

BOARD OF FIRE COMMISSIONERS

Marsha Berkbigler, Chair
Kitty Jung, Vice-Chair
Bob Lucey
Vaughn Hartung
Jeanne Herman

FIRE CHIEF

Charles A. Moore

ASSISTANT DISTRICT ATTORNEY

David Watts-Vial



NOTICE OF CONCURRENT MEETING AND AGENDA

**Truckee Meadows Fire Protection District
Sierra Fire Protection District
Washoe County Board Of Commissioners
Reno City Council**

**1:30 p.m.
Monday, June 15, 2015**

**Reno City Council Chambers
1 East First Street, Reno, Nevada 89505**

Accessibility - We are pleased to make reasonable accommodations for members of the public who are disabled and wish to attend meetings. If you should require special arrangements for any meeting, please contact our offices at 334-2030, 24 hours prior to the date of the meeting.

Public Transportation - Public transportation is available to this meeting site: For eligible RTC ACCESS reservations call (775) 348-5438

Time Limits. Public comments are welcomed during the Public Comment periods for all matters, whether listed on the agenda or not, and are limited to three minutes per person. Additionally, public comment of three minutes per person will 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.

Forum Restrictions and Orderly Conduct of Business. The Board conducts the business of the District and its citizens during its meetings. The presiding officer may order the removal of any person whose statement or other conduct disrupts the orderly, efficient or safe conduct of the meeting. Warnings against disruptive comments or behavior may or may not be given prior to removal. The viewpoint of a speaker will not be restricted, but reasonable restrictions may be imposed upon the time, place and manner of speech. Irrelevant and unduly repetitious statements and personal attacks which antagonize or incite others are examples of speech that may be reasonably limited.

Responses to Public Comments. The 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 Board. However, responses from 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 Board will consider, the Board members may choose not to respond to public comments, except to correct factual inaccuracies, ask for staff action or to ask that a matter be listed on a future agenda. The Board may do this either during the public comment item or during the following item: "**Commissioners'/Chief's Announcements, Requests for Information, Topics for Future Agendas and Statements Relating to Items Not on the Agenda".

Pursuant to NRS 241.020, the Agenda for the Board of Fire Commissioner Meetings has been posted at the following locations: Washoe County Administration Building (1001 E. 9th Street, Bldg. A), Washoe County Courthouse-District Court Administrator/Clerk of Court (75 Court Street), Washoe County Central Library (301 South Center Street) and Sparks Justice Court (1675 East Prater Way) and Truckee Meadows Fire Protection District's website at www.washoecounty.us/tmfpd

Support documentation for the items on the agenda, provided to the Board of Fire Commissioners is available to members of the public at the District's Admin Office (1001 E. 9th Street, Bldg. D, 2nd Floor, Reno, Nevada) Sandy Francis, Administrative Assistant I, phone (775) 328-6124 and on the Truckee Meadows Fire Protection District's website at www.washoecounty.us/tmfpd ; and <https://notice.nv.gov>.

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.

The City of Reno is responsible for posting of a Notice of Meeting for the City Council

1:30pm *1. Call to Order

*2. Pledge of Allegiance

*3. Roll call

*4. Public Comment - Public Comment - Comment heard under this item will be limited to three minutes per person and may pertain to matters both on and off the Board of Fire Commissioners agenda. The Board of County Commissioners will also hear public comment during individual action items, with comment limited to three minutes per person. Comments are to be made to the Commission, Truckee Meadows Fire Protection District Commission, Sierra Fire Protection District Commission, and Reno City Council as a whole.

5. Presentation, discussion and possible direction to staff regarding an outline of the process to develop an automatic aid agreement including major components of automatic aid, cost, geographic areas and a timeline for implementation.

6. Presentation (by Washoe County Sheriff's Office), discussion and possible direction to staff regarding regional dispatch.

7. Presentation, discussion and possible direction to staff regarding consolidation, regionalization and the Blue Ribbon Committee Report.

8. Discussion and potential direction by each governing board to its respective staff on possible dates and items for agendas for future Concurrent meetings relating to fire services

*9 Commissioners'/Reno City Council and Fire Chief's announcements, requests for information, topics for future agendas, and statements relating to items not on the Agenda. (No discussion among Commissioners/Reno City Council Members will take place on this item).

***10. Public Comment** - Comment heard under this item will be limited to three minutes per person and may pertain to matters both on and off the Board of Fire Commissioners agenda. The Board of County Commissioners will also hear public comment during individual action items, with comment limited to three minutes per person. Comments are to be made to the Commission, Truckee Meadows Fire Protection District Commission, Sierra Fire Protection District Commission, and Reno City Council as a whole.

11. Adjournment



TRUCKEE MEADOWS FIRE PROTECTION DISTRICT SIERRA FIRE PROTECTION DISTRICT



STAFF REPORT

Board Meeting Date: June 15, 2015

CM/ACM _____
Finance VVB
Legal DWV
Risk Mgt. DE
HR N/A

DATE: June 9, 2015

TO: Truckee Meadows Fire Protection District Board of Fire Commissioners
Sierra Fire Protection District Board of Fire Commissioners

FROM: Charles A. Moore, Fire Chief
Phone: (775) 328-6123 Email: cmoore@tmfpd.us

SUBJECT: Presentation, discussion and possible direction to staff regarding an outline of the process to develop an automatic aid agreement including major components of automatic aid, cost, geographic areas and a timeline for implementation. (All Commission Districts)

SUMMARY

This item is presentation, discussion and possible direction to staff regarding the process to develop an automatic aid agreement including:

- Major components of automatic aid
- Cost
- Geographic areas to be covered
- Timeline for implementation

Strategic Objective supported by this item: *Safe, secure and healthy communities*

PREVIOUS ACTION

On March 24, 2015 the Board of Fire Commissioners heard a supplemental report of the Blue Ribbon Committee for Regional Fire Service, presented by the Blue Ribbon Committee Chair, Sarah Chvilicek. The findings of the Blue Ribbon Committee were recapped including the Committee's recommendation for automatic aid.

On May 26, 2015 during a concurrent meeting along with the City of Reno and Washoe County Board of Commissioners the Board of Fire Commissioners discussed and requested further information regarding processes to develop an automatic aid agreement including major components of automatic aid, cost, geographic areas and a timeline for implementation.

BACKGROUND

At the previous concurrent meeting, the Board of Fire Commissioners directed staff to develop a framework to implement automatic aid. A copy of SB 185 is attached as "*Attachment 1*". SB 185

requires the closest fire engine to respond to reports of structure and brush fire regardless of jurisdiction. Automatic aid agreements must be completed by October 1, 2015.

There are two possible methods to dispatch closest unit. One is by a RAM (reporting area management) and the other is AVL (automatic vehicle location) based. Automatic aid dispatching could occur without AVL, but AVL is more accurate, sophisticated and efficient. Regardless of whether AVL is used, the RAM's will need to be developed for each agency.

The following steps would be required: to develop the dispatch of the closest unit:

1. Identify the geographic areas (RAM) where SB 185 will trigger an automatic aid response.

Each agency will need to discuss and agree on the geographical areas where automatic aid is required by the statute. The process to determine these areas for automatic aid is not complex but does require significant staff work for each agency. Identification of these areas is through map based analysis and can be determined by GIS mapping. Staff recommends that the criteria for closest unit be measured by time and not by distance.

Three graphical examples of how this would be determined are attached. Please bear in mind these are examples and do not represent a complete analysis. The maps allocate the first 8 minutes to the closest station by travel time. Where the two colors meet indicates the midpoint of both engines responding, assuming they leave the station at the same time.

"Attachment 2A" - Verdi/Mogul Area. Reno Station 11, 19 and TM Station 35

"Attachment 2B" - Hidden Valley. Reno Station 6 and TM Station 37

"Attachment 2C" - Stead. Reno Station 9 and TM Station 13

2. Construct URM's ("Unit Recommended Management").

Once RAMs are constructed, then URM's are built so that dispatchers know what vehicle type should respond by the type of call. These URM's must be input into Tiburon CAD. Dispatching by automatic vehicle location is a longer term solution. Through "Command CAD", Tiburon has the ability to dispatch the closest unit but that part of the system was not selected for purchase during the most recent upgrade. During initial development the committee working on the upgrade had to select automatic dispatching or manual dispatching (URM's). It was determined by Reno, Washoe and Sparks to go with the manual system. The committee had to select one or the other as the system had to be built in either automatic or manual mode. It is unclear how intuitive the automatic (closest unit) system will be in the future as it was not heavily explored.

If at some point it is determined that AVL dispatching is desired, there will be cost to redevelop the software for the region. However, AVL does provide an accurate and efficient way to select the closest fire unit. Complexities and costs of AVL dispatching require thorough consideration.

Attachment three is a graphical example of what a dispatcher would see on their screen.

"Attachment 3" – AVL Screenshot.

3. Construct Run Cards

Once RAM's and URM's are complete Run Cards will be constructed to identify the order of which stations apparatus will be dispatched to an incident

4. Written Agreement executed by the agencies.

During construction of RAM's and URM's, work on the formal written agreements could be drafted so they are ready to execute once the agencies have completed their work. The Board should discuss and determine if there will be a cost associated with the agreement. However, many costs associated with automatic aid are imbedded in existing budgets, such as labor and station costs.

The Board could elect to evaluate the automatic aid responses after one year to determine the frequency of responses.

5. Timeline

Work on RAM's and URM's and Run Cards should commence immediately. Staff estimates two months to complete this work. By September 2015, the system should be tested for accuracy prior to roll out on October 1.

Staff recommends study and planning with respect to AVL dispatching. Costs, technical implementation and processes are not yet known.

FISCAL IMPACT

The fiscal impact is not yet known.

RECOMMENDATION

Staff recommends approval of processes to develop an automatic aid agreement with fire agencies within Washoe County, where applicable.

POSSIBLE MOTION

A possible motion to staff could be, *"I move to direct staff to begin work to develop the components of automatic aid."*

(Reprinted with amendments adopted on May 30, 2015)

THIRD REPRINT

S.B. 185

SENATE BILL NO. 185—SENATOR KIECKHEFER

FEBRUARY 23, 2015

Referred to Committee on Government Affairs

SUMMARY—Makes temporary changes relating to fire and related emergency services in certain counties. (BDR 42-121)

FISCAL NOTE: Effect on Local Government: May have Fiscal Impact.
Effect on the State: No.

EXPLANATION – Matter in *bolded italics* is new; matter between brackets ~~omitted material~~ is material to be omitted.

