Analysis of Alternative Approaches to Providing Fire Protection Services

PACIFIC GROVE, CALIFORNIA

FINAL REPORT



September 4, 2013

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INTRODUCTION AND EXECUTIVE SUMMARY

This introductory section provides the summary of the project goals and objectives, as well as the key activities conducted to complete the study, followed by an executive summary of the recommendations.

1. PROJECT INTRODUCTION

In January 2013, the Matrix Consulting Group initiated the study analyzing alternative approaches to providing fire protection services in Pacific Grove to assess alternative delivery approaches. This study was meant to build upon recommendations from a 2007 Study, which recommended the current approach used with Monterey and a 2010 internal examination on the feasibility of forming a JPA and includes the following:

- Creating a stand-alone City of Pacific Grove Fire Department.
- Contracting for fire services with CAL FIRE.
- Enhancing the current contract with Monterey Fire Department.
- Creating a joint powers authority (JPA), outside of CalPERS.
- Contracting for fire services with a private firm.
- Limiting fire response on EMS calls.
- Making EMS part of the fire department service offerings.
- Combining police and fire duties into a public safety operation.
- Introducing advanced fire-interruption technologies and/or improving on-site fire prevention capabilities.
- Improving fire prevention operations and improving the inspection process.
- Improving the current ISO rating.

• A change in the retirement calculation to include options for moving out personnel who do not promote in the organization.

To meet the study objectives, the project team engaged in the following activities:

- Conducted interviews with the city managers from the City of Pacific Grove, The
 City of Monterey and the City of Carmel-by-the-Sea in order to understand the
 context of the study and identify challenges and improvement opportunities.
- Conducted interviews with the respective fire chiefs of the City of Monterey and the CAL FIRE as well as the City of Pacific Grove Police Chief in order to obtain perceptions of existing services and regional fire service options.
- Conducted numerous interviews with staff at all levels of the Monterey Fire Department and personnel assigned to the two contract stations.
- Review of extensive workload data as provided by the Monterey Fire Department including detailed incident and call for service information to understand the fire and emergency medical service workload demands of the region.
- Review of organizational, operational, and financial information regarding the respective fire service delivery system, including the current Monterey contract, organizational charts, budget and salary information, etc.

Additionally, the project team assessed the network of fire station locations (via GIS capabilities) to identify the gaps in service delivery areas across the region. As such, this report represents the organizational options and cost estimates regarding the delivery of fire and emergency services to the City Pacific Grove and surrounding areas.

2. EXECUTIVE SUMMARY

Overall, the project team found that the residents of the City of Pacific Grove are receiving a cost effective service from the current contract, although there are opportunities to improve the performance of the system. Additionally, several alternatives were identified that could reduce costs for fire and emergency services in Pacific Grove, including if the City formed its own Fire Department; however a stand alone department in Pacific Grove would have significantly fewer capabilities and incur

other issues that need be considered. The formation of a regional fire department through formation of Joint Powers Authority resulted in cost savings or increased costs depending on the method of cost sharing chosen.

The table below summarizes the key findings and recommendations of the Analysis of Alternative Approached to Providing Fire Protection Services in Pacific Grove.

#	Key Finding	Key Recommendation
1	The City has relatively low call volume at approximately 1,400 calls per year or 3.8 incidents daily. Of these calls approximately 63% are EMS related.	Call Volume by Call Type Should be Analyzed Regularly to Ensure Resource Allocation Remains Appropriate.
2	The City is allocating approximately \$126.68 per resident to provide fire and medical services, \$37.69 less than the national average of \$164.34 per resident.	The City should continue its fire service contract with Monterey until other options are fully explored and evaluated.
3	The City has not formally adopted fire and EMS performance standards beyond response times, which may be incorporated in the current contract. This may enhance the accountability of fire service delivery.	The City should establish service level objectives at 90% for dispatch, turnout and travel times for fire, rescue, and emergency medical response.
4	The Dispatch center is not reporting call processing time for fire and EMS responses. The turnout time of fire crews is 1:43 90% of the time, above best practices of 1:00 – 1:30. The travel time to emergency calls exceeds industry best practices, currently 3:33 for Code 3 responses.	The Dispatch Center should adopt a policy of processing calls in 1-minute or less at a 90% level. The Fire Department should also adopt a policy of achieving a 1:30 minute - turnout time at the 90% level.
5	The County has no plans of expanding EMS transport providers beyond the current providers in the Exclusive Operating Area.	The City should continue to receive EMS transport services from AMR or the County appointed EMS agency.
6	The formation of a Joint Powers Authority for providing fire services in the Region will produce cost savings of approximately \$1.2 million over the current approach.	The Cities of Pacific Grove, Monterey, Carmel-by-the-Sea and Seaside should continue discussions regarding regionalization approaches for the future.

#	Key Finding	Key Recommendation
7	The City of Pacific Grove has a current ISO rating of 3, which is excellent.	The City should work to maintain its current ISO rating.
8	Advanced fire interruption systems could benefit Pacific Grove under various service options by providing extra time to establish an effective response force.	The City should consider implementing the use of advanced fire interruption systems, particularly if the stand-alone or contracting with CAL FIRE or contracting with Seaside options is chosen for fire protection services.
9	The inspection process can be improved through the implementation of Company Inspections.	The City should work with Monterey to implement company inspections to enhance the fire inspection process.
10	Terminating personnel who do not promote within the organization at specified timelines is not in the best interest of the City.	The City should continue with the process of hiring and retaining quality employees regardless of whether they promote within the organization.
11	The City of Pacific Grove currently pays 100% of the costs for staffing and operating Station 4. This includes paying 100% of overtime costs associated with back-filling positions during planned and unplanned vacancies.	The City should consider modifying the contract language to include a fixed cost for positions assigned to the Pacific Grove Fire Station.

The following table summarizes the overall advantages or disadvantages with the various alternative contract service delivery approaches:

Issue	Monterey Fire Department	CAL FIRE
1. Service Providers	 City career fire department. Currently provides service to Monterey, Pacific Grove, Carmelby-the-Sea and Sand City. Provides BLS First Responder Service. Operates from five (5) stations and provides constant coverage to Pacific Grove. 	 State Fire Protection Provider Currently provides service from two fire stations in the Pebble Beach community. Offers choice of ALS or BLS first responder service. Contract would be for constant 3-person staffing an engine company in Pacific Grove. No move up provisions for

	Monterey	
Issue	Fire Department	CAL FIRE
		coverage when PG station is on a call.
		Station is on a call.
2. Staffing	 Minimum on-duty staff. 1 Duty Chief 5 engines – 15 personnel 1 ladder – 3 personnel Monterey FD shift personnel work a 48/96 shift schedule (56-hour work week). 6 reserve engines and 1 truck available for callback. Staffing is continually assigned to Pacific Grove. Back fill positions have local area knowledge. Continuous boundaries allow closest response in Pacific Grove. 92% of code three calls have a response time less than 5 minutes. Staffing levels ensure an effective response force can be deployed. Monterey desires to contract with Monterey Airport and Pebble Beach, which would further enhance the fire regional fire protection network. Personnel are required to pass police level background check and psychological prior to hiring. Random drug testing in agency. Firefighter association very active and involved in Pacific Grove. 	 Pacific Grove would be staffed with a fixed level of 3 personnel daily. 1 Captain 1 Engineer 1 Firefighter CAL FIRE personnel work a 72/96 shift schedule (72-hour work week). Shared Battalion Chief Coverage from local CAL FIRE Unit. Personnel staffing is from personnel assigned to the San Benito-Monterey Unit, but can be assigned from anywhere in the Southern Region of CAL FIRE to fill vacancies. Mutual aid required to establish an effective response force. Cursory background checks conducted, but no psychological prior to employment. No random drug testing.
3. Differences in Wages.	 Monterey has the highest overall pay 	CAL FIRE has the lowest overall pay

	Monterey	
Issue	Fire Department	CAL FIRE
	rates for each position for the three agencies. Pacific Grove costs are based on the salaries of the personnel that bid to work at the Pacific Grove station. More tenured personnel would mean higher operational salaries in Pacific Grove. Retirement is 2.7% @ 57.	rates for each position for the three agencies. • Staffing costs are fixed based on CAL FIRE standard calculations and include fixed staffing of the Pacific Grove station. • Retirement is 3% @ 55.
4. Contract Differences	 Admin costs in current contract are 15%. Pacific Grove maintains control and ownership of local assets. Local control maintained regarding deployment of assets. Annual True-up based on actual costs of providing staffing and services to Pacific Grove. Includes administration, fire protection and EMS first responders, fire inspection, investigation, prevention, enforcement, pre-fire planning and disaster planning. Dispatch services are provided by County 9-1-1 agency. Pacific Grove responsible for maintenance and repair of equipment. 	 Admin costs are factored at 11.5%. Pacific Grove maintains control and ownership of local assets. Pacific Grove must agree to be part of the State Mutual aid program, including deployment of their assets. Contract is on a not to exceed pricing schedule and includes administration, emergency fire protection and EMS first responder services. Dispatch services from CAL FIRE included. Fire Inspection, prevention and enforcement services are additional. Land use / pre-fire planning services are available for additional cost. Disaster planning services available for additional cost. Pacific Grove responsible for maintenance and repair of equipment.

The following table summarizes the key findings related to a stand-alone Pacific Grove Fire Department.

Issue	Full-Time	Public Safety Concept	Combination Career/Volunteer
2. Staffing	Minimum on-duty staff. 1 Captain 1 Engineer 1 Firefighter Personnel would work a 48/96 shift schedule (56-hour work week). Full-time staffing includes 1Fire Chief 3 Captains 3 Engineers 6 Firefighters 1 Admin. Assistant .5 Fire Inspector Mutual aid required to establish an effective response force.	 Minimum on duty staff. Captain Engineer Firefighter or cross trained officer. Fire personnel would work a 48/96 shift schedule. Cross-trained personnel would work 12-hour police shifts. Full-time staffing includes Fire Chief Fire Captains Firefighters Cross-trained personnel. Mutual aid required to establish an effective response force. 	 Minimum on duty staff. Captain Engineer Career or Volunteer Firefighter. Career fire personnel would work a 48/96-shift schedule. Volunteer fire personnel would be required to provide 24 hours of staff coverage per month. Full time staffing includes Fire Chief Fire Captains Fire Gighters Volunteer staffing would require 30 volunteer firefighters. Mutual aid required to establish an effective response force.
3. Costs.	Overall Cost for operating the fire department is \$2.12 million annually. Retirement is 2.7% @ 57.	 Overall cost to operate the fire department is \$2.66 million annually. Initial protective gear purchase of \$80,000 for cross trained personnel. Retirement is 2.7% @ 57. 	 Overall cost to operate the fire department is \$1.88 million annually. Initial protective gear purchase of \$300,000 for volunteer personnel. Retirement is 2.7% @ 57. Volunteer personnel would require workers' compensation, disability and life insurance coverage.

The table, which follows provides a side-by-side comparison of the anticipated annual costs of the various approaches to providing fire protection in Pacific Grove.

Option	Annual Cost
Current Contract with Monterey	\$2,347,428
Contract with CAL FIRE	\$2,271,483 - \$2,310,883
Stand alone paid Fire Department	\$2,120,300
Stand alone combination Fire Department	\$1,881,419
Stand alone public safety Concept	\$2,659,810
Joint Powers Authority	\$2,058,903 - \$2,935,669

As shown the various approaches range in annual costs for Pacific Grove from a low of \$1,881,419 to a high of \$2,935,669. The following table provides a summary of the advantages and disadvantages of each fire protection option:

Option	Advantages	Disadvantages
Contract with Monterey	 Fixed daily staffing coverage. Operate as part of a regional fire system. 24/7 command coverage. Excellent response times for primary and secondary units. Station back-filled when on a call. Daily resources ensure an effective response force can be deployed. Personnel assigned to station know Pacific Grove. All personnel trained to the same proficiency level. Personnel undergo strict background check. As part of the regional system, the ladder truck could be sold as surplus. Known partner with track record of providing high levels of service to the City 	 Paying costs of actual personnel assigned to station as opposed to fixed costs per position. Remain in CalPERS system and subject to rate increases.
Contract with CAL FIRE	 Initial contract costs lower than current agreement. 24/7 command coverage. Contract costs are based on fixed costs per position staffed. Personnel are trained to same proficiency levels. 	 Personnel assigned from regional pool and may not be familiar with Pacific Grove. Delayed call processing and response times due to separate dispatch operations from 911 center. Delayed mutual aid response due to multiple dispatch

Option	Advantages	Disadvantages
		centers. • Fire prevention services must be contracted separately. • More lenient hiring practices and less intensive background check prior to employment. • Personnel are part of CalPERS system and subject to rate increases.
Stand alone Paid Department	 More local control for Pacific Grove. Can develop a pay schedule lower than current Monterey personnel are paid. All newly hired personnel can be brought into lower tier CalPERS program. Lower salary and CalPERS costs will lower cost of operating the Department. Personnel will be familiar with Pacific Grove. 	 Would need to reach agreement with Monterey for training personnel. Increased workload on City support departments. Training would require overtime coverage. Pacific Grove would have to commit to make personnel available for regional teams when deployed. No 24/7 command availability unless contracted with Monterey for after hours response. Requires significant capital investment to maintain truck and engine capabilities. City would need to hire or contract for fire inspection services. Lower pay may lead to increased turnover rates. Significant start-up costs to outfit personnel in required gear and protective equipment.
Stand alone Public Safety	 Provides flexible coverage by have cross-trained police officers respond to fire calls. Can develop a pay schedule lower than current Monterey personnel are paid. All newly hired personnel can be brought into lower tier CalPERS program. Personnel will be familiar with Pacific Grove. 	 Increased personnel costs for maintaining multiple certifications. Increased training requirements for cross-trained personnel. Would need to reach agreement with Monterey for training personnel. Increased workload on City support departments. Training would require overtime coverage. Pacific Grove would have to commit to make personnel available for regional teams when deployed.

Option	Advantages	Disadvantages
•		 No 24/7 command availability unless contracted with Monterey for after hours response. Requires significant capital investment to maintain truck and engine capabilities. City would need to hire or contract for fire inspection services. Lower pay may lead to increased turnover rates. Significant start-up costs to outfit personnel in required gear and protective equipment. Loss of police coverage during fire calls. Overall cost higher than current contract costs due to cost of cross-trained personnel.
Stand Alone Combination	 Provides flexible coverage by have volunteers assigned to staff fire apparatus. Can develop a pay schedule lower than current Monterey personnel are paid. All newly hired personnel can be brought into lower tier CalPERS program. Lower salary, CalPERS and use of volunteer personnel for partial staffing will lower cost of operating the Department. Personnel will be familiar with Pacific Grove. 	 Volunteers must be trained to same standard as paid personnel. Would need to reach agreement with Monterey for training personnel. Increased workload on City support departments. Training paid personnel would require overtime coverage or increased volunteer participation. Pacific Grove would have to commit to make personnel available for regional teams when deployed. No 24/7 command availability unless contracted with Monterey for after hours response. Requires significant capital investment to maintain truck. and engine capabilities. City would need to hire or contract for fire inspection services. Lower pay may lead to increased turnover rates. Volunteers typically have high turnover rates. Significant start-up costs to outfit personnel in required gear and protective equipment. Volunteers have same gear

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Option	Advantages	Disadvantages
		requirements as paid personnel. • Demographics of community may make it difficult to attract volunteer personnel. • Additional workers' compensation insurance needed for volunteers.
Joint Powers Authority	 New pay structure could be developed. Retirement program would be outside CalPERS. Fixed daily staffing coverage. Operate as part of a regional fire system. 24/7 command coverage. Daily resources would ensure an effective response force can be deployed. Personnel assigned to station would be familiar with Pacific Grove. All personnel would be trained to the same proficiency level. As part of the regional system, the ladder truck could be sold as surplus. 	 Loss of local control. Requires agreement of all involved cities. Monterey Firefighters have mandatory arbitration, which could impact agreement. Depending on cost sharing approach, may cost more than current contract with Monterey.

The following chapter discusses the current approach to providing fire protection in Pacific Grove.

1. CURRENT FIRE DELIVERY SYSTEM

This chapter includes the assessment of the current delivery of fire and emergency medical services in the City of Pacific Grove, which is provided under contract by the Monterey Fire Department. The sections below discuss the general service environment and workload demands, followed by an assessment of how fire services are organized and delivered.

1. THE POPULATION OF PACIFIC GROVE IS FAIRLY STABLE, WITH POPULATION GROWTH OF 5.5% OVER THE PAST THREE YEARS.

The population and density of the City is an important factor in assessing the overall environment for fire protection services, especially when estimating future growth and impacts on service demands. With a current population of approximately 15,300 residents and a population density of 5,250 persons per square mile, the City of Pacific Grove falls into either the urban (density) or is suburban (population) category when evaluating fire protection.

Given the economic challenges being faced by the City of Pacific Grove, as well as the entire region and State, the growth in population is expected to remain relatively flat over the next several years. It is important to note that Pacific Grove and the Monterey Peninsula experience large numbers of visitors to the area due to the many recreational and tourism venues in the area, this often causes an increase in the daytime population.

If the City were to experience population increases of 1.5% annually, the following population projections would be realized by Pacific Grove by the year 2025.

Year	2011	2015	2020	2025
Population				
Estimate	15,295	16,234	17,488	18,840

2. THE PACIFIC GROVE FIRE STATION RESPONDED TO 1,399 INCIDENTS DURING FY 2011/2012 OR APPROXIMATELY 3.8 CALLS PER DAY.

The project team analyzed the calls for service data for FY 2011 / 2011, and identified the total number of calls per day, per hour, which is summarized in the following table:

	Day of Week								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Avg. / Day
0000	6	4	4	5	4	9	2	34	0.09
0100	11	3	4	3	2	4	4	31	0.08
0200	3	3	2	5	3	2	7	25	0.07
0300	8	2	4	3	3	6	6	32	0.09
0400	3	3	2	5	1	6	3	23	0.06
0500	2	3	0	0	4	1	4	14	0.04
0600	8	4	5	10	12	12	6	57	0.16
0700	4	5	12	7	14	3	6	51	0.14
0800	2	6	16	11	11	6	9	61	0.17
0900	16	10	7	13	10	9	12	77	0.21
1000	10	13	11	11	15	12	10	82	0.22
1100	11	11	9	14	13	10	14	82	0.22
1200	9	8	21	13	13	8	14	86	0.24
1300	11	11	14	11	14	13	9	83	0.23
1400	11	11	15	13	6	15	13	84	0.23
1500	9	11	12	14	10	21	12	89	0.24
1600	11	10	11	14	9	11	10	76	0.21
1700	13	9	12	7	10	13	10	74	0.20
1800	12	12	10	7	8	5	14	68	0.19
1900	11	14	7	11	13	10	6	72	0.20
2000	9	3	11	7	12	8	9	59	0.16
2100	5	8	6	8	6	13	9	55	0.15
2200	6	6	5	3	6	12	6	44	0.12
2300	5	6	5	7	3	7	7	40	0.11
Total	196	176	205	202	202	216	202	1,399	3.83

The following points summarize the total call distribution illustrated above:

• The City generates a low of 0.04 calls for service per hour, per day, between the hours of 0500 and 0600, equating to approximately 1 call for service every 25 days.

- The City generates a high of 0.24 calls for service per hour, per day, during the hours of 1200 and 1500, with the generally higher period of calls occurring consistently between 0900 and 1900 (at approximately 1 call for service every 4 5 days during each of those hours).
- The City generates a high of 3.9 calls for service on Fridays, to a low of 3.4 calls for service on Mondays, indicating fairly consistent call volume each day of the week.

In total, the City residents and visitors generated 1,399 calls for service during FY 2011 / 2012, equating to nearly 4 calls per day. Of these calls for service, over 63% was classified as an Emergency Medical or Rescue call. The calls for service are summarized in the following table:

Туре	#	%
Fire	32	2.29%
Overpressure, no fire	2	0.14%
Emergency Medical	887	63.40%
Hazardous Condition	79	5.65%
Service Call	184	13.15%
Good Intent Call	101	7.21%
False Alarm	112	8.01%
Severe Weather	2	0.14%
Total	1,399	100%

As shown above, fires, good intent calls and false alarms account for approximately 17.5% of total calls for service, with hazardous conditions, service calls, and severe weather accounting for approximately 19% of calls. The call data indicated that 125 of the EMS calls required the responding fire personnel to check for injuries and provide aid to the patient(s). As HIPPA laws do not allow access to protected medical information from persons not involved in the care of the patient, it is not known what value the care provided was to the overall outcome of the patient.

In total, the call volume for the City of Pacific Grove represents approximately 91 calls for service per 1,000 residents, which represents a much lower incident rate when compared to Monterey, which is responding to approximately 209 calls per 1,000

residents. Given the volume and mix of call types, the City management should regularly analyze these trends in order to determine the appropriate levels of resources allocated to response to fire and emergency medical service incidents, as well as to identify potential areas for community education and prevention programs to mitigate risks in the community.

Recommendation: Call Volume by Call Type Should be Analyzed Regularly to Ensure Resource Allocation Remains Appropriate.

3. TO MEET THE FIRE AND EMERGENCY MEDICAL CALL DEMANDS, THE CITY CONTRACTS WITH THE CITY OF MONTEREY AND IS BENEFITING FROM A REGIONAL NETWORK OF RESOURCES.

For fire services, the City is under contract with the City of Monterey through an Agreement to Provide Fire Services. Emergency Medical Transport services are provided by American Medical Response (AMR), who is the contract EMS provider for Monterey County.

(1) The City Contract Currently Includes the Provision of One Three-Person Engine Company Staffed Daily.

This contract includes the daily on-duty staffing of at least three (3) qualified Monterey fire personnel to staff an Engine Company (6414) at Station #4. The staffing is fixed with one (1) Captain, one (1) Engineer and one (1) Firefighter staffing the engine daily.

In general, Engine #6414 staffing is a company officer (Fire Captain), an Engineer (Driver) and a Firefighter. In addition to primary fire suppression responsibilities, the contract also includes support services such as a duty chief, administrative support, plan check and review, public safety prevention programs and education, annual fire inspections, etc.

