



2013 Fire Task Team Final Report

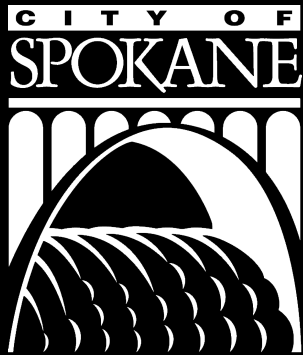


"TOMORROW BELONGS TO THOSE WHO PREPARE FOR IT TODAY"

-African Proverb

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2013 Fire Task Team Executive Summary



**"TOMORROW BELONGS TO THOSE WHO PREPARE FOR IT
TODAY"**

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Executive Summary

The Fire Service Task Team (FSTT) accepted the directive from Mayor David Condon to "...conduct a review and evaluation of Fire and Emergency Medical Services (EMS) within the City of Spokane and make recommendations for an updated model for service delivery."

The Task Team, facilitated by Spokane City Council Member Steve Salvatori, was comprised of 15 City and community representatives. Weekly meetings were conducted between mid-April and the end of July 2013 to allow an exchange of perspectives of the current services provided and managed by the Fire Department, to discuss areas in need of strengthening, and to determine recommendations that would go forward for the Mayor's consideration.

The Task Team reviewed aspects of available data and discussed key topics such as partnership development for EMS, data point requirements for better evaluation of future responses, peak staffing options, apparatus and equipment needs, automatic aid agreements with adjacent fire districts, innovative response options, fire staffing needs, risk levels, risk management and barriers to reducing response time.

Various response scenarios were discussed, including the current service model that has the Spokane Fire Department (SFD) responsible for first response medical services and all risk responses to fires, hazardous materials, marine rescue and technical rescue incidents. Ambulance transport is provided in a performance contract arrangement a private entity (currently AMR). On the way to evaluating the scenarios for consideration of which model might serve the community most appropriately in the future, it became apparent that other components of the EMS system were in need of review and revision, coupled with increased public education. The goal of optimized service delivery was the impetus for the development of the discussion points/recommendations being recommended in this report. In general, the Discussion Points were broken into three areas:

- 1. EMS System Modifications**
- 2. Fire System Modifications**
- 3. Global Solutions Modifications**

Below is a list of those Discussion Points and the position the Team took on each. While the discussion points below are specific to the directive that was put before the Task Team, the Team had limited time in which to look at a large range of options and strategies over a five-, ten-, and twenty-year time frame. With such a broad focus, we simply could not develop group support for every concept and strategy that was discussed. However, there were ideas identified that the Task Team believes could receive further study and those areas have been identified on the lists below.

FSTT Discussion Points Summary Tables

No.	EMS System Modifications	Support	Not Support	Further Study
E-1	Scenario Recommendation			
E-1.1	Scenario 1 [recommended by FSTT] Status Quo - 1st response ALS & BLS by SFD with transport by private ambulance (except 31-T calls and calls where AMR arrives 1st on scene)	X		
E-1.2	Scenario 2 All first response & transport services provided by the SFD		X	
E-1.3	Scenario 3 Private ambulance company would provide all first response and transport services		X	
E-1.4	Scenario 4 All first response by SFD with transport services shared between the SFD and private ambulance company		X	
E-1.5	Scenario 5 Both first response and transport would be shared between the SFD and private ambulance company			X
E-2	In conjunction with the SFD Combined Communications Center (CCC), consider implementation of a Nurse line that could handle certain types of calls placed to 9-1-1 and eliminate a response by field personnel	X		
E-3	Utilize a different level of response to Alpha and Bravo calls, which by their nature are lower-priority, where a field response is needed through the use of one person Alternative Response Units (ARU)	X		
E-4	Approach Hospitals & Accountable Care Organizations about providing at least 2 Nurse Practitioners/ Physician Assistants who would become a part of the response system for field treatment or referral to other than Emergency Departments	X		
E-5	Evaluate opportunities to expand the use of "Telemedicine Connections" that might reduce the necessity to transport individuals who do not need immediate care.	X		
E-6	Consider alternative transportation to alternative locations other than ER for evaluation.	X		

No.	EMS System Modifications	Support	Not Support	Further Study
E-7	Expand hours of the Detox program, in conjunction with a program review, to reduce response reliance on Fire and Police resources	X		
E-8	Work with Hospitals to expand and further integrate the SFD's CARES program to address patients' needs and minimize repetitive calls/care	X		
E-9	Consider expanding the Hot Spotters program to become more inclusive of provider agencies	X		
E-10	Expand Community Partnerships with the Hospitals and other entities impacted by EMS to improve outcomes for all and to reduce overall system costs.	X		
E-11	Work with private ambulance company towards utilization of the same Computer-Aided Dispatch system to improve call transfer times and consider adding requirement to future ambulance bid specification.	X		
E-12	Work with private ambulance company to place one of their dispatchers within the CCC for coordination and the improvement of call transfer times and consider adding requirement to future ambulance bid specifications.	X		
E-13	In future ambulance bid process, consider including provisions that allow the City to buy medical supplies, equipment, vehicles, etc. through the ambulance company if it provides for better pricing.	X		
E-14	Evaluate the inclusion of language in the ambulance contract that would allow for the replenishment of Medical Supplies or some other mutually-agreeable reimbursement process	X		
E-15	Expand the public EMS education program to inform the public of improvements to the system and ways in which they can help make the system operate more effectively.	X		

No.	Fire System Modifications	Support	Not Support	Further Study
F-1	Immediately address the SFD's aging fleet of apparatus, equipment and other capital needs.	X		
F-2	Add four additional firefighters (one per shift) to Fire Station 9 so the station regains its day-to-day ability to respond to and engage fire incidents in their first due response area.	X		
F-3	Implement EMS Modification E-3 to assist in improving unit availability/ reliability and to avoid future costs using Alternate Response Units (ARU's).	X		
F-4	Immediately pursue a Supplemental Response agreement with Fire District 3 to include response by Fire Station 35 in the Eagle Ridge or any other area of the SW portion of the city who lives in an area outside of 5 road miles from a fire station	X		
F-5	Investigate the feasibility of jointly building/ staffing a fire station with Fire District 8 along the 195 corridor that would place areas beyond 5 road miles from a fire station, within 5 road miles of a fire station.	X		
F-6	Work towards implementation of Automatic Aid agreements with Fire Districts immediately adjacent to the City limits who have career staffed companies, to implement the "closest unit dispatched" concept.	X		
F-7	Work with Spokane International Airport to combine SIA and SFD personnel and resources so that SFD personnel might be distributed to other parts of the City.			X
F-8	Consider modifying response to Fire Alarm System calls from non-residential properties during normal business hours.	X		
F-9	Consider initiating a Multiple False Fire Alarm fee for non-residential properties.	X		

No.	Global Solutions Modifications	Support	Not support	Further Study
G-1	Establish an on-going Fire Task Team to consider alternative approaches/ solutions that have been and will be identified that might improve service to the community.	X		
G-2	Immediately seek funding approval for the purchase of Traffic Pre-emption Devices that will allow emergency vehicles to switch traffic lights to green along response routes to help improve "code" responses.	X		
G-3	Aggressively work with City, State and Federal representatives to improve the capacity/ capability for fire apparatus to utilize bridges that currently have restricted use.	X		
G-4	Aggressively work toward the completion of the road connection between the Indian Trail and Five Mile areas of the city so that overall emergency response times can be improved.	X		
G-5	Consider implementing a fee for cost recovery when the SFD responds to Motor Vehicle accidents for fluid containment to minimize the potential for contamination of the aquifer.	X		
G -6	Seek financing towards an effort to ensure that a high percentage of the residential occupancies in Spokane, have working smoke detectors.	X		
G-7	Continue to work on the collection and analysis of SFD data to provide better opportunities for future analysis and decision-making.	X		

Report Format:

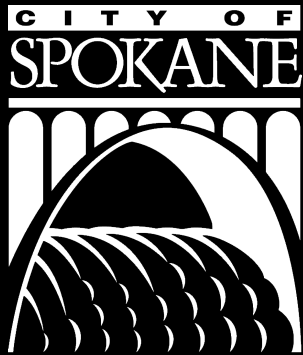
The body of this report will follow each of the Discussion Points listed above in the order of their listing. A brief overview will accompany each of the discussion points. The numbering used on the charts above is tied to the general category being discussed. Therefore:

E-# = EMS System Modification
F-# = Fire System Modifications
G-# = Global Solutions Modifications

Priority Recommendations

Throughout the course of our time together, the Fire Service Task Team had opportunity to deliberate on numerous concerns and present a host of recommendations for consideration. The priority recommendations constitute the majority of this report, with the following rising to the top in regard to urgency and importance:

- Retain the current Fire Service scenario with First Response ALS & BLS provided by the Spokane Fire Department, and with Transport provided by a private ambulance (except 31-T calls and calls where AMR arrives 1st on scene) contract.
- Utilize a different level of response to Alpha and Bravo calls, including use of Alternate Response Units (ARU) maximizing community resources for additional options for citizen transport and medical care beyond EMS 9-1-1.
- Immediately address the Spokane Fire Department's aging fleet of apparatuses, equipment, and other capital needs.
- Add four additional firefighters (one per shift) to Fire Station 9 so the station regains its day-to-day ability to respond to and engage fire incidents in their first due response area.
- Immediately seek funding approval for the purchase of Traffic Pre-emption Devices that will allow emergency vehicles to switch traffic lights to green along response routes to help improve "code" responses.
- Initiate discussions with District 8 and District 9 for Automatic Aid Agreements to help reduce response times in northwest and southeast portions of the city.
- Immediately pursue a Supplemental Response agreement with Fire District 3 to include response by Fire Station 35 in the Eagle Ridge or any other area of the SW portion of the city who lives in an area outside of five road miles from a fire station.
- Establish an on-going Fire Task Team to consider alternative approaches/ solutions that have been and will be identified that might improve service to the community.



2013 Fire Task Team Highlights



**"TOMORROW BELONGS TO THOSE WHO PREPARE FOR IT
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Introduction

In April of 2013, Mayor David Condon formed a Fire Service Task Team (FSTT). He called the Team together on April 9 with the challenge to take a long-term, 20-year strategic view of how the City of Spokane could provide optimal fire, emergency medical response and medical transport service to its citizens.

The Mayor's direction to the Task Team was:

The objective of the Fire Service Task Team is to align resources and investment to achieve the City of Spokane's strategic goal to become the 'safest city of our size'. This Task Team will conduct a review and evaluation of fire and emergency medical services within the City of Spokane and make recommendations for an updated model for service delivery.

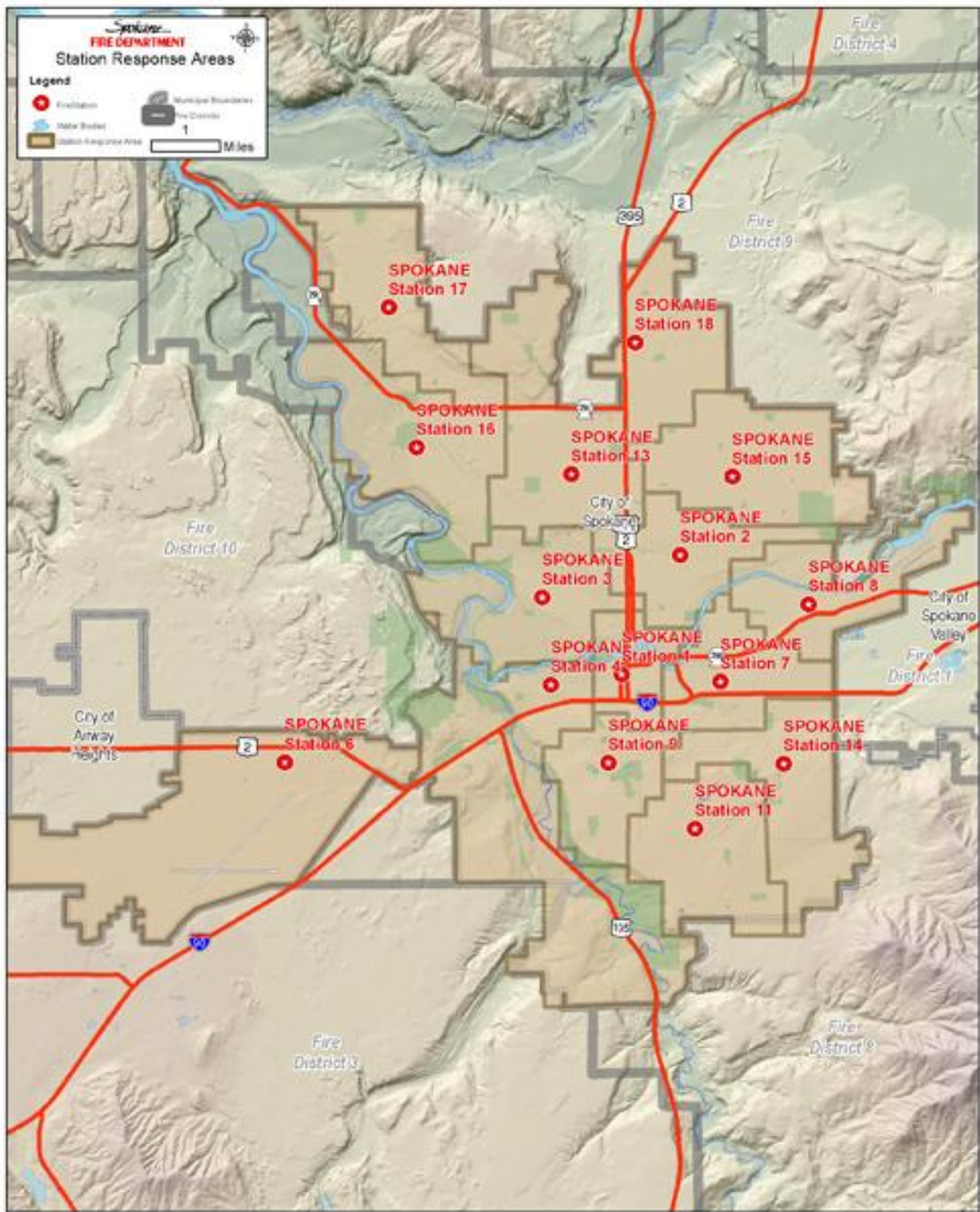
If we were creating a new fire service model from scratch that provided the best service to our citizens at the most reasonable cost, what would that model look like?

Current Status of Spokane's Service Delivery to 9-1-1 Calls

Currently, the Spokane Fire Department (SFD) provides all-risk response and medical response services to the citizens of Spokane. SFD is the primary provider for both Basic Life Support (BLS) and Advanced Life Support (ALS) first response medical services to incidents that occur in the City of Spokane. Ambulance transport services for 9-1-1 calls within the city are currently provided by American Medical Response (AMR), a private sector contractor that operates under a contractual agreement that is set to expire near the end of 2014.

SFD operates out of 15 stations across the City (**see map below**) with a total of 58 personnel on duty each day. Those personnel staff 18 primary units and numerous cross-staffed apparatus. AMR has an inventory of 22 ALS ambulances, with varying levels of staffing depending upon time of day and historical service demand patterns that they deploy to meet their contract obligations to the City.

Although the Fire Service Task Team was directed by Mayor Condon to conduct a review of the 9-1-1 Fire and EMS service delivery components in Spokane with recommendations for optimal service to our citizens, the Task Team would be remiss if there was not mention of how proud we are of the level and quality of service currently being provided, particularly in light of the fiscal, staffing, and equipment challenges the Spokane Fire Department is navigating. The City of Spokane is beyond a doubt one of the best cities in the United States to have a heart attack due to the superior quality of the Emergency Medical System being managed by the SFD.



Impetus for Fire Service Review

City leaders have a duty to the citizens to provide fire protection. Large fires can produce tragic results. While the occurrence of such fires is between 300-400 structure fires annually resulting in an average of 3-6 multiple alarm incidents per year, the resulting tragic loss of life and property always exists. The City of Spokane has established a goal for its Fire Department to respond to structure fires with the first Engine within 8 minutes and 30 seconds, 90% of the time, and a full complement of apparatus (enough to complete the needed tasks) in 11 minutes, 90% of the time. This standard compares to a National Fire Protection Association (NFPA)¹ goal of 5 minutes and 9 minutes, respectively. It is important to note that in accordance with state law, firefighters cannot normally enter an environment that requires breathing apparatus with less than 2 personnel going in and 2 personnel on the outside for rescue, therefore the management of an incident must occur through an incident specific Risk Management plan.

Our goal for critical medical incidents is the same. The City has a private EMS transport service delivery contract with AMR that is expiring in November 2014. The contract expiration has provided the City with an opportunity to revisit the Fire Service delivery options for optimized service to our citizens.

While response time objectives can be achieved through deliberate risk/cost analysis, staffing levels at both SFD and AMR, and the number of fire stations, some response times can also be reduced by taking a more integrated approach with other organizations and agencies in Spokane and Spokane County. Given the budgetary challenges the City has experienced in the past few years with rising costs and flat-to-declining revenue, service integration and partnership development are attractive and viable solutions.

The Task Team understands that over the past two decades, healthcare costs have soared and it became evident through the discussions that the pace of the increased costs of healthcare is unsustainable. New models of care have emerged as a result, including non-traditional patient-centered facilities and government-led Accountable Care Organizations (ACO). One of the largest impacts to EMS is the ACO's intent to put an end to incentivizing physicians, hospitals, and EMS agencies for providing more services; and instead allocate rewards and penalties based upon outcomes. Under the ACO, it is clear that the incentives and penalties will be assigned based upon how patients fare, and if the care they receive is financially-effective.

The objectives of the reform efforts are described by the industry as *Triple Aim*; meaning there is a focus on lowering the overall costs of health care, improving the patient experience, and improving patient outcomes. Aspects of the Affordable Care Act (ACA) that have been implemented to support the distribution of the Triple Aim doctrine

¹ For the NFPA calculation, this is actually the sum of two numbers added together: list drive time and turnout time. Also, NFPA always reports in seconds, not minutes.

include large grant programs for healthcare providers that demonstrate that they can achieve the expectations of the Triple Aim, coupled with fines from CMS to hospitals with excessive readmissions within a 30-day window. Another included aspect is that of decreased (or eliminated) reimbursement to EMS services for transports that are not medically necessary or that contribute to the expectations of the *Triple Aim*.

