WASHOE COUNTY HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

1001 East Ninth Street, Reno, Nevada 89512
P.O. Box 11130, Reno, Nevada 89520
Telephone 775.328-2400 • Fax 775.328.3752
www.washoecounty.us/health

MEETING NOTICE AND AGENDA

Emergency Medical Services Advisory Board

Date and Time of Meeting: Friday, October 23, 2015, 2:30 p.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
October 23, 2015 Meeting

5. Approval of Draft Minutes
June 4, 2015 and August 31, 2015 Meetings

***6. Program and Performance Data Updates**
Christina Conti

7. Presentation, discussion and possible direction to staff to present the use of the IAED Omega determinant codes and REMSA's alternative response process within the REMSA Franchise area to the District Board of Health.
Brittany Dayton

8. Presentation, discussion and possible approval for distribution the Washoe County EMS Oversight Program Data Report for Quarter 4.
Heather Kerwin

9. **Presentation, discussion and possible approval for distribution the Washoe County EMS Oversight Program Annual Data Report.**
   Heather Kerwin and Christina Conti

10. **Discussion and possible approval of presentation on the progress of revising the response zones within the Washoe County REMSA ambulance franchise service area.**
    Christina Conti

11. **Discussion and possible direction to staff regarding investigation outcome referencing mutual aid requests permissible under the REMSA franchise agreement.**
    Christina Conti

12. **Discussion and possible direction to staff regarding the Investigation Procedures and Expectations of EMS Agencies.**
    Christina Conti

13. **Discussion and possible approval for EMS Program Manager Christina Conti to present an annual update on accomplishments, current and future projects to the City Councils and the Board of County Commissioners.**
    Christina Conti

***14. Board Comment**
Limited to announcements or issues for future agendas. No action may be taken.

***15. Public Comment**
Limited to three (3) minutes per person. No action may be taken.

16. Adjournment

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
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. Supporting materials are also available at the Washoe County Health District Website www.washoecounty.us/health pursuant to the requirements of NRS 241.020.

1001 East Ninth Street, Reno, Nevada 89512
P.O. Box 11130, Reno, Nevada 89520
Telephone 775.328-2400 • Fax 775.328.3752
www.washoecounty.us/health

MEETING MINUTES

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

The Emergency Medical Services Advisory Board met on Thursday, June 4, 2015, in the Health Department South Conference Room, 1001 East Ninth Street, Reno, Nevada.

1. Call to Order

Acting Chair Dick called the meeting to order at 9:03 a.m.

---

2. Roll Call and Determination of Quorum

The following members and staff were present:

Members present:	Kevin Dick, District Health Officer, Vice Chair Steve Driscoll, Manager, City of Sparks Andrew Clinger, Manager, City of Reno Dr. Andrew Michelson, Emergency Room Physician, St. Mary's
Members absent:	John Slaughter, Manager, Washoe County, Chair Terri Ward, Hospital Continuous Quality Improvement Representative, Northern Nevada Medical Center
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
Heather Kerwin, Statistician
Dawn Spinola, Administrative Secretary, Recording Secretary

---

3. Public Comment

Acting Chair Dick opened the public comment period.

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

---

4. Approval of Agenda
June 4, 2015 Meeting

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

---

5. Approval of Draft Minutes
March 5, 2014 Meeting

Mr. Driscoll moved to approve the minutes as presented. Mr. Clinger seconded the motion which was approved four in favor and none opposed.

---

6. Presentation by Dr. Andrew Swanson regarding community committee called PMAC (Pre-Medicine Advisory Committee)
Staff Representative: Ms. Conti

Ms. Conti stated she and Dr. Andrew Swanson had identified potential collaborative opportunities between PMAC and the Emergency Medical Services Advisory Board (EMSAB).

Dr. Swanson explained the mission of PMAC was to evaluate protocols, try to resolve differences between agencies, and report back to the Health District (WCHD). He reiterated his goal was to establish more collaboration with EMSAB.

Dr. Swanson went on to explain that PMAC was comprised of doctors. The Committee includes representatives from REMSA, all the local fire agencies and each of the hospitals. At the next meeting they will be discussing backboard protocols and the use of oropharyngeal airways instead of endotracheal airways in the field. Their overall goal is to provide the best patient care possible.

---

7. Program and Performance Data Updates
Staff Representative: Ms. Conti

Ms. Conti presented the staff report. She noted that since the report had been submitted to the Board, staff had met with the City of Reno and Washoe County partners regarding the Compliance Checklist and the exemption process. They are working towards developing a checklist as part of a process to more fully explain how the exemption process works. When

an exemption is granted, it would be accompanied by the checklist which demonstrates the steps that had been taken prior to the exemption being granted.

Ms. Conti reported staff had held meetings on the Nevada Dispatch Interconnect Project (NDIP), which is the ability to talk console to console from the dispatch centers without the need to pick up a phone. One outcome had been learning that of all of the regional agencies have the capability, the process just needs to be developed.

Ms. Conti reviewed legislative topics that had been of interest. Some had failed, others had passed. She offered to send the members a full listing.

Ms. Conti noted her REMSA ride-along needed to be rescheduled.

Acting Chair Dick requested a status update on the Compliance Checklist. Ms. Conti explained it had been presented to the District Board of Health (DBOH) on May 28, 2015 and it had been accepted with modifications. It contains the auditable, tangible items from the Franchise Agreement. Three items were removed for further consideration, the CAD-to-CAD link, the 800 MHz system and Automatic Vehicle Locators (AVL), because it had been requested that time certain dates be included. Staff will work with REMSA and the community partners to establish those timelines and then will bring the Checklist back to the District Board of Health (DBOH).

Mr. Clinger requested elaboration on the NDIP system. Ms. Conti explained her understanding was that the dispatch station had a screen with all of the radio channels. NDIP is a component of that that allows the dispatcher to speak to a different call taker in a different dispatch center somewhere else in the state. Not all dispatchers in the state are equipped with NDIP yet, but all dispatch centers in the Washoe County region are.

Chief Mike Brown, North Lake Tahoe Fire Protection District, clarified the system was set up but not yet functional. Testing and training still need to occur. Mr. Clinger asked what the timeline for that would be and Chief Brown stated the dispatch center was not sure yet. Ms. Conti noted the project seemed as though it was stalled.

Mr. Driscoll noted interoperability had been passed by the Legislature and asked if NDIP was part of what is required due to that. If so, were there deadlines, and if so, had they been met or passed. Chief Brown stated he was on the Nevada steering committee for that project, and Mr. Driscoll was correct, there had been legislation. It had to do with future of both First Net and the ability to speak throughout the entire state. First Net is a nationwide program. State of Nevada has to opt in to use it, or opt out. They are in the process, through the Governor's Committee, to find out before the end of this year whether or not the State is going to opt into that program. It will be available for all public safety agencies in the state and the nation.

Mr. Clinger asked if anyone knew why the program was stalled. Chief Brown opined it might have to do with staff departures and noted REMSA was working to get it going, but it required testing. The system was designed so that if the Northern Nevada dispatch centers went down the calls could be routed through Las Vegas or vice versa.

Jim Gubbels, REMSA President, explained the NDIP installation contract included training, and that portion should be acted on. He opined the system was efficient and should be utilized.

Mr. Clinger noted that dispatch was one of the most critical components of emergency services and asked if there was something that the Board or individual managers could do to

help it along. Acting Chair Dick noted the item was not for action but was pertinent for discussion during the Strategic Planning item, during which the Board may provide direction.

---

8. Presentations on the utilization of System Status Management in an EMS system and REMSA's staffing model for the months June – September 2015.
Staff Representative: Ms. Conti

Ms. Conti noted the title should indicate that the time period is June through October of 2015.

Ms. Conti explained Steve Tafoya is the program manager for the State of Nevada's EMS oversight program. He had given the presentation to the DBOH and had intended to present to the EMSAB as well but had encountered a scheduling conflict. The presentation was designed to impart a baseline understanding of what SSM is. She noted System Status Management (SSM) was not specific to REMSA and Washoe County

Ms. Dayton reviewed Mr. Tafoya's presentation that provided an overview of how SSM works (Attachment A). She explained the staffing level is typically based on 20 to 40 weeks of historical data.

Mr. Driscoll noted the model primarily dealt with historical data and asked how it addressed new population bases. Kevin Romero, REMSA, opined his presentation would answer that.

Mr. Romero provided a presentation explaining REMSA's system demand analysis process (Attachment B). It compares the data gathered the previous year during the same time period and integrates snapshots of higher-growth areas. REMSA analyzes the data to establish staffing levels. They determined call volume had increased by 7.9 percent, and transport volume had increased by 6.5 percent since the same time period during the previous year. Mr. Romero reported that one of the growth areas that required additional coverage was in the Wingfield/Spanish Springs area. Regional Ambulance Services Incorporated (RASI) was granted an additional 144 unit hours by REMSA. The unit hours were divided between two locations, some in a fixed-post station in Spanish Springs and some into the Emergency Management System (EMS).

Mr. Romero displayed graphs demonstrating the ratio of average number of calls each day by hour and the number of units available to respond. He explained REMSA's surge capacity and how they handle anomalies in the data. He pointed out that approximately 60 percent of calls end up as a transport.

Mr. Romero explained that the number of units available that are shown on the graph may be involved in different activities besides responding to an emergency call, such as charting at a hospital or handling a non-emergency transport. The number may go up or down when variables occur such as staff illness or a unit being out for maintenance. The increase or decrease of number of units available based on the hour of the day is handled through scheduling overlap.

Mr. Romero explained calls were prioritized through the Emergency Medical Dispatch (EMD) process, which categorizes the severity level of the call. He stated they did track units not available for response, and that it was very rare that REMSA did not have an ambulance available to respond to a life-threatening emergency. They utilize a reprioritization system so can pull units off of a non-life-threatening call if necessary.

Mr. Clinger moved to accept the presentations. He requested REMSA provide the staffing matrix which supported the data presented. Mr. Driscoll seconded the motion, which passed four in favor and none opposed.

Vice Chair Dick noted a portion of Mr. Romero's presentation had included some verbiage regarding the importance of a common operating picture. He opined that bringing this type of information forward helped to build that.

---

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.
Staff Representative: Ms. Conti

Ms. Conti explained the staff report discusses the process the region would like to take regarding the current response map. During the prior meeting, there had been discussion about making changes to the response map. The Board had recommended staff meet with regional partners to discuss those changes.

Ms. Conti noted meeting attendees had included the EMS Working Group, all regional fire partners with the exception of Gerlach, and dispatch representatives. The outcome was a recommendation from the partners that everyone acknowledge the map was antiquated and needed change. They further recommended a new map be created that would change the response zones within the franchise service area.

Ms. Conti noted the proposed project charter, which had been provided to the Board members. If approved, it would guide the process for the partners. It included goals, deliverables, timelines, and risk factors. A subcommittee of the EMS Working Group would be creating the map.

Vice Chair Dick opined it would be helpful if some resolution and common understanding could be established regarding the North Lake Tahoe service area boundary. Ms. Conti explained that was outside the scope of the current project but needed to be done in coordination with it.

Mr. Clinger moved to approve the project charter. Mr. Driscoll seconded the motion, which passed four in favor and none opposed.

Vice Chair Dick stated he was pleased that all parties had agreed to bring the map up to date in one concerted effort as opposed to incrementally.

---

10. Presentation, discussion and possible approval for distribution of the Washoe County EMS Oversight Program Data Report for Quarter 3
Staff Representative: Ms. Conti

Ms. Conti showed a Power Point presentation outlining an overview of the results of the Quarter 3 (Q3) report (Attachment C). She noted the regional partners often asked what the purpose was for the data collection, analysis and review. She stated that the five regional partners had created the Interlocal Agreement that established the Washoe County EMS (WCEMS) program and the specific program outcomes.

Ms. Conti reviewed the changes in the methodology of the report. The median time would be utilized rather than mean. She explained alarm time and dispatch time would both be used, but for different reasons. Alarm time is used to determine which agency received

the call first, dispatch time is when units roll. For fire, it is called dispatch time, for REMSA, it is called clock start. Additionally, there is an effort to get away from a strict focus on compliance, and to put more emphasis on studying system performance from the citizen perspective.

Ms. Conti noted discussions regarding the national standards of Basic Life Support (BLS) within six minutes, Advanced Life Support (ALS) within eight minutes for the citizen. Priorities 1, 2 and 3, designated P1, P2 and P3, are REMSA's Emergency Medical Dispatch (EMD) determinant of priorities. The graphs show the model is working well.

Ms. Conti noted an item that will require ongoing observation would be the fire alarm first variable. The system is two-tiered, so fire should dispatch first a very high percentage of the time. Within unincorporated Washoe County, it happens as it should. The issue is that there is a close to 20 percent reduction of fire going first when they know about it first. An ambulance could be dispatched within that time frame of getting the call and dispatching fire but it should not be 20 percent.

Ms. Conti stated there was a real need for the Public-Safety Answering Point (PSAP) data. Staff needs to know when the initial call from the citizen came in because then they can look at it and start seeing the time element to see if this is just an issue with the data and how it is being looked at or if there is really an issue in the system that the majority of the time fire knows first but they do not go on the call first. That is not how the system is designed to work.

Ms. Conti noted that in a two-tiered system, fire should be arriving first, and so the arrival after the franchise-denoted response time would be about equal when you do all the calls, versus the calls when fire is first. Within Truckee Meadow Fire Protection District (TMFPD), for all calls, an ambulance unit arrived 9.1% of the time after the franchise-denoted response time. When fire arrived first, 10.7% of the time of those calls, REMSA arrived after the franchise-denoted response time. Those are close to equal, which is what you would expect.

Ms. Conti pointed out for the City of Sparks, the difference is almost double, which is concerning because that means that in those jurisdictions, the system might not be working the way it is designed. Based on the two-tiered system that has been established in Washoe County, fire should be responding first the majority of the time, then the late calls should match the entire system.

Ms. Conti went on to note that for all calls for service within the City of Sparks, REMSA was late 5.7% of the time past denoted response time. When Sparks Fire department arrived first, which is expected, REMSA was late 9.3% of the time beyond the denoted franchise response time. That compared as 5.7 and 9.3 as opposed to TMFPD, which is 9.1 and 10.7. There is a discrepancy. The difference in those percentages should be very minimal, whereas it is significant. It is also significant in Reno, where it is 5.0% across all calls, 8.7% when fire arrives first.

Ms. Conti stated these are some observations that need to start being looked at to determine if the performance of our system is what it is expected to be. Having the PSAP data of first call, staff can start seeing those time elements and try to figure out why it is. What is interesting is the difference between all calls versus when fire is arriving first.

Mr. Clinger summarized, asking if he understood that for calls within the city, REMSA was late 5% of the time past the denoted franchise response time. Ms. Conti clarified that

was for all calls. Mr. Clinger then asked if, when Reno Fire is on scene first, there is a higher percentage of the time that REMSA is outside of the denoted franchise time.

Ms. Conti stated that was not the best way to interpret it, because the way the data is split makes it seem that way. REMSA would not necessarily know if they are on scene to then change their time. Staff is splitting the data out and it is showing that they are waiting for a partner 8.7% of the time past what they would expect to.

Mr. Clinger noted he wasn't trying make implicates based on the data, but the way it reads it shows that when Reno Fire is on scene first, there is a greater likelihood that REMSA will be past the denoted franchise time. Ms. Conti stated that was correct. The data showed in Q3 that that was correct, which is why there is a concern. Fire should always be waiting. The 5% of the time past the denoted repose time is for all calls, to include the ones where fire was not on scene first. There is a possible discrepancy in the system because Reno Fire should always be getting there first which means the "late past denoted response time" should be similar. It should not be so different in the percentages when the data is split out.

Mr. Clinger asked how staff was measuring whether or not the fire departments receive the call first. Ms. Conti noted the slide presented earlier that showed alarm time versus dispatch. Alarm time is logged as the first time, but is not necessarily the first time the fire dispatcher knows about the call, that is where staff is encountering issues, which is why the PSAP data would be important. But it is logged as the first time on the fire side that the call is being handled. It is the first time stamp for that call in the fire spreadsheet, is alarm time. Then the dispatch time is when they are being dispatched out of their station and WCEMS also gets the enroute time and the on-scene time. For purposes of analysis the enroute time is not looked at and it is dispatch to on-scene and then alarm time is looked at as the first time stamp for that call from the fire perspective.

Mr. Clinger asked if when Ms. Conti said that the fire department knows first, was she referring to fire dispatch. Ms. Conti stated that was correct and added that for City of Reno, they did not have that for Q3, the previous chief had made a decision not to provide that information. That has been rectified and staff was receiving it again. She stated that if the City of Reno would like to send the previous three quarters of data, staff could include it for the annual report and provide a more accurate picture of what is happening in the city.

Acting Chair Dick asked if a reduction in fire department response to P3 calls would create a higher frequency of when they would arrive first to a call, versus REMSA, and REMSA showing up late. Ms. Conti stated it would not; the data was just looking at the calls that are late outside of the denoted franchise time, then looking at all calls, and then splitting it out where fire went first or fire went second or fire arrived first versus second.

Acting Chair Dick asked if it would be correct to say that if fire did not respond to a call at all then it would not be contained in the data. Ms. Conti explained it would not be matched, so it would not be included. That one change will actually start changing this data report, so that is something that the program and the partners need to look at. If fire partners stop going on calls, then the number of calls able to look at is going to change. That is something that staff can look at with the REMSA section that will be discussed later to show the P3 calls and then the increase that maybe are not matching the partners that you can still see what is going on in your jurisdiction even if you are not responding to it.

Ms. Conti explained Tables 4.2 and 4.2a. 4.2 showed the frequency that fire is alarmed, meaning the fire dispatcher is made aware of the call, prior to REMSA dispatching an ambulance. So fire is aware first 89.4% of the time. Staff would like to see the percentage

be higher, but it is more in line than the other jurisdictions. In Table 4.2a, the frequency that fire dispatches a unit prior to REMSA dispatching an ambulance drops down to 69%, a 20% change. That also occurred in Q2. During Q1 staff did not have the necessary data, because alarm time was the sole time stamp under review, and so that skewed the available data.

Mr. Clinger asked if that the way the dispatch system is set up factors into this situation, since there is a separate REMSA dispatch where the call is handed off. When measuring P1, P2 P3, for example, it is necessary to wait for REMSA to get that information back to fire dispatch.

Ms. Conti explained that her understanding was that Reno does not wait to dispatch a fire unit. If Reno is changing their dispatch method, waiting for REMSA to tell them the EMD priority, then the way the dispatch system is set up does factor into the situation.

Reno Fire Chief Dave Cochran stated Reno does not necessarily dispatch first. If the key words are there, they go. But if they are not, that call needs to go to REMSA, and if they determine through their EMD that Reno goes, then it comes back to us. So that would account for some of the delay.

Mr. Clinger opined this was a system problem, not a Reno fire problem. Ms. Conti agreed and noted it was shown in all of the data reviewed. It shows that the system as a whole is not operating the way that it was designed to operate, looking at performance, not compliance. All EMS partners want our system to work the way that it is supposed to, and if 20% of the time it is not, and there's a tangible item that we can figure out that can be changed, then that is what this region should do.

Mr. Clinger agreed and reiterated his opinion it was a system problem that starts at the dispatch center, how those calls are being dispatched, how the calls are being handing off to REMSA and how fire is getting the information back. Mr. Driscoll opined it was probably beyond the scope of the discussion for this purpose but that leads to a discussion of EMD in our dispatch center.

Jim Gubbels explained REMSA would like to use priorities within their system. They did not wish to over-utilize resources for minor occurrences. He opined the EMD process was important. He reiterated NDIP is one way to get that information back quicker to the primary PSAP. REMSA has also established an 800 base station, located at REMSA, that all of their services are using. When we page out that REMSA ambulance, at the same time that page is going out to that fire department stating that it is a P3, P2 or P1, and what the chief problem is. It is getting information faster to the fire service than by going back through dispatch and waiting for dispatch to do it.

Mr. Gubbels opined what was really needed in the community was the CAD-to-CAD link. Information would be transmitted to all services at the same time, so it would not be necessary to duplicate it. Initiation of that system is in process. When it is a life-threatening call, responders need to be able to get out immediately. That is what Chief Cochran is saying, they have a list of certain key words, and if those key words are there they are going. If they do not hear those key words, they will wait until if they know it is a P3, then they know that they don't need to respond. CAD-to-CAD will be an efficiency but there are some other tools that have not been used, NDIP is one of them.

Mr. Clinger noted the key words are just that, key words, not an EMD protocol, and Reno is not doing EMD. Mr. Gubbels agreed and stated that was why he would like to see the EMD protocol utilized. Mr. Gubbels went on to explain that the other method currently being utilized is that when that ambulance is paged out, so is the fire service, so they hear

that exact page. Fire knows at that time, when REMSA dispatches an ambulance on REMSA 1-800 frequency, exactly what the call is, because they hear what the ambulance is being told through radio communication. EMS services just got this working appropriately within the last 30 days, and it is being expanded so it helps all services know exactly what is going on as quickly as possible.

Ms. Conti reiterated that the information is flawed without the PSAP data. Without the actual time that the call came in to know where it came from and then the path that it follows, staff cannot analyze the situation and then make the changes, they can only speculate on what is impacting that 20%. In answer to a question posed by Mr. Clinger, she verified that Reno is not providing the PSAP data.

Acting Chair Dick noted the ILA included PSAP as part of what was included in the regional EMS oversight and asked what the status was with getting the PSAP data and why it was not being received. Ms. Conti replied she was not sure why it had not been provided. She recently had conversations with members of the PSAPs. One of PSAPs had suggested that fire already has it and that they just need to sort their spreadsheets differently to send it, so that is something that needs to be explored. Another PSAP said they were absolutely willing to send what they get to see if it works. The third one asked to wait until after their upgrade. Ms. Conti stated she felt like that challenge was close to being resolved, but staff is not really able to analyze the data and make recommendations without that piece. If all of Q4's data contains the PSAP information then the data would reflect the difference of having it available.

Chief Cochran opined the dispatch issue the items Mr. Gubbels talked about were attempts to put a band aid on the problem, EMD is the solution. He spoke of hearing problems every day about use of 800 radios and the NDIP. It was on both sides, there were training, operational and technological issues. They are helping but not solving the problem.

Chief Garrison, Sparks Fire Chief, pointed out that for the first time in a long time EMS agencies are getting data that they can use to make decisions. Each fire department and REMSA works with the WCEMS staff to make sure the data is accurate and that everyone is analyzing it in a proper way to identify problems. This data has identified a couple of issues with Sparks, and they are trying to track down why fire units are being dispatched 60% of the time after REMSA units.

Chief Garrison explained that Sparks has taken a different approach on the whole system and, to Mr. Clinger's comments on a key word not being EMD, Sparks certainly recognizes that as well. They have chosen to err on the side of patient care and timely two-tiered response. In the City of Sparks the process is that when a 911 call comes in and dispatch recognize it is an EMS call, they transfers the call to REMSA. Dispatch then sends a fire truck immediately, based on whatever information they have at the time. With the EMD process, if they wait for a determinant to be made to transfer the call, there may be a one- or two minute delay, and that is not an acceptable first-tier response in the City of Sparks.

Chief Garrison opined the dispatch issue and transfer process was very inefficient and that the NDIP project may help with communication. His expectations would be, based on the data, that Sparks is dispatched 60% of the time after REMSA. He felt that if Sparks received the 911 call, they should be getting out the door in the 90% before them, because there should be no delay. Sparks is reviewing a number of different things, talking with dispatch supervisors, looking at time clocks between REMSA and Sparks to see if they are the same, and other things of that nature. He opined the conversation had strayed off track

with EMD and the dispatch problem, he stated he did not think that was the intent of this data. He opined the data is important and it is showing some things, and it is bringing up questions about how the numbers came to be. These questions included if they are accurate, whether they are showing problems, are there problems with the data or perhaps the methodology. He stated Sparks was working on trying to get the PSAP data of 911 call times to WCEMS, although they have asked for a continuation because they are switching to Tiburon shortly.

Ms. Conti reiterated the data was being reviewed on what a typical call might look like from a citizen perspective, again going with the entire system. She detailed that IC is initial call, or alarm time, and where and what is the first stamp logged. From 0-27 seconds is when an ambulance is dispatching a typical call for P1. Typically in all calls 27 seconds after that initial call an ambulance is being dispatched. 35 seconds a fire engine is rolling. 6 minutes 10 seconds from initial call, a fire unit is arriving, and then 6 minutes 50 seconds. With the PSAP data this gets to change because staff will know the actual 911 call time and the response can be reviewed differently. Unincorporated WC is working the opposite of the cities. Fire is dispatching first, 7 seconds after the initial call, is the median time, with REMSA then at the 28 second mark, 6 minutes 54 seconds, 9 minutes and 49 seconds. This is the citizen's perspective of what they could expect.

Ms. Conti reiterated WC has a two-tiered system, and in each individual jurisdiction staff looks at when fire dispatches second, and reviewed what the impact really is to a citizen. From the initial call, and the patient's perspective would be all the calls, who knocks on the door first, the uniform does not matter, the median time is 5 minutes and 28 seconds, all calls.

Ms. Conti explained the next table displayed when fire dispatches first. All the calls are split it out then to fire first fire second. When fire dispatches first, somebody is knocking on the door, either fire or REMSA, at 5 minutes and 5 seconds. For City of Sparks, when fire dispatches second, somebody is knocking on the door 5 minutes and 45 seconds later. When fire dispatches second we can quantify the impact to a citizen of 40 seconds, median time. In Unincorporated WC the impact to a citizen is over a minute. The input allows data to show the impact to the system when it does not respond the way that it is expected to.

Ms. Conti reiterated every EMD call has P1, P2 and P3 status, so it was felt that maybe it would be more beneficial to just break it out by priorities and not EMD. Going through each of the three columns, what staff in the EMS program assumed was that the priority makeup would not change with delayed dispatch, because it would be the amount of priorities. They found that it is different. City of Reno was displayed as an example. For all matched calls, P1 P2 P3, the split is 53/34/12. When viewing all of the delayed dispatch calls, the split varies a little bit but is still fairly comparable to all the calls. When there is a minute delay, the split changes significantly. P2s are disproportionately affected in all three jurisdictions and that requires further exploration. P1s go down in all jurisdictions. In Unincorporated WC P3 also increases.

Ms. Conti noted that a review from the citizen's perspective would reveal that P1s are not being as impacted as one would think, but P2s are very definitely being impacted when fire is dispatching second over one minute.

Ms. Conti explained staff had added a REMSA special interest area from last quarter. It demonstrated 14,515 calls, and there is a percentage that matches to fire agencies, but not all. These are the first steps to explore that. Q4 will have a more robust look at what is

happening with the system as a whole and then looking at those calls that are not matched to a fire partner. The two graphs are all of the priorities with the percentage of the calls with the priorities and then resulting in transport, because not all calls result in transport. Then the calls are broken down by zone.

Ms. Conti noted the new addition is the City of Reno. Their previous fire chief had commented in the last EMSAB meeting that it was difficult for him to see what is going on in his jurisdiction as it relates to REMSA because the stations are not overlaid with the REMSA response map. And so Chief Cochran and Ms. Kerwin met and created graphs that look at the response within the district, and then the response out of the district and how those are comparing. What it was able to show is that Reno is at their depth of resources and the response is quite great. They are still being able to meet benchmarks when they are traveling outside of their district. They have median response times in their chart but the graphs were able to display the information better.

Ms. Conti stated the Reno Tahoe Airport Authority (RTAA) information had been added. WCEMS staff met with RTAA Chief Nelson and some of their issues still need to be reviewed more closely. WCEMS asked about occurrences where REMSA would know about a call and the RTAA would not, and were told they were few and far between. EMS data indicated the occurrences were not quite that rare. RTAA has their own dispatch, so if an incident happens at the airport and someone calls 911, they are going through the larger WC dispatch system. If they flag down an airport staff member to call, then they are calling their internal RTAA dispatch to dispatch fire and then it gets transferred to REMSA. There are 11 calls that did not match. Further exploration is needed there.

Ms. Conti went on to note that the Mt. Rose corridor needs continued observation. Three agencies were dispatched to 30 percent of the calls in that area. Further exploration would be necessary to determine if that was mutual aid, and if it is an efficient use of the system.

Ms. Conti clarified that the full match percentage for Sparks it should be 98.7, and the removed for analysis number should be 8.9. Those changes will be made upon approval for distribution.

Mr. Driscoll noted Ms. Conti had mentioned in an earlier presentation that the Mt. Rose corridor component was going to have its own discussion and project. He asked if the data that was being discussed at this meeting and the triple calls would be used to enhance the conversation to establish that project, or if other items would drive it.

Ms. Conti explained it could probably be used however they want but staff would really need all the data to be able to have it be valuable. She noted that they only have one month's worth of data and cannot draw any conclusions from that, it was interesting that three agencies went on 30 percent of the calls. Mr. Driscoll asked, if as that project goes forward, then the use of data would be explained. Ms. Conti stated she would hope so since that is what the ILA is recommending.

Mr. Driscoll moved to approve distribution of the report. Mr. Clinger seconded the motion, which passed four in favor and none opposed.

Acting Chair Dick noted it was good the data was being received and that the Board is able to engage in discussion about it.

---

11. Presentation, discussion and possible direction to staff to present the Fire EMS training framework to the District Board of Health

Staff Representative: Ms. Dayton

Ms. Dayton noted she had presented a report to the Board in March regarding the framework and indicated she would be providing an update and requesting direction from the Board to present it to the DBOH, as required by the franchise agreement.

Ms. Dayton explained she had met with REMSA and the regional fire partners in early April to discuss the structure and topics of the trainings, and they had arrived at successful conclusions. REMSA does offer free CEUs to all the fire agencies, but EMS staff was interested in going above and beyond that because fire agencies also offer CEUs to their own employees, so a new system was developed that is designed to be beneficial for field staff.

Ms. Dayton explained REMSA would offer quarterly trainings that will simulate real-world responses. She outlined how the trainings would work. The participants would be provided the opportunity to train on something that does not occur in the area on a regular basis, to include drownings, MCI triage, hyperthermia, long bone fractures and full cardiac arrests. A skeleton of a calendar has been developed and the first training would be in June.

Mr. Driscoll moved to direct WCEMS staff to present the Fire EMS training framework to the District Board of Health. Mr. Clinger seconded the motion, which passed four in favor and none opposed.

---

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

Staff Representative: Ms. Conti

Ms. Conti noted the ILA contained components directing the EMS program on its deliverables. One of those was the establishment and maintenance of a five-year strategic plan. WCEMS staff was requesting approval and possible direction on the development of the creation a subcommittee of regional partners that would work together to establish that. The subcommittee would create a strategic plan that would contain milestones, furthering the EMS system within WC. She pointed out there were several components listed in the staff report that were suggested to be included in the plan.

Mr. Driscoll noted there was some discussion related to this topic by the DBOH that might provide additional information to the EMSAB. Acting Chair Dick stated he may be referring to the discussion that occurred on the REMSA compliance checklist and the items that had to do under the franchise agreement with REMSA moving to a compatibility with the 800 MHz communication and with the CAD to CAD linkage. There had been some discussion of working to come up with some group language around REMSA's progress in those areas and the request to establish a timeline for those transitions. The discussion also surrounded the issue that the compliance checklist for this year is for REMSAs performance through their first franchise year which ends on June 30 and some concern about whether staff was in a position to be able to define a timeline for them to be reporting on prior to that. There was discussion about this being part of our strategic planning process to further define how that transition would move with 800, but also the franchise agreement contemplates that the EMS system work together as new technology evolves to further transition beyond 800 if we are going to new technologies in the future.

Mr. Driscoll asked if one of the things the DBOH was looking for was specific objectives that may be shorter term versus longer term for developing the checklist on those three

specific topics. Vice Chair Dick explained his understanding was that the DBOH would like the staff to be able to come back with a proposal that they could consider for approval of the compliance requirements for wording for those items around the 800 MHZ communication and CAD-to-CAD.

Mr. Driscoll asked if that could be provided even without the strategic plan being complete. Acting Chair Dick opined that if Board members had ideas about how to frame objectives regarding the communications to help direct the strategic plan development, it might be useful for looking at how the provisions may be incorporated in the checklist. The other thing to discuss would be the process for the EMSAB being involved in the discussions around some of those key areas such as the measurements or the formation of the strategic plan, versus giving it to a committee to come back with something that they had not been much involved with.

Mr. Driscoll asked if Vice Chair Dick was suggesting there might be a workshop with the subcommittee and the EMSAB to kick off the discussion and to provide some general direction for the purpose of getting them going and beginning at least a template of the strategic plan. He suggested that, from the result of the workshop, there may be some very specific deliverables that might be coming into effect sooner than later, with some desired outcomes.

Acting Chair Dick opined that may be a useful way to proceed. He added that, not just in the initial workshop, but it would be good to have a focused meeting, maybe at the next EMSAB meeting or some other workshop specifically, around the 800 MHZ communications dispatch and CAD-to-CAD type topics.

Mr. Driscoll noted the approach of the end of the compliance checklist FY. He pointed out if there were some changes or some outcomes that were going to be graded for compliance, that would need to be done sooner than later. He suggested that if they were doing something related to compliance, they would have to do that and solidify it well before the next quarterly meeting.

Ms. Conti explained the checklist provides a number of things to be used in order to determine compliance. If staff was able to have the workshop within in a week or two, it would not impede the ability to determine compliance within those components. She noted there had been other approved measures that had remained when those three items were taken out.

Mr. Driscoll noted it had been discussed that, while all those three were pulled out, and that the rest of the checklist is in place and is in compliance, those three things need attention, and need to get into the compliance framework as soon as possible. If there is an understanding that it may not get it done at the beginning of the year there should be some contemplation that it gets done quickly. If the Board is going to hold different people to that compliance, primarily REMSA, it is only fair to them that what is going to be discussed gets identified fairly quickly, along with meaningful details and start dates with contemplation of maybe even a partial year to determine compliance. That should get done sooner than later out of respect to the work that would need to be done by the franchisee. While this may not be accomplished in time for the next DBOH meeting, EMSAB would certainly want to have something significantly in motion if not determined before the next regular meeting of this Board.

Mr. Clinger stated that in going through the strategic planning process, it was very important to get stakeholder input. Following along with what Manager Driscoll says it is

important for this Board to have an opportunity to weigh into that process. He opined the idea of doing a workshop is a good one and stated he would support it.

Acting Chair Dick asked how the people that would be participating in the committee working on the strategic plan would be identified. Ms. Conti recommended that each jurisdiction's fire agency and REMSA have a representative. She opined that dispatch would want to have representation whether it is all the dispatches or there is a person that represents them all because the whole piece gets impacted.

Acting Chair Dick asked if that sounded agreeable to the Board.

Mr. Driscoll and Mr. Clinger stated it did for their jurisdictions.

Mr. Driscoll moved to direct EMS staff to develop a 5-year strategic plan through the use of a subcommittee and that the initial work include a workshop of this Advisory Board and the members of the subcommittee to go through the various components that were in this staff report that would be possibly the minimum elements in a strategic plan. Mr. Clinger seconded the motion.

Acting Chair Dick offered for consideration also including in that that the composition of the subcommittee include representatives from each of the jurisdiction's fire agencies and PSAP. Mr. Driscoll accepted the amendment and Mr. Clinger as the second concurred.

The motion passed four in favor and none opposed.

Mr. Gubbels asked if Acting Chair Dick meant to include REMSA in his clarification. Acting Chair Dick and Mr. Driscoll stated it was an assumption within the modification, so he had.

---

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

Presenter: Jim Gubbels

Mr. Gubbels introduced Elaine Messerly, REMSAs Registered Nurse and Clinical Operations Manager of Community Health Programs.

Ms. Messerly noted REMSA receives approximately 70,000 911 calls through their emergency dispatch center. Approximately 60 percent of the calls are non-emergent and do not result in transport. She explained Omega protocols help identify patients who call 911 who may safely be referred to an alternative resource. The determinant codes represent the lowest acuity or no acuity calls. Examples include toothaches, earaches, hiccups, itching or rash. The calls currently prompt an ambulance response.

The International Academy of Emergency Dispatches Certified Emergency Communication Nurse System (ECNS) is a nurse triage system. REMSA's Nurse Helpline is the first in the world to be presented with an Accredited Center of Excellence award from ECNS.

Ms. Messerly explained REMSA had reviewed Omega calls received for one year. The review showed that using Omega determinants to identify calls that are evaluated by a qualified nurse through the ECN system before an ambulance is dispatched is a safe and reliable method to reduce unnecessary and hazardous emergency responses to the lowest or

no-acuity medical complaints generated by 911 callers.

Ms. Messerly stated the recommendation of the review committee was to discontinue current practice of dispatching an ambulance to Omega-coded calls prior to the ECN evaluation. At any time during an Omega call or during the time a patient is talking to the nurse and they request an ambulance, one would be sent 100 percent of the time.

Mr. Gubbels noted P1, P2 and P3 calls were reviewed, and Omega calls were a priority below that. The activities were being conducted in an effort to increase efficiency. Citizens calling 911 who have no acuity would have the opportunity to speak with a nurse, who would provide them with a recommendation for care. This would decrease the number of times an ambulance responds to someone who does not require transport. He reiterated that if the citizen requested an ambulance, one would be sent. He noted the current process dispatches both Fire and REMSA.

Mr. Gubbles requested permission to activate the system. It would be monitored on every call. He pointed out the resources were available.

Chief Garrison stated that Sparks Fire recognized the value of the program and was behind the concept of reducing the impact to responding agencies. He opined the implementation was premature because there were obstacles that had not been fully addressed. Sparks dispatchers do not conduct EMD, they are ordered to dispatch immediately. Therefore, it was possible for a fire unit to make patient contact prior to being notified it was an Omega call. Currently they do not have a method to disengage from the patient. There is no clarification regarding legal liability or risks that may cause the department.

Chief Garrison went on to note another area that needed to be addressed was timely, positive two-way communication between REMSA dispatch and Sparks Fire field units. He had heard the REMSA-1 frequency may have been implemented, that would be helpful. With that communication in place, the responding unit could identify an Omega call and determine if it was appropriate to cancel the response. He reiterated implementation was premature as the issues had not been addressed.

Chief Garrison pointed out that a 911 call represents a City of Sparks patient, and it requires a level of trust to turn that patient over to a private franchiser to EMD the call properly. If something happens to go wrong, it was still unclear as to who would be responsible. He encouraged the Board to consider a quality control process for all Omega calls.

Dr. Michelson asked if there had been any precedence set in other areas that were using the system regarding what the local fire agencies had done with regards to handling the situations in which Fire arrives and the patient is handled through the Omega process. Chief Garrison stated he had not investigated that, but it would be an option to explore. Mr. Clinger opined the system had a lot of potential, although the Chief had brought up the need to address responsibilities. He agreed quality control should be addressed continuously.

Chief Brown agreed with Chief Garrison's comments. He opined it was an excellent program. He noted there had not been discussion in the NLTFPD community regarding 911 transfers, and the ownership of the 911 call rests in the public safety agency's hands. They have a responsibility to ensure that they initiate the proper response. In their community, the call is not handed off; they maintain it throughout the system. He agreed it was premature to initiate the system, but stated they supported REMSA in the effort.

Chief Cochran noted the City of Reno had experienced some of the same issues that Chief Garrison had raised. They were working on communication with REMSA and did have forms that released them from an Omega call. They did not function as true answers to the problems.

Chief Moore stated he was in support of getting to the point where Omega calls were not get dispatched to Fire. He suggested it was a process problem. Some calls made to the Nurse Helpline will end up being true 911 calls and be transferred, but the vast majority can be deferred for fire response. Calls that are transferred to 911 and determined to be Omega will require a methodology be developed to release the responding units once they have made patient contact.

Kevin Romero, REMSA Operations, reiterated that a year's worth of data had been carefully reviewed, and he had asked many of the same questions the fire chiefs had. He opined the tiered system worked, they were not asking the fire service to cancel response. If the responders on scene were of the opinion that the nurse on the line had a clear understanding of the situation and it was of low priority, then the call could be considered Omega. He suggested a meeting be held to work to overcome fire first response concerns.

Mr. Clinger opined it was the responsibility of this Board to make sure the EMS service is providing the best service to the citizens. Based on the chief's concerns, he felt the next step, prior to going to DBOH, would be to get REMSA to meet with the chiefs and review the policies, procedures and protocols that need to be implemented.

Mr. Driscoll agreed and noted legal work needed to be done to address risk perspective, primarily in the area of disengagement. He opined the system would have positive impacts and did not want to see a situation that caused the implementation progress to reverse.

Acting Chair Dick summarized, noting speakers and Board members conceptually agreed to look at the approach to the Omegas in that it does not deploy resources unnecessarily. However, there is more work to be done to nail down the details in how it is going to be implemented and how it will work for everybody.

Mr. Clinger moved that representatives from REMSA and each one of the fire departments convene a working group to look at the policies, procedures, protocols and risk assessment, and direct them to report back to the EMSAB at a future date.

DDA Admirand opined the motion was beyond the scope of the agenda item, as it was just to recommend REMSA present to the DBOH for approval of the codes and procedures. She suggested a motion that it not go forward until the issues have been addressed. It could also be brought up for a future EMSAB agenda item.

Mr. Driscoll noted there was a sense of urgency to have the program be able to be utilized region wide. He asked if there would be a way for the Board, in direction to staff or the Health Officer, to put together that subcommittee so it can move forward, or should they perhaps address it through the individual jurisdictions, outside of the EMSAB.

DDA Admirand opined it would be more appropriate for the individual managers to initiate it.

Mr. Clinger moved to not recommend that REMSA present the item to the DBOH at this time, and that as individual managers the District Health Officer, will work with our staffs to move this forward. Mr. Driscoll seconded the motion which passed four in favor and none against.

14. Presentation, discussion and possible approval of the process for external agencies requesting item(s) to be included on Regional EMS Advisory Board agendas
Staff Representative: Ms. Dayton

Ms. Dayton presented the staff report. She summarized, explaining that if an individual or agency that is interested in presenting an item, they would go through their EMSAB representative to obtain approval for their staff report. Once approved, the item would be forwarded to the Health District for inclusion on the EMSAB agenda. A template had been attached for review.

Mr. Driscoll moved that future items that might come from the individual jurisdictions go through their Advisory Board member for approval. Dr. Michelson seconded the motion which passed four in favor and none against.

---

15. Presentation, review and possible direction on the Truckee Meadows Fire Protection District (TMFPD) Emergency Medical Service Review from the Internal Audit Division to include responses from the Washoe County Health District and REMSA
Staff Representative: Ms. Dayton

Acting Chair Dick noted the item had been heard by the TMFPD Board and they had requested this item be presented to the EMSAB. Additionally, REMSA had met with Chief Moore of TMFPD to discuss.

Chief Moore explained the audit was requested and initiated by the TMFPD Board and was conducted by the County's Internal Auditor. The primary purposes were to clarify service to the Wadsworth area and define what the service is that TMFPD is providing to REMSA in the way of costs. He noted that the meeting with REMSA had been very productive and opined they had come to a consensus on the list of items included in the March 11, 2015 memo from Kevin Dick, entitled "Response to Truckee Meadows Fire Protection District Emergency Medical Services Review – January 26, 2015," (included in EMSAB packet). He summarized the results to the items as follows:

1. TMFPD would like to provide some surge capacity to REMSA and act as a mutual aid partner;
2. There was an issue of reimbursement for soft goods and all of those items have been input into REMSA's system, so it is anticipated that should be resolved soon;
3. Changes made to Wadsworth service by the TMFPD Board include entering into an agreement with Pyramid Lake Fire, who now has a transport ambulance for the tribal areas. Pyramid Lake Fire will now take over operations at the Wadsworth station on behalf of TMFPD to provide more timely response;
4. Resolved;
5. Addressed under Item 2.

Chief Moore stated progress had been made and he was happy with the results.

Mr. Gubbels verified that he and Chief Moore had met twice and were moving forward with the items. He reiterated that since 2014 Pyramid Lake Fire has their own ambulance service and the majority of Wadsworth is tribal land. He noted REMSA was working to finalize a mutual aid agreement with the Pyramid Lake Fire. They were also working on drafts for mutual aid with TMFPD.

Mr. Clinger moved to acknowledge the report. Mr. Driscoll seconded the motion which passed four in favor and none against.

---

16. Discussion and possible approval of a proposed schedule change to the Emergency Medical Services Advisory Board (EMSAB) regular meetings

Staff Representative: Ms. Conti

Ms. Conti presented the staff report. She explained one item prompting the request had to do with the data report. As discussed earlier, some items require further exploration for clarification and the agencies often have questions as well that require follow up and response. Pushing the meetings back by a month would allow for that.