(2) Beyond Engine #6414, the City of Pacific Grove Receives First-Due Incident Responses from Other Monterey Fire Stations.

The City of Pacific Grove is served by apparatus dispatched from Stations 1 - 3, located in Monterey, Station 4, located in Pacific Grove and Station 5 located in Carmelby-the-Sea, all operated by the Monterey Fire Department. The apparatus from these stations are dispatched as "first-due¹" as result of concurrent calls for service (e.g., Engine #6414 is engaged on a call), apparatus that are traveling and are the "closest unit", as well as support on fire and EMS incidents as back-up for the personnel on Engine #6414. There are also standard response guidelines for various major calls, such a structure fires, where 4 engines, 1 truck and 1 duty chief are dispatched for immediate response to all reported structure fires in Pacific Grove.

The project team reviewed the number and location of first-due responses for incidents occurring in Pacific Grove during FY 2011-2012. As shown in the table below, there were a total of 1,676 unit responses to incidents in Pacific Grove, 277 more than the total number of incidents occurring during the same period.

PG Unit Response FY 2011-12

Response From Station	Total
Station 1	238
Station 2	196
Station 3	8
Station 4	1,232
Station 5	2
Total	1,676

¹ "First due" refers to either a single engine response (i.e., where no other resources are dispatched) or to that unit which should arrive on scene first as part of a larger, multi-unit response.

As shown, Station 4 located in Pacific Grove accounted for 1,232 responses to calls in Pacific Grove, while Stations 1 and 2 provided the most frequent additional responses at 238 and 196 respectfully.

It is important to note that for all first due responses in Pacific Grove, the station located in the City (Station #4), was the primary responder to 88% of all calls for service, indicating that 12% of the time Engine #6414 was unable to respond as the primary unit to the call for service, which shows the importance of having reliable automatic and mutual aid partners to ensure emergencies can be mitigated in a timely fashion.

(3) Monterey has recently reached an agreement to provide Fire Protection Services to Monterey Regional Airport.

Beyond the resources listed above, the addition of the Monterey Regional Airport to the response network for the Monterey Fire Department will provide additional operational and fiscal effectiveness for the region. This addition will bring the system wide daily resources to six (6) engines, one (1) truck and one (1) duty chief. In addition specialty resources such as two (2) crash apparatus (ARFF) and a state-of-the-art command vehicle will be added to the apparatus available to mitigate incidents.

While the costing structure is not yet known, the addition of another partner in the regional response network will further reduce the shared administrative and prevention costs associated with contracting with Monterey for Fire Protection services.

(4) Beyond First-Due Incident Response, the City of Pacific Grove Benefits from Significant Support from the Monterey Fire Department.

As shown in the previous sub-section, the City receives "first-due" incident response from surrounding Monterey fire stations and units. Additionally, as a total response network, the Pacific Grove station has been designated as a "Core" station and is back filled when engine #6414 is committed to an emergency call. The following table illustrates the resources available to mitigate resources in Pacific Grove as part of the Monterey Fire Department System:

Unit	#	Staff
Duty Chief	1	1
Ladder Truck	1	3
Engine Company	5	3
Minimum Staffing		19

The importance of this is that a typical residential fire in a moderate risk occupancy requires 14 -15 personnel to provide an effective response force to control the fire effectively. With daily minimum staffing of 19 personnel, Monterey Fire Department is able to deploy an effective response force to fire occurring at typical occupancies in Pacific Grove. The following table illustrates the number of personnel required to deploy an effective response force to structural and other fires in various occupancy types based on the critical tasks to be accomplished. Maximum risk incidents involve high occupancy and hazardous occupancies, high risk incidents involve commercial occupancies that do not have large occupancy loads or store hazardous chemicals in great numbers, moderate risk incidents involve the typical single family residential or small office structure, and low risk incidents are small fires in outside storage areas or where there is little risk of the fire spreading to another occupancy. The typical fire in Pacific Grove will fall into the moderate or high risk category and require 14 – 22 personnel to mitigate.

	Maximum		Moderate	
Critical Task	Risk	High Risk	Risk	Low Risk
Attack Line	4	4	4	2
Search and Rescue	4	2	2	0
Ventilation	4	2	2	0
Backup Line	2	2	2	2
Rapid Intervention	2	2	0	0
Pump Operator	1	1	1	1
Water Supply	1*	1*	1*	1*
Support (Utilities)	1*	1*	1*	1*
Command	1	1	1	1
Safety Officer	1	1	1	1
Salvage/Overhaul	2	0	0**	0
Command Aid	1	1	0	0
Operations Chief	1	1	0	0
Logistics	1	0	0	0
Planning	1	0	0	0
Staging Officer	1	1	0	0
Rehabilitation	1	1	0	0
Division Supervisors	2	1	0	0
High-rise Evacuation	10	0	0	0
Stairwell Support	10	0	0	0
Total Personnel	50-51	21-22	14-15	8-9

4. THE CITY IS CURRENTLY PAYING APPROXIMATELY \$1.94 MILLION FOR FIRE SERVICES FROM THE CITY OF MONTEREY.

This section discusses the current cost structure of the fire contract between Monterey and Pacific Grove.

(1) The Contract is Currently is \$1,937,038 Million for Fire Services, Which Is Paid Through the City General Fund.

The table below summarizes the budget for Fire Services provided by the City of Monterey to the cities of Pacific Grove and Carmel-by-the-Sea. Operations is the largest cost for Pacific Grove at approximately \$1.7 million:

	FY 2010	FY 2011	FY 2012	
Expenditure	Actual	Actual	Actual	% Change
Administration	PG \$185,864	PG \$182,273	PG \$155,935	-16.1%
	MFD \$817,070	MFD \$748,395	MFD \$928,670	
	,	. ,	CbS \$43,320	
	\$1,002,934	\$930,668	\$1,127,925	12.5%
Prevention	PG \$136,532	PG \$141,258	PG \$91,414	-33.1%

	MFD \$511,211	MFD \$422,757	MFD \$289,472	
	. ,	,	CbS \$22,258	
	\$647,743	\$564,015	\$403,144	-37.8%
Operations	PG \$1,541,701	PG \$1,477,213	PG \$1,689,689	9.6%
	MFD \$8,540,876	MFD \$8,573,080	MFD \$8,619,389	
		CbS \$18,006	CbS \$813,389	
	\$10,082,577	\$10,068,299	\$11,122,467	10.3%
Training	PG \$55,193	PG \$ 38,567		
	MFD \$224,521	MFD\$ 165,204	MFD \$22,684	
	\$279,714	\$203,771	\$22,684	-91.9%
Emergency Preparedness	MFD \$39,913	MFD \$ 26,978	MFD \$94,935	237.9%
Total	\$12,052,882	\$11,793,730	\$12,771,155	5.96%
PG Total	\$1,921,120	\$1,841,322	\$1,939,050	0.93%

As shown in the table above, the contract costs for Pacific Grove increased less than 1% between FY 2010 and FY 2012. Administration and prevention costs both realized significant reductions in contract costs, while operations costs increased 9.6% over the period.

It is important to note that in April 2013, CalPERS issued a letter indicating an employer rate increase due amortization and smoothing policy changes. This policy change will increase employer contributions from a low of 1.1% to 5.5% over a five-year period to a maximum of 4.2% to 21% over the five-year period from 2014 - 2019 depending on the agency asset volatility ratio (AVR). According to the most recent annual actuarial report, Monterey has an AVR of 4.9, which will result in the following approximate increases in CalPERS contributions:

Fiscal Year	AVR – 4.9
2015-2016	1.4%
2016-2017	2.8%
2017-2018	4.2%
2018-2019	5.6%
2019-2020	7.0%

As indicated above, beginning in FY 2015/16, Pacific Grove would need to plan for an increase of 1.4% to the Operations portion of the contract due to retirement contributions of fire personnel assigned to the Pacific Grove station and the amount would increase to an additional 7% by FY 2019/20. It is important to note that this is less that the approximate increases Pacific Grove would realize in a stand-alone approach as their AVR is currently 8.6, which will see approximate increases of 2.2% to 11.0% over the five-year period.

5. MONTEREY FIRE DEPARTMENT IS MEETING ADOPTED SERVICE LEVEL OBJECTIVES FOR FIRE RESPONSE.

The adoption of performance standards for fire response is a critical first step in the evaluation of fire service levels and staffing alternatives. While there are national standards that can be used to evaluate fire service delivery, each community must identify the key risks and necessary level of protection it needs based on its own unique circumstances. Once these performance standards are established a community can assess its performance and determine if current resources support the desired level of service.

There is a growing national debate as to what the appropriate level of fire, rescue, and emergency medical services is for a community. Several organizations have recommended service level targets for communities generally based on two concepts: fire growth behavior and cardiac arrest survivability. The table, below, summarizes some of the standards recommended by national organizations:

Source	Description	Comments
ISO	 Targets stations within 2.5 miles of every location. Resources available to fight common types of fires. Industrial / institutions may get their own ISO rating (independent of the local fire service). No response time or other performance standards included. 	 2.5-mile response target is drawn from historical fire service delivery. Factors such as water system, access to non-system water, etc., may be used to lower ISO ratings. Does not impact EMS service delivery.
American Heart Association	 Initial (non-paramedic) response in less than 5 minutes from dispatch. Paramedic response in less than 8 minutes. 	 Recognizes the major impact of rapid intervention on survivability in cardiac cases. Standard is often cited as the major planning component for EMS system, even though it does not reflect on the majority of EMS workload (non-cardiac care responses).
NFPA	 NFPA 1710 applies to full-time paid fire departments in urban/suburban communities. On EMS, NFPA 1710 suggests a total response time of 6:20 minutes including the following elements: 1 minute for dispatch processing 90% of the time for emergency calls. 1:20 minute for fire department reflex time 90% of the time for emergency calls. 4 minutes of drive time for first arriving unit 90% of the time for emergency calls. On Fire, NFPA 1710 suggests a compliment of 13 to 15 personnel respond to the scene of a structure fire within 8 minutes of drive time and 10 minutes of total response time. 	 Assumes consistent level of risk in communities. Does not account for differences in built-in fire protection, age of construction, or other risks. Based on incidents with low probability but high-risk potential.

Source	Description	Comments
CFAI	 The Commission on Fire Accreditation International developed standards based on community population and/or density. For an urban setting density of over 2,000 per square mile the following standards are recommended: Alarm Processing 60 -90 seconds 90% of the time. Turnout 60 – 90 seconds 90% of the time. Travel 4:00 - 5:12 min's 90% of the time Full first alarm 8:00 – 10:24 min's 90% of the time. 	Allows a community to determine service level expectations in a range from baseline acceptable standards to benchmark (best practice) standards.

There are a number of factors that should be considered when establishing service level targets for fire, rescue, and emergency medical services. As described above, the "standards" recommended by ISO, AHA, NFPA and CFAI are based on high risk, low frequency incidents. As a result, communities should consider the relative value of establishing service levels based on these risks.

While Pacific Grove has established a response time standard of 5 minutes or less from station notification to arrival of the first response team, it has not identified at what percentage this performance standard is expected to be met. In 2011, Monterey Fire Department responded to 92% of code 3 responses in less than 5 minutes and had an average response time of 3:35 minutes for fire emergencies and 3:14 minutes for Medical Emergencies in Pacific Grove. The project team believes that the City should adopt service level objectives for each element of the response to emergencies (Dispatch, Turnout and Travel). Further discussion on the importance of performance measures from fixed facilities is provided in Appendix C of this report.

Recommendation: The City should establish service level objectives for fire, rescue, and emergency medical response to include dispatch, turnout and travel time expectations at 90%.

(1) The Actual Call Processing Time Is not Being Recorded Accurately.

The Matrix Consulting Group examined the ability of the system against the 1-minute call taking / dispatch process, the 1:30 minute "turnout" time, and the ability of the system to deliver at least one unit on-scene in four minutes or less for 90% of the calls for service (i.e., the drive time from the station to call location). The project team analyzed the emergency calls for service in the City of Pacific Grove, specifically identifying the variance between the "Alarm Time" and "Notification Time." This analysis indicated that the Dispatch Center is not accurately recording the time from the receipt of call to the notification of the first unit. A total of 1,077 CAD entries for Code 3 responses were analyzed for FY 2011 / 2012. All 1,077 calls showed an identical Alarm time and Notification Time, resulting in a call processing time of 0:00.

As this analysis shows, the dispatch center is recording the receipt of call and notification of the station as the same time. The agencies contracting with Monterey County for dispatch service should request that this practice cease so actual call processing time can be evaluated as part of the response time to emergency calls.

To improve the practice of recording times processing times, the dispatch center should take the following actions:

- Adopt a call processing time standard for dispatch of 1-minute or less to handle the call and dispatch units with accurate CAD entry for call receipt and unit notification.
- The policy should make it clear that the center should obtain information in 30 seconds or less which can result in verification of the address and caller's phone number and derive an initial classification of the call, and then an additional 30 seconds to assess the call and select and dispatch the appropriate units.

• The policy should also note that the call-taker should remain on the line with the caller to either 1) obtain additional information and/or 2) to offer pre-arrival instructions as possible.

Monterey County Dispatch and the Monterey Fire Department should continuously document and review performance statistics for the dispatch center. After a period of one month, the center should begin reviewing those calls, which exceed one minute from the time of call receipt to the time of dispatch. Corrective actions should be taken as a result of that review.

(2) The Turnout Time for Fire Crews Exceeds the Target of 1:30 minutes 90% of the Time for Code 3 responses

The project team analyzed the emergency calls for service in the City of Pacific Grove, specifically identifying the variance between the "First Notif. Time" and "First Roll Time." This analysis resulted in the following resulted in 90% of calls being responded to within 1:43 minutes from the time the station received the call from dispatch, 13 seconds longer than expected baseline performance of 1:30 minutes 90% of the time.

As this analysis shows, the personnel responding to calls in Pacific Grove are taking nearly 1:45 minutes 90% of the time for their "turnout" time, which is the time between the unit being dispatched and the unit going enroute to the call.

(3) Travel Time for Code Three (3) Responses is 3:37 minutes 90% of the Time.

The project team analyzed the emergency calls for service in the City of Pacific Grove, specifically identifying the variance between the "First Enroute Time" and "First Arrival Time." This analysis resulted in the travel times of 3:37 minutes 90% of the time. When turnout time was added to the travel time, the total response time for Code 3 responses was 4:50 minutes 90% of the time, which is excellent.

As this analysis shows, the City of Pacific Grove is receiving a high level of efficiency related to the overall response time of Code 3 emergency responses.

The table below summarizes the response time performance versus the best practice:

Time Element	Performance Target	PG Actual 90%	Variance
Call Taking / Triage / Dispatch of Units (Dispatch)	1:00 Minute	Unknown	Unknown
Crews React, Dress and Begin to Move (Reflex)	1:30 Minute	1:43	0:13
Initial Crew Drives from Station to Call Location	4:00 Minutes	3:37	-0:23
Total Average	6:30 Minutes	5:20	- 1:10

To continue to ensure response times remain at a high level, the Fire Department should adopt the following actions:

- Adopt a response policy which states that all calls for service will have a reflex time of 1-minute or less. This should be tested by the Department to ensure that
 - All gear can be put on before the units leave the station in the time allotted.
 - That there are no response impediments within the stations themselves which will result in increase reflex time.
 - The target should be to achieve this reflex time target in 90% fractile or better.
- Adopt a response policy which states that travel time targets for emergency calls is to reach 90% fractile performance of 4-minutes or less.

The following section provides the assessment of the fire station location network, which impacts the response time performance of the Fire Department.

Recommendation: The Dispatch Center should adopt a policy of processing calls in 1-minute or less at a 90% level.

Recommendation: The Fire Department should also adopt a policy of achieving a 1:30 -minute reflex time and a 4-minute response time at the 90% level.

7. ASSESSMENT OF THE FIRE STATION LOCATION NETWORK.

The project team conducted an analysis of the current deployment of fire protection resources within the City of Pacific Grove as it relates to their contact with the City of Monterey for providing Fire Services. ESRI's Arcview GIS software was utilized to conduct this analysis related to the predicted travel times for responding to emergencies in Pacific Grove utilizing the current Fire Station locations.

The basis for the model is described, below:

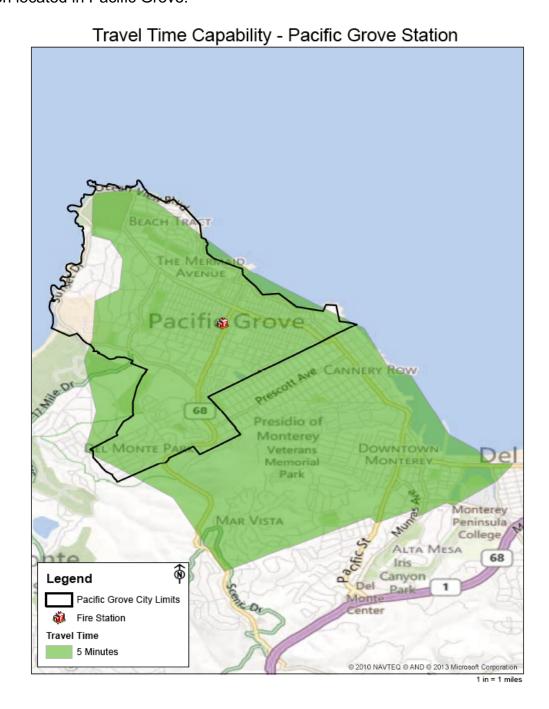
- The project team obtained publicly available street center-line files for the Cities of Monterey, Pacific Grove and Carmel-by-the-Sea.
- The City's current fire stations were plotted on this street file, including detailed calls for service data from FY 2011 / 2012.
- Travel speed assumptions of 30 miles per hour and the delay encountered at various intersections are also incorporated into the model.
- Apparatus are also assigned to the model.

Once these data are incorporated, the project team then tests the model against current system performance to determine if there are any issues with the assumptions made in the model. In this case, the model appears to be highly predictive of the current system capabilities. The project team examined several "layers" of the current system's performance capability. These include the following:

- Ability to reach all call types within 5-minutes of drive time from the current Pacific Grove Fire Station.
- Ability to reach all road miles within 5-minutes and 6:30-minutes of drive time from Monterey Station #1.
- Ability to reach all call types within 5-minutes of drive time from each of the five (5) Monterey Fire Stations.

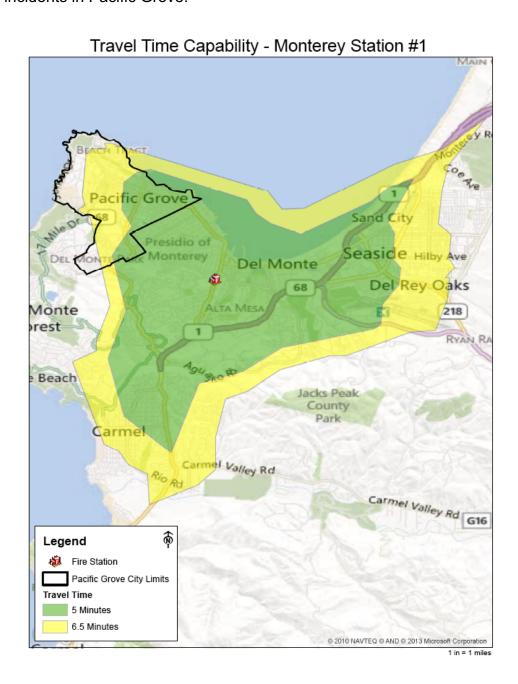
 Ability to reach all call types within 6:30 minutes of drive time from each of the five (5) Monterey Fire Stations.

The following map illustrates the predicted 5-minute travel time from the current station located in Pacific Grove.



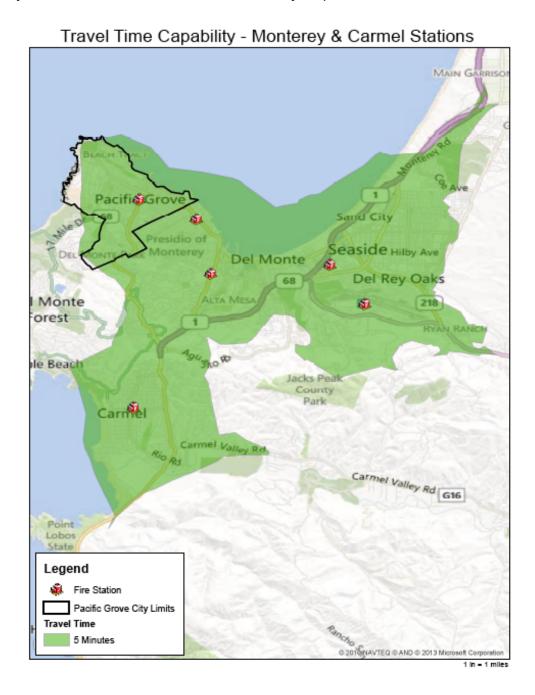
As shown above, the single station location is able to provide excellent coverage of the City with a five-minute travel time from the current location.

The following map illustrates the predicted 5-minute and 6 minute 30 second travel time from Monterey Station 1 to illustrate predicted response times for the ladder truck to incidents in Pacific Grove.



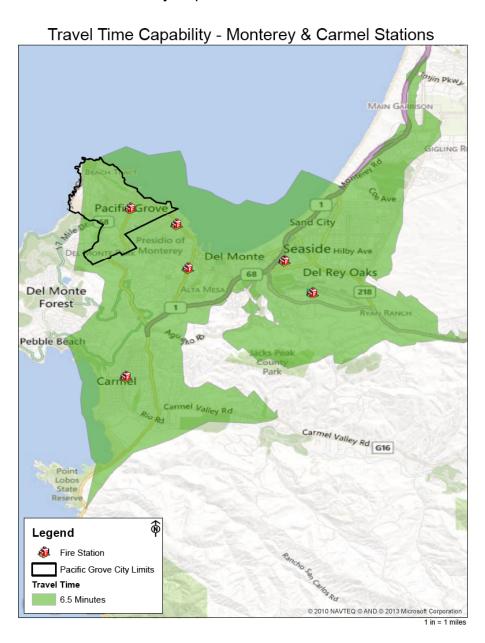
As shown above, the ladder truck can reach the majority of locations in Pacific Grove within 6 minutes 30 seconds travel time from its location in Monterey.