AN ACT relating to suppression of fires; temporarily requiring the entity that is responsible for the closest emergency fire-fighting vehicle to respond to and suppress certain fires in certain counties; exempting an airport authority located in certain counties from this requirement; requiring certain entities to negotiate an automatic aid agreement concerning certain matters; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law authorizes the municipalities of this State to provide fire protection services. (NRS 268.730) Existing law also authorizes the creation of districts for a fire department by boards of county commissioners and the creation of fire protection districts and county fire protection districts. (NRS 244.2961, 473.034, 474.110, 474.460) **Section 1** of this bill requires, in a county whose population is 100,000 or more but less than 700,000 (currently Washoe County), the entity that is responsible for the emergency fire-fighting vehicle located closest to a structure or brush fire to respond to and take all actions necessary to suppress the fire regardless of whether the location of the fire falls within the territory served by the entity. **Section 1** exempts an airport authority in such a county and any vehicle or firefighter of such an airport authority from this requirement. **Section 1** additionally: (1) requires each entity, other than an airport authority which maintains an emergency fire-fighting vehicle in such a county, to negotiate an automatic aid agreement with each other such entity which addresses the reimbursement of costs, geographic areas of coverage or any other relevant issue or any combination thereof; and (2) provides that a failure to reach an automatic aid agreement does not exempt an entity from complying with the requirement to respond to a fire if it is responsible for the emergency fire-fighting vehicle located



* S B 1 8 5 R 3 *

19 closest to the fire. **Section 2** of this bill provides that the provisions of **section 1**
20 expire by limitation on June 30, 2017.

1 WHEREAS, The provision of fire protection and related
2 emergency services is fundamental to what the people of this State
3 expect from their local governments; and

4 WHEREAS, Providing such services in a timely, effective and
5 efficient manner is critical to the protection of life and property; and

6 WHEREAS, The infighting that has continuously occurred for
7 several years between the entities that provide fire protection and
8 related emergency services in Washoe County threatens the lives
9 and property of the people of this State who reside in that county;
10 and

11 WHEREAS, The failure of the local governments in Washoe
12 County to resolve this dispute in a timely manner now requires the
13 Nevada Legislature to intervene and ensure that the lives and
14 property of the people of this State who reside in Washoe County
15 are no longer put at risk by the reluctance of these entities to find an
16 agreement that protects their residents; now, therefore,

17
18 THE PEOPLE OF THE STATE OF NEVADA, REPRESENTED IN
19 SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:
20

21 **Section 1.** Chapter 475 of NRS is hereby amended by adding
22 thereto a new section to read as follows:

23 *1. Notwithstanding any provision of law to the contrary, in a*
24 *county whose population is 100,000 or more but less than 700,000,*
25 *the entity that is responsible for the emergency fire-fighting*
26 *vehicle located closest to a structure or brush fire, unless that*
27 *entity is described in subsection 4, shall respond to and take all*
28 *actions necessary to suppress the fire regardless of whether the*
29 *fire occurs within the territory served by the entity.*

30 *2. Each entity, other than an airport authority which*
31 *maintains an emergency fire-fighting vehicle in a county whose*
32 *population is 100,000 or more but less than 700,000, shall*
33 *negotiate an automatic aid agreement with each other such entity*
34 *to address:*

35 *(a) The reimbursement of costs for actions to suppress fires*
36 *pursuant to subsection 1;*

37 *(b) Geographic areas to be covered by each entity, except that*
38 *any such geographic areas must be established so that, at a*
39 *minimum, the entity responsible for the emergency fire-fighting*
40 *vehicle located closest to a structure or brush fire is required to*
41 *respond to the fire as described in subsection 1; or*



1 (c) *Any other issues relating to the requirements of subsection*
2 *1 identified by the entities.*

3 3. *The failure of an entity to enter into an automatic aid*
4 *agreement pursuant to subsection 2 does not exempt the entity*
5 *from the requirements imposed by subsection 1.*

6 4. *The provisions of subsection 1 do not apply to an airport*
7 *authority or to any emergency fire-fighting vehicle or firefighter*
8 *of an airport authority.*

9 **Sec. 2.** This act expires by limitation on June 30, 2017.

③



* S B 1 8 5 R 3 *

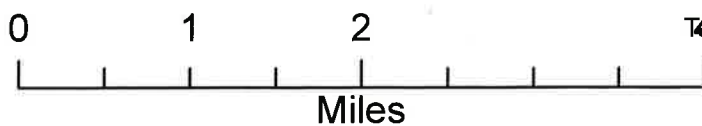
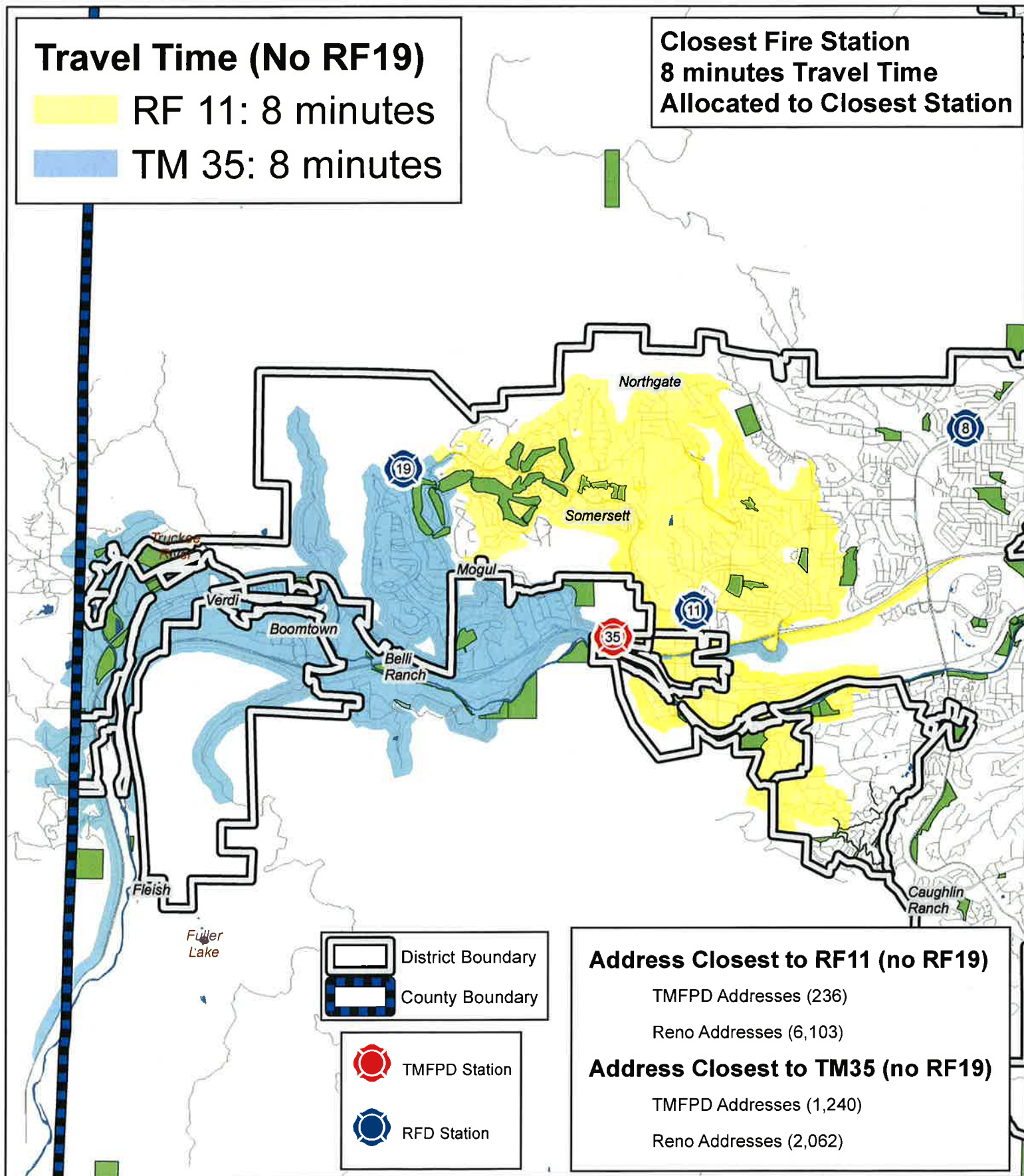
Stations 11 & 35

Attachment 2A

Travel Time (No RF19)