Acting Chair Dick noted the Board members had been polled and had indicated the change would not negatively affect their schedules. He supported Ms. Conti's statements surrounding the tremendous amount of work that currently needs to be completed in a very short time.

Ms. Conti thanked the partners for having worked with staff under the current compressed schedule and opined the extra time would be beneficial to them as well.

Mr. Driscoll moved to move the meetings back one month, to January, April, July and October of the same day of the month and the same time as the current meetings. Mr. Clinger seconded the motion which passed four in favor and none against.

Ms. Conti noted that action would also push back the Strategic Planning timeline by one month.

***17.Board Comment**

Mr. Driscoll thanked staff for the amount and quality of work and also for reaching out to the stakeholders. Additionally he thanked staff for getting the board packets out early.

Mr. Driscoll brought up the discussion about the working group for the Omega calls, requesting that future agenda items were crafted so the Board could start the Subcommittee process with all the proper membership so they could work with staff.

Acting Chair Dick echoed the commendation to staff for the hard work and progress being made. He opined the program had come a long way for having only recently gotten started.

***18. Public Comment**

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

---

19. Adjournment

At 11:40 a.m., Mr. Clinger moved to adjourn. Mr. Driscoll seconded the motion which was approved four in favor and none against

Respectfully submitted,

_____

Dawn Spinola, Administrative Secretary
Recording Secretary

Approved by Board in session on _____, 2015.

WASHOE COUNTY HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

1001 East Ninth Street, Reno, Nevada 89512
P.O. Box 11130, Reno, Nevada 89520
Telephone 775.328-2400 • Fax 775.328.3752
www.washoecounty.us/health

MEETING MINUTES

Emergency Medical Services Advisory Board

Date and Time of Meeting:	Monday, August 31, 2015, 1:00 p.m.
Place of Meeting:	Washoe County Health District 1001 E. Ninth Street, Building B, South Auditorium Reno, Nevada 89512

The Emergency Medical Services Advisory Board met on Monday, August 31, 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 1:10 p.m.

---

2. Roll Call and 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
Jeanne Harris, Administrative Secretary, Recording Secretary

---

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**.

---

4. Approval of Agenda
August 31, 2015 Meeting

Mr. Driscoll moved to approve the agenda as written. Mr. Dick seconded the motion which was approved four in favor and none against.

---

5. Discussion and reconsideration of creation of a subcommittee to develop 5-year strategic plan with possible direction to staff on creation of the strategic plan.
Staff representative: Ms. Conti

Mr. Driscoll requested that the Board reconsider the topic in item 5 and that Ms. Conti provide a presentation on the topic. Miss Conti reported that at the June 4, 2015 EMS Advisory Board meeting, there was a discussion of the strategic plan, and she had requested that a subcommittee be developed to work on the plan. Ms. Conti advised that through continued research on the process, a formalized subcommittee is not necessary to the process. Ms. Conti requested a reconsideration of the use of the subcommittee and direction to her to develop the strategic plan utilizing the subject matter expertise within the region. Mr. Dick advised that in the Inter Local Agreement, the development of a strategic plan had been assigned to the EMS Oversight Program. He recommended that the Board direct the EMS Oversight Program to work with regional partners to develop a strategic plan. **Mr. Dick moved that the Board approve the report and reconsider the creation of the subcommittee to develop a five-year strategic plan by dissolving the subcommittee and giving direction to staff to create the strategic plan. Mr. Driscoll seconded the motion, which was approved four in favor and none against.**

---

6. Discussion, approval and possible recommendations to staff regarding items to include in the development of the 5-year strategic plan, as required by the Inter Local Agreement for EMS Oversight.
Staff Representative: Ms. Conti

Board Member Andrew Clinger joined the meeting.

Ms. Conti noted that the components of the strategic plan that will be addressed in the plan development are included in the staff reports for Items 5 and 6, but the August 31, 2015 meeting will focus on the SWOT analysis. Ms. Conti turned the floor over to Steve Driscoll who she stated had been kind enough to offer his facilitation of the process. Mr. Driscoll said that with approval of the chair, the intent of the session is to be a work session and that

everyone in the room who was invited to attend would participate and have an equal voice in the discussion. He advised that participants who have a need to seek the opinion of someone at a higher level in their chain of command should remove themselves from the discussion. Mr. Driscoll asked for any objections to this process, and hearing none, proceeded with the discussion. He explained that the rules of engagement would include challenging ideas and thoughts and not challenging people, the analysis would be kept at a business level, and participants would be expected to speak for themselves only and to listen actively when others were speaking. Mr. Driscoll explained that he would control the floor, so that everyone would hear what was going on. As the facilitator, he would remain as silent as possible and direct the conversation, but as a Board member, he would reserve the right to interject comments during the process if his points were not brought out by others. Time outs would be allowed as needed for breaks or to return to some item in the discussion. Mr. Driscoll explained the 80-20 rule: speaking 80% of time and talking about 20% of what is left. He stated that if the conversation were to lag, he would stop and move on to the next item of conversation, possibly returning to the other item at a later time. Mr. Driscoll noted that the goal of the analysis is to reach consensus. He noted that there are three types of decisions made at every level: command (single decision), collaboration (decision made by one with input from many) and consensus (a group decision). Consensus would be used in the SWOT analysis. The majority would make the decisions and everyone would go forward as one voice with the strategic plan as a consensus document.

Through discussion, the participants in the SWOT analysis determined the top 3-5 strengths, weaknesses, opportunities, and threats to the regional EMS system (see Exhibit A to Minutes).

At the completion of the SWOT analysis, Mr. Driscoll congratulated the participants on a job well done, stating that a lot of work was done in a short period of time. He noted that this was the starting point for development of the strategic plan. Mr. Driscoll said he would now work with the Health District to understand how the information gained from the SWOT analysis would be integrated to provide some structure to the plan. Then this work, possibly including work from discussion by the non-designated group, would return to the Board from time to time in different segments that would include goals, objectives and work plans.

Chairman Slaughter thanked Steve Driscoll for a job well done in facilitating the discussion.

Ms. Ward reminded the Board that Item 6 requires action to give direction to staff to continue work on the development of the five-year strategic plan. **Mr. Clinger moved to approve, Mr. Driscoll seconded the motion which was approved five in favor and none against.**

---

7. Board Comment

Mr. Dick thanked everyone for their input and time spent for the SWOT analysis. Mr. Driscoll and agreed with his comment.

---

8. Public Comment

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

---

19. Adjournment

At 5:10 p.m., Mr. Driscoll moved to adjourn. Mr. Clinger seconded the motion which was approved five in favor and none against.

Respectfully submitted,

_____

Jeanne Harris, Administrative Secretary
Recording Secretary

Approved by Board in session on _____, 2015.

Exhibit A to August 31, 2015 Minutes of the EMS Advisory Board

SWOT Analysis – Conducted by WC Regional Partners August 28, 2015

S W O T (Strengths, Weaknesses, Opportunities, Threats)

Strengths of the EMS system. What are our capabilities and resources. Same thing with processes. Stakeholders. Some make us very strong or may be in the Weaknesses. Strengths and Weaknesses are from OUR point of view.

From an internal point of view, what are the things we think we are really good at for EMS for the public.

Through discussion of the below-listed strengths, the workgroup identified similar attributes and categorized them as follows:

P = patient care
E = employee driven
S = size of the program
C = communication
T = transformation of EMS system

Regional identified strengths:

- P - Desire to do good patient care
- E, T - Qualifications of our employees
- E, P -Excellent training program
- S -Size of EMS program
- S - parallel response/systems

- C - Communicating on multiple channels
- T – EMS transformation between partners
- S – adjustment to population density
- T, P – advanced protocols
- T, S – quick response capabilities
- E, Longevity of providers
- S - Broad range of services
- S - Depth of resources
- S - Regional assets
- P - ALS and Care Flight Resources
- T, E - Flexibility
- E - Experience of our EMS leadership
- P - Strength in training
- T - An all-inclusive oversight structure
- P - Passion
- P, T - Quality of care
- C - A sound franchise agreement with performance criteria
- S - A history of success
- T - Inter local agreement
- T - Community involvement
- P - ACE accredited
- P - Engaged personnel
- S - Ability to handle large regional incidents
- P - A strong QA QI program
- T - Increasing data capabilities
- S - An effective two tier response
- P - Strong hospital partnerships
- E - EMS training opportunities for both public and professional training
- C - Speaking in a common language
- ~~S - Depth of resources~~
- T - Data collection

- E - Equal level of services
- T, C, - Develop partnerships among organizations
- T, C - Inter agency communications
- S - One transport provider
- S - Force multiplier
- T - Collective desire to improve
- E - EMS program staff
  C - Ongoing dialog (among regional partners)
- C- Willingness to work together
- T - Political support
- E -Defined roles
- C, E - Regional emergency medical dispatch
- C- Prioritization of calls
- C, S - 911 system

WEAKNESSES:
From an internal point of view, what are the things we think are weaknesses relating to EMS for the public.

Through discussion, the workgroup identified similar weaknesses and categorized them as follow:

C = Poor Communication
IC = Interagency Competition
H = Hanging onto the past
P = Poor Continuity of Pre-hospital Care (continuum of care that impacts the patient)
L = Licensing and training
$ = Financial
= Ramping up and getting used to the system
[C] = Systematic communication issues

Regional identified weaknesses:

- C - Poor communication to field responders
- IC - Inter-agency competition
- IC - Multiple stakeholders
- IC - Territorial disputes
- IC - Trust
- C - Unclear operational picture
- H - Histrionic presentations (hanging on to the past)
- [C] , C, P -Dispatch
- [C], C, P - Multiple dispatch centers
- P - Poor continuity of care
- L - Support from licensing agency
- L, P - Non-uniform training
- P - Limited surge capacity
- H - Not sending the right level of service
- [C], P - Ineffective use of priority system (EMD)
- P, [C] - Call misrouting
- C, [C] - Disparate communications systems
- P, [C] - Standardized call taking
- H - Lack of transport providers
- ~~P - Disparity in reporting systems~~
- ~~IC - Lack of data transparency~~
- L - Common knowledge (training, terminology)
- P, [C] – Call routing between centers
- P, [C] - Time delay in call transfers
- H, P - Compliance zones
- H, P - Resource commitment to care facilities
- $ - Budget constraints
- IC - Continuity of data collection and reporting/Transparency (added from above)

- IC - Regional management of resources
- $, - Future continuity of the system
- C, $ - Aging radios
- - New and untested oversight structure
- IC - Duplication of services for citizens
- IC - Different expectations of performance
- C - Multiple communication modalities (radios, computers, data system, etc.)
- P,C - Tiburon implementation difficulties
- P - Different levels of service
- H - Inter local agreement
- IC, L - Attrition and new hires
- C, $ - Disparate radio systems
- P - Standardized medical protocols
- [C], P - No cad to cad linkage
- H - Response area commonality
- P - Transferring between PSAPs to secondary
- IC - Public misinformation
- IC - Lack of communication between administrations
- H - Overutilization of our two tiered responses
- H - Understanding national EMS trends
- IC - Differing views on control and authority
- IC, L - Loss of experienced providers
- $ - Cost recuperation
- P - Lack of common electronic patient care record
- IC - Lack of interagency respect
- P – Lack of patient outcome info
- H - Integration of ICS on EMS
- P - Medical director involvement

OPPORTUNITIES:
As defined as external world, how the world affects Washoe County. Things the EMS community needs to be prepared for, respond to. If these things keep coming, they may consume us in some way.

- Operating environments
- Industry / governance
- Market / Authorities
- Competitors

Through discussion, the workgroup identified similar opportunities and categorized them as follow:

- T = Technology opportunities
- C = Communications
- [T] = Training
- $ = Financial Need
- G = Governance
- R = Reporting
- A = Alternative models

Regional identified opportunities:

- T,C - Cad to cad participation
- C - One dispatch center
- T, C, $ - First Net
- T, C, $ - P25 Communications
- C - Single set of call-takers
- T,C - EPCR
- [T] – Shared training efforts

- T, C - Efficient Resource management
- $ - Cost recovery
- G - New elected leadership
- R - Benchmark to national standards
- $ - Changes to reimbursement levels
- G - Potential federal regulatory changes
- A - Alternative provider models
- A - Best practice of tiered systems
- $, A - Community paramedicine
- $ - Ground emergency medical transportation legislation
- $ - ACA
- T - Communication advances - consumer
- $, A - Access to healthcare
- T, C - Social media
- T - Advances in training
- T, R - Data utilization
- G, C - Shared resources and services
- R - Monitoring national EMS trends
- C, T - Leveraging communications technologies
- R - Public's expectation of services
- $ - Purchasing opportunities
- T, A -Technology
- [T] - Upgrading facility training
- $ - Creating a cooperative regional system
- T, C - System-wide integration of AVL
- C, G - EMS Advisory board
- G, $ - Regionalization
- G, $ - State legislature
- T - Modernized response map
- T - Appropriate resource allocation
- $, A - Evolving concepts on alternative care and transport
- T, [T], G - State EMS

THREATS: What is coming from the outside world that we may not be able to control. Industry wise, government wise, etc.

Through discussion, the workgroup identified similar threats and categorized them as follow:

P = Public (population, demographics, expectations)
R = Regulatory Changes
$ = Financial
2 = Two tier response
M = Multigenerations

Regional identified threats:

- P, M - Public expectations
- R, P - Legislation, federal and state
- R - Regulatory change
- 2, $, P - Local and state politics
- $, R - ACA – access to care
- $, R, 2 - Cost recovery
- $, P - Increase in customers
- $, P - Medical reimbursement
- 2 - Maintaining two-tiered response system
- $, M - Hiring capabilities
- $, R - First Net
- $, R, M - Technology changes
- 2, P - Development in areas that are geographically challenging to serve
- $, R, M - External funding sources
- P, M - Media coverage
- $, 2 - External competition
- 2, P, M, R - Resistance to change
- P, $ - Litigation

- $, P - Economic growth
- 2, R - Unilateral actions
- P, R - Federal deregulation
- $, M, P - Budget
- 2, M, $ - Available workforce
- 2, P - Customer dissatisfaction
- M - Multiple generational differences (workforce)
- 2, M - Cultural differences
- $,R - Unfunded mandates
- R - State EMS
- $ - Disasters
- $, R - Annexation
- 2, $ - Franchise challenges
- 2 - History

The workgroup discussed the top 3-5 priorities per section.

Strengths:

1. patient care
2. transformation, ability to change
3. Capabilities of the system
4. Employee qualification
5. Communication

Weaknesses:

1. Hanging onto the past
2. Communications
    a. Both systematic and systems
3. Poor continuity of care

Opportunities:

1. Governance
2. Alternative models
3. Reporting
4. Financial need

Threats:

1. Public and

1a. Multiple generations

2. Regulatory
3. Financial
4. Two-tier response

Next steps include:

- Creating goals, objectives that are high level from these four categories.
- Once the goals or objectives were determined, potential projects would be identified.
- The top identified SWOT items would be “competing” for a place in the strategic plan.
- Objective would be to develop a strategic plan that will guide our region in becoming stronger in our strengths and opportunities.

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

Agenda Item #6

STAFF REPORT
REGIONAL EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: October 1, 2015

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

Meetings with Partner Agencies:
EMS staff participated in the Reno Air Races Association tabletop exercise on June 9, 2015. The purpose was to walk through initial, secondary and recovery actions in the event of a mass casualty/mass fatality during the Air Races.

EMS Statistician met with Washoe County PSAP staff on June 9, 2015 to facilitate PSAP data variables for reporting. During the meeting the various time stamps, how they are generated and their meanings were discussed in order to ensure they would be utilized appropriately.

EMS Program Manager presented at the Rural Summit on June 11, 2015. The presentation topic was Family Assistance Centers (FAC). FAC's are utilized during mass fatalities to support the objectives of the Medical Examiner's Office. Regionally, FAC planning is going to be included in mass casualty planning and an Annex to the Multi-Casualty Incident Plan is being developed. The Annex will be finalized and presented to the District Board of Health in July 2016.

EMS staff, along with Gary Zaepfel from Washoe County GIS, went to San Joaquin County, Stockton, CA, to meet with their EMS Oversight Program. The meeting was excellent and the EMS Oversight Program was able to learn about several different processes that could be explored regionally. EMS staff met with regional fire/REMSA partners on June 22, 2015 to review the Stockton trip and the information obtained from contractor Inspironix.

EMS staff attended the State EMS committee on June 18, 2015. During the meeting, staff presented about the program and the accomplishments to date. The presentation was well received with staff being approached by partner agencies after the meeting to discuss future opportunities for collaboration.

EMS staff, along with Mr. Zaepfel, have met with or corresponded with regional partners several times over the last four months to develop a revised franchise area response map. The map subcommittee will not be proposing changes to the franchise area, but rather changes to the response zones contained within. With the assistance of Mr. Zaefpel, the region sent several data

layers to Inspironix for review, analysis and recommendation. Inspironix developed a draft response map that the region began reviewing on August 26, 2015.

On Monday, June 29, EMS staff went to Gerlach, NV to meet with Chief Bill Gooch and tour the Gerlach Volunteer Fire Department response area and learn more about their response capabilities. The tour provided the EMS staff with a better understanding of the challenges Gerlach faces with respect to dispatching and response. Chief Gooch has asked for assistance on a couple items and EMS staff is working on those items.

EMS staff held a regional Omega meeting on June 30, 2015. During the meeting, several items were discussed including a review of the EMD process to ensure accurate determination of Omega calls, communication challenges, and the most effective methods for implementing an Omega protocol in the REMSA franchise service area. During subsequent meetings the regional partners requested that Health District EMS staff develop a universal form for all fire agencies if the crew arrive on-scene of an Omega call, since REMSA would not be dispatching an ambulance. The group also set a target implementation date of November 2015, pending EMSAB and District Board of Health approvals.

EMS statistician met with regional partners July 8, 2015 to ensure consistency among variables reported by each agency and to resolve discrepancies between data elements being reported on a monthly basis. This meeting also served to increase transparency and help identify potential Fire calls which would not warrant a match to REMSA incidents. During the meeting Fire partners agreed to allow the EMS statistician to send the minimal data elements necessary to REMSA to help identify Fire EMS calls for services which did not match to REMSA calls for service.

EMS staff met with East Fork Fire Department on Monday, July 13, 2015. The purpose of the meeting was to learn more about East Fork Fire Department, the consolidated dispatch center, ACE Accreditation, and possible collaboration opportunities. The East Fork Fire District Dispatch center is currently going through their ACE Accreditation and was the first PSAP to be accredited for EMS Dispatching. Chief Dave Fogerson provided EMS staff with information that was relevant both in historical accounts and future growth potential within the region. East Fork produces a data report for their region and both agencies reviewed the reports and discussed possible improvements to the individual annual reports.

The quarterly EMS meeting between Washoe County EMS Oversight Program staff and State EMS was Thursday, July 16, 2015. During the meeting we discussed varying levels of response services around Nevada, mass gatherings and the new legislation, the quarterly data report, the new State EMS website, the EMS trip to San Joaquin County, the map revision project, and the statewide EMS database to include providing access to the Washoe County information.

EMS Coordinator presented proposed revisions to the Mutual Aid Evacuation Annex (MAEA) of the Washoe County Multi-Casualty Incident Plan (MCIP) to the District Board of Health on July 23, 2015. The revisions include a new patient tracking system for hospital evacuations, supplementary language for medical permissions at hospitals during an emergency evacuation, guidance on multiple faculty evacuations, and general formatting and language updates. The Board approved the revisions effective November 1, 2015 to allow time to order the new tag system and train hospital and EMS personnel.

EMS Coordinator attended the PHP Senior Advisory Committee on July 28, 2015 to discuss future revisions of the Nevada Statewide Medical Surge Plan and the possibility of incorporating the Mutual Aid Evacuation Annex (MAEA) into the Statewide Medical Surge Plan. EMS Coordinator was asked to participate on the working group to edit/revise the plan.

As a follow-up from a June 2015 agenda item, Reno Fire Department and Truckee Meadows Fire Protection District participated in REMSA's quarterly Fire EMS trainings on August 3, 2015 and August 5, 2015 respectively. The training was conducted at REMSA's simulation lab and 56 crew members had the opportunity to respond to a simulation of a drowning victim and review and practice CPAP and PEEP skills. Feedback from the training was very positive; the crews enjoyed the opportunity to train with their own personnel as well as REMSA staff. The agencies are working on scheduling training dates for the upcoming quarter.

EMS staff met with representatives from Northern Nevada Medical Center on Wednesday, August 26 and again Thursday, September 3. 2015. The purpose of the meetings was to explore the inclusion of patient outcome data from regional hospitals. The obtained data would be reviewed annually and would provide region specific information that completes the EMS picture for patient care. Through discussion and consensus cardiac patients will be the focus initially.

EMS Advisory Board members, EMS staff and regional partners came together for an EMS Advisory Board meeting on Monday, August 31, 2015. The main objective of the meeting was to conduct a SWOT (strengths, weaknesses, opportunities, and threats) analysis on the regional EMS system. The meeting was well attended and provided a framework for the strategic planning process. A follow up meeting is being scheduled.

On August 31, 2015 the EMS Coordinator collaborated with REMSA and Saint Mary's Regional Medical Center personnel to deliver the first of five regional trainings on the newly revised Mutual Aid Evacuation Annex (MAEA). A total of 10 hospital and EMS personnel completed the training and tabletop exercise using the new tag and patient tracking system.

During the 2015 legislative session the Senate and Assembly voted to enact AB 308 and the bill was signed into law by Governor Sandoval with an effective date of July 1, 2015. These regulations supersede the Washoe County Guidelines for EMS Coverage for Mass Gatherings; however during the upcoming Mass-Casualty Incident Plan (MCIP) revisions, EMS staff will insert the guidelines into the MCIP as part of mitigation planning for possible disasters. Throughout the month of September 2015 EMS staff will also be meeting with the local jurisdictions to update their staff on these changes.

Mass Gathering Applications or Events:

Red, White and Tahoe Blue: July 2-4, 2015

Barracuda Championship: August 3-9, 2015

DeLaLuz Horse Races: Select weekends through September 2015

Reno Air Balloon Races: September 11-13, 2015

Reno Air Races: September 16-20, 2015

Inquiries or Investigations:
In addition to the below items, on August 12, 2015, the EMS Oversight Program was approached by an EMS special events company to determine their ability to provide EMS services to the Rib Cook-off, being held at the Nugget in Sparks in September. The EMS Oversight Program conferred with both the State EMS program and Washoe County Health District DDA representative on this question. The outcome was to strongly discourage the company from providing EMS coverage for the Rib Cook off. NRS 450B specifically defines the staged ambulance at special events to be an ambulance capable of transport to a hospital. Per the franchise agreement for Washoe County, the ambulance would not be able to transport. During the week of August 31, 2015, the EMS Oversight Program was made aware that REMSA was contacted to contract for service as well as Sparks Fire Department.

Investigations conducted by the EMS Oversight Program:

Date Received	Individual/Organization Requested Investigation	Reason for Request	Investigation Outcome
5/2015	Jim Gubbels	A fire agency requested mutual aid without notifying REMSA dispatch.	The EMS Oversight Program concluded that this call exemplified the need for continued communication with partners while on calls. In addition, the EMS Oversight Program recommended improvement opportunities to ensure the expectations of the region are being met.
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.	The call was on tribal land and was dispatched appropriately.
8/2015	Jim Gubbels	REMSA claims that TMFPD dispatch center is conducting EMD and not transferring citizen calls to REMSA. Additionally, it is claimed that NLTFPD is being dispatched to calls	Investigation currently in progress.

		within the franchise service area.	

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
6/23/15	TMFPD to REMSA	Information regarding a decision to utilize Careflight when ground crew had cancelled.	EMS Oversight Program participated in meetings to clarify who and when Careflight can be cancelled.

Other Items of Note:
Over the last several months, EMS Program Manager met with City Manager Driscoll, City Manager Clinger and County Manager Slaughter. The purpose of the meetings was to discuss the EMS Oversight Program, the accomplishments and expectations for the future.

EMS statistician sat in City of Reno dispatch center to shadow the dispatch and 9-1-1 call taking processes in order to better understand the emergency response system.

On July 17, 2015 the EMS Coordinator completed a 12 hours ride along with the Reno Fire Department at Station 2.

EMS Program Manager participated in a dispatch sit-along with Sparks Police Department on Wednesday, August 5, 2015. It concluded the dispatch sit-along for the year, with only one remaining fire partner ride along to be scheduled. The purpose of the ride along is to learn more about the regional partners and the uniqueness of each agency.

Staff Report
Board Meeting Date: October 1, 2015

TO: EMS Advisory Board

FROM: Brittany Dayton, EMS Coordinator
(775) 326-6043, bdayton@washoecounty.us

SUBJECT: Presentation, discussion and possible direction to staff to present the use of the IAED Omega determinant codes and REMSA's alternative response process within the REMSA Franchise area to the District Board of Health.

SUMMARY

Omegas are 911 calls that are EMDed as non-emergent low acuity calls that can be referred to the Nurse Health Line (NHL) for assessment and evaluation by an Emergency Communications Nurse (ECN) to determine the most appropriate care resource, when an ambulance response is not necessary.

Since June 2015 the region participated in several meetings to develop a process for Omega calls. The Health District was requested to take the lead on researching the release of care in the event a fire partner arrived on scene before the Omega determination was made. The expectation is that regionally each agency would follow the same protocol to ensure consistency with training.

Health District staff is recommending that fire agencies get verbal consent from the ECN to be released from the scene. As part of the protocol, fire personnel will note the ECN's name and ID number in the incident/run record. If the patient has already hung up with the ECN, or the crew prefers to have written documentation to release from the scene they would use a one-page release form.

PREVIOUS ACTION

REMSA presented to the EMS Advisory Board on June 4, 2015. The presentation reviewed the proposed use of the IAED Omega determinants codes and the procedure of referring these callers to the Nurse Health Line prior to dispatching an ambulance. The EMS Advisory Board directed EMS staff to work with regional partners to develop a comprehensive process for handling Omega calls.

BACKGROUND

In 2011 the International Academy of Emergency Dispatch (IAED) included Omegas as part of the fourth pillar of the Academy when used in the ENC system. The IAED Omega determent is designed to identify patients who may safely be transferred to alternative care resources. These non-emergent low acuity calls do not need an ambulance response; however, if at any time a patient requests an ambulance, one will be dispatched.

The IAED has approved 200 Omega determinant codes; however, REMSA's Medical Director, Dr. Brad Lee, has initially approved 52 of the 200 for our region. The 52 selected Omega determinants have been discussed with the regional fire partner's Medical Directors and a consensus was reached on the use of these 52 Omega determinants codes.

At the direction of the EMS Advisory Board, EMS staff scheduled a meeting to discuss the Omega protocols for REMSA' s Franchise service area. The initial meeting was held on June 30, 2015 with regional agencies including REMSA, City of Reno, City of Sparks, Truckee Meadows Fire Protection District, North Lake Tahoe Fire Protect District and Pyramid Lake Fire Rescue. During the meeting, several items were discussed to include review of EMD process to ensure accurate determination of Omega calls, communication challenges, and the most effective methods for implementing an Omega protocol in the REMSA franchise service area.

On July 21, 2015 the region met to review a draft policy and release form developed by one of the partners. During this meeting it was requested that Health District EMS staff develop a universal form for all fire agencies if a crew arrives on-scene of an Omega call, since REMSA would not be dispatching an ambulance. The group also set a target implementation date of October 1, 2015 to allow for meetings with legal, training of crews and the approval of the EMS Advisory Board and District Board of Health.

EMS staff reached out to other regions to learn about other agencies' responses to Omega calls and used that information to develop recommendations for our region. In separate meetings with both fire and District Attorney's Office representatives, the recommendation of a verbal release first and a form second was supported. However, each regional agency's legal personnel would need to have a final review and approval of the process and release form prior to regional implementation.

A final meeting was held on September 16, 2015. EMS staff presented the recommendations and the regional partners in attendance supported the practice of verbal or written release from the scene. The group made several revisions to the draft release form to simplify the process. Due to legal review of the revised form and the training required for the form and the new process, it was decided that the implementation should be November 1, 2015.

FISCAL IMPACT

There is no additional fiscal impact should the Board direct to staff to present the use of the IAED Omega determinant codes and REMSA's alternative response process within the REMSA Franchise area to the District Board of Health.

RECOMMENDATION

EMS staff recommends the EMS Advisory Board direct staff to present the use of the IAED Omega determinant codes and REMSA's alternative response process within the REMSA Franchise area to the District Board of Health.

POSSIBLE MOTION

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

"I move to direct staff to present the use of the IAED Omega determinant codes and REMSA's alternative response process within the REMSA Franchise area to the District Board of Health."

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

Agenda Item #8

STAFF REPORT
REGIONAL EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: October 1, 2015

TO: EMS Advisory Board Members

FROM: Heather Kerwin, EMS Statistician
775-326-6041, hkerwin@washoecounty.us

SUBJECT: Presentation, discussion and possible approval for distribution the Washoe County EMS Oversight Program Data Report for Quarter 4.

SUMMARY

The purpose of this agenda item is to present for discussion and approval the EMS Oversight Program Quarter 4 Data Report. Some changes have been made to the report based on Quarter 3 feedback from regional partners and the EMS Advisory Board.

PREVIOUS ACTION

The Quarter 3 Data Report was approved for dissemination during the June 4, 2015 meeting. During the meeting, suggested changes were addressed for the Quarter 3 Data Report. These changes included determining how to obtain PSAP data and continue to shift 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 4.

RECOMMENDATION

Outlined in the presentation Staff recommends the Board approve the distribution of the Washoe County EMS Oversight Program Data Report for Quarter 4.

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 4.

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

Quarterly EMS Oversight Data Report

A performance analysis of the EMS system in Washoe County

Washoe County Health District
Regional EMS Oversight Program
1001 E. Ninth Street
Reno, NV 89512

2015 Quarter 4
April – June 2015
Issued October 2015

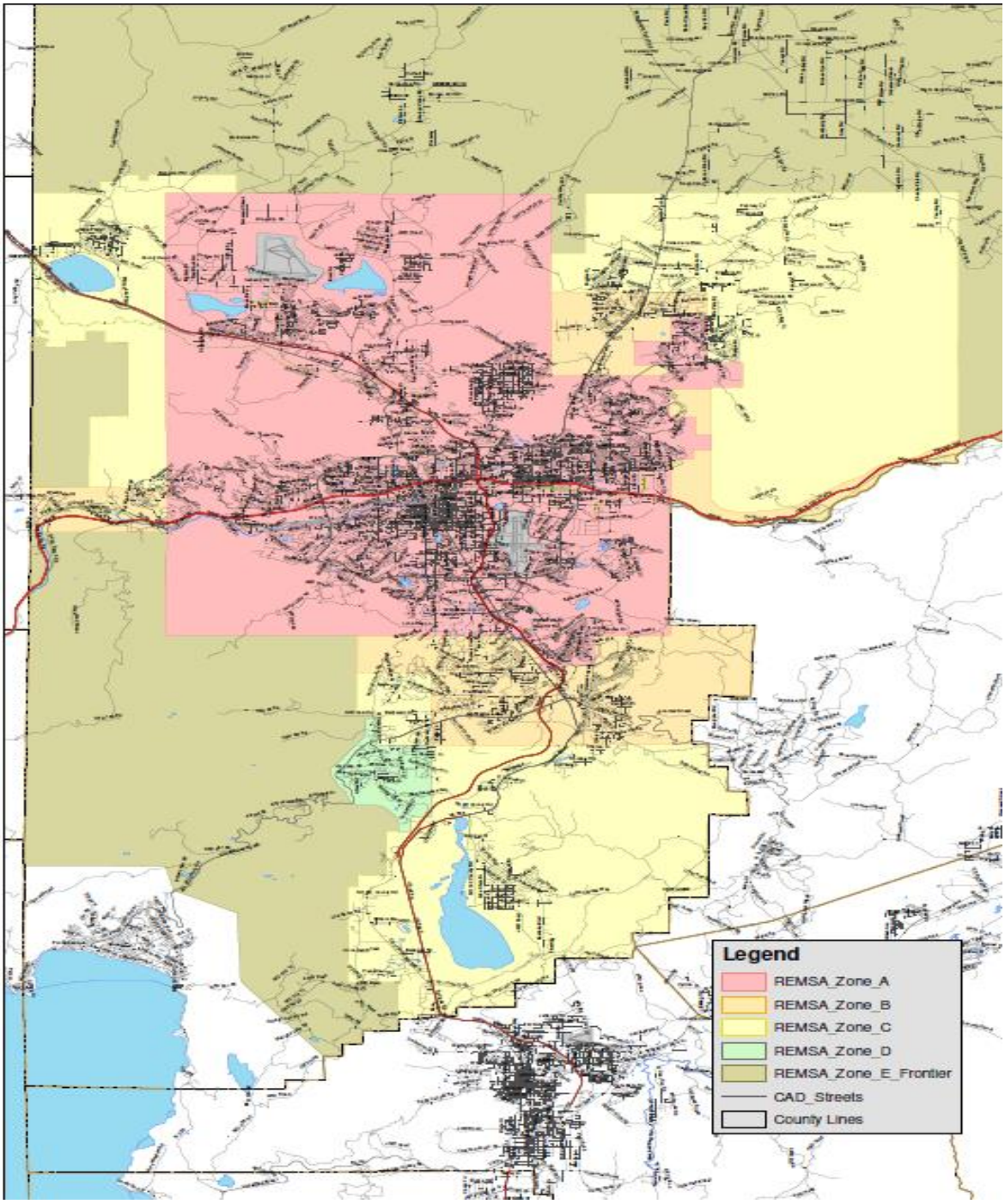
TABLE OF CONTENTS

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 Areas:

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



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 (average).

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

PSAP: Public Safety Answering Point

P9: REMSA Priority 9 or Omega call

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

Q4: Quarter 4, includes data for April, May, and June 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

REGIONAL SUMMARY:

Contained within this document is the data analysis for Washoe County Emergency Medical Systems matched calls for service during Quarter 4 (Q4), April-June 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.

Incident call data from participating agencies were de-duplicated and the first arriving unit data was matched based on address, date and time of the EMS call. It is important to note that the deduplication process may have deleted the first dispatched fire unit, inadvertently lowering the percentage of times fire dispatches before an ambulance. Matched calls were not considered for analysis if the difference between dispatch times was greater than 60 minutes or if either organization was cancelled enroute.

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. Q4 utilizes both variables “Alarm time” and “Dispatch time” to continue reviewing how inconsistencies in dispatch might impact the system and ultimately a patient waiting for an EMS responder. Overall, 59.8% of the time the fire agency is being dispatched prior to REMSA (Table1.2a).

Two of the three fire jurisdictions were able to start providing PSAP data including a variable called PSAP time, which indicates when the Primary PSAP was first notified of an incident. This helps determine if the Primary PSAP or REMSA dispatchers were notified of an incident first. PSAP time is not currently reported by all jurisdictions, and the jurisdictions providing PSAP data were not able to do so for the entire quarter, therefore PSAP data were analyzed where appropriate in Q4. In lieu of a submitted PSAP time, the analysis run utilizes the data variable “alarm time”, as has been done throughout the previous quarterly reports.

The EMS Oversight Program analyzed each incident to determine the median time between the earliest known time stamp, referred to as the “initial call” (PSAP time or Alarm time for fire, depending on variables reported, or REMSA pick up call) to REMSA and fire dispatch and arrival times (Table 1). In order to measure if dispatch delay is impacting patient wait times, this analysis was repeated and illustrates the wait time between the initial call and the first arriving unit for any responding agency (Table 1.8).

Regionally fire arrived first on scene 58.1% of the time, the percentage of time fire arrives first decreases approximately 7% during the nighttime hours (6pm-6am) (Table 1.3b). This trend is mirrored in each jurisdiction; therefore differences between day and night have been removed from each jurisdiction’s section.

Another addition in Q4 data was REMSA's ability to report Priority 9 calls, also known as an omega call. Calls are categorized as a Priority 9/Omega when it is determined by REMSA dispatchers there would be a more appropriate destination alternative to an emergency room.

REMSA's median response time for all matched calls was 06:07 minutes. This differed by priority, P1 the median time was 05:40 minutes, P2 06:14, P3 08:08 and P9 07:00 minutes (Table 1.4). The median response time for all fire agencies (dispatch to arrival) was 05:26 seconds, again differing by priority. For P1, the median response time was 05:17 minutes, P2 05:30, P3 05:43 and P9 was 06:03 minutes (Table 1.5).

When REMSA arrived on scene first, they were there for 01:42 minutes (median time) prior to a fire agency arriving on scene (Table 1.6). Conversely, when a partner fire agency arrived first, they were on scene 2:32 minutes (median time) (Table 1.5) prior to REMSA arriving on scene. This median time difference correlates with national standards of BLS units arriving 4 minutes prior to the ALS units and is expected due to the nature of Washoe County's two-tiered system.

Each jurisdiction includes a second set of analyses, which reviews only calls when fire was dispatched second. This occurred 3,818 or 40.2% of all calls for Q4. The process for data de-duplication selects only the first arriving unit to each call, which may not have been the first unit dispatched to an incident. The fire agencies are first on scene less often when they are dispatched second. Fire experiences a dispatch delay over one minute on 1,423 or 15.0% of calls during Q4, which disproportionately impacts P2 calls in two of the three jurisdictions, while the third jurisdiction had very little variation in the priority of calls impacted by delayed dispatch (Tables 2.10, 3.10, and 4.10). There is a slight spike in the percent of total calls with a dispatch delay in the 3:01-5:00 minute range, this pattern was consistent across all three jurisdictions. This may be of note and will continue to be monitored and further explored.

During Q4 REMSA reported 15,617 calls for service. Of those, 66.7% matched to a regional fire agency call. Both matched and unmatched REMSA calls are further explored in the Special Study Zone Appendix. Therefore, the REMSA special interest area looks at the 15,211 (P1-P3) total calls for service, the 406 P9/Omega calls and variables associated with those calls. Within the region, 38.1% of all calls (P1-P3, P9) for service in Q4 did not result in patient transport to a hospital.

STATISTICAL INFORMATION:

The table below depicts incidents reported, eliminated, matched and utilized from each organization for Q4. The full match and used for analysis percentages are higher in Q4 due to a change in methodology for calculating the appropriate denominator to be considered for finding potential matches to REMSA.

LinkPlus is the software program utilized to make a probabilistic match of the call information from fire and REMSA for analysis. 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 calls which REMSA was not on scene were removed from the original denominator. This information is listed below to show the difference between "full match" and "used for analysis."

Description of Call Data	Sparks	Reno	Truckee Meadows†	REMSA
All calls reported (Original denominator)	2,454	6,948	1,635	15,211 (P1-P3) 539 (P9/Omega)
Duplicates Removed	119	129	15	115 (P9/Omega)
Fire "611 cancelled enroute" calls not matched	-	115	10	-
REMSA not expected on scene	20	119	24	-
Training/test calls removed	-	-	-	18 (P9/Omega)
New Denominator	**2,315**	**6,585**	**1,587**	**15,211 (P1-P3) 406 (P9/Omega)**
LinkPlus Match*	2,049 (88.5%)	5,566 (84.5%)	1,322 (83.3%)	-
Manually matched	251	996	235	-
FULL MATCH *	**2,300 (99.4%)**	**6,562 (99.7%)**	**1,557 (98.1%)**	-
REMSA cancelled enroute	34	132	99	-
Fire cancelled enroute	67	523	75	-
Missing key time stamps	1	1	0	-
TOTAL Removed from Analysis	**102**	**656**	**174**	
Used for Analysis*	**2,198 (94.9%)**	**5,906 (89.7%)**	**1,383 (87.1%)**	-
Analyzed Calls by Priority**				
P1**	916 (41.7%)	3,030 (51.3%)	635 (45.9%)	-
P2**	845 (38.4%)	2,143 (36.3%)	479 (34.6%)	-
P3**	384 (17.5%)	682 (11.5%)	243 (17.6%)	-
P9/Omega**	53 (2.4%)	51 (0.9%)	26 (1.9%)	-

*Percent calculated based on the new denominator

**Percent calculated based on total calls used for analysis

†TMFPD matched an additional 5 calls to North Lake Tahoe Fire Protection District (NLTFPD), however these did not match to REMSA and are not shown in the table above.

Table 1 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 PSAP Time, depending on which was first. If PSAP time was missing, then Fire Alarm time was used.

REMSA Priority	Median Time from Initial Call (IC) to Dispatch and On Scene			
	IC to Fire Dispatch	IC to REMSA Clock Start	IC to Fire Arrival	IC to REMSA Clock Stop
1	0:00:21	0:00:31	0:05:54	0:06:19
2	0:00:22	0:00:32	0:06:15	0:07:00
3	0:00:21	0:00:31	0:06:23	0:08:44
9	0:00:56	0:02:00	0:06:54	0:08:10
All	0:00:21	0:00:31	0:06:07	0:06:49

For all calls the median time from the initial call to Fire dispatch is 00:21 seconds, from the initial call to REMSA dispatch (clock start) is 00:31 seconds, to Fire arrival is 06:07 minutes, and REMSA arrives 06:49 minutes after the initial call.

Table 1.2a The frequency fire is alarmed prior to REMSA Alarm time or dispatching an ambulance.

Due to the different variables utilized for this table among each of the jurisdictions, please refer to each of the following tables, 2.2a, 3.2a and 4.2a, which are not intended to be compared from one jurisdiction to another.

Table 1.2b The frequency fire dispatches a unit prior to REMSA clock start.

Fire Dispatch First	#	%
No	3818	40.2%
Yes	5669	59.8%

Table 1.3a Regional response data indicating the first responding unit on scene

First on Scene	Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	2143	46.8%	1439	41.5%	353	27.0%	43	33.1%	3978	41.9%
Fire First	2438	53.2%	2028	58.5%	956	73.0%	87	66.9%	5509	58.1%
Total	4581	100.0%	3467	100.0%	1309	100.0%	130	100.0%	9487	100.0%

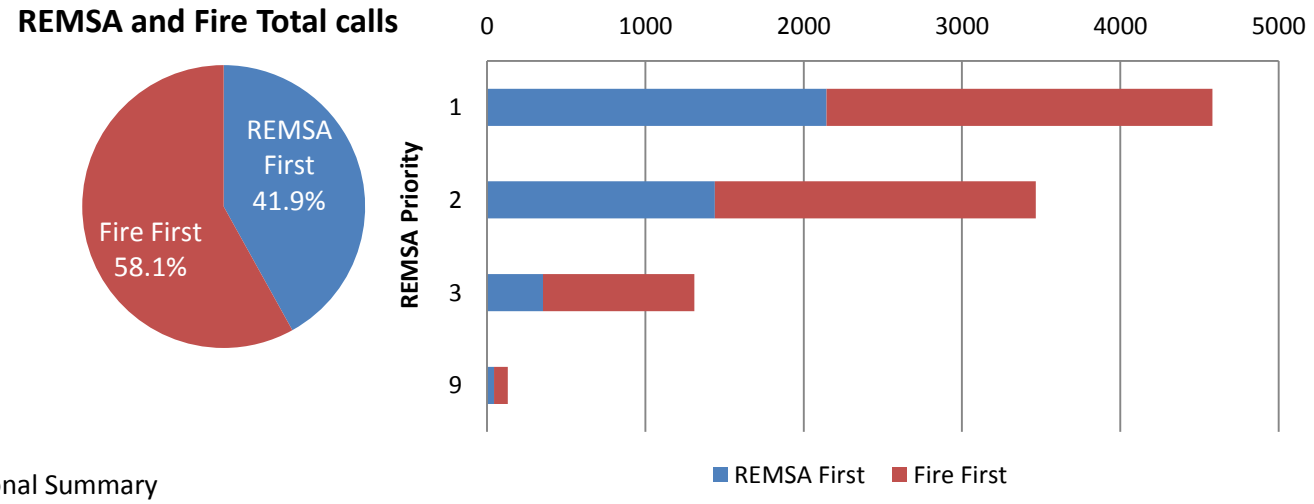
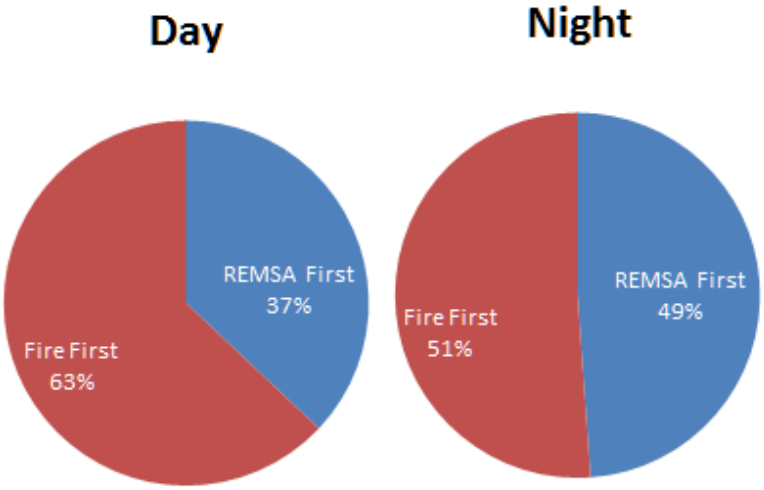


Table 1.3b Regional response data indicating the first responding unit on scene based on time of day.