The following map illustrates the predicted 5-minute travel times from the current Monterey fire station locations and the Monterey Airport station.



As shown above, the current station network provides excellent coverage of the service within 5-minutes travel time from the existing and Monterey Airport station locations.

The following map illustrates the predicted 6:30 travel times from the current Monterey Fire station and Monterey Airport station locations.



As illustrated in the preceding maps, the current station network is providing excellent coverage for Pacific Grove to ensure timely emergency response to incidents occurring in the City. The network also ensures additional resources will arrive quickly to larger; more complicated emergency scenes, which require more personnel.

8. FOR AMBULANCE TRANSPORT, THE CITY OF PACIFIC GROVE IS SERVED BY AMERICAN MEDICAL RESPONSE.

Through an agreement between the County of Monterey and the County EMS Agency, the private company American Medical Response (AMR) provides emergency response and dispatch services, non-emergency transport service, etc., for Monterey County under and Exclusive Operating Area (EOA) contract. This exclusive operating excludes the City of Carmel-by-the-Sea, the Carmel Valley Fire Protection District and Fort Hunter Liggett. This service is provided at virtually no cost to the City of Pacific Grove (patients are charged on a user-fee basis) as outlined in the Exclusive Operating Agreement, which provides AMR the capability to manage their resources and payer-mix and conduct their business. The City of Pacific Grove does provide space at their fire station for the AMR unit assigned to their response area.

As part of this Agreement, AMR provides EMS dispatch services, including the use of priority dispatch protocols and giving callers pre-arrival instructions.

As identified earlier, the City experienced 887 emergency medical service calls, of which an estimated 65% resulted in a medical transport. In the absence of specific data (as it is not kept specifically for the City), this percentage is an estimate based on our work with fire departments and ambulance transport services in California and

across the country. As such, the project team estimates that AMR transported 577 patients in Pacific Grove during FY 2011 / 2012.

For response time performance standards, AMR has established response zones in Monterey County. Pacific Grove falls in the Green Zone, which has the following response time performance standards based on, call priority.

Call Priority	Response Goal
Priority 1 – Life threatening emergency	8:00
Priority 2 – Non-life threatening emergency/urgent response	10:00
Priority 3 – Non-urgent medical condition	12:00
Priority 4 – Scheduled transfer at healthcare facility	N/A
Priority 5 – Unscheduled Transfer, immediate response	N/A
Priority 6 – Critical Care Transport at Health Care Facility	45:00

During the study process an inquiry was made to the EMS Agency Director for the County of Monterey Health Department regarding the opportunity for Pacific Grove to establish a fire based EMS service in the City. The response was very direct that the County plans to continue with the sole source provider, with the limited exceptions noted above and would not allow additional EMS transport providers in the County.

Finding: The City of Pacific Grove Currently has no Alternative to AMR for EMS Transport Services.

9. PACIFIC GROVE HAS ONGOING OPERATING EXPENSES REGARDLESS OF HOW FIRE SERVICES ARE PROVIDED.

There are ongoing expenses related to operating the Pacific Grove Fire Department regardless of whether it is a stand-alone operation or services are contracted with another agency. The following table illustrates the annual Fire/EMS budget for Pacific Grove from FY2009 – FY2012.

Pacific Grove FY 2009 - FY 2012 Fire/Emergency Medical Services Budget

Fund	Function	FY 2008/09	FY2009/10	FY 2010/11	FY 2011/12
		Actual	Actual	Budget	Budget
General Fund	Staffing	1,829,595	449,920	432,606	459,067
	Services	1,449,468	2,576,632	2,434,771	2,226,104
	Materials/Supplies	20,642	14,124	28,000	16,800
	Transfers	50,277	194,769	117,250	117,250
	Capital	0	0	5,000	0
	Total	\$3,349,982	\$3,235,445	\$3,017,627	\$2,819,491
Hyperbaric	Staffing	6,267	1,899	3,070	3,070
Chamber					
	Services	2,801	1,269	4,500	4,500
	Materials/	125	30	800	800
	Supplies				
	Total	\$9,193	\$3,198	\$8,370	\$8,370
Emergency	Staffing	0	0	0	0
Response Equip.					
	Materials/Supplies	10,830	4,607	2,000	2,000
	Capital	28,169	0	10,000	5,000
	Total	\$38,999	\$4,607	\$12,000	\$7,000
Public Safety	Staffing	0	0	0	0
Augmentation					
	Services	93,772	93,772	100,243	100,243
	Total	\$93,772	\$93,772	\$100,243	\$100,243
	Total Staffing	\$1,835,862	\$451,819	\$435,676	\$462,137
	Total Operating	\$1,562,312	\$2,791,431	\$2,602,321	\$2,472,967

When the contract costs of \$1,939,050 for fire services from the City of Monterey are removed from the annual budget, the total impact to Pacific Grove for operating the fire station and providing services to the community in FY 2012 is \$533,917.

2. CONTRACTING OPTIONS

This Chapter of the report will examine the contracting options for Fire Services available to Pacific Grove beyond contracting with the City of Monterey. The contracting options include:

- Contracting with the California Department of Forestry and Fire Protection (CAL FIRE) for all fire services.
- Contracting with a private fire service provider for all fire services.
- 1. CONTRACTING WITH THE CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION (CAL FIRE).
- (1) CAL FIRE Is Currently Providing Fire Service by Contract on the Monterey Peninsula.

CAL FIRE is currently providing contract fire protection for the Pebble Beach Community. The following information highlights the current operations and services available for CAL FIRE.

- CAL FIRE operates two (2) stations locally for Carmel Hill FFS and Pebble Beach FS.
- CAL FIRE operates with 42 FTE staff for the two stations, operating 3 engines and one truck.
- CAL FIRE provides dispatch services for their fire units.
- CAL FIRE is capable of being a full service contract provider for fire protection services to Pacific Grove.

(2) Assumptions Regarding Contracting with CAL FIRE.

- Staffing the Pacific Grove fire station will continue with daily staffing of three personnel for contract and shared administrative consolidation with Pacific Grove.
- Shift schedules will change to the 72-hour work-week currently utilized by CAL FIRE.

- Emergency Medical Services (EMS) will continue to be provided by the County designated EMS provider.
- A part-time fire inspector employed by Pacific Grove and assigned to the Building Department will provide fire prevention services. CAL FIRE would provide fire inspection and prevention services for an additional cost.
- Operating and maintenance expenses will continue as currently budgeted by Pacific Grove
- Specialty services would continue to be provided by the regional Monterey County Teams
- CAL FIRE would become the emergency dispatch provider as part of the contract costs.
- Fixed cost provided by CAL FIRE are utilized for contracting costs with additional items factored according to current conditions.

(3) CAL FIRE Cost Assumptions.

During the course of the study, the project team met with representatives from CAL FIRE to discuss the resources they could provide under a contract scenario with the City of Pacific Grove. The Chief assigned to the Monterey administrative station was very interested in the idea of providing service to Pacific Grove under a contract similar to the one that exists today between Pacific Grove and Monterey.

CAL FIRE provided an estimate for providing fire services to Pacific Grove. The estimate included the staffing costs for a three (3)-person engine company, training, personnel services, emergency command center/dispatching services and operational support. The costs do not include operating expenses, equipment, ancillary services or fleet maintenance. Pacific Grove would retain ownership of the fire station and apparatus.

The following table illustrates the cost estimates provided by CAL FIRE for providing fire protection services to Pacific Grove:

CAL FIRE Estimated Fire Protection Contract Costs				
BLS Engine Company (3.0 Staffing)	\$1,703,600			
ALS Engine Company (3.0 Staffing)	\$1,743,000			

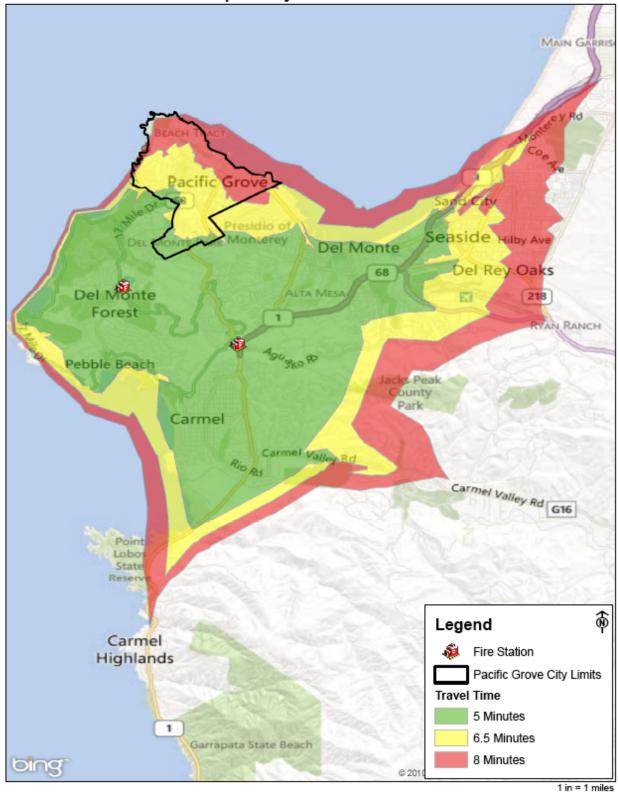
The additional \$533,917 operating costs and the cost of a part time fire inspector (\$33,966) would occur under this contract scenario, bringing the total assumed annual fire service costs to \$2,271,483. It is important to note that this estimate is an increase of \$37,610 or 2.3% over the estimate for services provide in 2010.

(4) CAL FIRE Response Time Estimates.

As stated earlier, CAL FIRE is currently operating stations for the Pebble Beach Community. The following map illustrates the predicted response times from those stations to Pacific Grove. It is important to note that these will be the initial mutual aid responding stations as under this scenario CAL FIRE is providing dispatch and there will be a delay in notifying the Monterey Fire Department as a single dispatch authority would no longer be providing service to Monterey and Pacific Grove.

As shown on the map on the following page, the predicted response times for assistance from the Pebble Beach stations is longer than currently received from the Monterey Stations. Much of the area in the north and east sections of Pacific Grove will see travel times increase to 8 minutes for emergency response if the resources are needed from the Pebble Beach station. Also there is no provision for Pacific Grove to be a constantly staffed station, as is currently the case with the Monterey agreement; therefore it is the opinion of the project team that the time required to develop an effective response force will increase under this contract scenario.

Travel Time Capability - Pebble Beach Stations



(5) CAL FIRE Considerations

There are other service level considerations regarding contraction with CAL FIRE. Currently CAL FIRE dispatches their resources to emergencies. This requires the Monterey County 911 Center to answer the call and take basic information before the call being transferred to CAL FIRE dispatches to alert emergency crews. This can often result in dispatching delays of several minutes and cause frustration for callers who must repeat information after the call is transferred. There is no indication from discussions with CAL FIRE to change this dispatching process, which would result in call processing times will over the 1 minute best practices standard as the CAL FIRE standard is to process and dispatch calls within 1 minute after the transfer of the call.

Another issue is the use of a regional workforce for staffing apparatus. While the Pacific Grove apparatus would have the same staffing levels as currently deployed, the personnel will be assigned from the San-Benito – Monterey region of CAL FIRE and may not have local knowledge of occupancy risks, road networks or incident locations, which may delay travel times to emergency scenes.

As CAL FIRE is only able to assist with Fire and Life Safety inspections, the agreement with Monterey for the annual fire inspections in Pacific Grove will likely need to continue.

2. CONTRACTING WITH A PRIVATE FIRM TO PROVIDE FIRE SERVICES.

There are limited private entities available for the provision of fire protection, prevention and emergency services to communities; however these should be explored further for feasibility and interest as part of the study. Typically the privatization occurs under a master fire contract to provide the requested services and include options for fire

suppression, fire prevention, emergency medical services, fire inspection, and community health and safety programs.

The current industry leaders in providing private fire protection service for communities include Rural / Metro Corporation and G4S Solutions (formally Wackenhut Services Inc.) Currently Rural Metro is providing ambulance service in Northern California in Santa Clara County, Alameda County and Contra Costa County, but is not providing fire protection services. While G4S Solutions does provide contract fire services, there are no know municipalities in California currently contracting with G4S solutions, however they did provide a bid to the City of San Carlos to provide this service, but ultimately the City choose to continue with a locally based fire department.

In the San Carlos proposal, which has been provided in its entirety to Pacific Grove, there were three options given for providing fire services to the community. The base offer included providing a Fire Chief, part-time administrative assistant, one Battalion Chief per shift, one Captain per shift, one Lieutenant per shift, two Driver-Engineers per shift and two Firefighter Paramedics per shift to staff two ALS engine companies 24/7. The annual cost for the staffing described above totaled \$4,002,880.

The lack of private firms operating and providing fire protection services in the area and the potential cost of a private contract may make this a less viable approach than other options available to Pacific Grove. There are also operational considerations to consider such as the availability of mutual and automatic aid if a contract is reached with a private firm as these issues are not discussed on the copy of the contract received from the City of San Carlos. As shown previously in this report, the availability

Analysis of Alternative Approaches to Providing Fire Protection Services				
of effective and timely mutual and automatic is critical in Pacific Grove to establish an				
effective response for the timely resolution to any structural fire occurring in the City.				

3. STAND-ALONE FIRE DEPARTMENT

This chapter includes the feasibility and cost analysis of the City of Pacific Grove forming its own stand-alone fire department. The sections below first discuss the key assumptions in the development of the alternative, followed by the proposed management, organizational, and operational approaches, as well as the associated costs.

1. KEY ASSUMPTIONS FOR A STAND-ALONE FULL TIME FIRE DEPARTMENT.

The matrix, which follows, outlines the major planning assumptions employed to structure and estimate the costs of an in-house fire department.

Planning Element	Planning Assumption			
Management / Governance	The Chief of the Fire Department would report directly to the City of Pacific Grove City Manager, under the overall policy direction of the City Council.			
Compensation – Salaries and Fringe Benefits	The levels at which positions would be compensated (e.g. average top step, bottom step, mid-range) can have a substantial impact on the total projected cost of an in-house Fire Department for Pacific Grove, since labor costs (salaries and benefits) typically account for over 80% of the municipal fire department operating budget. Personnel information was collected from the Monterey, Seaside and CAL FIRE with the average mid-point of their compensation plans serving as the assumed salary for positions in the Fire Department. In addition, the benefit costs (including applicable taxes, insurance for health, medical, life, and unemployment, uniform allowance, holiday pay, etc.) are factored at 44.3% of salary costs. As such, the total average "fully-loaded" cost for each classification is utilized for this analysis to estimate personnel costs.			
	Retirement PERS 17.15% Other Benefit Costs 27.14% Total 44.3%* It is important to note that in April 2013, CalPERS issued a letter indicating an employer rate increase due amortization and smoothing policy changes. This policy change will increase employer contributions from a low of 1.1% to 5.5% over a five-year period to a maximum of 4.2% to 21% over the five-year period from 2015 – 2012 depending on your agency asset volatility ratio (AVR). According to the most recent annual actuarial report, Pacific grove			

	has an AVR of 8.6, which will result in the following approximate increases in CalPERS contributions:			
	Fiscal Year AVR - 8			
	2015-2016 2.2%			
	2016-2017 4.4%			
	2017-2018 6.6%			
	2018-2019 8.8%			
	2019-2020 11.0%			
	As indicated above, beginning in FY 2015/16, Pacific Grove would need to allocate an additional 2.2% to the retirement contribution of fire personnel and the amount would increase to an additional 11% by FY 2019/20, resulting in total CalPERS contributions of 27.15% of salaries by FY 2020.			
Operating Expenses	Previous Pacific Grove Fire Department Budgets as well as current budgeted operating costs were used to estimate the annual operating expenses. These expenses are estimated at \$455,739 annually.			
	For each position required to staff the stand-alone fire department, Pacific Grove should plan on \$10,000 in equipment and protective gear to outfit the personnel. This includes volunteers and paid members as all have the same gear requirements: Currently this consists of: 2 sets of turnout gear, 1 set of Wildland gear, 1 pair of safety boots, 1 pair of turnout boots, 1 pair of Wildland boots, 1 structural helmet, 1 Wildland helmet, 1 hand light, 1 SCBA, 1 EMS coat and station uniforms. Currently the cost of all firefighter safety clothing and equipment is covered by the Monterey contract. A recent grant received by Monterey will also benefit Pacific Grove as all existing SCBA's in the City will be replaced at no cost.			
Emergency Medical Service	EMS service would continue to be provided by the County contracted firm under the Exclusive Operating Area Agreement.			
Fire Suppression Network and Unit Staffing	Three principal factors drive determining the number of staff required to staff response units: (1) The average hours in the workweek for shift personnel; (2) The number of response units; and (3) The minimum staffing of each response unit. Principal issues and assumptions associated with projecting staffing for an in-house Department are as follows:			
	Response Personnel Workweek: If the City establishes a municipal fire department, the assumption is that City would employ a 56-hour standard workweek for shift personnel.			
	Number of Responding Units: The project team is operating under the assumptions that the Department will continue to staff a single engine company from the Pacific Grove fire station.			
	• Response Unit Staffing: Total daily staffing would include one (1) Captain, (1), Engineer and (2) Firefighters. The minimum daily staffing would be three (3) personnel with the Engineer acting as the supervisor in the absence of the Captain and a Firefighter stepping up to drive the apparatus in the absence of the Engineer.			
HazMat / Technical	Specialty services would continue to be provided by the regional Monterey			

Rescue, etc.	County Teams. While there is no financial contribution to the teams from participating agencies, there is an expectation that all agencies contribute in a technical or specialized capacity. This would necessitate Pacific Grove training personnel to provide technical / specialized skills to support the regional teams as requested. Currently Monterey is a member of the Monterey County Urban Search and Rescue (USAR) Team. They contribute personnel, a heavy rescue apparatus and specialized equipment as part of their role in regional response. MFD also has members assigned to CA Task Force-3 as part of their commitment to provide regional assistance.
Communications and Dispatch	Dispatch services would continue to be provided by Monterey County 911.
Impact of An In-House Fire Department on City Support Departments	There will be an increased workload impact on City support departments, including human resources, legal and risk management, finance, etc.
Apparatus and Major Equipment Needs	These charges would still be the responsibility of the City of Pacific Grove. In the current approach with Monterey, Pacific Grove is maintaining one (1) front-line engine and one (1) reserve engine for response to incidents in the City. While Pacific Grove does own a 75' ladder truck, it is not utilized as Monterey sends a ladder truck to incidents requiring this type of apparatus. If the decision to cross-staff apparatus was part of the stand-alone plan as previously occurred in Pacific Grove, this ladder truck would be slated for replacement immediately as it is beyond the recommended front-line life of 15 years of service, but could remain as a reserve apparatus for an additional 9 years. Replacement of a ladder truck currently runs between \$1,000,000 and \$1,350,000 depending on the options chosen. In the current contact agreement with Monterey or in a JPA situation, the ladder truck could be sold for surplus, with a current value of approximately \$100,000. The front-line engine should be scheduled for replacement in 2021 and moved to reserve status to replace the current reserve engine.

The next section projects organization and staffing for a stand-alone Fire Department.

(1) A Stand-alone Full-time Fire Department Would Conduct Operations Out of a Single Station with 14 Personnel.

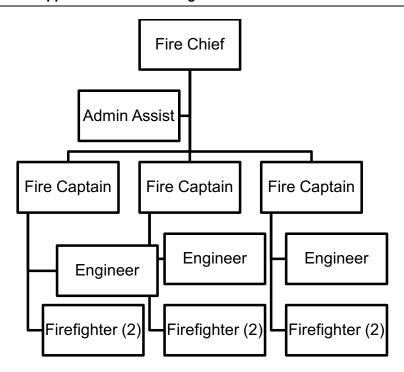
As noted in the preceding chapter, our analysis indicated that a single fire station provided excellent first response coverage in Pacific Grove and would be assumed if an in-house Full-time Fire Department were established, summarized as follows:

Station	% of First-Due Incidents	Apparatus	Staffing
Pacific Grove	100%	One Engine Company	Three (3) person minimum staffing

The response unit deployment plan shown in the previous table illustrates the following:

- The first line engine would be deployed with three (3) personnel at all times.
- Current mutual aid / automatic aid agreements would remain in place to assist
 the in-house Fire Department with large incidents occurring in Pacific Grove. Any
 structure fire in the City would require mutual aid from neighboring jurisdictions to
 develop an effective response force and mitigate the emergency.
- To be self-sufficient under this model requires Pacific Grove to staff an additional firefighter above minimum staffing on each shift to ensure minimum staffing levels are achieved since the current practice of "borrowing" extra capacity would no longer be available to the City.

Given the deployment plan outlined above, as well as a 56-hour workweek for personnel in the fire station, staffing would include an accounting for the impact of vacation, sick and other leaves on net availability. This assumed approach would require 14 personnel. The following illustrates the basic proposed organizational structure of a stand-alone Fire Department and assuming a minimum daily staffing of three (3) personnel in the fire station.



The general roles and responsibilities of these personnel are summarized in the following table:

Position	Number	General Roles and Responsibilities
Fire Chief	1	 Provides the overall management of the Department, including the development of budget, special programs, etc. Manages and assigns special projects / tasks (i.e., policies and procedure development, etc.) to Department personnel. Serves as the primary liaison to the City Manager and Council regarding Department operations.
Captain	3	 Serves as the manager in the daily station operations. Serves as the incident commander until arrival of the Fire Chief during fire incidents. Ensures that all assigned inspections are completed, all testing is completed, etc. Would work a 56-hour workweek (2-on / 4-off or some equivalent variation).
Engineer	3	 Operates and maintains vehicles, apparatus, and equipment. Responds to fire, rescue, and medical emergencies in the City and surrounding areas and provides basic or advanced life support services. Responsible for patient care at the scene of an incident and provides emergency medical treatment. Stabilizes victims with life or health threatening problems during incidents. Would work a 56-hour workweek (2-on / 4-off or some equivalent variation).

