Joint Sponsored by Senator Kieckhefer and Assemblyman Bobzien. Makes various changes relating to fire and emergency medical services in Washoe County. Waiver granted effective 4/17/15, Taken from General File and placed on Secretary's desk 4/20

**SB 164:** Sponsored by Senator Parks. Revises provisions prohibiting certain discriminatory acts. Referred to Committee on Judiciary. Passed Senate, sent to Assembly and referred to Committee on Government Affairs

**AB 163:** Sponsored by Assemblyman Hansen. Provides for the establishment of Rangeland Fire Protection Associations. Passed Assembly, sent to Senate and referred to Committee on Government Affairs

**SB 189:** Sponsored by several Senators. Makes various changes concerning the collection of information relating to the treatment of trauma. Exemption effective 4/2/15, Committee on Finance

**Other Items of Note:**

EMS Program Manager completed a ride along with North Lake Tahoe Fire Protection District on April 2, 2015. Additionally, a ride along is scheduled with REMSA for May 21, 2015.

EMS Coordinator completed a sit-along with Washoe County PSAP on May 1, 2015 and has another sit-along scheduled with the Sparks PSAP on May 21, 2015.

**STAFF REPORT**  
**EMS ADVISORY BOARD MEETING DATE:** June 4, 2015

**TO:** Regional EMS Advisory Board Members  
**FROM:** Christina Conti, EMS Program Manager  
775-326-6042, [cconti@washocounty.us](mailto:cconti@washocounty.us)  
**SUBJECT:** **Presentations on the utilization of System Status Management in an EMS system and REMSA's staffing model for the months June – September 2015.**

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**SUMMARY**

The purpose of this agenda item is to allow Steve Tafoya, EMS Program Manager for the Nevada Division of Public and Behavioral Health, to present information regarding System Status Management (SSM) and Jim Gubbels, President/CEO of REMSA to present on REMSA's staffing model for the next four months (June – September 2015) to the District Board of Health (DBOH).

SSM is a method of deploying ambulances based on the hour-of-the-day and day-of-the-week analysis in order to match supply with expected demand. The process attempts to provide faster responses by locating ambulances at "posts" nearer the next predicted calls.

REMSA conducts an analysis of system needs based on past performance and determines suitable staffing levels based on the analysis. Jim Gubbels will present REMSA's staffing model for the June – September 2015.

The presentations are meant to be informational for the Board and offer an opportunity to have an open dialogue about SSM and REMSA staffing.

**PREVIOUS ACTION**

No action has been taken by this Board on this agenda item.

**BACKGROUND**

Steve Tafoya and Jim Gubbels were asked to present because of the recent discussions regarding the number of ambulances that are available to respond within the EMS system at any given time.

During the March EMS Advisory Board, community members expressed a need to better understand REMSA's staffing model to appropriately plan within their jurisdictions. Subsequently, during the March DBOH meeting, Chair Jung requested to see how many ambulances were on the streets each day, or each quarter. Additionally, during the April DBOH meeting Chair Jung stated that she would like to know how many times, and for how long, ambulances are out of service in the Franchise area.

**FISCAL IMPACT**

There is no fiscal impact to the Board on this agenda item.

**RECOMMENDATION**

Staff recommends the Board accept the presentations regarding System Status Management in an EMS system and REMSA's staffing model for the months June-September 2015.

**POSSIBLE MOTION**

Should the Board agree with staff's recommendation, a possible motion would be:

“Move to accept the presentations regarding the utilization of System Status Management in an EMS system and REMSA's staffing model for the months June-September 2015.”

**STAFF REPORT**

**EMS ADVISORY BOARD MEETING DATE:** June 4, 2015

**TO:** EMS Advisory Board Members

**FROM:** Christina Conti, EMS Program Manager 775-326-6042,  
cconti@washoecounty.us

**SUBJECT:** **Discussion and possible approval of the project charter that outlines the process for revising the response zones within the Washoe County REMSA ambulance franchise service area.**

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**SUMMARY**

The purpose of this agenda item is discuss the process by which the region is proposing to revise the currently identified response zones within the Washoe County REMSA ambulance franchise service area.

**PREVIOUS ACTION**

During the March 2015 EMS Advisory Board (EMSAB) meeting, as part of the program update, staff reviewed the meeting held between EMS personnel, District Health Officer Kevin Dick and REMSA staff on Monday, February 23, 2015. The purpose of the meeting was to discuss the franchise service area and propose changes to the response map.

EMSAB Board members recommended a meeting with regional partners to discuss the proposed changes. The recommended changes to the map included Sparks special zone 5.1 as well as the Mount Rose corridor.

**BACKGROUND**

During the March 2015 EMSAB meeting, it was recommended that the EMS Working Group reconvene to discuss the proposed map revisions. This meeting was held on April 15, 2015 and had representatives from all regional fire partners, WCSO, WCHD, and REMSA. During this meeting it was determined that the historical method of updating the map should include more specific criteria such as standards of coverage. Previously map revisions were based on compliance calculations of specific study zones for a six month period. This is not a viable method as it does not include specific and quantifiable measures that should be included in the process.

After extensive discussion, the regional partners recommended that the antiquated map be updated. The recommendation is that the current map remains and the currently suggested revisions should cease in lieu of developing a new population density driven map that factors in call volume.

The EMS Program staff developed a project charter (attached) that would provide a structure to the project, to include objectives and a timeline for the revision process. The charter will be used by the

EMS Working Group subcommittee to modernize the Washoe County REMSA ambulance franchise response zones, based on specific criteria and quantifiable measures.

The first subcommittee meeting was held on May 19, 2015. During the meeting, recommendations to the project charter were discussed and the document was approved. The next steps were proposed, to include obtaining the approval of the proposed path by the EMS Advisory Board.

### **FISCAL IMPACT**

There is no additional fiscal impact should the EMS Advisory Board approve the proposed project charter.

### **RECOMMENDATION**

Staff recommends the Board approve the proposed project charter that outlines the process for revising the response zones within the Washoe County REMSA ambulance franchise service area.

### **POSSIBLE MOTION**

Should the Board agree with staff's recommendation, a possible motion would be: "Move to approve the project charter that outlines the process for revising the response zones within the Washoe County REMSA ambulance franchise service area."

## Project Charter

### REMSA Response Map Revisions

<b>Project</b>	REMSA Response Map Revisions		
<b>Created By</b>	Brittany Dayton and Christina Conti	<b>Date</b>	4/23/15 Revised 5/20/15
<b>Executive Sponsor</b>	Washoe County Health District	<b>Project Manager</b>	Christina Conti

<b>Mission</b> “Practical Problem to Solve and/or Opportunity to Gain”	<p>The current REMSA response map and zones are not effective or representative of the region’s population growth and development in recent years.</p> <p>Members of the EMS Working Group met on April 15, 2015 to discuss the ambulance service area map and REMSA exemptions. During this meeting it was determined that the historical method of updating the map should include more specific criteria such as standards of coverage. Previously map revisions were based on compliance calculations of specific study zones for a six month period. This is not a viable method as it does not include specific and quantifiable measures that should be included in the process.</p> <p>After extensive discussion, the regional partners are recommending that the antiquated map be updated and should be a priority of the EMS Oversight Program. The recommendation is that the current map remains and the currently suggested revisions should cease in lieu of developing a new population density driven map that factors in call volume.</p> <p>This project charter outlines the procedure that will be used by the EMS Working Group subcommittee, chaired by the Washoe County Health District (WCHD), to modernize the REMSA response map revisions, based on specific criteria and quantifiable measures.</p>
<b>Parameter Statement</b>	<p>The purpose of the subcommittee is to develop for consideration, by the EMS Advisory Board and the District Board of Health, a new map that will be used by REMSA for response zone delineation within the Washoe County franchise area. This Project Charter documents and tracks the timeline, process and necessary information needed for the various community partners to develop a revised REMSA response map for use.</p>
<b>Process/Methodology</b>	<p>Develop new response zones that are based on population density and call volume.</p>
<b>Objectives/Goals</b>	<p>The objectives of the REMSA Response Map Revisions are as follows:</p> <ul style="list-style-type: none"> <li>● Research and identify the processes used by other regions concerning response zone development by May 13, 2015.</li> <li>● Convene the map subcommittee to discuss proposed versions of the Washoe County franchise area response map (May 2015-August 2015).</li> <li>● Work with GIS to plot a layer/overlay of population density and a year of REMSA calls, per the subcommittee the timeframe utilized for the map revisions will be March 2014 – March 2015.</li> <li>● Develop a draft map based on feedback from the subcommittee by August 21, 2015.</li> <li>● Present the final draft map to the EMS Advisory Board at the September 3, 2015 meeting for approval to present to the District Board of Health.</li> <li>● Presentation to District Board of Health of proposed map and implementation timeline to include the transition plan.</li> </ul>

## Project Charter

### REMSA Response Map Revisions

<b>Deliverables</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; padding: 5px;">Major Deliverable</th> <th style="width: 50%; padding: 5px;">Deliverable Description</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Development of map subcommittee</td> <td style="padding: 5px;">The map subcommittee includes representatives from each of the jurisdictions</td> </tr> <tr> <td style="padding: 5px;">Development of response maps based on specific criteria</td> <td style="padding: 5px;">Create various possible versions of the REMSA response map based on the criteria determined by the EMS Working Group.</td> </tr> <tr> <td style="padding: 5px;">Meetings with various groups to review/discuss changes</td> <td style="padding: 5px;">Several meetings will be held with all involved groups (EMS Working Group, EMSAB and DBOH) to provide process updates and final decisions on the new map.</td> </tr> <tr> <td style="padding: 5px;">Creation of updated map</td> <td style="padding: 5px;">The subcommittee will review and recommend a new response map for the Washoe County franchise area.</td> </tr> <tr> <td style="padding: 5px;">Presentation to the EMS Advisory Board</td> <td style="padding: 5px;">EMS Program Staff will present the final draft version of the map to the EMS Advisory Board for possible approval and recommendation to present to the DBOH.</td> </tr> <tr> <td style="padding: 5px;">Implementation Plan</td> <td style="padding: 5px;">Development of implementation plan based on input from subcommittee and additional regional partners as necessary. The plan will include a timeline, compliance considerations and resource allocation.</td> </tr> <tr> <td style="padding: 5px;">Presentation to the DBOH</td> <td style="padding: 5px;">EMS Program staff will present the final version of the map and implementation plan to the DBOH for possible approval.</td> </tr> </tbody> </table>	Major Deliverable	Deliverable Description	Development of map subcommittee	The map subcommittee includes representatives from each of the jurisdictions	Development of response maps based on specific criteria	Create various possible versions of the REMSA response map based on the criteria determined by the EMS Working Group.	Meetings with various groups to review/discuss changes	Several meetings will be held with all involved groups (EMS Working Group, EMSAB and DBOH) to provide process updates and final decisions on the new map.	Creation of updated map	The subcommittee will review and recommend a new response map for the Washoe County franchise area.	Presentation to the EMS Advisory Board	EMS Program Staff will present the final draft version of the map to the EMS Advisory Board for possible approval and recommendation to present to the DBOH.	Implementation Plan	Development of implementation plan based on input from subcommittee and additional regional partners as necessary. The plan will include a timeline, compliance considerations and resource allocation.	Presentation to the DBOH	EMS Program staff will present the final version of the map and implementation plan to the DBOH for possible approval.																													
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<b>Stakeholders</b>	<p>The intended stakeholders of the REMSA Response Map Revisions Project Charter are those regional partners that will be impacted by the map revisions. This includes the project sponsor (WCHD) and senior leadership of regional EMS agencies.</p> <table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="width: 20%; padding: 5px;"><i>Major Stakeholders</i></th> <th style="width: 15%; padding: 5px;"><i>Technical Support</i></th> <th style="width: 15%; padding: 5px;"><i>Customer/ Agency Impacted</i></th> <th style="width: 15%; padding: 5px;"><i>Advisors</i></th> <th style="width: 15%; padding: 5px;"><i>Decision Maker</i></th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Citizens of Washoe County</td> <td style="padding: 5px;"><input type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 5px;">North Lake Tahoe Fire Protection District</td> <td style="padding: 5px;"><input type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 5px;">REMSA</td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 5px;">Reno Fire Department</td> <td style="padding: 5px;"><input type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 5px;">Sparks Fire Department</td> <td style="padding: 5px;"><input type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 5px;">Truckee Meadows Fire Protect District</td> <td style="padding: 5px;"><input type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 5px;">Washoe County GIS</td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 5px;">Washoe County Health District</td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> <td style="padding: 5px;"><input type="checkbox"/></td> <td style="padding: 5px;"><input checked="" type="checkbox"/></td> </tr> </tbody> </table>	<i>Major Stakeholders</i>	<i>Technical Support</i>	<i>Customer/ Agency Impacted</i>	<i>Advisors</i>	<i>Decision Maker</i>	Citizens of Washoe County	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	North Lake Tahoe Fire Protection District	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	REMSA	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Reno Fire Department	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sparks Fire Department	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Truckee Meadows Fire Protect District	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Washoe County GIS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Washoe County Health District	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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## Project Charter

### REMSA Response Map Revisions

<p><b>Team Members with Roles and Responsibilities</b></p>	<pre> graph TD     A[Washoe County Health District (Chairman)] --- B[Washoe County GIS (Technical Support)]     A --- C[Sparks Fire Department (Impacted Agency/Advisors)]     A --- D[Reno Fire Department (Impacted Agency/Advisors)]     A --- E[Truckee Meadows Fire Protect District (Impacted Agency/Advisors)]     A --- F[North Lake Tahoe Fire Protection District (Impacted Agency/Advisors)]     A --- G[REMSA (Technical Expert/Advisors)]           </pre>
<p><b>Resources</b></p>	<p><a href="#">Washoe County GIS/Technology Services</a></p> <p><a href="#">GeoHealth Platform</a></p> <p><a href="#">San Joaquin County Ambulance Districts</a></p> <p><a href="#">California EMS System Standards and Guidelines:</a></p> <p><a href="#">EMS at Midpassage</a></p>
<p><b>Assumptions</b></p>	<p>The subcommittee assumes that all regional partners will be supportive in the development of a new Washoe County franchise area response map and will participate fully in the process. It is also assumed that the data received is factual and has not been altered for the purposes of influencing map revisions.</p>

## Project Charter

### REMSA Response Map Revisions

<b>Risks</b>	<b>Risk#</b>	<b>Risk Description</b>	<b>Probability</b>	<b>Impact</b>	<b>Mitigation Activities</b>
	1	Subcommittee members are unable to meet within the identified timeframe.	1	3	WCHD will utilize Doodle to ensure availability of stakeholders to set meeting dates.
	2	Subcommittee unable to make a recommendation for a new map.	2	3	WCHD will strive to ensure consensus with the partner agencies throughout the process and will meet individually to address concerns as they may arise.
	3	EMS Advisory Board does not approve and recommend presentation to the DBOH	1	3	The subcommittee members will provide opportunities to meet with EMS Advisory Board representatives prior to Board meeting.
	4	DBOH does not approve the implementation of the new map.	1	3	The EMS Advisory Board members could provide an opportunity to brief DBOH representative on the map and the process utilized, prior to the DBOH presentation.
	5	Lack of funding for implementation and development of a revised map.	2	3	EMS Program staff will research the possibility of utilizing State EMS grant funding and/or local program dollars from salary savings.
<i>1= low risk, 2 = medium risk, 3= high risk</i>					
<b>Scope</b>	<b>In Scope</b>		<b>Out of Scope</b>		
	Updating/altering response zones		Consolidated dispatch		
	Develop various GIS layers (such as population density and call volume) to help determine appropriate decision criteria		Decisions made on compliance percentages		
<b>Communications</b>	<p>The communication will include periodic updates to the subcommittee on assignments given during meetings. The following items will be included in the communications matrix.</p> <ul style="list-style-type: none"> <li>• Committee minutes: Subcommittee meetings discussing versions and recommended changes to the map</li> <li>• Presentation materials: Presentation to both the EMS Advisory Board and DBOH, when applicable.</li> <li>• Other informal communication as needed to accomplish the subcommittee goals and objectives: phone calls, one-on-one meetings, emails, etc.</li> </ul>				

## Project Charter

### REMSA Response Map Revisions

<b>Schedule</b>	<p>The following is a six month timeline for the REMSA response map revisions. The timeline is based on the assumption that the possible identified obstacles do not occur so that the process of the project remains intact.</p> <div style="text-align: center;"> <pre> graph LR     A[Project charter (April 2015)] --&gt; B[GIS map process identification and development (May 18, 2015)]     B --&gt; C[Subcommittee meetings (May - August 2015)]     C --&gt; D[Development of final draft map based on feedback from EMS Working Group subcommittee (September 18, 2015)]     D --&gt; E[Presentation for possible approval and recommendation of presentation to DBOH by EMS Advisory Board (October 1, 2015)]     E --&gt; F[Presentation and possible approval of draft map and implementation plan by DBOH]           </pre> </div>
<b>Signatures</b>	<p>Project Sponsor Name, Title: _____</p> <p>Signature: _____</p>

DRAFT

**STAFF REPORT**

**ADVISORY BOARD MEETING DATE:** June 4, 2015

**TO:** EMS Advisory Board Members

**FROM:** Christina Conti, EMS Program Manager  
775-326-6042, [cconti@washoecounty.us](mailto:cconti@washoecounty.us)  
Heather Kerwin, EMS Statistician  
775-326-6041 [hkerwin@washoecounty.us](mailto:hkerwin@washoecounty.us)

**SUBJECT:** **Presentation, discussion and possible approval for distribution of the Washoe County EMS Oversight Program Data Report for Quarter 3.**

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**SUMMARY**

The purpose of this agenda item is to present for discussion and approval the EMS Oversight Program Quarter 3 Data Report. Some changes have been made to the report based on Quarter 2 feedback from regional partners and the EMS Advisory Board.

**PREVIOUS ACTION**

The Quarter 2 Data Report was approved for dissemination during the March 5, 2015 meeting. During the meeting, suggested changes were addressed for the Quarter 3 Data Report. These changes included evaluating Reno Tahoe Airport calls for EMS, overlaying Reno Fire Department's districts with REMSA's response time zones to evaluate station performance and starting to shift more towards a system performance based report.

**BACKGROUND**

Washoe County has a two tiered system response to medical emergency calls. The call routes through the Public Safety Answering Point (PSAP) and then is forwarded to REMSA for Emergency Medical Dispatch (EMD). The performance of the EMS System within Washoe County is dependent on all parties working together.

An Inter-local Agreement between the Cities of Reno and Sparks, Washoe County, Washoe County Health District and Truckee Meadows Fire Protection District created the EMS Oversight Program. There were eight identified tasks of the Oversight Program, a few specifically discussing data. Those are:

- Monitor the response and performance of each agency providing emergency medical services and provide recommendations for maintenance, improvement and long range success.
- Measure performance, analysis of system, data and outcomes of EMS and provide recommendations.

- Collaborate with regional partners on EMS data response and formulation of recommendations for modifications or changes.
- Identify sub-regions as may be requested by partners to be analyzed and evaluated for potential recommendations.

**FISCAL IMPACT**

There is no additional fiscal impact should the Advisory Board approve the Washoe County EMS Oversight Program Data Report for Quarter 3.

**RECOMMENDATION**

Outlined in the presentation Staff recommends the Board approve the distribution of the Washoe County EMS Oversight Program Data Report for Quarter 3.

**POSSIBLE MOTION**

Should the Board agree with staff's recommendation, a possible motion would be: "Move to approve the distribution of the Washoe County EMS Oversight Program Data Report for Quarter 3."

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# Quarterly EMS Oversight Data Report

A performance analysis of the EMS system in Washoe County

DRAFT

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#### Jurisdiction Summary

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Jurisdiction Summary

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### Response Zone Information

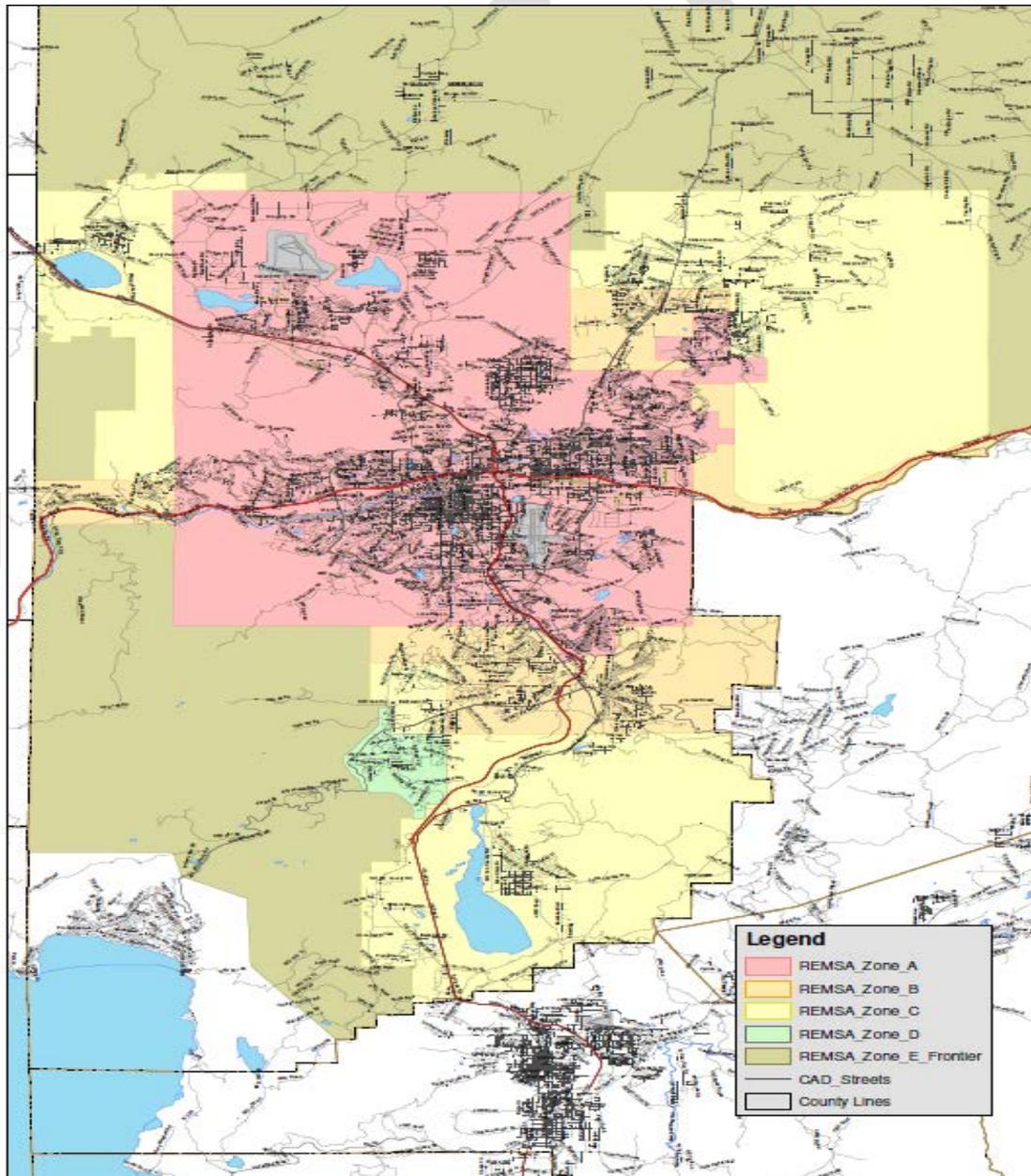
	ZONE A	ZONE B	ZONE C	ZONE D	ZONE E
Priority 1	8:59	15:59	20:59	30:59	Wilderness/frontier
Priority 2	12:59	19:59	24:59	34:59	Wilderness/frontier
Priority 3	19:59	24:59	29:59	39:59	Wilderness/frontier

#### Jurisdiction Response Area:

Reno Fire Department – Zone A (primarily), B, C and E

Sparks Fire Department – Zones A, B, C and E

Truckee Meadows Fire Protect District – Zones A, B, C, D, and E



## Statistical Terms and Definitions

**Frequency:** The number of times an observation occurs.

**Median:** Middle value in the list of observations.

**Mean:** Sum of all the observations of a variable, divided by the number of observations.

**Maximum:** The largest observation of a given variable.

## Glossary of Abbreviated Terms

**NFPA 1710:** National Fire Protection Agency Standard 1710 (response time standards)

**NLTFPD:** North Lake Tahoe Fire Protection District

**Q2:** Quarter 2, includes data for October, November, and December of 2014

**Q3:** Quarter 3, includes data for January, February, and March 2015

**RFD:** Reno Fire Department

**RTIA:** Reno Tahoe International Airport

**RTAA:** Reno Tahoe Airport Authority

**SFD:** Sparks Fire Department

**TMFPD:** Truckee Meadows Fire Protection District

## System Wide Information

### SUMMARY:

Contained within this document is the data analysis for Washoe County Emergency Medical Systems matched calls for service during Quarter 3 (Q3), January-March 2015. The purpose of the analysis conducted is to achieve the goals outlined within the Inter Local Agreement, which establishes the EMS Oversight Program and data sharing. These objectives include: monitoring of the response and performance of each agency providing Emergency Medical Services within Washoe County; measuring performance, analysis of system characteristics, data and outcomes of the Emergency Medical Services; and providing analysis on sub-regions identified regarding EMS response services. It is the intention of the quarterly documents to assist with providing data that will support regional decisions regarding the maintenance, improvement and long-range success of Emergency Medical Services in Washoe County.

**A change from Quarter 2 (Q2) to Q3 is the focus on median times. A median time is the middle observation in a given set of numbers and is much less skewed by outliers than an average (mean) time would be. Both times are provided for the majority of tables so the reader can see the differences.**

Data was initially matched based on address, date and time of the EMS call. Matched calls were not considered for analysis if the difference between dispatch times was greater than 60 minutes. Calls were removed for analysis if either organization was cancelled enroute or when fire sends multiple responding units, all but the first arriving unit on scene was removed for analysis (Table1).

During Q3 REMSA responded to 14,515 calls for service, of those 65.4% matched to a regional fire agency call. For purposes of the quarterly report, only matched calls are analyzed, however all REMSA calls are further explored in Special Study Zone Appendix. These calls utilized represent all calls for service and do not distinguish between transported or non-transported calls. At each call, the citizen has the ability to request or refuse transport. Therefore, the REMSA special interest area looks at the 14,515 total calls for service and the variables of those calls. Within the region, 35.8% of all calls for service in Q3 did not result in patient transport to a hospital.

Washoe County has a two-tiered system response to emergency medical calls. A 9-1-1 call is routed through the Public Safety Answering Point (PSAP) and then forwarded to REMSA for Emergency Medical Dispatch (EMD). The performance of the EMS System within Washoe County is dependent on all parties working together. Q3 utilizes both variables "Alarm time" and "Dispatch time" to start looking at how inconsistencies in dispatch might impact the system and ultimately a patient waiting for an EMS responder. Overall, 62.1% of the time the fire agency is being dispatched prior to REMSA, which is .1% higher than Q2 (Table1.1a). Examining the jurisdictions with both the variables, "Alarm time" and "Dispatch time", there are discrepancies between when a fire dispatcher is first notified about the call "alarmed first" and an individual station is being notified of the call "dispatched first". For example, TMFPD (Table 4.2 & 4.2a) is alarmed first 89.4% of the time, however are dispatched first only 69.0% of the time. Between these two time stamps it is quite possible the call is routed to REMSA and they are able to dispatch an ambulance to the call. For REMSA, it takes three pieces of information to dispatch an ambulance: telephone number, address, and citizen identified compliant.

Without PSAP data these data anomalies cannot be explored and there will continue to be what appears to be dispatch related errors, which inhibits the EMS system from performing to its full effectiveness.

System-wide, fire arrived first on scene 57.0% of the time, the percentage of time fire arrive first decreases approximately 4% during the nighttime hours (6pm-6am) (Table 1.1b). This trend is mirrored in each jurisdiction and did not vary significantly from Q2, therefore the differences between daytime and nighttime hours have been removed from each jurisdiction's section.

Additionally, system-wide, from clock start to clock stop, REMSA took 06:00 minutes to reach the on scene location. This differed by priority, P1 the median time was 05:38 minutes, P2 06:00 minutes, and P3 08:01 minutes (Table 1.2). All fire agencies combined median time from dispatch to arrival on scene was 05:26 seconds, again differing by priority. For P1 the median difference in dispatch time to on scene time was 05:19 minutes, P2 05:28 minutes, and P3 05:53 minutes (Table 1.3).

In looking at the data from the two-tiered response system, the data indicates that system wide REMSA was on scene with a patient waiting for a partner fire agency to arrive 1:35 minutes after arrival at the call destination (Table 1.4). Conversely, a partner fire agency was on scene with a patient waiting for REMSA to arrive for possible patient transport 2:15 minutes (Table 1.5) after arrival at the call. This median time goes in line with the national standards of BLS units arriving 2 minutes prior to the ALS units.

When looking from a citizen perspective a few observations can be made relating to the treatment and a potential transport to a hospital for advanced care. For all calls for services within the region (regardless of priority), REMSA was late 5.8% of the time past the franchise denoted response time. When a fire agency arrived to a call first, REMSA was late 9.2% of the time beyond the denoted franchise response time. The difference in percentages is something to continue to explore and analyze. The Washoe County system is set up to have a fire response on scene first, which would suggest these percentages should be similar. Without PSAP data, an accurate 9-1-1 call time response cannot be measured from the viewpoint of a citizen. However there are data points the EMS Oversight Program analyzed to depict a fairly close representation, given the data limitations. The EMS Oversight Program analyzed each call to determine the median time between various time stamps including REMSA and Fire dispatch times and REMSA and Fire arrival times (Table 2 & Table 4). This analysis measures these intervals using the earliest known time stamp, which was termed the "initial call" (either Alarm time for fire or REMSA pick up call). The interval from the initial call to REMSA dispatch and initial call to Fire dispatching are similar between the City of Sparks and unincorporated Washoe County.

In order to explore how the dispatch delay is impacting patient wait times, this analysis was repeated, but ignores agency time stamps and only uses the first initial call and the first arriving unit. Again, the EMS Program was only able to demonstrate this analysis for two jurisdictions, SFD and TMFPD (Tables 2.7 & 4.7 respectively).

For the second set of analysis only calls when fire was dispatched second are utilized, which represents 3,349 or 37.9% of all calls for Q3. Not surprisingly, the fire agencies are first on scene less often when they are dispatched second. Fire experiences a dispatch delay over one minute on 1,162 or 13.2% of calls during Q3,

which disproportionately impacts P2 calls in all three jurisdictions (Tables 2.11, 3.11, and 4.11). This percentage is concerning and will continue to be monitored. However, without PSAP data it is impossible for the EMS Oversight Program to discern if the delay is due to operator error, citizen self-identified complaint changes, REMSA's ability to dispatch an ambulance within the alarm and dispatch timeframe, or the call originating outside of the appropriate PSAP.

DRAFT

**STATISTICAL INFORMATION:**

Table 1 depicts the information for Q3 and the calls reported and matched from each organization. The percentages are significantly higher in Q3 due to a change in methodology for linking.

LinkPlus is the data program utilized to make a probabilistic match of the call information from fire and REMSA for analysis. The information contained in the report shows the original match information and the SAS analysis percentages. This is split by jurisdiction as well as priority. The highlighted information indicates the actual numbers utilized in the report, duplicate response units to single calls as well as cancelled enroute calls have been taken out. This information is listed below to show the difference between “full match” and “used for analysis.”

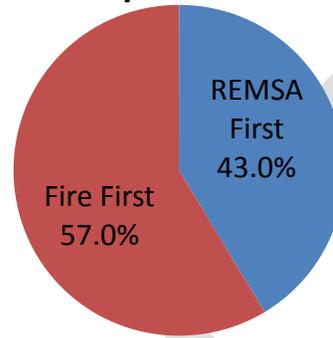
<b>Table 1</b>		<b>Reno</b>	<b>Sparks</b>	<b>Truckee Meadows</b>	<b>REMSA</b>
<b>All calls</b>		5,842	2,164	1,764*	14,515
<b>Full match</b>		5,726 (98.0%)	2,135 (98.8%)	1,628 (92.3%)	
<b>Removed from Analysis (matched)</b>		210 (3.6%)	191 (8.4%)	251 (15.4%)	
	<i>REMSA cancelled enroute</i>	67 (1.2%)	27 (1.3%)	94 (5.8%)	
	<i>Fire no arrival time</i>	101 (1.8%)	152 (7.1%)	136 (8.4%)	
	<i>Fire multiple responding units (MRU)</i>	42 (<1%)	12 (<1%)	21 (1.2%)	
<b>Used for Analysis</b>		5,516 (94.4%)	1,944 (89.8%)	1,377 (78.1%)	
<b>Analyzed Calls by Priority</b>	P1	2,933 (53.2%)	866 (44.5%)	671 (48.7%)	
	P2	1,884 (34.2%)	720 (37.0%)	458 (33.3%)	
	P3	699 (12.6%)	358 (18.4%)	248 (18.0%)	

*\*Two of Truckee Meadows Fire Protection District’s calls which were not matched to REMSA calls for service, matched to North Lake Tahoe Fire Protection District for the month of January, but not included in the Full Match table above.*

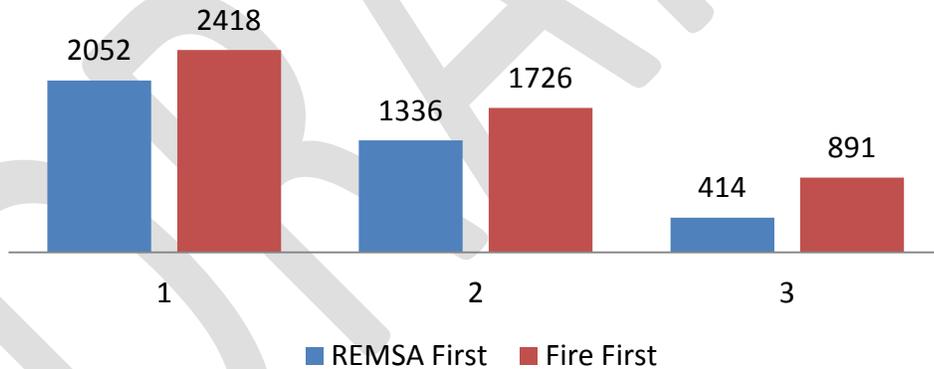
**Table 1.1: Regional response data indicating the first responding unit on scene**

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
<b>REMSA First</b>	2052	45.9%	1336	43.6%	414	31.7%	3802	43.0%
<b>Fire First</b>	2418	54.1%	1726	56.4%	891	68.3%	5035	57.0%
<b>Total</b>	4470	100.0%	3062	100.0%	1305	100.0%	8837	100.0%

**Regional Response Percentage**



**REMSA and All Region Fire Total Number of Calls by Priority**



**Table 1.2 The frequency fire is alarmed prior to REMSA dispatching an ambulance.**

Unable to calculate due to missing data

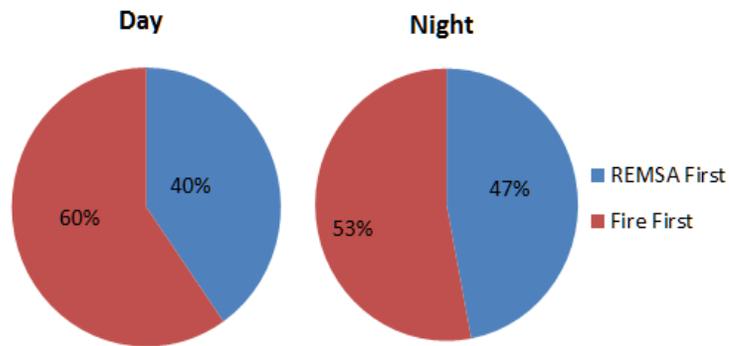
**Table 1.2a The frequency fire dispatches a unit prior to REMSA dispatches an ambulance.**

Fire Dispatch First	#	%
<b>No</b>	3349	37.9%
<b>Yes</b>	5488	62.1%

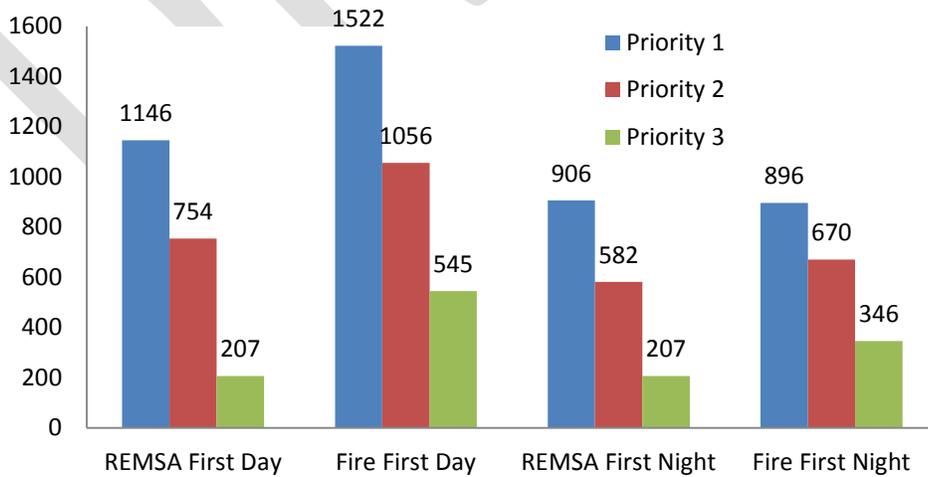
**Table 1.3 Regional response data indicating the first responding unit on scene based on time of day.**

Day (6am-6pm)								
First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	1146	43.0%	754	41.7%	207	27.5%	2107	40.3%
Fire First	1522	57.0%	1056	58.3%	545	72.5%	3123	59.7%
<b>Total</b>	<b>2668</b>	<b>100.0%</b>	<b>1810</b>	<b>100.0%</b>	<b>752</b>	<b>100.0%</b>	<b>5230</b>	<b>100.0%</b>

Night (6pm-6am)								
First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	906	50.3%	582	46.5%	207	37.4%	1695	47.0%
Fire First	896	49.7%	670	53.5%	346	62.6%	1912	53.0%
<b>Total</b>	<b>1802</b>	<b>100.0%</b>	<b>1252</b>	<b>100.0%</b>	<b>553</b>	<b>100.0%</b>	<b>3607</b>	<b>100.0%</b>



**Total Number of Calls by Priority and Day/Night Time**



**Table 1.4 Clock start – clock stop difference for REMSA in all jurisdictions**

Priority Number	Median	Mean	Max
1	0:05:38	0:06:12	0:37:12
2	0:06:00	0:06:48	1:03:57
3	0:08:01	0:09:32	0:57:44
All	0:06:00	0:06:54	1:03:57

Day (6am-6pm)			
Priority Number	Median	Mean	Max
1	0:05:39	0:06:14	0:32:57
2	0:06:08	0:07:06	1:03:57
3	0:08:23	0:10:16	0:57:44
All	0:06:05	0:07:07	1:03:57

Night (6pm-6am)			
Priority Number	Median	Mean	Max
1	0:05:36	0:06:09	0:37:12
2	0:05:50	0:06:23	0:32:21
3	0:07:32	0:08:32	0:36:14
All	0:05:55	0:06:35	0:37:12

This table depicts the difference between clock start time and clock stop time for all REMSA calls, regardless of jurisdiction.