Day (6am-6pm)										
First on Scene	Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	1112	41.2%	743	36.5%	187	24.2%	17	29.8%	2059	37.0%
Fire First	1585	58.8%	1291	63.5%	585	75.8%	40	70.2%	3501	63.0%
Total	2697	100.0%	2034	100.0%	772	100.0%	57	100.0%	5560	100.0%

Night (6pm-6am)										
First on Scene	Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	1031	54.7%	696	48.6%	166	30.9%	26	35.6%	1919	48.9%
Fire First	853	45.3%	737	51.4%	371	69.1%	47	64.4%	2008	51.1%
Total	1884	100.0%	1433	100.0%	537	100.0%	73	100.0%	3927	100.0%



REMSA & Fire Total Calls by Priority, Day v Night

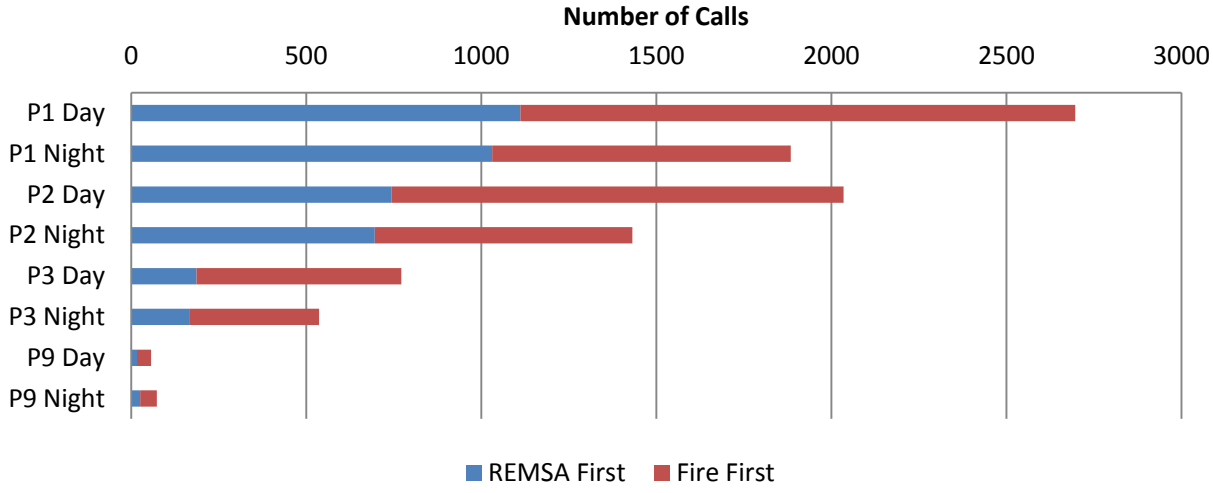


Table 1.4 Clock start – clock stop difference for REMSA in all jurisdictions

REMSA Priority	Median	Mean	Max
1	0:05:40	0:06:20	0:49:00
2	0:06:14	0:07:13	1:17:28
3	0:08:08	0:09:54	1:01:05
9	0:07:00	0:08:08	0:30:00
All	0:06:07	0:07:11	1:17:28

Day (6am-6pm)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:05:53	0:06:35	0:49:00
2	0:06:33	0:07:40	0:44:18
3	0:08:43	0:10:40	1:01:05
9	0:07:00	0:08:33	0:29:00
All	0:06:23	0:07:34	1:01:05

Night (6pm-6am)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:05:24	0:05:59	0:31:33
2	0:05:51	0:06:36	1:17:28
3	0:07:30	0:08:49	0:36:52
9	0:07:04	0:07:48	0:30:00
All	0:05:49	0:06:38	1:17:28

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

REMSA Priority	Median	Mean	Max
1	0:05:17	0:05:42	0:38:44
2	0:05:30	0:05:58	0:35:57
3	0:05:43	0:06:05	0:45:02
9	0:06:03	0:06:28	0:20:13
All	0:05:26	0:05:52	0:45:02

Day (6am-6pm)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:05:06	0:05:31	0:38:44
2	0:05:17	0:05:48	0:34:53
3	0:05:38	0:06:01	0:29:17
9	0:05:39	0:06:19	0:16:48
All	0:05:14	0:05:42	0:38:44

Night (6pm-6am)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:05:32	0:05:57	0:38:23
2	0:05:48	0:06:11	0:35:57
3	0:05:56	0:06:11	0:45:02
9	0:06:15	0:06:35	0:20:13
All	0:05:41	0:06:05	0:45:02

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 1.6a Number of calls and time differences – REMSA arrived before fire

Priority	Time Interval when REMSA arrives First							
	< 1 min	**1:01-3 mins**	**3:01-5 mins**	**5:01-10 mins**	**10 + mins**	**Total**	**Median**	**Max**
P1	771	840	317	173	42	2143	0:01:35	0:31:02
P2	429	569	252	143	46	1439	0:01:52	0:31:58
P3	106	139	56	34	18	353	0:01:52	0:33:57
P9 (Omega)	19	15	6	3	0	43	0:01:07	0:09:18
Total	1325	1563	631	353	106	3978	0:01:42	0:33:57

Day (6am-6pm)								
Priority	**Time Interval when REMSA arrives First**							
	< 1 min	**1:01-3 mins**	**3:01-5 mins**	**5:01-10 mins**	**10 + mins**	**Total**	**Median**	**Max**
1	411	444	143	94	20	1112	0:01:32	0:30:52
2	226	287	132	75	23	743	0:01:48	0:28:26
3	56	68	31	22	10	187	0:02:07	0:18:08
9	8	9	0	0	0	17	0:01:07	0:02:57
Total	701	808	306	191	53	2059	0:01:39	0:30:52

Night (6pm-6am)								
Priority	**Time Interval when REMSA arrives First**							
	< 1 min	**1:01-3 mins**	**3:01-5 mins**	**5:01-10 mins**	**10 + mins**	**Total**	**Median**	**Max**
1	360	396	174	79	22	1031	0:01:39	0:31:02
2	203	282	120	68	23	696	0:01:56	0:31:58
3	50	71	25	12	8	166	0:01:42	0:33:57
9	11	6	6	3	0	26	0:01:18	0:09:18
Total	624	755	325	162	53	1919	0:01:45	0:33:57

This table indicates the number of calls that were within the identified time frame. The above table corresponds with calls when REMSA is arriving first on-scene.

Table 1.6b Percent of calls and time differences –REMSA arrived before fire

Priority	Time Interval when REMSA arrives First					
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total
P1	36.0%	39.2%	14.8%	8.1%	2.0%	2143
P2	29.8%	39.5%	17.5%	9.9%	3.2%	1439
P3	30.0%	39.4%	15.9%	9.6%	5.1%	353
P9 (Omega)	44.2%	34.9%	14.0%	7.0%	0.0%	43
Total	33.3%	39.3%	15.9%	8.9%	2.7%	3978

Day (6am-6pm)						
Priority	Time Interval when REMSA arrives First					
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total
1	37.0%	39.9%	12.9%	8.5%	1.8%	1112
2	30.4%	38.6%	17.8%	10.1%	3.1%	743
3	29.9%	36.4%	16.6%	11.8%	5.3%	187
9	47.1%	52.9%	0.0%	0.0%	0.0%	17
Total	34.0%	39.2%	14.9%	9.3%	2.6%	2059

Night (6pm-6am)						
Priority	Time Interval when REMSA arrives First					
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total
1	34.9%	38.4%	16.9%	7.7%	2.1%	1031
2	29.2%	40.5%	17.2%	9.8%	3.3%	696
3	30.1%	42.8%	15.1%	7.2%	4.8%	166
9	42.3%	23.1%	23.1%	11.5%	0.0%	26
Total	32.5%	39.3%	16.9%	8.4%	2.8%	1919

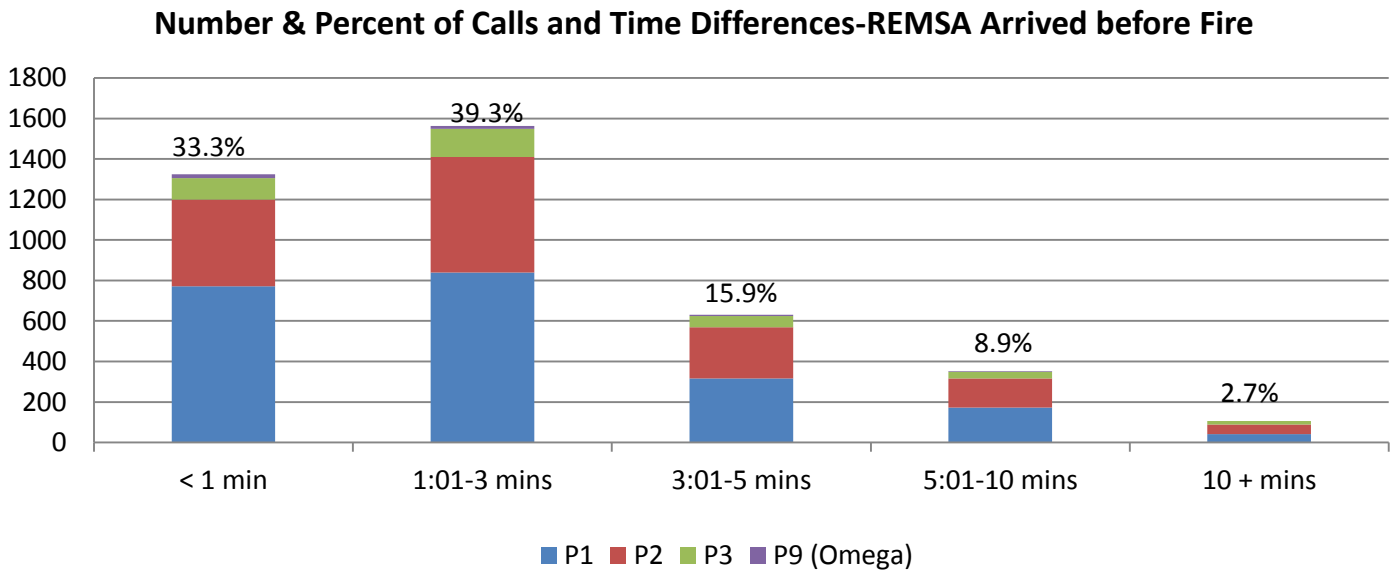


Table 1.7a Number of calls and time differences – fire arrived first

Priority	Time Interval when Fire arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total	Median	Max
1	721	879	451	302	85	2438	0:02:00	0:24:33
2	456	637	389	381	165	2028	0:02:46	0:59:21
3	143	242	168	247	156	956	0:04:08	0:43:31
9	14	25	12	17	19	87	0:03:42	0:40:43
Total	1334	1783	1020	947	425	5509	0:02:32	0:59:21

Day (6am-6pm)								
Priority	Time Interval when Fire arrives First							
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total	Median	Max
1	425	585	302	218	55	1585	0:02:08	0:24:33
2	244	391	276	257	123	1291	0:03:04	0:38:01
3	75	136	100	153	121	585	0:04:35	0:43:31
9	5	12	6	9	8	40	0:03:50	0:40:43
Total	749	1124	684	637	307	3501	0:02:45	0:43:31

Night (6pm-6am)								
Priority	Time Interval when Fire arrives First							
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total	Median	Max
1	296	294	149	84	30	853	0:01:43	0:22:42
2	212	246	113	124	42	737	0:02:12	0:59:21
3	68	106	68	94	35	371	0:03:17	0:30:11
9	9	13	6	8	11	47	0:03:42	0:30:54
Total	585	659	336	310	118	2008	0:02:12	0:59:21

This table indicates the number of calls, median and maximum time differences between arrival within the identified time frame. The above table corresponds to calls when fire agencies are arriving first on-scene.

Table 1.7b Percent of calls and time differences – fire arrived first

Priority	Time Interval when FIRE arrives First					
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total
P1	29.6%	36.1%	18.5%	12.4%	3.5%	2438
P2	22.5%	31.4%	19.2%	18.8%	8.1%	2028
P3	15.0%	25.3%	17.6%	25.8%	16.3%	956
P9 (Omega)	16.1%	28.7%	13.8%	19.5%	21.8%	87
Total	24.2%	32.4%	18.5%	17.2%	7.7%	5509

Day (6am-6pm)						
Priority	Time Interval when Fire arrives First					
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total
1	26.8%	36.9%	19.1%	13.8%	3.5%	1585
2	18.9%	30.3%	21.4%	19.9%	9.5%	1291
3	12.8%	23.2%	17.1%	26.2%	20.7%	585
9	12.5%	30.0%	15.0%	22.5%	20.0%	40
Total	21.4%	32.1%	19.5%	18.2%	8.8%	3501

Night (6pm-6am)						
Priority	Time Interval when Fire arrives First					
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total
1	34.7%	34.5%	17.5%	9.8%	3.5%	853
2	28.8%	33.4%	15.3%	16.8%	5.7%	737
3	18.3%	28.6%	18.3%	25.3%	9.4%	371
9	19.1%	27.7%	12.8%	17.0%	23.4%	47
Total	29.1%	32.8%	16.7%	15.4%	5.9%	2008

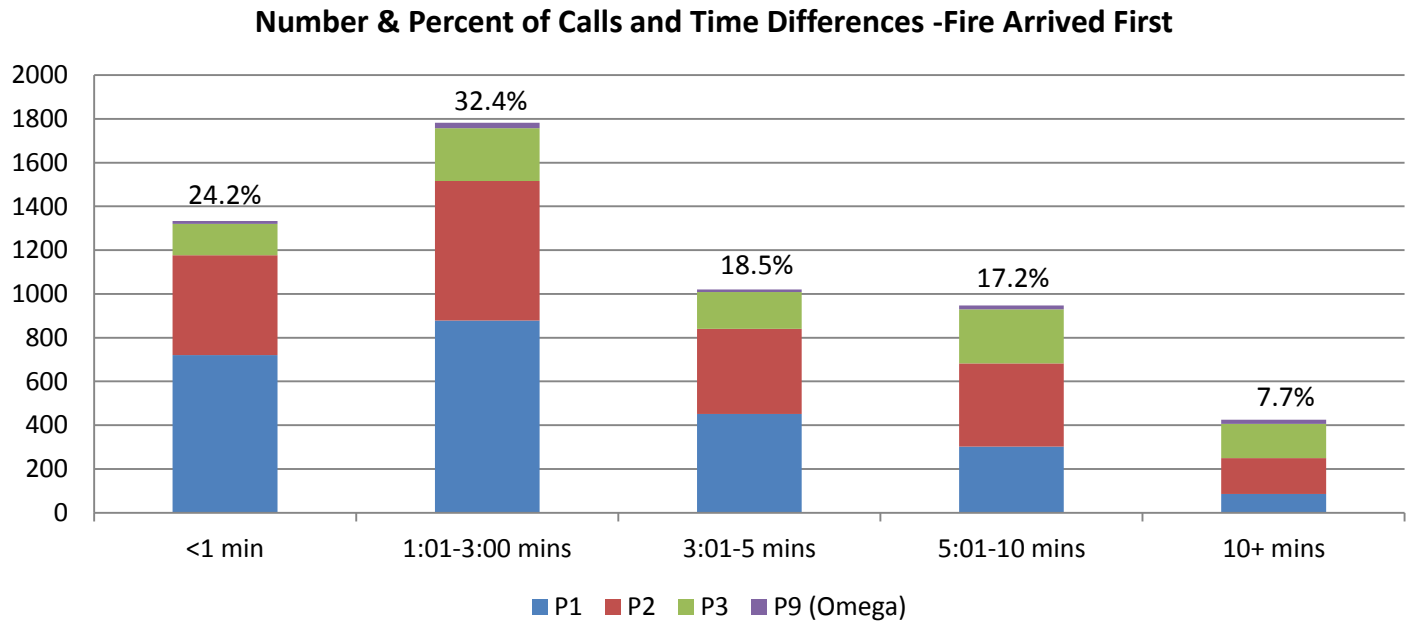


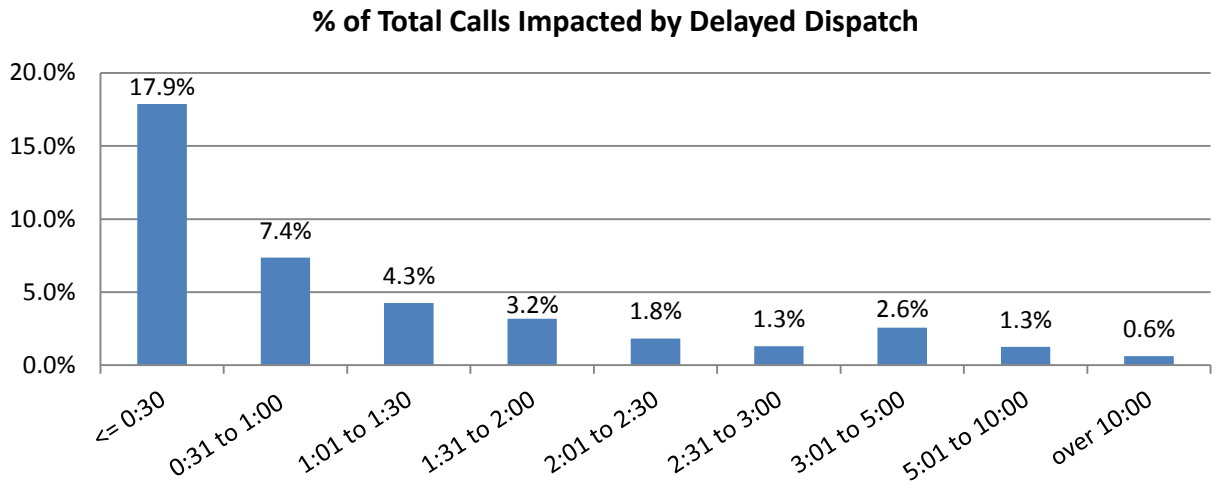
Table 1.8 The table below shows how long a patient is waiting from the initial call to the first arriving unit on scene and how those median times are impacted when the Fire agency is not being dispatched first.

REMSA Priority	Median Response Time: Initial call to First Arriving Unit		
	Patient's Perspective	Fire Dispatched First	Fire Dispatched Second
1	0:05:09	0:05:04	0:05:18
2	0:05:26	0:05:16	0:05:38
3	0:05:53	0:05:41	0:06:15
9	0:06:05	0:05:38	0:08:00
All	0:05:20	0:05:13	0:05:33

When a fire agency is dispatched second the patient's median wait time increases by 00:20 seconds.

The section below only includes calls when Fire dispatch time was later than REMSA's clock start, which occurred 3,818 (40.2%) of the time during Q4.

Table 1.9a Percentage of total calls between REMSA dispatching and Fire dispatching to an EMS call



The graph illustrates the percent of all calls, when fire's dispatch time is after REMSA's clock start time within each of the denoted time intervals. With each successive interval, fewer and fewer calls are impacted by a delay in fire dispatch, until the 3:01 to 5:00 minute mark. The calls where fire's dispatch time is 3:01-5:00 minutes after REMSA's clock start goes up slightly in all three jurisdictions as well. This anomaly is unexpected and reasons why this may be occurring are not clear at this time; however, this will be monitored to determine if it was an anomaly in Quarter 4 or if there is a regional issue to be identified and resolved.

Table 1.9b Call volume breakdown by minutes/seconds for calls when Fire is dispatching second

Time in Delay	# of calls	%
<= 0:30	1695	17.9%
0:31 to 1:00	700	7.4%
1:01 to 1:30	404	4.3%
1:31 to 2:00	301	3.2%
2:01 to 2:30	173	1.8%
2:31 to 3:00	125	1.3%
3:01 to 5:00	242	2.6%
5:01 to 10:00	121	1.3%
over 10:00	57	0.6%

The total number of calls with a dispatch delay over 1 minute was 1,423, which represents 15.0% of all matched calls for service.

Table 1.10 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
Priority 1	4581 (48.3%)	1860 (48.7%)	664 (46.6%)
Priority 2	3467 (36.5%)	1408 (36.9%)	573 (40.3%)
Priority 3	1309 (13.8%)	526 (13.8%)	177 (12.3%)
Priority 9 (Omega)	130 (1.4%)	24 (0.6%)	9 (0.6%)
Total Calls	9,487	3,818	1,423

The table above indicates 48.3% of all matched calls were P1, 36.5% P2, 17.6% P3 and 1.4% P9. Calls with a delayed dispatch were similar in nature, however a slightly higher proportion of P2 calls are being impacted by a dispatch delay over 1 minute.

JURISDICTION SPECIFIC DATA ANALYSIS

City of Sparks

SUMMARY:

In Quarter 4 (Q4), City of Sparks matched 2,300 medical calls for service, which was 99.4% of the EMS calls for Sparks Fire Department (SFD). However, Q4 used 2,198 (94.9%) of calls for analysis. The data indicates a fire response arriving prior to REMSA an overall 62.4% of the time. 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 delay in the dispatch process. There was an increase from 59.2% in Q3 to 75.0% in Q4 for SFD being alarmed prior to REMSA's clock starting. SFD also experienced an increase in being dispatched prior to REMSA's clock starting, from 41.7% in Q3 to 57.9% in Q4. The potential impacts of delayed dispatch on the system are demonstrated in Tables 2.7-2.11.

The overall median response time for SFD was 5:27 minutes (Table 2.3 for priority breakdown). The median overall response time for the City of Sparks for REMSA was 6:22 minutes (Table 2.2 for priority breakdown).

Table 2.7 uses the time difference between the first time stamp (initial call) to the first arriving EMS responder to illustrate how long a patient waits when fire is dispatched first versus second. In Sparks, the patient's median wait time increases by 0:25 seconds when fire is not being dispatched first.

The second set of analyses includes the 926 (42.1% of calls) when SFD is dispatched second. SFD arrives first 51.2% of the time and 14.5% of the calls are delayed by over 1 minute; disproportionately impacting P2 calls (Table 2.10).

STATISTICAL INFORMATION:

Table 2 Number of calls per each REMSA defined priority used in this analysis

Priority	#	%
1	916	41.7%
2	845	38.4%
3	384	17.5%
9 (omega)	53	2.4%
Total	**2198**	**100.0%**

Table 2.1 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 Fire Dispatch	IC to REMSA Clock Start	IC to Fire Arrival	IC to REMSA Clock Stop
1	0:00:23	0:00:32	0:05:44	0:06:28
2	0:00:27	0:00:35	0:06:27	0:07:13
3	0:00:21	0:00:32	0:06:35	0:08:36
9	0:00:57	0:02:39	0:07:19	0:08:13
All	0:00:25	0:00:33	0:06:09	0:07:01

For all calls the median time from the initial call to SFD dispatch is 00:25 seconds, from the initial call to REMSA clock start is 00:33 seconds, to SFD arrival is 06:09 minutes, and REMSA arrives 07:01 after the initial call.

Table 2.2a The frequency fire is alarmed prior to REMSA clock start.

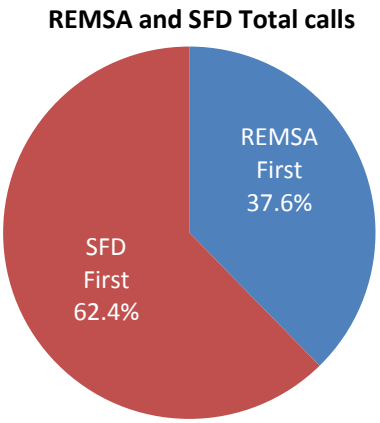
Fire Alarm First	#	%
No	549	25.0%
Yes	1649	75.0%

Table 2.2b The frequency fire dispatches a unit prior to REMSA clock start.

Fire Dispatch First	#	%
No	926	42.1%
Yes	1272	57.9%

Table 2.3 Jurisdictional information that indicates the first responding unit on scene.

First on Scene	Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	379	41.4%	336	39.8%	95	24.7%	17	32.1%	827	37.6%
SFD First	537	58.6%	509	60.2%	289	75.3%	36	67.9%	1371	62.4%
Total	916	100.0%	845	100.0%	384	100.0%	53	100.0%	2198	100.0%



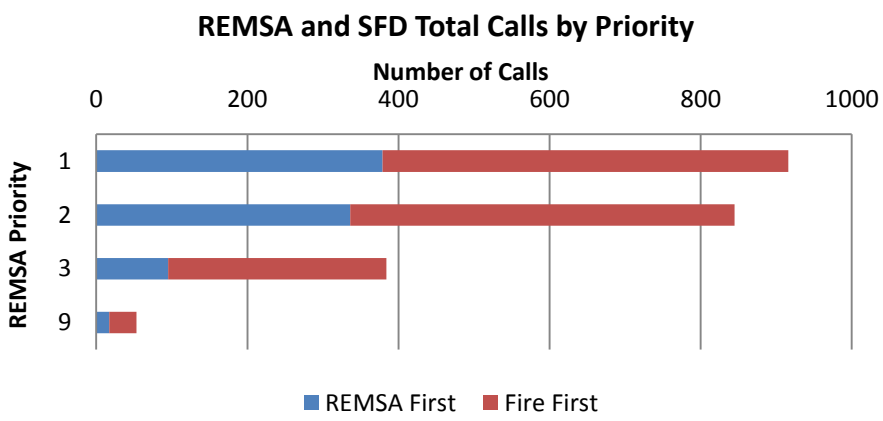


Table 2.4 Dispatch time – on scene difference for Sparks Fire Department

REMSA Priority	Median	Mean	Max
1	0:05:10	0:05:17	0:32:39
2	0:05:37	0:05:48	0:15:15
3	0:05:58	0:06:09	0:18:25
9	0:05:50	0:06:11	0:11:46
All	0:05:27	0:05:39	0:32:39

Day (6am-6pm)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:04:59	0:05:06	0:32:39
2	0:05:19	0:05:38	0:15:15
3	0:05:57	0:06:08	0:16:35
9	0:05:39	0:06:12	0:11:46
All	0:05:15	0:05:31	0:32:39

Night (6pm-6am)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:05:23	0:05:32	0:12:49
2	0:06:03	0:06:01	0:12:01
3	0:06:04	0:06:11	0:18:25
9	0:06:10	0:06:09	0:10:13
All	0:05:44	0:05:51	0:18:25

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

Table 2.5 Clock Start – clock stop difference for REMSA

REMSA Priority	Median	Mean	Max
1	0:05:48	0:06:14	0:28:20
2	0:06:27	0:07:08	0:38:05
3	0:07:55	0:09:29	0:44:05
9	0:07:00	0:07:33	0:29:00
All	0:06:22	0:07:11	0:44:05

Day (6am-6pm)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:06:02	0:06:25	0:19:32
2	0:06:37	0:07:35	0:38:05
3	0:08:31	0:10:16	0:44:05
9	0:07:45	0:09:13	0:29:00
All	0:06:41	0:07:38	0:44:05

Night (6pm-6am)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:05:34	0:05:59	0:28:20
2	0:06:10	0:06:29	0:23:19
3	0:07:12	0:08:14	0:28:32
9	0:06:00	0:06:15	0:18:41
All	0:06:00	0:06:33	0:28:32

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 2.6a Number of calls, Time difference between arrivals, SFD first

Priority	Time Interval when SFD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total	Median	Max
1	148	217	100	59	13	537	0:02:04	0:22:42
2	108	188	104	74	35	509	0:02:26	0:59:21
3	56	79	54	62	38	289	0:03:13	0:41:14
9	6	10	7	5	8	36	0:03:42	0:40:34
Total	318	494	265	200	94	1371	0:02:24	0:59:21

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, as well as the median and maximum times.

Table 2.6b Percent of calls, Time difference between arrivals, SFD first

Priority	Time Interval when SFD arrives First					
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total
1	27.6%	40.4%	18.6%	11.0%	2.4%	537
2	21.2%	36.9%	20.4%	14.5%	6.9%	509
3	19.4%	27.3%	18.7%	21.5%	13.1%	289
9	16.7%	27.8%	19.4%	13.9%	22.2%	36
Total	23.2%	36.0%	19.3%	14.6%	6.9%	1371

This table contains the same information as Table 2.6a, but depicts the percent of calls within each identified time frame that correspond to the difference of arrival time between agencies when SFD arrives first.

Table 2.7a Number of calls, Time difference between arrivals, REMSA first

Priority	Time Interval when REMSA arrives First							
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total	Median	Max
1	164	154	37	22	2	379	0:01:13	0:30:52
2	102	142	59	31	2	336	0:01:38	0:13:01
3	24	40	14	11	6	95	0:01:59	0:33:57
9	8	4	4	1	0	17	0:01:17	0:05:18
Total	298	340	114	65	10	827	0:01:26	0:33:57

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, as well as the median and maximum times.

Table 2.7b Percent of calls, Time difference between arrivals, REMSA first

Priority	Time Interval when REMSA arrives First					
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total
1	43.3%	40.6%	9.8%	5.8%	0.5%	379
2	30.4%	42.3%	17.6%	9.2%	0.6%	336
3	25.3%	42.1%	14.7%	11.6%	6.3%	95
9	47.1%	23.5%	23.5%	5.9%	0.0%	17
Total	36.0%	41.1%	13.8%	7.9%	1.2%	827

This table contains the same information as Table 2.7a, but depicts the percent of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

Table 2.8: 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.

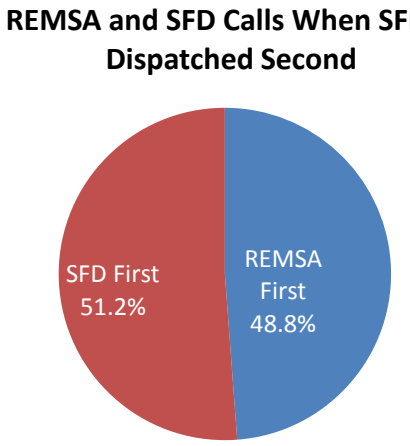
REMSA Priority	Median Response Time: Initial call to First Arriving Unit		
	Patient's Perspective	Fire Dispatched First	Fire Dispatched Second
1	0:05:13	0:05:07	0:05:23
2	0:05:45	0:05:32	0:05:57
3	0:06:09	0:05:51	0:06:34
9	0:06:24	0:05:29	0:08:00
All	0:05:32	0:05:23	0:05:48

For all calls, the patient's median wait time increases by 0:25 seconds when fire is not being dispatched first.

Statistical Information regarding calls when SFD is dispatched second. The number of calls relevant to this analysis is 926 (42.1% of all calls) for Q4.

Table 2.9: Jurisdictional information that indicates the first responding unit on scene, when SFD is dispatched second.

First on Scene	Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	209	53.0%	188	50.7%	50	33.1%	5	50.0%	452	48.8%
SFD First	185	47.0%	183	49.3%	101	66.9%	5	50.0%	474	51.2%
Total	394	100.0%	371	100.0%	151	100.0%	10	100.0%	926	100.0%



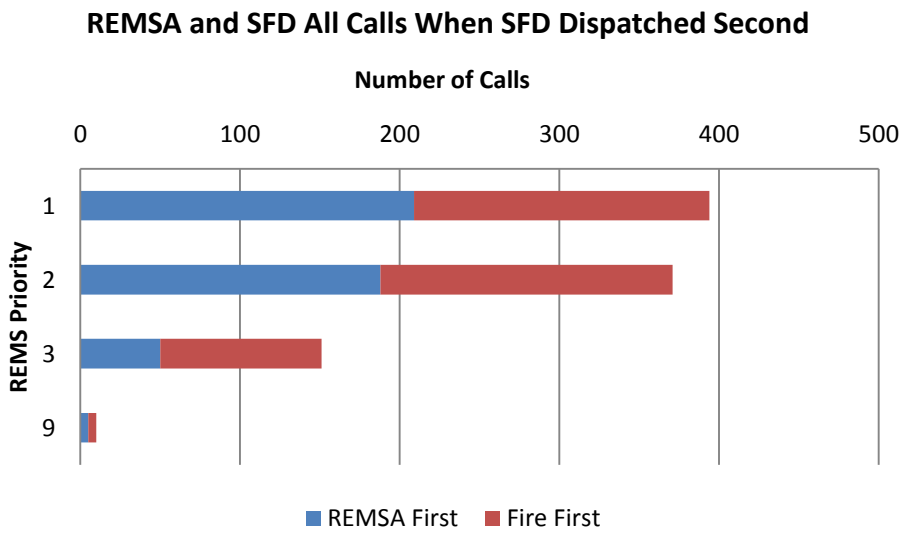


Table 2.10a Percentage of calls between REMSA dispatching and SFD dispatching to an EMS call

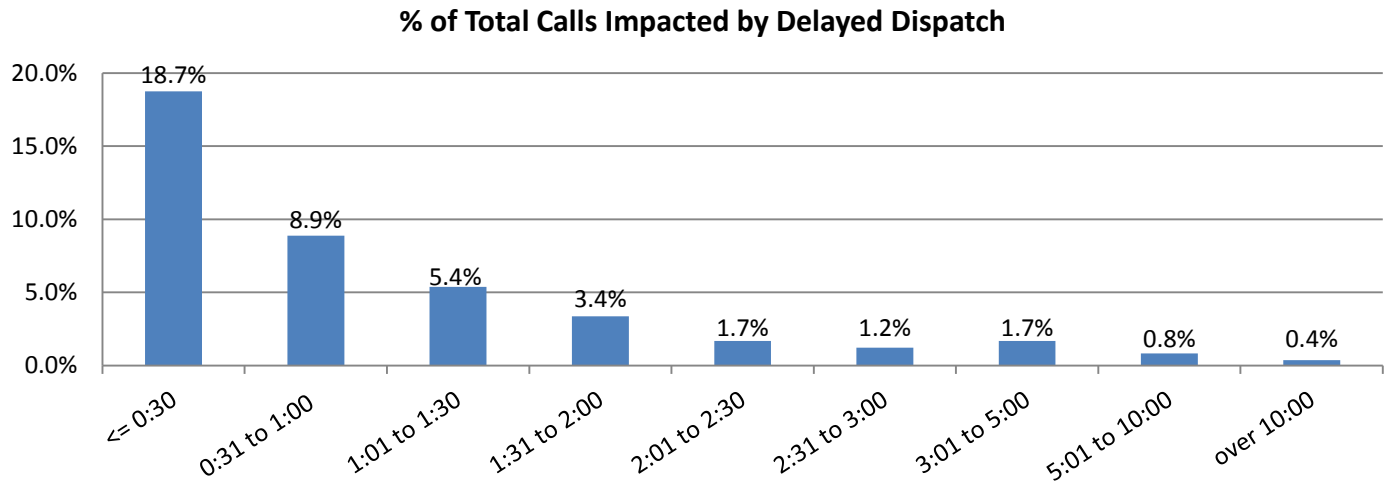


Table 2.10b Call volume breakdown by minutes/seconds for calls when SFD is dispatching second.

Time in Delay	# of calls
<= 0:30	412
0:31 to 1:00	195
1:01 to 1:30	118
1:31 to 2:00	74
2:01 to 2:30	37
2:31 to 3:00	27
3:01 to 5:00	37
5:01 to 10:00	18
over 10:00	8

Total number of calls with a dispatch delay over 1 minute was 319, which represents 14.5% of all matched calls for service.

Table 2.11 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
Priority 1	916 (41.7%)	394 (42.6%)	123 (38.6%)
Priority 2	845 (38.4%)	371 (40.1%)	149 (46.7%)
Priority 3	384 (17.5%)	151 (16.3%)	45 (14.1%)
Priority 9 (Omega)	53 (2.4%)	10 (1.1%)	2 (0.6%)
Total Calls	2198	926	319

The above table indicates 41.7% of all matched calls were P1, 38.4% were P2 and 17.5% were P3 for SFD. Calls with delayed dispatch problems were similar in nature. However, a higher proportion of P2 calls are being impacted by a dispatch delay over 1 minute.

City of Reno

SUMMARY:

In Quarter 4 (Q4), City of Reno matched 6,562 medical calls for service, which was 99.7% of the EMS calls for Reno Fire Department (RFD). However, Q4 used 5,906 (89.7%) calls for analysis. The data indicates a fire response arriving prior to REMSA an overall 53.0% of the time. The difference between day and night is reflective of the regional trends, therefore not shown in the charts below.

RFD Dispatchers are notified of an incident prior to REMSA 51.2% of the time, while RFD is dispatched 59.2% of the time prior to REMSA's clock start. The potential impacts of delayed dispatch on the system are demonstrated in Tables 3.7-3.11.

The overall median response time for RFD was 5:16 minutes (Table 3.4 for priority breakdown). The median overall response time for the City of Reno for REMSA was 5:34 minutes (Table 3.5 for priority breakdown).

Table 3.7 uses the time difference between the first time stamp (initial call) to the first arriving EMS responder to illustrate how long a patient wait when fire is dispatched first versus second. In Reno, the patient's wait time increases by 00:15 seconds when RFD is not dispatched first.

The second set of analyses explores only those calls when RFD is dispatched second, which occurred 40.8% of the time during Q4. RFD arrives first 45.0% of the time, when dispatched second. While 15.7% of all calls are delayed over 1 minute, this does not appear to disproportionately impact calls relative to the priority (Table 3.11).

STATISTICAL INFORMATION:

Table 3: Number of calls per each REMSA defined priority used in this analysis

REMSA Priority	#	%
1	3030	51.3%
2	2143	36.3%
3	682	11.5%
9 (Omega)	51	0.9%
Total	**5906**	**100.0%**

Table 3.1: Call response using median time for each time stamp. The initial call (IC) time was calculated using either REMSA call pick up time or PSAP time, if there was no PSAP time available, then Fire Alarm time was used to determine which agency was notified of an incident first.

REMSA Priority	Median Time from Initial Call (IC) to Dispatch and On Scene			
	IC to Fire Dispatch	IC to REMSA Clock Start	IC to Fire Arrival	IC to REMSA Clock Stop
1	0:00:47	0:00:49	0:06:11	0:06:16
2	0:00:50	0:00:50	0:06:29	0:06:54
3	0:00:52	0:00:51	0:06:31	0:08:28
9	0:01:07	0:02:09	0:06:52	0:08:01
All	0:00:49	0:00:50	0:06:21	0:06:39

For all calls the median time from the initial call to RFD dispatch is 00:49 seconds, from the initial call to REMSA clock start is 00:50 seconds, to RFD arrival is 06:21 minutes, and REMSA arrives 06:39 after the initial call. PSAP time was only reported in June, therefore Alarm time was utilized as the earliest known time stamp for RFD incidents during April and May.

Table 3.2a: The frequency PSAP is notified or fire is alarmed, prior to REMSA being notified of an incident.

Fire Alarm First	#	%
No	2881	48.8%
Yes	3025	51.2%

Table 3.2b: The frequency fire dispatches a unit prior to REMSA clock start.

Fire Dispatch First	#	%
No	2409	40.8%
Yes	3497	59.2%

Table 3.3: Jurisdictional information that indicates the first responding unit on scene

First on Scene	Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	1560	51.5%	976	45.5%	217	31.8%	22	43.1%	2775	47.0%
RFD First	1470	48.5%	1167	54.5%	465	68.2%	29	56.9%	3131	53.0%
Total	3030	100.0%	2143	100.0%	682	100.0%	51	100.0%	5906	100.0%

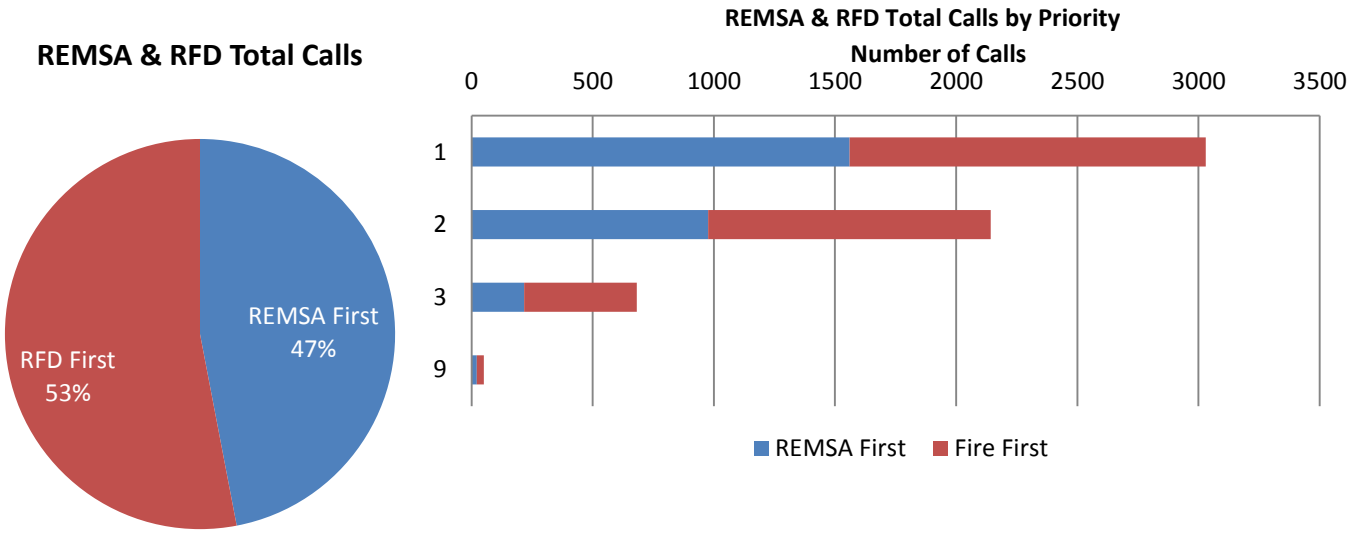


Table 3.4: Dispatch time – on-scene difference for Reno Fire Department

REMSA Priority	Median	Mean	Max
1	0:05:12	0:05:30	0:38:23
2	0:05:20	0:05:46	0:35:57
3	0:05:28	0:05:40	0:25:32
9	0:05:55	0:06:08	0:14:13
All	0:05:16	0:05:37	0:38:23

Day (6am-6pm)			
REMSA Priority	Median	Mean	Max
1	0:05:01	0:05:18	0:24:39
2	0:05:12	0:05:39	0:27:35
3	0:05:20	0:05:33	0:15:42
9	0:04:41	0:05:38	0:14:13
All	0:05:07	0:05:28	0:27:35

Night (6pm-6am)			
REMSA Priority	Median	Mean	Max
1	0:05:28	0:05:46	0:38:23
2	0:05:33	0:05:56	0:35:57
3	0:05:33	0:05:50	0:25:32
9	0:06:15	0:06:35	0:13:10
All	0:05:31	0:05:51	0:38:23

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

Table 3.5: Clock start – clock stop difference for REMSA

REMSA Priority	Median	Mean	Max
1	0:05:18	0:05:37	0:49:00
2	0:05:43	0:06:30	0:36:20
3	0:07:20	0:08:51	0:48:31
9	0:05:00	0:06:23	0:23:00
All	0:05:34	0:06:19	0:49:00

Day (6am-6pm)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:05:27	0:05:53	0:49:00
2	0:06:00	0:06:58	0:36:20
3	0:07:47	0:09:37	0:48:31
9	0:05:15	0:06:36	0:18:00
All	0:05:50	0:06:42	0:49:00

Night (6pm-6am)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:04:55	0:05:13	0:25:53
2	0:05:19	0:05:50	0:28:18
3	0:06:59	0:07:50	0:35:10
9	0:05:00	0:06:12	0:23:00
All	0:05:18	0:05:46	0:35:10

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 3.6 Time difference between arrivals, RFD first

Incident District Number	All REMSA Priorities (P1-P3, P9), Time Interval when RFD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total	Median	Max
1	31.0%	37.4%	16.4%	10.1%	5.0%	**681**	0:01:51	0:43:31
2	35.7%	36.9%	13.9%	9.8%	3.7%	**244**	0:01:40	0:18:37
3	28.0%	36.0%	19.2%	11.3%	5.5%	**600**	0:02:04	0:36:51
4	39.2%	35.9%	10.6%	8.6%	5.7%	**245**	0:01:25	0:27:14
5	29.8%	31.0%	18.1%	15.2%	5.8%	**171**	0:02:23	0:30:56
6	29.3%	31.6%	20.1%	12.6%	6.3%	**174**	0:02:24	0:29:33
7	26.7%	43.3%	16.7%	10.0%	3.3%	**30**	0:01:55	0:14:37
8	22.7%	37.7%	15.5%	19.1%	5.0%	**220**	0:02:23	0:24:39
9	21.2%	28.1%	17.1%	26.0%	7.5%	**146**	0:03:01	0:26:47
10	28.2%	35.9%	14.1%	15.4%	6.4%	**78**	0:02:07	0:17:12
11	11.0%	36.7%	33.0%	14.7%	4.6%	**109**	0:03:19	0:27:41
12	14.4%	30.9%	23.0%	23.0%	8.6%	**139**	0:03:38	0:24:33
19	33.3%	19.0%	28.6%	14.3%	4.8%	**21**	0:02:19	0:13:41
21	33.9%	32.1%	16.6%	13.7%	3.7%	**271**	0:01:49	0:30:54
Other	0.0%	0.0%	50.0%	50.0%	0.0%	**2**	0:04:11	0:05:13
Total	**28.9%**	**35.0%**	**17.5%**	**13.2%**	**5.3%**	**3131**	**0:02:05**	**0:43:31**

This table depicts the proportion of calls and the difference (in minutes) for arrival at an incident location, when RFD arrives before REMSA, as well as the median and maximum times before a REMSA unit arrives. Incident location is defined as “Incident District Number”, not the station responding.