- RF 11: 8 minutes
- TM 35: 8 minutes

Closest Fire Station
8 minutes Travel Time
Allocated to Closest Station

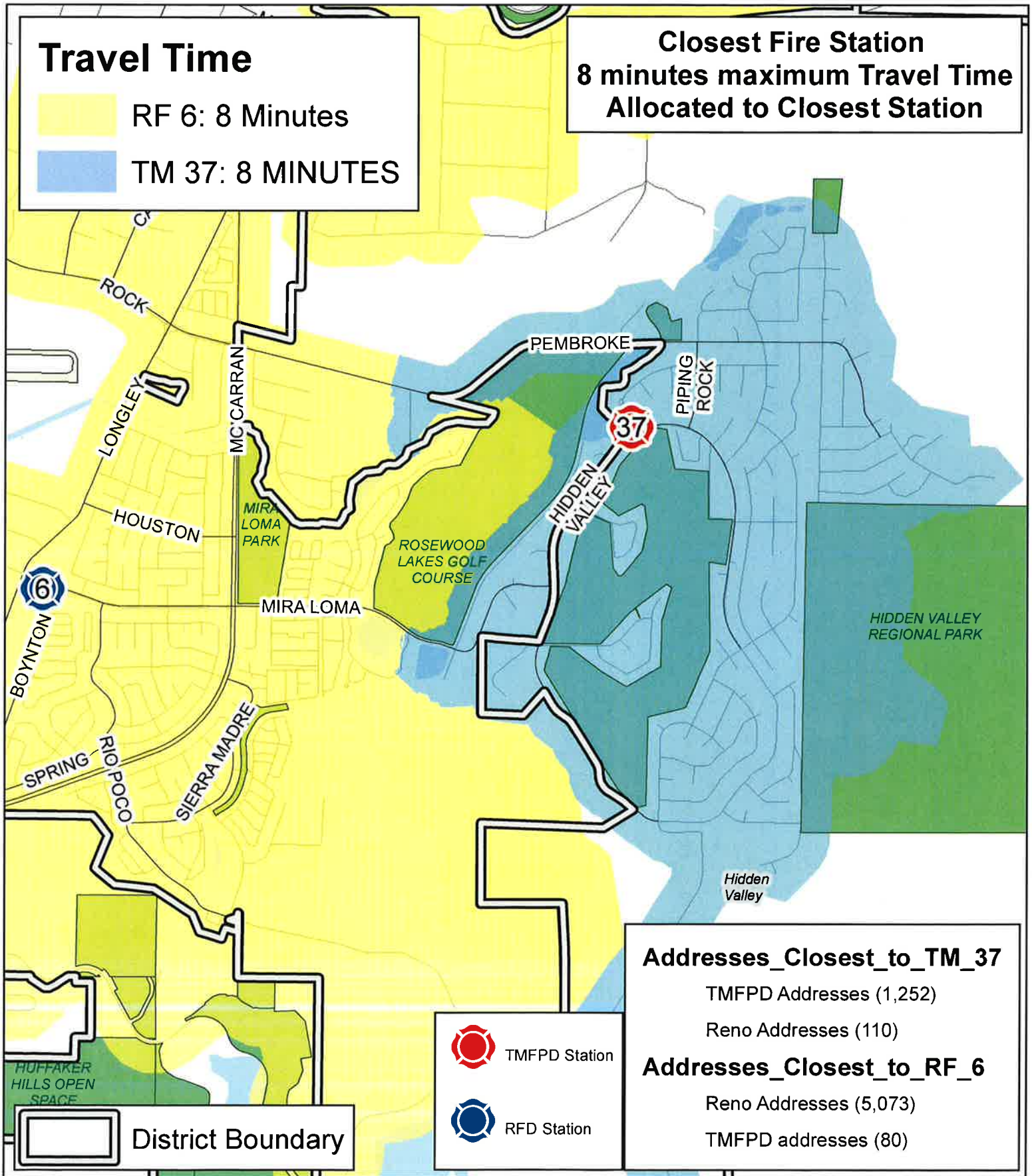


Washoe County GIS Program
Tech. Svcs. Dept/Regional Svcs. Div
1001 E. 9th St.
Reno, NV 89512
www.washoecounty.us/gis



Stations 6 & 37

Attachment 2B



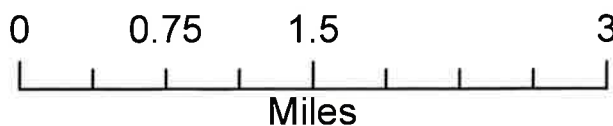
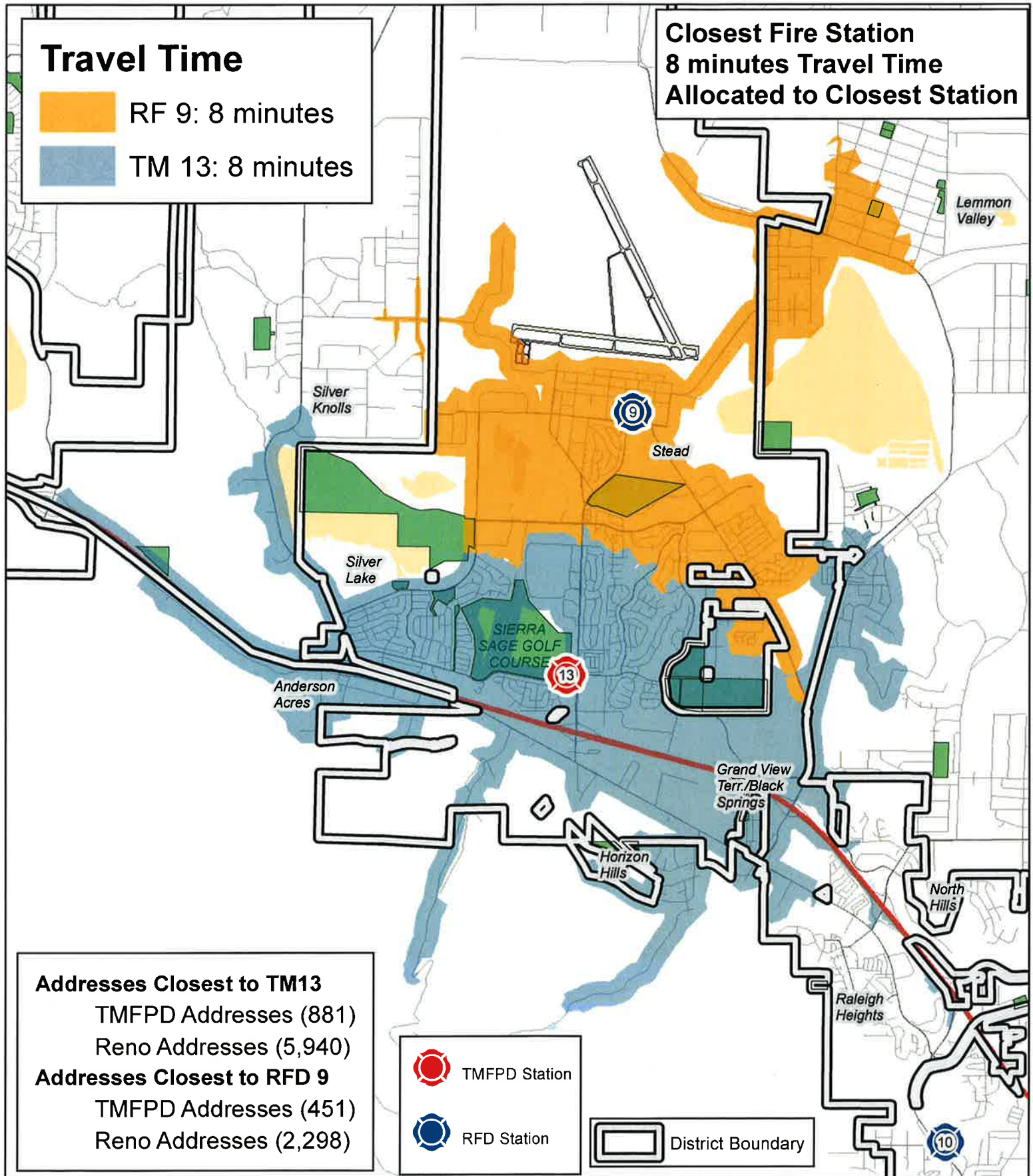
0 0.2 0.4 0.8
Miles

Washoe County GIS Program
Tech. Svcs. Dept/Regional Svcs. Div
1001 E. 9th St.
Reno, NV 89512
www.washoecounty.us/gis



Stations 9 & 13

Attachment 2C



Washoe County GIS Program
 Tech. Svcs. Dept/Regional Svcs. Div
 1001 E. 9th St.
 Reno, NV 89512
www.washoecounty.us/gis



TMF Status F1	TMF Incident F2	NLT Status F3	NLT Incidents F4	Regional Status F5	Recall Incident F6	Available on Radio F7	Available in Quarters F8	Unavailable Staffing F9	Day/Night Mode F11
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Available			Dispatch			Messaging			Admin		
										Show my Unit Show My Call Route to My Call Get Direction to Call Into On Call Location Hide Units and Calls Copy to Whiteboard	
Back Next Track Layers In Out Pan Info Full Address Places Cross St										SERVICE F - Fire	
VIEW1			CAD STATUS			MAP			PATIENT CARE		
AVL			SCRATCHPAD			Full Scr			Send		



TRUCKEE MEADOWS FIRE PROTECTION DISTRICT SIERRA FIRE PROTECTION DISTRICT



STAFF REPORT Board Meeting Date: June 15, 2015

CM/ACM _____
Finance VVB
Legal DWV
Risk Mgt. DE
HR N/A

DATE: June 9, 2015
TO: Truckee Meadows Fire Protection District Board of Fire Commissioners
Sierra Fire Protection District Board of Fire Commissioners
FROM: Charles A. Moore, Fire Chief
Phone: (775) 328-6123 Email: cmoore@tmfpd.us
THROUGH: John Spencer, Washoe County Undersheriff
SUBJECT: Presentation (by Washoe County Sheriff's Office), discussion and possible direction to staff regarding regional dispatch.

SUMMARY

Washoe County Undersheriff John Spencer will present and discuss issues regarding regional dispatch.

Strategic Objective supported by this item: *Safe, secure and healthy communities*

PREVIOUS ACTION

On May 26, 2015 during a concurrent meeting along with the City of Reno and Washoe County Board of Commissioners the Board of Fire Commissioners discussed and requested further information regarding regional dispatch.

BACKGROUND

Dispatch is a critical component of the automatic aid process. The process to dispatch automatic aid will not be automated initially and dispatching by automatic vehicle locators will need to be studied as to cost and implementation.

The Undersheriff will present and discuss matters related to regional dispatch including dispatching for automatic aid

FISCAL IMPACT

The fiscal impact in matters related to regional dispatch is not known.

RECOMMENDATION

There is no staff recommendation.

POSSIBLE MOTION

A possible motion to staff could be, *"I move to direct staff"*.



TRUCKEE MEADOWS FIRE PROTECTION DISTRICT SIERRA FIRE PROTECTION DISTRICT



STAFF REPORT Board Meeting Date: June 15, 2015

CM/ACM _____
Finance VVB
Legal DWV
Risk Mgt. DE
HR N/A

DATE: June 9, 2015
TO: Truckee Meadows Fire Protection District Board of Fire Commissioners
Sierra Fire Protection District Board of Fire Commissioners
FROM: Charles A. Moore, Fire Chief
Phone: (775) 328-6123 Email: cmoore@tmfpd.us
SUBJECT: Presentation, discussion and possible direction to staff regarding consolidation, regionalization and the Blue Ribbon Committee Report. (All Commission Districts)

SUMMARY

This item is presented for discussion and possible direction to staff regarding consolidation, regionalization and the Blue Ribbon Committee Report (Attachment 1).

Strategic Objective supported by this item: *Safe, secure and healthy communities*

PREVIOUS ACTION

On May 26, 2015, during a concurrent meeting along with the City of Reno and Washoe County Board of Commissioners, the Board of Fire Commissioners discussed and requested further information regarding consolidation, regionalization and the Blue Ribbon Committee Report on Regional Fire Services.

BACKGROUND

The Blue Ribbon Committee Report on Regional Fire Service recommended that automatic aid should be implemented as a first step. Legislative action now mandates agencies to implement automatic aid by October 1, 2015. For the reason that automatic aid dispatching will initially be constructed and implemented by way of manual processes, staff is recommending that the primary focus in the next few months should be automatic aid to ensure successful implementation.

Discussions related to regionalization can certainly continue. After the last concurrent meeting, District staff met with City of Reno Fire Department staff to discuss the City's proposed regionalization model. District staff has not had the opportunity to study the information in depth and is requesting further direction from the Board if staff should proceed on analysis and/or possible alternative models for a pro-forma. Staff believes that any model should forecast costs a minimum of five years to test for financial sustainability, inclusive of all operational, administrative and capital cost centers.

FISCAL IMPACT

There are no fiscal impacts related to discussions on regional fire. If the Board directs staff to study regional models, there could be costs for consultants.