Position	Number	General Roles and Responsibilities
Firefighter	6	 Conducts virtually all roles and responsibilities as the above, Would work a 56-hour workweek (2-on / 4-off or some equivalent variation).
Administrative Assistant	1	 Provides secretarial and office support assistance for the Department. Assists with project research, data collection and performance of routine statistical analysis. Process payroll for the FD and submit final payroll to City for payment of time worked. Order departmental supplies verify receipt and process invoices for appropriate payment. Serve as the initial point of contact for the public at the fire station and direct callers and visitors to the appropriate location. Take minutes at key meetings and provide a summary to staff as needed. Handles the sorting of incoming mail. Provides typing assistance for correspondence and other documents, organizes meetings, etc.
Total	14	
Fire Inspector	.5 Contract with Monterey	 Would remain an employee of the Monterey Building Department. Conducts annual business inspections on high risk occupancies Conducts plan reviews for Fire Code Compliance Ensures shift personnel are adhering to the inspection schedule for low to moderate risk occupancies.
Command	Contract	 For after hours and weekend command response the City of Pacific Grove would need to contract for chief officer response from the City of Monterey as this staffing formula would necessitate

(2) The Estimated Annual Cost for an In-house Full-time Fire Department is Approximately \$2.1 Million.

Basic assumptions and approaches were employed to project annual operating costs for a City Fire Department, including developing a salary plan for positions to project staffing costs. These costs were developed utilizing mid-point compensation rates based on figures obtained from Monterey, Seaside and CAL FIRE.

Salary Assumption / Area Mid-point

Position	Monterey	Seaside	CAL FIRE	Average
Fire Chief	\$162,072	\$135,429	(Unit Chief) \$96,504	\$131,335
Fire Captain	\$94,752	\$81,836	\$58,380	\$78,323

Fire Engineer	\$81,840	\$74,311	\$49,440	\$68,530
Fire Fighter	\$77,952	\$67,526	\$43,728	\$63,069
Fire Inspector	\$59,568	\$61,055	\$43,332	\$54,651
Administrative Assist	\$54,336	\$40,939	\$47,952	\$47,742

To estimate a City of Pacific Grove compensation plan for staffing the standalone fire station the average cost position was applied to the staffing approach outlined above.

Position	Salary	Benefits	Total	Annual Cost
Fire Chief	\$131,335	58,181	189,516	\$189,516
Fire Captain	\$78,323	34,697	113,020	\$339,060
Fire Engineer	\$68,530	30,359	98,889	\$296,666
Fire Fighter (6)	\$63,069	27,940	91,009	\$546,051
Fire Inspector (.5)	\$54,561	24,171	78,732	\$39,366
Admin Assist.	\$47,742	21,150	68,892	\$68,892
Total				\$1,479,552

Additionally, the City of Pacific Grove would need to budget for various support, maintenance, and other operational costs (beyond personnel), including the following types of items as they currently do under the contract terms with the City of Monterey:

- Utilities (electricity, water, etc.)
- Departmental supplies (office supplies and any special supplies)
- Professional development (training, conferences, subscriptions, etc.)
- Maintenance for office equipment, building, grounds, etc.
- Vehicle repair and maintenance, as well as insurance
- Apparatus and protective equipment replacement

The project team utilized the existing Pacific Grove Fire Services budget and previous budget to arrive at total annual operating expenses (i.e., exclusive of

personnel, contract services, etc.) equating to \$455,739. This figure is consistent with the project team's experience with public safety operational budgets.

The following table illustrates the total estimated annual operating costs for the stand-alone fire department.

Line Item	Amount
Salaries and Benefits	\$1,479,552
Overtime	\$147,955
Contract Services	\$37,000
Operating Expenses	\$455,739
Total	\$2,120,300

In total, the annual operating cost for an in-house Fire Department would be an estimated \$2,120,300. This is approximately \$300,00 less than the current contract with Monterey. There are a couple of factors driving this reduction in cost for providing fire services in Pacific Grove including:

- Salaries are lower than current salaries due to the mid-point average assumptions.
- Benefit costs are reduced, as all employees hired to staff the station will be on the CalPERS 2.7@ 57 plan with employees pay 50% of normal costs.

There are also one-time and ongoing cost assumptions that must be weighed against the proposed savings such as the purchasing of protective gear for personnel, the decision on whether to cross-staff a ladder truck, how training will be conducted and while not typical, whether there will be additional costs for utilizing training facilities owned by other area fire agencies.

(3) Alternative Scheduling Options for a Stand-alone Full-Time Fire Department.

As part of the study, the project team was instructed to provide cost options for the fire department if personnel were placed on 12-hour shifts as compared to the current 24-hour shifts. The idea behind this approach is that personnel could be more effectively utilized in a 12-hour staffing plan as they would not have the built-in sleep time associated with the 56-hour workweek schedule. There are key issues with the implementation of 12-hour shifts including:

- The 12-hour shifting pattern will require an additional shift of fire personnel, significantly increasing personnel costs for the city.
- In a community such as Pacific Grove, there will be little benefit gained in terms of productive use of fire personnel between the hours of 10:00 p.m. and 7:00 a.m.

The following table illustrates the staffing costs associated with moving to a 12-hour shifting pattern for personnel assigned to the fire department:

Position	Salary	Benefits	Total	Annual Cost
Fire Chief	\$131,335	58,181	189,516	\$189,516
Fire Captain (4)	\$78,323	34,697	113,020	\$452,080
Fire Engineer (4)	\$68,530	30,359	98,889	\$395,556
Fire Fighter (8)	\$63,069	27,940	91,009	\$728,072
Fire Inspector (.5)	\$54,561	24,171	78,732	\$39,366
Admin Assist.	\$47,742	21,150	68,892	\$68,892
Total				\$1,873,502

As shown above, the salary and benefit costs associated with staffing the fire department on 12-hour shifts increase by approximately \$400,000 annually. Utilizing the same operating costs as discussed earlier, the total annual cost of the staffing option would be \$2,553,591.

Another shifting option is to use a 72-hour workweek for fire personnel. Typically this is achieved with a work schedule of 72-hours on, followed by 96-hours off. The difficulty of this schedule for a smaller agency is the extra day off as in larger agencies, such as CalFIRE that use this schedule approach there are extra positions staffed each

day to fill the daily staffing needs. The staffing levels in Pacific Grove do not allow the extra capacity for this staffing model as additional personnel would need to be hired to fill staffing gaps that would essentially offset any savings realized by the 72-hour work week.

2. KEY ASSUMPTIONS FOR A STAND-ALONE FULL TIME FIRE DEPARTMENT USING A PUBLIC SAFETY CONCEPT.

The matrix, which follows on the next page, outlines the major planning assumptions employed to structure and estimate the costs of an in-house fire department as part of a public safety concept.

Planning Element	Planning Assumption
Management /	The Chief of the Fire Department would report directly to the City of Pacific
Governance	Grove City Manager, under the overall policy direction of the City Council.

Planning Element Planning Assumption Compensation – The levels at which positions would be compensated (e.g. average top step, Salaries and Fringe bottom step, mid-range) can have a substantial impact on the total projected cost of an in-house Fire Department for Pacific Grove, since labor costs Benefits (salaries and benefits) typically account for over 80% of the municipal fire department operating budget. Personnel information was collected from the Monterey, Seaside and CAL FIRE with the average mid-point of their compensation plans serving as the assumed salary for positions in the Fire Department. Cross-trained personnel would receive a \$5,000 assignment pay in addition to their police officer salary. In addition, the benefit costs (including applicable taxes, insurance for health, medical, life, and unemployment, uniform allowance, holiday pay, etc.) are factored at 44.3% of salary costs. As such, the total average "fully-loaded" cost for each classification is utilized for this analysis to estimate personnel costs. Benefit Assumed % of Salary Retirement PERS 17.15% Other Benefit Costs 27.14% Total 44.3%* It is important to note that in April 2013, CalPERS issued a letter indicating an employer rate increase due amortization and smoothing policy changes. This policy change will increase employer contributions from a low of 1.1% to 5.5% over a five-year period to a maximum of 4.2% to 21% over the five-year period from 2015 – 2012 depending on your agency asset volatility ratio (AVR). According to the most recent annual actuarial report, Pacific grove has an AVR of 8.6, which will result in the following approximate increases in CalPERS contributions: Fiscal Year **AVR - 8** 2015-2016 2.2% 2016-2017 4.4% 2017-2018 6.6% 2018-2019 8.8% 2019-2020 11.0% As indicated above, beginning in FY 2015/16, Pacific Grove would need to allocate an additional 2.2% to the retirement contribution of fire personnel and the amount would increase to an additional 11% by FY 2019/20, resulting in total CalPERS contributions of 27.15% of salaries by FY 2020.

Planning Element	Planning Assumption
Operating Expenses	Previous Pacific Grove Fire Department Budgets as well as current budgeted operating costs were used to estimate the annual operating expenses. These expenses are estimated at \$455,739 annually. For each position required to staff the stand-alone fire department, Pacific Grove should plan on \$10,000 in equipment and protective gear to outfit the personnel. This includes volunteers and paid members as all have the same gear requirements: Currently this consists of: 2 sets of turnout gear, 1 set of Wildland gear, 1 pair of safety boots, 1 pair of turnout boots, 1 pair of Wildland boots, 1 structural helmet, 1 Wildland helmet, 1 hand light, 1 SCBA,
	1 EMS coat and station uniforms. Currently the cost of all firefighter safety clothing and equipment is covered by the Monterey contract. A recent grant received by Monterey will also benefit Pacific Grove as all existing SCBA's in the City will be replaced at no cost.
Emergency Medical Service	EMS service would continue to be provided by the County contracted firm under the Exclusive Operating Area Agreement.
Fire Suppression Network and Unit Staffing	Three principal factors drive determining the number of staff required to staff response units: (1) The average hours in the workweek for shift personnel; (2) The number of response units; and (3) The minimum staffing of each response unit. Principal issues and assumptions associated with projecting staffing for an in-house Department are as follows:
	Response Personnel Workweek: If the City establishes a municipal fire department, the assumption is that City would employ a 56-hour standard workweek for shift personnel.
	Number of Responding Units: The project team is operating under the assumptions that the Department will continue to staff a single engine company from the Pacific Grove fire station.
	Response Unit Staffing: Total daily staffing would include one (1) Captain, (1), Engineer and (2) Cross-trained Officers. The minimum daily staffing would be three (2) personnel in the fire station and one (1) cross-trained officer on patrol, with the Engineer acting as the supervisor in the absence of the Captain and a Cross-trained officer utilized to drive the apparatus in the absence of the Engineer. Cross-trained officers would work a 12-hour schedule.
HazMat / Technical Rescue, etc.	Specialty services would continue to be provided by the regional Monterey County Teams. While there is no financial contribution to the teams from participating agencies, there is an expectation that all agencies contribute in a technical or specialized capacity. This would necessitate Pacific Grove training personnel to provide technical / specialized skills to support the regional teams as requested.
	Currently Monterey is a member of the Monterey County Urban Search and Rescue (USAR) Team. They contribute personnel, a heavy rescue apparatus and specialized equipment as part of their role in regional response. MFD also has members assigned to CA Task Force-3 as part of their commitment to provide regional assistance.

Planning Element	Planning Assumption
Communications and Dispatch	Dispatch services would continue to be provided by Monterey County 911.
Impact of An In-House Fire Department on City Support Departments	There will be an increased workload impact on City support departments, including human resources, legal and risk management, finance, etc.
Apparatus and Major Equipment Needs	These charges would still be the responsibility of the City of Pacific Grove. In the current approach with Monterey, Pacific Grove is maintaining one (1) front-line engine and one (1) reserve engine for response to incidents in the City. While Pacific Grove does own a 75' ladder truck, it is not utilized as Monterey sends a ladder truck to incidents requiring this type of apparatus. If the decision to cross-staff apparatus was part of the stand-alone plan as previously occurred in Pacific Grove, this ladder truck would be slated for replacement immediately as it is beyond the recommended front-line life of 15 years of service, but could remain as a reserve apparatus for an additional 9 years. Replacement of a ladder truck currently runs between \$1,000,000 and \$1,350,000 depending on the options chosen. In the current contact agreement with Monterey or in a JPA situation, the ladder truck could be sold for surplus, with a current value of approximately \$100,000. The front-line engine should be scheduled for replacement in 2021 and moved to reserve status to replace the current reserve engine.

The next section projects organization and staffing for a stand-alone Fire Department.

(1) A Stand-alone Full-time Fire Department Operating in a Public Safety Concept Would Require 15 Personnel.

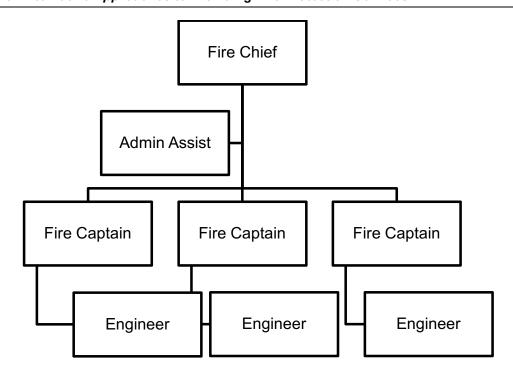
As noted in the preceding chapter, our analysis indicated that a single station provides excellent first response coverage in Pacific Grove and would be assumed if an in-house Fire Department operating in a Public Safety concept were established, summarized as follows:

Station	% of First-Due Incidents	Apparatus	Staffing
Pacific Grove	100%	One Engine Company	Two (2) person minimum staffing
		Cross-trained personnel	One (1) person minimum staffing

The response unit deployment plan shown in the previous table illustrates the following:

- The first line engine would be deployed with two (2) personnel at all times.
- Current mutual aid / automatic aid agreements would remain in place to assist the in-house Fire Department with large incidents. Any structure fire would require mutual aid to develop an effective response force.
- To be self-sufficient under this model requires Pacific Grove to staff two
 additional cross-trained personnel each patrol shift to ensure minimum staffing
 levels are achieved since the current practice of "borrowing" extra capacity would
 no longer be available to the City.

Given the deployment plan outlined above, as well as a 56-hour workweek for personnel assigned to the fire station and 12-hour shifts for the cross-trained personnel, staffing would include an accounting for the impact of vacation, sick and other leaves on net availability. This assumed approach would require 15 personnel. The following illustrates the basic proposed organizational structure of a stand-alone Fire Department and assuming a minimum daily staffing of two (2) personnel in the fire station and one (1) cross-trained officer on each patrol shift.



The general roles and responsibilities of these personnel are summarized in the following table:

Position	Number	General Roles and Responsibilities
Fire Chief	1	 Provides the overall management of the Department, including the development of budget, special programs, etc. Manages and assigns special projects / tasks (i.e., policies and procedure development, etc.) to Department personnel. Serves as the primary liaison to the City Manager and Council regarding Department operations.
Captain	3	 Serves as the manager in the daily station operations. Serves as the incident commander until arrival of the Fire Chief during fire incidents. Ensures that all assigned inspections are completed, all testing is completed, etc. Would work a 56-hour workweek (2-on / 4-off or some equivalent variation).
Engineer	3	 Operates and maintains vehicles, apparatus, and equipment. Responds to fire, rescue, and medical emergencies in the City and surrounding areas and provides basic or advanced life support services. Responsible for patient care at the scene of an incident and provides emergency medical treatment. Stabilizes victims with life or health threatening problems during incidents. Would work a 56-hour workweek (2-on / 4-off or some equivalent variation).

Position	Number	General Roles and Responsibilities
Cross-trained Officer	8	 Would function as a Police Officer on patrol Would work the current 12-hour patrol shift schedule. Would respond to all fire calls (non-EMS) requiring additional personnel to mitigate the emergency scene. Would be cross-trained to be certified as a Police Officer, Firefighter and EMT. Would fill vacancies in the fire station during absences of the Fire Captain and Engineer.
Administrative Assistant	1	 Provides secretarial and office support assistance for the Department. Assists with project research, data collection and performance of routine statistical analysis. Process payroll for the FD and submit final payroll to City for payment of time worked. Order departmental supplies verify receipt and process invoices for appropriate payment. Serve as the initial point of contact for the public at the fire station and direct callers and visitors to the appropriate location. Take minutes at key meetings and provide a summary to staff as needed. Handles the sorting of incoming mail. Provides typing assistance for correspondence and other documents, organizes meetings, etc.
Total	15	
Fire Inspector	.5 Contract with Monterey	 Would remain an employee of the Monterey Building Department. Conducts annual business inspections on high risk occupancies Conducts plan reviews for Fire Code Compliance Ensures shift personnel are adhering to the inspection schedule for low to moderate risk occupancies.
Command	Contract	For after hours and weekend command response the City of Pacific Grove would need to contract for chief officer response from the City of Monterey as this staffing formula would necessitate

(2) The Estimated Annual Cost for an in-house Full-time Fire Department Operating in a Public Safety Concept Is Approximately \$2.7 Million.

Basic assumptions and approaches were employed to project annual operating costs for a City Fire Department, including developing a salary plan for positions to project staffing costs. These costs were developed utilizing mid-point compensation rates based on figures obtained from Monterey, Seaside and CAL FIRE.

Salary	Assum	ption /	Area	Mid-point
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Position	Monterey	Seaside	CAL FIRE	Average
Fire Chief	\$162,072	\$135,429	(Unit Chief) \$96,504	\$131,335
Fire Captain	\$94,752	\$81,836	\$58,380	\$78,323
Fire Engineer	\$81,840	\$74,311	\$49,440	\$68,530
Fire Fighter	\$77,952	\$67,526	\$43,728	\$63,069
Fire Inspector	\$59,568	\$61,055	\$43,332	\$54,651
Administrative Assist	\$54,336	\$40,939	\$47,952	\$47,742

To estimate a City of Pacific Grove compensation plan for staffing the standalone fire station operating in a Public Safety concept the average cost position was applied to the staffing approach outlined above.

Position	Salary	Benefits	Total	Annual Cost
Fire Chief	\$131,335	58,181	189,516	\$189,516
Fire Captain (3)	\$78,323	34,697	113,020	\$339,060
Fire Engineer (3)	\$68,530	30,359	98,889	\$296,666
Cross-Trained (8)*	\$91,616	40,586	131,202	\$1,057,615
Fire Inspector (.5)	\$54,561	24,171	78,732	\$39,366
Admin Assist.	\$47,742	21,150	68,892	\$68,892
Total				\$1,991,116

^{*} Cross-trained officers are paid a \$5,000 assignment pay above police officer pay.

Additionally, the City of Pacific Grove would need to budget for various support, maintenance, and other operational costs (beyond personnel), including the following types of items as they currently do under the contract terms with the City of Monterey:

- Utilities (electricity, water, etc.)
- Departmental supplies (office supplies and any special supplies)
- Professional development (training, conferences, subscriptions, etc.)
- Maintenance for office equipment, building, grounds, etc.
- Vehicle repair and maintenance, as well as insurance
- Apparatus and protective equipment replacement

The project team utilized the existing Pacific Grove budget and previous budgets to arrive at a total annual operating budget, equating to \$483,739 in the Public Safety Concept. This figure is consistent with the project team's experience with public safety operational budgets.

The following table illustrates the total estimated annual operating costs for the stand-alone public safety approach to staffing the fire department.

Line Item	Amount
Salaries and Benefits	\$1,991,116
Overtime	\$147,955
Contract Services	\$37,000
Operating Expenses	\$483,739
Total	\$2,659,810

In total, the annual operating cost for an in-house Fire Department operating in a Public Safety Concept would be an estimated \$2,659,810. This is approximately \$250,000 more than the current contract with Monterey and \$530,000 more than operating a stand-alone fire department. The key factor driving this increase in cost is the salary of the cross-trained personnel and the fact that 8 cross-trained personnel are required to ensure minimum staffing levels are achieved due to the 12-hour schedule as opposed to the 56-hour work week of fire station assigned personnel.

1. KEY ASSUMPTIONS FOR A STAND-ALONE COMBINATION CAREER/VOLUNTEER FIRE DEPARTMENT.

The project team examined the viability of a volunteer fire department as part of this study, but ultimately came to the conclusion that the best alternative in Pacific Grove would be a combination career/volunteer department if the desire to reduce personnel costs through the use of volunteers were employed.

The following key facts lead to the decision to review a combination career/volunteer fire department as opposed to an all-volunteer option.

- A significant number of residents commute outside of Pacific Grove for work with City-Data indicating that approximately 1,260 residents having commute times of 10 – 25 minutes and an additional 300 residents having commute times over 25 minutes, making these residents unable to respond to emergencies while at work. This would exclude approximately 10% of the population from volunteering during working hours.
- Pacific Grove residents have a high median age at 48. Census estimates show 21.6% of the population is over 65 and another 16.5% is under the age of 18, which would exclude these population groups from engaging in firefighting duties.
- Additionally 54% of the population in Pacific Grove is female, which typically pursue less dangerous volunteer options than engaging in an active firefighting role.
- Availability of volunteers can affect response time due to the necessity of traveling to the station to respond on assigned apparatus and waiting for a full crew to arrive.
- The highest percentage of calls in Pacific Grove occurs during the typical workday, when the least amount of volunteer personnel would be available to respond.

The matrix, which follows, outlines the major planning assumptions employed to structure and estimate the costs of an in-house combination career/volunteer fire department.

Planning Element	Planning Assumption		
Management / Governance	The Chief of the Fire Department would report directly to the City of Pacific Grove City Manager, under the overall policy direction of the City Council.		