Just recently, CMS announced another \$1 billion available for healthcare innovation grants to further incentivize healthcare organizations, highlighting efforts of Triple Aim-focused programs. The Fire Service Task Team recommends and supports the Spokane Healthcare Systems in pursuing, and formally applying for, these opportunities. The direct link to the timely White Paper, *Innovation Opportunities for Emergency Medical Services*, published for commentary on July 15, 2013, and jointly-drafted by the National Highway Traffic Safety Administration (DOT), Office of the Assistant Secretary for Preparedness and Response, and Health Resources (HHS) and Services Administration (HHS), is provided here:

http://www.ems.gov/pdf/2013/EMS_Innovation_White_Paper-draft.pdf

Fire Service Task Team

The Fire Service Task Team (FSTT) included 15 individuals **(see Appendix A for the membership listing)** representing Spokane citizens, IAFF Local 29, Spokane Fire Department (SFD) Chiefs, medical community members, and representatives of the City Council and City Administration. Council Member Steve Salvatori was selected by Mayor Condon to chair the group, and work began in April **(see Appendix B for the meetings schedule)**.

The Task Team met each Tuesday from April 16 through July 30, with the exception of July 23. In order to analyze existing services and determine recommendations for optimum service delivery in the future, the Task Team reviewed and discussed numerous previous plans, studies, and analyses, including the City of Spokane's Comprehensive Plan, SFD Annual Reports and Standard of Coverage, as well as the Abaris, Matrix and IBM/San Jose reports. The resource materials from the National Fire Protection Association, National Institute of Standards and Technology, Commission on Fire Accreditation, and internal SFD data were also reviewed. For additional reference points, the Team also looked at models introduced in other comparable cities, such as Spokane Valley, Everett, Yakima, Tacoma, and Vancouver in Washington; and Boise in Idaho **(see Appendix C for the comparison tables)**.

The Task Team received presentations on service delivery modeling options from Don Waller of the IAFF Local 29; from Rocco Roncarati of AMR, the current private vendor for medical transport; and from Chief Bobby Williams of the SFD. Other pertinent presenters included Robert Ferrell from the Washington Survey & Ratings Bureau and Joe Parrott from Emergency Services Consulting International, an independent Accreditation consultant. **(See Appendix D for presentation summaries.)** Active participation and insight were also solicited from representatives of local hospitals, specifically on their Emergency Department challenges, operations and policies.

The majority of Task Team meetings were held collectively with the members, but the full team was divided up into two Work Teams for several weeks so that one team could focus on organizational scenario questions, while the other team explored possible solutions that might benefit the system regardless of its organizational structure. The Scenarios Work Team was led by Dr. Debra Robole. The Global Solutions Work Team was led by Mr. Carl Griffin.

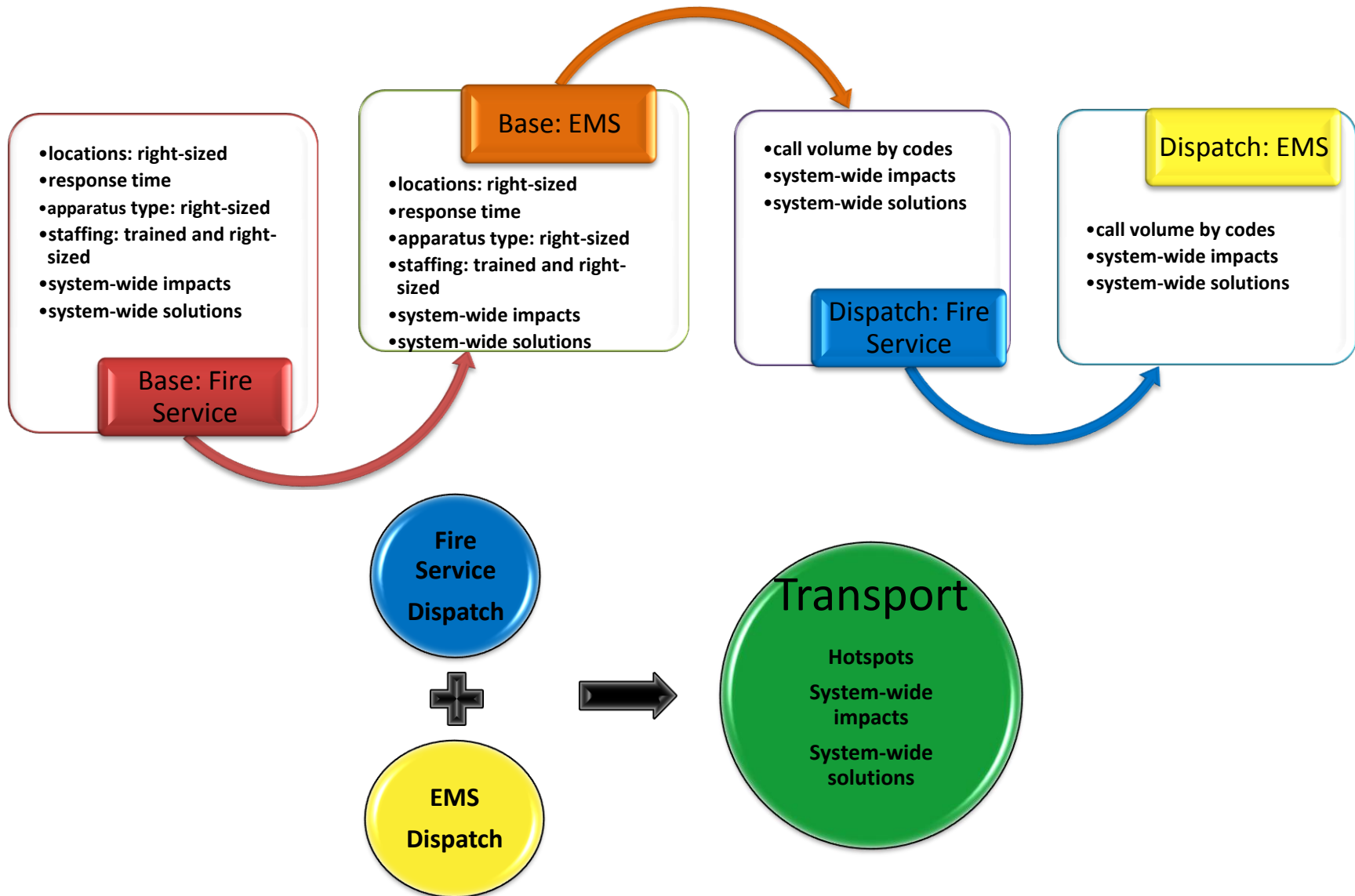
Scenarios Work Team

The Scenarios Work Team discussed a number of topic areas including:

- Major current and future challenges in successful service delivery
- Impact of change from Status Quo
- Response times
- Prioritization of response categories (including non-emergency response)
- Performance standards
- Labor union bargaining needs
- Capital needs - Apparatus, stations, equipment
- Impact of scenario on citizens' fire insurance rating
- 20-year view of station positioning / personnel and vehicle deployment
- Definition of parameters for shared response
- Shifts—length of shifts, number of shifts, hours of shifts

As discussion continued on various Scenario models, the Scenarios Work Team quickly realized that if our goal is to provide the best service in a cost-effective manner, a possibility existed to make major improvements if we could increase the reliability of information given by callers into the 9-1-1 system during the initial Dispatch phase, and if the agency had additional options available in our Response phase.

In order to do justice to both sectors, we felt it was necessary to break this 20-year strategic vision into two parts. The first part was a narrower look at different scenarios for medical response, within the various components of the world as we know it today, looking at the mix of SFD and AMR response to medical calls and transport. The second part was a broader and longer look at trends, categories of medical calls, appropriateness of our response, the destination patients are delivered and the impact on our health care delivery system. **The chart below illustrates the Fire Service components under review.**

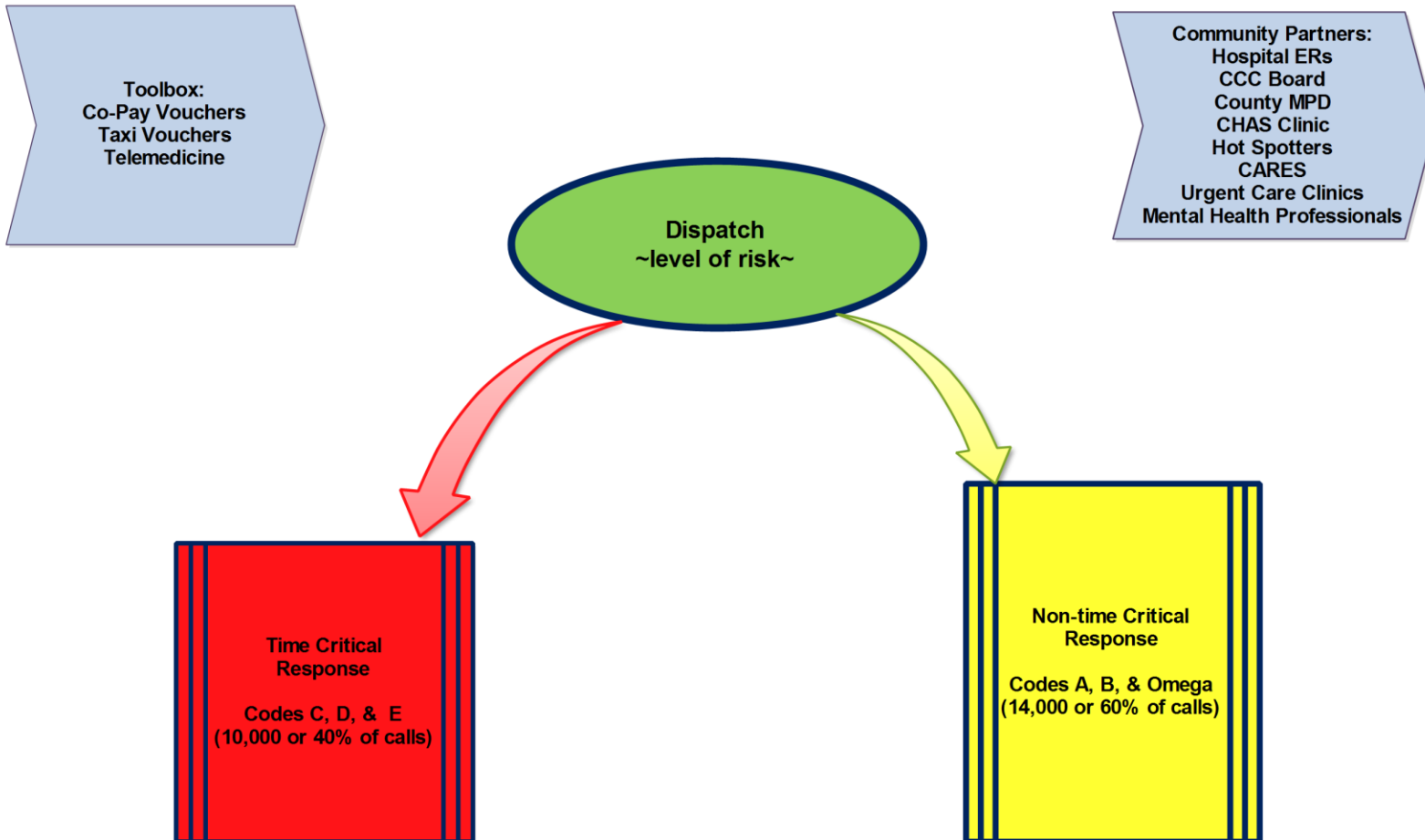


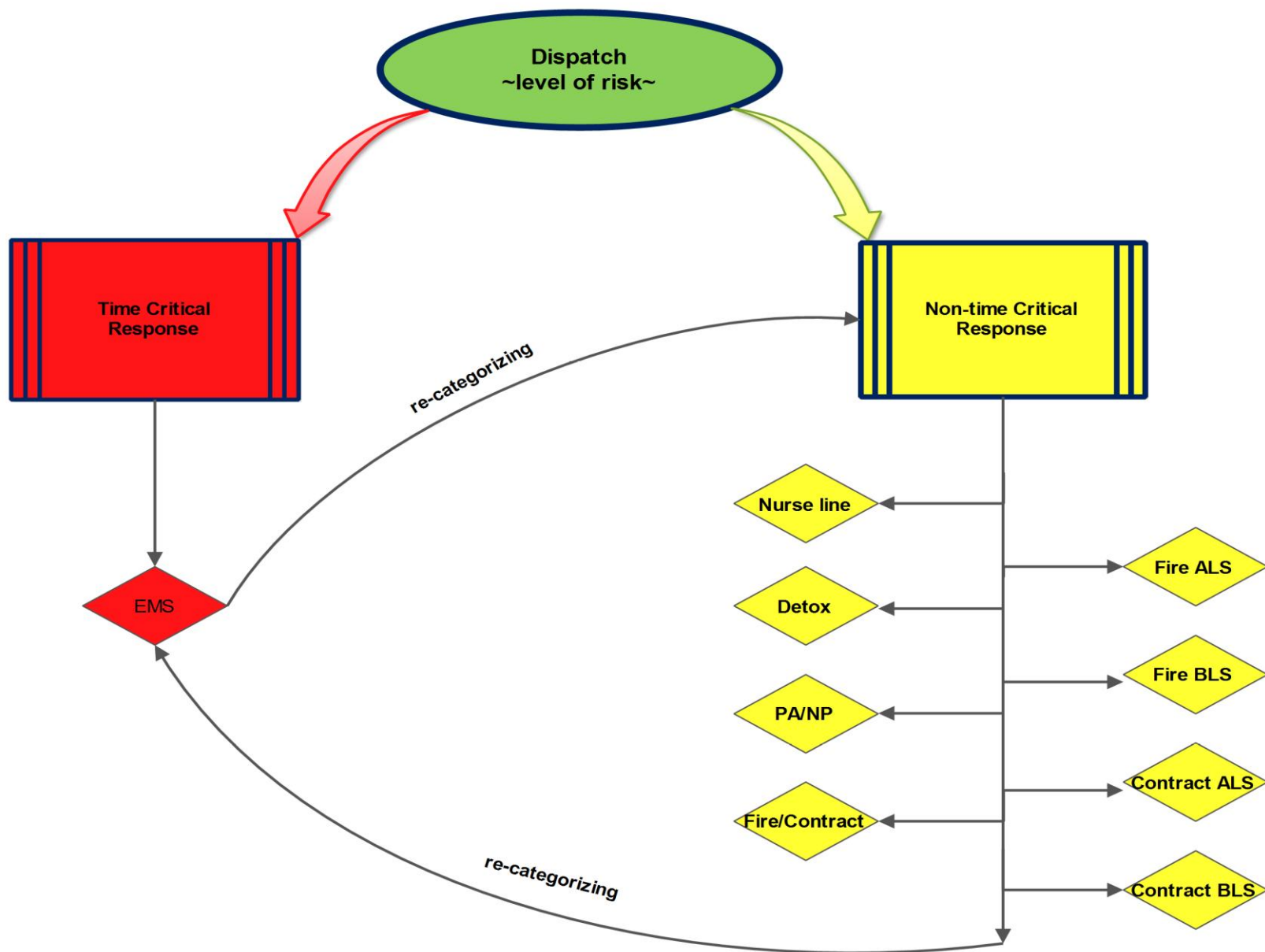
This second discussion included topics such as Advanced Paramedics, Hospital Emergency Departments, Urgent Care Clinics, Cabulances, Cars, Taxi Vouchers, Co-Pay Coupons and the potential expansion or collaboration with programs and organizations such as CHAS, Detox, CARES, Hot Spotters, and 24 Hour Nurse Hot Lines. It identified the need for a dialogue and collaboration with organizations beyond the city itself.

Mind Mapping Session on Fire Service Components

On May 21, the Scenarios Work Team participated in a Mind Mapping session. As a result of the Mind Mapping session, service process flow charts were generated to best capture the sequencing of service responses. The progression of process-charting ultimately culminated in the development of the **Dispatch Response flow charts shown below**, which served as the driver for continued discussion on EMS delivery options.

Spokane Fire Service: Dispatch Response Code Service Delivery





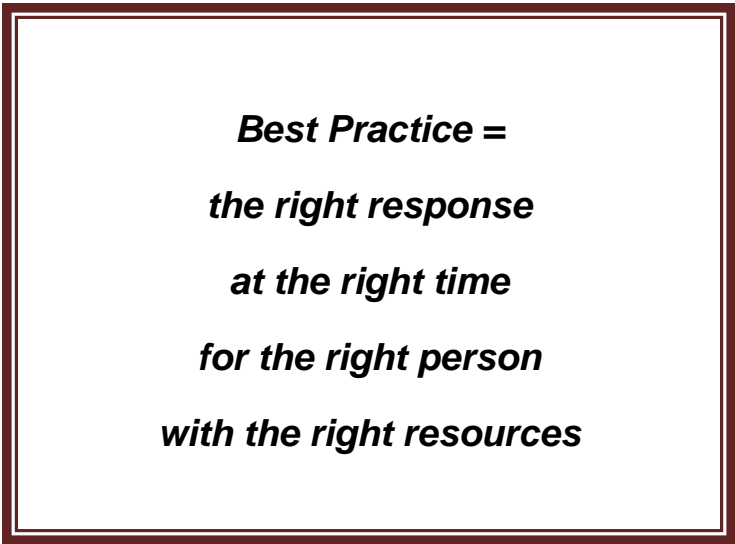
Fire Scenarios / Optimal Service Delivery Model

Emergency Department costs are a big concern for the healthcare community. The optimum service delivery model is an attempt to look at the ideal system by breaking down the processes involved and rebuilding for a new optimum service model, including a provision for alternative care clinics. The optimal service delivery means “providing the right patients with the right services at the right time.”

Possible Service Scenarios

In order to look beyond the current method of conducting fire service business, the Task Team considered the existing service response scenario against other “what if” service response scenarios. Five distinct fire service scenarios were provided to the team for potential adoption as the service scenario to recommend forward to Mayor Condon (**see *Five Fire Scenarios* chart below**). All of these scenarios address the EMS side of SFD services and not the Fire Service delivery requirement.





As the Team worked through ideas, concepts, etc. perhaps the statement that captures the approach that the Task Team tried to use throughout this effort is this:

A rectangular box with a double-line border, containing the text:




***Best Practice =
the right response
at the right time
for the right person
with the right resources***

Five Fire Service Scenarios for Consideration




Scenario # 1 - Status Quo--Baseline

	Fire Response	Medical Response	Medical Transport
AMR			
SFD			





Scenario # 2 - SFD Only Provides All Services

	Fire Response	Medical Response	Medical Transport
AMR			
SFD			






Scenario # 3 - SFD Fire Only – All EMS First Response and Transport provided by Private Sector

	Fire Response	Medical Response	Medical Transport
AMR			
SFD			

Scenario # 4 - SFD Fire & EMS First Response - Transport shared by FD and Private Sector

	Fire Response	Medical Response	Medical Transport
AMR			
SFD			

Scenario # 5 - SFD Fire – EMS First Response & Transport shared by FD and Private Sector

	Fire Response	Medical Response	Medical Transport
AMR			
SFD			

Scenarios Review Process

The Scenarios Work Team started the work of reviewing scenarios components with a Mind mapping exercise; brainstorming the major categories of the services offered in the fire, dispatch, and transport.