The following tables show the same information as above, split by each of the priorities

District Number	Priority 1 calls, Time Interval when RFD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total	Median	Max
1	134	138	47	24	2	**345**	0:01:28	0:19:31
2	42	47	13	7	2	**111**	0:01:19	0:17:08
3	93	112	50	19	1	**275**	0:01:40	0:10:26
4	50	43	10	2	1	**106**	0:01:05	0:11:20
5	28	30	15	3	1	**77**	0:01:54	0:11:41
6	28	27	21	9	2	**87**	0:02:09	0:20:57
7	6	5	2	0	0	**13**	0:01:16	0:04:56
8	32	46	20	7	2	**107**	0:01:51	0:11:23
9	19	21	9	21	3	**73**	0:02:48	0:12:56
10	10	9	1	4	0	**24**	0:01:28	0:08:27
11	6	22	18	6	0	**52**	0:02:54	0:09:36
12	15	20	18	11	2	**66**	0:02:52	0:24:33
19	4	2	4	0	1	**11**	0:01:55	0:13:41
21	53	44	20	5	1	**123**	0:01:22	0:10:39
Total	**520**	**566**	**248**	**118**	**18**	**1470**	**0:01:37**	**0:24:33**

Incident District Number	Priority 2 calls, Time Interval when RFD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total	Median	Max
1	56	85	51	30	14	**236**	0:02:16	0:31:30
2	36	29	9	8	2	**84**	0:01:43	0:13:57
3	63	84	44	34	15	**240**	0:02:11	0:26:59
4	42	33	11	14	7	**107**	0:01:42	0:27:14
5	17	16	13	14	4	**64**	0:02:59	0:30:56
6	20	21	7	9	3	**60**	0:02:16	0:13:01
7	1	3	3	2	1	**10**	0:03:30	0:14:37
8	14	29	10	17	7	**77**	0:02:41	0:24:39
9	8	15	14	15	5	**57**	0:03:32	0:23:01
10	12	11	10	4	2	**39**	0:02:14	0:17:09
11	4	13	13	4	2	**36**	0:03:36	0:27:41
12	3	17	9	16	7	**52**	0:04:01	0:16:47
19	3	2	2	1	0	**8**	0:01:49	0:06:19
21	31	30	17	15	3	**96**	0:02:03	0:16:11
Other	0	0	0	1	0	**1**	0:05:13	0:05:13
Total	**310**	**388**	**213**	**184**	**72**	**1167**	**0:02:20**	**0:31:30**

Incident District Number	Priority 3 calls, Time Interval when RFD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total	Median	Max
1	21	31	14	15	18	**99**	0:02:37	0:43:31
2	8	13	12	9	4	**46**	0:03:19	0:15:47
3	12	20	18	15	17	**82**	0:03:56	0:36:51
4	3	11	5	3	6	**28**	0:03:09	0:18:41
5	3	6	3	8	5	**25**	0:05:13	0:30:11
6	3	7	7	4	4	**25**	0:03:35	0:29:33
7	1	4	0	1	0	**6**	0:02:04	0:09:38
8	4	7	4	18	2	**35**	0:05:25	0:12:17
9	4	4	2	2	3	**15**	0:01:45	0:26:47
10	0	6	0	4	2	**12**	0:04:02	0:16:09
11	2	5	4	6	3	**20**	0:04:17	0:18:12
12	2	6	5	5	3	**21**	0:04:32	0:18:59
19	0	0	0	2	0	**2**	0:06:48	0:06:58
21	7	11	8	17	5	**48**	0:04:31	0:16:01
Other	0	0	1	0	0	**1**	0:03:09	0:03:09
Total	**70**	**131**	**83**	**109**	**72**	**465**	**0:03:39**	**0:43:31**

Incident District Number	Priority 9/Omega calls, Time Interval when RFD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total	Median	Max
1	0	1	0	0	0	**1**	0:01:21	0:01:21
2	1	1	0	0	1	**3**	0:01:54	0:18:37
3	0	0	3	0	0	**3**	0:03:33	0:03:42
4	1	1	0	2	0	**4**	0:03:17	0:05:12
5	3	1	0	1	0	**5**	0:00:58	0:05:08
6	0	0	0	0	2	**2**	0:14:29	0:14:58
7	0	1	0	0	0	**1**	0:02:35	0:02:35
8	0	1	0	0	0	**1**	0:02:44	0:02:44
9	0	1	0	0	0	**1**	0:02:56	0:02:56
10	0	2	0	0	1	**3**	0:01:57	0:17:12
11	0	0	1	0	0	**1**	0:04:29	0:04:29
21	1	2	0	0	1	**4**	0:01:56	0:30:54
Total	**6**	**11**	**4**	**3**	**5**	**29**	**0:02:42**	**0:30:54**

Table 3.7a Number of calls, Time difference between arrivals, REMSA first

Priority	Time Interval when REMSA arrives First							
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total	Median	Max
1	542	619	246	121	32	1560	0:01:38	0:25:26
2	287	389	170	92	38	976	0:01:51	0:31:58
3	70	82	37	17	11	217	0:01:49	0:23:09
9	9	9	2	2	0	22	0:01:11	0:09:18
Total	908	1099	455	232	81	2775	0:01:43	0:31:58

This table depicts the time difference (in minutes) for arrival at call destination, when REMSA arrives before RFD, as well as the median and maximum times before a RFD unit arrives.

Table 3.7b Percent of calls, Time difference between arrivals, REMSA first

Priority	Time Interval when REMSA arrives First					
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total
1	34.7%	39.7%	15.8%	7.8%	2.1%	1560
2	29.4%	39.9%	17.4%	9.4%	3.9%	976
3	32.3%	37.8%	17.1%	7.8%	5.1%	217
9	40.9%	40.9%	9.1%	9.1%	0.0%	22
Total	32.7%	39.6%	16.4%	8.4%	2.9%	2775

This table contains the same information as Table 3.7a, but depicts the percent of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

Table 3.8 The table below shows how long a patient is waiting from the initial call (either REMSA call ringing, PSAP time, or alarm time) 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 Arriving Unit		
	Patient's Perspective	Fire Dispatched First	Fire Dispatched Second
1	0:05:16	0:05:12	0:05:22
2	0:05:36	0:05:30	0:05:46
3	0:05:53	0:05:52	0:05:54
9	0:06:11	0:06:06	0:06:52
All	0:05:28	0:05:22	0:05:37

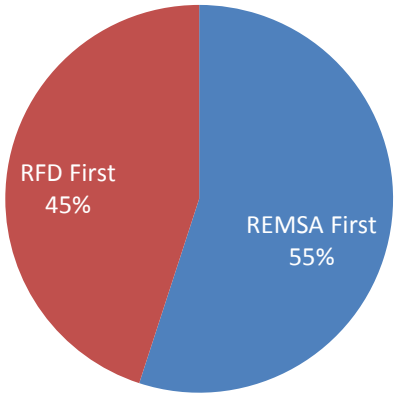
The patient's median wait time increases by 0:15 seconds when fire is not being dispatched first.

Statistical Information regarding calls when RFD is dispatched second. The number of calls relevant to this analysis is 2,409 (40.8% of all calls) for Q4.

Table 3.9 Jurisdictional information that indicates the first responding unit on scene

First on Scene	Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	726	58.7%	488	55.7%	103	35.9%	8	80.0%	1325	55.0%
TMFPD First	510	41.3%	388	44.3%	184	64.1%	2	20.0%	1084	45.0%
Total	1236	100.0%	876	100.0%	287	100.0%	10	100.0%	2409	100.0%

REMSA & RFD Arrival on Scene First, Calls when RFD Dispatched Second



REMSA & RFD Calls by Priority, Calls when RFD Dispatched Second

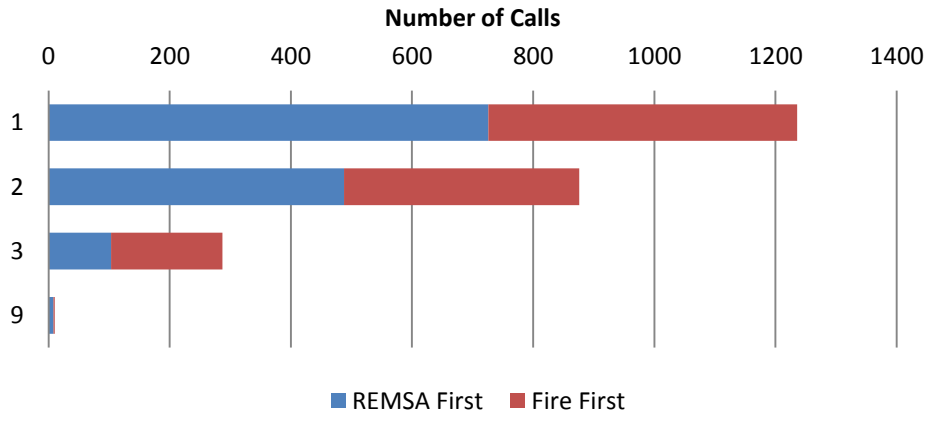


Table 3.10a Frequency of minutes/seconds between REMSA dispatching and RFD dispatching to an EMS call

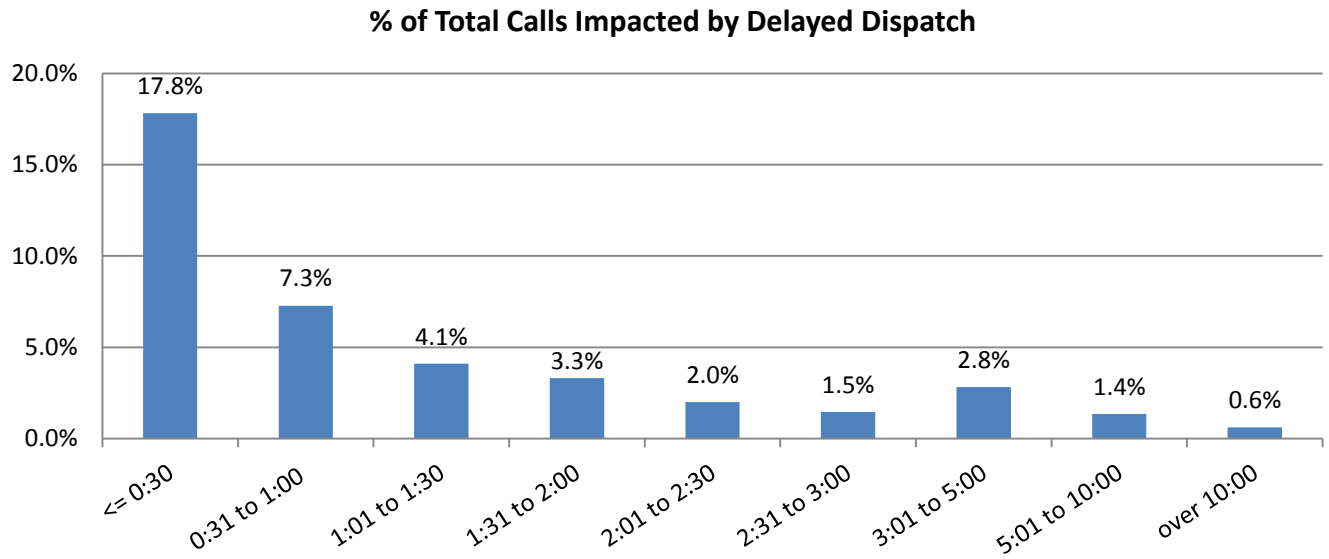


Table 3.10b Call volume breakdown by minutes/seconds:

Time in Delay	# of calls	%
<= 0:30	1053	17.8%
0:31 to 1:00	430	7.3%
1:01 to 1:30	242	4.1%
1:31 to 2:00	196	3.3%
2:01 to 2:30	118	2.0%
2:31 to 3:00	86	1.5%
3:01 to 5:00	167	2.8%
5:01 to 10:00	80	1.4%
over 10:00	37	0.6%

Total number of calls with a dispatch delay over 1 minute was 926, which represents 15.7% of all matched calls for service.

Table 3.11 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
Priority 1	3030 (51.3%)	1236 (51.3%)	466 (50.3%)
Priority 2	2143 (36.3%)	876 (36.4%)	356 (38.4%)
Priority 3	682 (11.6%)	287 (12.0%)	100 (10.8%)
Priority 9 (Omega)	51 (<1.0%)	10 (<1.0%)	4 (<1.0%)
Total Calls	5906	2409	926

The above table indicates slightly over half (51.3%) of all matched calls were P1, 36.3% were P2, 11.6% were P3 and <1.0% were P9 (Omega) calls for RFD. Calls with delayed dispatch were similar in nature, with very few differences among priority of calls being impacted by a dispatch delay over 1 minute.

Unincorporated Washoe County

SUMMARY:

In Quarter 4 (Q4), Truckee Meadows Fire Protection District (TMFPD) matched 1,557 medical calls for service, which was 98.1% of the EMS calls. However, Q4 used 1,383 (87.1%) of calls for analysis. The data indicates TMFPD arriving prior to REMSA overall 72.8% 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.

Dispatchers are notified of an incident prior to REMSA 76.5% of the time, while TMFPD is dispatched 65.1% of the time prior to a REMSA ambulance. The potential impacts of delayed impact on the system are demonstrated in Tables 4.7-4.11.

The overall median response time for TMFPD was 6:09 minutes (Table 4.4 for priority breakdown).The median overall response time for REMSA responding to incidents in unincorporated Washoe County was 9:36 minutes (Table 4.5 for priority breakdown).

Table 4.7 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 EMS unit. In unincorporated Washoe County, the patient's median wait time increases by 0:54 seconds when fire is not dispatched first.

The second set of analyses explores only those calls when TMFPD is dispatched second, which occurred 34.9% of the time during Q4. TMFPD arrives first 63.8% of the time and 12.8% 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: Number of calls per each REMSA defined priority used in this analysis

REMSA Priority	#	%
1	635	45.9%
2	479	34.6%
3	243	17.6%
9 (Omega)	26	1.9%
Total	**1383**	**100.0%**

Table 4.1: Call response using median time for each time stamp. The initial call (IC) time was calculated using either REMSA call pick up time or PSAP time, if there was no PSAP time available, then Fire Alarm time was used to determine which agency was notified of an incident first.

REMSA Priority	Median Time from Initial Call (IC) to Dispatch and On Scene			
	IC to Fire Dispatch	IC to REMSA Clock Start	IC to Fire Arrival	IC to REMSA Clock Stop
1	0:00:56	0:01:06	0:07:35	0:10:22
2	0:00:56	0:01:10	0:07:31	0:11:12
3	0:00:54	0:01:06	0:07:53	0:12:46
9	0:01:08	0:02:37	0:08:06	0:14:28
All	0:00:56	0:01:08	0:07:35	0:10:59

For all calls the median time from the initial call to TMFPD dispatch is 00:56 seconds, for REMSA Dispatch (clock start) is 01:08 minutes, TMFPD's median arrival time is 07:35 minutes after the initial call and REMSA's median arrival time is 10:59 minutes after the initial call. PSAP time was only reported for May and June, therefore Alarm time was utilized as the earliest known time stamp for TMFPD incidents in April.

Table 4.2a: The frequency PSAP is notified or fire is alarmed, prior to REMSA being notified of an incident.

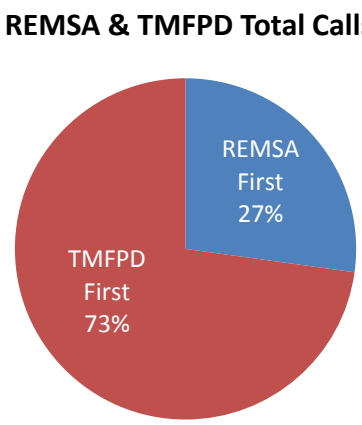
Fire Alarm First	#	%
No	325	23.5%
Yes	1058	76.5%

Table 4.2b: The frequency fire dispatches a unit prior to REMSA clock start.

Fire Dispatch First	#	%
No	483	34.9%
Yes	900	65.1%

Table 4.3: Jurisdictional information that indicates the first responding unit on scene.

First on Scene	Priority REMSA									
	1		2		3		9 (Omega)		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	204	32.1%	127	26.5%	41	16.9%	4	15.4%	376	27.2%
TMFPD First	431	67.9%	352	73.5%	202	83.1%	22	84.6%	1007	72.8%
Total	635	100.0%	479	100.0%	243	100.0%	26	100.0%	1383	100.0%



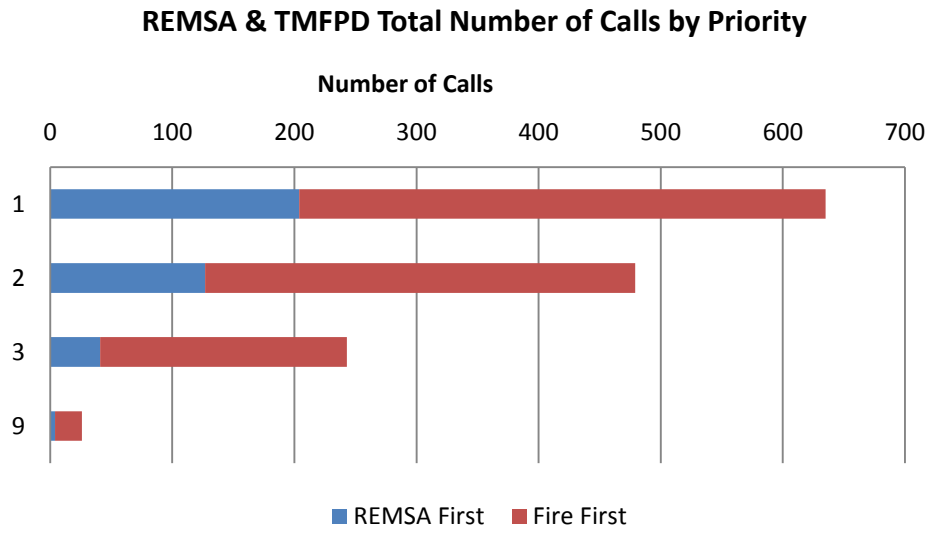


Table 4.4 Dispatch time – on-scene difference for TMFPD

REMSA Priority	Median	Mean	Max
1	0:06:07	0:07:17	0:38:44
2	0:06:06	0:07:06	0:34:53
3	0:06:21	0:07:09	0:45:02
9	0:06:33	0:07:43	0:20:13
All	0:06:09	0:07:12	0:45:02

Day (6am-6pm)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:05:59	0:07:07	0:38:44
2	0:05:44	0:06:46	0:34:53
3	0:06:02	0:07:06	0:29:17
9	0:06:37	0:08:12	0:16:48
All	0:05:58	0:07:00	0:38:44

Night (6pm-6am)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:06:21	0:07:31	0:35:15
2	0:06:39	0:07:37	0:28:22
3	0:06:32	0:07:12	0:45:02
9	0:06:27	0:07:24	0:20:13
All	0:06:30	0:07:30	0:45:02

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

Table 4.5 Clock start – clock stop difference for REMSA

REMSA Priority	Median	Mean	Max
1	0:08:59	0:09:56	0:41:00
2	0:09:22	0:10:39	1:17:28
3	0:11:47	0:13:31	1:01:05
9	0:12:10	0:12:45	0:30:00
All	0:09:36	0:10:52	1:17:28

Day (6am-6pm)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:09:09	0:10:01	0:41:00
2	0:09:44	0:10:52	0:44:18
3	0:12:10	0:14:03	1:01:05
9	0:09:52	0:11:42	0:28:00
All	0:09:44	0:11:03	1:01:05

Night (6pm-6am)			
REMSA Priority	**Median**	**Mean**	**Max**
1	0:08:42	0:09:48	0:31:33
2	0:08:59	0:10:20	1:17:28
3	0:10:58	0:12:42	0:36:52
9	0:12:35	0:13:25	0:30:00
All	0:09:16	0:10:35	1:17:28

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

Table 4.6a Time difference between arrivals, TMFPD first

All REMSA Priorities (P1, P2, P3 & P9/Omega) Included								
Incident District Number	Time Intervals when TMFPD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total Number of Calls	Median	Max
TM13	21.7%	26.1%	14.5%	23.2%	14.5%	**69**	0:03:13	0:37:08
TM14	20.0%	33.3%	20.0%	18.3%	8.3%	**60**	0:02:51	0:27:42
TM15	16.4%	26.6%	27.2%	25.9%	3.9%	**305**	0:03:34	0:23:40
TM16	0.0%	10.0%	8.0%	24.0%	58.0%	**50**	0:10:37	0:27:06
TM17	5.8%	12.8%	25.5%	42.4%	13.6%	**243**	0:05:41	0:34:19
TM18	1.8%	7.1%	8.0%	50.4%	32.7%	**113**	0:07:41	0:38:01
TM30	12.5%	6.3%	6.3%	25.0%	50.0%	**16**	0:10:11	0:31:51
TM35	17.5%	25.0%	20.0%	30.0%	7.5%	**40**	0:03:40	0:15:54
TM36	9.3%	14.8%	18.5%	38.9%	18.5%	**54**	0:05:42	0:17:28
TM37	7.9%	21.1%	13.2%	36.8%	21.1%	**38**	0:05:55	0:15:07
TM39	0.0%	0.0%	22.2%	33.3%	44.4%	**9**	0:09:43	0:40:43
TM41	0.0%	25.0%	0.0%	0.0%	75.0%	**4**	0:13:51	0:16:12
TM43	0.0%	50.0%	0.0%	0.0%	50.0%	**2**	0:16:11	0:30:24
Other	0.0%	25.0%	25.0%	50.0%	0.0%	**4**	0:05:20	0:07:57
Total	**10.9%**	**19.2%**	**20.6%**	**33.2%**	**16.2%**	**1007**	**0:04:58**	**0:40:43**

This table depicts the proportion of calls and the difference (in minutes) for arrival at an incident location, when TMFPD arrives before REMSA, as well as the median and maximum times before a REMSA unit arrives. Incident location is defined as "Incident District Number", not the station responding.

The following tables show the same information as above, split by each of the priorities

Incident District Number	Priority 1 Calls, Time Intervals when TMFPD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total Number of Calls	Median	Max
TM13	4	10	2	5	1	**22**	0:02:41	0:10:11
TM14	6	8	7	3	0	**24**	0:02:24	0:06:11
TM15	25	40	40	28	1	**134**	0:03:10	0:10:53
TM16	0	3	3	6	17	**29**	0:10:33	0:21:06
TM17	8	16	35	42	4	**105**	0:04:42	0:19:55
TM18	1	3	4	22	19	**49**	0:07:10	0:16:13
TM30	1	0	1	2	4	**8**	0:08:45	0:16:04
TM35	4	6	3	3	1	**17**	0:02:37	0:10:23
TM36	2	4	4	7	2	**19**	0:04:31	0:12:30
TM37	2	6	3	5	3	**19**	0:04:15	0:15:07
TM39	0	0	1	1	1	**3**	0:09:43	0:14:21
TM41	0	0	0	0	1	**1**	0:11:33	0:11:33
Other	0	0	0	1	0	**1**	0:07:57	0:07:57
Total	**53**	**96**	**103**	**125**	**54**	**431**	**0:04:17**	**0:21:06**

Incident District Number	Priority 2 Calls, Time Intervals when TMFPD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total Number of Calls	Median	Max
TM13	6	4	5	10	7	**32**	0:05:23	0:37:08
TM14	5	5	3	5	1	**19**	0:02:47	0:15:51
TM15	16	31	29	28	6	**110**	0:03:35	0:22:37
TM16	0	1	1	4	7	**13**	0:10:28	0:17:49
TM17	4	10	20	29	12	**75**	0:05:33	0:25:15
TM18	1	2	4	24	10	**41**	0:07:41	0:38:01
TM30	1	1	0	2	3	**7**	0:09:40	0:31:41
TM35	2	2	3	4	0	**11**	0:03:47	0:08:07
TM36	2	1	4	11	4	**22**	0:06:28	0:17:05
TM37	1	1	1	4	4	**11**	0:07:15	0:11:29
TM39	0	0	1	2	1	**4**	0:07:44	0:23:32
TM41	0	1	0	0	1	**2**	0:09:36	0:16:12
TM43	0	1	0	0	1	**2**	0:16:11	0:30:24
Other	0	1	1	1	0	**3**	0:04:54	0:05:46
Total	**38**	**61**	**72**	**124**	**57**	**352**	**0:05:06**	**0:38:01**

Incident District Number	Priority 3 Calls, Time Intervals when TMFPD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total Number of Calls	Median	Max
TM13	4	3	3	1	2	**13**	0:02:22	0:26:36
TM14	1	6	2	3	4	**16**	0:04:48	0:27:42
TM15	9	10	14	21	4	**58**	0:04:19	0:23:40
TM16	0	1	0	1	5	**7**	0:13:21	0:27:06
TM17	1	3	6	30	15	**55**	0:08:11	0:34:19
TM18	0	3	1	9	7	**20**	0:08:11	0:29:59
TM30	0	0	0	0	1	**1**	0:31:51	0:31:51
TM35	1	2	2	4	2	**11**	0:05:47	0:15:54
TM36	1	3	2	3	3	**12**	0:04:49	0:17:28
TM37	0	1	1	4	1	**7**	0:07:02	0:11:38
TM39	0	0	0	0	1	**1**	0:16:34	0:16:34
TM41	0	0	0	0	1	**1**	0:16:09	0:16:09
Total	**17**	**32**	**31**	**76**	**46**	**202**	**0:06:33**	**0:34:19**

Incident District Number	Priority 9/Omega Calls, Time Intervals when TMFPD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total Number of Calls	Median	Max
TM13	1	1	0	0	0	**2**	0:01:20	0:02:07
TM14	0	1	0	0	0	**1**	0:01:37	0:01:37
TM15	0	0	0	2	1	**3**	0:08:13	0:11:55
TM16	0	0	0	1	0	**1**	0:08:19	0:08:19
TM17	1	2	1	2	2	**8**	0:05:39	0:13:47
TM18	0	0	0	2	1	**3**	0:09:25	0:11:06
TM35	0	0	0	1	0	**1**	0:08:49	0:08:49
TM36	0	0	0	0	1	**1**	0:12:38	0:12:38
TM37	0	0	0	1	0	**1**	0:09:07	0:09:07
TM39	0	0	0	0	1	**1**	0:40:43	0:40:43
Total	**2**	**4**	**1**	**9**	**6**	**22**	**0:08:16**	**0:40:43**

Table 4.7a Number of calls, Time difference between arrivals, REMSA first

Priority	Time Interval when REMSA arrives First							
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total	Median	Max
1	69	66	34	30	5	204	0:01:50	0:14:02
2	42	38	22	19	6	127	0:02:17	0:25:13
3	12	17	5	6	1	41	0:01:53	0:17:00
9	2	2	0	0	0	4	0:00:50	0:02:52
Total	125	123	61	55	12	376	0:02:04	0:25:13

This table depicts the time difference (in minutes) for arrival at call destination, when REMSA arrives before TMFPD, as well as the median and maximum times before a TMFPD unit arrives.

Table 4.7b Percent of calls, Time difference between arrivals, REMSA first

Priority	Time Interval when REMSA arrives First					
	< 1 min	1:01-3 mins	3:01-5 mins	5:01-10 mins	10 + mins	Total
1	33.8%	32.4%	16.7%	14.7%	2.5%	**204**
2	33.1%	29.9%	17.3%	15.0%	4.7%	**127**
3	29.3%	41.5%	12.2%	14.6%	2.4%	**41**
9	50.0%	50.0%	0.0%	0.0%	0.0%	**4**
Total	33.2%	32.7%	16.2%	14.6%	3.2%	**376**

This table contains the same information as Table 4.7a, but depicts the percent of calls within each identified time frame that correspond to the difference of arrival time between agencies when REMSA arrives first.

Table 4.8 The table below shows how long a patient is waiting from the initial call (either REMSA call ringing, PSAP time, or alarm time) 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 Arriving Unit		
	Patient's Perspective	Fire Dispatched First	Fire Dispatched Second
1	0:06:46	0:06:39	0:07:22
2	0:06:48	0:06:44	0:07:16
3	0:07:22	0:06:59	0:08:29
9	0:07:12	0:07:00	0:11:49
All	0:06:52	0:06:43	0:07:37

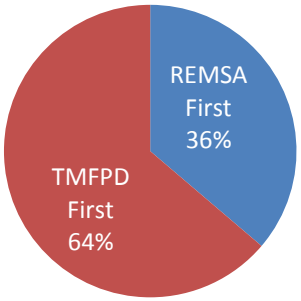
The patient's median wait time increases by 0:54 seconds when fire is not being dispatched first.

Statistical Information regarding calls when TMFPD is dispatched second. The number of calls relevant to this analysis is 483 (34.9% of all calls) for Q4.

Table 4.9 Jurisdictional information that indicates the first responding unit on scene

First on Scene	Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	95	41.3%	61	37.9%	18	20.5%	1	25.0%	175	36.2%
TMFPD First	135	58.7%	100	62.1%	70	79.5%	3	75.0%	308	63.8%
Total	230	100.0%	161	100.0%	88	100.0%	4	100.0%	483	100.0%

REMSA & TMFPD Arrival on Scene First, Calls when TMFPD Dispatched Second



REMSA & TMFPD Calls by Priority, Calls when TMFPD Dispatched Second

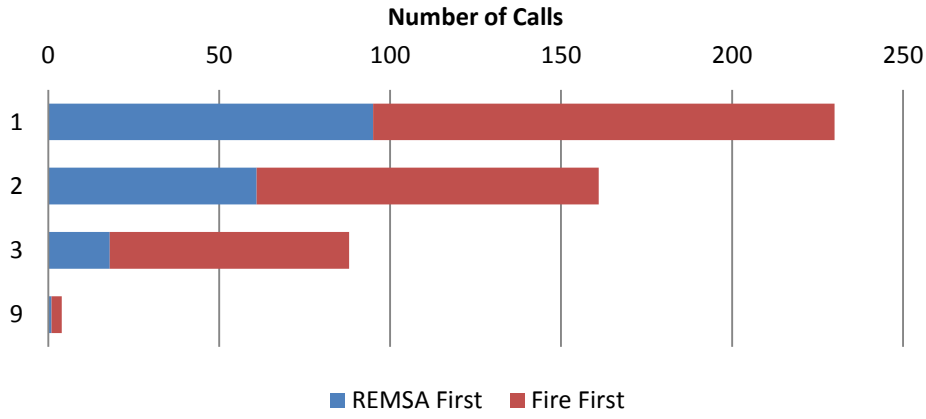


Table 4.10a Frequency of minutes/seconds between REMSA dispatching and TMFPD dispatching to an EMS call

% of Total calls Impacted by Delayed Dispatch

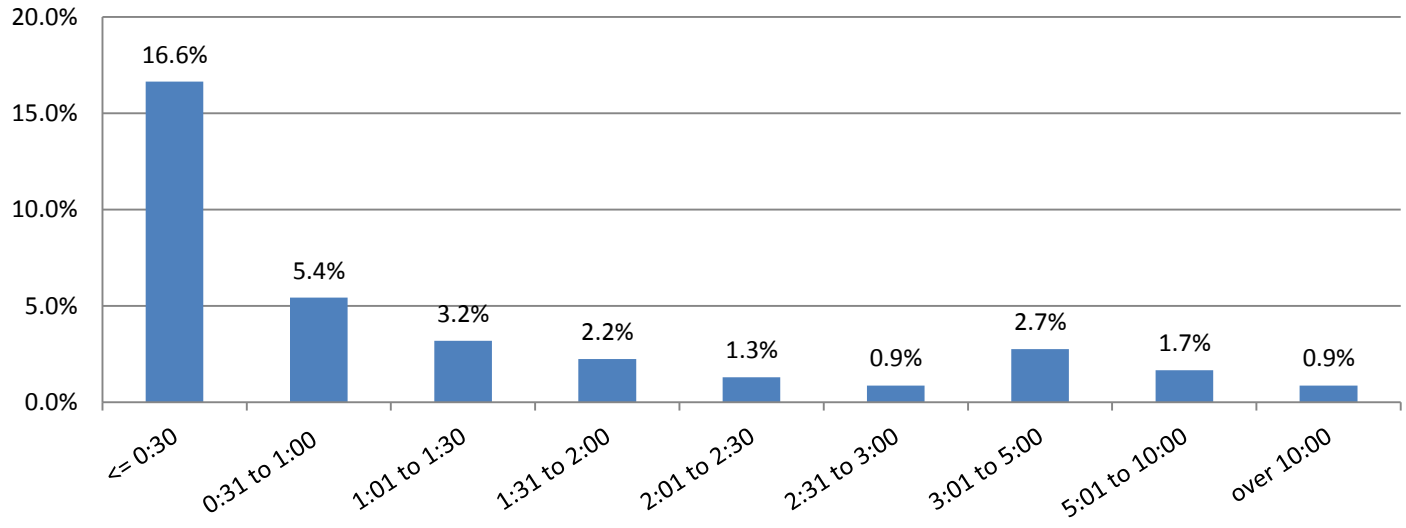


Table 4.10b Call volume breakdown by minutes/seconds:

Time in Delay	# of Calls	% of Total Calls
<= 0:30	230	16.6%
0:31 to 1:00	75	5.4%
1:01 to 1:30	44	3.2%
1:31 to 2:00	31	2.2%
2:01 to 2:30	18	1.3%
2:31 to 3:00	12	0.9%
3:01 to 5:00	38	2.7%
5:01 to 10:00	23	1.7%
over 10:00	12	0.9%

Total number of calls with a dispatch delay over 1 minute was 178, which represents 12.8% of all matched calls for service.

Table 4.11 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
Priority 1	635 (45.9%)	230 (47.6%)	75 (42.1%)
Priority 2	479 (34.6%)	161 (33.3%)	68 (38.2%)
Priority 3	243 (17.6%)	88 (18.2%)	32 (17.9%)
Priority 9 (Omega)	26 (1.9%)	4 (<1.0%)	3 (1.6%)
Total Calls	1383	483	178

The above table indicates 45.9% of all matched calls were P1, 34.6% were P2, 17.6% were P3 and 1.9% were P9 (omega) calls for TMFPD. Calls with delayed dispatch problems were similar in nature, however slightly higher proportion of P2 calls are being impacted by a dispatch delay over 1 minute.

Appendix A: Special Study Areas

REMSA

SUMMARY:

The following three tables are summaries of REMSA's 15,211 total P1, P2, and P3 calls for service during Quarter 4. Priority 9/omega calls were reported separately from P1-P3 calls and do not contain Zone information, therefore are not included in the following three tables below. P9/Omega calls are examined in the following REMSA subsection.

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.

REMSA Priority	Number of Calls	% of Calls	% Resulting in Transport*
P1	5,922	38.9%	69.2%
P2	6,344	41.7%	52.4%
P3	2,945	19.4%	66.8%
All Priorities	**15,211**	**100.0%**	**61.7%**

**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 classified in each of the REMSA Response Zones and what proportion of calls for each priority result in a transport.

REMSA Response Zone	Number of Calls	% of Calls	% of Calls per Zone Resulting in Transport*
Zone A	13,993	92.0%	62.1%
Zone B	646	4.2%	57.9%
Zone C	403	2.6%	62.3%
Zone D	16	0.1%	68.8%
Zone E	153	1.0%	41.8%
All Zones	**15,211**	**100.0%**	**61.7%**

**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 is a detailed table of all of REMSA's Priority 1, 2, and 3 calls for service which were reported to the EMS Oversight Program during Q4.

Zone	Priority	Calls For Service	Calls For Service % by Zone	Cancel Enroute	Cancel At Scene	Calls Resulting in Transport	% Calls Resulting in Transport	Transport % by Zone	Total # Units Transporting	Avg Response Time	Avg Call Duration Non TX	Avg Call Duration TX
ZONE A	1	5431	35.70%	67	1596	3767	69.36%	40.13%	3800	00:05:37	00:08:53	00:43:24
	2	5852	38.47%	236	2513	3102	53.01%	33.04%	3172	00:06:24	00:11:36	00:33:01
	3	2710	17.82%	84	810	1819	67.12%	19.38%	1820	00:09:21	00:09:28	00:42:14
Total ZONE A		**13993**	**91.99%**	**387**	**4919**	**8688**	**62.09%**	**92.54%**	**8792**	**00:07:07**	**00:09:59**	**00:39:33**
ZONE B	1	237	1.56%	7	69	161	67.93%	1.71%	167	00:09:34	00:10:18	00:50:47
	2	262	1.72%	31	109	122	46.56%	1.30%	123	00:09:55	00:13:18	00:35:17
	3	147	0.97%	20	36	91	61.90%	0.97%	92	00:13:29	00:08:42	00:47:10
Total ZONE B		**646**	**4.25%**	**58**	**214**	**374**	**57.89%**	**3.98%**	**382**	**00:10:59**	**00:10:46**	**00:44:25**
ZONE C	1	181	1.19%	11	37	133	73.48%	1.42%	135	00:13:31	00:08:36	00:58:19
	2	151	0.99%	25	54	72	47.68%	0.77%	72	00:14:16	00:16:52	00:39:18
	3	71	0.47%	14	11	46	64.79%	0.49%	46	00:16:38	00:09:10	00:55:45
Total ZONE C		**403**	**2.65%**	**50**	**102**	**251**	**62.28%**	**2.67%**	**253**	**00:14:48**	**00:11:33**	**00:51:07**
ZONE D	1	5	0.03%	0	2	3	60.00%	0.03%	3	00:14:26	00:21:35	00:44:24
	2	8	0.05%	1	2	5	62.50%	0.05%	5	00:10:47	00:08:48	00:49:07
	3	3	0.02%	0	0	3	100.00%	0.03%	3	00:17:41	00:00:00	01:33:44
Total ZONE D		**16**	**0.11%**	**1**	**4**	**11**	**68.75%**	**0.12%**	**11**	**00:14:18**	**00:10:08**	**01:02:25**
ZONE E	1	68	0.45%	14	18	34	50.00%	0.36%	38	00:23:25	00:20:44	00:50:44
	2	71	0.47%	23	26	21	29.58%	0.22%	22	00:22:21	00:22:13	00:33:16
	3	14	0.09%	2	3	9	64.29%	0.10%	9	00:31:22	00:12:40	01:15:01
Total ZONE E		**153**	**1.01%**	**39**	**47**	**64**	**41.83%**	**0.68%**	**69**	**00:25:43**	**00:18:32**	**00:53:00**
Total		15211	100%	535	5286	9388	61.72%	100%	9507	00:14:35	00:12:12	00:50:06

Priority 9/Omega Calls

In 2011, the International Academy of Emergency Dispatch (IAED) included Omega codes within the fourth pillar of their approved EMD protocols for Emergency Communication Nurses. This is termed the Omega determinant. The Omega determinant was designed to identify patients who may safely be transferred to an alternative care resource, like a Nurse Health Line, rather than receive an ambulance response.

As part of the effort to establish an Omega protocol in the region, REMSA has been reporting and reviewing calls which would be determined Omegas through the EMD questioning process. A total of 539 P9/Omega calls were reported to the EMS Program during Q4. Of those 18 were training calls, and 115 were duplicate calls to the same incident, leaving 406 Priority 9/Omega calls to match to a fire agency.

The following table shows a breakdown of all P9 calls for reported for Q4.

Month	Total Calls	Transport (%)
April	142	97 (68.3%)
May	128	92 (71.9%)
June	136	92 (67.6%)
Total	**406**	**281 (69.2%)**

The following table shows the incident dispositions for all P9 calls reported for Q4.

Incident Disposition	Number (%)
Calls Complete	387 (95.3%)
Transport by Ambulance	281
Patient AMA	83
No Medical Complaint	19
No Patient Found	4
Calls Cancelled	19 (4.7%)
Cancelled by Caller/Requestor	7
Cancelled by Fire	11
Cancelled Other	1

City of Sparks, Zone 5.1

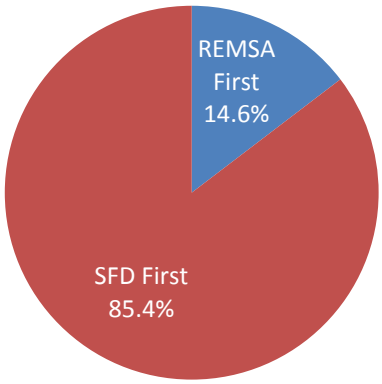
SUMMARY:

For Quarter 4, 41 calls for service were matched with REMSA for analysis. Fire arrived on scene first 85.4% of the time.

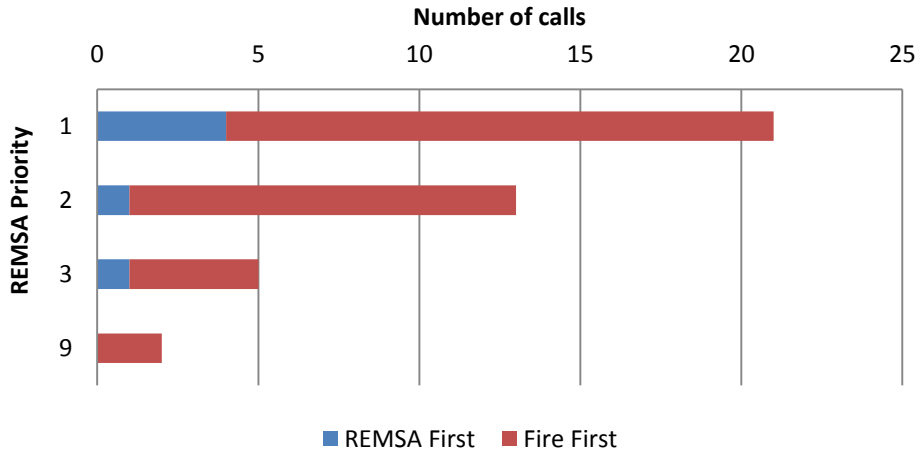
Special study area response information that indicates the first responding unit on scene

First on Scene	Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	4	19.0%	1	7.7%	1	20.0%	0	0.0%	6	14.6%
SFD First	17	81.0%	12	92.3%	4	80.0%	2	100.0%	35	85.4%
Total	21	100.0%	13	100.0%	5	100.0%	2	100.0%	41	100.0%

REMSA and SFD Sparks 5.1 calls



REMSA and SFD 5.1 Total Calls by Priority



The frequency SFD is alarmed prior to REMSA clock start within the special study area.

Fire Alarm First	#	%
No	9	22.0%
Yes	32	78.0%

The frequency SFD dispatches a unit prior to REMSA clock start within the special study area.