Planning Element Planning Assumption The levels at which positions would be compensated (e.g. average top step, Compensation – Salaries and Fringe bottom step, mid-range) can have a substantial impact on the total projected cost of an in-house Fire Department for Pacific Grove, since labor costs Benefits (salaries and benefits) typically account for over 80% of the municipal fire department operating budget. Personnel information was collected from the Monterey, Seaside and CAL FIRE with the average mid-point of their compensation plans serving as the assumed salary for positions in the Fire Department. Volunteer personnel would not be paid, but would receive benefits including workman's compensation insurance, disability and life insurance for on duty injuries or death associated with their work as a volunteer firefighter. In addition, the benefit costs (including applicable taxes, insurance for health, medical, life, and unemployment, uniform allowance, holiday pay, etc.) are factored at 44.3% of salary costs. As such, the total average "fully-loaded" cost for each classification is utilized for this analysis to estimate personnel costs. Benefit Assumed % of Salary Retirement PERS 17.15% Other Benefit Costs 27.14% Total 44.3%* It is important to note that in April 2013, CalPERS issued a letter indicating an employer rate increase due amortization and smoothing policy changes. This policy change will increase employer contributions from a low of 1.1% to 5.5% over a five-year period to a maximum of 4.2% to 21% over the five-year period from 2015 – 2012 depending on your agency asset volatility ratio (AVR). According to the most recent annual actuarial report, Pacific grove has an AVR of 8.6, which will result in the following approximate increases in CalPERS contributions: Fiscal Year AVR - 8 2015-2016 2.2% 2016-2017 4.4% 2017-2018 6.6% 2018-2019 8.8% 2019-2020 11.0% As indicated above, beginning in FY 2015/16, Pacific Grove would need to allocate an additional 2.2% to the retirement contribution of fire personnel and the amount would increase to an additional 11% by FY 2019/20.

resulting in total CalPERS contributions of 27.15% of salaries by FY 2020.

Planning Element	Planning Assumption	
Operating Expenses	Previous Pacific Grove Fire Department Budgets as well as current budgets operating costs were used to estimate the annual operating expenses. Texpenses are estimated at \$455,739 annually.	
	For each position required to staff the stand-alone fire department, Pacific Grove should plan on \$10,000 in equipment and protective gear to outfit the personnel. This includes volunteers and paid members as all have the same gear requirements: Currently this consists of: 2 sets of turnout gear, 1 set of Wildland gear, 1 pair of safety boots, 1 pair of turnout boots, 1 pair of Wildland boots, 1 structural helmet, 1 Wildland helmet, 1 hand light, 1 SCBA, 1 EMS coat and station uniforms. Currently the cost of all firefighter safety clothing and equipment is covered by the Monterey contract. A recent grant received by Monterey will also benefit Pacific Grove as all existing SCBA's in the City will be replaced at no cost.	
Emergency Medical Service	EMS service would continue to be provided by the County contracted firm under the Exclusive Operating Area Agreement.	
Fire Suppression Network and Unit Staffing	Three principal factors drive determining the number of staff required to staff response units: (1) The average hours in the workweek for shift personnel; (2) The number of response units; and (3) The minimum staffing of each response unit. Principal issues and assumptions associated with projecting staffing for an in-house Department are as follows:	
	Response Personnel Workweek: If the City establishes a municipal fire department, the assumption is that City would employ a 56-hour standard workweek for shift personnel. Volunteer personnel would be required to work 24 hours per month on either a 12-hour or 24-hour shift.	
	Number of Responding Units: The project team is operating under the assumptions that the Department will continue to staff a single engine company from the Pacific Grove fire station.	
	Response Unit Staffing: Total daily staffing would include one (1) Captain, (1), Engineer, (1) Career Firefighter and one (1) Volunteer Firefighter. The minimum daily staffing would be three (3) personnel with the Engineer acting as the supervisor in the absence of the Captain and a Firefighter stepping up to drive the apparatus in the absence of the Engineer. The volunteer would be the lone firefighter in the absence of the career firefighter.	

Planning Element	Planning Assumption
HazMat / Technical Rescue, etc.	Specialty services would continue to be provided by the regional Monterey County Teams. While there is no financial contribution to the teams from participating agencies, there is an expectation that all agencies contribute in a technical or specialized capacity. This would necessitate Pacific Grove training personnel to provide technical / specialized skills to support the regional teams as requested.
	Currently Monterey is a member of the Monterey County Urban Search and Rescue (USAR) Team. They contribute personnel, a heavy rescue apparatus and specialized equipment as part of their role in regional response. MFD also has members assigned to CA Task Force-3 as part of their commitment to provide regional assistance.
Communications and Dispatch	Dispatch services would continue to be provided by Monterey County 911.
Impact of An In-House Fire Department on City Support Departments	There will be an increased workload impact on City support departments, including human resources, legal and risk management, finance, etc.
Apparatus and Major Equipment Needs	These charges would still be the responsibility of the City of Pacific Grove. In the current approach with Monterey, Pacific Grove is maintaining one (1) front-line engine and one (1) reserve engine for response to incidents in the City. While Pacific Grove does own a 75' ladder truck, it is not utilized as Monterey sends a ladder truck to incidents requiring this type of apparatus. If the decision to cross-staff apparatus was part of the stand-alone plan as previously occurred in Pacific Grove, this ladder truck would be slated for replacement immediately as it is beyond the recommended front-line life of 15 years of service, but could remain as a reserve apparatus for an additional 9 years. Replacement of a ladder truck currently runs between \$1,000,000 and \$1,350,000 depending on the options chosen. In the current contact agreement with Monterey or in a JPA situation, the ladder truck could be sold for surplus, with a current value of approximately \$100,000. The front-line engine should be scheduled for replacement in 2021 and moved to reserve status to replace the current reserve engine

The next section projects organization and staffing for a stand-alone Fire Department.

(1) A Stand-alone Combination Fire Department Would Conduct Operations Out of a Single Station with 10 Career Personnel and 30 volunteer personnel.

As noted in the preceding chapter, our analysis indicated that a single station could provide excellent response time coverage in Pacific Grove and would be assumed

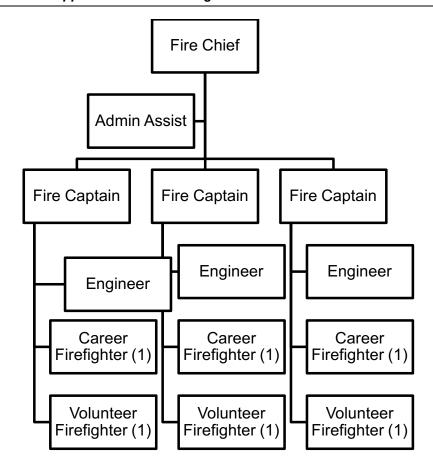
if an in-house combination career/volunteer Fire Department were established, summarized as follows:

Station	% of First-Due Incidents	Apparatus	Staffing
Pacific Grove	100%	One Engine Company	Three (3) person minimum staffing

The response unit deployment plan shown in the previous table illustrates the following:

- The first line engine would be deployed with three personnel at all times.
- Current mutual aid / automatic aid agreements would remain in place to assist the in-house Fire Department with large incidents. Any structure fire would require mutual aid to develop an effective response force.
- To be self-sufficient under this model requires Pacific Grove to staff one volunteer position each shift to ensure minimum staffing levels are achieved since the current practice of "borrowing" extra capacity would no longer be available to the City.

Given the deployment plan outlined above, as well as a 56-hour workweek, staffing would include an accounting for the impact of vacation, sick and other leaves on net availability. This assumed approach would require 10 career personnel and a contingent of 30 volunteers. The following illustrates the basic proposed organizational structure of a stand-alone combination Fire Department and assuming a minimum daily staffing of three (3) personnel.



The general roles and responsibilities of these personnel are summarized in the following table:

Position	Number	General Roles and Responsibilities
Fire Chief	1	 Provides the overall management of the Department, including the development of budget, special programs, etc. Manages and assigns special projects / tasks (i.e., policies and procedure development, etc.) to Department personnel. Serves as the primary liaison to the City Manager and Council regarding Department operations.
Captain	3	 Serves as the manager in the daily station operations. Serves as the incident commander until arrival of the Fire Chief during fire incidents. Ensures that all assigned inspections are completed, all testing is completed, etc. Would work a 56-hour workweek (2-on / 4-off or some equivalent variation).

Position	Number	General Roles and Responsibilities
Engineer	3	 Operates and maintains vehicles, apparatus, and equipment. Responds to fire, rescue, and medical emergencies in the City and surrounding areas and provides basic or advanced life support services. Responsible for patient care at the scene of an incident and provides emergency medical treatment. Stabilizes victims with life or health threatening problems during incidents. Would work a 56-hour workweek (2-on / 4-off or some equivalent variation).
Career Firefighter / Volunteer Firefighter	6	 Conducts virtually all roles and responsibilities as the above, Would work a 56-hour workweek (2-on / 4-off or some equivalent variation). Volunteer firefighters would be required to work a minimum of 24 hours per month, either on a 12 or 24-hour shift.
Administrative Assistant	1	 Provides secretarial and office support assistance for the Department. Assists with project research, data collection and performance of routine statistical analysis. Process payroll for the FD and submit final payroll to City for payment of time worked. Order departmental supplies verify receipt and process invoices for appropriate payment. Serve as the initial point of contact for the public at the fire station and direct callers and visitors to the appropriate location. Take minutes at key meetings and provide a summary to staff as needed. Handles the sorting of incoming mail. Provides typing assistance for correspondence and other documents, organizes meetings, etc.
Total	13	
Fire Inspector	.5 Contract with Monterey	 Would remain an employee of the Monterey Building Department. Conducts annual business inspections on high risk occupancies Conducts plan reviews for Fire Code Compliance Ensures shift personnel are adhering to the inspection schedule for low to moderate risk occupancies.
Command	Contract	For after hours and weekend command response the City of Pacific Grove would need to contract for chief officer response from the City of Monterey as this staffing formula would necessitate

(2) The Estimated Annual Cost for an In-house Combination Fire Department is Approximately \$1.8 Million.

Basic assumptions and approaches were employed to project annual operating costs for a combination Fire Department, including developing a salary plan for positions to project staffing costs. These costs were developed utilizing mid-point compensation rates based on figures obtained from Monterey, Seaside and CAL FIRE.

Salary Assumption / Area Mid-point

Position	Monterey	Seaside	CAL FIRE	Average
Fire Chief	\$162,072	\$135,429	(Unit Chief) \$96,504	\$131,335
Fire Captain	\$94,752	\$81,836	\$58,380	\$78,323
Fire Engineer	\$81,840	\$74,311	\$49,440	\$68,530
Fire Fighter	\$77,952	\$67,526	\$43,728	\$63,069
Fire Inspector	\$59,568	\$61,055	\$43,332	\$54,651
Administrative Assist	\$54,336	\$40,939	\$47,952	\$47,742

To estimate a City of Pacific Grove compensation plan for staffing the standalone fire station the average cost position was applied to the staffing approach outlined above.

Position	Salary	Benefits	Total	Annual Cost
Fire Chief	\$131,335	58181.405	189,516	\$189,516
Fire Captain	\$78,323	34697.089	113,020	\$339,060
Fire Engineer	\$68,530	30358.79	98,889	\$296,666
Fire Fighter (3)	\$63,069	27939.567	91,009	\$273,027
Fire Inspector (.5)	\$54,561	24170.523	78,732	\$39,366
Admin Assist.	\$47,742	21149.706	68,892	\$68,892
Total				\$1,206,527

Additionally, the City of Pacific Grove would need to budget for various support, maintenance, and other operational costs (beyond personnel), including the following types of items as they currently do under the contract terms with the City of Monterey:

- Utilities (electricity, water, etc.)
- Departmental supplies (office supplies and any special supplies)

- Professional development (training, conferences, subscriptions, etc.)
- Maintenance for office equipment, building, grounds, etc.
- Vehicle repair and maintenance, as well as insurance
- Apparatus and protective equipment replacement

The project team utilized the existing Pacific Grove Fire Services budget and previous budget to arrive at a total annual operating budget, equating to \$517,239. This figure is consistent with the project team's experience with combined fire department operational budgets as there are increased costs associated with outfitting and training volunteers.

The following table illustrates the total estimated annual operating costs for the stand-alone fire department.

Line Item	Amount
Salaries and Benefits	\$1,206,527
Overtime	\$120,653
Contract Services	\$37,000
Operating Expenses	\$517,239
Total	\$1,881,419

In total, the annual operating cost for an in-house Fire Department would be an estimated \$1,908,721. This is approximately \$500,00 less than the current contract with Monterey. There are a couple of factors driving this reduction in cost for providing fire services in Pacific Grove including:

- Salaries are lower than current salaries due to the mid-point average assumptions.
- Benefit costs are reduced, as all employees hired to staff the station will be on the CalPERS 2.7@ 57 plan with employees paying 50% of normal costs.

 Volunteer personnel are used to staff the additional firefighter position required to ensure minimum staffing levels, saving approximately \$220,000

It is important to note, that while the cost savings associated with implementing a combination fire department are significant, it is not clear that this will be a viable option for Pacific Grove based on the demographic issues discussed earlier. In order to staff the single position with a 24-hour minimum requirement Pacific Grove would have to recruit, train and retain a contingent of at least 30 volunteer personnel. This is based on the current industry standard of requiring 24-hours of station time per month from volunteers in order to ensure they are providing adequate service to the community and keeping their skills at an acceptable level. Personnel not assigned to a shift would be notified of any critical incidents requiring the response of additional personnel to mitigate the emergency. Training requirements would be in excess of scheduled station time and must be commensurate with the training received by career personnel.

The City of Pacific Grove would also have to plan on providing uniforms and protective gear for the volunteer firefighters. The initial cost of outfitting each of the 30 volunteers is estimated at \$10,000 for the two sets of structural and one set of Wildland protective gear required and may vary depending on the type of protective gear purchased. This does not include the price for radios as the project team is assuming portable radios will be shared and kept at the fire station. The total initial outlay is estimated at \$382,500.

(3) Training for Volunteer Personnel Must Be at the Same Level as Full-Time Career Personnel.

In January 2004, new laws (AB 2118 and SB 1207) were passed in California requiring volunteer firefighters receive the same level of training that the full-time staff

receives. AB 2118 states in part "...provide that the California Occupational Safety and Health Act applies to volunteer firefighters. Equipment and training for volunteers to meet the same requirements as regular firefighters."

Personal and agency liability related to training are also a huge consideration as in October 1999 AB 1127 made changes to California Labor Code, which impacted the California Occupational Safety and Health Act. This legislation made all OSHA regulations applicable to local government, including fines and criminal penalties under Cal/OSHA. In short, individual managers and supervisors (Fire Chiefs – Incident Commanders) can now be fined up to \$250,000 and face up to 4 years imprisonment for failure to take appropriate safety precautions. This requires the City to ensure that personnel in the agency, especially those that may assume command of an incident, have the appropriate experience, training and education to effective supervise emergency service personnel.

4. REGIONAL FIRE DEPARTMENT

This chapter includes the feasibility and cost analysis of the City of Pacific Grove consolidating its fire and emergency medical services with the Cities of Monterey, Carmel-by-the-Sea and Seaside.

The formation of regional fire department under a Joint Powers Authority (JPA) allows the partner agencies to create a governing structure that meets the local needs related to fiscal and operational control. Personnel in the JPA would be employed separately for their current employers and be subject to a new employer relationship. This structure allows the costs associated with pay, benefits and retirement to be reevaluated to allow a fiscally responsible and financially sustainable approach to providing fire protection in the communities. The sections below first discuss the key assumptions in the development of the alternative, followed by the proposed management, organizational, and operational approaches, as well as the associated costs.

1. KEY ASSUMPTIONS FOR A REGIONAL FIRE DEPARTMENT.

The matrix, which follows, outlines the major planning assumptions employed to structure and estimate the costs of regional fire department.

Planning Element	Planning Assumption
Management / Governance	The regional Fire Department would be organized as a Joint Powers Authority, and would include a JPA Board of Directors that is made up of respective council members and act as a subcommittee to the City Councils. The Fire Chief would report to the City Managers.

Planning Element	Planning Assumption						
Compensation – Salaries and Fringe Benefits	The levels at which positions would be compensated (e.g. average top step, bottom step, mid-range) can have a substantial impact on the total projected cost of a regional Fire Department, since labor costs (salaries and benefits) typically account for over 80% of the municipal fire department operating budget. Personnel information was collected from Monterey, Seaside and CAL FIRE.						
	For this analysis, it is assumed that a regional Fire Department would utilize the mid-step salaries for the highest paying agency. In addition to the current average benefit costs of the three fire agencies (including applicable taxes, insurance for health, medical, life, and unemployment, uniform allowance, holiday pay, etc. As such, the total average "fully-loaded" cost for each classification is utilized for this analysis to estimate personnel costs.						
	While the agencies would have the option to use a non defined benefit plan for the newly created JPA, for costing purposes the project team assumed that all personnel would become employees of the JPA and be part of the CalPERS retirement plan with the 2.7% @ 57 option with employees paying 50% of normal costs. Total benefit costs will be factored as shown below:						
	Benefit	Assumed % of Salary					
	Retirement PERS	17.15%					
	Other Benefit Costs Total	27.14% 44.3%*					
	It is important to note that in April 2013, CalPERS issued a letter indicating an employer rate increase due amortization and smoothing policy changes. This policy change will increase employer contributions from a low of 1.1% to 5.5% over a five-year period to a maximum of 4.2% to 21% over the five-year period from 2015 – 2012 depending on your agency asset volatility ratio (AVR). Operating as a JPA in a regional effort would remove this increase for the personnel employed by the fire protection district as they would not be in the CalPERS retirement system. Outside of the formation of a JPA, Pacific Grove would will realize an increase from 2.2 – 11% over the five year period and Monterey would see increases from 1.1 – 5% over the period.						
Operating Expenses	Information was collected from municipal fire departments in the area and used to determine the average ratio of operating expense to total budget among comparison communities. Additionally, based on our experience working with public safety budgets, the operating budget will be estimated at 17% of the total salary costs of the agency.						
Emergency Medical Service	EMS service would continue to be provided by the County contracted firm under the Exclusive Operating Area Agreement. The City of Carmel-by-the-Sea would continue to operate a transport ambulance service as they are excluded from the exclusive operating provision in Monterey County.						

Planning Element	Planning Assumption				
Fire Suppression Network and Unit Staffing	Three principal factors drive determining the number of staff required to staff response units: (1) The workweek for shift personnel; (2) The number of response units; and (3) The minimum staffing of each response unit. Principal issues and assumptions associated with projecting staffing for an in-house Department are as follows:				
	Response Personnel Workweek: The assumption is that a regional Fire Department would employ a 56-hour standard workweek for shift personnel.				
	Number of Responding Units: The project team is operating under the assumptions that the regional Fire Department would operate from the current 6-station network, each staffed as currently staffed.				
	Response Unit Staffing: Minimum staffing for all fire apparatus will be three (3) personnel.				
HazMat / Technical Rescue, etc.	Specialty services would continue to be provided by the regional Monterey County Teams. While there is no financial contribution to the teams from participating agencies, there is an expectation that all agencies contribute in a technical or specialized capacity. This would necessitate Pacific Grove training personnel to provide technical / specialized skills to support the regional teams as requested.				
	Currently Monterey is a member of the Monterey County Urban Search and Rescue (USAR) Team. They contribute personnel, a heavy rescue apparatus and specialized equipment as part of their role in regional response. MFD also has members assigned to CA Task Force-3 as part of their commitment to provide regional assistance.				
Communications and Dispatch	Dispatch services will continue to be provided by Monterey County 911.				
Apparatus and Major Equipment Needs	Each City would be responsible for the maintenance and purchases of its own fire stations and apparatus.				
Support Services	The respective Cities would divide the responsibility for an administrative service, such as payroll, human resources and risk management, etc.				
Cost Allocation	The budget of the regional Fire Department would be allocated based on calls for service workload and population.				

2. A REGIONAL FIRE DEPARTMENT WOULD CONDUCT OPERATIONS WITH A 6-STATION NETWORK AND 96 PERSONNEL.

The feasibility analysis of a regional Fire Department consisting of Pacific Grove,

Monterey and Seaside assumes a 6 fire station network, including 3 located within

Monterey and 1 within each of the other cities, with the current and proposed staffing levels summarized below:

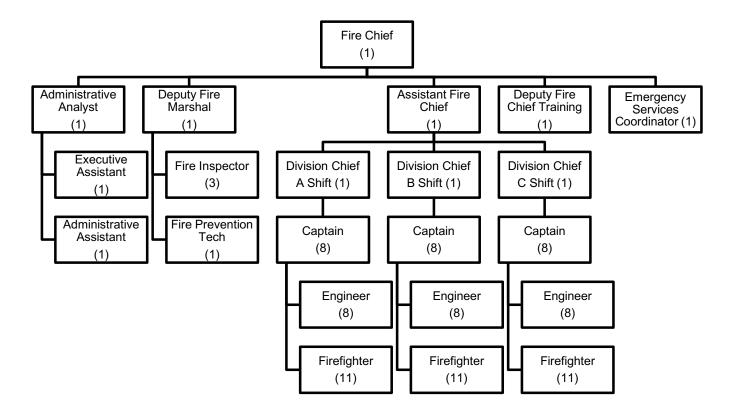
Station	Current Staffing	Proposed Staffing		
1 – Monterey Engine & Truck	1 Deputy Chief2 Captain2 Engineer3 Firefighter	1 Deputy Chief2 Captain2 Engineer3 Firefighter		
2 – Monterey Engine	1 Captain1 Engineer1 Firefighter	1 Captain1 Engineer1 Firefighter		
3 – Monterey Engine	1 Captain1 Engineer2 Firefighter	1 Captain1 Engineer2 Firefighter		
4 – Pacific Grove Engine	1 Captain1 Engineer1 Firefighter	1 Captain1 Engineer1 Firefighter		
5 – Carmel-by-the Sea Engine	1 Captain1 Engineer1 Firefighter	1 Captain1 Engineer1 Firefighter		
6 – Seaside Engine Truck	1 Battalion Chief2 Captain2 Engineer3 Firefighter	 2 Captain 2 Engineer 3 Firefighter		

The response unit deployment plan shown in the previous matrix reflects the following:

- Deploying all first line engine units with a minimum of three personnel at all times.
- Current mutual aid / automatic aid agreements would remain in place with County units.
- This model means that the regional Fire Department would require "extra" personnel or floaters on each shift to cover vacant positions.