From the ensuing discussions, several charts were developed to convey the flow of services. These included the **EMS Service Buckets chart on page 31** and others included in this report.

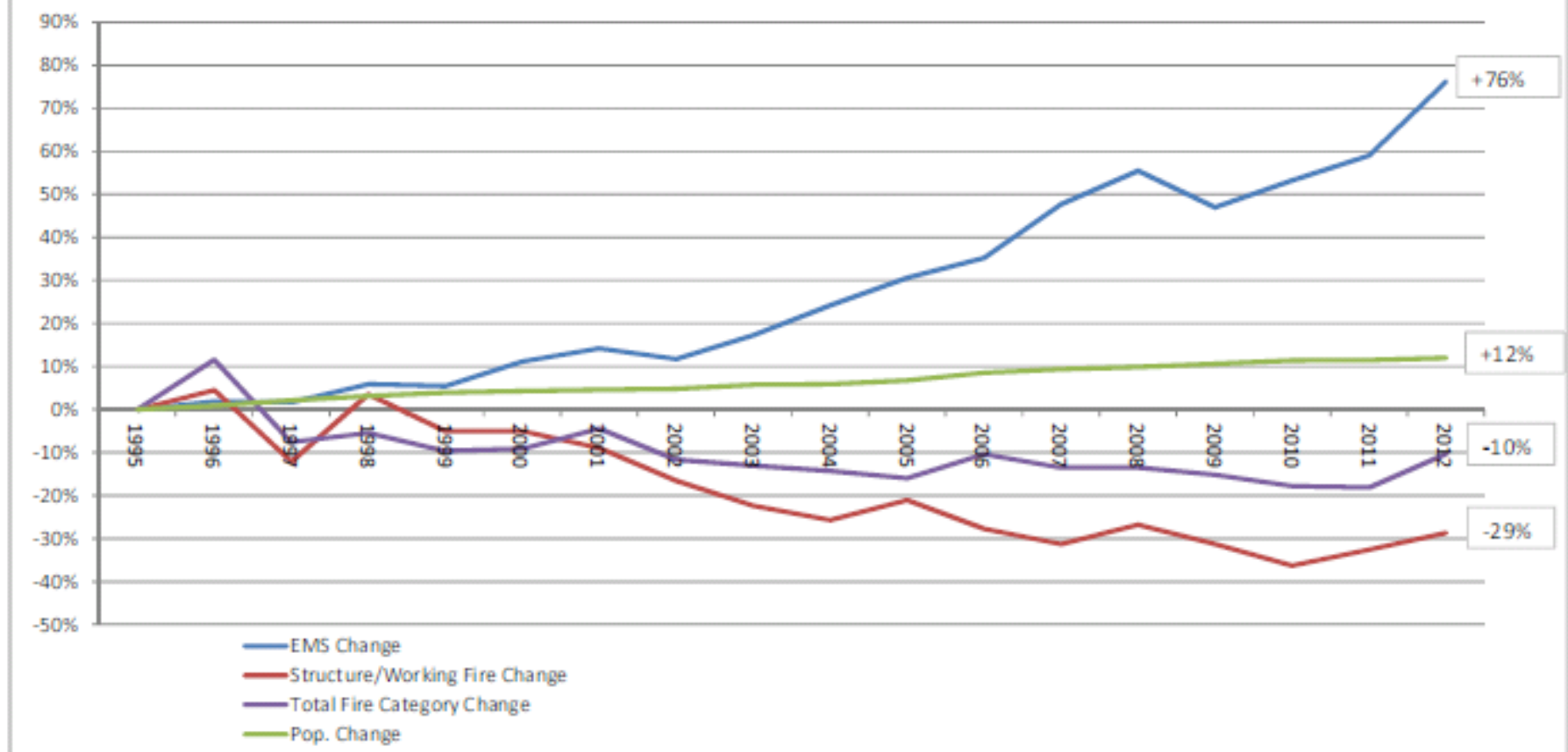
Global Solutions Work Team

The Global Solutions Work Group looked at opportunities to improve service or reduce cost regardless of other structural scenarios. It focused on reducing barriers to response time, potential Fee for Service opportunities and many other ways to maximize the value of our service delivery

Evident Limitations

The Future of Health Care--One of the limitations we faced was gazing into a crystal ball 20 years into the future, just as the *Affordable Care Act* is beginning to be implemented with so many uncertainties. However, the simple chart below led the Task Team to believe that certain trends from the past will continue to play a role in our future, and that even with so many unknowns, we could reach certain conclusions with a high level of confidence.

Cumulative Percent Change in FD Activity Since 1995



Spokane Fire Department Historical Stats

Year	Total Incidents	Total EMS	% of Total	EMS Excluding Vehicle Accidents	% of Total	Total Fire Misc	% of Total	Full Structure Fire Full Responses	% of Total	Working Structure Fire Responses	% of Total	Structure Fires Full & Working	% of Total
1995	20689	15739	76%	n/a	#VALUE!	4950	24%	441	2.13%	97	0.47%	538	2.6%
1996	21556	16030	74%	n/a	#VALUE!	5526	26%	457	2.12%	105	0.49%	562	2.6%
1997	20580	16003	78%	n/a	#VALUE!	4577	22%	377	1.83%	96	0.47%	473	2.3%
1998	21347	16668	78%	14387	67%	4679	22%	494	2.31%	63	0.30%	557	2.6%
1999	21066	16594	79%	14270	68%	4472	21%	426	2.02%	85	0.40%	511	2.4%
2000	21994	17496	80%	15201	69%	4498	20%	430	1.96%	81	0.37%	511	2.3%
2001	22705	17974	79%	15768	69%	4731	21%	400	1.76%	90	0.40%	490	2.2%
2002	21963	17590	80%	15587	71%	4373	20%	370	1.68%	79	0.36%	449	2.0%
2003	22762	18459	81%	16359	72%	4303	19%	334	1.47%	84	0.37%	418	1.8%
2004	23794	19551	82%	17297	73%	4243	18%	345	1.45%	55	0.23%	400	1.7%
2005	24713	20552	83%	18280	74%	4161	17%	353	1.43%	72	0.29%	425	1.7%
2006	25716	21281	83%	19050	74%	4435	17%	334	1.30%	55	0.21%	389	1.5%
2007	27529	23247	84%	20837	76%	4282	16%	319	1.16%	51	0.19%	370	1.3%
2008	28753	24471	85%	22263	77%	4282	15%	338	1.18%	56	0.19%	394	1.4%
2009	27332	23134	85%	21149	77%	4198	15%	328	1.20%	42	0.15%	370	1.4%
2010	28180	24111	86%	21769	77%	4069	14%	272	0.97%	71	0.25%	343	1.2%
2011	29081	25027	86%	22819	78%	4054	14%	304	1.05%	59	0.20%	363	1.2%
2012	32172	27773	86%	25201	78%	4439	14%	316	0.98%	68	0.21%	384	1.2%
Note: In 2012, SFD began responding to 11W in the Valley as a part of a program to improve organizational cooperation. There were a total of 101 total 11 W calls dispatched, but of those, only 68 were in the Spokane City Limits.													

Note: Structure Fires and Working Structure Fires are shown separately above. Most structure fires, if not put out promptly, have the potential to grow into larger Working Structure Fires. While there are significantly fewer Working Structure Fires, these are the large multi-company fires, and in some cases multi-district fires, that cause a much higher magnitude of risk to citizens, fire fighters, and property. Early response to Structure Fires helps prevent them from becoming the larger Working Structure Fires.

The FSTT felt that we could safely assume that over the next 20 years:

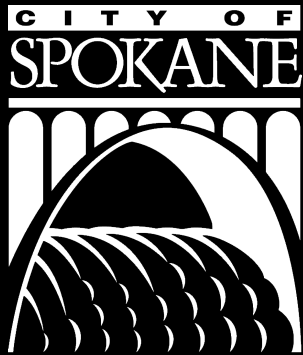
- Population growth will continue between .5% and 1% annually
- Even with population growth, the number of fires will likely continue to be relatively level
- EMS calls will continue to rise
 - The annual use per citizen rate of SFD services in 2012 was 154/1000, which is up from 61/1000 in 1983. This number is likely impacted by the aging of the overall population and the degradation of social services that previously handled minor problems. The public is looking to the fire department as the “go to” agency for help in many non-traditional areas.

Early Discussion Themes

Themes began to emerge early on as the Task Team discussed current and potential future statistical details. The major themes are as follows:

Fire calls versus EMS calls

While total miscellaneous fire calls have remained relatively flat and the numbers of structure fires have declined to approximately one per day, EMS incidents have continued to rise at a substantial pace. Dispatch data showed that about 80% of the incoming calls were for EMS, leaving about 20% for fire and other incidents. Even though large fires represent a large risk to life, property, infrastructure, and economic impact, EMS incidents cumulatively result in numerous serious long-term medical conditions, significant injuries and deaths each year in our community driving health care costs to higher levels.



2013 Fire Task Team EMS System Modifications



**"TOMORROW BELONGS TO THOSE WHO PREPARE FOR IT
TODAY"**

-African Proverb

EMS System Modification Discussions

Because EMS Incidents constitute the majority of the demands for service from the Fire Department, this area will be addressed in this report first.

The Rising Demands and Possible Overuse of EMS

All across America the number of 9-1-1 calls for EMS is increasing. This is due to a many reasons including an older population, increased cost of medical insurance and care, economic impacts, etc. There appears to be a small population of citizens using 9-1-1 repeatedly for ambulance runs to the emergency room rather than using personal transport to a clinic. In addition, many of these types of calls which would normally fall under Medicare reimbursement are being denied such reimbursement due to a “lack of medical necessity” finding.

With such a heavy load of EMS incidents currently and anticipated to increase in the future, the Team’s discussion of how to deal with future escalating EMS demands, flowed into numerous conversations on the overall impacts to the entire EMS system-- from 9-1-1 to first response to transport to the emergency department.

Importance of Partnerships

The fire service EMS first response and private sector ambulance transport are critical parts of the EMS system, but it is not likely they, or hospitals can continue to stay ahead of the increasing EMS demand that is impacting them and their other EMS partners. The traditional EMS system approach must be further dissected to identify potential changes that can have a positive impact on all aspects of the system. Therefore, need for a greater collaborative partnership with key health care providers is evident and must be pursued.

Medical Response Scenarios

While the City of Spokane is responsible for fire response by State mandate, responsibility for EMS response is a local option. The Task Team spent a majority of our time at and between meetings, looking at and evaluating different models for delivering EMS that will be discussed in greater detail below. These discussions included acknowledging the expertise, investment and productivity of providing Medical Response from our existing Fire Department, which is the standard methodology in most of the United States as well as other EMS service delivery models.

As the robust discussions continued within the team, it became apparent that EMS is an integral part of a larger system of Health Care in Spokane; and that recommendations we make regarding EMS also impact the local hospitals. We came to an early conclusion that in many ways, the current system produces outcomes at the highest

possible cost to our institutions and our citizens. In spite of having the lowest ambulance rates on the west coast, opportunities remain to eliminate certain non-emergency calls or incidents not meeting the definition of medical necessity. We found that regardless of what structure or organization responds to pre-hospital medical incidents, when we follow that patient from the initial call to 9-1-1 to his or her final destination using a 20-year perspective, we were led to some rather startling and thought-provoking conclusions.

Hurdles to Progress

Development of a more effective and efficient EMS system from the Task Force's perspective creates a number of roadblocks to overcome. From State Department of Health Regulations to Federal Medicare/ Medicaid reimbursement policies, it is currently virtually impossible to attempt immediate improvements. The current government and private insurance reimbursement policies contribute to how the system has evolved and how it functions. Requirements stipulate that a patient must be transported by ambulance to an Emergency Department in order for ambulance providers to receive payment. This question of whether the individual should even go to the Emergency Department in the first place clouds the issue even further. As usual, "follow the money" becomes the driver of much of the current service delivery system. On top of these hurdles, the United States is in the process of a significant change in the healthcare model as a result of the Affordable Care Act (ACA), particularly regarding the way the entire EMS system will be getting reimbursed.

It is widely acknowledged that the most expensive way to transport a patient is by ambulance, and the most expensive place to deliver them is to a hospital emergency department. While that is exactly what needs to take place in many cases, we have a system that is pre-determined to deliver this outcome, at the greatest expense, regardless of need, in almost every circumstance. This is due to institutional habit, inflexible regulation, lack of communication, fear of liability, and the resistance to change. These dynamics will lead to community financial distress at best and severe financial trauma at worst, if nothing is changed.

"Citizen" versus "Patient"

When does a "citizen" become a "patient?" This is a question that has a significant impact on the overall cost of scene response to 9-1-1 calls for EMS service, as well as transport and treatment costs at hospital emergency departments. Based upon current State and Federal guidelines, once a call is made to 9-1-1 for a medical incident, the party needing assistance becomes a patient. Unless the patient signs a "patient refusal form" they must be taken to an Emergency Department for treatment. The Task Team believes there must be efforts put forth to modify the current State and Federal provisions to allow for alternative service delivery, transport, and medical facility utilization to lower overall EMS system costs. This could be the #1 issue for future cost avoidance and should be made a priority to be worked on at the state level through

legislation, and other means. This matter will specifically impact some of the alternatives identified in this report.

The Current System

Currently, a joint-response model for EMS first response and transport is delivered to our citizens who call 9-1-1 for medical incidents. SFD normally handles BLS and ALS first response and AMR handles the ambulance transport of patients to the emergency room. In cases where AMR arrives first to the scene, they have the ability to provide initial Emergency Medical care as well.

Medical calls are categorized into five broad categories depending on the seriousness of the situation. Alpha, Bravo, Charlie, Delta, and Echo. See chart below.

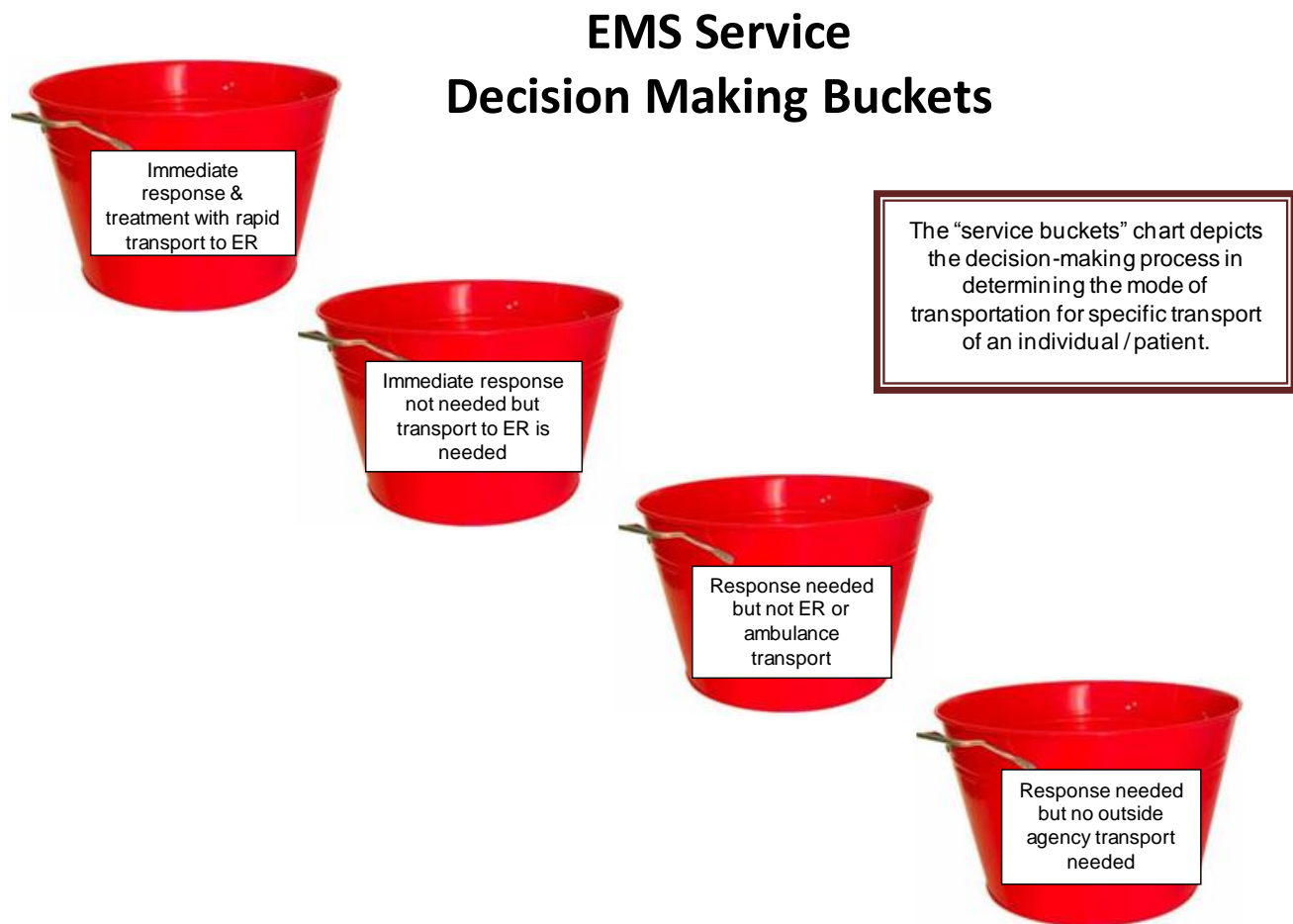
		SFD Response	Ambulance Response		Examples of Call Types
31A	BLS - Alpha Response	1 unit - no code	None		Bloody nose, Fall - no injury, lift assist, Eye problem-non traumatic, Unknown Medical, Obvious Death, Allergic reaction,
31B	BLS - Bravo Response	1 unit - code	1 unit - no code		Broken bone, general sickness, Seizure-past, Diabetic-alert, Eye problem-moderate injury, Fall-non dangerous, Abdominal pain, Hemorrhage, Overdose, Psych, Trauma-non dang body area, Assault, Back Pain-non traumatic
31C	ALS - Charlie Response	1 unit - code	1 unit - code		Chest pain, Stroke, Passed out-now cons, Difficulty breathing, Long Fall, Diabetic-not alert, Heart, Overdose-not alert,
31D	ALS - Delta Response	1 unit - code	1 unit - code		Chest pain/ Heart-not alert, Choking-not alert, Seizure-multiple, Unconscious person, Fall-not alert, Hemorrhage-not alert,
31E	ALS - Echo Response	1 unit - code	1 unit - code		Cardiac or Respiratory Arrest, Multi-system trauma, Gunshot, Stabbing

The following chart shows a historical breakdown of EMS call type Dispatches & the rate of change.