Fire Dispatch First	#	%
No	15	36.6%
Yes	26	63.4%

Dispatch time – on-scene differences for SFD

REMSA Priority	Median	Mean	Max
1	0:05:24	0:05:28	0:10:23
2	0:05:18	0:05:58	0:10:48
3	0:05:03	0:06:32	0:12:44
9	0:03:42	0:03:42	0:04:00
All	0:05:04	0:05:40	0:12:44

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

Clock start – clock stop difference for REMSA

REMSA Priority	Median	Mean	Max
1	0:09:23	0:10:22	0:18:42
2	0:10:41	0:11:42	0:23:19
3	0:11:03	0:14:54	0:32:24
9	0:18:16	0:18:16	0:29:00
All	0:09:39	0:11:44	0:32:24

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

Time differences between arrival times – SFD arrived first

Priority	Time Interval when SFD arrives First							
	<1 min	1:01-3:00 mins	3:01-5 mins	5:01-10 mins	10+ mins	Total	Median	Max
1	2	4	2	5	4	17	0:05:24	0:14:11
2	0	2	6	2	2	12	0:04:21	0:16:32
3	0	0	1	2	1	4	0:05:22	0:27:19
9	0	1	0	0	1	2	0:20:51	0:40:34
Total	2	7	9	9	8	35	0:04:56	0:40:34

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

Time differences between arrival times – REMSA arrived first

Priority	Time Interval when REMSA arrives First					
	< 1 min	1:01-3 mins	3:01-5 mins	Total	Median	Max
1	4	0	0	4	0:00:31	0:00:56
2	0	1	0	1	0:01:09	0:01:09
3	0	0	1	1	0:03:05	0:03:05
Total	4	1	1	6	0:00:48	0:03:05

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

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. Data was analyzed and color coded using the 8 minute response time standards (NFPA 1710). The tables below provide each station's median response time for all EMS calls which matched to REMSA calls for service for Quarter 4.

Station #7 had only 4 calls for service, so was not included in either of the following maps.

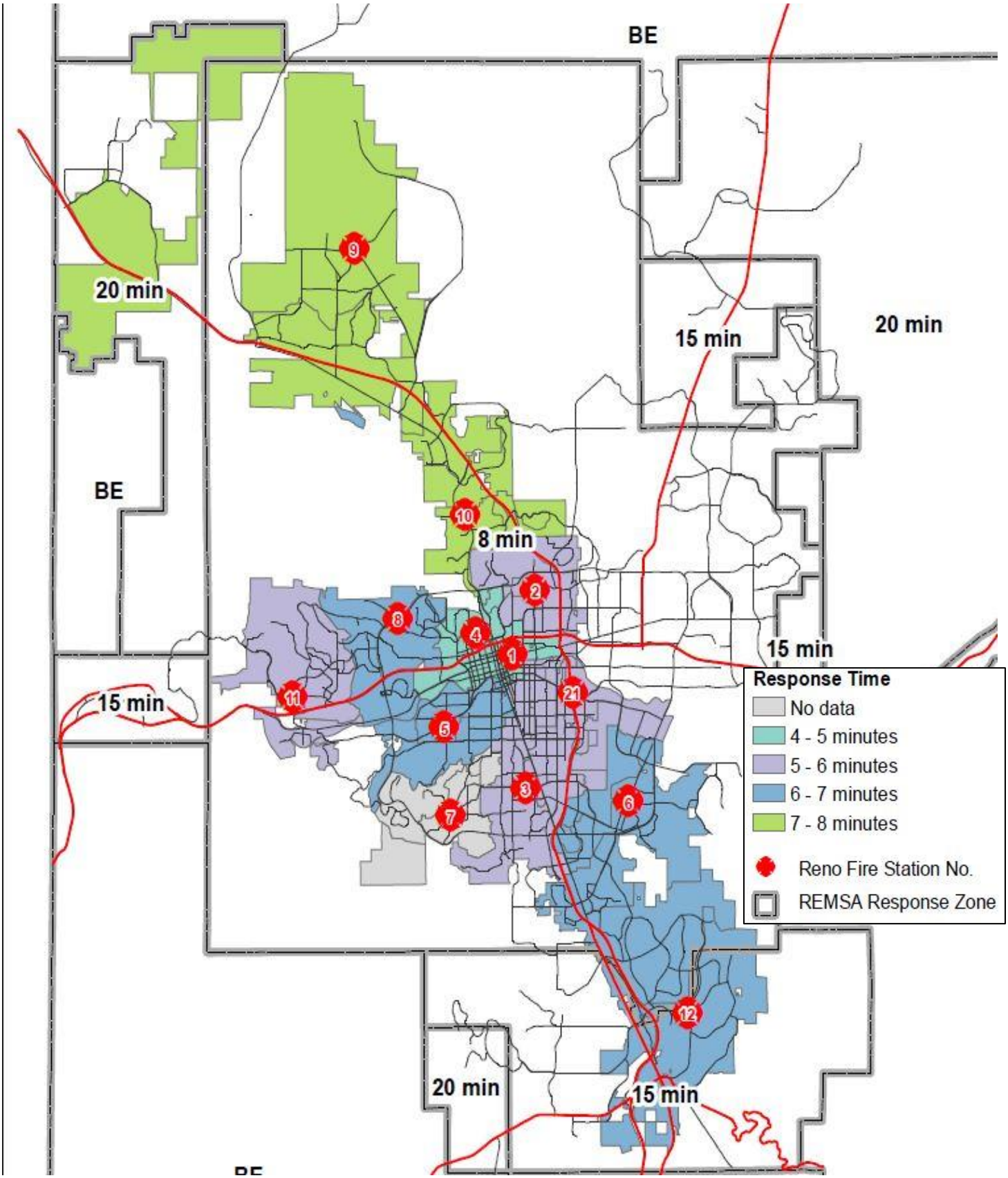
Station #9 had only 1 call out of district, so was not included in the Out of Station District map.

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	1363	91.1%	1242	0:04:15	121	0:06:20
2	485	95.5%	463	0:05:35	22	0:06:45
3	1022	93.0%	950	0:05:10	72	0:07:44
4	512	92.8%	475	0:04:58	37	0:05:40
5	311	81.7%	254	0:06:06	57	0:09:11
6	359	92.5%	332	0:06:11	27	0:07:49
7	4	25.0%	1	0:10:18	3	0:07:20
8	398	93.7%	373	0:06:10	25	0:07:54
9	270	99.6%	269	0:07:24	1	0:10:50
10	179	89.4%	160	0:07:05	19	0:08:37
11	203	70.9%	144	0:05:48	59	0:10:15
12	225	96.0%	216	0:06:49	9	0:07:57
21	571	93.7%	535	0:05:36	36	0:08:00
TOTAL	5902	91.7%	5414	0:05:22	488	0:07:44

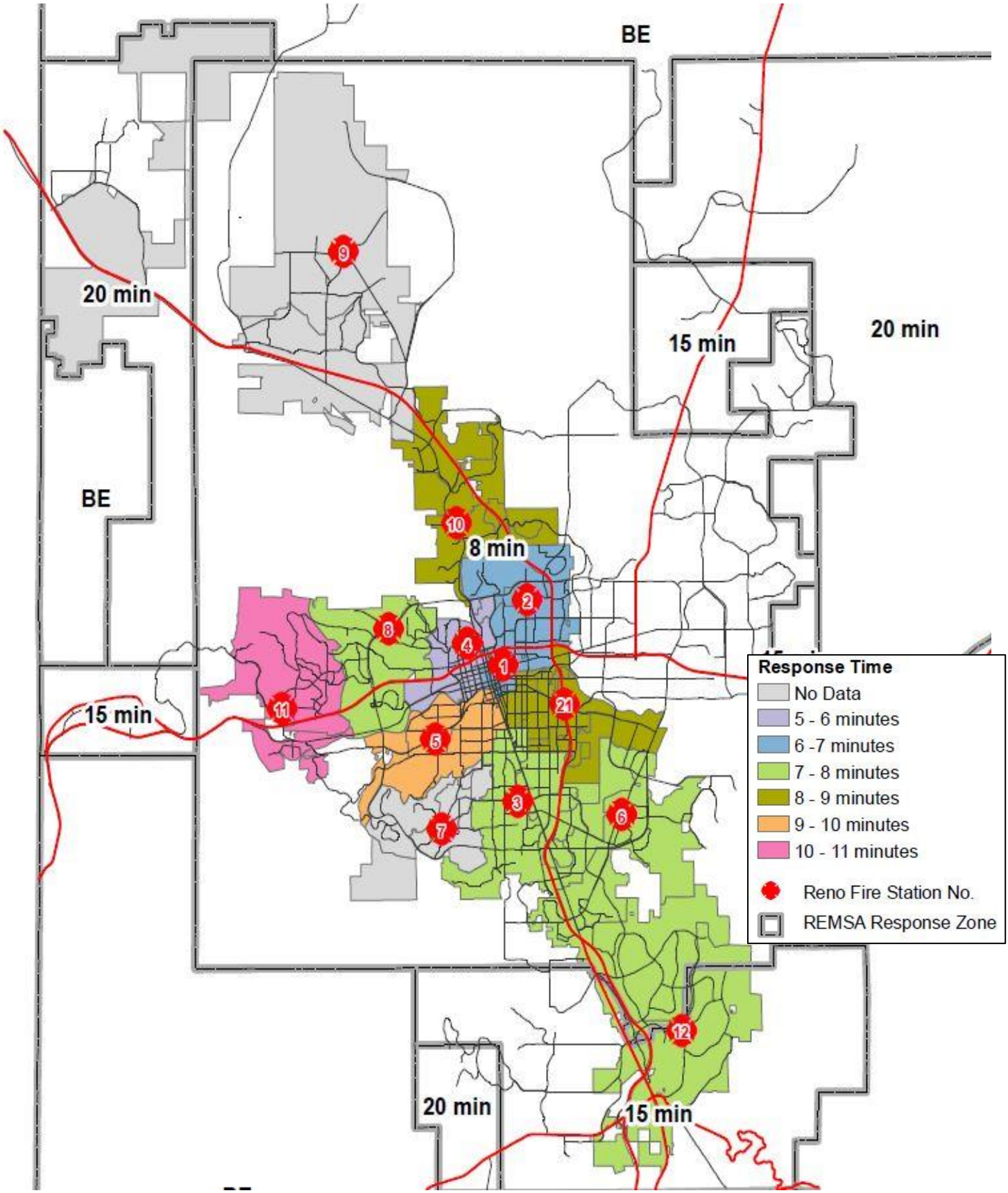
**4 calls not included because incident district number was missing*

The majority of calls for service are within each station's district (91.6%), with the exception of Station 7, ranging from 70.9% for Station #11 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.

Q4 RFD EMS Calls In District



Q4 RFD EMS Calls Out of District



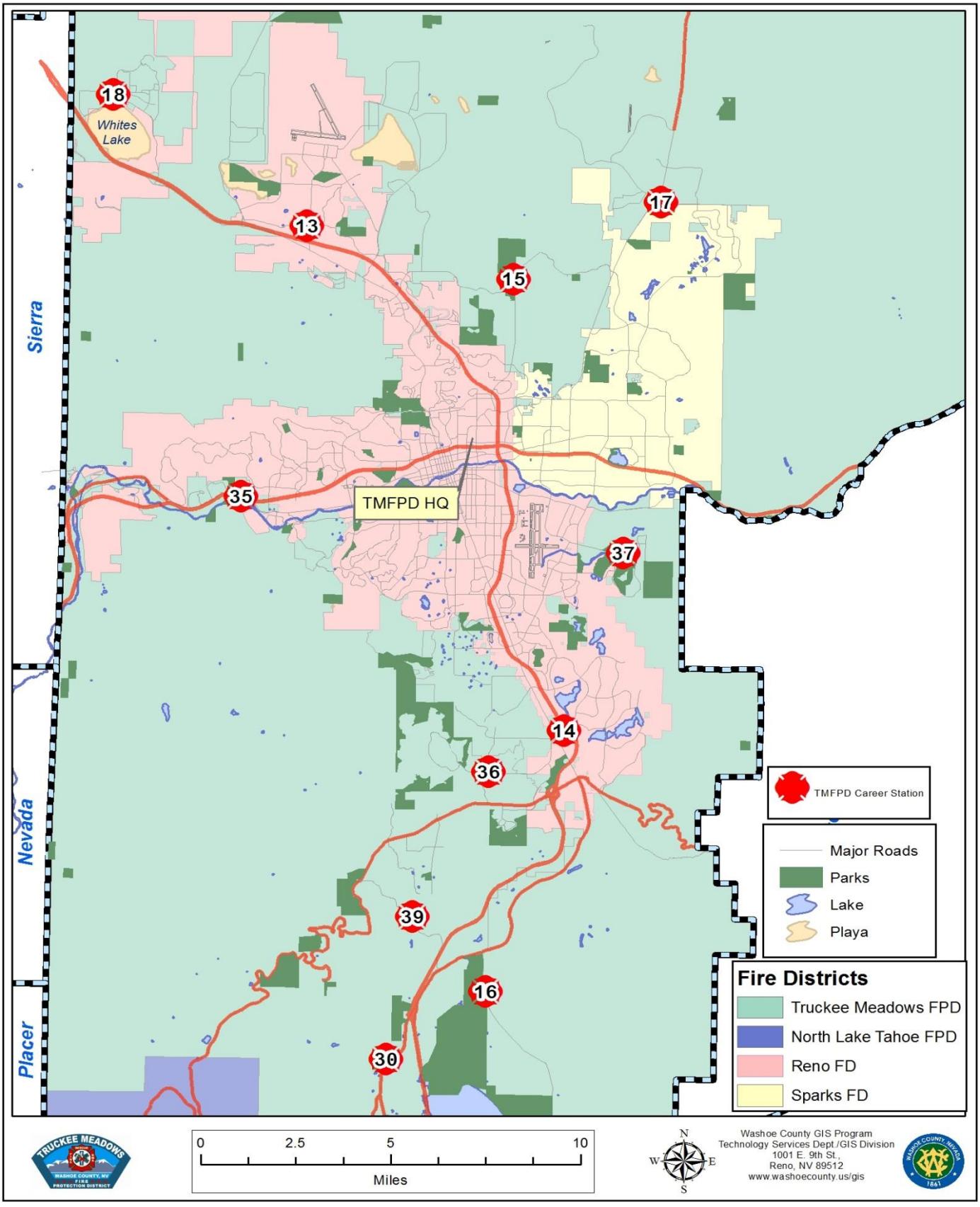
Truckee Meadows Fire Protection District

Each of Truckee Meadows Fire Protection District's stations are presented in this section and divided between North Battalion Stations and South Battalion Stations. The table below illustrates how many calls were utilized for analysis during Q4 for each station, by REMSA priority. Those rows in green correspond with North Battalion Stations, while those shaded blue correspond with South Battalion Stations. Due to the low frequency of calls (n=2) responded to by Head Quarters (HQ) this station was not included in this analysis.

Station	REMSA Priority					
	1	2	3	9	Total	%
13	67	77	22	3	169	12.2%
14	47	25	20	2	94	6.8%
15	210	156	73	5	444	32.1%
16	31	12	7	1	51	3.7%
17	131	91	61	8	291	21.0%
18	57	47	22	3	129	9.3%
30	9	9	1	0	19	1.4%
35	19	13	14	1	47	3.4%
36	25	27	14	1	67	4.8%
37	34	16	8	1	59	4.3%
39	4	5	1	1	11	0.8%
HQ*	1	1	0	0	2	0.1%
Total	**635**	**479**	**243**	**26**	**1383**	**100.0%**

**not included in this analysis*

Map of TMFPD Stations by Number



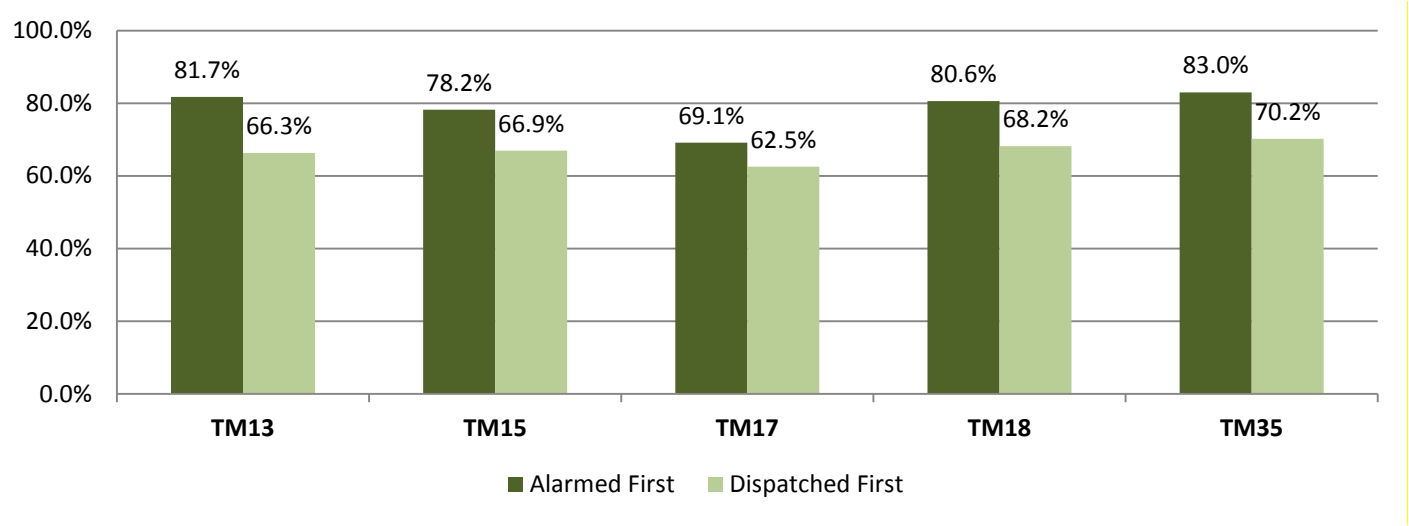
North Battalion Stations: 13, 15, 17, 18, and 35

SUMMARY:

For Quarter 4 there were 1,080 calls the North Battalion Stations responded to which were matched with REMSA and used for analysis, these include Stations 13, 15, 17, 18, and 35.

STATISTICAL INFORMATION:

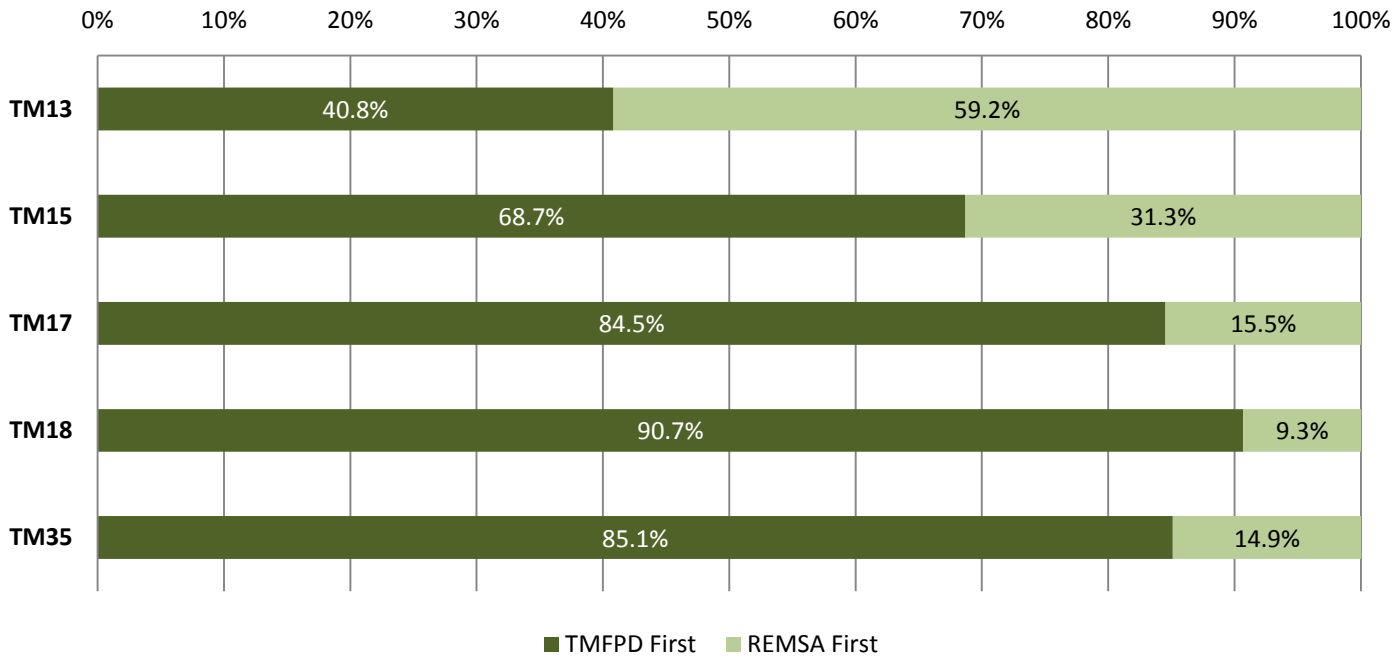
TMFPD Alarmed (using PSAP or Alarm time compared to REMSA's initial notification) and Dispatched First



Number and percent of calls when TMFPD was alarmed and dispatched prior to REMSA being notified of a call or dispatching an ambulance.

	Alarmed First		Dispatched First	
Station	**# of calls**	**% of calls**	**# of calls**	**% of calls**
TM13	138	81.7%	112	66.3%
TM15	347	78.2%	297	66.9%
TM17	201	69.1%	182	62.5%
TM18	104	80.6%	88	68.2%
TM35	39	83.0%	33	70.2%

First responding unit on scene, all calls, by station



First responding unit on scene, number of calls by agency and priority, for each North Battalion Station

First on Scene	TMFPD Station #13, Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	45	67.2%	45	58.4%	9	40.9%	1	33.3%	100	59.2%
TMFPD First	22	32.8%	32	41.6%	13	59.1%	2	66.7%	69	40.8%
Total	67	100.0%	77	100.0%	22	100.0%	3	100.0%	169	100.0%

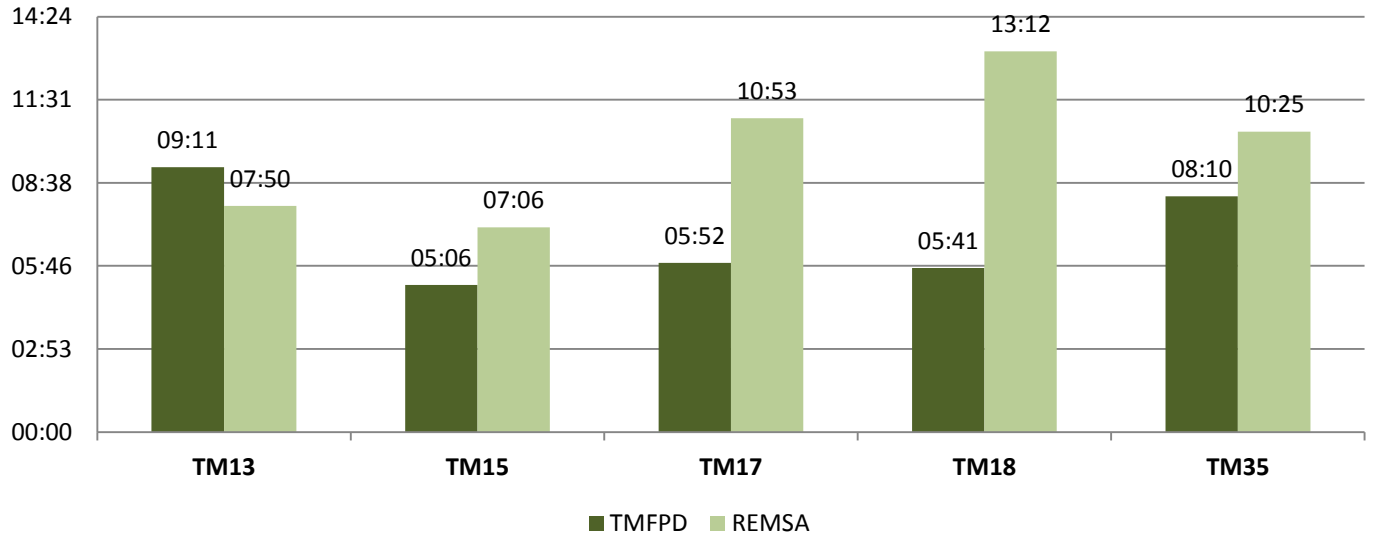
First on Scene	TMFPD Station #15, Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	76	36.2%	46	29.5%	15	20.5%	2	40.0%	139	31.3%
TMFPD First	134	63.8%	110	70.5%	58	79.5%	3	60.0%	305	68.7%
Total	210	100.0%	156	100.0%	73	100.0%	5	100.0%	444	100.0%

First on Scene	TMFPD Station #17, Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	26	19.8%	13	14.3%	6	9.8%	0	0.0%	45	15.5%
TMFPD First	105	80.2%	78	85.7%	55	90.2%	8	100.0%	246	84.5%
Total	131	100.0%	91	100.0%	61	100.0%	8	100.0%	291	100.0%

First on Scene	TMFPD Station #18, Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	7	12.3%	4	8.5%	1	4.5%	0	0.0%	12	9.3%
TMFPD First	50	87.7%	43	91.5%	21	95.5%	3	100.0%	117	90.7%
Total	57	100.0%	47	100.0%	22	100.0%	3	100.0%	129	100.0%

First on Scene	TMFPD Station #35, Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	2	10.5%	2	15.4%	3	21.4%	0	0.0%	7	14.9%
TMFPD First	17	89.5%	11	84.6%	11	78.6%	1	100.0%	40	85.1%
Total	19	100.0%	13	100.0%	14	100.0%	1	100.0%	47	100.0%

Median response times for each agency for all calls



TMFPD median and maximum response times, by responding station and priority

	TMFPD Median Response Times					
Station	**1**	**2**	**3**	**9**	**Total Calls Median**	**Maximum**
TM13	09:36	08:55	09:08	08:45	09:11	25:05
TM15	05:11	04:54	05:24	06:01	05:06	16:39
TM17	06:07	05:35	05:35	08:06	05:52	37:57
TM18	05:32	05:54	04:50	05:48	05:41	33:17
TM35	07:48	08:10	08:12	11:03	08:10	17:37

REMSA median and maximum response times, by responding station and priority

	REMSA Median Response Times					
Station	**1**	**2**	**3**	**9**	**Total Calls Median**	**Maximum**
TM13	08:06	07:33	10:28	05:00	07:50	39:35
TM15	06:44	06:49	08:39	09:48	07:06	35:31
TM17	09:57	10:53	12:57	11:44	10:53	01:05
TM18	12:21	13:56	13:37	14:02	13:12	44:18
TM35	10:04	11:12	11:11	17:39	10:25	24:51

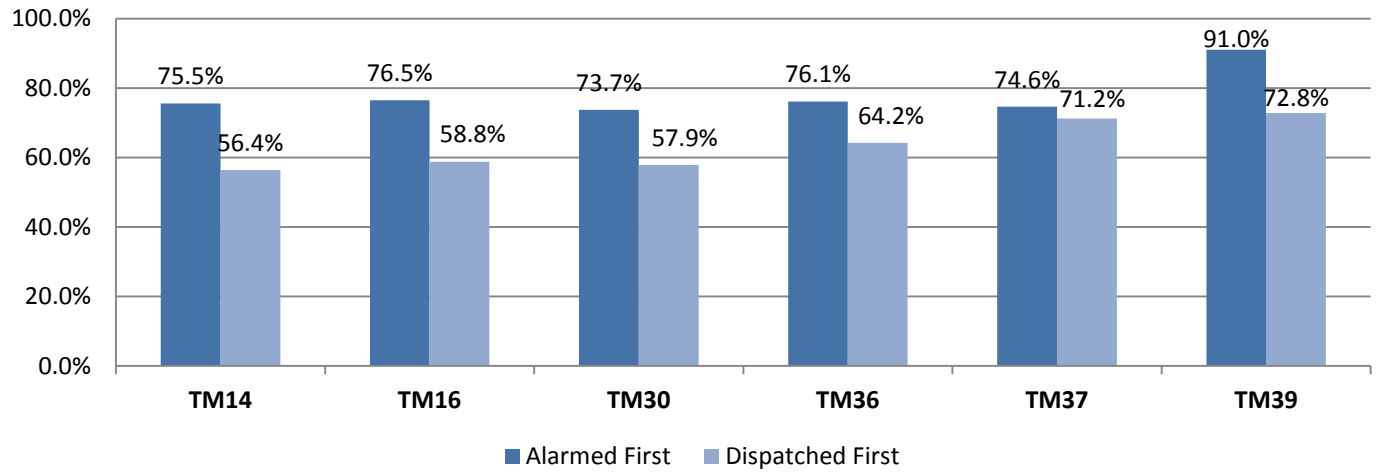
South Battalion Stations 14, 16, 30, 36, 37, & 39

SUMMARY:

For Quarter 4 there were 301 calls the South Battalion Stations responded to which were matched with REMSA and used for analysis, these include Stations 14, 16, 30, 36, 37, and 39.

STATISTICAL INFORMATION:

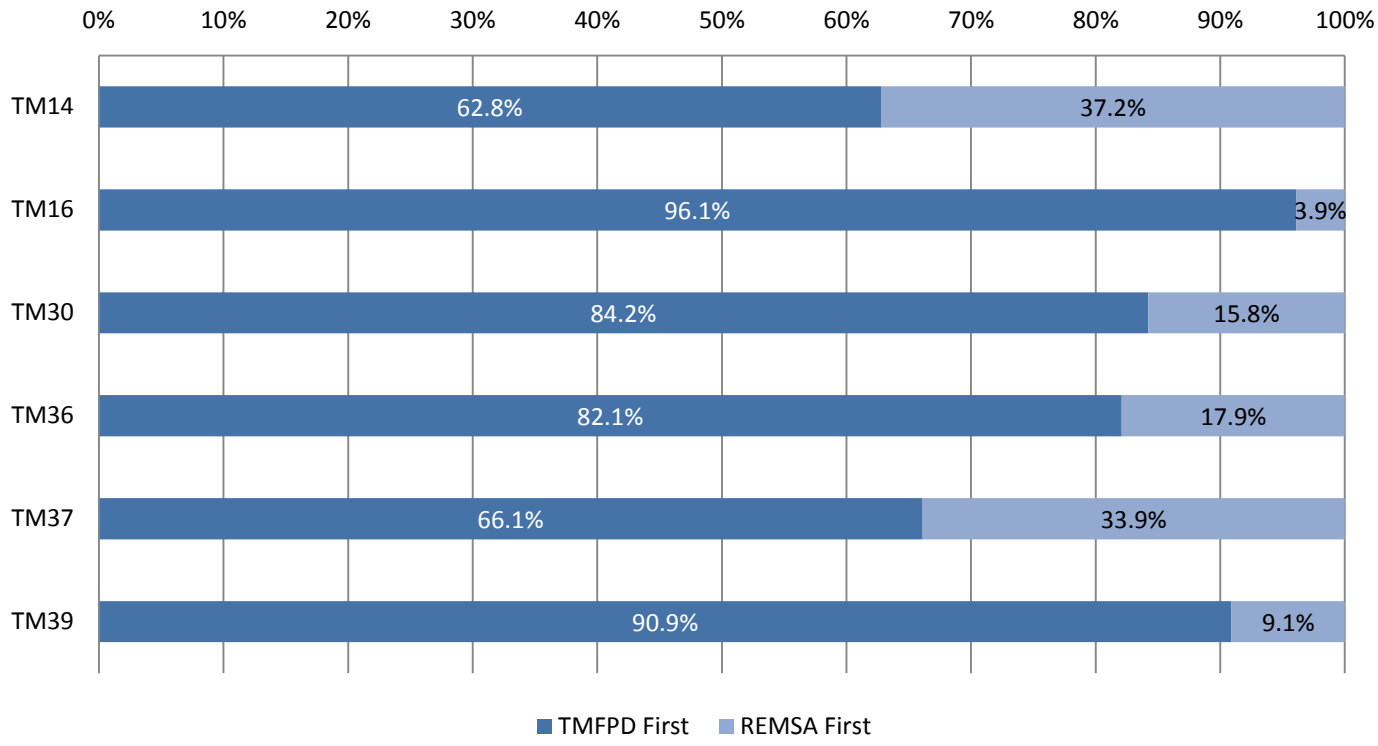
TMFPD Alarmed (using PSAP or Alarm time compared to REMSA's initial notification) and Dispatched First



Number and percent of calls when TMFPD was alarmed and dispatched prior to REMSA being notified of a call or dispatching an ambulance.

	Alarmed First		Dispatched First	
Station	**# of calls**	**% of calls**	**# of calls**	**% of calls**
TM14	71	75.5%	53	56.4%
TM16	39	76.5%	30	58.8%
TM30	14	73.7%	11	57.9%
TM36	51	76.1%	43	64.2%
TM37	44	74.6%	42	71.2%
TM39	10	91.0%	8	72.8%

First responding unit on scene, all calls, by station



First responding unit on scene, number of calls by agency and priority, for each South Battalion Station

First on Scene	TMFPD Station #14, Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	23	48.9%	8	32.0%	3	15.0%	1	50.0%	35	37.2%
TMFPD First	24	51.1%	17	68.0%	17	85.0%	1	50.0%	59	62.8%
Total	47	100.0%	25	100.0%	20	100.0%	2	100.0%	94	100.0%

First on Scene	TMFPD Station #16, Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	2	6.5%	0	0.0%	0	0.0%	0	0.0%	2	3.9%
TMFPD First	29	93.5%	12	100.0%	7	100.0%	1	100.0%	49	96.1%
Total	31	100.0%	12	100.0%	7	100.0%	1	100.0%	51	100.0%

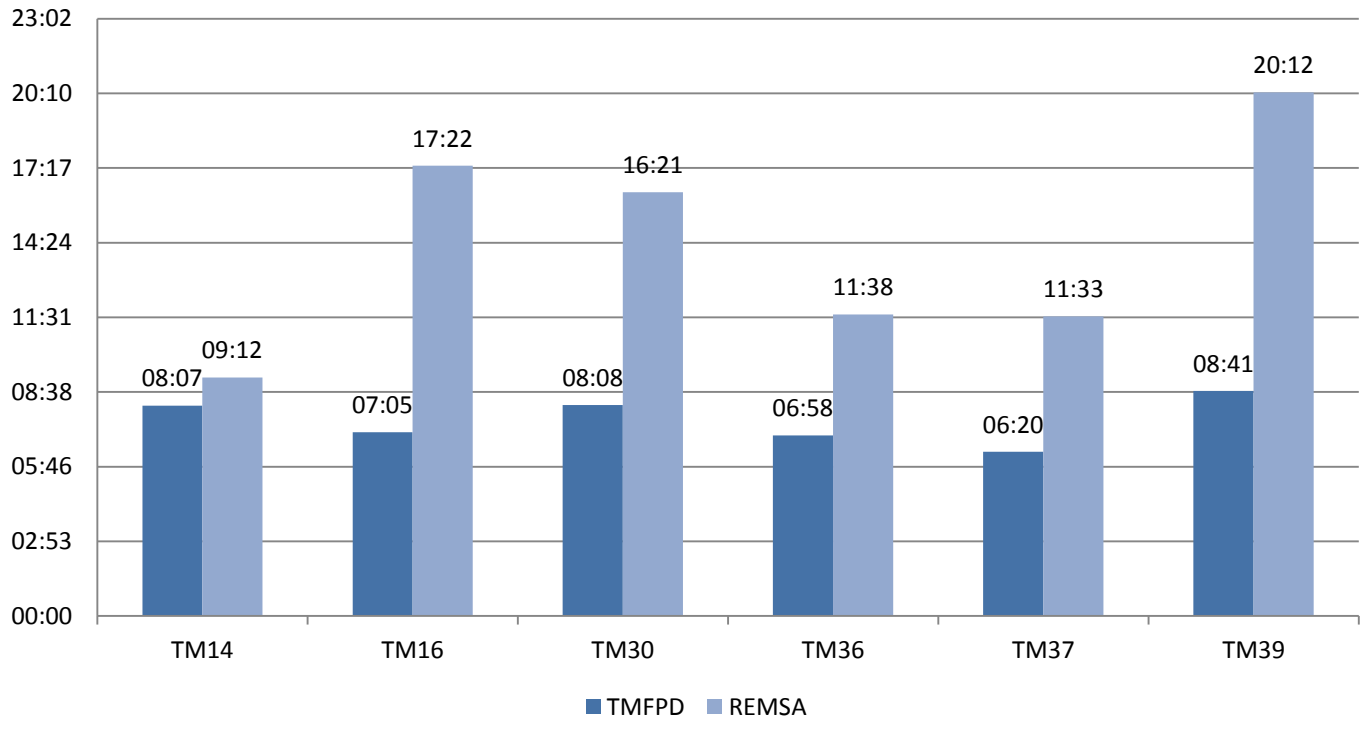
First on Scene	TMFPD Station #30, Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	1	11.1%	2	22.2%	0	0.0%	0	0.0%	3	15.8%
TMFPD First	8	88.9%	7	77.8%	1	100.0%	0	0.0%	16	84.2%
Total	9	100.0%	9	100.0%	1	100.0%	0	0.0%	19	100.0%

First on Scene	TMFPD Station #36, Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	6	24.0%	3	11.1%	3	21.4%	0	0.0%	12	17.9%
TMFPD First	19	76.0%	24	88.9%	11	78.6%	1	100.0%	55	82.1%
Total	25	100.0%	27	100.0%	14	100.0%	1	100.0%	67	100.0%

First on Scene	TMFPD Station #37, Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	15	44.1%	4	25.0%	1	12.5%	0	0.0%	20	33.9%
TMFPD First	19	55.9%	12	75.0%	7	87.5%	1	100.0%	39	66.1%
Total	34	100.0%	16	100.0%	8	100.0%	1	100.0%	59	100.0%

First on Scene	TMFPD Station #39, Priority REMSA									
	1		2		3		9		Total	
	#	%	#	%	#	%	#	%	#	%
REMSA First	1	25.0%	0	0.0%	0	0.0%	0	0.0%	1	9.1%
TMFPD First	3	75.0%	5	100.0%	1	100.0%	1	100.0%	10	90.9%
Total	4	100.0%	5	100.0%	1	100.0%	1	100.0%	11	100.0%

Median response times for each agency for all calls



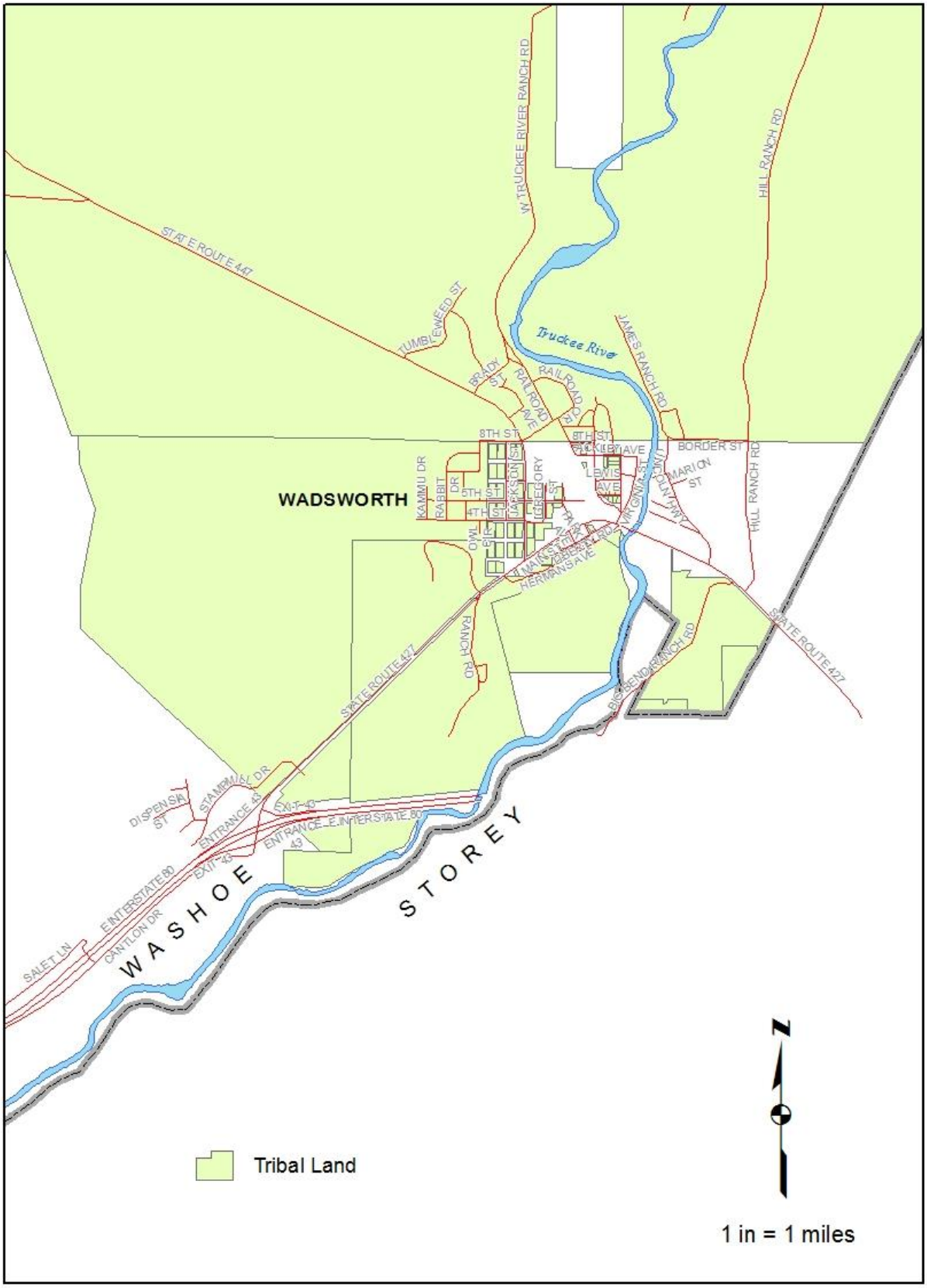
TMFPD median response times, by responding station and priority

	TMFPD Median Response Times					
Station	**1**	**2**	**3**	**9**	**Total Calls Median**	**Maximum**
TM14	08:00	08:17	08:51	08:07	08:07	0:20:43
TM16	07:01	07:13	08:49	04:23	07:05	0:12:05
TM30	08:34	08:08	05:15	--	08:08	0:16:06
TM36	06:48	06:40	08:23	07:16	06:58	0:16:57
TM37	07:12	05:42	05:50	06:35	06:20	0:45:02
TM39	09:30	07:52	07:33	16:48	08:41	0:16:48

REMSA median and maximum response times, by responding station and priority

	REMSA Median Response Times					
Station	**1**	**2**	**3**	**9**	**Total Calls Median**	**Maximum**
TM14	08:00	09:47	12:26	08:12	09:12	0:33:08
TM16	15:52	17:40	20:36	11:00	17:22	0:36:52
TM30	18:12	14:58	28:51	--	16:21	0:28:51
TM36	09:41	12:11	12:44	18:39	11:38	0:24:42
TM37	09:54	13:20	15:25	23:00	11:33	0:35:19
TM39	12:56	20:12	24:03	28:00	20:12	1:17:28

Map of Wadsworth



REMSA & TMFPD Wadsworth Calls

REMSA reported 22 calls for service in Wadsworth, NV, 9 matched to TMFPD and 6 were used for analysis in previous sections.