**TERMS and DEFINITIONS:**

**Median:** Middle value in the list of observations.

**Mean:** Sum of all the observations of a variable, divided by the number of observations.

**Maximum:** The largest observation of a given variable.

**Table 1.5: Dispatch time – on scene difference for fire in all jurisdictions**

Priority Number	Median	Mean	Max
1	0:05:19	0:05:42	0:42:18
2	0:05:28	0:05:57	0:56:47
3	0:05:53	0:06:15	0:38:21
All	0:05:26	0:05:52	0:56:47

Day (6am-6pm)			
Priority Number	Median	Mean	Max
1	0:05:08	0:05:32	0:30:00
2	0:05:25	0:05:55	0:56:47
3	0:05:44	0:06:11	0:38:21
All	0:05:18	0:05:45	0:56:47

Night (6pm-6am)			
Priority Number	Median	Mean	Max
1	0:05:33	0:05:57	0:42:18
2	0:05:33	0:06:01	0:36:13
3	0:06:09	0:06:21	0:24:42
All	0:05:37	0:06:02	0:42:18

This table depicts the difference between dispatch time and on-scene time for all fire organizations calls, regardless of jurisdiction.

**TERMS and DEFINITIONS:**

**Median:** Middle value in the list of observations.

**Mean:** Sum of all the observations of a variable, divided by the number of observations.

**Maximum:** The largest observation of a given variable.

**Table 1.6: Time difference between arrival times – REMSA arrives before fire**

Priority Number	REMSA First		
	Median	Mean	Max
1	0:01:29	0:02:04	0:37:26
2	0:01:47	0:02:41	0:41:51
3	0:01:21	0:02:10	0:42:07
All	0:01:35	0:02:17	0:42:07

Day (6am-6pm)			
Priority Number	Median	Mean	Max
1	0:01:30	0:02:06	0:34:10
2	0:01:49	0:02:48	0:41:51
3	0:01:16	0:02:05	0:26:33
All	0:01:36	0:02:21	0:41:51

Night (6pm-6am)			
Priority Number	Median	Mean	Max
1	0:01:28	0:02:00	0:37:26
2	0:01:42	0:02:31	0:26:16
3	0:01:28	0:02:16	0:42:07
All	0:01:32	0:02:13	0:42:07

This table depicts the time difference (in minutes) for arrival at call destination, when REMSA arrives before fire.

**TERMS and DEFINITIONS:**

**Median:** Middle value in the list of observations.

**Mean:** Sum of all the observations of a variable, divided by the number of observations.

**Maximum:** The largest observation of a given variable.

**Table 1.6a: Number of calls and time differences – REMSA arrived first**

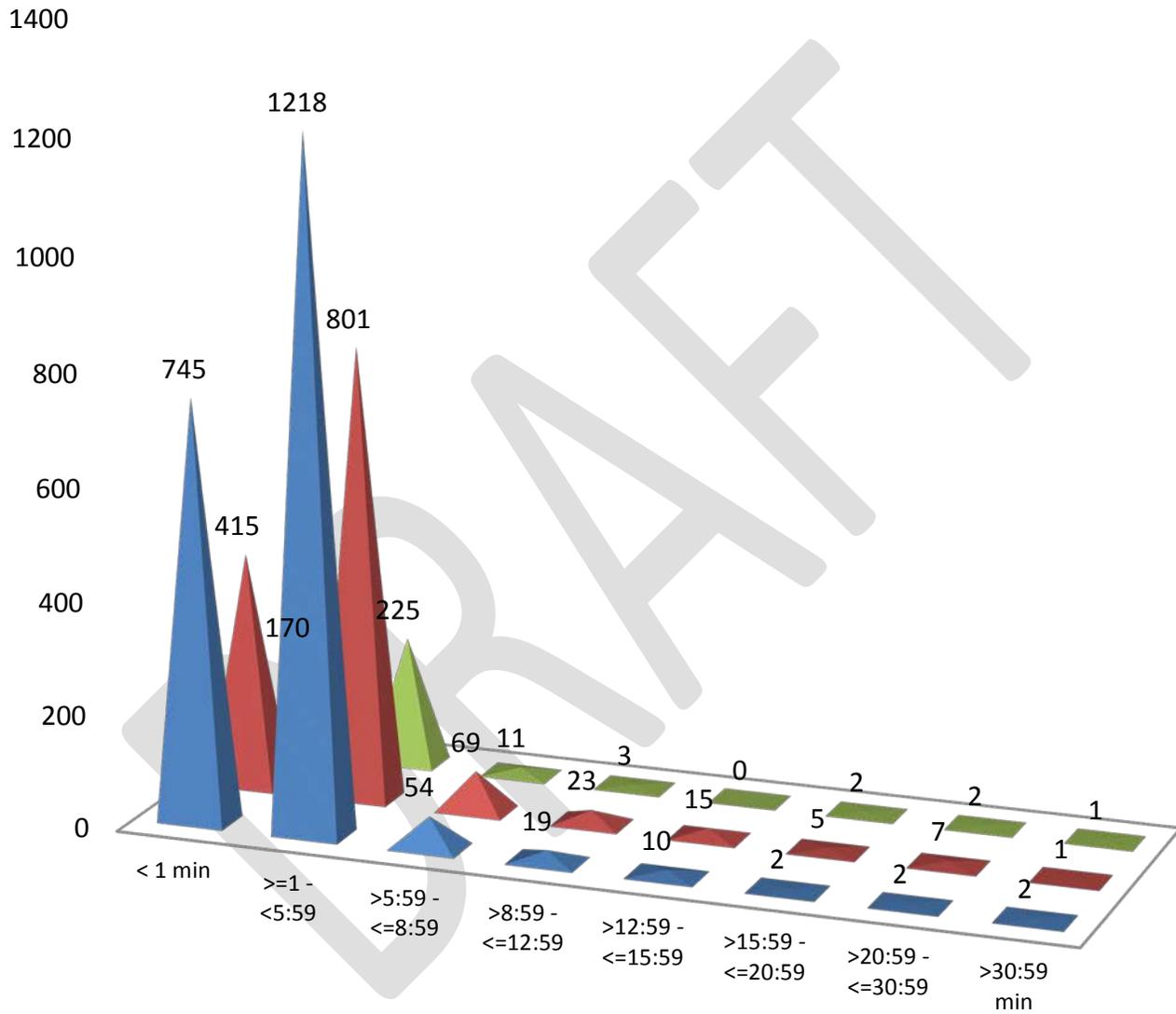
Time interval between REMSA and Fire									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
<b>1</b>	745	1218	54	19	10	2	2	2	2052
<b>2</b>	415	801	69	23	15	5	7	1	1336
<b>3</b>	170	225	11	3	0	2	2	1	414
<b>Total</b>	1330	2244	134	45	25	9	11	4	3802

Day (6am-6pm)									
Time interval between REMSA and Fire									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
<b>1</b>	412	679	33	13	7	0	1	1	1146
<b>2</b>	226	449	48	15	9	2	4	1	754
<b>3</b>	92	104	6	3	0	1	1	0	207
<b>Total</b>	730	1232	87	31	16	3	6	2	2107

Night (6pm-6am)									
Time interval between REMSA and Fire									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
<b>1</b>	333	539	21	6	3	2	1	1	906
<b>2</b>	189	352	21	8	6	3	3	0	582
<b>3</b>	78	121	5	0	0	1	1	1	207
<b>Total</b>	600	1012	47	14	9	6	5	2	1695

This table utilizes the same information from Table 1.6 but indicates the number of calls that were within the identified time frame. The table corresponds with calls when REMSA is arriving first on-scene.

## Number of Calls and Time Differences-REMSA Arrived First



■ Priority 1 ■ Priority 2 ■ Priority 3

**Table 1.7: Time differences between arrival times – fire arrives before REMSA**

Priority Number	Fire First		
	Median	Mean	Max
1	0:01:54	0:02:39	0:27:39
2	0:02:17	0:03:26	0:44:37
3	0:03:39	0:05:24	0:46:42
All	0:02:15	0:03:24	0:46:42

Day (6am-6pm)			
Priority Number	Median	Mean	Max
1	0:02:00	0:02:44	0:27:39
2	0:02:24	0:03:44	0:37:39
3	0:04:00	0:06:01	0:46:42
All	0:02:23	0:03:39	0:46:42

Night (6pm-6am)			
Priority Number	Median	Mean	Max
1	0:01:42	0:02:29	0:19:31
2	0:02:00	0:02:58	0:44:37
3	0:03:06	0:04:27	0:29:51
All	0:02:01	0:03:00	0:44:37

This table depicts the time difference (in minutes) for arrival at call destination, when fire arrives before REMSA.

**TERMS and DEFINITIONS:**

**Median:** Middle value in the list of observations.

**Mean:** Sum of all the observations of a variable, divided by the number of observations.

**Maximum:** The largest observation of a given variable.

**Table 1.7a: Number of calls and time differences – fire arrived first**

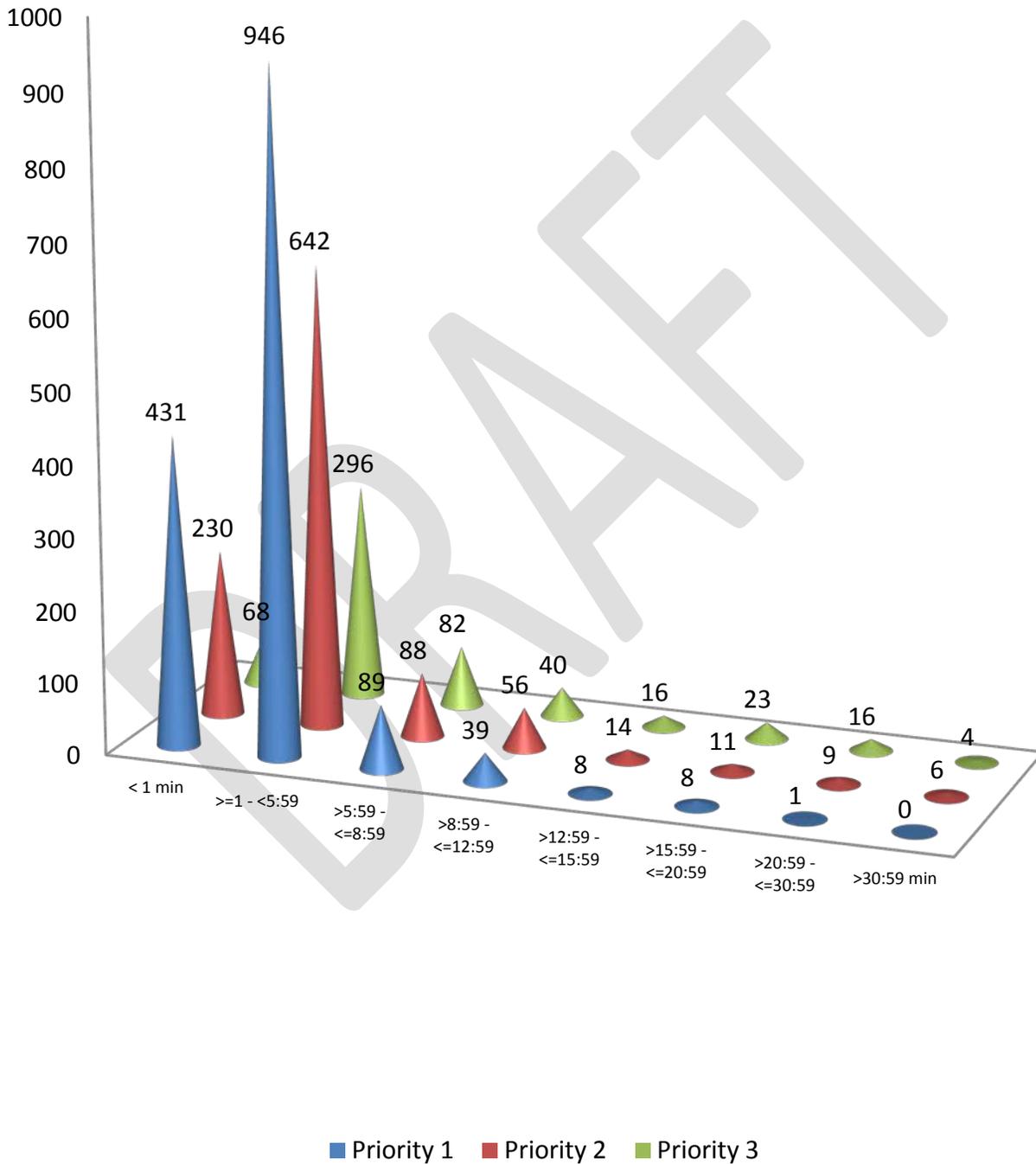
Time interval between Fire and REMSA									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
<b>1</b>	724	1472	136	60	14	11	1	0	2418
<b>2</b>	414	1049	130	86	16	13	11	7	1726
<b>3</b>	133	491	124	67	23	31	18	4	891
<b>Total</b>	1271	3012	390	213	53	55	30	11	5035

Day (6am-6pm)									
Time interval between Fire and REMSA									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
<b>1</b>	431	946	89	39	8	8	1	0	1522
<b>2</b>	230	642	88	56	14	11	9	6	1056
<b>3</b>	68	296	82	40	16	23	16	4	545
<b>Total</b>	729	1884	259	135	38	42	26	10	3123

Night (6pm-6am)									
Time interval between Fire and REMSA									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
<b>1</b>	293	526	47	21	6	3	0	0	896
<b>2</b>	184	407	42	30	2	2	2	1	670
<b>3</b>	65	195	42	27	7	8	2	0	346
<b>Total</b>	542	1128	131	78	15	13	4	1	1912

This table utilizes the same information from Table 1.7, but indicates the number of calls that were within the identified time frame. The above table corresponds to calls when fire agencies are arriving first on-scene.

## Number of Calls and Time Differences-Fire Arrived First



# **JURISDICTION SPECIFIC DATA ANALYSIS**

DRAFT

# City of Sparks

## SUMMARY:

In Quarter 3 (Q3), City of Sparks matched 2,135 medical calls for service, which was 98.8% of the EMS calls for Sparks Fire Department, however used 1,944 (89.8%) of calls for analysis. The data indicates a fire response arriving prior to REMSA an overall 60.5% of the time. As discussed in the regional summary, the difference between day and night is reflective of the regional trends and is not shown in the charts below.

The EMS Program utilized both variables “Alarm time” and “Dispatch time” to examine how fire may be impacted by a potential error during the dispatch process. Q3 aligns with the percentages from Q2 indicating fire is alarmed 59.2% of the time before a REMSA ambulance is assigned, however is only being dispatched 41.7% of the time prior to a REMSA ambulance being assigned. The potential impacts on the system are demonstrated in Tables 2.7-2.11.

The median overall response time for the City of Sparks for REMSA was 6:14 minutes (Table 2.3 for priority breakdown). The overall median response time for SFD was 5:20 minutes (Table 2.4 for priority breakdown). When looking from a citizen perspective a few observations can be made relating to the treatment and a potential transport to a hospital for advanced care. For all calls for services within City of Sparks, REMSA was late 5.7% of the time, past the denoted franchise response time. When SFD arrived to a call first, REMSA was late 9.3% of the time beyond the denoted franchise response time.

An additional analysis was included for Q3 to demonstrate how a patient’s wait time is impacted when fire is dispatched second. Table 2.7 utilizes the earliest time stamp in the system to denote when a call is known about and shows how long a patient waits for the first arriving unit, fire or REMSA. In Sparks, the patient’s median wait time increases by 0:40 seconds when fire is not being dispatched first.

The second set of analyses explores only those calls when SFD is dispatched second, which occurred 58.3% of the time during Q3. SFD arrives first 52.2% of the time and 16.8% of the calls are delayed by over 1 minute; disproportionately impacting P2 calls (Table 2.11).

## STATISTICAL INFORMATION:

**Table 2: Typical call response using median time for each time stamp. The initial call (IC) time was calculated using either REMSA call pick up time or Fire 9-1-1 time, depending on which was first.**

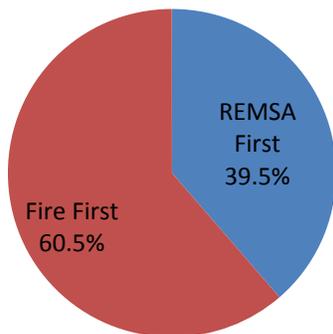
REMSA Priority	Median Time from Initial Call (IC) to Dispatch and On Scene			
	IC to REMSA Dispatch	IC to Fire Dispatch	IC to Fire Arrival	IC to REMSA Arrival
<b>1</b>	00:27	00:34	05:50	06:24
<b>2</b>	00:26	00:35	06:22	06:44
<b>3</b>	00:29	00:39	06:46	08:24
<b>All</b>	00:27	00:35	06:10	06:50

For all calls the median time from the initial call to REMSA dispatch (clock start) is 00:27 seconds, for SFD Dispatch is 00:35 seconds, SFD arrives 06:10 minutes after the initial call and REMSA arrives 06:50 after the initial call.

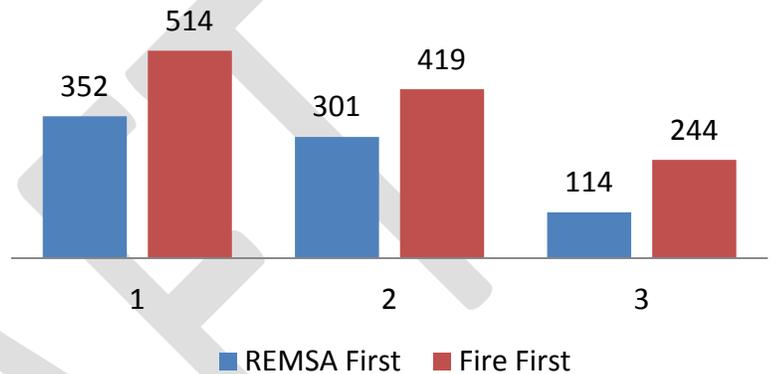
**Table 2.1 Jurisdictional information that indicates the first responding unit on scene.**

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
<b>REMSA First</b>	352	40.6%	301	41.8%	114	31.8%	767	39.5%
<b>Fire First</b>	514	59.4%	419	58.2%	244	68.2%	1177	60.5%
<b>Total</b>	866	100.0%	720	100.0%	358	100.0%	1944	100.0%

**REMSA and Sparks Fire Total Percentage**



**REMSA and SFD Total Number of Calls by Priority**



**Table 2.2 The frequency fire is alarmed prior to REMSA dispatching an ambulance.**

Fire Alarm First	#	%
No	793	40.8%
Yes	1151	59.2%

**Table 2.2a The frequency fire dispatches a unit prior to REMSA dispatches an ambulance.**

Fire Dispatch First	#	%
No	1134	58.3%
Yes	810	41.7%

**Table 2.3: Clock Start – clock stop difference for REMSA**

Priority Number	Median	Mean	Max
1	0:05:54	0:06:10	0:17:51
2	0:06:07	0:06:37	0:29:11
3	0:07:56	0:09:13	0:52:45
All	0:06:14	0:06:54	0:52:45

Day (6am-6pm)			
Priority Number	Median	Mean	Max
1	0:05:52	0:06:11	0:17:51
2	0:06:13	0:06:51	0:29:11
3	0:08:37	0:09:59	0:52:45
All	0:06:21	0:07:07	0:52:45

Night (6pm-6am)			
Priority Number	Median	Mean	Max
1	0:05:57	0:06:09	0:16:53
2	0:05:56	0:06:17	0:21:17
3	0:07:00	0:08:05	0:27:51
All	0:06:07	0:06:34	0:27:51

This table depicts the difference between the clock start time and the clock stop time for all REMSA calls within the City of Sparks.

**Table 2.4: Dispatch time – on scene difference for Sparks Fire Department**

Priority Number	Median	Mean	Max
1	0:05:03	0:05:17	0:20:23
2	0:05:29	0:05:37	0:19:08
3	0:05:54	0:06:09	0:14:57
All	0:05:20	0:05:34	0:20:23

Day (6am-6pm)			
Priority Number	Median	Mean	Max
1	0:04:48	0:05:05	0:20:23
2	0:05:21	0:05:32	0:16:32
3	0:05:46	0:06:05	0:14:08
All	0:05:08	0:05:26	0:20:23

Night (6pm-6am)			
Priority Number	Median	Mean	Max
1	0:05:22	0:05:34	0:15:27
2	0:05:40	0:05:45	0:19:08
3	0:06:07	0:06:14	0:14:57
All	0:05:36	0:05:45	0:19:08

This table depicts the difference between dispatch time and on-scene time for the Sparks Fire Department (SFD).

**Table 2.5 Time difference between arrivals, REMSA first**

Priority Number	REMSA First		
	Median	Mean	Max
1	0:01:06	0:01:47	0:15:53
2	0:01:45	0:02:26	0:18:44
3	0:01:21	0:01:55	0:12:25
All	0:01:24	0:02:04	0:18:44

Time interval between REMSA and Fire							
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	Total
1	162	175	8	3	4	0	352
2	82	196	16	4	1	2	301
3	48	63	2	1	0	0	114
Total	292	434	26	8	5	2	767

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

**Table 2.6 Time difference between arrivals, SFD first**

Priority Number	Fire First		
	Median	Mean	Max
1	0:01:47	0:02:18	0:13:07
2	0:02:00	0:02:44	0:23:56
3	0:03:14	0:04:52	0:46:42
All	0:02:10	0:02:59	0:46:42

Time interval between Fire and REMSA									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
1	151	342	14	6	1	0	0	0	514
2	118	258	24	13	4	1	1	0	419
3	43	138	32	13	6	5	6	1	244
Total	312	738	70	32	11	6	7	1	1177

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when SFD arrives first.

**Table 2.7: The table below shows how long a patient is waiting from the initial call to the first arriving unit on scene and how those median times are impacted when the Fire agency is not being dispatched first.**

REMSA Priority	Median Response Time: Initial call to first unit on scene		
	Patient's Perspective	Fire Dispatched First	Fire Dispatched Second
<b>1</b>	5:15	4:57	5:35
<b>2</b>	5:29	5:03	5:44
<b>3</b>	6:08	5:49	6:27
<b>All</b>	5:28	5:05	5:45

For all calls, the patient's median wait time increases by 0:40 seconds when fire is not being dispatched first.

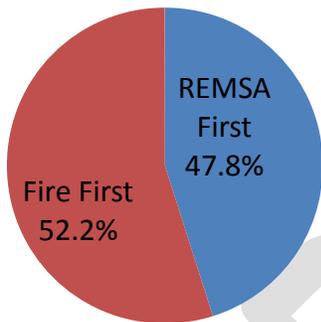
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**Statistical Information regarding calls when SFD is dispatched second. The number of calls relevant to this analysis is 1,134 (58.3% of all calls) for Q3.**

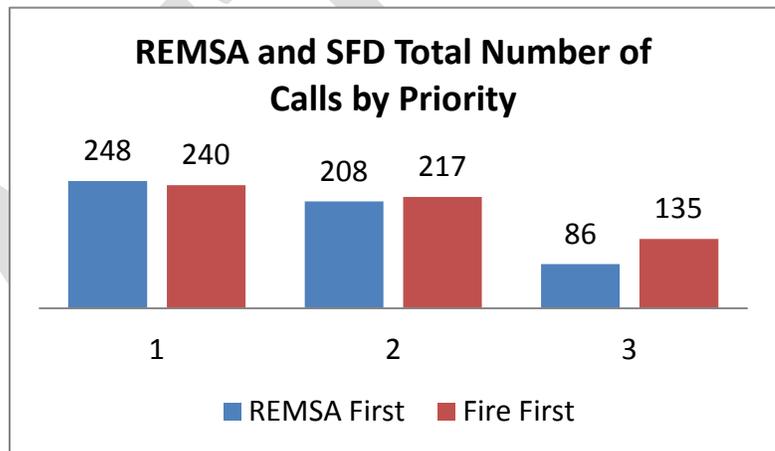
**Table 2.8: Jurisdictional information that indicates the first responding unit on scene, when SFD is dispatched second.**

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	248	50.8%	208	48.9%	86	38.9%	542	47.8%
Fire First	240	49.2%	217	51.1%	135	61.1%	592	52.2%
<b>Total</b>	<b>488</b>	<b>100.0%</b>	<b>425</b>	<b>100.0%</b>	<b>221</b>	<b>100.0%</b>	<b>1134</b>	<b>100.0%</b>

**REMSA and Sparks Fire Response Percentage**

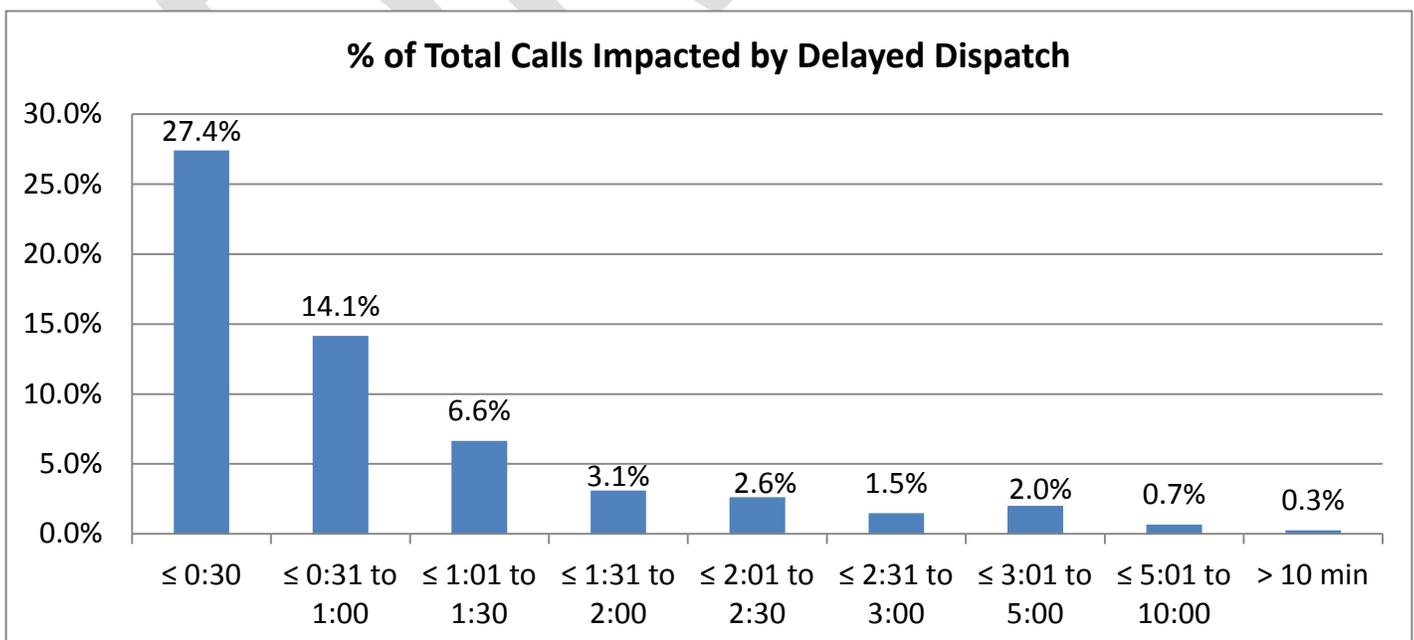


**REMSA and SFD Total Number of Calls by Priority**



**Table 2.9 Percentage of calls between REMSA dispatching and SFD dispatching to an EMS call**

**% of Total Calls Impacted by Delayed Dispatch**



**Table 2.9a Call volume breakdown by minutes/seconds for calls when SFD is dispatching second.**

<b>Time in Delay</b>	<b># of Calls</b>
≤ 0:30 seconds	533
≤ 0:31 to 1:00	275
≤ 1:01 to 1:30	129
≤ 1:31 to 2:00	60
≤ 2:01 to 2:30	51
≤ 2:31 to 3:00	29
≤ 3:01 to 5:00	39
≤ 5:01 to 10:00	13
> 10 minutes	5

Total number of calls with a dispatch delay over 1 minute was 326, which represents 16.8% of all matched calls for service.

**Table 2.10 Priority breakdown for all matched calls, calls which were impacted by delayed dispatch, and calls with a delayed dispatch over 1 minute.**

<b>REMSA Priority</b>	<b>All Matched Calls</b>	<b>Delayed Dispatch Calls</b>	<b>Delayed Dispatch &gt;1 minute</b>
<i>Priority 1</i>	866 (44.5%)	488 (43.0%)	123 (37.7%)
<i>Priority 2</i>	720 (37.0%)	425 (37.5%)	156 (47.8%)
<i>Priority 3</i>	358 (18.4%)	221 (19.5%)	47 (14.4%)
<b>Total Calls</b>	1,944	1,134	326

The above table indicates almost half (44.5%) of all matched calls were P1, 37.0% were P2 and 18.4% were P3 for SFD. Calls with delayed dispatch problems were similar in nature, however proportionately fewer P1 and P3 calls and more P2 calls are being impacted by a dispatch delay over 1 minute.

# City of Reno

## SUMMARY:

In Quarter 3 (Q3), City of Reno matched 5,726 medical calls for service, which was 98.0% of the EMS calls for Reno Fire Department, however used 5,516 (94.4%) of calls for analysis.

The data indicates a fire response arriving prior to REMSA an overall 52.0% of the time. As discussed in the regional summary, the difference between day and night is reflective of the regional trends and is not shown in the charts below.

RFD is only being dispatched 67.6% of the time prior to a REMSA ambulance being assigned. The potential impacts on the system are demonstrated in Tables 3.7-3.11.

The median overall response time for the City of Reno for REMSA was 5:29 minutes (Table 2.3 for priority breakdown). The overall median response time for RFD was 5:20 minutes (Table 2.4 for priority breakdown). When looking from a citizen perspective a few observations can be made relating to the treatment and a potential transport to a hospital for advanced care. For all calls for services within City of Reno, REMSA was late 5.0% of the time, past the denoted franchise response time. When RFD arrived to a call first, REMSA was late 8.7% of the time beyond the denoted franchise response time.

An additional analysis was included for Q3 to demonstrate how a patient's wait time is impacted when fire is dispatched second. The second set of analyses explores only those calls when RFD is dispatched second, which occurred 32.4% of the time during Q3. RFD arrives first 42.0% of the time and 11.8% of the delayed dispatch calls are delayed over 1 minute, disproportionately impacting P2 calls (Table 3.11).

## STATISTICAL INFORMATION:

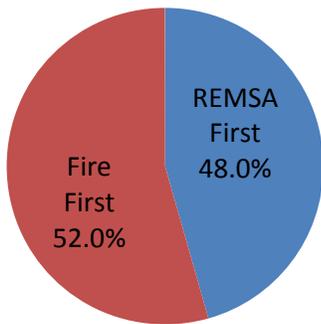
**Table 3: Typical call response using median time for each time stamp. The initial call (IC) time was calculated using either REMSA call pick up time or Fire 9-1-1 time, depending on which was first.**

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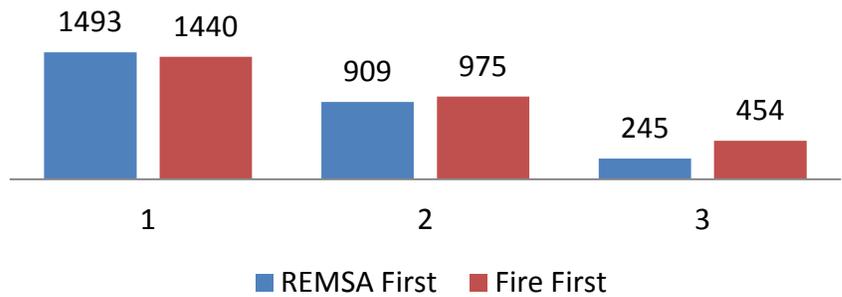
**Table 3.1: Jurisdictional information that indicates the first responding unit on scene**

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	1493	50.9%	909	48.2%	245	35.1%	2647	48.0%
Fire First	1440	49.1%	975	51.8%	454	64.9%	2869	52.0%
<b>Total</b>	<b>2933</b>	<b>100.0%</b>	<b>1884</b>	<b>100.0%</b>	<b>699</b>	<b>100.0%</b>	<b>5516</b>	<b>100.0%</b>

**REMSA and Reno Fire Total Percentage**



**REMSA and RFD Total Number of Calls by Priority**



**Table 3.2: The frequency fire dispatches a unit prior to REMSA dispatches an ambulance.**

Unable to calculate due to missing data

**Table 3.2a: The frequency fire dispatches a unit prior to REMSA dispatches an ambulance.**

Fire Dispatch First	#	%
No	1788	32.4%
Yes	3728	67.6%

**Table 3.3: Clock start – clock stop difference for REMSA**

Priority Number	Median	Mean	Max
1	0:05:08	0:05:29	0:23:45
2	0:05:33	0:06:01	0:46:34
3	0:07:22	0:08:17	0:57:44
All	0:05:29	0:06:01	0:57:44

Day (6am-6pm)			
Priority Number	Median	Mean	Max
1	0:05:12	0:05:34	0:23:45
2	0:05:41	0:06:19	0:46:34
3	0:07:28	0:08:44	0:57:44
All	0:05:34	0:06:13	0:57:44

Night (6pm-6am)			
Priority Number	Median	Mean	Max
1	0:05:04	0:05:21	0:18:00
2	0:05:21	0:05:35	0:23:47
3	0:07:10	0:07:41	0:26:43
All	0:05:21	0:05:44	0:26:43

This table depicts the difference between the clock start time and the clock stop time for all REMSA calls within the City of Reno.

**Table 3.4: Dispatch time – on-scene difference for Reno Fire Department**

Priority Number	Median	Mean	Max
1	0:05:17	0:05:33	0:33:09
2	0:05:19	0:05:41	0:20:05
3	0:05:40	0:05:57	0:16:47
All	0:05:20	0:05:39	0:33:09

Day (6am-6pm)			
Priority Number	Median	Mean	Max
1	0:05:09	0:05:25	0:19:56
2	0:05:19	0:05:41	0:20:05
3	0:05:29	0:05:50	0:16:28
All	0:05:14	0:05:33	0:20:05

Night (6pm-6am)			
Priority Number	Median	Mean	Max
1	0:05:26	0:05:45	0:33:09
2	0:05:20	0:05:42	0:19:27
3	0:05:48	0:06:06	0:16:47
All	0:05:27	0:05:46	0:33:09

This table depicts the difference between dispatch time and on-scene time for the Reno Fire Department (RFD).