Spokane Fire Department													
EMS Response Category Statistics													
Code	Description	2007	2008	% Change	2009	% Change	2010	% Change	2011	% Change	2012	% Change	Ave Change Over Period
31A	BLS - Alpha Response	3,550	3,543	-0.20%	3,654	3.13%	3,562	-2.52%	4,145	16.37%	4,436	7.02%	4.76%
31B	BLS - Bravo Response	7,667	8,111	5.79%	7,850	-3.22%	8,511	8.42%	8,864	4.15%	10,137	14.36%	5.90%
31C	ALS - Charlie Response	4,710	5,197	10.34%	4,680	-9.95%	4,483	-4.21%	3,870	-13.67%	4,446	14.88%	-0.52%
31D	ALS - Delta Response	4,742	5,186	9.36%	4,610	-11.11%	4,827	4.71%	5,534	14.65%	5,733	3.60%	4.24%
31E	ALS - Echo Response	145	214	47.59%	229	7.01%	384	67.69%	406	5.73%	445	9.61%	27.52%

As can be seen in the chart above, Alpha and Bravo types of medical responses are the areas with the greatest rise in EMS calls. In some jurisdictions, some of these calls are being placed in what is being referred to as the “Omega” code category of calls which may not be appropriate for the 9-1-1 system or a response by field personnel. Alternative approaches to deal with these types of calls will be discussed below.

The bottom line: the Team felt that EMS service delivery decision-making could be simplified to making a determination of which bucket an incoming call fits within. **The following diagram is a depiction of the process.**



Details of EMS System Modifications

EMS System Modification 1 - The EMS field response to 9-1-1 calls should operate by one of the following systems:

Scenario E-1.1 – Status Quo - 1st response ALS & BLS by SFD with transport by private ambulance (except 31-T calls and calls where AMR arrives 1st on scene)

SFD is the primary First Responder for Medical calls. Their objective is to arrive within 8 minutes and 30 seconds 90% of the time. Because of limited staff and limited equipment, they utilize Fire Trucks (Ladders and Engines) on most of their responses, to be prepared in case they are dispatched to a Fire call directly from the Medical call. AMR receives the information near the same time that SFD is dispatched, and their objective is to respond within 10 minutes for critical emergencies and 20 minutes for non-critical incidents, 90% of the time.

There are some exceptions to this dispatch protocol. For example, AMR responds to specific designated Nursing Home for certain calls instead of SFD under the SFD's 31T program. Conversely, SFD responds to most Alpha calls without an AMR ambulance since ambulance transport service is not normally needed on Alpha calls. AMR delivers Advanced or Basic Life Support if they arrive first on the scene. AMR provides all transport whenever required.

This system provides a good service at a reasonable cost for the patient and the citizens. It allows for system redundancy (but no Transport redundancy) when the SFD is busy with significant incidents. It also allows for strict control over the quality of care via a performance contract specifying agreed-upon response times.

[The Task Team unanimously endorsed this scenario for the new contract.]

Scenario E-1.2 - All first response and transport services provided by the SFD

Under this scenario, SFD would take over all the medical response that had been shared with AMR, as well as providing transport of patients to the hospital. The key advantages of such a scenario would be the seamless communication within a single organization, the goal of utilizing a higher percent of fire fighter's time between Fire calls, and the continuity of care of patients. The key disadvantage of such a scenario would be the cost of increased personnel and equipment to adequately staff a new business (including administration, finance, logistics, risk, legal, training et al) to the extent that these new expenses would not be offset by increased revenue from Transport billings.

Scenario E-1.3 - Private ambulance company would provide all first response and transport services

Under this scenario, the private sector would take over all EMS responsibility from the SFD, as well as continuing to provide transport services. The advantages of this

scenario are that it would free up our firefighters to focus on fire fighting, and increase their capacity to do so by eliminating time previously-spent providing medical response. It would ensure fire trucks were used exclusively to fight fires, and would eliminate a ladder or engine responding to minor medical incidents. The key disadvantage is it would require additional staffing by AMR (or any other third party provider) to be able to meet response standards. This model would increase the per-use cost to the citizens and/or require subsidization from the City. Moreover, the SFD needs a base staffing for fire response so there would be little or no savings available by reducing fire resources. This would also eliminate any system redundancy and cause additional silos in the EMS system.

Scenario E-1.4 - All first response by SFD with transport services shared between the FD and private ambulance company

This scenario would require the purchase or lease of transport vehicles by the SFD and additional staffing for the vehicles. The agency would develop criteria under which the SFD would transport patients while minimizing the impact on the private business model. This would improve continuity of care in certain circumstances and would encourage the use of EMS vehicles ONLY for EMS calls, without reducing services to and safety of our citizens and fire fighters. It may also provide a partial-funding mechanism for future EMS capital, increased staff, and increased service. It also provides reasonable backup coverage to a private company in the event the company changed business plans and discontinued service to the community.

Key disadvantages include the cost of vehicle purchases and the staffing needed in order to provide the Transport function. Ideally, all of these costs would be offset by new incremental revenue from providing and billing for Transport. However, with Transport opportunities come the risks associated with them, which include a high percentage of non-reimbursed trips, regardless of whether a third party vendor or the SFD is providing the service. It is also possible the reduction of volume will likely cause AMR to raise rates if it is not possible to scale up or down proportionately. If they do scale back available in-service ambulances, it would likely result in longer response times. For example: if SFD is going to do 15% of the transports, the transport vendor cannot afford the fixed costs of having as many ambulances in rotation as there currently are, and will need to scale back units in service with the lower volume estimations, which may also impact response time compliance.

Scenario E-1.5 - Both First Response and Transport would be shared between the SFD and private ambulance company

While the SFD is the primary provider of EMS first response services, the ambulance company does share in providing some of those services when they are first on the scene. The real focus of this scenario centers around the concept of sharing Transport duties between SFD and the private ambulance company. Local 29 proposed this

concept with consideration of a pilot program. The Task Team did not feel there was enough information presented or enough time available to evaluate this concept.

[The Task Team recommends this be an item for further study.]

EMS System Modification E-2 - Utilize a different level of response to Alpha and Bravo calls, which by their nature are lower-priority, where a field response is needed through the use of one person Alternative Response Units (ARU)

Since Alpha and Bravo calls appear to be the fastest growing area of EMS calls, alternatives to traditional EMS responses are being evaluated around the country. One of the most successful programs is occurring in the NW within Tualatin Valley Fire & Rescue (TVFR) who serves a large area adjacent to Portland, Oregon. TVFR uses one-person "CARS" units staffed with a paramedic who responds in a Toyota FJ Cruiser on a four ten-hour day schedule. The unit normally responds alone to non-life threatening medical and public service calls and can be included in more critical calls with other FD responders if close to the incident. TVFR have found the program to be a cost-effective option for responding to situations that don't require a traditional fire unit or larger crew.

Implementation of this type of response unit can help mitigate the rising demand of EMS services on the FD to leave traditional crews available for fires and more critical EMS incidents. Traditional fire units that are responding to more than 2500 calls per year can result in deficiency points from the Washington Survey and Rating Bureau (WSRB) and their high unit hour utilization (UHU), make it virtually impossible to meet response performance measures.

Both Don Waller from Local 29 and Chief Williams spoke in favor of the flexibility that ARU's bring to a department. The Chief recommended that 8 additional FF positions be added to the FD budget to place four ARU's in service at Stations 1, 11, 13 and in the 195 Corridor. His proposal was for ten-hour day coverage, seven days a week. This would require two persons to staff each of the four units for a total of eight personnel. His recommendation was put forward as a means to help deal with the increasing number of EMS incidents while maintaining existing personnel for fires and more critical EMS calls.

By creating a tighter response area for the ARU in the southwest quadrant of the city, we could also provide improved service to the 195 corridor that is currently not within five road miles of a fire station. In 2012, there were a total of 124 calls for FD service between Thorpe Road and the SW city limits. Ninety-three (75%) of these calls were EMS incidents and there was only one structure fire. Providing an ARU to this area during normal business hours would be progress in providing improved FD services to this growing area of the city.

[The Task Team unanimously endorsed the use of Alternate Response Units.]

The Task Team also considered modifying the Private Ambulance contract so that the FD would no longer be the primary responder to Alpha and Bravo calls. Under this scenario, the private ambulance provider would respond to Alpha and Bravo calls as the

primary responder and the FD would no longer respond. While this frees up FD units for availability for fires and more critical EMS calls, it would likely come with an additional cost. In order to provide this service the ambulance vendor would have to add more unit hours during most of the day. The only way to absorb the cost of adding unit hours without an exceptional financial loss would be a subsidy by the City or by raising all ambulance rates. Alpha calls account for approximately 16% of all medical calls and normally do not result in a transport so vendor would be tied up on calls that generally do not result in their use (no opportunity for revenue).

[The Task Team recommended against modifying the contract.]

EMS System Modification E-3 – In conjunction with the FD Combined Communications Center, consider implementation of a Nurse line that could handle certain types of calls placed to 9-1-1

One method that is being utilized around the country to reduce field responses to 9-1-1 medical calls is the utilization of a “Nurse Line”. Jurisdictions such as Yakima, WA have contracted for this service that is linked directly to their Communications Centers. Implementation of this concept requires the approval of the County Medical Program Director (MPD) who must approve the non-critical types of calls that could be forwarded to the “Nurse Line” for direction to the caller. The nurse line would have the resources to connect patients with clinics, make appointments and recommendations for supportive care in lieu of ambulance transport. Provisions would have to be in place to re-route the call to the CCC if at any time the “Nurse Line” felt that a field response was necessary.

[The Task Team recommends consideration of a Nurse Line.]

EMS System Modification E-4 – Approach Hospitals and Accountable Care Organizations about providing at least 2 Nurse Practitioners/Physician Assistants who would become a part of the response system for field treatment or referral to other than Emergency Departments

The Task Team saw tremendous potential in exploring alternate options to deliver medical attention in the field, as opposed to the emergency department, in certain well-defined and appropriate situations approved by the Medical Program Director. For example, these options could take the form of a mobile Nurse Practitioner (NP) or Physician Assistant (PA) who could be added to the response system and deployed to treat and release on the scene, instead of requiring transport for the sole reason of trying to qualify for reimbursement.

While some states have used advanced paramedics that would have the medical ability to assist with emergency/non-emergency care, Washington currently does not grant this authority. Advanced paramedic options would take more time and work to provide as a viable option than that of integrating an NP or PA, which should just require local approval. Additionally, if the NP or PA is affiliated with the hospitals, they could arrange

doctor's visits at various locations when circumstances warrant. NP's or PA's could also supplement the SFD training and quality assurance programs.

With a Physician's Assistant (PA) deployment system, the Task Team felt there might be a bias of defaulting to transport to avoid liability issues. There are legal distinctions in when a "citizen" becomes a "patient." We must provide transport to any citizen who demands it. Our past experience has shown that we carry many people who don't have other hospital / clinic transport options. There are people who are willing to take alternative transport, but they don't want to pay for it. Our legal system presents challenges in creating alternatives to ambulance transport. For example, "patients" have to be transported by ambulance. Reimbursement for these trips by insurance companies could also be an issue. AMR does not transport to non-ERs in the 9-1-1 system. They always transport to the ER.

Any implementation of this scenario would require the modification of some DOH and reimbursement regulations, and could only occur with the financial support of our local hospitals and Accountable Care Organizations. But with new Medicare reimbursement guidelines requiring a level of "Medical Necessity," the Task Team felt there would be benefit to our citizens and our community healthcare partners if our system was able to deploy a PA/NP upstream in circumstances where non-emergency medical attention may be needed, but Transport and Emergency Rooms are not needed.

[The Task Team recommends exploring a PA/NP option.]

EMS System Modification E-5 – Evaluate opportunities to expand the use of "Telemedicine Connections" that might reduce the necessity to transport individuals who do not need immediate care

As identified in E-4 and other discussion points, the Task Team believes that the introduction of additional alternative service delivery method is essential to dealing with future EMS System demands. Developments in Telemedicine and Smart Phone technology hold promise to deliver physician level input further upstream in the EMS system.

[The Task Team recommends that SFD, in conjunction with our broader Health Care Community, aggressively pursue the benefits this technology promises.]

EMS System Modification E-6 – Consider alternative transportation of persons to alternative locations other than Emergency Departments for evaluation.

As previously identified, transport of a person to an ED is not always the appropriate outcome, but currently options are limited. The Team felt that there should be additional options to provide flexibility in transport and treatment. Any such changes would require modification to DOH and Federal reimbursement regulations. Using something like this more extensively would be a benefit to AMR because they could decrease the unbillable transports. It would also help hospitals for the same reasons. If AMR, hospitals,

and community partners would help support an increased program, it could help everyone.

One transport option would be through Detox, which is operated by a non-profit organization in cooperation with Spokane County. Assuming modifications are made to DOH and Federal reimbursement regulations over time, alternative transport to alternative locations could become a reality. The private ambulance contract may be able to provide an alternative service through some type of Cabulance. Another option would be for the City to prepare an RFP to pursue a Cab Voucher System where field personnel could call a cab for transport of individuals to specified locations. Expanding transport destinations to include CHAS or new hospital-owned Urgent Care Clinics also has the potential to deliver effective medical care faster and more efficiently to our citizens, if we can encourage our regulatory environment to allow it.

[The Task Team unanimously recommends exploring Alternate Transport options to Alternate Locations.]

EMS System Modification E-7 – Expand hours of the Detox program to reduce response reliance on Fire and Police resources

Detox provides supplemental response to those individuals who are publically intoxicated and normally have no medical necessity to be transported to the hospital. Detox is under contract with the City to provide service during certain hours of the day. Their response and dealing with the individuals, frees up both FD and PD resources for availability to more critical incidents.

When Detox is not available, many times individuals are transported to hospital emergency departments in AMR ambulances or Police cars for medical evaluation. Many of these citizens have no ability to pay, questionably require emergency department attention and are being delivered by the most expensive method to the most expensive destination.

Increasing Detox hours of availability can help improve the overall system. Hospitals and AMR may be a willing source of the expansion of Detox hours of operation if we can quantify potential savings by avoiding Emergency Department visits and unnecessary transports.

[The Task Team unanimously recommends this action.]

EMS System Modification E-8 – Work with Hospitals to expand and further integrate the SFD's CARES program to address patient's needs and minimize repetitive calls/ care

CARES serves as an example that could be expanded into a preventative care partner via the Eastern Washington University's (EWU) Master's in Social Work program. The students complete internships throughout the school year with the SFD. When

someone on a call appears to have a social service need, the CARES team members are brought in and they attempt to hook them up with existing services that the citizen may not be aware of as an option. CARES workers help get the patients to the assistance that is needed at the time. While they do not provide direct care, they do link people to care; which can be a tremendous resource. The CARES Program currently staffs 0.5 FTE and the recommendation is to increase the Social Response Manager to a FTE.

Hospitals have similar programs for their patients. The Team feels that opportunities exist to enhance the individual programs toward more comprehensive services to address patient needs with the ultimate goal toward minimizing repetitive 9-1-1 EMS calls and/ or trips to the hospital.

[The Task Team unanimously recommends this action.]

EMS System Modification E-9 – Consider expanding the Hot Spotters program to become more inclusive of provider agencies

Hot Spotters is made up of representative from many of the EMS organizations with the intent to focus on plans to deal with persons who repeatedly use/ abuse the EMS system. This effort has been effective in developing plans for intervention with some of the high call volume individuals.

[The Team applauded the Hot Spotters efforts and recommends the expansion of the Hot Spotters program to be more inclusive by bringing additional provider agencies into the group.]

EMS System Modification E-10 – Expand Community Partnerships with the Hospitals and other entities impacted by EMS to improve outcomes for all and to reduce overall system costs

The Task Team recognizes the importance of Community Partnerships and supports the expansion of on-going interaction to improve the EMS system for all. Many of the Team recommendations are founded on the cooperation of the broader Health Care Community.

[The Team recommends that these vital partnerships extend beyond dealing with the specific recommendations of this report, and include a continuing dialog on improving quality of care and cost effectiveness in the community in order to keep up with changes occurring at the federal level, as well as synergies and opportunities that are specific to the Spokane region.]

EMS System Modification E-11 – Work with private ambulance company towards utilization of the same Computer-Aided Dispatch system to improve call transfer times and consider adding requirement to future ambulance bid specifications.

Currently, AMR operates its own Dispatch Center and has a different Computer-Aided Dispatch (CAD) system than the CCC. Although calls are shipped from the CCC CAD to the AMR CAD system, there are delays due to the CAD systems being different vendor solutions. Fire Administration has recommended that the next ambulance contract contain provisions that require the ambulance provider to use the same CAD system as the City if it they already have the same CAD system somewhere in their system. They believe this would speed up processing time and should reduce the on-going network charges for the ambulance company.

[The Task Team unanimously recommends that future ambulance contracts should require the vendor use the same CAD system.]

EMS System Modification E-12 – Work with private ambulance company to place one of their dispatchers within the CCC for coordination and the improvement of call transfer times and consider adding requirement to future ambulance bid specifications.

AMR made the recommendation that they co-locate one of their dispatchers at the CCC. They believe that it will provide better coordination between the dispatch centers and could improve overall response time.

[The Task Team recommends that this action be completed as soon as possible because there is the potential to reduce response time for transport response, and increase the save rate in critical medical incidents. The Task Team also recommends that this requirement be added to future ambulance bid specifications.]

EMS System Modification E-13 – In future ambulance bid process, consider including provisions that allow the City to buy medical supplies, equipment, vehicles, etc. through the ambulance company if it provides for better pricing

SFD will on occasion utilize access to AMR's contract pricing on certain pharmaceuticals, medical supplies, and equipment, as it does with other group purchasing contracts with other municipalities and fire departments. While this is currently being done an ad hoc basis, there may be other savings if a more standardized first look/second look system could be developed before purchases are made, to ensure the SFD is getting the best possible pricing available in the market for its equipment and supplies.