AGENDA ITEM #7

RECOMMENDATION

A possible recommendation could include direction to staff.

POSSIBLE MOTION

A possible motion to staff could be, "*I move to direct staff.....*"

Washoe County *Nevada*

Blue Ribbon Committee Report On Regional Fire Service 2014

Prepared By:

Don Bivins, Facilitator
Blue Ribbon Committee



Emergency Services
Consulting International

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ACKNOWLEDGEMENTS

Emergency Services Consulting International (ESCI) would like to acknowledge the assistance and support of Fire Chief Charles Moore and Maureen O'Brien in completing this project. Further, all Blue Ribbon Committee members made themselves available to attend the numerous meetings and presentations throughout the life of this project. The Blue Ribbon Committee (BRC) members were actively engaged in each session, listening carefully to the information being presented by the various agencies and subject matter experts, asking insightful follow-up questions to develop thoughtful positions on the topics. The members of this committee are to be congratulated for wading through volumes of information, developing lines of questions which belie their deeper understanding of the subject matter, and staying engaged in the process to the end.

We would also like to thank the many presenters who made time for the BRC to develop and present information about their agency or area of expertise and field questions by the committee. These presentations were critical to helping the BRC gain understanding, perspective, and context into the many dynamics involved in fire and emergency services delivery.

Washoe County Blue Ribbon Committee Members

Sarah Chvilicek, Chair	Jay Cwiak
Cindy Davis	Chris Graves
Marlene Olsen	Dr. Robert Parker
Susan Severt	Matt Toni
Kim Toulouse	Jennifer Herz, 1st Alternate
Jason Evans, 2nd Alternate	

Truckee Meadows & County Staff

Charles Moore, Fire Chief
Maureen O'Brien, Program Assistant
Blaine Cartlidge, Deputy District Attorney
Robert Cox, Recorder

EXECUTIVE SUMMARY

Emergency Services Consulting International (ESCI) was engaged by the Washoe County Board of Commissioners and the Board of Fire Commissioners of Truckee Meadows to facilitate a Blue Ribbon Committee (BRC), which was convened to evaluate the potential for regional fire services in Washoe County. The BRC was made up of eleven citizens selected by Washoe County who began meeting monthly on July 24, 2013. The purpose of the BRC was to recommend the most efficient and effective regional delivery of Fire, EMS, and Patient Transport services to all communities in Washoe County possible. This report is the culmination of nine months of work gathering data, interpreting information, discussing the results, and coming to certain conclusions as a committee.

Washoe County spans 6,302 square miles in the northwestern edge of Nevada along the eastern slope of the Sierra Nevada Mountains. It is home to approximately 421,000 residents and numerous visitors. It is an expansive region with high urban densities, suburban developments and rural areas, all surrounded by wilderness areas prone to wildfires. The fire departments and fire districts serving these areas are equally diverse, from fully career-staffed, to career staffed with volunteer augmentation, to purely volunteer. There are five government agencies and thirteen volunteer fire departments serving the region. The challenges these agencies face are a reflection of the demographics and geography of their jurisdictions.

Key Findings

- **Fire jurisdictional boundaries are inefficient** – While the agency boundaries may have been logical and provided for efficient response in their initial formation, annexation has rendered them inefficient in many cases. Numerous examples exist where the closest fire station to residents and businesses is in a neighboring jurisdiction or the nearest station is a long distance from a large development. The jurisdictional boundaries are unnecessary limitations to service delivery, often slowing response from the closest unit. And, the neighboring agency unit which is physically closest is often not dispatched due to limitations in automatic and mutual aid agreements. The BRC believes the community expectation is to send the closest resource regardless of jurisdiction.
- **Fiscal constraints impact service** – Some of the fire agencies in the region are financially challenged in terms of sustainability. Commensurate with revenue constraints, service levels vary widely among agencies. Some agencies have a difficult time assembling an effective response force without reliance upon their neighboring agencies. Oftentimes, defined risks exceed the response capability of local responders.
- **Staffing and risk/cost are disconnected** – Staffing levels do not comply with national consensus standards (*NFPA 1710*) and/or are not sustainable. There is a lack of balance between “acceptable level of risk” and an “acceptable cost of protection,” and the community is not adequately educated to make an informed decision about striking that balance on a community-by-community basis or regionally.
- **Non-standardized response protocols lead to greater expense** – There is not a standardized response protocol (approach) by geographic type (urban, suburban, rural, wilderness) throughout the region, leading to inefficient resource acquisition and deployment. Each agency attempts to

equip and respond to all risks in their jurisdiction even if the risk is minimal or the frequency of demand miniscule. The regional hazardous materials team is a successful example of what is possible with regionalization.

- **Efficiency and effectiveness are sacrificed for local control** – Redundancy and duplication are evident with each agency maintaining its own administrative and support infrastructure.
- **Volunteers should not be separate and autonomous** – Volunteers are a key component of emergency services in several areas where insufficient tax base exists to support career staff. That will continue to be true in a regional model as well. However, volunteer organizations in Washoe County are fragmented and inefficient on many levels and are in need of reform. Response, training and activity records, and other critical documentation are either missing or inadequate. A problem of span of control exists in the current system and some volunteers do not live within a reasonable distance of their stations. These issues were also raised in the Standard of Cover published in 2011.
- **Personnel and labor agreements can negate efficiencies** – Some current collective bargaining agreements have language compelling the employer to negotiate any impacts or effects of consolidation, merger or contracts for service. This positions the bargaining units to “cherry-pick” the best components from each collective bargaining agreement in an integration initiative, potentially offsetting efficiencies gained in other areas or rendering the resulting regional agency unsustainable.
- **Grants are necessary but unreliable revenue stream** – Given the limitations of property and other taxes and fees collected by local governments for the services the fire department provides, other revenue sources must be sought. Grants are pursued aggressively. If the sources of these grants dry up, agencies that relied upon the additional revenues to maintain ongoing services will be compelled to reduce core services to their constituents.
- **Numerous system improvements available** – Response data standardization, fractile response time tracking, capturing 9-1-1 caller information prior to hand-off to REMSA, simultaneous dispatch of emergency resources, consideration of pre-alerts to reduce time lags, implementation or standardization of emergency medical dispatch protocols, synchronization of dispatch clocks to standardize response times, and implementation of flexibly deployed and staffed units during periods of peak activity are all examples of improvement which can be made to the existing system but have not been made.
- **Miscellaneous Issues** – Several smaller but important issues were also identified by the BRC. They include:
 - Multiple dispatch centers fragment information and data, and cause redundant investment in technology. Often the centers cannot communicate with one another.
 - The fire service is a key resource in providing emergency medical services to the region, but is not consulted prior to franchise agreement modification with Regional Ambulance Services, Inc. (RASI), the regional ambulance agency with exclusive transport authority.
 - RASI is the emergency medical transportation agency for the vast majority of Washoe County. The fire service is not relied upon to provide surge capacity for the system in when RASI resources are depleted or the unlikely event of a default by RASI.

- Wildland-Urban Interface (WUI) area fuel management is inadequate and inconsistent throughout the region.
- Encouraging use of built-in fire protection features to reinforce remote areas hard-pressed to receive an adequate physical fire department response is an effective strategy.
- While some improvement in standardization of code enforcement has occurred, continuing to align codes to a standardized approach should be the goal in each code adoption cycle in the region.

Opportunities

The citizens of Washoe County can be actively engaged in protecting and defending themselves from wildfire and natural disaster in ways such as becoming Fire Adapted Communities. This program forms a partnership between property owners, neighbors, firefighters, and civic leaders to create a well-coordinated defense in advance of a wildfire's occurrence. The program requires education, commitment, and follow-through. There are numerous examples of this program's successful implementation throughout the United States.

In addition, maintained enhancement of code enforcement efforts in defensible spaces within the interface areas can reduce the occurrence of devastating wildfires within the region. Utilization of built-in fire protection features, especially in those areas unable to receive an adequate effective response force, can reduce system costs while increasing the protection available to more remote portions of the region.

Borderless responses (otherwise known as automatic aid or closest unit response) can provide efficient and effective emergency response by disregarding inefficient jurisdictional boundaries. The issue of subsidy can be addressed by annual true-ups of any disparity which exists between agencies.

A public-private partnership with REMSA could provide for better coordinated utilization of advanced life support resources throughout the region. By coordinating, fewer REMSA units are distributed strategically where advanced life support assets are not available within a reasonable response time, reducing system expense. The addition of a fire agency representative on the all-volunteer board of directors would provide greater opportunity for coordination and collaboration.

Standardized response protocols between agencies allows for redistribution of assets based on risk. This facilitates redeployment of busier emergency vehicles to slower station areas to extend the useful life of the vehicles which reduces system costs.

Challenges

Labor costs and contracts create different fiscal impacts to each of the agencies. Aligning these under a single agreement can become exceedingly difficult and can result in "cherry-picking" the best components of the various agreements, increasing overall costs for a single, integrated system.

Each agency has various facilities and equipment, each with varying degrees of maintenance programs and apparatus/facilities replacement schedules. To the extent that maintenance has been deferred, a

single integrated agency may cause some agencies to subsidize others. This also includes funded versus unfunded post-employment benefits provided to retirees.

Equalization of taxes can shift costs from one area to another, increasing taxes in one area and decreasing taxes in another. Absent a legislative solution to the statutory property tax cap, some agencies do not have room to increase their taxes.

Finally, the three most common obstacles to regionalization or integration are turf, power, and politics. It will take substantial political will to overcome these three obstacles. If these obstacles are overcome, there are well-proven solutions to the remaining challenges to regionalization available.

Regional Options & Recommendations

While there are numerous permutations to regionalization or integration, there are four basic regional options: enhanced mutual aid/automatic aid agreements; consolidation through interlocal agreement; consolidation through one taxing district; or consolidation through a Joint Powers Agreement (JPA).

With the JPA, there are two types; an interlocal agreement with equitable shared governance of the entire fire department, and an interlocal agreement with equitable shared governance and management only. In the first JPA, “cherry-picking” continues to be a potential problem, but tax equalization is not an issue.

In the second, each agency would continue to define their own service level, retain facilities and equipment, manage their own budget, and be responsible for their own unfunded liabilities. Closest unit response, as in automatic aid agreements, could be implemented in this concept. Some efficiency would be lost in this form of a JPA, but much of the benefit can be retained.