**Table 3.5 Time difference between arrivals, REMSA first**

Priority Number	REMSA First		
	Median	Mean	Max
1	0:01:30	0:02:04	0:37:26
2	0:01:42	0:02:28	0:28:49
3	0:01:16	0:02:18	0:42:07
All	0:01:33	0:02:13	0:42:07

This table depicts the time difference (in minutes) for arrival at call destination, when REMSA arrives before the RFD.

Time interval between REMSA and Fire									
Priority	< 1 min	>=1 and <=5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
1	522	911	37	14	4	1	2	2	1493
2	298	539	44	15	9	2	2	0	909
3	105	127	6	2	0	2	2	1	245
<b>Total</b>	925	1577	87	31	13	5	6	3	2647

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

**Table 3.6 Time difference between arrivals, RFD first**

Priority Number	Fire First		
	Median	Mean	Max
1	0:01:32	0:02:04	0:27:39
2	0:01:58	0:02:58	0:44:37
3	0:03:09	0:04:34	0:43:36
All	0:01:53	0:02:46	0:44:37

This table depicts the time difference (in minutes) for arrival at call destination, when RFD arrives before the REMSA.

Time interval between Fire and REMSA									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
1	518	854	52	10	3	2	1	0	1440
2	255	618	53	30	8	2	4	5	975
3	78	270	53	29	9	9	4	2	454
<b>Total</b>	851	1742	158	69	20	13	9	7	2869

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when RFD arrives first.

Table 3.7: The table below shows how long a patient is waiting from the initial call to the first arriving unit on scene and how those median times are impacted when the Fire agency is not being dispatched first.

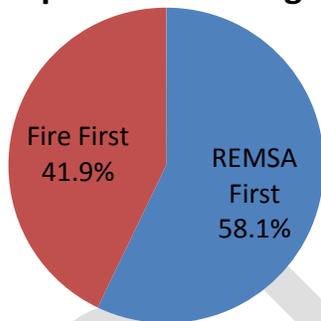
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**Statistical Information regarding calls when RFD is dispatched second. The number of calls relevant to this analysis is 1,788 (which are 32.4% of all calls) for Q3.**

Table 3.8: Jurisdictional information that indicates the first responding unit on scene

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	538	60.0%	402	61.6%	98	41.2%	1038	58.1%
Fire First	359	40.0%	251	38.4%	140	58.8%	750	41.9%
<b>Total</b>	<b>897</b>	<b>100.0%</b>	<b>653</b>	<b>100.0%</b>	<b>238</b>	<b>100.0%</b>	<b>1788</b>	<b>100.0%</b>

REMSA and Reno Fire Response Percentage



REMSA and RFD Total Number of Calls by Priority

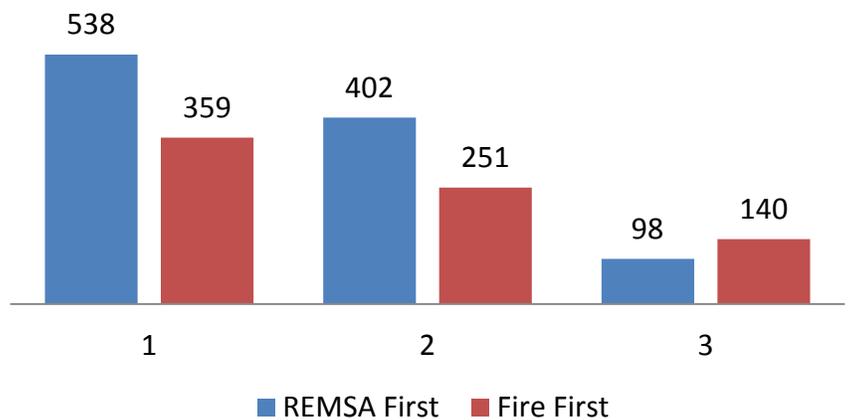
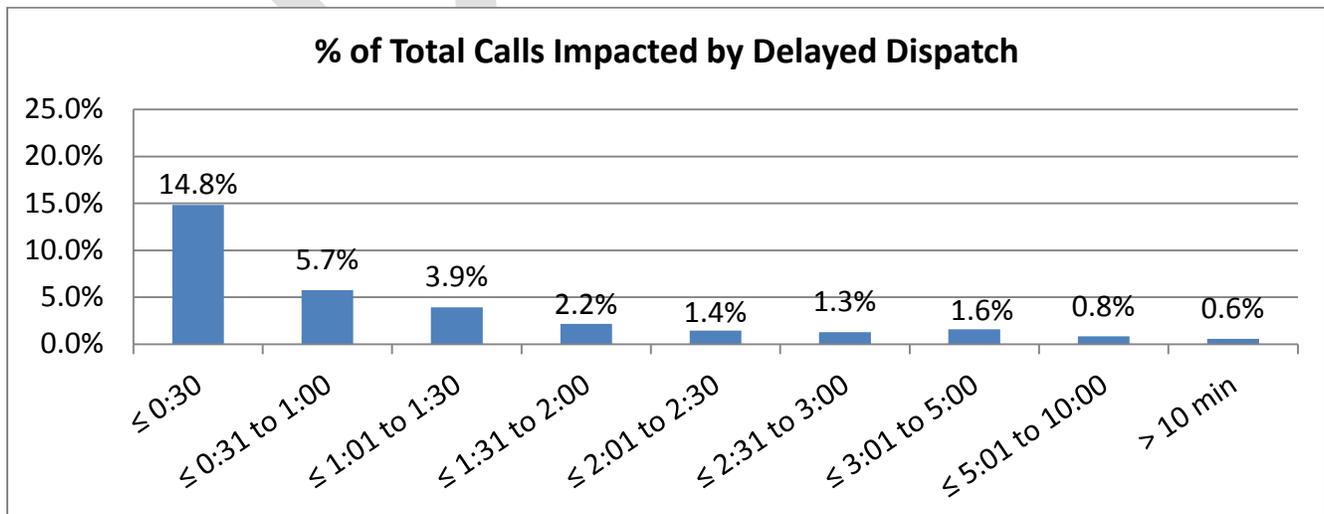


Table 3.9 Frequency of minutes/seconds between REMSA dispatching and RFD dispatching to an EMS call



**Table 3.9a Call volume breakdown by minutes/seconds:**

<b>Time in Delay</b>	<b># of Calls</b>
≤ 0:30	818
≤ 0:31 to 1:00	317
≤ 1:01 to 1:30	217
≤ 1:31 to 2:00	120
≤ 2:01 to 2:30	79
≤ 2:31 to 3:00	71
≤ 3:01 to 5:00	88
≤ 5:01 to 10:00	46
> 10 min	32

Total number of calls with a dispatch delay over 1 minute was 653, which represents 11.8% of all matched calls for service.

**Table 3.10 Priority breakdown for all matched calls, calls which were impacted by delayed dispatch, and calls with a delayed dispatch over 1 minute.**

<b>REMSA Priority</b>	<b>All Matched Calls</b>	<b>Delayed Dispatch Calls</b>	<b>Delayed Dispatch &gt;1 minute</b>
<i>Priority 1</i>	2,933 (53.2%)	897 (50.2%)	301 (46.1%)
<i>Priority 2</i>	1,884 (34.1%)	653 (36.5%)	279 (42.7%)
<i>Priority 3</i>	699 (12.7%)	238 (12.7%)	73 (11.2%)
<b>Total Calls</b>	5,516	1,788	653

The above table indicates over half (53.2%) of all matched calls were P1, 34.1% were P2 and 12.7% were P3 for RFD. Calls with delayed dispatch problems were similar in nature, however proportionately fewer P1 and P3 calls and more P2 calls are being impacted by a dispatch delay over 1 minute.

# Unincorporated Washoe County

## SUMMARY:

In Quarter 3 (Q3), Truckee Meadows Fire Protection District matched 1,628 medical calls for service, which was 92.3% of the EMS calls for TMFPD, however used 1,377 (78.1%) of calls for analysis.

The data indicates a fire response arriving prior to REMSA an overall 71.8% of the time. As discussed in the regional summary, the difference between day and night is reflective of the regional trends and is not shown in the charts below.

The EMS Program utilized both variables “Alarm time” and “Dispatch time” to examine how the fire may be impacted by a potential error during the dispatch process. Q3 aligns with the percentages from Quarter 2 (Q2) indicating fire is alarmed 89.4% of the time before a REMSA ambulance is dispatched, however is only being dispatched 69.0% of the time prior to a REMSA ambulance. The potential impacts on the system are demonstrated in Tables 4.7-4.11.

The median overall response time for the unincorporated Washoe County for REMSA was 9:18 minutes (Table 4.3 for priority breakdown). The overall median response time for TMFPD was 6:13 minutes (Table 4.4 for priority breakdown). When looking from a citizen perspective a few observations can be made relating to the treatment and a potential transport to a hospital for advanced care. For all calls for services within unincorporated Washoe County, REMSA was late 9.1% of the time, past the denoted franchise response time. When TMFPD arrived to a call first, REMSA was late 10.7% of the time beyond the denoted franchise response time. The similarities between these two percentages are indicative to what the region would expect in a two-tier system. The expectation is that fire, as the first tier, would be aware of the call and arrive to the call first. This would imply that a late percentage should not fluctuate significantly between all calls and only those when a fire agency arrives on scene first.

An additional analysis was included for Q3 to demonstrate how a patient’s wait time is impacted when fire is dispatched second. Table 2.7 utilizes the earliest time stamp in the system to denote when a call is known about and shows how long a patient waits for the first arriving unit, fire or REMSA. In unincorporated Washoe County, the patient’s median wait time increases by 1:12 minutes when fire is not being dispatched first.

The second set of analyses explores only those calls when TMFPD is dispatched second, which occurred 31.0% of the time during Q3. TMFPD arrives first 61.1% of the time and 13.3% of the delayed dispatch calls are delayed over 1 minute, disproportionately impacting P2 and P3 calls (Table 4.11).

Due to the widespread jurisdictional nature of TMFPD, response times should be interpreted with the understanding that response to calls are in the rural and frontier areas of Washoe County.

**STATISTICAL INFORMATION:**

**Table 4: Call response using median time for each time stamp. The initial call (IC) time was calculated using either REMSA call pick up time or Fire Alarm time, depending on which was first.**

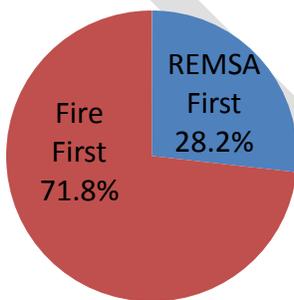
REMSA Priority	Median Time from Initial Call (IC) to Dispatch and On Scene			
	IC to Fire Dispatch	IC to REMSA Dispatch	IC to Fire Arrival	IC to REMSA Arrival
1	00:07	00:28	06:33	09:13
2	00:04	00:30	07:03	09:59
3	00:11	00:26	07:10	11:58
All	00:07	00:28	06:54	09:49

For all calls the median time from the initial call to TMFPD dispatch is 00:07 seconds, for REMSA Dispatch (clock start) is 00:28 seconds, TMFPD arrives 06:54 minutes after the initial call and REMSA arrives 09:49 minutes after the initial call.

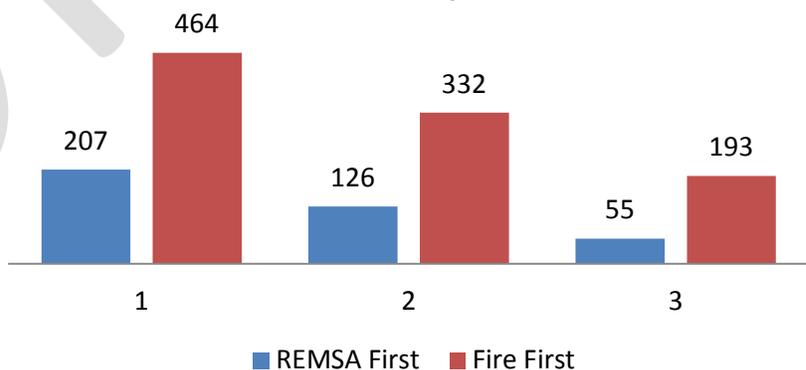
**Table 4.1: Jurisdictional information that indicates the first responding unit on scene**

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	207	30.8%	126	27.5%	55	22.2%	388	28.2%
Fire First	464	69.2%	332	72.5%	193	77.8%	989	71.8%
Total	671	100.0%	458	100.0%	248	100.0%	1377	100.0%

**REMSA and TMFPD Fire Total Percentage**



**REMSA and TMFPD Total Number of Calls by Priority**



**Table 4.2: The frequency fire is alarmed prior to REMSA dispatching an ambulance.**

Fire Alarm First	#	%
No	146	10.6%
Yes	1231	89.4%

**Table 4.2a: The frequency fire dispatches a unit prior to REMSA dispatching an ambulance.**

Fire Dispatch First	#	%
No	427	31.0%
Yes	950	69.0%

**Table 4.3 Clock start – clock stop difference for REMSA**

Priority Number	Median	Mean	Max
1	0:08:40	0:09:22	0:37:12
2	0:09:23	0:10:20	1:03:57
3	0:11:21	0:13:30	0:49:24
All	0:09:18	0:10:26	1:03:57

Day (6am-6pm)			
Priority Number	Median	Mean	Max
1	0:08:36	0:09:11	0:32:57
2	0:09:16	0:10:38	1:03:57
3	0:12:20	0:14:55	0:49:24
All	0:09:20	0:10:40	1:03:57

Night (6pm-6am)			
Priority Number	Median	Mean	Max
1	0:08:41	0:09:40	0:37:12
2	0:09:28	0:09:52	0:32:21
3	0:10:24	0:11:33	0:36:14
All	0:09:17	0:10:05	0:37:12

This table depicts the difference between the clock start time and the clock stop time for all REMSA calls within TMFPD.

**Table 4.4 Dispatch time – on-scene difference for TMFPD**

Priority Number	Median	Mean	Max
1	0:06:02	0:06:54	0:42:18
2	0:06:19	0:07:35	0:56:47
3	0:06:39	0:07:16	0:38:21
All	0:06:13	0:07:12	0:56:47

Day (6am-6pm)			
Priority Number	Median	Mean	Max
1	0:05:46	0:06:37	0:30:00
2	0:05:57	0:07:29	0:56:47
3	0:06:30	0:07:16	0:38:21
All	0:05:56	0:07:01	0:56:47

Night (6pm-6am)			
Priority Number	Median	Mean	Max
1	0:06:28	0:07:20	0:42:18
2	0:06:50	0:07:45	0:36:13
3	0:06:50	0:07:15	0:24:42
All	0:06:40	0:07:27	0:42:18

This table depicts the difference between dispatch time and on-scene time for the TMFPD.

**Table 4.5 Time difference between arrivals, REMSA first**

Priority Number	REMSA First		
	Median	Mean	Max
1	0:01:57	0:02:32	0:20:58
2	0:02:40	0:04:47	0:41:51
3	0:01:52	0:02:09	0:08:27
All	0:02:07	0:03:12	0:41:51

This table depicts the time difference (in minutes) for arrival at call destination, when REMSA arrives before the TMFPD.

Time interval between REMSA and Fire									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
1	61	132	9	2	2	1	0	0	207
2	35	66	9	4	5	1	5	1	126
3	17	35	3	0	0	0	0	0	55
Total	113	233	21	6	7	2	5	1	388

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

**Table 4.6 Time difference between arrivals, TMFPD first**

Priority Number	Fire First		
	Median	Mean	Max
1	0:04:08	0:04:51	0:20:40
2	0:04:31	0:05:38	0:36:24
3	0:06:08	0:08:03	0:41:06
All	0:04:35	0:05:44	0:41:06

This table depicts the time difference (in minutes) for arrival at call destination, when TMFPD arrives before the REMSA.

Time interval between Fire and REMSA									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
1	55	276	70	44	10	9	0	0	464
2	41	173	53	43	4	10	6	2	332
3	12	83	39	25	8	17	8	1	193
Total	108	532	162	112	22	36	14	3	989

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when TMFPD arrives first.

**Table 4.7** The table below shows how long a patient is waiting from the initial call to the first arriving unit on scene and how those median times are impacted when the Fire agency is not being dispatched first.

REMSA Priority	Median Response Time: Initial call to first unit on scene		
	Patient's Perspective	Fire Dispatched First	Fire Dispatched Second
<b>1</b>	05:58	05:45	06:45
<b>2</b>	06:17	05:53	07:18
<b>3</b>	06:46	06:31	07:31
<b>All</b>	06:15	05:52	07:04

The patient's median wait time increases by 1:12 minutes when fire is not being dispatched first.

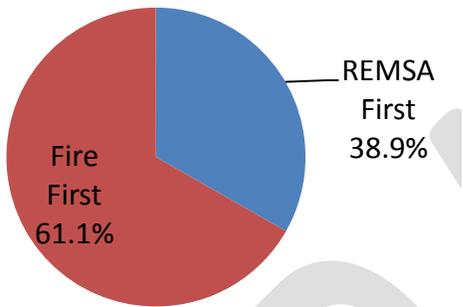
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**Statistical Information regarding calls when TMFPD is dispatched second. The number of calls relevant to this analysis is 427 (which are 31.0% of all calls) for Q3.**

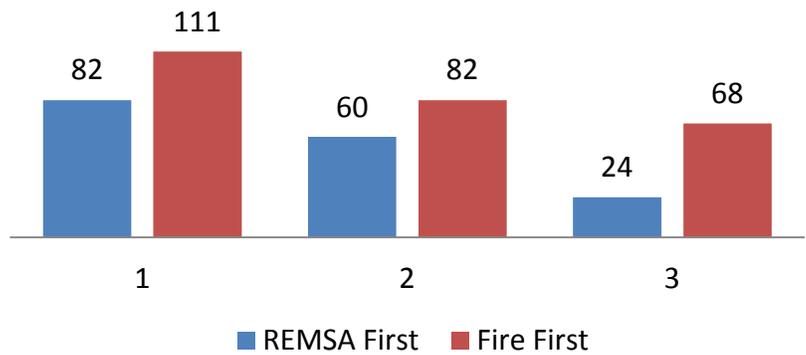
**Table 4.8 Jurisdictional information that indicates the first responding unit on scene**

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	82	42.5%	60	42.3%	24	26.1%	166	38.9%
Fire First	111	57.5%	82	57.7%	68	73.9%	261	61.1%
<b>Total</b>	<b>193</b>	<b>100.0%</b>	<b>142</b>	<b>100.0%</b>	<b>92</b>	<b>100.0%</b>	<b>427</b>	<b>100.0%</b>

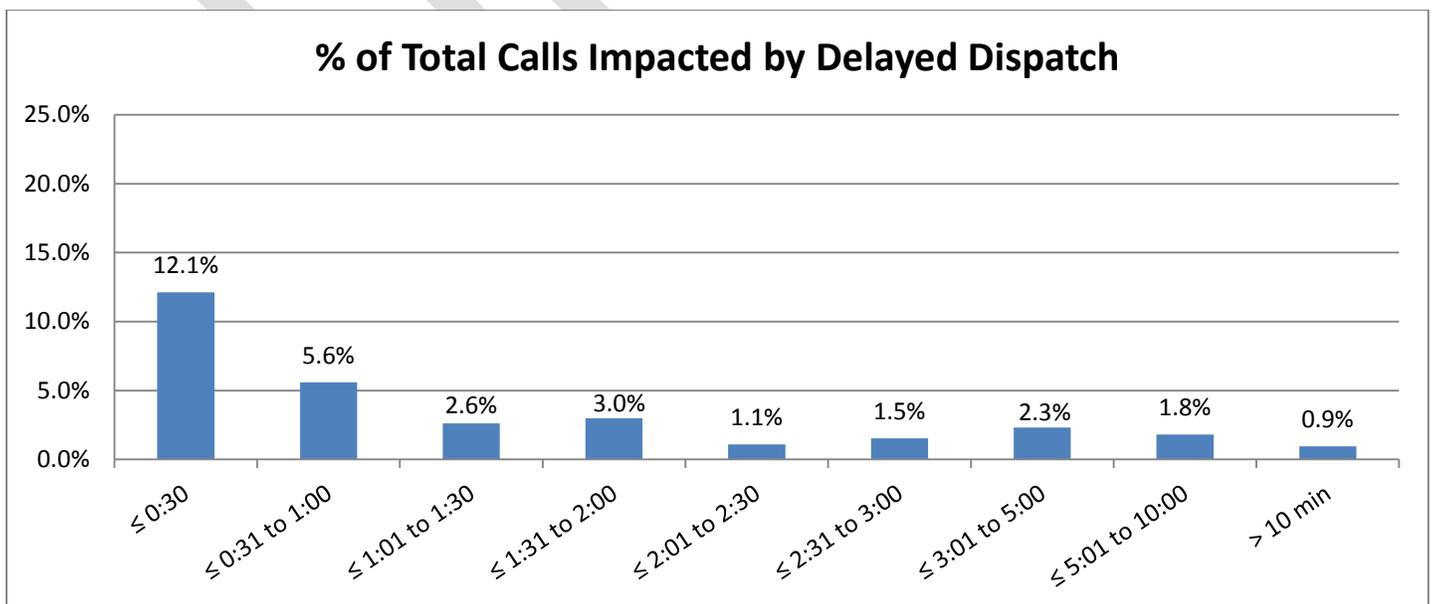
**REMSA and TMFPD Fire Response Percentage**



**REMSA and TMFPD Total Number of Calls by Priority**



**Table 4.9 Frequency of minutes/seconds between REMSA dispatching and TMFPD dispatching to an EMS call**



**Table 4.9a Call volume breakdown by minutes/seconds:**

Time of Delay	# of Calls
≤ 0:30	167
≤ 0:31 to 1:00	77
≤ 1:01 to 1:30	36
≤ 1:31 to 2:00	41
≤ 2:01 to 2:30	15
≤ 2:31 to 3:00	21
≤ 3:01 to 5:00	32
≤ 5:01 to 10:00	25
> 10 min	13

Total number of calls with a dispatch delay over 1 minute was 183, which represents 13.3% of all matched calls for service.

**Table 4.10 Priority breakdown for all matched calls, calls which were impacted by delayed dispatch, and calls with a delayed dispatch over 1 minute.**

REMSA Priority	All Matched Calls	Delayed Dispatch Calls	Delayed Dispatch >1 minute
<i>Priority 1</i>	671 (48.7%)	193 (45.2%)	64 (35.0%)
<i>Priority 2</i>	458 (33.3%)	142 (33.3%)	69 (37.7%)
<i>Priority 3</i>	248 (18.0%)	92 (21.5%)	50 (27.3%)
<b>Total Calls</b>	<b>1,377</b>	<b>427</b>	<b>183</b>

The above table indicates nearly half (48.7%) of all matched calls were P1, 33.3% were P2 and 18.0% were P3 for TMFPD. Calls with delayed dispatch problems were similar in nature, however proportionately fewer P1 calls and more P2 and P3 calls are being impacted by a dispatch delay over 1 minute.

## **Appendix A: Special Study Areas**

DRAFT

# REMSA

## **SUMMARY:**

The following two tables are summaries of REMSA's 14,515 total calls for service during Quarter 3. Only calls designated as a Priority 1, 2, or 3 are reported to the EMS Oversight program for the purposes of this data analysis.

The table below shows how many calls are classified in each of the priorities and what proportion of calls for each priority result in a transport of at least one patient.

REMSA Priority	Number of Calls	% of Calls	% Resulting in Transport*
P1	5,827	40.1%	71.4%
P2	5,663	39.0%	55.1%
P3	3,025	20.8%	67.6%
All Priorities	14,515	100.0%	64.2%

*\*represents the proportion of calls where at least one person was transported, not the number of people transported as a result of an incident*

The table below shows how many calls are located in each of the REMSA Franchise response zones (map pg. 4) and what proportion of calls for each zone result in a transport of at least one patient.

REMSA Response Zone	Number of Calls	% of Calls	% Resulting in Transport*
Zone A	13,310	91.7%	64.8%
Zone B	625	4.3%	58.1%
Zone C	372	2.6%	65.6%
Zone D	20	0.1%	70.0%
Zone E	188	1.3%	41.0%
All Zones	14,515	100.0%	64.2%

*\*represents the proportion of calls where at least one person was transported, not the number of people transported as a result of an incident*

## City of Sparks, Zone 5.1

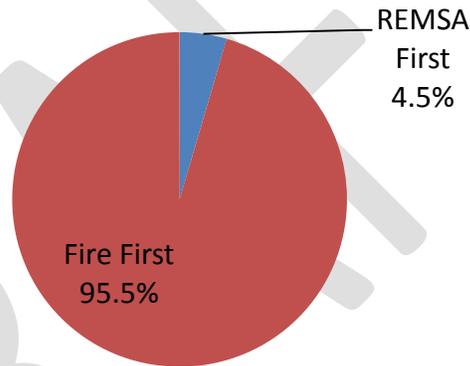
**SUMMARY:**

For Quarter 3, 22 calls for service were matched with REMSA for analysis. Fire arrived on scene first 95.5% of the time.

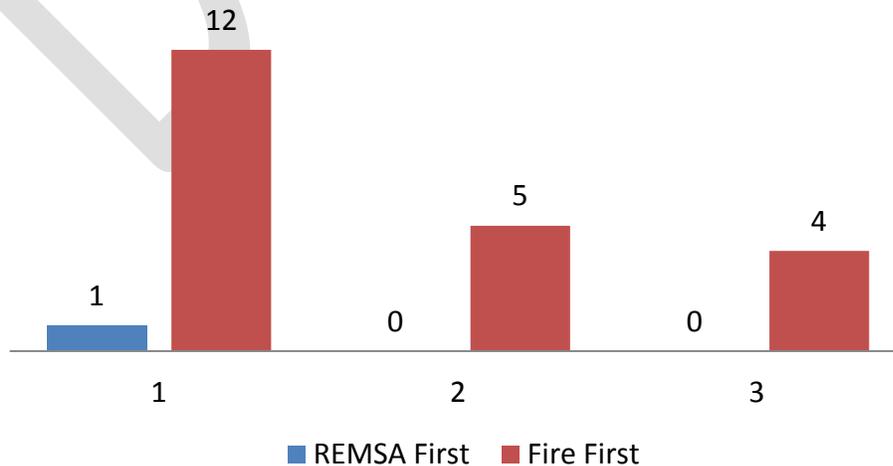
**Special study area response information that indicates the first responding unit on scene**

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	1	7.7%	0	0.0%	0	0.0%	1	4.5%
Fire First	12	92.3%	5	100.0%	4	100.0%	21	95.5%
<b>Total</b>	13	100.0%	5	100.0%	4	100.0%	22	100.0%

**REMSA & SFD Response Percentage**



**REMSA and SFD Total Number of Calls by Priority**



The frequency SFD is alarmed prior to REMSA dispatching an ambulance within the special study area.

Fire Alarm First	#	%
No	8	36.4%
Yes	14	63.6%

The frequency SFD dispatches a unit prior to REMSA dispatches an ambulance within the special study area.

Fire Dispatch First	#	%
No	13	59.1%
Yes	9	40.9%

**Clock start – clock stop difference for REMSA**

Priority Number	Median	Mean	Max
1	0:10:31	0:10:31	0:15:47
2	0:07:43	0:09:21	0:18:10
3	0:11:44	0:11:39	0:14:15
All	0:10:26	0:10:27	0:18:10

This table depicts the difference between the clock start time and the clock stop time for all REMSA calls within the special study area.

**Dispatch time – on-scene differences for SFD**

Priority Number	Median	Mean	Max
1	0:05:09	0:05:19	0:06:53
2	0:05:25	0:05:06	0:07:13
3	0:06:32	0:06:09	0:07:48
All	0:05:17	0:05:25	0:07:48

This table depicts the difference between Dispatch time and on-scene time for SFD within the special study area.

### Time differences between arrival times – REMSA arrived first

Priority Number	REMSA First		
	Median	Mean	Max
1	0:01:00	0:01:00	0:01:00
2	-	-	-
3	-	-	-
All	0:01:00	0:01:00	0:01:00

This table depicts the time difference (in minutes) for arrival at call destination, when REMSA arrives before the SFD.

### Number of calls and time differences – REMSA arrived first

Time interval between REMSA and Fire		
Priority	< 1 min	Total
1	1	1
2	0	0
3	0	0
Total	1	1

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

### Time differences between arrival times – SFD arrived first

Priority Number	Fire First		
	Median	Mean	Max
1	0:04:54	0:05:13	0:09:52
2	0:03:48	0:04:36	0:11:35
3	0:05:13	0:05:14	0:05:39
All	0:05:02	0:05:05	0:11:35

This table depicts the time difference (in minutes) for arrival at call destination, when SFD arrives before the REMSA.

### Number of calls and time differences – SFD arrived first

Time interval between Fire and REMSA					
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	Total
1	1	8	1	2	12
2	1	3	0	1	5
3	0	4	0	0	4
Total	2	15	1	3	21

This table utilizes the same information from above but corresponds with SFD arriving first on-scene within the special study area.

# Reno Fire Department

## Station by Station Response Times for Calls In and Out of District

**SUMMARY:**

The following maps depict median response times, per station, for when a station is responding to calls within the district versus when they respond to calls out of their district. Due to the lack of the variable “Alarm time” the EMS Program was not able to analyze data using the 8 minute NFPA 1710 standard. Instead we assumed the time between alarm and dispatch was 1 minute or less, which would allow the responding station a 7 minute time from dispatch to arriving on scene. Given this limitation we have shaded stations with response times of 7 minutes or less in green, while response times over 7 minutes were considered to be potentially over the NFPA 1710 standard of 8 minutes. The tables below provide each station’s median response time for all EMS calls which matched to REMSA calls for service for Quarter 3.

Station #7 had only 1 call for service, so was not included in either of the following maps.

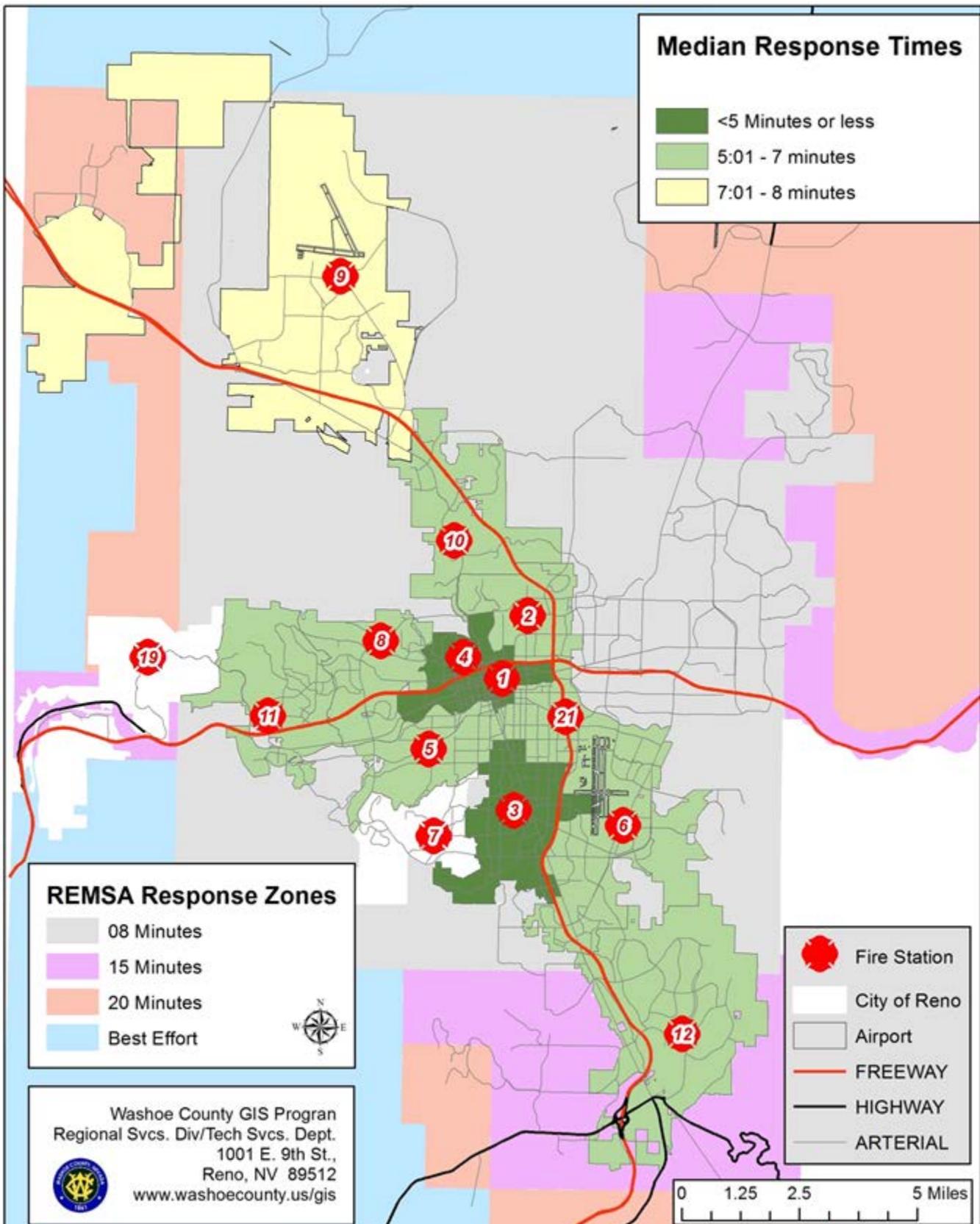
Station #9 had only 1 call out of district, so was not included in the Out of Station District map.

Station Number	Total Calls Per Station	% of Calls In District	# of Calls In District	In District Median Response Time	# of Calls Out of District	Out of District Median Response Time
1	1226	87.8%	1077	4:07	149	5:52
2	545	95.2%	519	5:23	26	6:21
3	945	91.3%	863	5:00	82	7:30
4	478	90.6%	433	4:46	45	6:11
5	241	78.8%	190	6:21	51	8:20
6	354	94.1%	333	5:48	21	8:50
8	383	96.1%	368	5:58	15	8:45
9	243	99.6%	242	7:23	1	-
10	205	89.8%	184	6:38	21	8:26
11	199	78.9%	157	5:50	42	10:36
12	216	95.8%	207	6:42	9	8:38
21	470	92.3%	434	5:16	36	6:31
<b>TOTAL</b>	5506*	91.0%	5008	5:49	498	8:20

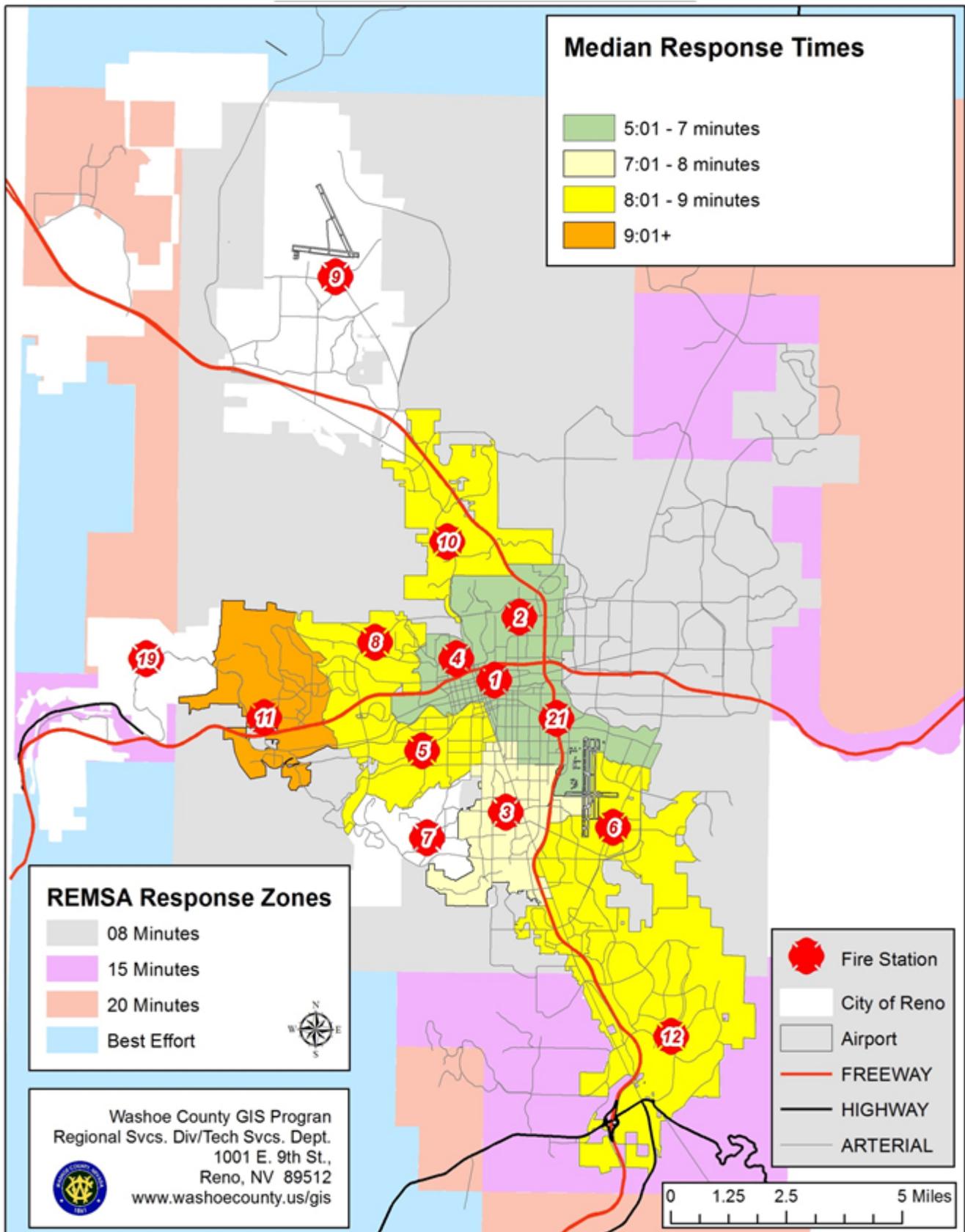
*\*7 calls were missing Incident District Number and not included in this analysis*

The majority of calls for service are within each station’s district (91.0%), ranging from 78.8% for Station #5 to 99.6% for Station #9. Median response times were shorter for each station when they respond to calls within the station’s respective district.