[The Task Team recommends SFD consider taking greater advantage of this current opportunity, and recommends language be added into future ambulance contracts to formalize this capability.]

EMS System Modification E-14 - Evaluate the inclusion of language in the ambulance contract that would allow for the replenishment of Medical Supplies or some other mutually agreeable reimbursement process

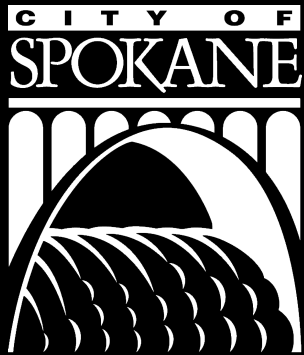
Disposable medical supplies are consumed on a daily basis by both the SFD and AMR. Some reimbursement is provided to AMR by patients with insurance coverage. Previous studies have recommended that SFD be compensated for the consumption of disposable medical supplies in which AMR ultimately receives reimbursement. This might take the form of an allowance or percentage of supplies, or some other mutually agreeable reimbursement level. Previous efforts to accomplish this failed due to complexity or complications.

[The Task Team recommends a streamlined, efficient method of reimbursement be developed in cooperation with the ambulance vendor and savings from medical supply reimbursement be captured.]

EMS System Modification E-15 – Expand the public EMS education program to inform the public of improvements to the system and ways in which they can help make the system operate more effectively

The steps the City takes in regard to its delivery of Emergency Medical Response will need to be clearly communicated to our citizens. The greater the understanding of the system by our citizens, the more effective and productive that system will be. When we create a future system where there is more than one outcome when calling 9-1-1, we will need to educate the public on what to expect when they call. When we build a system where there are more choices, and where citizens no longer need to call 9-1-1 when what they really need is transportation, we need to demonstrate how that system will work. When we introduce concepts such as a Nursing Line, Mobile PA/NP, or Detox as part of a Response System, we need to educate our citizens on what those changes mean to them.

[The Task Team recommends a strategic EMS education program be developed, concurrent with changes to the system itself.]



2013 Fire Task Team

Fire System Modifications



**"TOMORROW BELONGS TO THOSE WHO PREPARE FOR IT
TODAY"**

-African Proverb

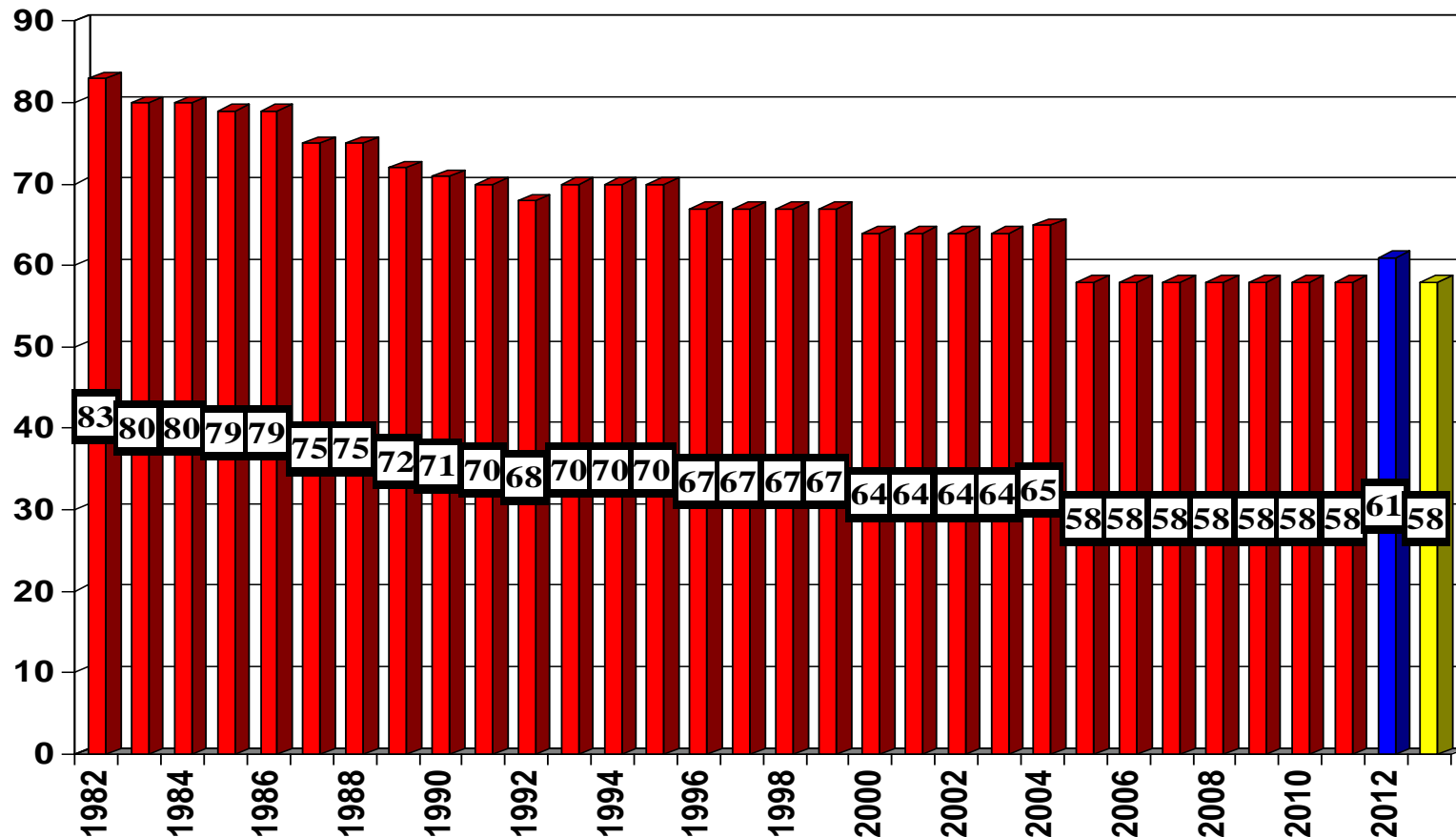
Fire System Modification Discussions

Fire Service Levels

We have discussed the fact that the overall call volume has increased in the last 20 years by almost 75% and that most all of that growth has been associated with EMS activity, while at the same time the number of structure fires has remained flat. From a loss standpoint, that is positive for our community and we want the trend to continue. However, while the number of fires has reduced, the number of personnel needed to extinguish structure fires has not gone down. Fighting fires when they occur is very labor intensive and is dangerous. During this same timeframe the daily on-duty strength of fire fighters available to respond to fire calls, has declined by about 17%.

Much of the Task Team's time was spent examining response times, our depth in responding to multiple incidents, and the geographic spread of the city. The stark reality of fire protection is that it more resembles insurance than operations. Fire protection and EMS Delivery is insurance to help minimize tragedy. The commitment in personnel and equipment is dictated by the level of protection we want to provide to our citizens. There are many tempting adjustments that could be made to staffing, physical buildings and equipment, if we chose to just protect to our average level of fire or EMS demand. While there was robust discussion on this topic, and imperfect consensus, there was a general feeling among the Team that our Fire and EMS coverage is at bare minimum, and reconsideration of some previous cuts should be considered along with our performance objectives. **See the shift chart below depicting 24-hour shift on-duty strength history of the SFD.**

24 Hour Shift On-Duty Strength History



2012 Increase in Staffing was a result of opening additional fire station on West Plains due to Annexation.

Importance of partnerships

Like on the EMS side of the house, firefighting delivery needs partnerships. Very few fire agencies have the financial capacity to reach and maintain staffing levels that erase the need to rely on their neighbors. Mutual Aid agreements have been a long tradition in the fire service, where surrounding fire agencies support each other when things go bad.

As our country has faced tough economic times and the availability of public safety funding has diminished, these local agreements have become ever increasingly important and have expanded to include different levels of response assistance. Like EMS, the need for greater collaborative partnerships with our fire service neighbors is evident and must be pursued.

Influences

Homeowners' insurance ratings

The provisions for determining insurance ratings in the State of Washington are developed and overseen by the Washington Survey and Rating bureau WSRB. The scale used to rate jurisdictions for insurance purposes is from 1 to 10, with 1 being the best. Currently, the City of Spokane is a 3², and Spokane Valley is also a 3. The City's rating went from a class 2 to a class 3 on April 1, 2000 when it was last fully reviewed.

WSRB evaluates Communities on Four Primary Areas with the following rating values

1. Water Supplies: 35%
2. Fire Department: 40%
3. Emergency Communications: 9%
4. Fire Safety Control: 16%

Historically, all areas within the city limits received the jurisdictional rating (Class 3 for Spokane), however in recent years WSRB rule modifications have resulted in changes to areas that are more than five road miles from a fire station to a Class 9A. The term known as the "cliff rule" (all or nothing based on 5 miles) is being reviewed and may change to a graduated scale in the future.

The area of the City primarily impacted by the fore mentioned rule is the Eagle Ridge subdivision in SW Spokane. All areas to the west of Moran View Ave and Eagle Ridge Boulevard are beyond 5 road miles from a SFD fire station and are subject to 9A class insurance rates resulting in higher insurance rates (reported to be between \$300 and \$800 more per year). There are provisions within WSRB rules that allow the jurisdictions regular rating to be received if they have an agreement with a neighboring fire agency that has a fire station within 5 road miles. This allowance could possibly be modified in

² Spokane did not drop from a 2 rating until the 2000s

the future to only allow the improved rating to be equal to the rating of the agency whose station is within 5 road miles.

The Team questioned WSRB's Public Protection Manager Robert Ferrell as to why response times were not used in the determination of ratings. It was explained that consistency and reliability of data is the major factor in allowing response time data to be utilized. While technology has brought us a long way towards the best collection and analysis of data, there are such varied levels of local government and funding in Washington, that many cannot dedicate resources to capture response time information that can be guaranteed as statistically accurate.

Risk management

As the Task Team began to distinguish between the fire service roles of fire, communication and transport; risk management became an overall theme that needed to be built into the decision-making criteria for future fire service. The fire service in general, and firefighting specifically, have always been built on what MIGHT happen. Large catastrophes that strike the U.S. every year with unforeseen incidents such as like Fire Storm, Boston Marathon bombing, Asiana flight crash in San Francisco, Ice Storm, and many more, depend upon prepared First Responders. The fire service is the primary go-to for First Response. The fire service must be staffed well enough to cope with these inevitable large events or we risk losing life, property, and confidence in our emergency response capabilities. Managing risk ensures the balanced coverage of service needs and resources. **The table below highlights important questions when considering risk management.**

Risk Management: Base—Dispatch—Transport Filtering for Optimized Fire Service/Field Resources

Risk Management System Driver:
Fire Service is the constant across all service-delivery formats

Base: Fire Service
What is the call volume by accelerated code?

Is there sufficient coverage to handle need?

Is there more coverage than is needed?

Base: EMS
What is the call volume by accelerated code?

Is there sufficient coverage to handle need?

Dispatch: Fire Service
Is there sufficient coverage to handle need?

Dispatch: EMS
Is there sufficient coverage to handle need?

Transport: Fire Service and EMS
Is there sufficient coverage to handle need?

Details of Fire System Modifications

Fire System Modification F-1 – Immediately address the SFD's aging fleet of apparatus, equipment and other capital needs.

The Washington Survey and Ratings Bureau utilizes multiple criteria to determine a fire department's rating. One of the key areas examined is that of Apparatus and Equipment. Their analysis includes both a quantitative metric, such as the number of Ladders, Engines, and Pumpers in relation to the number, type, height and size of structures. In addition, they use a point system for apparatuses that gives full credit for equipment less than 15 years old, but starts subtracting points as the equipment ages up to 25 years, at which level zero points are given for that specific ladder or engine.

By any objective measure, whether it is the Washington Survey & Ratings Bureau, the Center For Public Excellence, the NFPA, or peer review of benchmark cities, Spokane's fleet of fire apparatus is old and aging as we speak. The SFD has obtained funds for capital needs by going out to the public twice with a fire bond, which constitutes only 20 years of the SFD's 130-year history. These were bonds designed to fulfill their capital needs for the coming 10-year period, and were paid off by the end of every 10-year cycle. The last Bond was passed in 1999 and completely paid off in 2009. The Bond put forward in 2009 failed by less than 0.5% (approximately 400 votes) so we are now four additional years behind on capital replacement needs. Given the length of time to propose and hopefully pass a bond, we are actually five years or more behind.

The Task Team had some discussion on providing for capital funding via a levy lid lift versus a bond. While the City's Finance Department would certainly need to be consulted, the traditional guideline in Generally Accepted Accounting Practice and financial management would be to pay for long-term capital purchases with long-term bonds matching the approximate life of the assets, while a levy lid lift would be more appropriate for funding the increased operating expenses on an ongoing basis.

Millions of dollars of capital funding is needed right away for the SFD to cover apparatuses and equipment replacement costs. For example, one of our front-line Ladders and four of our front-line Engines are 20 years old. We have two reserve Ladders that are over 35 years old. All five reserve Engines are 21 years old.

Aging apparatuses and equipment place the fire fighters' lives at risk; reduce fire response time which impacts citizen safety; and, as Robert Ferrell of the WA Ratings Bureau shared during his presentation on July 9, we start to lose points on our rating when our equipment hits 15 years old. At 25 years of age, the value is set to zero.

[The Task Team feels strongly that the capital needs of the SFD are urgent and recommends they be addressed as soon as possible.]

Fire System Modification F-2 – Add four (4) additional firefighters (one per shift) to Fire Station 9 so the station regains its day-to-day ability to respond to and engage fire incidents in their first due response area.

During the 2013 budget cycle, Engine 9, previously serving as Station 9's first due response area from the Station at 18th and Bernard, was removed from service due to budget cuts. The SFD's only Rescue Unit that had historically operated from Station 1, was relocated to Station 9 in order to maintain the capability to still provide EMS First Response to the area. Because Rescue 9 is only staffed with two personnel, this change resulted in Fire Station 9 not having a unit that could initiate fire fighting actions.

The Team discussed approaches to restore fire fighting capacity to the crew that operates from Fire Station 9. Re-establishing fire fighting capability out of Station 9 would require adding one fire fighter position per shift. This means four FTE's since it takes four positions to cover the four shifts required. But the asset of the Fire Station

already exists, the Fire Engine already exists, and the only incremental expense would be the addition of four personnel.

[The Task Team recommends addition of four positions to restore fire fighter capacity at Station 9.]

Fire System Modification F-3 – Implement EMS Modification E3 to assist in improving unit availability / reliability and to avoid future costs.

Innovative new concepts such as CARS program used in Tualatin, to help intercept EMS calls further upstream, and reduce unnecessary fire response to alarm system calls, and unnecessary emergency department transports could help our entire community, from the citizen in need, to the EMS response, to the hospital emergency department. Peak Staffing capability, for the CARS program or even for peak demand hours at tapped out stations would give us a fine tuning mechanism to meet service demand in less than full Fire Engine Company increments.

Data shows unmistakable sustained patterns in call activity for both Fire and Medical Response. While 24-hour shifts have historically been the backbone staffing model for the Spokane Fire Department, a supplemental model of 8-, 10-, or 12-hour shifts to address peak periods of activity will be useful in meeting the needs of our citizens in a cost-effective manner. The large holes in the system (e.g. Engine 9 and eventually Qualchan) must be addressed first if there are limited funds. A pilot project could be created, in which existing firefighters are given the opportunity to work 8-, 10-, or 12-hour shifts, or new positions created which follow that shift structure, so that the department has peak staffing options. The important aspect is to utilize peak staffing as a supplement to the existing 24-hour staffing schedule.

To accomplish this will take a great leap of faith and trust between the City Administration and Local 29. Because of frequent turnover of elected officials in both the Executive and Legislative branch of the City, this has been a difficult relationship to foster. By protecting the traditional 24-hour shift, and restoring fire fighting capability to Station 9, we may be able to accomplish other innovative, but heretofore unattainable, flexibility in an Alternate Response Unit (ARU) concept program based on 4x10 hour shifts; or other Peak Staffing shifts based upon supplementing rather than replacing the basic 24-hour shift.

[The Task Team recommends the introduction of an ARU program.]

Fire System Modification F-4 – Immediately pursue a Supplemental Response agreement with Fire District 3 to include response by Fire Station 35 in the Eagle Ridge or any other area of the SW portion of the city who lives in an area outside of five road miles from a fire station.

When Spokane residents' homes are more than five road miles from a physical SFD fire station, those homes are dropped into a more expensive insurance ratings

category. The difference in premium cost between a Category 5 and Category 9 rating can be as much as 100%-200%. As mentioned previously, all areas to the west of Moran View Avenue and Eagle Ridge Boulevard, within the Eagle Ridge Subdivision, are beyond five road miles from a SFD fire station. This subjects them to the WSRB 9A class insurance rates resulting in higher insurance rates (reported to be between \$300 and \$800 more per year).

There are provisions within WSRB rules that allow the jurisdiction's regular rating to be received if there is a response agreement with a neighboring fire agency that has a fire station within five road miles. (Note: This allowance could possibly be modified in the future to only allow the improved rating to be equal to the rating of the agency whose station is within five road miles.)

Station 35, within Spokane County's Fire District 3, is located at Gibbs and Austin Roads and is within five road miles of the majority of the Eagle Ridge subdivision. **(A map of the Spokane County Fire Districts is attached below.)** A "Supplemental Response Agreement" with Fire District 3 could be considered that would allow homeowners in that area to qualify for the less expensive insurance category and they could save hundreds of dollars each year. A "Supplemental Response Agreement" means that the other fire agency's resources (in this case Station 35) are added to the normal SFD response, so the number of SFD responders is not modified in any way.

In this specific example, District 3 is an all-volunteer district. The Task Team understood that a "Supplemental Response Agreement" would not actually provide faster response or greater protection, and could cause greater safety concerns for SFD fire fighters. However, implementing this agreement would simply exploit a current quirk in underwriting standards (which may be changed in the future) and it would offer our citizens in that area, the same level of fire protection they currently have, but with a significantly lower fire insurance premium.

[The Task Team recommends that a "Supplemental Aid Agreement" be negotiated to provide rate relief to affected homeowners until a more permanent solution can be put in place.]