REMSA Wadsworth Calls				
Month	**Total REMSA Calls**	**REMSA Cancelled**	**REMSA Completed**	**REMSA Transports**
April	5	1	4	2
May	9	1	8	6
June	8	1	7	4
Total	**22**	**3 (13.6%)**	**19 (86.4%)**	**12 (54.4%)**

REMSA and TMFPD Wadsworth Calls				
Month	**Total REMSA Calls**	**Matched**	**TMFPD Cancelled**	**TMFPD Completed Call**
April	5	2	2	0
May	9	5	1	4
June	8	2	0	2
Total	**22**	**9 (40.9%)**	**3 (13.6%)**	**6 (27.3%)**

Pyramid Lake Tribal Lands

Pyramid Lake Fire & Rescue Q4 Summary

April Total of 23 calls for service

- 13 Medical + 3 motor vehicle crashes
- 2 Fires
- 1 boat rescue
- 3 training calls
- 1 service call

April Communities Served

- 9 calls in Nixon
- 12 calls in Wadsworth
- 2 calls in Sutcliffe

April Transports

- 4 Pyramid Lake Tribal members

REMSA & TMFPD Tribal Lands Q4 Summary
(non-Wadsworth calls only)

April REMSA Tribal calls:

- 3 calls to Nixon, none matched to TMFPD
  - 2 cancelled enroute
  - 1 complete
  - 0 transports

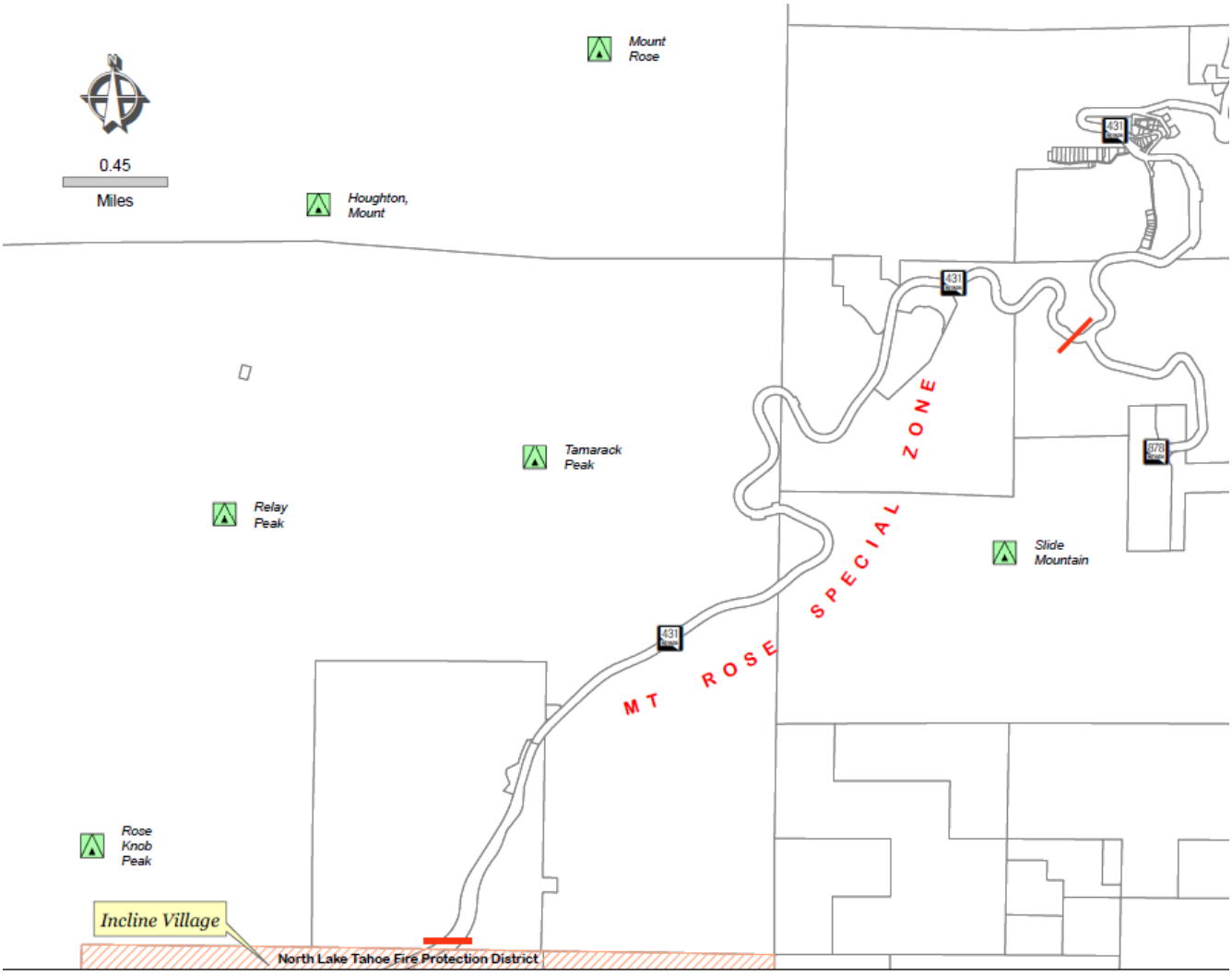
May REMSA Tribal calls:

- 4 calls to Nixon
  - 3 cancelled enroute, none matched to TMFPD
  - 1 complete
  - 0 transports
- 6 calls to Sutcliffe, 1 matched to TMFPD
  - 4 cancelled enroute
  - 1 matched to TMFPD, they were also cancelled enroute
  - 2 completed calls
  - 2 transports
- 2 calls in "Washoe County", 2 matched to TMFPD, neither agency was cancelled on either call
  - TMFPD data indicate 1 call was classified as mutual aid and the other was an automatic aid

June REMSA Tribal calls:

- 4 calls to Nixon, 1 matched to TMFPD, both REMSA and TMFPD were cancelled enroute
  - 2 cancelled enroute
  - 2 completed calls
  - 1 transport
- 6 calls to Sutcliffe, none matched to TMFPD
  - 1 cancelled enroute
  - 5 completed calls
  - 1 transport by REMSA
- 5 calls in "Washoe County", 2 matched to TMFPD
  - 1 cancelled enroute
  - 4 completed calls
  - 2 transports

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



SUMMARY:

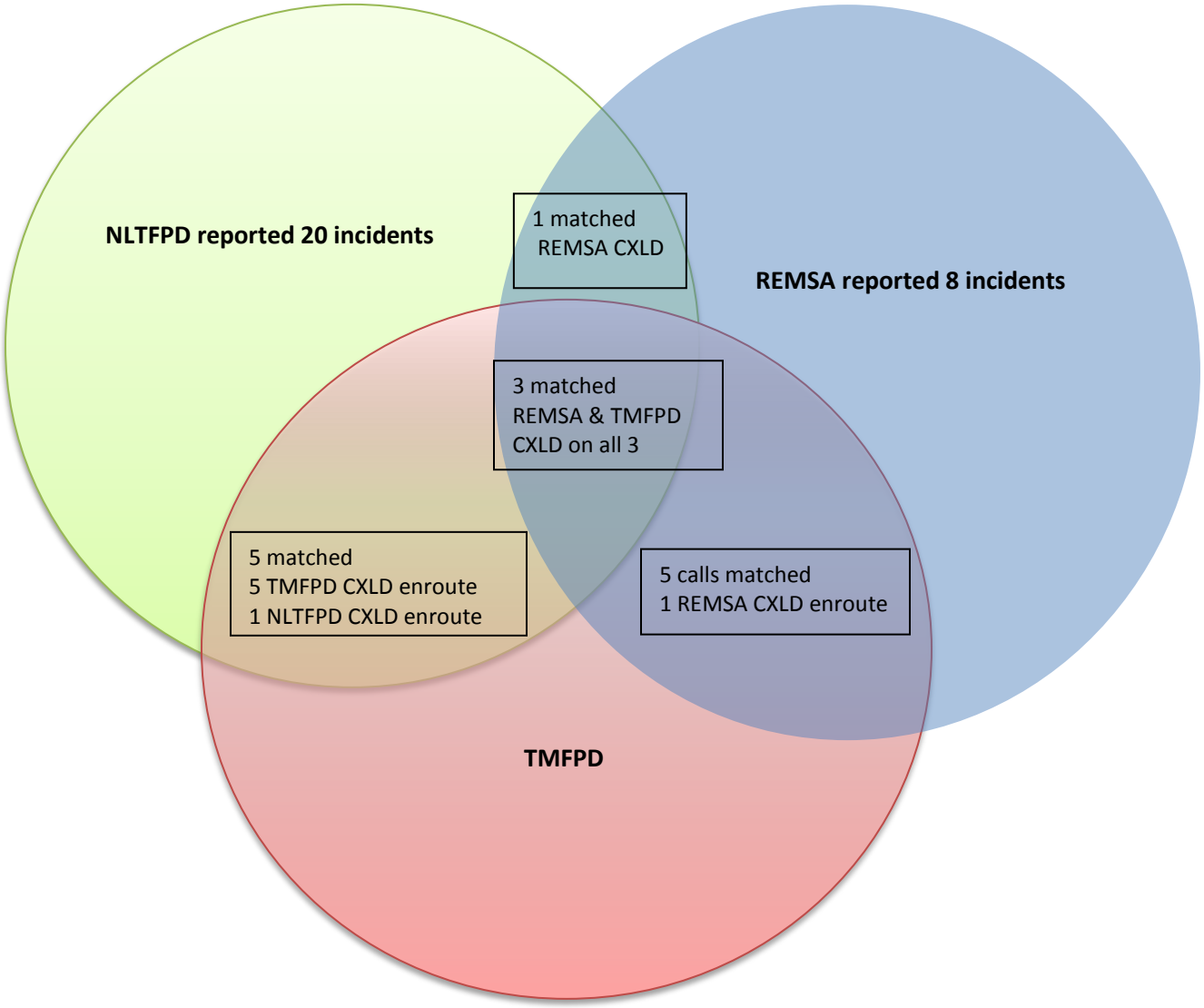
The Mount Rose corridor is the area on Highway 431 between the 2 red lines in the map above. A total of 3 calls matched to all 3 jurisdictions, TMFPD and REMSA were both cancelled enroute on all 3 calls.

REMSA

- 8 total incidents reported
  - 6 incidents REMSA cancelled enroute, the other 2 were completed
  - 4 incidents matched to NLTFPD, all 4 were incidents which REMSA cancelled enroute
  - None of the 2 completed incidents resulted in transport
- 5 matched to TMFPD (62.5% of REMSA calls), all 5 were incidents which TMFPD cancelled enroute
  - 1 of those both REMSA and TMFPD both cancelled enroute
- 1 call was used for analysis in previous sections, since neither TMFPD nor REMSA were cancelled enroute

NLTFPD

- 20 total incidents reported
- 8 matched to TMFPD (40.0% of NLTFPD calls), TMFPD was cancelled enroute on all 8 calls
  - 5 matched to TMFPD, but not to REMSA



Reno Tahoe Airport Authority

SUMMARY:

There were 77 known calls to the Reno Tahoe International Airport (RTIA) during Quarter 4 as reported by REMSA (n=67) and Reno Tahoe Airport Authority (RTAA) (n=62), of those 52 calls matched. The matched calls represent 77.6% of all known REMSA calls for service to the airport, and 83.8% of the RTAA's calls to REMSA for service during Q4. The table below depicts call details.

Call Details	Total Calls (% calculated using total REMSA calls, n=67)	Matched (% calculated using total number matched, n=52)	Unmatched (% calculated using total number unmatched, n=25)
REMSA calls to RTIA	62	52	15
RTAA calls to REMSA	67	52	10
Priority 1	14	14 (26.9%)	0
Priority 2	37	22 (42.3.0%)	15 (60.0%)
Priority 3	16	16 (30.8%)	0
Priority Unknown	10	0 (0.0%)	10 (40.0%)
REMSA Cancelled	14 (20.8%)	10 (19.2%)	4 (16.0%)
REMSA Median Response	06:07	06:26	04:38
REMSA Transported	15 (22.4%)	13 (25.0%)	2 (8.0%)

Appendix B: Data Changes from Quarter 3

PSAP time:

Two of the three fire jurisdictions were able to start providing PSAP data including a variable called PSAP Time, which indicates when PSAP was first notified of an incident. This helps determine if the Primary PSAP or REMSA dispatchers were notified of an incident first. The three jurisdictions providing PSAP data were not able to do so for the entire quarter, therefore PSAP data were analyzed where appropriate in Q4. When PSAP time was not available, Alarm time was utilized as the earliest notification of an incident to a fire agency.

Priority 9/OMEGA:

REMSA reported Priority 9 calls, also known as an omega call for all 3 months of Q4. A call is categorized as a Priority 9/Omega when it is determined by REMSA dispatchers there would be a more appropriate destination as an alternative to an emergency room.

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.)
Initial Call	The timestamp when a Reno, Sparks or Washoe County call taker answers the initial 9-1-1 call or when a call rings into REMSA dispatch.
(Fire) PSAP time	The timestamp when the 9-1-1 call taker answers the initial 9-1-1 call.
(Fire) Alarm time	The timestamp when the fire dispatcher is first made aware of the call.
(Fire) Dispatch time	The timestamp when 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 calculates)
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.

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

Agenda Item #9

STAFF REPORT

ADVISORY BOARD MEETING DATE: October 1, 2015

TO: EMS Advisory Board Members

FROM: Christina Conti, EMS Program Manager
775-326-6042, cconti@washoecounty.us
Heather Kerwin, EMS Statistician
775-326-6041, hkerwin@washoecounty.us

SUBJECT: Presentation, discussion and possible approval for distribution the Washoe County EMS Oversight Program Annual Data Report for FY 14 - 15.

SUMMARY

The purpose of this agenda item is to present for discussion the EMS Oversight Program Annual Data Report for FY 14-15. The Annual Report serves as a baseline document which measures the EMS system performance standards within the region.

PREVIOUS ACTION

No previous action.

This is the first Annual Report produced by the Washoe County EMS Oversight Program. The report utilizes the same calls which were matched and used for analysis during the Quarterly Reports for FY 14-15. The quarterly reports were accepted and made final December 2014 (Q1), March 2015 (Q2) and June 2015 (Q3).

BACKGROUND

An Interlocal Agreement for Emergency Medical Services Oversight (ILA) was created and signed by the City of Reno, City of Sparks, Truckee Meadows Fire Protection District, Washoe County Board of County Commissioners and the Washoe County Health District. The ILA created the Emergency Medical Services Oversight Program (EMS Program).

The Purpose of the EMS Program Annual Report is to utilize and explore the data provided from each of the signatory agencies on the ILA over the course of Fiscal Year 2014-15, July 1, 2014 through July 30, 2015. The regional partners agreed to provide the EMS Program response data on a monthly basis to be analyzed and evaluated. The analysis provided is designed to help the region make data-driven decisions on changes that could positively or negatively impact system performance.

There were eight identified tasks of the Oversight Program, two of which are addressed in the Annual Report. Those are:

- Provide a written Annual Report on the State of Emergency Medical Services to Reno, Sparks, Washoe, and REMSA covering the preceding fiscal year (July 1st to June 30th), containing measured performance in each agency including both ground and rotary wing air ambulance services provided by REMSA in Washoe County, as well as the compliance with performance measures established by the District Emergency Medical Services Oversight Program in each agency.
- Measure performance, analysis of system, data and outcomes of EMS and provide recommendations.

The EMS Program Annual Report utilizes national standards and serves as a document to help partner agencies identify opportunities for improvement related to call processing times as well as response times. Additionally this Annual Report will be utilized as a baseline to help evaluate future systematic changes and their impacts on EMS system-wide performance.

FISCAL IMPACT

There is no additional fiscal impact should the Advisory Board approve the Washoe County EMS Annual Data Report for FY 14-15.

RECOMMENDATION

Outlined in the presentation Staff recommends the Board approve the distribution of the Washoe County EMS Oversight Program Annual Data Report for FY 14-15.

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 Annual Data Report for FY 14-15.

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

Annual Oversight Data Report

A performance analysis of the EMS system in Washoe County

Washoe County Health District
Regional EMS Oversight Program
1001 E. Ninth Street
Reno, NV 89512

FY 2014- 2015
Annual Report
Issued October 2015

Introduction

The Purpose of the Washoe County Emergency Medical Services Oversight Program (EMS Program) Annual Report is to utilize and explore the data provided from each of the signatory agencies on the Interlocal Agreement for Emergency Medical Services Oversight (ILA). This report covers Fiscal Year 2014-15 (July 1, 2014 through July 30, 2015). The signatories are the City of Reno, City of Sparks, Truckee Meadows Fire Protection District, Washoe County Board of County Commissioners and the Washoe County Health District. The regional partners agreed to provide the EMS Program with response data on a monthly basis to be analyzed and evaluated. The analyses provided are designed to help the region make data-driven decisions on changes that could positively impact system performance.

Interlocal Agreement for Emergency Medical Services Oversight

The ILA specifically identified eight duties of the EMS Program, four of which relate directly to data analysis and performance measures. The quarterly reports measure each individual agency and identified special interest areas to allow for the maintenance, improvement and long range success of the Emergency Medical Services (EMS) system. The quarterly reports allow for collaboration within the region for recommendations on regional standards and protocols.

Below are the two applicable ILA duties that the annual report addresses:

a) Measure performance, analysis of system, data and outcomes of EMS and provide recommendations.

b) Provide a written Annual Report on the State of Emergency Medical Services to Reno, Sparks, Washoe, and REMSA covering the preceding fiscal year (July 1st to June 30th), containing measured performance in each agency including both ground and rotary wing air ambulance services provided by REMSA in Washoe County, as well as the compliance with performance measures established by the District Emergency Medical Services Oversight Program in each agency.

Response Time Standards

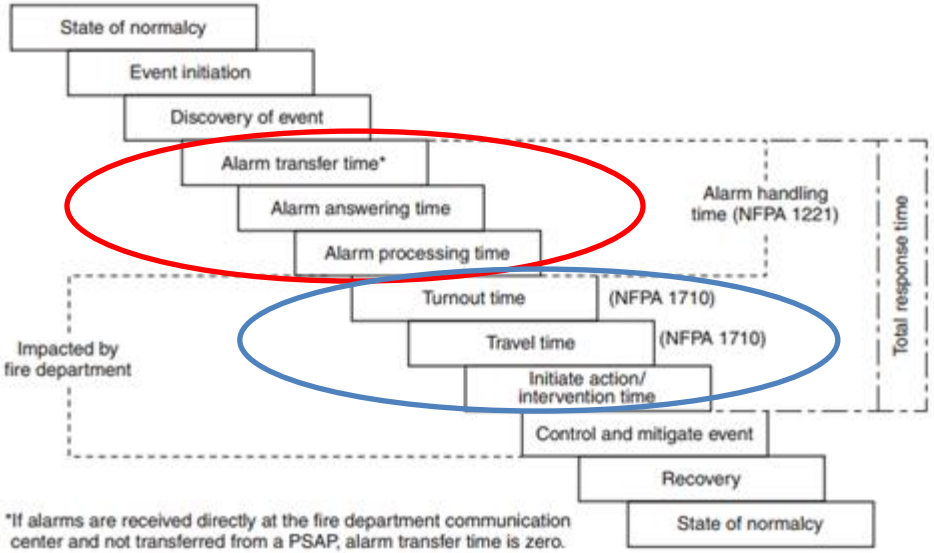
In order to appropriately measure the performance of the EMS system, national standards have been identified for Emergency Medical Services. The National Fire Protection Association (NFPA) is a global, nonprofit organization devoted to eliminating death, injury, property and economic loss due to fire, electrical and related hazards. The NFPA provided the first organized approach to defining levels of service, deployment capabilities, response times, and staff levels for substantially career fire departments. The association delivers information and knowledge through more than 300 consensus codes and standards. The NFPA is not the only public service organization that develops health and safety standards used by government. However, the NFPA is the standard Washoe County utilizes.

There are three sections of the NFPA codes and standards that provide performance measures that are applicable to the Washoe County EMS system.

- NFPA 1221 outlines phase one of the EMS system; alarm handling time, which includes alarm transfer time, alarm answering time and alarm processing time.
- NFPA 1710 outlines phase two of the EMS system, which includes turnout time and travel time.
- NFPA 1720 further outlines fire department staffing levels and response times based on a demand zone.

This annual report focuses on the standards contained within NFPA 1710 to evaluate system performance. The diagram below, from Annex A in NFPA 1710, shows the call processing and data elements that can be analyzed. The elements illustrated in the red circled area, “Alarm transfer time”, “Alarm answering time” and “Alarm processing time” were not measured for the FY 14-15. The next set of data elements in the blue circled area illustrates the fire response once notified and dispatching to an EMS call. The “Turnout time”, “Travel time” were able to be measured but “Initiate action/intervention time” was not utilized during the FY 14-15.

Figure A.3.3.53.6 Cascade of Events Chart



The standards established in NFPA 1710 Chapter 4, Section 4.1.2.1 are broken out into segments to measure various aspects of a medical fire response. The NFPA sets a standard for turnout time of 60 seconds for EMS calls. The "turnout" time for Washoe County is measured as the dispatch time to enroute time. It further establishes a standard for the travel time, which for Washoe County is measured as enroute time to on-scene time. The NFPA standard is listed as 240 seconds or less travel time for a BLS response and 480 seconds or less travel time for an ALS response. Not all incidents contain the enroute timestamp; therefore, this annual report combines the standard of 60 seconds turnout time with the 240 seconds or less travel time for a performance measure of 300 seconds, or 5 minutes.

While call processing within the PSAP is a standard within NFPA 1221, it is not a variable able to be evaluated within the FY 14-15 annual report. However, this annual report is able to review the emergency call processing time from the call being received in the REMSA Dispatch Center to ambulance assignment. NFPA 1221, Chapter 7, Section 7.4.2.2 sets a processing standard within 90

seconds 90 percent of the time, and within 120 seconds 99 percent of the time. This standard is applied for calls that require emergency medical dispatch (EMD) questioning and pre-arrival medical instructions. Therefore, for the purposes of the analysis, the data elements of REMSA call pick-up and ambulance assignment are utilized.

The Amended and Restated Franchise Agreement for Ambulance Service (Franchise Agreement) is a document used to determine REMSA's compliance. However, it also provides a level of expectation for ambulance services within the region. Article 7, section 7.1 of the Franchise Agreement defines the response zones, effective July 1, 2014, that currently regulate the ambulance response times for Zones A-E Priority 1 (P1) calls within Washoe County, excluding Gerlach and the North Lake Tahoe Fire Protection District. While the Franchise Agreement is a compliance document, it also provides a framework for system performance since Washoe County employs a two-tiered response system. The length of time a fire partner waits for ambulance arrival is already understood and known based on the regional response zones.

	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

Within the FY 14-15 annual report, the median response times for REMSA are analyzed by zone as there are 5 zones, each with different response standards. However, the fire median response times will be analyzed using the NFPA 1710 standard for response, organized by priority.

Data Limitations

Through the course of the fiscal year, the EMS Program's approach for data analysis evolved and nominally impacted the data elements available for the annual report. The enhancements were due to the quarterly report feedback from each partner agency. An annex is contained within each quarterly report that discusses data changes for that specific quarter. For the purposes of this annual report, the lack of zone information in Quarter 1 (July-September 2014) is the only data element impacted.

Annual Report Data Analysis

The following four sections review the data for the annual report. Since REMSA responds throughout the region, the first section looks only at the REMSA calls for service. The subsequent sections look at the two-tiered EMS response system for Washoe County, excluding Gerlach and the North Lake Tahoe Fire Protection District. The EMS system is designed for fire to arrive first on scene and begin treating the patient until REMSA units arrive for continued treatment and transport to a hospital for advanced care.

Section 1: REMSA Response Summary

The following section focuses on response data for REMSA. Specifically, the total number of REMSA responses used in the EMS Oversight Program Quarterly Reports and ambulance assignment data.

The tables utilize all emergency medical calls for REMSA and provide information relating to EMS calls within the REMSA Franchise service area. Table 1.1 is broken out by priority and month. The dada analysis process evolved throughout the reports, showing an increase in matches for Quarters 3 and 4. This increase is due to the eliminated initial step of excluding all cancelled enroute calls for both fire and REMSA. The number of calls used for analysis was not impacted in any quarter with this change, as cancelled calls are not measurable.

In an effort to continue to review and understand the EMS system in Washoe County and the impacts to citizens, specifically how often an ambulance is not immediately assigned to a call, the EMS Oversight Program utilized the NFPA 1221 standards to determine ambulance assignment times. Table 1.2 graphically measures all REMSA calls with respect to this performance standard. Table 1.3 depicts the median time that it takes REMSA to assign an ambulance by month. The table also shows what percentage of time REMSA met the 90 second and 120 second timeframes established by NFPA 1221.

In April 2015, REMSA began identifying calls that would meet the designation of P9/Omega as determined by the International Academy of Emergency Dispatching (IAED). This was part of the effort to establish a P9/Omega protocol for the region. REMSA began reviewing and reporting calls which would be considered Omega determinants through the EMD questions process. These calls are included throughout the data analysis, where appropriate.

Table 1.1 REMSA EMS Responses, by Month FY 14-15

	July*	August*	September*	October*	November*	December*	January	February	March	April	May	June	Total
P1	1999	1990	1949	1855	1747	1918	2014	1762	2051	1840	2053	2029	**23207**
P2	1833	1917	1730	1958	1823	1970	1928	1767	1968	1952	2223	2169	**23238**
P3	986	994	928	976	888	947	1064	914	1047	963	967	1015	**11689**
P9/Omegas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	142	128	136	**406**
Total	**4818**	**4901**	**4607**	**4789**	**4458**	**4835**	**5006**	**4443**	**5066**	**4897**	**5371**	**5349**	**58540**

**Data analysis process changed in quarter 3 to include cancelled enroute calls.*

REMSA Ambulance Assignment

Table 1.2 REMSA Ambulance Assignment, Percent of Calls Meeting Timeframe, by Month FY 14-15

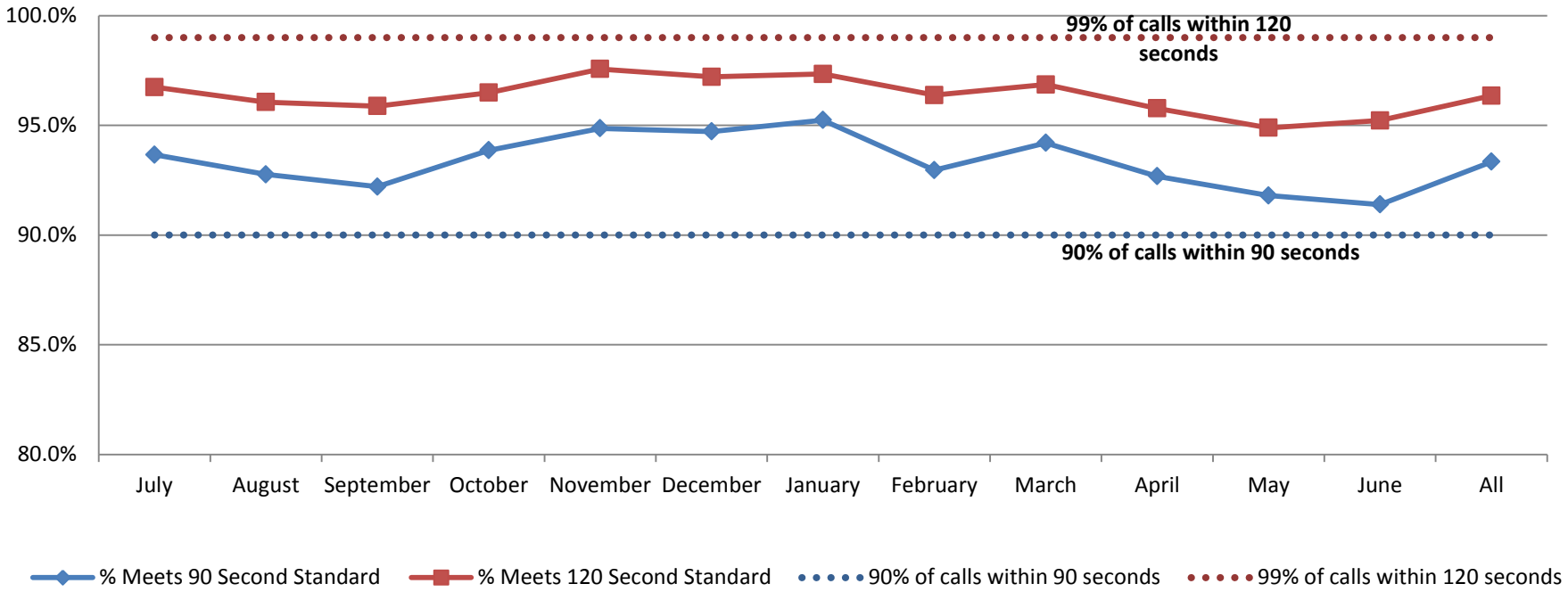


Table 1.3 REMSA Ambulance Assignment Within 90 and 120 Seconds, Median Times and Percent of Calls Meeting Standard, by Month FY 14-15													
	July	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**	**FY 14-15**
Median Time	00:29	00:28	00:28	00:27	00:28	00:28	00:27	00:28	00:29	00:31	00:29	00:31	00:29
% Meets 90 Second Timeframe	93.7%	92.8%	92.2%	93.9%	94.9%	94.7%	95.2%	93.0%	94.2%	92.7%	91.8%	91.4%	93.3%
% Meets 120 Second Timeframe	96.7%	96.1%	95.9%	96.5%	97.6%	97.2%	97.3%	96.4%	96.9%	95.8%	94.9%	95.2%	96.4%
Standard: 90% of calls have an ambulance assigned within 90 seconds Standard: 99% of calls have an ambulance assigned within 120 seconds													

Section 2: Calls Matched and Used for Analysis

This section summarizes all REMSA emergency medical calls within the region that matched to a regional fire partner in the ILA. As mentioned in Section 1, the process for matching calls changed prior to the data analysis conducted for Quarter 3 and 4. Table 2.1 below depicts the quarterly numbers and percentage of matched calls for each regional fire agency.

It is important to note that the EMS Oversight Program is unable to analyze all matched calls because the data may include duplicate records for a single incident, cancelled in enroute calls, and/or training/test calls. EMS Program staff uses a systematic process to determine the number of records that should be used to conduct analyses for each agency. This step includes the confirmation that all time stamps are available for analysis.

Once all appropriate records are removed from the full match dataset, the Program has the final used for analysis numbers for each agency. Tables 2.2 and 2.3 are the regional summaries that represent the calls per agency that were used for analysis each month of the fiscal year. All subsequent tables (2.4 – 2.9) are fire agency specific data that demonstrate the number of calls used for analysis by priority and month.

Table 2.1 All Matched Calls per Agency, by Quarter FY14-15

	RFD	SFD	TMFPD
Q1 Full Match	5375 (89.7%)	2247 (92.4%)	1613 (84.3%)
Q2 Full Match	5813 (90.5%)	2138 (92.6%)	1219 (88.1%)
Q3 Full Match	5726 (98.0%)	2135 (98.7%)	1628 (92.3%)
Q4 Full Match	6562 (99.7%)	2300 (99.4%)	1557 (98.1%)

Table 2.2 Total Number of Calls Used for Analysis per Fire Agency, by Month FY 14-15

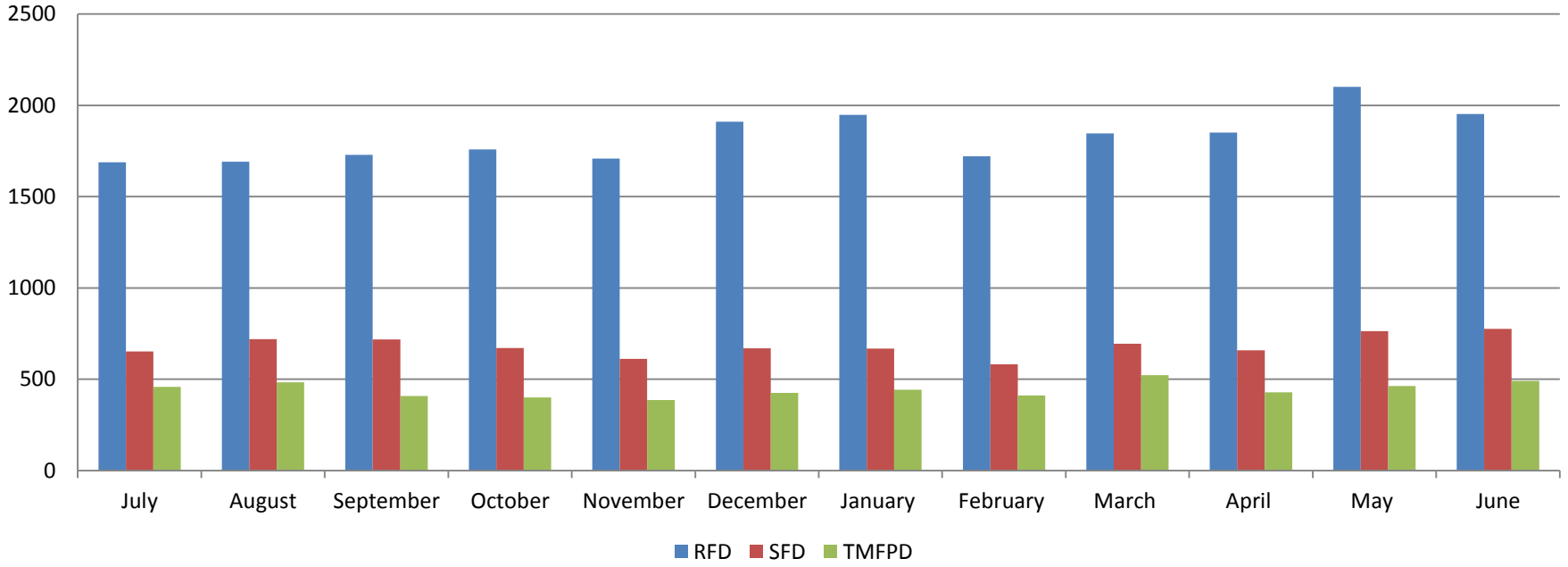


Table 2.3 Total Number of Calls Used for Analysis per Fire Agency, by Month FY 14-15													
Fire Agency	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**	**Total**
RFD	1688	1691	1729	1759	1709	1911	1948	1721	1847	1851	2102	1953	**21909**
SFD	652	720	718	671	612	669	668	582	694	659	763	776	**8184**
TMFPD	459	483	408	401	386	425	442	412	523	429	463	491	**5322**
Total	**2799**	**2894**	**2855**	**2831**	**2707**	**3005**	**3058**	**2715**	**3064**	**2939**	**3328**	**3220**	**35415**

RFD Calls Used for Analysis

Table 2.4 RFD Calls Used for Analysis All Calls (P1-P3, P9), by Priority and Month FY 14-15

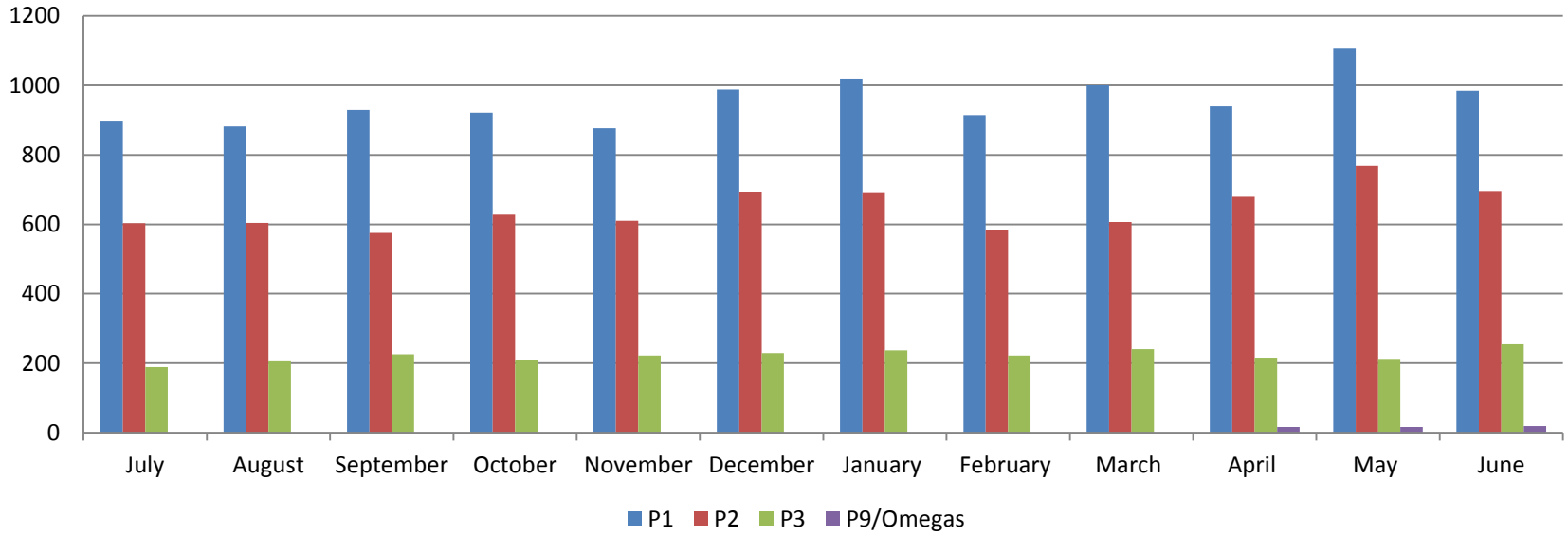


Table 2.5 RFD Calls Used for Analysis All Calls (P1-P3, P9), by Priority and Month FY 14-15													
REMSA Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**	**Total**
P1	896	882	929	921	877	988	1019	914	1000	940	1106	984	**11456**
P2	603	604	575	628	610	694	692	585	607	679	768	696	**7741**
P3	189	205	225	210	222	229	237	222	240	216	212	254	**2661**
P9/Omegas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16	16	19	**51**
Total	**1688**	**1691**	**1729**	**1759**	**1709**	**1911**	**1948**	**1721**	**1847**	**1851**	**2102**	**1953**	**21909**
N/A: The Omega determinant was not initiated until March, 2015													

SFD Calls Used for Analysis

Table 2.6 SFD Calls Used for Analysis All Calls (P1-P3, P9), by Priority and Month FY 14-15

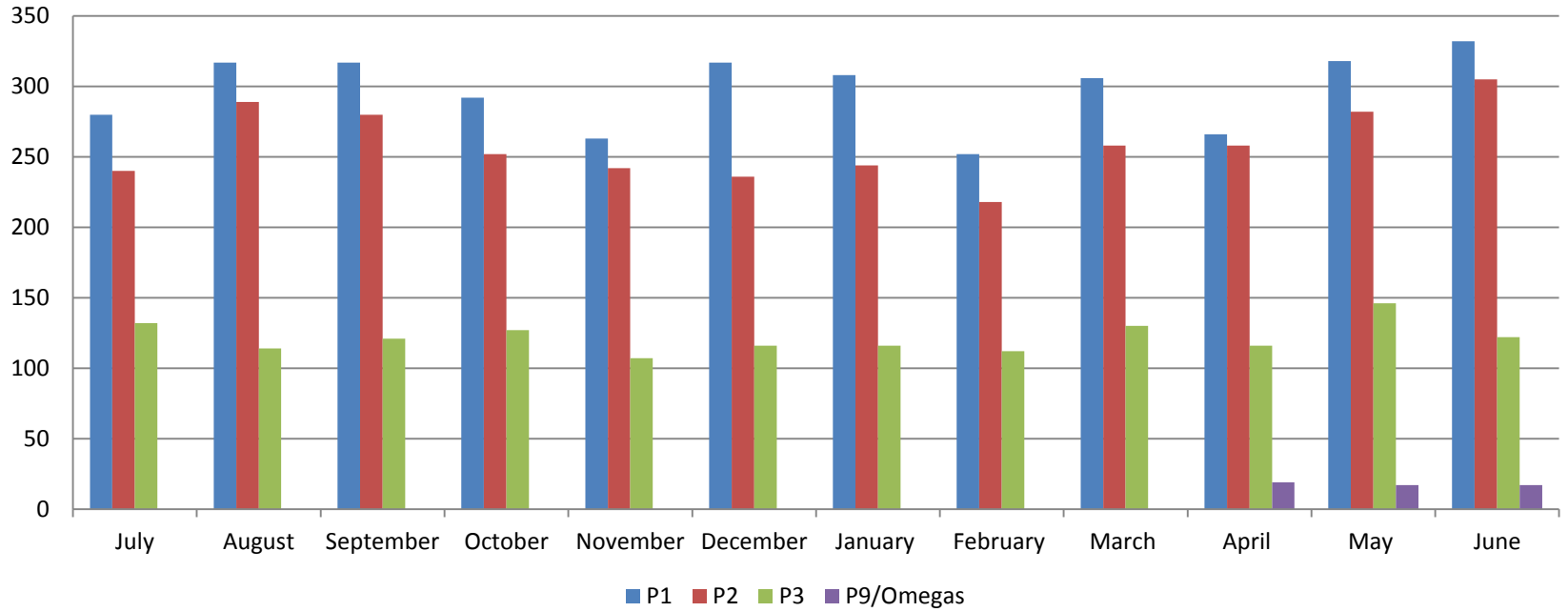


Table 2.7 SFD Calls Used for Analysis All Calls (P1-P3, P9), by Priority and Month FY 14-15													
REMSA Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**	**Total**
P1	280	317	317	292	263	317	308	252	306	266	318	332	**3568**
P2	240	289	280	252	242	236	244	218	258	258	282	305	**3104**
P3	132	114	121	127	107	116	116	112	130	116	146	122	**1459**
P9/Omegas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19	17	17	**53**
Total	**652**	**720**	**718**	**671**	**612**	**669**	**668**	**582**	**694**	**659**	**763**	**776**	**8184**
N/A: The Omega determinant was not initiated until March, 2015													

TMFPD Calls Used for Analysis

Table 2.8 TMFPD Calls Used for Analysis All Calls (P1-P3, P9), by Priority and Month FY 14-15

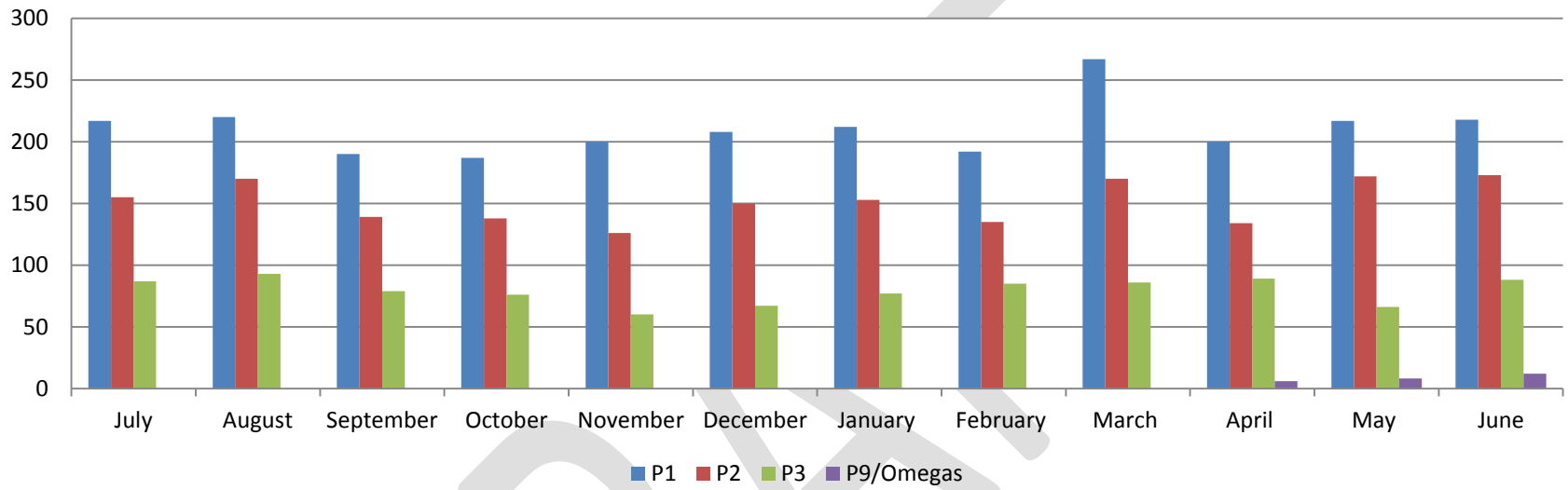


Table 2.9 TMFPD Calls Used for Analysis All Calls (P1-P3, P9), by Priority and Month FY 14-15													
REMSA Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**	**Total**
P1	217	220	190	187	200	208	212	192	267	200	217	218	**2528**
P2	155	170	139	138	126	150	153	135	170	134	172	173	**1815**
P3	87	93	79	76	60	67	77	85	86	89	66	88	**953**
P9/Omegas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6	8	12	**26**
Total	**459**	**483**	**408**	**401**	**386**	**425**	**442**	**412**	**523**	**429**	**463**	**491**	**5322**
N/A: The Omega determinant was not initiated until March, 2015													

Section 3: REMSA Median Response Times

Section 3 describes the median response times from REMSA throughout the fiscal year.

As a way to establish baseline data for the region to measure impacts, both positive and negative, the median response times for the regional agencies were reviewed. The median values provide statistical information about the median time an individual awaits a first-responder once the call is processed.

The standards utilized for REMSA are the response times assigned in the Franchise Agreement. The Franchise Agreement identifies the required time response for all P1 life threating calls. The time standards associated with the response map for Priority 2 and Priority 3 calls were defined by REMSA for the region utilizing the P1 call response time as a baseline.

These standards are listed in table 3.1 by the five response zones within REMSA's Franchise service area. The calls, used for analysis, are displayed by REMSA Zone and priority to measure performance during the fiscal year.