# Q3 RFD EMS Calls In District



# Q3 RFD EMS Calls Out of District



# Truckee Meadows Fire Protection District Stations 16 & 30 (South Washoe Valley)

**SUMMARY:**

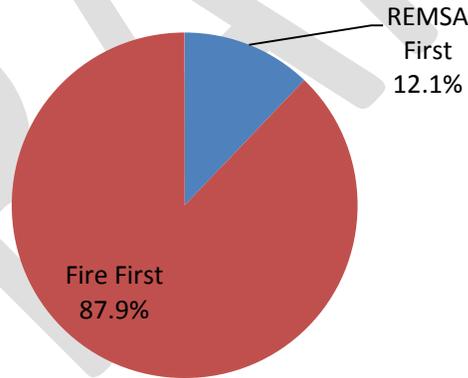
For Quarter 3 there were 66 calls for service which were matched with REMSA for analysis. Fire arrived on scene first 87.9% of the time.

**STATISTICAL INFORMATION:**

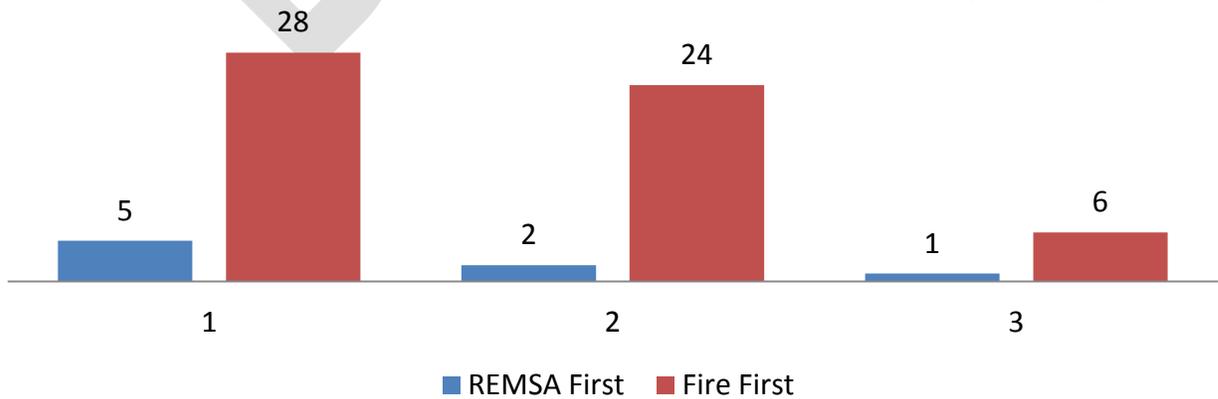
**Jurisdictional information that indicates the first responding unit on scene**

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	5	15.2%	2	7.7%	1	14.3%	8	12.1%
Fire First	28	84.8%	24	92.3%	6	85.7%	58	87.9%
<b>Total</b>	<b>33</b>	<b>100.0%</b>	<b>26</b>	<b>100.0%</b>	<b>7</b>	<b>100.0%</b>	<b>66</b>	<b>100.0%</b>

**REMSA and TM #16 & #30 Response Percentage**



**REMSA and TMFPD #16 & #30 Total Number of Calls by Priority**



The frequency TMFPD #16 & #30 is alarmed prior to REMSA dispatching an ambulance.

Fire Alarm First	#	%
No	4	6.1%
Yes	62	93.9%

The frequency dispatches a unit prior to REMSA dispatching an ambulance.

Fire Dispatch First	#	%
No	17	25.8%
Yes	49	74.2%

Clock start – clock stop difference for REMSA

Priority Number	Median	Mean	Max
1	0:14:45	0:14:40	0:26:04
2	0:16:32	0:15:57	0:24:44
3	0:13:51	0:16:54	0:27:45
All	0:15:23	0:15:24	0:27:45

This table depicts the difference between the clock start time and the clock stop time for all REMSA calls within the special study area.

Dispatch time – on-scene differences for TMFPD

Priority Number	Median	Mean	Max
1	0:07:11	0:07:36	0:17:40
2	0:07:28	0:07:40	0:18:10
3	0:06:13	0:06:52	0:11:48
All	0:07:08	0:07:32	0:18:10

This table depicts the difference between Dispatch time and on-scene time for TMFPD within the special study area.

**Time differences between arrival times – REMSA arrived first**

Priority Number	REMSA First		
	Median	Mean	Max
1	0:01:16	0:02:01	0:04:40
2	0:01:14	0:01:14	0:01:27
3	0:01:00	0:01:00	0:01:00
All	0:01:08	0:01:41	0:04:40

This table depicts the time difference (in minutes) for arrival at call destination, when REMSA arrives before the TMFPD.

**Number of calls and time differences – REMSA arrived first**

Time interval between REMSA and Fire			
Priority	< 1 min	>=1 and <5:59	Total
1	2	3	5
2	0	2	2
3	0	1	1
Total	2	6	8

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

**Time differences between arrival times – TMFPD arrived first**

Priority Number	Fire First		
	Median	Mean	Max
1	0:09:11	0:09:12	0:20:40
2	0:09:36	0:09:46	0:23:14
3	0:08:59	0:10:11	0:18:43
All	0:09:26	0:09:32	0:23:14

This table depicts the time difference (in minutes) for arrival at call destination, when TMFPD #16 & #30 arrives before REMSA.

**Number of calls and time differences – TMFPD arrived first**

Time interval between Fire and REMSA								
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	Total
1	1	5	7	10	2	3	0	28
2	0	7	3	10	1	1	2	24
3	0	2	1	1	0	2	0	6
Total	1	14	11	21	3	6	2	58

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when TMFPD arrives first.

# Truckee Meadows Fire Protection District Station 17

## (Spanish Springs & Palomino Valley)

**SUMMARY:**

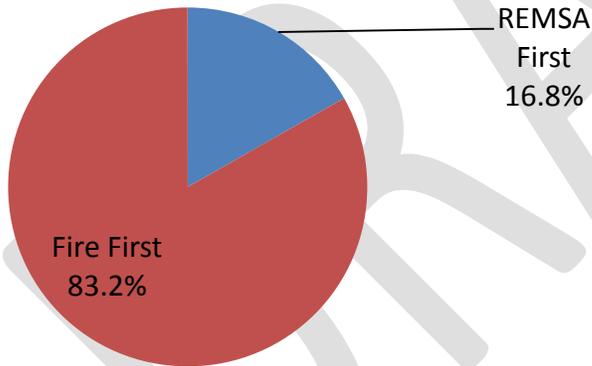
For Quarter 3, 286 calls for service were matched with REMSA for analysis. Fire arrived on scene first 83% of the time.

**STATISTICAL INFORMATION:**

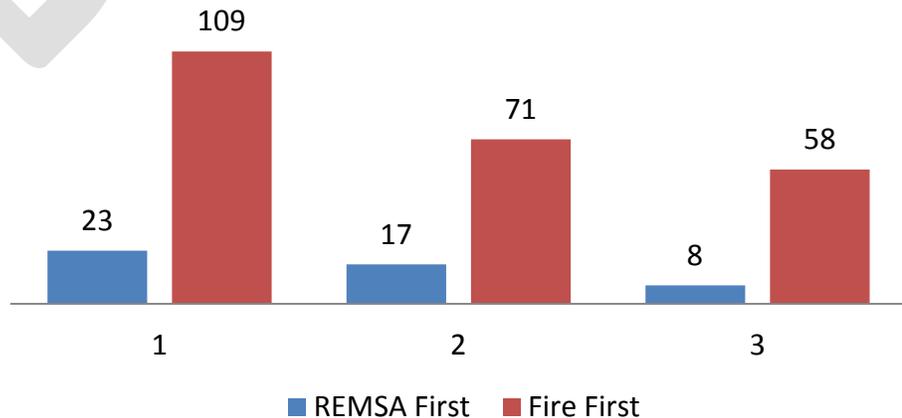
Jurisdictional information that indicates the first responding unit on scene

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	23	17.4%	17	19.3%	8	12.1%	48	16.8%
Fire First	109	82.6%	71	80.7%	58	87.9%	238	83.2%
<b>Total</b>	<b>132</b>	<b>100.0%</b>	<b>88</b>	<b>100.0%</b>	<b>66</b>	<b>100.0%</b>	<b>286</b>	<b>100.0%</b>

**REMSA & TMFPD Station #17 Response Percentage**



**REMSA and TM #17 Total Number of Calls by Priority**



The frequency TMFPD #17 is alarmed prior to REMSA dispatching an ambulance.

Fire Alarm First	#	%
No	47	16.4%
Yes	239	83.5%

The frequency dispatches a unit prior to REMSA dispatching an ambulance.

Fire Dispatch First	#	%
No	96	33.5%
Yes	190	66.4%

Clock start – clock stop difference for REMSA

Priority Number	Median	Mean	Max
1	0:09:47	0:10:33	0:27:37
2	0:10:16	0:11:14	0:32:21
3	0:12:24	0:15:49	0:48:30
All	0:10:33	0:11:59	0:48:30

This table depicts the difference between the clock start time and the clock stop time for all REMSA calls within the special study area.

Dispatch time – on-scene differences for TMFPD

Priority Number	Median	Mean	Max
1	0:06:13	0:06:58	0:42:18
2	0:06:00	0:06:57	0:31:10
3	0:06:13	0:07:43	0:38:21
All	0:06:07	0:07:08	0:42:18

This table depicts the difference between Dispatch time and on-scene time for SFD within the special study area.

Time differences between arrival times – REMSA arrived first

Priority Number	REMSA First		
	Median	Mean	Max
1	0:02:01	0:03:00	0:15:32
2	0:01:30	0:02:17	0:06:35
3	0:01:51	0:01:51	0:04:16
All	0:01:49	0:02:33	0:15:32

This table depicts the time difference (in minutes) for arrival at call destination, when REMSA arrives before the TMFPD #17.

**Number of calls and time differences – REMSA arrived first**

Time interval between REMSA and Fire						
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	Total
<b>1</b>	6	14	1	1	1	23
<b>2</b>	5	11	1	0	0	17
<b>3</b>	3	5	0	0	0	8
<b>Total</b>	14	30	2	1	1	48

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

**Time differences between arrival times – TMFPD #17 arrived first**

Priority Number	Fire First		
	Median	Mean	Max
<b>1</b>	0:04:33	0:04:53	0:13:31
<b>2</b>	0:05:22	0:05:33	0:19:36
<b>3</b>	0:06:10	0:08:52	0:30:09
<b>All</b>	0:05:10	0:06:03	0:30:09

This table depicts the time difference (in minutes) for arrival at call destination, when TMFPD #17 arrives before REMSA.

**Number of calls and time differences – TMFPD #17 arrived first**

Time interval between Fire and REMSA								
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	Total
<b>1</b>	10	67	18	13	1	0	0	109
<b>2</b>	6	35	17	11	1	1	0	71
<b>3</b>	2	23	16	7	2	3	5	58
<b>Total</b>	18	125	51	31	4	4	5	238

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when TMFPD #17 arrives first.

# Truckee Meadows Fire Protection District Station #18 (Cold Springs)

## SUMMARY:

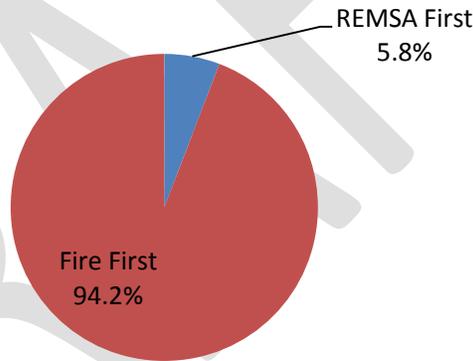
For Quarter 3 there were 137 calls for service which matched with REMSA for analysis. Fire arrived on scene first 94.2% of the time.

## STATISTICAL INFORMATION:

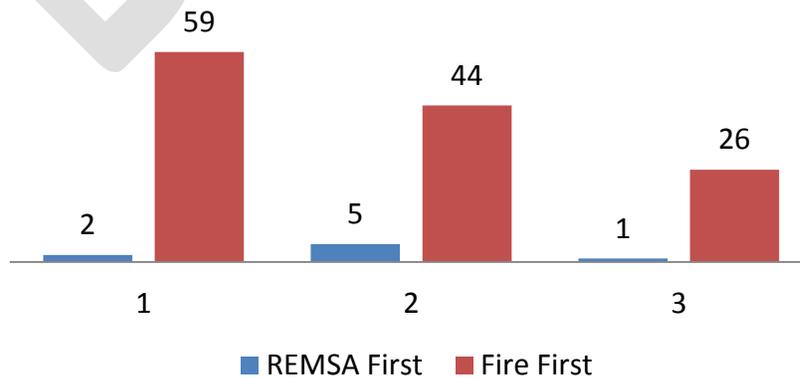
Jurisdictional information that indicates the first responding unit on scene

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	2	3.3%	5	10.2%	1	3.7%	8	5.8%
Fire First	59	96.7%	44	89.8%	26	96.3%	129	94.2%
<b>Total</b>	61	100.0%	49	100.0%	27	100.0%	137	100.0%

**REMSA & TMFPD #18 Response Percentage**



**REMSA & TMFPD #18 Total Number of Calls by Priority**



The frequency TMFPD #18 is alarmed prior to REMSA dispatching an ambulance.

Fire Alarm First	#	%
No	10	7.3%
Yes	127	92.7%

The frequency TMFPD #18 dispatches a unit prior to REMSA dispatching an ambulance.

Fire Dispatch First	#	%
No	37	27.0%
Yes	100	73.0%

Clock start – clock stop difference for REMSA

Priority Number	Median	Mean	Max
1	0:12:41	0:13:56	0:37:12
2	0:13:33	0:15:48	0:40:21
3	0:15:09	0:18:28	0:49:24
All	0:13:10	0:15:30	0:49:24

This table depicts the difference between the clock start time and the clock stop time for all REMSA calls within TMFPD #18.

Dispatch time – on-scene difference for TMFPD #18

Priority Number	Median	Mean	Max
1	0:05:28	0:05:58	0:27:50
2	0:06:16	0:09:24	0:56:47
3	0:06:09	0:06:53	0:24:36
All	0:05:48	0:07:23	0:56:47

This table depicts the difference between Dispatch time and on-scene time for the TMFPD #18.

**Time differences between arrival times – REMSA arrived first**

Priority Number	REMSA First		
	Median	Mean	Max
1	0:03:01	0:03:01	0:03:14
2	0:14:33	0:15:26	0:41:51
3	0:00:30	0:00:30	0:00:30
All	0:03:01	0:10:28	0:41:51

This table depicts the time difference (in minutes) for arrival at call destination, when REMSA arrives before the TMFPD #18.

**Number of calls and time differences – REMSA arrived first**

Time interval between REMSA and Fire									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
1	0	2	0	0	0	0	0	0	2
2	0	2	0	0	2	0	0	1	5
3	1	0	0	0	0	0	0	0	1
Total	1	4	0	0	2	0	0	1	8

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

**Time differences between arrival times – TMFPD #18 arrived first**

Priority Number	Fire First		
	Median	Mean	Max
1	0:07:00	0:08:12	0:17:23
2	0:08:01	0:08:57	0:23:46
3	0:09:14	0:11:26	0:41:06
All	0:08:05	0:09:07	0:41:06

This table depicts the time difference (in minutes) for arrival at call destination, when TMFPD #18 arrives before REMSA.

**Number of calls and time differences – TMFPD #18 arrived first**

Time interval between Fire and REMSA									
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	>30:59 min	Total
1	2	19	16	14	5	3	0	0	59
2	0	14	13	9	1	6	1	0	44
3	1	7	5	6	1	4	1	1	26
Total	3	40	34	29	7	13	2	1	129

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when TMFPD #18 arrives first.

# Truckee Meadows Fire Protection District Station #36 (Arrowcreek)

## SUMMARY:

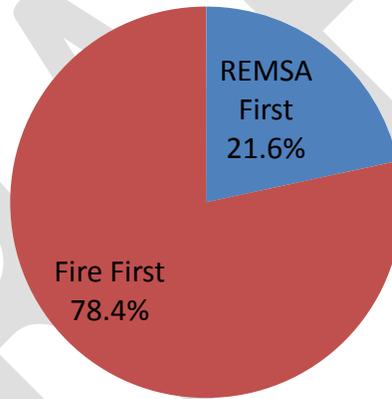
For Quarter 3 there were 74 calls for service which matched with REMSA for analysis. Fire arrived on scene first 78.4% of the time.

## STATISTICAL INFORMATION:

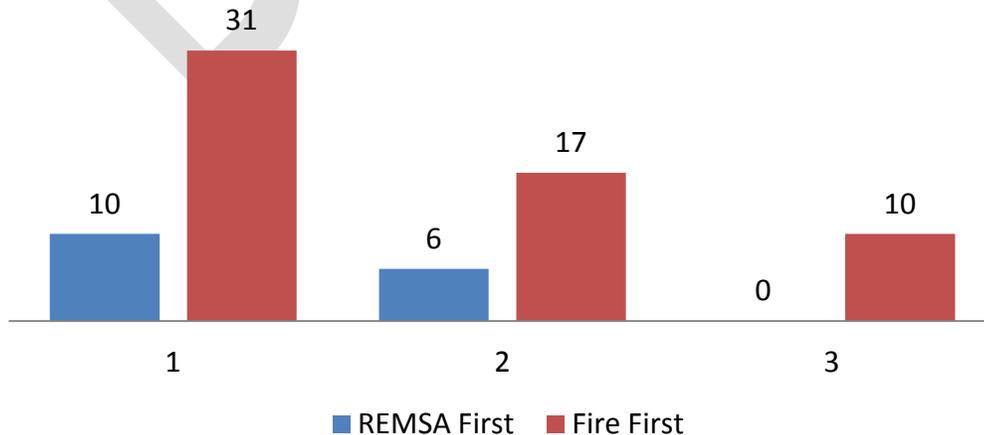
Jurisdictional information that indicates the first responding unit on scene

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	10	24.4%	6	26.1%	0	0.0%	16	21.6%
Fire First	31	75.6%	17	73.9%	10	100.0%	58	78.4%
<b>Total</b>	<b>41</b>	<b>100.0%</b>	<b>23</b>	<b>100.0%</b>	<b>10</b>	<b>100.0%</b>	<b>74</b>	<b>100.0%</b>

**REMSA and TM #36 Percentage**



**REMSA and TM #36 Total Number of Calls by Priority**



The frequency TMFPD #36 is alarmed prior to REMSA dispatching an ambulance.

Fire Alarm First	#	%
No	10	13.5%
Yes	64	86.5%

The frequency TMFPD #36 dispatches a unit prior to REMSA dispatching an ambulance.

Fire Dispatch First	#	%
No	29	39.1%
Yes	45	60.8%

Clock start – clock stop difference for REMSA

Priority Number	Median	Mean	Max
1	0:09:42	0:09:27	0:17:50
2	0:09:23	0:10:50	0:35:49
3	0:11:18	0:13:18	0:28:07
All	0:09:48	0:10:24	0:35:49

This table depicts the difference between the clock start time and the clock stop time for all REMSA calls within the TMFPD #36.

Dispatch time – on-scene difference for TMFPD #36

Priority Number	Median	Mean	Max
1	0:07:43	0:08:07	0:27:54
2	0:06:55	0:08:14	0:37:30
3	0:06:45	0:06:49	0:10:06
All	0:07:16	0:07:59	0:37:30

This table depicts the difference between Dispatch time and on-scene time for the TMFPD #36.

Time differences between arrival times – REMSA arrived first

Priority Number	REMSA First		
	Median	Mean	Max
1	0:02:55	0:04:34	0:20:58
2	0:02:48	0:06:35	0:30:04
3	-	-	-
All	0:02:48	0:05:19	0:30:04

This table depicts the time difference (in minutes) for arrival at call destination, when REMSA arrives before the TMFPD #36.

**Number of calls and time differences – REMSA arrived first**

Time interval between REMSA and Fire								
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	>20:59 and <=30:59	Total
1	2	6	1	0	0	1	0	10
2	2	3	0	0	0	0	1	6
3	0	0	0	0	0	0	0	0
<b>Total</b>	4	9	1	0	0	1	1	16

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

**Time differences between arrival times – TMFPD #36 arrived first**

Priority Number	Fire First		
	Median	Mean	Max
1	0:03:00	0:03:25	0:08:20
2	0:04:18	0:04:51	0:16:50
3	0:05:08	0:06:28	0:17:32
<b>All</b>	0:03:11	0:04:22	0:17:32

This table depicts the time difference (in minutes) for arrival at call destination, when TMFPD #36 arrives before REMSA.

**Number of calls and time differences – TMFPD #36 arrived first**

Time interval between Fire and REMSA							
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	Total
1	3	24	4	0	0	0	31
2	5	7	1	3	0	1	17
3	0	6	2	1	0	1	10
<b>Total</b>	8	37	7	4	0	2	58

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when TMFPD #36 arrives first.

# Truckee Meadows Fire Protection District Station #39

## (Galena Forrest & St. James Village)

**SUMMARY:**

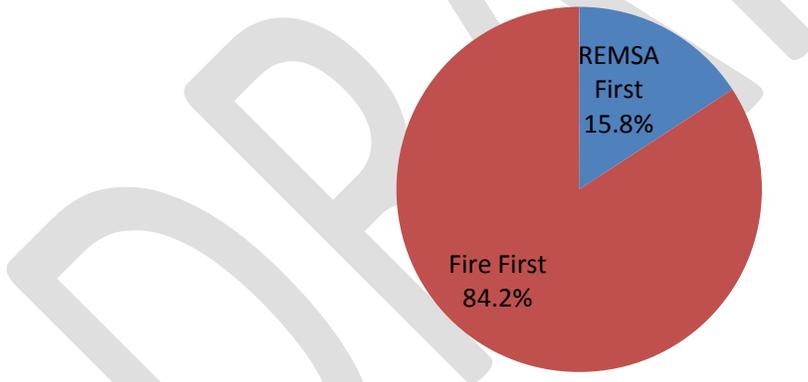
For Q3 there were 19 calls for service which were matched with REMSA for analysis, which is not a statistically significant amount to analyze. However the same indicators are able to be reviewed. Fire arrived on scene first 84.2% of the time.

**STATISTICAL INFORMATION:**

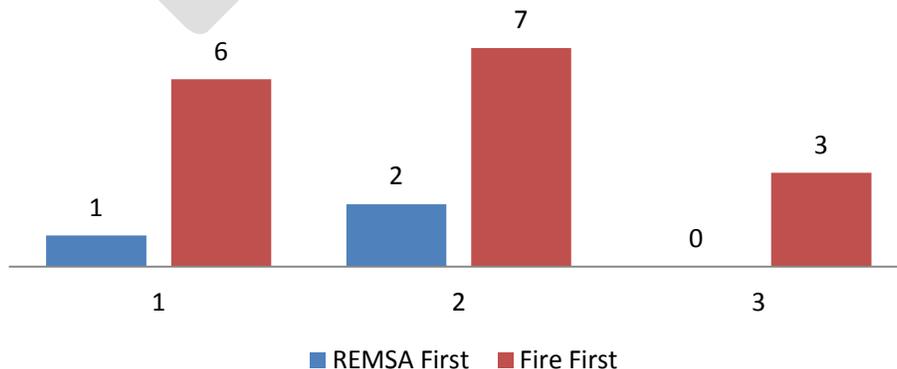
Jurisdictional information that indicates the first responding unit on scene

First on Scene	Priority REMSA							
	1		2		3		Total	
	#	%	#	%	#	%	#	%
REMSA First	1	14.3%	2	22.2%	0	0.0%	3	15.8%
Fire First	6	85.7%	7	77.8%	3	100.0%	16	84.2%
<b>Total</b>	<b>7</b>	<b>100.0%</b>	<b>9</b>	<b>100.0%</b>	<b>3</b>	<b>100.0%</b>	<b>19</b>	<b>100.0%</b>

**REMSA & TMFPD #39 Response Percentage**



**REMSA & TMFPD #39 Total Number of Calls by Priority**



The frequency TMFPD #39 is alarmed prior to REMSA dispatching an ambulance.

Fire Alarm First	#	%
No	0	0%
Yes	19	100%

The frequency dispatches a unit prior to REMSA dispatching an ambulance.

Fire Dispatch First	#	%
No	3	31.6%
Yes	16	68.4%

Clock start – clock stop difference for REMSA

Priority Number	Median	Mean	Max
1	0:15:43	0:16:10	0:21:47
2	0:15:43	0:15:34	0:20:52
3	0:16:02	0:14:48	0:19:47
All	0:15:43	0:15:40	0:21:47

This table depicts the difference between the clock start time and the clock stop time for all REMSA calls within the TMFPD #39.

Dispatch time – on-scene difference for TMFPD #39

Priority Number	Median	Mean	Max
1	0:11:06	0:12:50	0:26:20
2	0:13:58	0:12:16	0:19:39
3	0:03:09	0:02:32	0:04:27
All	0:09:08	0:10:56	0:26:20

This table depicts the difference between Dispatch time and on-scene time for the TMFPD #39.

**Time differences between arrival times – REMSA arrived first**

Priority Number	REMSA First		
	Median	Mean	Max
1	0:12:41	0:12:41	0:12:41
2	0:00:11	0:00:11	0:00:11
3	-	-	-
All	0:00:11	0:04:21	0:12:41

This table depicts the time difference (in minutes) for arrival at call destination, when REMSA arrives before the TMFPD #39.

**Number of calls and time differences – REMSA arrived first**

Time interval between REMSA and Fire					
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	Total
1	0	0	0	1	1
2	2	0	0	0	2
3	0	0	0	0	0
Total	2	0	0	1	3

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

**Time differences between arrival times – TMFPD #39 arrived first**

Priority Number	Fire First		
	Median	Mean	Max
1	0:07:43	0:08:53	0:18:51
2	0:01:35	0:03:45	0:12:53
3	0:16:55	0:14:02	0:17:09
All	0:05:38	0:07:36	0:18:51

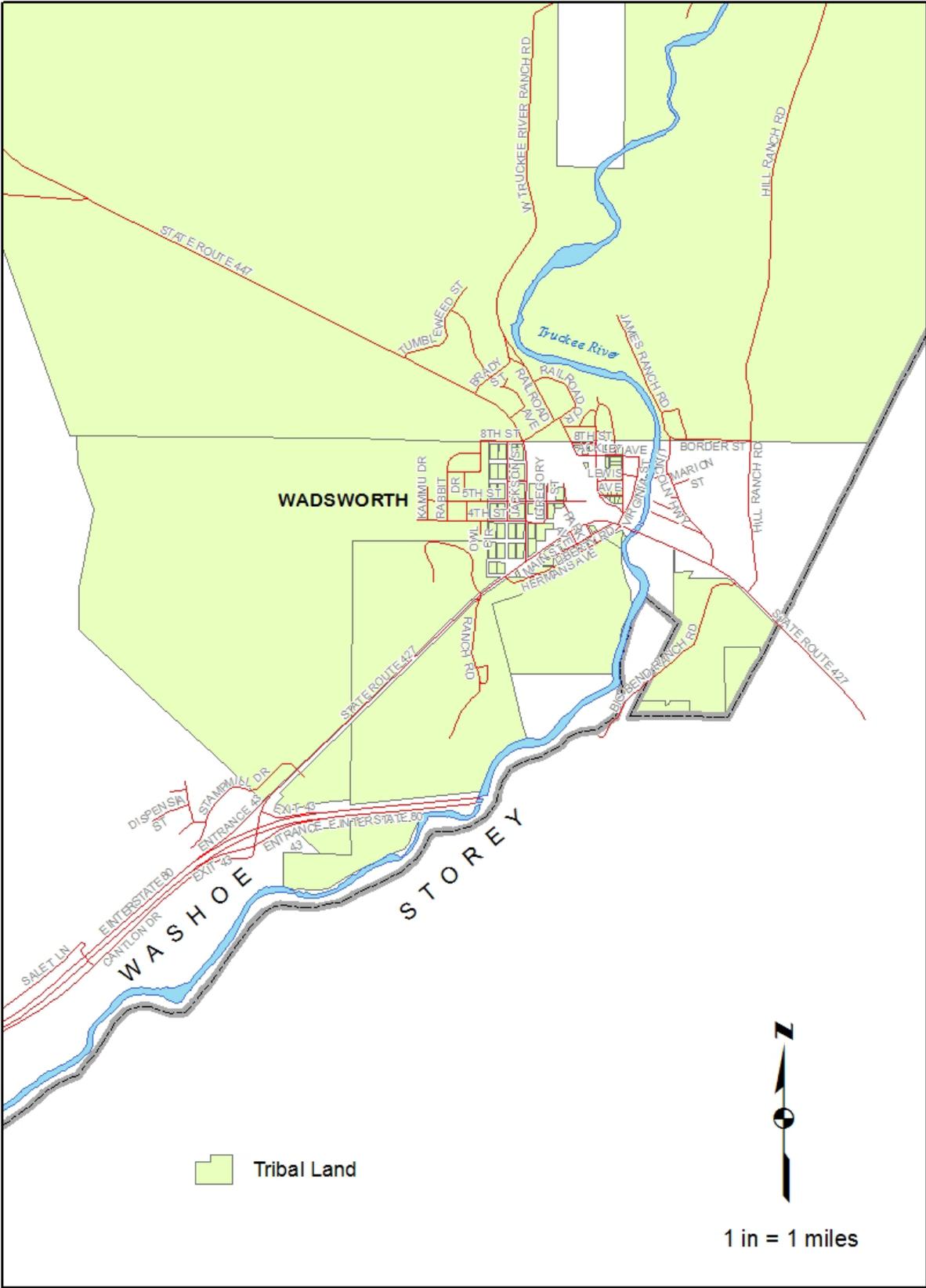
This table depicts the time difference (in minutes) for arrival at call destination, when TMFPD #39 arrives before REMSA.

**Number of calls and time differences – TMFPD #39 arrived first**

Time interval between Fire and REMSA							
Priority	< 1 min	>=1 and <5:59	>5:59 and <=8:59	>8:59 and <=12:59	>12:59 and <=15:59	>15:59 and <=20:59	Total
1	1	1	1	1	1	1	6
2	2	4	0	1	0	0	7
3	0	0	1	0	0	2	3
Total	3	5	2	2	1	3	16

This table depicts the number of calls within each identified time frame that correspond to the difference of arrival time between agencies when TMFPD #39 arrives first.

# Map of Wadsworth



## REMSA Calls to Wadsworth & Pyramid Lake Fire & Rescue EMS Calls

During Quarter 3 there were 36 calls for service, of which 8 were cancelled enroute. Twenty six of those incident calls were located on tribal lands, while the other 10 were located in Wadsworth, non-tribal land. None of the 10 calls in Wadsworth, non-tribal land, matched to TMFPD. Below is table depicting REMSA calls for service in Wadsworth, as well as a table containing submitted Pyramid Lake Fire & Rescue EMS data.

<b>REMSA Calls for Service</b>			
<b>Call Details</b>	<b>All Calls</b> (% calculated using total REMSA calls)	<b>Non-Tribal Land</b> (% calculated using REMSA calls on non-Tribal Land)	<b>Tribal Land</b> (% calculated using REMSA calls on Tribal Land)
Wadsworth Calls	36	10	26
<i>January Calls</i>	15 (41.6%)	5 (50%)	10 (38.5%)
<i>February Calls</i>	5 (13.9%)	2 (20%)	3 (11.5%)
<i>March Calls</i>	16 (44.4%)	3 (30%)	13 (50%)
<b>REMSA Call Priority</b>			
<i>Priority 1</i>	15 (41.6%)	5 (50%)	10 (38.5%)
<i>Priority 2</i>	16 (44.4%)	4 (40%)	12 (46.2%)
<i>Priority 3</i>	5 (13.9%)	1 (10%)	4 (15.4%)
REMSA Median Response	19:33	23:14	17:20
REMSA Cancelled Enroute	8 (22.2%)	1 (10%)	7 (26.9%)
REMSA Transported	19 (52.8%)	8 (80%)	11 (42.3%)

<b>PLFR EMS All Calls</b>			
<b>Call Details</b>	<b>January Calls</b>	<b>February Calls</b>	<b>March Calls</b>
<b>Total PLFR Calls</b>	36	47	38
<b>PLFR Call Type</b>			
<i>Fires</i>	3	1	4
<i>Vehicle Crashes</i>	4	4	4
<i>Boat Rescues</i>	0	0	0
<i>Training Drills</i>	0	20	3
<i>Service Calls</i>	0	1	1
<b>Location</b>			
<i>Nixon</i>	15	29	12
<i>Sutcliffe</i>	6	9	8
<i>Wadsworth</i>	15	9	18
<b>EMS Calls</b>	29 (80.5%)	21 (44.7%)	26 (68.4%)
<b>Transports</b>	13	8	13
<i>Tribal Members</i>	10	7	13
<i>Non-Tribal Members</i>	3	1	0

## Mount Rose Corridor – REMSA, North Lake Tahoe Fire Protection District & Truckee Meadows Fire Protection District

### SUMMARY:

NLTFPD did not submit data for February or March, therefore, the EMS Oversight Program had challenges drawing meaningful conclusions for this special study area due to the lack of reported data for this quarter.

NLTFPD reported 33 calls for EMS service in the Mt. Rose Corridor during January 2015. A total of 15 (45.5%) of those calls matched to either TMFPD (n=12) or REMSA (n=13), or both (n=10). From a statistical standpoint, this means that for 30.3% of the submitted NLTFPD calls, all three agencies were dispatched to the call. However only two (6.1%) incidents indicate that all three agencies arrived on scene.

Call Details	All NLTFPD Calls (% calculated using total NLTFPD calls)	Matched to REMSA*	Matched to TMFPD**	Matched to TMFPD & REMSA	Not Matched
<b>Total Calls</b>	33	13	12	10	18
<b>Cancelled Enroute</b>					
<i>NLTFPD</i>	5 (15.1%)	4	3	3	1
<i>REMSA</i>	-	4	4	4	-
<i>TMFPD</i>	-	5	5	5	-
<b>REMSA Transported</b>	-	3	2	2	-

\*A total of 13 NLTFPD calls matched to REMSA for the month of January. Three of those 13 NLTFPD calls did not match to TMFPD.

\*\* A total of 12 NLTFPD matched to TMFPD for the month of January. Two of those 12 NLTFPD calls did not match to REMSA.

Options for exploring the low match rate between these agencies is limited due to the lack of information from PSAP, which could help determine how the call originated and if a match should or should not be expected.

### REMSA Mount Rose Corridor Calls February and March

REMSA Calls February & March	
	All Calls
<b>Total Calls</b>	12
<b>REMSA Call Priority</b>	
<i>Priority 1</i>	7 (58.3%)
<i>Priority 2</i>	4 (33.3%)
<i>Priority 3</i>	1 (8.3%)
<b>Cancelled Enroute</b>	8 (66.7%)
<b>Transported</b>	2 (16.7%)

## Reno Tahoe Airport Authority

**SUMMARY:**

There were 61 known calls to the Reno Tahoe International Airport (RTIA) during Quarter 3 as reported by REMSA and Reno Tahoe Airport Authority (RTAA), of those 50 calls matched. The matched calls represent 94.0% of all known REMSA calls for service to the airport, and 86.2% of the RTAA's calls to REMSA for service during Q3. The table below depicts call details.