Given all of the foregoing, the BRC recommends the following:

- The BRC strongly believes that an independent regional fire department governed by an autonomous board, free of political grandstanding and in-fighting is the ultimate answer and therefore the ultimate goal. The county should lead the way of regional collaboration by starting small and working toward larger collaboration efforts with other agencies.
- Pursue legislative remedies to Nevada Revised Statutes 318 and 474, allowing general improvement districts to exceed the current statutory tax cap, and allowing county fire districts to overlay cities, respectively.
- Use Peak Activity Units (PAUs, units placed in service above the normal deployment model only for short periods of time during anticipated peak demand) when and where demand is predictable and where resource concentration needs to be bolstered temporarily as determined by demand data.
- Standardize response performance data, including quantifiable definitions of the components contained within the fire and EMS response cascade of events. Transparency of this data would help educate communities about the quality of the service they receive.
- Synchronize dispatch center clocks for all emergency services dispatch agencies in the county.

- Assimilate all volunteer fire departments into Truckee Meadows Fire Protection District.
- Implement borderless response (automatic aid) agreements among all agencies in Washoe County.
- Educate the community about the details of the emergency response system within the county.
- Educate the community about their responsibility to prepare and protect themselves in the event of an emergency.
- Enforce existing codes requiring the creation and maintenance of defensible spaces.
- Establish Washoe County as a Fire Adapted Community (see University of Nevada Cooperative Extension website for model – <http://www.livingwithfire.info/>).
- Create incentives to install built-in fire protection systems in rural and interface areas, in particular in Gerlach and Red Rock.
- Create a public-private partnership with REMSA, coordinating emergency resources for more efficient utilization.
- Should the formation of any specific regional agencies be pursued, a committee be formed to evaluate the details of that partnership.

CHARGE TO THE COMMITTEE

On February 26, 2013, the Board of Fire Commissioners began the process of developing a Blue Ribbon Committee to evaluate the potential for regional fire services.¹ The Blue Ribbon Committee (BRC) was charged with the following:

1. Prepare a comprehensive written report that assesses the current systems and identifies opportunities and challenges for improvements, effectiveness, efficiency, and innovation.
2. Prepare and present findings to members of the public, elected leaders, and local fire service that is easy to understand, both by the technologically-educated professional and the lay-person.
3. Invite and involve participation from stakeholders including fire service professionals, volunteers and leaders, labor, and elected officials including those that are innovative and in touch with the latest and most advanced trends within the fire service. Participation by any and all agencies or representatives should be voluntary but encouraged. It should be emphasized that any member, representative, or agency who participates in the fact-finding process shall not be expected to commit to the plan as described in the written or presentation findings report.
4. Convene as soon as possible, establish an aggressive meeting schedule, and provide a preliminary report of findings to the Washoe County Commission, Cities of Reno and Sparks, the regional fire districts, and other cooperating agencies.

The BRC was formed and met for the first time on July 24, 2013. Invitations were extended to the Reno Fire Department and the Sparks Fire Department to participate, but Reno failed to respond and Sparks declined. Neither agency participated.

PURPOSE

At its core, the purpose of this effort is to recommend the most efficient and effective delivery of fire, EMS, and transport services to all communities in Washoe County possible. The BRC has concluded that a regional approach to emergency services delivery would create economies of scale in operations, support services, and administration. The BRC believes these economies and efficiencies can be found in:

- Costs associated with inefficient geographic overlap of service deployment.
- Costs associated with redundant administrations.
- Costs associated with fixed post positions.

¹ The Blue Ribbon Committee interprets the term “fire service” broadly to be all-inclusive of the services provided by a fire agency, such as emergency medical services, rescue services, fire prevention services, public education services, and all of the internal support services. Throughout this report, wherever the term “fire service” is used, it is meant in the broader context.

- Critical assets could be strategically deployed throughout the service area, increasing efficient utilization and decreasing redundancy.
- Response time enhancement by eliminating jurisdictional boundaries.
- More effective training of first responders.
- Expanded opportunities for volunteers.
- More effective planning for future delivery of these critical services.

BACKGROUND

The entire area known as Washoe County is home to almost a half million residents who inhabit \$11 billion of taxable structural value and three million acres of open space for recreation. It relies on the Truckee River, the Sierra Snow Pack, and the region's pleasant climate as natural resources to sustain life. It also relies on critical infrastructure such as freeways, highways, railways, airports, power plants, and utility transmission lines to support its economy and its tax base. This place we call home is filled with peace, beauty, and happiness intermixed with risks, mishaps, and disasters. To maintain a comfortable balance, the people of Washoe County rely heavily on public safety services dedicated to respond quickly to disasters and daily emergency incidents, assigned with the mission to protect life and property from further harm and destruction. One such service is fire protection.

It could be argued that many autonomous agencies with authority for fire protection require more coordination, thereby limiting efficiency. Communities within Washoe County have expanded over time – both in land area and population – to a point that boundaries that were once easily identifiable have blended together into inefficient service territories that can impact cost, response times, and service levels. Technological and/or political solutions that see no jurisdictional boundary have been implemented with success in other jurisdictions. Our region has history and continued potential for incidents that can easily overrun and overwhelm the sole responding agency. It seems obvious that finding a balance between the cost to provide resources and the duty to protect the community from risks is no longer an issue that can be ignored.

Financial exigencies and competition for resources from other deserving public service functions dictate that we apply resources for fire and emergency response in the most efficient, responsive, and highest quality manner.

The Washoe County region has received fire and emergency medical services (EMS) by as many as five local government agencies and thirteen (13) volunteer departments, plus various federal and state agencies. As of the 2010 census, the region is home to 421,407 people inhabiting 6,302 square miles. The county has highly urban centers surrounded by suburban communities which transition into rural areas, and significant wildland areas. Using U.S. Census definitions, urban is an area with a density of greater than 1,000 population per square mile, suburban is an area with a density of between 500 and 1,000 population per square mile, and rural is an area with a density of less than 500 population per

square mile. Wildland is defined as an area in which development is essentially non-existent, except for roads, railroads, power lines, and similar transportation facilities. Structures, if any, are widely scattered.²

Urban centers have spread by population and land area, but not efficiently. The boundaries between communities were once clearly defined and logical, but expansion has all but obliterated visible signs of community separation, leaving very inefficient service areas and unique emergency services challenges. In numerous cases, the fire service infrastructure (fire stations) is no longer strategically placed to serve its own constituents when strictly adhering to jurisdictional boundaries.

Consolidation/Deconsolidation

Efforts to consolidate and then deconsolidate appear to have a central theme – financial sustainability. The focus on financial sustainability is critical, but if emphasized to the exclusion of other factors such as the impact on services provided, the safety of the citizens, or the safety of first responders, the fire department falls short of its mission.

In the late 1990's, Truckee Meadows Fire Protection District provided direct service to its constituents around the City of Reno and operated as an independent fire service provider. In 1998, Reno annexed a portion of Truckee Meadows which reduced the districts' revenues by \$700,000. With the prospect of additional planned annexations by Reno into Truckee Meadows, the combined potential loss of revenue would render the district financially unsustainable. Options for Truckee Meadows included service reductions, tax increases, or consolidation with Reno. After two years of negotiating, Truckee Meadows and Reno agreed to consolidate agencies in 2000.

As the lead agency, Reno had exclusive authority to make expenditure decisions and negotiate with labor. The consolidation worked well financially until 2008-2009 when the Great Recession hit. Reno closed 4 of 14 stations, 2 additional were frequently browned-out (unstaffed for periods of time), one unit was decommissioned, and another was unstaffed. The city renegotiated the contract with Truckee Meadows, but did not renegotiate staffing levels for fire units as Truckee Meadows requested. In 2010, Truckee Meadows notified Reno that it was having difficulty financially due to the recession and needed further adjustments to the agreement to continue to be sustainable. Truckee Meadows requested a reduction to three person companies as part of the strategy to reverse the economic losses. Reno provided \$450,000 of relief, but far below the expenditure reductions requested and did not reduce Truckee Meadows crews to three person companies. By fiscal year 2012, Truckee Meadows had lost \$4.1 million in revenue. Sierra Fire, while not part of the consolidation, lost an additional \$2.2 million. Sierra was created out of the Nevada Division of Forestry in 2006, and operated as a stand-alone entity until the consolidation with Truckee Meadows in April, 2012.

In 2011, Reno notified Truckee Meadows that indirect charges will be increased to \$912,017; almost triple the previous years' indirect charge. After further negotiation, Reno made a final fire services offer

² Wildland Fire Coordinating Group, *Glossary of Wildland Fire Terminology*, July, 2012, page 185.

to Truckee Meadows which eliminated annexation credit and resulted in increased financial instability. Eleven days later, the Truckee Meadows Board of Commissioners approved a notice of termination of the interlocal agreement with Reno, opting to reconstitute its own independent fire service agency with three-person companies as its only financially viable option.

While Truckee Meadows Fire Protection District is operating successfully since the deconsolidation, it is clear to the Board of Commissioners that greater efficiency can be gained by a regional approach to delivery of fire services. For these reasons, the Board of County Commissioners have sought to convene a non-partisan citizen committee to; a) evaluate the fire and emergency services system and issues; b) establish findings regarding existing and possible new service models; and c) provide for a flexible but permanent plan for managing fire services within Washoe County at a regional level.

The Board of County Commissioners approved a scope of work document that outlines the direction for the formation of a Blue Ribbon Committee on February 26, 2013. The committee itself convened on July 24, 2013 to kick off the process. Within a short period of time, the committee had developed a work plan to systematically evaluate each facet of emergency service delivery in Washoe County to the extent information was available or agencies were willing to participate.

For these reasons, the Board of County Commissioners and Board of Fire Commissioners convened a Blue Ribbon Committee of significant citizens tasked to study the issues from a non-partisan perspective.