Given the deployment plan outlined above, as well as a 56-hour workweek, fire suppression and emergency medical unit staffing would include an accounting for the

impact of vacation, sick and other leaves on net availability. This assumed approach would require 81 personnel. The following illustrates the basic proposed organizational structure of a regional Fire Department and assuming a minimum daily staffing of 28 personnel (including 27 fire suppression personnel plus 1 on-shift Deputy Chief):



The general roles and responsibilities of these personnel are summarized in the following table:

Position	Number	General Roles and Responsibilities
Fire Chief	1	 Provides the overall leadership and management of the Department, including the development of budget, special programs, etc. Serves as the primary liaison to the City Manager and Council regarding Department operations.

Position	Number	General Roles and Responsibilities				
Assistant Fire Chief	1	 Provides the day-to-day management of the Department resources and activities. Manages and assigns special projects / tasks (i.e., policies and procedure development, etc.) to Department personnel. 				
Administrative Analyst	1	 Provides analytical support to the Fire Department, including budget analysis, development of performance statistics, etc. Supports the budget development and expenditure tracking of the Department, including capital outlay. 				
Deputy Fire Marshal	1	Manages the inspection programs, including assigning shift inspections, and conductions re-inspections when appropriate. Ensures that all commercial and residential buildings are meeting life and safety codes.				
Deputy Chief of Training	1	 Provides overall management of the Department Training Program. Ensure agency remains compliant with State and Federal training requirements. 				
Emergency Services Coordinator	1	 Develops and provides public education services and programs Supports the activities of the Fire Marshal Handles day to day emergency preparedness activities for the agency. 				
Fire Prevention Tech	1	Manages and conducts plan and design review, which includes processes related to building permitting, reviewing for code compliance (i.e., access issues, etc.).				
Fire Inspector	3	 Conduct inspections of businesses to ensure compliance with the adopted Fire Code. Work with business owners to correct code violations and deficiencies. 				
Division Chief	3	 Manages the day to day operations of the shift, including handling personnel matters, ensuring shifts have the necessary materials and equipment, ensuring proper training and inspection / testing completions, public education, etc. May have responsibility for particular administrative areas, including the following: Training: development of training programs and ensuring all personnel meet local and state mandates. Administration: responsibility for vehicle and station maintenance, budgeting, accounts payable, etc.) Disaster Preparedness: coordinates city-wide disaster planning efforts, training for all City employees, disaster planning for local businesses, etc. 1 additional position is allocated for back-up on administrative duties, and could work a 40-hour week. 				

Position	Number	General Roles and Responsibilities				
Captain	24	 Serves as the manager in the daily station operations. Ensures that all assigned inspections are completed, all testing is completed, etc. 				
Engineer / Paramedic	24	 Operates and maintains vehicles, apparatus, and equipment. Responds to fire, rescue, and medical emergencies in the services areas and provides basic or advanced life support services. Responsible for patient care at the scene of an incident and provides emergency medical treatment Stabilizes victims with life threatening problems during incidents. 				
Firefighter	33	 Operates and maintains vehicles, apparatus, and equipment. Responds to fire, rescue, and medical emergencies in the services areas and provides basic or advanced life support services. Responsible for patient care at the scene of an incident and provides emergency medical treatment Stabilizes victims with life threatening problems during incidents. 				
Executive Assistant Administrative Assistant	1	 Provides secretarial and office support assistance. Assists with project research, data collection and performance of routine statistical analysis. Handles the sorting of incoming mail. Provides typing assistance for correspondence and other documents, organizes meetings, etc. 				
Total	96					

3. THE ESTIMATED ANNUAL COST FOR CONSOLIDATED REGIONAL DEPARTMENT IS APPROXIMATELY \$17.4 Million.

Basic assumptions and approaches were employed to project annual operating costs for a regional Fire Department, including developing a salary plan for positions to project staffing costs. These costs were developed utilizing a top-step / "fully-loaded" compensation rates of the highest paying agency based on figures obtained from Monterey, Seaside and CAL FIRE.

Position	# of Positions	Total Cost
Fire Chief	1	\$233,870
Assistant Chief	1	\$226,285
Deputy Chief	1	\$196,918
Analyst	1	\$123,255
Deputy Fire Marshal	1	\$158,268
Emergency Services Coordinator	1	\$112,900
Fire Inspector	3	\$284,363

Total Salaries and Benefits Overtime Estimate	96	\$13,036,723 \$903,446
Admin Assistant	1	\$78,511
Executive Assistant	1	\$99,428
FF	33	\$4,094,948
Engineer	24	\$3,125,192
Captain	24	\$3,617,243
Division Chief	3	\$590,753
Fire Prevention Tech	1	\$94,788

Additionally, the participating cities would need to budget for various support, maintenance, and other operational costs (beyond personnel) of a regional Fire Department, including the following types of items:

- Utilities (electricity, water, etc.).
- Departmental supplies (office supplies and any special supplies).
- Professional development (training, conferences, subscriptions, etc.).
- Maintenance for office equipment, building, grounds, etc.
- Vehicle repair and maintenance, as well as insurance.

The project team assumed this cost to be 17% of the total annual personnel costs, equating to \$2,369,829, and is based on the project team's experience with public safety operational budgets. Finally, the project team assumes that the regional Fire Department would utilize Monterey County 911 for emergency dispatching services (at an estimated cost of \$161,228).

In total, the annual operating cost for regional Fire Department would be an estimated \$16,471,226. This equates to approximately \$1.2 million less than the \$17,677,746 the four cities currently allocate total toward fire and emergency services. It is important to note this budget amount excludes the current PERS obligation bond currently being paid by each agency, which would remain a responsibility of the individual cities.

4. IN A REGIONAL FIRE DEPARTMENT, THE CITIES OF PACIFIC GROVE AND MONTEREY MAY EXPERIENCE COST INCREASES WHILE CARMEL-BY-THE-SEA AND SEASIDE MAY EXPERIENCE COST SAVINGS.

This analysis indicates that the consolidation or regionalization of fire services among Pacific Grove, Monterey, Carmel-by-the-Sea and Seaside is a feasible and cost-effective option, with potential savings of approximately 6.8% versus what is currently being allocated for fire and emergency medical services. Although the overall savings is approximately 6.8%, there is going to be variation in how these savings (and / or costs) are allocated among the participating agencies.

There are various methods for approaching how costs are allocated. For this analysis, the project team utilizes calls for service, population, and the number of staffed fire apparatus as possible methods for allocating costs, as well as provides the participating agencies preliminary insights regarding cost / savings distribution:

Calls for Service Allocation

Agency	Annual Calls	% of Total	Allocation	Current Budget	Costs / (Savings)
Pacific Grove	1,399	14.60%	\$2,405,349	\$2,347,424	\$57,925
Monterey	5,495	57.36%	\$9,447,744	\$7,992,378	\$1,455,366
Carmel-by-the-Sea	397	4.14%	\$682,576	\$2,190,531	(\$1,507,955)
Seaside	2,289	23.89%	\$3,935,557	\$5,147,413	(\$1,211,856)
Total	9,580	100.00%	\$16,471,226	\$17,677,746	(\$1,206,520)

As this table shows, if the distribution of calls for service was the primary method for allocating costs, the Cities of Pacific Grove and Monterey would see their cost increase, while the Cities of Carmel-by-the-Sea and Seaside would experience cost savings of \$1.5 million \$1.2 million, respectively.

Population Allocation

City	Population	% of Total	Allocation	Current Budget	Costs / (Savings)
Pacific Grove	15,295	17.82%	\$2,935,669	\$2,347,424	\$588,245
Monterey	34,028	39.65%	\$6,531,217	\$7,992,378	(\$1,461,161)
Carmel-by-the-Sea	3,722	4.34%	\$714,388	\$2,190,531	(\$1,476,143)

CITY OF PACIFIC GROVE, CALIFORNIA Analysis of Alternative Approaches to Providing Fire Protection Services

Seaside	33,576	39.13%	\$6,444,461	\$5,147,413	\$1,297,048
Total	85,816	100.00%	\$16,471,226	\$17,677,746	(\$1,206,520)

As this table shows, if the distribution of population was the primary method for allocating costs, the Cities of Pacific Grove and Seaside would see their cost increase, while the Cities of Monterey and Carmel-by-the-Sea would experience cost savings of \$1.46 million and \$1.47 million, respectively.

Staffed Apparatus Allocation

Stations	# Staffed Apparatus	% of Total	Allocation	Current Budget	Costs / (Savings)
Pacific Grove	1	12.50%	\$2,058,903	\$2,347,424	(\$288,521)
Monterey	4	50.00%	\$8,235,613	\$7,992,378	\$243,235
Carmel-by-the-Sea	1	12.50%	\$2,058,903	\$2,190,531	(\$131,628)
Seaside	2	25.00%	\$4,117,807	\$5,147,413	(\$1,029,607)
Total	8	100.00%	\$16,471,226	\$17,677,746	(\$1,206,520)

As this table shows, if the distribution in the number of staffed apparatus was the primary method for allocating costs, the City of Monterey would see their cost increase by \$243,245, while the Cities of Pacific Grove, Carmel-by-the-Sea and Seaside would experience cost savings of \$288,000, \$132,000 and \$1.02 million respectively.

When one takes the average of the above three allocation models the following cost sharing distribution results:

Average Allocation

City	Avg. Allocation	Current Budget	Costs / (Savings)
Pacific Grove	2,466,641	\$2,347,424	\$119,217
Monterey	8,071,524	\$7,992,378	\$79,146
Carmel-by-the-Sea	1,151,956	\$2,190,531	(\$1,038,575)
Seaside	4,832,608	\$5,147,413	(\$314,805)
Total	\$16,471,226	\$17,677,746	(\$1,206,520)

As this table shows, using the average allocation amount based on calls for service, population, and number of staffed apparatus, the Cities of Pacific Grove and Monterey would realize slight increases to their current costs, while the Cities of

Carmel-by-the-Sea and Seaside would experience cost savings of \$1.04 million and \$315,000, respectively.

5. THE FORM OF GOVERNANCE AND MANAGEMENT WOULD IMPACT HOW SERVICE IS ADMINISTERED.

If the participating agencies move forward with a regional Fire Department in the formation of a Joint Powers Authority (JPA) they need to carefully consider the way the agency is governed.

It is important to note that the local labor groups should be closely involved in all discussions related to forming the JPA as labor buy-in and collaboration will be the key to successful implementation. If labor is not involved early and provided with the opportunity for input into the formation of the JPA, the mandatory arbitration rights could effectively kill the implementation of the JPA.

While oversight and review mechanisms can be built in to contracts for service, a Regional Fire District or Authority provides a formal mechanism for representation and decision-making. Each of these issues impacts the long-term sustainability of the agreement. The following points summarize the major considerations for the JPA:

- Regional Fire District or Authority: the Governance structure would include a board Appointed by Elected Officials from Participating Agencies or directly elected from the communities. Primary advantages include:
 - Direct policy input and formation.
 - Each participating agency guaranteed representation.
 - Levels of Service and revenue generation determined by elected policy makers.
 - Provides long-term commitment to strategic service delivery and associated financial obligations.

- Funding stream provided by a special assessment or tax on the citizens of the participating jurisdictions (versus the general fund).
- Scalable / flexible to include additional jurisdictions, as the new entity would have representation on the governing board, as well as the new entity would be incorporated into the existing cost allocation model.

The primary disadvantages to this approach include:

- Votes not usually weighted. Each agency has equal vote despite revenue contributions or population representation.
- New support structures must be devised.
- Infrastructure needs to be created to provide executive administration of Board decisions
- Not easily terminated.

Recommendation: The Cities of Pacific Grove, Monterey, Carmel-by-the-Sea and Seaside should continue discussions regarding regionalization approaches for the future.

5. OTHER CONSIDERATIONS

This chapter of the report will focus on other opportunities for improving the fire protection services in Pacific Grove. These options include:

- Improving fire prevention operations and improving the inspection process.
- Introducing advanced fire-interruption technologies and/or improving on-site fire prevention capabilities.
- Improving the current Insurance Services Office (ISO) rating.
- A change in the retirement calculation to include options for moving out personnel who do not promote in the organization.
- Enhancing the current contract with Monterey.

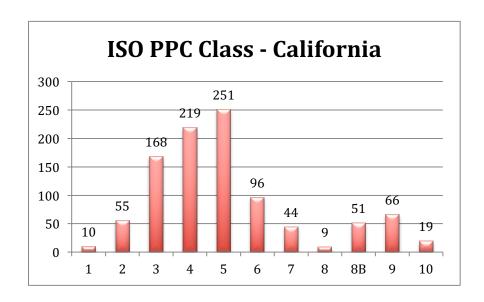
10. IMPROVING THE INSURANCE SERVICES OFFICE (ISO) RATING.

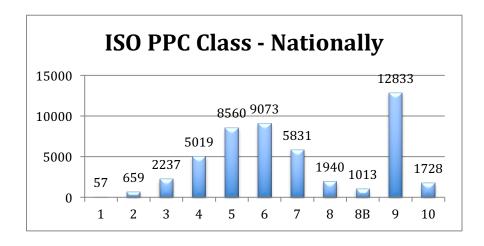
The City of Pacific Grove currently has an ISO public protection classification of three (3), which is an excellent classification. The discussion of a lowered ISO public protection classification (PPC) and its impact on insurance rates is often overstated. In fact in 2001, State Farm abandoned the use of ISO classification in the calculation of rates and instead utilizes a formula based on local risk and regional risk, a trend many other insurance companies have followed. For the insurance agencies that utilize ISO in determining homeowner rates, it is only one tool in the process. The insurance companies establish the rates (premiums) they charge to their policyholders, which will depend on many factors including fire loss experience in an area, underwriting guidelines and the marketing strategy for an area.

The fact that Pacific Grove has a strong ISO classification would mean that with all other factors being equal, there would not be a significant saving in insurance premiums for homeowners or businesses due to an improved classification rating and the infrastructure (water supply) costs associated with improving the rating often greatly outweigh any potential savings for homeowners.

Insurance companies establish premium rates for commercial and industrial occupancies individually based on the type of business being conducted, presence of fire detection and automatic fire suppression systems etc. Based on this information the idea of lowering the ISO rating classification rating is not a viable option for Pacific Grove in lowering fire protection costs for the community.

The following graphs depict the current distribution of communities by Public Protection Classification (PPC) class both nationally and in California as reported by ISO. As shown with a current PPC of 3, Pacific Grove enjoys an excellent rating, with only 126 communities nationwide having a higher PPC Class rating than Pacific Grove, while 65 agencies in California have a higher rating.





RECOMMENDATION: The City should work to maintain their current ISO rating.

2. ADVANCED FIRE INTERRUPTION TECHNOLOGY

In recent years the use of advanced fire interruption technology has proven to be an effective tool for first responders to help contain a fire prior to water being available. These devices are intended to be utilized by trained firefighters who can gain access to the fire area and deploy the device in a contained area. The devices are ineffective if the fire has penetrated the roof or if a window is broken due to the airflow carrying the powder away from the fire, making it ineffective.

Pulling a ripcord near the top of the unit and throwing it into a burning structure manually activates the device. A thermal charge inside the device is activated within 10 seconds, rapidly releasing a dense cloud of fire extinguishing aerosol powder in all directions and knocking down flames almost instantaneously. According to a 2008 article in Fire Engineering Magazine, "Thermal imaging during live burn tests shows that temperatures in a room will drop from 1,000°F to less than 300°F within seconds of deployment, creating a far safer environment for firefighters to enter a building to search for and rescue victims and to overhaul the fire."

According to industry websites these devices can buy crews fifteen additional minutes to allow the arrival of volunteers or and the remaining alarm assignment to allow staffing for adherence to the two-in and two-out rule. The deployment of this type of technology may have application in Pacific Grove under the public safety, CAL FIRE contract and volunteer options being explored.

The manufacturers list the following as applications for advanced fire interruption technology in common fire situations:

Structure fires

Aerosols work best in contained spaces. Just like Halon or other gaseous fire suppressants, if there isn't a sufficient volume of aerosol near and around the fire, effectiveness is reduced. These devices are designed to protect a space up to 1,700 cubic feet (60m3). In a larger or highly ventilated space, more than one device may be needed.

First response

The devices have applications for all responders who can deploy the device to reduce risks associated with fighting the fire while limiting the loss of human life and property. Device deployments can be extremely useful in departments where personnel arrive on scene and have to wait several minutes for additional personnel to arrive. The devices are an excellent choice for use an early deployment device that will knock down the fire and buy time for volunteers or additional units to arrive.

Basement fires

Fires in confined spaces below ground are some of the most challenging to attack and present significant risks to firefighters. Deploying a device in a basement fire situation will make that space much safer for firefighter entry and overhaul.

Vehicle fires

If a burning vehicle contains trapped victims or if the vehicle fire threatens adjacent structures, a device can be used to knock down flames within the vehicle, providing valuable time for people to be rescued and for firefighters to reduce fire spread and extended damage of property.

RIT rescues

These devices could serve as a valuable tool to the rapid intervention team (RIT). If a firefighter has succumbed to heat or smoke or is threatened by flashover, the ability to knock down flames and reduce the temperature by up to 800°F in 15 seconds allows the team to perform safe entry and rescue.

Recommendation: The City should consider implementing the use of advanced fire interruption systems, particularly if the stand-alone or contracting with CAL FIRE or contracting with Seaside options is chosen for fire protection services.

3. IMPROVING FIRE PREVENTION OPERATIONS AND IMPROVING THE INSPECTION PROCESS.

The current process of conducting business inspections for compliance with the adopted Fire Code is by the use of specialty fire inspection personnel. These personnel are employees of the Monterey Building Department.

The current fire prevention inspection program does not utilize shift personnel to conduct company inspections. These inspections can serve as valuable tool to get fire personnel in businesses before a fire occurs to allow them to be familiar with the layout of businesses and allows the fire inspector to focus on higher risk occupancies. Typically the company inspections will focus on low to moderate risk businesses that do not have built in fire protection systems. The fire inspector would produce a monthly schedule for shift personnel of businesses requiring inspection and shift personnel would send the inspection report to the inspector for filling or follow-up if violations are noted.

It is the opinion of the project team that utilizing shift personnel to conduct inspections of low and moderate risk occupancies will enhance the inspection process by allowing the fire inspector to focus on higher risk occupancies and ensuring there is adequate time to conduct thorough inspections of these higher risks to life and property. Shift personnel conducting the inspections should be trained and have successfully passed the California State Code Course.

Recommendation: The City should work with Monterey to implement company inspections to enhance the fire inspection process.

4. MODIFYING THE RETIREMENT CALCULATION FOR PERSONNEL WHO DO NOT PROMOTE IN THE ORGANIZATION.

An option to consider for the project team was the idea that personnel who do not promote in the organization after a certain period of time should be moved out and replaced with new personnel who would have a lower impact on the retirement calculation.

This idea is based on the fact that the current retirement reform will take many years to accomplish as all existing personnel are grandfathered into the higher calculation CalPERS plan and only new personnel can be factored into the 2.7% @ 57 plan, which has much lower costs to the City.

The project team does not believe the idea of forcing resignation on members of the organization who do not promote is of value for recruiting and retaining top-notch employees. Many personnel that are excellent line firefighters have no desire to promote to supervisory or management positions in the organization and should not be penalized for the decision to remain at a line level. Also, there is an issue in smaller organizations such Pacific Grove with promotional opportunities not being frequent enough to ensure all employees have an opportunity to promote within the organization.

Recommendation: The City should continue with the process of hiring and retaining quality employees regardless of whether they promote within the organization.

5. ENHANCING THE CONTRACT WITH MONTEREY.

As part of this study, the project team evaluated the current contract between the Cities of Pacific Grove and Monterey for providing fire protection services. A summary of the contract is included in the appendix of this report.

One key area of the contract that stood out as a possible area for improvement is the way personnel costs are factored in the contract. Currently Pacific Grove pays 100% of the costs for personnel assigned to the Pacific Grove Station plus overtime for back filling the station during vacancies (workman's' compensation, sick leave, vacation etc.). This lends itself to Pacific Grove experiencing high levels of overtime if personnel leave spikes for any reason. In fact in 2012 the average leave for personnel assigned to the Pacific Grove station 416 hours.

If the City were to move to a fixed staffing model the overtime fluctuation would be removed and costs would stabilize. Using the 416 hours as the basis for analysis the following costs could be expected under a fixed staffing model. Since fire personnel are schedule 2,912 hours per year, a leave factor of 416 hours results in an available rate of 86%. The following table illustrates the station staffing costs under a fixed approx using the top step of the MFD pay plan. Costs for Admin and Fire Prevention are factored using the current budget.

Position	Unit Cost	Total Units	Total
		Required	Estimated Cost
Staffing			
Captain	\$150,718	4.42	\$666,174
Engineer	\$130,216	4.42	\$575,555
Firefighter	\$124,089	4.42	\$548,474
TOTAL STAFFING COST			\$1,790,203
Administration			\$155,935
Fire Prevention			\$91,414
TOTAL CONTRACT COST			\$2,037,552

This approach would increase the total contract costs for Pacific Grove to \$2,037,552 (\$100,514 above current costs). While this is more expense that the current contracted amount, the true-up costs associated with back-filling the station would be eliminated, saving approximately \$192,100 in annual true-up costs, resulting in actual savings of \$91,586 in overtime expenditures for back-filling shift personnel since Monterey would be responsible for ensuring minimum staffing levels are maintained at the Pacific Grove station regardless of assignment.

Monterey may choose to use a leave factor consistent with the overall fire department for factoring these costs and should provide that number annually to Pacific Grove if the fixed staffing model is adopted.

Recommendation: The City should consider modifying the contract language to include a fixed cost for positions assigned to the Pacific Grove Fire Station.