<b>Call Details</b>	<b>Total Calls</b> (% calculated using total REMSA calls, n=61)	<b>Matched</b> (% calculated using total number matched, n=50)	<b>Unmatched</b> (% calculated using total number unmatched, n=11)
<b>REMSA calls to RTIA</b>	61	50	3
<b>RTAA calls to REMSA</b>	58	50	8
<i>Priority 1</i>	12	12 (24.0%)	0
<i>Priority 2</i>	31	28 (56.0%)	3 (27.3%)
<i>Priority 3</i>	10	10 (20.0%)	0
<i>Priority Unknown</i>	8	0 (0.0%)	8 (72.7%)
<b>REMSA Cancelled</b>	5 (8.2%)	5 (10.0%)	0 (0.0%)
<b>REMSA Median Response</b>	06:01	6:01	05:00
<b>REMSA Transported</b>	23 (37.7%)	21 (42.0%)	2 (18.2%)

## Appendix B: Data Changes from Quarter 2

### Median Time

Due to concerns about the average (mean) response time being negatively impacted by outliers, the median or middle time was focused on in Q3. A median time is the middle observation in a given set of numbers and is much less skewed by outliers than an average would be. Both times have been included, but the presentation of the data fields in Q3 is less cumbersome and focuses on median, while also providing the mean and max.

### Fire Variables “Alarm time” and “Dispatch time”

Fire agency personnel clarified the variable known as “fire alarm time” is when a fire dispatcher is first aware of the call and begins to input information into the PSAP data system. The variable “dispatch time” indicates when a particular station is made aware of the call. The Q1 report reflects the amount of time it takes for a fire agency to respond to a call using “alarm time” as the initial clock start, the Q2 used “dispatch time” as the more accurate time stamp for starting the clock to measure response time and Q3 utilized both “Alarm time” and “dispatch time” to explore dispatch differences.

As noted in Q2 during the presentation, the utilization of dispatch time solely skewed the data and negatively impacted the fire response information. Therefore, for Q3, the “fire alarm time” has been utilized solely for analysis to determine if fire was aware of the call prior to a REMSA ambulance dispatch. Then, “dispatch time” was the time stamp utilized for the remainder of the analysis.

### Data Matching:

Date, time, and address of call are variables used to perform a match with LinkPlus matching software. A higher proportion of calls were matched this quarter due to a number of changes. All jurisdictions were matched on a monthly basis which reduced the number of calls manually reviewed at one time. Unmatched calls were sent back to each of the fire partners to review audio and ensure REMSA was truly on scene. Any calls which were determined to have a REMSA unit on scene were then reviewed again. The order of the variables used to determine a match were re-prioritized to allow the software to consider more calls as a potential match, before identifying a true match. Due to the historically low match percentage between TMFPD and REMSA, address suffixes (St, Dr, Ln, Cir etc.) were removed from the address column prior to matching between those agencies.

When multiple fire agency units respond to a single call, only the first responding unit is used to measure performance, while the additional responding units are then removed for analysis. This protocol has not changed from the Q1, Q2 or Q3 reports.

For Q3, matched calls were manually overridden if there was more than 1 hour difference in dispatch times between REMSA and the reporting fire agency.

### Appendix C: Call Data Definitions

The definitions below are the agreed upon definitions, although not all data elements are utilized at this time.

Data Element	Definition
Call response volume	The number of EMS calls each agency receives per month including priorities, transports, AMAs and cancelled calls. (WCHD will calculate.)
Receipt of call	The timestamp when a Reno, Sparks or Washoe County call taker answers the initial 9-1-1 request.
Time of priority	The timestamp when a priority designation of 1, 2 or 3 is assigned to the call.
(Fire) Alarm time	The timestamp with the fire dispatcher is first made aware of the call.
(Fire) Dispatch time	The timestamp with the fire alarm has sounded in the station.
Fire enroute	The timestamp when fire is enroute.
(REMSA) Clock start	The timestamp when the ambulance is dispatched to the call.
REMSA enroute	The timestamp when REMSA is enroute.
Fire on scene	The timestamp when fire arrives on scene.
REMSA clock stop	The timestamp when REMSA arrives on scene.
Fire and REMSA arrivals	The delta between the arrivals of fire and REMSA units. (WCHD will calculate.)
<i>Patient contact</i>	<i>The timestamp when patient contact is initiated.</i>
Fire leaves scene	The timestamp when fire leaves the scene.
REMSA leaves scene	The timestamp when REMSA leaves the scene.
Patient arrival	The timestamp when REMSA arrives at the hospital.
Fire engine/unit is back in service	The timestamp when the responding fire unit is resupplied and available to respond to another call.
REMSA unit is back in service	The timestamp when the responding REMSA unit is back in service and available to respond to another call.

\*Call is defined as the time a Reno, Sparks or Washoe County call taker answers the initial 9-1-1 request. (After the call taker determines a response is needed WCHD will also complete analyses based on the timestamp when REMSA receives the transfer.)

\*\*Arrival is defined as the time the responding unit is at the address with the wheels stopped and/or emergency brake on.

**STAFF REPORT**

**EMS ADVISORY BOARD MEETING DATE:** June 4, 2015

**TO:** Regional EMS Advisory Board Members  
**FROM:** Brittany Dayton, EMS Coordinator  
775-326-6043, [bdayton@washeocounty.us](mailto:bdayton@washeocounty.us)  
**SUBJECT:** **Presentation, discussion and possible direction to staff to present the Fire EMS training framework to the District Board of Health.**

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**SUMMARY**

EMS staff met with REMSA and regional fire agencies on April 3, 2015 to discuss the structure and topics of future Fire EMS trainings. During the meeting it was recommended that REMSA offer quarterly trainings that simulate the response of real world EMS calls. Fire and REMSA crews will “respond” with appropriate units/apparatus and practice all elements of the call from arrival to possible transport.

The training topics will focus on types of calls that do not occur as often in our region. The first several training proposed include topics like drowning, MCI/triage, hyperthermia, long bone fractures and full cardiac arrest. This training will allow participating first-responders the opportunity to practice and maintain certain skills they do not use on a frequent basis in the field.

The first training is scheduled for June and will be a simulated response to a drowning victim.

**PREVIOUS ACTION**

The EMS Advisory Board heard a presentation on Fire EMS training during the March 4, 2015 Board meeting and directed staff to work with the regional EMS agencies to develop a process and training calendar.

**BACKGROUND**

In August 2012 TriData completed an analysis of the emergency medical services in Washoe County. This report included 38 recommendations to enhance the EMS system. One of the recommendations (number 31) suggested the WCHD enter into an agreement with REMSA for the provision for county-wide EMS education and training with the opportunity for local agencies to “opt-out” of, or augment REMSA provided education and training.

Based on TriData recommendation 31 and Principle of Agreement 5a, regional Fire EMS training was included in the Amended and Restated Franchise Agreement for Ambulance Service.

REMSA currently offers continuing education units (CEUs) and other training opportunities that are available to all first responders; however according to the Franchise language, Fire EMS trainings are to be determined based on recommendations of the Regional EMS Advisory Board as approved by the District.

**FISCAL IMPACT**

There is no additional fiscal impact to the budget should the Board make a recommendation to staff to present the Fire EMS training framework to the District Board of Health.

**RECOMMENDATION**

Staff recommends that the Regional EMS Advisory Board direct EMS Program staff to present the Fire EMS training framework to the District Board of Health.

**POSSIBLE MOTION**

Should the Board agree with staff's recommendation, a possible motion would be:

“Move to direct EMS Program staff to present the Fire EMS training framework to the District Board of Health.”

**STAFF REPORT**

**EMS ADVISORY BOARD MEETING DATE:** June 4, 2015

**TO:** Regional EMS Advisory Board Members  
**FROM:** Christina Conti, EMS Program Manager  
775-326-6042, [ccconti@washoecounty.us](mailto:ccconti@washoecounty.us)  
**SUBJECT:** Discussion, approval and possible direction to staff to proceed with establishing a committee to develop a 5-year strategic plan to be presented to the Board for input and adoption.

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**SUMMARY**

The purpose of this agenda item is discuss and possibly provide direction to staff on the development of the five-year strategic plan, as required in the Inter Local Agreement.

**PREVIOUS ACTION**

No action has been taken by this Board on this agenda item.

**BACKGROUND**

The EMS Oversight Program was created through an Inter Local Agreement (ILA) signed by the City of Reno (RENO), City of Sparks (SPARKS), Washoe County (WASHOE), Truckee Meadows Fire Protection District (FIRE), and the Washoe County Health District. Within the ILA there are eight duties specifically outlined for the EMS Oversight Program. One item specifically 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.

While the EMS Oversight Program will take the lead in the development of the strategic plan, the involvement of the community is paramount to the successful implementation of the plan. Therefore, staff recommends the development of a committee comprised of diverse stakeholders, between six and ten, who represent all areas of Emergency Medical Services. This group would be asked to follow a basic overall framework: Where are we now? Where are we going? How will we get there? These three components identify what the current system strengths and opportunities or needs are and begin to shape recommendations for items to be included in the strategic plan.

There are several potential components of the strategic plan. Those components are listed below for discussion:

**Mission Statement:** The mission statement would express the purpose of the strategic plan and what the plan seeks to accomplish and in what manner in which the region will accomplish it.

**Vision Statement:** This is a short, concise statement of what the region will look like in five years.

**Guiding Principles:** These are the core beliefs of the region, as it relates to Emergency Medical Services. They would never change and would be part of the strategic foundation.

**SWOT:** A SWOT would give a summarized view of the region, currently, specifically the strengths, weaknesses, opportunities, and threats.

**Long-term Strategic Objectives:** These long-term strategic focus areas would span a three-year or more time frame. They would discuss what the region wants to focus on to achieve the vision.

**Strategies:** These would be general methods the region would employ to reach the vision.

**Short-term Goals:** These items convert the strategic objectives into specific performance targets that would fall within a one-two year time frame.

**Action Items:** These specific statements would explain how a goal will be accomplished.

### **FISCAL IMPACT**

There is no fiscal impact to the Board on this agenda item.

### **RECOMMENDATION**

Staff recommends the Board to approve and possibly provide direction to staff on the development of the five-year strategic plan, as required in the Inter Local Agreement

### **POSSIBLE MOTION**

Should the Board agree with staff's recommendation, a possible motion would be:

“Move to approve presentation and direct staff to establish a committee to develop a 5-year strategic plan to be presented to the Board for input and adoption.”



**STAFF REPORT**  
**BOARD MEETING DATE:** June 4, 2015

**TO:** Emergency Medical Services Advisory Board

**FROM:** Jim Gubbels, President/ CEO REMSA  
775-858-5700 jgubbels@remsa-cf.com

**SUBJECT:** **Discussion and possible approval to recommend REMSA present to the District Board of Health for approval the use of Omega Determinant Codes and the procedure of referring these callers to the Nurse Health Line prior to dispatching an ambulance.**

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**SUMMARY**

REMSA is requesting to fully implement the utilization of Omega protocols. Low acuity calls will be referred to the Nurse Health Line (NHL) for assessment and evaluation by an Emergency Communication Nurse (ECN) to determine the most appropriate level of care.

**PREVIOUS ACTION**

REMSA has met with the District Health Department, as well as Reno Fire Department, Sparks Fire Department, and Truckee Meadows Fire Department to review the Omega codes and process.

**BACKGROUND**

The International Academy of Emergency Dispatch (IAED) has developed a fourth category within their protocols which is the Omega determinant. REMSA has been very conservative while introducing the Omega's. The IAED has over 200 Omega codes, while REMSA has initially approved 52 of them with the Medical Director. The Omega protocol is designed to identify patients who may safely be transferred to alternative care resources. These low acuity patients do not require ambulance transport, and by fully implementing the process will decrease the incidence of unnecessary ambulance responses. However, at any time a patient requests an ambulance, an ambulance will be dispatched.

**FISCAL IMPACT**

REMSA receives approximately 70,000 '911' calls per year. Approximately 42,500 of these calls are transported. Full implementation of the Omega protocols will decrease the incidence of unnecessary responses as well as decrease the overutilization of our emergency departments.

There is no additional fiscal impact to the EMS Advisory Board (EMSAB) should the EMSAB approve and recommend presentation to the District Board of Health for approval.

**RECOMMENDATION**

REMSA has concluded that the use of Omega determinant codes to identify appropriate calls to be evaluated by a qualified ECN before an ambulance response is initiated is safe and effective. The recommendation is that REMSA discontinue the current practice of dispatching an ambulance to

Subject - Omega Determinant Codes

Date – May 28, 2015

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Omega determinant-coded calls prior to the ECN evaluation. This recommendation is consistent with current IAED recommended use of Omega determinants in ambulance systems where Emergency Communication Nurse System (ECNS) protocols are in use (see appendix A). It should be noted again that at any time the caller requests an ambulance, one will be dispatched.

Therefore, staff recommends the EMSAB approve and recommend REMSA present to the District Board of Health for approval the use of Omega Determinant Codes and the procedure of referring these callers to the NHL prior to dispatching an ambulance.

### **POSSIBLE MOTION**

Should the Board agree with the recommendation, a possible motion would be: “Move to approve and recommend REMSA present to the District Board of Health for approval the use of Omega Determinant Codes and the procedure of referring these callers to the Nurse Health Line prior to dispatching an ambulance.”

## **Review of REMSA approved OMEGA Determinant Calls**

**1-1-14 through 12-23-14**

### **Executive Summary**

REMSA has initiated a trial implementation of Omega determinant codes by the International Academy of Emergency Dispatch (IAED). The purpose of this trial is to evaluate the safety, efficacy and use of these determinant codes in the REMSA ambulance system to identify appropriate calls to be further evaluated by a Registered Nurse certified as an Emergency Communications Nurse (ECN) at the REMSA Nurse Health Line (NHL) before an ambulance response is initiated. Omega determinants are assigned to 911 calls that do not require an immediate ambulance response. These Omega determinant codes represent the lowest acuity medical conditions that prompt an ambulance response by 911 callers in Washoe County, NV. The data in this evaluation period described in this document represents 911 calls received into REMSA's dispatch center between January 1, 2014 and December 23, 2014, approximately 12 months of calls. During this time, an automatic REMSA ambulance response was continued on all calls. A small percentage of the evaluations by the ECN resulted in differing determinations of the patient's condition from the initial determination by the REMSA Emergency Medical Dispatcher (EMD).

Omega calls are currently in use as a qualifier to be evaluated by an ECN prior to an ambulance response in the following locations within the United States:

- Louisville, KY
- Ft. Worth, TX
- Syosset, NY
- Salt Lake City, UT

Calls that received an Omega determinant upon initial coding by the EMD were sent to an ECN after an initial ambulance was dispatched without lights and sirens. Callers were then assessed by the ECN using a separate, but congruent, methodology to determine a more precise and appropriate care pathway for the patient. Calls where the ECN evaluation and the EMD evaluations resulted in differing determinant codes, and where the ECN recommended an ambulance response were further reviewed. The number of these calls over the 12 month evaluation period totaled 37 out of 765 total Omegas calls sent to the NHL (4.84%). This total number of calls represents an average of 3 per month, or 3.4% of average total Omega volume per month. However, it is important to know coding differences do not necessarily equate to improper protocol application or poor patient outcomes. REMSA reviewed all 37 calls in question.

REMSA concluded that 10 of the 37 were possibly coded incorrectly from the EMD (1.3% of total Omega calls sent to the NHL) and only one resulted in a recommendation of a lights and sirens response; the outcome of that specific call resulted in the patient refusing ambulance transport. In addition, a clinical review of the patient care reports revealed that no adverse patient outcomes were identified. It should be noted that the standard acceptable critical coding error rate defined by the IAED is 6%.

## Review of REMSA approved OMEGA Determinant Calls

1-1-14 through 12-23-14

*In conclusion, the data shows use of Omega determinants to identify calls that are evaluated by an ECN before an ambulance is dispatched is a safe and reliable method of reducing unnecessary and hazardous emergency responses to the lowest acuity medical complaints generated by 911 callers in Washoe County, NV.*

### Methodology

There are over 200 IAED approved Omega determinant codes. Of these, REMSA has approved 52 Omegas determinant codes for evaluation. A query was run from the TriTech CAD and LowCode data bases for the time period of January 1, 2014 through December 23, 2014. The query specifically looked for any 911 call coded as an OMEGA determinant<sup>1</sup> and sent to an ECN at REMSA's Nurse Health Line (NHL) for further evaluation and possible recommendation of an alternative care pathway. Of the calls sent to the NHL, calls where the ECN evaluation and the EMD evaluations resulted in differing determinant codes and where the ECN recommended an ambulance response were evaluated by REMSA's quality assurance staff and Medical Director as necessary.

Satisfaction surveys are mailed monthly. The NHL patient satisfaction surveys measure how well the nurse explained care options, if all questions were answered, and if the nurse gave adequate information to the caller. Each caller is also asked if they would utilize our service in the future.

### Outcomes

1029 calls were coded as a REMSA-approved Omega determinant. Of those 1029 calls coded as Omega determinants, 765 were routed to the ECN (see Figure 1). There are 5 reasons an OMEGA determinant may **not** be transferred to the ECN:

1. *NHL is Busy,*
2. *Public Assist,*
3. *Caller Refused NHL,*
4. *Healthcare Professional on Scene,*
5. *The CAD Omega notification system was disabled.*

---

<sup>1</sup> From the REMSA Medical Director's list of 52 approved Omega determinants

## Review of REMSA approved OMEGA Determinant Calls

1-1-14 through 12-23-14

### OMEGA Determinant - EMD Call Routing

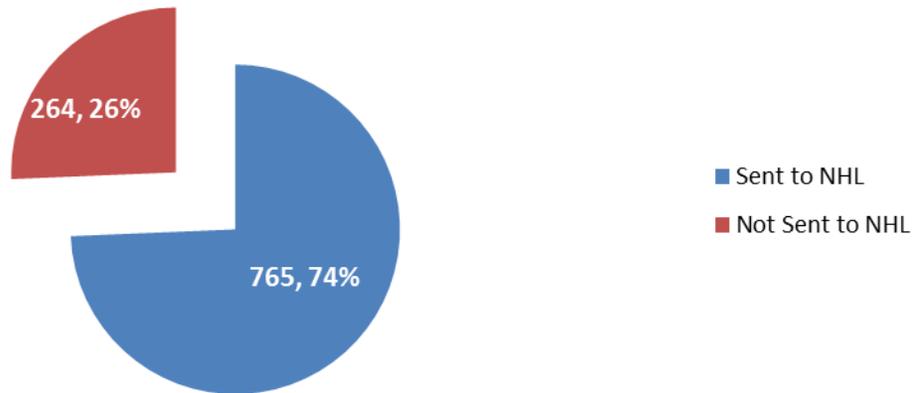


Figure 1

Of the 37 Omega calls sent to the NHL that resulted in a different final coding, 10 (1.3% of total calls sent to the NHL) were determined to have been incorrectly coded by the EMD<sup>2</sup>. REMSA further reviewed EMD coding differences to identify possible trends. No trends in difficulty with any particular EMD protocol or individual performance were identified. The remaining 27 calls were correctly coded by the EMD.

It should be noted during the evaluation period, REMSA continued to dispatch an emergency ambulance prior to the completion of the ECN evaluation. The ECN's final recommendation was likely influenced knowing an emergency response had already been initiated. REMSA believes some ECNs may have selected "Ambulance Response" knowing an ambulance was enroute or because the ambulance arrived on scene during the ECN phone assessment.

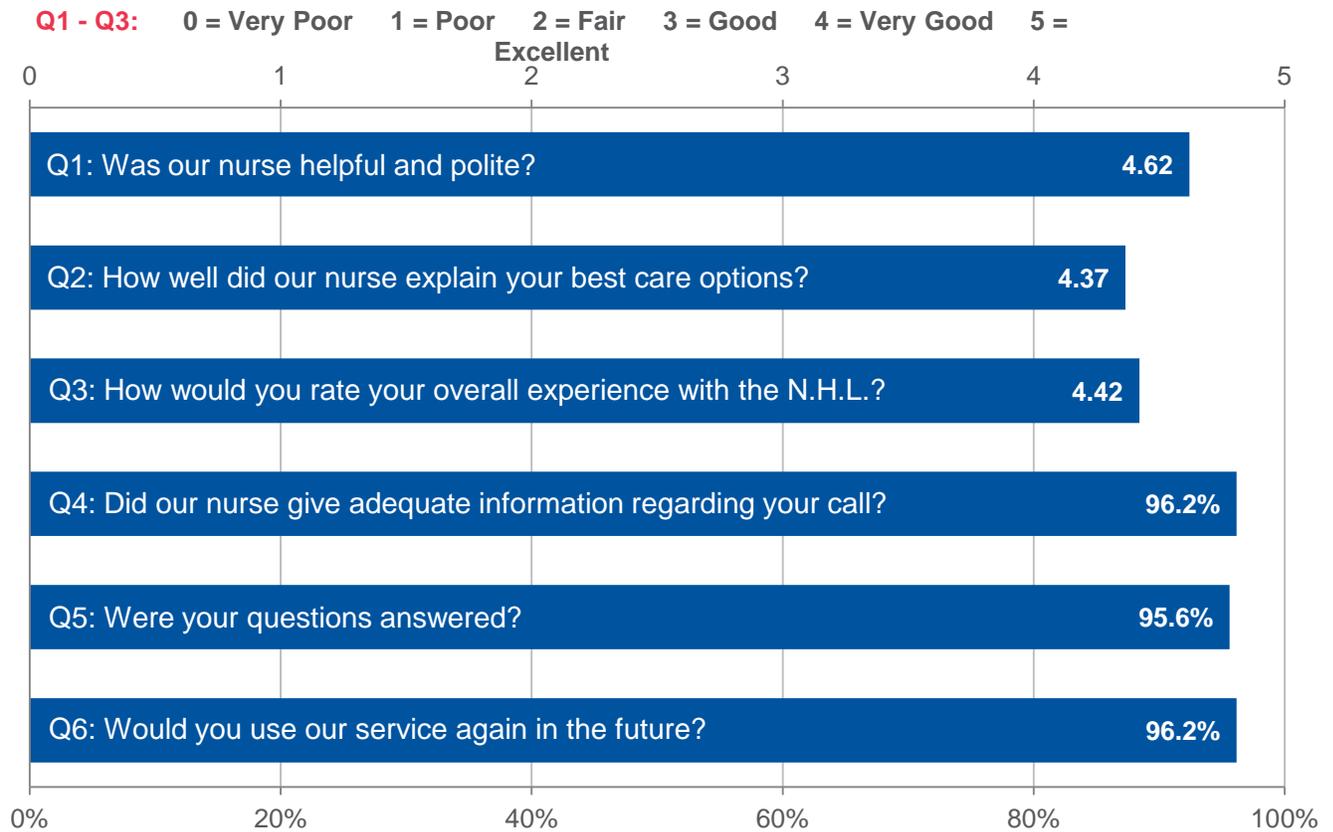
Monthly surveys depict high satisfaction. The survey captures data on the following questions:

1. *Was our nurse helpful and polite?*
2. *How well did our nurse explain your best care options?*
3. *How would you rate your overall experience with the NHL?*
4. *Did our nurse give adequate information regarding your call?*
5. *Were your questions answered?*
6. *Would you use our services again in the future?*

<sup>2</sup> NOTE: REMSA's 911 EMD center is a Medical Priority Dispatch System "Accredited Center of Excellence". As such we are held to a strict quality standard of correct determinant coding of  $\geq 94\%$ . The error rate noted above for the OMEGA determinants during the review period equates to a correct coding rate of 98.7%

## Review of REMSA approved OMEGA Determinant Calls

1-1-14 through 12-23-14



**Q4 - Q6:** Percentage of Respondants Answering "Yes"

Surveys Returned for Patients Served by the REMSA Nurse Health Line July 2014 - December 2014 n = 579

### Conclusion

REMSA captured 1029 calls to 911 that met the IAED requirements and REMSA medical director approval for classification of an Omega determinant. Of these 1029 calls, 765 were sent to the REMSA NHL for further evaluation of appropriate medical care pathways. Of these 765 calls, 37 total calls were coded differently from the EMD by the ECN and resulted in a recommendation of an ambulance response by the ECN. All 37 calls were reviewed for accuracy of initial coding and patient outcome information. It was found that 10 of these calls were inaccurately coded upon initial EMD questioning and none of the reviewed calls resulted in poor patient outcomes.

Satisfaction scores show that the callers are happy with the service, got the information that they needed regarding their care, had their questions answered, and would use the NHL again.

## **Review of REMSA approved OMEGA Determinant Calls**

**1-1-14 through 12-23-14**

REMSA has concluded that the use of Omega determinant codes to identify appropriate calls to be evaluated by a qualified ECN before an ambulance response is initiated is safe and effective. It is recommended REMSA discontinue the current practice of dispatching an ambulance to Omega determinant-coded calls prior to the ECN evaluation. This recommendation is consistent with current IAED recommended use of Omega determinants in ambulance systems where ECNS protocols are in use (see appendix A). It should be noted at any time the caller requests an ambulance, one will be dispatched.

# Review of REMSA approved OMEGA Determinant Calls

1-1-14 through 12-23-14

## Appendix A

Taken from [http://www.emergencydispatch.org/about\\_ecns](http://www.emergencydispatch.org/about_ecns)

The International Academies of Emergency Dispatch's® (IAED™) certified Emergency Communication Nurse System™ (ECNS™) is a comprehensive nurse triage system comprised of over 200 protocols. It is designed to be implemented within an Emergency Medical Services (EMS) communication center and used alongside the IAED's Medical Priority Dispatch System™ (MPDS®), which was developed over 33 years ago. Not every emergency call needs a lights-and-siren response. In fact, not every call even needs a COLD ambulance response. ECNS, when used with the MPDS Protocol and Priority Dispatch Corp.'s™ internationally-recognized gold-standard dispatch and QI software—ProQA® and AQUA®—can provide optimal **ALTERNATIVE CARE** for vetted low-acuity, or OMEGA, Determinant Codes, giving EMS systems new options to care for patients and their communities. Responses to OMEGA determinates are locally defined based on MPDS-approved codes.

ECNS is considered IAED's "Fourth Pillar of Care" along with Emergency Medical Dispatch™, Emergency Fire Dispatch™, and Emergency Police Dispatch™. Accreditation as a Center of Excellence is an integral part of superior care standards with current medical accreditation required before a center can use the ECNS protocol. Other prerequisites for ECNS include implementing ProQA dispatch software and AQUA quality improvement software.

The overall ECNS progress is comprehensive, yet simple. First, a call comes into the communication center and ProQA is launched by the Emergency Medical Dispatcher™ (EMD). If, after EMD questioning, the patient is assigned a pre-determined and locally-defined "low code" (OMEGA Code), the call is transferred to the Emergency Communication Nurse (ECN) desk. This desk is staffed by an experienced, specially-trained, and ECNS-certified Registered Nurse who uses LowCode™ software developed by Priority Solutions Inc. (PSI), which seamlessly integrates with ProQA, to assess the patient. For numerous reasons it is imperative that the ECN be co-located within the communication center. After verifying there are no priority symptoms, additional information is gathered such as co-morbid conditions, medications, and allergies. An ECNS symptom-based protocol is then selected and additional assessment conducted.

Based on the caller's answers, a Recommended Care Level is achieved, which includes tiered response levels from Send an Ambulance Now to Self-Care Instructions. From here a second tier disposition is available which is customer definable. This tier represents resources available in the customer's community e.g. urgent care centers, primary care physicians. Users can engage a third tier disposition called a directory of services which will identify a specific list of health care resources near the patient.

Priority Solutions Inc.'s LowCode software has been in use for over fourteen years throughout the world and more than two million calls have been processed without an untoward incident.

**The ECNS has been designed to specifically meet the following two goals:**

1. Appropriately manage and support caller access to an increasingly burdened healthcare system by better allocating resources to meet their non-emergent, non-life-threatening health situations.
2. Help EMS communication centers, ambulance services, and all EMS providers optimize their resources and outcomes by sending, when necessary, the
  - right personnel, to the
  - right place, at the
  - right time, with the
  - right equipment, using the
  - right resources, to get the
  - right care, in the most clinically appropriate way; thereby facilitating the

## Review of REMSA approved OMEGA Determinant Calls

1-1-14 through 12-23-14

- right cost, to patients, providers, and payers.

### Key Points:

- ECNS currently has user centers in 5 countries on 4 continents
- More than 1,000 clinicians trained throughout the world
- ECNS currently has over 200 protocols—each containing a clinical rationale along with a reference list for additional information

### Benefits of ECNS:

- Effective and standardized clinical assessment and assignment of appropriate Recommended Care Levels
- Safely manages the growing demands on healthcare providers
- Reduces the demand on ambulance transportation services
- Reduces unnecessary ER visits and wait times
- Numerous integration efforts completed with third party software
- Brings appropriate care closer to patients while being responsive to their needs
- Establishes efficient and effective use of EMS and community provider resources
- ECNS is considered “The Fourth Pillar” of the International Academies of Emergency Dispatch, along with EMD, EFD, and EPD, and is regulated by its Standards Council
- Established Quality Assurance/Quality Improvement process, with the software integration availability of AQUA Evolution
- Data-driven approach with proven safety and efficacy with over 14 years of QA/QI data

**STAFF REPORT**  
**EMS ADVISORY BOARD MEETING DATE:** June 4, 2015

**TO:** Regional EMS Advisory Board Members  
**FROM:** Brittany Dayton, EMS Coordinator  
775-326-6043, [bdayton@washoecounty.us](mailto:bdayton@washoecounty.us)  
**SUBJECT:** **Presentation, discussion and possible approval of the process for external agencies requesting item(s) to be included on Regional EMS Advisory Board agendas**

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**SUMMARY**

EMS Program staff drafted a standard process for all external agencies outlining how to request items for inclusion on future Regional EMS Advisory Board (REMSAB) agendas. Staff recommends that external agencies request all agenda items through their applicable representative on the REMSAB.

If an agency is interested in presenting to the REMSAB, the process would be to complete a staff report and submit it to the appropriate Board representative. The representative will review the report for content and applicability for presentation to the REMSAB. Once that determination has occurred, the REMSAB representative would initial the document and forward it to the Washoe County Health District to be included on the designated agenda, or determine that it is not applicable.

In an effort to provide consistent structure of all staff reports the REMSAB Secretary developed the attached template to be used by external agencies. It is suggested that all agencies use this format on their agency's specific letterhead.

**PREVIOUS ACTION**

There has been no previous action on this item.

**BACKGROUND**

The REMSAB is comprised of representatives from the three political jurisdictions and hospital representatives. Currently it is unclear how partner agencies would request to present to the REMSAB.

Prior to the March 2015 Board meeting an external agency requested to have an item included on the agenda. While processing this request EMS Program staff recognized the need to develop a specific procedure for future agenda item requests.

For many public bodies the process for requesting items future agendas is completed during public comment. The item requested is then included on the agenda for the follow meeting, which typically occurs the next month. This process is not an efficient method for requesting agenda items for the REMSAB given that meetings occur on a quarterly basis.

**FISCAL IMPACT**

There will be no additional direct fiscal impact to the any of the jurisdictions associated with the approval of the process for external agencies requesting item(s) to be included on Regional EMS Advisory Board agendas.

**RECOMMENDATION**

EMS Program staff recommends that the Board approve the process for external agencies requesting item(s) to be included on Regional EMS Advisory Board agendas.

**POSSIBLE MOTION**

Should the Board agree with staff's recommendation a possible motion would be:

“Move to approve the process for external agencies requesting item(s) to be included on Regional EMS Advisory Board agendas.”

# Insert Agency Logo/Title Here

## STAFF REPORT

EMS ADVISORY BOARD MEETING DATE: insert date here

Reno \_\_\_\_\_  
Sparks \_\_\_\_\_  
Washoe \_\_\_\_\_  
WCHD \_\_\_\_\_  
Legal \_\_\_\_\_

**TO:** Regional EMS Advisory Board Members  
**FROM:** Author's name, Title  
Phone number, E-mail address  
**SUBJECT:** *Language to be posted on the agenda for this item, which matches the Recommendation and Motion.*

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### **SUMMARY**

*Brief description of the question or issue you are bringing before the Board.*

### **PREVIOUS ACTION**

*List, chronologically, a brief summary of any previous actions taken relevant to this item.*

### **BACKGROUND**

*Explain what the issue is and the background information, including history leading up to and current status of the matter you are bringing to the Board. Anticipate and answer all reasonable questions about the matter, its impact on the public, the Board, other entities, the County organization and/or staff. When possible, use bullet points rather than lengthier narrative.*

### **FISCAL IMPACT**

*Explain any potential fiscal impact to the Emergency Medical Service agencies.*

### **RECOMMENDATION**

*Recommendation is based on the background provided above and is to match the Subject Line and Motion of your memo.*

### **POSSIBLE MOTION**

*Should the Board agree with staff recommendation, a possible motion would be: "Move to (insert recommendation language)."*

**STAFF REPORT**  
**EMS ADVISORY BOARD MEETING DATE:** June 4, 2015

**TO:** Regional EMS Advisory Board Members  
**FROM:** Brittany Dayton, EMS Coordinator  
775-326-6043, [bdayton@washoecounty.us](mailto:bdayton@washoecounty.us)  
**SUBJECT:** **Presentation, review and possible direction on the Truckee Meadows Fire Protection District Emergency Medical Service Review from the Internal Audit Division to include responses from the Washoe County Health District and REMSA.**

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**SUMMARY**

In 2014 the Board of Fire Commissioners approved an analysis of the Truckee Meadows Fire Protection District and Sierra Fire Protection District to determine the TMFPD cost per medical call. With this direction the Washoe County Internal Audit Division and LSM-Government Financial Management completed the audit on January 26, 2015.

This report was initially presented to the Board of Fire Commissioners in February 2015, however no action was taken to allow the Washoe County Health District and REMSA the opportunity to review and respond to the audit. The agenda item was brought back to the Board in March 2015. After considerable discussion Commissioner Lucey motioned to acknowledge receipt of the Truckee Meadows Fire Protection District Emergency Medical Service Review from the Internal Audit Division to include responses from the Washoe County Health District and REMSA and direct staff to deliver the report the EMS Advisory Board for further review on a future agenda.

Attached is the packet that was provided to the Board of Fire Commissioners during the March 24, 2015 meeting.

**PREVIOUS ACTION**

No previous action has been taken by this Board concerning the TMFPD EMS audit report.

**BACKGROUND**

During the September 23, 2014 Board of Fire Commissioners meeting the Board approve an analysis of the Truckee Meadows Fire Protection District and Sierra Fire Protection District by the Washoe County Internal Audit Division and LSM-Government Financial Management to determine the TMFPD cost per medical call.

On February 10, 2015 Alison Gordon presented the TMFPD EMS audit report to the Board of Fire Commissioners. After presentation and discussion of this item the board took no action and requested Alison Gordon to bring the report back to allow for inclusion of additional information from REMSA and the Washoe County Health District.

On March 24, 2015 Alison Gordon presented a summary of the TMFPD EMS audit report. Jim Gubbels, President of REMSA and Careflight, and Kevin Dick, District Health Officer, had the opportunity to present to the Board to discuss the various topics within the report.

### **FISCAL IMPACT**

There is no additional fiscal impact to the budget should the Board review the TMFPD audit report (and make recommendations to the Board of Fire Commissioners).

### **RECOMMENDATION**

EMS staff recommends the EMS Advisory Board review, discuss and acknowledge the Truckee Meadows Fire Protection District Emergency Medical Service Review from the Internal Audit Division to include responses from the Washoe County Health District and REMSA, (and if the Board so chooses, provide recommendations to the Board of Fire Commissioners).

### **POSSIBLE MOTION**

Should the Board agree with staff's recommendation a possible motion would be:

“Move to acknowledge the Truckee Meadows Fire Protection District Emergency Medical Service Review from the Internal Audit Division to include responses from the Washoe County Health District and REMSA (and if the Board so chooses, provide recommendations to the Board of Fire Commissioners).”



# TRUCKEE MEADOWS FIRE PROTECTION DISTRICT

## STAFF REPORT

BOARD MEETING DATE: March 24, 2015

CM/ACM \_\_\_\_\_  
Finance \_\_\_\_\_  
Legal \_\_\_\_\_  
Risk Mgt. \_\_\_\_\_  
HR \_\_\_\_\_

**DATE:** March 11, 2015

**TO:** Board of Fire Commissioners and  
Truckee Meadows Fire Protection District

**FROM:** Alison A. Gordon, CPA, CFE  
Washoe County Internal Audit Manager  
328-2064, [agordon@washoecounty.us](mailto:agordon@washoecounty.us)

**THROUGH:** Charles Moore, Fire Chief  
John Slaughter, County Manager

**SUBJECT:** Acknowledge Receipt of Truckee Meadows Fire Protection District  
Emergency Medical Services Review from the Internal Audit Division to  
include responses from the Washoe County Health District and REMSA.  
(All Commission Districts)

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### SUMMARY

This review was performed in response to approval of Agenda Item 5 during the September 23, 2014 Board of Fire Commissioners of the Truckee Meadows Fire Protection District. The agenda item approved was an analysis of the Truckee Meadows Fire Protection District (District) and Sierra Fire Protection District (SFPD) by the Washoe County Internal Audit Division and LSM-Government Financial Management to determine the TMFPD cost per medical call. This included a review of the emergency medical services provided to County citizens in Wadsworth.