OVERVIEW OF CURRENT SERVICE PROVIDERS:

North Lake Tahoe Fire Protection District

Contact: Michael Brown, Fire Chief

Demographics: 8,777 population and 16 square miles served

Fire Stations: 3

Response Capability: Structure fire, wildland fire, motor vehicle collisions, EMS transport at the ALS level, desert search and rescue, lake response, rescue and recovery

Challenges: Fuels management in the Wildland Urban Interface (WUI) surrounding Incline Village and Crystal Bay, and funding

EMS Transport: Provided internally

Pyramid Lake Fire Rescue

Contact: Donald J. Pelt, Emergency Response Coordinator

Demographics: 2,253 population (approximate) and 497 square miles served in Washoe County

Fire Stations: 2

Response Capability: Structure fire, wildland fire, motor vehicle collisions, EMS at the BLS level, desert search and rescue, lake response, rescue and recovery

Challenges: Volunteer training, retention of volunteers, and shrinking budgets

EMS Transport: Currently seeking to provide EMS transport services (via the permit process)

Storey County Fire Protection District

Contact: Battalion Chief DuFresne

Demographics: 4,010 population and 262 square miles served

Fire Stations: 5

Response Capability: Structure fire, wildland fire, motor vehicle collisions, EMS at the ALS level, desert search and rescue, technical rescue (in partner with Central and North Lyon), hazardous materials (in partner with Central and North Lyon), dozer initial response, ice rescue

Challenges: Communication, unfunded mandates, funding, staffing, long responses across district, long transports, which create resource shortages

EMS Transport: Provided internally

Truckee Meadows Fire Protection District

Contact: Charles Moore, Fire Chief

Demographics: 94,200 population (combined service area) and 970 square miles combined service area (238.1 square miles in Sierra Fire District and 731.9 square miles in Truckee Meadows Fire District)

Fire Stations: 11 career staffed, 14 volunteer staffed

Response Capability: Structure fire, wildland fire, motor vehicle collisions, EMS at the ALS level, desert search and rescue, technical rescue, hazardous materials, swift water rescue

Challenges: Span of control with current volunteer departments not manageable, annexations erode tax base, future I-80 corridor growth will increase demand on already taxed resources

EMS Transport: Currently received through REMSA (see below)

Regional Emergency Medical Services Authority (REMSA)

Contact: Mitch Nowicki

Demographics: 421,407 population and 6,302 square miles served

Fire Stations: Not fixed post – 42 ambulances and 4 helicopters in the fleet, one of which is assigned to Washoe County

Response Capability: All priority 1, 2 and 3 calls, tactical EMS, subscription service offered (including aero-medical)

Challenges: None were submitted to the BRC

EMS Transport: Primary mission

North Lyon County Fire Protection District

Contact: Chief Cleveland

Demographics: Approximately 20,000 population and 164 square miles served

Fire Stations: 2

Response Capability: Structure fire, wildland fire, motor vehicle collisions, EMS at the ALS level with transport capability, desert search and rescue

Challenges: Low tax base, low funding, low staffing, extreme risk through industrial and transportation growth and development

EMS Transport: Provided internally



Reno Fire Department – Did not participate

Contact:

Demographics:

Fire Stations:

Response Capability:

Challenges:

EMS Transport:

Sparks Fire Department – Did not participate

Contact:

Demographics:

Fire Stations:

Response Capability:

Challenges:

EMS Transport:

Airport – Did not participate

Contact:

Demographics:

Fire Stations:

Response Capability:

Challenges:

EMS Transport:

METHODOLOGY

The BRC convened, developed, and approved a work plan for a six month series of meetings, inviting experts in their field to present information pertinent to its deliberation and consideration of regional fire service delivery. The following people and/or agencies presented information to the BRC and made themselves available to answer questions posed by the committee:

- Chief Moore and Division Chief Leighton, Truckee Meadows Fire Protection District (terminology, mutual and automatic aid)
- Chief Cleveland, North Lyon County Fire Protection District (agency specific information)
- Emergency Response Coordinator Pelt, Pyramid Lake Paiute Tribe (agency specific information)
- Battalion Chief DuFresne, Storey County Fire Protection District (agency specific information)
- Chief Brown and Battalion Chief Magenheimer, North Lake Tahoe Fire Protection District (agency specific information and emergency communications)
- Mitch Nowicki, Regional Emergency Medical Services Authority (agency specific information)
- Aaron Kenneston, Washoe County Emergency Manager (agency specific information)
- Blaine Cartlidge, Deputy District Attorney, Washoe County (on statutes related to regional fire services)
- Don Bivins, Emergency Services Consulting International (industry best practices, EMS trends, and fiscal challenges/fire service Innovation)
- Mary Walker, Walker & Associates (fiscal and governance overview)

SERVICES CONSIDERED

It is important to define the broader term, “emergency services” in the context of this report. Specifically, the services the BRC considered in this report are:

- Fire and rescue services
- Emergency medical care (first responder ALS and BLS)
- Ambulance transport (ALS and BLS)
- Fire prevention
- Fire investigation
- Building plan review
- Community education (what services are available currently, what citizens can do to protect themselves, fire prevention, crisis communication, and social media)
- Emergency management
- Support services (fleet and facility maintenance, finance, human resources)
- Aero-medical resources
- Tactical response with service-law enforcement
- Volunteers



LEVELS OF SERVICE

While most fire and emergency services agencies provide most or all of the services listed above, the levels of service vary from agency to agency. It is important to evaluate the need for these services based on the emergency response demand (call volume) and the risk the community faces which would require these services. Once it is determined that an area has a clearly defined risk and a demonstrated demand for the services, the quantity of resources and capacity of the agency providing the service must be evaluated. This is referred to as an effective response force. An effective response force is the number and type of resources arriving within a predetermined period of time (usually ten minutes) to effectively manage an incident.

In April 2011, ESCI completed and published a Regional Standards of Cover document, assessing and recommending service level standards and system improvements for Reno Fire Department, Washoe County Fire Suppression Program, Sierra Fire Protection District, and Truckee Meadows Fire Protection District. Recommendations from that report included:

- Improve call processing time at ECOMM (Reno's Emergency Communications Division), which currently exceeds national standards by more than one minute.
- Improve turnout time for emergency responses for all agencies, which currently exceeds national standards by more than one minute.
- Use built-in fire protection systems (i.e., residential sprinklers) to reduce effective response force needs in Gerlach and Red Rock.
- Standardize existing independent volunteer fire departments by assimilating them into existing fire protection districts.
 - Improve systems for record-keeping, data compilation, and analysis.
 - Establish minimum performance standards for volunteers.

Since that report was published, some improvements have been made in call processing time and turnout time, but work still needs to be done in the Gerlach and Red Rock areas, as well as assimilation of independent volunteer fire departments into existing fire districts. Further, the Regional Standards of Cover document did not include key agencies, such as Sparks and REMSA. Some key data tracking and analysis components are not standardized throughout the county or are missing, making effective management decisions on sound data difficult. Simple infrastructure coordination such as synchronized dispatch times would improve data reporting and analysis. True response time comparisons are made more difficult when separate dispatch centers handle the same calls for service, dispatch different resources to the same event, and use non-synchronized clocks to track all of the elements which make up a total response time.

Staffing Levels

The staffing levels of the fire agencies reviewed vary in number and qualifications. In Reno, unit staffing is typically four firefighters and some units operate at the intermediate life support level, while others operate at the basic life support level. In Truckee Meadows, unit staffing is a minimum of three, one of



which is an advanced life support paramedic. In Sparks, unit staffing is three or four and operate at the intermediate life support level. The more rural agencies have widely varying staffing levels and medical certifications.

National Fire Protection Association (NFPA) established a consensus standard titled "Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments." Referred to as *NFPA 1710*, the document outlines engine and truck company staffing levels at four for career fire departments. Reno is the only agency in Washoe County to achieve this staffing standard. A great many fire departments nationally do not meet this standard as it is exceedingly difficult to afford.

A safety standard for structural firefighting also exists, commonly called "two-in, two-out." This requires offensive interior attacks on a structure fire to be performed in teams of two (minimum), with a minimum of two additional crew members outside of the structure prepared to rescue the two attacking the fire should that become necessary. If there are not sufficient personnel to meet this standard for offensive operation, personnel must not enter the structure until sufficient personnel arrive to meet the standard. Thus, a four person unit can initiate offensive interior operations. Units staffed with fewer must wait for additional personnel. The only exception to this limitation is if there is an immediate threat of life loss, in which case three personnel are allowed to operate in the interior to effect rescue of trapped occupants.

There is much debate in the fire service about staffing levels and the cost of the various staffing configurations. In dense urban areas, risks are typically higher, especially with high rise occupancies, and thus larger numbers of firefighters must arrive quickly to limit the spread of fire and rescue trapped occupants. In more suburban and rural areas, the risk is not quite as built up, but exists nonetheless. Large concentrations of firefighters are not typically needed or expected in as short a period of time. In these suburban and rural areas where risk is separated, units are typically deployed further apart than their urban counterparts. Thus, second or subsequent units are further away and will arrive much later than their urban counterparts. While the risk is not as high, the "two-in, two-out" rule still applies. If the first arriving unit has less than four firefighters aboard, they tend to wait longer for a fourth firefighter to arrive to meet the standard and conduct offensive interior operations.

The debate in the fire service is this:

- Is it more advantageous to have four person companies in the dense urban core where higher concentrations of risk are located but where high concentrations of resources are also likely to arrive almost simultaneously with the first unit?

Or,

- Is it more advantageous to have four person companies in the suburban and rural areas where the risk is more separated, but the crew size facilitates an offensive interior attack without having to wait for an additional crew?

Of course, four-person staffing regardless of density resolves all of the regulatory safety issues. It also ignores the cost of providing this service, the frequency of which has been steadily declining in most of the United States to become a fairly infrequent occurrence.

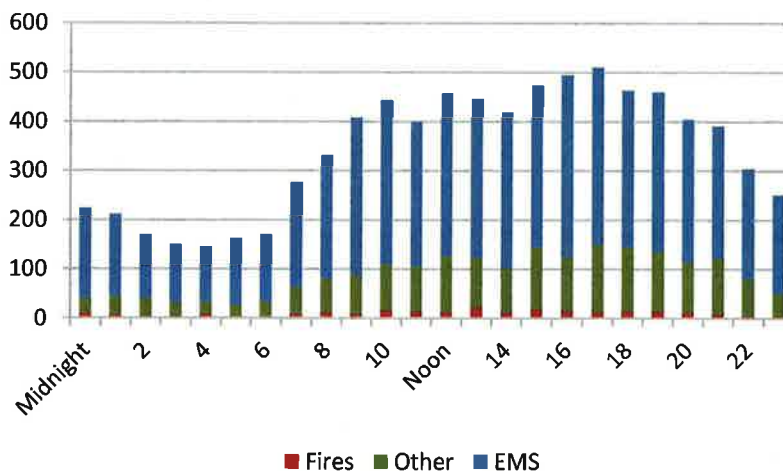
Communities and policy-makers can respond to this conundrum by educating the community about the risks and the costs, striking a balance between “acceptable level of risk” and an “acceptable cost of protection.” Once this is performed, the fire department can develop a deployment plan accordingly.

Flexibility Based On Peak Demand

One of the keys to the success of an effective response force is the distribution and concentration of resources. In most communities throughout the United States, fire departments build “fixed post” locations (fire stations) based on the current demand in place at the time of construction. While many communities look into long range planning and attempt to forecast growth patterns for the future of their community and place fire stations in positions for future benefit as well, many communities grow in unforeseeable patterns (such as annexation). A dynamic way to address these cycles is to flexibly deploy some resources based on peak demands for service.