APPENDIX A: PROFILE OF CURRENT ORGANIZATION AND OPERATIONS

This appendix provides organizational, operational, financial, and workload information regarding the provision of fire and emergency services in the City of Pacific Grove and surrounding jurisdictions (i.e., the Cities of Monterey and Carmel-by-the-Sea). The information contained in this document provides the project team with an overall understanding of current fire and EMS resources in order to assess the feasibility of alternative service delivery models, including:

- Creating a stand-alone City of Pacific Grove Fire Department.
- Contracting for fire services with CAL FIRE.
- Enhancing the current contract with Monterey Fire Department.
- Creating a joint powers authority (JPA), outside of CalPERS.
- Contracting for fire services with a private firm.
- Limiting fire response on EMS calls.
- Making EMS part of the fire department service offerings.
- Combining police and fire duties into a public safety operation.
- Introducing advanced fire-interruption technologies and/or improving on-site fire prevention capabilities.
- Improving fire prevention operations and improving the inspection process.
- Improving the current ISO rating.
- A change in the retirement calculation to include options for moving out personnel who do not promote in the organization.

The following sections discuss the overall operating and workload environment for the participating agencies.

1. THE CITIES OF PACIFIC GROVE, MONTEREY, AND CARMEL-BY-THE-SEA HAVE A POPULATION OF APPROXIMATELY 47,300 RESIDENTS COVERING 12.4 SQUARE MILES OF LAND.

To understand the overall context of the service delivery environment, the following table identifies the population change for the cities since 2008 according to US Census data:

	Sq. Miles Land	2008	2009	2010	2011	3-Year % Change
Pacific Grove	2.87	14,501	14,635	15,041	15,295	5.5%
Monterey	8.47	27,595	27,824	27,810	28,246	2.4%
Carmel	1.08	3,861	3,903	3,722	3,787	-1.9%
Total	12.42	45,957	46,362	46,573	47,328	2.98%

It is important to note that MFD provides fire protection for several entities, which are not reflected in the above United States Census figures including Sand City, Presidio, and two Navy facilities, which makes their population for this study 35,015. As shown above, the City of Pacific Groves' population has grown by over 5% since 2008, and represents a population density of 5,329 residents per square mile, versus 4,134 residents per square mile in Monterey, and 3,506 residents per square mile in Carmelby-the-Sea. In total, the population of these respective cities has grown by approximately 3% since 2008. It is important to note that the above figures illustrate the full-time residents of each city. There are also a significant number of part-time residents, visitors, tourists and daytime workforce employees in each of the cities.

2. TO PROVIDE FIRE SERVICES TO THESE RESIDENTS, THE CITIES UTILIZE FIVE FIRE STATIONS AND A TOTAL BUDGET ALLOCATION OF OVER \$12.7 MILLION.

The City of Monterey Fire Department is currently providing contract fire service to the Cities of Pacific Grove and Carmel-by-the-Sea. The table below summarizes the overall operation and budget impact to each of the cities over the past three fiscal years:

FY2010 - FY2012 Budget

	FY 2010	FY 2011	FY 2012	
Expenditure	Actual	Actual	Actual	% Change
Administration	PG \$185,864	PG \$182,273	PG \$155,935	-16.1%
	MFD \$817,070	MFD \$748,395	MFD \$928,670	
			CbS \$43,320	
	\$1,002,934	\$930,668	\$1,127,925	12.5%
Dunantian	DO \$400 F00	DO 0444 050	DO 604 444	22.40/
Prevention	PG \$136,532	PG \$141,258	PG \$91,414	-33.1%
	MFD \$511,211	MFD \$422,757	MFD \$289,472	
	¢c47.740	¢504.045	CbS \$22,258	27.00/
	\$647,743	\$564,015	\$403,144	-37.8%
Operations	PG \$1,541,701	PG \$1,477,213	PG \$1,689,689	9.6%
	MFD \$8,540,876	MFD \$8,573,080	MFD \$8,619,389	0.070
	= 40,010,010	CbS \$18,006	CbS \$813,389	
	\$10,082,577	\$10,068,299	\$11,122,467	10.3%
Training	PG \$55,193	PG \$ 38,567		
	MFD \$224,521	MFD\$ 165,204	MFD \$22,684	
	\$279,714	\$203,771	\$22,684	-91.9%
Emergency Preparedness	MFD \$39,913	MFD \$ 26,978	MFD \$94,935	237.9%
, .			. ,	
Total	\$12,052,882	\$11,793,730	\$12,771,155	5.96%

As shown above the overall budget for operating fire services increased approximately 6% from 2010 to 2012. This increase also included the addition of Carmel by the Sea as a contract agency with Monterey Fire Department in the 2012 fiscal year. The overall cost to Pacific Grove for fire protection services has increased approximately 1% during the period from \$1,919,290 to \$1,937,038.

Agency	Fire Station Location(s)	Summary of Operation
Pacific Grove	Fire Station #4 600 Pine Ave.	Daily contract staffing of 3 personnel, including 1 Captain, 1 Engineer and 1 Firefighter.
		Response from the station is a 3-person engine company. The station is designated as a "core station" and is back-filled by other MFD apparatus when the engine is committed to a scene.
		Private ambulance provider (AMR) houses an ambulance at this station.
		Total Budget of \$1,937,038
Monterey	Fire Station #1 600 Pacific Street Fire Station #2 582 Hawthorne Street Fire Station #3 401 De la Vina Avenue	Total allocation of 49 full-time equivalent positions, including 1 Fire Chief, 1 Assistant Fire Chief, 1 Admin Analyst, 1 Executive Assistant, 1 Deputy Fire Marshal, 1 Fire Prevention Technician, 3 part-time Fire Inspectors, 1 Part time Emergency Coordinator, 3 Division Chiefs, 12 Fire Captains, 12 Fire Engineers and 15 Firefighters.
		Total Budget of \$9,955,150
Carmel by the Sea	Fire Station #5 6 th Avenue between Mission and San Carlos	Daily contract staffing of 3 personnel including 1 Captain, 1 Engineer and 1 Firefighter. Daily staffing of 2 Carmel by the Sea employees to staff the ambulance, which is not part of the fire department, but a separate entity. MFD does handle administrative oversight of the ambulance service.
		Total Budget of \$878,967* *For portion of FY 2012 contracted

The combined budget for the shared services approach to providing fire services is approximately \$12.8 million. The cost for Pacific Grove specifically is approximately \$2 million. This equates to a per capita cost of \$126.65 for Pacific Grove, lower than the most recent national average of \$164.34 per capita based on a recent ICMA survey. Monterey has a per capita cost of \$284.31.

3. THE MONTEREY FIRE DEPARTMENT RESPONDED TO OVER 6,400 CALLS FOR SERVICE DURING FY 2011 / 2012.

The project team obtained detailed calls for service data from the Monterey Fire Department to understand individual station and total field workload activity. The table below shows the total calls for service per hour, per day, for all five fire stations during FY 2011-12:

			Da	y of We	ek				
									Avg./
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Day
0000	37	25	22	21	23	24	23	175	0.48
0100	51	15	22	14	16	22	34	174	0.48
0200	28	15	13	15	16	12	39	138	0.38
0300	25	16	9	9	16	15	22	112	0.31
0400	18	12	9	14	11	17	16	97	0.27
0500	12	18	9	9	20	14	17	99	0.27
0600	22	20	21	23	22	31	26	165	0.45
0700	21	32	35	35	36	31	23	213	0.58
0800	20	41	59	44	49	38	30	281	0.77
0900	37	57	43	67	40	39	42	325	0.89
1000	40	68	45	73	59	66	42	393	1.08
1100	52	64	52	58	58	58	60	402	1.10
1200	57	49	66	60	64	53	61	410	1.12
1300	51	60	49	59	54	70	54	397	1.09
1400	50	51	51	62	48	52	67	381	1.04
1500	55	65	63	49	51	68	57	408	1.12
1600	54	50	69	50	48	63	50	384	1.05
1700	47	47	63	50	51	57	56	371	1.02
1800	57	51	45	38	37	39	53	320	0.88
1900	44	53	24	40	42	49	46	298	0.82
2000	41	28	43	30	48	40	54	284	0.78
2100	34	38	28	30	26	53	40	249	0.68
2200	28	28	24	25	31	47	36	219	0.60
2300	23	25	18	25	19	32	40	182	0.50
Total	904	928	882	900	885	990	988	6,477	17.75

As this shows, the Monterey Fire Department responded to 6,477 emergency and non-emergency calls for service during FY 2011 / 2012, equating to nearly 18 calls for service per day. It is important to note that this information is only illustrative of six (6) months of service in Carmel-by-the Sea.

(1) The Pacific Grove Fire Station (#4) Responded to 1,399 Calls for Service During FY 2011 / 2012.

The following table shows the total number of emergency and non-emergency calls for service:

			Day	y of Wee	k				
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Avg. / Day
0000	6	4	4	5	4	9	2	34	0.09
0100	11	3	4	3	2	4	4	31	0.08
0200	3	3	2	5	3	2	7	25	0.07
0300	8	2	4	3	3	6	6	32	0.09
0400	3	3	2	5	1	6	3	23	0.06
0500	2	3	0	0	4	1	4	14	0.04
0600	8	4	5	10	12	12	6	57	0.16
0700	4	5	12	7	14	3	6	51	0.14
0800	2	6	16	11	11	6	9	61	0.17
0900	16	10	7	13	10	9	12	77	0.21
1000	10	13	11	11	15	12	10	82	0.22
1100	11	11	9	14	13	10	14	82	0.22
1200	9	8	21	13	13	8	14	86	0.24
1300	11	11	14	11	14	13	9	83	0.23
1400	11	11	15	13	6	15	13	84	0.23
1500	9	11	12	14	10	21	12	89	0.24
1600	11	10	11	14	9	11	10	76	0.21
1700	13	9	12	7	10	13	10	74	0.20
1800	12	12	10	7	8	5	14	68	0.19
1900	11	14	7	11	13	10	6	72	0.20
2000	9	3	11	7	12	8	9	59	0.16
2100	5	8	6	8	6	13	9	55	0.15
2200	6	6	5	3	6	12	6	44	0.12
2300	5	6	5	7	3	7	7	40	0.11
Total	196	176	205	202	202	216	202	1,399	3.83

As this shows, there were a total of 1,399 unique incidents in Pacific Grove during FY 2011-12. This equates to an average of 3.83 incidents per day. These incidents required a total of 1,676 unit responses to mitigate the emergency situation. Of these calls, 1,118 were code 3 responses, with the remaining 281 codes 1 or 2 responses.

The following table shows the breakdown of responses by station for the 1,676 unit responses to incidents in Pacific Grove during FY 2011-12:

PG Unit Response FY 2011-12

Response From Station	Total
Station 1	238
Station 2	196
Station 3	8
Station 4	1,232
Station 5	1
Station 6	1
Total	1,676

4. THE CITY OF PACIFIC GROVE PAYS ACTUAL AND PERCENTAGE COSTS ACCORDING TO THE CONTRACTUAL AGREEMENT.

(1) The City of Pacific Grove Pays 100% of the Costs for Staffing and Operating Fire Station #4.

According to the contract documents, Pacific Grove is responsible for 100% of the costs associated with staffing the Pacific Grove fire station. This includes all salary and benefit costs for the nine (9) personnel assigned to Fire Station #4.

The City of Pacific Grove also funds one part-time fire inspector position for the purpose of conducting business inspections for fire code violations.

During vacancies if adequate staff is not available and a position is filled, Pacific Grove is responsible for 100% of the overtime costs related to ensuring a 3-person constant staffing at Station #4.

(2) The City of Pacific Grove Pays 15% of the Costs for Headquarters Staffing.

According to the contract documents, the City of Pacific Grove is responsible for a 15% share of costs related to headquarters staffing of the Monterey Fire Department.

5. THE MONTEREY FIREFIGHTERS HAVE A 2-TIER RETIREMENT FORMULA.

(1) Monterey Firefighters Are Part of CALPERS.

Monterey Firefighters are part of the California Public Employee Retirement System (CalPERS). Current Firefighters have an employee contribution of 12% with a retirement formula of 3% @ 50 according to the single highest year of pay.

New firefighters will be included in the pension reform approved by the Monterey Firefighters which will include a 12% employee contribution with a retirement formula of 2.7% @ 57 according to the final 3-year salary average.

APPENDIX B: CONTRACT LANGUAGE

The table below summarizes the primary sections of the Agreement to Provide

Fire Services between the Cities of Monterey and Pacific Grove.

Section	Language
Article I: Definitions	1.1 Capital Improvements : Structural repairs and similar improvements, which are the type of improvements which would be added to the tax "basis" if the property were owned by a non-governmental entity.
	1.2 Fire Services: Those services described in Article IV
	1.3 Fiscal Year : The annual period commencing on July 1 and ending June 30.
Article II: Term of Agreement	2.1 Initial Term: The initial term of the Agreement is from 12:00 midnight on December 16, 2008 through 11:59 p.m. on December 31, 2013.
	2.2 Extension of Term: The Agreement may be extended for additional five (5) year increments no later than June 30 immediately preceding the Agreements expiration.
	2.3 Termination: Either party may terminate the Agreement by providing 12 months' written notification to the other party, and the term of the Agreement or any extension thereof shall be shortened accordingly.
	2.4 Option to Create Joint Powers Authority: At any time the Parties may, by mutual written agreement, terminate the Agreement with the intent of forming a Joint Powers Authority to provide fire protection services to both jurisdictions.

Section	Language
Article III: Facilities and Equipment	3.1 Title : Pacific Grove shall retain title to all existing Pacific Grove real property, buildings, equipment and apparatus.
	3.2 Use of Real Property, Equipment and Apparatus : For the duration of the Agreement, Pacific Grove shall lease to Monterey all real property, building, equipment and apparatus to enable Monterey to provide services to Pacific Grove pursuant to this Agreement as well to provide local mutual and automatic mutual aid, statewide master mutual aid and assistance by hire pursuant to California Fire Assistance Agreement. Monterey may also, when necessary, use any apparatus as relief apparatus in Monterey.
	3.3 Maintenance and Replacement: Pacific Grove shall bear all costs to maintain and replace all real property, buildings, equipment and apparatus and may create such reserves for depreciation as may be necessary and prudent for replacement of equipment and apparatus; provided however, that should an insurable event result in irreparable damage to any such real property, buildings, equipment and apparatus, Pacific Grove shall only bear the portion of the replacement cost that exceeds the amount of any payment for said irreparable damage received under the insurance coverage described in Section 8.3 of the Agreement. Pacific Grove Fire Services budget shall contain line item descriptions for maintenance and replacement of such items.
	3.4 Repair : In the event that any real property, buildings, equipment and apparatus described in Exhibit A and used or operated by Monterey employees for the provision of Fire Services pursuant to this agreement is damaged, Pacific Grove shall bear the costs of repairing such real property, buildings, equipment and apparatus.
	3.5 Use of Command Vehicles : For the duration of the Agreement, Pacific Grove shall lease to Monterey all vehicles described in Exhibit B for use as command vehicles. Monterey shall perform all necessary maintenance and repair of the command vehicles described in Exhibit B. In the event that any vehicle described in Exhibit B must be replaced, Monterey shall replace it and shall account for depreciation of said vehicles. In the event of termination of this Agreement, Pacific Grove shall purchase any vehicle replaced by Monterey for its depreciated value.
	3.6 Vehicle Not Used to Provide Service : The vehicle described in Exhibit C of this agreement shall not be used to provide services pursuant to this Agreement.

Section	Language
Article IV: Duties of Monterey	4.1 Scope of Services : Monterey shall provide Fire Services within the jurisdictional area of Pacific Grove as more specifically described in Section 4.2. In providing such services, Monterey shall administer the provisions of the Pacific Grove Fire Code and other Pacific Grove rules, regulations, policies and procedures as applicable to this Agreement. Throughout the term of the Agreement and as needed or as requested by Pacific Grove, Monterey shall consult with Pacific Grove regarding Monterey's implementation of the provisions of this Agreement.
	4.2 Description of Fire Service to be Provided by Monterey : Monterey's duties to provide Fire Services under this agreement shall be the following:
	(a) Fire Department Administration: Monterey shall provide the following administrative and support services necessary to maintain Fire Services within Pacific Grove.
	(i) Fire Services program planning and administration consistent with the terms and conditions of this Agreement. (ii) Development and administration of the annual Pacific Grove fire
	services budget. (iii) Coordination and administration of Pacific Grove Fire Services subprograms as authorized and funded within the Pacific Grove fire services budget, including: (A) Ocean Rescue
	(B) Reserve Firefighters (iv) Delivery and documentation of all federal and state-mandated firefighter training as well as provision of additional training as authorized and funded within the Pacific Grove fire services budget.
	(v) Provision of a Chief Fire Officer or qualified acting Chief Fire Officer, or if no Chief Officer is available, a Company Officer or qualified acting Company Officer, to assist with emergency and disaster management within the Pacific Grove Emergency Operations Center as requested by the Pacific Grove City Manager or his or her designee.
	(vi) Coordination of procurement of all operational supplies, services, and equipment as necessary to provide the Fire Services outlined in this Agreement.
	(vii) Review of all development and building plans to ensure compliance with applicable fire and life safety codes and regulations, as well as inspection of fire protection and fire alarm systems for compliance with applicable codes and standards. Pacific Grove shall collect and retain any fees collected for issuance of building permits.
	(viii) Fire safety inspections of all state-mandated occupancies within Pacific Grove. (ix) Issuance of operational permits to, and conduct associated
	inspections of applicable businesses within the City of Pacific Grove as required in Appendix Chapter 1, Section 105.6 of the 2007 California Fire Code and as that Section may be amended in the future. Pacific Grove shall collect and retain any fees for said operational permits and inspections. (x) Investigation of all fires to establish origin and cause as well as
	coordination with the Pacific Grove Police Department in all criminal prosecutions resulting from such investigations. (xi) Maintenance of sufficient, segregated records relating to provisions of Fire Services in Pacific Grove, including, but not limited to response time

Section	Language	
	data for all incident responses described in Section 4.2(b) of this Agreement. At a minimum, such records shall be sufficient to meet any and all federal and state reporting obligations as they relate to the provision of Fire Services, including but not limited to annual audits, mutual aid, and reimbursement for disaster response, hazardous material response or other incident response.	
	(b) Incident Response within Incorporated Limits of Pacific Grove. (i) General Service Criteria: The following criteria shall apply to all services identified in Section 4.2(b) (ii)-(vii): (A) Response Area: Monterey shall provide services identified in Sections 4.2(b) (ii)-(vii) below to all areas within the incorporated limits of Pacific Grove.	
	(B) <u>Chief Officer Coverage</u> : Monterey shall provide a qualified Chief Fire Officer or acting Chief Fire Officer, to be immediately available for response and management of emergency incidents as necessary to provide incident command and coordination functions with the jurisdictional boundaries of Pacific Grove, including the authority to commit expenditures of Pacific Grove funds to mitigate an emergency incident consistent with the ordinances, policies and procedures of Pacific Grove. In the event the Monterey Duty Chief Officer is otherwise committed to another emergency incident, an administrative Chief Officer or off-duty Operations Chief Officer shall be recalled and assigned to provide operational Duty Chief coverage as soon as possible.	
	(C) Staffing: Monterey shall provide at least three (3) qualified Monterey Fire personnel, meeting minimum federal and state-mandated training requirements for their respective classifications and responsibilities assigned to the Pacific Grove fire station to provide Fire Services pursuant to this Agreement each and every day of the term of this Agreement. (D) Response Time: Monterey acknowledges the existing Pacific Grove response performance standard for all emergency calls of five (5) minutes or less from receipt of an alarm a the responding station to arrival of the first response team on scene. Monterey will strive to maintain that response standard with existing facilities and apparatus, and will provide a monthly response summary report to Pacific Grove by the 15 th day of the following month delineating the response time for each incident within Pacific Grove. (E) Dispatch Service: Pacific Grove shall continue to contract with and pay the Monterey County Department of Emergency Communications for all dispatch services.	
	(c) Statewide Mutual Aid and Assistance by Hire: Monterey may respond to requests for mutual aid or assistance-by-hire by other agencies within the State of California pursuant to the California Statewide Master Mutual Aid Agreement or the California Assistance Agreement, as approved by the Fire Chief or his or her authorized designee. Monterey shall credit or reimburse Pacific Grove for any reimbursement(s) received by Monterey relating to use of personnel assigned to the Pacific Grove station and/or Pacific Grove-owned apparatus.	
	(d) Miscellaneous (i) Weed Abatement: Monterey will enforce the provisions of Chapter 12.12 of the Pacific Grove Municipal Code relating to Weed Abatement.	

Section	Language	
	(ii) Fireworks: Monterey will enforce the provisions of Chapter 11.84 of the Pacific Grove Municipal Code relating to Fireworks. (iii) Community Outreach and Education: Consistent with operational capacity and the Pacific Grove Fire Services budget, Monterey shall coordinate the planning and development of fire prevention and safety education programs for schools, businesses, community associations, child-care providers and other members of the community. Fire Prevention and life safety programs will be tailored to educate Pacific Grove residents and business community in order to help preserve life and property. (iv) False Fire Alarms: Monterey will enforce the provisions of Chapter 6.02.040 (Schedule of fees and service charges) of the Pacific Grove Municipal Code relating to the recovery of costs associated with responses to false fire alarms. (v) Hazardous Materials Releases: Monterey will enforce the provisions of 6.02.040 (Schedule of fees and service charges) of the Pacific Grove Municipal Code relating to the recovery of costs associated with responses to releases of hazardous materials.	
	 4.3 Inspection of Pacific Grove-Owned Property and Notification of Necessary Maintenance and Repairs: Monterey agrees to regularly inspect all real property, buildings, equipment and apparatus descried in Exhibit A to ensure they meet the appropriate and applicable fire services standards. (a) In the event that any real property, buildings, equipment or apparatus requires routine maintenance or is in a condition that presents an immediate or 	
	imminent threat to employees or public health or safety, Monterey agrees to notify Pacific Grove immediately of the existence of such conditions. (i) Monterey shall not use any equipment and apparatus requiring maintenance or repair in the provision of Fire Services pursuant to this agreement until such time as Pacific Grove has satisfactorily performed the necessary maintenance or repairs.	
	(ii) Monterey shall ensure that access to any real property of buildings described in Exhibit A which is in a condition that presents an immediate or imminent threat to employee or public health and safety is restricted so as to minimize the threat posed to employee or public health or safety. (iii) In the event that a condition gives rise to an immediate or imminent threat to public or employee health or safety, the Parties agree that the Fire Chief, or his or her designee, shall have the authority to take any actions necessary to preserve public or employee heath or safety. Such action may include prohibiting the occupancy or use of anything described in Exhibit A until the conditions giving rise to the threat are remedied.	
	(b) Monterey shall inspect any maintenance and repairs performed pursuant to Section 4.4 of this Agreement to ensure that such maintenance and repairs have ensured that the real property, buildings, equipment and apparatus are so maintained or repaired to meet the appropriate and applicable fire service standards.	
	(c) In the event that any Capital Improvements authorized in the Pacific Grove fire services budget are performed on Pacific Grove-owned real property or buildings described in Exhibit A, Monterey shall coordinate the performance of such Capital Improvements with Pacific Grove.	