The review showed the following:

Various County and non-County emergency response entities responded to emergency medical service, (EMS), calls within Washoe County. These include but are not limited to REMSA, the District, certain District and County volunteer fire stations, the Storey County Fire Protection District, the North Lyon County Fire Protection District, and the Pyramid Lake Fire/EMS tribal district.

The District's cost to provide emergency services is estimated at \$2,582. This includes the costs of direct emergency operations and administrative overhead. This amount is about 9 percent more than first reported to the Fire Board in March 2012.

The District periodically helps REMSA in the transportation of patients by sending a paramedic in the REMSA ambulance to assist with the patient. During the period January 1 through June 30 2014, this occurred 56 times. The average staff time spent on transport was 45 minutes at a cost of about \$129.

Wadsworth EMS services falls within REMSA's operational area. During FY14, the County Health District reported REMSA responded to calls in the Wadsworth area three times. While the number of responses appears low, no other data was available. The number of REMSA responses has resulted in other fire entities with fire apparatus or ambulance and paramedic staff responding to calls in Wadsworth, including the District's Spanish Springs and Hidden Valley stations, the North Lyon County Fire Protection District, and the Pyramid Lake Fire Rescue/EMS tribal district. These teams responded to EMS calls 215 times during FY14 with limited cost reimbursement or medical supply replacement from REMSA.

Since May 1994, REMSA has collected the additional \$27 increase adjusted annually for CPI in its customer billing. Based on the analysis performed in Appendix I, we prepared a conservative estimate of REMSA's Wadsworth fee revenues and expenditures including amounts for uncollectible accounts, and annually adjusted for CPI to staff an ambulance in Wadsworth over the last 20 years. This analysis showed over the 20 years REMSA collected an estimated \$6.1M more revenues than expenses.

During August 2013, the District, the Reno Fire Department, the Sparks Fire Department and REMSA entered into a three-month agreement regarding REMSA reimbursing certain medical supplies used by the participating agencies. The District reported once the agreement expired, it entered into a verbal agreement with REMSA to continue the program. To date REMSA has only reimbursed the District about \$852 of the \$15,421.16 owing through November 2014 for agreed upon medical supplies. REMSA is also not reimbursing other non-County entities responding to Washoe County emergency medical calls the cost of providing the service and replacement of medical supplies is inconsistent.

**County Priority/Goal supported by this item:** Government Efficiency and Financial Stability

#### **PREVIOUS ACTION**

Item was presented at the February 10, 2015 BOFC with no action taken to allow REMSA and the Washoe County Health District to respond.

#### **BACKGROUND**

On October 22, 1986, the Health District granted REMSA the right to provide both emergency and non-emergency ambulance service by ground and rotary wing units on an exclusive basis within the Washoe County Health District, except for ground operations in Gerlach and the North Lake Tahoe Fire Protection District. The most recent Amended and Restated Franchise Agreement is dated May 22, 2014. There were no changes to the franchise service area in this agreement.

Per the Amended and Restated Franchise Agreement, REMSA may employ the use of "mutual aid" as appropriate in fulfillment of its obligations to provide ambulance service. Mutual and automatic aid providers in Washoe County include the Truckee Meadows Fire Protection District, County volunteer fire departments, the Reno Fire Department, the Sparks Fire Department, the North Lake Tahoe Fire Protection District, and the

Pyramid Lake Fire Rescue and EMS. In addition, other non-County EMS first responders include the North Lyon County Fire Protection District, the Storey County Fire Department, and Pyramid Lake Fire/EMS tribal district.

On February 26, 2013, the County Board of Fire Commissioners approved the Truckee Meadows Fire Protection District, District, request to increase the service level for emergency medical services in the Truckee Meadows District boundary. At that time, the County Fire Board approved staff's recommendation to increase the service level for emergency medical services within the District. This changed the service level from Intermediate Life Support to Advanced Life Support (ALS) with at least one of the on-duty staff at seven fire stations being certified as a Paramedic. Currently, a minimum of one on duty paramedic is assigned per shift at each of the District's 11 stations.

### **SCOPE AND METHODOLOGY**

The scope of the review included identifying the number of EMS calls during FY14 and evaluating the costs incurred by the Truckee Meadows Fire Protection District when providing emergency medical services. In addition, the review includes identifying the cost incurred when District paramedic staff assists REMSA during the transport of a patient to the hospital. It also included reviewing paramedic services provided to the citizens of Wadsworth and determining the revenues generated by the additional fees REMSA receives to provide emergency medical services in Wadsworth.

This audit was conducted in accordance with Generally Accepted Government Auditing Standards, and covered the period of July 2013 to December 2014. Fieldwork was conducted between November 2014 and January 2015.

### **FISCAL IMPACT**

This report has no fiscal impact.

### **RECOMMENDATION**

It is recommended the Board of Fire Commissioners acknowledge receipt of the Truckee Meadows Fire Protection District EMS Review to include responses from the Washoe County Health District and REMSA.

### **POSSIBLE MOTION**

Should the Board of Fire Commissioners acknowledge receipt of this audit report, a possible motion would be:

*"I move to acknowledge receipt of the Truckee Meadows Fire Protection District EMS Review from the Washoe County Internal Audit Division, to include responses from the Washoe County Health District and REMSA."*

ag

Attachments



# Truckee Meadows Fire Protection District Emergency Medical Services Review

January 26, 2015



## Executive Summary

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The Truckee Meadows Fire Protection District provides emergency medical services to Washoe County citizens. This internal audit was performed to analyze the costs incurred by the District to provide emergency medical services and analyzed emergency medical services in Wadsworth, NV.

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REMSA provides emergency and non-emergency ambulance service within Washoe County.

REMSA holds the exclusive right to provide ambulance service within Washoe County with the exception of ground services in Gerlach and North Lake Tahoe Fire Protection District (Page 1).

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The District responds to EMS calls within Washoe County.

During FY14, the District responded to 6,257 EMS calls. The cost to the District for each response is estimated at \$2,582 (Page 2).

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Four entities currently provide various levels of EMS service in Wadsworth during FY14.

The County Health District reported REMSA responded 3 times, the District responded 112 times, the North Lyon Fire Protection District responded 32 times and the Pyramid Lake Fire/EMS Tribal District responded 71 times (Page 5).

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REMSA bills an additional amount to its Washoe County customers to fund ambulance services in Wadsworth.

Over the last 20 years, it is estimated that REMSA has collected revenues exceeding its expenses for providing a service in Wadsworth. These excess revenues have increased annually reaching about \$6.1M at the end of FY14 (Page 6).

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REMSA does not always reimburse or replace medical supplies used by other EMS responders providing service in Washoe County.

Since entering an agreement with the District in August 2013, REMSA has only reimbursed about \$852 of \$15,421.16 billed and only sporadically replaces used medical supplies (Page 7).

## Observations

### **Truckee Meadows Fire Protection District Emergency Medical Services**

The Truckee Meadows Fire Protection District (District) station staff includes a minimum of one on duty paramedic per shift at each of its 11 fire stations. In addition to the paramedics assigned, the other station staff may also be certified at the paramedic level and function in this job classification, as needed, e.g. firefighters, equipment operators, and station captains. However, having other fire station staff with a paramedic certification greatly assists in providing quality care to EMS patients.

REMSA provides both emergency and non-emergency ambulance service by ground and rotary wing units on an exclusive basis within the Washoe County Health District, except for ground operations in Gerlach and the North Lake Tahoe Fire Protection District. In the suburban, rural and frontier areas of Washoe County, many of which includes District communities, REMSA's response time standards for life threatening calls varies between 15 to about 31 minutes depending on the location of the call, with frontier/wilderness areas requiring a response "as quickly as possible".

Because response time and distance are directly correlated, the further an ambulance or first responder is from a patient in need of emergency medical services, the longer the wait for those services. In a life threatening situation, as more time elapses until care is initiated, the worse the outcome is for the patient. In the suburban, rural and frontier areas, the District fire stations are strategically located which allows District staff to provide initial emergency medical services to patients until a REMSA ambulance or care flight arrives. In those frontier/wilderness areas where the District stations may not be the closest responder, the District has established automatic aid agreements with other non-County emergency response districts that may be closer.

### **District Emergency Call Data**

Using the District's Fire RMS reporting system, during FY14, the District responded to 7,627 emergency calls. An analysis of these calls showed the District, responded to 6,257 emergency medical services, EMS, calls. This equates to 82% of the total emergency calls. Exhibit 1 shows the number of EMS calls per District station.

#### **Exhibit 1**

St.#	Location	# of EMS Calls
13	Stead	741
14	Damonte Ranch	517
15	Sun Valley	1,678
16	East Washoe Valley	302
17	Spanish Springs	1,352
18	Cold Springs	485
30	Bowers	46

35	Mogul	284
36	Arrowcreek	298
37	Hidden Valley	357
39	Joy Lake	197
Total		6,257

In addition to the District stations providing service in eastern Washoe County, the Storey County Fire Protection District provides automatic aid, including responding to EMS calls. According to the Storey County Fire Chief, about 95 percent of the automatic aid calls pertain to EMS Services. During the period January 2014 through June 2014, Storey County responded about 43 times to EMS calls in Washoe County and during the period July 2014 through October 2014 responded about 51 times including EMS calls along the I80 corridor between Orchard and Painted Rock.

**District Costs per Emergency Medical Response**

To estimate the total dollar cost on a per response basis, we reviewed the County financial system, SAP, during FY2014 and used the cost of direct emergency operations and administrative overhead, excluding contingencies and capital outlay. The results are as follows:

District EMS Expenses during F14	\$16,153,680
Total number of emergency calls (per District Fire RMS system)	6,257
Estimated District Cost per Response	\$2,582

The District EMS Expenses includes about \$88,600 in medical supplies expense for FY14. This equates to an average of about \$14 per medical call. However, the amount of medical supplies used for each EMS call can vary from a few inexpensive supplies such as a bandage and antiseptic wipe to expensive supplies including various equipment and pharmaceuticals.

**District Participation in Patient Transports**

During the period January 1, 2014 through June 30, 2014, the District assisted REMSA in the transportation of patients 56 times by sending a firefighter in the REMSA ambulance to assist with patient care while transporting the patient to the hospital. Data prior to January 1, 2014 was not available. The average staff time spent during transport was 45 minutes at a cost of about \$129, with actual transport times occurring between 10 minutes to 2 hours and 40 minutes where costs range between \$29 and \$459 respectively. These costs include both salaries and benefits of the paramedic participating in the transport, and the staff and benefit costs of the responding fire station going out of service. When District staff participates in the transportation of a patient, the responding fire engine is out of service until the paramedic is retrieved by the engine company on scene or returns

to the station by other means of transportation. As a result, fire staff from another station would be required to respond to calls assigned to the out of service station or apparatus.

**EMS Service in Wadsworth**

Wadsworth EMS service falls within REMSA’s franchise operational area. On June 22, 1994, the Washoe County District Board of Health met and approved REMSA maintaining a ground ambulance unit within Wadsworth; and that the average ground ambulance bill be increased by 5.3% or \$27 as outlined by staff. The increase to the average REMSA ground bills was to cover the cost of placing and staffing an advanced life support, ALS, unit in Wadsworth. REMSA documentation also showed this additional funding was needed to pay for ambulance, medical equipment and communications in Wadsworth, all of which would result in REMSA incurring long-term costs.

Both District and REMSA staff reported that REMSA did place a mobile home next to the District’s Wadsworth fire station, which also included an ambulance. For unknown reasons the arrangement did not continue and REMSA staff and an ambulance are now located in the Big Bend RV Park in Wadsworth. At a recent Citizen’s Advisory Board meeting held in Wadsworth, REMSA management stated an ambulance is located in Wadsworth as ambulances are available. As a result, REMSA staff and ambulances are not always stationed in Wadsworth as also demonstrated in the response numbers below.

REMSA was requested to provide data showing the number of ground responses in Wadsworth during FY14. According to REMSA management, this data was not available. County District Board of Health records showed three REMSA ground responses in the Wadsworth area during FY14. While the number of responses appears low, no other data was available. For the first four months of FY15, REMSA management reported their staff responded to calls 19 times with 9 ground transports.

The number of REMSA responses has resulted in other fire entities with fire apparatus or ambulance and ALS personnel responding to EMS calls in Wadsworth. These include District Stations 17 and 37. The District’s Spanish Springs and Hidden Valley stations are located in eastern Reno/Sparks areas and are at least 30 miles away from Wadsworth. Other non-Washoe County entities are strategically closer and respond when available. This includes the North Lyon County Fire Protection District, and the Pyramid Lake Fire Rescue/EMS tribal district, each of which provide ambulance services. Exhibit II below shows the number of Wadsworth area EMS call responses by the District stations and each of the non-County entities during FY14.

**Exhibit II**

<b>District</b>	<b>FY14</b>	<b>July – Oct. 2014</b>
Truckee Meadows Fire District Stations 17 & 37	112	8
North Lyon County Fire Protection District	32	12 <sup>(1)</sup>
Pyramid Lake Fire Rescue/EMS	71 <sup>(2)</sup>	81

Total	215	101
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<sup>(1)</sup> The North Lyon County Fire Protection District reported a decrease in call responses because they were unable to fill the request due to staffing issues or denied the request for other reasons.

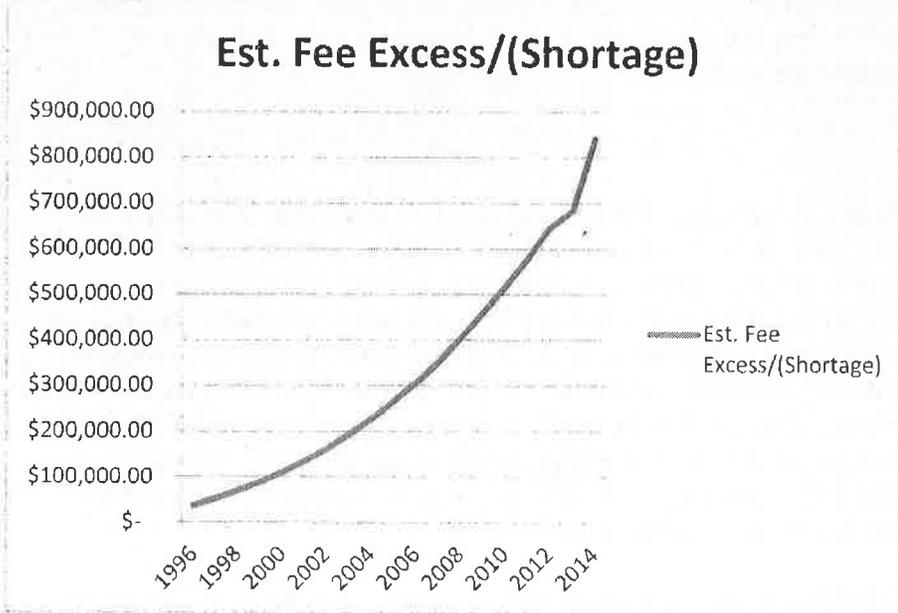
<sup>(2)</sup> Data includes call responses from March 2014 when services were first available through June 2014.

**Additional Billing Fee for Wadsworth Service**

Since May of 1994, REMSA has included the additional \$27 increase, adjusted annually for CPI, in its customer billing, even though it has not consistently provided ambulance services in Wadsworth. To estimate the amounts collected and expended by REMSA for providing ambulance service in Wadsworth over the last 20 years, various assumptions were made because actual data was limited and/or not available. After much analysis, a conservative estimate of both revenues and expenses was developed using the medical services CPI rates for each year. The details behind the amounts described and the assumptions used are identified in Appendix I of this report.

Based on the analysis performed in Appendix I, over the 20 years where REMSA received revenues and expenses were incurred to staff an ambulance in Wadsworth, it appears REMSA collected an estimated \$6.1M more revenues than it had in expenses. For example, we estimated that revenues exceeded costs in FY96 by about \$36K, in FY05 by about \$265K, and in FY14 by about \$842K. During years where REMSA had limited responses in Wadsworth, its expenses would have been significantly less to provide service in Wadsworth and excess fees would be higher than estimated in Appendix I. Exhibit III, which is based on the data in Appendix I, shows how estimated excess Wadsworth funding revenues have steadily increased over the years.

**Exhibit III**



REMSA's revenues and expenses pertaining to the additional funding received for Wadsworth are not tracked separately and are included as part of REMSA's patient

service revenue and expense in its financial statements. Therefore, any excess revenues collected resulting from the Wadsworth funding would have subsidized the cost of providing service in areas outside of Wadsworth or increased REMSA's fund balances.

### **Reimbursement for EMS Medical Supplies Used**

During August 2013, the District, the Reno Fire Department, the Sparks Fire Department and REMSA entered into an agreement regarding EMS medical supplies used. Per the agreement, REMSA agreed to reimburse participating agencies (at REMSA's cost) for disposable medical equipment used on scene by first responders prior to the arrival of REMSA personnel, as long as REMSA had adequate financial resources to do so. The term of the agreement was August 15, 2013 through October 31, 2013 as a three-month trial period. After three months of successful compliance with the agreement, all parties were to meet to discuss the continuation, adjustment, suspension, termination or general changes to the agreement.

According to District staff, once the three-month period expired, the District and REMSA made a verbal agreement to continue the medical supply reimbursement arrangement. Since the beginning of the three-month agreement, the District's financial system shows REMSA has only reimbursed the District twice – once in November 2013 and again in February 2014 totaling around \$852. Since December 2013 through December 2014, the District has used medical supplies falling within this agreement totaling \$15,421.16.

In addition, both the North Lyon Fire Protection District and the Pyramid Lake Fire Rescue/EMS tribal district reported that periodically REMSA ambulances meet them and provide replacement supplies from the REMSA ambulance. However, both agencies reported supply replacement is sporadic and depends on the staff responding in the ambulance. REMSA does not reimburse either of the agencies for their costs of providing service in Wadsworth.

### **Summary**

Based on the information provided, several emergency response providers respond to emergency medical calls within Washoe County. REMSA is primarily responsible for providing this service with the exception of Gerlach and North Lake Tahoe Fire Protection District. Other providers include both County and non-County entities such as the District and certain of its volunteer stations, and the Storey County Fire Protection District, which provides automatic aid essentially primarily along the I-80 corridor on the eastern side of Washoe County. For the Wadsworth area, in addition to REMSA and District staff, several other non-County emergency response providers respond to emergency medical calls, including the North Lyon Fire Protection District and the Pyramid Lake Fire Rescue/EMS tribal district.

Since FY95, REMSA has been collecting an additional amount from each County citizen using REMSA services to provide ambulance services in the Wadsworth area even though it has not provided consistent service. We prepared a conservative estimate

showing REMSA has collected significantly more revenues from this fee than the amounts expended to provide service. Additionally, REMSA is currently not reimbursing these entities for their costs to provide service in Wadsworth or replacing medical supplies used.

Appendix I  
Estimate of REMSA Wadsworth Revenue & Expense

Year	CPI Rate for Medical Services (1)	Rate + 1	Per Bill Fee Amount using CPI	REMSA Patient Numbers (2)	Annual Revenue (Patient Numbers multiplied by Fee)	Annual Revenue Less Uncollectible Amounts (3)	Expenses Using CPI Rate for Medical Services (4)	Excess/(Shortage)
1995	-	1.0000	\$ 27.00	16,500	\$ 445,500.00	\$ 258,390.00	\$ 263,096.00	\$ (4,706.00)
1996	0.0460	1.0460	\$ 28.24	17,243	\$ 486,962.69	\$ 311,656.12	\$ 275,198.42	\$ 36,457.70
1997	0.0370	1.0370	\$ 29.29	18,018	\$ 527,704.42	\$ 337,730.83	\$ 285,380.76	\$ 52,350.07
1998	0.0300	1.0300	\$ 30.17	18,829	\$ 567,994.65	\$ 363,516.58	\$ 293,942.18	\$ 69,574.40
1999	0.0310	1.0310	\$ 31.10	19,677	\$ 611,954.60	\$ 391,650.94	\$ 303,054.39	\$ 88,596.55
2000	0.0340	1.0340	\$ 32.16	20,562	\$ 661,235.30	\$ 423,190.59	\$ 313,358.24	\$ 109,832.36
2001	0.0400	1.0400	\$ 33.44	21,487	\$ 718,630.52	\$ 459,923.54	\$ 325,892.57	\$ 134,030.97
2002	0.0460	1.0460	\$ 34.98	22,454	\$ 785,513.47	\$ 502,728.62	\$ 340,883.62	\$ 161,844.99
2003	0.0470	1.0470	\$ 36.63	23,465	\$ 859,442.07	\$ 550,042.92	\$ 356,905.15	\$ 193,137.77
2004	0.0400	1.0400	\$ 38.09	24,521	\$ 934,041.64	\$ 597,786.65	\$ 371,181.36	\$ 226,605.29
2005	0.0460	1.0460	\$ 39.84	25,624	\$ 1,020,972.89	\$ 653,422.65	\$ 388,255.70	\$ 265,166.95
2006	0.0430	1.0430	\$ 41.56	26,777	\$ 1,112,794.09	\$ 712,188.22	\$ 404,950.70	\$ 307,237.52
2007	0.0420	1.0420	\$ 43.30	27,982	\$ 1,211,710.36	\$ 775,494.63	\$ 421,958.63	\$ 353,536.00
2008	0.0400	1.0400	\$ 45.04	29,241	\$ 1,316,886.82	\$ 842,807.56	\$ 438,836.97	\$ 403,970.59
2009	0.0410	1.0410	\$ 46.88	30,557	\$ 1,432,568.74	\$ 916,843.99	\$ 456,829.29	\$ 460,014.70
2010	0.0320	1.0320	\$ 48.38	31,932	\$ 1,544,939.43	\$ 988,761.24	\$ 471,447.83	\$ 517,313.41
2011	0.0340	1.0340	\$ 50.03	33,369	\$ 1,669,353.40	\$ 1,068,386.18	\$ 487,477.05	\$ 580,909.13
2012	0.0300	1.0300	\$ 51.53	34,871	\$ 1,796,808.54	\$ 1,149,957.46	\$ 502,101.36	\$ 647,856.10
2013	0.0290	1.0290	\$ 51.53 (5)	36,440	\$ 1,877,748.03	\$ 1,201,758.74	\$ 516,662.30	\$ 685,096.43
2014	0.0290	1.0290	\$ 51.53 (5)	38,080	\$ 1,962,246.69	\$ 1,373,572.68	\$ 531,645.51	\$ 841,927.17
<b>Totals</b>					\$ 21,545,008.33	\$ 13,879,810.13	\$ 7,749,058.03	\$ 6,130,752.10

(1) The Health District reported REMSA's billing rates are adjusted annually for the May CPI. Because the CPI rates used were not available, medical services rates were obtained from the U.S. Bureau of Labor Statistics website.

(2) REMSA patient data was not available other than in 1995. For subsequent years, we assumed a 4.5% annual increase in patient load which resulted slightly under REMSA's reported patient load for FY14.

(3) REMSA uncollectible amount percentage data was not available other than in 1995 and 2013, where the percentages of 42% and 30% were used respectively. For the years occurring between 1995 and 2013 a blended rate of 36% was used. Using these rates, revenues were adjusted to estimate the amount collectible.

(4) REMSA expenditure data pertaining to Wadsworth was not available other than in 1995. For subsequent years, expenditures were estimated using the same medical services rates obtained from the U.S. Bureau of Labor Statistics as used for REMSA's billing rates.

(5) The 2012 bill fee of \$51.53 was used for 2013 and 2014 as this rate is consistent with REMSA's current average bill amount.

**WASHOE COUNTY  
HEALTH DISTRICT**  
ENHANCING QUALITY OF LIFE

DATE: March 11, 2015

TO: Fire Commissioners  
Truckee Meadows Fire Protection District

FROM: Kevin Dick   
District Health Officer

SUBJECT: Response to Truckee Meadows Fire Protection District  
Emergency Medical Services Review – January 26, 2015

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This memorandum is in response to the Truckee Meadows Fire Protection District (TMFPD) Emergency Medical Services Review from the Internal Audit Division, dated January 26, 2015.

The Washoe County Health District (WCHD) received this audit report as part of the TMFPD February 10, 2015 agenda packet. As a result, WCHD did not have an appropriate amount of time to review the contents and provide feedback on discussed data points during the Commission meeting.

The audit review begins with the executive summary that highlights five main points reviewed within the internal audit. Those points are:

- REMSA provides emergency and non-emergency ambulance service within Washoe County.
- The TMFPD responds to EMS Calls within Washoe County.
- Four entities currently provide various levels of EMS service in Wadsworth during FY14.
- REMSA bills an additional amount to its Washoe County customers to fund ambulance services in Wadsworth.
- REMSA does not always reimburse or replace medical supplies used by other EMS responders providing service in Washoe County.

Each point will be addressed from the WCHD perspective, as the authority over the emergency medical transport franchise service for Washoe County.

- (1) *"REMSA provides emergency and non-emergency ambulance service within Washoe County."* REMSA was granted an exclusive right to ambulance transport within Washoe County, excluding Gerlach and North Lake Tahoe Fire Protection District, in 1986. This was initially through a resolution dated October 2, 1986, then a Memorandum of Understanding

OFFICE OF THE DISTRICT HEALTH OFFICER  
1001 East Ninth Street | P.O. Box 11130 | Reno, Nevada 89520  
ODHO Phone: 775-328-2416 | Fax: 775-328-3752 | [washoecounty.us/health](http://washoecounty.us/health)  
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dated October 22, 1986 and formally through the franchise agreement. The initial franchise agreement was reviewed and amended several times over the years by the District Board of Health (DBOH). Most recently the franchise agreement was completely rewritten and the existing agreement is termed the "Amended and Restated Franchise Agreement for Ambulance Service" dated May 22, 2014. It is important to note that the old franchise is what was governing ambulance service during FY 14 and some of the data elements within the audit report confuse the two agreements.

The response zones within TMFPD include 8 minute zones as well as the 15 minute, 20 minute and "best effort." These time delineations were designated by the DBOH and reviewed annually by the District Health Officer (DHO) to determine changes to the franchise service map. There is no documentation that indicates response zones for TMFPD were discussed with the DHO as a concern for possible service area adjustment prior to the discussions regarding the current Amended and Restated Franchise Agreement. The response map dated November 30, 2010 was the most current map during FY 14.

- (2) *"The TMFPD responds to EMS Calls within Washoe County."* Washoe County has a two-tiered system response to emergency medical calls. The call routes through the Public Safety Answering Point (PSAP), which dispatches fire as the first tier of the system. After the PSAP obtains the relevant information to dispatch a fire unit, the call is forwarded to REMSA for Emergency Medical Dispatch (EMD) and ambulance dispatch. The information contained within the audit indicates that TMFPD went on 6,257 medical calls during FY 14. This is consistent with a two-tiered response system. WCHD is not able to comment on the fiscal impacts of a two-tiered system on a fire agency with the information contained within the audit. Back-up documentation would need to be reviewed. However, if the system is set up for a two-tiered response, the availability of a fire unit for a medical call would also be included in the availability for the same unit to respond to a haz-mat or fire call, which is the cost of doing business. The audit report seems to allocate a substantial amount of fire response infrastructure and labor costs specifically to EMS, and to each EMS call.
- (3) *"Four entities currently provide various levels of EMS service in Wadsworth during FY14."* Wadsworth is a community of Washoe County that is within the Truckee Meadows Fire Protection District. What is misrepresented within this audit is the idea that REMSA only responded to Wadsworth 3 times during FY 14. Information required to be submitted to the WCHD by the FY 14 franchise agreement was only the priority 1 calls that required patient transport. Therefore, the information provided to the internal auditor through a public records request and emails, was that REMSA transported 3 times from Wadsworth during

FY 14<sup>1</sup>. This clarification of transport versus response was made multiple times through correspondence with the auditor<sup>2</sup>. As stated in the correspondence, WCHD did not have information related to response calls and directed TMFPD/Auditor back to REMSA for that information. Under the Amended and Restated Franchise agreement, effective July 1, 2014, section 7 outlines the response and reporting requirements. Specifically, REMSA must report ALL calls for service to the District Board of Health, regardless of priority or patient transport within the franchise service area. As outlined in section 7.4, this data is submitted on a monthly basis to assure compliance with the response time standards.

With respect to multiple entities responding to calls within Wadsworth, WCHD had not been made aware of North Lyon Fire Protection District (North Lyon) responding into the franchise service area. A significant portion of Wadsworth is tribal land<sup>3</sup> and the response by Pyramid Lake Fire is an appropriate response. For those specific calls, Pyramid Lake is the primary service provider and REMSA is operating as a partner agency. For the non-tribal areas, it would be expected to see TMFPD and REMSA respond to calls for service. WCHD would like to see the data relevant to the North Lyon responses and determine if those responses were on tribal land or in unincorporated Washoe County. North Lyon should only be responding into Washoe County through a mutual aid agreement with REMSA. Within the county land portion of Wadsworth, EMS response should be under a mutual aid agreement between REMSA and Pyramid Lake Fire, or North Lyon. For fire specific calls, the agreement would be between TMFPD and North Lyon.

- (4) "REMSA bills an additional amount to its Washoe County customers to fund ambulance services in Wadsworth." Information relating to this item was given to the Auditor and the WCHD believes the information contained within the report is a misrepresentation of the actions of the District Board of Health. Annually, REMSA is able to adjust the average bill based on a consumer price index (CPI). In June 1994, REMSA requested an adjustment to their previously approved base (as allowable by the franchise agreement) for an increase in personnel and the purchase of equipment required to provide services to Wadsworth for \$26 and \$1 for the posting station. The total increase in the maximum average bill was for \$27.

Per the franchise agreement, the DHO annually reviews the CPI for the maximum average bills. The DHO issued the annual average bill letter indicating what the allowable maximum for the average bill for 1995/1996 would be. At that time, the \$27 was considered part of the base fee structure and the CPI increase applied to that.

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<sup>1</sup> Public Records Request documentation - Attachment 1

<sup>2</sup> Email Correspondence - Attachment 2

<sup>3</sup> Map of Wadsworth, depicting tribal land - Attachment 3

(5) *“REMSA does not always reimburse or replace medical supplies used by other EMS responders providing service in Washoe County.”* The old franchise agreement did not discuss supply reimbursement; therefore, the WCHD is unable to comment on this particular section of the audit. For clarification purposes, no partner agency has ever come to the WCHD for assistance in supply reimbursement. However, it is included in the Amended and Restated Franchise Agreement section 2.7. This states that REMSA shall develop and offer a supply exchange/reimbursement agreement with the county and city fire service functions. To date, an agreement has been drafted, sent to the regional fire departments and Reno Fire Department has signed.

The Health District disagrees with the characterization provided before the Fire Board that the District was uncooperative to the County Auditor. The Fire District and the County requested documentation that was not in the Health District's possession and which was not required to be provided by REMSA to the Health District under the old Franchise Agreement. Therefore, REMSA was the appropriate organization for which to refer these information requests. The approach of requesting information from the Health District under Public Records Law was proposed by TMFPD's contractor and did not originate from the Health District. The Health District attempted to cooperate in providing information we had available and appropriately responded to requests for information from the internal auditor and the Fire District.

KD:jh  
Attachments (3)

**ATTACHMENT 1:**

**PUBLIC RECORDS REQUEST**

# WASHOE COUNTY PUBLIC RECORDS REQUEST FORM



All requests for public records will be responded to in accordance with the provisions of Chapters 239 - 239B of Nevada Revised Statutes and Washoe County Resolution Adopting Public Records Policies and Procedures. Our policy is to fill a request within 5 working days or less unless the requester is informed that the request will take additional time.

**This section should be completed by the Requester (optional)**

<b>Date of Request:</b>	November 7, 2014
<b>Name of Requester (Optional):</b>	Truckee Meadows Fire Protection District
<b>Address:</b>	1001 E. 9 <sup>th</sup> St. Bldg. D, Reno, NV 89512
<b>Telephone:</b>	775 326-6000

**Documents Requested**

(Please be as specific as possible and include names and dates of the documents if you know them. This will help us respond to your request as fast as possible.)

- |   |  |
|---|--|
| 1. REMSA Cost Information for Ground Ambulance FY2014 | 6. REMSA Number of Medical Transports from Wadsworth FY2014                            |
| 2. REMSA Cost Information for Care Flight FY2014      | 7. REMSA Average Time of all response and return to base on all medical calls FY2014   |
| 3. REMSA Number of Medical Calls FY2014               | 8. REMSA Average time of response and return to base on Wadsworth medical calls FY2014 |
| 4. REMSA Number of Medical Calls to Wadsworth FY2014  | 9. REMSA Rate Schedule FY2014  |
| 5. REMSA Number of Medical Transports FY2014          | 10.  |

**Date Documents Needed By:\***

11/17/14 AM  PM

**Signature: (Optional)**

*Charles Moore, Fire Chief*

**Copy Needed:**

Yes: No:

**Certified Copy:**

Yes: No:

\* If unable to fill request in 5 working days, requester must be informed in writing, along with the date record will be available.

**This section to be completed by the Department**

Department Receiving

The Request:

Actual Charge (if extraordinary use):

Date Request Filled:

Employee Initials:

**Determination of Access if Document is not a known public record**

District Attorney Referral  
Date Sent:

Date Returned:

Access Granted (circle one)  
Yes No

---

**From:** Conti, Christina  
**Sent:** Friday, November 14, 2014 1:15 PM  
**To:** Moore, Charles  
**Cc:** Admirand, Leslie; Dick, Kevin; Todd, Randall  
**Subject:** Re: Open Meeting Request

Hi Chief Moore,

Thank you for your public records request, dated Friday, November 7, 2014. The EMS Oversight Program has had a chance to research the items you have requested to determine if we have them in our custody for FY2014 (July 1, 2013 – June 30, 2014). Please see below for an itemized response to each of your nine requested items.

1. REMSA Cost Information for Ground Ambulance: This is available in the monthly REMSA operations report, submitted to the District Board of Health.
2. REMSA Cost Information for Care Flight: This is available in the monthly REMSA operations report, submitted to the District Board of Health.
3. REMSA Number of Medical Calls: This is available in the monthly REMSA operations report, submitted to the District Board of Health.
4. REMSA Number of Calls to Wadsworth: We do not have this information. We recommend that you contact REMSA directly for this information.
5. REMSA Number of Medical Transports: This is available in the monthly REMSA operations report, submitted to the District Board of Health.
6. REMSA Number of Medical Transports from Wadsworth: We have this information.
7. REMSA Average Time of all response and return to base on all medical calls: We only have partial data on this topic, which would be the information related to patient transports only. We recommend that you contact REMSA directly for this information. For FY2014, we only have the data for patients who were transported.
8. REMSA Average time of response and return to base on Wadsworth medical calls: We only have partial data on this topic, which would be the information related to patient transports only. We recommend that you contact REMSA directly for this information. For FY2014, we only have the data for patients who were transported.
9. REMSA Rate Schedule: This is available in the monthly REMSA operations report, submitted to the District Board of Health.

We are willing and able to copy the FY 2014 operations report and send them to you. We will begin to compile and provide all the requested reports and information in #6 by close of business on Monday, November 24, 2014.

On item #7 and #8, where we could only partially meet your request, would you like us to proceed with providing you with the data we do have?

Please let me know if you have any questions about the above information relating to your request.

Thank you so much,

Christina

*Christina Conti  
EMS Program Manager  
Washoe County Health District  
775.326.6042 desk  
775.343.2143 cell*

**ATTACHMENT 2:**

**EMAIL CORRESPONDENCE**

**Dayton, Brittany**

---

**From:** Gordon, Alison  
**Sent:** Wednesday, November 19, 2014 2:42 PM  
**To:** Dayton, Brittany; Van Buren, Vicki L.  
**Cc:** Conti, Christina; Moore, Charles  
**Subject:** RE: Public Records Request

Hi Brittany,

Thanks for getting back to us. Do you have any idea when we could expect to receive this information?

Thanks!  
Alison

**From:** Dayton, Brittany  
**Sent:** Wednesday, November 19, 2014 2:41 PM  
**To:** Van Buren, Vicki L.; Gordon, Alison  
**Cc:** Conti, Christina; Moore, Charles  
**Subject:** Public Records Request

Hello Vicki and Alison,

I understand that you have a copy of the email Christina Conti sent Chief Moore concerning his public records request. I was asked to touch base with you to confirm that you would like partial data for requests #7 and #8.

Just so you are aware, we have the data to fulfill request #6, but there are numerous addresses that need to be checked to confirm if they are in fact in Wadsworth. I am going to need to work with GIS to determine the addresses, so there may be a delay in getting you the information for request #7 and #8.

Please let me know if you have any questions.