Table 3.1 REMSA Franchise Response Times per Zone and Priority

Priority	ZONE A	ZONE B	ZONE C	ZONE D	ZONE E
P1	8:59	15:59	20:59	30:59	Wilderness/Frontier
P2	12:59	19:59	24:59	34:59	Wilderness/Frontier
P3	19:59	24:59	29:59	39:59	Wilderness/Frontier

REMSA Zone A

Table 3.2 REMSA Median Response Times for Zone A, by Priority and Month FY 14-15

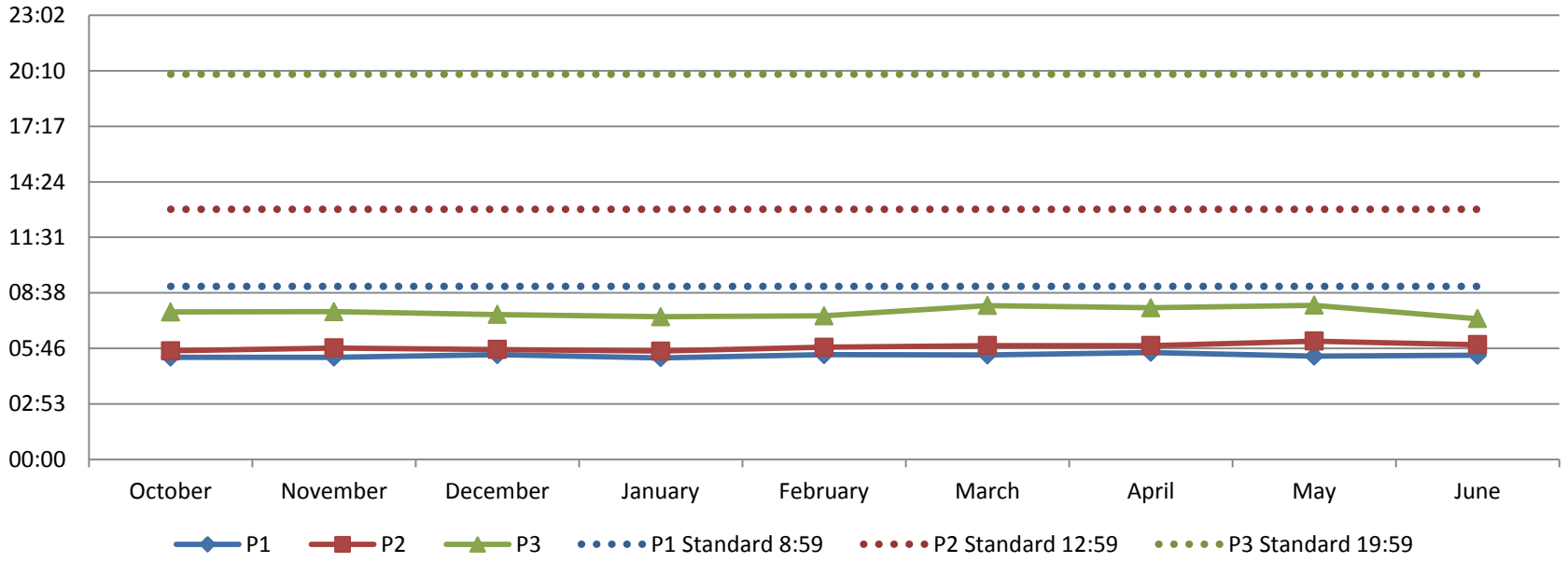


Table 3.3 REMSA Median Response times for Zone A, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	N/A	N/A	N/A	05:18	05:18	05:26	05:16	05:26	05:25	05:33	05:21	05:24
P2	N/A	N/A	N/A	05:38	05:47	05:42	05:37	05:49	05:54	05:54	06:08	05:57
P3	N/A	N/A	N/A	07:39	07:40	07:31	07:24	07:27	07:59	07:52	08:00	07:18
ALL	N/A	N/A	N/A	05:40	05:43	05:45	05:38	05:50	05:46	05:54	05:50	05:49
N/A: Zone information was not being utilized until October, 2014												

REMSA Zone B

Table 3.4 REMSA Median Response Times for Zone B, by Priority and Month FY 14-15

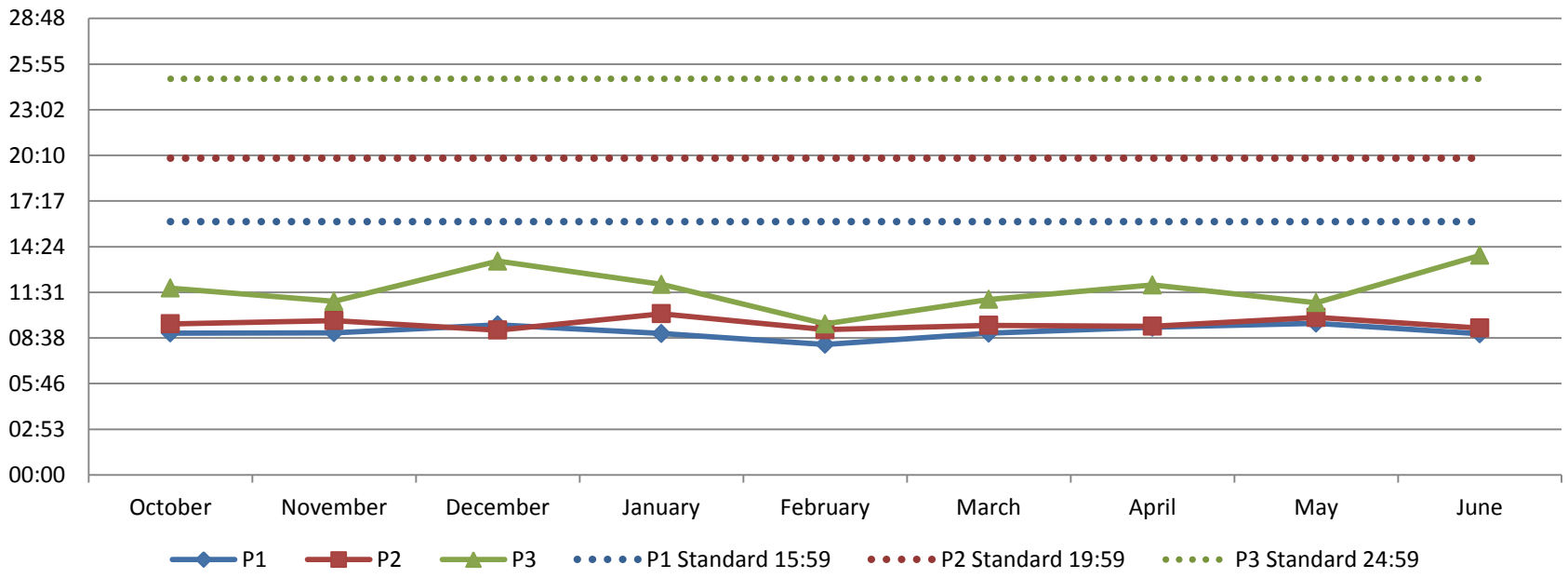


Table 3.5 REMSA Median Response Times for Zone B, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	N/A	N/A	N/A	08:57	08:58	09:28	08:55	08:14	08:56	09:19	09:34	08:54
P2	N/A	N/A	N/A	09:32	09:44	09:08	10:10	09:10	09:26	09:23	09:56	09:16
P3	N/A	N/A	N/A	11:47	10:57	13:29	12:01	09:31	11:04	11:59	10:52	13:51
ALL	N/A	N/A	N/A	09:34	09:25	09:28	09:44	09:01	09:34	09:57	09:53	09:52
N/A: Zone information was not being utilized until October, 2014												

REMSA Zone C

Table 3.6 REMSA Median Response Times for Zone C, by Priority, and Month FY 14-15

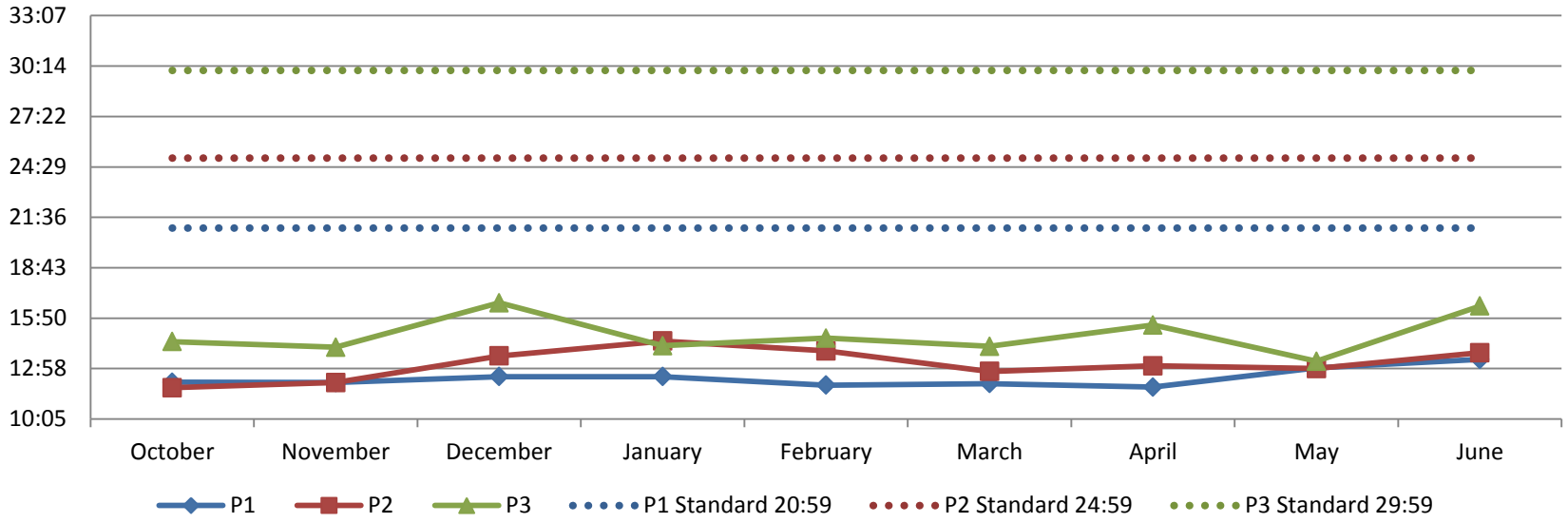


Table 3.7 REMSA Median Response Times for Zone C, by Priority and Month, FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	N/A	N/A	N/A	12:11	12:10	12:30	12:30	12:01	12:06	11:54	13:00	13:29
P2	N/A	N/A	N/A	11:52	12:10	13:41	14:32	13:58	12:48	13:07	12:58	13:52
P3	N/A	N/A	N/A	14:30	14:11	16:43	14:16	14:42	14:14	15:27	13:23	16:32
ALL	N/A	N/A	N/A	12:38	12:12	13:42	12:47	13:12	12:32	12:58	13:09	14:01
N/A: Zone information was not being utilized until October, 2014												

REMSA Zone D

Table 3.8 REMSA Median Response Times for Zone D, by Priority, and Month FY 14-15

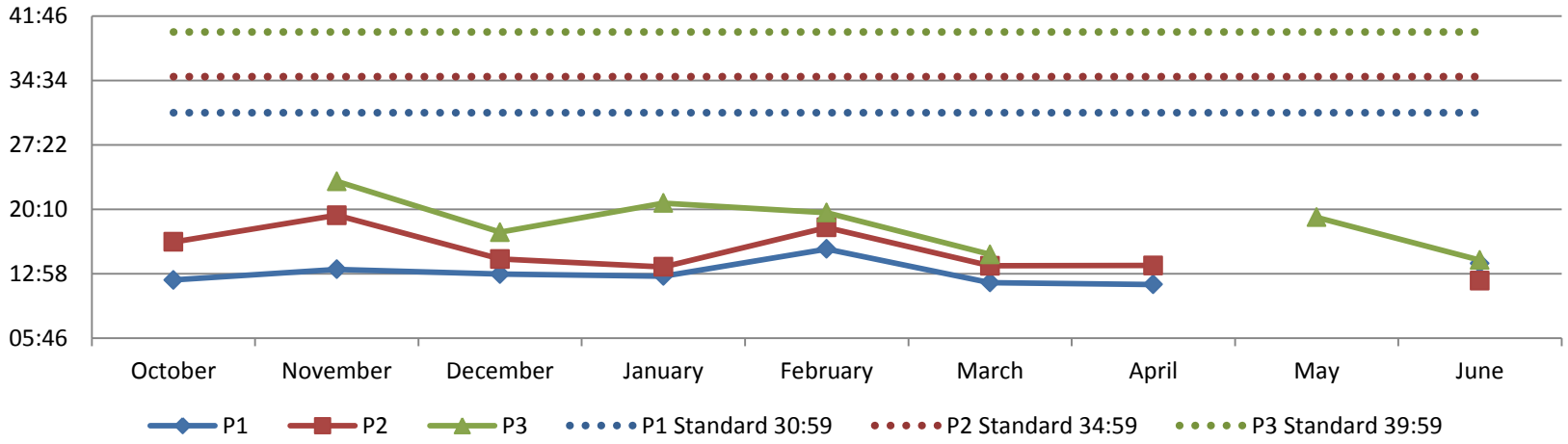


Table 3.9 REMSA Median Response Times for Zone D, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	N/A	N/A	N/A	12:16	13:27	12:55	12:42	15:43	11:58	11:46	~	14:06
P2	N/A	N/A	N/A	16:31	19:30	14:36	13:44	18:08	13:51	13:53	~	12:12
P3	N/A	N/A	N/A	~	23:17	17:36	20:52	19:47	15:07	~	19:17	14:29
ALL	N/A	N/A	N/A	14:30	19:30	13:23	13:36	17:45	13:51	13:50	~	13:16
N/A: Zone information was not being utilized until October, 2014 ~ no matched calls used for analysis for this Zone and Priority												

REMSA Zone E

Table 3.10 REMSA Median Response Times for Zone E, by Priority, and Month FY 14-15

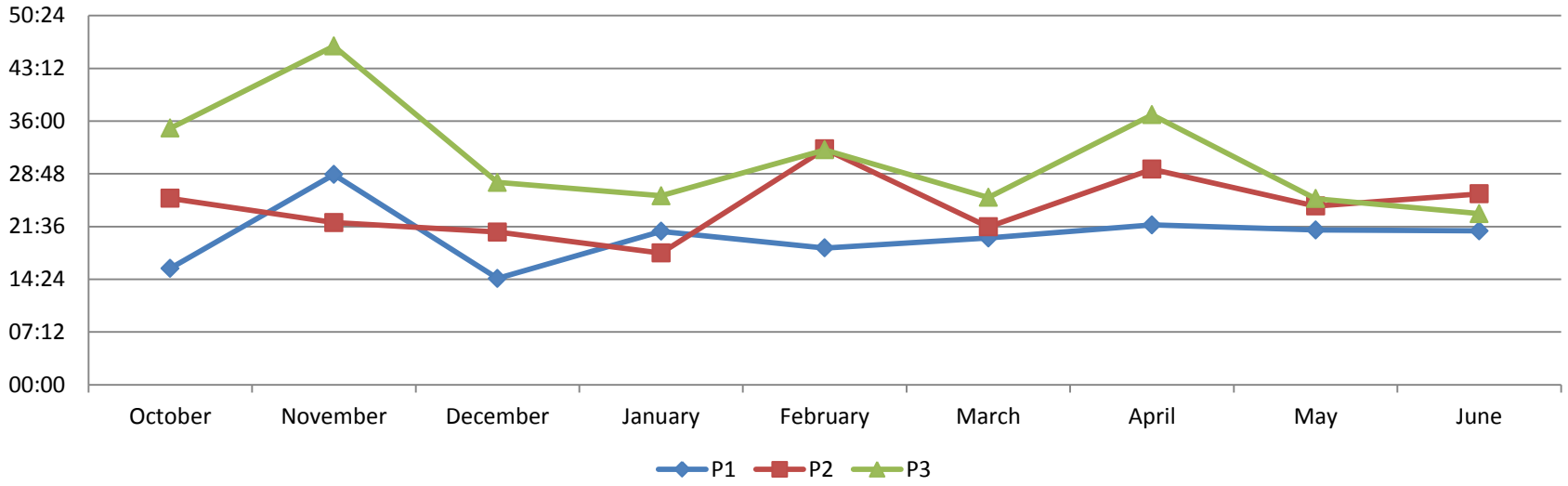


Table 3.11 REMSA Median Response Times for Zone E, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	N/A	N/A	N/A	15:53	28:42	14:31	20:57	18:40	20:02	21:49	21:08	21:00
P2	N/A	N/A	N/A	25:27	22:08	20:50	17:59	32:12	21:33	29:26	24:24	26:04
P3	N/A	N/A	N/A	35:02	46:14	27:38	25:48	32:04	25:35	36:52	25:25	23:22
ALL	N/A	N/A	N/A	19:32	22:35	17:17	19:28	20:00	20:45	24:13	24:04	22:56
N/A: Zone information was not being utilized until October, 2014												

Section 3a: Fire Median Response Times

Section 3a displays the median response times for the regional fire agencies by priority and month. There are specific identified BLS and ALS response benchmarks within NFPA 1710.

The standard provides a 60 seconds turnout time and 240 seconds or less travel time for a Basic Life Support (BLS) response. For the purposes of this report a time standard of 300 seconds, or 5 minutes was used for Basic Life Support, which combines both the turnout and travel times.

Conversely, the standard provides a 60 second turnout time and 480 seconds or less travel time for an Advanced Life Support (ALS) response. For the purposes of this report a time standard of 540 seconds, or 9 minutes was used for ALS, which combines both the turnout and travel times.

These standards are included in tables 3a.1 – 3a.6 to show the fire median response times by specific fire agency and the correlation to the NFPA recommended time.

RFD Median Response Times

Table 3a.1 RFD Median Response Times, by Priority and Month FY 14-15

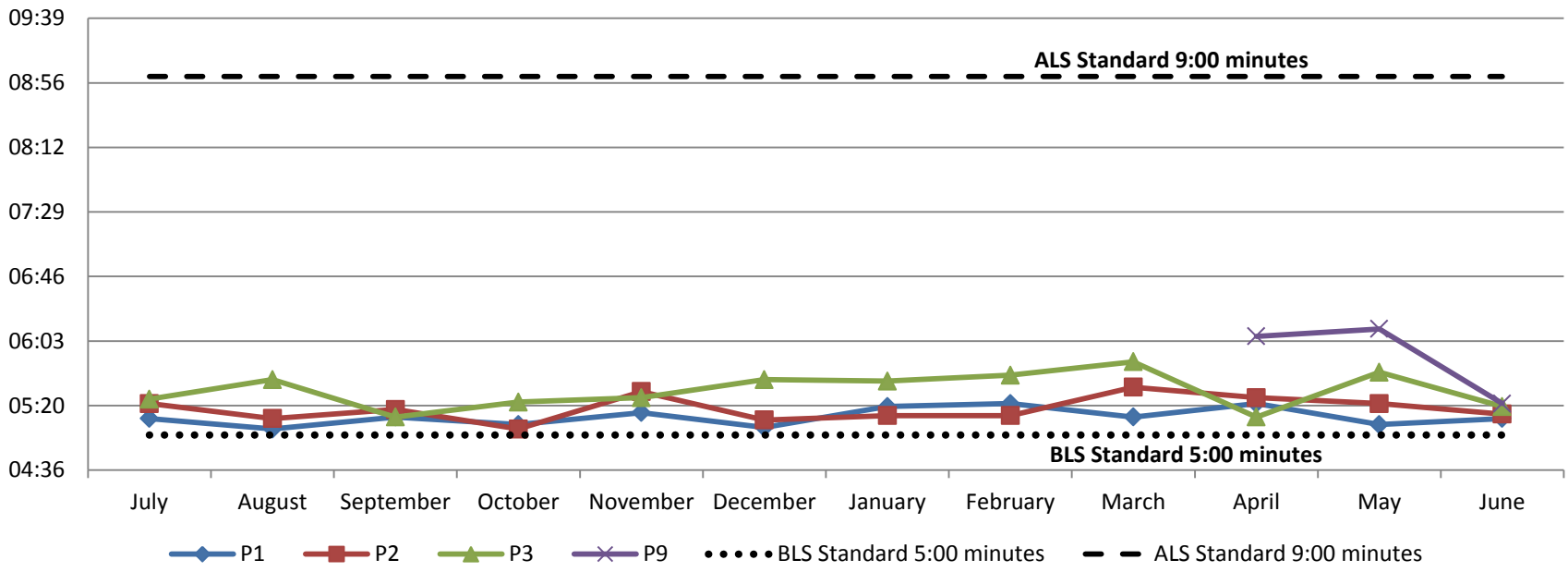


Table 3a.2 RFD Median Response Times, by Priority and Month, FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	05:11	05:04	05:12	05:07	05:15	05:05	05:19	05:21	05:12	05:21	05:07	05:11
P2	05:21	05:11	05:17	05:04	05:29	05:10	05:13	05:13	05:32	05:25	05:21	05:14
P3	05:24	05:37	05:12	05:22	05:25	05:37	05:36	05:40	05:49	05:12	05:42	05:19
P9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	06:06	06:11	05:21
ALL	**05:16**	**05:10**	**05:13**	**05:07**	**05:19**	**05:09**	**05:19**	**05:20**	**05:22**	**05:22**	**05:15**	**05:12**
N/A: The Omega determinant was not initiated until March, 2015												

SFD Median Response Times

Table 3a.3 SFD Median Response Times, by Priority and Month FY 14-15

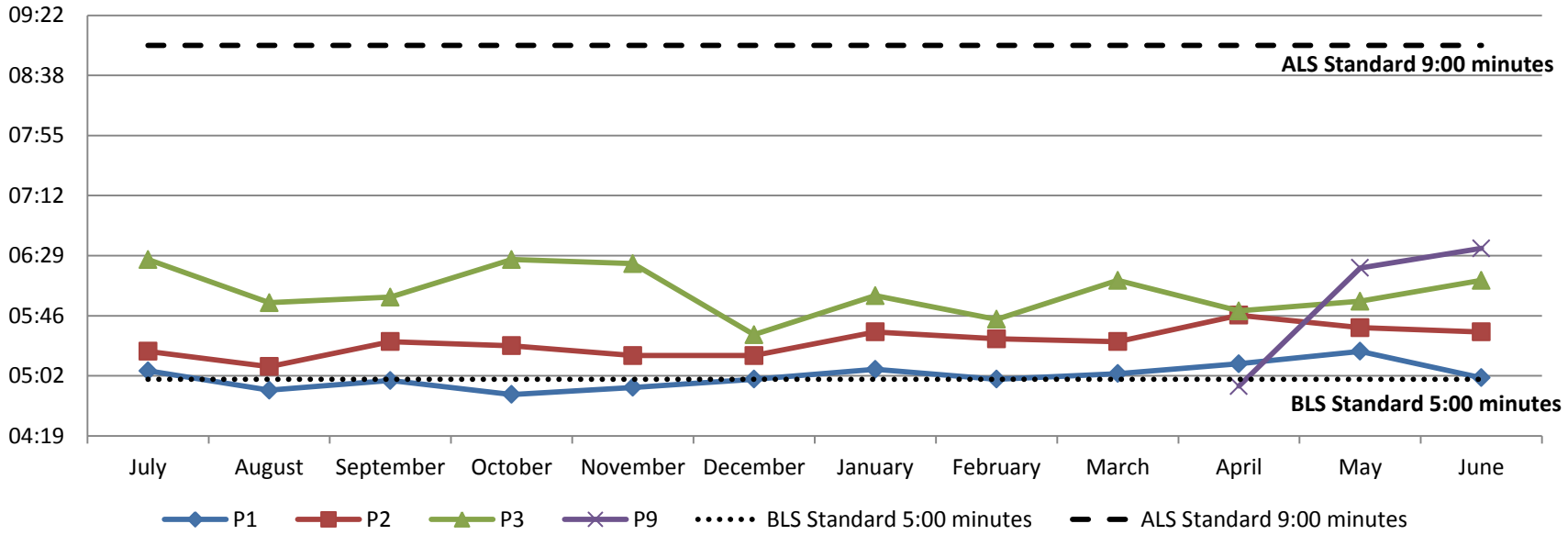


Table 3a.4 SFD Median Response Times, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	05:06	04:52	04:59	04:49	04:54	05:00	05:07	05:00	05:04	05:11	05:20	05:01
P2	05:20	05:09	05:27	05:24	05:17	05:17	05:34	05:29	05:27	05:46	05:37	05:34
P3	06:26	05:55	05:59	06:26	06:23	05:32	06:00	05:43	06:11	05:49	05:56	06:11
P9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	04:55	06:20	06:34
ALL	**05:22**	**05:05**	**05:17**	**05:16**	**05:13**	**05:10**	**05:22**	**05:16**	**05:21**	**05:27**	**05:30**	**05:22**
N/A: The Omega determinant was not initiated until March, 2015												

TMFPD Median Response Times

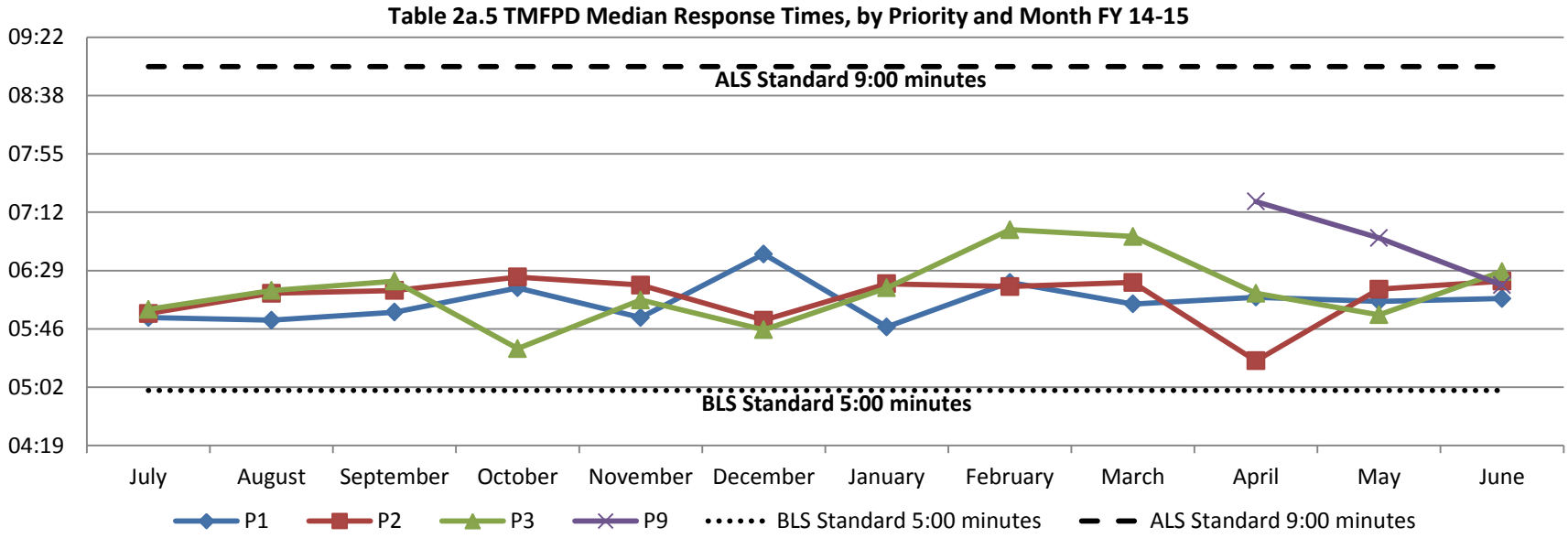


Table 3a.6 TMFPD Median Response Times, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	05:54	05:52	05:58	06:16	05:54	06:41	05:47	06:20	06:04	06:09	06:06	06:08
P2	05:57	06:12	06:14	06:24	06:18	05:52	06:19	06:17	06:20	05:22	06:15	06:21
P3	06:00	06:14	06:21	05:31	06:07	05:45	06:16	06:59	06:54	06:12	05:56	06:28
P9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07:20	06:53	06:18
ALL	**05:57**	**06:04**	**06:06**	**06:13**	**06:02**	**06:12**	**06:02**	**06:25**	**06:13**	**06:01**	**06:13**	**06:20**
N/A: The Omega determinant was not initiated until March, 2015												

Section 4: Median Time between Agency Arrivals

The two-tiered EMS response system in the REMSA Franchise service area is designed for a fire agency to arrive on-scene first. The Amended and Restated Franchise Agreement outlines the response times allowable for all P1 life threatening emergency medical calls. As part of Franchise compliance, REMSA must meet these requirements at least 90 percent of the time.

With this two-tiered system design, it is likely the regional fire partner will be waiting for the REMSA transport resource. "Wait time" is a data element that should interpreted carefully as it may set up a comparative relationship between the partners and their individual response times. However, while there is the potential for comparison, analyses of wait times provide information relating to system performance.

This observable timestamp will also be valuable to the region with regards to system changes. It is anticipated that some system changes will occur during fiscal year 15-16 that could positively impact the wait times between the arrivals of a fire agency and a REMSA ambulance. The first is the implementation of Omega protocols. Fire partners should see a decrease in responses to the existing categorized P9 calls. This type of low acuity calls is statistically linked to longer wait times, which precludes fire from being available for the next emergency call.

Another potential change is the addition of ILS ambulances. If this system change is implemented, it is anticipated that the wait times for fire partners on identified and approved Priority 3 calls should decrease. A potential negative impact to the system resides with dispatching. Per NFPA standards, the fire partner should be dispatched within 60 seconds, 80% of the time and 106 seconds 95% of the time. A delay of transfer does not impact fire response because the regional fire partner is dispatched during this process. If the call is not immediately transferred to REMSA dispatch, the potential impact would be the extension of on-scene time wait times.

Tables 4.1- 4.12 below demonstrate the median time between agency arrivals, by priority and month.

RFD First - REMSA Second

Table 4.1 Median Time between RFD Arriving and REMSA Arriving On Scene-RFD Arrived First, by Priority and Month FY 14-15

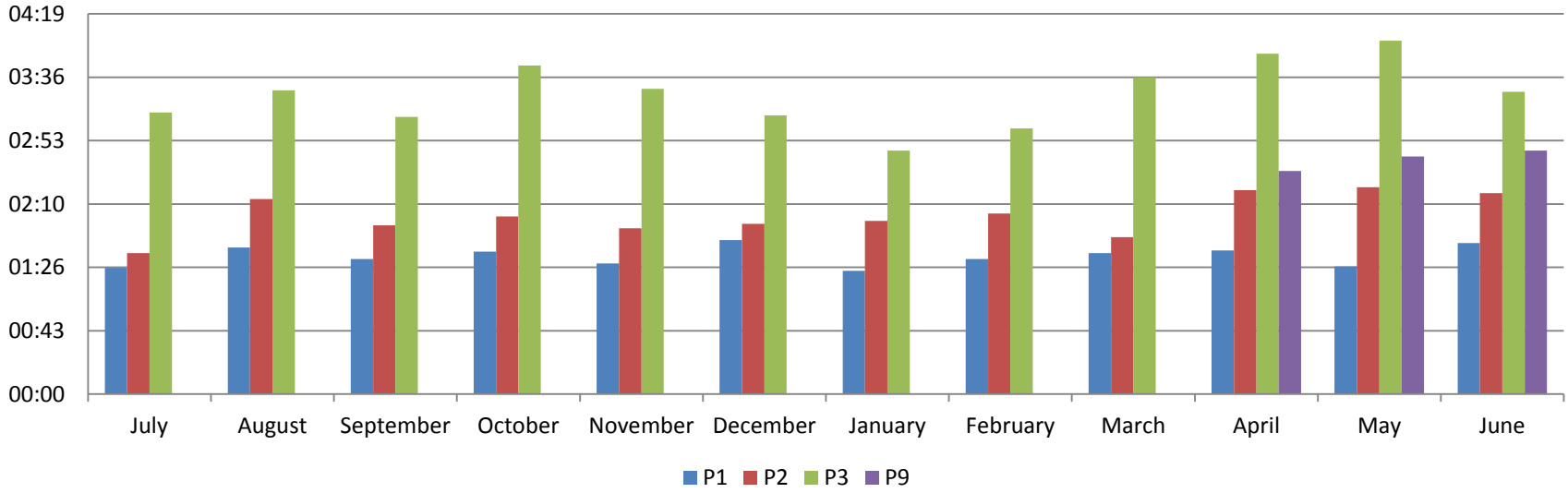


Table 4.2 Median Time Between RFD Arriving and REMSA Arriving On Scene, When RFD On Scene First, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	01:26	01:40	01:32	01:37	01:29	01:45	01:24	01:32	01:36	01:38	01:27	01:43
P2	01:36	02:13	01:55	02:01	01:53	01:56	01:58	02:03	01:47	02:19	02:21	02:17
P3	03:12	03:27	03:09	03:44	03:28	03:10	02:46	03:01	03:36	03:52	04:01	03:26
P9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	02:32	02:42	02:46
ALL	**01:45**	**02:03**	**01:52**	**01:56**	**01:49**	**02:00**	**01:51**	**01:54**	**01:52**	**02:07**	**01:54**	**02:08**
N/A: The Omega determinant was not initiated until March, 2015												

REMSA First - RFD Second

Table 4.3 Median Time between REMSA Arriving and RFD Arriving On Scene-REMSA Arrived First, by Priority and Month FY 14-15

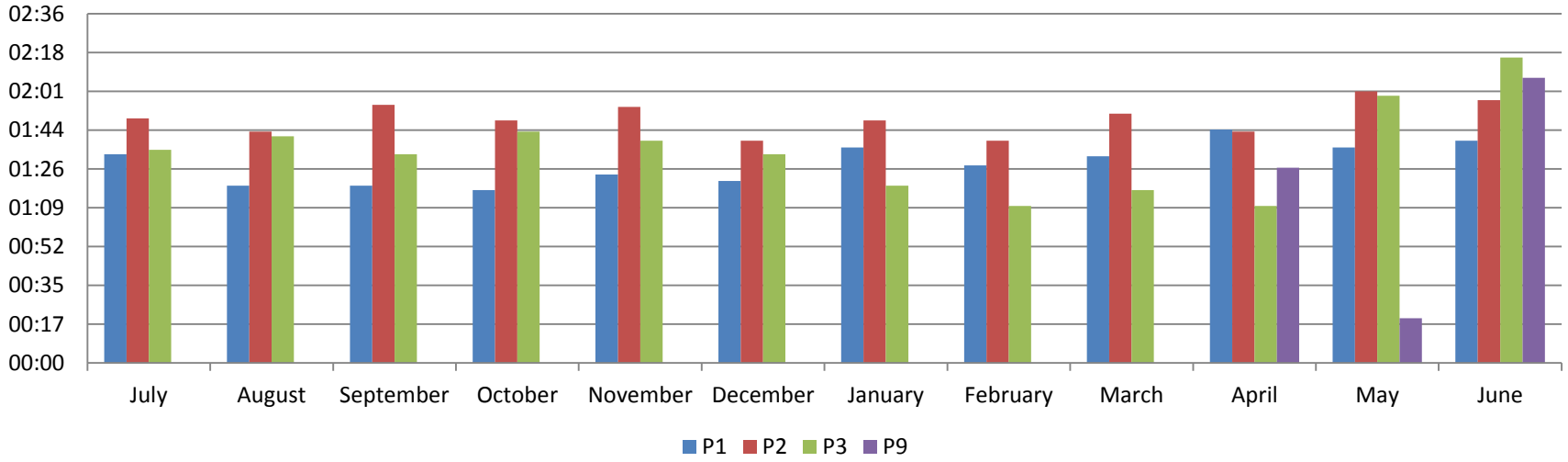


Table 4.4 Median Time Between REMSA Arriving and RFD Arriving On Scene, When REMSA On Scene First, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	01:33	01:19	01:19	01:17	01:24	01:21	01:36	01:28	01:32	01:44	01:36	01:39
P2	01:49	01:43	01:55	01:48	01:54	01:39	01:48	01:39	01:51	01:43	02:01	01:57
P3	01:35	01:41	01:33	01:43	01:39	01:33	01:19	01:10	01:17	01:10	01:59	02:16
P9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	01:27	00:20	02:07
ALL	**01:38**	**01:30**	**01:33**	**01:29**	**01:35**	**01:27**	**01:37**	**01:29**	**01:37**	**01:40**	**01:45**	**01:49**
N/A: The Omega determinant was not initiated until March, 2015												

SFD First - REMSA Second

Table 4.5 Median Time Between SFD Arriving and REMSA Arriving On Scene, When SFD On Scene First, by Priority and Month FY 14-15

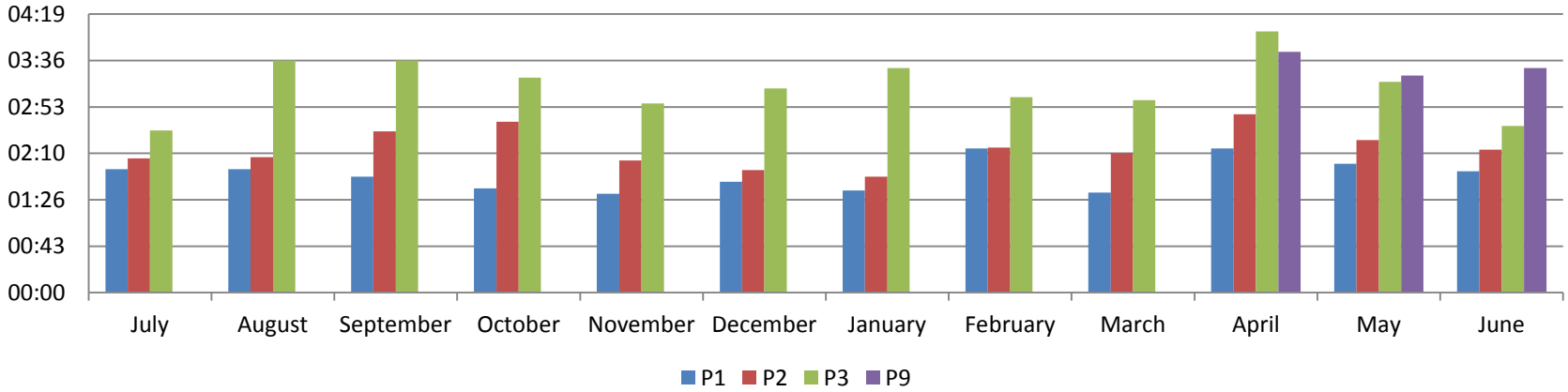


Table 4.6 Median Time Between SFD Arriving and REMSA Arriving On Scene, When SFD On Scene First, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	01:55	01:55	01:48	01:37	01:32	01:43	01:35	02:14	01:33	02:14	02:00	01:53
P2	02:05	02:06	02:30	02:39	02:03	01:54	01:48	02:15	02:10	02:46	02:22	02:13
P3	02:31	03:36	03:36	03:20	02:56	03:10	03:29	03:02	02:59	04:03	03:16	02:35
P9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	03:44	03:22	03:29
ALL	**02:05**	**02:07**	**02:16**	**02:06**	**02:10**	**01:57**	**01:56**	**02:19**	**02:07**	**02:39**	**02:25**	**02:12**
N/A: The Omega determinant was not initiated until March, 2015												

REMSA First - SFD Second

Table 4.7 Median Time Between REMSA Arriving and SFD Arriving On Scene, When REMSA On Scene First, by Priority and Month FY 14-15

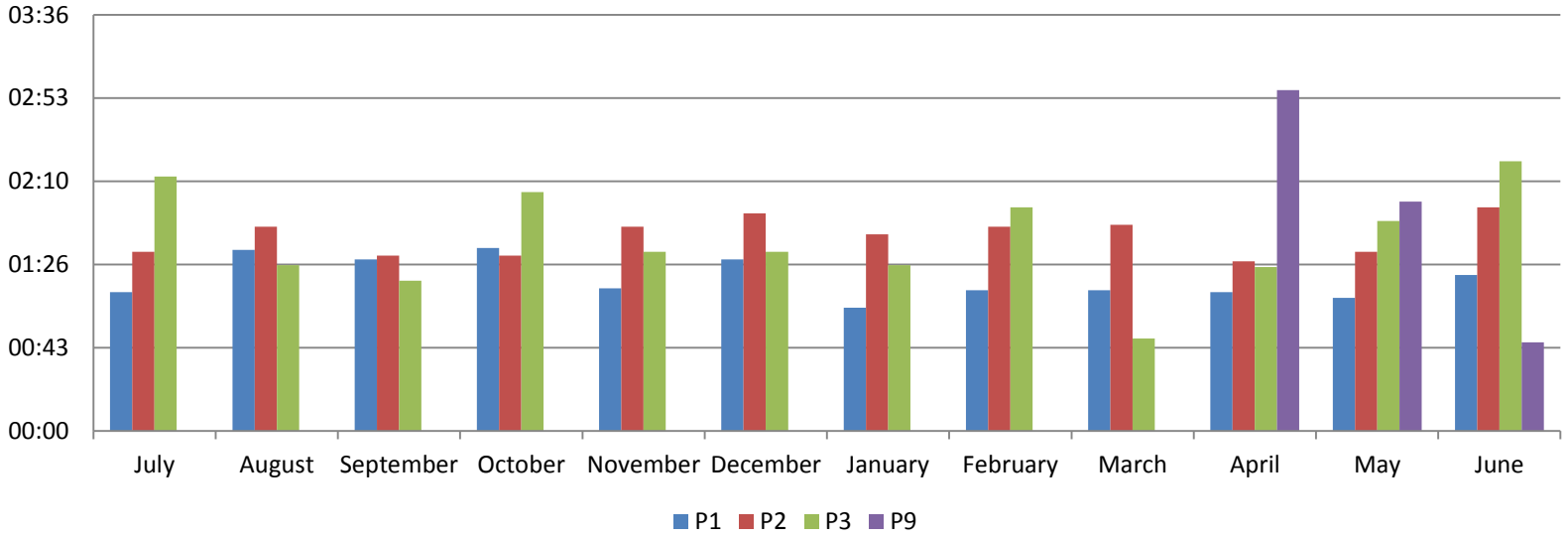


Table 4.8 Median Time Between REMSA Arriving and SFD Arriving On Scene, When REMSA On Scene First, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	01:12	01:34	01:29	01:35	01:14	01:29	01:04	01:13	01:13	01:12	01:09	01:21
P2	01:33	01:46	01:31	01:31	01:46	01:53	01:42	01:46	01:47	01:28	01:33	01:56
P3	02:12	01:26	01:18	02:04	01:33	01:33	01:26	01:56	00:48	01:25	01:49	02:20
P9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	02:57	01:59	00:46
ALL	**01:25**	**01:36**	**01:29**	**01:35**	**01:30**	**01:37**	**01:23**	**01:40**	**01:21**	**01:21**	**01:20**	**01:42**
N/A: The Omega determinant was not initiated until March, 2015												

TMFPD First - REMSA Second

Table 4.9 Median Time Between TMFPD Arriving and REMSA Arriving On Scene, When TMFPD On Scene First, by Priority and Month FY 14-15

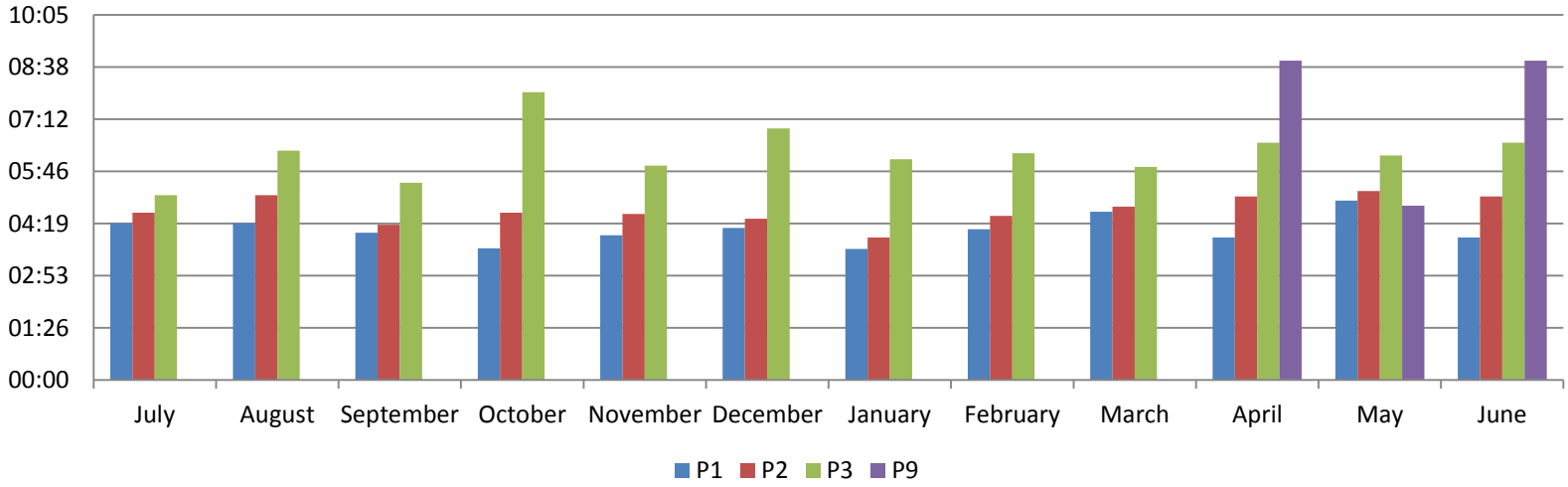


Table 4.10 Median Time Between TMFPD Arriving and REMSA Arriving On Scene, When TMFPD On Scene First, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	04:20	04:20	04:04	03:38	04:00	04:12	03:37	04:10	04:39	03:56	04:57	03:56
P2	04:37	05:06	04:17	04:37	04:35	04:27	03:56	04:32	04:47	05:04	05:13	05:04
P3	05:06	06:20	05:27	07:57	05:55	06:57	06:06	06:16	05:53	06:33	06:12	06:33
P9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	08:49	04:49	08:49
ALL	**04:37**	**04:49**	**04:22**	**04:28**	**04:40**	**04:28**	**03:59**	**04:33**	**04:48**	**04:46**	**05:05**	**04:46**
N/A: The Omega determinant was not initiated until March, 2015												

REMSA First - TMFPD Second

Table 4.11 Median Time Between REMSA Arriving and TMFPD Arriving On Scene, When REMSA On Scene First, by Priority and Month FY 14-15

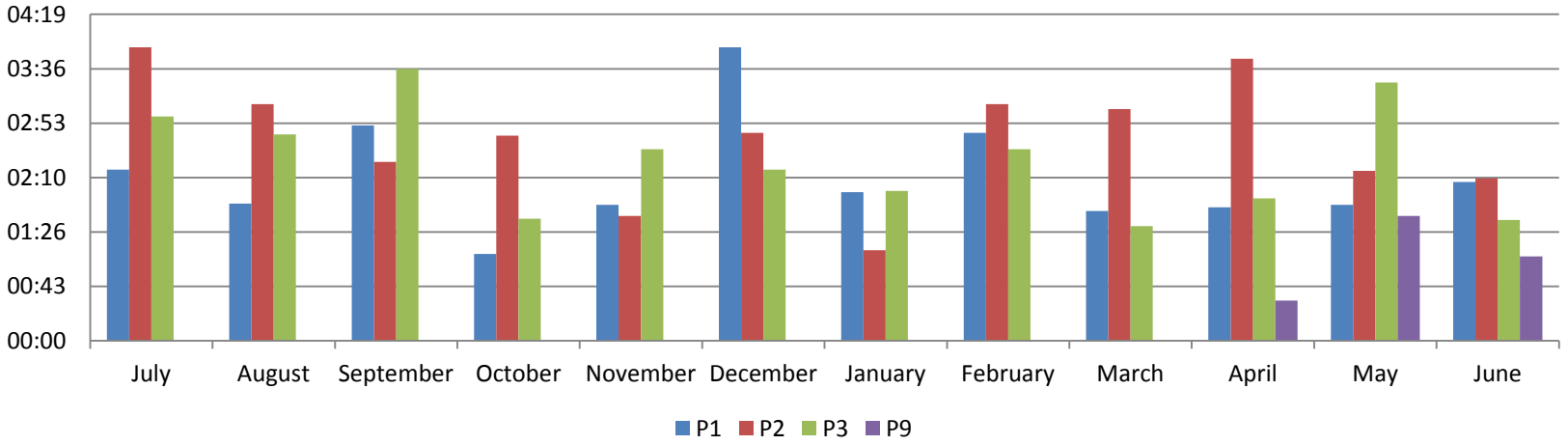


Table 4.12 Median Time Between REMSA Arriving and TMFPD Arriving On Scene, When REMSA On Scene First, by Priority and Month FY 14-15												
Priority	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
P1	02:16	01:49	02:51	01:09	01:48	03:53	01:58	02:45	01:43	01:46	01:48	02:06
P2	03:53	03:08	02:22	02:43	01:39	02:45	01:12	03:08	03:04	03:44	02:15	02:09
P3	02:58	02:44	03:36	01:37	02:32	02:16	01:59	02:32	01:31	01:53	03:25	01:36
P9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	00:32	01:39	01:07
ALL	**02:47**	**02:10**	**02:53**	**02:05**	**01:53**	**02:59**	**01:49**	**02:43**	**01:55**	**01:59**	**02:07**	**02:04**
N/A: The Omega determinant was not initiated until March, 2015												

Future Quarterly and Annual Report Data Elements

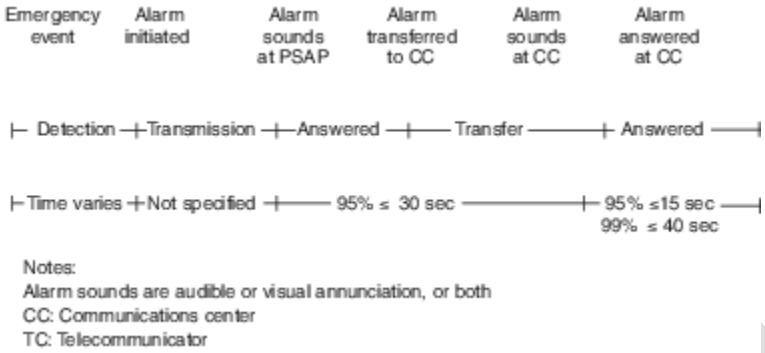
Fiscal year 14-15 began a culture of data sharing throughout the region with the creation of the ILA. The distributed quarterly reports provided performance information that allowed regional awareness and provided data for decisions regarding future enhancements. Several NFPA standards have been utilized for these analyses; however, there were relevant standards not able to be immediately measured within the region. Future reports will strive to explore all available standards and provide a comprehensive picture of the EMS system from initial 911 call to hospital outcome.