Spokane County Fire Districts

Legend

- Municipal Fire Service
- Not in a Fire District*
- Fire Stations
- Municipal Boundaries

* Area is served by DNR or State of Washington



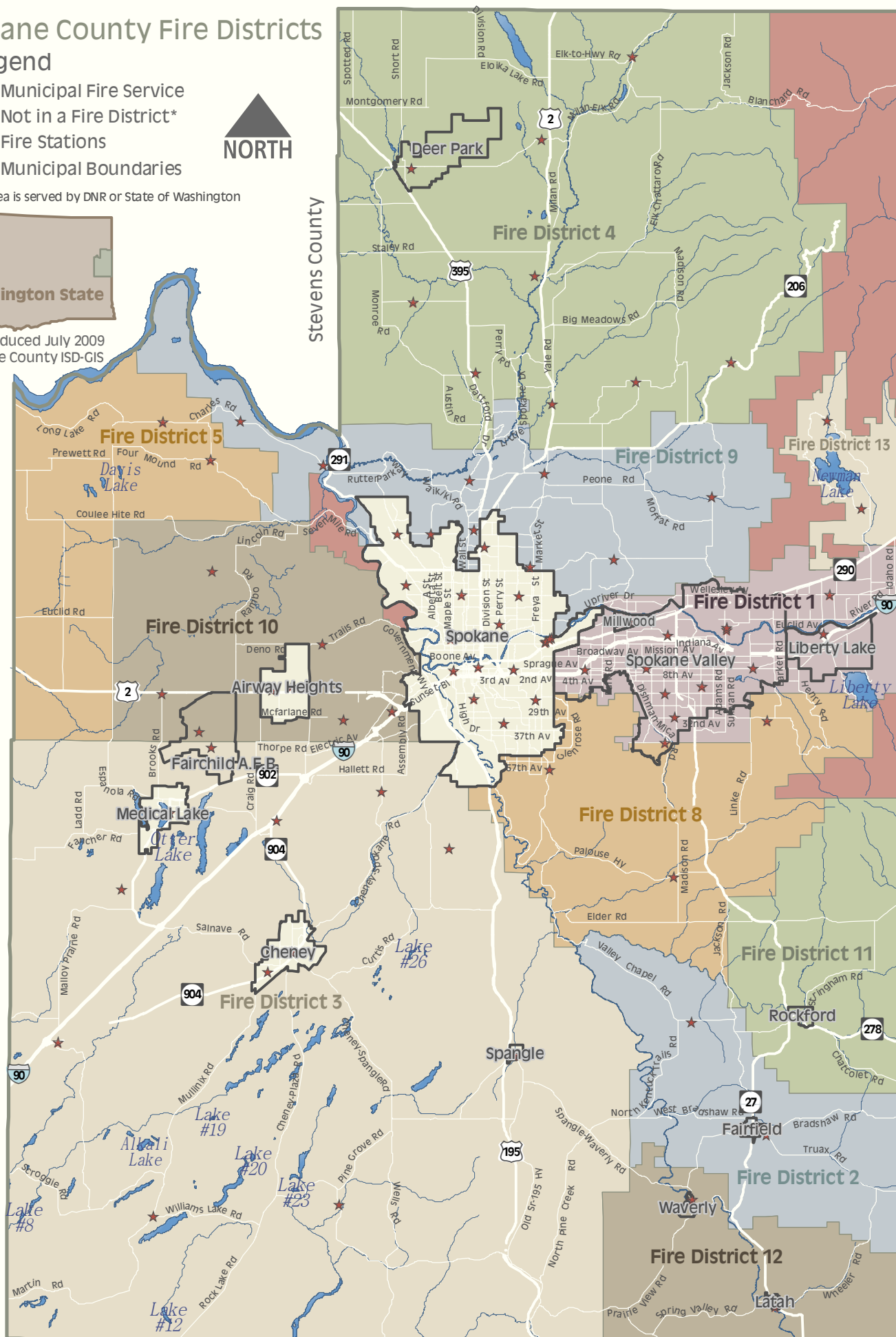
Stevens County



Map Produced July 2009
Spokane County ISD-GIS

Lincoln County

State of Idaho



Fire System Modification F-5 – Investigate the feasibility of jointly building / staffing a fire station with Fire District 8 along the 195 corridor that would place areas beyond five road miles from a fire station, within five road miles of a fire station.

The Task Team recognizes that the 195 corridor southwest of the city limits is continuing to grow and that the delivery of SFD services to the area is currently a distance away, provided by Fire Station 4 (adjacent to Browne's Addition). It was discussed during team meetings that there are no standards in place that identify when a fire station should be added to a newly-developing area.

As discussed above under EMS Scenario E-3.2, during 2012 there were a total of 124 incidents in the southwest city area south of Thorpe Road to the city limits. Of this total, 93 (75%) were EMS incidents with one structure fire. While the SFD repeatedly expressed desire to have a station to serve the area, they also recognize that providing the facility and personnel to do so, using the traditional fire station model, is extremely expensive (one-time cost of approximately \$2 million for the station and \$600,000 for the Engine, plus annual cost of about \$1 million for personnel).

Given the costs associated with a traditional station, the Task Team looked at other short-and long-term approaches as alternatives. One idea was to pursue the potential for creating an inter-local agreement with Fire District 8 for a cooperative project to build a joint fire station to serve the southwest portion of Spokane and the northwest portion of their district. The entire Ridge at Hangman Subdivision that lies within Fire District 8 is beyond five road miles, and their residents face the same insurance rate dilemma as those in Eagle Ridge. Neither of these areas is expected to experience the population and/or the number of calls for service growth that necessitates a fire station in the near future. With the high capital cost of building a new station, and the high operational cost of staffing it, a shared station concept might cut the threshold costs in half, and bring a higher level of service sooner and for less cost.

[The Task Team was unanimous in their recommendation to explore the possibility of a jointly-funded/staffed Fire Station through an Inter-local Agreement with Fire District 8.]

Fire System Modification F-6 – Work towards implementation of Automatic Aid agreements with Fire Districts immediately adjacent to the City limits who have career staffed companies, to implement the “closest unit dispatched” concept.

Increasing demands for service for SFD and the surrounding fire agencies, coupled with diminishing financial resources, is mandating the expansion of cooperation and reliance on each other. Other example of how this can occur is through the implementation of Automatic Aid Agreements with border jurisdictions. Automatic Aid agreements are not new to the fire service and have been in place for years in Spokane County. However, their use has been limited by the City of Spokane.

The concept of Automatic Aid agreements is sending the “closest resource” regardless of the agency to which it belongs. These agreements are most often effective along the borders of neighboring jurisdictions, where the adjoining fire agency’s resources may be closer than the host jurisdiction’s resources. Within the agreement, the number of units and personnel normally sent on an incident within the host jurisdiction is modified such that the numbers (units and personnel) do not change, but the response complement is made up by the host jurisdiction and the neighboring agency, with the closest resources. This concept assures the closest and the quickest response, regardless of the name on the door of the apparatus or colors of the uniforms worn by responders.

Once in place, Automatic Aid agreements can benefit those facing a crisis in their lives by getting the help they need, the quickest. While they can appear as a no-brainer recommendation, they do not come without a lot of work and coordination. Automatic Aid agreements require concurrence of the agency’s policy makers and are developed in cooperation with bargaining groups. They require coordination of operational policies and procedures which normally result in joint training.

Because the City is surrounded on three sides by fire agencies with career companies, the Task Team felt that this was an area that showed future promise. Fire District 8’s Station 81 lies just outside Spokane’s southeast border (Palouse Highway and 61st). Fire District 9’s Station 99 is just outside our northern city border at Whitehouse just off of Country Homes Blvd and Spokane Valley Fire has two stations not far from Spokane’s border. It was identified by FD representatives that discussions are underway with Spokane Valley Fire Department.

This would require the cooperation of Local 29, District 8, and other bargaining units. The Task Team felt that the Automatic Aid Agreements and potential inter-local agreements have significant potential for adding improved service at a low cost, and recommend that efforts be made to bring this to fruition. This effort must be built on a foundation of trust and cooperation between Administration, Local 29, and the citizens who pay for it all, not to mention the adjoining districts. For the future, the community will need to be able to see a fire service less restricted by political boundaries and more concerned with service to all citizens.

[The Task Team unanimously recommends implementing Automatic Aid agreements where feasible.]

Fire System Modification F-7 – Work with Spokane International Airport to combine SIA and SFD personnel and resources so that SFD personnel might be distributed to other parts of the City.

Logic would point to potential opportunities to find increased efficiency and service through a higher level of cooperation with SIA. The City operates Station 6 on the West Plains, and is a partner in the ownership and governance of SIA. While SIA-Fire has a specialized mission in aircraft fire and rescue operations, and has primary standards

and obligation to FAA regulations, there may be areas for future cooperation in shared physical plant and equipment, personnel, training, and administration.

However, concern was expressed about the dilution of their specialized mission, and there was no initial agreement that increased cooperation might result in potential savings or increased service delivery.

The Task Team believes that cooperative efforts among various districts, departments, community partners and other governmental entities hold great promise to contain costs while maintaining or improving services.

[While this Task Team was not able to generate progress in this area, the Team recommends this be a topic for further study.]

Fire System Modification F-8 – Consider modifying response to non-residential fire alarm system calls during normal business hours so the SFD only responds when there is a second call that verifies that there is a fire. Investigation of sounding alarm becomes responsibility of property owner/ manager.

Historically, whenever an automatic alarm was sounded, the SFD has been called and has responded back for clarification on the cause of the alarm. Not only is this an expensive use of SFD resources, but it can also tie-up our resources, leaving them unavailable when confirmed Fire and EMS emergencies occur. While systems are very effective in identifying when smoke and fire become present, with today's environment, they can be activated due to circumstances that are not a real fire. Since most alarm system calls that come in to the SFD are not for actual emergency situations, some jurisdictions are changing the approach to dealing with alarm systems, and are placing the responsibility to check on sounding alarms on the property owner or property manager. In such cases, the SFD would only respond when a caller actually verifies a fire or other emergency situation. The Task Team thought this change in philosophy was one that should be evaluated by the City's Legal and Risk Management divisions for implementation consideration.

The Task Team felt that thought that rather than modifying the response procedure for all non-residential alarm system activations, it may be more prudent to consider changing the procedure to normal office hours when businesses have personnel who could immediately check on the alarm. The SFD would respond during closed hours, such as evenings and weekends, as applicable.

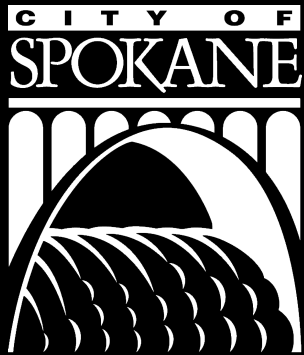
[The Task Team recommends that non-residential fire system alarm calls received during normal business hours be treated as a non-emergency response, until or unless confirmation of an emergency situation is received.]

Fire System Modification F-9 – Consider initiating a False Fire Alarm fee for non-residential properties.

Since a very high percentage of the fire alarm system calls that the SFD responds to from Automated Alarm Systems are inadvertent or unintentional alarms, the topic of assessing fines for multiple false alarms was discussed by the Task Team. Many commercial locations are required by City Ordinance to have a fire alarm, and there was great reluctance on the part of the Task Team to assess fines due to equipment that State and City Codes require be in service. On the other hand, repeated generation of unintentional alarms exhausts precious City resources, and calls for some type of remedial action.

The Task Team encountered a difference in opinion on the topic of fines and the potential revenue this program might generate. However, the biggest advantage is not in the increased revenue, but rather is in the higher reliability in the alarms, as well as in the cost avoidance of going on the alarm responses. The Task Team had a difference in opinion on whether such fines might cause ill-will among citizens in the business community, and also had differences in gauging our ability to streamline the billing process to recoup false alarm response costs in an effective and efficient manner.

False Alarm Fees are imposed in many other cities. As we look 20 years into the future, it is not hard to imagine more cities developing a capability to create a system to enable Fee For Service billing. A fee for multiple false alarms would only apply if a specific location has been responsible for three or more false alarms in the past 12 months. Schools or other governmental buildings would probably need to be exempt. There are third-party contractors that can handle the billing and administration ***[The Task Team recommends that a policy for Multiple False Alarm Fees be instituted.]***



2013 Fire Task Team Global Modifications



**"TOMORROW BELONGS TO THOSE WHO PREPARE FOR IT
TODAY"**

-African Proverb

Global Solutions Modification Discussions

As identified earlier, for a period of time, the Task Team was divided into two separate groups. One of them, the Global Solutions Work Group, looked at opportunities to improve service or reduce cost regardless of other structural scenarios. It focused on reducing barriers to response time, potential Fee for Service opportunities and many other ways to maximize the value of our service delivery. Below are the discussion areas brought forth as a result of this work.

Global Solution Modification G-1 – Establish an on-going Fire Task Team to consider alternative approaches / solutions that have been and will be identified that might improve service to the community.

The Task Team felt that it had the right group configured to identify service issues and then recommend solutions for consideration, but generally it was felt that the Team would not have enough time to fully consider or implement those solutions. Therefore, a long-term team, committee or commission is being recommended going forward in order to keep the current dialogue moving, stay on top of national and state changes in healthcare and EMS, and continue to promote partnerships in our broader health care community.

While many ideas came through the full Task Team Meetings, and the Work Group Meetings, other individual meetings and discussions also took place throughout the life of the Task Team. It would appear that additional ideas of merit for cost savings ideas could be constantly reviewed and the best ones implemented if there were fewer barriers to communication within the Department, between the Department and the Administration, and between the Administration and the City Council.

[The Task Team recommends this action be taken.]

Global Solution Modification G-2 – Immediately seek funding approval for the purchase of Traffic Pre-emption Devices that will allow emergency vehicles to switch traffic lights to green along response routes to help improve "code" responses.

Modern technology, such as that provided by Opticom™, allows emergency vehicles to automatically switch traffic lights to green along response routes generating further reductions in emergency response times. Traffic signal pre-empting devices for Fire and EMS apparatuses can save time while increasing safety. There is a **list of existing and proposed Intersections in Appendix E**. While many of our currently-controlled intersections were funded by Spokane County's Fire District 9, there are numerous additional intersections where these devices could be installed, generating further reductions in emergency response times. Likewise, there are many fire vehicles and vendor's ambulances that have not been outfitted with the transponder units that trigger

traffic light changes. This represents a one-time capital outlay for a system that would generate ongoing response time efficiencies.

[The Task Team unanimously recommends this action be taken.]

Global Solution Modification G-3 – Aggressively work with City, State, and Federal representatives to improve the capacity / capability for fire apparatuses to utilize bridges that currently have restricted use.

Many of our fire apparatuses are not allowed to use certain bridges due to weight restrictions. While the deferred maintenance and repair of our bridges are necessary, some of these restrictions seem overly-cautious and self-imposed. There is a big difference between daily wear-and-tear and allowing fire apparatuses to use a bridge during an emergency response. The Task Team found that some of these restrictions come from the Federal level, some from the State of Washington, and many from our own City Street Department. **See Appendix F for a list of the bridge restrictions.**

The Work Team felt there was potential for reducing response times by questioning and more aggressively resisting limits (during emergencies only) at the Federal, State, and Local levels, where appropriate. The Team also felt that strategic repairs and strengthening of key bridges, in conjunction with integrated street work, would allow greater access for fire trucks on emergency response. Without these bridge changes, some of the SFD stations also remain limited in their flexibility to assist other stations, including North and South or East and West travel.

[The Task Team unanimously recommends this action be taken.]

Global Solution Modification G-4 – Aggressively work toward the completion of the road connection between the Indian Trail and Five Mile areas of the city so that overall emergency response times can be improved.

The Work Team surmised that response times could also be reduced through an integrated approach to road connections, such as the Barnes Road / Strong Road project between Indian Trail and Five Mile. The City has made great strides in looking at road construction from a wider perspective, but in addition to Water, Sewer, Traffic, and Storm Water concerns, additional consideration should be given to road connections that inadvertently reduce emergency response times.

[The Task Team unanimously recommends this action be taken.]

Global Solution Modification G-5 – Consider implementing a fee for cost recovery when the SFD responds to Motor Vehicle accidents for fluid containment to minimize the potential for contamination of the aquifer.

On occasion, the SFD responds to a motor vehicle accident (MVA) for the sole purpose of fluid clean-up. Our citizens benefit from prompt action taken to protect our aquifer

and environment from automotive fluids. The SFD is entitled to invoice the vehicle owner or the owner's private insurance carrier for the cost of the clean-up activity, yet it has not been utilizing this cost-recovery opportunity to-date. The Team discussed the pros and cons of billing for this service. Estimates of potential revenue vary greatly, from as little as \$12,000 to as much as \$100,000 per year. Other decision factors include potential ill-will created among citizens who receive the billings, regardless of whether it is reimbursed or paid by their insurance company.

[The Task Team recommends this action be taken.]

Global Solution Modification G-6 – Seek financing towards an effort to ensure that a high percentage of the residential occupancies in Spokane, have working smoke detectors.

Community Fire Prevention - One of the most effective ways to save lives is the distribution and installation of smoke detectors in homes that do not have them.

[The Task Team believes grant dollars and other sources should be sought to fund community programs like these, and Spokane should aggressively go after the grant funding to ensure that a significant number of our residences have working smoke detectors.]

Global Solution Modification G-7 – Continue to work on the collection and analysis of FD data to provide better opportunities for future analysis and decision making.

The Task Team spent time reviewing existing data, and identifying valuable additional data for future utilization by Fire management, the Mayor and Council, and our citizens. The following listing provides the suggested data sets:

1. **\$ value and % of structures saved** – we currently track the value of property, an estimate of property lost, but not an estimate of the value of percentage of property saved.
2. **Number of structures and % of fires** – we currently track the number of structure fires and the number of citizens, but not the overall number of structures in the city. With increased fire safety codes, better community fire awareness and prevention, it is important to see the % of structures that catch fire annually, not just the number, in order to properly analyze risk and the cost to our citizens.
3. **Firefighter time spent on Fire Calls vs Medical Calls** – We need to do a better analysis of the amount of time FD personnel spend on incidents. If a Fire call takes five hours and a Medical call takes one hour, the city could have a scenario in which Medical are 80% of the total calls, but fire fighters are spending 50% of their time on Medical and 50% on Fire.

4. **Bench marking other cities** - while there is value in following our own data and trends, having valid comparisons with other comparable cities that share common characteristics is valuable.

[There are on-going efforts to improve and refine data collection and the Task Team recommends this effort continue.]



2013 Fire Task Team Summary



**"TOMORROW BELONGS TO THOSE WHO PREPARE FOR IT
TODAY"**
-African Proverb

Summary / Concluding Remarks

Most of the Task Team members came into this process naive in some way or another. We are all now better informed and hopeful that our citizens will benefit from our teamwork. We now recognize that what many would consider as simple solutions to address what is perceived to be simple problems is just not the case. Services provided by the Spokane Fire Department are complicated and extremely dynamic. What is believed to be an ideal system developed to deliver a good level of service to the community can change in a matter of seconds depending on the next call for service.