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Section	Language		
	(d) In the event that Pacific Grove has determined, pursuant to Section 5.1(b) of this Agreement, that maintenance or replacement of any Pacific Grove-owned equipment and apparatus described in Exhibit B will not be sufficient to ensure that said equipment and apparatus meet applicable fire services standards, Monterey shall coordinate the replacement of any such equipment or apparatus with Pacific Grove as authorized in the Pacific Grove Fire Services budget.		
	4.4 Budget Projections and Accounting of Actual Expenses: Monterey shall provide Pacific Grove with the budget projections and detailed accounts of actual as expenses as further described in Article VI of this Agreement.		
Article V: Duties of Pacific Grove	5.1 Payment for Fire Services . Pacific Grove shall compensate Monterey for the provision of Fire Services as further described in Article VI of this Agreement.		
	5.2 Maintenance and Repair of Equipment . Pacific Grove agrees to maintain at its own cost all real property, buildings, equipment and apparatus, as described in Exhibit A to this Agreement, in a safe, habitable, and serviceable condition at all times.		
	(a) Upon notification by Monterey, Pacific Grove shall, as soon as possible thereafter, perform such routine maintenance or repairs necessary to ensure that any real property, buildings, equipment and/or apparatus remain in a safe, habitable and serviceable condition.		
	(b) IN the event that it is not possible to repair any buildings, equipment and apparatus sufficient to ensure that they are in a safe, habitable, and serviceable condition, Pacific Grove shall replace the equipment or apparatus in question.		
	(c) In the event that Pacific Grove fails to respond in a timely manner to notification pursuant to this section, Monterey may undertake the necessary maintenance, repair or replacement. Pacific Grove agrees to reimburse Monterey for any costs is so incurs, including applicable administrative expenses associated with any such maintenance, repair or replacement.		
	(d) In the event that Pacific Grove contracts or otherwise hires a third-party contractor to perform any necessary maintenance, repair or replacement pursuant to this Article V, Pacific Grove shall require any such third-party contractor to have general liability insurance with minimum limits of \$1,000,000 per occurrence and \$2,000,000 in the aggregate. Both Pacific Grove and Monterey shall be named as additional insureds on any such coverage.		

Section	Language		
Article VI: Fees for Service	6.1 Fees for Services. Pacific Grove agrees to compensate Monterey for all services provided pursuant to the terms and conditions of this Agreement.		
	(a) The period from the effective date of this Agreement through June 30, 2010 shall be the initial period. For the 2008-2009 and 2009-2010 Fiscal Years, Monterey shall provide Pacific Grove with an Initial Period. Budget projection describing the total anticipated costs of providing Fire Services for each Fiscal Year or portion thereof. The Initial Period budget projection shall be in the form of, and shall use the same methodology as, the Initial Period budget projection model contained in Exhibit D. Monterey shall provide Pacific Grove with the Fiscal Year 2009-2010 budget projection to Pacific Grove no later than March 15, 2008.		
	(b) No later than March 15, 2010 and no later than March 15 each year thereafter, Monterey agrees to provide Pacific Grove with a Fiscal Year budget projection describing the total anticipated costs of providing Fire Services for the next Fiscal Year. Such Fiscal Year budget projections shall bin in the same form of, and shall use the same methodology as, the Ongoing Years budget projection model contained in Exhibit E.		
	(c) Beginning on July 15 of every Fiscal Year, and on the first day of each month of the Fiscal Year thereafter, Pacific Grove agrees to remit to Monterey one twelfth (1/12) of the Fiscal Year budget projection. Notwithstanding the foregoing, in the first fiscal year that Fire Services are provided pursuant to this Agreement, the initial payment shall be due on the 15 th day of the first month that Monterey provides Fire Services to Pacific Grove, and the amount of the payments will be prorated based on the budget projection for the partial year and the number of whole and partial months that service is provided to Pacific Grove during the first Fiscal Year.		
	(i) In the event that Pacific Grove fails to pay the entire amount described in Section 6.1(c) above within thirty (30) days of the due date, interest shall accrue to the unpaid balance at an annual equivalent rate equal to the Prior Year Penalty Factor, determined from the date the payment was originally due. The Prior Year Penalty Factor shall be the interest rate earned by Monterey's entire investment portfolio for the preceding Fiscal Year plus two percent (2%). (ii) Failure by Pacific Grove to pay the amount(s) due pursuant to Section 6.1(c) plus the interest due pursuant to Section 6.1 (c)(i) within three (3) months of the due date shall constitute a material breach of this Agreement. Notwithstanding Article II of this Agreement, in the event such material breach, Monterey shall have the right to terminate this Agreement upon the provision to Pacific Grove of three (3) months written notice of said termination, and the Term of this Agreement or any extension thereof shall be shortened accordingly. The termination shall not be effective if Pacific Grove pays Monterey all amounts due within thirty (30) days of such notice. Termination of this Agreement shall be shortened accordingly. Termination of this Agreement pursuant to this section shall not be construed to limit the right of Monterey to obtain, by any means available at law, any monies due to it from Pacific Grove pursuant to this Agreement.		

Section	Language		
	6.2 Accounting . No later than November 1 of each year, Monterey shall provide Pacific Grove with a detailed account of the actual costs incurred by Monterey to provide Fire Services pursuant to this Agreement for the preceding Fiscal Year. Said account shall also include the Service Year Factor.		
(a) If the actual costs are greater than the Fiscal Year budget project Pacific Grove shall, no later than ninety (90) calendar days after recedent detailed account of actual costs, remit to Monterey the difference between Fiscal Year budget projection and the actual cost. In the alternative, Grove may elect to defer payment of the difference or any portion the pursuant to the provisions of subsection 6.2(c) of this Agreement.			
	(b) If the actual costs are less than the Fiscal Year budget projection, Monterey shall, no later than ninety (90) calendar days after providing Pacific Grove with the detailed account of actual costs, remit to Pacific Grove the difference between the Fiscal Year budget projection and the actual costs. IN the alternative, Monterey may elect to defer payment of the difference or any portion thereof pursuant to the provisions of subsection 6.2(c) of this Agreement.		
	(c) Any party owing an outstanding amount to the other party pursuant to section 6.2(a) or section 6.2(b) of this Agreement may elect to pay the outstanding amount on July 15 at the beginning of the next Fiscal Year, at which time the indebted party shall pay the amount outstanding plus an amount equal to the amount outstanding multiplied by the Service Year Factor. Any indebted Party so electing make the outstanding payment on July 15 at the beginning of the next Fiscal Year shall deliver written notice to the other Party informing of its intent no later than the ninetieth (90 th) day after receipt of the detailed account of actual costs.		
	(d) If the total payment described in section 6.2(c) of this Agreement is not made by the end of that July, any amount outstanding shall accrue interest at an annual equivalent rate equal to the Service Year Factor plus two percent (2%), calculated from the July 15 th due date.		
	(e) Failure by any indebted party that has not given notice of its intent to postpone payment of the outstanding amount pursuant to either Section 6.2(a) or 6.2(b) within ninety (90) days after receipt of the detailed account of actual costs shall constitute a material breach of this Agreement. In the event that an indebted Party has given notice of its intent to postpone payment of the outstanding amount pursuant to Section 6.2(c), failure to make the payment owed pursuant to either Section 6.2(a) or 6.2(b0, plus the interest calculated thereon pursuant to the provisions of Section 6.2(d), within ninety (90) days of the due date, shall constitute a material breach of this Agreement. Notwithstanding Article II of this Agreement, in the event of such material breach, the non-breaching Party shall have the right to terminate this Agreement upon the provision to the breaching Party of ninety (90) days' notice of said termination, and the Term of this Agreement or any extension thereof shall be shortened according. Termination of this Agreement pursuant to this Section shall not be construed to limit the right of the non-breaching Party to obtain, by any means available at law, the amount still owed by the breaching Party.		

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Section	Language		
	(f) At any time during the term of this Agreement, the formulas, approaches, and Contract Percentage Drivers described in Article 6 and in Exhibits D and E of this Agreement may be modified upon the mutual written agreement of the City Managers of Monterey and Pacific Grove. In the event that Monterey contracts to provide fire services to another jurisdiction or terminates an existing contract for the provision of fire services to another jurisdiction, the Parties' City Managers shall review the Contract Percentage Drivers in Exhibits D and E.		
	6.3 Transferred Leave Bank. Pacific Grove shall calculate the value of any unused and unpaid leave time accrued by Pacific Grove employees hire by Monterey pursuant to Article VII of this Agreement and transferred to Monterey at the time Monterey hires the employees. The value of such leave time shall be calculated at the hourly rates Pacific Grove would pay the employees on December 15, 2008 if they used the leave time while still employed by Pacific Grove. The total value of the transferred leave times for said employees hired by Monterey shall be the Leave Balance. During the term of this agreement, the value of the Leave Balance shall be reduced by the amount Pacific Grove pays Monterey each year to compensate Monterey for direct expenses attributable to annual leave payoffs and termination leave payoffs, as those terms are used in Exhibit D and Exhibit E of this Agreement. Upon termination of this Agreement, Pacific Grove shall pay Monterey the outstanding value of the Leave Balance, if any.		
Article VII: Personnel 7.1 Offers of Employment to Pacific Grove Employees. On or after On 27,2008, but no later than November 17,2008, Monterey shall make conditional offers of employment to all persons employed by Pacific Grows "safety" employees in its Fire Department ("Current Employees") and are unconditional offer of employment to the person employed by Pacific Grows the Fire Prevention Inspector. The offer to the Fire Prevention Inspector for half-time work and will be to commence employment on December 12008.			
	7.2 Class A Physical Examination. During the period November 3, 2008 to December 3, 2008, Monterey will schedule and all Current Employees receiving conditional offers shall submit to a "Class A" examination by a physician retained by Monterey as provided by the forms attached hereto as Exhibit I. Monterey shall pay all costs of the Class A examination.		

Section	Language		
Article VIII:	8.1 Mutual Indemnification		
Indemnification and Insurance	(a) Each Party shall indemnify, defend and hold harmless the other party, to the extend allowed by law in proportion to fault, against any and all third-party liability for claims, demands, costs or judgments involving bodily injury, personal injury, death, property damage or other costs and expenses arising or resulting from the acts or omissions of its own officers, agents, employees or representatives carried out pursuant to the obligations of this Agreement.		
	(b) Each Party shall protect, defend, indemnify and hold harmless the other party from and against any and all liabilities, losses, damages, expenses or costs, whatsoever, which may arise against or be incurred by the other Party as a result of or in connection with any actual or alleged breach of this Agreement by either Party.		
	(c) Monterey shall be responsible for all third party liability, including third party property damage, caused by negligence or wrongful acts of Monterey officers, officials, and employees resulting from Monterey's operation of Pacific Grove vehicles and equipment, or resulting from maintenance performed by Monterey pursuant to Section 5.2(c) of this Agreement.		
	8.2 Mutual Indemnification Obligations Survive Termination. As to activities occurring or being carried out in performance of this Agreement and during the term of this Agreement, the obligations created by Section 8.1 shall survive termination of this Agreement.		
	8.3 Public Liability and Property Insurance.		
	(a) Each Party shall maintain in effect, at its own cost and expense, the following insurance coverage provided either through a bona fide program of self-insurance, commercial insurance policies, or any combination thereof:		
	(i) Commercial general liability or public liability with minimum limits of \$1,000,000 per occurrence and \$2,000,000 in the aggregate. (ii) Auto liability including owned, leased, non-owned and hired automobiles, with a combined single limit of not less than \$1,000,000 per occurrence and \$2,000,000 in the aggregate. (iii) If a Party employs others in the performance of this Agreement, that Party shall maintain Workers' Compensation in accordance with California Labor Code section 3700 with a minimum of \$1,000,000 per occurrence for employer's liability, for the duration of time that such workers are employed. (iv) All risk property insurance, excluding earthquake and flood, on all permanent property of an insurable nature in an amount sufficient to cover at least 100% of the replacement costs of said property. In any event, Pacific Grove shall maintain property insurance coverage for all the real property, buildings, equipment and apparatus described in Exhibit A. (b) All insurance required by this Agreement shall:		
	(i) Be placed (1) with companies admitted to transact insurance business in the State of California and with a current A.M. Best rating of less than A:VI or with carriers with a current A.M. Best rating of no less than A:VII; or (2) disclosed self-insurance with limits acceptable to the other.		

CITY OF PACIFIC GROVE, CALIFORNIA Analysis of Alternative Approaches to Providing Fire Protection Services

Section	Language			
	(ii) Provide that each Party's insurance is primary and non-contributing insurance to any insurance or self-insurance maintained by the other Party and that the insurance of the other Party shall not be called upon to contribute to a loss covered by a Party's insurance.			
	(c) Prior to December 16, 2008, each Party shall file certificates of insurance with the other Party evidencing that the required insurance is in effect.			
	8.4 Worker' Compensation.			
	(a) Monterey shall provide Pacific Grove an endorsement that its Workers' Compensation insurer waives the right of subrogation against Pacific Grove, its officers, officials, employees and volunteers for all claims on or after the effective start date of this Agreement during the tenure of said Agreement.			
	(b) This Agreement shall not take effect unless and until the Parties enter into a separate agreement regarding allocation of liability for workers' compensation benefits for Current Employees of Pacific Grove.			

Section	Language		
Article IX: Miscellaneous	9.1 Amendments to Agreement. No part of this Agreement shall be altered or amended without written agreement of the signatory Parties, except that Sections 6.1 and 6.2 of this Agreement as well as exhibits to this Agreement may be amended by mutual written agreement of the City Managers.		
	9.2 Assignment . The rights and obligations of the Parties under this agreement are not assignable and shall not be delegated without the prior written approval of the other party's City Manager.		
	9.3 Dispute Resolution . The Parties recognize that this Agreement cannot represent a complete expression of all issues, which may arise during the performance of the Agreement. Accordingly, Monterey and Pacific Grove agree to meet and confer in good faith over any issue not expressly described herein to the end that Pacific Grove will obtain the best Fire Services possible under the most favorable economic terms and that Monterey will be fairly and adequately compensated for the services it provides hereunder.		
	It is the Parties' intention to avoid the cost of litigation and to resolve any issues that may arise amicably if possible. To that end, the Parties agree to meet within ten (10) business days of a request made by the other party in writing to discuss the issues and attempt to resolve the dispute. If the dispute is not resolved after that meeting, the parties agree to mediate the dispute within 30 calendar days of the meeting or as soon thereafter as possible. The mediator will be chosen by mutual agreement of the parties. The costs of the mediation will be borne by the Parties equally. No party may initiate litigation prior to the conclusion of mediation. IN any action brought under this Agreement, the prevailing Party shall be entitled to recover its actual costs and attorney fees pursuant to California Civil Code section 1717.		
	9.4 Exhibits . The following Exhibits are attached hereto and incorporated as if fully set forth herein:		
	Exhibit A: Pacific Grove Facilities and Equipment Leased to Monterey Exhibit B: Pacific Grove Command Vehicles leased to Monterey Exhibit C: Pacific Grove Vehicles not Leased to Monterey Exhibit D: Initial Period Budget Projection Model Exhibit E: Ongoing Year Budget Projection Model Exhibit F: Agreement Between the City of Pacific Grove, the City of Monterey, the Pacific Grove Firefighters' Association and Monterey Firefighters' Association Exhibit G: Agreement Between the City of Pacific Grove, the City of Monterey, the Pacific Grove Fire Management Employees' Association and the Fire Management Association Exhibit H: Waiver and Consent to Transfer Exhibit I: Class A Medical Examination Requirements		
	9.5 Notices . All notices required or permitted hereunder shall be deemed sufficiently given if delivered by hand, electronic mail, or by United States mail, postage prepaid, addressed to the Parties at the addresses set forth below or to such other address as may, from time to time, be designated in writing.		

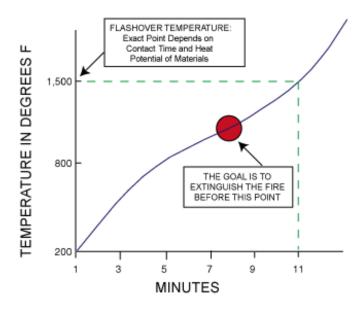
APPENDIX C: IMPORTANCE OF PERFORMANCE MEASURES

1. PERFORMANCE MEASURES FROM FIXED STATION LOCATIONS.

This discussion focuses on why there is a movement to use performance measures focusing on the drive time capability from the fixed station locations. The project team referred to a series of performance measures developed by the American Heart Association, the National Fire Protection Association and others for benchmark response time targets. These targets are derived from a series of initiatives that examine the ability of first responders to address two issues: a typical room and contents fire and a cardiac arrest. The objective in the first example is to mitigate the fire before "flashover" occurs – the point at which the fire leaves the room of origin and begins to impact the remainder of the structure or neighboring structures. The objective in the second example is to enhance survivability for cardiac arrest patients (and by extension to improve the health outcome of those suffering from trauma or other serious illnesses).

The chart, that follows, shows a typical flashover curve for interior structure fires. The point in time represented by the occurrence of flashover is critical because it defines when all of the contents of a room become involved in the fire. This is also the point at which a fire typically shifts from "room and contents" to a "structure" fire – involving a wider area of the building and posing a potential risk to the structures surrounding the original location of the fire.

Generalized Flashover Curve



It needs to be pointed out that this exhibit depicts a fire from the moment of inception – not from the moment that a fire is detected or reported. This demonstrates the criticality of early detection and fast reporting as well as the rapid dispatch of responding units. This also shows the critical need for a rapid and sufficiently staffed initial response – by quickly initiating the attack on a fire, flashover can be averted. The points, below, describe the major changes that occur in a fire when flashover occurs:

- It is the end of time for effective search and rescue in a room involved in the fire.
 It means that likely death of any person trapped in the room either civilian or firefighter.
- After this point in a fire is reached, portable extinguishers can no longer have a successful impact on controlling the blaze. Only larger hand-lines will have enough water supply to affect a fire after this point.
- The fire has reached the end of the growth phase and has entered the fully developed phase. During this phase, every combustible object is subject to the full impact of the fire.
- This also signals the changeover from "contents" to "structure" fire. This is also the beginning of collapse danger for the structure. Structural collapse begins to

become a major risk at this point and reaches the highest point during the decay stage of the fire (after the fire has been extinguished).

It should be noted that not every fire will reach flashover – and that not every fire will wait for the 8-minute mark to reach flashover. A quickly responding fire crew can do things to prevent or delay the occurrence of flashover. These options include:

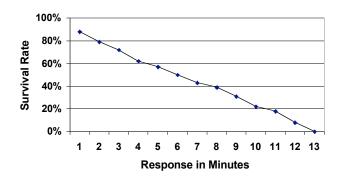
- Application of portable extinguisher or other "fast attack" methodology.
- Venting the room to allow hot gases to escape before they can cause the ignition of other materials in the room.
- Not venting a room under some circumstances this will actually stifle a fire and prevent flashover from occurring.

Each of these techniques requires the rapid response of appropriately trained fire suppression resources that can safely initiate these actions. In the absence of automatic fire suppression systems, access to interior fires can be limited by a safety requirement related to staffing levels. OSHA and related industry standards require the presence of at least two firefighters on the exterior of a building before entry can be made into a structure in which the environment has been contaminated by a fire. In the absence of a threat to life demanding immediate rescue, interior fire suppression operations are limited to the extent that a fire service delivery system can be staffed to assure a minimum of four people actively involved in firefighting operations.

The second issue to consider is the delivery of emergency medical services.

One of the primary factors in the design of emergency medical systems has been the ability to deliver basic CPR and defibrillation to the victims of cardiac arrest. The chart, below, demonstrates the survivability of cardiac patients as related to time from onset:

% Survival Rate



This graph illustrates that the chances of survival of cardiac arrest diminishes approximately 10% for each minute that passes before the initiation of CPR and/or defibrillation, and is the result of extensive studies of the survivability of patients suffering from cardiac arrest. While the demand for services in EMS is wide ranging, the survival rates for full-arrests are often utilized as benchmarks for response time standards as they are more readily evaluated because of the ease in defining patient outcomes (a patient either survives or does not). This research results in the recommended objectives:

- Provision of basic life support (BLS) within 4-minutes of notification
- Provision of advanced life support (ALS) within 8 minutes of notification

This is often used as the foundation for a two-tier system where fire resources function as first responders with additional (ALS) assistance provided by responding ambulance units and personnel. These best practice timeframes are broken down further as follows:

CITY OF PACIFIC GROVE, CALIFORNIA Analysis of Alternative Approaches to Providing Fire Protection Services

Time Element	Time for Element	Time Elapsed
Call Taking / Triage / Dispatch of Units (Dispatch)	1 Minute	0-1 Minutes
Crews React, Dress and Begin to Move (Reflex)	1:30 Minute	1-2 Minutes
Initial Crew Drives from Station to Call Location	4 Minutes	3 – 6 Minutes
Balance of Initial Dispatch Arrives on Scene	4 Additional Minutes	7 – 10 Minutes