Resources deployed in a dynamic manner based on peak demand are often referred to as “Peak Activity Units” or PAUs. These units are added to a system during times of predictably higher demand than normal or in a geographically diverse manner. For example, activity in part of a community may face significant demand during typical commute times (rush hour), making response to the downtown area difficult. A PAU may be deployed during those times to temporarily add concentration of resources to that area. If that demand drops off significantly once commuters have arrived at their destination, the PAU may be redeployed to another area of the community where statistically high call volume occurs, or the unit may be deactivated, reducing system costs. Figure 1 illustrates typical activity by time of day in many communities.

Figure 1: Example of Peak Demand by Time of Day



Maintain or Enhance ISO Rating

The Insurance Services Organization (ISO) is a national insurance industry organization that evaluates fire protection for communities across the country. A jurisdiction's ISO rating is an important factor when considering fire station and apparatus distribution; since it can affect the cost of fire insurance for individuals and businesses. For ISO purposes, response areas are measured at 1.5 miles of travel distance for each engine company; and 2.5 miles for a ladder company (aerial apparatus) on existing roadways. For a structure to be in a protected rating for insurance purposes, it must be within five miles of a fire station. Maintenance or enhancement of the ISO ratings is an important consideration in evaluating the potential for regional service delivery, since only partial credit for response capability is given when provided by neighboring agencies, but full credit is given when provided by the evaluated department.

Standardized Response Protocols

Standardized response protocols by demographic subset (i.e., urban, suburban, rural) are easier to manage when there is significant depth of resources, such as in a regional service delivery system. Risk management planning and decisions can be made based on the density of the risk and the concentration of resources required managing such risks. Those densities and risks lend themselves to be managed well by using critical task analyses to guide resource deployment. For example, rural and some suburban densities are more likely to require water delivery by water tenders to the scene of a fire. The personnel and equipment needs for these types of incidents vary significantly from urban densities which rely on fixed water distribution systems or fire hydrants.

By standardizing response protocols (the level and type of response a given emergency requires), equipment can be distributed based on risk, and staffing can be deployed based on the critical task analysis for the given risk. These distinctions allow for more efficient assignment of resources, providing greater concentrations where density and life risk is high, and comparatively fewer resources (but the right type of resources) where density and risk are low. Utilizing dynamic deployment concepts allows for a "power shift" of resources where seasonal or event driven risks grow for a predictable period of time. An example includes greater risk in the rural areas during wildland fire season.

ADMINISTRATION AND GOVERNANCE OF SERVICES

The numerous fire departments serving the Washoe County area have various administrative and governance structures. While an argument can be made for the advantages of local control, it is often at the expense of opportunities for greater efficiency and effectiveness. The simple example of duplication of fire chiefs illustrates this tradeoff. A balance must be established to maintain some form of local control while leveraging the efficiencies possible with regional collaboration.

Direct local control and focused service delivery can be obtained by a single purpose government structure. A portion of the disconnect or dysfunction with the current array of structures in the reviewed fire service agencies is the competition for funding with other government services. This is the difficulty of a general purpose government model, i.e. a city or county. The BRC believes that the fire service is a critical public safety function, and as such, should be managed with an independently elected board.

Incremental steps can be taken to accomplish this. The county can start small and work toward a fully regional system over time.

Shared Administrative Services Expense

In typical regional collaboration for fire services, administrative duplication could be eliminated to increase efficiency. It is important to recognize that the five years of budget cutting has reduced some of the opportunity for that efficiency, however, there are still more fire chiefs than necessary within the region if those agencies were to operate as a single entity.

VOLUNTEERS

Economics, risk, incident activity, and demographics are all factors that influence the need for and support the utilization of volunteer fire departments in Washoe County.

There are numerous volunteer organizations serving communities in Washoe County, and the surrounding Counties of Storey and Lyon. Volunteer service is not limited to firefighting. Washoe County Sheriff's Office sponsors Search and Rescue and Citizen Emergency Response Team Volunteers.

As it pertains to fire response, more traditional volunteer agencies currently service communities in Washoe County and should continue to be active in any regional fire service configuration. These volunteer agencies are non-typical from other communities in that they are separate organizations from Truckee Meadows Fire Protection District (TMFPD), and operate their organizations with separate Boards of Directors, by-laws and personnel. Truckee Meadows provides management oversight of processing new members, training, competency, funds for operations, protective clothing and equipment, and rolling stock. Two volunteer agencies are affiliated with Washoe County. These agencies lie north of Township 22 and are outside of the TMFPD. TMFPD provides oversight of these agencies by way of an interlocal agreement.

TMFPD has recently begun a new reserve program intended for career minded volunteers who wish to gain more immersion in emergency response. This program augments career staff at stations with a *Firefighter I* qualified firefighter.

However, the current system of separate and autonomous volunteer organizations is fragmented and inefficient on many levels and is in need of reform. Response, training and activity records, and other critical documentation is either missing or inadequate. A problem of span of control exists in the current system and some volunteers do not live within a reasonable distance of their stations.

A regionalized and centralized management of volunteer service would provide:

- Enhanced oversight and management
- Increased accountability
- Longer term retention and more efficient recruitment
- Standardized training and competencies
- Implementation of performance standards

The use of volunteers provides a force multiplier, providing a resource by which career resources can minimize their commitment on incidents with extended operational periods and free those career resources for subsequent calls. A consolidation of the relationships and organizational structure between TMFPD and the voluntary fire departments will improve the overall system including enhanced reliability and performance. It is the BRC's position that the volunteer fire departments should be fully assimilated into whatever regional agency provides service.

PERSONNEL AND LABOR AGREEMENTS

A key component of any effective regional fire services plan must include personnel analysis and labor agreements impacting costs for services. Typical cost drivers must be evaluated, such as wages, benefits, leave, and work practices. Beyond these cost drivers, the issues impacting staffing levels by unit and by risk model (urban, suburban, rural) must also be evaluated, which have a cost and service impact.

The current collective bargaining agreements have language compelling the employer to negotiate any impacts or effects of consolidation, merger, or contracts for service. This positions the bargaining units to "cherry-pick" the best components from each collective bargaining agreement, potentially driving the costs to unsustainable levels. Since personnel costs (wages, benefits, and Other Post-Employment Benefits – OPEBs) within a career-staffed fire agency typically range between 75-90% of the operating budget, this can quickly negate any other gains in efficiencies or effectiveness if it renders the resulting agency insolvent.

FACILITIES AND EQUIPMENT

The physical assets required to provide effective fire services, specifically fire stations and apparatus, must be assessed for their serviceability.

Facilities

Fire stations must be designed to house the appropriate number and types of response apparatus and the crews who operate them. The stations must also be positioned to provide a travel time which coincides with the response standards for the jurisdiction. To determine appropriate location, an analysis of current and future population densities, construction types (multi-family residential, high rise, warehouse, industry, etc.), transportation infrastructure, traffic patterns, and projected growth patterns must be undertaken. It is important to site fire stations with future growth identified, since many fire stations are constructed as a fifty (50)-year investment.

Apparatus

Fire apparatus must also be positioned appropriate to the risk they are to mitigate. The apparatus must perform their primary functions with zero failure rate, as the consequences of failure are extremely high. Apparatus must be replaced in a systematic manner, with the replacement costs identified and funds required for their eventual replacement secured. The expense of these specialized pieces of equipment do not usually lend themselves to be absorbed within an annual operating budget, but programmed as many as twelve to fifteen years ahead. Apparatus should have minimum maintenance standards which comply with *NFPA 1911*.

FUNDING

Each public agency primarily relies upon the revenues from either property taxes for fire districts or a combination of taxes and fees collected by a municipality for the provision of services through the city general fund. In today's fiscal environment, more must be done to enhance revenues, including reliance upon grants and user fees. While grants can be a two-edged sword, it can be a short-term solution to a fixed-cost problem, such as purchasing equipment, building facilities, or implementing a pilot program. Grants used to fund an ongoing expense with a short-term revenue stream is dangerous, but can be used to fill a gap in anticipation of a more permanent, sustainable revenue stream occurring at the end of the life of the grant.

SYSTEM IMPROVEMENTS

Opportunities abound for enhancement of the existing services, even if regional fire services are not pursued. Many agencies in Washoe County do not track standardized data in a manner that meaningful decisions can be made. If, for example, each agency defined response time differently, there is no effective means of measuring a standardized service across the region. There must be uniform standards for data reporting by all regional agencies, public or private. Fractile response time tracking is a standard in the fire service industry, yet that data is not collected in many cases. This has been a problem noted as far back as 2009 in the Diamante Report.³

Not only does data collection need to be standardized, but the time intervals must also be standardized. Synchronization of dispatch clocks for all dispatch centers in the county, including REMSA, helps ensure an "apples to apples" comparison of response performance, which is a key ingredient to quality assurance and quality improvement.

Emergency medical services can be handled in a much more expedient manner by eliminating the immediate hand-off by the Public Safety Answering Point (PSAP – 9-1-1 call-takers) to REMSA without first determining the location/jurisdiction of the call, the nature of the call, and notification to the appropriate unit(s). All resources required to respond to an emergency should be dispatched simultaneously. If this is a process which takes time to implement, pre-alerts for those units closest to the incident should be implemented as an interim step. Implementation of emergency medical dispatch protocols provide pre-arrival instructions for responding personnel, helping ensure the right resources arrive prepared to mitigate whichever emergency they face. These protocols should be immediately implemented at the dispatch centers in Washoe County where they do not currently exist. If different protocols are in place, they should be standardized.

The BRC endorses a single, centralized dispatch center which drives standardization, increases efficiency and cost effectiveness, and maximizes technology investments to the benefit of all citizens of Washoe County.

³ Diamante Public Sector Group, 101 Parkshore Drive, Suite 100, Folsom, California, page 11.

There must be recognition that Regional Ambulance Services, Inc. (RASI) is the emergency medical transportation agency for the vast majority of Washoe County. It is possible for the organization to default as a franchisee. While there is no indication of an impending default, such defaults are not unheard of by other nationally recognized ambulance companies. It is important, therefore, that the fire service is poised to provide assistance during such an event, as well as for surge capacity. The fire service should be included and consulted in future franchise agreement discussions because of their system expertise.

The August 2012 TriData report, *Emergency Medical Services Systems Analysis — Final Report* summarizes well the opinions of many on the BRC. “We are very concerned about the status of the REMSA Franchise Agreement. Since 1990, most of the negotiated changes have clearly favored REMSA, limiting the District Board of Health oversight authority. The EMS system is supposed to resemble a PUM [Public Utility Model] with an independent oversight organization (REMSA), and an independent contractor, [Regional Ambulance Services, Inc.] RASI. In practice, it is difficult to tell the difference between organizations, with REMSA functioning as a private EMS contractor.”⁴

Where resources are less readily available, typically in the rural areas where wildland interface risks are high, the county should establish a fuels management program to mitigate ladder fuels. Enforcement of existing ordinances requiring defensible spaces should be a high priority. Further, there should be incentives created for homeowners to install built-in fire protection, such as residential sprinkler systems, particularly in the Gerlach and Red Rock areas of the county.