The Task Team has come to realize that when an apparatus and its team are out on a call, the unit remains out of service until the existing emergency is taken care of, which can challenge response to subsequent emergency calls. This is compounded further when apparatus are cross-staffed, attending mandated training or out of service for maintenance. While SFD leadership has worked to ensure adequate service coverage across the city, budget constraints with resulting budget cuts have also constrained the availability of responders, of up-to-date apparatus and other necessary equipment including safety equipment and protective gear.

We recognize that currently, fire fighters work on rotating shifts to ensure 24/7/365 coverage and many believe that there is significant savings or improved efficiency by changing the shift. It is important to note that fire fighters on a 24-hour shift will work 320 hours a year more than those on a 40 hour week. This is only one example of the efficiencies gained by the 24-hour shift. With that said, the Task Team feels that even though the basic 24-hour shift is considered the most efficient shift for the vast majority of operational staffing, the department must develop a supplemental “Peak Staffing” capability to be able to bring in additional personnel for specialized innovative response options or to address a station or area where we simply cannot match service to demand in 24 hour shift increments. This ability to match peak service call periods with peak staffing coverage, supplementing the existing shifts will require a higher level of trust and cooperation between Local 29 and the City, but is an important tool to provide a higher level of service to our citizens at a cost they can afford.

Influenced by the depth of the greatest recession and perhaps as a result of the political turnover of the past 30 years, it certainly has been a difficult fiscal environment to navigate. Ideas that are mutually beneficial are more important than ever. Ideally, certain goals, such as higher levels of staffing, might be accomplished if we could incorporate other cost savings ideas, new revenue ideas, grant opportunities, etc., to help offset the increased costs of providing or maintaining that higher level of service. We must get beyond being stifled and break through the resistance of change and polarization of views, to improve service to the community and make Spokane the *City of Choice and the Safest City of our Size in the Northwest*.



2013 Fire Task Team Appendices



**"TOMORROW BELONGS TO THOSE WHO PREPARE FOR IT
TODAY"**

-African Proverb

Appendix A: Fire Task Team Members

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Appendix B: Fire Task Team Meeting Schedule

4/09/13 Introductory Meeting with Mayor Condon: Scope of Work Discussion
4/16/13 Task Team Meeting
4/23/13 Task Team Meeting
4/30/13 Task Team Meeting
5/07/13 Task Team and Work Groups Meetings
5/14/13 Task Team and Work Groups Meetings
5/21/13 Task Team and Work Groups Meetings
5/28/13 Task Team and Work Groups Meetings
6/04/13 Optimum Service Delivery Model Discussion
6/11/13 Optimum Service Delivery Model Discussion
6/18/13 Local 29 Structure Scenario Presentation
6/25/13 Optimum Service Delivery Model Discussion
7/02/13 AMR Structure Scenario Presentation
7/09/13 Fire Safety Ratings Presentation
7/16/13 Fire Accreditation Presentation / SFD Structure Scenario Presentation
7/30/13 Final Recommendations Discussion
8/06/13 Report presentation to Mayor David Condon



OFFICE OF THE CITY CLERK
808 W. SPOKANE FALLS BLVD
SPOKANE, WASHINGTON 99201-3342
509.625.6350

February 11, 2013

City Clerk File No.:
RES 2013-0009

COUNCIL ACTION MEMORANDUM:

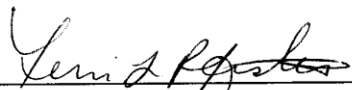
RE: RESOLUTION 2013-0009 REGARDING THE CITY'S EMERGENCY MEDICAL RESPONSE PROCEDURES

During the Spokane City Council 6:00 p.m. Legislative Session held Monday, February 4, 2013, Council Member Salvatori provided an overview of Resolution 2013-0009. Subsequently, the following action was taken:

Motion by Council Member Fagan, seconded by Council Member Snyder, to change the fourth whereas so it reads: "WHEREAS, using large ladder and pumper trucks to respond to medical calls increases fuel costs and is not an efficient use of expensive capital equipment...;" **rejected 1-5 (Council Member Fagan voting "aye" and Council President and Council Members Allen, Salvatori, Snyder, and Waldref voting "no" and Council Member McLaughlin absent).**

Subsequent to additional Council comment, the following action was taken:

Upon Unanimous Roll Call Vote (Council Member McLaughlin absent), the City Council adopted Resolution 2013-0009 relating to the City's emergency medical response procedures by the Fire Department.


Terri L. Pfister, MMC
Spokane City Clerk

**Agenda Sheet for City Council Meeting of:**

02/04/2013

Date Rec'd	1/23/2013
Clerk's File #	RES 2013-0009
Renews #	
Cross Ref #	
Project #	
Bid #	
Requisition #	

Submitting Dept	CITY COUNCIL
Contact Name/Phone	STEVE 625-6715 SALVATORI
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Agenda Item Type	Resolutions
Agenda Item Name	CITY'S EMERGENCY MEDICAL RESPONSE PROCEDURES BY THE FIRE DEPARTMENT

Agenda Wording

A resolution regarding the City's emergency medical response procedures by the Fire Department.

Summary (Background)

The City Council desires to examine issues pertaining to emergency medical response procedures by the Fire Department relating to response times, equipment, and deployment strategies. This resolution sets forth a request by the City Council that the City Administration convene an independent task force to study options and make recommendations for a 20 year comprehensive plan that would reduce response time for medical calls including transport, while maintaining or improving current fire respo

Fiscal Impact		Budget Account
Neutral	\$	#
Select	\$	#
Select	\$	#
Select	\$	#
Approvals		Council Notifications
Dept Head	STUCKART, BEN	Study Session
Division Director		Other
Finance	LESESNE, MICHELE	Distribution List
Legal	BURNS, BARBARA	
For the Mayor	SANDERS, THERESA	
Additional Approvals		
Purchasing		

ADOPTED BY SPOKANE CITY COUNCIL

2/4/2013
[Signature]
CITY CLERK

RES 2013-0009

Resolution No. 2013-0009

A resolution regarding the City's emergency medical response procedures by the Fire Department.

WHEREAS, the top priority of the City is to provide the best possible level of public safety to its citizens; and

WHEREAS, the number of responses to medical emergencies have continued to climb, now accounting for almost 80% of Fire Department dispatches; and

WHEREAS, shorter response times to medical emergencies would save lives; and

WHEREAS, using large ladder and pumper trucks to respond to medical calls may increase fuel costs and may not be an efficient use of expensive capital equipment, while the use of smaller emergency medical vehicles may shorten response time and provide greater flexibility in deployment of emergency medical personnel; and

WHEREAS, even small reductions in response times to medical calls significantly increase positive outcomes in medical emergencies; and

WHEREAS, the transport time required to move a patient to a hospital emergency room can be just as critical as the initial response, and is an integral part of the EMS system; and

WHEREAS, analysis of response times, equipment, and deployment strategies may offer major opportunities to save lives and improve utilization of city assets.

NOW, THEREFORE, BE IT RESOLVED by the City Council for the City of Spokane that the City Council requests the City Administration convene an independent task force to study options and make recommendations for a 20 year comprehensive plan that would reduce response time for medical calls including transport, while maintaining or improving current fire response standards, and increase system efficiency.

ADOPTED by the City Council February 4, 2013.



City Clerk

Approved as to form:





Appendix C: Research on Other Like-Size Cities

Spokane Valley

city	population	budget	calls	on duty strength	budget capital	FF/1000 population	FF/1000 call	calls/ff	FF/\$100,000	budget/FF
S Valley	116,571	\$30,125,800	12,056	35	\$258,433	0.300	2.903	344.457	0.116	\$860,737.14
Spokane	210,000	\$41,500,000	32,523	58	\$197,619	0.276	1.783	560.741	0.140	\$715,517.24
If Spokane was like Spokane Valley		budget by per capita cost \$54,270,942				on duty strength by population 63.0517024	on duty strength by call 94.41813			
Note: when FF is used in the statistics it is the number on duty a day; not total firefighters in the department										

Everett

city	population	budget	calls	on duty strength	budget capital	FF/1000 population	FF/1000 call	calls/ff	FF/\$100,000	budget/FF
Everett	105,000	\$27,746,485	18751	30	\$264,252	0.286	1.600	625.033	0.108	\$924,882.83
Spokane	210,000	\$41,500,000	32523	58	\$197,619	0.276	1.783	560.741	0.140	\$715,517.24
If Spokane was like Everett		budget by per capita cost \$55,492,970				on duty strength by population 60.00	on duty strength by call 52.03402			
ISO 3	Note: when FF is used in the statistics it is the number on duty a day; not total firefighters in the department									

Spokane D9

city	population	budget	calls	on duty strength	budget capital	FF/1000 population	FF/1000 call	calls/ff	FF/\$100,000	budget/FF
District 9	40,000	\$11,000,000	3,500	14	\$275,000	0.350	4.000	250.000	0.127	\$786,714.29
Spokane	210,000	\$41,500,000	32,523	58	\$197,619	0.276	1.783	560.741	0.140	\$715,517.24
If Spokane was like District 9		budget by per capita cost \$57,750,000				on duty strength by population 73.5	on duty strength by call 103.092			

Note: when FF is used in the statistics it is the number on duty a day; not total firefighters in the department

Yakima

city	population	budget	calls	on duty strength	budget capital	FF/1000 population	FF/1000 call	calls/ff	FF/\$100,000	budget/FF
Yakima	91,000	\$9,848,295	9,484	24	\$108,223	0.264	2.531	395.167	0.244	\$410,345.24
Spokane	210,000	\$41,500,000	32,523	58	\$197,619	0.276	1.783	560.741	0.140	\$715,517.24
If Spokane was like Yakima		budget by per capita cost \$227,726,835				on duty strength by population 55.38461538	on duty strength by call 82.30198			

Note: when FF is used in the statistics it is the number on duty a day; not total firefighters in the department

Response time standard
5.13

Tacoma

city	population	budget	calls	on duty strength	budget capital	FF/1000 population	FF/1000 call	calls/ff	FF/\$100,000	budget/FF
Tacoma	217,660	\$63,698,884	38,859	65	\$292,653	0.299	1.673	597.831	0.102	\$979,982.83
Spokane	210,000	\$41,500,000	32,523	58	\$197,619	0.276	1.783	560.741	0.140	\$715,517.24
If Spokane was like Tacoma		budget by per capita cost \$61,457,161				on duty strength by population 62.71248737	on duty strength by call 54.40168			
Note: when FF is used in the statistics it is the number on duty a day; not total firefighters in the department										

Boise ID

city	population	budget	calls	on duty strength	budget capital	FF/1000 population	FF/1000 call	calls/ff	FF/\$100,000	budget/FF
Boise	210,000	\$43,255,520	19,336	84	\$205,979	0.400	4.344	230.190	0.194	\$514,946.67
Spokane	210,000	\$41,500,000	32,523	58	\$197,619	0.276	1.783	560.741	0.140	\$715,517.24
If Spokane was like Boise		budget by per capita cost \$43,255,520				on duty strength by population 84	on duty strength by call 141.2873			
Note: when FF is used in the statistics it is the number on duty a day; not total firefighters in the department										

Data source: Don Waller, International Association of Firefighters (IAFF) Local 29, May 2013

Appendix D: Summary of Presentations

~Service Delivery Options~

Local 29 Scenarios Presentation - Don Waller, June 18, 2013

<http://www.local29.org/>

City of Spokane—Risk Management: Fire Service and Emergency Medical Service

Base Fire Service and EMS

Current Risk Management Challenges:

- Insufficient capital funding for equipment, clothing, staffing (I.E. medic units)
- Insufficient operational funding for staff training
- Lack of City-wide comprehensive strategic plan covering Fire Service, et al.
- Lack of emphasis on regional partnering for maximized resources

Major Risk Management Categories:

- *Benchmarks and Like-Cities Comparison Data*
 - National and Spokane
 - Size: Population and service delivery
 - Level of risk
 - Staffing
 - Demographic—socio-economic
 - Like-cities
 - Spokane Valley; Tacoma; Boise, ID; Everett; and Spokane D9
- *Vital Resources*
 - Personnel
 - Training
 - Scheduling
 - Right-sizing
 - Equipment
 - Apparatus
 - Smaller specialized equipment
 - Clothing
 - Financial
 - Capital budget
 - Operating budget
- *Community Risk-level Analysis*
 - Low- and high-risk residential areas for Fire
 - Low- and high-risk commercial areas for Fire
 - Low- and high-risk EMS response areas (I added this to see if it was applicable on the EMS side of the service)
- *Partnerships for Maximum Efficiency and Effectiveness of Service*

- Utilization (personnel coverage)
- Deployment (service coverage)
- Redundancy (no service coverage gaps)
- Global solutions (maximized partnerships for maximized coverage)

Risk Management Best Practices (Recommendations)

- Added partnerships and coordination in the region
- Added assistance on ambulance transport

AMR Scenarios Presentation – Rocco Roncarati, July 2, 2013

<http://www.amr.net/Locations/Operations/Washington/Spokane.aspx>

Current business

- Statewide Systematic Approach
 - EMS has high regulation in the State of Washington via the Department of Health
 - The State is divided into eight regions, each of which have a 2 to 5 year strategic plan; Spokane is in the East Region
 - East Region designates the number of trauma verified transport agencies with changes approved by the State
 - Every county has a Medical Program Director (MPD) who establishes protocol
 - MPD can give authority to Agency's MPD to work with EMS agencies
- AMR's current EMS model has been in place for 25 years and was developed on what existed at the time with administrative oversight by SFD
- AMR pays \$450,000 per year for contract administration and liquidated damages
- Late response charges are incurred in the form of "liquidated damages" in the amount of \$60 per minute with a \$600 maximum, which goes into the SFD budget
- ARM averages about 43 late responses per month; if response is below performance for 3 out of 12 months, AMR can be held in contract default
- The Spokane Municipal Code (SMC) specifies how EMS is delivered in Spokane
- SFD responds on all EMS calls; if SFD member rides in the AMR ambulance, only the BLS rate can be charged
- Emergency code response time is set at 9 minutes, 59 seconds with flashing lights or 19 minutes, 59 seconds without flashing lights (no code response)
- AMR responds only to codes B-E and must transport to the hospital ER in order to receive Medicare/Medicaid reimbursement unless the patient is willing to pay out of pocket to be transported to a clinic—there are no alternative sources of funds available to transport to other than the hospital ER
- Federal government determines whether or not each transport will be approved for reimbursement--AMR receives about 45 denials per week (of claims billed to Medicare/Medicaid based upon the Medicare/Medicaid rules regarding medical

necessity) out of about 700-800 total bills, based upon Usual Customary Rates (UCR); 60-60% of the total bills are Medicare/Medicaid

- Medicare is a fixed payer, which means payment is made based upon fixed rates for certain services regardless of the actual cost submitted; claims are denied if the transport was deemed as medically unnecessary by Medicare
- “You call; we haul” is legal obligation for transport units yet the federal government makes the eligibility decision on reimbursement
- Creates two negative feedback loops:
 1. patient must be transported to ER yet the State mandates that ER needs to clear out low critical-care patients ASAP after triage to deal with critical-care patients
 2. Transport units must take patients to ER but there is no guarantee that the patients are eligible for reimbursement, which would leave the transport agency to determine how to get paid for the service provided
- AMR appeals on the patient’s behalf
- An ambulance run charge is \$600
- AMR has a contract with Providence to transport persons by wheelchair van FROM the ER and other departments to avoid medically-unnecessary ambulance transports, and to keep those resources free for emergencies
- Providence pays a monthly fee to AMR – AMR bills the patient for the service – whatever the patient pays reduces the cost to Providence. Most of the payment is out of pocket by patient. Wheelchair service is not typically a covered service from either government or private insurance carriers.
- The question of when a “person” becomes a “patient” is generally handled this way: either a person may self-identify her/himself as a patient or s/he is determined to be one based upon signs and symptoms presented at the time of the request.