Thank you,  
Brittany

*Brittany Dayton, MPA*  
EMS Coordinator  
Division of Epidemiology & Public Health Preparedness  
Washoe County Health District  
Phone: 775.326.6043  
Fax: 775.328.3631  
[bdayton@washoecounty.us](mailto:bdayton@washoecounty.us)

## **Dayton, Brittany**

---

**From:** Dayton, Brittany  
**Sent:** Friday, November 21, 2014 4:41 PM  
**To:** Moore, Charles; Gordon, Alison; Van Buren, Vicki L.  
**Cc:** Conti, Christina  
**Subject:** RE: Public Records Request  
**Attachments:** Public Records Request - Wadsworth Transports.pdf

Hello Chief Moore, Alison and Vicki,

GIS was able to do all the geo-coding and sent me the results this afternoon. I can now provide you with request #6 and the partial data for request #8. Attached is the requested information separated by month. For FY 2014 there were 3 medical transports from Wadsworth, therefore I calculated the "response and return" information for each call, but did not average them since the sample was so small.

I must apologize because I incorrectly read request #7 and will need to send the partial data for request #7 on Monday. This will include the average response times and return to base/call cleared times for all medical transports in FY 2014. Please feel free to contact me if you have any questions.

Thanks and have a great weekend,  
Brittany

**From:** Gordon, Alison  
**Sent:** Thursday, November 20, 2014 11:25 AM  
**To:** Dayton, Brittany; Van Buren, Vicki L.  
**Cc:** Conti, Christina; Moore, Charles  
**Subject:** RE: Public Records Request

Hi Brittany,

That works perfectly for me as I will be out all next week as well. I truly appreciate you keeping us updated on this. Hope you have a wonderful Thanksgiving!

Thanks again,  
Alison

**From:** Dayton, Brittany  
**Sent:** Thursday, November 20, 2014 11:23 AM  
**To:** Gordon, Alison; Van Buren, Vicki L.  
**Cc:** Conti, Christina; Moore, Charles  
**Subject:** RE: Public Records Request

Hello all,

I just spoke with the GIS department and they have already began geo-coding the addresses but this process will take a couple days. I was also advised that several of the staff members will be on vacation next week, so the staff thought next Wednesday was a realistic timeline for them to return all the information to me. Once I have the data I will be able to complete request #7 and #8 relatively quickly. Keeping in mind that next week is a relatively short week due to the holidays, I believe I can have the information to you by Monday, December 1 (but shooting for sooner if possible).

Again, I apologize for the delay in getting you this information, but appreciate your flexibility. Please let me know if you have any questions.

Thanks,  
Brittany

**From:** Gordon, Alison  
**Sent:** Thursday, November 20, 2014 7:40 AM  
**To:** Dayton, Brittany; Van Buren, Vicki L.  
**Cc:** Conti, Christina; Moore, Charles  
**Subject:** RE: Public Records Request

Thanks Brittany! I appreciate your assistance on this.

Alison

**From:** Dayton, Brittany  
**Sent:** Wednesday, November 19, 2014 4:55 PM  
**To:** Gordon, Alison; Van Buren, Vicki L.  
**Cc:** Conti, Christina; Moore, Charles  
**Subject:** RE: Public Records Request

Hello Alison,

I heard from the GIS department and they thought the location matching could be done relatively quickly so this shouldn't cause too much of a delay. I will continue to keep you updated with the progress and should be able to give you a more definitive answer tomorrow.

Thanks and have a good evening,  
Brittany

**From:** Gordon, Alison  
**Sent:** Wednesday, November 19, 2014 2:42 PM  
**To:** Dayton, Brittany; Van Buren, Vicki L.  
**Cc:** Conti, Christina; Moore, Charles  
**Subject:** RE: Public Records Request

Hi Brittany,

Thanks for getting back to us. Do you have any idea when we could expect to receive this information?

Thanks!  
Alison

**From:** Dayton, Brittany  
**Sent:** Wednesday, November 19, 2014 2:41 PM  
**To:** Van Buren, Vicki L.; Gordon, Alison  
**Cc:** Conti, Christina; Moore, Charles  
**Subject:** Public Records Request

Hello Vicki and Alison,

I understand that you have a copy of the email Christina Conti sent Chief Moore concerning his public records request. I was asked to touch base with you to confirm that you would like partial data for requests #7 and #8.

Just so you are aware, we have the data to fulfill request #6, but there are numerous addresses that need to be checked to confirm if they are in fact in Wadsworth. I am going to need to work with GIS to determine the addresses, so there may be a delay in getting you the information for request #7 and #8.

Please let me know if you have any questions.

Thank you,  
Brittany

*Brittany Dayton, MPA*  
EMS Coordinator  
Division of Epidemiology & Public Health Preparedness  
Washoe County Health District  
Phone: 775.326.6043  
Fax: 775.328.3631  
[bdayton@washoecounty.us](mailto:bdayton@washoecounty.us)

**Dayton, Brittany**

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**From:** Gordon, Alison  
**Sent:** Tuesday, December 02, 2014 9:23 AM  
**To:** Dayton, Brittany  
**Subject:** RE: Public Records Request

Hi Brittney,

Do have ½ an hour to meet with me sometime this week to talk about the operations reports you all receive from REMSA. I am trying to figure out what some of the data means and Kevin Dick suggested I speak with you. I also have a question on the report you sent below. Let me know what works for you.

Thanks much,m  
Alison

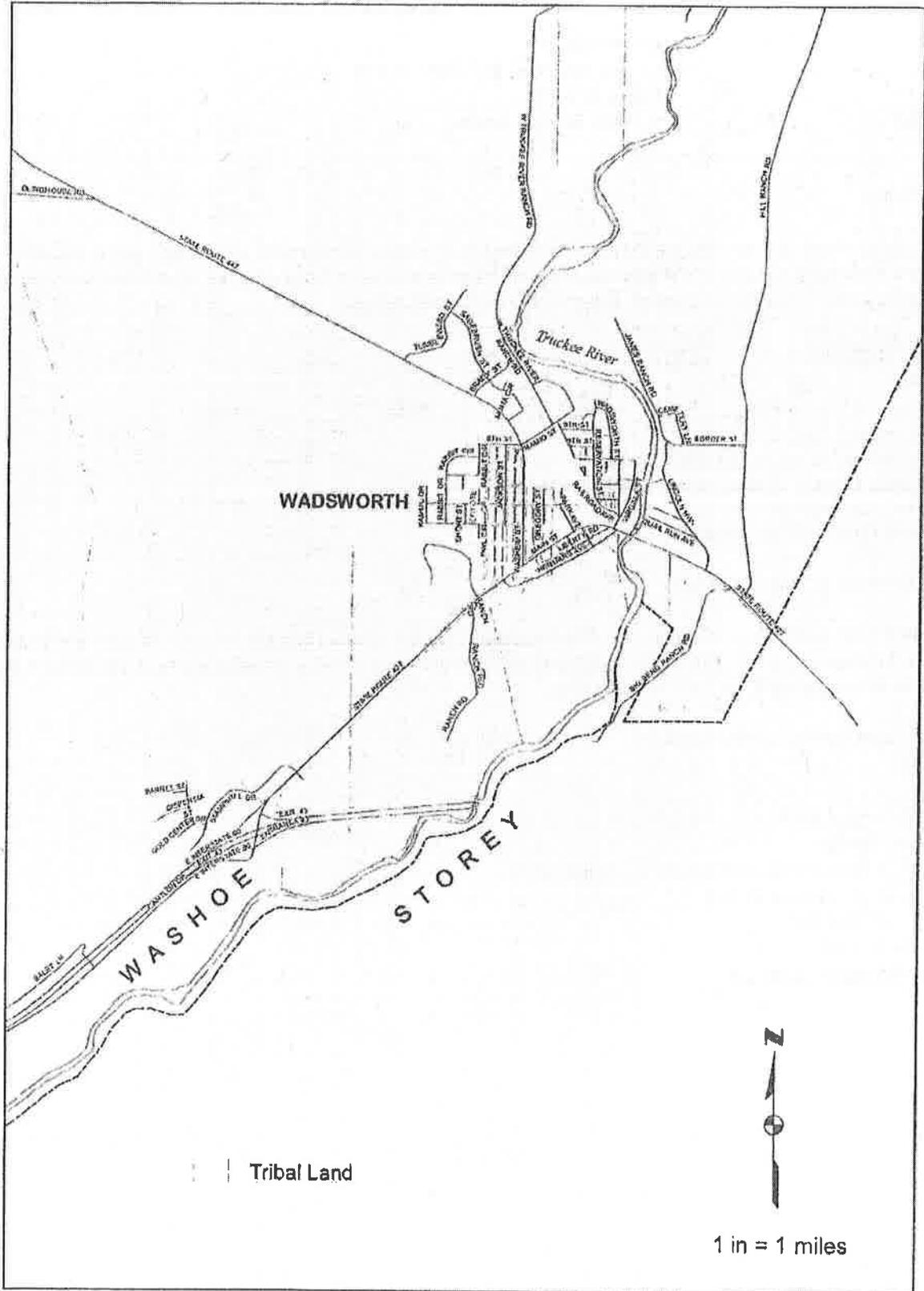
**From:** Dayton, Brittany  
**Sent:** Monday, November 24, 2014 5:02 PM  
**To:** Moore, Charles; Gordon, Alison; Van Buren, Vicki L.  
**Cc:** Conti, Christina  
**Subject:** Public Records Request

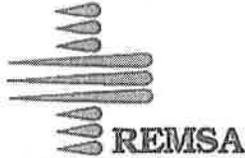
Hello Chief Moore, Alison and Vicki,

Attached is the partial data for request #7. This document includes REMSA's average response times as well as return to base/call cleared times for medical transports in FY 2014, based on information provided to the Health District. Please feel free to contact me if you have any questions.

Thanks and have a great Thanksgiving!  
Brittany

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*A non-profit community service using no tax dollars*

*Regional Emergency Medical Services Authority*

Date: March 12, 2015

To: Board of Fire Commissioners, Truckee Meadows Fire Protection District

From: The Regional Emergency Medical Services Authority (REMSA)

Subject: REMSA Response to the *Estimate of REMSA Wadsworth Revenue and expenses, Truckee Meadows Fire Protection District Emergency Medical Services Review, dated January 26 2015, Presented to the Board of Fire Commissioners on February 10, 2015.*

The following is the response from REMSA to several comments and assertions made in the Auditor's report, which was presented to the Truckee Meadows Fire Protection District Board of Commissioners (the District) on February 10, 2015.

REMSA staff, along with REMSA Board members and our legal counsel, has reviewed this report, and we have found that several comments and findings contained in this report are inaccurate, misleading, and potentially damaging to REMSA. Therefore, to assure that the TMFPD Board of Commissioners has received and is acting upon factual information regarding the matters contained within this Audit report, REMSA has prepared this detailed response.

**Page 1, Paragraph 3 of the Audit Report states:**

The District's cost to provide emergency services is estimated at \$2,582. This includes the costs of direct emergency operations and administrative overhead. This amount is about 9 percent more than first reported to the Fire Board in March 2012.

**REMSA's response:**

Based upon the above and the more detailed description given by the Auditor at the February 10<sup>th</sup> Fire Board meeting explaining the method of determining the total "cost to provide emergency services" for the District (TMFPD), it appears this report shows that the total cost for the District was divided by all emergency service calls (both fire and EMS calls) that the District responded to for that year. The result shows that the District cost per response is \$2,582, and this is an important finding to understand. There is no mention, however, in the audit report on what amount of funding the District already receives from taxpayer funding in return for the

District's services. It is substantial but is unaccounted for in the Auditor's report. This is important information to understand because later in this report, the District's costs are then used to imply that REMSA should somehow be helping to fund the District's EMS response services for its citizens.

The report also does not point out that the District is already responsible to respond to any threat of fire, rescue or Emergency Medical Service request, such as life threatening EMS calls, in the community the District serves (see attachment 1, the Fire District's website for its charter and its list of services which are committed to the community). And since the District already receives funding from multiple tax sources (according to the District's budgets) to provide these services, then isn't the District already being paid to respond to and provide these fire and EMS response services for their community? Therefore, why is this report (or anyone else) suggesting that REMSA should somehow also be responsible to pay the District for their EMS services to their communities.

Another very important piece of information regarding the District's costs to respond to each call is that (by comparison) REMSA's ground ambulance service total costs (using the same fully loaded cost method including overhead) is currently an average cost per EMS system response of \$351 for the 60,368 total budgeted system wide calls that REMSA will respond to this fiscal year. But perhaps the most important piece of information is that the only source of funding to REMSA to provide the Franchise ground ambulance services comes from billing for REMSA services ONLY when REMSA actually transports a patient, which occurs about 41,000 times per year.

This patient transport reimbursement (the funding) to REMSA from the Franchise services comes in the form of healthcare reimbursement received from commercial insurance and government payers (currently paid on average at 36 cents on each dollar billed, primarily due to government program reimbursement shortfalls). The current patient transport reimbursement levels do not cover the average cost per transport for REMSA's service within the Franchise.

Any claim in this report, or elsewhere, that REMSA is making profits from the EMS system Franchise services shows a complete lack of understanding of the current healthcare reimbursement environment. In fact, in the 2012/2013 REMSA Community Report, REMSA showed that we had provided uncompensated care (services not reimbursed for) in the amount of over \$37 million.

**Page 1, Paragraph 4 of the Audit Report states:**

The District periodically helps REMSA in the transportation of patients by sending a paramedic in the REMSA ambulance to assist with the patient. During the period January 1 through June 30 2014, this occurred 56 times. The average staff time spent on transport was 45 minutes at a cost of about \$129.

**REMSA's Response:**

There is a misstatement about the fire service "helping REMSA" when in fact the fire department is actually providing their required services for their community and therefore "helping their citizens" for which they are already funded by tax funding. The fact is that it is often not necessary for a District firefighter to accompany a REMSA patient transport to the hospital as explained below. Occasionally, REMSA's Paramedics and Fire Department First Responders will continue care of the patient as a team to ensure the most critically ill patients receive the best care. These true need cases are actually quite rare and are usually the joint decision of the professionals in the field. But when it is truly needed, the District paramedic would be providing his/her additional services for the benefit of the tax-paying patient, not providing services for the benefit of REMSA.

A review of numerous calls over the past year shows that the majority of firefighter paramedic ride-a-longs from the District were a result of the District firefighter paramedic insisting that they ride-a-long to the hospital, not that they were truly needed or requested for the patient. REMSA's Paramedics often accommodate this request in the spirit of cooperation to promote a team-based care approach. Therefore, the numbers listed in this paragraph are not representative of true need for the patients.

**Page 2, paragraph 1 of the Audit Report states:**

Wadsworth EMS services falls within REMSA's operational area. During FY14, the County Health District reported REMSA responded to calls in the Wadsworth area three times. While the number of responses appears low, no other data was available. The number of REMSA responses has resulted in other fire entities with fire apparatus or ambulance and paramedic staff responding to calls in Wadsworth, including the District's Spanish Springs and Hidden Valley stations, the North Lyon County Fire Protection District, and the Pyramid Lake Fire Rescue/EMS tribal district. These teams responded to EMS calls 215 times during FY14 with limited cost reimbursement or medical supply replacement from REMSA.

**REMSA's Response:**

The data reported here on the number of REMSA responses into the Wadsworth area during FY 2014 for EMS calls is completely wrong and the resulting conclusions and comments in this paragraph are false. The author of the report clearly acknowledges that the data being reported here is likely wrong ("*number of responses appears low*") but then attempts to justify the reporting of the "*appears low*" data anyway by stating "*no other data was available*". This is also completely false. The author then goes on to use this questionable data to form flawed conclusions and then makes damaging statements.

Additionally, the assertions being made in this paragraph that the number of REMSA responses to this area is somehow the cause of fire agencies having to perform REMSA's work (as implied) to respond to EMS calls in Wadsworth demonstrates a complete lack of understanding of how the system in the Wadsworth area actually functions.

The following are responses to each mis-information item in the above paragraph from the Audit Report:

1. Wadsworth EMS services and REMSA's operational area:

REMSA's Franchise operational area for ground ambulance service includes ground ambulance calls within the Washoe County Health District, except for ground unit operations in Gerlach and the North Lake Tahoe Fire Protection District. However, Sovereign Nation Tribal lands do not fall under the jurisdiction of the Washoe County Health District or REMSA's response area, even though they may be located within the boundaries of Washoe County.

The Wadsworth community area is divided into two geopolitical areas: 1. County land, and 2. Sovereign Nation Tribal lands. The vast majority of the homes (estimated at 90%) in Wadsworth are located on the Tribal lands. In fact, the REMSA ambulance station is also located within the Tribal lands.

Also, you will see later in this report that the only reason that REMSA has an ambulance station in Wadsworth is due to a "temporary" directive from the District Board of Health back in 1994. Prior to this directive, the Fernley Volunteer Fire and EMS Department provided the ambulance service for the Wadsworth area. From July 1 2013 to June 30 2014, REMSA responded to 63 calls in the Franchise operational areas of Wadsworth. REMSA also reported our Franchise operational area calls (for a four month period) in December as a result of the Auditors request for call volume information (outlined below) because the request asked for Fiscal year 2014 calls. REMSA's 2014 fiscal year begins July 1 2014 and the latest call volume information we had at that time was for July through October of 2014.

2. The Total Number of Calls REMSA Responded to in Wadsworth during 2013/2014:

From July 1 2013 through June 30 2014, REMSA responded to 147 ground ambulance calls in Wadsworth. 63 of those calls (43%) were in REMSA's Franchise operational area. The other 84 calls (57%) were on Tribal lands.

3. The Statement that "No Other Data Was Available"

Below is a summary of the facts and events (substantiated by copies of e-mails back and forth) which involved REMSA's response to the Auditor's requests and the data sent from REMSA to the Auditor.

- December 2nd, Ms. Gordon (the Auditor) leaves a voice message at REMSA requesting to know who she should talk to in order to acquire needed information. Jim Gubbels of REMSA asks his assistant to respond to Ms. Gordon right away and to provide her with his e-mail address. Ms. Gordon then responds thanking REMSA for getting back to her so quickly and lists her questions, including call volume data for Wadsworth responses for FY 2014 (See Attachment 2 with the specific data asked for).

- December 7<sup>th</sup>, after collecting and formulating a report for the requested data, Mr. Gubbels sends a return e-mail to Ms. Gordon answering her questions and also attaching a separate report with the requested call volume data. Ms. Gordon asked for FY 2014 data, of which our FY for 2014 starts on July 1, 2014 and at the time of this request the call data available was from July 1<sup>st</sup> through October 31, 2014 - 4 months (see Attachment 3 - the e-mail, and Attachment 4 - the e-mail attached data sheet). Of specific interest, you will note in Attachment 4 that the reported number of responses in Wadsworth to Ms. Gordon for just this 4-month period was 19 responses and 12 transports (not 3 responses for the entire year as is reported to you in this Audit Report).

- January 8<sup>th</sup>, the next day, Mr. Gubbels was advised from Health Department EMS staff that Ms. Gordon still had questions about the data for the Wadsworth area. Mr. Gubbels then sent another e-mail to Ms. Gordon asking her to respond to his e-mail if she still had questions that he could help with (See Attachment 5 e-mail from Mr. Gubbels). Immediately after Mr. Gubbels sent his e-mail, he received an automatic reply back from Ms. Gordon's e-mail system that she was out of the office (See Attachment 6). No other response or inquiry was received back from Ms. Gordon after this e-mail.

As the evidence clearly shows from this e-mail trail, REMSA cooperated fully to each specific question she supplied.

4. The statement that *"The number of REMSA responses has resulted in other fire entities with fire apparatus or ambulance and paramedic staff responding to calls in Wadsworth"* is completely baseless. The following response outlines the facts regarding this issue.

- In addition to REMSA's 147 calls into the Wadsworth area in 2014, REMSA also responded to 116 calls into other Tribal land areas in and near the Nixon area. It is the primary responsibility of the Pyramid Lake Paiute Tribal District to cover the Sovereign Nation areas (and at their own expense). However, REMSA responds to these areas when requested to do so because it's the right thing to do in time of need. The number of responses to the Wadsworth / Nixon areas above include the mutual aid responses to the Tribal lands.

- Additionally, REMSA has in place a mutual aid agreement with North Lyon County Fire Protection District for ambulance service mutual aid to the response areas of Wadsworth. However, it is important to understand that while North Lyon County Fire sent an ambulance into the Wadsworth area for mutual aid assistance 16 times in 2014, REMSA responded to mutual aid calls in their (North Lyon County Fire) response area 48 times. Neither party in this mutual aid agreement is responsible to pay the other party for any expenses, in part because the resulting transporting agency is then allowed to bill for their ambulance transport services, to cover any reimbursement for medical supplies – as outlined in the mutual aid agreement (See Attachment 7 – Mutual Aid Agreement).

- Another critical piece relating to this mis-information in this paragraph is regarding the District service responses from both Spanish Springs and Hidden Valley stations to the Wadsworth area. The District is responsible to provide any fire response on any fire calls (this has nothing to do with REMSA) and the District is responsible to its citizens to respond to life threatening EMS calls as the fire first responder along with REMSA (the designed two tier system in Washoe County) when they are dispatched to calls in the Wadsworth area (which is also the District's area of responsibility).

Therefore, any response the District might have made in the Wadsworth area for fire or EMS calls is a result of the District's responsibilities to the tax-paying citizens in the Wadsworth area and has nothing to do with the number of responses that REMSA made to this area for ambulance service requests.

5. The statement regarding limited cost reimbursement to Fire Departments from REMSA.

REMSA has no responsibility to the other ambulance services or fire EMS first responders mentioned in the above Audit Report paragraph to reimburse them for any used EMS response medical supplies, with the exception of the District (TMFPD) for EMS first response services pursuant to the agreement with REMSA. However, the District has not followed the medical supply reimbursement agreement by sending REMSA a proper documentation for the used supplies as further outlined in detail below. The other fire departments (Reno and Sparks) are following the agreement and sending the appropriate information to REMSA so that REMSA can then pay them for the used supplies.

4. Page 2, paragraph 2 of the Audit Report States:

Since May 1994, REMSA has collected the additional \$27 increase adjusted annually for CPI in its customer billing. Based on the analysis performed in Appendix I, we prepared a conservative estimate of REMSA's Wadsworth fee revenues and expenditures including amounts for uncollectible accounts, and annually adjusted for CPI to staff an ambulance in Wadsworth over the last 20 years. This analysis showed over the 20 years REMSA collected an estimated \$6.1M more revenues than expenses.

### REMSA's Response:

The following is a summary of the events that transpired in 1994 and the years to follow regarding the Wadsworth ambulance service coverage and the claimed \$27 issue. We have attached documents from those requests and decisions to serve as evidence of the facts.

- On February 17, 1994, REMSA was advised in writing of changing conditions between the District Health Department and the Fernley Volunteer Fire / EMS Rescue Department. Prior to this time, the Fernley Volunteer Fire / EMS Rescue Department provided the ambulance services from their Fernley station to the Wadsworth area. However, at that time, no mutual aid agreement was in place for the level of service which was desired by the District Health Department and attempts to cure this matter appeared to be failing. (See Attachment 8)
- On April 14, 1994, REMSA received official written notice from the District Health Department directing REMSA to staff a 24 hour station in Wadsworth after mutual aid agreement negotiations with Fernley had failed. Paragraph 2 of the written notice clarifies *"This temporary measure is due to our (the District Health Department) failure to negotiate a mutual aid Emergency Medical Service agreement with Fernley Volunteer Department, Inc."* to provide ambulance service coverage for the Wadsworth area. (See Attachment 9)
- On April 16, 1994, REMSA acknowledged in writing that it had placed a 24 hour ambulance stationed in Wadsworth as directed, that REMSA had hired additional personnel for this additional ambulance unit staffing and that REMSA now has additional costs of a long term nature, including more equipment, new station costs, overtime costs, etc. REMSA also advised that it would be preparing a list of options and estimates to discuss with District Health Department staff. (See Attachment 10)
- On April 20, 1994, REMSA sent a letter to the Pyramid Lake Paiute Tribe Chairman updating him on the new Health District requirements resulting in a REMSA ambulance now being based in Wadsworth and confirming REMSA's interest in working closely with them to cover this area. REMSA also offered to help them with public awareness information as to the changing EMS coverage for the area. (See Attachment 11)
- On June 14, 1994, after preparing the necessary information for an upcoming District Board of Health meeting, REMSA sent a document to the District Health Department outlining a number of options regarding the provision of ambulance services now and in the future for the Wadsworth area. Of particular importance in this document is Option 2 on the first page which makes it clear that the requested \$27 increase to the allowed average bill covers two things - \$1 for the Wadsworth station facility costs, and the other \$26 to cover the additionally needed ambulance

staffing and equipment costs (regardless of where in the EMS system those staffed unit hours shall be deployed).

Option 4 outlined on page 2 of this June 14, 1994 document also speaks to the possibility of new cooperation from the Fernley EMS service over time resulting in a mutual aid agreement in the future. This could then allow for other options for the EMS system. When a new mutual aid agreement occurs, the District Health Department could then direct REMSA to either reduce staffing or to use that staffing for other areas of the EMS system (See Attachment 12). On June 22, 1994, the proposed increase of \$27 was approved by the District Board of Health.

#### The 24-Hour Ambulance Station Staffing in Wadsworth

- A 24-hour ambulance station (like a 24 hour fire station) means you have a full ambulance crew assigned to that station for 24-hour coverage each day. When that crew is not otherwise running calls in their response area, doing area familiarization, conducting local training as previously offered, running mutual aid calls, helping to respond to calls in other areas of the district, or providing system move-up coverage when needed, then the assigned crew returns back to their assigned station in Wadsworth.

- The REMSA 24 hour ambulance station staffing assigned to Wadsworth with dedicated crews was in place from April 1994 until October 2010 (See Attachment 13, Staffing Schedule which includes the 24 hour coverage assignments to the Wadsworth station through the 2010 Summer shift assignments ending in Oct 2010). Pursuant to the April 1994 directive from the District Health Department, the temporary REMSA 24 hour staffing was in place in Wadsworth for over 16 years until REMSA was able to secure a mutual aid agreement with the North Lyon County Fire Protection District (who took over ambulance services in Fernley several years earlier) which took effect in early October 2010 (Attachment 7).

- In addition to the mutual aid agreement mentioned above, which was reached in 2010 for assistance in covering the Wadsworth area, the Pyramid Lake Paiute Tribe EMS services was also able to secure a licensed BLS ambulance service to respond to Tribal area calls. This Tribal BLS ambulance was licensed in March 2014. A mutual aid agreement with REMSA has been proposed and offered by REMSA for ALS response when needed into the Tribal areas, but no final decision has been reached.

- Even though REMSA was able to secure a mutual aid agreement with North Lyon County Fire Protection District for ambulance service in Wadsworth in October 2010 (the absence of which is what prompted the 1994 temporary action), REMSA continues to maintain the Wadsworth station to this day, and in 2010 converted the crews to 12 hour staffing where they utilize the Wadsworth station as a posting location when not running calls.

#### Other Current Wadsworth Response Concerns:

REMSA has information regarding known incidents where REMSA's dispatch center was not notified of calls in Wadsworth. These calls received a Fire Department response dispatched by Washoe County but were not forwarded to REMSA. Although detailed information is limited because we are not getting the calls, it is believed that TMFPD dispatchers are requesting mutual aid from Storey County and Lyon County into REMSA's franchise area without REMSA's knowledge. This practice prompts an ambulance response from a neighboring community, even though an available REMSA ambulance may already be posted in Wadsworth. It is unknown how often this has occurred.

REMSA would like the opportunity to work with the Washoe County dispatch through the TMFPD District's staff to resolve the practice of requesting mutual aid into REMSA's franchise area without REMSA's consent.

The Auditors Appendix 1 Findings of a \$6.1m Over Funding to REMSA

It is apparent that the Auditor received extensive false information regarding this matter. From that false information, flawed assumptions and findings resulted. We have outlined the facts below:

1. It appears that those who were involved in trying to calculate the actual collections which result from REMSA's billable charges may have been confused between the uncollectable rate (which are the bad debt write-offs and contractual write downs) versus the collection rate (which is the actual net amount collected when compared to the amount billed). The Audit report used a 36% uncollectable rate for the entire 20-year period, which is in essence claiming to be a 64% collection rate for the entire 20-year period. This is completely incorrect. The estimated highest collection rate in 1995 for REMSA was 55% when the call volume was the lowest and the average bill was only \$548. The current collection rate is 36% with a current average bill of \$1,070.

The most accurate way to calculate net revenue over a long period of time is to use the actual projected collection percentages for each year over the entire period. Though some years may not change a whole percentage from one year to the next, other years may drop 2-3 % from the previous year. We took the liberty of copying the relevant portions of Ms. Gordon's analysis and plugging in the accurate collection rates for each year over the entire 20 year period. The difference in the 20-year net revenue result shows that the Auditors calculations were off by \$4,627,764 (Attachment 14)

2. Another important finding from the Auditor's analysis is that even though this report acknowledges that the large increase in patient call and transport volume from 1994 to 2014 is a 231% increase over the 20 year period (of which the reported increased revenue is largely based on), the Auditor must not have taken into consideration the corresponding increase in staffing and equipment expenses

which would also be required to continue to respond to and handle the increase in calls. The call demands on the system have increased at a rate of over 11.5% per average year over the 20 year period. See just some of the expense findings below:

- The 1994 field staffing level of 40 full time personnel to handle the 1994 call volume levels was about \$1,900,000 annually in total field personnel costs. By 2014, the required staffing level increased to 92 full time field personnel to handle the increased call volumes at a current annual cost of \$6,058,842 which are actually annual re-occurring additional costs. This is an increase of approximately \$4,158,842 in additional personnel costs to handle the increasing call volumes - just when comparing the 1994 annual costs to the 2014 annual costs. With all the new personnel regulations, healthcare costs, and other annual pay requirements to try to compete with the local fire department EMT and paramedic market, our actual personnel costs have far outpaced the small annual CPI increases (or any other increases) we have received over the period.

- Additionally, the ambulance fleet in 1994 consisted of 16 ambulance vehicles, which at that time cost about \$60,000 each (total 1994 fleet investment costs of \$960,000). By 2014, the REMSA fleet had grown to 38 ambulance vehicles at an average cost of \$155,000 each (the additional fleet investment costs for the 22 additional ambulance units is \$3,410,000 due to cost inflation and higher call volumes requiring more ambulance units.

- The required medical equipment for each ambulance in 1994 (about \$20,000 per vehicle) has since skyrocketed to over \$45,000 per ambulance for the required monitors, defibrillators, power cots, e-charting technology, new airway equipment, etc (a \$25,000 increase in equipment per additional ambulance unit for the additional 22 ambulances = \$550,000 in additional costs).

- From a very conservative standpoint, we estimate that our average costs to provide our increased services over the years to handle the increased call volumes and increased service level requirements have far outpaced the small annual CPI increases (or any other increases we have received) over the 20 year period to the tune of at least an additional \$8,118,842. We have taken the liberty of incorporating the above more realistic revenue projections, and the conservative additional costs above to keep up with the growing call volumes, into the analysis from the Auditor (See Attachment 14 for the results to the above findings).

5. Page 2, paragraph 3 of the Audit Report states:

During August 2013, the District, the Reno Fire Department, the Sparks Fire Department and REMSA entered into a three-month agreement regarding REMSA reimbursing certain medical supplies used by the participating agencies. The District reported once the agreement expired, it entered into a verbal agreement with REMSA to continue the program. To date REMSA has only reimbursed the District about \$852 of the \$15,421.16 owing through November 2014 for agreed upon medical supplies. REMSA is also not reimbursing other non-County entities responding to Washoe County emergency medical calls the cost of providing the service and replacement of medical supplies is inconsistent.

#### **REMSA's Response:**

REMSA has conducted a thorough and factual review of events surrounding the REMSA resupply and reimbursement program. The Amended and Restated Franchise Agreement For Ambulance Service states the following; *"REMSA shall develop and offer a supply exchange/reimbursement agreement with the county and city fire service functions"*. REMSA has complied with this requirement but we have concluded that the District has not been receiving reimbursement funds because they have not completed and submitted the required reimbursement information.

In mid 2013, Jim Gubbels assigned Aaron Abbott, Director of Operational Services, to attend a series of meetings between Fire Department personnel and REMSA for the purpose of developing a supply reimbursement agreement. These meetings included Aaron Abbott from REMSA, Alex Kukulius from the District and other representatives from SFD (Sparks Fire Department) and RFD (Reno Fire Department). The resulting trial agreement (Attachment 15) spanned from August 2013 to October 2013. This agreement included the following provisions:

- Fire Department agencies will submit reimbursement requests directly into REMSA's inventory management system via an online portal.
- Incident numbers and quantity must be included.
- REMSA will reimburse for qualified and agreed upon equipment only.
- REMSA will reimburse at REMSA's cost of the supplies.
- Items not carried by REMSA will not be reimbursed.
- REMSA will provide for Cervical Spine Stabilization equipment (long board, straps, head-blocks, and cervical collars) to be exchanged on-scene between REMSA and the Fire Department.
- REMSA will not reimburse for expired, damaged, or otherwise replaced equipment.

During the time of the initial trial agreement, data was submitted to REMSA for each incident. The data was inputted into REMSA's inventory management system. SFD and RFD submitted data on time and included all the elements required in the agreement. This data was confirmed by a monthly audit meeting of 50% of submissions to confirm the validity of the reimbursement submissions.

TMFPD did not fully participate in the monthly data submissions and audit meetings citing a transition period moving to a new inventory management system. The TMFPD was able to submit partial data for August, October, and November. This data was incomplete as it did not contain incident numbers or quantities of equipment per incident. However, these submissions were accepted, despite their incompleteness, and TMFPD was reimbursed for August, October, and November for \$364.44, \$310.37, and \$177.49 respectively. September data was not submitted at all by the District for unknown reasons.

At the expiration of the trial agreement, there was desire by SFD, RFD and the TMFPD to use an average cost basis per quarter to reduce the workload associated with the audit process. For this reason, the trial period was extended to expire in February 2014. This would allow 6 months of complete data to create the average cost associated with the reimbursements.

At the conclusion of the trial period, an agreement for reimbursement was signed by Reno FD. Sparks FD has not yet signed that agreement but they have been submitting the needed information pursuant to the agreement so REMSA has been reimbursing SFD and RFD on a quarterly basis. TMFPD however wanted to wait on signing an agreement until cost data could be collected after all their Paramedic engines were implemented.

On December 8, 2014, REMSA again reminded the TMFPD to resubmit data with incident numbers and dates associated so the audit process can be completed. The incident numbers required to perform the audit were not submitted to REMSA until January 20, 2015. Although incident numbers were included in the data submitted on January 20<sup>th</sup>, the data also included expired supplies and test submissions. REMSA is unable to separate these submissions manually and we asked the TMFPD to re-submit a clean supply reimbursement submission.

On January 29, 2015, REMSA communicated to the TMFPD that too much time had passed to reimburse the TMFPD for anything beyond the last Quarter of 2014 (October, November and December), as reimbursement dollars are budgeted quarterly. Additionally, the required data needed for reimbursement was again restated at this time to clear any confusion from the past (See Attachment 16, e-mail trail showing continued issues with incorrect submissions). To this date, the TMFPD has not submitted the requested correct information

REMSA has fulfilled the Franchise obligation by developing and offering a resupply and reimbursement agreement for all Countywide Fire Agencies. REMSA is open to continued discussions with TMFPD to further clarify our agreement for approved reimbursable supplies but would ask that TMFPD provide the required detail for REMSA to reimburse them. REMSA has reimbursed a total of \$851.90 for the months of August, October, and November of 2014. No other valid data was submitted to REMSA by TMFPD, despite restated submission requirements and reminders from REMSA.

**The TMFPD Emergency Medical Services Review Document:**

Attached behind the Audit Report at the February 10, 2015 Board meeting was another document titled "The Truckee Meadows Fire Protection District Emergency Medical Services Review". This "TMFPD Review" document was found right behind the Audit Report and appears to be intended to further drive home the same Audit Report findings of mis-information about the REMSA services.

Since we have already invalidated the mis-information, which is contained within the Audit Report outlined above, and of which the TMFPD Review document information is a mirror image of, we do not see the need to again invalidate all the mis-information that was found in the TMFPD Review document.

We ask that our corrections to the misinformation be added to both reports.

**In Conclusion:**

The basis of any sound public policy conclusions and decisions must be founded upon factual information in order for that resulting public policy to pass the test of "for the public good". False and/or mis-leading information received by a public official can be deadly to sound policy making, can damage the credibility of the policy makers, and can result in many other negative consequences. None of us want that.

With this in mind, REMSA requests that when questions arise in the Fire Board meetings concerning REMSA, that the agenda item reflect the need for REMSA to be present for that item and that REMSA staff be allowed the opportunity to answer those questions rather than someone else who is not affiliated with REMSA and may not have all the facts. REMSA should have received a draft copy of this report for review and comment prior to submission to the Fire Board. This would have given REMSA the opportunity to address the mis-information before the report was presented to the Fire Board.