Within this annual report, NFPA 1710 standards were used to measure system performance for both fire and REMSA. The analysis using national benchmarks revealed some improvement opportunities within the region. For example, rather than utilizing the 300 second BLS response, or 5 minutes from dispatch to on-scene, there is an opportunity to further segment the response phase to include turnout time analyses (60 second standard) separate from enroute to on-scene time (240 second standard).

During FY 15-16 there are regional enhancements expected and the impacts to the system, both positive and negative, may be observable through future data reports. It will be important for any changes within the region to be reported to the EMS Program at the inception so that subsequent quarterly data report can accurately reflect the system changes. An example of an expected enhancement is the CAD-to-CAD link between Public Safety Answering Point (PSAP) and REMSA Dispatch. This two way real-time communication has the potential to positively impact the system. These changes have the potential to impact the response time measures.

NFPA 1221 Chapter 7 applies time standards for the PSAP relating to emergency lines being answered, emergency alarm processing and the transferring of the call from the PSAP to a secondary answering point. These standards can be utilized in measuring the system performance of dispatching both for the PSAP and the correlation to REMSA Dispatch. NFPA Chapter 7 Section 7.4.4 sets a transfer time standard of 30 seconds 95 percent of the time. PSAP data began being received by the EMS Program in May, 2015; therefore, this performance measure will begin to be analyzed in future quarterly reports and will be included in FY 15-16 annual report. During meetings with PSAP personnel, the EMS Program understands there are a myriad of reasons why a call transfer may not occur within this time frame standard. Most reasons relate back to a public safety issue where the police department is involved, or may need to be involved. The EMS Program will work with PSAP personnel to ensure the most accurate depiction of

this process. The diagram below illustrates the PSAP NFPA standards.



The regional strategic plan, anticipated to be developed and approved during FY 15-16 will help shape the expectations and performance measures for future reports. However, there are some immediately identifiable items that will be included in future reports. The (1) Omega protocols and (2) ILS ambulances reviewed in Section 4: Median Time between Agency Arrivals are immediately identifiable items. . Additionally, the EMS Program is aware of potential changes with fire partner response capabilities within the individual jurisdictions. A final potential impact is the revisions to the REMSA Franchise zone map. The map is currently being revised and may include a significant shift in the response zones. During the implementation phase of the revised map, fire agencies could experience either longer or shorter wait times on the border locations of the new zones.

The FY 14-15 annual report focuses on the relationship between the two tiered response systems in an isolated review. A planned future enhancement to the annual report will not only be the inclusion of PSAP data but also the addition of patient outcome data. The vision for inclusion of hospital outcome data would be to: (1) look at the median length of time from the citizen calling 9-1-1 to receiving hospital care, (2) gather information on patient outcome for possible community outreach/education or EMS provider training, (3) provide validation of EMD process by determining if there is a statistically significant difference between EMD determinant and the hospital diagnosis of the patient, and (4) determine if is there a statistically significant difference in patient outcome if patient arrived to hospital by POV or ambulance.

While the performance of regional EMS agencies is important for individual agency review and improvements, from a regional

perspective, studies have shown that regions may benefit more by focusing on the first phase of the EMS call, the call processing and dispatch, and not the travel time to the patient. The hypothesis is that travel time is not a controllable variable; it is fluid and dependent upon others and not solely a performance measure of the agency. This would not be a decision of the EMS Program; however, having performance measures focus more on patient care would align with the hospital outcome data.

This annual report reviewed the partners in the Interlocal agreement, specifically those agencies within the REMSA franchise service area. What is quantifiable for the region is baseline data for the Washoe County EMS system that until this point has not been achievable. This report exemplifies the two-tier system within Washoe County and the benefits of partner agencies working together to achieve the same end result – good patient care.

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

Agenda Item #10

STAFF REPORT
REGIONAL EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: October 1, 20115

TO: Regional EMS Advisory Board Members

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

SUBJECT: **Discussion and possible approval of presentation on the progress of revising the response zones within the Washoe County REMSA ambulance franchise service area.**

SUMMARY

The purpose of this agenda item is report on the progress the region has made with regards to the revision of the 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.

During the June 2015 EMSAB, EMSAB members approved the project charter that outlined the process for revising the response zones within the Washoe County REMSA ambulance franchise service area.

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.

EMS staff, along with Gary Zaepfel from Washoe County GIS, went to San Joaquin County, Stockton, CA, to meet with their EMS Oversight Program. The meeting was excellent and the EMS Oversight Program was able to learn about several different processes that could be explored regionally.

EMS staff met with regional fire/REMSA partners on June 22, 2015 to review the Stockton trip and the information obtained from contractor Insprionix. During this meeting, the methodology for map development was agreed to and the process for developing the maps was established. The region would primarily utilize population density, provided by the census report, and not call data. In addition, a methodology for future reviews of the map was discussed.

EMS staff, along with Mr. Zaepfel, have met with or corresponded with regional partners several times over the last four months to develop a revised franchise area response map. With the assistance of Mr. Zaefpel, the region sent several data layers to Inspironix for review, analysis and recommendation. Inspironix developed a draft response map that the region began reviewing on August 26, 2015. During the meeting, the methodology for developing the draft map was reviewed and the proposed changes to the existing map were reviewed.

Mr. Zaepfel developed a PDF map with layers that included the draft zones, existing zones and call data for a 20 week period of time. This interactive map was sent to the regional partners on Friday, September 11, 2015 in preparation for our scheduled meeting on Friday, September 25, 2015. The intention of the meeting will be to go through each area of the franchise service area and ensure regional consensus on the proposed response time.

The region is behind schedule by close to a month from the anticipated timeline as reviewing of the maps is a comprehensive process.

FISCAL IMPACT

There is no additional fiscal impact should the EMS Advisory Board approve the presentation on the progress of revising the response zones within the REMSA franchise service area.

RECOMMENDATION

Staff recommends the Board approve the presentation on the progress of revising the response zones within the REMSA franchise service area.

POSSIBLE MOTION

Should the Board agree with staff's recommendation, a possible motion would be: "Move to approve the presentation on the progress of revising the response zones within the Washoe County REMSA ambulance franchise service area."

STAFF REPORT
REGIONAL EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: October 1, 2015

TO: Regional Emergency Medical Services Advisory Board

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

SUBJECT: Discussion and possible direction to staff regarding investigation outcome referencing mutual aid requests permissible under the REMSA franchise agreement.

SUMMARY

As a part of the EMS Oversight Program (Program) duties outlined in the Interlocal Agreement for Emergency Medical Service Oversight, the Program is required to "monitor the response and performance of each agency providing Emergency Medical Services and provide recommendations to each agency for the maintenance, improvement and long-range success of the Emergency Medical Services." (Article 1.2 of Interlocal Agreement for EMS Oversight)

The Program meets this objective through the quarterly data reports as well as complaint inquiries and/or investigations. To provide structure to the investigation process, the Program developed Investigation Procedures and Expectations of EMS Agencies. These procedures were distributed through the District Health Officer to regional EMS agencies on October 30, 2014. The procedures were developed to ensure consistency regarding EMS partner concerns.

The procedures emphasize that EMS agencies should be working together to resolve grievances prior to filing a complaint with the EMS Oversight Program. However, if a resolution cannot be achieved and the nature of the complaint requires a fair, thorough and impartial investigation, such complaints should be submitted to the Program for evaluation and possible review.

If an investigation occurs, and if deemed necessary, the Program staff will present the investigation and findings to the EMS Advisory Board. This ensures the members are aware of current concerns within the EMS system and can provide guidance, input or recommendations as appropriate.

PREVIOUS ACTION

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

BACKGROUND

The Interlocal Agreement (ILA) established the Regional Emergency Medical Services Oversight Program and outlined eight specific duties of the Program. When the program was first established, policies and procedures were developed and appropriately distributed to regional partners.

On October 30, 2014 the District Health Officer distributed a policy for Investigation Procedures and Expectations of EMS Agencies. These policies served as notification of the development of procedures that would impact the specific jurisdictional EMS organizations. The procedures were

established to ensure consistency regarding EMS partner concerns. The procedures outlined the internal guidelines for conducting administrative investigations of the Washoe County EMS system. The procedures are applicable to the investigation of complaints regarding EMS services in the purview and jurisdiction of the Washoe County Health District.

To date, the Program has officially investigated eight complaints from regional partners. Each complaint has been investigated by following the procedures finalized and distributed on October 30, 2014. The Program sends an official letter to the involved partners; the letter includes an allegation summary and requests information within 10 days of the date of letter. Once the requested information is received, the Program reviews the information and determines if the claims were substantiated and if there are any recommendations for improvement.

The Program received a complaint on May 15, 2015 regarding a Reno Fire Department Battalion Chief requesting mutual aid ambulance response into the REMSA franchise service area. The investigation process revealed opportunities for improvement by both Reno Fire Department and REMSA. The Program drafted letters to each agency reviewing the findings and recommendations for system improvements. The letters were sent to the respective agencies on July 23, 2015.

The Program received a formal reply from Reno Fire Department (RFD) regarding the investigation findings dated August 3, 2015. RFD disagrees with the Program's interpretation of the Franchise Agreement that suggests REMSA has the exclusive right to request mutual aid as part of the exclusive rights for ambulance transport.

According to the developed policies, when there is a disagreement with the investigation findings and recommendations, it is to be elevated to the EMS Advisory Board for review, input and possible direction to staff. As a part of the EMS Advisory Board review, the Board could request and approve the investigation findings and recommendations be brought to the involved governing boards for review and possible direction to their respective EMS providers.

Since there is a disagreement with the Program's investigation conclusions and recommendations, this investigation is being brought to the EMS Advisory Board for review and input. The Program believes it is important to clarify and resolve this issue by reviewing the applicable terms of the Franchise Agreement, Article 2, Section 2.1 Granting of Exclusive Franchise.

All formal correspondence associated with this investigation is attached. It has been redacted as appropriate to keep protected health information confidential.

FISCAL IMPACT

There is no additional fiscal impact should the EMS Advisory Board provide direction to staff regarding the investigation outcome referencing mutual aid requests permissible under the REMSA franchise agreement.

RECOMMENDATION

Staff recommends the Board approve the presentation, provide direction to staff and request a legal opinion as to the interpretation of Article 2, Section 2.1 of the Franchise Agreement regarding the investigation outcome referencing mutual aid requests permissible under the REMSA franchise agreement.

POSSIBLE MOTION

Should the Board agree with staff recommendation, a possible motion would be: "Move to approve the presentation and direct staff (if applicable) regarding the investigation outcome referencing mutual aid requests permissible under the REMSA franchise agreement."

WASHOE COUNTY HEALTH DISTRICT

OFFICE OF THE DISTRICT HEALTH OFFICER

Public Health
Prevent. Promote. Protect.

Memorandum

To: Regional EMS Agencies

From: Kevin Dick, District Health Officer

Re: Investigation Procedures and Expectations of EMS Agencies

Date: October 30, 2014

As part of the Inter-Local Agreement, the Washoe County Health District (WCHD) is taking on new responsibilities relating to oversight of the Regional Emergency Medical Services System (EMS provided by Fire, REMSA and Dispatch). As part of the expansion of duties, an EMS Oversight Program is being established. This memorandum is serving as a notification of the development of procedures that will impact your jurisdictional EMS organization.

As part of program development, procedures are being established that will ensure consistency regarding EMS partner concerns. The first procedures developed are internal guidelines for conducting administrative investigations of the Washoe County EMS system. These procedures will be applicable to the investigation of complaints regarding EMS services in the purview and jurisdiction of the WCHD. The following process will be utilized in regards to any investigation request filed for review.

The WCHD would like to emphasize that EMS agencies must attempt to resolve grievances with other agencies prior to filing a complaint with the WCHD. It is anticipated that most resolutions can and should be found without the intervention of the Health District. However, if that resolution cannot be achieved and the nature of the issue requires a fair, thorough and impartial investigation, such complaints should be submitted to the EMS Oversight Program for evaluation and possible review.

In an effort to clearly outline the expectations of regional EMS agencies regarding this new process, the EMS Oversight Program developed the following procedure for investigations:

1) EMS agencies must attempt to resolve the complaint/grievance with the other agency/agencies involved.
    - This step must be followed prior to elevating an investigation inquiry to the WCHD.
    - Enclosed is a suggested template for documenting the concerns, solutions and communication between agencies. This document would allow all parties involved to have a clear understanding of the issue and resolution. Additionally, this will be a valuable document if the WCHD is asked to conduct an investigation.

2) If a solution cannot be established between the parties, the EMS agencies can complete and submit an Investigation Request Form to the WCHD (see enclosed).
    - EMS Oversight Program staff will review the form and conduct an evaluation of the information provided.
    - The EMS agency will receive notification whether WCHD mediation will or will not be occurring.
3) If an investigation occurs, and if deemed necessary, EMS Oversight Program staff will present the investigation and findings to the EMS Advisory Board. This ensures the members are aware of current concerns within the EMS system.

The EMS Oversight Program has a number of responsibilities related to EMS system planning and system response analysis. It may be necessary to further evaluate and adjust this process if EMS agencies are not able to resolve issues on their own and EMS Oversight Program staff are not able to respond to all investigation requests and still fulfill other responsibilities. When investigations are required, staff will approach all investigations with a sense of urgency and impartiality. When possible, EMS Oversight Program staff will strive to complete the investigation and fact gathering within 30 days of the filing of the complaint.

For questions regarding this process please contact EMS Oversight Program staff:

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

Brittany Dayton, EMS Coordinator
775-326-6043
bdayton@washoecounty.us

Below is a suggested format for documenting communication between EMS agencies prior to submitting an Investigation Request Form. Submitting such records will aid EMS Oversight Program staff in determining whether an investigation is necessary.

Issue/Area for Improvement	Action Taken	Meeting Date	Attendees	Outcome of Meeting (Deliverables)	Primary Responsible Organization	Proposed Completion Date
1.						
2.						

Washoe County

Health District

EMS Oversight Program Investigation Request Form

*Individual/organization requesting an investigation (please include all contact information and mailing address):	
*Incident date/time:	
*Incident location:	
Patient name(s):	
Responding agencies involved in incident:	
PCR/RMS number (if known):	
Hospital medical record number (if known):	
Reason for investigation (please attach additional sheets if necessary):	
*Regulation, policy or procedure that was violated (if known):	
*Previous action taken to resolve this issues with the other agency/agencies:	
*Possible solution(s) to the identified issue:	

EMS Oversight Program Investigation Request Form

Please include the following information with your request, if applicable/accessible:

- ☐ Copy of PCR and/or incident report
- ☐ Patient outcome information
- ☐ Dispatch tape(s) and/or radio recordings
- ☐ Other investigation requests
- ☐ Other documentation: _____

I believe that the above information is accurate and true, and I hereby request that the Washoe County Health District EMS Oversight Program staff investigate the incident.

Signature: _____ Date: _____

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

May 22, 2015

Acting Chief Cochran
Fire Chief
1 East 1st Street
Reno, NV 89501

RE: Notice of Investigation

Dear Acting Chief Cochran,

Notice is hereby given that a complaint has been filed regarding a Reno Fire Department (RFD) Battalion Chief's request for a Carson City Fire Department ambulance unit to respond to an EMS call in downtown Reno. The Washoe County Health District EMS Oversight Program staff has initiated an investigation.

Summary of allegation:
The EMS Oversight Program was notified of a call that occurred on the morning of Friday, May 15, 2015. Reno E-Communications advised REMSA dispatch that the REMSA unit could cancel because the patient decided to go to the hospital via personal owned vehicle (POV).

Subsequently, REMSA dispatch received a call from Carson City dispatch. The call was to notify REMSA that a Battalion Chief requested Carson City Fire Department to respond to the call. Carson City notified REMSA that they would not respond without the request from REMSA, per the mutual aid agreement.

Information requested:
Please provide the following information for this incident: dispatch call log, incident logand audio recordings that show every action taken on the call by the dispatcher(s) and crew, to include their communication between personnel (including the Battalion Chief) for this incident.

Please return the information to EMS Oversight Program staff by June 5, 2015. Thank you for your cooperation, and please feel free to contact me with any questions.

Sincerely,

Christina Conti
EMS Program Manager
EMS Oversight Program
775-326-6042
cconti@washoecounty.us

Cc: EMS Oversight Program

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

May 22, 2015

Jim Gubbels
President and CEO
REMSA
450 Edison Way
Reno, Nevada 89502

RE: Notice of Investigation

Dear Mr. Gubbels,

Notice is hereby given that a complaint has been filed regarding a Reno Fire Department (RFD) Battalion Chief's request for a Carson City Fire Department ambulance unit to respond to an EMS call in downtown Reno. The Washoe County Health District EMS Oversight Program staff has initiated an investigation.

Summary of allegation:
The EMS Oversight Program was notified of a call that occurred on the morning of Friday, May 15, 2015. Reno E-Communications called to advise REMSA dispatch that the REMSA unit could cancel because the patient decided to go to the hospital via personal owned vehicle (POV).

Subsequently, REMSA dispatch received a call from Carson City dispatch. The call was to notify REMSA that a Battalion Chief requested Carson City Fire Department to respond to the call. Carson City notified REMSA that they would not respond without the request from REMSA, per the mutal aid agreement.

Information requested:
Please provide the following information for this incident: dispatch call log and audio recordings that show every action taken on the call by the dispatcher(s) and their communication with field personnel for incident number [redacted].

Please return the information to EMS Oversight Program staff by June 5, 2015. Thank you for your cooperation, and please feel free to contact me with any questions.

Sincerely,

Christina Conti
EMS Program Manager
EMS Oversight Program
775-326-6042
cconti@washoecounty.us

Cc: EMS Oversight Program

Public Health

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

July 23, 2015

Interim Chief Cochran
Fire Chief
1 East 1st Street
Reno, NV 89501

RE: Investigation Findings

Dear Chief Cochran:

I would like to thank your agency for providing the requested information relating to Incident Number [redacted] in order for the EMS Oversight Program to complete its investigation.

Summary of allegation:
The EMS Oversight Program was notified of a call that occurred on the morning of Friday, May 15, 2015 where Reno E-Communications advised REMSA dispatch that the REMSA unit could cancel because the patient decided to go to the hospital via personal owned vehicle (POV).

In addition to the Reno E-Communication notification, REMSA dispatch received a call from Carson City dispatch. The call was to notify REMSA that a Battalion Chief had called Carson City Fire Department and requested their agency to respond to the call. Carson City notified REMSA that they would not respond without the request from REMSA.

Finding:
After a complete investigation into this call, the EMS Oversight Program has some concerns with the sequence of events associated with this call.

According to the audio tapes and dispatch logs reviewed, the baseline timeline is as follows:

[redacted] – REMSA dispatch receives call, incident #[redacted]
[redacted] – RFD Fire Dispatcher receives call
– RFD dispatches to incident [redacted]
– EMD begins, Priority 3 designation assigned (19:59 franchise response area)
[redacted] – RFD arrives on scene (no REMSA)
[redacted] – status update for REMSA, no ambulance enroute
[redacted] – upgrade from RFD to priority 2 (time starts over, 12:59 franchise response area)
[redacted] - RFD requests approval from Battalion Chief to request mutual aid transport from Carson City fire or Incline Village
Battalion Chief approved – Carson City Fire Department and North Lake Tahoe Fire Protection District
[redacted] – RFD logs family members on scene
[redacted] – RFD advises cancel REMSA
[redacted] - REMSA cancels ambulance

Public Health
Protect. Promote. Prevent.

It is the opinion of the EMS Oversight Program that this call exemplifies the need for continued communication between partners on a call. According to records obtained, an ambulance was diverted three times from this call for higher priority calls. However, that information was never conveyed to the regional fire partner on scene. Conversely, the regional fire partner did not request REMSA utilize Mutual Aid Agreements (MAA) to secure transport for the call. Rather, they called for transport from a fire mutual aid partner, who also has transport authority within their specific jurisdiction.

The concern of the EMS Oversight Program is that the franchise agreement grants exclusive rights for ambulance transport to REMSA. Contained within the franchise language, REMSA is able to secure and use MAA with regional transport agencies to help meet the needs of Washoe County.

In this particular call, REMSA appears to have had a large number of calls that negatively impacted the system and the pending calls. Mutual Aid should have been an option for this day considering the number of calls received in a small window of time. Regardless, it is the responsibility of REMSA, as written in the franchise agreement, to request and use MAA to manage the expectations of the region, not the regional fire partner.

As a result of this call, the EMS Oversight Program would like to request that RFD develop a trigger that is objective for when the Captain or Battalion Chief would ask REMSA to request Mutual Aid for transport. Once this policy has been developed, please provide a copy to the EMS Oversight Program as a follow up to this investigation. Please feel free to contact me if you have any questions.

Sincerely,

Christina Conti
EMS Program Manager
775-326-6042
cconti@washoecounty.us

Cc: EMS Oversight Program

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

July 23, 2015

Jim Gubbels
President and CEO
REMSA
450 Edison Way
Reno, Nevada 89502

RE: Investigation Findings

Dear Mr. Gubbels:

I would like to thank your agency for providing the requested information relating to Incident Number [redacted] in order for the EMS Oversight Program to complete its investigation.

Summary of allegation:
The EMS Oversight Program was notified of a call that occurred on the morning of Friday, May 15, 2015 where Reno E-Communications advised REMSA dispatch that the REMSA unit could cancel because the patient decided to go to the hospital via personal owned vehicle (POV).

In addition to the Reno E-Communication notification, REMSA dispatch received a call from Carson City dispatch. The call was to notify REMSA that a Battalion Chief had called Carson City Fire Department and requested their agency to respond to the call. Carson City notified REMSA that they would not respond without the request from REMSA.

Finding:
After a complete investigation into this call, the EMS Oversight Program has some concerns with the sequence of events associated with this call.

According to the audio tapes and dispatch logs reviewed, the baseline timeline is as follows:

[redacted] – REMSA dispatch receives call, incident [redacted]
[redacted] – RFD Fire Dispatcher receives call
[redacted] – RFD dispatches to incident
[redacted] – EMD begins, Priority 3 designation assigned (19:59 franchise response area)
[redacted] – RFD arrives on scene (no REMSA)
[redacted] – status update for REMSA, no ambulance enroute
[redacted] – upgrade from RFD to priority 2 (time starts over, 12:59 franchise response area)
[redacted] – RFD requests approval from Battalion Chief to request mutual aid transport from Carson City fire or Incline Village
Battalion Chief approved – Carson City Fire Department and North Lake Tahoe Fire Protection District
[redacted] – RFD logs family members on scene
[redacted] – RFD advises cancel REMSA
[redacted] REMSA cancels ambulance

PublicHealth

It is the opinion of the EMS Oversight Program that this call exemplifies the need for continued communication between partners on a call. According to records obtained, an ambulance was diverted three times from this call for higher priority calls. However, that information was never conveyed to the regional fire partner on scene. Conversely, the regional fire partner did not request REMSA utilize Mutual Aid Agreements (MAA) to secure transport for the call. Rather, they called for transport from a fire mutual aid partner, who also has transport authority within their specific jurisdiction.

The concern of the EMS Oversight Program is that the franchise agreement grants exclusive rights for ambulance transport to REMSA. Contained within the franchise language, REMSA is able to secure and use MAA with regional transport agencies to help meet the needs of Washoe County.

In this particular call, REMSA appears to have had a large number of calls that negatively impacted the system and the pending calls. Mutual Aid should have been an option for this day considering the number of calls received in a small window of time. Regardless, it is the responsibility of REMSA, as written in the franchise agreement, to request and use MAA to manage the expectations of the region, not the regional fire partner.

As a result of this call, the EMS Oversight Program would like to request that REMSA develop a mutual aid trigger that is objective. This request was initially made by the EMS Oversight Program to REMSA on November 6, 2014 in response to an investigation. As a result of the November 6, 2014 investigation, it was requested that a policy be developed to ensure REMSA call-takers or dispatch supervisor contact field personnel or/PSAP dispatch when an ambulance has been diverted multiple times.

Once these policies have been developed, please provide a copy to the EMS Oversight Program as this is the second time an investigation has occurred where these issues have been present. Please feel free to contact me if you have any questions.

Sincerely,

Christina Conti
EMS Program Manager
775-326-6042
cconti@washoecounty.us

Cc: EMS Oversight Program

Dave Cochran
Interim Fire Chief

Seth Williams
Interim Fire Marshal

August 3, 2015

Washoe County Health District
Attn: Christina Conti
P.O. Box 11130
Reno, NV 89520

Dear Ms. Conti:

Thank you for your response on behalf of the EMS Oversight Program with respect to the Investigation of Incident Number . On behalf of the Reno Fire Department (RFD), I share and agree with the concerns over the lack of clear communication from REMSA to the fire partner on scene (RFD). Having said that, I do have an issue with any actual or implied criticism of the timing and manner in which RFD requested mutual aid. The primary concern and motivating factor for the actions taken by RFD revolved solely around what was best for the patient. As your investigation revealed, transport of this patient was severely delayed and, in fact, never occurred because no REMSA unit ever arrived on scene. RFD took decisive action to remedy this situation by requesting mutual aid. However, due to the unreasonable delay in arrival of a REMSA transport unit, the patient was ultimately transported by a family member who came from a remote location to transport the patient.

We also disagree with any interpretation of the Franchise Agreement that suggests REMSA has the exclusive right to request mutual aid. That language does not appear in the agreement. REMSA has the ability to request mutual aid but not the exclusive right. Indeed, such an interpretation could lead to absurd results. For example, less than two weeks after this incident RFD sought mutual aid through REMSA and REMSA refused to request mutual aid. If REMSA has no ambulances available—as was the case when RFD requested mutual aid—and they refuse to request mutual aid, then the effective result for the patient is that they cannot be transported. Obviously this should never occur. Patient care should not be delayed or denied based on an interpretation of the franchise agreement which prevents an EMS provider such as RFD from providing the best available patient care. As I mentioned when we discussed this issue, we are willing to revisit the terms of the Franchise Agreement to clarify and resolve this issue along with any other issues which need to be addressed in order to provide the best patient care in the area.

Thank you again for your efforts. If you have any questions or would like to discuss any of these matters further please do not hesitate to contact me.

Sincerely,

Dave Cochran
Interim Fire Chief
Reno Fire Department

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

STAFF REPORT
REGIONAL EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: October 1, 2015

TO: Regional Emergency Medical Services Advisory Board

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

SUBJECT: Discussion and possible direction to staff regarding the Investigation Procedures and Expectations of EMS Agencies.

SUMMARY

As a part of the EMS Oversight Program (Program) duties outlined in the Interlocal Agreement for Emergency Medical Service Oversight (ILA), the Program is required to "monitor the response and performance of each agency providing Emergency Medical Services and provide recommendations to each agency for the maintenance, improvement and long-range success of the Emergency Medical Services." (Article 1.2 of Interlocal Agreement for EMS Oversight)

The Program meets this objective through the quarterly data reports as well as complaint inquiries and/or investigations. To provide structure to the investigation process, the Program developed Investigation Procedures and Expectations of EMS Agencies. These procedures were distributed through the District Health Officer to regional EMS agencies on October 30, 2014. The procedures were developed to ensure consistency regarding EMS partner concerns.

The procedures emphasize that EMS agencies should be working together to resolve grievances prior to filing a complaint with the EMS Oversight Program. To date the Program has actively investigated and made determinations or recommendations on seven investigations, with an eighth investigation currently penidng. Additionally, the Program has been made aware of or participated in several agency-to-agency inquiries.

With the ILA being in existence in the region for a year, the policies developed to reach the eight duties of the Program should be reviewed by the EMS Advisory Board for possible edits.

PREVIOUS ACTION

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

The Board was briefed on the Investigation policy developed during the December 2014 meeting.

BACKGROUND

The Interlocal Agreement for Emergency Medical Service Oversight was fully executed on August 26, 2014 when it was signed by the last regional partner. The ILA establishes a foundation for EMS Oversight and regional collaboration for the improvement and enhancement of EMS services within Washoe County, excluding the North Lake Tahoe Fire Protection District. The ILA establishes both the Regional Emergency Medical Services Advisory Board and the Regional Emergency Medical Services Oversight Program. Outlined within the ILA are eight specific duties of the Program. When the program was first established, policies and procedures were developed and appropriately distributed to regional partners.

One policy applicable to the region was the policy for Investigation Procedures and Expectations of EMS Agencies. These were developed and distributed to the regional EMS partners associated with the ILA on October 30, 2014. A copy was also provided to North Lake Tahoe Fire Protection District and REMSA as they are partners within the region who could be impacted by investigation requests. The Investigation policies were reviewed with the Board during the December 2014 meeting.

These policies served as notification of the development of procedures that would structure investigation requests to the Program. Specifically, the procedures were established to ensure consistency and expectations of action regarding EMS partner concerns. The procedures outlined the internal guidelines for conducting administrative investigations of the Washoe County EMS system. The procedures are applicable to the investigation of complaints regarding EMS services in the purview and jurisdiction of the Washoe County Health District.

To date, the Program has officially investigated eight complaints from regional partners, one is still pending information from regional partners. Each complaint has been investigated by following the procedures finalized and distributed on October 30, 2014.

- The Program sends an official letter to the involved partners;
- The letter includes an allegation summary and requests information within 10 days of the date of letter.
- Once the requested information is received, the Program reviews the information.
- The Program sends a conclusion letter that discusses the findings of the investigation, regardless if the claims were substantiated. The conclusion letter includes any recommendations for improvement.

As a way to ensure the EMS Advisory Board is aware of regional concerns, the investigation/inquiries are included in the Program update staff report for each quarterly EMS Advisory Board meeting. It has not been the practice of the Program to distribute the original complaint since the allegation summary was felt to be most important. Additionally, the Program has historically not shared the recommendations to those involved in the investigation. The Program sends the findings and recommendations, if applicable, to only the impacted agency.

A review by the EMS Advisory Board is a method of validating the policies guidelines for the Program, as well as, verifying the policies help achieve the specific objective within the ILA.

FISCAL IMPACT

There is no additional fiscal impact should the EMS Advisory Board provide direction to staff regarding the Investigation Procedures and Expectations of EMS Agencies.

RECOMMENDATION

Staff recommends the Board approve the presentation, provide direction regarding the Investigation Procedures and Expectations of EMS Agencies.

POSSIBLE MOTION

Should the Board agree with staff recommendation, a possible motion would be: "Move to approve the presentation and direct staff (if applicable) regarding the Investigation Procedures and Expectations of EMS Agencies."

WASHOE COUNTY HEALTH DISTRICT

OFFICE OF THE DISTRICT HEALTH OFFICER

Public Health
Prevent. Promote. Protect.

Memorandum

To: Regional EMS Agencies

From: Kevin Dick, District Health Officer

Re: Investigation Procedures and Expectations of EMS Agencies

Date: October 30, 2014

As part of the Inter-Local Agreement, the Washoe County Health District (WCHD) is taking on new responsibilities relating to oversight of the Regional Emergency Medical Services System (EMS provided by Fire, REMSA and Dispatch). As part of the expansion of duties, an EMS Oversight Program is being established. This memorandum is serving as a notification of the development of procedures that will impact your jurisdictional EMS organization.

As part of program development, procedures are being established that will ensure consistency regarding EMS partner concerns. The first procedures developed are internal guidelines for conducting administrative investigations of the Washoe County EMS system. These procedures will be applicable to the investigation of complaints regarding EMS services in the purview and jurisdiction of the WCHD. The following process will be utilized in regards to any investigation request filed for review.

The WCHD would like to emphasize that EMS agencies must attempt to resolve grievances with other agencies prior to filing a complaint with the WCHD. It is anticipated that most resolutions can and should be found without the intervention of the Health District. However, if that resolution cannot be achieved and the nature of the issue requires a fair, thorough and impartial investigation, such complaints should be submitted to the EMS Oversight Program for evaluation and possible review.

In an effort to clearly outline the expectations of regional EMS agencies regarding this new process, the EMS Oversight Program developed the following procedure for investigations:

1) EMS agencies must attempt to resolve the complaint/grievance with the other agency/agencies involved.
    - This step must be followed prior to elevating an investigation inquiry to the WCHD.
    - Enclosed is a suggested template for documenting the concerns, solutions and communication between agencies. This document would allow all parties involved to have a clear understanding of the issue and resolution. Additionally, this will be a valuable document if the WCHD is asked to conduct an investigation.

2) If a solution cannot be established between the parties, the EMS agencies can complete and submit an Investigation Request Form to the WCHD (see enclosed).
    - EMS Oversight Program staff will review the form and conduct an evaluation of the information provided.
    - The EMS agency will receive notification whether WCHD mediation will or will not be occurring.
3) If an investigation occurs, and if deemed necessary, EMS Oversight Program staff will present the investigation and findings to the EMS Advisory Board. This ensures the members are aware of current concerns within the EMS system.

The EMS Oversight Program has a number of responsibilities related to EMS system planning and system response analysis. It may be necessary to further evaluate and adjust this process if EMS agencies are not able to resolve issues on their own and EMS Oversight Program staff are not able to respond to all investigation requests and still fulfill other responsibilities. When investigations are required, staff will approach all investigations with a sense of urgency and impartiality. When possible, EMS Oversight Program staff will strive to complete the investigation and fact gathering within 30 days of the filing of the complaint.

For questions regarding this process please contact EMS Oversight Program staff:

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

Brittany Dayton, EMS Coordinator
775-326-6043
bdayton@washoecounty.us

Below is a suggested format for documenting communication between EMS agencies prior to submitting an Investigation Request Form. Submitting such records will aid EMS Oversight Program staff in determining whether an investigation is necessary.

Issue/Area for Improvement	Action Taken	Meeting Date	Attendees	Outcome of Meeting (Deliverables)	Primary Responsible Organization	Proposed Completion Date
1.						
2.						

Washoe County

Health District

EMS Oversight Program Investigation Request Form

*Individual/organization requesting an investigation (please include all contact information and mailing address):	
*Incident date/time:	
*Incident location:	
Patient name(s):	
Responding agencies involved in incident:	
PCR/RMS number (if known):	
Hospital medical record number (if known):	
Reason for investigation (please attach additional sheets if necessary):	
*Regulation, policy or procedure that was violated (if known):	
*Previous action taken to resolve this issues with the other agency/agencies:	
*Possible solution(s) to the identified issue:	

EMS Oversight Program Investigation Request Form

Please include the following information with your request, if applicable/accessible:

- ☐ Copy of PCR and/or incident report
- ☐ Patient outcome information
- ☐ Dispatch tape(s) and/or radio recordings
- ☐ Other investigation requests
- ☐ Other documentation: _____

I believe that the above information is accurate and true, and I hereby request that the Washoe County Health District EMS Oversight Program staff investigate the incident.

Signature: _____ Date: _____

STAFF REPORT
REGIONAL EMERGENCY MEDICAL SERVICES ADVISORY BOARD
MEETING DATE: October 1, 2015

TO: Regional Emergency Medical Services Advisory Board

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

SUBJECT: **Discussion and possible approval for EMS Program Manager Christina Conti to present an annual update on accomplishments, current and future projects to the City Councils and the Board of County Commissioners.**

SUMMARY

The Inter-Local Agreement (ILA) has been in effect within the region since August 2015. The ILA established both the EMS Oversight Program and the Regional EMS Advisory Board. Outlined within the ILA are eight duties for the EMS Oversight Program. EMS Program Manager, Christina Conti, is seeking approval to present to the City of Reno City Council, City of Sparks City Council and the Washoe County Board of County Commissioners to review the accomplishments and progress over the past year for the EMS Oversight Program and to inform the Boards on the current projects.

PREVIOUS ACTION

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

BACKGROUND

In August 2012 the District Board of Health was provided a report titled "Emergency Medical Services System Analysis" performed by TriData. The study contains 38 specific recommendations to be considered for the improvement of Emergency Medical Services in Washoe County.

The District Board of Health met concurrently with Washoe County Board of Commissioners, Reno City Council and Sparks City Council on October 18, 2012. At that meeting, action was taken to form an EMS Working Group to address the TriData recommendations and establish a mechanism for expanded oversight of Emergency Medical Services.

During the EMS Executive Committee and EMS Working Group meetings it was acknowledged that the implementation of many of the TriData study's recommendations required an Interlocal Agreement (ILA) concerning the Washoe County Health District to amend, remand and establish certain authorities by and between Reno, Sparks, Washoe County and the Health District.

On February 10, 2014 another concurrent meeting was held for presentation, discussion and approval of the Principles of Agreement and a Resolution directing the Washoe County Health District to establish and maintain a regional EMS Oversight Program. During this meeting a motion was made

that there be a full development of an updated Franchise agreement between the Washoe County District Board of Health and REMSA as well as a full development of an ILA concerning the duties and responsibilities of the entities participating in the EMS Oversight Program.

The ILA between the Washoe County Health District, City of Reno, City of Sparks, Washoe County and Truckee Meadows Fire Protection District was drafted based on the resolution presented at the February 10, 2014 concurrent meeting and created a Regional Emergency Medical Services Oversight function for the management, measurement and improvement of Emergency Medical Services within the Washoe County Health District.

During the months of June – August each Board for the represented regional partner reviewed and approved for signature the developed ILA. The approval dates are as follows: Board of County Commissioners 6/24, District Board of Health 6/26, City of Sparks 7/14, City of Reno 7/16, and TMFPD Board of Fire Commissioners 8/26.

The EMS Oversight Program was established and the first EMS Advisory Board meeting was held on October 30, 2014. The EMS Oversight Program has developed several policies and worked on numerous projects since its inception. These activities are relayed to the individual jurisdictions by the Managers and/or the Fire Chiefs.

The EMS Oversight Program would like the opportunity to go before the individual Councils to introduce themselves and the work completed by the program during the first year. The presentation would also discuss the projects the program is currently working on.

A potential presentation outline could be:

- Program staff introductions
- Review of ILA
    - Program duties
    - EMS Advisory Board
- Accomplishments
    - Privacy Policies
    - Investigation Procedures
    - EMS Data Reports
- Current and future projects
    - Mutli-casualty Incident Plan
    - EMS 5-year strategic Plan
    - Franchise response zones within Franchise area

FISCAL IMPACT

There is no additional fiscal impact should the EMS Advisory Board approve the EMS Program Manager, Christina Conti, to present an annual update on accomplishments, current and future projects to the City Councils and the Board of County Commissioners.

RECOMMENDATION

Staff recommends the Board approve for the EMS Program Manager, Christina Conti, to present an annual update on accomplishments, current and future projects to the City Councils and the Board of County Commissioners.

POSSIBLE MOTION

Should the Board agree with staff recommendation, a possible motion would be: "Move to approve EMS Program Manager, Christina Conti, to present an annual update on accomplishments, current and future projects to the City Councils and the Board of County Commissioners."