Single-source Delivery / Third-party EMS coverage

- Single-source delivery is unusual; AMR doesn’t know of any on record
- Response times would have to be modified with additional personnel and ambulances and a tiered response system
- Rate adjustments and/or subsidized service would need to be determined
- Built-in backup service and surge capacity coverage would need to be developed, generally via mutual aid agreements
- A City ordinance change would need to be made to SMC 10.47

Optimizing Current EMS System

- There are two main challenges to increase EMS transport options:
 1. Legal--What would the State allow?
 2. Financial--How would you fund the transports that would currently be considered non-reimbursable? Currently, costs are increasing while budgets are decreasing.
- While the current system in place is working well, there is still room for increased efficiencies

- Strong community education is key and Spokane has this in place already; I.E. Hans Only CPR
- Golden Apple
 - Create a responsive system: right resource with right patient in right amount of time
 - Public and private partnerships are key for coordination of shared resources and shared savings
 - Robust Quality Assurance (QA) process is vital when flexing and changing
 - Need to build in flexibility for any future modifications
 - Integrate the current CCC and establish better protocol on lower-level calls to realize the best level of response
 - Tiered system—currently, all ambulances are ALS; having ALS and BLS resources can reduce the overall cost to the system
 - Place SFD and AMR dispatch in the same location to cut down on the cost incurred in making the technology work together, and to increase coordination
 - AMR offers an economy of scale on purchases that the City cannot achieve alone
- Eagle Ridge
 - Adding a fire station is logical, but cost restrictive
 - Different models may provide coverage

Spokane Fire Department Scenarios Presentation – Chief Bobby Williams, July 16, 2013

<http://www.spokanefire.org/>

Basic Assumptions and Recommendations to Address System Improvements

Assumptions

- The number of calls for service are not going to decrease
 - Public's definition of "emergency" and need to call 9-1-1 has changed and will be difficult to turn around in the short run
 - Majority of increase will be for EMS incidents
- Structure fire strategy is going to continue to be "Offensive"
 - City is not going to require retro-active fire sprinklers in all structures
 - Policy direction is not going to change to FD not entering structures and taking "Defensive" strategy of standing in the front yard and trying to confine fire to building of origin
- Federal Reimbursements and Insurance Payments are not going to increase for Medical calls
- General Government funding is not going to significantly increase
- Must look at Global solutions to historic FD response services (primarily EMS) because impacts to others in community are constantly changing in negative ways

- Must involve our partners in service alternatives that help them and the overall system
- FD focus need to be on priority incidents

EMS System Modifications

- Research and in concert with MPDs, implement use of a “Nurse Line” to handle Omega and other calls
- Modify responses to “Alpha & Bravo” calls that need responses
 - Add personnel to FD to Place 3 – 1 person ARU (Alternative Response Units) in service at Stations 1 (downtown), Station 11 (south hill) and Station 13 (north side) to handle these calls
 - Staff unit with Paramedic
 - Work a modified shift – 4 – 10 hour days to deal with majority of incident volume when the remainder of the system is busiest
 - Evaluate need for 7 day a week service versus 4 days a week
- Add personnel to place a ARU (Alternative Response Units) in service in the Qualchan area for day responses to incidents
- Evaluate need to increase Detox hours to provide additional relief to FD and PD
- Work in concert with hospitals to fund the placement of at least 2 Nurse Practitioner staffed units into the response system to minimize the unnecessary transport of individuals to E.D.
 - Evaluate methods by which individuals seeking treatment can be scheduled for appointments at other more appropriate medical facilities or transported to those facilities by something other than an ambulance so the 9-1-1 system is not negatively impacted
- Work to complete the staffing of all SD fire stations with Paramedics
 - Achieves equal level of service throughout community
 - Adds higher level of capacity & knowledge to traditional fire companies – which provides better flexibility for the overall system and prepares for the future of health care
 - Minimizes the necessity for multiple FD unit response on ALS calls in parts of the community
 - Improves the system to allow for improvement of Cardiac Save Rate
- Modify the Dispatch process to quicken call transfer to the Ambulance Co.
- Change future Ambulance bid requirements to:
 - Mandate same CAD systems if FD used CAD is being used by the vendor in other locations
 - Locate an Ambulance Co dispatcher to the CCC
 - Improved on current opportunities to take advantage of joint training as well as purchasing power
- Work with hospitals to seek funding for:
 - Expanding and coordinating the FD QA/QI system
 - Integration of the CARES program with hospital and other medical facilities

- Partner with hospitals, ambulance company and other health care providers on comprehensive health education programs with the goal to minimize unnecessary 9-1-1 calls and improve overall health within the community
- Evaluate utilization of Fire Stations as locations to provide coordinated efforts by the overall medical community for medical screenings

Alternative Response Units

- During the first 12 months the CARs responded to 2,134 incidents,
 - 7.2% of total call volume
 - a CAR was **the primary response unit to nearly 1,700 calls**
 - 482 false fire alarms,
 - 638 minor medical calls,
 - 255 non injury motor vehicle crashes,
 - 72 detector problems,
 - 48 false medical alarms,
 - 67 lock-outs,
 - 70 odor, smoke and burn complaint investigations,
 - 27 wires down calls, and
 - A number of other miscellaneous incidents

Fire System Modifications

- Research legal and risk concern in the pursuit of eliminating the FD response to fire alarm calls during normal business hours unless a fire is verified
 - Utilize CAR units to check on the status of alarm system calls if necessary
- Move forward necessary steps to enter into a “Supplemental Response” agreement with Fire District 3 for the Qualchan area to help improve insurance rates for those living in the area
- Initiate discussions with Fire District 8 as to interest in jointly funding a station and response unit that could serve the Qualchan area and the Ridge at Hangman areas within 5 road miles
 - Be willing to consider alternative initial response units and staffing levels until incident volumes and population grows to trigger additional capacity
- Move forward with necessary steps to enter into “Automatic Aide” agreements with Valley Fire (east), Fire District 9 (north) and Fire District 8 (south) towards closest unit dispatch
- Add 3rd person per shift to Fire Station 9 so it has FF capability and cross-staff Engine and Rescue
 - Obtain a secondary Rescue unit that will allow a 2nd unit availability and place on the North side – possibly Station 16
- Move forward immediately with finalization of Capital funding methodology for FD apparatus, equipment and facilities
 - This is a critical matter that must be addressed expeditiously

Funding

- We were not necessarily supposed to worry about how to fund recommendations by this group

- Safer Grant
 - Would apply for 20 positions that have been lost through budget reductions over the last several years
 - If the Grant is awarded, it would provide funding for 2 years
 - City could not lay off personnel during that time
 - City would have to determine how to fund if grant was not received or after grant period expired
- Partner agency funding
 - Evaluate if the CARS response modifications could be funded by hospitals if means to reduce ER visits can be accomplished

Other Discussion Topics

- Transport
 - Fire Admin is not currently supportive of FD transport because:
 - Current arrangement with private sector transport has worked well
 - Private sector rates have been extremely low and very reasonable
 - Response times and compliance have been good
 - Very few complaints about patient care or other issues
 - Collection rates are very low for this area for a number of reasons
 - Federal reimbursements are well below actual service delivery costs
 - System redundancy works well for FD & Community
- Consolidation with SIA
 - Fire Admin is not currently supportive because:
 - Airport Administration and Board are not supportive at this time

Summary

- Proposed Concepts:
 - Helps address fastest growing demands – EMS
 - Creates greater availability of resources for fires & more critical EMS calls
 - Involves partners in solutions to EMS system issues
 - Better integrates response coverage with other fire agencies
 - Provides improved cost-effective services to the community
 - Helps avoid unnecessary responses
 - Minimizes duplicate apparatus responses
 - Helps improve Unit Hour Utilization (UHU)

~Fire Safety Ratings~

Washington Surveying and Rating Bureau (WSRB) -- Robert Ferrell, July 9, 2013

<http://www.wsrb.com/WSRBWeb/>

The WSRB is in its 102nd year as a non-profit, independent organization. It is licensed and regulated by Office of the Insurance Commissioner, and primarily funded through insurance companies based upon premium volume. Major duties include: filing rules, rates, and forms; conducting inspections; and evaluating fire defenses and building codes.

Protection Class ratings have been conducted since 1911 when the insurance industry called for a way to understand fire protection issues. The Protection Class is used to set insurance rates in communities on a scale of 1-10, with 1 being the best. Cities have a Protection Class rating, as do major commercial properties. Spokane has a rating of 3, which is the highest it can achieve. The two biggest rating factors are 1) distance to the nearest fire station, and 2) distance to the nearest hydrant distribution.

With ratings between 2-5, there is very little change for the homeowner's policy. A rate of 9 is negative, and a 10 rating is the worst rating. Historically, as the Protection Class rating increases, the insurance loss increases. A significant loss change is not actualized in residential property until about a Class 6 rating is given.

In Commercial properties, the loss raises with almost every Protection Class rating increase. Commercial grading has fewer steps than residential.

Grading values include:

- Water supplies (hydrant locations, sizes, types, and condition): 35%
- Fire department: 40%
- Emergency communications (equipment, operators, training): 9%
- Fire safety control (prevention, education, etc.): 16%

In regard to the fire department rated as 40% of the value, there are 17 items considered, including:

- Fire flow need and geographical distribution of pumpers
- Distribution of companies
- Number of frontline and reserve resources, such as apparatuses and staffing
- Maintenance and condition of apparatuses—repairs, checks, age (<15 years is optimum)
- Other considerations include conditions and locations of stations, construction, communications equipment, radios, telephones, backup power, fueling capabilities, delays in response (RR crossings, steep grades, inclement weather, traffic, etc.)
- Credit can be received for the utilization of pre-emption equipment

Q&A Discussion

BW – When Spokane went from a 2 to a 3, it was probably a combination of closing a few stations, reducing apparatus, and reducing on-duty strength since the last rating.

GG – Do you factor in the number of fires?

Bob – No, there isn't an assessment of the number of fires. It's not like auto insurance. (In other words, WSRB's definition of fire risk doesn't take into account past experience, only a calculation of liability)

DW – When you calculate the rating, do you give the department an opportunity to make corrections before a rating is established?

Bob – The list of considerations is always available to fire departments to review.

BW – Some fire agencies are setting policies of not responding to alarms unless there is a verified incident. Some ratings agencies are downgrading departments because of this.

Bob – We don't penalize departments for this practice in WA.

SS – Do you look at response times, since that's the bottom-line for a lot of these considerations?

Bob – No, we don't look at response times at all.

SS – So if we put in traffic preemption devices to reduce response times, would we get credit for that?

Bob – You wouldn't get credit for reduced response times, but there would be a consideration for having those devices. Until fairly recently, response times weren't available. It may be something we evaluate in the future.

ES – New York and LA were recently accused of manipulating their response time data. You can't cheat on the mileage. For communications, we can give credit for call answering and dispatch data as an alternative to staffing levels.

BW – A limitation for Spokane has been the inspection of existing buildings. We have over 10,000 businesses and they would like us to inspect at least one per year.

Bob – That's one of the more heavily weighted items in this category. Spokane moved from a class 2 to a class 3 in 1999. In 2007 a spot-check was done and nothing changed. Typically it's done about every 7-8 years. Communities can ask for an evaluation if they'd like. Big companies, such as Home Depot or WalMart,

are probably self-insured to some extent, so a rating change probably wouldn't affect their bottom-line very much.

BW – In the Qualchan area, could their situation be mitigated with an automatic aid agreement with Station 3?

Bob – If there were automatic aid, where they are dispatched at the same time, then they could get Spokane's rating. We don't currently distinguish between volunteer and full-time. We recognize the loophole and it may change in the future. We are also looking at the "cliff rule" of the 5-mile standard. Perhaps there will be some steps involved after 5 miles instead of dropping way off.

~Fire Service Accreditation~

Emergency Services Consulting International (ESCI) – Joe Parrott, July 16, 2013
<http://esci.us/>

Fire and Emergency Services Performance and Deployment Analysis

Services Provided

- Fire suppression
- Emergency medical first-response (ALS and BLS)
- Hazardous materials emergency control (Level A)
- Technical rescue
- Entrapment extrication
- Trench rescue
- Confined space rescue
- Water rescue
- High angle rescue
- Hazardous condition control
- Public assistance
- Fire safety inspections
- Public safety education
- New construction plan review and inspection

Phases of an Emergency Event

1. Detection
2. Contact with emergency dispatch
3. Dispatch incident processing and response crew notification
4. Turnout time
5. Travel time
6. Set-up time
7. Incident control time Fire cause investigation

Why Time Matters

- Trauma – “Golden hour”
- STEMI – Onset to recognition to treatment in cath lab
- Respiratory compromise during entrapment
- Physical and environmental harm from hazardous materials release
- Cold water drowning

People + Tools + Time = Effectiveness

- People – Trained emergency responders
- Tools – Apparatus, equipment
- Time – Duration between event start and intervention
- Effectiveness – Degree to which harm caused by event is limited

SFD Time Performance Objectives

All times are at the 90th percentile (12,776 priority incidents)

- Dispatch
 - Notify response crews within 60 seconds of receipt of call (current – 52 seconds)
 - National standard – 60 seconds
- Turnout
 - Initiate response within 90 seconds of dispatch (current – 128 seconds)
 - National standard – 60 seconds (80 seconds for fire incidents)
- Response
 - Arrive within 8 minutes 30 seconds of dispatch (current – 7 minutes)
 - National standard - 5 minutes (5:20 for fire incidents)
- Effective Response Force
 - Arrive within 11 minutes of dispatch (current – 11 minutes 16 seconds)
 - National standard – 9 minutes (9:20 for fire incidents)

Response Resource Deployment

Primary Considerations:

1. Risk
 - a) Population density
 - b) Structure types
 - c) Other risks
2. System demand
 - a) Incident types
 - b) Incident density
3. Geography
 - a) Size
 - b) Barriers

SFD Contribution to Emergency Medical Services

- Who arrives first?
 - AMR 23.6% of the time
 - SFD 76.4% of the time
- How quickly does each arrive?
 - AMR - 11 minutes 4 seconds from receipt of call at CCC at the 90th percentile
 - SFD - 7 minutes 16 seconds from receipt of call at CCC at the 90th percentile

Questions the Committee Should Consider

1. From the time you call 9-1-1, how long should it take for help to arrive at your doorstep?
2. Should all Spokane residents receive a relatively equal level of service?
3. Who is the most appropriate provider of these services?
 - a) Fire suppression
 - b) Emergency medical initial care and treatment
 - c) Patient transportation to the hospital
 - d) Hazardous materials emergency control
 - e) Technical rescue
 - i. Entrapment extrication
 - ii. Trench rescue
 - iii. Confined space rescue
 - iv. Water rescue
 - v. High angle rescue
 - f) Hazardous condition control
 - g) Public assistance
 - h) Fire safety inspections
 - i) Public safety education
 - j) New construction plan review and inspection
 - k) Fire cause investigation
4. Are there services provided by the Fire Department that are not meeting your expectations?
5. Are there services you think the Fire Department should provide but does not?

Appendix E: Traffic Pre-emption Intersections (Opticom Operational)

Intersections that are Opticom operational are:

SR-2 and Hawthorne

SR-2 and Northpointe (mall ent)

SR-2 and Holland

Country Homes and Division
Division and Magnesium

Division and Lincoln Rd

Division and Cozza

Division and Lyons
Nevada and Hawthorne

Nevada and Holland

Holland and Hoerner

Nevada and Magnesium

Nevada and Lincoln Rd

Nevada and Lyons

Francis and Market

Francis and Freya

In progress

Planned

Source: SFD

Highway 2		
	1	Hawthorne
	2	Northpointe/Graves
	3	Holland
North Division	4	Country Homes/Highway 2
	5	Magnesium/Price
	6	Cascade/Lincoln
	7	Cozza
	8	Lyons
		Country Homes/Highway 395 Hwy 395 Y
Nevada	13	Hawthorne
	14	Holland
	15	Magnesium
	16	Lincoln
	17	Lyons
Miscellaneous	9	Ash/5-Mile
	18	Maple/5-Mile
	19	Freya/Fredrick
	20	Wellesley/Havana
	21	Wellesley/Market
	22	Market/Garland
	23	Market/Euclid
	33	Holland/Hoerner
Francis	10	Ash
	11	Alberta
	12	Indian Trail
	24	N. Market
	25	Maple
	26	Freya
	27	Crestline
	28	Nevada
	29	Addison
	30	Division
	31	Wall
	32	Monroe

Appendix F: Bridge Restrictions

Bridge * means still needs further review and may be upgraded in near future	20 ton max	Aerials (all over 25 tons except L52)							Can be crossed	Exceptions and notes
Northwest	Engines	L-1	L-2	L-4	PL-13	PL-11	L-51	L-52		
Broadway Ave. over Maple St.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Division (Sam Guess)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Maple St. over Spokane River	Yes	No	No	Yes	No	No	No	Yes	No	Except L4 and L52 and Engines per posted weight limits
Monroe St. over Spokane River	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Ohio Ave. over Maple St.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Post St. over Spokane River	No	No	No	No	No	No	No	No	No	No engines or ladders allowed (posted 11 tons)
Howard Middle Channel, (Blue Bridge)	No	No	No	No	No	No	No	No	No	No engines or ladders allowed(posted 13 tons)
Howard North Channel	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Caution	Keep all trucks to the center of the bridge
Howard South Channel	No	No	No	No	No	No	No	No	No	No engines or ladders allowed(posted 13 tons)
Riverpoint over Centennial Trail *	Yes	No	No	Yes	No	No	No	Yes	No	Except L4 and L52 and Engines
Theme Stream @ Riverfront Park	No	No	No	No	No	No	No	No	No	(posted for 8 tons)
Washington St. over South Channel	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Seven Mile Rd	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Except L2
Stevens St. over Spokane River *	Yes	No	No	Yes	No	No	No	Yes	No	Except L4 and L52 and Engines
TJ Meenach over Spokane River *	Yes	No	No	Yes	No	No	No	Yes	No	Except L4 and L52 and Engines
Washington St. over North Channel *	Yes	No	No	Yes	No	No	No	Yes	No	Except L4 and L52 and Engines (per federal weight formulas)
Northeast										
Fancher	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Except L2
Fiske St. over RR	No	No	No	No	No	No	No	No	No	No engines or ladders allowed(posted limits)
Francis Ave. over RR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
South Freya Street over RR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Freya Way over RR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Greene St. over Spokane River	Yes	No	No	Yes	No	No	No	Yes	Caution	All ladders may cross at 20 mph, code runs only, can not pass or be passed in same direction of travel except L4 and L52 and Engines may go over anytime code/no code.

Bridge * means still needs further review and may be upgraded in near future	20 ton max	Aerials (all over 25 tons except L52)							Can be crossed	Exceptions and notes
Hamilton (James E Keefe)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Mission Ave. over Spokane River	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Caution	Keep all trucks to the center lanes
Sprague Ave. over Erie St.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Trent/Hwy 290 Bridges (near Trent and Hamilton)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
West Trent over Spokane River	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Wellesley Flyover, (Northtown Garage Entrance)	Yes	No	No	Yes	No	No	No	Yes	No	Except L4 and L52 and Engines
Southwest										
1st Ave. over Maple St.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
9th Ave. over Ben Garnett *	Yes	No	No	Yes	No	No	No	Yes	No	Except L4 and L52 and Engines
Chestnut St. over Latah Creek	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
11th Ave over Latah Creek	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Cliff Ave. over Ben Garnett	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Garden Springs @ I-90 (Rustle)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Government Way (@ I-90)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Hatch Rd. over Latah Creek *	Yes	No	No	Yes	No	No	No	Yes	No	Except L4 and L52 and Engines
Inland Empire Way over Latah Creek *	Yes	No	No	Yes	No	No	No	Yes	No	Except L4 and L52 and Engines
Manito Park Bridge	No	No	No	No	No	No	No	No	No	No engines or ladders allowed(posted limits)
Riverside Ave. over Latah Creek	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Qualchan Golf Course over Latah Creek	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Except L2
Riverside Ave. over Maple St.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Rosamond Ave. over Sunset Blvd. *	Yes	No	No	Yes	No	No	No	Yes	No	Except L4 and L52 and Engines
Summit Blvd	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
SHMC parking Garage	No	No	No	No	No	No	No	No	No	No engines or ladders allowed
Sunset Blvd. over Inland Empire Way	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Sunset Bridge over Latah Creek	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Except L2
Southeast										
2nd St. Access (off Hamilton)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Bridge * means still needs further review and may be upgraded in near future	20 ton max	Aerials (all over 25 tons except L52)							Can be crossed	Exceptions and notes
Arthur (I-90)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Freya Overpass (I-90)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Havana Bridge over RR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Sprague Ave. over Sprague Way	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Sprague Off-Ramp over Erie St.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Sprague Way over 2nd Ave.	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Sherman Ave. (I-90)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Thor Overpass (I-90)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Northbound Sprague Way	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

Source: Spokane Fire Department

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