REMSA wishes to build a cooperative, transparent and productive working relationship with the TMFPD staff, so that the citizens of Washoe County benefit when they truly need all of us to respond to their worst hour of need.

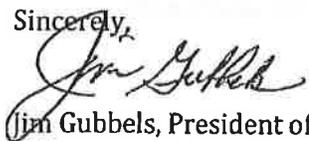
The current Washoe County Health District EMS staff has worked hard to put a issue resolution process in place to be followed when one agency has a concern about another agency call or calls. This process allows these matters to be resolved at the appropriate lowest level. That is how such matters can be logically resolved – assuming both parties truly want to resolve such matters. The Audit Report, which

was developed and submitted only hours before the Fire Board meeting does not support that spirit of cooperation.

REMSA would ask that the TMFPD staff follow the established EMS system issue resolution procedures and not needlessly escalate perceived concerns to elected officials, or share mis-information with local community figures which have not yet even been brought to REMSA's attention. Such tactics are not productive and do not support the spirit of cooperation for the public good.

In closing, REMSA would like to take this opportunity to sincerely thank the TMFPD Board of Fire Commissioners for insisting that REMSA be permitted the opportunity to review and respond to these reports which were presented at your February 10, 2015 Board meeting, prior to any conclusions being drawn or decisions being made on your part from these reports.

Sincerely,



Jim Gubbels, President of REMSA

Cc; Jim Begbie, Chairman of the REMSA Board

Cc; Bonnie Drinkwater, REMSA Counsel

**ATTACHMENTS TO FOLLOW**

[County Home](#) => [Truckee Meadows Fire Protection District](#) => **Emergency Services**

**Additional Pages**  
Emergency Medical Services .: Rescue .: Suppression

The Truckee Meadows Fire Protection District serves a population of over 80,000 residents in a 6,000 square mile service area. The District provides fire and fire-based emergency services to residents in unincorporated Washoe County surrounding the Cities of Reno and Sparks.

On any given day, there are approximately 34 on-duty personnel to serve the community. The District operates out of 11 Career Fire Stations, 13 Volunteer Fire Stations, and a District Headquarters.

Truckee Meadows Fire Protection District is comprised of three branches - Operations, Administration, and Support Services. The Operations Branch includes Fire and Rescue, Emergency Medical Services, Training and Safety, Special Operations, Fire Investigation and Prevention, and Health and Wellness. The Administration Branch consists of Office Support, Finance, and Human Resources. Support Services oversees Fleet Maintenance assistance and Logistics.



James Gubbels &lt;jgubbels@remsa-cf.com&gt;

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**RE: REMSA Emails**

3 messages

Gordon, Alison &lt;agordon@washoecounty.us&gt;

Tue, Dec 2, 2014 at 10:44 AM

To: Debbie Zalmana &lt;dzalmana@remsa-cf.com&gt;, "jgubbels@remsa-cf.com" &lt;jgubbels@remsa-cf.com&gt;

Good Morning,

Thanks so much for responding to my call so quickly this morning. I am the County's Internal Auditor and have been requested by the County Fire Board of Commissioners to report back on both REMSA's and Truckee Meadows Fire Department Wadsworth medical call data during FY2014 as well as the fire departments medical call data in other County areas. That being said I am hopeful you can provide me with some assistance on the REMSA data. Specifically, the following data would be helpful:

Does REMSA have an ambulance stationed out in Wadsworth?

How many calls did REMSA have pertaining to Wadsworth during FY2014?

How many of the Wadsworth calls were transport versus just responding and providing service?

What is the average time of response and return to base for Wadsworth calls for both transport and non-transport?

Does REMSA have a rate schedule for its services and if so may I obtain a copy?

If you have any questions or concerns, please let me know.

Thanks,

Alison

Alison A. Gordon, CPA, CFE

Internal Audit Manager

Washoe County

775-328-2064



James Gubbels &lt;jgubbels@remsa-cf.com&gt;

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**REMSA data**

3 messages

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James Gubbels <jgubbels@remsa-cf.com>  
To: agordon@washoecounty.us  
Bcc: Kevin Dick <KDick@washoecounty.us>

Sun, Dec 7, 2014 at 9:07 PM

Hi Alison, attached is the Wadsworth's response and transport data for July 1st through Oct 31st 2014. This information was also share with the East Truckee Canyon Citizen Advisory Board on Dec 3, 2014. The following are responses to your other questions: REMSA has a post in Wadsworth and we station at a trailer in the Big Ben trailer park. As the system status plan allows during the shifts an ambulance is posted there. The number of responses and transports at Wadsworth is attached. The average responses times including all responses is attached. REMSA average rates are set by the District Board of Health. The ambulance base rate for this FY is \$1,009.00 and the patient transport mileage rate is \$22.00 per loaded mile. Please email me if you need any clarification.

---  
Jim Gubbels, BSN, RN  
President/ CEO  
REMSA  
450 Edison, Reno, NV 89502  
Office: 775-858-5700  
Fax: 775-858-5726  
Mobile: 775-742-7797  
Email: jgubbels@remsa-cf.com

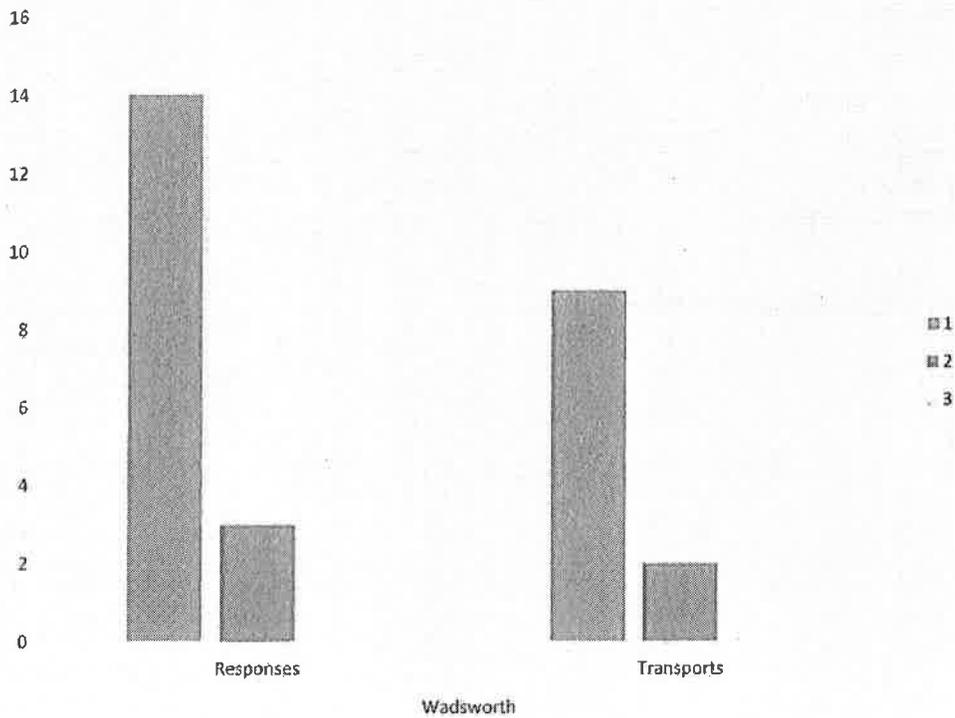
A non-profit community service using no tax dollars

Wadsworth Responses\_Transports July\_October 2014 (2).pdf  
112K

Wadsworth Resp/Transports  
July-October 2014

Response Area	E-WF-SN Washoe Co PL
---------------	----------------------

City	Data	Pri			Grand Total
		1	2	3	
Wadsworth	Responses	14	3	2	19
	Transports	9	2	1	12
Total Responses		14	3	2	19
Total Transports		9	2	1	12



City	Average of Response Time			Grand Total
	1	2	3	
Wadsworth	0:17:36	0:27:02	0:33:14	0:20:44
Grand Total	0:17:36	0:27:02	0:33:14	0:20:44



James Gubbels <jgubbels@remsa-cf.com>

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## Wadsworth Transports

1 message

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James Gubbels <jgubbels@remsa-cf.com>

Thu, Jan 8, 2015 at 5:26 PM

To: agordon@washoeconomy.us

Cc: "Dayton, Brittany" <BDayton@washoeconomy.us>

Hi Alison, I heard from Brittany that you still had a question on the Wadsworth data that I gave you. All of the transports for those four months were by the REMSA ground service. If you have other questions you may contact me by email and I will try and help you and just cc Brittany. Jim.

--

Jim Gubbels, BSN, RN

President/ CEO

REMSA

450 Edison, Reno, NV 89502

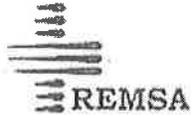
Office: 775-858-5700

Fax: 775-858-5726

Mobile: 775-742-7797

Email: jgubbels@remsa-cf.com

A non-profit community service using no tax dollars



James Gubbels <jgubbels@remsa-cf.com>

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**Automatic reply: Wadsworth Transports**

1 message

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Gordon, Alison <agordon@washoecounty.us>  
To: James Gubbels <jgubbels@remsa-cf.com>

Thu, Jan 8, 2015 at 5:26 PM

I will be out of the office for training starting Thursday, January 8 at 7AM and will return Monday, January 12. If you need immediate assistance, please call 328-2000.

**Mutual Aid Agreement**  
**Between**  
**Regional Emergency Medical Services Authority and**  
**The North Lyon County Fire Protection District**

This agreement is made and entered into this 13<sup>th</sup> Day of October, 2010 by and between the Regional Emergency Medical Services Authority ("REMSA") a Nevada based non-profit corporation, and the North Lyon County Fire Protection District.

Whereas, each of the above named organizations maintain and operate emergency medical ambulance services within their respective jurisdictions, and,

Whereas, the parties hereto desire to enter into a mutual aid agreement to assist each other in providing those services,

Now, therefore, the parties hereto mutually agree as follows:

**Request and Response Provisions:**

1. When possible (as determined by the requested organization), each of the above agencies may furnish EMS services to each other's area of responsibility (including ambulance services and medical helicopter services) upon request by the other as may be necessary to provide EMS services at an incident of such magnitude that it is or is likely to be beyond the capacity of a single agency and requires the combined resources of additional agencies (such as a Mass Casualty Incident).
2. When possible (as determined by the requested organization), each of the above agencies may furnish EMS services to each others area of responsibility (including ambulance services and medical helicopter services) upon request by the other to respond to an incident that the jurisdictional and requesting organization may not have available resources to respond to at the time of the call.
3. No party to this agreement shall be required to deplete unreasonably its own EMS resources in order to provide the mutual aid services. The ability of the requested party to respond to a mutual aid request shall be made by the requested party at the time of call. If the mutual aid requested agency arrives on scene, they will be the responsible transporting agency, and be responsible for billing the patient for reimbursement.
4. The parties hereto will make no response to a mutual aid request unless specifically requested by the other party or their designated dispatch center.



8



# DISTRICT HEALTH DEPARTMENT

February 17, 1994

To: Patrick Smith  
 From: Dave Rico  
 Subject: Wadsworth Service Area

As you know, the Fernley Volunteer Fire Department has been provided with a draft agreement concerning operating as a medical rescue service in the Washoe Health District.

There is a possibility that the Fernley Volunteer Fire Department may decide to discontinue operations in the Health District. In the event this occurs, REMSA must immediately begin to serve this area of the Health District by stationing an ALS unit in Wadsworth so that no interruption in service occurs.

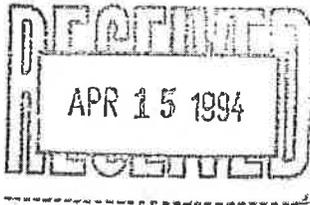
You have advised this Department that there may be some problems with adding staff on such short notice to equip an additional unit. You also stated that you may have to use personnel who are certified as an EMT.

Should the Fernley Volunteer Fire Department discontinue operations in the Health District, I will declare an emergency and allow you to staff an ALS unit with a certified EMT instead of an Intermediate EMT. However, it is my expectation that the ALS unit in Wadsworth be fully staffed. Please notify us as soon as your staffing situation is corrected. This declaration would last only until midnight on March 4, 1994. This should give you enough time to find additional staff resources.

If you have any questions regarding this matter, do not hesitate to contact me.

-----  
 District Health Officer

cc James Begbie  
 Stephanie Beck



9

## DISTRICT HEALTH DEPARTMENT

April 14, 1994

TO: Patrick Smith

FROM: Dave Rice

SUBJECT: Advanced Life Support (ALS) Ambulance To Be Stationed  
At Wadsworth

This is to confirm my verbal discussion with you today, directing that REMSA place an ALS Ambulance in Wadsworth, Nevada until further notice, effective today. This unit is to be staffed 24 hours a day.

This temporary measure is due to our failure to negotiate a mutual aid Emergency Medical Service agreement with Fernley Volunteer Department, Inc. As of this date Fernley Volunteer Department, Inc., an Intermediate Life Support (ILS) firefighting agency and ambulance service, is prohibited from responding into the Health District.

We appreciate your help in ensuring rapid ALS response during this transition. We are hoping to ensure an eight minute response to the citizens of Wadsworth until we have an opportunity to reevaluate the response requirement for this area.

\_\_\_\_\_  
District Health Officer



10

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Regional Emergency Medical Services Authority

To: David Rice, District Health Officer  
From: Patrick Smith, President   
Re: Placement of ALS Unit In Wadsworth  
Date: April 16, 1994

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On Thursday, April 14, 1994, REMSA responded to your directive placing an ALS unit in the Wadsworth area. In complying with that directive, REMSA has, and will continue, to incur ambulance delivery costs of a long-term nature. REMSA has hired six additional full-time personnel, added a vehicle (with communications and medical equipment), secured housing and utilities, and assorted other necessary costs. Additionally, until such time as REMSA's new Paramedics and EMT II's are able to fill scheduled shifts (estimated at 6-8 weeks), REMSA will incur overtime costs for staffing this unit.

Because of the need, service was necessarily provided without the benefit of initial rate increases to cover the costs (normally instituted four months prior to an expansion). We are currently working on cost and revenue estimates and will meet with your staff, the Audit Committee, and REMSA Board, prior to seeking District Board of Health approval in the near future.

As always, REMSA is working with its contractor to ensure cost effective ALS to the communities and citizens in the area. If you have any questions please contact me.

cc: REMSA Board of Directors  
file



(11)

April 20, 1994

Regional Emergency Medical Services Authority

Chairman Alvin R. James  
Pyramid Lake Paiute Tribe  
P.O. Box 256  
Nixon, NV 89424

Dear Chairman James:

As you're probably aware, REMSA has been instructed by the Washoe County District Health Officer to place an Advanced Life Support ambulance in Wadsworth to provide service to the residents of Washoe County who reside in the area.

We wanted to let you know that REMSA looks forward to assisting you and your tribal community in whatever way we can, and will respect your tribal jurisdiction in every way. We will also respect patients' and families' wishes to the highest degree possible in their choice of health care providers.

We have already met with representatives from the Wadsworth Volunteer Fire Department and the Pyramid Lake First Responders to ensure quality coordination of patient care. We intend to meet with them in another week, and in the meantime are looking at new programs to further improve patient care and cooperation between all providers in the area. We plan to mail out emergency 9-1-1 stickers as a public service to all residents of your area in the near future as part of our public education programming. REMSA is also available to meet with you or your Tribal Council if you'd like, at your convenience.

Again, we look forward to providing the highest level of care possible should your tribal community members require our help, and working with all emergency medical and first response providers to provide quality pre-hospital care to all the residents of the area.

Best regards,

Patrick Smith  
President

cc: Dave Rice, District Health Officer  
Ray Brunstrom, TMFPD  
Steve Dean, Mercy Ambulance/REMSA



Regional Emergency Medical Services Authority

To: David Rice, District Health Officer  
From: Patrick Smith, President  
Re: Wadsworth ALS Unit Costs and Options  
Date: June 14, 1994

As discussed at the Audit Committee and approved by the REMSA Board of Directors, the cost of placing an ALS unit in Wadsworth in April requires a 5.3% increase to the average bill, or \$27. REMSA in responding to your directive necessarily incurred costs of a long term nature, primarily six new paramedics and EMT II's, an equipped ambulance, and other miscellaneous costs. REMSA also incurred one-time costs which will be covered by any small overage to the current allowed average bill.

REMSA staff informed the Audit Committee that the increase to the allowed average bill must be approved due to the long term commitments REMSA made to provide service to the area. While the costs must be approved, the District Board of Health does have some options to consider. Essentially, options involve "where" ALS resources are utilized which has an impact on service in our area. The options are as follows:

1. Keep the unit in Wadsworth.  
Fiscal Note: Increase to average bill \$27
2. Instruct REMSA to close this station and use the Wadsworth unit hours to further expand the current 8 minute zone in its service area.  
\* Fiscal Note: Under this scenario, the system would save about \$1 eliminating the need for an ambulance station and associated utility costs, resulting in an increase to the average bill of \$26.
3. Have the Health Department work with the TMFPD and REMSA to implement a basic or intermediate life support response unit that would rendezvous with REMSA. If implemented, REMSA would be able to implement item 2 above increasing service to more patients, and Wadsworth residents would be assured of a system response, under

Health Department monitoring, control, and quality assurance.

Fiscal Note: Same as item 2.

4. Fernley Fire Department agrees to cooperate with the Health Department, which should be confirmed over a period of time. If this happens there are two options available:
  - a. Implement item 2 above.
  - b. Instruct REMSA over time and with natural attrition to reduce its staffing back to pre Wadsworth levels. This would involve determining the savings as attrition occurred in a particular year, and the subsequent offset of the following year's increase. The methodology would need to be developed and agreed to by members of the Audit Committee.

REMSA is at a critical time in which a decision regarding how to proceed is vital. Due to zoning requirements and building time frames REMSA must make a decision regarding crews quarters and garage space. Further, REMSA must inform the bidders at the prebid conference (the day after the Health Board meeting) of how the system is proceeding in this area. This is crucial to bidders strategies in preparing their proposals.

I have enclosed the materials used by the Audit Committee. You made a tough decision on behalf of the patients in the District. REMSA supports that decision and will assist you and the District Board of Health wherever possible. If you have any further questions please contact me.

cc: REMSA Board of Directors  
file

WASHOE COUNTY DISTRICT BOARD OF HEALTH MEETING  
June 22, 1994  
Page Thirty-nine

opposition to the proposed rate increase, the Public Hearing was closed.

MOTION: Mr. King moved and it was seconded by Mr. Herndon that REMSA continue to maintain a ground ambulance unit within Wadsworth; that the average ground ambulance bill be increased by 5.3% (\$27), as outlined by Staff. It was further ordered that Mr. Rice continue to pursue negotiations with the Fernley Volunteer Fire Department in an effort to develop a Mutual Aid Agreement; and should it become necessary, to investigate utilizing the services of a mediator.

Motion was carried, with Ms. Galt and Mr. Walker voting "no".

Mr. Walker stated that he voted "no" because he is opposed to the rate increase.

Mr. Herndon requested a monthly update on the process.

Mr. Shaw requested that a review of the Board's action and the status of the entire issue be placed on the Board's agenda in six (6) months.

**Summer 2010 Shift June 5- October 9**

ID	Shift/Type	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Paramedic	ERT/IT
1	12 Hr 2212x1	6:45	6:46		6:45	6:45			Lisa Harzer	Jeff O'Connell
2	12 Hr 2222x1	15:45	15:45		15:45	15:45			Trevor Rattinud	Greg Cabas
3	12 Hr 311x1x2	13:30		13:30			13:30	19:30	David Rattinud	Dan Kilborn
4	12 Hr 311x2	10:15	10:15	10:15		10:15			Jake Beck	Jared Ocarson
5	12 Hr 4x3 Core	5:00	5:00	5:00	5:00	5:00			Steve Schroeder	Chris Franklin
6	12 Hr 4x3 Core	5:15	5:15	5:15	5:15	5:15			Sarah Buchner	Nik Rav
7	12 Hr 4x3 Core	5:30	5:30	5:30	5:30	5:30			Kevin Basta	Kim Polimihl
8	12 Hr 4x3 Core	16:45	16:45	16:45	16:45	16:45			Dominic Polimihl	Alex Rodriguez
9	Double Medic	12 Hr 4x3 Core	18:15	18:15	18:15	18:15			Josh Coffey	Andy Welch
10	12 Hr 4x3 Core	9:00	9:00	9:00	9:00	9:00		9:00	Mike Lennon	Mike Bushlee
11	12 Hr 4x3 Core	11:15	11:15	11:15	11:15	11:15		11:15	Scott Van Dover	Travis Reynolds
12	12 Hr 4x3 Core	18:45	18:45	18:45	18:45	18:45		18:45	Jake Waston	Geoffrey Cameron
13	Double Medic	4:30				4:30		4:30	Manny Fuentes	Patrick Ruber
14	2nd Seat Student	5:45	5:45			5:45		5:45	Chris Watson	Wormack/Maples
15	2nd Seat Student	8:30	8:30			8:30		8:30	Karen Ocarson	Paramedic Student
16	Double Medic	17:45	17:45	17:45		17:45		17:45	Kolt Clure	Kyle Endres
17	Double Medic	18:30	18:30	18:30		18:30		18:30	Richard Walsh	Shane Akerson
18	12 Hr 4x3 Core	5:15	5:15	5:15		5:15		5:15	Mike Medley	Erin Bergrein
19	12 Hr 4x3 Core	16:00	16:00	16:00		16:00		16:00	Angie Finch	Jilene Colling
20	12 Hr 4x3 Core	17:15	17:15	17:15		17:15		17:15	Kathina Travis	Jessica Buyer
21	16 Hr Core Fri	8:00					4:00	6:00	Trent Murriska	Delicia Priest
22	16 Hr Core Mon		6:00	6:00	8:00				Steve Park	Kyle Cobb
23	16 Hr Core Thu			4:00	6:00	8:00		8:00	Rex Nelson	Mike Neen
24	16 Hr Core Tue			4:00	6:00	8:00		8:00	Ryan Ramsdell	Justin Butcher
25	16 Hr Core Wed			4:00	6:00	8:00		8:00	Ken Fivelstad	Jeff Rauhen
26	HPC Mon 12 Hr	5:00	13:00					5:00	Walt Dixon	Brad Baker
27	HPC Tue 12 Hr	4:15	4:15	12:00				4:15	Phil Glenn	Avery Bisbwin
28	HPC Wed 12 Hr	8:15	8:15		12:00				Christine Howard	Nicole Franklin
29	HPC Thu 12 Hr	6:30	6:30		8:30				Chris Wade	Nancy Butler
30	HPC Fri 12 Hr		4:15	4:15	4:15	11:00			Chris Chang	Cassandra Kindle
31	Sunday Waits	5:00	17:00	17:30					Nick Hammond	Nick Remington
32	Monday Waits		5:00	17:00	17:30				Mike Shaire	Nick Phillip
33	Tuesday Waits			5:00	17:00	17:30			Laura Foster	Nelissa Martinez
34	Wednesday Waits				5:00	17:00	17:30		David Boyd	Joseph Van Walraven
35	Thursday Waits					5:00	17:00	17:30	Ernick Kerfoot	Seif Connley
36	Friday Waits	17:30					5:00	17:00	David Stimpson	Alex Doer
37	Saturday Waits	17:00	17:30					5:00	Zeb Nemura	Erin Thornley

24 for shifts  
for Wadsworth

Rachel Reilly/Floot until student seat is filled

Corrections to Washoe County Staff Audit Report Appendix 1 Analysis - February 10, 2015 Audit Presentation

The Audit Report used an uncollectible blended rate of 36% for the 20 year period (as stated in her analysis). This means that she was actually using a 64% collection rate in calculating REMSA's revenues. This is completely incorrect. The actual collection rate for the period ranged from an estimated high of 55% in 1995 to the current rate of 36%. REMSA has never received a 64% collection rate during the past 20 years. When applying a more accurate decreasing collection rate over the 20 year period (as outlined in the chart below) to the increasing annual billable amounts each year (from the Audit Report and using the \$27 average bill increase), the projected resulting increase in net revenue to REMSA is \$4,627,763 less than reported in the Audit Report. Another critical factor which was overlooked in this analysis, is that while the increased billables and resulting revenues used in the Report is largely a result of the increased call and transport volumes over the years (a 231% increase over the 20 year period), the report neglected to acknowledge that REMSA's required service staffing, required equipment and all other costs necessary to handle the rapid increase in call volumes, also increased over the 20 year period a great deal (requiring additional staff, more ambulance vehicles, more maintenance, fuel, etc) and those additional costs were not accounted for in this report. (You can't count the revenue from increased call volumes without also counting the associated expenses) We have therefore estimated the increase in expenses over the 20 year period using the expenses in 1994 compared to today to handle the call volumes. Those expenses were weighted more heavily in the later years rather than in the earlier years because the increased expenses followed the call volume growth over the 20 year period. Once those additional expenses to cover the annually increasing call volumes are also included in this new analysis below (estimated to be additional expenses of \$8,118,842 over the 20 year period), the true picture changes dramatically and shows that REMSA's revenues from the additional \$27 (\$26 of which was for the staffing resources) have not kept pace at all with the rising costs associated with the additional staffing and equipment required to handle the additional call volumes and increased services year after year.

Year	Annual Billables Per the Audit Report	More Realistic Collection Rates From Billables	More Realistic Annual Revenues From the \$27 Increase	More Realistic Expenses to Handle the Increased call Volumes	More Realistic Excess/(Shortage) to REMSA
	From the \$27 Adjustment	Over 20 Years	From Changing Collections	Increased Expenses Over 20 yrs	Compared to the \$27
1995	445,500.00	55%	245,025.00	263,096.00	(18,071.00)
1996	486,962.69	54%	262,959.85	429,675.00	(166,715.15)
1997	527,704.42	53%	279,683.34	439,858.00	(160,174.66)
1998	567,994.65	52%	295,357.22	525,657.00	(230,299.78)
1999	611,954.60	51%	312,096.85	534,769.00	(222,672.15)
2000	661,235.30	50%	330,617.65	622,311.00	(291,693.35)
2001	718,630.52	49%	352,128.95	634,845.00	(282,716.05)
2002	785,513.47	48%	377,046.47	649,836.00	(272,789.53)
2003	859,442.07	47%	403,937.77	665,858.00	(261,920.23)
2004	934,041.64	46%	429,659.15	680,134.00	(250,474.85)
2005	1,020,972.89	45%	459,437.80	891,187.00	(431,749.20)
2006	1,112,794.09	44%	489,629.40	907,882.00	(418,252.60)
2007	1,211,710.36	43%	521,035.45	924,890.00	(403,854.55)
2008	1,316,886.82	42%	553,092.46	941,768.00	(388,675.54)
2009	1,432,568.74	41%	587,353.18	959,760.00	(372,406.82)
2010	1,544,939.43	40%	617,975.77	1,128,856.00	(510,880.23)
2011	1,669,353.40	39%	651,047.83	1,144,885.00	(493,837.17)
2012	1,796,808.54	38%	682,787.25	1,159,509.00	(476,721.75)
2013	1,877,748.03	37%	694,766.77	1,174,070.00	(479,303.23)
2014	1,962,246.69	36%	706,408.81	1,189,054.00	(482,645.19)
Total	21,545,008.35		9,252,046.98	15,867,900.00	(6,615,853.02)

Reimbursement Allegations Investigation  
February 11, 2015



REMSA and Fire Department/First Response  
Agency Medical Resupply Agreement

The purpose of the Medical Supply Exchange program is to allow medical first response agencies in Washoe County, including the Reno Fire Department, Sparks Fire Department, and the Truckee Meadows Fire Protection District, to receive a one-for-one exchange or other assistance for disposable medical supplies used on patients when providing their first response duties within Washoe County. REMSA recognizes that first response agencies within Washoe County are equipped to provide high quality medical care. REMSA agrees to reimburse participating agencies (at REMSA's cost) for disposable medical equipment used on scene by first responders prior to the arrival of REMSA personnel, as long as REMSA has adequate financial resources to do so.

The following provisions are intended to control and account for medical supply reimbursement:

Spinal Motion Restriction Supply Exchange:

1. REMSA will provide backboards, head blocks and spinal motion restriction straps for each agency, not to exceed three sets of each item per response vehicle. Additionally, REMSA will provide for exchange of backboards, head blocks, and spinal motion restriction straps on scene, not to deplete in-service ambulances of less than one of each piece of equipment.
2. Medical supply items will not be exchanged at the scene or otherwise resupplied.
3. Pharmaceutical and invasive medical devices, e.g. medications, IV/IO catheters, hypodermic needles, IV fluids and tubing, endotracheal tubes, oral airways, etc., are explicitly prohibited for exchange by state and federal law.

Financial Reimbursement

4. Financial reimbursement will be for disposable medical supplies used by first responder agencies prior to arrival of REMSA personnel. Medical supplies considered for financial reimbursement must be used by first responder agencies during direct patient care activities prior to the arrival of REMSA personnel.
5. Reimbursement will not be considered for items which have been expired, damaged, or otherwise need replacement.
6. Medications will not be considered for reimbursement excluding normal saline products.

Reimbursement Allegations Investigation  
February 11, 2015



7. Items for reimbursement must be documented per call via Operative IQ system. The Operative IQ system is REMSA's purchasing, receiving, and supply inventory management system. Instructions and training for requesting supplies will be performed online for the first responder agency staff. Training will be provided by REMSA to two representatives from each agency.
8. Disposable items for reimbursement are listed on Appendix A. Items not listed on Appendix A will not be considered for reimbursement.
9. Reimbursement will be based on current cost of supplies purchased by REMSA, through REMSA's purchasing agreements with vendors.
10. Items not carried by REMSA will not be considered for reimbursement.

**Monthly Audit**

11. Monthly audits will be performed between REMSA logistics staff and first responder staff.
12. Monthly audits will include a review of 50% of all calls submitted for reimbursement.
13. Randomized call selection generated by computer software will be performed by REMSA staff who will then notify each agency representative to bring the associated patient care report to the audit meeting for review. Patient demographics or other patient identification information including address will not be presented or discussed, in compliance with the Health Insurance Portability and Accountability Act.
14. This audit process is not a means for clinical review and clinical care will not be discussed. The purpose of the monthly audit meeting is for confirmation of use of supplies only. If this cannot be verified the supply will be denied. If there is no verification, the item will be denied.

**Term of Agreement**

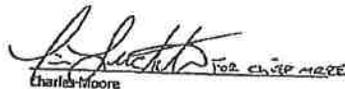
15. This agreement will begin August 15<sup>th</sup>, 2013 as a 3 month trial period ending October 31<sup>st</sup>, 2013. After three months of successful compliance with this agreement, all parties will meet to discuss the continuation, adjustment, suspension, termination, or general changes to this agreement.

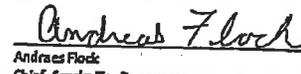
Reimbursement Allegations Investigation  
February 11, 2015



  
Michael Hernandez  
Chief, Reno Fire Department  
8/6/13  
Date

  
James Gubels  
President / CEO, REMSA  
8/1/13  
Date

  
FOR CHIEF MOORE  
Charles Moore  
Chief, Truckee Meadows Fire Protection District  
8/6/13  
Date

  
Andreas Flock  
Chief, Sparks Fire Department  
8/9/13  
Date

Filed with the Washoe County Health Department.



Aaron Abbott <aabbott@remsa-cf.com>

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**TMFPD Reimbursement Submissions**

12 messages

Aaron Abbott <aabbott@remsa-cf.com>  
To: Alex Kukulus <akukulus@tmfpd.us>

Mon, Dec 8, 2014 at 9:52 AM

Hi Alex,

I see Erin got some reimbursement submissions in, however there are no incident/run numbers or dates associated with the use. We will need the incident/run number to complete the audit process. Let me know if I can help in any way.

Aaron Abbott, MS, Paramedic  
Director of Operational Services  
ORMS Program Manager  
REMSA  
450 Edison Way  
Reno, NV 89502  
REMSA: (775) 858-5700  
Direct Line: (775) 353-0752  
Cell: (775) 223-9341  
www.remsa-cf.com

**From:** Kukulus, Alex K  
**Sent:** Thursday, December 11, 2014 10:58 PM  
**To:** Holland, Erin  
**Subject:** FW: TMFPD Reimbursement Submissions

Are you able to run that report for him so that he has the numbers?

Alex Kukulus  
Battalion Chief  
Truckee Meadows Fire

akukulus@tmfpd.us  
(775) 762-0638



Holland, Erin <EHolland@tmfpd.us>  
To: "Kukulus, Alex K" <AKukulus@tmfpd.us>  
Cc: "aabbott@remsa-cf.com" <aabbott@remsa-cf.com>

Fri, Dec 12, 2014 at 8:47 AM

Hi Alex,

I am back in the office today and will submit the November request along with the incident numbers for the year through November 30<sup>th</sup>.

Thanks,

Erin Holland

Truckee Meadows Fire Protection District

775-326-6073 Direct

Aaron Abbott <aabbott@remsa-cf.com>  
To: "Kukulus, Alex K" <AKukulus@tmfpd.us>

Mon, Jan 12, 2015 at 1:50 PM

Hi Alex,

For some reason I still do not see an incident number on the submissions. Is Erin sure she entered the incident numbers? If so, I will keep digging into the report to see what the issue is.

[Quoted text hidden]

Aaron Abbott <aabbott@remsa-cf.com>  
To: Alex Kukulus <akukulus@tmfpd.us>

Mon, Jan 19, 2015 at 2:18 PM

Hi Alex,

Have you looked into this? I can't see any incident numbers on my end.

[Quoted text hidden]

Kukulus, Alex K <AKukulus@tmfpd.us>  
To: Aaron Abbott <aabbott@remsa-cf.com>  
Cc: "Holland, Erin" <EHolland@tmfpd.us>

Mon, Jan 19, 2015 at 2:25 PM

Yes, Erin was going to send you a spreadsheet, similar to what we provided in the past out of Operative IQ. She should be getting that to you any time now.

Sent from my iPhone

[Quoted text hidden]

Aaron Abbott <aabbott@remsa-cf.com>

Thu, Jan 29, 2015 at 7:23 AM

To: "Holland, Erin" <EHolland@tmfpd.us>

Cc: "Kukulius, Alex K" <AKukulius@tmfpd.us>

Bcc: James Gubbels <jgubbels@remsa-cf.com>, Kevin Romero <kromero@remsa-cf.com>

Good Morning Alex and Erin,

With all the back and forth, maybe there is some confusion on what we need to get you the reimbursement. What I need is for TM to submit into REMSA's Operative IQ system the following:

1. items used on the patient prior to REMSA's arrival
2. incident number per submission
3. Please do not include any expired medications or resupply items
4. Also, please do not include any C-Spine equipment as that is under equipment exchange on scene.

Since TM would like to have every supply itemized for accounting purposes, we need this in our system so we have REMSA's cost associated with each item. The submissions need to be done per incident so there is an incident number tied to each item, therefore, unfortunately a spreadsheet from your system will not work.

Also, please just submit for the past quarter, October through December 2014. FD reimbursements are a budgeted item per quarter for REMSA, therefore we cannot retro-actively reimburse the Fire services for previous quarters.

The Reimbursement list has been update and the CPAP masks are now in there. Let me know if there is anything else missing.

Let's get this first submission out of the way so we can get an agreement assigned. We will need the agreement before we move forward with any other reimbursements.

**STAFF REPORT**

**EMS ADVISORY BOARD MEETING DATE:** June 4, 2015

**TO:** EMS Advisory Board Members  
**FROM:** Christina Conti, EMS Program Manager 775-326-6042,  
cconti@washoecounty.us  
**SUBJECT:** **Discussion and possible approval of a proposed schedule change to the  
Emergency Medical Services Advisory Board (EMSAB) regular meetings**

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**SUMMARY**

Staff is proposing a change to the current EMSAB meeting schedule.

**PREVIOUS ACTION**

During the initial EMSAB meeting held on October 30, 2014, Members agreed on a quarterly meeting schedule with the initial meeting to be held on December 4, 2014.

**BACKGROUND**

As the EMS Program and EMSAB processes have evolved, it has been determined that a modification to the Board meeting schedule would provide great benefits to all involved, as it would allow staff additional time to review data and research items of concern.

Staff would like to propose that the meetings be pushed back by one month, beginning in October of 2015. They would still be held on the first Thursday of the month at 9:00 a.m. and would continue to be held quarterly. Therefore, rather than the current schedule of March, June, September and December, they would be in January, April, July and October.

**FISCAL IMPACT**

There is no additional fiscal impact should the Advisory Board approve the proposed meeting schedule.

**RECOMMENDATION**

Staff recommends the Board approve the proposed schedule change to the Emergency Medical Services Advisory Board (EMSAB) regular meetings.

**POSSIBLE MOTION**

Should the Board agree with staff's recommendation, a possible motion would be: "Move to approve the proposed schedule change to the Emergency Medical Services Advisory Board regular meetings."