Uniformity of fire codes is absent throughout the county. Standardization of fire codes and code enforcement should be a goal of all regulatory and enforcement agencies in the county. Strong consideration should be given to requiring residential sprinkler systems throughout the county. This lifesaving measure not only improves survivability of a residential fire, it reduces the demand and burden placed upon the fire department by extinguishing fire while still small, reducing the resources required to respond to these types of incidents.

OPPORTUNITIES

There are numerous opportunities for enhancement of services through a regional fire services system. It starts with providing public education to the citizens served about how they must take responsibility for protecting and defending themselves, such as becoming Fire Adapted Communities. A Fire Adapted Community means that homeowners, firefighters, land managers, and civic leaders have done their part to prepare for the next wildfire.

Code modification to help manage risk can be implemented, such as rigid enforcement of defensible space regulations in the wildfire interface areas, or implementation of incentives for property owners to install built-in fire protection systems in their occupied spaces. This also helps reduce demand and shore up the cost effectiveness of fire protection in the Gerlach and Red Rock areas.

⁴ *Emergency Medical Services Systems Analysis — Final Report*, page 4. Washoe County, Nevada, August 2012. TriData Division, System Planning Corporation, 3601 Wilson Boulevard. Arlington, VA 22201. Philip Schaenman.

All agencies can benefit from the establishment of so-called “borderless response areas” where automatic aid agreements are in place. The issue of subsidy can be addressed with annual activity true-up language. However, if all agencies participate in a closest unit response system, even those agencies who are net exporters of service have their stations and constituents covered by move-up agreements from their neighboring agencies.

The BRC had divergent opinions on the EMS component of this evaluation. The recent approval of a new franchise agreement with REMSA initiated some debate among committee members about whether it was good or bad for the communities, or whether the committee had sufficient information to form an opinion. Ultimately, the BRC agreed that it should endorse a higher role for the fire service in EMS.

Fire-based Advanced Life Support (ALS) first response services can be provided, reducing the amount of time a patient waits to receive definitive medical care in a medical emergency. This program of sending fire crews to medical emergencies (which they are already responding to anyway) is enhanced by ensuring that one of the crew members is certified as a paramedic. This program could be further expanded to incorporate a fire-based ALS transport service.

An EMS public-private partnership with REMSA could be forged. In this case, coordination of resources creates system efficiencies. If fire-based ALS services are provided, response times for the transport agency, whether REMSA or a fire-based system, could be slowed since definitive care is already being provided by the fire-based ALS first response system providers. This results in fewer posting locations and potentially fewer units in the system, reducing system costs for the consumers. This public-private partnership can include expansion of the REMSA Board of Directors to include one fire agency representative.

Establishing a set of uniform performance standards by population density (urban, suburban, rural, and wilderness) allows for regional redeployment of appropriate resources based on risk and the effective response force required. This may simultaneously improve services to the fringe areas as well as concentrate resources in the urban core. If outlying areas no longer need to provide for technical rescue or hazardous materials services because these services are provided in the urban core, those outlying areas can concentrate more sharply on their core risks; structure fires, wildland fires, and emergency medical services.

As emergency vehicles and equipment wear down due to use in high demand areas, these expensive assets can be redeployed to less active areas, extending the useful life of that equipment. Apparatus replacement schedules can reflect a longer life by the active redeployment of equipment which might otherwise be replaced while possessing some remaining useful life.

Some fire stations are not currently well positioned to provide optimum service to its jurisdictional constituents today due to shifting boundaries. If those boundaries were invisible to a deployment and coverage plan, some currently inefficient stations become immediately more efficient through cross-

jurisdictional utilization. The same optimization can occur in emergency management and preparedness planning, public education, and fire prevention activities, including active vegetation management within wildland interface areas.

CHALLENGES

While there are ample opportunities to gain efficiency with a regional approach to service delivery, there are also numerous difficulties and obstacles which can preclude a successful, effective regional system.

One of the factors which led to the deconsolidation between Reno and Truckee Meadows – labor costs – remains a very thorny subject. Existing collective bargaining agreements in place require bargaining over the impacts or effects of a consolidation, merger, or contract for services. This could lead to “cherry-picking,” which takes the highest union-valued articles of any of the contracts in play, driving the costs for services much higher than any one existing contract calls for.

Facilities and equipment condition can complicate a regional approach to delivering services. If an existing agency were to have extensive deferred maintenance of existing fire apparatus, regionalizing those assets shifts some of the cost of that deferred maintenance to the other partner agencies. The same thing is true for deferred maintenance of facilities. If some agencies have a funded capital improvement plan and others do not, this can further complicate replacement plans, schedules, and funding. This can be somewhat offset by a redeployment of existing resources based on risk. Redeployment allows for extensively used apparatus to be dispatched to more rural, lower call volume areas, thus obtaining additional life than would otherwise be the case.

Unfunded liabilities can create a disparity between partner agencies in some regional service delivery models. Some agencies may have a funded Other Post-Employment Benefits (OPEB) Trust, whereas other agencies may not have OPEBs such as funded retiree health insurance. Regionalizing these agencies can cause a shift in this unfunded liability across all of the partner agencies.

Shifts in resources and service levels can cause an inadvertent decrease in services to a portion of the region. Careful planning and benchmarking of existing services must be performed to ensure such an outcome is not an unintentional consequence of regionalizing services.

Equalization of taxation can increase taxes to some taxpayers and decrease costs to others. A study was performed in 2002 by Walker & Associates for a regional fire service encompassing the entire county and found at that time that Reno’s taxes would increase \$.03 per hundred dollars, Sparks’ taxes would increase \$.01 per hundred dollars, Truckee Meadows’ taxes would decrease \$.12 per hundred dollars, and Sierra’s taxes would decrease \$.24 per hundred dollars. Given the state’s property tax cap, neither Reno nor Sparks could raise their taxes. Blending the tax rates would cause some agencies to subsidize others; this can be remedied via legislative change.

While there are numerous challenges to regionalizing services, perhaps none of the challenges are as daunting and formidable as the political will that will be required to make regionalization of services occur. It is well established that *turf*, *power*, and *politics* are the three most common reasons for a

regional service effort to fail. If service to the people is the driving force behind the effort to regionalize services, the other challenges can be overcome. The BRC believes that citizens are not concerned about these three factors; only about protection and response.

REGIONAL OPTIONS

There are four primary ways in which agencies can collaborate to provide regional services. They are each discussed as follows.

Mutual Aid/Automatic Aid Agreements

Current mutual aid agreements exist between the agencies. Mutual aid is a term used to describe a request for resources outside of the jurisdiction making the request. This requires a specific request by the “host” agency. Some limitations on the mutual aid agreements, such as requiring a command officer to be on scene and reasonably exhausting the host agency resources before mutual aid can be requested, has caused some negative outcomes on incidents. A recent incident highlighted this limitation, causing Reno and Truckee Meadows to revise the mutual aid agreement, striking these limitations.

Automatic aid agreements take the cooperation between agencies to a higher level. Automatic aid is a term used to describe neighboring resources being dispatched immediately, along with host agency resources, not relying upon a specific request. The decision to provide automatic aid resources to a given building or area is made by the participating agencies well in advance of a specific incident via a written agreement, when agency balance, response time, critical tasks, and other factors can be thoughtfully considered. These automatic aid resources are then preprogrammed into the resource dispatch protocols. This approach may also be referred to as borderless response or closest unit response when describing an automatic aid area.

Consolidation through Interlocal Agreement

This model is the one used by Truckee Meadows and Reno in 2000, which ultimately led to deconsolidation due to the economic downturn. The unique features of this model are as follows:

- It requires one or more parties to relinquish authority over expenditures.
- One agency conducts all labor negotiations on behalf of the other agencies.
- “Cherry-picking” labor-beneficial articles from among the collective bargaining unit agreements.
- Subsidy if one or more agencies is not financially sustainable or has unfunded liabilities.
- Tax equalization is not a factor in this model.

Consolidation through One Taxing District

This option is not likely feasible due to the tax equalization requirement and/or possibly exceeding the statutory \$3.64 cap. However, this impediment can be remedied legislatively.

Consolidation through Joint Powers Agreement

There are two types of Joint Powers Agreements (JPAs). The first is similar to an interlocal agreement except that governance is shared among the agencies. This process eliminates the complications of

relinquishing authority over expenditures and limiting agency involvement in labor negotiations. The problems associated with “cherry-picking” and potential subsidy still remain. Tax equalization is not a factor in this model.

The second JPA is a fire department consolidation of government and management, but not line staff. This would eliminate the issue of “cherry-picking,” and each agency would continue to define their own service level through their own budget, leaving the other agencies unaffected if one agency fails to sustain itself. Equipment and facilities would remain with the originating agency, eliminating any subsidy concerns. Unfunded liabilities remain with the agency, eliminating subsidy from the other agencies. Closest unit response, as in automatic aid agreements, would be implemented in this concept. Some efficiency would also be lost in this form of a JPA, but much can be retained.

RECOMMENDATIONS

- The county should model regional collaboration by starting small and working toward larger collaboration efforts with other agencies.
- Pursue legislative remedies to Nevada Revised Statute 318, allowing general improvement districts to exceed the current statutory tax cap.
- Pursue legislative remedies to Nevada Revised Statute 474, allowing county fire districts to overlay cities.
- Peak Activity Units (PAUs) should be used where demand is predictable and where resource concentration needs to be bolstered for a period of time as determined by demand data.
- Standardize response performance data, including quantifiable definitions of the components contained within the fire and EMS response cascade of events.
- Synchronize dispatch center clocks for all emergency services dispatch agencies in the county.
- Assimilate all volunteer fire departments into Truckee Meadows Fire Protection District.
- Implement borderless response (automatic aid) agreements between all agencies in Washoe County.
- Educate the community about the details of the emergency response system within the county.
- Educate the community about their responsibility to prepare and protect themselves in the event of an emergency.
- Enforce existing codes requiring the creation and maintenance of defensible spaces.
- Establish Washoe County as a Fire Adapted Community (see University of Nevada Cooperative Extension website for model – <http://www.livingwithfire.info/>).
- Create incentives to install built-in fire protection systems in rural and interface areas, in particular in Gerlach and Red Rock.
- Create a public-private partnership with REMSA, coordinating emergency resources for more efficient utilization.
- Should any questions arise about the formation of a specific regional agency, the BRC recommends another committee be formed to evaluate the details of that partnership.